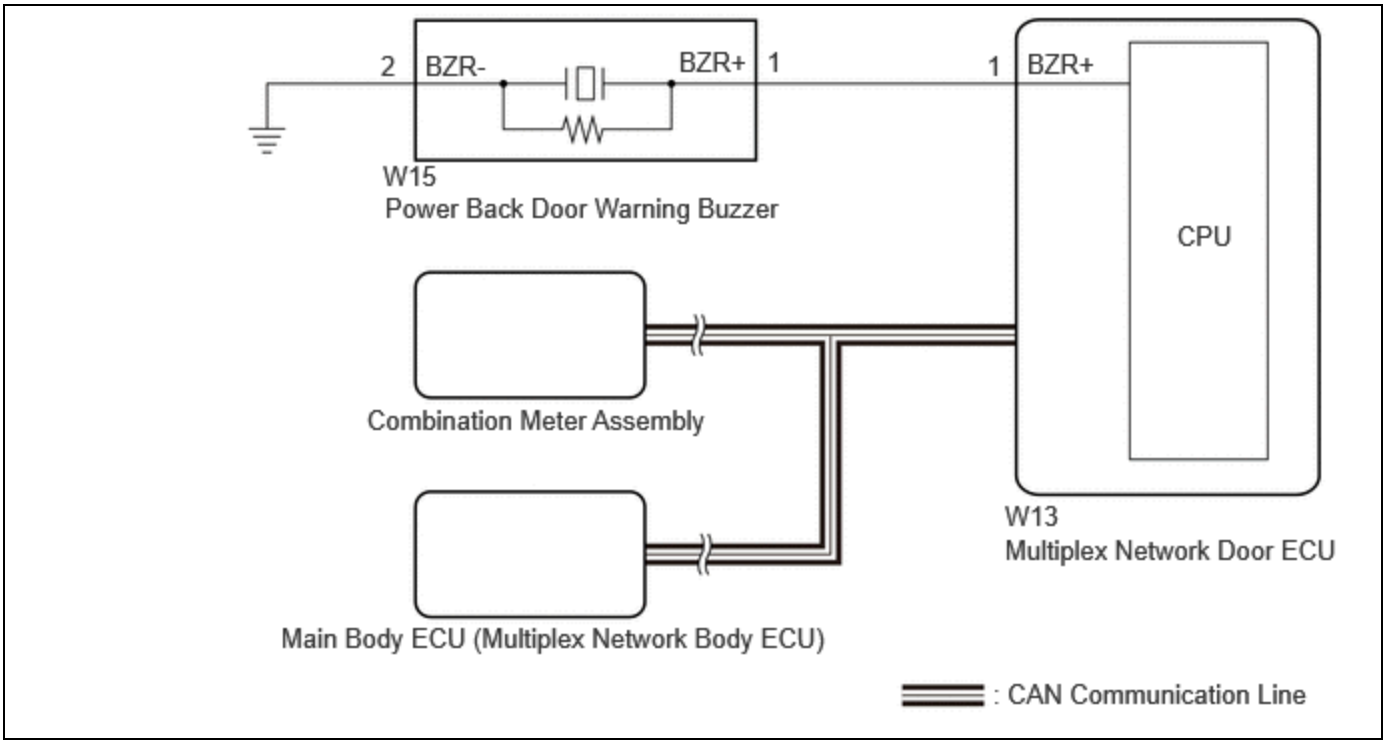
Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM1000000029247
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: DOOR / HATCH: POWER BACK DOOR SYSTEM: Power Back Door Warning System does not Operate; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Power Back Door Warning System does not Operate

DESCRIPTION

Depending on the operating conditions, the multiplex network door ECU sounds the buzzer and outputs a hazard light flash signal to the combination meter assembly.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- If the multiplex network door ECU has been replaced, or if any of the connectors has been disconnected, initialize the power back door system.

  Click here INFO
- First perform the communication function inspections in How to Proceed with Troubleshooting to confirm that there are no CAN communication malfunctions before troubleshooting this problem.
- If the main body ECU (multiplex network body ECU) is replaced, refer to registration.

  Click here INFO
- The auxiliary battery supplies power to the main body ECU (multiplex network body ECU) via the integration control supply. If a main body ECU (multiplex network body ECU) power source malfunction occurs, the integration control supply may be malfunctioning.

PROCEDURE

1.	**CHECK OPERATION**

(a) Operate the power back door and check that the warning buzzer and hazard warning light operate.

RESULT	PROCEED TO
Hazard warning light does not come on	A
Power back door warning buzzer does not operate	B

B ▶ **GO TO STEP 6**

A ▼

2.	**CHECK WIRELESS DOOR LOCK CONTROL SYSTEM (HAZARD ANSWER-BACK FUNCTION)**

(a) Check wireless door lock operation.

Click here INFO

OK:

Hazard answer-back function operates normally.

