DTC	B1774	Pressure Sensor Circuit Malfunction

DTC	B1775	Pressure Sensor Power Source Circuit Malfunction

DESCRIPTION

The pressure sensor circuit consists of the occupant classification ECU and the occupant classification sensor.

The occupant classification sensor sends the pressure signal to the occupant classification ECU to control the occupant classification system.

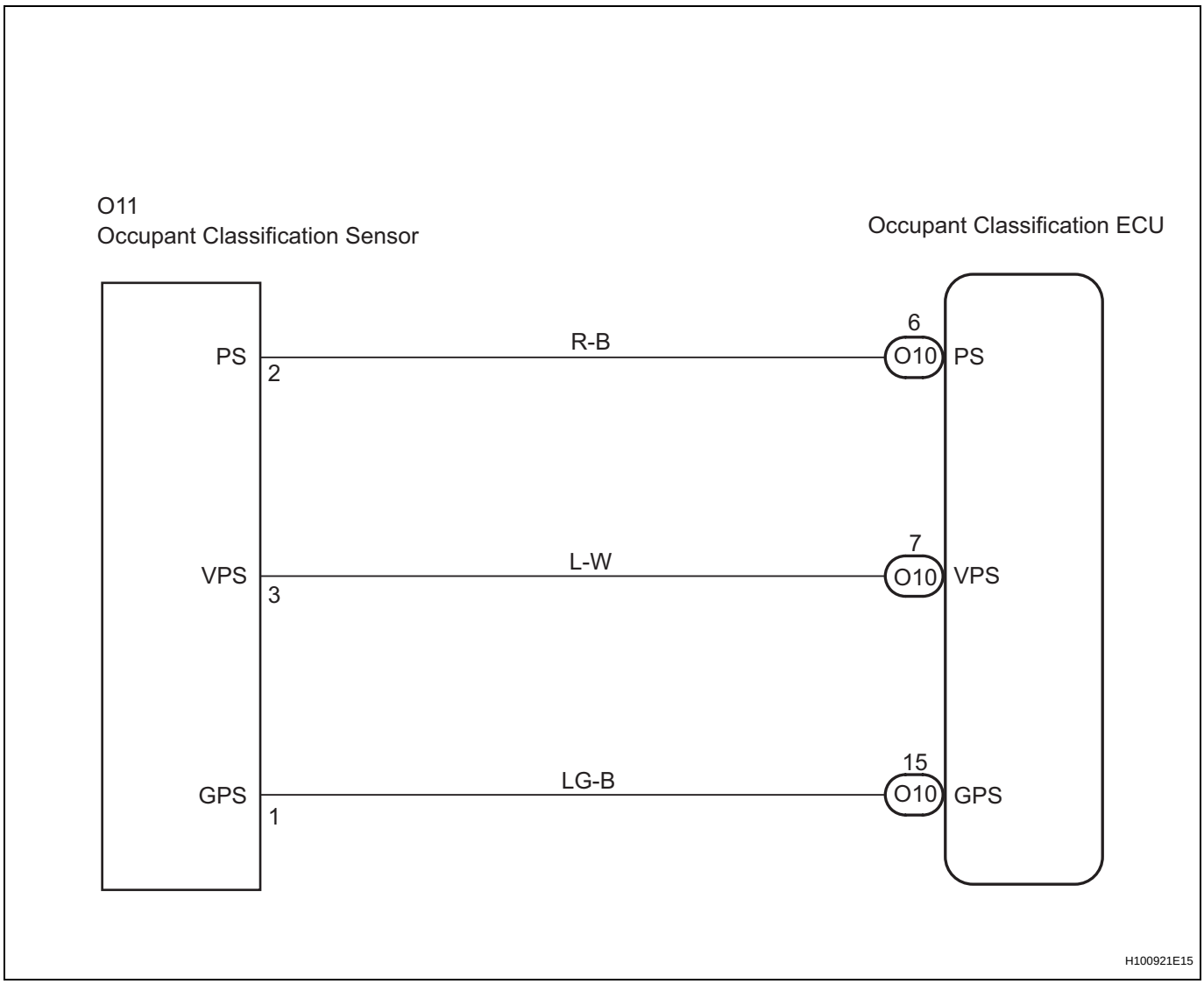
DTCs B1774 and B1775 are recorded when a malfunction is detected in the pressure sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1774 B1775	• Occupant classification ECU receives line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in pressure sensor circuit for 2 seconds. • Occupant classification sensor malfunction • Occupant classification ECU malfunction	• No. 1 seat wire • Occupant classification sensor • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the 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 up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.
- After performing the zero point calibration, check for DTCs to confirm that the calibration is completed normally. (If it fails, DTC B1797 will be output.)

