

DTC	B1771	Passenger Side Buckle Switch Circuit Malfunction
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DESCRIPTION

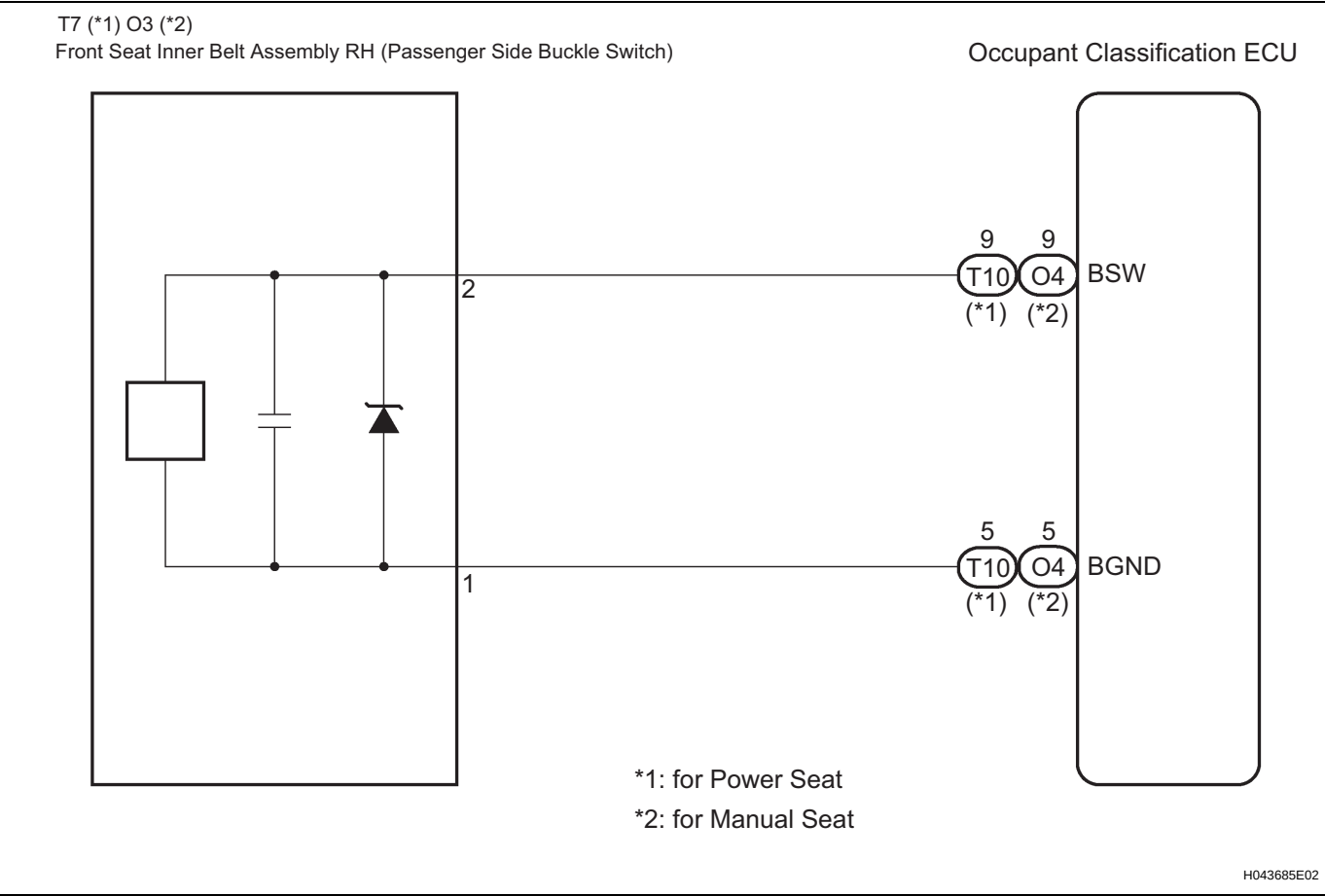
The passenger side buckle switch circuit consists of the occupant classification ECU and the front seat inner belt assembly RH.

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

Troubleshoot DTC B1771 first when the DTC 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 (Passenger side buckle switch) - Occupant classification ECU - Floor wire No. 2 - Front seat wire RH (for Power seat)

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 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 power switch on (IG).
- (b) Clear the DTCs stored in the occupant classification ECU (See page [RS-248](#)).
- (c) Clear the DTCs stored in the center airbag sensor assembly (See page [RS-41](#)).
- (d) Turn the power switch off.
- (e) Turn the power switch on (IG).
- (f) Check the DTCs (See page [RS-248](#)).

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.

