

DTC	B1793	Occupant Classification Sensor Power Supply Circuit Malfunction
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DESCRIPTION

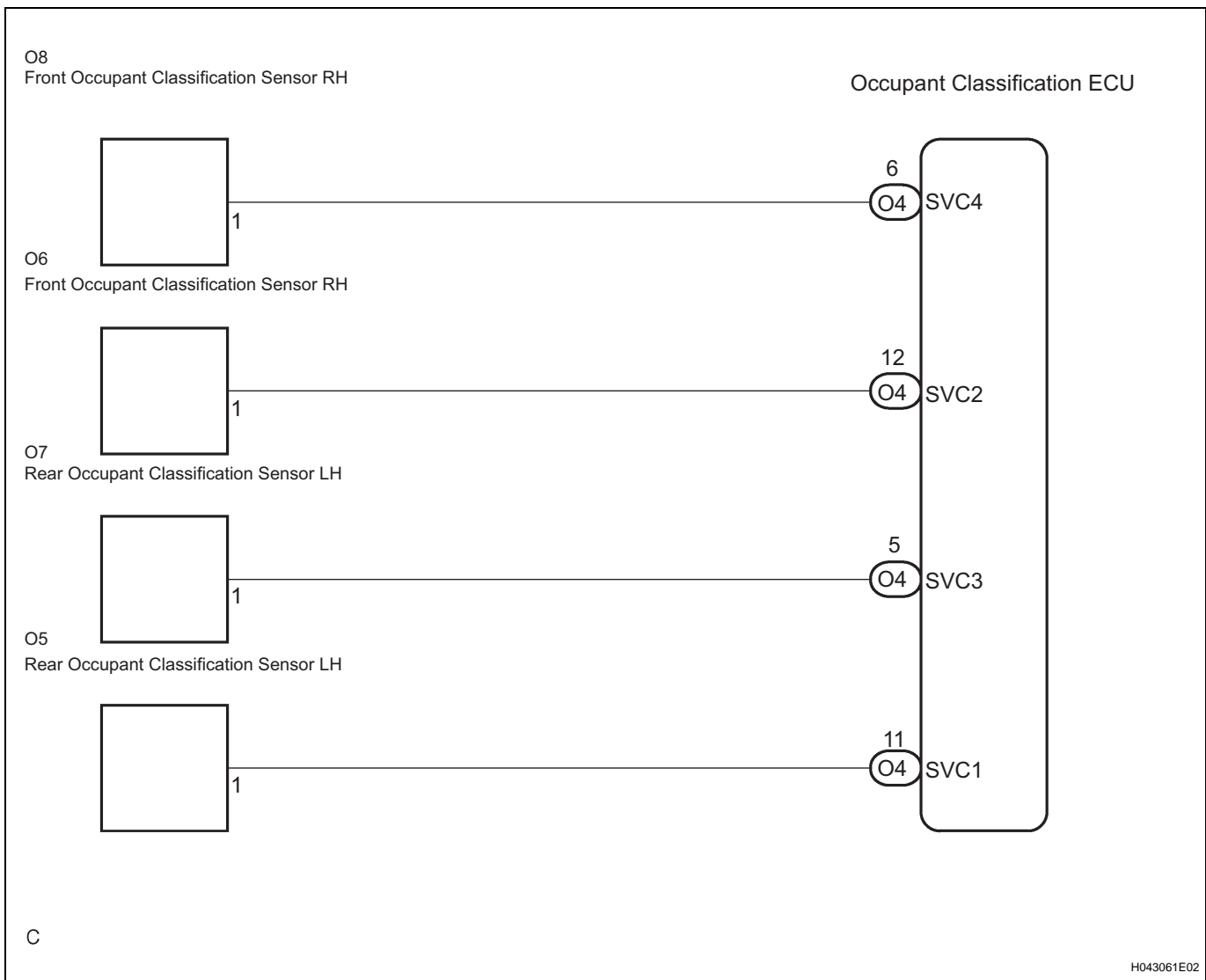
The occupant classification sensor power supply circuit consists of the occupant classification ECU and the occupant classification sensors.