RS

1	**CHECK DTC**

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
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-487).
OK:
DTCs B1774 and B1775 are not output.
HINT:
DTCs other than B1774 and B1775 may be output at this time, but they are not related to this check.

OK	**USE SIMULATION METHOD TO CHECK**

NG

2	**CHECK CONNECTORS**

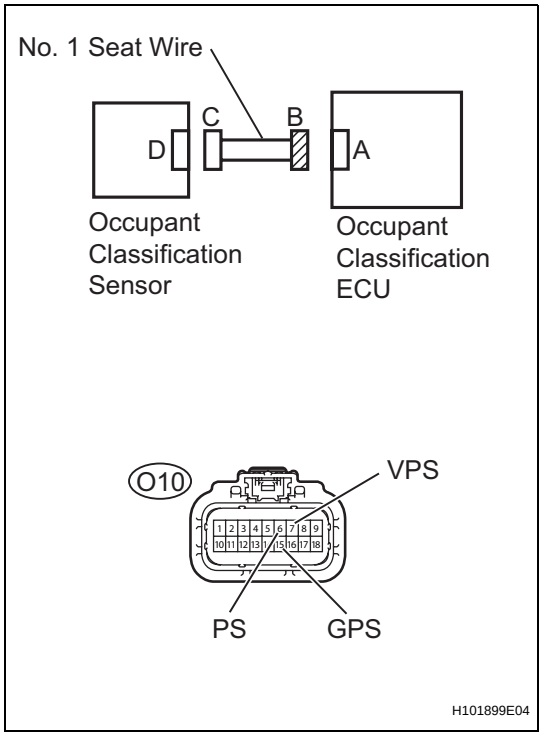
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the occupant classification sensor.
OK:
The connectors are properly connected.
(d) Disconnect the connectors from the occupant classification ECU and the occupant classification sensor.
(e) Check that the terminals of the connectors are not damaged.
OK:
The terminals are not deformed or damaged.
HINT:
If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG	**REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

RS

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



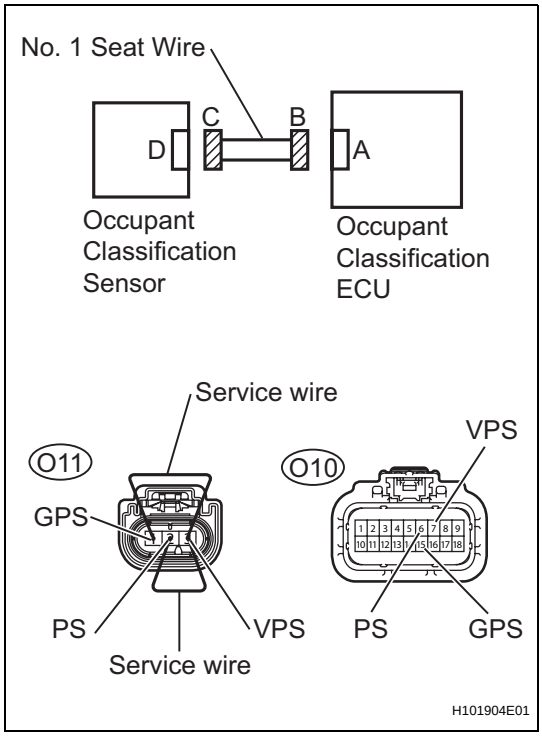
(a) Disconnect the connector from the occupant classification ECU and occupant classification sensor.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
O10-6 (PS) - Body ground	Ignition switch ON	Below 1 V
O10-7 (VPS) - Body ground	Ignition switch ON	Below 1 V
O10-15 (GPS) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

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 O11-2 (PS) and O11-3 (VPS), and connect O11-3 (VPS) and O11-1 (GPS) of connector C.
NOTICE:
Do not forcibly insert the service wire into the terminals of the connector when connecting.
(d) Measure the resistance.
Standard resistance

