Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM1000000028W2I
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]

Title: M20A-FXS (ENGINE CONTROL): SFI SYSTEM: HOW TO PROCEED WITH TROUBLESHOOTING; 2023 - 2024 MY Prius Prius Prime [12/2022 -   ]

HOW TO PROCEED WITH TROUBLESHOOTING

CAUTION / NOTICE / HINT

HINT:

*: Use the GTS.

PROCEDURE

1.	**VEHICLE BROUGHT TO WORKSHOP**

NEXT
▼

2.	**CUSTOMER PROBLEM ANALYSIS**

NEXT
▼

3.	**CONNECT GTS TO DLC3***

HINT:

If the display indicates a communication malfunction, inspect the DLC3.

When any CAN communication system DTCs are output, perform troubleshooting for the CAN communication system first.

NEXT
▼

4.	**CHECK DTC AND FREEZE FRAME DATA***

(a) Check for DTCs.

Powertrain > Engine > Trouble Codes

(b) Check for Freeze Frame Data.

Click here **INFO**

> **HINT:**
>
> Record or print DTCs and Freeze Frame Data if necessary.

NEXT
▼

5.	CHECK VEHICLE CONTROL HISTORY (RoB) AND VEHICLE CONTROL HISTORY FREEZE FRAME DATA*

(a) Check for Vehicle Control History (RoB) and Vehicle Control History Freeze Frame Data.

Powertrain > Engine > Utility

TESTER DISPLAY
Vehicle Control History (RoB)

> **HINT:**
>
> Print Vehicle Control History (RoB) and Vehicle Control History Freeze Frame Data if necessary.

NEXT
▼

6.	CLEAR DTC AND FREEZE FRAME DATA*

(a) Clear the DTCs and Freeze Frame Data.

Powertrain > Engine > Clear DTCs

NEXT
▼

7.	CONDUCT VISUAL INSPECTION

NEXT
▼

8.	SELECT CHECK MODE DIAGNOSIS*

(a) Change the ECM from normal mode to check mode.

Powertrain > Engine > Utility

TESTER DISPLAY
Check Mode
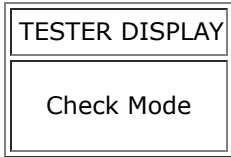
NEXT
▼

9.	CONFIRM PROBLEM SYMPTOMS

(a) Confirm the problem symptoms.

HINT:

If the engine does not start, first perform the "Check DTC" procedure and "Conduct Basic Inspection" procedure below.

RESULT	PROCEED TO
Malfunction does not occur	A
Malfunction occurs	B

B ▶ **GO TO STEP 11**

A
▼

10.	SIMULATE SYMPTOMS

HINT:

Refer to Symptom Simulation.

Click here INFO

NEXT
▼

11.	CHECK DTC*

(a) Check for DTCs.

Powertrain > Engine > Trouble Codes

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

B ▶ **GO TO STEP 13**

A
▼

12.	REFER TO DTC CHART

HINT:
Refer to Diagnostic Trouble Code Chart.

NEXT
▼

13.	CONDUCT BASIC INSPECTION

(a) Conduct basic inspection.

Click here INFO

RESULT	PROCEED TO
Malfunctioning parts not confirmed	A
Malfunctioning parts confirmed	B

B ▶ **GO TO STEP 18**

A

▼

14.	REFER TO PROBLEM SYMPTOMS TABLE

HINT:

Refer to Problem Symptoms Table.

Click here `INFO`

RESULT	PROCEED TO
Malfunctioning circuit confirmed	A
Malfunctioning parts confirmed	B

B ▶ **GO TO STEP 18**

A
▼

15.	CHECK ECM POWER SOURCE CIRCUIT

(a) Check the ECM power source circuit.

Click here `INFO`

NEXT
▼

16.	CONDUCT CIRCUIT INSPECTION

RESULT	PROCEED TO
Malfunction not confirmed	A
Malfunction confirmed	B

B ▶ **GO TO STEP 19**

A

▼

17.	CHECK FOR INTERMITTENT PROBLEMS

(a) Check for intermittent problems.

Click here INFO

NEXT

▼

18.	CONDUCT PARTS INSPECTION

NEXT

▼

19.	IDENTIFY PROBLEM

NEXT

▼

20.	ADJUST AND/OR REPAIR

NEXT

▼

21.	CONDUCT CONFIRMATION TEST

NEXT ▶ END