

DTC	B1771	Passenger Side Buckle Switch Circuit Malfunction
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DESCRIPTION

RS

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.

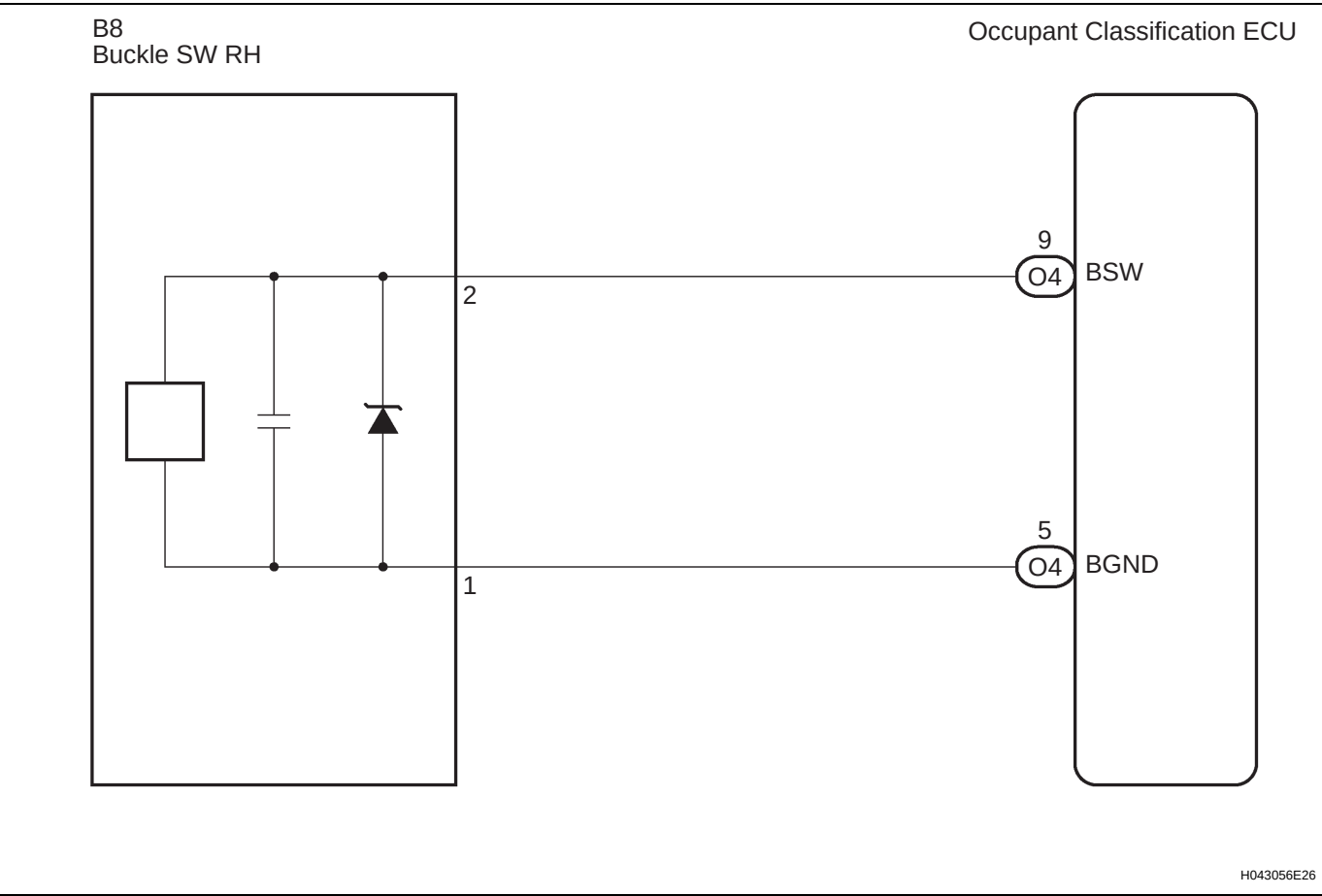
Troubleshoot DTC B1771 first when DTCs B1771 and B1795 are output simultaneously.

DTC No.	DTC Detecting Condition	Trouble Area
B1771	- 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	- Front seat inner belt assembly RH (Back switch RH) - Occupant classification ECU - Floor wire (*1) - Instrument panel wire No. 3 (*2)

*1: w/ Side and curtain shield airbag

*2: w/o Side and curtain shield airbag

WIRING DIAGRAM



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 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 the memory (See page [RS-194](#)).

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-194](#)).

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 properly connected.

NG

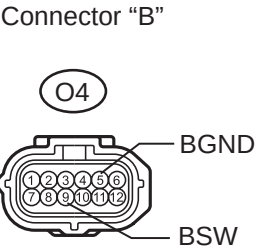
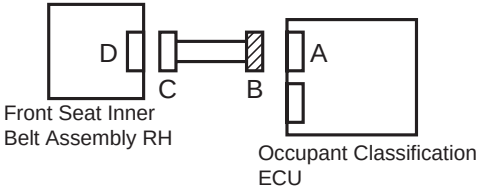
CONNECT CONNECTORS

OK

RS

3

CHECK WIRE HARNESS (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.

