DTC	B1827	SHORT IN SIDE SQUIB (P SEAT SIDE) CIRCUIT (TO GROUND)

CIRCUIT DESCRIPTION

The side squib (P seat side) circuit consists of the airbag ECU assy and the front seat w/ adjuster frame assy RH (LHD) or front seat w/ adjuster frame assy LH (RHD).
The circuit instructs the SRS to deploy when deployment conditions are met.
DTC B1827 is recorded when a short to ground is detected in the side squib (P seat side) circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1827	• When the airbag ECU assy receives a short to ground signal in the side squib (P seat side) circuit for 0.5 seconds. • Side squib (P seat side) malfunction • Airbag ECU assy malfunction	• Floor wire No.2 • Seat airbag No.2 wire • Front seat w/ adjuster frame assy RH (LHD) (Side squib (P seat side)) • Front seat w/ adjuster frame assy LH (RHD) (Side squib (P seat side)) • Airbag ECU assy

WIRING DIAGRAM

See page 05–1343.

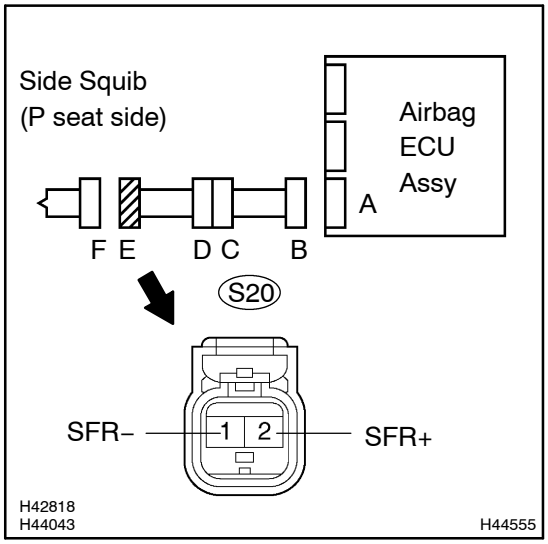
INSPECTION PROCEDURE

CAUTION:

Be sure to perform the following procedures before troubleshooting to avoid unexpected airbag deployment.

(a) Turn the power switch off.
(b) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the airbag ECU assy.
(d) Disconnect the connectors from the horn button assy.
(e) Disconnect the connectors from the front passenger airbag assy.
(f) Disconnect the connector from the front seat airbag assy LH.
(g) Disconnect the connector from the front seat airbag assy RH.
(h) Disconnect the connector from the curtain shield airbag assy LH.
(i) Disconnect the connector from the curtain shield airbag assy RH.
(j) Disconnect the connector from the front seat outer belt assy LH.
(k) Disconnect the connector from the front seat outer belt assy RH.

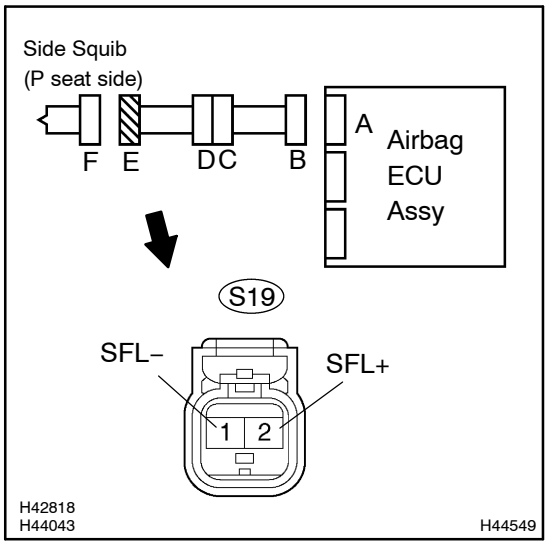
1	CHECK SIDE SQUIB (P SEAT SIDE) CIRCUIT



(a) LHD:
(1) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
S20–2 (SFR+) – Body ground	Always	1 MΩ or Higher
S20–1 (SFR–) – Body ground	Always	1 MΩ or Higher



(b) RHD:
(1) Measure the resistance according to the value(s) in the table below.

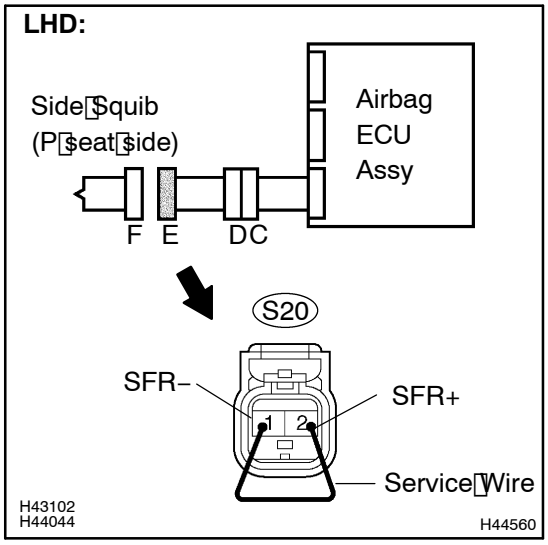
Standard:

