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|------------|--------------|---|
| DTC | B1783 | OCCUPANT CLASSIFICATION SENSOR REAR RH CIRCUIT MALFUNCTION |
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CIRCUIT DESCRIPTION

The occupant classification sensor rear RH circuit consists of the occupant classification ECU and the occupant classification sensor rear RH.

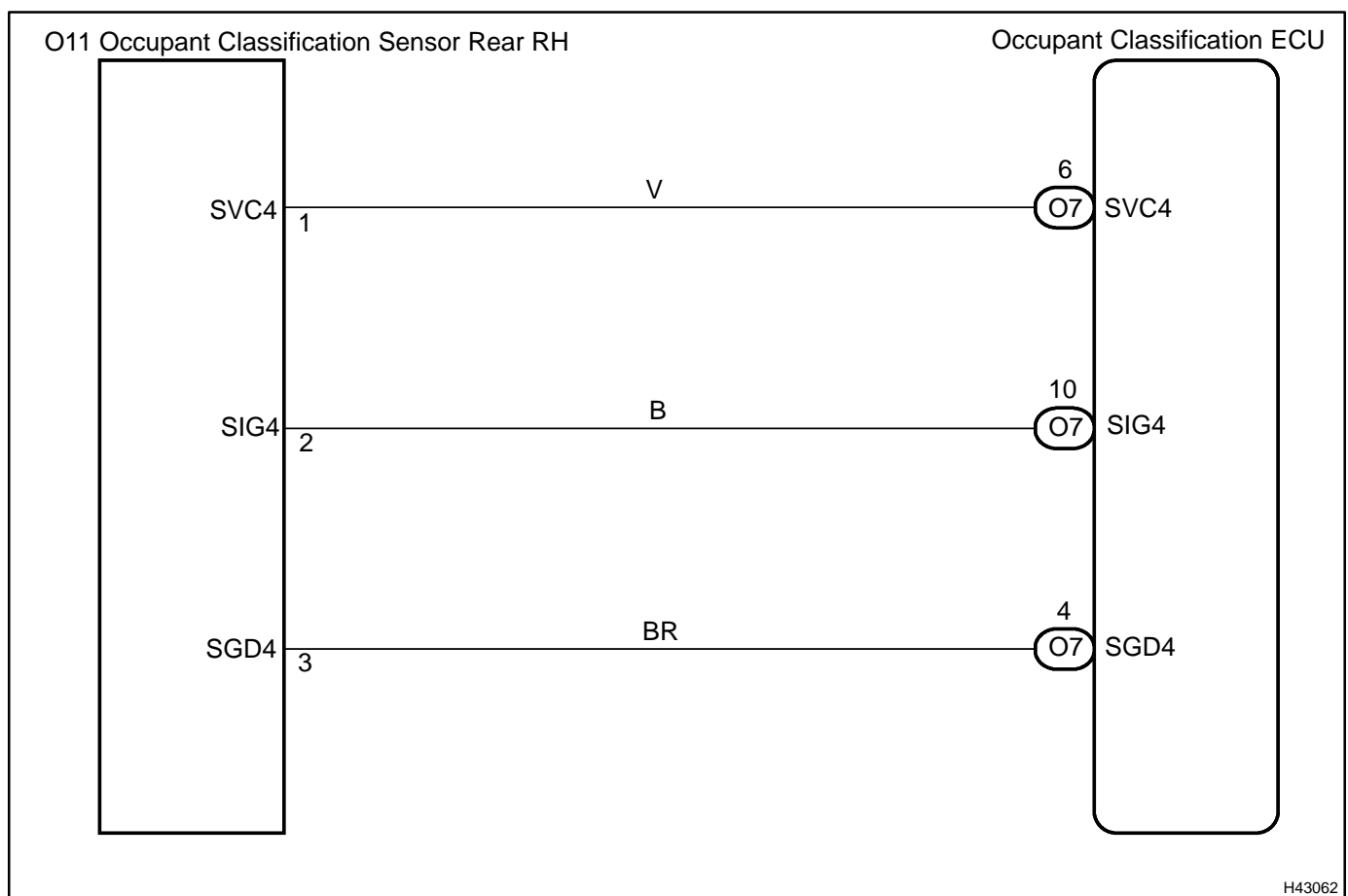
DTC B1783 is recorded when a malfunction is detected in the occupant classification sensor rear RH circuit.

