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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: THEFT DETERRENT / KEYLESS ENTRY: DIGITAL KEY SYSTEM: B27C487; Front Passenger Side BLE Antenna Missing Message; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	B27C487	Front Passenger Side BLE Antenna Missing Message
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DESCRIPTION

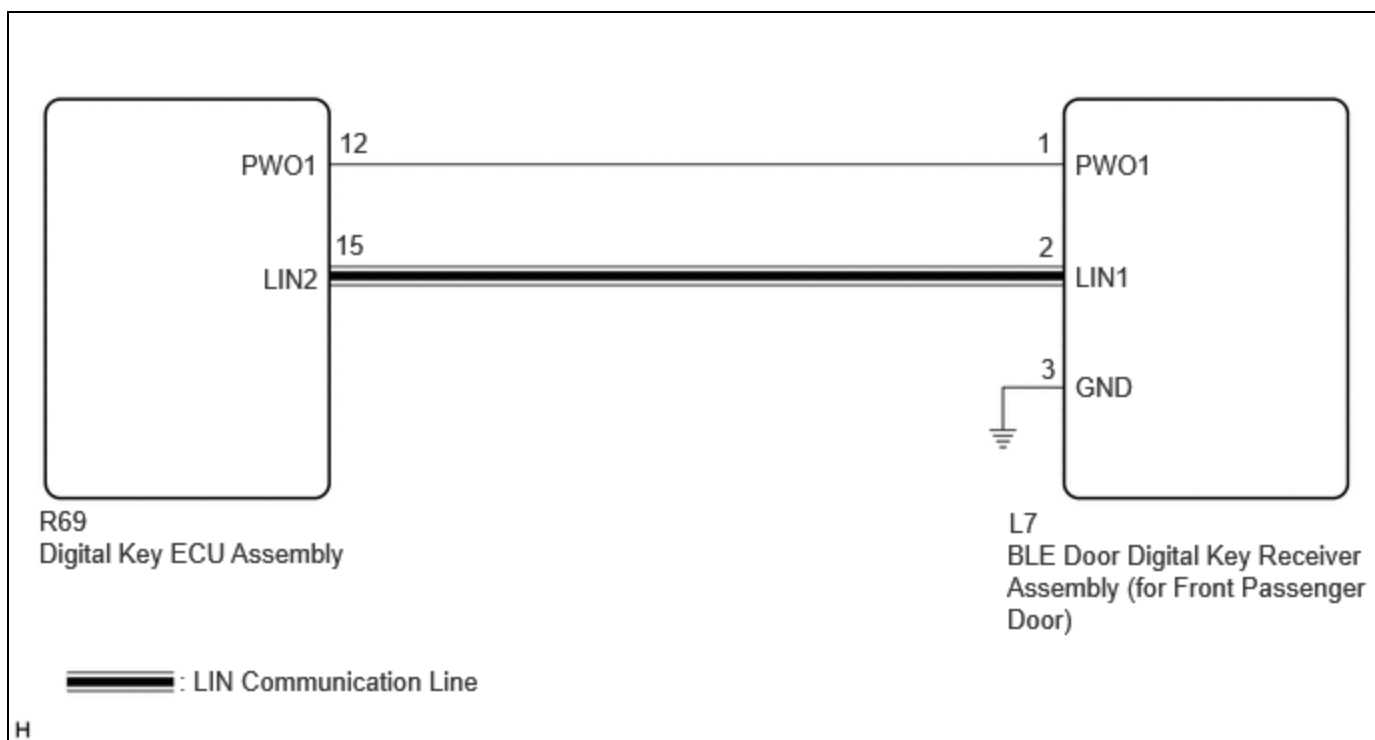
This DTC is stored when a LIN communication malfunction between the digital key ECU assembly and BLE door digital key receiver assembly (for front passenger door) is detected.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY	NOTE
B27C487	Front Passenger Side BLE Antenna Missing Message	LIN communication malfunction between the digital key ECU assembly and BLE door digital key receiver assembly (for front passenger door)	<ul style="list-style-type: none"> Digital key ECU assembly BLE door digital key receiver assembly (for front passenger door) Wire harness or connector 	Smart Key	A	DTC Output Confirmation Operation: Any time

Vehicle Condition and Fail-safe Operation when Malfunction Detected

VEHICLE CONDITION WHEN MALFUNCTION DETECTED	FAIL-SAFE OPERATION WHEN MALFUNCTION DETECTED
Digital key is inside the front passenger seat digital key detection range Front passenger door entry function does not operate	-

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

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

Click here [INFO](#)

- Cancel power saving mode before performing troubleshooting.

Click here [INFO](#)

PROCEDURE

1. CHECK CONNECTOR CONNECTION

- (a) Check that the connectors are properly connected to the digital key ECU assembly and BLE door digital key receiver assembly (for front passenger door).

OK:

Connectors are properly connected.

NG **CONNECT CONNECTORS PROPERLY**

OK



2. CHECK HARNESS AND CONNECTOR (DIGITAL KEY ECU ASSEMBLY - BLE DOOR DIGITAL KEY RECEIVER ASSEMBLY (FOR FRONT PASSENGER DOOR) - BODY GROUND)

Pre-procedure1

- (a) Disconnect the R69 digital key ECU assembly connector.
- (b) Disconnect the L7 BLE door digital key receiver assembly (for front passenger door) connector.

Procedure1

- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R69,L7\).](#)

[Click Connector\(R69\).](#)

[Click Connector\(L7\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
R69-12 (PWO1) - L7-1 (PWO1)	Always	Below 1 Ω	Ω
R69-12 (PWO1) or L7-1 (PWO1) - Other terminals and body ground	Always	10 k Ω or higher	k Ω
R69-15 (LIN2) - L7-2 (LIN1)	Always	Below 1 Ω	Ω
R69-15 (LIN2) or L7-2 (LIN1) - Other terminals and body ground	Always	10 k Ω or higher	k Ω
L7-3 (GND) - Body ground	Always	Below 1 Ω	Ω

Post-procedure1

- (d) Connect the R69 digital key ECU assembly connector.

NG **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK



3. REPLACE BLE DOOR DIGITAL KEY RECEIVER ASSEMBLY (FOR FRONT PASSENGER DOOR)

- (a) Replace the BLE door digital key receiver assembly (for front passenger door) with a new one or used one.

HINT:

[Click here](#)

NEXT



4.	CLEAR DTC
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(a) Clear the DTCs.

Body Electrical > Smart Key > Clear DTCs

NEXT



5.	CHECK DTC
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(a) Check for DTCs.

Body Electrical > Smart Key > Trouble Codes

RESULT	PROCEED TO
B27C487 is not output	A
B27C487 is output	B

A ▶ END (BLE DOOR DIGITAL KEY RECEIVER ASSEMBLY (FOR FRONT PASSENGER DOOR) WAS DEFECTIVE)

B ▶ REPLACE DIGITAL KEY ECU ASSEMBLY INFO

