Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002BM2B
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: M20A-FXS (ENGINE CONTROL): SFI SYSTEM: P008800; Fuel Rail / System Pressure - Too High; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DTC	**P008800**	**Fuel Rail / System Pressure - Too High**

DESCRIPTION

Refer to DTC P008700.

Click here INFO

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	DTC OUTPUT FROM	PRIORITY	NOTE
P008800	Fuel Rail / System Pressure - Too High	Although the ECM is requesting the fuel (engine room side) pump assembly (for high pressure side) to open the spill control valve, fuel pressure increases 3 MPa (30.6 kgf/cm ^{2} , 435 psi) from target pressure for about 10 seconds (1 trip detection logic).	• Fuel (engine room side) pump assembly (for high pressure side) • Fuel pressure sensor (for high pressure side) • ECM	Comes on	Engine	B	SAE Code: P0088

MONITOR DESCRIPTION

If the fuel pressure (for high pressure side) increases despite a decrease request signal being sent to the Fuel (engine room side) pump assembly (for high pressure side) by the ECM, the ECM will illuminate the MIL and store this DTC.

MONITOR STRATEGY

Related DTCs	P0088: Fuel pressure too high
Required Sensors/Components (Main)	Fuel pressure sensor (for high pressure side)
Required Sensors/Components (Related)	-
Frequency of Operation	Continuous
Duration	About 10 seconds
MIL Operation	Immediate
Sequence of Operation	None

TYPICAL ENABLING CONDITIONS

Fuel pressure sensor (for high pressure side) malfunction (P0192, P0193)	Not detected
High pressure fuel pump malfunction (P1235)	Not detected
Fuel injector driver malfunction (P0201, P0202, P0203, P0204, P062D)	Not detected
Time after engine start	0.2 seconds or more

TYPICAL MALFUNCTION THRESHOLDS

Duration that both of the following conditions (a) and (b) are met	10 seconds or more
(a) Difference in fuel pressure between actual and target	3 MPa (30.6 kgf/cm ^{2} , 435 psi) or higher
(b) Actual discharge rate of high pressure fuel pump	0 mm ^{3} /st or less

CONFIRMATION DRIVING PATTERN

HINT:

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

  Click here INFO
- Permanent misfire and fuel system DTCs can only be cleared when performing the universal trip driving pattern when no malfunction is detected.

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

   Click here INFO
5. Start the engine.
6. Based on the engine speed, engine load, injection mode and other conditions displayed in the Freeze Frame Data, reproduce the conditions present when the DTC was stored.
7. Enter the following menus: Powertrain / Engine / Trouble Codes.
8. 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.
9. Enter the following menus: Powertrain / Engine / Utility / All Readiness.
10. Input the DTC: P008800.
11. Check the DTC judgment result.

    HINT:

    - If the judgment result is NORMAL, the system is normal.
    - If the judgment result is ABNORMAL, the system has a malfunction.

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.	**CHECK OTHER DTCS OUTPUT (IN ADDITION TO DTC P008800)**

(a) Read the DTCs.

Powertrain > Engine > Trouble Codes

RESULT	PROCEED TO
P008800 and other DTCs are output	A
P008800 is output	B

HINT:

If any DTCs other than P008800 are output, troubleshoot those DTCs first.

A ▶ **GO TO DTC CHART**

B ▼

2.	**INSPECT FUEL PRESSURE SENSOR (FOR HIGH PRESSURE SIDE)**

Pre-procedure1

(a) Put the engine in Inspection Mode (Maintenance Mode).

Powertrain > Hybrid Control > Utility

TESTER DISPLAY
Inspection Mode

(b) Start the engine.

Procedure1

(c) According to the display on the GTS, read the Data List while racing the engine.

Powertrain > Engine > Data List

TESTER DISPLAY
Fuel Pressure (High)

OK:

Fuel pressure fluctuates.

Post-procedure1

(d) None

NG ▶ **REPLACE FUEL PRESSURE SENSOR (FOR HIGH PRESSURE SIDE)**

OK

▼

3.	**REPLACE FUEL (ENGINE ROOM SIDE) PUMP ASSEMBLY (FOR HIGH PRESSURE SIDE)**

HINT:

Click here INFO

NEXT

▼

4.	**CLEAR DTC**

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

5.	**CHECK IF DTC OUTPUT RECURS (SEE IF DTC P008800 IS OUTPUT AGAIN)**

Pre-procedure1

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

Procedure1

(b) Read the DTCs.

Powertrain > Engine > Trouble Codes

RESULT	PROCEED TO
DTCs are not output	A
P008800 is output	B

Post-procedure1

(c) None

A ▶ **END**

B ▶ **REPLACE ECM**