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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): U117E87; Lost Communication				
with Drive Motor Control Module "A" (ch4) Missing Message; 2023 - 2024 MY Prius Prius Prime [12/2022 -				

DTC	U117E87 Lost Communication with Drive Motor Control Module "A"	(ch4) Missing Message
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DESCRIPTION

The hybrid vehicle control ECU transmits and receives signals via CAN communication to and from the inverter with converter assembly (MG ECU).

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	NOTE
U117E87	with Drive Motor	A CAN communication error between the MG ECU and hybrid vehicle control ECU (CAN communication system malfunction) occurs (1 trip detection logic)	CAN communication system	Comes	Master Warning: Comes on	Hybrid Control		SAE Code: U117E

MONITOR DESCRIPTION

If the hybrid vehicle control ECU detects a problem with CAN communication with the motor generator control ECU, it will illuminate the MIL and store a DTC.

MONITOR STRATEGY

Related DTCs	U117E (INF U117E87): Lost Communication with Drive Motor Control Module "A" (ch4) verify communication
Required sensors/components	Main: Hybrid vehicle control ECU Sub: CAN bus line
Frequency of operation	Continuous
Duration	TMC's intellectual property
MIL operation	Immediately
Sequence of operation	None

TYPICAL ENABLING CONDITIONS

The monitor will run whenever the following DTCs are not stored	TMC's intellectual property
Other conditions belong to TMC's intellectual property	-

TYPICAL MALFUNCTION THRESHOLDS

The monitor will run whenever the following DTCs are not stored	TMC's intellectual property
Other conditions belong to TMC's intellectual property	-

COMPONENT OPERATING RANGE

Hybrid vehicle control ECU	U117E (INF U117E87) is not detected

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

- 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 to ON and wait for 2 minutes or more. [*1]

HINT:

[*1]: Normal judgment procedure.

The normal judgment procedure is used to complete DTC judgment and also used when clearing permanent DTCs.

- 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 the normal judgment procedure again.

PROCEDURE

1. CHECK DTC OUTPUT

(a) Check for DTCs.

Powertrain > Hybrid Control > Trouble Codes

NEXT GO TO INVERTER LOW - VOLTAGE CIRCUIT



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