

DIAGNOSTIC TROUBLE CODE CHART

If a trouble code is displayed during the DTC check, check the circuit listed for the code in the table below (proceed to the page listed for that circuit).

Occupant Classification ECU

DTC No.	Detection Item	Trouble Area	See page
B1771	Passenger Side Buckle Switch Circuit Malfunction	1. No. 1 seat wire 2. Front seat inner belt assembly (Buckle switch RH) 3. Occupant classification ECU	RS-259
B1780	Front Occupant Classification Sensor LH Circuit Malfunction	1. No. 1 seat wire 2. Front seat assembly RH (Front occupant classification sensor LH) 3. Occupant classification ECU	RS-265
B1781	Front Occupant Classification Sensor RH Circuit Malfunction	1. No. 1 seat wire 2. Front seat assembly RH (Front occupant classification sensor RH) 3. Occupant classification ECU	RS-272
B1782	Rear Occupant Classification Sensor LH Circuit Malfunction	1. No. 1 seat wire 2. Front seat assembly RH (Rear occupant classification sensor LH) 3. Occupant classification ECU	RS-279
B1783	Rear Occupant Classification Sensor RH Circuit Malfunction	1. No. 1 seat wire 2. Front seat assembly RH (Front occupant classification sensor RH) 3. Occupant classification ECU	RS-286
B1785	Front Occupant Classification Sensor LH Collision Detection	1. Front seat assembly RH (Front occupant classification sensor LH) 2. Occupant classification ECU	RS-293
B1786	Front Occupant Classification Sensor RH Collision Detection	1. Front seat assembly RH (Front occupant classification sensor RH) 2. Occupant classification ECU	RS-297
B1787	Rear Occupant Classification Sensor LH Collision Detection	1. Front seat assembly RH (Rear occupant classification sensor LH) 2. Occupant classification ECU	RS-301
B1788	Rear Occupant Classification Sensor RH Collision Detection	1. Front seat assembly RH (Rear occupant classification sensor RH) 2. Occupant classification ECU	RS-305
B1790	Center Airbag Sensor Assembly Communication Circuit Malfunction	1. No. 1 seat wire 2. Floor wire 3. Occupant classification ECU 4. Center airbag sensor assembly	RS-309
B1793	Occupant Classification Sensor Power Supply Circuit Malfunction	1. No. 1 seat wire 2. Front seat assembly RH (Occupant classification sensors) 3. Occupant classification ECU	RS-319
B1794	Open in Occupant Classification ECU Battery Positive Line	1. Wire harness 2. Occupant classification ECU	RS-327
B1795	Occupant Classification ECU Malfunction	1. Occupant classification ECU	RS-332
B1796	Sleep Operation Failure of Occupant Classification ECU	1. Occupant classification ECU	RS-334

DTC	B1771	Passenger Side Buckle Switch Circuit Malfunction
------------	--------------	---

DESCRIPTION

The passenger side buckle switch circuit consists of the occupant classification ECU and the front seat inner belt assembly RH.

