

DTC	12	Short in D Squib Circuit (to B+) (possible for P squib)
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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-1](#).

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

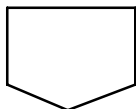
DTC No.	DTC Detecting Condition	Trouble Area
12	<ul style="list-style-type: none"> • Short circuit in D squib wire harness (to B+) • Short circuit in P squib wire harness (to B+) • D squib malfunction • P squib malfunction • Spiral cable malfunction • Airbag sensor assembly malfunction 	<ul style="list-style-type: none"> • Steering wheel pad (D squib) • Front passenger airbag assembly (P squib) • Spiral cable • Airbag sensor assembly • Wire harness

WIRING DIAGRAM

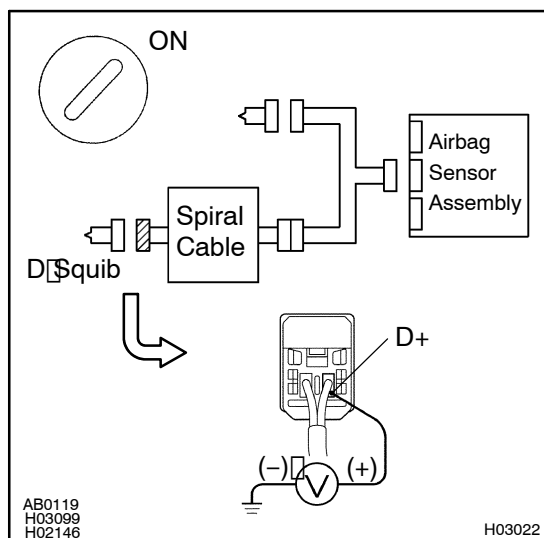
See [page DI-1](#).

INSPECTION PROCEDURE

1	Prepare for inspection (See step 1 in Pub. No. RM670E on page DI-138).
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2	Check D squib circuit.
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CHECK:

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

OK:

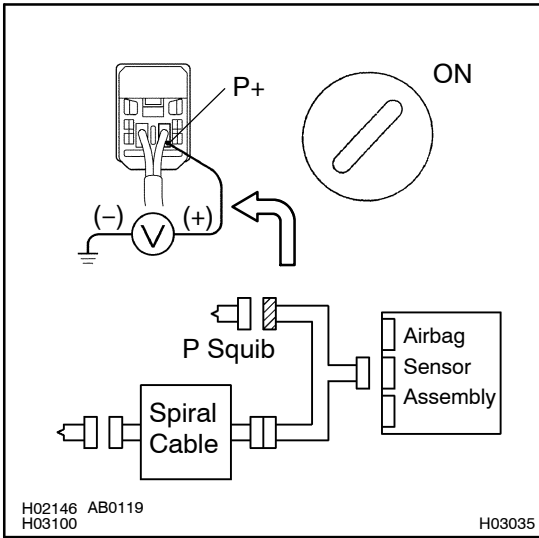
Voltage: Below 1V



Go to step 7.



3 Check P squib circuit.



CHECK:

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

OK:

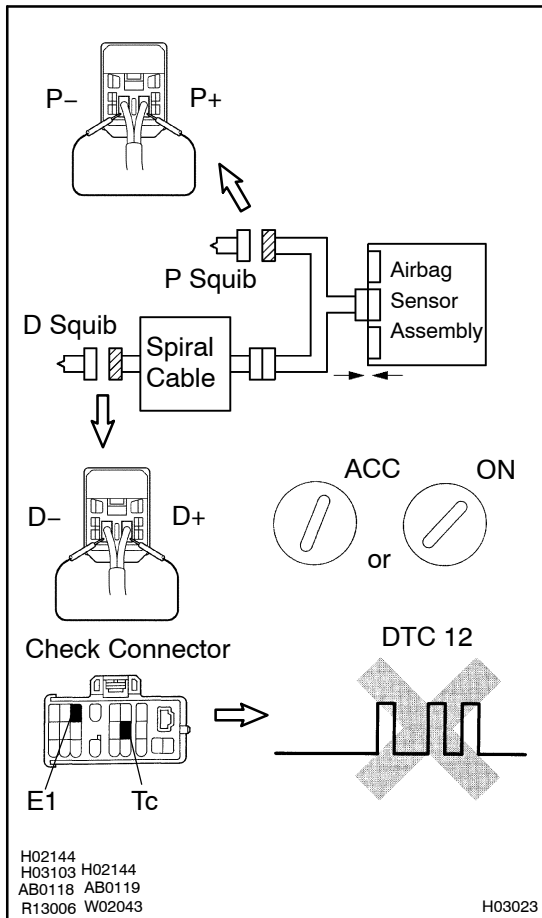
Voltage: Below 1 V

NG

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

OK

4 Check airbag sensor assembly.



PREPARATION:

- Connect the connector to the airbag sensor assembly.
- Using a service wire, connect D+ and D- of the connector (on the spiral cable side) between the spiral cable and steering wheel pad.
- 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.
- Connect negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ACC or ON and wait at least for 20 seconds.
- Clear the DTC stored in memory (See step 5 in Pub. No. RM670E on page DI-97).
- Turn the ignition switch to LOCK, and wait at least for 20 seconds.
- Turn the ignition switch to ACC or ON, and wait at least for 20 seconds.
- Check the DTC (See Pub. No. RM670E on page DI-97).

OK:

DTC 12 is not output.

HINT:

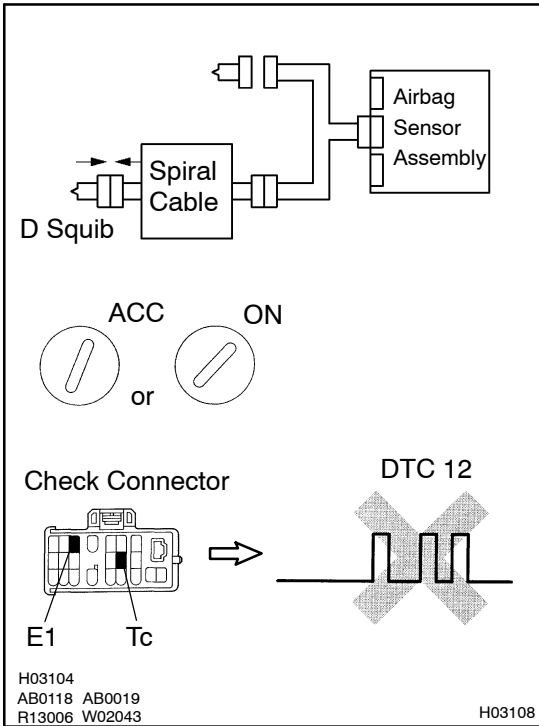
Codes other than DTC 12 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

5 Check D squib.



PREPARATION:

- Turn the ignition switch to LOCK.
- Disconnect negative (–) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the steering wheel pad connector.
- Connect negative (–) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ACC or ON, and wait at least for 20 seconds.
- Clear the DTC stored in memory (See step 5 in Pub. No. RM670E on page DI-97).
- Turn the ignition switch to LOCK, and wait at least for 20 seconds.
- Turn the ignition switch to ACC or ON, and wait at least for 20 seconds.
- Check DTC (See Pub. No. RM670E on page DI-97).

OK:

DTC 12 is not output.