| DTC No. | DTC Detecting Condition | Trouble Area |
|---------|---|--|
| B1783 | <ul style="list-style-type: none"> When the occupant classification ECU receives a line short signal, open signal, short to ground signal or B+ short signal in the occupant classification sensor rear RH circuit for 2 seconds. Occupant classification sensor rear RH malfunction Occupant classification ECU malfunction | <ul style="list-style-type: none"> Seat adjuster frame assy (Occupant classification sensor rear RH) Front seat wire RH Occupant classification ECU |

HINT:

- When DTC B1150/23 is detected as a result of troubleshooting for the supplemental restraint system, perform troubleshooting for DTC B1783 of the occupant classification system.
- Use the hand-held tester to check the DTC of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assy 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 ignition switch to the ON position.
- Clear the DTCs stored in memory (see page 05-1215).

HINT:

- First clear DTCs stored in the occupant classification ECU memory and then in the airbag sensor assy center memory.
 - Use the hand-held tester to clear the DTC of the occupant classification ECU, otherwise the DTC cannot be cleared.
- Turn the ignition switch to the LOCK position.
 - Turn the ignition switch to the ON position.
 - Using the hand-held tester, check the DTCs (see page 05-1215).

OK:

DTC B1783 is not output.

HINT:

Codes other than code B1783 may be output at this time, but they are not related to this check.

NG

Go to step 2

OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05-1207)

2 CHECK CONNECTION OF CONNECTORS

- Turn the ignition switch to the LOCK position.
- 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 sensor rear RH.

OK:

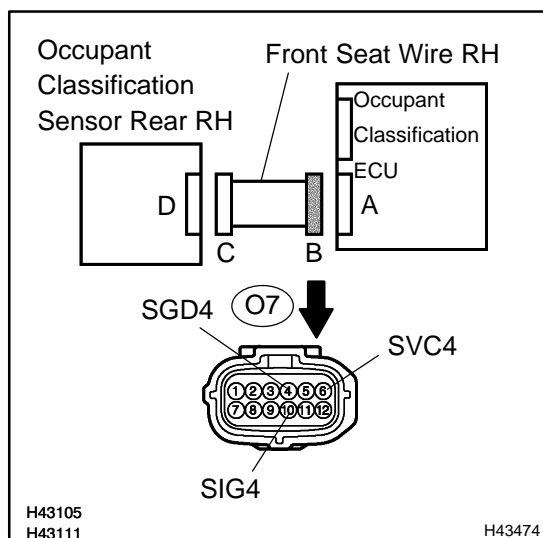
The connectors are connected.

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CONNECT CONNECTORS, THEN GO TO STEP 1

OK

3 CHECK FRONT SEAT WIRE RH (TO B+)



- Disconnect the connectors from the occupant classification ECU and the occupant classification sensor rear RH.
- Connect the negative (-) terminal cable to the battery.
- Turn the ignition switch to the ON position.
- Measure the voltage according to the value(s) in the table below.

