DTC	B1820/55	Short in Front Driver Side - Side Squib Circuit

DTC	B1821/55	Open in Front Driver Side - Side Squib Circuit

DTC	B1822/55	Short to GND in Front Driver Side - Side Squib Circuit

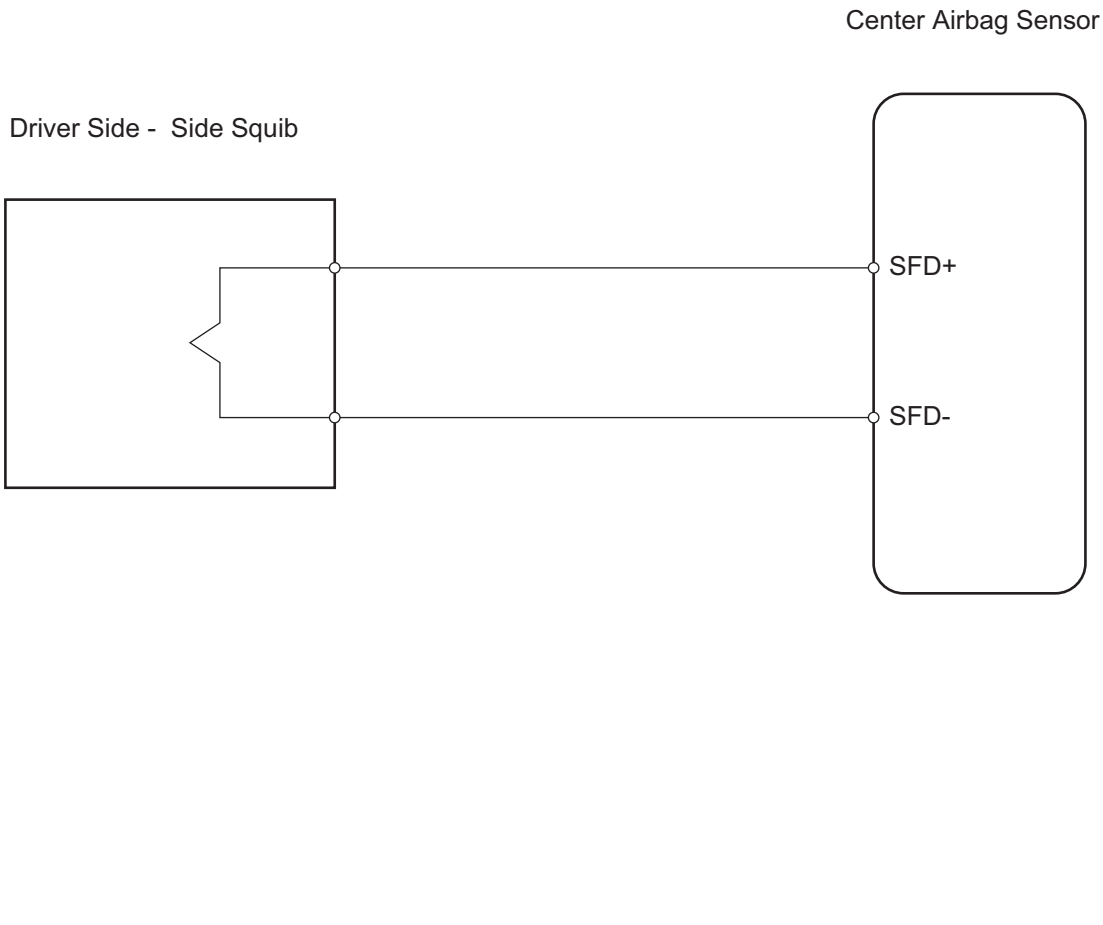
DTC	B1823/55	Short to B+ in Front Driver Side - Side Squib Circuit

