DI3Q.I-01

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

# **CIRCUIT DESCRIPTION**

The D squib circuit consists of the airbag sensor assembly, spiral cable and 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-2. 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 wire harness (to B+)	Steering wheel pad (D squib)
	D squib malfunction Spiral cable malfunction	Spiral cable Airbag sensor assembly
	Airbag sensor assembly malfunction	Wire harness

# WIRING DIAGRAM

See page DI-459.

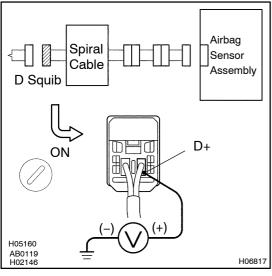
## INSPECTION PROCEDURE

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



1

2 Check D squib circuit.



#### CHECK:

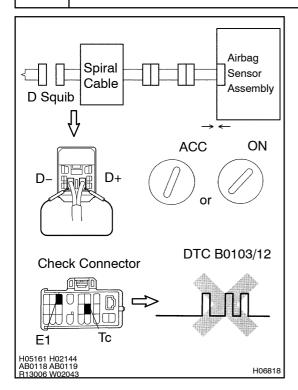
- (a) Connect negative ( -) terminal cable to the battery, and wait at least for 2 seconds.
- (b) Turn ignition switch to ON.
- (c) For the connector (on the spiral cable side) between the spiral cable and the steering wheel pad, measure the voltage between D+ and body ground.

#### OK:

Voltage: 0 V

NG Go to step 5.

# 3 Check airbag sensor assembly.



#### PREPARATION:

- (a) Disconnect negative (–) terminal cable from the battery, and wait at least for 90 seconds.
- (b) Connect the connector to the airbag sensor assembly.
- (c) Using a service wire, connect D+ and D- of the connector (on the spiral cable side) between the spiral cable and the steering wheel pad.
- (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-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:

#### DTC B0 103/12 is not output.

#### HINT:

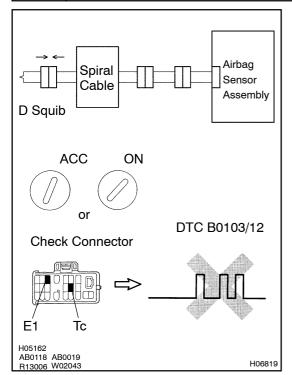
Codes other than code B0103/12 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

# 4 Check D squib.



#### PREPARATION:

- (a) Turn 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-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:

# DTC B0 103/12 is not output.

#### HINT:

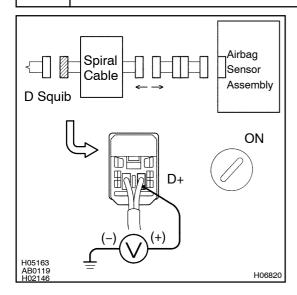
Codes other than code B0103/12 may be output at this time, but they are not relevant to this check.

NG Replace steering wheel pad.

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.

# 5 Check spiral cable.



#### PREPARATION:

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

#### **CHECK:**

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:

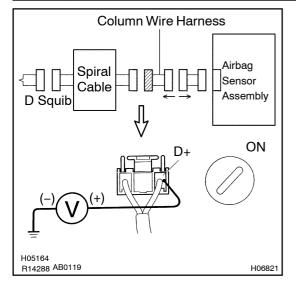
Voltage: 0 V

NG

Repair or replace spiral cable.



# 6 Check column wire harness.



## **PREPARATION:**

- (a) Turn ignition switch ON.
- (b) Disconnect the connector between the column wire harness and airbag sensor assembly.

## **CHECK:**

For the connector (on the column wire harness) between the column wire harness and spiral cable, measure the voltage between D+ and body ground.

## OK:

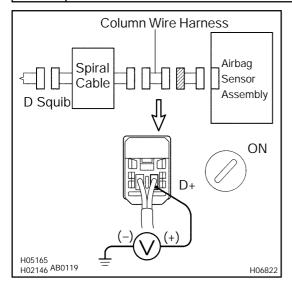
Voltage: 0 V

NG

Repair or replace column wire harness.

ОК

# 7 Check harness between airbag sensor assembly and column wire harness.



# CHECK:

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

OK:

Voltage: 0 V

NG

Repair or replace harness or connector between airbag sensor assembly and column wire harness.

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