NG ▶ **GO TO WIRELESS DOOR LOCK CONTROL SYSTEM**

OK ▼

3.	**REPLACE MULTIPLEX NETWORK DOOR ECU**

(a) Temporarily replace the multiplex network door ECU with a new or normally functioning one.

Click here INFO

NEXT ▼

4.	**INITIALIZE MULTIPLEX NETWORK DOOR ECU**

(a) Perform the initialization for the multiplex network door ECU.

Click here INFO

NEXT

5.	**CHECK POWER BACK DOOR SYSTEM**

(a) Check that the power back door hazard warning lights operate normally.

Click here INFO

OK:
The power back door hazard warning lights operate normally.

OK ▶ **END (MULTIPLEX NETWORK DOOR ECU WAS DEFECTIVE)**

NG ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)** INFO

6.	**CHECK VEHICLE CONDITION**

(a) Using the GTS, check the customization status.

PSD & PBD operation

TESTER DISPLAY	DESCRIPTION	DEFAULT	SETTING	ECU
PBD Buzzer Function	Function that changes the power back door warning buzzer setting.	OFF	$00:OFF,$01:ON	Multiplex network door ECU

RESULT	PROCEED TO
Customization item is "ON"	A
Customization item is "OFF"	B

B ▶ **PERFORM CUSTOMIZE SETTING**

A

7.	**PERFORM ACTIVE TEST USING GTS**

(a) Perform the Active Test according to the display on the GTS.

Body Electrical > Back Door > Active Test

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
PBD Buzzer (Small Volume)	Power back door warning buzzer sound (small volume)	Start	-
PBD Buzzer (Middle Volume)	Power back door warning buzzer sound (Middle volume)	Start	-
PBD Buzzer (Large Volume)	Power back door warning buzzer sound (Large volume)	Start	-

Body Electrical > Back Door > Active Test

TESTER DISPLAY
PBD Buzzer (Small Volume)

Body Electrical > Back Door > Active Test

TESTER DISPLAY
PBD Buzzer (Middle Volume)

Body Electrical > Back Door > Active Test

TESTER DISPLAY
PBD Buzzer (Large Volume)

OK:

Power back door warning buzzer sounds.

OK ▶ **REPLACE MULTIPLEX NETWORK DOOR ECU**

NG

8.	CHECK MULTIPLEX NETWORK DOOR ECU

(a) Disconnect the W15 Power back door warning buzzer connector.

(b) Perform the Active Test according to the display on the GTS.

Body Electrical > Back Door > Active Test

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
PBD Buzzer (Middle Volume)	Power back door warning buzzer sound (Middle volume)	Start	-

Body Electrical > Back Door > Active Test

TESTER DISPLAY
PBD Buzzer (Middle Volume)

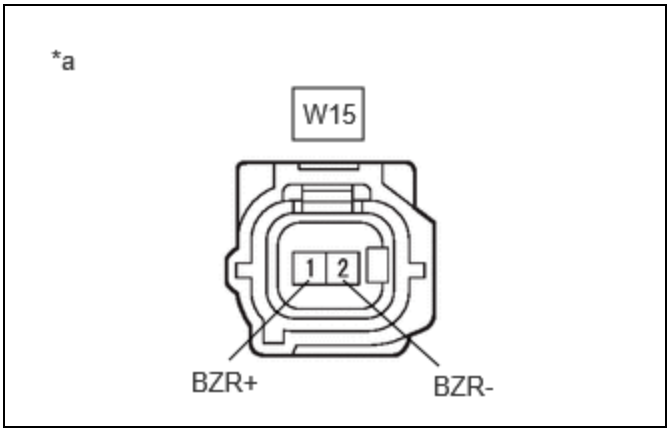
(c) Measure the voltage according to the value(s) in the table below.

Standard Voltage:

EWD INFO

Click Location & Routing(W15)
Click Connector(W15)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W15-1 (BZR+) - W15-2 (BZR-)	Active Test "PBD Buzzer (Middle Volume)" is not performed	Below 1 V
	Active Test "PBD Buzzer (Middle Volume)" is being performed	Pulse generation (frequency: 2 kHz, high voltage: 11 to 14 V, low voltage: below 1 V)



*a	Front view of wire harness connector (to Power Back Door Warning Buzzer)

OK ▶ **REPLACE POWER BACK DOOR WARNING BUZZER**

NG

9.	**CHECK HARNESS AND CONNECTOR (POWER BACK DOOR WARNING BUZZER - MULTIPLEX NETWORK DOOR ECU AND BODY GROUND)**

(a) Disconnect the W15 power back door warning buzzer connector.

(b) Disconnect the W13 multiplex network door ECU connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(W15,W13)
Click Connector(W15)
Click Connector(W13)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W15-1 (BZR+) - W13-1 (BZR+)	Always	Below 1 Ω
W15-2 (BZR-) - Body ground	Always	Below 1 Ω
W15-1 (BZR+) or W13-1 (BZR+) - Body ground	Always	10 kΩ or higher

OK ▶ **REPLACE MULTIPLEX NETWORK DOOR ECU**

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**