DESCRIPTION

The driver side - side squib circuit consists of the center airbag sensor and the front seat side airbag LH. This circuit instructs the SRS to deploy when the deployment conditions are met.
These DTCs are recorded when a malfunction is detected in the driver side - side squib circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1820/55	Center airbag sensor receives a line short signal 5 times in the driver side - side squib circuit during primary check.	• Floor wire • No. 1 seat airbag wire • Front seat side airbag LH (Driver side - side squib) • Center airbag sensor
B1821/55	Center airbag sensor receives an open signal in the driver side - side squib circuit for 2 seconds.	• Floor wire • No. 1 seat airbag wire • Front seat side airbag LH (Driver side - side squib) • Center airbag sensor
B1822/55	Center airbag sensor receives a short to ground signal in the driver side - side squib circuit for 0.5 seconds.	• Floor wire • No. 1 seat airbag wire • Front seat side airbag LH (Driver side - side squib) • Center airbag sensor
B1823/55	Center airbag sensor receives a short to B+ signal in the driver side - side squib circuit for 0.5 seconds.	• Floor wire • No. 1 seat airbag wire • Front seat side airbag LH (Driver side - side squib) • Center airbag sensor

WIRING DIAGRAM



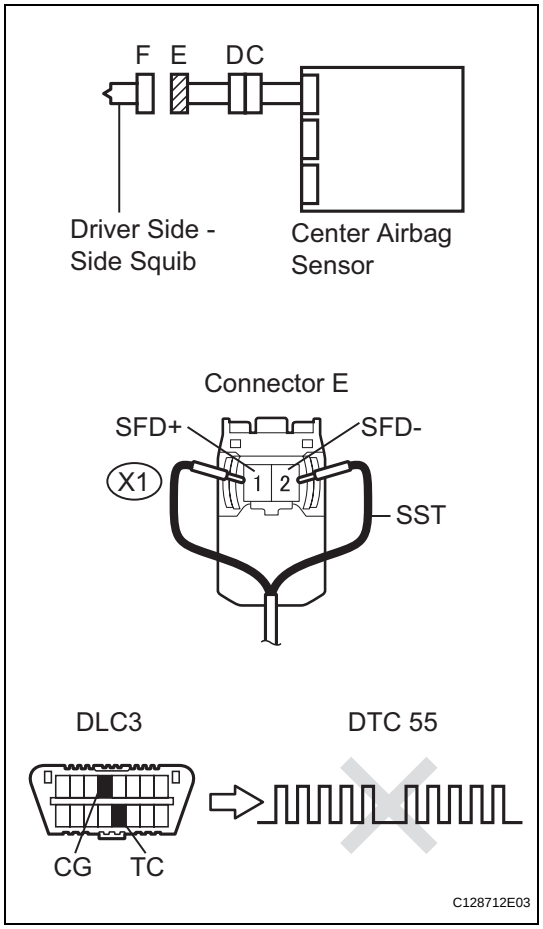
RS

INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page RS-52).
- After selecting the "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-52).

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



(a) Turn the ignition switch OFF.
(b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
(c) Disconnect the connector from the front seat side airbag LH.
(d) Connect the black wire side of SST to connector E.
CAUTION:
Never connect a tester to the front seat side airbag LH (driver side - side squib) for measurement, as this may lead to a serious injury due to airbag deployment.
NOTICE:
- **Do not forcibly insert SST into the terminals of the connector when connecting.**
- **Insert SST straight into the terminals of the connector.**

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(e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
(f) Turn the ignition switch ON, and wait for at least 60 seconds.
(g) Clear the DTCs (see page RS-49).
(h) Turn the ignition switch OFF.
(i) Turn the ignition switch ON, and wait for at least 60 seconds.
(j) Check the DTCs (see page RS-49).
OK:
DTC B1820, B1821, B1822, B1823 or 55 is not output.
HINT:
DTCs other than DTC B1820, B1821, B1822, B1823 or 55 may be output at this time, but they are not related to this check.

