

|     |       |                                                            |
|-----|-------|------------------------------------------------------------|
| DTC | B1782 | Rear Occupant Classification Sensor LH Circuit Malfunction |
|-----|-------|------------------------------------------------------------|

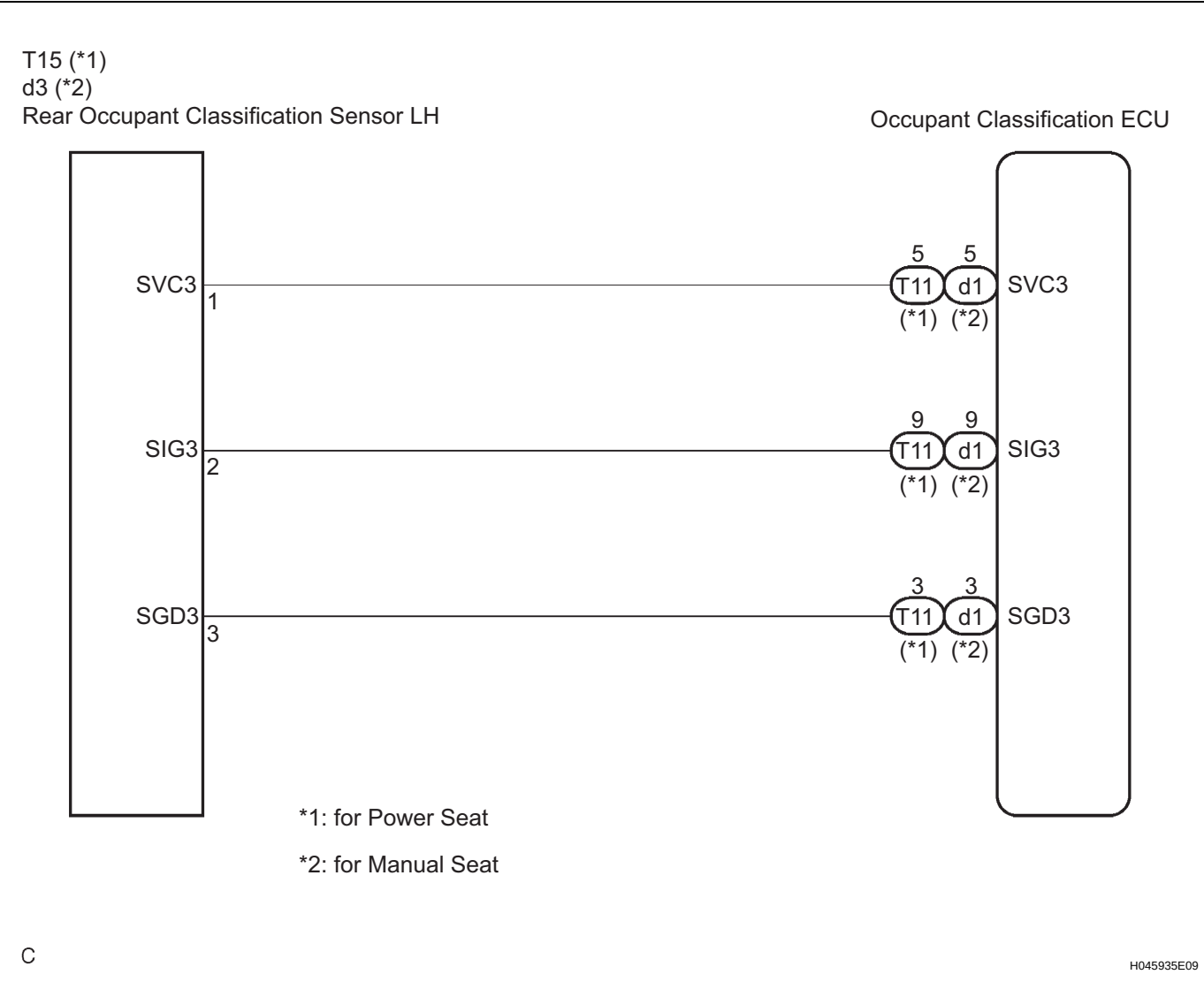
DESCRIPTION

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

DTC B1782 is recorded when a malfunction is detected in the rear occupant classification sensor LH circuit.

| DTC No. | DTC Detecting Condition                                                                                                                                                                                                                                                                                                                                                                        | Trouble Area                                                                                                                                                                   |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B1782   | <ul style="list-style-type: none"><li>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 rear occupant classification sensor LH circuit for 2 seconds.</li><li>Rear occupant classification sensor LH malfunction</li><li>Occupant classification ECU malfunction</li></ul> | <ul style="list-style-type: none"><li>Front seat assembly RH (Rear occupant classification sensor LH)</li><li>Front seat wire RH</li><li>Occupant classification ECU</li></ul> |

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 B1782 is not output.**

HINT:

Codes other than DTC B1782 may be output at this time, but they are not related to this check.

OK

**USE SIMULATION METHOD TO CHECK (See page [RS-245](#))**

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**2****CHECK CONNECTION OF CONNECTORS**

- Turn the power switch off.
- Disconnect the negative (-) terminal cable from the battery.
- Check that the connectors are properly connected to the occupant classification ECU and the rear occupant classification sensor LH.

