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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: THEFT DETERRENT / KEYLESS ENTRY: DIGITAL KEY SYSTEM: Driver Side Door Entry Lock/Unlock Operation Range has Decreased; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Driver Side Door Entry Lock/Unlock Operation Range has Decreased

DESCRIPTION

Remove all causes of non-operation other than the vehicle components and vehicle settings. Under these conditions, if the digital key entry operation range is small, there may be a malfunction in the BLE door digital key receiver assembly (for driver door) and the digital key.

Also, if the smart entry function does not operate only when the digital key is at the height of the driver door glass, the vehicle may be determining that the digital key is inside the vehicle.

CAUTION / NOTICE / HINT

NOTICE:

- Before performing troubleshooting of the vehicle, refer to Precautions for Inspection or Registration to check for a cause of the malfunction which is not related to vehicle settings or vehicle components.

Click here [INFO](#)

- Perform troubleshooting with the electrical key transmitter sub-assembly not inside the detection area of the smart key system.
- When using the digital key to perform door lock/unlock with the entry function, refer to Precautions for Digital Key Detection Range Outside.

Click here [INFO](#)

- Make sure that no DTCs are output. If any DTCs are output, proceed to Diagnostic Trouble Code Chart.
- Cancel power saving mode before performing troubleshooting.

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- If the digital key system has been disabled, enable the system before performing troubleshooting.

Click here [INFO](#)

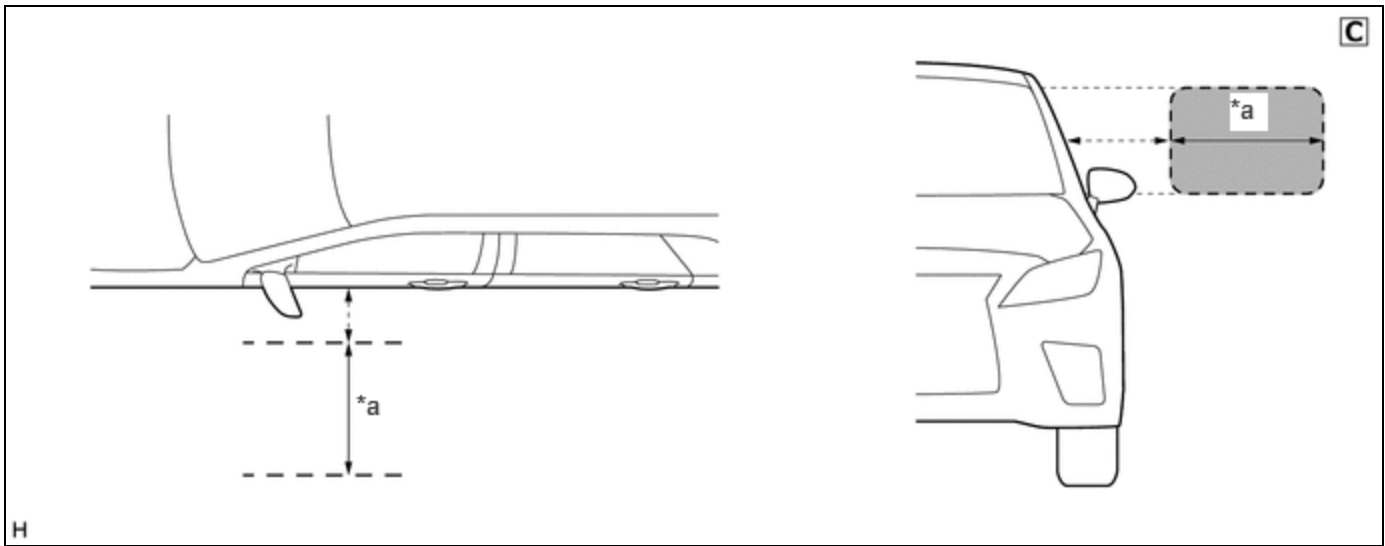
- Before replacing the digital key ECU assembly or BLE door digital key receiver assembly (for driver door), refer to Registration.

