

DTC	B1793	Occupant Classification Sensor Power Supply Circuit Malfunction
-----	-------	---

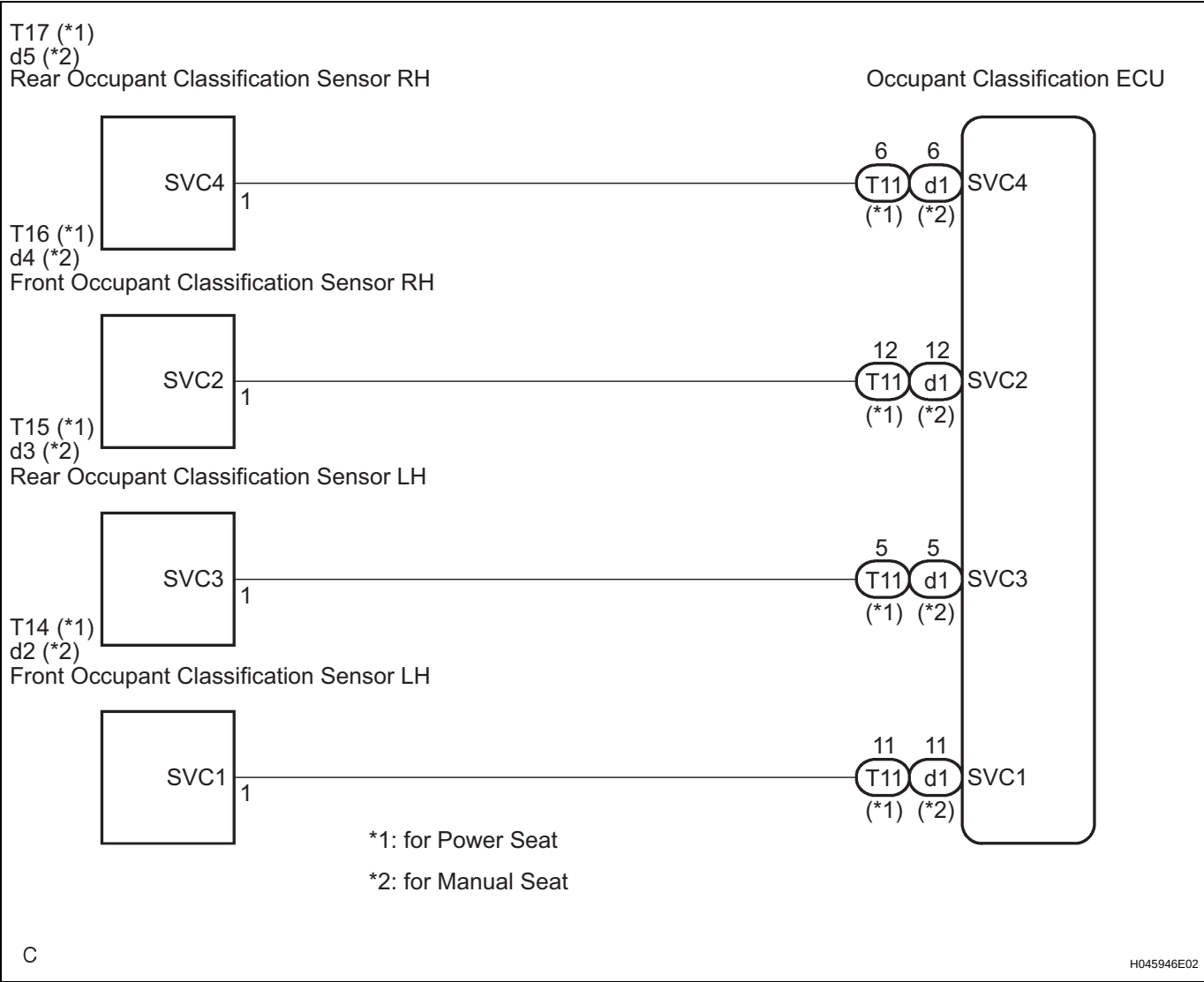
DESCRIPTION

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	- 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	- Front seat assembly RH (Occupant classification sensors) - Front seat wire RH - Occupant classification ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of 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**

- Turn the power switch on (IG).
- Clear the DTCs stored in the occupant classification ECU (See page [RS-248](#)).
- Clear the DTCs stored in the center airbag sensor assembly (See page [RS-41](#)).
- Turn the power switch off.
- Turn the power switch on (IG).
- Check the DTCs (See page [RS-248](#)).

