

DTC	B1820/55	Short in Driver Side - Side Squib Circuit
DTC	B1821/55	Open in Driver Side - Side Squib Circuit
DTC	B1822/55	Short to GND in Driver Side - Side Squib Circuit
DTC	B1823/55	Short to B+ in Driver Side - Side Squib Circuit

DESCRIPTION

The driver side - side squib circuit consists of the center airbag sensor assembly and the front seat side airbag assembly LH.

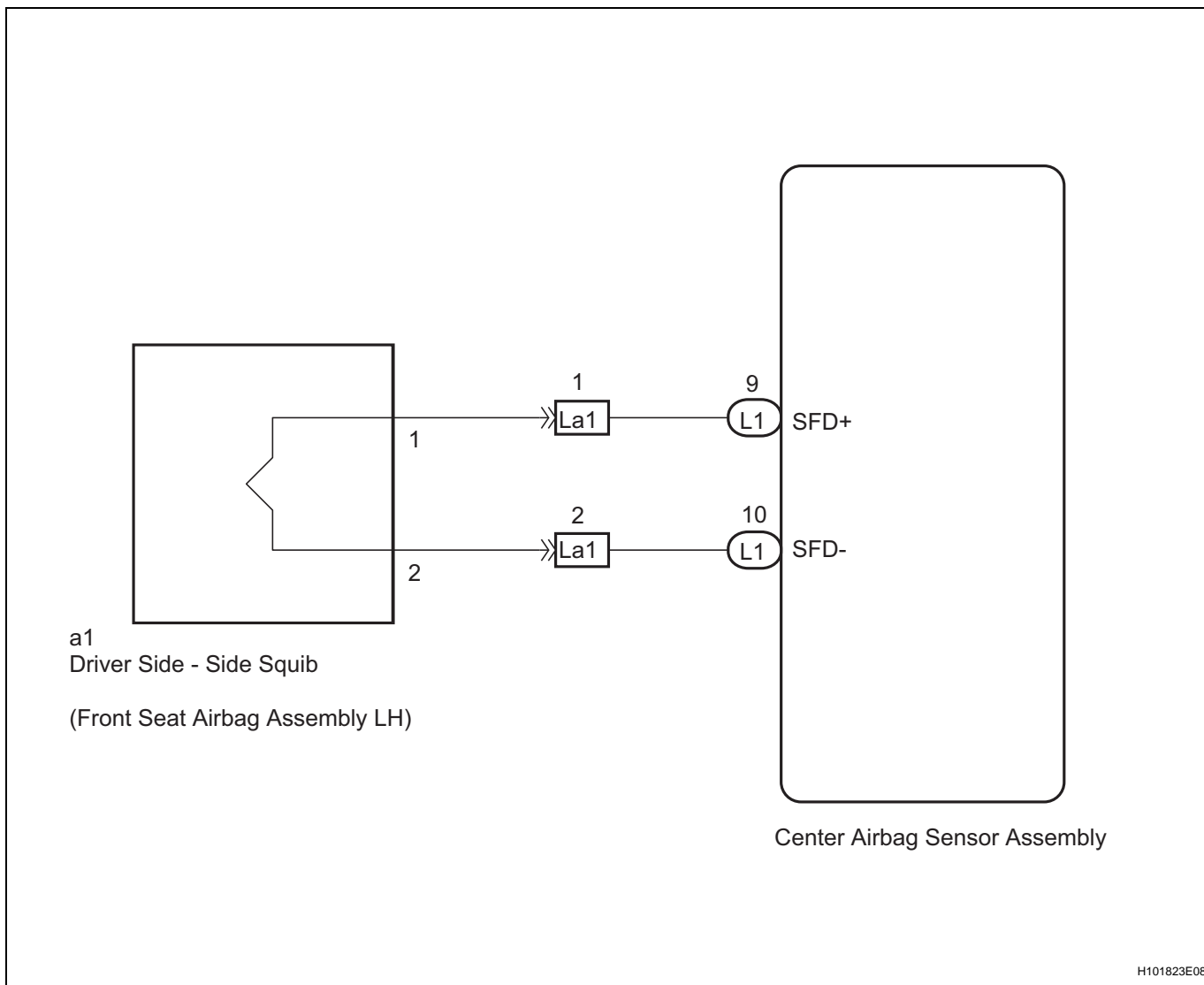
This circuit signals the SRS to deploy when deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the driver side - side squib circuit.

