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

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

RS

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

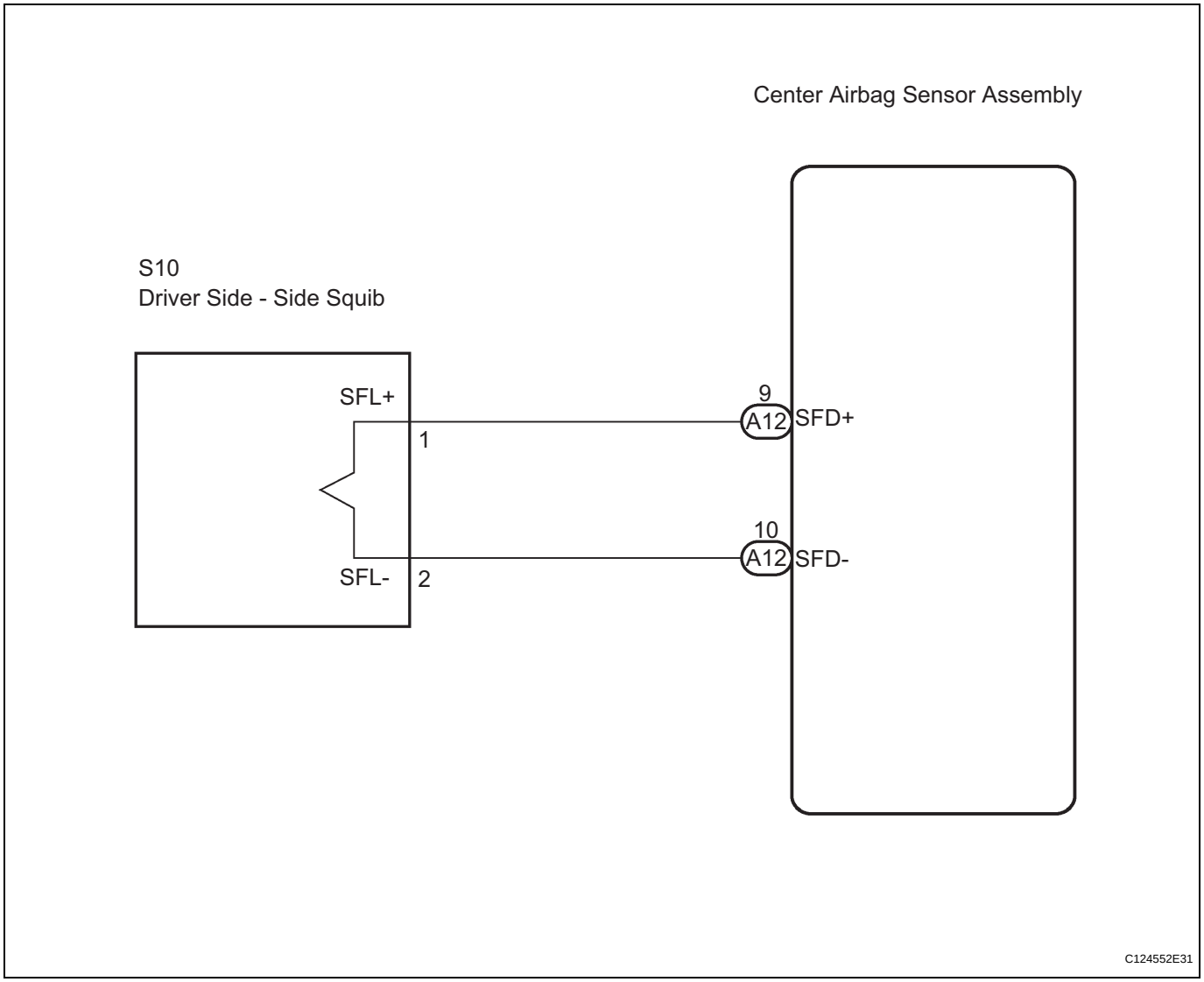
DESCRIPTION

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

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

RS

WIRING DIAGRAM



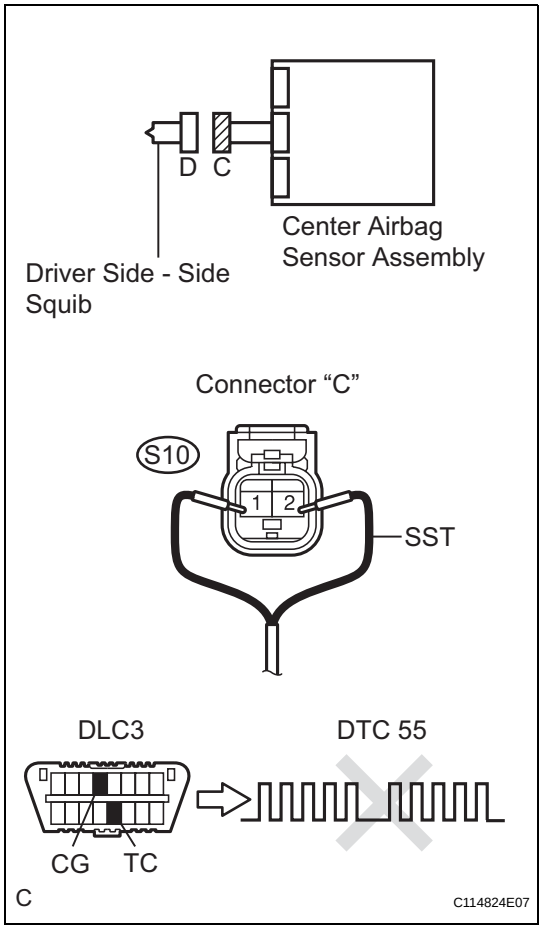
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting the "check mode" (signal check) with the intelligent tester (See page RS-37).
- 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-37).

