



Service Bulletin

Bulletin No.: 18-NA-186

Date: September, 2019

TECHNICAL

Subject: Loss of Propulsion or No Start with Malfunction Indicator Lamp Illuminated DTC P0A3F or P1B03 Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Malibu E2	2016	2018	—		1.8L — RPO LKN	5ET50 — RPO MKE
	Volt D2	2016	2018			1.5L — RPO L3A	5ET50 — RPO MKV

Involved Region or Country	North America, South Korea
Condition	Some customers may comment on a loss of propulsion and/or a no start with the Malfunction Indicator Lamp (MIL) illuminated.
Cause	The internal transmission wiring harness may have backed out terminals, poor terminal connections, corrosion, poor crimps, damaged terminals and/or high resistance in one or more circuits. The Technician may find one or both of the following DTCs set in the T6 Power Inverter Module, also referred to as the Drive Motor Generator Power Inverter Module: • DTC P0A3F Drive Motor 1 Position Sensor Circuit • DTC P1B03 Drive Motor 1 Position Sensor Circuit Tracking Lost
Correction	Review the Safety Information and perform the Service Procedure.

Safety Information

Important: Always perform the High Voltage Disabling procedure prior to servicing any High Voltage component or connection. Personal Protection Equipment (PPE) and proper procedures must be followed.

Danger: Ensure all High Voltage safety procedures are followed. Failure to follow the procedure exactly as written may result in serious injury or death.

Danger: Before working on any high voltage system, be sure to wear the following Personal Protection Equipment:

- Safety glasses with appropriate side shields when within 50 feet (15.24 m) of the vehicle, either indoors or outdoors.
- Certified and up-to-date Class "0" Insulation gloves rated at 1000V with leather protectors.

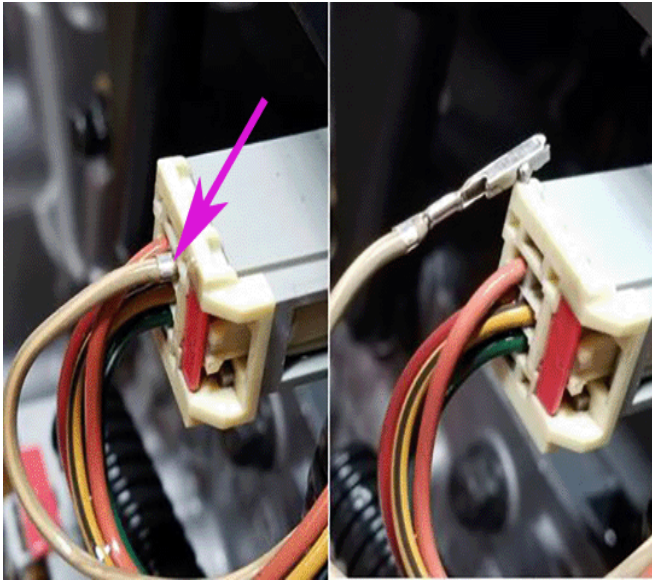
- Visually and functionally inspect the gloves before use.
- Wear the Insulation gloves at all times when working with the high voltage battery assembly, whether the system is energized or not.

The High Voltage Disabling procedure only de-energizes the high voltage circuits and components outside of the Hybrid/EV battery pack. Dangerous voltage levels always exist within the Hybrid/EV battery pack.

The technician must verify that the high voltage disabling procedure was successful by measuring the applicable connectors for a safe voltage level with a DMM.

Service Procedure

Overview



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The Drive Motor Power Inverter Module is an assembly which contains two motor control modules and the Hybrid/EV Powertrain Control Module 1. The drive motor position sensor is monitored by its respective motor control module.

The motor control module monitors the angular position, speed and direction of the drive motor rotor based upon the signals of the resolver-type position sensor. The drive motor position sensor circuits operate at very low current. These circuits are susceptible to moisture intrusion, backed out terminal(s) (shown), poor terminal connections or damage, poor crimps and corrosion. The harness **cannot be repaired** for any of these conditions, it **must be replaced**.

1. Perform the Diagnostic System Check - Vehicle. Refer to **Diagnostic System Check - Vehicle** in SI.

2. Is DTC P0A3F or P1B03 Set?
 - ⇒ If DTC P0A3F or P1B03 are Set, go to Step 3. Continue even if the DTCs are Set as "Current" or Set as "History".
 - ⇒ If the vehicle is setting additional faults for **both** Drive Motor 1 Position Sensor Circuits and Drive Motor 2 Position Sensor Circuits simultaneously, or several additional DTCs are set, contact GM Technical Assistance Center (TAC) for diagnostic help **before** proceeding.
3. Disable the High Voltage. Refer to **High Voltage Disabling** in SI.
4. Verify the date code on the replacement harness is **after** 04/07/2018 **prior** to installation.
5. Replace the transmission wiring harness with Part Number 24285319 HARNESS, A/TRNS WRG CONT VALVE SOL. Refer to **Automatic Transmission Wiring Harness Replacement** in SI.
6. Perform the Diagnostic Repair Verification. Refer to **Diagnostic Repair Verification** in SI.

Additional Keywords

DTC P0C52: Drive Motor 1 Position Sensor Circuit 1 Low Voltage

DTC P0C53: Drive Motor 1 Position Sensor Circuit 1 High Voltage

DTC P0C5C: Drive Motor 1 Position Sensor Circuit 2 Low Voltage

DTC P0C5D: Drive Motor 1 Position Sensor Circuit 2 High Voltage

Parts Information

Causal Part	Description	Part Number	Qty
X	HARNESS, A/TRNS WRG CONT VALVE SOL	24285319	1

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
8463570	Automatic Transmission Wiring Harness Replacement	Use Published Labor Operation Time

Version Information

Version	4
Modified	Released June 04, 2018 June 19, 2018 – Corrected the replacement Harness Part Number to the affected DTC. Added South Korea to Involved Region or Country. September 27, 2018 – Changed the date in Step #3 and Step #4 from 02/12/2018 to 04/07/2018. September 17, 2019 – Revised the Subject and the Bulletin information to pertain only to DTC P0A3F or P1B03. Removed all references to DTC P0A45 or P1B04, its associated repair procedure, Wiring Harness Part Number Information and Warranty Information. Removed the Keywords DTC P0C57, P0C58, P0C61 and P0C62.

