

DTC	B1771	Passenger Side Buckle Switch Circuit Malfunction
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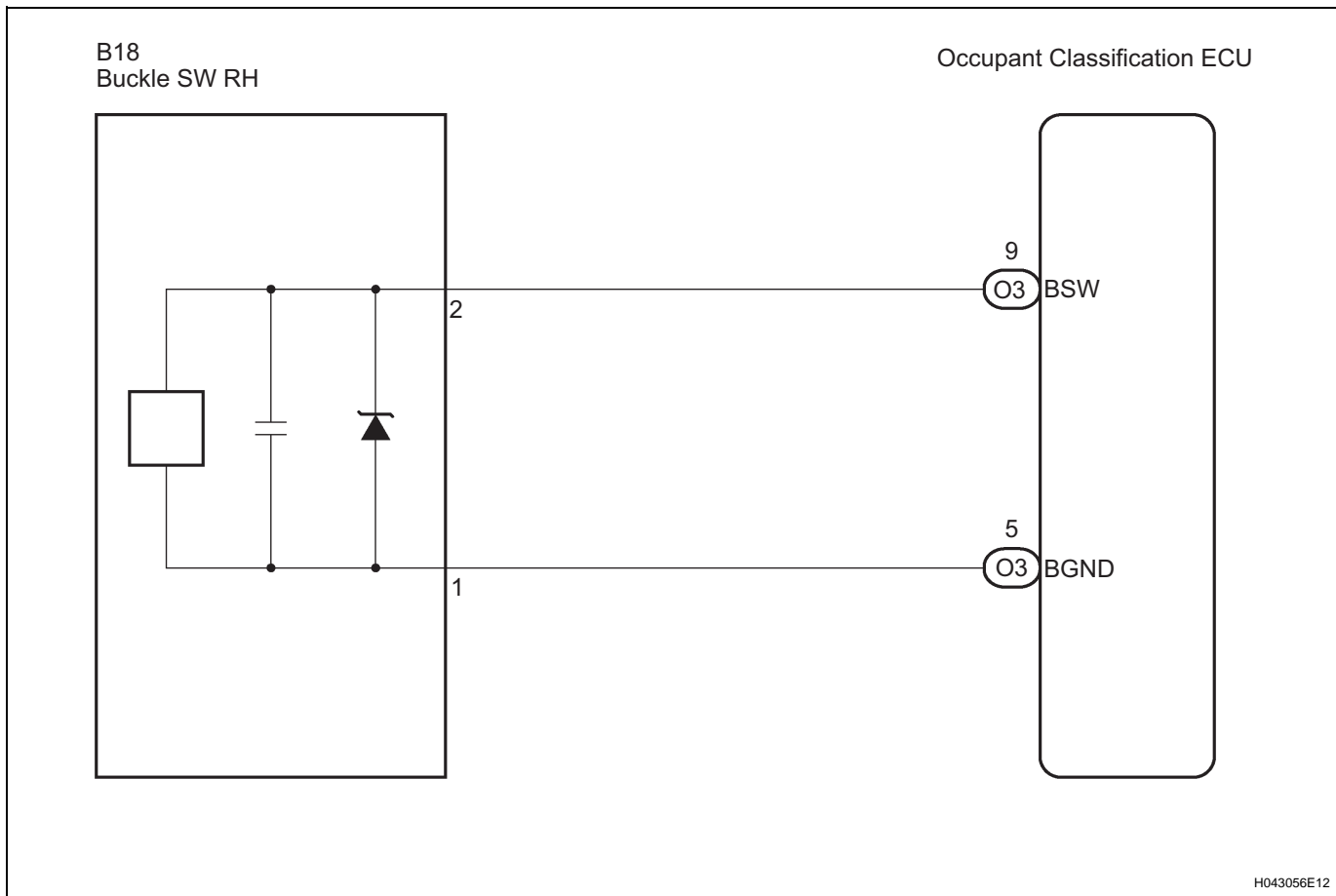
DESCRIPTION

The passenger side buckle switch circuit consists of the occupant classification ECU and the front seat inner belt 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"> 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 passenger side buckle switch circuit for 2 seconds. Passenger side buckle switch malfunction Occupant classification ECU malfunction 	<ul style="list-style-type: none"> Front seat inner belt assembly RH Occupant classification ECU Front seat wire RH

WIRING DIAGRAM**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 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

- (a) Turn the ignition switch to the ON position.
 - (b) Clear the DTCs stored in memory (See page [RS-310](#)).
- 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-310](#)).

