

<b>DTC</b>	<b>B1793</b>	<b>Occupant Classification Sensor Power Supply Circuit Malfunction</b>
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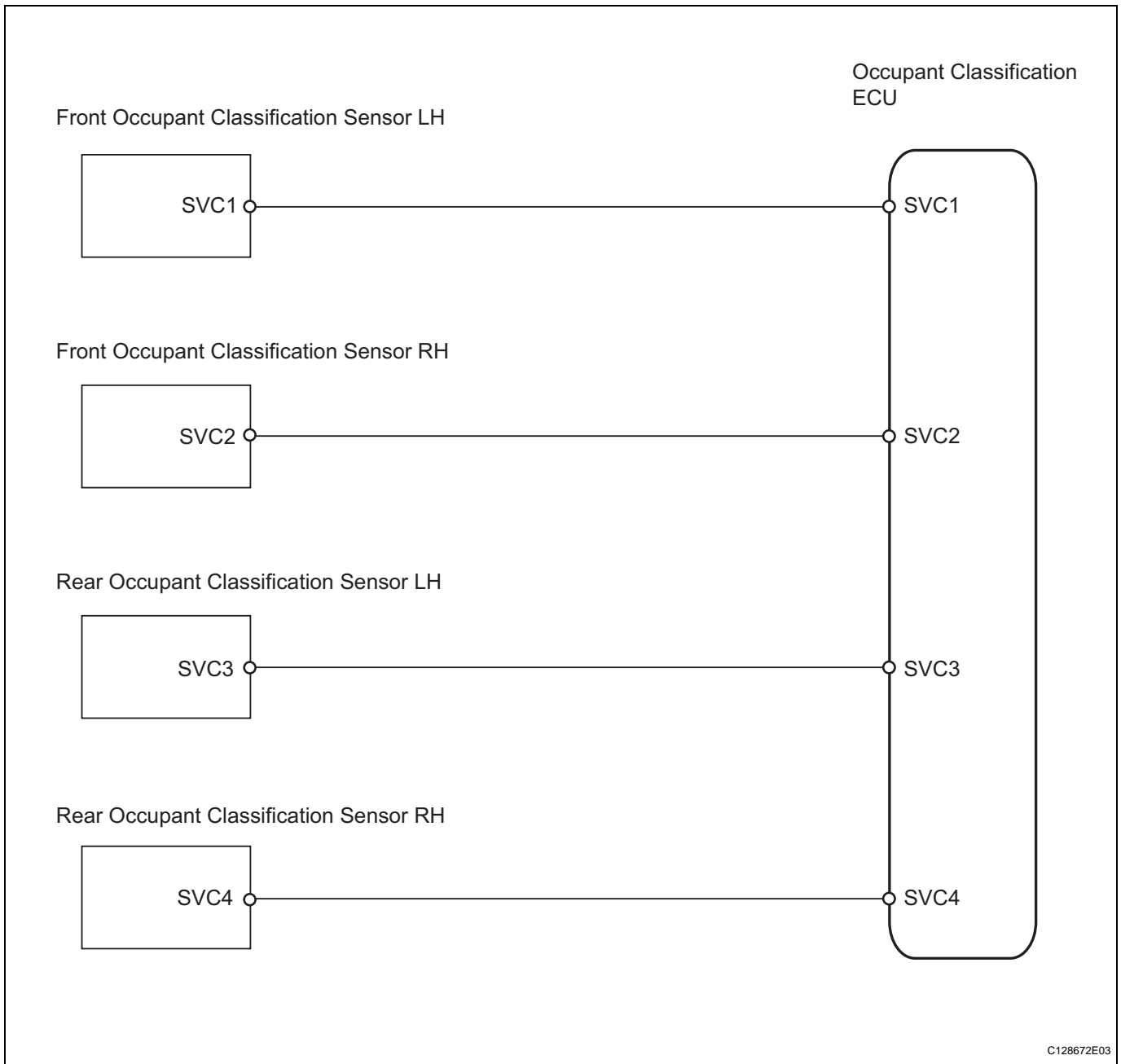
**DESCRIPTION**

The occupant classification sensor power supply circuit consists of the occupant classification ECU and the occupant classification sensors.

DTC B1793 is recorded when a malfunction is detected in the occupant classification sensor power supply circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1793	When one of following conditions is met: <ul style="list-style-type: none"> <li>• Occupant classification ECU detects line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in the occupant classification sensor power supply circuit for 2 seconds</li> <li>• Occupant classification ECU malfunction</li> </ul>	<ul style="list-style-type: none"> <li>• Front seat wire RH</li> <li>• Front seat RH (Occupant classification sensors)</li> <li>• Occupant classification ECU</li> </ul>

## WIRING DIAGRAM



RS

## INSPECTION PROCEDURE

## HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the undersurface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat up only for as long as necessary.

