

DTC	B1782	Rear Occupant Classification Sensor LH Circuit Malfunction
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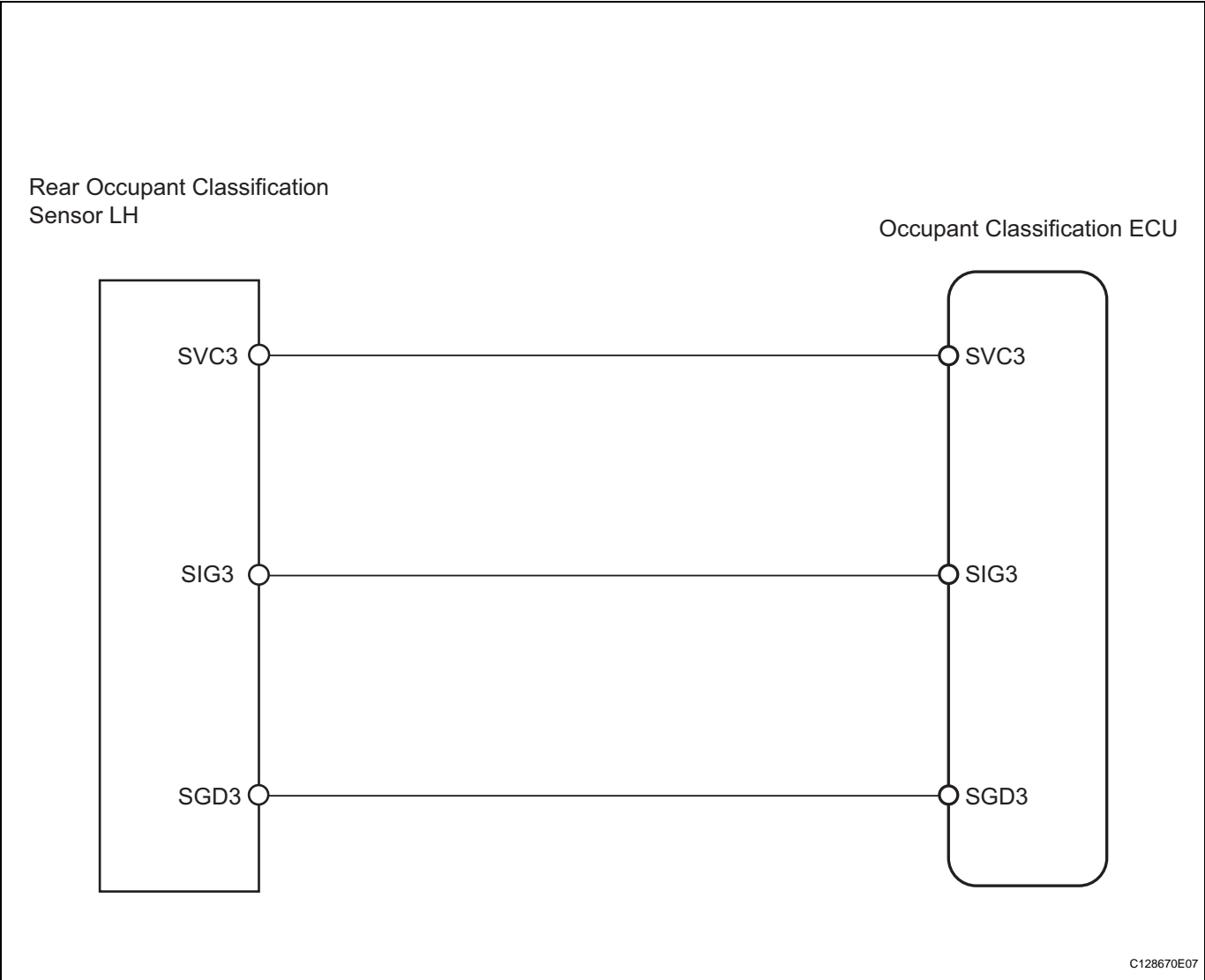
DESCRIPTION

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 Detection Condition	Trouble Area
B1782	When one of following conditions is met: <ul style="list-style-type: none"><li>Occupant classification ECU detects line short signal, open signal, short to ground signal or short 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 wire RH</li><li>Front seat RH (Rear occupant classification sensor LH)</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 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.

