DI58L-02

DTC B0103/12 Short in D and P Squib Circuit (to B+)

CIRCUIT DESCRIPTION

The D and P squib circuits consist of the airbag sensor assembly, spiral cable, steering wheel pad and front passenger airbag assembly.

It causes the SRS to deploy when the SRS deployment conditions are satisfied.

For details of the function of each component, see page OPERATION on page RS-2.

DTC B0103/12 is recorded when B+ short is detected in the D and P squib circuits.

DTC No.	DTC Detecting Condition	Trouble Area
B0103/12	Short circuit in D squib wire harness (to B+) Short circuit in P squib wire harness (to B+) D squib malfunction P squib malfunction Spiral cable malfunction Airbag sensor assembly malfunction	Steering wheel pad (D squib) Front passenger airbag assembly (P squib) Spiral cable Airbag sensor assembly Wire harness

WIRING DIAGRAM

See page DI-397.

INSPECTION PROCEDURE

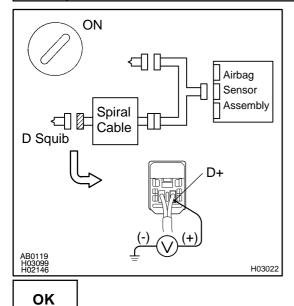
Prepare for inspection. (See step 1 on page DI-456)



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1

Check D squib circuit.



PREPARATION:

Turn ignition switch ON

CHECK:

For the connector (on the spiral cable side) between the spiral cable and steering wheel pad, measure the voltage between D+ and body ground.

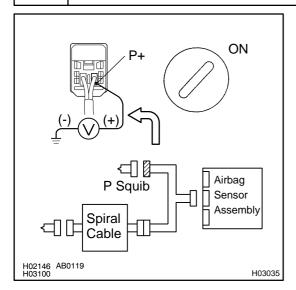
OK:

Voltage: Below 1 V

NG Go to step 7.

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3 Check P squib circuit.



CHECK:

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

OK:

Voltage: Below 1 V



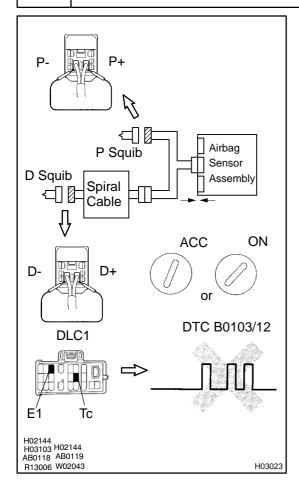
Repair or replace harness or connector between front passenger airbag assembly and airbag sensor assembly.



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Check airbag sensor assembly.



PREPARATION:

- (a) Connect the connector to the airbag sensor assembly.
- (b) Using a service wire, connect D+ and D- of the connector (on the spiral cable side) between the spiral cable and steering wheel pad.
- (c) Using a service wire, connect P+ and P- of the connector (on the front passenger airbag assembly side) between the front passenger airbag assembly and airbag sensor.
- (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 step 5 on page DI-377)
- (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-377)

OK:

DTC B0103/12 is not output.

HINT:

Codes other than DTC B0103/12 may be output at this time, but they are not relevant to this check.

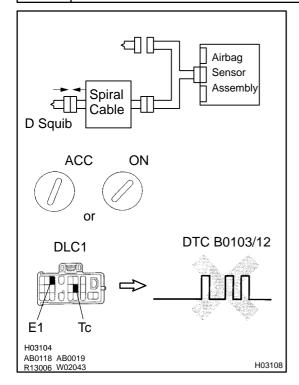
NG

Replace airbag sensor assembly.

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5 Check D squib.



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 steering wheel pad 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 step 5 on page DI-377)
- (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-377)

OK:

DTC B0103/12 is not output.

HINT:

Codes other than DTC B0103/12 may be output at this time, but they are not relevant to this check.

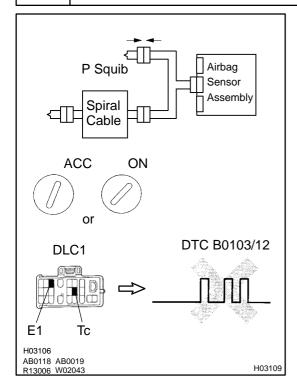
NG

Replace steering wheel pad.

OK

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6 Check P squib.



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 passenger airbag 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 step 5 on page DI-377)
- (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-377)

OK:

DTC B0103/12 is not output.

HINT:

Codes other than DTC B0103/12 may be output at this time, but they are not relevant to this check.

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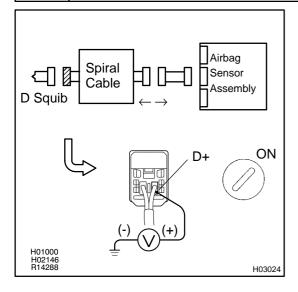
Replace front passenger airbag assembly.



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. If the malfunctioning part can not be detected by the simulation method, replace all SRS components including the wire harness.

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7 Check spiral cable.



PREPARATION:

- (a) Turn ignition switch to LOCK.
- (b) Disconnect the connector between the airbag sensor assembly and spiral cable.

CHECK:

- (a) Turn ignition switch to ON.
- (b) For the connector (on the spiral cable side) between the spiral cable and steering wheel pad, measure the voltage between D+ and body ground.

OK:

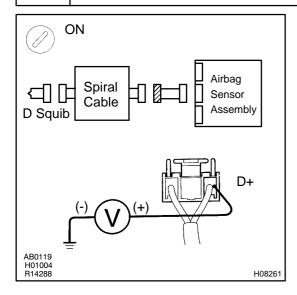
Voltage: Below 1 V

NG

Repair or replace spiral cable.



8 Check spiral cable.



CHECK:

- (a) Turn ignition switch to ON.
- (b) For the connector (on the spiral cable side) between the spiral cable and airbag sensor assembly, measure the voltage between D+ and body ground.

OK:

Voltage: 0 V

NG

Repair or replace harness between airbag sensor assembly and spiral cable.



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. If the malfunctioning part can not be detected by the simulation method, replace all SRS components including the wire harness.

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