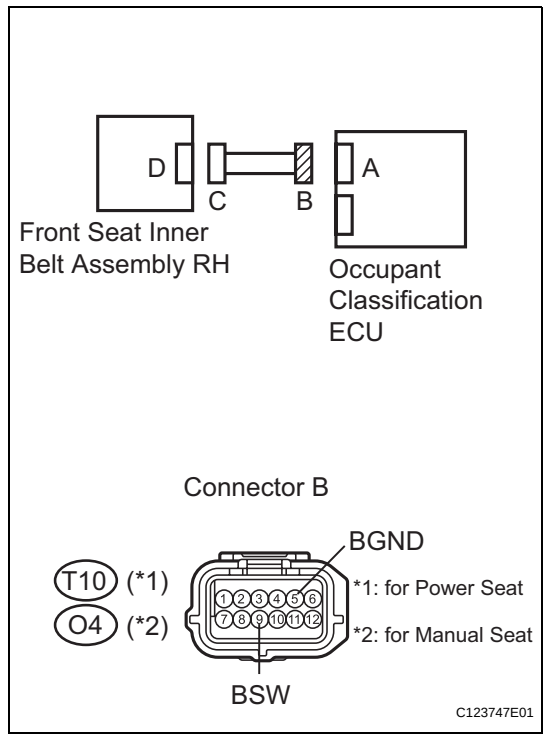
OK**USE SIMULATION METHOD TO CHECK (See page [RS-245](#))****NG****2** CHECK CONNECTION OF CONNECTORS

- (a) Turn the power switch off.
- (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 PROPERLY, THEN GO TO STEP 1****OK**

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 power switch on (IG).
- (d) Measure the voltage according to the value(s) in the table below.

Standard voltage:
for Power seat

Tester connection	Condition	Specified condition
T10-9 (BSW) - Body ground	Power switch on (IG)	Below 1 V
T10-5 (BGND) - Body ground	Power switch on (IG)	Below 1 V

for Manual seat

Tester connection	Condition	Specified condition
O4-9 (BSW) - Body ground	Power switch on (IG)	Below 1 V
O4-5 (BGND) - Body ground	Power switch on (IG)	Below 1 V

Result

Result	Proceed to
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

A

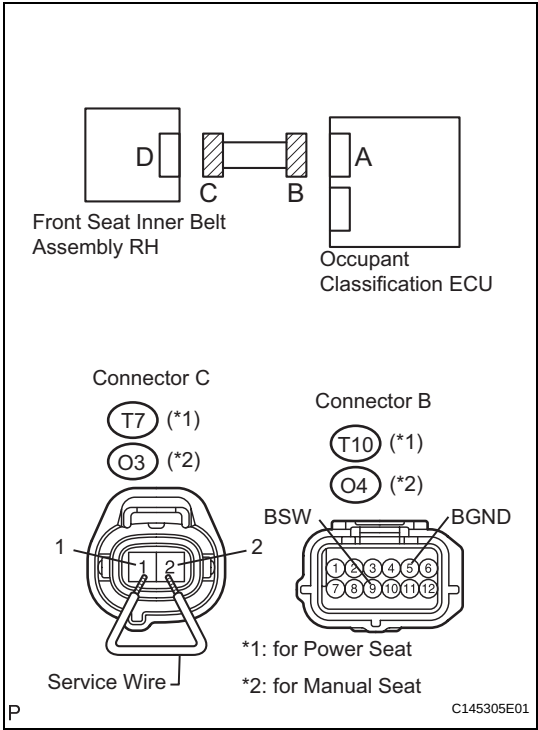
REPAIR OR REPLACE FRONT SEAT WIRE RH

B

REPAIR OR REPLACE FLOOR WIRE NO. 2

C

4 CHECK WIRE HARNESS (OPEN)



- (a) Turn the power switch off.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Using a service wire, connect terminals 2 and 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:
for Power seat

Tester connection	Condition	Specified condition
T10-9 (BSW) - T10-5 (BGND)	Always	Below 1 Ω

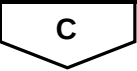
for Manual seat

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

Result

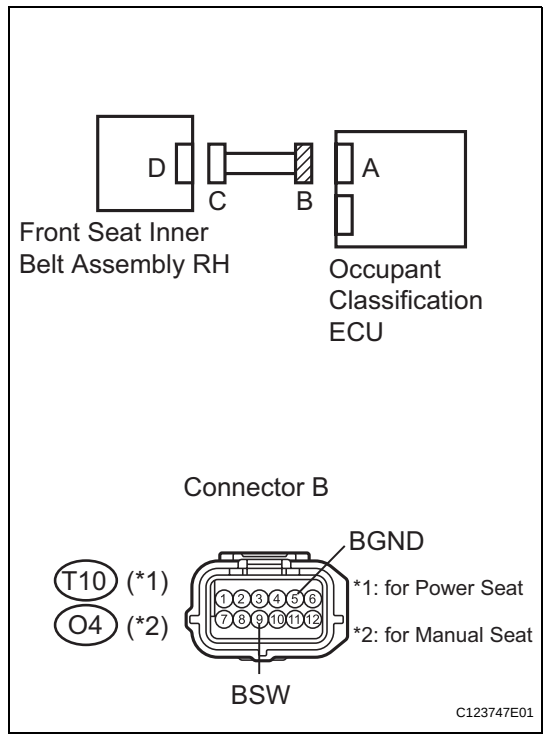
Result	Proceed to
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

