DIAT7-01

DTC B0 126/B0127/27 Seat Belt Buckle Switch LH Malfunction

CIRCUIT DESCRIPTION

The seat belt buckle switch LH malfunction circuit consists of the airbag sensor assembly and the front seat inner belt LH (seat belt buckle switch LH).

For details of the function of each component, see OPERATION on page RS-3.

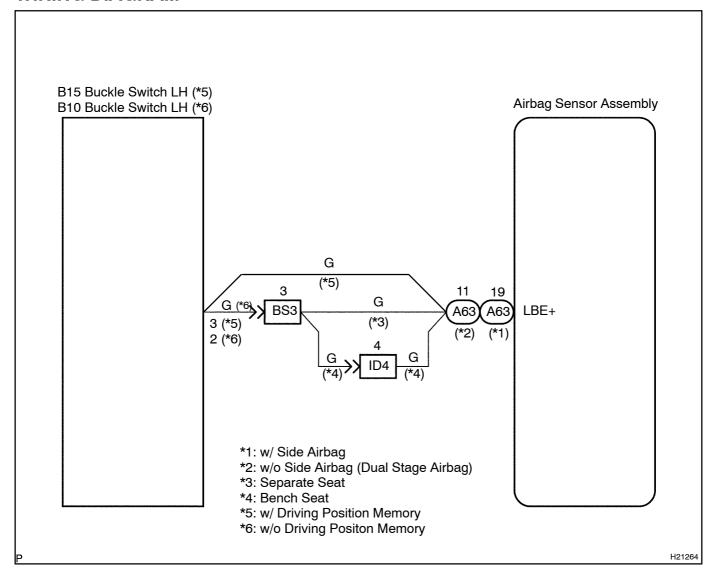
 $DTC\,B0\,\,126/B0127/27\,is\,recorded\,when\,a\,mal function\,is\,detected\,in\,the\,seat\,belt\,buckle\,switch\,LH\,circuit.$

DTC No.	DTC Detecting Condition	Trouble Area
B0126/B0127/27	Seat belt buckle switch LH circuit malfunction	Front seat inner belt LH (Seat belt buckle switch LH)
		Airbag sensor assembly
		• Floor No. 1 wire
		• dash wire
		• Front seat wire LH
		Dash wire (Bench seat)

HINT:

DTC B0 126/B0127/27 is indicated only for the LHD vehicle equipped with the side airbag and without the side airbag (dual stage airbag).

WIRING DIAGRAM



INSPECTION PROCEDURE

1

Prepare for inspection (See step 1 on page DI-432).

2 Check vehicle condition.

CHECK:

Confirm that the type of the vehicle.

<u>OK:</u>

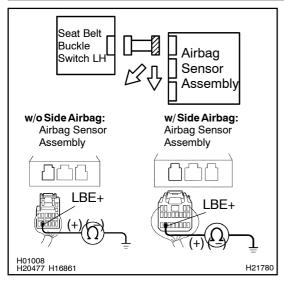
- A: w/ Driving Position Memory buckle switch
- **B:** Separate seat
- C: Bench seat

B Go to step 8.

C Go to step 15.

A

3 Check floor No. 1 wire (to ground).



CHECK:

Measure the resistance between the body ground and LBE+ of the floor No. 1 wire connector on the airbag sensor assembly side.

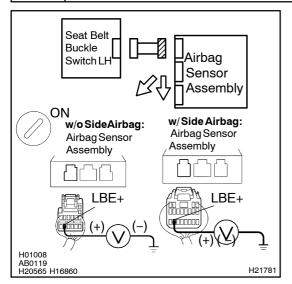
OK:

Resistance: 1 M Ω or Higher

NG Repair or replace floor No. 1 wire.

OK

4 Check floor No. 1 wire (to B+).



PREPARATION:

Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and LBE+ of the floor No. 1 wire connector on the airbag sensor assembly side.

OK:

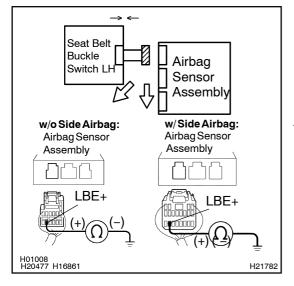
Voltage: Below 1 V

NG Repair or replace floor No. 1 wire.

