Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM10000000289LY
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: ADVANCED DRIVER ASSISTANCE SYSTEM: FRONT CAMERA SYSTEM: C00CA15; Camera "A" Heater Control Circuit Short to Battery or Open; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

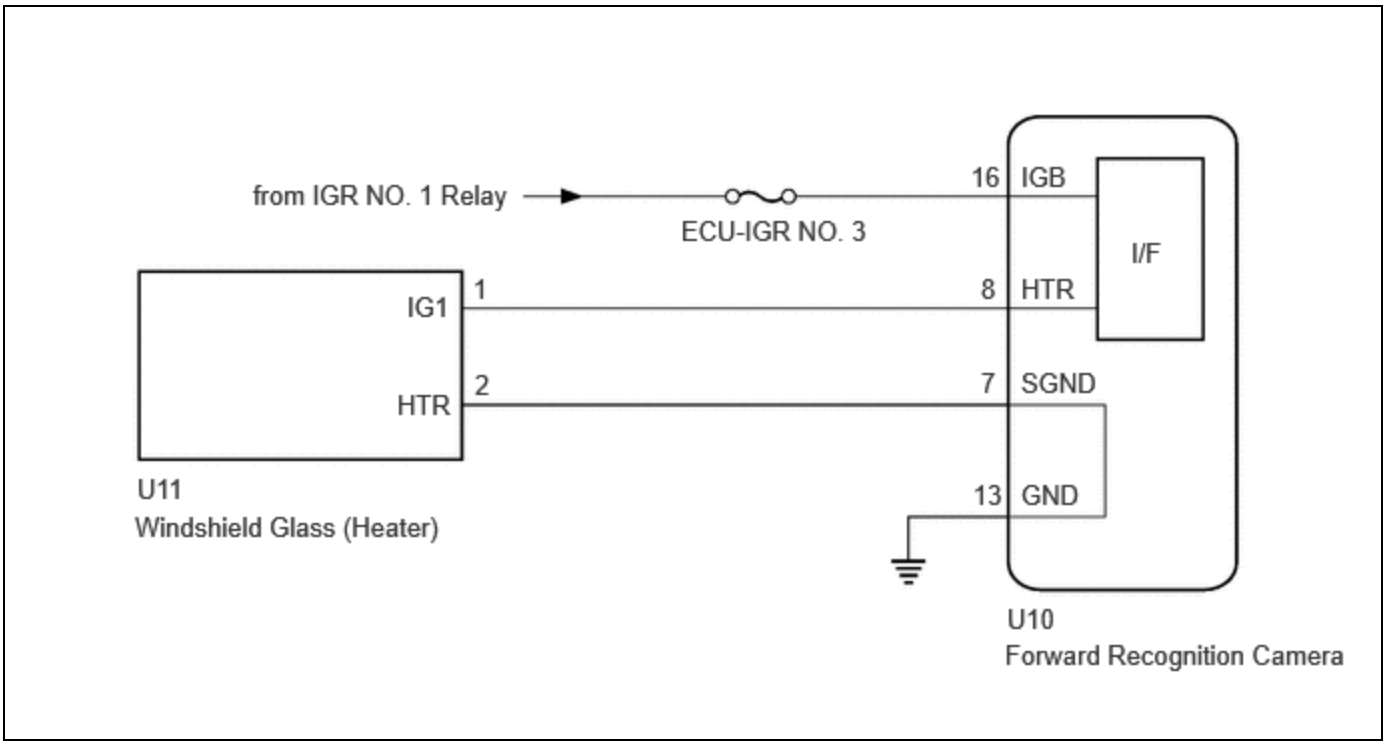
DTC	**C00CA15**	**Camera "A" Heater Control Circuit Short to Battery or Open**

DESCRIPTION

Forward recognition camera controls the current to the windshield glass (heater). Forward recognition camera stores DTC C00CA15 when it detects a malfunction in the drive circuit of the windshield glass (heater).

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
C00CA15	Camera "A" Heater Control Circuit Short to Battery or Open	When the forward recognition camera detects a short to +B in the hot wire circuit or open circuit in the hot wire circuit when the heater is turned on or after 10 seconds or more have elapsed from turning the ignition switch to ON	• Windshield glass • Forward recognition camera • Harness or connector	Front Recognition Camera	A

WIRING DIAGRAM



CAUTION / NOTICE / HINT

CAUTION:

To prevent burns due to the heat of the windshield glass (heater), do not touch the area directly.