**OK:**

**The connectors are properly connected.**

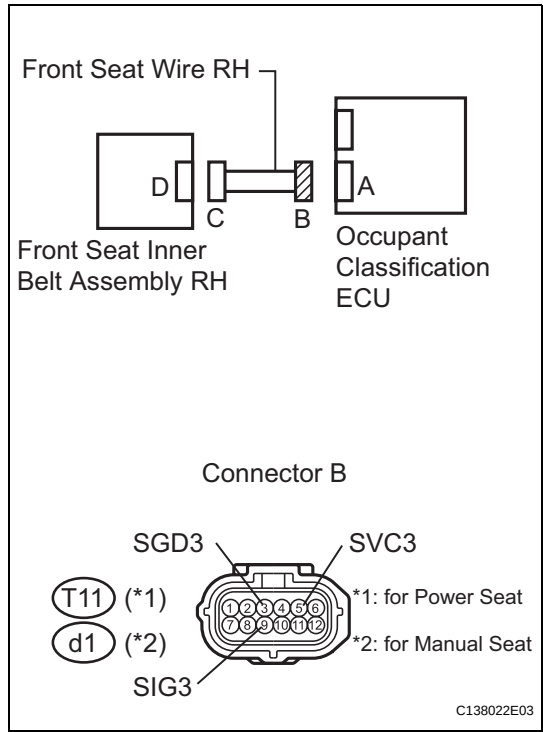
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**CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

3

CHECK FRONT SEAT WIRE RH (SHORT TO B+)



- (a) Disconnect the connectors from the occupant classification ECU and the rear occupant classification sensor LH.
- (b) Connect the negative (-) terminal cable to the battery.
- (c) Turn the power switch on (IG).
- (d) Measure the voltage according to the value(s) in the table below.

Standard voltage:  
for Power seat

| Tester connection          | Condition            | Specified condition |
|----------------------------|----------------------|---------------------|
| T11-3 (SGD3) - Body ground | Power switch on (IG) | Below 1 V           |
| T11-5 (SVC3) - Body ground | Power switch on (IG) | Below 1 V           |
| T11-9 (SIG3) - Body ground | Power switch on (IG) | Below 1 V           |

for Manual seat

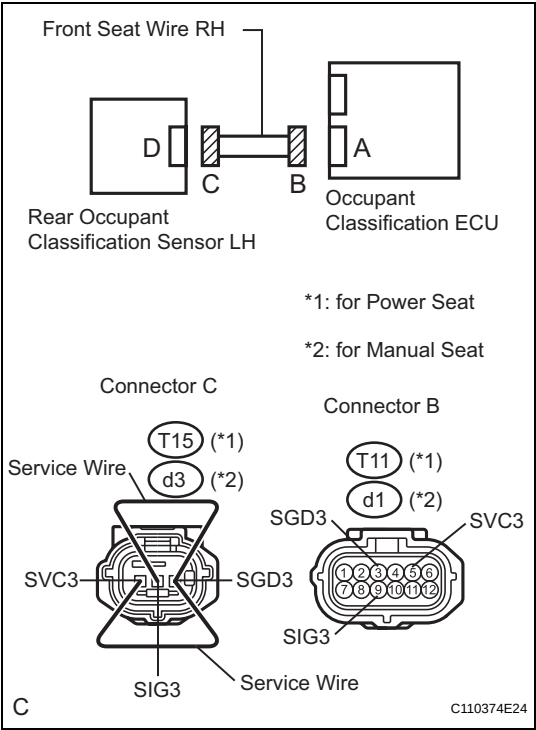
| Tester connection         | Condition            | Specified condition |
|---------------------------|----------------------|---------------------|
| d1-3 (SGD3) - Body ground | Power switch on (IG) | Below 1 V           |
| d1-9 (SIG3) - Body ground | Power switch on (IG) | Below 1 V           |
| d1-5 (SVC3) - Body ground | Power switch on (IG) | Below 1 V           |

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REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

4 CHECK FRONT SEAT WIRE RH (OPEN)



- (a) Turn the power switch off.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Using a service wire, connect terminals 1 (SVC3) and 3 (SGD3), and connect terminals 2 (SIG3) and 3 (SGD3) of connector C.

**NOTICE:**

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

- (d) 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) - T11-3 (SGD3) | Always    | Below 1 Ω           |
| T11-9 (SIG3) - T11-3 (SGD3) | Always    | Below 1 Ω           |

