

# TECHNICAL SERVICE BULLETIN

 Classification:
 Reference:
 Date:

 EL22-015
 NTB23-024
 March 14, 2023

# VEHICLE WILL NOT START AND DTCS P31E7 AND P0AA6 STORED IN EV/HEV CONTROL MODULE

**APPLIED VEHICLES:** 2019-2022 LEAF (ZE1)

**APPLIED SYSTEMS:** 62 kWh Battery Pack (4th Character of the VIN is B)

#### IF YOU CONFIRM

The vehicle does not start.

#### **AND**

DTCs P31E7 (RESTART INHIBITION) and P0AA6 (HV BATTERY VOLTAGE SYSTEM ISOLATION) are stored in the EV/HEV Control Module.

#### ACTION

Follow the **SERVICE PROCEDURE** in this bulletin to:

- 1. Perform ESM diagnosis for DTCs P31E7 or P0AA6 to determine if a Li-Ion battery module triggered the DTCs.
  - If a Li-lon battery module did not trigger the DTCs, this bulletin does not apply. Refer to ASIST for further diagnosis.
- 2. Inspect the Li-Ion battery module for a bent retention plate.
- 3. Replace the Li-Ion battery module, if applicable.

**IMPORTANT:** The purpose of **ACTION** (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the entire **SERVICE PROCEDURE** as it contains information that is essential to successfully completing this repair.

Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. **NOTE:** If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

#### SERVICE PROCEDURE

These procedures are to be performed <u>ONLY</u> by a technician with <u>current</u> LEAF certification.

Follow all Warning, Caution, and Danger instructions in the ESM.

- 1. Perform ESM diagnosis for DTCs to determine which Li-Ion battery module has caused the DTC.
  - The affected module will only be in module row A or B (Figure 1).

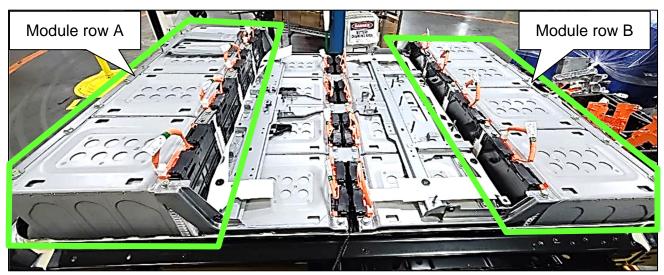


Figure 1

## **ADANGER**

Electric vehicles contain a high voltage battery. There is the risk of electric shock, electric leakage, or similar accidents if the high voltage component and vehicle are handled incorrectly. Be sure to follow the correct work procedures when performing inspection and maintenance. Touching high voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

#### **AWARNING**

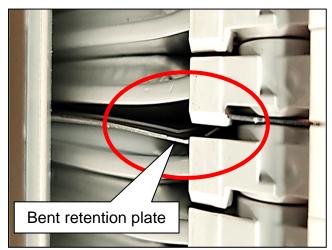
To avoid the risk of death or severe personal injury:

- Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.
- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.
- Be sure to wear insulating protective equipment consisting of glove, shoes, face shield and glasses before beginning work on the high voltage system.
- Do not allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep others from touching the high voltage parts, these parts must be covered with an insulating sheet except when using them.

2/4 NTB23-024

## NOTICE

- Do not bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Electronic Service Manual (ESM). A malfunction may occur if this is not observed.
- 2. Remove and inspect the affected Li-Ion battery module for a bent retention plate.
  - If a Li-lon battery module has a bent retention plate (Figure 2), replace the Li-lon battery module.
    - Refer to the ESM: ELECTRIC POWER TRAIN > EV BATTERY SYSTEM >
       62kWh LI-ION BATTERY > DISASSEMBLY AND ASSEMBLY > MODULE >
       MODULE : Disassembly & Assembly
      - **IMPORTANT**: Make sure to follow all Dangers, Warning, Cautions, and additional work procedures outlined in the ESM.
  - If the Li-Ion battery module does not have a bent retention plate (Figure 3), this bulletin does not apply. Refer to ASIST for further diagnosis.



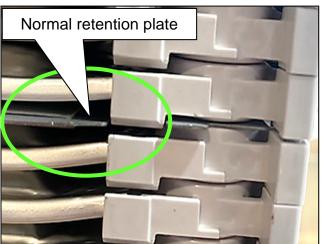


Figure 2 Figure 3

3/4 NTB23-024

#### PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
BATTERY MODULE – LITHIUM ION	295B9-5SF9D	1 If Needed
	295B9-5SF9E	1 If Needed
SEAL – BATTERY	295G3-3NF0A	1
WASHER – DRAIN PLUG	11026-01M02	1

#### NOTE:

- If the removed Li-lon battery module's part number is 295B9-5SF9A, replace with new Li-lon battery module part number 295B9-5SF9D.
- If the removed Li-lon battery module's part number is 295B9-5SF9B, replace with new Li-lon battery module part number 295B9-5SF9E.

#### **CLAIMS INFORMATION**

# Submit a Primary Part (PP) type line claim using the following claims coding:

Reference the current Nissan Warranty Flat Rate Manual and use the JR section indicated Flat Rate Time (FRT) for module replacement.

#### **AMENDMENT HISTORY**

PUBLISHED DATE	REFERENCE	DESCRIPTION	
March 14, 2023	NTB23-024	Original bulletin published	