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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]	
Title: THEFT DETERRENT / KEYLESS ENTRY: SMART KEY SYSTEM (for Start Function): B277A96; Wireless Starter				
Component Internal Failure; 2023 - 2024 MY Prius Prius Prime [03/2023 -]				

DTC B2	277A96	Wireless Starter Component Internal Failure	
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DESCRIPTION

If the remote engine start ECU*1 or DCM (telematics transceiver)*2 does not respond to the certification ECU (smart key ECU assembly) or the remote engine start ID is not registered, this DTC is stored.

HINT:

Registration status of the DCM (telematics transceiver) can be checked using the "Remote Engine Starter Registration Status" item in the Data List.*2

- *1: w/ Genuine Remote Engine Start
- *2: for Remote Connect Compatible Type

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY	NOTE
B277A96		One of the following conditions is met (1 trip detection logic*3): • A remote start communication error occurs. • Response is not possible. • Registration has not been performed.	 CAN communication system Remote engine start ECU*1 DCM (telematics transceiver)*2 Certification ECU (smart key ECU assembly) 	Smart Key	В	DTC output confirmation operation: A remote start operation is performed.

- *1: w/ Genuine Remote Engine Start
- *2: for Remote Connect Compatible Type
- *3: Only output while a malfunction is present.

Vehicle Condition and Fail-safe Operation when Malfunction Detected

VEHICLE CONDITION WHEN MALFUNCTION DETECTED	FAIL-SAFE OPERATION WHEN MALFUNCTION DETECTED
1	Hybrid control system cannot be started by remote start operation only

Related Data List and Active Test

DTC NO.	DATA LIST AND ACTIVE TEST	
B277A96	Telematics	
	Remote Engine Starter Registration Status*	

^{*:} for Remote Connect Compatible Type

CAUTION / NOTICE / HINT

NOTICE:

• When using the GTS with the ignition switch off, perform lock and unlock operations using the door control switch of the multiplex network master switch assembly at intervals of 1.5 seconds or less until communication between the GTS and the vehicle begins, and then select the vehicle model manually.

Then select Model Code "KEY REGIST" under manual mode and enter the following menus: Body Electrical / Smart Key(CAN). While using the GTS, periodically perform lock and unlock operations using the door control switch of the multiplex network master switch assembly at intervals of 1.5 seconds or less to maintain communication between the GTS and the vehicle.

• The smart key system (for Start Function) uses the LIN communication system and CAN communication system. Inspect the communication function by following How to Proceed with Troubleshooting. Troubleshoot the smart key system (for Start Function) after confirming that the communication systems are functioning properly.

Click here NFO

• Before replacing the certification ECU (smart key ECU assembly), refer to Registration.*

Click here NFO

*: w/ Genuine Remote Engine Start

 After performing repairs, confirm that no DTCs are output by performing "DTC Output Confirmation Operation".

<u>PROCEDURE</u>

1. CHECK CAN COMMUNICATION SYSTEM

(a) Check for CAN communication system DTCs.

HINT:

for PHEV Model: Click here

for HEV Model: Click here

OK:

CAN communication DTCs are not output.

NG > GO TO CAN COMMUNICATION SYSTEM (DIAGNOSTIC TROUBLE CODE CHART)

for PHEV Model: Click here

for HEV Model: Click here



2. CONFIRM MODEL

(a) Choose the model to be inspected.

RESULT	PROCEED TO
w/ Genuine Remote Engine Start	А
for Remote Connect Compatible Type	В

B GO TO TELEMATICS SYSTEM (Remote Engine Starter does not Operate)



3. REGISTER REMOTE ENGINE STARTER ID

(a) Register the remote engine starter ID.

OK:

Registration can be completed.

NG REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)



4. CHECK REMOTE ENGINE STARTER FUNCTION

(a) Check the remote engine starter function.

OK:

Remote engine starter functions operate normally.

OK END (REMOTE ENGINE STARTER ID WAS NOT REGISTERED)

NG > REPLACE REMOTE ENGINE START ECU



