

DTC	B1771	Passenger Side Buckle Switch Circuit Malfunction
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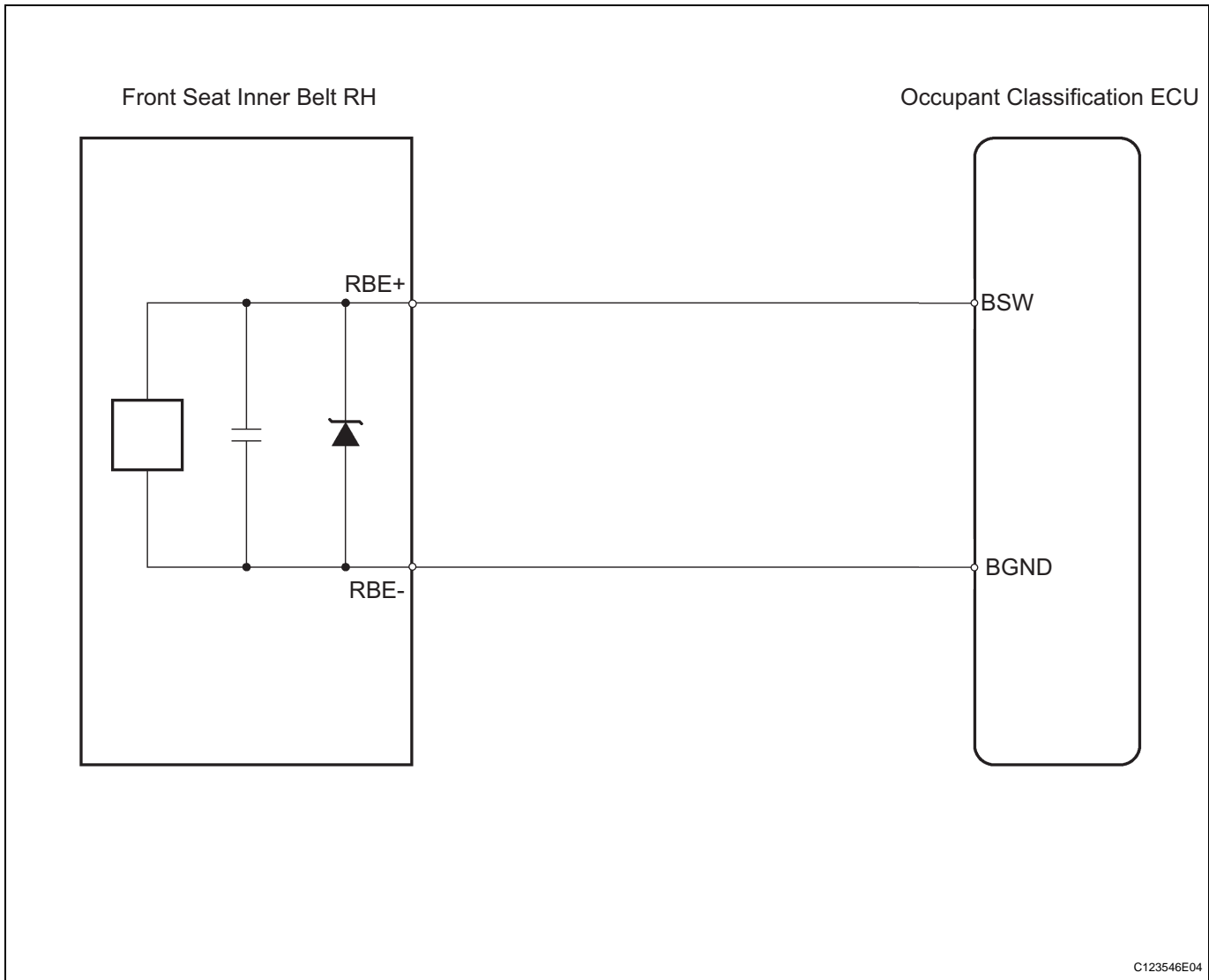
DESCRIPTION

The passenger side buckle switch circuit consists of the occupant classification ECU and the front seat inner belt 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 Detection Condition	Trouble Area
B1771	When one of following conditions is met: <ul style="list-style-type: none"> • Occupant classification ECU detects line short signal, open signal, short to ground signal or short 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"> • Floor wire • Front seat inner belt 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 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

- Turn the ignition switch ON.
- Clear the DTCs (see page [RS-249](#)).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor.
- Turn the ignition switch OFF.
- Turn the ignition switch ON.
- Check the DTCs (see page [RS-249](#)).