HINT:

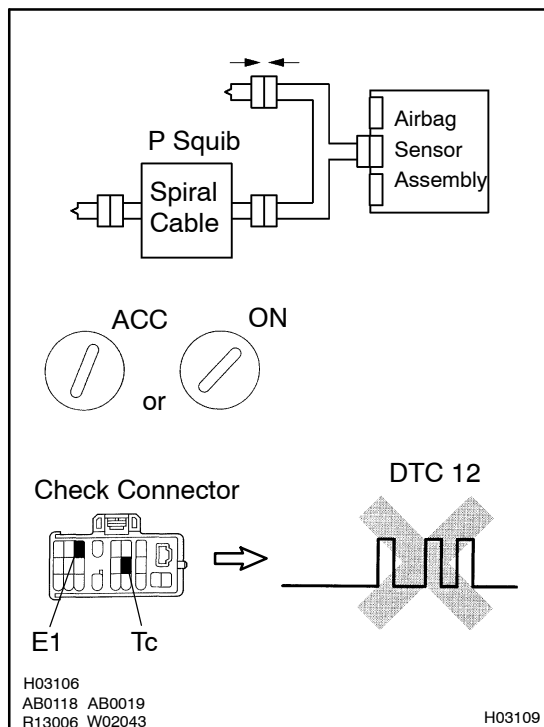
Codes other than DTC 12 may be output at this time, but they are not relevant to this check.

NG

Replace steering wheel pad.

OK

6 Check P squib.



PREPARATION:

- Turn the ignition switch to LOCK.
- Disconnect negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the front passenger airbag connector.
- Connect negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ACC or ON, and wait at least for 20 seconds.
- Clear the DTC stored in memory (See step 5 in Pub. No. RM670E on page DI-97).
- Turn the ignition switch to LOCK, and wait at least for 20 seconds.
- Turn the ignition switch to ACC or ON, and wait at least for 20 seconds.
- Check the DTC (See Pub. No. RM670E on page DI-97).

OK:

DTC 12 is not output.

HINT:

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

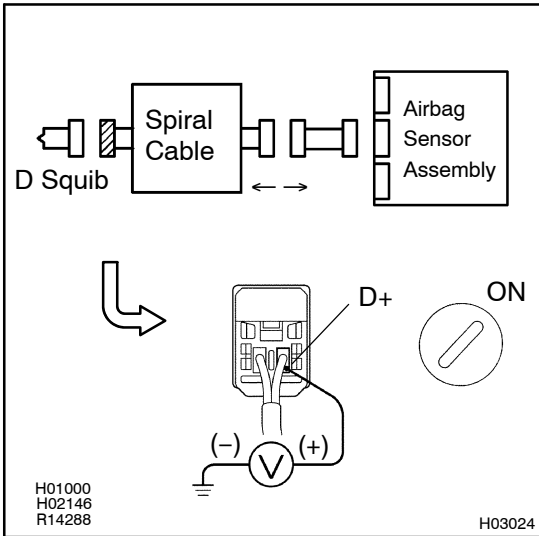
NG

Replace front passenger airbag assembly.

OK

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.

7 Check spiral cable.



PREPARATION:

- Turn the ignition switch to LOCK.
- Disconnect the connector between the airbag sensor assembly and spiral cable.
- Turn the ignition switch to 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:

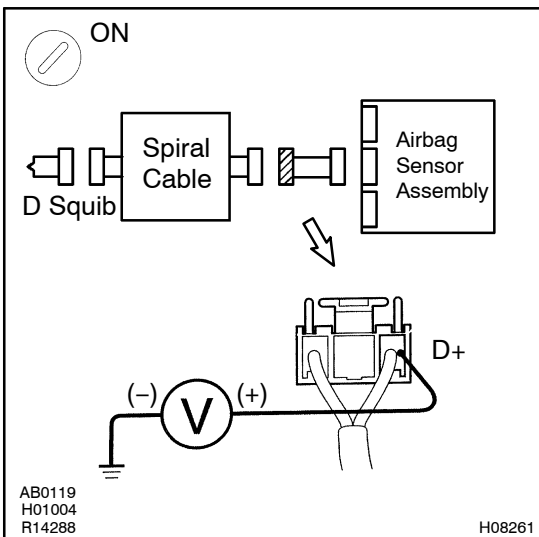
Voltage: Below 1 V

NG

Repair or replace spiral cable.

OK

8 Check harness between airbag sensor assembly and spiral cable.



CHECK:

- Turn the ignition switch to ON.
- 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.

OK

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.