

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002BMEG
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: M20A-FXS (BATTERY / CHARGING): SOLAR CHARGING SYSTEM: P1EDB49; Solar Charger Control Module A/D Processing Internal Electronic Failure; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DTC	P1EDB49	Solar Charger Control Module A/D Processing Internal Electronic Failure
------------	----------------	--

DESCRIPTION

The solar energy control ECU assembly monitors its internal operation and will store these DTCs when it detects an internal malfunction. If these DTCs are output, replace the solar energy control ECU assembly.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY
P1EDB49	Solar Charger Control Module A/D Processing Internal Electronic Failure	ECU internal malfunction (AD timeout error) (1 trip detection logic)	Solar energy control ECU assembly	Solar Charging Warning Light: Comes on	Solar Charging Control	A

CONFIRMATION DRIVING PATTERN

HINT:

After completing repairs, clear the DTCs and then check that the vehicle has returned to normal by performing the following All Readiness check procedure.

Click here [INFO](#)

1. Park the vehicle in an area where the solar radiation will be steady.

Weather	Clear or mostly clear and sunny
Time	Between 11:00 and 14:00
Place	An area where sunlight strikes the solar roof directly

HINT:

- o Make sure no part of the solar roof is shaded.
 - o If the solar roof is dirty, clean it.
2. Turn the ignition switch off and then disconnect the cable from the negative (-) auxiliary battery terminal.
 3. Wait for 5 seconds or more, then disconnect the power source connector and then all other low voltage connectors the solar energy control ECU assembly.
 4. Wait for 30 seconds or more, then connect the low voltage connectors of the solar energy control ECU assembly except the power source connector and then connect the power source connector.
 5. Connect the cable to the negative (-) auxiliary battery terminal.
 6. Turn the ignition switch to ON, wait for 5 to 10 seconds, and then turn the ignition switch off.

HINT:

Make sure to turn the ignition switch off within 10 seconds.

7. Wait for 20 minutes and then check for DTCs to check that no DTCs have been stored.

HINT:

- While waiting, the HV battery will be charged by the solar charging system. However, depending on certain conditions, charging may not be performed.
- When the HV battery is fully charged, high voltage charging to the HV battery is not performed.
- If any of the following conditions is met, the HV battery will not be charged by the solar charging system:
 - The HV battery is charged via an external power source.
 - The ignition switch is turned to ACC.
 - The ignition switch is turned to ON.
 - The ignition switch is turned to ON (READY).
 - The HV battery heating system is operating.
 - The remote air conditioning system is operating.

8. Check that solar charging is being performed.

HINT:

Be sure to check that high voltage battery charging is being performed by the solar roof.

CAUTION / NOTICE / HINT

CAUTION:

Refer to the precautions before inspecting high voltage circuit.

Click here 

NOTICE:

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

Click here 

- 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.

Click here 

PROCEDURE

1.	REPLACE SOLAR ENERGY CONTROL ECU ASSEMBLY
-----------	--

Click here 

NEXT  **END**