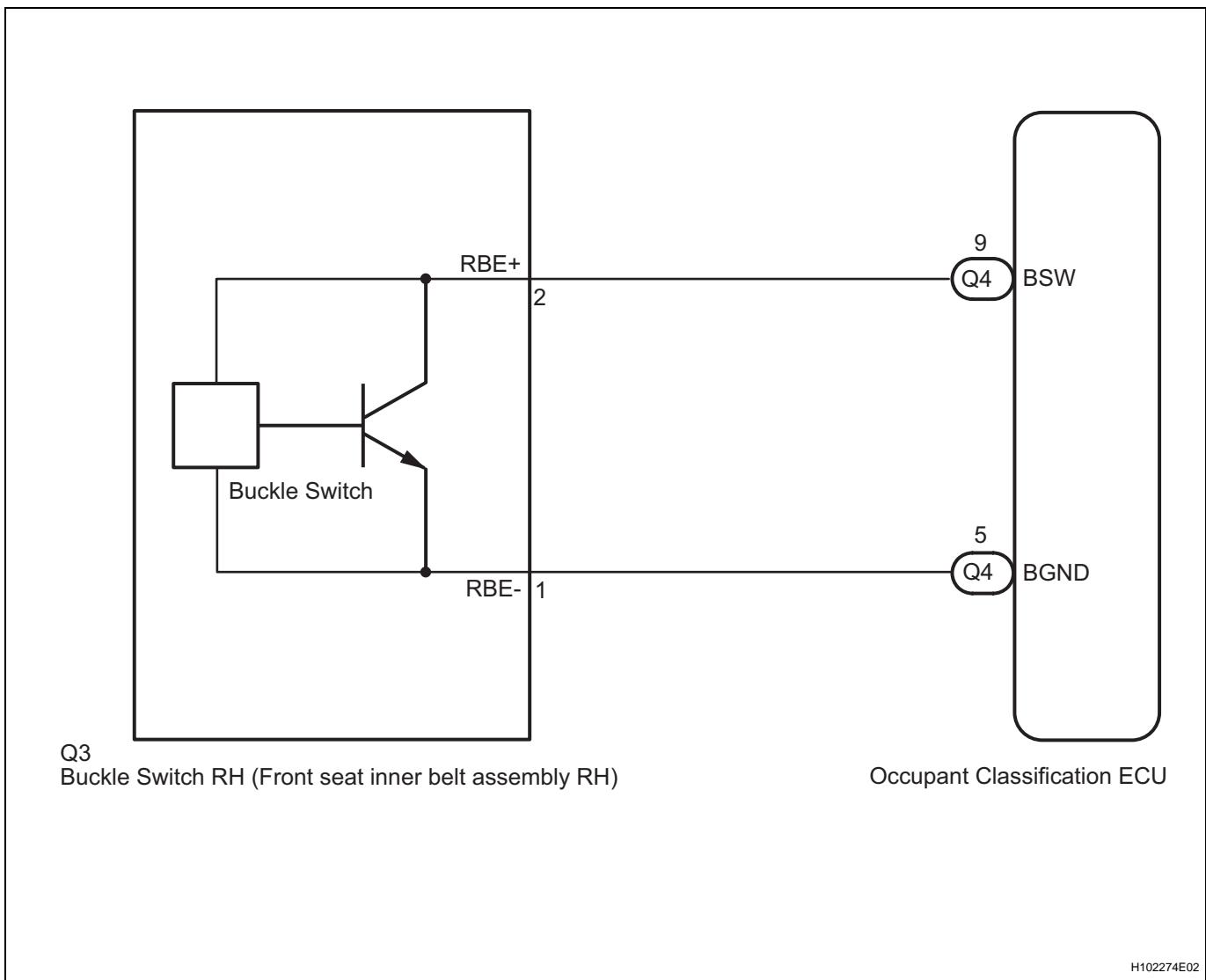
DTC B1771 is recorded when a malfunction is detected in the passenger side buckle switch circuit.

Troubleshoot DTC B1771 first when DTCs B1771 and B1795 are output simultaneously.

DTC No.	DTC Detecting Condition	Trouble Area
B1771	<ul style="list-style-type: none"> Occupant classification ECU detects line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in the passenger side buckle switch circuit for 2 seconds Passenger side buckle switch malfunction Occupant classification ECU malfunction 	<ul style="list-style-type: none"> No. 1 seat wire Front seat inner belt assembly RH (Buckle switch RH) Occupant classification ECU

WIRING DIAGRAM

RS



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

- Turn the ignition switch to the on position.
- 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.

- Turn the ignition switch to the lock position.
- Turn the ignition switch to the on position.
- Check the DTCs (See page [RS-254](#)).

OK:

DTC B1771 is not output.

HINT:

Codes other than DTC B1771 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 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 front seat inner belt assembly RH.

