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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: M20A-FXS (ENGINE CONTROL): SFI SYSTEM: P064A49; Fuel Pump Control Module Internal Electronic Failure; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DTC	P064A49	Fuel Pump Control Module Internal Electronic Failure
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MONITOR DESCRIPTION

The fuel pump control ECU has a self-diagnosis function. If there is an internal malfunction, the fuel pump control ECU sends a malfunction signal to the ECM via the FPC drive circuit.

Based on the signal, the ECM judges that there is a malfunction in the fuel pump control ECU stores a DTC.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	DTC OUTPUT FROM	PRIORITY	NOTE
P064A49	Fuel Pump Control Module Internal Electronic Failure	When the fuel pump control ECU operation duty ratio is 3 to 65%, there is an internal malfunction in the fuel pump control ECU for 3 seconds or more (2 trip detection logic).	Fuel pump control ECU	Comes on	Engine	B	SAE Code: P064A

MONITOR STRATEGY

Related DTCs	P064A: Fuel pump control module range check
Required Sensors/Components (Main)	Fuel pump control ECU
Required Sensors/Components (Related)	-
Frequency of Operation	Continuous
Duration	3 seconds
MIL Operation	2 driving cycles
Sequence of Operation	None

TYPICAL ENABLING CONDITIONS

Monitor runs whenever the following DTCs are not stored	None
All of the following conditions are met	-
Output duty cycle	3 to 65%
Auxiliary battery voltage	10.5 V or higher
Ignition switch	ON

TYPICAL MALFUNCTION THRESHOLDS

Internal malfunction from fuel pump control module

Received

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](#)

1. Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
2. Turn the ignition switch off and wait for at least 30 seconds.
3. Put the engine in Inspection Mode (Maintenance Mode).

Click here [INFO](#)

4. Start the engine and wait 10 seconds or more [A].
5. Enter the following menus: Powertrain / Engine / Trouble Codes [B].
6. 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.

7. Enter the following menus: Powertrain / Engine / Utility / All Readiness.
8. Input the DTC: P064A49.
9. Check the DTC judgment result.

HINT:

- If the judgment result is NORMAL, the system is normal.
- If the judgment result is ABNORMAL, the system is malfunctioning.
- If the judgment result is INCOMPLETE, run the engine at an engine speed of 2000 rpm or more for 10 seconds or more and check the DTC judgment result again.
- [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](#) INFO

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

PROCEDURE

1.	CLEAR DTC
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Pre-procedure1

(a) None.

Procedure1

(b) Clear the DTCs.

Powertrain > Engine > Clear DTCs

Post-procedure1

(c) Turn the ignition switch off and wait for at least 30 seconds.

NEXT



2.	CHECK ANY OTHER DTCS OUTPUT (IN ADDITION TO DTC P064A49)
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Pre-procedure1

(a) Drive the vehicle in accordance with the driving pattern described in the Confirmation Driving Pattern.

Procedure1

(b) Read the DTCs.

Powertrain > Engine > Trouble Codes

RESULT	PROCEED TO
P064A49 and other DTCs are output	A
P064A49 is output	B

Post-procedure1

(c) None.

A **GO TO DTC CHART**

B **REPLACE FUEL PUMP CONTROL ECU**