Standard:

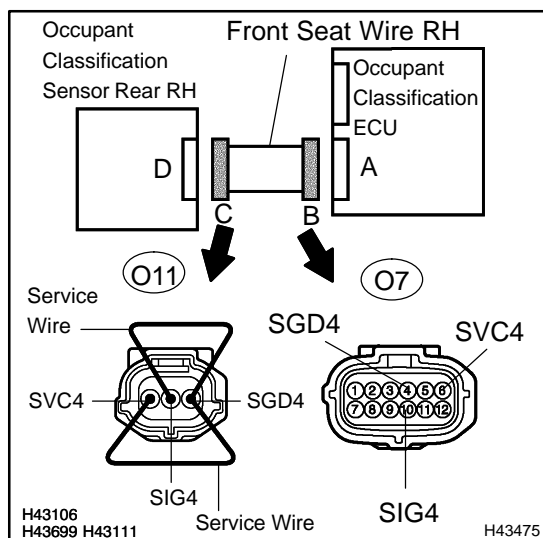
| Tester connection | Condition | Specified condition |
|----------------------------|--------------------|---------------------|
| O7-4 (SGD4) - Body ground | Ignition switch ON | Below 1 V |
| O7-6 (SVC4) - Body ground | Ignition switch ON | Below 1 V |
| O7-10 (SIG4) - Body ground | Ignition switch ON | Below 1 V |

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REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

4 CHECK FRONT SEAT WIRE RH (OPEN)



- Turn the ignition switch to the LOCK position.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Using a service wire, connect O11-1 (SVC4) and O11-3 (SGD4), and connect O11-2 (SIG4) and O11-3 (SGD4) of connector "C".

NOTICE:

Do not forcibly insert a service wire into the terminals of the connector when connecting.

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

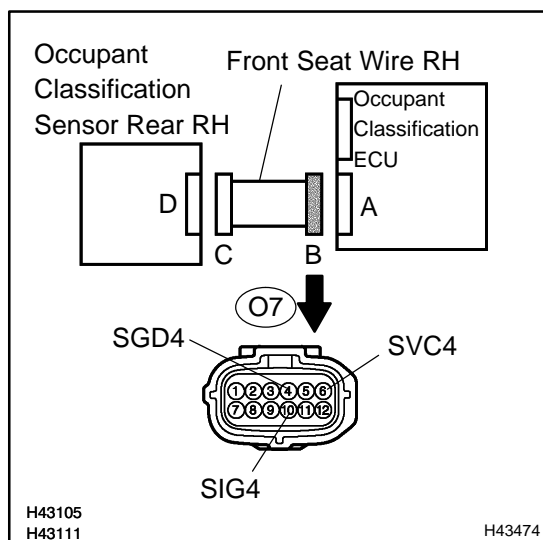
Standard:

| Tester connection | Condition | Specified condition |
|----------------------------|-----------|---------------------|
| O7-6 (SVC4) - O7-4 (SGD4) | Always | Below 1 Ω |
| O7-10 (SIG4) - O7-4 (SGD4) | Always | Below 1 Ω |

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REPAIR OR REPLACE FRONT SEAT WIRE RH

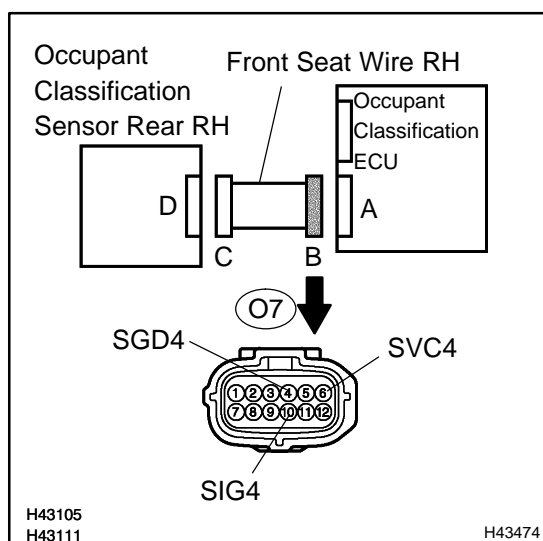
OK

5 CHECK FRONT SEAT WIRE RH (SHORT)

- (a) Disconnect the service wire from connector "C".
 (b) Measure the resistance according to the value(s) in the table below.