A	REPAIR OR REPLACE FRONT SEAT WIRE RH
B	REPAIR OR REPLACE FLOOR WIRE NO. 2



5

CHECK WIRE HARNESS (SHORT)



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

Standard resistance:
for Power seat

Tester connection	Condition	Specified condition
T10-9 (BSW) - T10-5 (BGND)	Always	1 MΩ or Higher

for Manual seat

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

Result

Result	Proceed to
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

A

REPAIR OR REPLACE FRONT SEAT WIRE RH

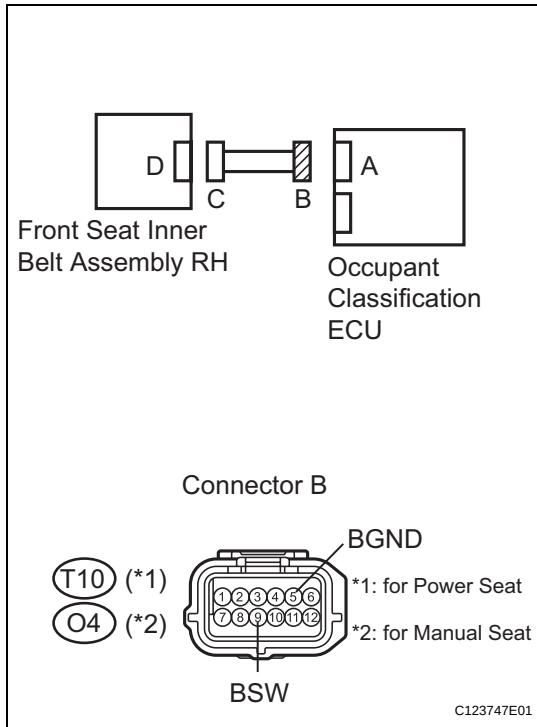
B

REPAIR OR REPLACE FLOOR WIRE NO. 2

C

6

CHECK WIRE HARNESS (SHORT TO GROUND)



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

**Standard resistance:
for Power seat**

Tester connection	Condition	Specified condition
T10-9 (BSW) - Body ground	Always	1 MΩ or Higher
T10-5 (BGND) - Body ground	Always	1 MΩ or Higher

for Manual seat

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
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

A

REPAIR OR REPLACE FRONT SEAT WIRE RH

B

REPAIR OR REPLACE FLOOR WIRE NO. 2

C

7

CHECK DTC

- Connect the connectors to the occupant classification ECU and the front seat inner belt assembly RH.
- Connect the negative (-) terminal cable to the battery.
- Turn the power switch on (IG).
- Clear the DTCs stored in the occupant classification ECU (See page RS-248).
- Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
- Turn the power switch off.
- Turn the power switch on (IG).
- Check the DTCs (See page RS-248).

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 (See page [RS-245](#))

NG

8

REPLACE FRONT SEAT INNER BELT ASSEMBLY RH

- (a) Turn the power switch off.
 - (b) Disconnect the negative (-) terminal cable from the battery.
 - (c) Replace the front seat inner belt assembly RH (See page [SB-16](#)).
- HINT:
Perform the inspection using parts from a normal vehicle if possible.
- (d) Connect the negative (-) terminal cable to the battery.
 - (e) Turn the power switch on (IG).
 - (f) Clear the DTCs stored in the occupant classification ECU (See page [RS-248](#)).
 - (g) Clear the DTCs stored in the center airbag sensor assembly (See page [RS-41](#)).
 - (h) Turn the power switch off.
 - (i) Turn the power switch on (IG).
 - (j) Check the DTCs (See page [RS-248](#)).

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 power switch off.
- (b) Disconnect the negative (-) terminal cable from the battery.
- (c) Replace the occupant classification ECU (See page [RS-445](#)).

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 power switch on (IG).
- (d) Using the intelligent tester, perform "zero point calibration" (See page [RS-239](#)).

OK:

"COMPLETED" is displayed.

NEXT

11 PERFORM SENSITIVITY CHECK

- (a) Using the intelligent tester, perform "sensitivity check"
(See page [RS-239](#)).

Standard value:

27 to 33 kg (59.52 to 72.75 lb)

NEXT

END