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CHECK FOR DTC

- Turn the ignition switch ON.
- Clear the DTCs (see page [RS-249](#)).

## HINT:

First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor.

- (c) Turn the ignition switch OFF.
- (d) Turn the ignition switch ON.
- (e) Check the DTCs (see page RS-249).

## OK:

**DTC B1793 is not output.**

## HINT:

DTCs other than DTC B1793 may be output at this time, but they are not related to this check.

OK

USE SIMULATION METHOD TO CHECK

NG

## 2 CHECK CONNECTION OF CONNECTOR

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the occupant classification ECU and the occupant classification sensors.

## OK:

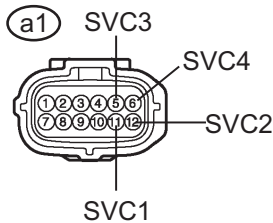
**The connectors are properly connected.**

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CONNECT CONNECTOR

OK

## 3 CHECK FRONT SEAT WIRE RH (TO B+)



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- (a) Disconnect the connectors from the occupant classification ECU and the 4 occupant classification sensors.
- (b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (c) Turn the ignition switch ON.
- (d) Measure the voltage of the wire harness side connector.

**Standard voltage**

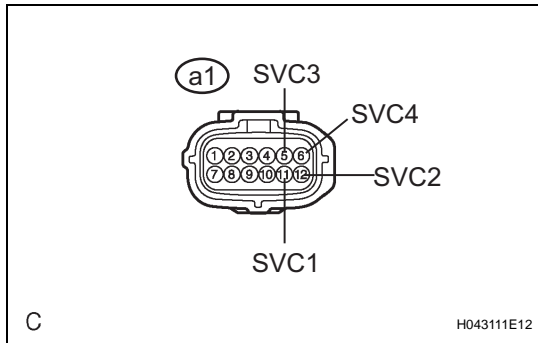
Tester Connection	Specified Condition
a1-11 (SVC1) - Body ground	Below 1 V
a1-12 (SVC2) - Body ground	Below 1 V
a1-5 (SVC3) - Body ground	Below 1 V
a1-6 (SVC4) - Body ground	Below 1 V

NG

REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

**4 CHECK FRONT SEAT WIRE RH (TO GROUND)**



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Measure the resistance of the wire harness side connector.

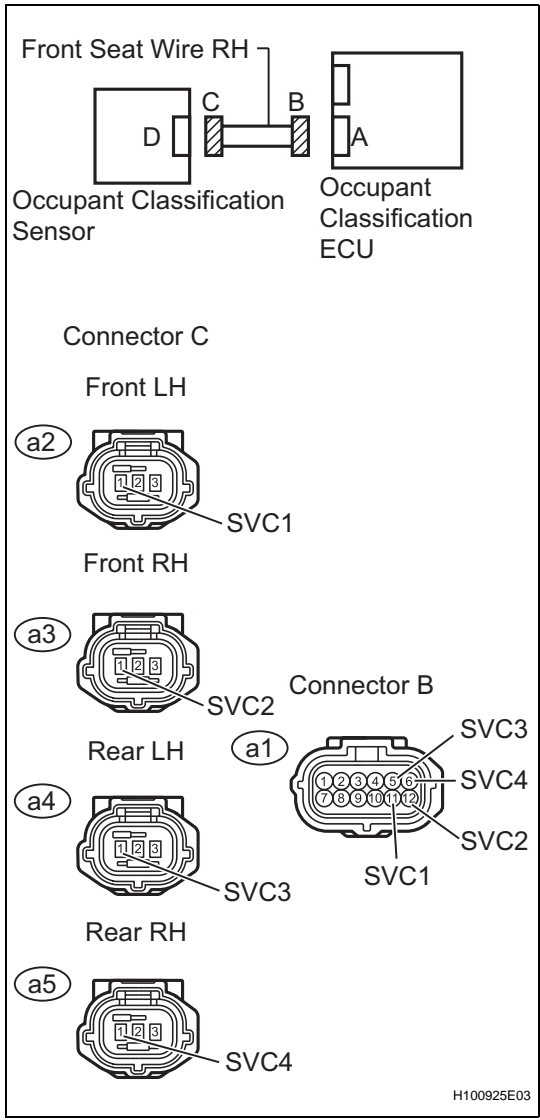
**Standard resistance**

Tester Connection	Specified Condition
a1-11 (SVC1) - Body ground	1 MΩ or higher
a1-12 (SVC2) - Body ground	1 MΩ or higher
a1-5 (SVC3) - Body ground	1 MΩ or higher
a1-6 (SVC4) - Body ground	1 MΩ or higher

**NG** REPAIR OR REPLACE FRONT SEAT WIRE RH

**OK**

**5 CHECK FRONT SEAT WIRE RH (FOR OPEN)**



(a) Measure the resistance of the wire harness side connectors.