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PROCEDURE

1. CHECK ENTRY FUNCTION (DRIVER DOOR)

(a) While holding the digital key in the test range, perform a door lock/unlock using the entry function.*



*a	Test Range (approximately 50 - 100 cm (reference value measured using a typical device))	-	-
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The illustrations shown are examples only.

NOTICE:

- If the entry function does not operate when near the driver door glass, the vehicle may be determining that the digital key is inside the vehicle.

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- Refer to Precautions for Inspection or Registration regarding the digital key and surrounding environment.

[Click here](#) INFO

(b) Hold the key in your hand and hold your hand close to the digital key detection range. Then perform door lock/unlock using the entry function.*

NOTICE:

- For details on the digital key detection range, refer to Precautions for Outside Vehicle Digital Key Detection Range/Diagnostic Range.
- Refer to Precautions for Inspection or Registration regarding the digital key and surrounding environment.

(c) Repeat * while moving your hand closer to and farther from the vehicle, and check the range where the entry function operates.

OK:

The entry function operates within the same range as usual

RESULT	PROCEED TO
Operates within the digital key detection range	A
Digital key detection range is narrow	B
Operates within the digital key detection range, but does not operate within the test range	C

B ▶ GO TO STEP 3

C  **GO TO STEP 11**

A



2. CAUSE ANALYSIS

(a) Using the GTS, check for Vehicle Control History (RoB).

Body Electrical > Smart Key > Utility



(b) Perform cause analysis.

Click here 

(c) Take appropriate action in accordance with the result of the cause analysis.

NEXT  **END**

3. CHECK DIGITAL KEY DIAGNOSTIC MODE (DRIVER DOOR)

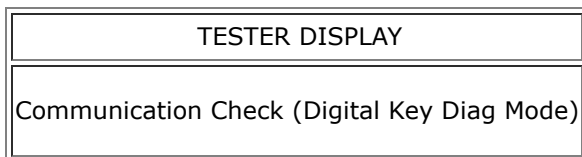
NOTICE:

With only one digital key connected to BLE, perform inspection in digital key diagnostic mode.

(a) Check the BLE door digital key receiver assembly (for driver door) in digital key diagnostic mode.

(1) Using the GTS, select Body Electrical / Smart Key / Utility / Communication Check (Digital Key Diag Mode) / Digital key driver door outside area

Body Electrical > Smart Key > Utility



(2) Hold the digital key in your hand, and hold your hand close to the digital key detection range. Check that the wireless buzzer sounds.*

NOTICE:

- For details on the digital key detection range, refer to Precautions for Outside Vehicle Digital Key Detection Range/Diagnostic Range.
- Refer to Precautions for Inspection or Registration regarding the digital key and surrounding environment.

(3) Repeat * while moving your hand closer to and farther from the vehicle, and check the range where the wireless buzzer sounds.

RESULT	PROCEED TO
The wireless buzzer sounds within a narrower range than the usual operating range	A
The wireless buzzer does not sound	B

B ► **GO TO OTHER PROBLEM (Driver Side Door Entry Lock and Unlock Functions do not Operate)**

A



4.	CHECK ANOTHER DIGITAL KEY
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(a) Check if there is digital key available that is already registered to the vehicle.

RESULT	PROCEED TO
Another registered digital key is not available	A
Another registered digital key is available	B

B ► **GO TO STEP 7**

A



5.	CHECK USING ANOTHER VEHICLE
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(a) Check if another vehicle equipped with digital key system is available

RESULT	PROCEED TO
Vehicle equipped with digital key system not available	A
Vehicle equipped with digital key system available	B

B ► **GO TO STEP 9**

A**6. REGISTER NEW SHARE KEY**

(a) Register a share key.

HINT:

Refer to the digital key application.