**1****CHECK FOR DTC**

- (a) Turn the ignition switch ON.
- (b) 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 B1782 is not output.**

HINT:

DTCs other than DTC B1782 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 rear occupant classification sensor LH.

**OK:**

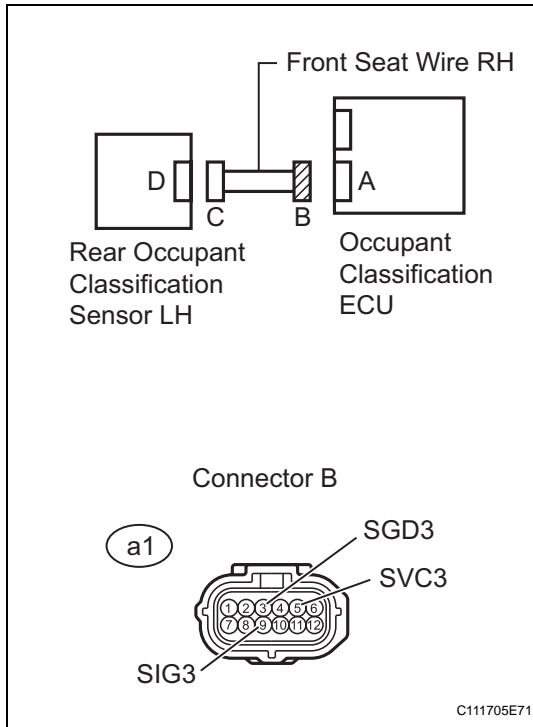
**The connectors are properly connected.**

**NG**

**CONNECT CONNECTOR**

**OK**

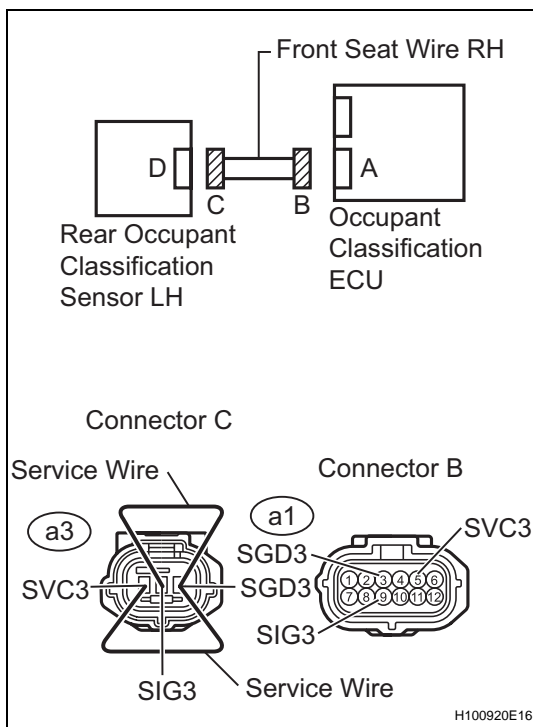
**RS**

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

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

**Standard voltage**

Tester Connection	Specified Condition
a1-3 (SGD3) - Body ground	Below 1 V
a1-5 (SVC3) - Body ground	Below 1 V
a1-9 (SIG3) - Body ground	Below 1 V

**NG****REPAIR OR REPLACE FRONT SEAT WIRE RH****OK****4 CHECK FRONT SEAT WIRE RH (FOR OPEN)**

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- Using a service wire, connect terminals a3-1 (SVC3) and a3-3 (SGD3), and connect terminals a3-2 (SIG3) and a3-3 (SGD3) of connector C.

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

- Measure the resistance of the wire harness side connector.