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

DTC No.	DTC Detecting Condition	Trouble Area
B1793	<ul style="list-style-type: none"> The occupant classification ECU receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the occupant classification sensor power supply circuit for 2 seconds. Occupant classification ECU malfunction 	<ul style="list-style-type: none"> Front seat assembly RH (Occupant classification sensors) Occupant classification ECU Front seat wire RH

RS

WIRING DIAGRAM



HINT:

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

1	CHECK DTC
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- (a) Turn the ignition switch to the ON position.
- (b) Clear the DTCs stored in memory (See page [RS-310](#)).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- (c) Turn the ignition switch to the LOCK position.
- (d) Turn the ignition switch to the ON position.
- (e) Check the DTCs (See page [RS-310](#)).

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

HINT:

Codes 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 CONNECTORS
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- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, 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.

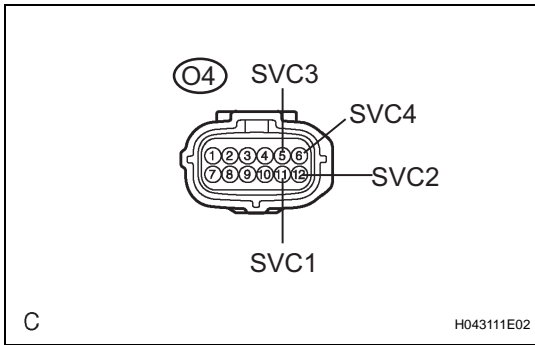
OK:**The connectors are connected.**

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CONNECT CONNECTORS, THEN GO TO STEP 1

OK

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



- (a) Disconnect the connectors from the occupant classification ECU and the 4 occupant classification sensors.
- (b) Connect the negative (-) terminal cable to the battery.
- (c) Turn the ignition switch to the ON position.
- (d) Measure the voltage according to the value(s) in the table below.

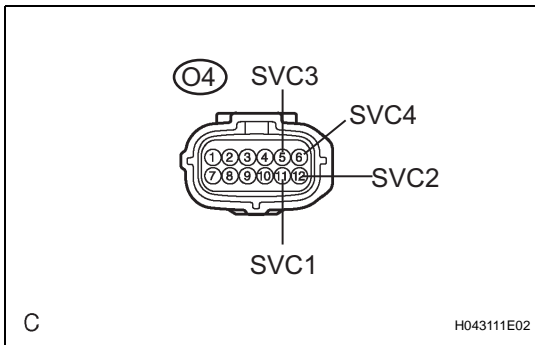
Voltage

Tester connection	Condition	Specified condition
O4-5 (SVC3) - Body ground	Ignition switch ON	Below 1 V
O4-6 (SVC4) - Body ground	Ignition switch ON	Below 1 V
O4-11 (SVC1) - Body ground	Ignition switch ON	Below 1 V
O4-12 (SVC2) - Body ground	Ignition switch ON	Below 1 V

NG REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

4 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)



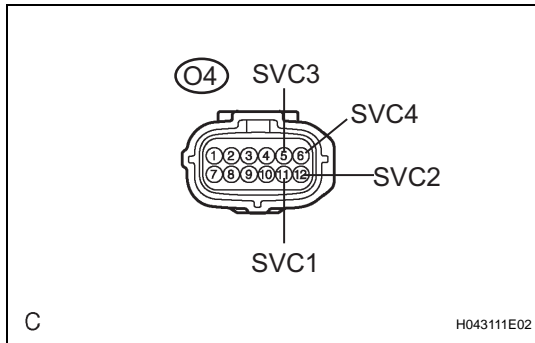
- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Measure the resistance according to the value(s) in the table below.