ОК

5

Check front seat inner belt LH.



PREPARATION:

- (a) Connect the connector of the front seat inner belt LH (seat belt buckle switch LH).
- (b) Unlock the seat belt for the driver's seat.

CHECK:

Measure the resistance between the body ground and LBE+ of the floor No. 1 wire connector on the airbag sensor assembly side.

OK:

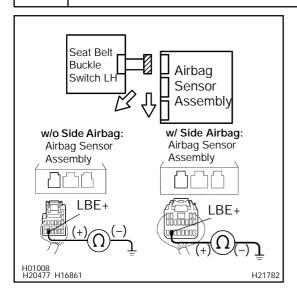
Resistance: 1 k Ω – 1.6 k Ω

NG

Replace front seat inner belt LH.

ок

6 Check front seat inner belt LH.



PREPARATION:

Lock the seat belt for the driver's seat.

CHECK:

Measure the resistance between the body ground and LBE+ of the floor No. 1 wire connector on the airbag sensor assembly side.

OK:

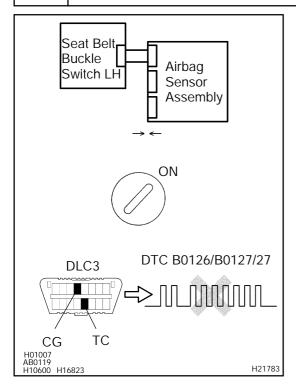
Resistance: 100 Ω – 500 Ω

NG

Replace front seat inner belt LH.



7 Check airbag sensor assembly.



PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Connect the connector to the airbag sensor assembly.
- (d) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (b) Clear the DTC stored in memory (See page DI-432).
- (c) Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- (d) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (e) Check the DTC (See page DI-432).

OK:

DTC B0126/B0127/27 is not output.

HINT:

Codes other than code B0126/B0127/27 may be output at this time, but they are not relevant to this check.

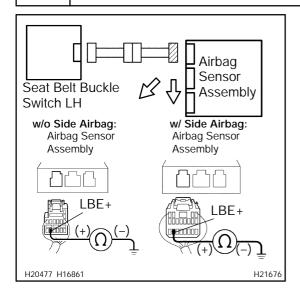
NG Replace airbag sensor assembly.



From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

8

Check wire harness (to ground).



CHECK:

Measure the resistance between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

OK:

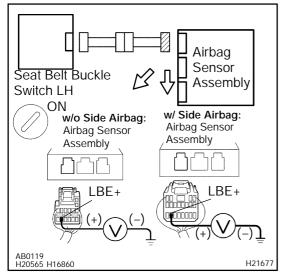
Resistance: $1 M\Omega$ or Higher

NG Go to step 13.

ОК

9

Check wire harness (to B+).



PREPARATION:

Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

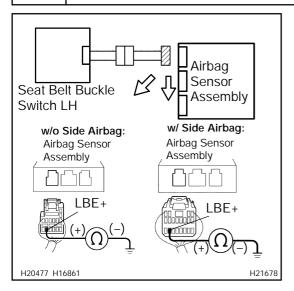
OK:

Voltage: Below 1 V

NG Go to step 14.

ОК

10 Check front seat inner belt LH.



PREPARATION:

- (a) Connect the connector of the front seat inner belt LH (seat belt buckle switch LH).
- (b) Unlock the seat belt for the driver's seat.

CHECK:

Measure the resistance between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

<u>OK:</u>

Resistance: $1 \text{ k}\Omega$ – $1.6 \text{ k}\Omega$

NG

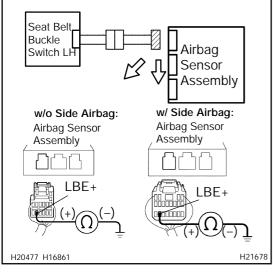
Replace front seat inner belt LH.

OK

11

OK

Check front seat inner belt LH.



PREPARATION:

Lock the seat belt for the driver's seat.