RS

DTC No.	DTC Detection Condition	Trouble Area
B1820/55	<ul style="list-style-type: none"> Center airbag sensor assembly detects line short circuit signal in driver side - side squib circuit 5 times during primary check. Driver side - side squib malfunction Center airbag sensor assembly malfunction 	<ul style="list-style-type: none"> Floor wire No.2 Front seat side airbag assembly LH (Driver side - side squib) Center airbag sensor assembly
B1821/55	<ul style="list-style-type: none"> Center airbag sensor assembly detects open circuit signal in driver side - side squib circuit for 2 seconds. Driver side - side squib malfunction Center airbag sensor assembly malfunction 	<ul style="list-style-type: none"> Floor wire No.2 Front seat side airbag assembly LH (Driver side - side squib) Center airbag sensor assembly
B1822/55	<ul style="list-style-type: none"> Center airbag sensor assembly detects short circuit to ground signal in driver side - side squib circuit for 0.5 seconds. Driver side - side squib malfunction Center airbag sensor assembly malfunction 	<ul style="list-style-type: none"> Floor wire No.2 Front seat side airbag assembly LH (Driver side - side squib) Center airbag sensor assembly
B1823/55	<ul style="list-style-type: none"> Center airbag sensor assembly detects short circuit to B+ signal in driver side - side squib circuit for 0.5 seconds. Driver side - side squib malfunction Center airbag sensor assembly malfunction 	<ul style="list-style-type: none"> Floor wire No.2 Front seat side airbag assembly LH (Driver side - side squib) Center airbag sensor assembly

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting CHECK MODE (signal check) with the intelligent tester (See page [RS-39](#)).
- After selecting CHECK MODE (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (See page [RS-29](#)).

1

CHECK CONNECTOR (DRIVER SIDE -SIDE SQUIB - FLOOR WIRE NO.2)

- Turn the ignition switch off.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Check the floor wire No.2 connector and terminals (on the front seat side airbag assembly LH side) and check the connector is properly connected to the front seat side airbag assembly LH.

Result

Result	Proceed to
No problem.	A
Connector or terminals incorrect.	B
Connector connected improperly.	C

B

REPAIR OR REPLACE FLOOR WIRE NO.2

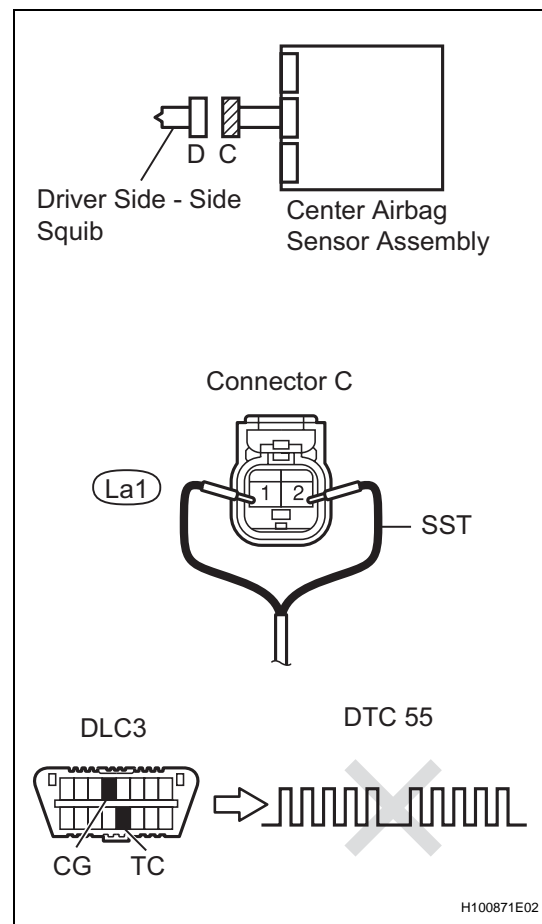
C

CONNECT CONNECTOR PROPERLY

A

2

CHECK FRONT SEAT SIDE AIRBAG ASSEMBLY LH (DRIVER SIDE - SIDE SQUIB)



SST 09843-18060

- Disconnect the connector from the front seat side airbag assembly LH.
- Connect the black wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:

Never connect a tester to the front seat side airbag assembly LH (driver side - side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- Do not forcibly insert the SST into the terminals of the connector when connecting.
 - Insert the SST straight into the terminals of the connector.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
 - Turn the ignition switch on, and wait for at least 60 seconds.
 - Clear the DTCs stored in the memory (See page RS-36).
 - Turn the ignition switch off.
 - Turn the ignition switch on, and wait for at least 60 seconds.
 - Check the DTCs (See page RS-36).

OK:

DTC B1820/55, B1821/55, B1822/55 and B1823/55 are not output.

HINT:

DTCs other than DTC B1820/55, B1821/55, B1822/55 and B1823/55 may be output at this time, but they are not related to this check.

