DI3QT-01

DTC

B 1158/B1159/16 Front Airbag Sensor (LH) Malfunction

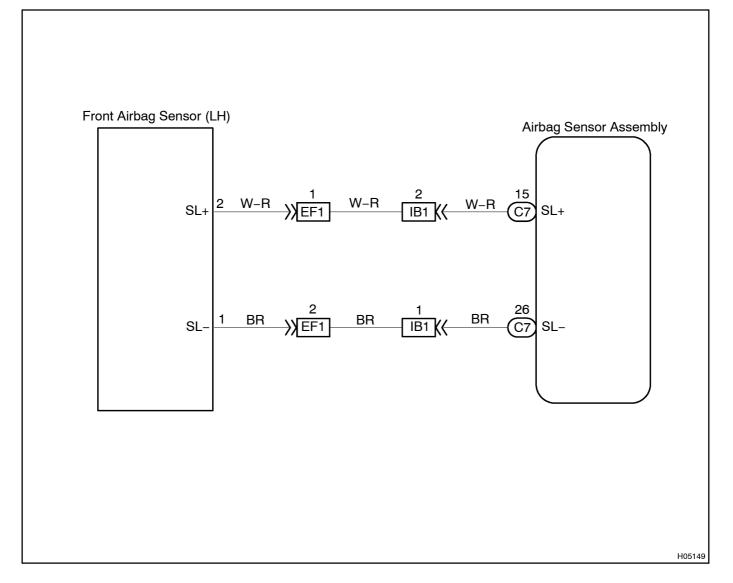
CIRCUIT DESCRIPTION

The front airbag sensor (LH) circuit consists of the airbag sensor assembly and front airbag sensor (LH). For details of the function of each component, see OPERATION on page RS-2.

DTC B1158/B1159/16 is recorded when malfunction is detected in the front airbag sensor (LH) circuit.

| DTC No. | DTC Detecting Condition | Trouble Area |
|----------------|--|----------------------------|
| B1158/B1159/16 | • Front airbag sensor (LH) malfunction | • Front airbag sensor (LH) |
| | | Wire harness |
| | | Relay harness |

WIRING DIAGRAM

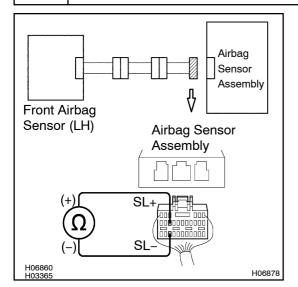


INSPECTION PROCEDURE

1 Prepare for inspection. (See step 1 on page DI-549)



2 Check front airbag sensor (LH) circuit.



CHECK:

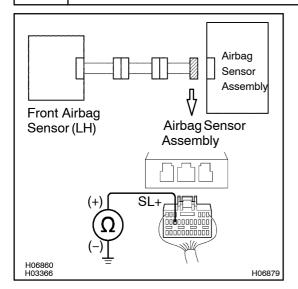
For the connector (on the airbag sensor assembly side) between the front airbag sensor (LH) and the airbag sensor assembly, measure the resistance between SL+ and SL-. **OK:**

Resistance: 754 $\,-\,$ 886 $\,\Omega$



ок

3 Check front airbag sensor (LH) circuit (to ground).



CHECK:

For the connector (on the airbag sensor assembly side) between the front airbag sensor (LH) and the airbag sensor assembly, measure the resistance between SL+ and body ground.

OK:

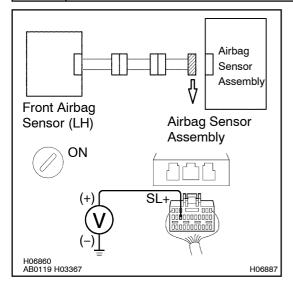
Resistance: 1 M Ω or Higher



OK

4

Check front airbag sensor (LH) circuit (to B+).



PREPARATION:

- (a) Connect negative (-) terminal cable to the battery, and wait at least for 2 seconds.
- (b) Turn ignition switch to ON.

CHECK:

For the connector (on the airbag sensor assembly side) between the front airbag sensor (LH) and the airbag sensor assembly, measure the voltage between SL+ and body ground.

