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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: HYBRID / BATTERY CONTROL: HYBRID CONTROL SYSTEM (for M20A-FXS): P0AA749; Hybrid/EV Battery Voltage Isolation Sensor Circuit Internal Electronic Failure; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	P0AA749	Hybrid/EV Battery Voltage Isolation Sensor Circuit Internal Electronic Failure
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DESCRIPTION

The hybrid vehicle control ECU monitors the insulation monitoring circuit located in the battery ECU assembly and detects malfunctions.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	NOTE
P0AA749	Hybrid/EV Battery Voltage Isolation Sensor Circuit Internal Electronic Failure	Malfunction in the insulation monitoring circuit in the battery ECU assembly (1 trip detection logic)	Battery ECU assembly	Does not come on	Master Warning: Comes on	Hybrid Control	A	SAE Code: P0AA7

CONFIRMATION DRIVING PATTERN

HINT:

After repair has been completed, clear the DTC and then check that the vehicle has returned to normal by performing the following All Readiness check procedure.

Click here [INFO](#)

1. Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
2. Turn the ignition switch off and wait for 2 minutes or more.
3. With ignition switch ON and wait for 70 seconds or more.
4. Enter the following menus: Powertrain / Hybrid Control / Utility / All Readiness.
5. Check the DTC judgment result.

HINT:

- If the judgment result shows NORMAL, the system is normal.
- If the judgment result shows ABNORMAL, the system has a malfunction.
- If the judgment result shows INCOMPLETE, perform driving pattern again.

PROCEDURE

1.	CLEAR DTC
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Click here [INFO](#)

NEXT**2. SIMULATION TEST**

Pre-procedure1

(a) Turn the ignition switch to ON and wait for 70 seconds or more.

NOTICE:

Do not turn the ignition switch off until step 3 is complete.

Procedure1

(b) Check if DTCs are output.

Powertrain > Hybrid Control > Trouble Codes

RESULT	PROCEED TO
P0AA749 is not output	A
P0AA749 is output	B

Post-procedure1

(c) None.

B **REPLACE BATTERY ECU ASSEMBLY****A****3. SIMULATION TEST****NOTICE:**

Do not turn the ignition switch off while performing this inspection.

Pre-procedure1

(a) With the vehicle and engine stopped, turn the ignition switch to ON (READY) with shift lever in P and wait for 70 seconds or more. (If the engine starts, wait until the engine stops.)

(b) While depressing the brake pedal without depressing the accelerator pedal, move the shift lever to D and wait for 1 minute. (Step A)

(c) Drive the vehicle 0.5 m (1.6 ft.) forward and perform step A.

- (d) Drive the vehicle another 0.5 m (1.6 ft.) forward and perform step A. Repeat this procedure 5 times (minimum total driving distance: 2 m (6.6 ft.)).

Procedure1

- (e) Check if DTCs are output.

Powertrain > Hybrid Control > Trouble Codes

RESULT	PROCEED TO
P0AA649 is not output	A
P0AA649 is output	B

Post-procedure1

- (f) Turn the ignition switch off.

A ► **REPLACE BATTERY ECU ASSEMBLY**

B ► **GO TO DTC CHART (P0AA649)**