OK

REPLACE FRONT SEAT ASSEMBLY LH

NG

3

CHECK CONNECTOR (FLOOR WIRE NO.2 - CENTER AIRBAG SENSOR ASSEMBLY)

- Turn the ignition switch off.

- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Disconnect the SST from connector C.
- (d) Check the floor wire No.2 connector and terminals (on the center airbag sensor assembly side) and check the connector is properly connected to the center airbag sensor assembly.

Result

Result	Proceed to
No problem.	A
Connector or terminals incorrect.	B
Connector connected improperly.	C

B

REPAIR OR REPLACE FLOOR WIRE NO.2

C

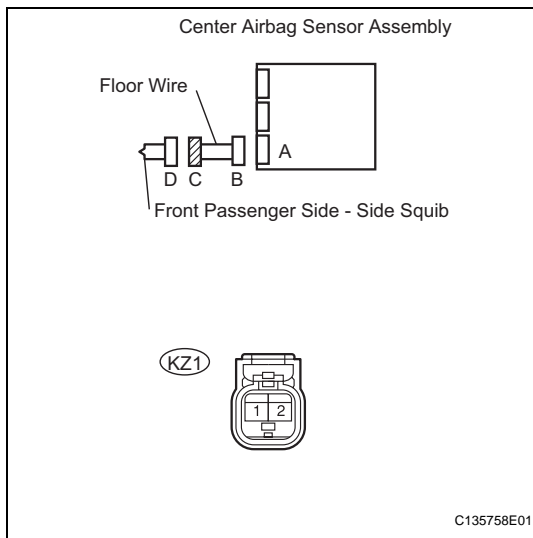
CONNECT CONNECTOR PROPERLY

RS

A

4

CHECK FLOOR WIRE (DRIVER SIDE - SIDE SQUIB CIRCUIT)



- (a) Turn the ignition switch off.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Disconnect the connectors from the center airbag sensor assembly.
- (d) Check for short to B+ in the circuit.
 - (1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
 - (2) Turn the ignition switch on.
 - (3) Measure the voltage.

Standard voltage

Tester connection	Condition	Specified condition
1 - Body ground	Ignition switch on	Below 1 V
2 - Body ground	Ignition switch on	Below 1 V

- (e) Check for open in the circuit.
 - (1) Turn the ignition switch off.
 - (2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
 - (3) Measure the resistance.

Standard resistance

Tester connection	Condition	Specified condition
1 - 2	Always	Below 1 Ω

- (f) Check for short to ground in the circuit.
 - (1) Measure the resistance.

Standard resistance

Tester connection	Condition	Specified condition
1 - Body ground	Always	1 MΩ or higher
2 - Body ground	Always	1 MΩ or higher

- (g) Check for short in the circuit.

- (1) Release the activation prevention mechanism built into connector B (See page RS-29).
- (2) Measure the resistance.

Standard resistance

Tester connection	Condition	Specified condition
1 - 2	Always	1 MΩ or higher

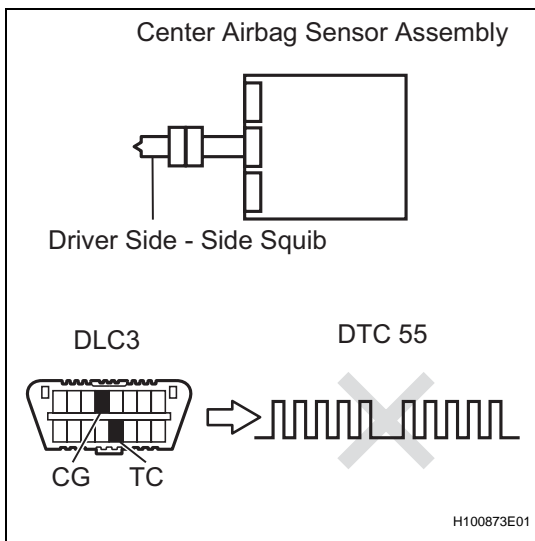
- (3) Restore the released activation prevention mechanism of connector B to the original condition.

NG → **REPAIR OR REPLACE FLOOR WIRE NO.2**

OK

5 CHECK CENTER AIRBAG SENSOR ASSEMBLY

RS



- (a) Connect the connectors to the front seat side airbag assembly LH and the center airbag sensor assembly.
- (b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (c) Turn the ignition switch on, and wait for at least 60 seconds.
- (d) Clear the DTCs stored in the memory (See page RS-36).
- (e) Turn the ignition switch off.
- (f) Turn the ignition switch on, and wait for at least 60 seconds.
- (g) Check the DTCs (See page RS-36).

OK:

DTC B1820/55, B1821/55, B1822/55 and B1823/55 are not output.

HINT:

DTCs other than DTC B1820/55, B1821/55, B1822/55 and B1823/55 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK