Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM10000000290C4
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: THEFT DETERRENT / KEYLESS ENTRY: DIGITAL KEY SYSTEM: B27C687; Front Floor BLE Antenna Missing Message; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	**B27C687**	**Front Floor BLE Antenna Missing Message**

DESCRIPTION

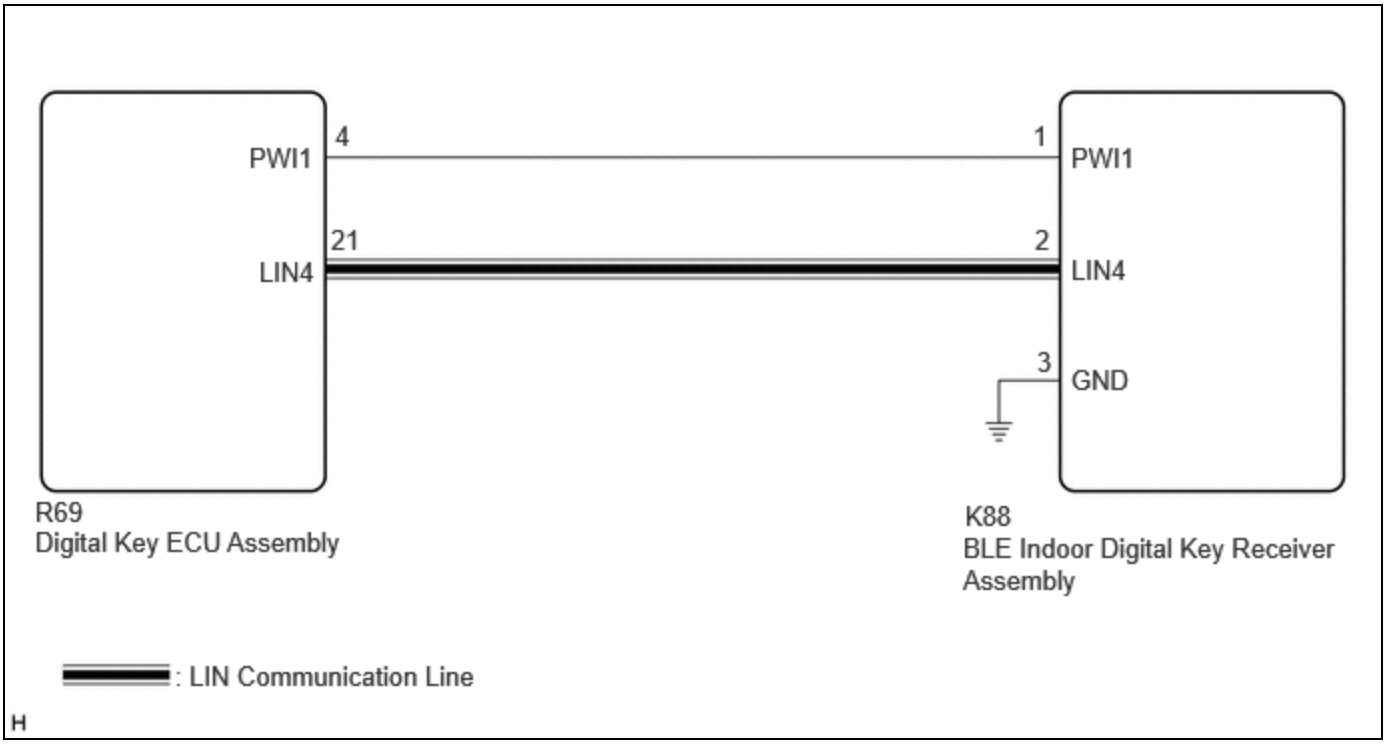
This DTC is stored when a LIN communication malfunction between the digital key ECU assembly and BLE indoor digital key receiver assembly is detected.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY	NOTE
B27C687	Front Floor BLE Antenna Missing Message	LIN communication malfunction between the digital key ECU assembly and BLE indoor digital key receiver assembly	• Digital key ECU assembly • BLE indoor digital key receiver assembly • 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
The digital key is on the center console near the vehicle interior BLE digital key receiver. Power source mode does not change	-

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- Before replacing the digital key ECU assembly or BLE indoor digital key receiver assembly, 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 indoor digital key receiver assembly.

OK:

Connectors are properly connected.

NG ▶ **CONNECT CONNECTORS PROPERLY**

OK ▼

2.	**CHECK HARNESS AND CONNECTOR (DIGITAL KEY ECU ASSEMBLY - BLE INDOOR DIGITAL KEY RECEIVER ASSEMBLY - BODY GROUND)**

Pre-procedure1

(a) Disconnect the R69 digital key ECU assembly connector.

(b) Disconnect the K88 BLE indoor digital key receiver assembly connector.

Procedure1

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

Standard Resistance:

EWD INFO

Click Location & Routing(R69,K88)
Click Connector(R69)
Click Connector(K88)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
R69-4 (PWI1) - K88-1 (PWI1)	Always	Below 1 Ω	Ω
R69-4 (PWI1) or K88-1 (PWI1) - Other terminals and body ground	Always	10 kΩ or higher	kΩ
R69-21 (LIN4) - K88-2 (LIN4)	Always	Below 1 Ω	Ω
R69-21 (LIN4) or K88-2 (LIN4) - Other terminals and body ground	Always	10 kΩ or higher	kΩ
K88-3 (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 INDOOR DIGITAL KEY RECEIVER ASSEMBLY**

(a) Replace the BLE indoor digital key receiver assembly with a new one or used one.

HINT:

Click here INFO

NEXT
▼

4.	**CLEAR DTC**

(a) Clear the DTCs.

Body Electrical > Smart Key > Clear DTCs

NEXT

5.	**CHECK DTC**

(a) Check for DTCs.

Body Electrical > Smart Key > Trouble Codes

RESULT	PROCEED TO
B27C687 is not output	A
B27C687 is output	B

A **END (BLE INDOOR DIGITAL KEY RECEIVER ASSEMBLY WAS DEFECTIVE)**

B **REPLACE DIGITAL KEY ECU ASSEMBLY** INFO