

Service Bulletin

Bulletin No.:

n No.: 18-NA-084 Date: March, 2018

TECHNICAL

Subject: Hybrid Unable to Start in Cold Temperatures, MIL Illuminated, DTC P0AA1 and/or P0AA4 Set

Brand:	Model:	Model Year:		VIN:		Engino	Transmission:
Branu.	woder.	from	to	from	to	Engine: Trans	mansinission.
Chevrolet	Malibu (VIN Z)	2016	2016	_	_	1.8L (RPO LKN) — (Hybrid RPO HP4)	5ET50 (RPO MKE)

Involved Region or Country	or Country United States and Canada	
ConditionSome customers may comment that the vehicle is unable to start in cold ter and the Malfunction Indicator Lamp (MIL) is illuminated.		
	One or both of these contactors, the Battery Positive Contactor or the Battery Negative Contactor in the High Voltage Battery Disconnect Relay (also identified as the A28 Hybrid/EV Battery Contactor Assembly) may stick closed as a result of cold ambient temperatures, causing the No/Start condition and the DTC or DTCs to set.	
Cause	Some technicians may find one or both of the following DTCs set in the K114B Hybrid Powertrain Control Module 2 (HPCM2):	
	DTC P0AA1 Hybrid/EV Battery Positive Contactor Circuit Stuck Closed	
	DTC P0AA4 Hybrid/EV Battery Negative Contactor Circuit Stuck Closed	
Correction	A design change has been made to the contactors in the High Voltage Battery Disconnect Relay to address this cold weather contactor sticking condition. Replace the High Voltage Battery Disconnect Relay with the latest available part.	

Service Procedure

- 1. Vehicle in Service Mode.
- 2. Verify that DTC P0AD9, P0ADB, P0ADC, P0ADD, P0ADF, P0AE0, P0AE4, P0AE6, P0AE7 or P1EC0 is not set.
 - ⇒ If any of the DTCs are set, refer to Diagnostic Trouble Code (DTC) List – Vehicle in SI.
 - \Rightarrow If none of the DTCs are set, Go to Step 3.
- Verify that DTC P0AA1 and/or P0AA4 is set without any of the above Contactor Control Circuit DTCs.
 - ⇒ If only DTC P0AA1 and/or P0AA4 is set, replace the High Voltage Battery Disconnect Relay. Refer to High Voltage Battery Disconnect Relay Replacement in SI.

Perform the Diagnostic Repair Verification after completing the repair. Refer to *Diagnostic Repair Verification* in SI.

Parts Information

Causal Part	Description	Part Number	Qty
x	High Voltage Battery Disconnect Relay	24284374	1

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
5031760	High Voltage Battery Disconnect Relay Replacement	Use Published Labor Operation Time

Version Information

Version	1
Modified	Released March 15, 2018

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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