OK → **REPLACE FRONT SEAT ASSEMBLY LH**

NG

2	CHECK CONNECTOR

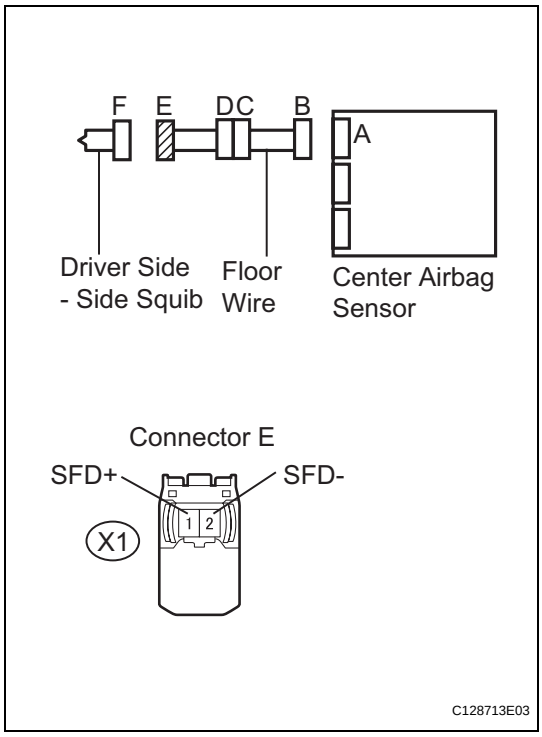
(a) Turn the ignition switch OFF.
(b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
(c) Disconnect SST from the No. 1 seat airbag wire.
(d) Check that the floor wire connectors (on the driver side - side squib) are not damaged.
OK:
Lock button is not disengaged, and claw of lock is not deformed or damaged.

NG → **REPLACE FLOOR WIRE**

RS

OK

3	CHECK FLOOR WIRE (DRIVER SIDE - SIDE SQUIB CIRCUIT)



(a) Disconnect the connector from the center airbag sensor.
(b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
(c) Turn the ignition switch ON.
(d) Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
X1-1 (SFD-) - Body ground	Below 1 V
X1-2 (SFD+) - Body ground	Below 1 V

(e) Turn the ignition switch OFF.
(f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
(g) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
X1-1 (SFD-) - X1-2 (SFD+)	Below 1 Ω
X1-1 (SFL-) - Body ground	1 MΩ or higher
X1-2 (SFL+) - Body ground	1 MΩ or higher

(h) Release the activation prevention mechanism built into connector B (see page RS-37).
(i) Measure the resistance of the wire harness side connector.

Standard resistance

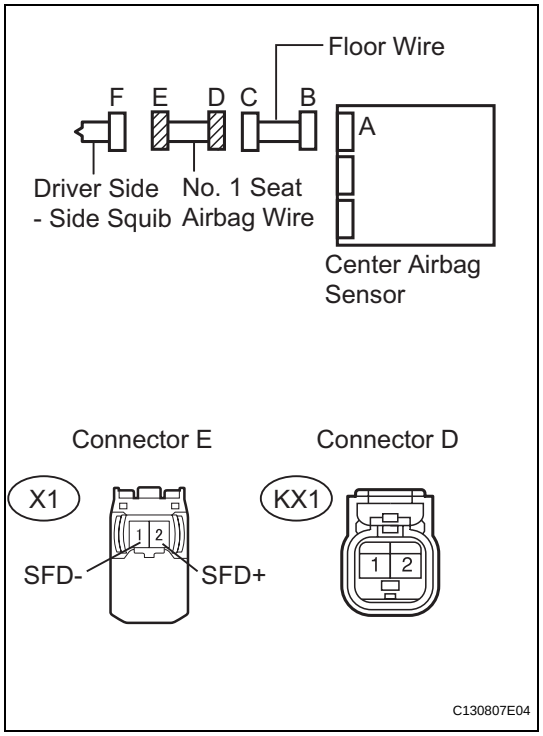
Tester Connection	Specified Condition
X1-1 (SFD-) - X1-2 (SFD+)	1 MΩ or higher

RS

OK → REPLACE CENTER AIRBAG SENSOR ASSEMBLY

NG

4	CHECK NO. 1 SEAT AIRBAG WIRE



(a) Disconnect the No. 1 seat airbag wire connector from the floor wire.
(b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
(c) Turn the ignition switch ON.
(d) Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
X1-1 (SFD-) - Body ground	Below 1 V
X1-2 (SFD+) - Body ground	Below 1 V

(e) Turn the ignition switch OFF.
(f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
(g) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
X1-2 (SFD+) - KX1-2	Below 1 Ω
X1-1 (SFD-) - KX1-1	Below 1 Ω
X1-2 (SFD+) - X1-1 (SFD-)	1 MΩ or higher
X1-2 (SFD+) - Body ground	1 MΩ or higher
X1-1 (SFD-) - Body ground	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT AIRBAG WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

RS