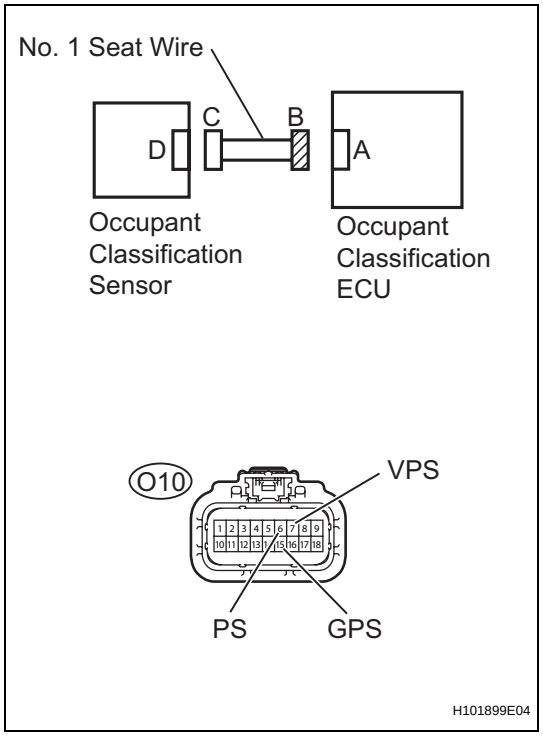
Tester Connection	Condition	Specified Condition
O10-6 (PS) - O10-7 (VPS)	Always	Below 1 Ω
O10-7 (VPS) - O10-15 (GPS)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

5 CHECK NO. 1 SEAT WIRE (TO GROUND)



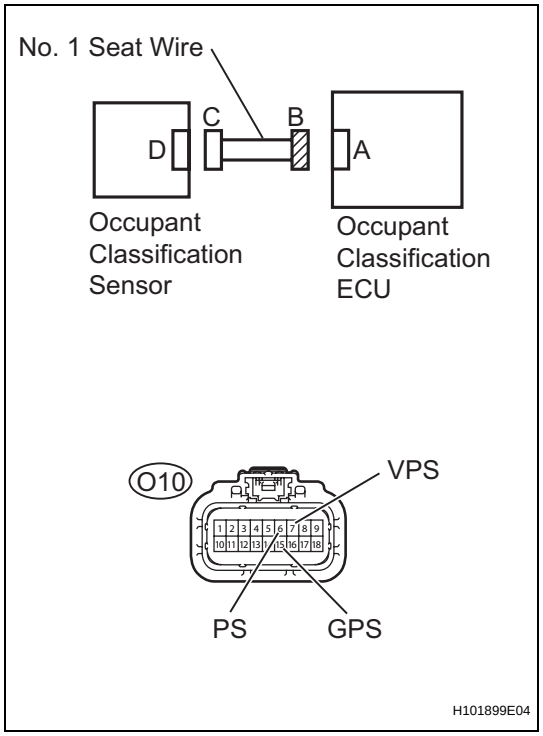
(a) Disconnect the service wire from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-6 (PS) - Body ground	Always	1 MΩ or higher
O10-7 (VPS) - Body ground	Always	1 MΩ or higher
O10-15 (GPS) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-6 (PS) - O10-15 (GPS)	Always	1 MΩ or higher
O10-7 (VPS) - O10-15 (GPS)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

RS

OK

7	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the occupant classification sensor.
(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-487).
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-487).
OK:
DTCs B1774 and B1775 are not output.
HINT:
DTCs other than B1774 and B1775 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

8	REPLACE OCCUPANT CLASSIFICATION SENSOR (FRONT SEAT CUSHION ASSEMBLY)

(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 cushion assembly (with occupant classification ECU and occupant classification sensor) (See page RS-626).
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-487).
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-487).
OK:
DTCs B1774 and B1775 are not output.
HINT:
DTCs other than B1774 and B1775 may be output at this time, but they are not related to this check.

NEXT

9	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Using the intelligent tester, perform the zero point calibration (See page RS-480).
(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

10	CHECK DTC

HINT:
Check that the zero point calibration is completed normally. If either of the following conditions is met, DTC B1797 will be output (Refer to INITIALIZATION: See page RS-480):
- Zero point calibration is performed when the conditions for the calibration are not satisfied.
- Zero point calibration has failed.

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
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-487).
OK:
DTC B1797 is not output.

NG → **GO TO DTC CHART**

OK

11	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END