Standard voltage

Tester connection	Condition	Specified condition
O4-9 (BSW) - Body ground	Ignition switch ON	Below 1 V
O4-5 (BGND) - Body ground	Ignition switch ON	Below 1 V

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

B

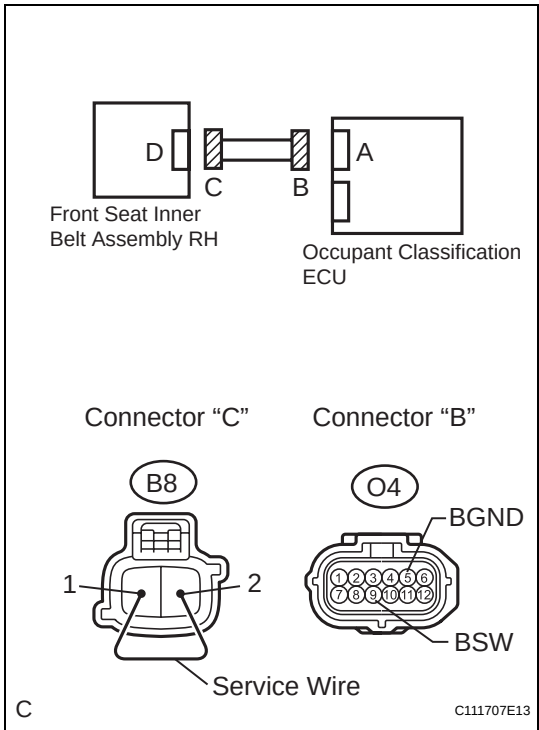
REPAIR OR REPLACE FLOOR WIRE

C

REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3

A

4 CHECK WIRE HARNESS (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 B8-2 and B8-1 of connector "C".

NOTICE:

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

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

Standard resistance

Tester connection	Condition	Specified condition
O4-9 (BSW) - O4-5 (BGND)	Always	Below 1 Ω

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

B

REPAIR OR REPLACE FLOOR WIRE

C

REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3

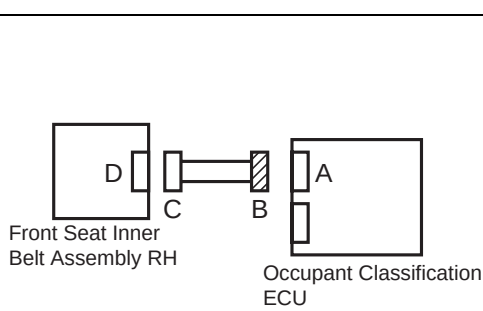
A

RS

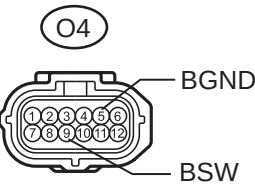
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5

CHECK WIRE HARNESS (SHORT)



Connector "B"



C

C111706E28

A

- (a) Disconnect the service wire from connector "C".
- (b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
O4-9 (BSW) - O4-5 (BGND)	Always	1 MΩ or higher

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

B

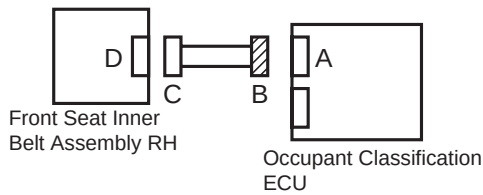
REPAIR OR REPLACE FLOOR WIRE

C

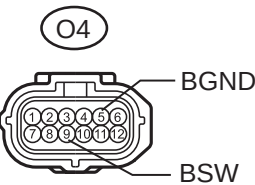
REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3

6

CHECK WIRE HARNESS (SHORT TO GROUND)



Connector "B"



C

C111706E28

A

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

Standard resistance

Tester connection	Condition	Specified condition
O4-9 (BSW) - Body ground	Always	1 MΩ or higher
O4-5 (BGND) - Body ground	Always	1 MΩ or higher

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

B

REPAIR OR REPLACE FLOOR WIRE

C

REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3

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-194](#)).

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-194](#)).

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.
 - (c) Replace the front seat inner belt assembly RH (See page [SB-4](#)).
- 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-194](#)).

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-194](#)).

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

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NG

9 REPLACE OCCUPANT CLASSIFICATION ECU

RS

- (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-187](#)).

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-187](#)).

OK:**"COMPLETED" is displayed.**

NEXT

11 PERFORM SENSITIVITY CHECK

- (a) Using the intelligent tester, perform "Sensitivity check" (See page [RS-187](#)).

Standard value:**27 to 33 kg (59.52 to 72.75 lb)**

NEXT

END