



Service Bulletin

Bulletin No.: 22-NA-214

Date: October, 2022

TECHNICAL

Subject: Stop/Start System Inhibited / IBS / Battery Monitor with Module Malfunction Indicator Light (MIL) Illuminated - DTC U152D, P15FF, P305D, P305E, U01B0 Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	Envision	2021	2023	—	—	All	All
Cadillac	CT4	2020	2023				
	CT5						
	CT6	2023					
	Escalade Models	2021					
	Lyriq	2023					
Chevrolet	Colorado	2023	2023				
	Corvette	2020					
	Silverado 1500 - New (RPO J22, VIN Digit 5 = A/D)	2022	2022				
	Silverado 1500	2023	2023				
	Suburban	2021					
	Tahoe	2021					
GMC	Canyon	2023	2023				
	HUMMER EV	2022					
	Sierra 1500 - New (RPO J22, VIN Digit 5 = H/U)	2022	2022				
	Sierra 1500	2023	2023				
	Yukon Models	2021	2023				
Brightdrop	EV 600	2022	2022				

Involved Region or Country	North America, Middle East, Israel, Palestine, Argentina, Brazil, Chile, China, Colombia, Ecuador, Paraguay, Peru, Uruguay, Cadillac Korea (South Korea), GM Korea Company, Thailand, Australia/New Zealand, Egypt, Other Africa
Additional Options (RPOs)	Equipped with Engine Control-Stop/Start System (RPO KL9)
Condition	Some customers may comment on any of the following conditions: <ul style="list-style-type: none"> • The Malfunction Indicator Lamp (MIL) is illuminated. • The Stop/Start system is inoperative. • A "Stop/Start System Disabled" Message appears on the DIC, if equipped.
Cause	Technicians may observe on a scan tool one or more of the following DTCs set: <ul style="list-style-type: none"> • U152D: Body Control Module LIN Bus 9 • P15FF: Battery Monitor Sensor Signal Message Counter Incorrect • P305D: DC/DC Converter Crank Control Circuit High Voltage • P305E: DC/DC Converter Crank Control Circuit Low Voltage • U01B0: Lost Communication with Battery Monitor Module Intermittent Conditions and Poor Connections on the LIN Bus may also be a Cause.
Correction	Read the Information section and perform the Service Procedure.

Important: This technical service bulletin (TSB) can only be completed by BrightDrop dealers or BrightDrop certified repair facilities who have met all BrightDrop specific training, tool and equipment requirements. Repairs must be performed by a technician who has successfully completed the required training.

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.

2022 Silverado or Sierra

Refer to **PIT5912E** for new 1500 pickup trucks (RPO J22). May find DTC U3000 with a Front View Camera causing a parasitic drain inhibiting the learn of the battery sensor module.

Information

Auto Stop Criteria (If Equipped)

Important: Vehicles With RPO NSS or Police 9C1 - KL9 Is Disabled. The Cluster will not have Auto Stop on the Tachometer.

The engine control module (ECM) will send an Autostop state message to the body control module (BCM) and shut down the engine and restart the vehicle when all of the criteria is met. The BCM will transmit the Autostop state message to the instrument cluster which will display the Autostop indicator on the instrument cluster.

Reference *Stop/Start Disable, Inhibit, and Restart Reasons* in Service Information to see all the parameters and reasons why stop/start does not enable.

Note: Not all parameters may be available in all vehicles.

Battery Sensor Module

The B110 Battery Sensor Module also known as the intelligent battery sensor (IBS) is a BCM LIN sensor that tells the vehicle important 12V information such as state of charge (SOC), voltage, current charge, drain, etc. There are critical 12V features that depend on this sensor:

- Battery Maintenance report
- Enhanced Battery Saver Mode (EBSM)
- Start/Stop System, if equipped
- Over the Air (OTA) updates
- Future features

Diagnostic Aids

- Unplugging Battery Sensor connector or removing it from the negative battery post will reset the learn status. In the scan tool, an unlearned Battery Sensor Module will display a SOC error above 95%.
- An excessive battery draw higher than ~250 mA will prevent the B110 Battery Monitor Module learn from completing successfully in 4 Hrs.
- If the battery state of charge error is more than 10% then it will disable Stop/Start if equipped.

Preventing Sensor Reset



6164935

Unless the 12V battery or the sensor is being replaced, the Battery Sensor should stay attached to the negative stud with its connector attached at all times.

- OK to disconnect at Green circled point or any point further downstream towards chassis ground stud.
- DO NOT disconnect Battery Sensor Module from the negative battery post or the connector.

Service Procedure

Important: Depending on the Model Year, the vehicle and the information that the Service Personnel is referencing, the Battery Monitor Module is also identified as the Battery Sensor Module and the Battery Monitor Sensor in Service Information, the EPC and the Global Labor Time Guide.

1. Perform the Diagnostic System Check - Vehicle. Refer to *Diagnostic System Check - Vehicle* in SI.
2. Are any of the listed Diagnostic Trouble Codes (DTCs) Set?
 - ⇒ If one or more of the listed DTCs are Set, Go to Step 3.
 - ⇒ If none of the listed DTCs are Set, refer to Diagnostic Trouble Code (DTC) List - Vehicle. Refer to *Diagnostic Trouble Code (DTC) List - Vehicle* in SI.

3. Diagnose the DTCs in the order that is defined in the Diagnostic System Check - Vehicle.
4. Did you find and correct the Condition?
 - ⇒ If you found and corrected the Condition, then perform the Diagnostic Repair Verification. Refer to *Diagnostic Repair Verification* in SI.
 - ⇒ If you did not find and correct the Condition, Go to Step 5.
5. Perform the following:

Note: You must use regionally required battery test equipment for warranty repairs.

- Perform the Battery Inspection/Test procedure.
 - ⇒ If you found and corrected the Condition, then perform the Diagnostic Repair Verification. Refer to *Diagnostic Repair Verification* in SI.
 - ⇒ If you did not find and correct the Condition, Go to Step 6.
- 6. Replace the Battery Monitor Module. Refer to *Battery Monitor Module Replacement* in SI.
- 7. Perform the Diagnostic Repair Verification. Refer to *Diagnostic Repair Verification* in SI.

Parts Information

Causal Part	Description	Part Number	Qty
X	Battery Sensor Module	Refer to EPC	1

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
4040070	Battery Monitor Module Replacement	Use Published Labor Operation Time

Version Information

Version	1
Modified	Released October 25, 2022

Additional SI Keywords: IBS, Intelligent Battery Sensor, Battery Monitor Module, Battery Sensor