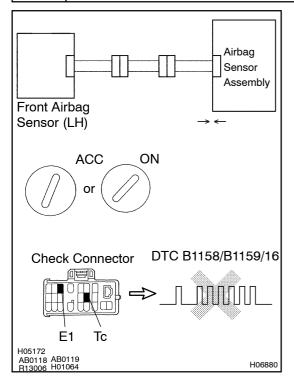
OK:

Voltage: Below 1 V



ок

5 Check airbag sensor assembly.



PREPARATION:

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

CHECK:

- (a) Turn ignition switch to ACC or ON, and wait at least for 20 seconds.
- (b) Clear DTC stored in memory. (See page DI-447)
- (c) Turn ignition switch to LOCK, and wait at least for 20 seconds.
- (d) Turn ignition switch to ACC or ON, and wait at least for 20 seconds.
- (e) Check DTC. (See page DI-447)

OK:

DTCB 1158/B1159/16 is not output.

HINT:

Codes other than DTC B1158/B1159/16 may be output at this time, but they are not relevant to this check.

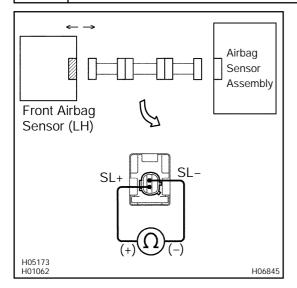
NG

Replace airbag sensor assembly.

ОК

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.

6 Check front airbag sensor (LH).



PREPARATION:

Disconnect the front airbag sensor connector (LH).

CHECK:

For the connector (on the front airbag sensor), measure the resistance between SL+ and SL-.

OK:

Resistance: 754 – 886 Ω

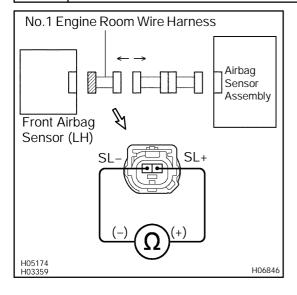
NG

Replace front airbag sensor (LH).



7

Check No.1 engine room wire harness.



PREPARATION:

Disconnect the No.1 engine room wire harness connector on the airbag sensor assembly side.

CHECK:

For the connector (on the No.1 engine room wire harness side) between the front airbag sensor (LH) and the No.1 engine room wire harness, measure the resistance between SL+ and SL-.

OK:

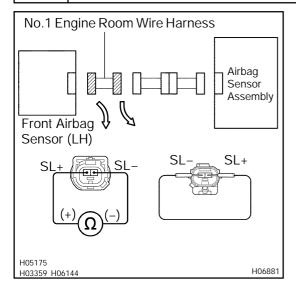
Resistance: 1 M Ω or Higher

NG

Repair or replace No.1 engine room wire harness.

ОК

8 Check No.1 engine room wire harness.



PREPARATION:

Using a service wire, connect SL+ and SL- of the connector (on the No.1 engine room wire harness side), between the airbag sensor assembly and the No.1 engine room wire harness.

CHECK:

For the connector (on the No.1 engine room wire harness side) between the front airbag sensor (LH) and the No.1 engine room wire harness, measure the resistance between SL+ and SL-.

OK:

Resistance: Below 1 Ω

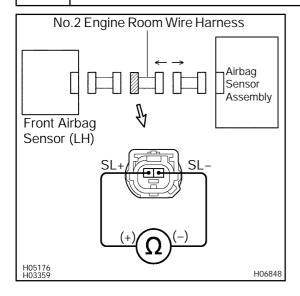
NG

Repair or replace No.1 engine room wire harness.

OK

9

Check No.2 engine room wire harness.



PREPARATION:

Disconnect the No.2 engine room wire harness connector on the airbag sensor assembly side.

CHECK:

For the connector (on the No.2 engine room wire harness side) between the No.1 engine room wire harness and the No.2 engine room wire harness, measure the resistance between SL+ and SL-.

OK:

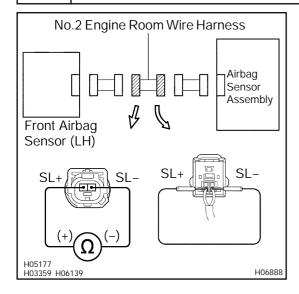
Resistance: 1 M Ω or Higher

NG

Repair or replace No.2 engine room wire harness.

ок

10 Check No.2 engine room wire harness.



PREPARATION:

Using a service wire, connect SL+ and SL- of the connector (on the No.2 engine room wire harness side), between the airbag sensor assembly and the No.2 engine room wire harness.

CHECK:

For the connector (on the No.2 engine room wire harness side) between the No.1 engine room wire harness and the No.2 engine room wire harness, measure the resistance between SL+ and SL-.

<u>OK:</u>

Resistance: Below 1 Ω

NG

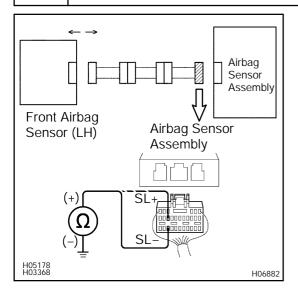
Repair or replace No.2 engine room wire harness.

