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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: HYBRID / BATTERY CONTROL: HYBRID BATTERY SYSTEM (for M20A-FXS): P31B400; Extreme Hybrid/EV Battery Charging Current; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	P31B400	Extreme Hybrid/EV Battery Charging Current
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DESCRIPTION

The battery ECU assembly monitors its internal operation, it will set DTCs and perform fail-safe control when it detects the following malfunction.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	NOTE
P31B400	Extreme Hybrid/EV Battery Charging Current	An abnormal signal is detected by the battery ECU assembly (excessive charging current). (1 trip detection logic)	Hybrid vehicle control ECU	Does not come on	Master Warning: Comes on	HV Battery	A	SAE Code: P31B4

CONFIRMATION DRIVING PATTERN

HINT:

After repairs have been completed, 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. 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. Drive the vehicle for approximately 10 minutes according to the freeze frame data items "Vehicle Speed", "Accelerator Position", "Hybrid/EV Battery Temperature 1 to 6" and "Hybrid/EV Battery Current".
4. Enter the following menus: Powertrain / HV battery / 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.	CHECK DTC OUTPUT (HV BATTERY, HYBRID CONTROL)
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Pre-procedure1

(a) None

Procedure1

(b) Check for DTCs.

Powertrain > HV Battery > Trouble Codes**Powertrain > Hybrid Control > Trouble Codes**

RESULT	PROCEED TO
"P31B400" only is output.	A
DTCs except "P31B400" of hybrid battery system are output.	B
DTCs except "P31B400" of hybrid control system are output.	C

Post-procedure1

(c) Turn the ignition switch off.

A ▶ **REPLACE HYBRID VEHICLE CONTROL ECU** INFO**B** ▶ **GO TO DTC CHART (HYBRID BATTERY SYSTEM)****C** ▶ **GO TO DTC CHART (HYBRID CONTROL SYSTEM)**