Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002BM1S
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: M20A-FXS (ENGINE CONTROL): SFI SYSTEM: P319300; Fuel Run Out; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DTC	**P319300**	**Fuel Run Out**

DESCRIPTION

The ECM receives the low fuel level signal from the combination meter assembly (meter ECU) to detect if the vehicle is running out of fuel.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	DTC OUTPUT FROM	PRIORITY	NOTE
P319300	Fuel Run Out	All of the following conditions are met (1 trip detection logic): 1. Ignition switch ON 2. The ECM receives the fuel empty low level signal from the combination meter assembly (meter ECU). 3. DTC detection conditions of either DTC P319000 or P319100 are met.	- (This DTC indicates that the vehicle ran out of fuel and does not indicate the malfunction of part.)	Does not come on	Engine	A	SAE Code: P3193

MONITOR DESCRIPTION

This DTC indicates that the vehicle ran out of fuel. If the ECM receives the low fuel level signal from the combination meter assembly (meter ECU) and the DTC detection conditions of either DTC P319000 or P319100 are met while the ignition switch is ON or the engine is operating, the ECM stores this DTC.

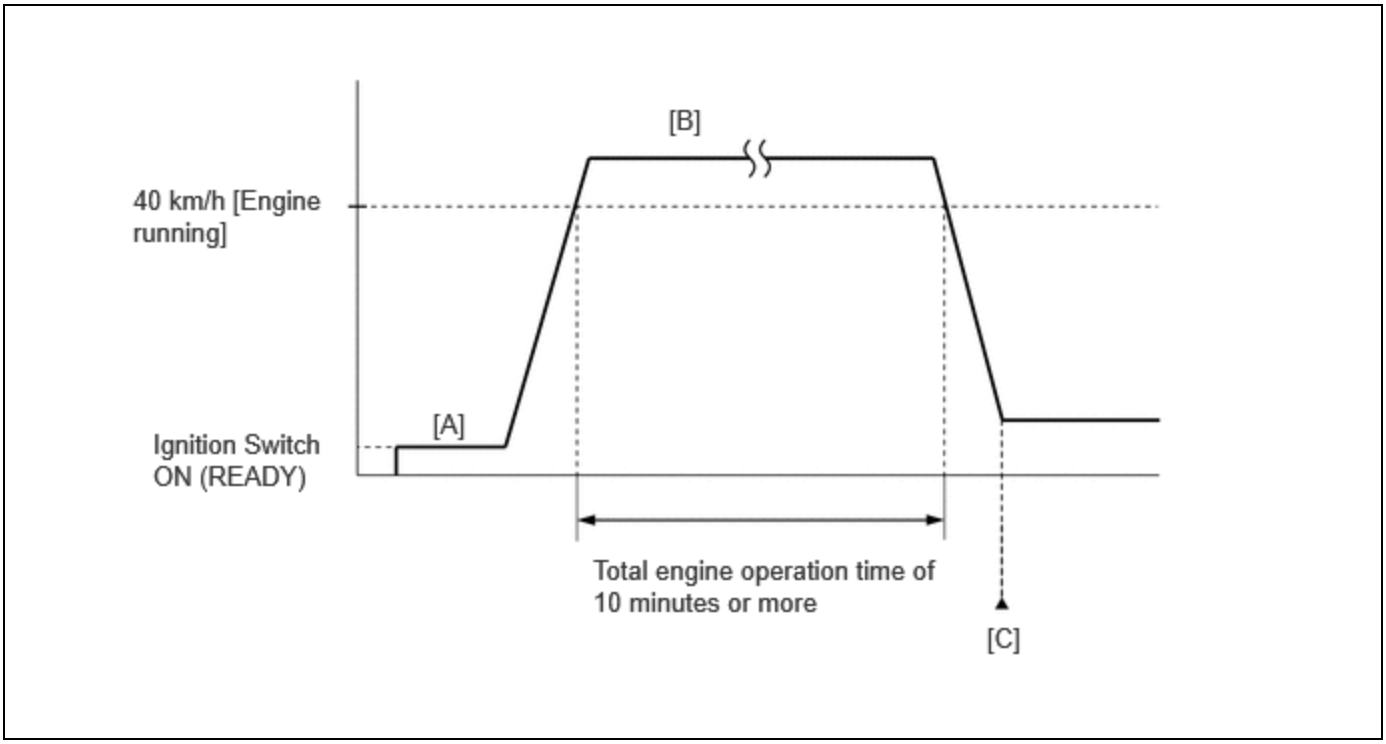
MONITOR STRATEGY

Frequency of Operation	Continuous

CONFIRMATION DRIVING PATTERN

NOTICE:

If the MIL or a master warning light illuminates, immediately end the confirmation driving pattern. When DTCs P319000, P319100 and P319300 are output, the engine may stop. In this case, the HV battery will no longer be chargeable and the distance that the vehicle can be driven will be limited.



1. Apply the parking brake firmly.
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. Turn the ignition switch to ON (READY).
5. Fully depress the accelerator pedal for 10 seconds with the vehicle stopped, the shift lever in P and the brake pedal depressed [A].

NOTICE:

As soon as the engine starts, release the accelerator pedal.

6. Release the parking brake.
7. Press the EV/HV mode selection switch to select HV mode. (for PHEV Model)
8. Drive the vehicle at an average of approximately 40 km/h (25 mph) or more until the total engine operation time is 10 minutes or more [B].

CAUTION:

When performing the confirmation driving pattern, obey all speed limits and traffic laws.

HINT:

- It is not necessary to maintain the vehicle speed at 40 km/h (25 mph) throughout the road test.
- If the engine stops, further depress the accelerator pedal to restart the engine.

9. Enter the following menus: Powertrain / Engine / Trouble Codes [C].
10. 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.

11. Enter the following menus: Powertrain / Engine / Utility / All Readiness.
12. Input the DTC: P319300.
13. 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.

- If the judgment result is INCOMPLETE, perform the Confirmation Driving Pattern and check the DTC judgment result again.

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

HINT:

- When DTCs P319000, P319100 and P319300 are output, the engine may stop.

  In this case, after adding fuel or performing repairs, clear the DTCs. Then turn the ignition switch off to return to the normal condition.
- When this DTC is output and the engine is stopped, the HV battery cannot be charged since the vehicle is driven with the motor only. If the vehicle continues to be driven under this condition, the HV battery will become depleted and the ignition switch will not be able to be turned on (READY).

PROCEDURE

1.	**CHECK SHORTAGE OF FUEL**

(a) Check the amount of fuel remaining.

OK:

There is enough fuel.

HINT:

- DTCs P319000, P319100 and/or P319300 may be output if the vehicle ran out of fuel in the past.
- If not enough fuel is added, DTC P319000, P319100 or P319300 may be output again. If the engine cannot be started because the vehicle is out of fuel, add fuel until the fuel level warning turns off.

OK ▶ **GO TO STEP 3**

NG ▼

2.	**REFILL FUEL**

(a) Add fuel until the fuel level warning turns off.

NEXT

3.	**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

4.	**CHECK WHETHER DTC OUTPUT RECURS**

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
P319000 or P319100 and other DTCs are output	A
P319000 or P319100 is output	B
DTCs are not output	C

Post-procedure1

(c) None

A ▶ **GO TO DTC CHART**

B ▶ **GO TO DTC P319000, P319100**

C ▶ **END**