CHECK:

Measure the resistance between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

OK:

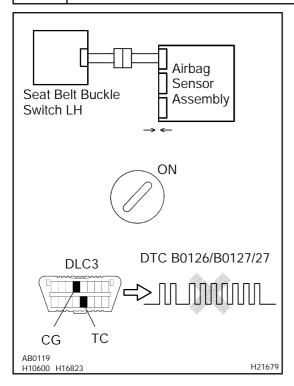
Resistance: 100 Ω – 500 Ω

77 H16861 H21678 NG

Replace front seat inner belt LH.

LAND CRUISER (W/G) SUP (RM970E)

12 Check airbag sensor assembly.



PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Connect the connector to the airbag sensor assembly.
- (d) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (b) Clear the DTC stored in memory (See page DI-432).
- (c) Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- (d) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (e) Check the DTC (See page DI-432).

OK:

DTC B0126/B0127/27 is not output.

HINT:

Codes other than code B0126/B0127/27 may be output at this time, but they are not relevant to this check.

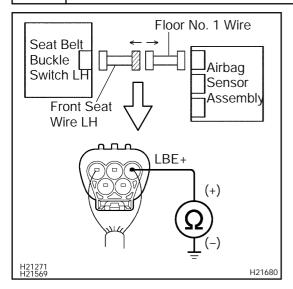
NG

Replace airbag sensor assembly.



From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

13 Check front seat wire LH (to ground).



PREPARATION:

Disconnect the front seat wire LH connector from the floor No. 1 wire.

CHECK:

Measure the resistance between the body ground and LBE+ of the front seat wire LH connector on the floor No. 1 wire side.

<u>OK:</u>

Resistance: $1 M\Omega$ or Higher

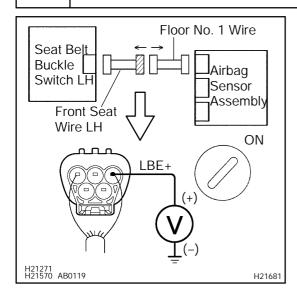
NG

Repair or replace front seat wire LH.

OK

Repair or replace floor No. 1 wire.

14 Check front seat wire LH (to B+).



PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Disconnect the front seat wire LH connector from the floor No. 1 wire.
- (d) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and LBE+ of the front seat wire LH connector on the floor No. 1 wire side.

OK:

Voltage: Below 1 V

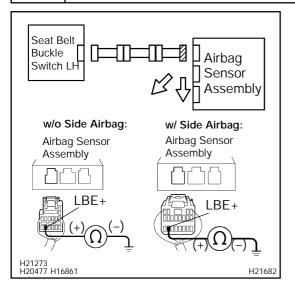
NG

Repair or replace front seat wire LH.

OK

Repair or replace floor No. 1 wire.

15 Check wire harness (to ground).



CHECK:

Measure the resistance between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

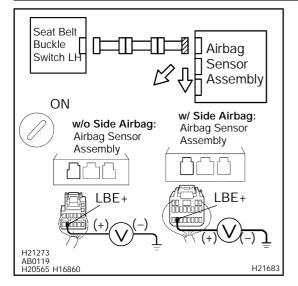
OK:

Resistance: 1 M Ω or Higher

NG Go to step 20.

OK

16 Check wire harness (to B+).



PREPARATION:

Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

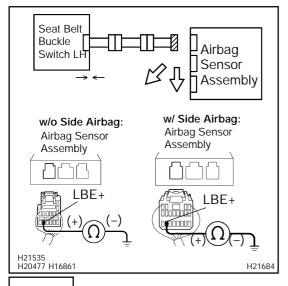
<u>OK:</u>

Voltage: Below 1 V

NG Go to step 22.

ОК

17 Check front seat inner belt LH.



PREPARATION:

- (a) Connect the connector of the front seat inner belt LH (seat belt buckle switch LH).
- (b) Unlock the seat belt for the driver's seat.

