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.

<table>
<thead>
<tr>
<th>DTC No.</th>
<th>DTC Detecting Condition</th>
<th>Trouble Area</th>
</tr>
</thead>
</table>
| B1793   | • Occupant classification ECU detects line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in the occupant classification sensor power supply circuit for 2 seconds  | • No. 1 seat wire  
• Front seat assembly RH (Occupant classification sensors)  
• Occupant classification ECU                                                                 |
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 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 DTC

(a) Turn the ignition switch to the on position.
(b) Clear the DTCs stored in the memory (See page RS-254).
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-254).

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

2 CHECK CONNECTION OF CONNECTORS

(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 properly connected.

OK

CONNECT CONNECTORS

3 CHECK NO.1 SEAT WIRE (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.

Standard voltage

<table>
<thead>
<tr>
<th>Tester connection</th>
<th>Condition</th>
<th>Specified condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5-11 (SVC1) - Body ground</td>
<td>Ignition switch on</td>
<td>Below 1 V</td>
</tr>
<tr>
<td>Q5-12 (SVC2) - Body ground</td>
<td>Ignition switch on</td>
<td>Below 1 V</td>
</tr>
<tr>
<td>Q5-5 (SVC3) - Body ground</td>
<td>Ignition switch on</td>
<td>Below 1 V</td>
</tr>
<tr>
<td>Q5-6 (SVC4) - Body ground</td>
<td>Ignition switch on</td>
<td>Below 1 V</td>
</tr>
</tbody>
</table>

NG

REPAIR OR REPLACE NO.1 SEAT WIRE
(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.

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester connection</th>
<th>Condition</th>
<th>Specified condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5-11 (SVC1) - Body ground</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
<tr>
<td>Q5-12 (SVC2) - Body ground</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
<tr>
<td>Q5-5 (SVC3) - Body ground</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
<tr>
<td>Q5-6 (SVC4) - Body ground</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
</tbody>
</table>

**OK**

**NG**

REPAIR OR REPLACE NO.1 SEAT WIRE
5 CHECK NO.1 SEAT WIRE (FOR OPEN)

(a) Measure the resistance.

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester connection</th>
<th>Condition</th>
<th>Specified condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5-11 (SVC1) - Q1-1 (SVC1)</td>
<td>Always</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>Q5-12 (SVC2) - Q7-1 (SVC2)</td>
<td>Always</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>Q5-5 (SVC3) - Q2-1 (SVC3)</td>
<td>Always</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>Q5-6 (SVC4) - Q6-1 (SVC4)</td>
<td>Always</td>
<td>Below 1 Ω</td>
</tr>
</tbody>
</table>

6 CHECK NO.1 SEAT WIRE (FOR SHORT)

(a) Measure the resistance.

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester connection</th>
<th>Condition</th>
<th>Specified condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5-5 (SVC3) - Q5-6 (SVC4)</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
<tr>
<td>Q5-6 (SVC4) - Q5-11 (SVC1)</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
<tr>
<td>Q5-11 (SVC1) - Q5-12 (SVC2)</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
<tr>
<td>Q5-12 (SVC2) - Q5-5 (SVC3)</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
<tr>
<td>Q5-12 (SVC2) - Q5-6 (SVC4)</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
</tbody>
</table>
RS–326 SUPPLEMENTAL RESTRAINT SYSTEM – OCCUPANT CLASSIFICATION SYSTEM

<table>
<thead>
<tr>
<th>Tester connection</th>
<th>Condition</th>
<th>Specified condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5-11 (SVC1) - Q5-5 (SVC3)</td>
<td>Always</td>
<td>1 MΩ or higher</td>
</tr>
</tbody>
</table>

**NG**  
REPAIR OR REPLACE NO.1 SEAT WIRE

**OK**

### 7 CHECK DTC

(a) Connect the connectors to 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) Clear the DTCs stored in the memory (See page RS-254).

**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-254).

**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**

### 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 RS-412).

**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 the zero point calibration (See page RS-246).
10 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-246).
   (1) Confirm that nothing is placed on the passenger seat.
   (2) Confirm that the beginning sensor reading is within the standard range.
       **Standard range:**
       -3.2 to 3.2 kg (-7 to 7 lb)
   (3) Place a 30 kg (66.14 lb) weight (e.g. a lead mass) onto the front passenger seat.
   (4) Confirm that the sensitivity is within the standard range.
       **Standard range:**
       27 to 33 kg (59.52 to 72.75 lb)
       **HINT:**
       When performing the sensitivity check, use a solid metal weight (the check result may not be accurate if a liquid weight is used).

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 the memory (See page RS-254).
   **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-254).
   **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.
12 REPLACE FRONT SEAT ASSEMBLY RH

(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 front seat assembly RH (See page SE-5).

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 the zero point calibration (See page RS-246).
   OK: COMPLETED is displayed.

14 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-246).
   (1) Confirm that nothing is placed on the passenger seat.
   (2) Confirm that the beginning sensor reading is within the standard range.
       Standard range:
       -3.2 to 3.2 kg (-7 to 7 lb)
   (3) Place a 30 kg (66.14 lb) weight (e.g. a lead mass) onto the front passenger seat.
   (4) Confirm that the sensitivity is within the standard range.
       Standard range:
       27 to 33 kg (59.52 to 72.75 lb)
   HINT:
   When performing the sensitivity check, use a solid metal weight (the check result may not be accurate if a liquid weight is used).