DI30.I\_0

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

## **CIRCUIT DESCRIPTION**

The D squib circuit consists of the airbag sensor assembly, the spiral cable and the steering wheel pad. It causes the SRS to deploy when the SRS deployment conditions are satisfied.

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

DTC B0103/12 is recorded when a B+ short is detected in the D squib circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B0103/12	Short circuit in D squib circuit (to B+) D squib malfunction Spiral cable malfunction Airbag sensor assembly malfunction	Steering wheel pad (D squib) Spiral cable Airbag sensor assembly Dash wire Column wire

## WIRING DIAGRAM

See page DI-452.

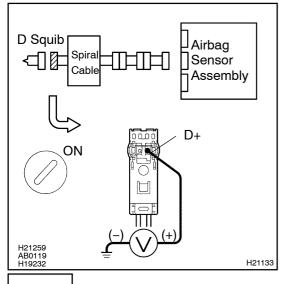
## INSPECTION PROCEDURE

1 Prepare for inspection (See step 1 on page DI-764).



2

Check D squib circuit.



**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 D+ of the orange connector on the steering wheel pad (D squib) side between the airbag sensor assembly and the steering wheel pad (D squib).

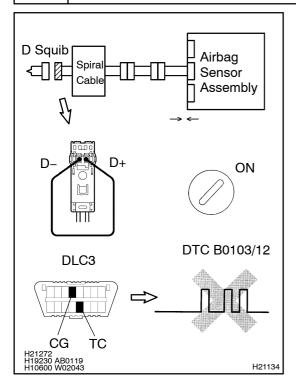
**OK**:

Voltage: Below 1 V

NG Go to step 5.

OK

# 3 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) Using a service wire, connect D+ and D- of the orange connector on the steering wheel pad (D squib) side between the airbag sensor assembly and the steering wheel pad (D squib).
- (e) 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 B0 103/12 is not output.

### HINT:

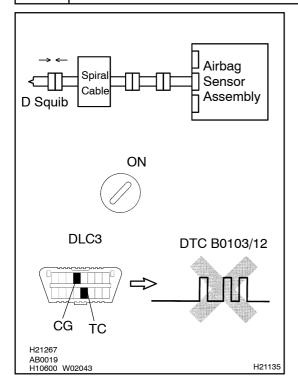
Codes other than code B0103/12 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

# 4 Check D squib.



### 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 steering wheel pad (D squib) to the spiral cable.
- (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 B0 103/12 is not output.

## HINT:

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

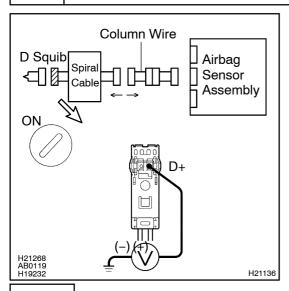
NG

Replace steering wheel pad (D squib).



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.

# 5 Check spiral cable.



### PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the spiral cable connector from the column wire.

## **CHECK:**

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and D+ of the orange spiral cable connector on the steering wheel pad (D squib) side.

## OK:

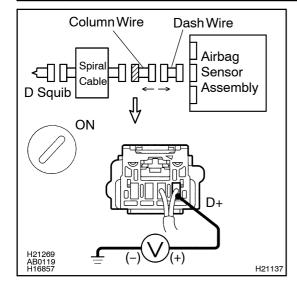
Voltage: Below 1 V

NG

Replace spiral cable.

ОК

# 6 Check column wire.



#### PREPARATION:

- (a) Turn the ignition switch to LOCK.
- (b) Disconnect the column wire connector from the dash wire.

## **CHECK:**

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and D+ of the column wire connector on the spiral cable side.

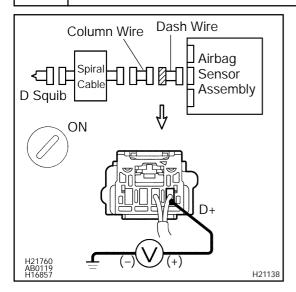
## OK:

Voltage: Below 1 V

NG Repair or replace column wire.

ОК

# 7 Check dash wire.



## **CHECK:**

- (a) Turn the ignition switch to ON.
- (b) Measure the voltage between the body ground and D+ of the dash wire connector on the column wire side.

# <u>OK:</u>

Voltage: Below 1 V

NG

Repair or replace dash wire.



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.