NOTICE:

- Inspect the fuses for circuits related to this system before performing the following procedure.
- When replacing the forward recognition camera, always replace it with a new one. If a forward recognition camera which was installed to another vehicle is used, the information stored in the forward recognition camera will not match the information from the vehicle and a DTC may be stored.
- When the forward recognition camera has been replaced with a new one, make sure to clear all stored vehicle control history of each system and the forward recognition camera beam axis alignment data.

HINT:

Forward recognition camera beam axis alignment can be performed by using "One Time Recognition", "Driving Adjustment" or "Camera Axis Adjustment Value Write".

One Time Recognition: Click here INFO

Driving Adjustment: Click here INFO

Camera Axis Adjustment Value Write: Click here INFO

- If the forward recognition camera has been replaced with a new one, make sure to perform Software Version Confirmation.

Click here INFO

PROCEDURE

1.	**CLEAR DTC**

(a) Clear the DTCs.

Chassis > Front Recognition Camera > Clear DTCs

NEXT

2.	**CHECK FOR DTCs**

Pre-procedure1

(a) Turn the ignition switch to ON and wait for 10 seconds or more.

Procedure1

(b) Check for DTCs.

Chassis > Front Recognition Camera > Trouble Codes

RESULT	PROCEED TO
C00CA15 is not output	A

RESULT	PROCEED TO
C00CA15 is output	B

Post-procedure1

(c) None

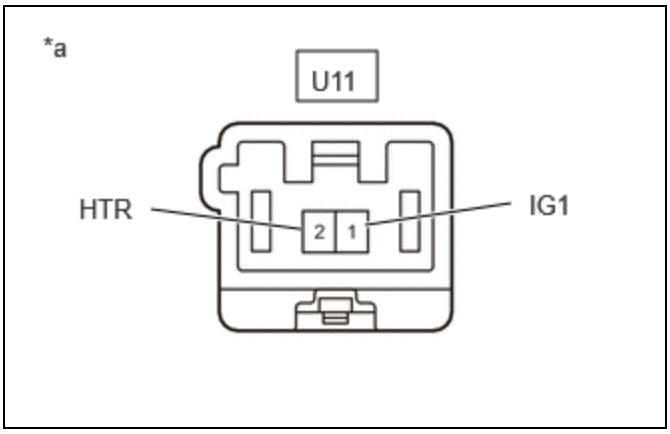
A ▶ **USE SIMULATION METHOD TO CHECK**

B ▼

3.	**INSPECT WINDSHIELD GLASS (HEATER)**

Pre-procedure1

(a) Disconnect the U11 windshield glass (heater) connector.



*a	Component without harness connected (Windshield Glass (Heater))

Procedure1

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

Standard Resistance:

EWD INFO

Click Location & Routing(U11)
Click Connector(U11)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
U11-1 (IG1) - U11-2 (HTR)	Always	8.1 to 10.9 Ω	Ω

Post-procedure1

(c) None

NG ▶ **REPLACE WINDSHIELD GLASS (HEATER)** INFO

OK ▼

4.	**CHECK HARNESS AND CONNECTOR (FORWARD RECOGNITION CAMERA - WINDSHIELD GLASS (HEATER))**

Pre-procedure1

(a) Disconnect the U10 forward recognition camera connector.

Procedure1

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

Standard Voltage:

EWD INFO

Click Location & Routing(U10,U11)
Click Connector(U10)
Click Connector(U11)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
U10-8 (HTR) - U11-1 (IG1)	Always	Below 1 V	V

Post-procedure1

(c) None

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

OK ▼

5.	**CHECK HARNESS AND CONNECTOR (FORWARD RECOGNITION CAMERA - WINDSHIELD GLASS (HEATER))**

Pre-procedure1

(a) Disconnect the U10 forward recognition camera connector.

Procedure1

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

Standard Resistance:

EWD INFO

Click Location & Routing(U10,U11)
Click Connector(U10)
Click Connector(U11)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
U10-8 (HTR) - U11-1 (IG1)	Always	Below 1 Ω	Ω
U10-7 (SGND) - U11-2 (HTR)	Always	Below 1 Ω	Ω
U10-8 (HTR) or U11-1 (IG1) - Other terminals	Always	10 kΩ or higher	kΩ

Post-procedure1

(c) None

OK ▶ **REPLACE FORWARD RECOGNITION CAMERA** INFO

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