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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): U042481; HVAC Control Module to Hybrid Powertrain Control Module Invalid Serial Data Received; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	U042481	HVAC Control Module to Hybrid Powertrain Control Module Invalid Serial Data Received
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DESCRIPTION

If the hybrid vehicle control ECU receives an invalid compressor control request from the air conditioning amplifier assembly via CAN communication, it will store this DTC.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	NOTE
U042481	HVAC Control Module to Hybrid Powertrain Control Module Invalid Serial Data Received	An invalid control request was received from the air conditioning amplifier assembly (1 trip detection logic)	Air conditioning amplifier assembly	Does not come on	Master Warning: Does not come on	Hybrid Control	B	SAE Code: U0424

CONFIRMATION DRIVING PATTERN

HINT:

After repair has 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. Wait for 1 minute or more with the vehicle stopped, the ignition switch to ON (READY), the shift lever in P and the air conditioning system on (Lo/COOL MAX, blower speed HI).
4. Turn the air conditioning system off and wait for 10 seconds or more with the ignition switch ON (READY).
5. Enter the following menus: Powertrain / Hybrid Control / Utility / All Readiness.
6. 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 (AIR CONDITIONER)
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Pre-procedure1

(a) None.

Procedure1

(b) Check if DTCs related to the Air Conditioning System (A/C) are output.

Body Electrical > Air Conditioner > Trouble Codes

Result	PROCEED TO
DTCs related to Air Conditioning System (A/C) are not output.	A
DTCs related to Air Conditioning System (A/C) are output.	B

Post-procedure1

(c) Turn the ignition switch off.

A  **REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY****B**  **GO TO DTC CHART (AIR CONDITIONING SYSTEM)**