Standard:

| Tester connection | Condition | Specified condition |
|----------------------------|-----------|---------------------|
| O7-6 (SVC4) - O7-4 (SGD4) | Always | 1 MΩ or Higher |
| O7-10 (SIG4) - O7-4 (SGD4) | Always | 1 MΩ or Higher |
| O7-6 (SVC4) - O7-10 (SIG4) | Always | 1 MΩ or Higher |

NG**REPAIR OR REPLACE FRONT SEAT WIRE RH****OK****6 CHECK FRONT SEAT WIRE RH (TO GROUND)**

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

Standard:

| Tester connection | Condition | Specified condition |
|----------------------------|-----------|---------------------|
| O7-4 (SGD4) - Body ground | Always | 1 MΩ or Higher |
| O7-6 (SVC4) - Body ground | Always | 1 MΩ or Higher |
| O7-10 (SIG4) - Body ground | Always | 1 MΩ or Higher |

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

7 RECHECK DTC

- (a) Connect the connectors to the occupant classification ECU and the occupant classification sensor rear RH.
- (b) Connect the negative (-) terminal cable to the battery.
- (c) Turn the ignition switch to the ON position.
- (d) Clear the DTCs stored in memory (see page [05-1215](#)).

HINT:

- First clear DTCs stored in the occupant classification ECU memory and then in the airbag sensor assy center memory.
 - Use the hand-held tester to clear the DTC of the occupant classification ECU, otherwise the DTC cannot be cleared.
- (e) Turn the ignition switch to the LOCK position.
 - (f) Turn the ignition switch to the ON position.
 - (g) Using the hand-held tester, check the DTCs (see page [05-1215](#)).

OK:

DTC B1783 is not output.

HINT:

Codes other than code B1783 may be output at this time, but they are not related to this check.

NG

Go to step 8

OK

USE SIMULATION METHOD TO CHECK (SEE PAGE [05-1207](#))

8 REPLACE OCCUPANT CLASSIFICATION ECU

- (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) Replace the occupant classification ECU (see page [60-64](#)).

HINT:

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

9 PERFORM ZERO POINT CALIBRATION

- (a) Using the hand-held tester, perform "Zero point calibration" (see page [05-1203](#)).

OK:

The "COMPLETED" is displayed.

NG

Go to step 12

OK

10 PERFORM SENSITIVITY CHECK

- (a) Using the hand-held tester, perform "Sensitivity check" (see page [05-1203](#)).
Standard value: 27 to 33 kg (59.52 to 72.75 lb)

NG **Go to step 12**

OK

11 RECHECK 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 [05-1215](#)).

HINT:

- First clear DTCs stored in the occupant classification ECU memory and then in the airbag sensor assy center memory.
 - Use the hand-held tester to clear the DTC of the occupant classification ECU, otherwise the DTC cannot be cleared.
- (d) Turn the ignition switch to the LOCK position.
 (e) Turn the ignition switch to the ON position.
 (f) Using the hand-held tester, check the DTCs (see page [05-1215](#)).

OK:

DTC B1783 is not output.

HINT:

Codes other than code B1783 may be output at this time, but they are not related to this check.

NG **Go to step 12**

OK

END

12 REPLACE SEAT ADJUSTER FRAME ASSY

- (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) Replace the seat adjuster frame assy (see page [72-11](#), [72-19](#)).

13 PERFORM ZERO POINT CALIBRATION

- (a) Using the hand-held tester, perform "Zero point calibration" (see page [05-1203](#)).

OK:

The "COMPLETED" is displayed.

| | |
|-----------|----------------------------------|
| 14 | PERFORM SENSITIVITY CHECK |
|-----------|----------------------------------|

- (a) Using the hand-held tester, perform "Sensitivity check" (see page [05-1203](#)).
Standard value: 27 to 33 kg (59.52 to 72.75 lb)



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| END |
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