CHECK:

Measure the resistance between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

OK:

Resistance: $1 \text{ k}\Omega$ – $1.6 \text{ k}\Omega$

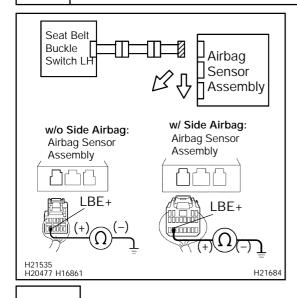
NG

Replace front seat inner belt LH.

OK

18

Check front seat inner belt LH.



PREPARATION:

Lock the seat belt for the driver's seat.

CHECK:

Measure the resistance between the body ground and LBE+ of the connector on the airbag sensor assembly side between the front seat inner belt LH (seat belt buckle switch LH) and the airbag sensor assembly.

OK:

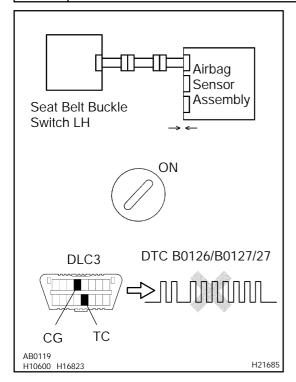
Resistance: 100 Ω – 500 Ω

NG

Replace front seat inner belt LH.

OK

19 Check airbag sensor assembly.



PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Connect the connector to the airbag sensor assembly.
- (d) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (b) Clear the DTC stored in memory (See page DI-432).
- (c) Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- (d) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (e) Check the DTC (See page DI-432).

OK:

DTC B0126/B0127/27 is not output.

HINT:

Codes other than code B0126/B0127/27 may be output at this time, but they are not relevant to this check.

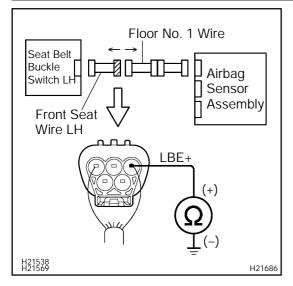
NG

Replace airbag sensor assembly.



From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

20 Check front seat wire LH (to ground).



PREPARATION:

Disconnect the front seat wire LH connector from the floor No. 1 wire.

CHECK:

Measure the resistance between the body ground and LBE+ of the front seat wire LH connector on the airbag sensor assembly side.

OK:

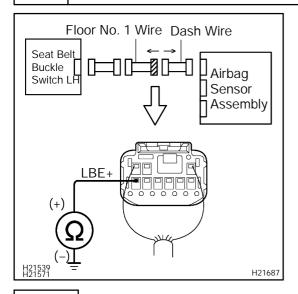
Resistance: 1 M Ω or Higher



Repair or replace front seat wire LH.

OK

21 Check floor No. 1 wire (to ground).



PREPARATION:

Disconnect the floor No. 1 wire connector from the dash wire. **CHECK:**

Measure the resistance between the body ground and LBE+ of the floor No. 1 wire connector on the dash wire side.

OK:

Resistance: 1 M Ω or Higher

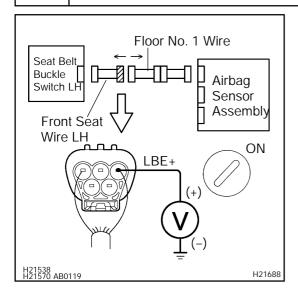
NG

Repair or replace floor No. 1 wire.

OK

Repair or replace dash wire.

22 Check front seat wire LH (to B+).



PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Disconnect the front seat wire LH connector from the floor No. 1 wire.
- (d) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and LBE+ of the front seat wire LH connector on the airbag sensor assembly side.

OK:

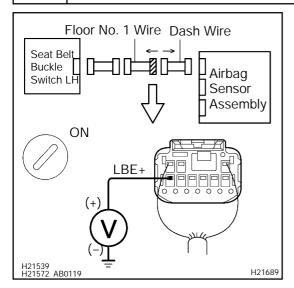
Voltage: Below 1 V

NG

Repair or replace front seat wire LH.

OK

23 Check floor No. 1 wire (to B+).



PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Disconnect the floor No. 1 wire connector from the dash wire.
- (d) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and LBE+ of the floor No. 1 wire connector on the dash wire side.

OK:

Voltage: Below 1 V

NG

Repair or replace floor No. 1 wire.



Repair or replace dash wire.