OK:

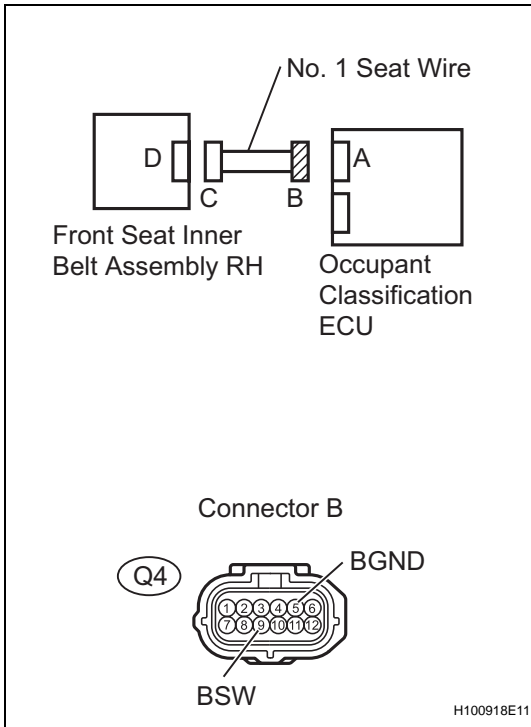
The connectors are properly connected.

NG

CONNECT CONNECTORS

OK

3 CHECK NO. 1 SEAT WIRE (TO B+)



- (a) Disconnect the connectors from the occupant classification ECU and the front seat inner belt assembly RH.
- (b) Connect the negative (-) terminal cable to the battery.
- (c) Turn the ignition switch to the on position.
- (d) Measure the voltage.

Standard voltage

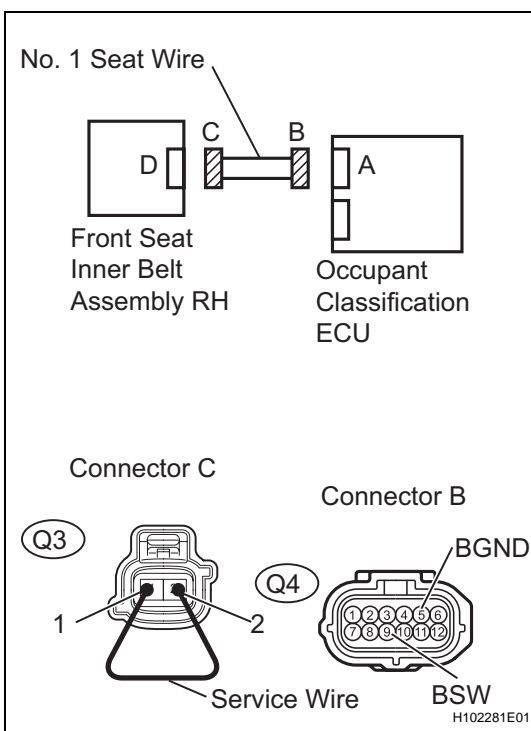
Tester connection	Condition	Specified condition
Q4-9 (BSW) - Body ground	Ignition switch on	Below 1 V
Q4-5 (BGND) - Body ground	Ignition switch on	Below 1 V

NG REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

RS

4 CHECK NO. 1 SEAT WIRE (FOR OPEN)



- (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) Using a service wire, connect Q3-2 and Q3-1 of connector C.

NOTICE:

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

- (d) Measure the resistance.

