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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: SUPPLEMENTAL RESTRAINT SYSTEMS: OCCUPANT CLASSIFICATION SYSTEM: Trouble in Passenger Airbag ON/OFF Indicator; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Trouble in Passenger Airbag ON/OFF Indicator

DESCRIPTION

The occupant classification system detects the front passenger seat condition. It then displays the instrument panel passenger airbag assembly condition (activated/not activated) using the passenger airbag ON/OFF indicator.

HINT:

Approximately 6 seconds after the ignition switch is turned to ON, the passenger airbag ON/OFF indicator will indicate ON/OFF depending on the following conditions.

Indicator Operation

FRONT PASSENGER SEAT CONDITION	PASSENGER AIRBAG ON/OFF INDICATOR		SRS WARNING LIGHT
	ON INDICATOR	OFF INDICATOR	
Vacant	OFF	ON	OFF
Adult*1 is seated	ON	OFF	OFF
Child*2 is seated	ON or OFF*2	OFF or ON*2	OFF
Child restraint system is installed	OFF	ON	OFF
Occupant classification system failure	OFF	ON	ON

*1: The system judges a person of average adult weight or more as an adult. If a smaller adult sits in the front passenger seat, the system may not recognize them as an adult depending on their physique and posture.

*2: The system may not recognize a child or a child in a child restraint system as a child depending on factors such as the positioning of the child restraint system or the child's physique or posture.

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](#) 

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](#) 

- After replacing the airbag ECU assembly, refer to work procedure.

[Click here](#) 

PROCEDURE

1. CHECK SRS WARNING LIGHT

(a) Turn the ignition switch to ON, and check the SRS warning light condition.

OK:

After the primary check period, the SRS warning light goes off.

HINT:

The primary check is performed for approximately 6 seconds after the ignition switch is turned to ON.

NG  **GO TO AIRBAG SYSTEM** 

OK**2. PERFORM ZERO POINT CALIBRATION**

(a) Using the GTS, perform "Occupant Detection Sensor Zero Point Calibration".

Click here 

NEXT**3. CHECK PASSENGER AIRBAG ON/OFF INDICATOR**

(a) Check the passenger airbag ON/OFF indicator.

Click here 

OK:

Passenger airbag ON/OFF indicator operation normally.

OK  **END (NORMAL AFTER PERFORMING ZERO POINT CALIBRATION)**

NG**4. RETIGHTEN FRONT SEAT ASSEMBLY RH BOLT**

(a) Loosen the 4 installation bolts of the front seat assembly RH.

(b) Tighten the 4 installation bolts of the front seat assembly RH to the specified torque.

Click here [INFO](#)

NEXT



5. PERFORM ZERO POINT CALIBRATION

(a) Using the GTS, perform "Occupant Detection Sensor Zero Point Calibration".

Click here [INFO](#)

NEXT



6. CHECK PASSENGER AIRBAG ON/OFF INDICATOR

(a) Check the passenger airbag ON/OFF indicator.

Click here [INFO](#)

OK:
Passenger airbag ON/OFF indicator operation normally.

OK **END (THE 4 INSTALLATION BOLTS WAS LOOSEN)**

NG



7. READ VALUE USING GTS

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

Body Electrical > SRS Airbag > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Judgment Result for Occupant Detection System (Buckle Switch of Passenger Seat)	Front passenger side buckle switch	Unknown, Buckle, Unbuckle or Malfunction	Buckle: Front passenger seat belt is fastened Unbuckle: Front passenger seat belt is	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			not fastened Malfunction: Front passenger seat belt is malfunctioning	

Body Electrical > SRS Airbag > Data List

TESTER DISPLAY
Judgment Result for Occupant Detection System (Buckle Switch of Passenger Seat)

OK:

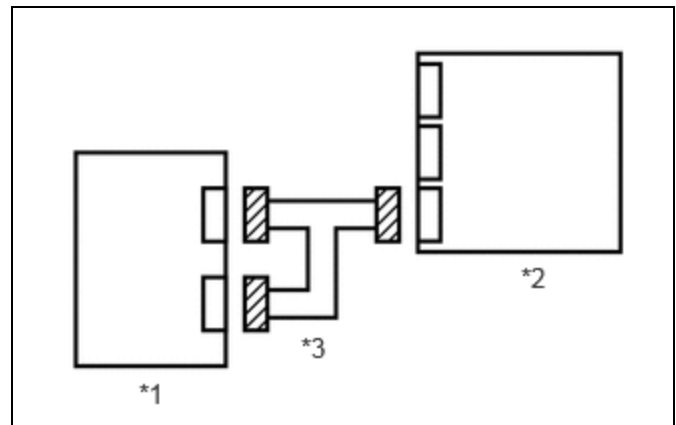
The GTS display changes correctly in accordance with the operation of the front passenger side buckle switch.

NG ► **GO TO STEP 11**

OK



8.	CHECK CONNECTORS
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*1	Front Seat Adjuster Assembly RH
*2	Airbag ECU Assembly
*3	Wire Harness

(a) Turn the ignition switch off.

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

(c) Disconnect the airbag ECU assembly connector.

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

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

OK:

The terminals are not deformed or damaged.

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

OK



9. REPLACE AIRBAG ECU ASSEMBLY

(a) Connect the front seat adjuster assembly RH connector.

(b) Replace the airbag ECU assembly with a new one.

Click here [INFO](#)

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

NEXT



10. PERFORM ZERO POINT CALIBRATION

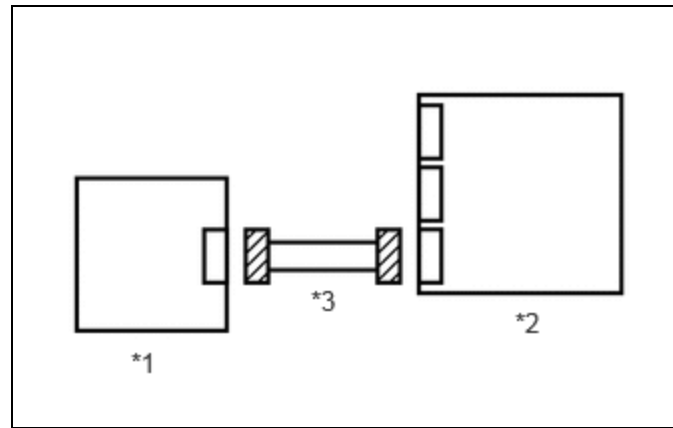
(a) Using the GTS, perform "Occupant Detection Sensor Zero Point Calibration".

Click here [INFO](#)

NEXT ► **END (AIRBAG ECU ASSEMBLY WAS DEFECTIVE)**

11. CHECK CONNECTORS

(a) Turn the ignition switch off.



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

- (b) Disconnect the cable from the negative (-) auxiliary battery terminal, and wait for at least 60 seconds.
- (c) Disconnect the airbag ECU assembly connector.
- (d) Disconnect the front seat inner belt assembly RH connector.
- (e) Check that the terminals of the connectors are not deformed or damaged.

OK:

The terminals are not deformed or damaged.

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

OK



12.	REPLACE FRONT SEAT INNER BELT ASSEMBLY RH
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- (a) Connect the airbag ECU assembly connector.
- (b) Replace the front seat inner belt assembly RH with a new one.

Click here [INFO](#)

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

NEXT



13. PERFORM ZERO POINT CALIBRATION

(a) Using the GTS, perform "Occupant Detection Sensor Zero Point Calibration".

Click here 

NEXT  **END (FRONT SEAT INNER BELT ASSEMBLY RH WAS DEFECTIVE)**