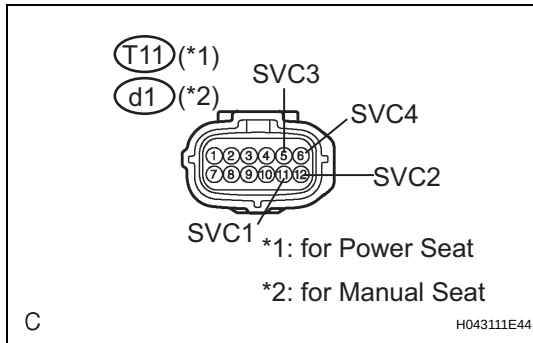
OK:**DTC B1793 is not output.****HINT:**

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 (See page [RS-245](#))****NG****2****CHECK CONNECTION OF CONNECTORS**

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

OK:**The connectors are properly connected.****NG****CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1****OK**

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

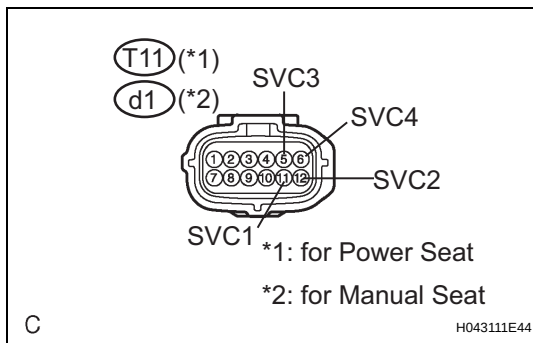
- Disconnect the connectors from the occupant classification ECU and the 4 occupant classification sensors.
- Connect the negative (-) terminal cable to the battery.
- Turn the power switch on (IG).
- Measure the voltage according to the value(s) in the table below.

**Standard voltage:
for Power seat**

Tester connection	Condition	Specified condition
T11-5 (SVC3) - Body ground	Power switch on (IG)	Below 1 V
T11-6 (SVC4) - Body ground	Power switch on (IG)	Below 1 V
T11-11 (SVC1) - Body ground	Power switch on (IG)	Below 1 V
T11-12 (SVC2) - Body ground	Power switch on (IG)	Below 1 V

for Manual seat

Tester connection	Condition	Specified condition
d1-5 (SVC3) - Body ground	Power switch on (IG)	Below 1 V
d1-6 (SVC4) - Body ground	Power switch on (IG)	Below 1 V
d1-11 (SVC1) - Body ground	Power switch on (IG)	Below 1 V
d1-12 (SVC2) - Body ground	Power switch on (IG)	Below 1 V

NG**REPAIR OR REPLACE FRONT SEAT WIRE RH****OK****4 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)**

- Turn the power switch off.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Measure the resistance according to the value(s) in the table below.

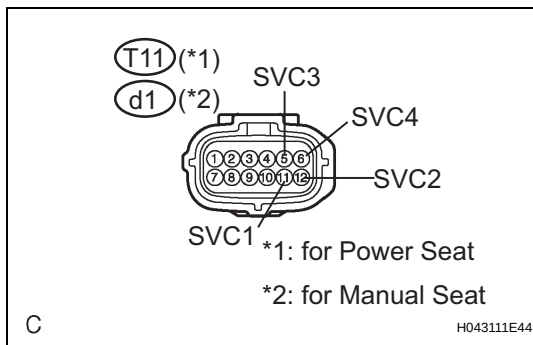
**Standard resistance:
for Power seat**

Tester connection	Condition	Specified condition
T11-5 (SVC3) - Body ground	Always	1 MΩ or Higher
T11-6 (SVC4) - Body ground	Always	1 MΩ or Higher
T11-11 (SVC1) - Body ground	Always	1 MΩ or Higher

Tester connection	Condition	Specified condition
T11-12 (SVC2) - Body ground	Always	1 M Ω or Higher

for Manual seat

Tester connection	Condition	Specified condition
d1-5 (SVC3) - Body ground	Always	1 M Ω or Higher
d1-6 (SVC4) - Body ground	Always	1 M Ω or Higher
d1-11 (SVC1) - Body ground	Always	1 M Ω or Higher
d1-12 (SVC2) - Body ground	Always	1 M Ω 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.