OK:

DTC B1771 is not output.

HINT:

DTCs 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 CONNECTOR

- Turn the ignition switch OFF.
- Disconnect the cable from the negative (-) battery terminal, 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 RH.

OK:

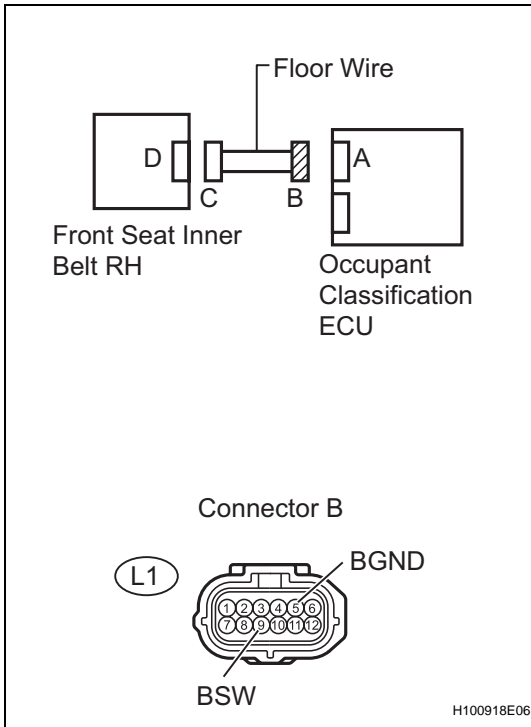
The connectors are properly connected.

NG

CONNECT CONNECTOR

OK

3 CHECK FLOOR WIRE (TO B+)



- (a) Disconnect the connectors from the occupant classification ECU and the front seat inner belt RH.
- (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (c) Turn the ignition switch ON.
- (d) Measure the voltage of the wire harness side connector.

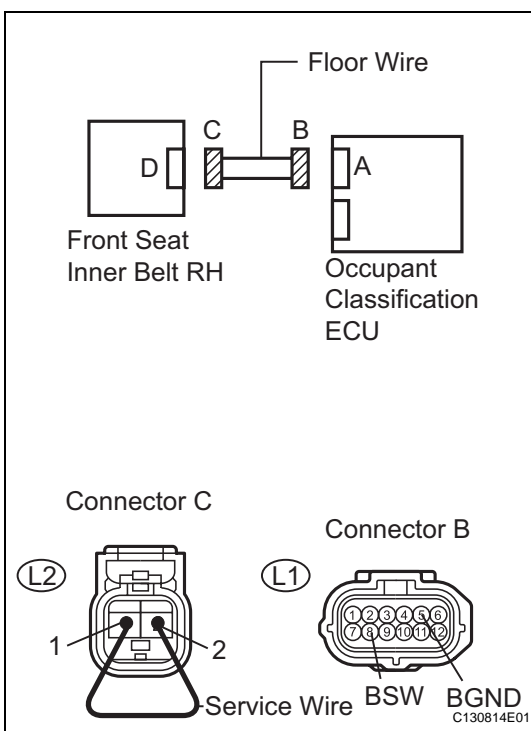
Standard voltage

Tester Connection	Specified Condition
L1-9 (BSW) - Body ground	Below 1 V
L1-5 (BGND) - Body ground	Below 1 V

NG REPAIR OR REPLACE FLOOR WIRE

OK

4 CHECK FLOOR WIRE (FOR OPEN)



- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Using a service wire, connect terminals L2-2 and L2-1 of connector C.

NOTICE:

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

- (d) Measure the resistance of the wire harness side connectors.