Resistance

Tester connection	Condition	Specified condition
O4-5 (SVC3) - Body ground	Always	1 MΩ or higher
O4-6 (SVC4) - Body ground	Always	1 MΩ or higher
O4-11 (SVC1) - Body ground	Always	1 MΩ or higher
O4-12 (SVC2) - Body ground	Always	1 MΩ or higher

NG REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

5 CHECK FRONT SEAT WIRE RH (OPEN)

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

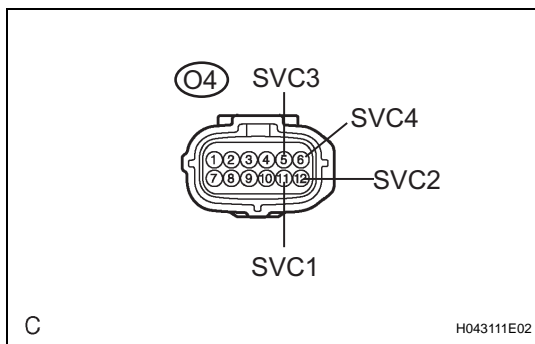
Resistance

Tester connection	Condition	Specified condition
O4-5 (SVC3) - O7-1 (SVC3)	Always	Below 1 Ω
O4-6 (SVC4) - O8-1 (SVC4)	Always	Below 1 Ω
O4-11 (SVC1) - O5-1 (SVC1)	Always	Below 1 Ω
O4-12 (SVC2) - O6-1 (SVC2)	Always	Below 1 Ω

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REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

6 CHECK FRONT SEAT WIRE RH (SHORT)

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

Resistance

Tester connection	Condition	Specified condition
O4-5 (SVC3) - O4-6 (SVC4)	Always	1 M Ω or higher
O4-6 (SVC4) - O4-11 (SVC1)	Always	1 M Ω or higher
O4-11 (SVC1) - O4-12 (SVC2)	Always	1 M Ω or higher
O4-12 (SVC2) - O4-5 (SVC3)	Always	1 M Ω or higher
O4-12 (SVC2) - O4-6 (SVC4)	Always	1 M Ω or higher
O4-11 (SVC1) - O4-5 (SVC3)	Always	1 M Ω or higher

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REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

7 CHECK DTC

- Connect the connectors to the occupant classification ECU and the 4 occupant classification sensors.
- Connect the negative (-) terminal cable to the battery.
- Turn the ignition switch to the ON position.
- Clear the DTCs stored in memory (See page [RS-310](#)).

HINT:

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

- (e) Turn the ignition switch to the LOCK position.
- (f) Turn the ignition switch to the ON position.
- (g) Check the DTCs (See page RS-310).

OK:

DTC B1793 is not output.

HINT:

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

OK

USE SIMULATION METHOD TO CHECK

RS

NG

8 REPLACE OCCUPANT CLASSIFICATION ECU

- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Replace the occupant classification ECU (See page RS-457).

HINT:

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

NEXT

9 PERFORM ZERO POINT CALIBRATION

- (a) Connect the negative (-) terminal cable to the battery.
- (b) Connect the intelligent tester to the DLC3.
- (c) Turn the ignition switch to the ON position.
- (d) Using the intelligent tester, perform "Zero point calibration" (See page RS-303).

OK:

The "COMPLETED" is displayed.

NG

Go to step 12

OK

10 PERFORM SENSITIVITY CHECK

- (a) Using the intelligent tester, perform "Sensitivity check" (See page RS-303).

Standard values:

27 to 33 kg (59.52 to 72.75 lb)

NG

Go to step 12

OK

11 CHECK DTC

- (a) Connect the negative (-) terminal cable to the battery.
- (b) Turn the ignition switch to the ON position.
- (c) Clear the DTCs stored in memory (See page [RS-310](#)).

HINT:

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

- (d) Turn the ignition switch to the LOCK position.
- (e) Turn the ignition switch to the ON position.
- (f) Check the DTCs (See page [RS-310](#)).

OK:

DTC B1793 is not output.

HINT:

Codes 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 to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Replace the front seat assembly RH (See page [SE-38](#)).

NEXT

13 PERFORM ZERO POINT CALIBRATION

- (a) Connect the negative (-) terminal cable to the battery.
- (b) Connect the intelligent tester to the DLC3.
- (c) Turn the ignition switch to the ON position.
- (d) Using the intelligent tester, perform "Zero point calibration" (See page [RS-303](#)).

OK:

The "COMPLETED" is displayed.

NEXT

14 PERFORM SENSITIVITY CHECK

- (a) Using the intelligent tester, perform "Sensitivity check" (See page [RS-303](#)).

Standard values:

27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

RS