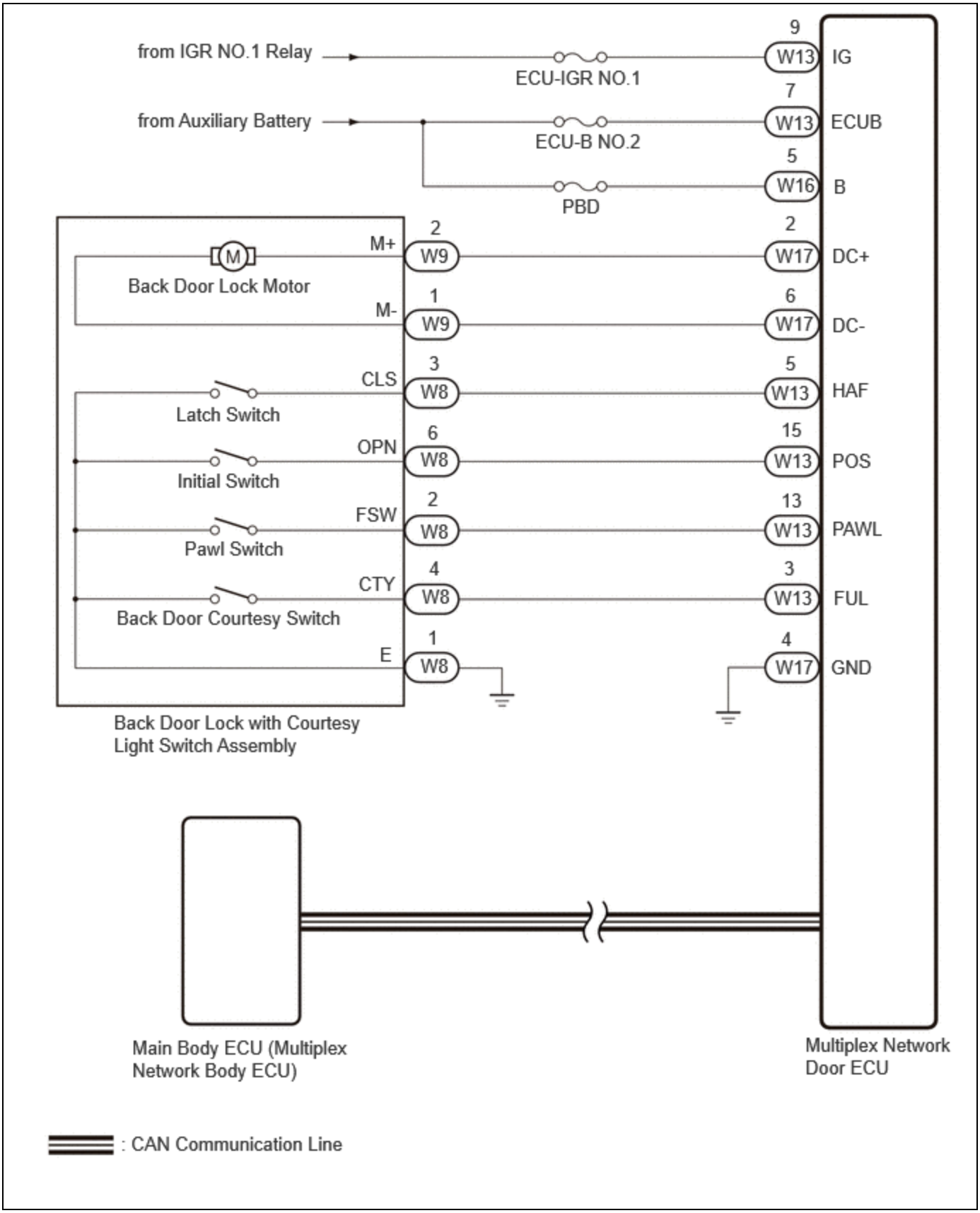
Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM1000000029243
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: DOOR / HATCH: POWER BACK DOOR SYSTEM: Back Door Closer does not Operate; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Back Door Closer does not Operate

DESCRIPTION

The back door lock with courtesy light switch assembly is controlled by the multiplex network door ECU. The multiplex network door ECU is activated according to the switch signals in the back door lock with courtesy light switch assembly.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- 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.