Standard resistance

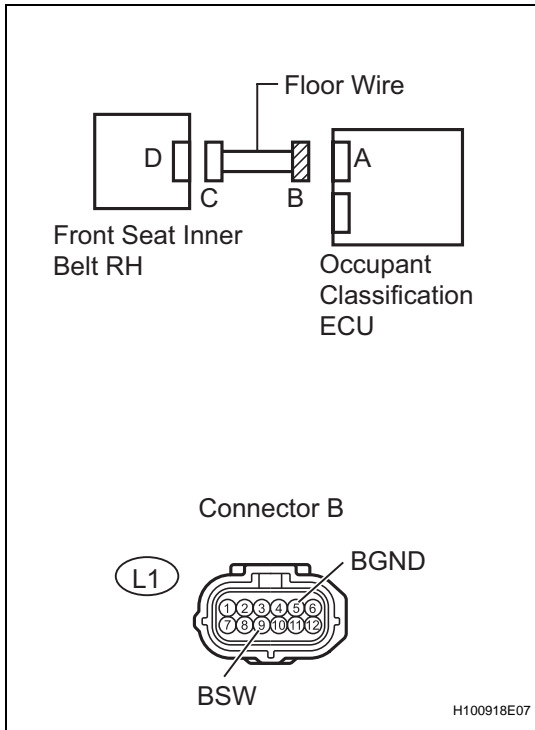
Tester Connection	Specified Condition
L1-9 (BSW) - L1-5 (BGND)	Below 1 Ω

NG REPAIR OR REPLACE FLOOR WIRE

OK

RS

5 CHECK FLOOR WIRE (FOR SHORT)



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

Standard resistance

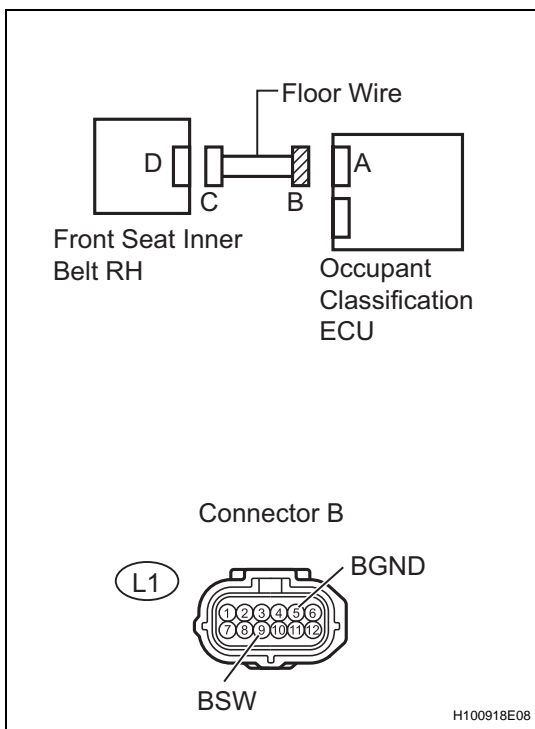
Tester Connection	Specified Condition
L1-9 (BSW) - L1-5 (BGND)	1 MΩ or higher

NG REPAIR OR REPLACE FLOOR WIRE

OK

6 CHECK FLOOR WIRE (TO GROUND)

RS



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

Standard resistance

Tester Connection	Specified Condition
L1-9 (BSW) - Body ground	1 MΩ or higher
L1-5 (BGND) - Body ground	1 MΩ or higher

NG REPAIR OR REPLACE FLOOR WIRE

OK

7	CHECK FOR DTC
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- (a) Connect the connectors to the occupant classification ECU and the front seat inner belt RH.
- (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 B1771 is not output.

HINT:

DTCs 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
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- (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 inner belt RH (see page [SB-21](#)).

HINT:

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

- (d) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (e) Turn the ignition switch ON.
- (f) Clear the DTCs (see page [RS-249](#)).

HINT:

First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor.

- (g) Turn the ignition switch OFF.
- (h) Turn the ignition switch ON.
- (i) Check the DTCs (see page [RS-249](#)).

OK:

DTC B1771 is not output.

HINT:

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

OK

END

NG

RS

9 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](#)).

NEXT**10 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 (with CAN VIM) 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.****NEXT****11 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)****RS****NEXT****END**