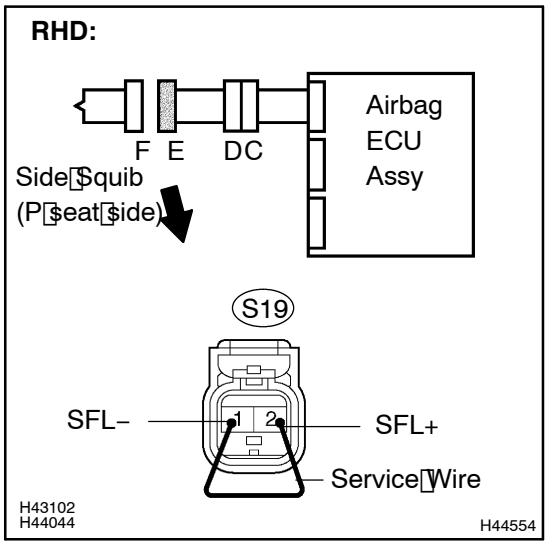
Tester connection	Condition	Specified condition
S19–2 (SFL+) – Body ground	Always	1 MΩ or Higher
S19–1 (SFL–) – Body ground	Always	1 MΩ or Higher

OK

NG → **Go to step 4**

2 CHECK AIR BAG ECU ASSY





(a) Connect the connectors to the airbag ECU assy.

(b) LHD:
Using a service wire, connect S20–2 (SFR+) and S20–1 (SFR–) of connector "E".

(c) RHD:
Using a service wire, connect S19–2 (SFL+) and S19–1 (SFL–) of connector "E".

NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.

(d) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.

(e) Turn the power switch on (IG), and wait for at least 60 seconds.

(f) Clear the DTCs stored in memory (see page 05–1170).

(g) Turn the power switch off.

(h) Turn the power switch on (IG), and wait for at least 60 seconds.

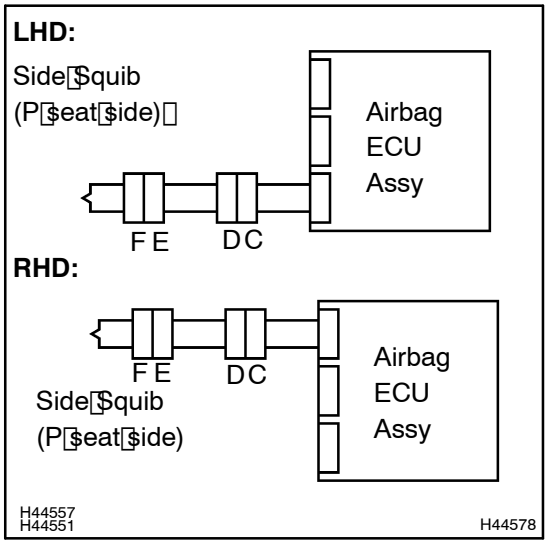
(i) Check the DTCs (see page 05–1170).
OK:
DTC B1827 is not output.

HINT:
Codes other than code B1827 may be output at this time, but they are not related to this check.

NG	**REPLACE AIR BAG ECU ASSY (SEE PAGE 60–54)**

OK

3	CHECK DTC(SIDE SQUIB (P SEAT SIDE))



(a) Turn the power switch off.
(b) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector "E".
(d) LHD:
Connect the connector to the front seat w/ adjuster frame assy RH (side squib (P seat side)).
(e) RHD:
Connect the connector to the front seat w/ adjuster frame assy LH (side squib (P seat side)).
(f) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
(g) Turn the power switch on (IG), and wait for at least 60 seconds.
(h) Clear the DTCs stored in memory (see page 05–1170).
(i) Turn the power switch off.
(j) Turn the power switch on (IG), and wait for at least 60 seconds.
(k) Check the DTCs (see page 05–1170).
Result:

DTC B1827 is not output.	A
DTC B1827 is output (LHD).	B
DTC B1827 is output (RHD).	C

HINT:
Codes other than code B1827 may be output at this time, but they are not related to this check.

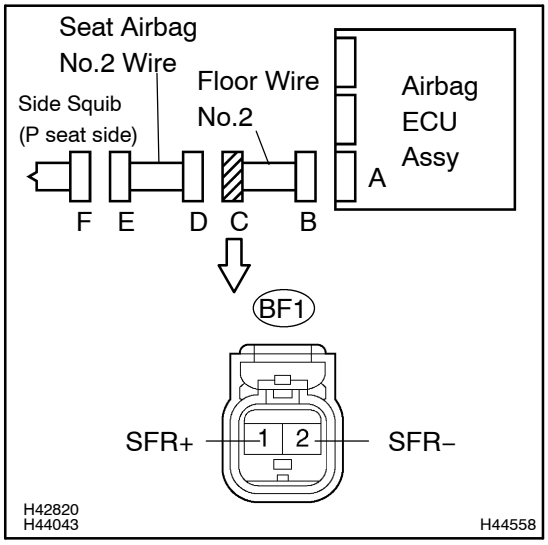
B	REPLACE FRONT SEAT W/ADJUSTER FRAME ASSY RH (SEE PAGE 72–2)
C	REPLACE FRONT SEAT W/ADJUSTER FRAME ASSY LH (SEE PAGE 72–2)

A

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–1165)

HINT:
- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–1171).
- After selecting the check mode, perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page 05–1171).