OK:**DTC B1771 is not output.****HINT:**

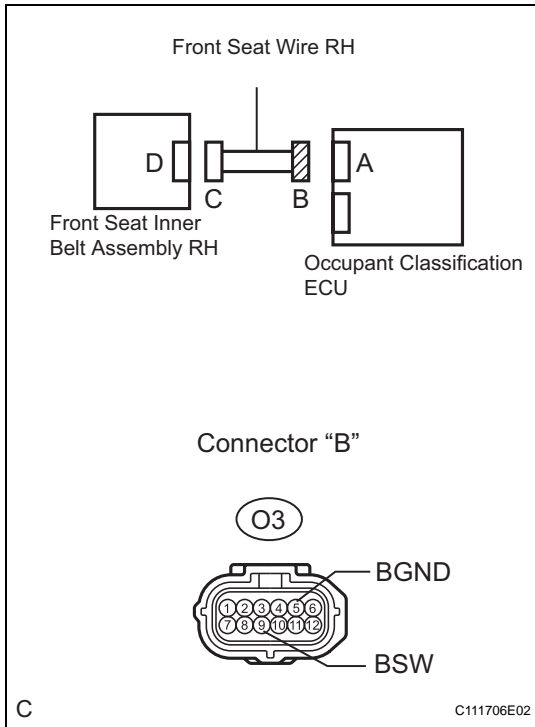
Codes other than DTC B1771 may be output at this time, but they are not related to this check.

OK**USE SIMULATION METHOD TO CHECK****NG****2** CHECK CONNECTION OF CONNECTORS

- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Check that the connectors are properly connected to the occupant classification ECU and the front seat inner belt assembly RH.

OK:**The connectors are connected.****NG****CONNECT CONNECTORS, THEN GO TO STEP 1****OK****RS**

3 CHECK FRONT SEAT WIRE RH (SHORT 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 according to the value(s) in the table below.

Voltage

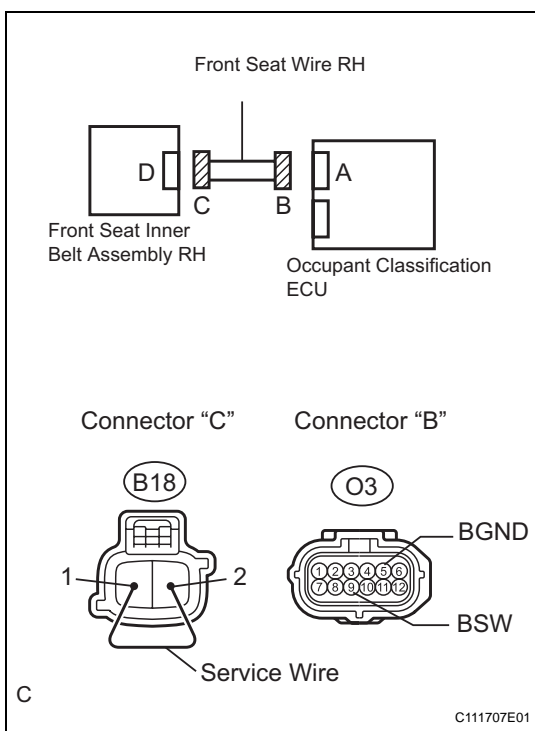
Tester connection	Condition	Specified condition
O3-9 (BSW) - Body ground	Ignition switch ON	Below 1 V
O3-5 (BGND) - Body ground	Ignition switch ON	Below 1 V

NG

REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

4 CHECK FRONT SEAT WIRE RH (OPEN)



- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Using a service wire, connect B18-2 and B18-1 of connector "C".
- (d) Measure the resistance according to the value(s) in the table below.