Click here INFO

- Check the smart key system with push-button start (for Entry Function) first before troubleshooting the power back door system.

Click here

Click here INFO

- Inspect fuses for circuits related to this system before performing the following inspection procedure.
- 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

PROCEDURE

1.	**CHECK FOR DTC**

(a) Check for DTCs.

Body Electrical > Back Door > Trouble Codes

RESULT	PROCEED TO
DTC is not output	A
DTC B225001 is output	B
DTC B225101 is output	C

B ▶ **GO TO DIAGNOSTIC TROUBLE CODE CHART**

C ▶ **GO TO DIAGNOSTIC TROUBLE CODE CHART**

A ▼

2.	**CHECK BACK DOOR LOCK FUNCTION**

(a) Check if the back door can be fully closed by hand.

RESULT	PROCEED TO
The back door can be closed normally	A
The back door cannot be closed normally	B

B ▶ **IMPROPER FIT OF BACK DOOR, OR A FOREIGN OBJECT IS STUCK IN BACK DOOR**

A ▼

3.	**CHECK HARNESS AND CONNECTOR (MULTIPLEX NETWORK DOOR ECU - AUXILIARY BATTERY AND BODY GROUND)**

(a) Disconnect the W13, W17 and W16 multiplex network door ECU connectors.

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

Standard Resistance:

EWD INFO

Click Location & Routing(W17)
Click Connector(W17)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W17-4 (GND) - Body ground	Always	Below 1 Ω

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

Standard Voltage:

EWD INFO

Click Location & Routing(W13,W16)
Click Connector(W13)
Click Connector(W16)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W13-7 (ECUB) - Body ground	Ignition switch off	11 to 14 V
W16-5 (B) - Body ground	Ignition switch off	11 to 14 V
W13-9 (IG) - Body ground	Ignition switch ON	11 to 14 V
	Ignition switch off	Below 1 V

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

OK ▼

4.	**INSPECT BACK DOOR LOCK WITH COURTESY LIGHT SWITCH ASSEMBLY**

Click here INFO

NG ▶ **REPLACE BACK DOOR LOCK WITH COURTESY LIGHT SWITCH ASSEMBLY**

OK ▼

5.	**CHECK HARNESS AND CONNECTOR (BACK DOOR LOCK WITH COURTESY LIGHT SWITCH ASSEMBLY - MULTIPLEX NETWORK DOOR ECU AND BODY GROUND)**

(a) Disconnect the W9 and W8 back door lock with courtesy light switch assembly connectors.

(b) Disconnect the W17 and W13 multiplex network door ECU connectors.

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

Standard Resistance:

EWD INFO

Click Location & Routing(W9,W17,W8,W13)
Click Connector(W9)
Click Connector(W17)
Click Connector(W8)
Click Connector(W13)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W9-2 (M+) - W17-2 (DC+)	Always	Below 1 Ω
W9-1 (M-) - W17-6 (DC-)	Always	Below 1 Ω
W8-4 (CTY) - W13-3 (FUL)	Always	Below 1 Ω
W8-2 (FSW) - W13-13 (PAWL)	Always	Below 1 Ω
W8-3 (CLS) - W13-5 (HAF)	Always	Below 1 Ω
W8-6 (OPN) - W13-15 (POS)	Always	Below 1 Ω
W8-1 (E) - Body ground	Always	Below 1 Ω
W9-2 (M+) or W17-2 (DC+) - Body ground	Always	10 kΩ or higher
W9-1 (M-) or W17-6 (DC-) - Body ground	Always	10 kΩ or higher
W8-2 (FSW) or W13-13 (PAWL) - Body ground	Always	10 kΩ or higher
W8-4 (CTY) or W13-3 (FUL) - Body ground	Always	10 kΩ or higher
W8-3 (CLS) or W13-5 (HAF) - Body ground	Always	10 kΩ or higher
W8-6 (OPN) or W13-15 (POS) - Body ground	Always	10 kΩ or higher

OK ▶ **REPLACE MULTIPLEX NETWORK DOOR ECU**

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