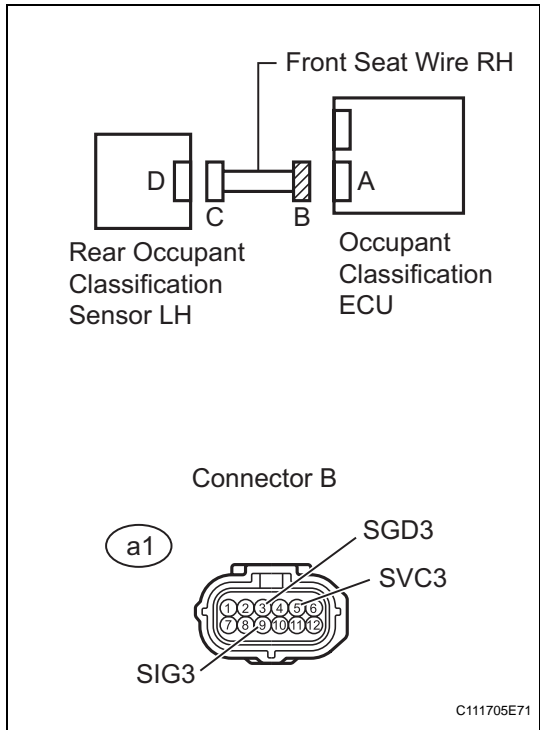
**Standard resistance**

Tester Connection	Specified Condition
a1-5 (SVC3) - a1-3 (SGD3)	Below 1 $\Omega$
a1-9 (SIG3) - a1-3 (SGD3)	Below 1 $\Omega$

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

5

CHECK FRONT SEAT WIRE RH (FOR SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
a1-5 (SVC3) - a1-3 (SGD3)	1 MΩ or higher
a1-9 (SIG3) - a1-3 (SGD3)	1 MΩ or higher
a1-5 (SVC3) - a1-9 (SIG3)	1 MΩ or higher

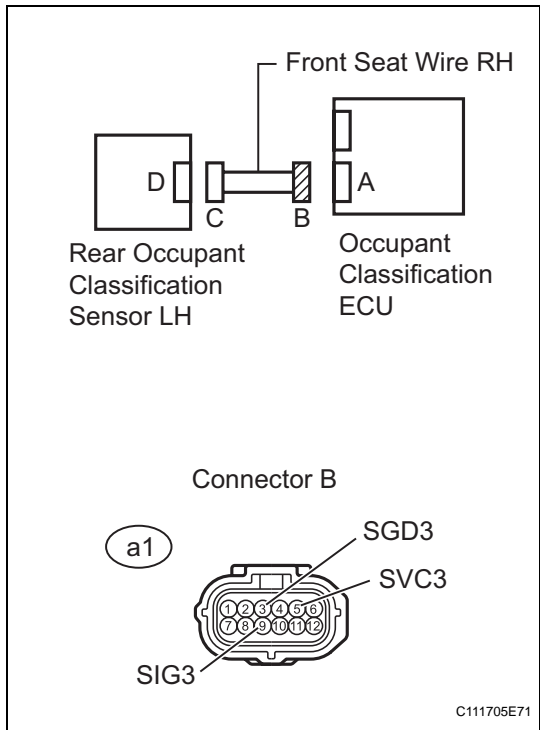
NG

REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

6

CHECK FRONT SEAT WIRE RH (TO GROUND)



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

Standard resistance

Tester Connection	Specified Condition
a1-3 (SGD3) - Body ground	1 MΩ or higher
a1-5 (SVC3) - Body ground	1 MΩ or higher
a1-9 (SIG3) - Body ground	1 MΩ or higher

NG

REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

**7 CHECK FOR DTC**

- (a) Connect the connectors to the occupant classification ECU and the rear occupant classification sensor LH.
- (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 B1782 is not output.**

HINT:

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

**OK**

**USE SIMULATION METHOD TO CHECK**

**NG**

**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.**

**NG**

**Go to step 12**

**OK**

**RS**

**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)**

NG

**Go to step 12**

OK

**11 CHECK FOR DTC**

- (a) Connect the cable to the negative (-) battery terminal, 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 B1782 is not output.**

**HINT:**

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

OK

**END**

RS

NG

**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 assembly RH (see page [SE-8](#)).

NEXT

**13 PERFORM ZERO POINT CALIBRATION**

- (a) Connect the negative (-) terminal cable to the battery, 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.**

A rectangular button with a downward-pointing arrow shape at the bottom, containing the word "NEXT" in bold, uppercase letters.

<b>14</b>	<b>PERFORM SENSITIVITY CHECK</b>
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- (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)**

A rectangular button with a downward-pointing arrow shape at the bottom, containing the word "NEXT" in bold, uppercase letters.

<b>END</b>
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