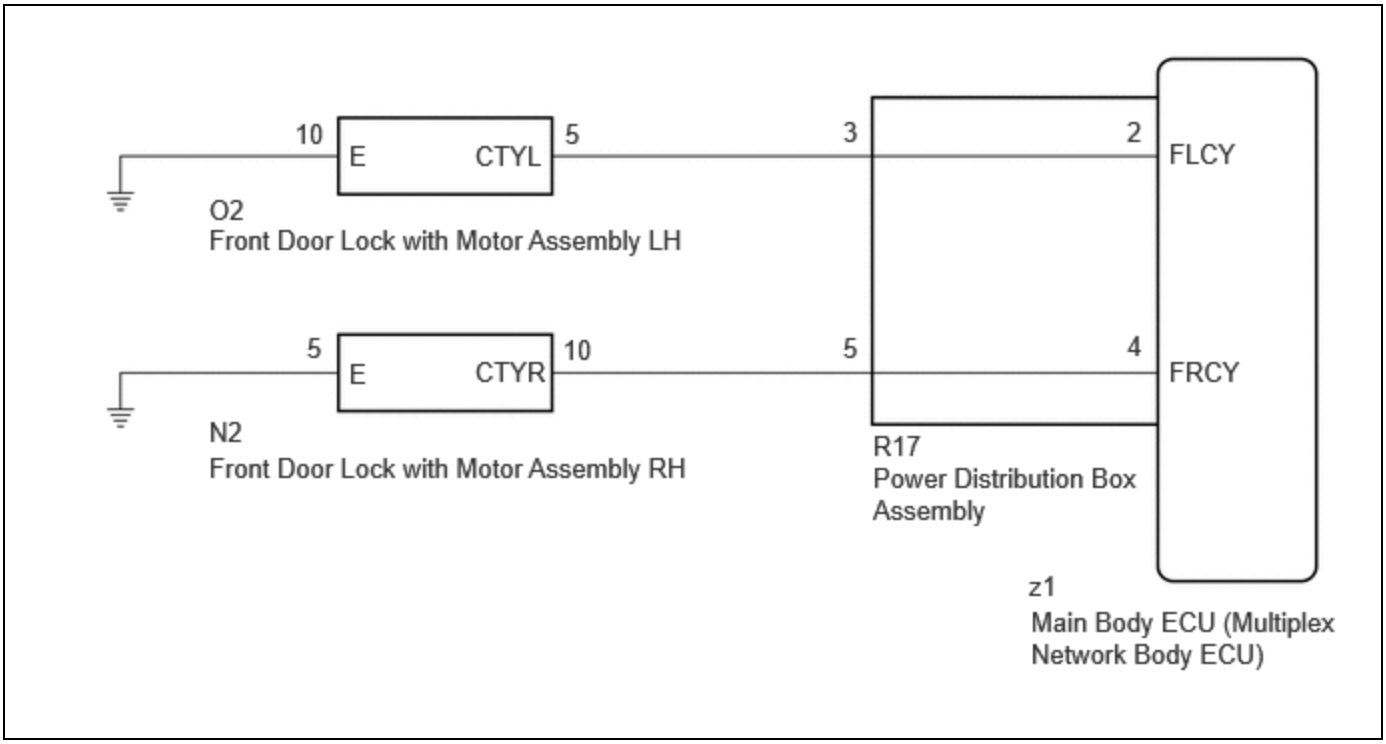
Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM1000000029INA
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: LIGHTING (INT): LIGHTING SYSTEM: Front Door Courtesy Switch Circuit; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Front Door Courtesy Switch Circuit

DESCRIPTION

The main body ECU (multiplex network body ECU) detects the condition of the front door courtesy light switch assembly.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

Before replacing the main body ECU (multiplex network body ECU), refer to Registration.

Click here INFO

PROCEDURE

1.	**READ VALUE USING GTS**

(a) Read the Data List according to the display on the GTS.

Body Electrical > Main Body > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
FR Door Courtesy Switch Status	Front door courtesy light switch assembly (for RH) signal	Close or Open	Close: Front door RH closed Open: Front door RH open	-
FL Door Courtesy Switch Status	Front door courtesy light switch assembly (for LH) signal	Close or Open	Close: Front door LH closed Open: Front door LH open	-

Body Electrical > Main Body > Data List

TESTER DISPLAY
FR Door Courtesy Switch Status
FL Door Courtesy Switch Status

OK:
Normal conditions listed above are displayed.

RESULT	PROCEED TO
OK	A
NG ("FL Door Courtesy Switch Status" is not normal)	B
NG ("FR Door Courtesy Switch Status" is not normal)	C

A ▶ **PROCEED TO NEXT SUSPECTED AREA SHOWN IN PROBLEM SYMPTOMS TABLE** INFO

C ▶ **GO TO STEP 5**

B ▼

2.	**INSPECT FRONT DOOR LOCK WITH MOTOR ASSEMBLY LH**

Click here INFO

NG ▶ **REPLACE FRONT DOOR LOCK WITH MOTOR ASSEMBLY LH** INFO

OK ▼

3.	**CHECK HARNESS AND CONNECTOR (FRONT DOOR LOCK WITH MOTOR ASSEMBLY LH - POWER DISTRIBUTION BOX ASSEMBLY)**

(a) Disconnect the R17 power distribution box assembly connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(O2,R17)
Click Connector(O2)
Click Connector(R17)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
O2-5 (CTYL) - R17-3	Always	Below 1 Ω
O2-5 (CTYL) or R17-3 - Body ground	Always	10 kΩ or higher

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

OK ▼

4.	**INSPECT POWER DISTRIBUTION BOX ASSEMBLY**

(a) Remove the main body ECU (multiplex network body ECU) from the power distribution box assembly.

Click here INFO

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

Standard Resistance:

EWD INFO

Click Location & Routing(R17,z1)
Click Connector(R17)
Click Connector(z1)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R17-3 - z1-2 (FLCY)	Always	Below 1 Ω

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

NG ▶ **REPLACE POWER DISTRIBUTION BOX ASSEMBLY** INFO

5.	**INSPECT FRONT DOOR LOCK WITH MOTOR ASSEMBLY RH**

Click here INFO

NG ▶ **REPLACE FRONT DOOR LOCK WITH MOTOR ASSEMBLY RH** INFO

OK ▼

6.	**CHECK HARNESS AND CONNECTOR (FRONT DOOR LOCK WITH MOTOR ASSEMBLY RH - POWER DISTRIBUTION BOX ASSEMBLY)**

(a) Disconnect the R17 power distribution box assembly connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(N2,R17)
Click Connector(N2)
Click Connector(R17)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
N2-10 (CTYR) - R17-5	Always	Below 1 Ω
N2-10 (CTYR) or R17-5 - Body ground	Always	10 kΩ or higher

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

OK ▼

7.	INSPECT POWER DISTRIBUTION BOX ASSEMBLY

(a) Remove the main body ECU (multiplex network body ECU) from the power distribution box assembly.

Click here INFO

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

Standard Resistance:

EWD INFO

Click Location & Routing(R17,z1)
Click Connector(R17)
Click Connector(z1)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R17-5 - z1-4 (FRCY)	Always	Below 1 Ω

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

NG ▶ **REPLACE POWER DISTRIBUTION BOX ASSEMBLY** INFO