OK

11

Repair or replace harness or connector between airbag sensor assembly and No.2 engine room wire harness.

Check wire harness (to ground).



PREPARATION:

Disconnect the front airbag sensor connector (LH).

CHECK:

For the connector (on the airbag sensor assembly side) between the front airbag sensor (LH) and the airbag sensor assembly, measure the resistance between body ground and each of SL+ and SL-.

OK:

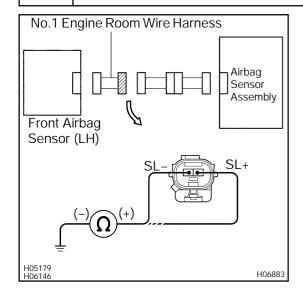
Resistance: 1 M Ω or Higher

ОК

Replace front airbag sensor (LH).



12 Check No.1 engine room wire harness (to ground).



PREPARATION:

Disconnect the No.1 engine room wire harness connector on the airbag sensor assembly side.

CHECK:

For the connector (on the No.1 engine room wire harness side) between the airbag sensor assembly and the No.1 engine room wire harness, measure the resistance between body ground and each of SL+ and SL-.

OK:

Resistance: 1 M Ω or Higher

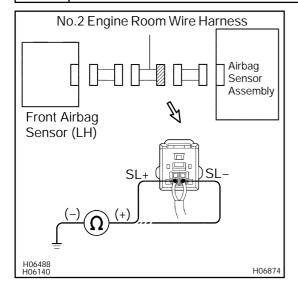
NG

Repair or replace No.1 engine room wire harness.

OK

13

Check No.2 engine room wire harness (to ground).



PREPARATION:

Disconnect the No.2 engine room wire harness connector on the airbag sensor assembly side.

CHECK:

For the connector (on the No.2 engine room wire harness side) between the airbag sensor assembly ad the No.2 engine room wire harness, measure the resistance between body ground and each of SL+ and SL-.

<u>OK:</u>

Resistance: 1 M Ω or Higher

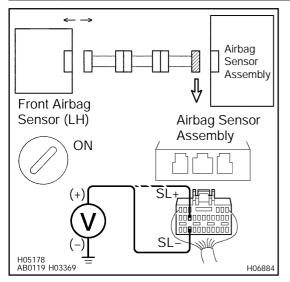
NG

Repair or replace No.2 engine room wire harness.

ОК

Repair or replace harness or connector between airbag sensor assembly and No.2 engine room wire harness.

14 Check wire harness (to B+).



PREPARATION:

- (a) Disconnect the front airbag sensor connector (LH).
- (b) Turn ignition switch ON.

CHECK:

For the connector (on the airbag sensor assembly side) between the front airbag sensor (LH) and the airbag sensor assembly, measure the resistance between body ground and each of SL+ and SL-.

OK:

Voltage: Below 1 V

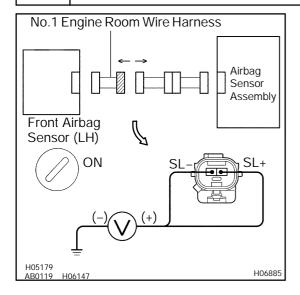
ОК

Replace front airbag sensor (LH).

OK

15

Check No.1 engine room wire harness (to B+).



PREPARATION:

Disconnect the No.1 engine room wire harness connector on the airbag sensor assembly side.

CHECK:

For the connector (on the No.1 engine room wire harness side) between the airbag sensor assembly and the No.1 engine room wire harness, measure the voltage between body ground and each of SL+ and SL-.

OK:

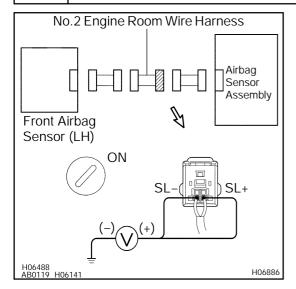
Voltage: Below 1 V

NG

Repair or replace No.1 engine room wire harness.

ОК

16 Check No.2 engine room wire harness (to B+).



PREPARATION:

Disconnect the No.2 engine room wire harness connector on the airbag sensor assembly side.

CHECK:

For the connector (on the No.2 engine room wire harness side) between the airbag sensor assembly and the No.2 engine room wire harness, measure the voltage between body ground and each of SL+ and SL-.

OK:

Voltage: Below 1 V

NG

Repair or replace No.2 engine room wire harness.



Repair or replace harness or connector between airbag sensor assembly and No.2 engine room wire harness.