DI58K-02

DTC B0102/11 Short in D and P Squib Circuit (to Ground)

CIRCUIT DESCRIPTION

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

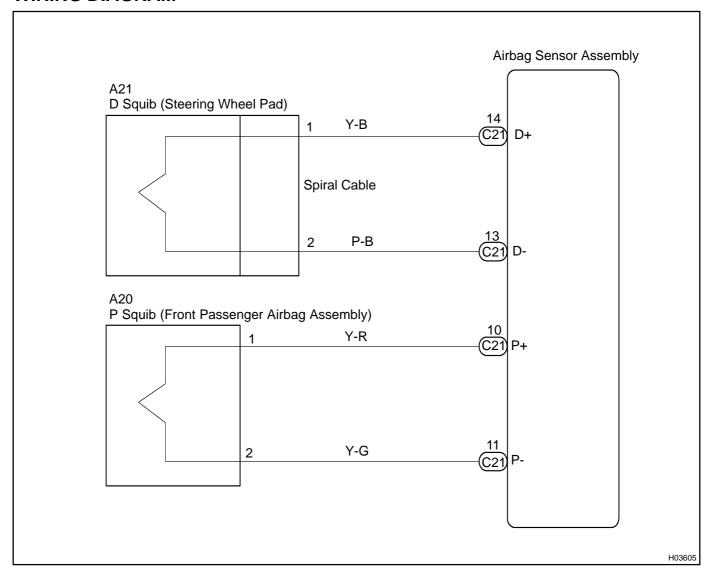
It causes the SRS to deploy when the SRS deployment conditions are satisfied.

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

DTC B0102/11 is recorded when ground short is detected in the D and P squib circuits.

DTC No.	DTC Detecting Condition	Trouble Area
B0102/11	Short circuit in D squib wire harness (to ground) Short circuit in P squib wire harness (to ground) 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



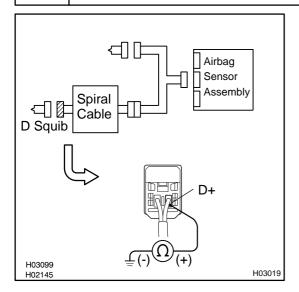
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INSPECTION PROCEDURE

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



2 Check D squib circuit.

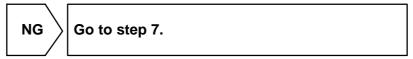


CHECK:

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

OK:

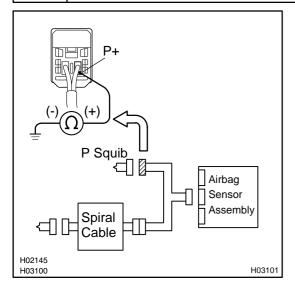
Resistance: 1 M Ω or Higher



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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 resistance between P+ and body ground.

OK:

Resistance: 1 M Ω or Higher



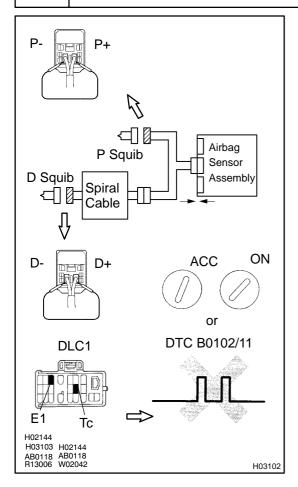
Repair or replace harness or connector between front passenger airbag assembly and airbag sensor assembly.



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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 assembly.
- (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 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 20 seconds.
- (d) Turn ignition switch to ACC or ON, and wait at least 20 seconds.
- (e) Check DTC. (See page DI-377)

OK:

DTC B0102/11 is not output.

HINT:

Codes other than DTC B0102/11 may be output at this time, but they are not relevant to this check.

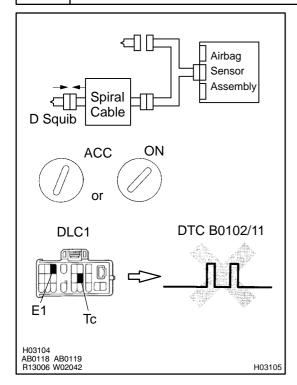
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Replace airbag sensor assembly.

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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 B0102/11 is not output.

HINT:

Codes other than DTC B0102/11 may be output at this time, but they are not relevant to this check.

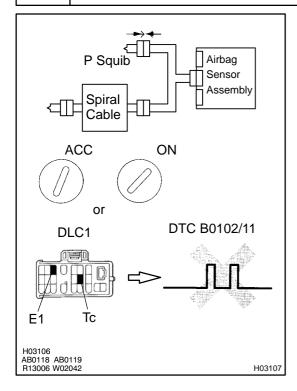
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Replace steering wheel pad.

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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 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 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 B0102/11 is not output.

HINT:

Codes other than DTC B0102/11 may be output at this time, but they are not relevant to this check.

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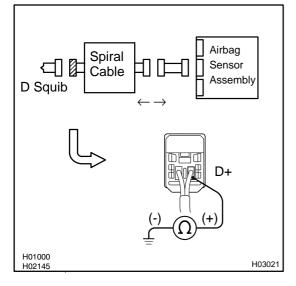
Replace front passenger airbag assembly.



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:

Disconnect the connector between the airbag sensor assembly and spiral cable.

CHECK:

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

OK:

Resistance: 1 M Ω or Higher

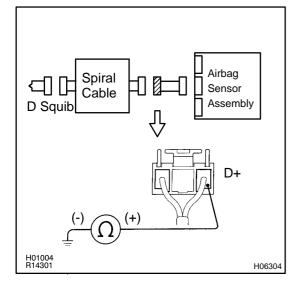
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Repair or replace spiral cable.

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Check harness between airbag sensor assembly and spiral cable.



CHECK:

For the connector (on the spiral cable side) between the spiral cable and airbag sensor assembly, measure the resistance between D+ and body ground.

OK:

Resistance: 1 M Ω or Higher

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

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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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