DTC	B1787	Rear Occupant Classification Sensor LH Collision Detection

DESCRIPTION

DTC B1787 is output when the occupant classification ECU receives a collision detection signal sent by the rear occupant classification sensor LH when an accident occurs.
DTC B1787 is also output when the front seat assembly RH is subjected to a strong impact, even if an actual accident does not occur.
However, when the occupant classification ECU outputs a collision detection signal, even if the vehicle is not in a collision, DTC B1787 can be cleared by performing the zero point calibration and sensitivity check.
Therefore, when DTC B1787 is output, first perform the zero point calibration and sensitivity check.

DTC No.	DTC Detecting Condition	Trouble Area
B1787	• Front seat assembly RH malfunction • Occupant classification ECU malfunction • Rear occupant classification sensor LH detects large load	• Occupant classification ECU • Front seat assembly RH (Rear occupant classification sensor LH)

RS

WIRING DIAGRAM

Refer to DTC B1782 (See page RS-279).

INSPECTION PROCEDURE

1	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-246).
OK:
COMPLETED is displayed.

NG → **Go to step 4**

OK

2	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-246).
(1) Confirm that nothing is placed on the passenger seat.
(2) Confirm that the beginning sensor reading is within the standard range.
Standard range:
-3.2 to 3.2 kg (-7 to 7 lb)
(3) Place a 30 kg (66.14 lb) weight (e.g. a lead mass) onto the front passenger seat.
(4) Confirm that the sensitivity is within the standard range.
Standard range:
27 to 33 kg (59.52 to 72.75 lb)

HINT:
When performing the sensitivity check, use a solid metal weight (the check result may not be accurate if a liquid weight is used).

NG → **Go to step 4**

OK

3	CHECK DTC

(a) Turn the ignition switch to the on position.
(b) Clear the DTCs stored in the memory (See page RS-254).
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-254).
OK:
DTC B1787 is not output.
HINT:
Codes other than DTC B1787 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

4	REPLACE FRONT SEAT ASSEMBLY RH

(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 assembly RH (See page SE-5).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

5	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 the zero point calibration (See page RS-246).
OK:
COMPLETED is displayed.

NG → **Go to step 8**

OK

6	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-246).
  (1) Confirm that nothing is placed on the passenger seat.
  (2) Confirm that the beginning sensor reading is within the standard range.
  Standard range:
  -3.2 to 3.2 kg (-7 to 7 lb)
  (3) Place a 30 kg (66.14 lb) weight (e.g. a lead mass) onto the front passenger seat.
  (4) Confirm that the sensitivity is within the standard range.
  Standard range:
  27 to 33 kg (59.52 to 72.75 lb)
  HINT:
  When performing the sensitivity check, use a solid metal weight (the check result may not be accurate if a liquid weight is used).

NG → **Go to step 8**

OK

7	CHECK DTC

(a) Turn the ignition switch to the on position.
(b) Clear the DTCs stored in the memory (See page RS-254).
  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-254).
  OK:
  DTC B1787 is not output.
  HINT:
  Codes other than DTC B1787 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 ECU

(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.

RS

(c) Replace the occupant classification ECU (See page RS-412).

NEXT

9	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 the zero point calibration (See page RS-246).
OK:
COMPLETED is displayed.

NEXT

RS

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-246).
(1) Confirm that nothing is placed on the passenger seat.
(2) Confirm that the beginning sensor reading is within the standard range.
Standard range:
-3.2 to 3.2 kg (-7 to 7 lb)
(3) Place a 30 kg (66.14 lb) weight (e.g. a lead mass) onto the front passenger seat.
(4) Confirm that the sensitivity is within the standard range.
Standard range:
27 to 33 kg (59.52 to 72.75 lb)
HINT:
When performing the sensitivity check, use a solid metal weight (the check result may not be accurate if a liquid weight is used).

NEXT

END