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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: THEFT DETERRENT / KEYLESS ENTRY: SMART KEY SYSTEM (for Entry Function): Entry Lock Function does not Operate Using Close & Lock Function; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Entry Lock Function does not Operate Using Close & Lock Function

DESCRIPTION

If the back door does not lock when using the power back door close and lock function, there may be communication problem between the certification ECU (smart key ECU assembly) and main body ECU (multiplex network body ECU).

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

Click here [INFO](#)

- Check that there are no electrical key transmitter sub-assemblies in the vehicle.
- After repair, confirm that no DTCs are output.
- Make sure that the electrical key transmitter sub-assembly is within the power back door close and lock function operating range when performing a back door close and lock operation.

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HINT:

- If the entry lock function does not operate using close & lock function, the cause of the malfunction may be stored in the certification ECU (smart key ECU assembly).
- If the cause of the malfunction is stored in the certification ECU (smart key ECU assembly), the following table is helpful in checking whether the malfunction was caused by wave interference.

Body Electrical > Smart Key > Utility

TESTER DISPLAY
Vehicle Control History (RoB)

PROCEDURE

1. CHECK VEHICLE CONTROL HISTORY (ROB)

(a) Enter the following menus: Body Electrical / Smart Key / Utility / Vehicle Control History (RoB).

Body Electrical > Smart Key > Utility

TESTER DISPLAY

Vehicle Control History (RoB)

Auto Entry Wireless Operation History (Open/Close)

PARAMETER NAME	CONTENT
Back Door Lock & Close signal	Certification ECU (smart key ECU assembly) confirmed the back door lock and close signal.

Auto Entry Lock (Inactive)

PARAMETER NAME	CONTENT
No PBD Lock or Close Operation (Key Detected Inside Vehicle)	Power back door close and lock function did not operate due to electrical key transmitter sub-assembly in cabin.
No PBD Lock or Close Operation (Power Switch on (IG) or on (ACC))	Power back door close and lock function did not operate due to ignition switch turned to ACC or ON.
No PBD Lock or Close Operation (Operation Conditions Not Met)	Power back door close and lock function did not operate due to operating conditions not met.

RESULT	PROCEED TO
Not output	A
"Back Door Lock & Close signal" is output	B
"No PBD Lock or Close Operation (Key Detected Inside Vehicle)" is output	C
"No PBD Lock or Close Operation (Power Switch on (IG) or on (ACC))" is output	
"No PBD Lock or Close Operation (Operation Conditions Not Met)" is output	

A ► **GO TO STEP 4****C** ► **GO TO OPERATION CHECK (POWER BACK DOOR CLOSE AND LOCK FUNCTION)****B****2. CHECK FOR DTC**

(a) Check for DTCs.

Body Electrical > Smart Key > Trouble Codes

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

B  [GO TO DIAGNOSTIC TROUBLE CODE CHART](#)

A



3.	CHECK FOR DTC
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(a) Check for DTCs.

Body Electrical > Back Door > Trouble Codes

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

B  [GO TO POWER BACK DOOR SYSTEM](#) 

A



4.	CHECK POWER BACK DOOR CLOSE AND LOCK OPERATION
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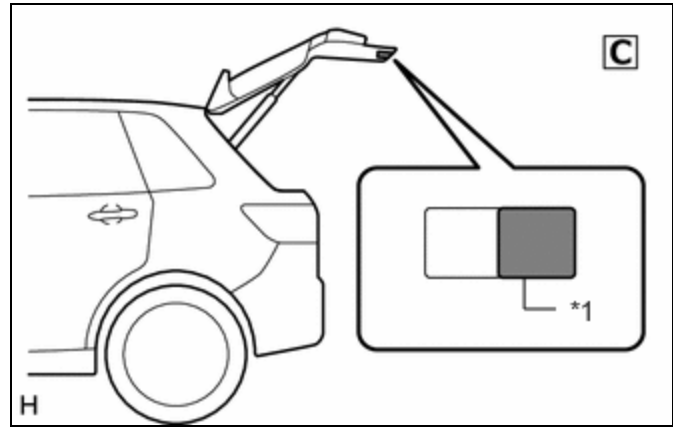
(a) Open the back door with the electrical key transmitter sub-assembly outside of the vehicle.

(b) While carrying the electrical key transmitter sub-assembly, press the door control switch assembly and check that the back door closes automatically and then locks.

HINT:

If the door control switch assembly is pressed by a hand which is also holding the electrical key transmitter sub-assembly, the electrical key

transmitter sub-assembly may not be detected as in the exterior detection area and the power back door close and lock function may not operate.



*1 Door Control Switch Assembly

RESULT	PROCEED TO
Power back door close and lock function operates normally	A
Power back door close and lock function does not operate normally	B

A ► USE SIMULATION METHOD TO CHECK

B
▼

5. CHECK VEHICLE CONTROL HISTORY (ROB)

(a) Enter the following menus: Body Electrical / Smart Key / Utility / Vehicle Control History (RoB).

Body Electrical > Smart Key > Utility



Auto Entry Wireless Operation History (Open/Close)

PARAMETER NAME	CONTENT
Back Door Lock & Close signal	Certification ECU (smart key ECU assembly) confirmed the back door lock and close signal.

Auto Entry Lock (Inactive)

PARAMETER NAME	CONTENT
No PBD Lock or Close Operation (Key Detected Inside Vehicle)	Power back door close and lock function did not operate due to electrical key transmitter sub-assembly in cabin.
No PBD Lock or Close Operation (Power Switch on (IG) or on (ACC))	Power back door close and lock function did not operate due to ignition switch turned to ACC or ON.
No PBD Lock or Close Operation (Operation Conditions Not Met)	Power back door close and lock function did not operate due to operating conditions not met.

RESULT	PROCEED TO
Not output	A
"Back Door Lock & Close signal" is output	
"No PBD Lock or Close Operation (Key Detected Inside Vehicle)" is output	B
"No PBD Lock or Close Operation (Power Switch on (IG) or on (ACC))" is output	
"No PBD Lock or Close Operation (Operation Conditions Not Met)" is output	

A  **GO TO POWER BACK DOOR SYSTEM** 

B  **GO TO OPERATION CHECK (POWER BACK DOOR CLOSE AND LOCK FUNCTION)**

