

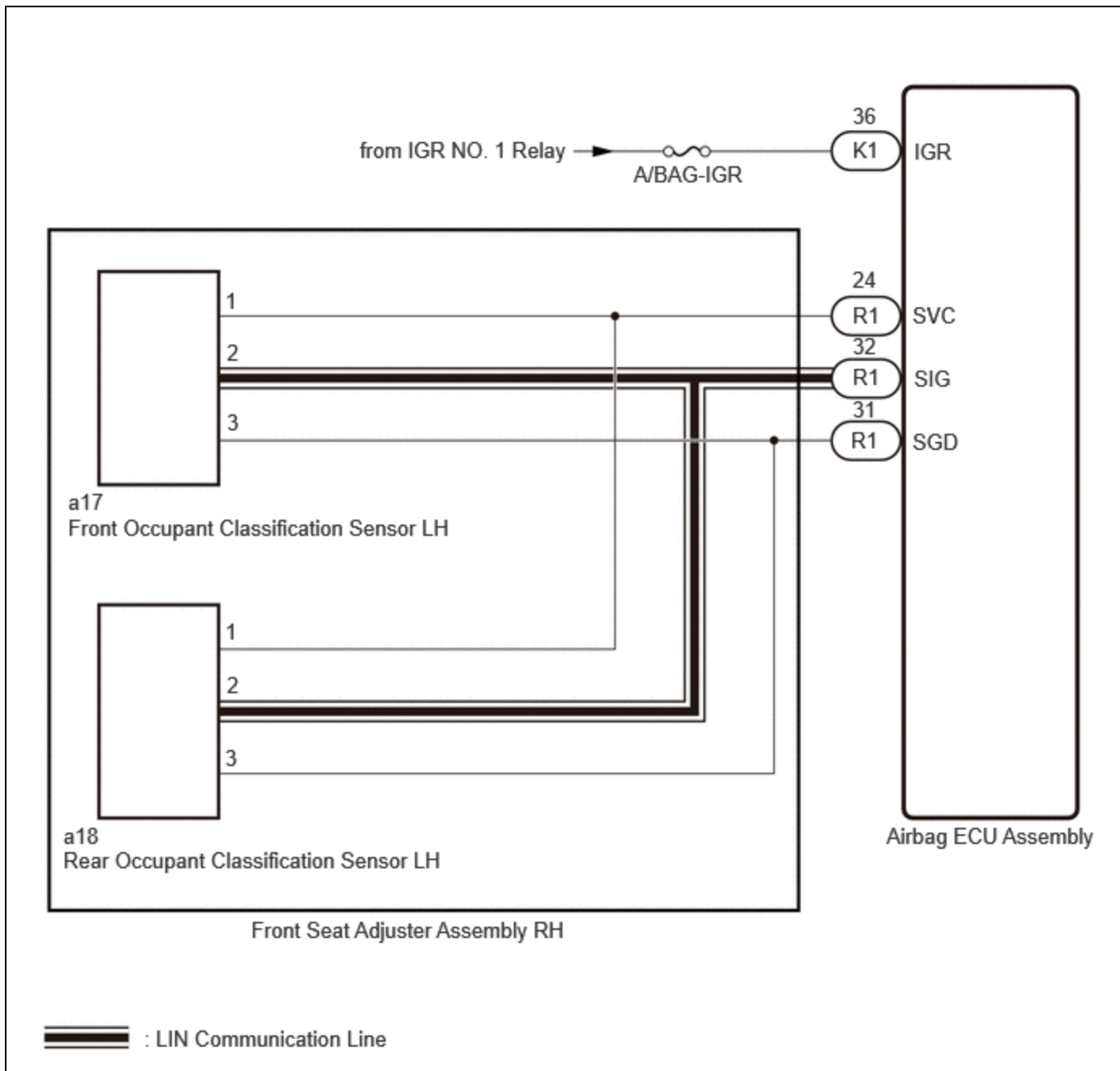
<b>Last Modified:</b> 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM100000028UZ0
<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> SUPPLEMENTAL RESTRAINT SYSTEMS: OCCUPANT CLASSIFICATION SYSTEM: B179316; Load Sensor for Occupant Detection System Circuit Voltage Below Threshold; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