NOTICE:

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

Resistance

Tester connection	Condition	Specified condition
O3-9 (BSW) - O3-5 (BGND)	Always	Below 1 Ω

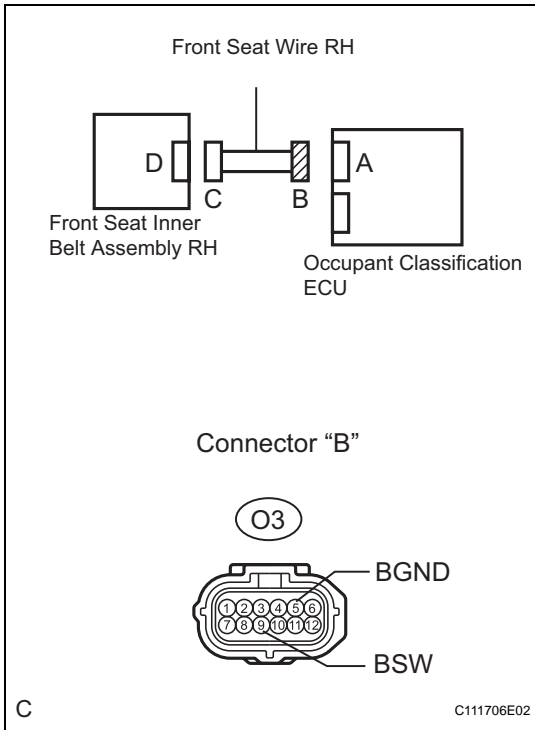
NG

REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

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.

Resistance

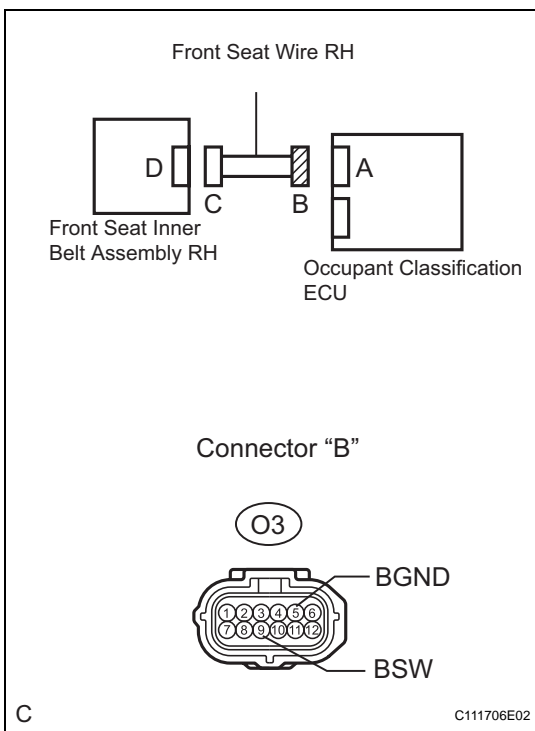
Tester connection	Condition	Specified condition
O3-9 (BSW) - O3-5 (BGND)	Always	1 MΩ or higher

NG REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

6 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)



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

Resistance

Tester connection	Condition	Specified condition
O3-9 (BSW) - Body ground	Always	1 MΩ or higher
O3-5 (BGND) - Body ground	Always	1 MΩ or higher

NG REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

7	CHECK DTC
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- (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 memory (See page [RS-310](#)).

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-310](#)).

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
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- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Replace the front seat inner belt assembly RH (See page [SB-15](#)).

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 memory (See page [RS-310](#)).

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-310](#)).

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

NG

9 REPLACE OCCUPANT CLASSIFICATION ECU

- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Replace the occupant classification ECU (See page [RS-457](#)).

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 "Zero point calibration" (See page [RS-303](#)).

OK:

The "COMPLETED" is displayed.

NEXT**11 PERFORM SENSITIVITY CHECK**

- (a) Using the intelligent tester, perform "Sensitivity check" (See page [RS-303](#)).

Standard values:**27 to 33 kg (59.52 to 72.75 lb)****NEXT****END****RS**