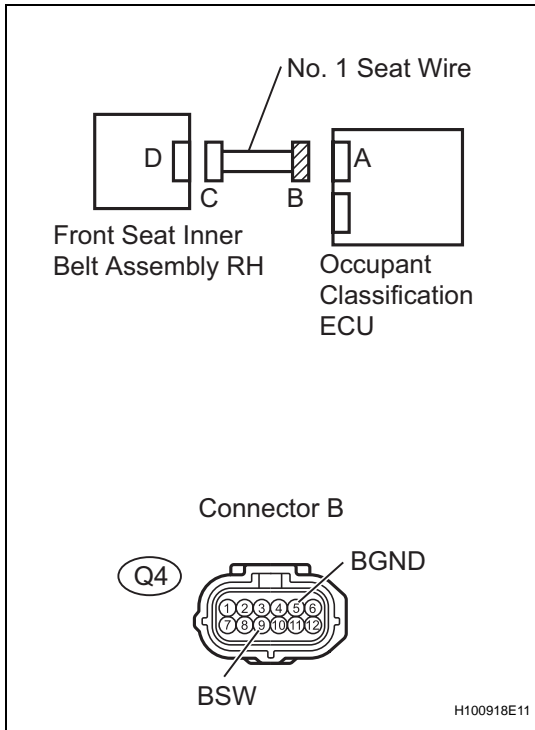
Standard resistance

Tester connection	Condition	Specified condition
Q4-9 (BSW) - Q4-5 (BGND)	Always	Below 1 Ω

NG REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

5 CHECK NO. 1 SEAT WIRE (FOR SHORT)



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

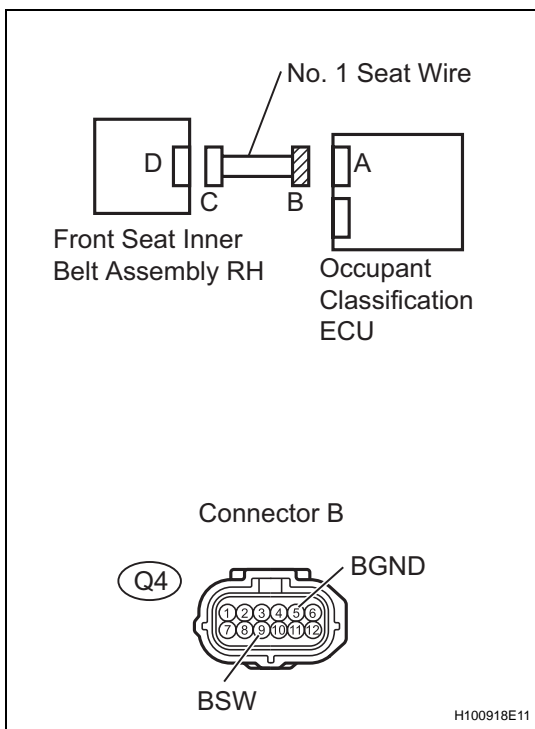
Standard resistance

Tester connection	Condition	Specified condition
Q4-9 (BSW) - Q4-5 (BGND)	Always	1 MΩ or higher

NG REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

6 CHECK NO. 1 SEAT WIRE (TO GROUND)



- (a) Measure the resistance.
- Standard resistance**

Tester connection	Condition	Specified condition
Q4-9 (BSW) - Body ground	Always	1 MΩ or higher
Q4-5 (BGND) - Body ground	Always	1 MΩ or higher

NG REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

RS

7 CHECK DTC

- (a) Connect the connectors to the occupant classification ECU and the front seat inner belt assembly 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 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 B1771 is not output.

HINT:

Codes other than DTC B1771 may be output at this time, but they are not related to this check.

OK**USE SIMULATION METHOD TO CHECK****NG****8** REPLACE FRONT SEAT INNER BELT 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 inner belt assembly RH (See page [SB-31](#)).

HINT:

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

- (d) Connect the negative (-) terminal cable to the battery.
- (e) Turn the ignition switch to the on position.
- (f) 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.

- (g) Turn the ignition switch to the lock position.
- (h) Turn the ignition switch to the on position.
- (i) Check the DTCs (See page [RS-254](#)).

OK:

DTC B1771 is not output.

HINT:

Codes other than DTC B1771 may be output at this time, but they are not related to this check.

OK**END****RS**

NG

9 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](#)).

NEXT

10 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 on the tester.**

NEXT

11 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.
- (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:**-3.2 to 3.2 kg (-7 to 7 lb)****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).

NEXT

END

RS