Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002BHVC
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: HYBRID / BATTERY CONTROL: HYBRID BATTERY SYSTEM (for PHEV Model): P1AFC00; System Voltage (AM) Circuit Voltage Below Threshold; 2023 - 2024 MY Prius Prime [03/2023 -]		

DTC	**P1AFC00**	**System Voltage (AM) Circuit Voltage Below Threshold**

DESCRIPTION

The battery ECU assembly monitors its internal operation and will store a DTC when it detects an internal malfunction.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	NOTE
P1AFC00	System Voltage (AM) Circuit Voltage Below Threshold	The battery ECU assembly shutdown memory procedure did not complete normally in consecutive 40 trips. (1 trip detection logic)	• Wire harness or connector • Battery ECU assembly • Fuse	Does not come on	Master Warning: Comes on	HV Battery	A	SAE Code: P1AFC

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.

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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. Turn the ignition switch to ON and wait for 11 seconds or more.*1
4. Turn the ignition switch off and wait for 2 minutes or more.*2
5. Perform the procedures *1 and *2 41 times or more.
6. Turn the ignition switch to ON and turn the GTS on.
7. Enter the following menus: Powertrain / HV Battery / Utility / All Readiness.
8. 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 or N/A, perform driving pattern again.

WIRING DIAGRAM

Refer to the wiring diagram for DTC P056014.

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CAUTION / NOTICE / HINT

CAUTION:

Refer to the precautions before inspecting high voltage circuit.

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NOTICE:

- After the ignition switch is turned off, there may be a waiting time before disconnecting the auxiliary negative (-) battery terminal.

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- When disconnecting and reconnecting the auxiliary battery.

HINT:

When disconnecting and reconnecting the auxiliary battery, there is an automatic learning function that completes learning when the respective system is used.

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PROCEDURE

1.	**CHECK FUSE (PHV BATT)**

Click here INFO

NG ▶ **REPLACE FUSE (PHV BATT)**

OK ▼

2.	**CHECK CONNECTOR CONNECTION CONDITION (BATTERY ECU ASSEMBLY)**

Click here INFO

NG ▶ **CONNECT SECURELY**

OK ▼

3.	**CHECK HARNESS AND CONNECTOR (AM VOLTAGE)**

Click here INFO

OK ▶ **REPLACE BATTERY ECU ASSEMBLY**

NG
▼

4.	**CHECK HARNESS AND CONNECTOR (PHV BATT FUSE - BATTERY TERMINAL)**

Click here INFO

OK ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR (PHV BATT FUSE - BATTERY ECU ASSEMBLY)**

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR (PHV BATT FUSE - BATTERY TERMINAL)**