<b>DTC</b>	<b>B179316</b>	<b>Load Sensor for Occupant Detection System Circuit Voltage Below Threshold</b>
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## DESCRIPTION

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
B179316	Load Sensor for Occupant Detection System Circuit Voltage Below Threshold	When the detections voltage value below specified value before supplying power to the sensor.	<ul style="list-style-type: none"> <li>• Harness or connector</li> <li>• Front seat adjuster assembly RH</li> <li>• Airbag ECU assembly</li> </ul>	SRS Airbag	A

## WIRING DIAGRAM



## **CAUTION / NOTICE / HINT**

### **NOTICE:**

- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) auxiliary battery terminal.

Click here [INFO](#)

### **HINT:**

When disconnecting and reconnecting the auxiliary battery, there is an automatic learning function that completes learning when the respective system is used.

Click here [INFO](#)

- After replacing the airbag ECU assembly or front seat adjuster assembly RH, refer to work procedure.

Click here [INFO](#)

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

**HINT:**

- If it is difficult to perform troubleshooting (wire harness inspection), remove the front passenger seat installation bolts to see under the seat cushion.
- In the above case, lift and hold the seat so that it does not fall down. Hold the seat only as necessary because holding the seat for a long period of time may cause seat rail deformation.

## PROCEDURE

### 1. CHECK CONNECTION OF CONNECTORS

Pre-procedure1

- Turn the ignition switch off.
- Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.

Procedure1

- Check that the connectors are properly connected to the airbag ECU assembly and front seat adjuster assembly RH.

OK:

The connectors are properly connected.

Post-procedure1

- None

**NG**  **CONNECT CONNECTORS PROPERLY**

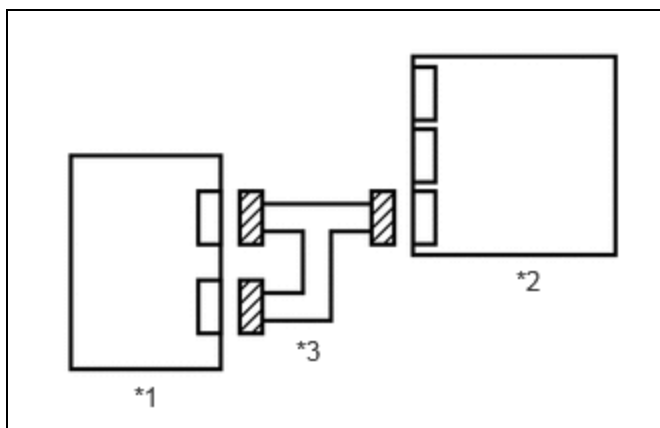
**OK**



### 2. CHECK CONNECTORS

Pre-procedure1

- Disconnect the airbag ECU assembly connector.



*1	Front Seat Adjuster Assembly RH
*2	Airbag ECU Assembly
*3	Wire Harness

(b) Disconnect the front seat adjuster assembly RH connector.

Procedure1

(c) Check that the terminals of the connectors are not deformed or damaged.

OK:

The terminals are not deformed or damaged.

Post-procedure1

(d) None

**NG** ► REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**



<b>3.</b>	<b>CHECK HARNESS AND CONNECTOR (AIRBAG ECU ASSEMBLY - AUXILIARY BATTERY)</b>
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Pre-procedure1

(a) Disconnect the airbag ECU assembly connector.

(b) Connect the cable to the negative (-) auxiliary battery terminal, and wait for at least 2 seconds.

(c) Turn the ignition switch to ON.

(d) Operate all components of the electrical systems (defogger, wipers, headlights, heater blower, etc.).