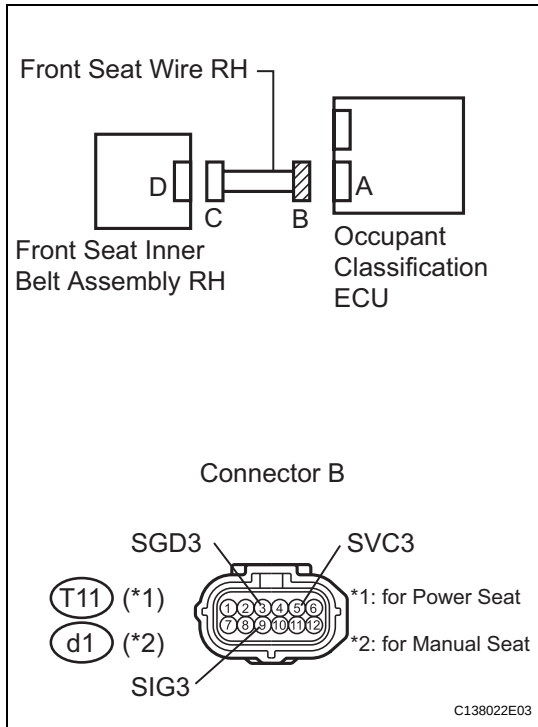
**for Manual seat**

| Tester connection         | Condition | Specified condition |
|---------------------------|-----------|---------------------|
| d1-9 (SIG3) - d1-3 (SGD3) | Always    | Below 1 Ω           |
| d1-5 (SVC3) - d1-3 (SGD3) | 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 resistance:  
for Power seat**

| Tester connection           | Condition | Specified condition |
|-----------------------------|-----------|---------------------|
| T11-5 (SVC3) - T11-3 (SGD3) | Always    | 1 MΩ or Higher      |
| T11-9 (SIG3) - T11-3 (SGD3) | Always    | 1 MΩ or Higher      |
| T11-5 (SVC3) - T11-9 (SIG3) | Always    | 1 MΩ or Higher      |

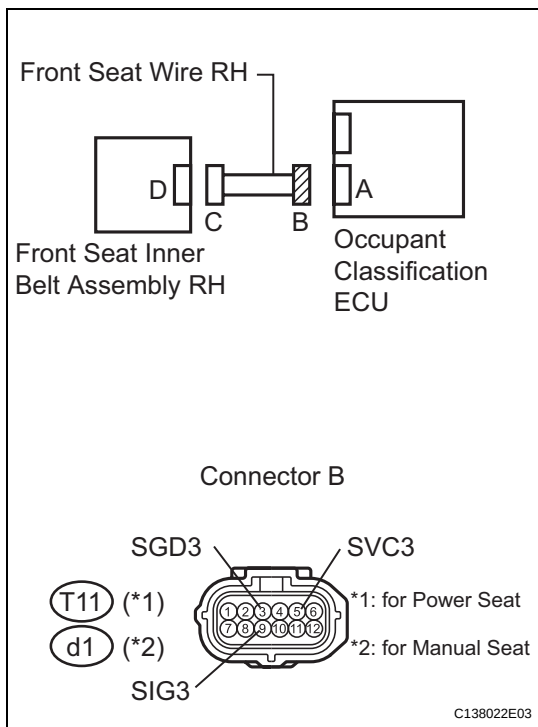
**for Manual seat**

| Tester connection         | Condition | Specified condition |
|---------------------------|-----------|---------------------|
| d1-9 (SIG3) - d1-3 (SGD3) | Always    | 1 MΩ or Higher      |
| d1-5 (SVC3) - d1-3 (SGD3) | Always    | 1 MΩ or Higher      |
| d1-9 (SIG3) - d1-5 (SVC3) | Always    | 1 MΩ or Higher      |

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**REPAIR OR REPLACE FRONT SEAT WIRE RH**

**OK**

**6 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)**

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

**Standard resistance:  
for Power seat**

| Tester connection          | Condition | Specified condition |
|----------------------------|-----------|---------------------|
| T11-3 (SGD3) - Body ground | Always    | 1 MΩ or Higher      |
| T11-5 (SVC3) - Body ground | Always    | 1 MΩ or Higher      |
| T11-9 (SIG3) - Body ground | Always    | 1 MΩ or Higher      |

**for Manual seat**

| Tester connection         | Condition | Specified condition |
|---------------------------|-----------|---------------------|
| d1-3 (SGD3) - Body ground | Always    | 1 MΩ or Higher      |
| d1-9 (SIG3) - Body ground | Always    | 1 MΩ or Higher      |
| d1-5 (SVC3) - Body ground | Always    | 1 MΩ or Higher      |

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**REPAIR OR REPLACE FRONT SEAT WIRE  
RH**

OK

**7****CHECK DTC**

- (a) Connect the connectors to the occupant classification ECU and the rear occupant classification sensor LH.
- (b) Connect the negative (-) terminal cable to the battery.
- (c) Turn the power switch on (IG).
- (d) Clear the DTCs stored in the occupant classification ECU (See page [RS-248](#)).
- (e) Clear the DTCs stored in the center airbag sensor assembly (See page [RS-41](#)).
- (f) Turn the power switch off.
- (g) Turn the power switch on (IG).
- (h) Check the DTCs (See page [RS-248](#)).

**OK:****DTC B1782 is not output.****HINT:**

Codes other than DTC B1782 may be output at this time, but they are not related to this check.

OK

**USE SIMULATION METHOD TO CHECK (See  
page [RS-245](#))**

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**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-445](#)).

**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)**

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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 B1782 is not output.****HINT:**

Codes other than DTC B1782 may be output at this time, but they are not related to this check.

OK

END

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**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