4 CHECK FLOOR WIRE NO.2



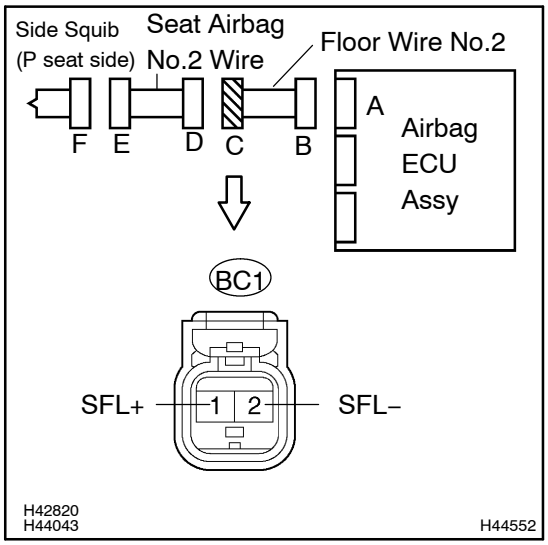
(a) LHD:

(1) Disconnect the floor wire No.2 connector from the seat airbag No.2 wire.

(2) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
BG1–1 (SFR+) – Body ground	Always	1 MΩ or Higher
BG1–2 (SFR–) – Body ground	Always	1 MΩ or Higher



(b) RHD:

(1) Disconnect the floor wire No.2 connector from the seat airbag No.2 wire.

(2) Measure the resistance according to the value(s) in the table below.

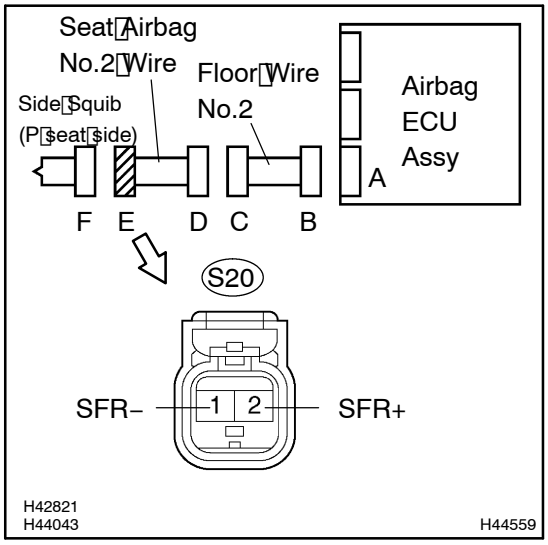
Standard:

Tester connection	Condition	Specified condition
BC1–1 (SFL+) – BC1–2 (SFL–)	Always	Below 1 Ω

OK

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

5 CHECK SEAT AIRBAG NO.2 WIRE

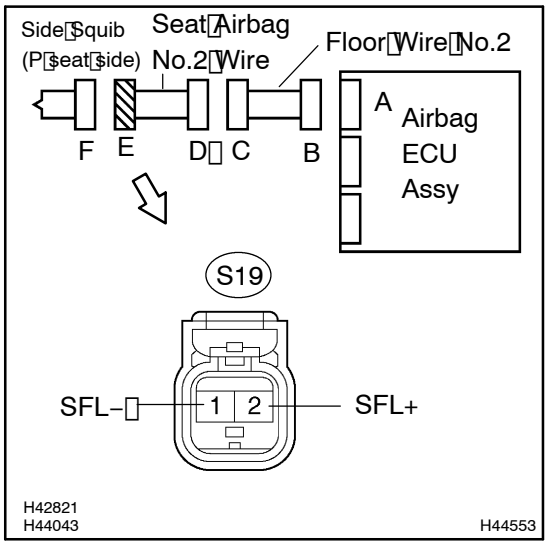


(a) LHD:

(1) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
S20–2 (SFR+) – Body ground	Always	1 MΩ or Higher
S20–1 (SFR–) – Body ground	Always	1 MΩ or Higher



(b) RHD:

(1) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
S19–2 (SFL+) – Body ground	Always	1 MΩ or Higher
S19–1 (SFL–) – Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE SEAT AIRBAG NO.2 WIRE**

OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–1155)

HINT:

- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–1171).
- After selecting the check mode, perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page 05–1171).