**Standard resistance:
for Power seat**

Tester connection	Condition	Specified condition
T11-5 (SVC3) - T15-1 (SVC3)	Always	Below 1 Ω
T11-6 (SVC4) - T17-1 (SVC4)	Always	Below 1 Ω
T11-11 (SVC1) - T14-1 (SVC1)	Always	Below 1 Ω
T11-12 (SVC2) - T16-1 (SVC2)	Always	Below 1 Ω

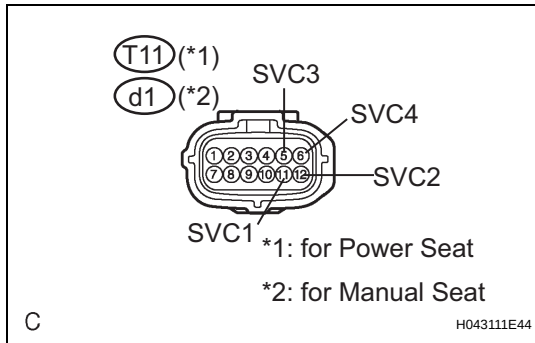
for Manual seat

Tester connection	Condition	Specified condition
d1-5 (SVC3) - d3-1 (SVC3)	Always	Below 1 Ω
d1-6 (SVC4) - d5-1 (SVC4)	Always	Below 1 Ω
d1-11 (SVC1) - d2-1 (SVC1)	Always	Below 1 Ω
d1-12 (SVC2) - d4-1 (SVC2)	Always	Below 1 Ω

NG**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.

**Standard resistance:
for Power seat**

Tester connection	Condition	Specified condition
T11-5 (SVC3) - T11-6 (SVC4)	Always	1 MΩ or Higher
T11-5 (SVC3) - T11-11 (SVC1)	Always	1 MΩ or Higher
T11-5 (SVC3) - T11-12 (SVC2)	Always	1 MΩ or Higher
T11-6 (SVC4) - T11-11 (SVC1)	Always	1 MΩ or Higher
T11-6 (SVC4) - T11-12 (SVC2)	Always	1 MΩ or Higher
T11-11 (SVC1) - T11-12 (SVC2)	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
d1-5 (SVC3) - d1-6 (SVC4)	Always	1 MΩ or Higher
d1-5 (SVC3) - d1-11 (SVC1)	Always	1 MΩ or Higher
d1-5 (SVC3) - d1-12 (SVC2)	Always	1 MΩ or Higher
d1-6 (SVC4) - d1-11 (SVC1)	Always	1 MΩ or Higher
d1-6 (SVC4) - d1-12 (SVC2)	Always	1 MΩ or Higher
d1-11 (SVC1) - d1-12 (SVC2)	Always	1 MΩ or Higher

NG

**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 power switch on (IG).
- Clear the DTCs stored in the occupant classification ECU (See page [RS-248](#)).
- Clear the DTCs stored in the center airbag sensor assembly (See page [RS-41](#)).
- Turn the power switch off.
- Turn the power switch on (IG).
- Check the DTCs (See page [RS-248](#)).

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 (See page [RS-245](#))

NG

8 REPLACE OCCUPANT CLASSIFICATION ECU

- (a) Turn the power switch off.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Replace the occupant classification ECU (See page [RS-248](#)).

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 power switch on (IG).
- (d) Using the intelligent tester, perform "zero point calibration" (See page [RS-239](#)).

OK:

"COMPLETED" is displayed.

NG

Go to step 12

OK

10 PERFORM SENSITIVITY CHECK

- (a) Using the intelligent tester, perform "sensitivity check" (See page [RS-239](#)).

Standard value:

27 to 33 kg (59.52 to 72.75 lb)

NG

Go to step 12

OK

11 CHECK DTC

- (a) Turn the power switch on (IG).
- (b) Clear the DTCs stored in the occupant classification ECU (See page [RS-248](#)).

- (c) Clear the DTCs stored in the center airbag sensor assembly (See page [RS-41](#)).
- (d) Turn the power switch off.
- (e) Turn the power switch on (IG).
- (f) Check the DTCs (See page [RS-248](#)).

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

NG

12 REPLACE FRONT SEAT ASSEMBLY RH

- (a) Turn the power switch off.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Replace the front seat assembly RH (See page [SE-29](#) for power seat or [SE-16](#) for manual seat).

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 power switch on (IG).
- (d) Using the intelligent tester, perform "zero point calibration" (See page [RS-239](#)).

OK:

"COMPLETED" is displayed.

NEXT

14 PERFORM SENSITIVITY CHECK

- (a) Using the intelligent tester, perform "sensitivity check" (See page [RS-239](#)).

Standard value:

27 to 33 kg (59.52 to 72.75 lb)

NEXT

END