Procedure1

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

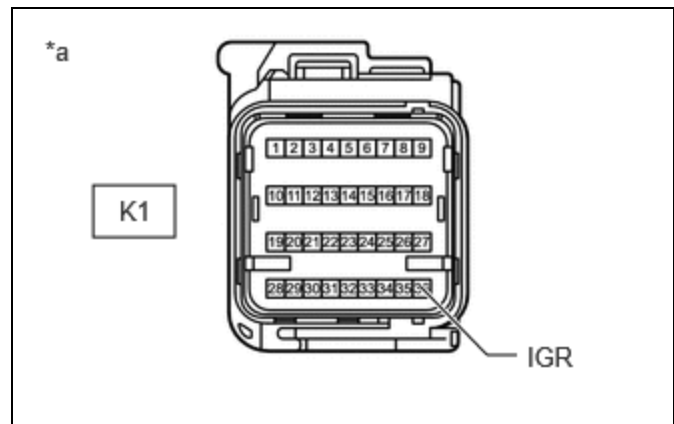
Standard Voltage:



[Click Location & Routing\(K1\)](#)

[Click Connector\(K1\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K1-36 (IGR) - Body ground	Ignition switch ON	8 to 16 V	V



*a	Front view of wire harness connector
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Result:

(to Airbag ECU Assembly)

PROCEED TO
OK
NG

Post-procedure1

- (f) Turn the ignition switch off.
- (g) Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.

**NG** ► REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**



<b>4.</b>	<b>CHECK HARNESS AND CONNECTOR (AIRBAG ECU ASSEMBLY - FRONT SEAT ADJUSTER ASSEMBLY RH)</b>
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- (a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



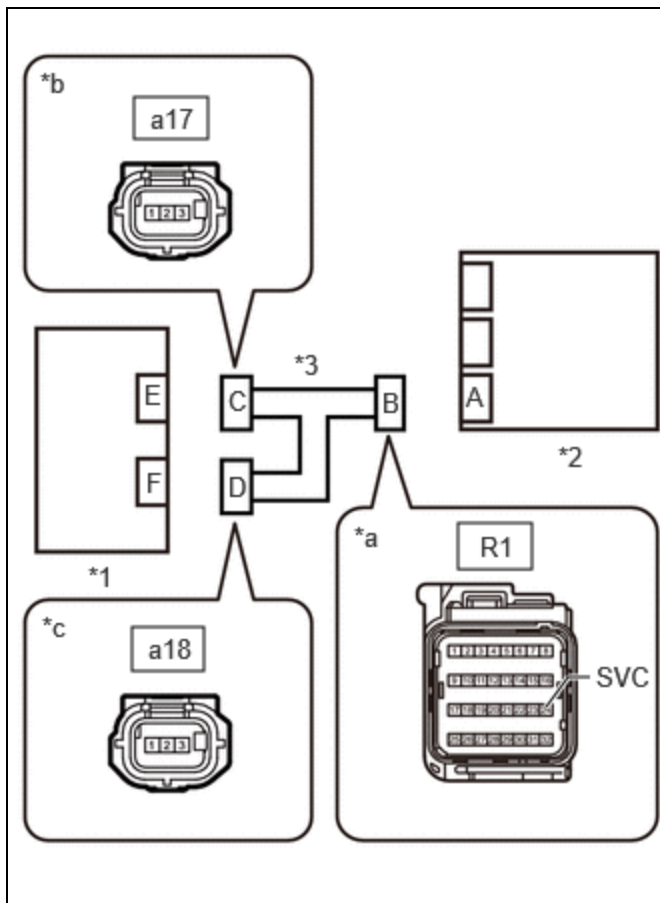
[Click Location & Routing\(R1,a17,a18\)](#)

[Click Connector\(R1\)](#)

[Click Connector\(a17\)](#)

[Click Connector\(a18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
R1-24 (SVC) - Other terminals and body ground	Always	10 kΩ or higher	kΩ
a17-1 - Other terminals and body ground	Always	10 kΩ or higher	kΩ
a18-1 - Other terminals and body ground	Always	10 kΩ or higher	kΩ