RS

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



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the front seat side airbag assembly LH.
(d) 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 straight the SST into the terminals of the connector.**

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-34).
OK:
DTC B1820, B1821, B1822, B1823 or 55 is not output.
HINT:
Codes other than DTC B1820, B1821, B1822, B1823 and 55 may be output at this time, but they are not related to this check.

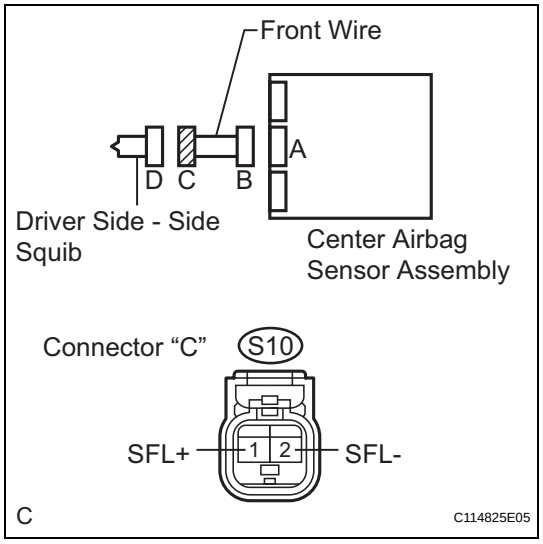
NG → **Go to step 2**

OK

REPLACE FRONT SEAT ASSEMBLY LH

RS

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



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector "C".
(d) Disconnect the connectors from the center airbag sensor assembly.
(e) Check for a 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 to the ON position.
  (3) Measure the voltage according to the value(s) in the table below.
  Standard voltage

Tester connection	Condition	Specified condition
S10-1 (SFL+) - Body ground	Ignition switch ON	Below 1 V
S10-2 (SFL-) - Body ground	Ignition switch ON	Below 1 V

(f) Check for an open in the circuit.
  (1) Turn the ignition switch to the LOCK position.
  (2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
  (3) Measure the resistance according to the value(s) in the table below.
  Standard resistance

Tester connection	Condition	Specified condition
S10-1 (SFL+) - S10-2 (SFL-)	Always	Below 1 Ω

(g) Check for a short to ground in the circuit.
  (1) Measure the resistance according to the value(s) in the table below.
  Standard resistance

Tester connection	Condition	Specified condition
S10-1 (SFL+) - Body ground	Always	1 MΩ or higher
S10-2 (SFL-) - Body ground	Always	1 MΩ or higher

(h) Check for a short in the circuit.
  (1) Release the activation prevention mechanism built into connector "B" (See page RS-26).
  (2) Measure the resistance according to the value(s) in the table below.
  Standard resistance

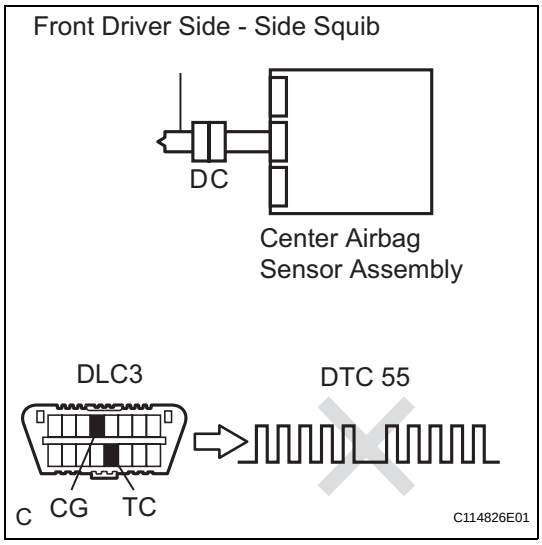
Tester connection	Condition	Specified condition
S10-1 (SFL+) - S10-2 (SFL-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

3	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 to the ON position, and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-34).
OK:
DTC B1820, B1821, B1822, B1823 or 55 is not output.
HINT:
Codes other than DTC B1820, B1821, B1822, B1823 and 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