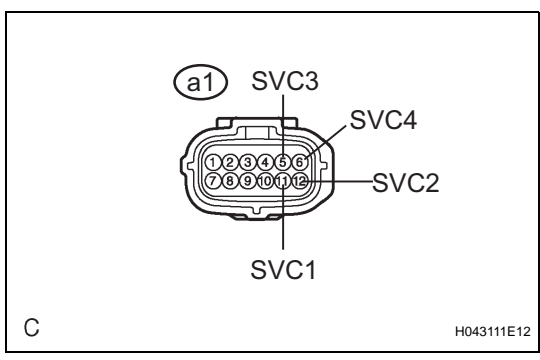
**Standard resistance**

Tester Connection	Specified Condition
a1-11 (SVC1) - a2-1 (SVC1)	Below 1 Ω
a1-12 (SVC2) - a3-1 (SVC2)	Below 1 Ω
a1-5 (SVC3) - a4-1 (SVC3)	Below 1 Ω
a1-6 (SVC4) - a5-1 (SVC4)	Below 1 Ω

**NG** REPAIR OR REPLACE FRONT SEAT WIRE RH

**OK**

**6 CHECK FRONT SEAT WIRE RH (FOR SHORT)**



(a) Measure the resistance of the wire harness side connector.

**Standard resistance**

Tester Connection	Specified Condition
a1-5 (SVC3) - a1-6 (SVC4)	1 MΩ or higher
a1-6 (SVC4) - a1-11 (SVC1)	1 MΩ or higher
a1-11 (SVC1) - a1-12 (SVC2)	1 MΩ or higher
a1-12 (SVC2) - a1-5 (SVC3)	1 MΩ or higher
a1-12 (SVC2) - a1-6 (SVC4)	1 MΩ or higher
a1-11 (SVC1) - a1-5 (SVC3)	1 MΩ or higher

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**REPAIR OR REPLACE FRONT SEAT WIRE  
RH**

OK

**7 CHECK FOR DTC**

- (a) Connect the connectors to the occupant classification ECU and the 4 occupant classification sensors.
- (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (c) Turn the ignition switch ON.
- (d) Clear the DTCs (see page [RS-249](#)).

HINT:

First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor.

- (e) Turn the ignition switch OFF.
- (f) Turn the ignition switch ON.
- (g) Check the DTCs (see page [RS-249](#)).

**OK:****DTC B1793 is not output.**

HINT:

DTCs other than DTC B1793 may be output at this time, but they are not related to this check.

OK

**USE SIMULATION METHOD TO CHECK**

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**8 REPLACE OCCUPANT CLASSIFICATION ECU**

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Replace the occupant classification ECU (see page [RS-392](#)).

HINT:

Perform the inspection using parts from a normal vehicle if possible.

NEXT

**9 PERFORM ZERO POINT CALIBRATION**

- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (b) Connect the intelligent tester to the DLC3.
- (c) Turn the ignition switch ON.
- (d) Using the intelligent tester, perform the zero point calibration (see page [RS-241](#)).

**OK:****COMPLETED is displayed.**

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Go to step 12

OK

**10 PERFORM SENSITIVITY CHECK**

- (a) Using the intelligent tester, perform the sensitivity check (see page [RS-241](#)).

**Standard value:****27 to 33 kg (59.52 to 72.75 lb)**

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Go to step 12

OK

**11 CHECK FOR DTC**

- (a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.  
 (b) Turn the ignition switch ON.  
 (c) Clear the DTCs (see page [RS-249](#)).

**HINT:**

First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor.

- (d) Turn the ignition switch OFF.  
 (e) Turn the ignition switch ON.  
 (f) Check the DTCs (see page [RS-249](#)).

**OK:****DTC B1793 is not output.****HINT:**

DTCs other than DTC B1793 may be output at this time, but they are related to this check.

OK

END

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**12 REPLACE FRONT SEAT ASSEMBLY RH**

- (a) Turn the ignition switch OFF.  
 (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.  
 (c) Replace the front seat RH (see page [SE-8](#)).

NEXT

**13 PERFORM ZERO POINT CALIBRATION**

- (a) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.  
 (b) Connect the intelligent tester to the DLC3.  
 (c) Turn the ignition switch ON.

- (d) Using the intelligent tester, perform the zero point calibration (see page [RS-241](#)).

**OK:**

**COMPLETED is displayed.**

**NEXT**

**14 | PERFORM SENSITIVITY CHECK**

- (a) Using the intelligent tester, perform the sensitivity check (see page [RS-241](#)).

**Standard value:**

**27 to 33 kg (59.52 to 72.75 lb)**

**NEXT**

**END**