*1	Front Seat Adjuster Assembly RH
*2	Airbag ECU Assembly
*3	Wire Harness
*a	Front view of wire harness connector (to Airbag ECU Assembly)
*b	Front view of wire harness connector (to Front Seat Adjuster Assembly RH (Front Occupant Classification Sensor LH))
*c	Front view of wire harness connector (to Front Seat Adjuster Assembly RH (Rear Occupant Classification Sensor LH))

**NG** ► REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**  
▼

<b>5.</b>	<b>CHECK AIRBAG ECU ASSEMBLY</b>
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Pre-procedure1

- (a) Connect the connector to the airbag ECU assembly.
- (b) Connect the cable to the negative (-) auxiliary battery terminal, and wait for at least 2 seconds.
- (c) Turn the ignition switch to ON.

Procedure1

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

Standard Voltage:



[Click Location & Routing\(a17,a18\).](#)

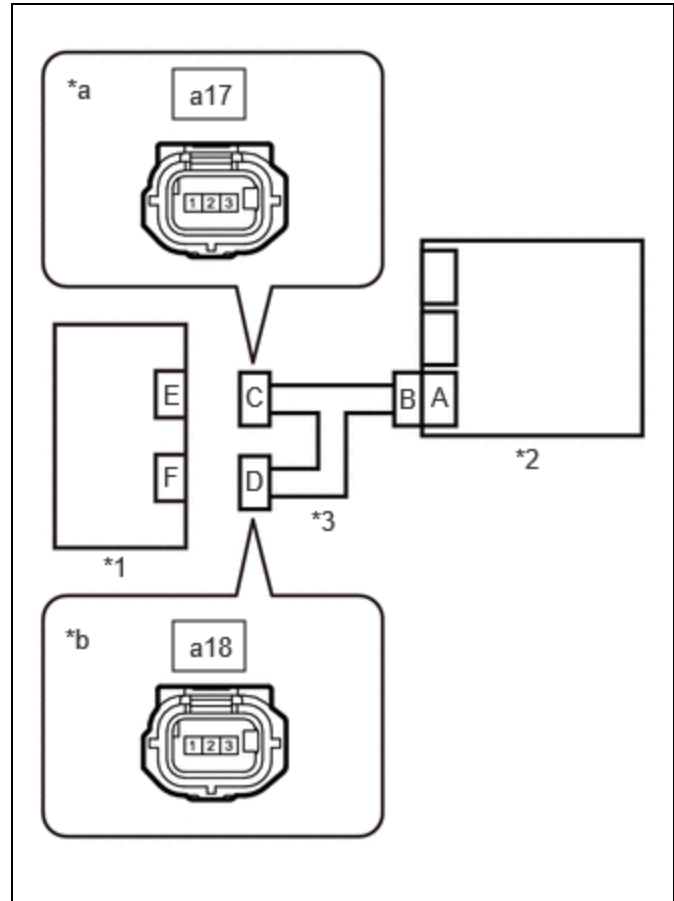
[Click Connector\(a17\).](#)

[Click Connector\(a18\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
a17-1 - Body ground	Ignition switch ON	6.2 V or higher	V
a18-1 - Body ground	Ignition switch ON	6.2 V or higher	V

Result:

PROCEED TO
OK
NG



*1	Front Seat Adjuster Assembly RH
*2	Airbag ECU Assembly
*3	Wire Harness
*a	Front view of wire harness connector (to Front Seat Adjuster Assembly RH (Front Occupant Classification Sensor LH))
*b	Front view of wire harness connector (to Front Seat Adjuster Assembly RH (Rear Occupant Classification Sensor LH))

Post-procedure1

- (e) None

**OK** REPLACE FRONT SEAT ADJUSTER ASSEMBLY RH

**NG** REPLACE AIRBAG ECU ASSEMBLY

