

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002BM24
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: M20A-FXS (ENGINE CONTROL): SFI SYSTEM: U012987; Lost Communication with Brake System Control Module Missing Message; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DTC	U012987	Lost Communication with Brake System Control Module Missing Message
------------	----------------	--

MONITOR DESCRIPTION

The ECM and skid control ECU send and receive signals via CAN communication.

If a communication error occurs between the ECM and skid control ECU, the ECM illuminates the MIL and stores this DTC.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	DTC OUTPUT FROM	PRIORITY	NOTE
U012987	Lost Communication with Brake System Control Module Missing Message	<p>All of the following conditions are met for 4.98 seconds or more (1 trip detection logic):</p> <ul style="list-style-type: none"> Ignition switch ON Auxiliary battery voltage 10 V or higher No communication between ECM and skid control ECU 	<ul style="list-style-type: none"> CAN communication system Skid control ECU ECM 	Comes on	Engine	B	SAE Code: U0129

MONITOR STRATEGY

Related DTCs	U0129: Lost communication with brake system control module
Required Sensors/Components (Main)	ECM
Required Sensors/Components (Related)	-
Frequency of Operation	Continuous
Duration	4.98 seconds
MIL Operation	Immediate
Sequence of Operation	None

TYPICAL ENABLING CONDITIONS

Monitor runs whenever the following DTCs are not stored	None
---	------

Both of the following conditions are met	-
Auxiliary battery voltage	10 V or higher
Ignition switch	ON

TYPICAL MALFUNCTION THRESHOLDS

Communication signal	Lost communication with brake system control module
----------------------	---

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

- When clearing the permanent DTCs, refer to the "CLEAR PERMANENT DTC" procedure.

[Click here](#) INFO

- Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
- Turn the ignition switch off and wait for at least 30 seconds.
- Turn the ignition switch to ON [A].
- Wait 5 seconds or more.
- Enter the following menus: Powertrain / Engine / Trouble Codes [B].
- Read the pending DTCs.

HINT:

- If a pending DTC is output, the system is malfunctioning.
- If a pending DTC is not output, perform the following procedure.

- Enter the following menus: Powertrain / Engine / Utility / All Readiness.
- Input the DTC: U012987.
- Check the DTC judgment result.

HINT:

- If the judgment result shows NORMAL, the system is normal.
- If the judgment result shows ABNORMAL, the system is malfunctioning.
- [A] to [B]: Normal judgment procedure.

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

- When clearing the permanent DTCs, do not disconnect the cable from the auxiliary battery terminal or attempt to clear the DTCs during this procedure, as doing so will clear the universal trip and normal judgment histories.

CAUTION / NOTICE / HINT

NOTICE:

- Vehicle Control History may be stored in the hybrid vehicle control ECU if the engine is malfunctioning. Certain vehicle condition information is recorded when Vehicle Control History is stored. Reading the vehicle conditions recorded in both the Freeze Frame Data and Vehicle Control History can be useful for troubleshooting.

for HEV Model: [Click here](#) INFO

for PHEV Model: [Click here](#) INFO

(Select Powertrain in Health Check and then check the time stamp data.)

- If any "Engine Malfunction" Vehicle Control History item has been stored in the hybrid vehicle control ECU, make sure to clear it. However, as all Vehicle Control History items are cleared simultaneously, if any Vehicle Control History items other than "Engine Malfunction" are stored, make sure to perform any troubleshooting for them before clearing Vehicle Control History.

for HEV Model: [Click here](#) 

for PHEV Model: [Click here](#) 

PROCEDURE

1.	GO TO CAN COMMUNICATION SYSTEM
-----------	---------------------------------------

HINT:

for HEV Model: [Click here](#) 

for PHEV Model: [Click here](#) 

NEXT  **END**