NEXT**7. CHECK ENTRY FUNCTION (DRIVER DOOR)**

(a) Hold a different registered digital key in your hand hold your hand close to the digital key detection range. Then perform door lock/unlock using the entry function.*

NOTICE:

- For details on the digital key detection range, refer to Precautions for Outside Vehicle Digital Key Detection Range/Diagnostic Range.
- Refer to Precautions for Inspection or Registration regarding the digital key and surrounding environment.

(b) Repeat * while moving your hand closer to and farther from the vehicle, and check the range where the entry function operates.

OK:

The entry function operates within the same range as usual

OK **END (PERFORM TROUBLESHOOTING ON ORIGINAL DIGITAL KEY)**

NG**8. CHECK THE INSTALLATION CONDITION OF BLE DOOR DIGITAL KEY RECEIVER ASSEMBLY (FOR DRIVER DOOR)**

(a) Install BLE door digital key receiver assembly (for driver door) properly.

Click here

OK **REPLACE BLE DOOR DIGITAL KEY RECEIVER ASSEMBLY (FOR DRIVER DOOR)**

NG  **END (INSTALL THE BLE DOOR DIGITAL KEY RECEIVER ASSEMBLY (FOR DRIVER DOOR) TO THE STANDARD LOCATION)**

9. REGISTER NEW SHARE KEY

(a) Register a share key that did not operate correctly within the default operating range to another vehicle equipped with a digital key system.

HINT:

Refer to the digital key application.

NEXT



10. CHECK ENTRY FUNCTION (DRIVER DOOR)

(a) Hold a registered digital key in your hand and hold your hand close to the digital key detection range. Then perform door lock/unlock using the entry function.*

NOTICE:

- For details on the digital key detection range, refer to Precautions for Outside Vehicle Digital Key Detection Range/Diagnostic Range.
- Refer to Precautions for Inspection or Registration regarding the digital key and surrounding environment.

(b) Repeat * while moving your hand closer to and farther from the vehicle, and check the range where the entry function operates.

OK:

The entry function operates within the same range as usual

OK  **GO TO STEP 8**

NG  **END (PERFORM TROUBLESHOOTING ON ORIGINAL DIGITAL KEY)**

11. DIGITAL KEY DIAGNOSTIC MODE (FRONT FLOOR)

NOTICE:

With only one digital key connected to BLE, perform inspection in digital key diagnostic mode.

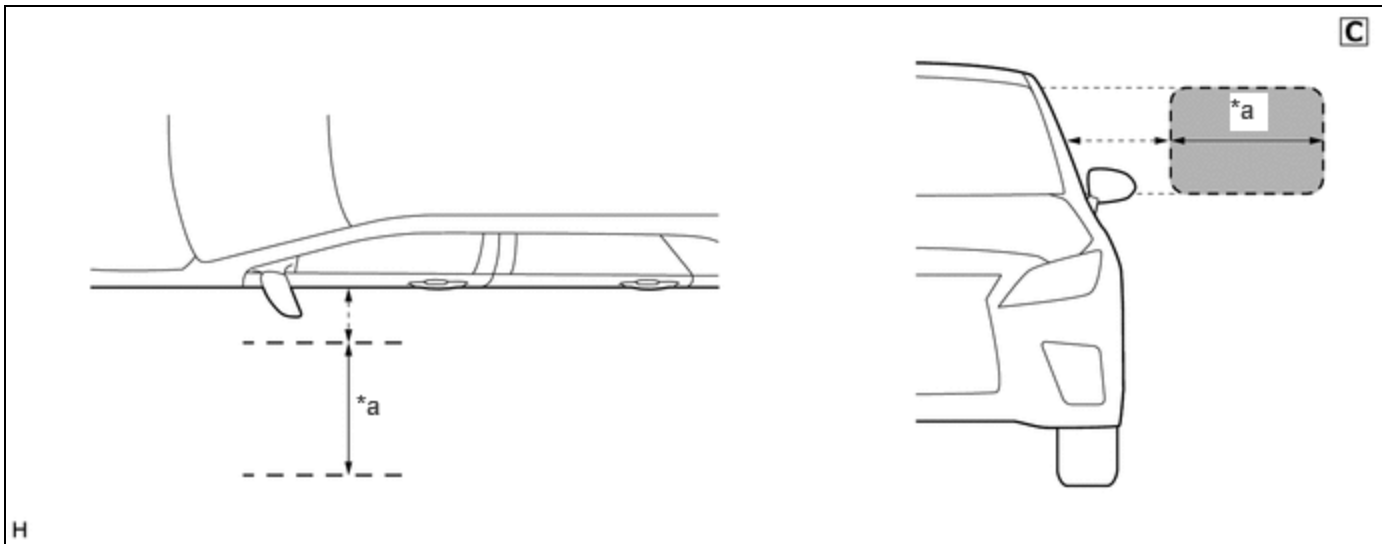
(a) Check the BLE indoor digital key receiver assembly in digital key diagnostic mode.

(1) Using the GTS, select Body Electrical / Smart Key / Utility / Communication Check (Digital Key Diagnostic Mode) / Digital key engine/power start area

Body Electrical > Smart Key > Utility

TESTER DISPLAY
Communication Check (Digital Key Diag Mode)

(2) While holding the digital key in the test range, check that the wireless buzzer sounds.



*a	Test Range (approximately 50 - 100 cm (reference value measured using a typical device))	-	-
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The illustrations shown are examples only.

RESULT	PROCEED TO
The wireless buzzer does not sound	A
The wireless buzzer sounds	B

A **END (NO MALFUNCTION)**

HINT:

The range of the digital key detection area differs greatly depending on the type of digital key device, the way the device is held and the surrounding environment, etc. Explain to the customer that entry function did not operate while they were outside the range of the digital key detection area.

B

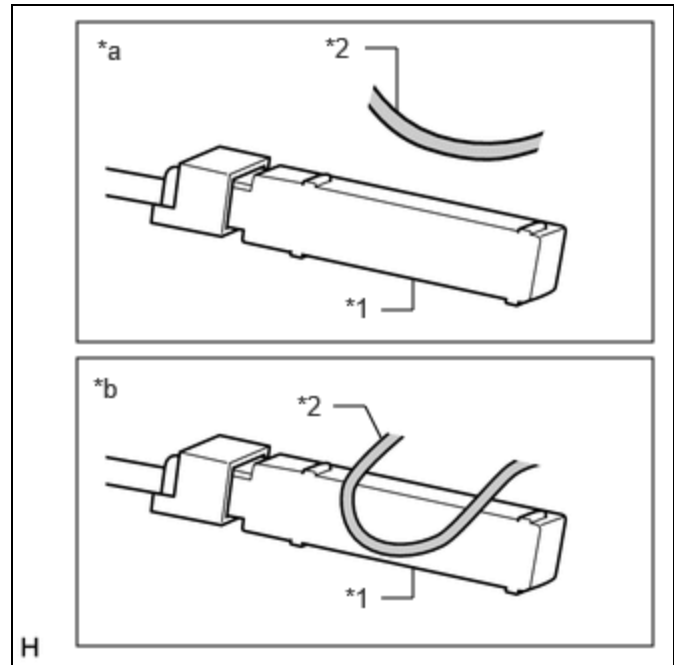
12. CHECK THE INSTALLATION CONDITION OF BLE INDOOR DIGITAL KEY RECEIVER ASSEMBLY

(a) Check that the wire harness is not contacting or hanging near the BLE indoor digital key receiver assembly.

Click here [INFO](#)

NOTICE:

If the wire harness is contacting or hanging near the BLE indoor digital key receiver assembly, the vehicle interior digital key detection range will change.



*1	BLE Indoor Digital Key Receiver Assembly
*2	Wire Harness
*a	Normal
*b	Abnormal

OK ▶ **REPLACE BLE INDOOR DIGITAL KEY RECEIVER ASSEMBLY** [INFO](#)

NG ▶ **END (ADJUST WIRE HARNESS POSITION)**

