

| | | |
|------------|-----------------|--|
| DTC | B1820/55 | SHORT IN SIDE SQUIB (D SEAT SIDE) CIRCUIT |
| DTC | B1821/55 | OPEN IN SIDE SQUIB (D SEAT SIDE) CIRCUIT |
| DTC | B1822/55 | SHORT IN SIDE SQUIB (D SEAT SIDE) CIRCUIT (TO GROUND) |
| DTC | B1823/55 | SHORT IN SIDE SQUIB (D SEAT SIDE) CIRCUIT (TO B+) |

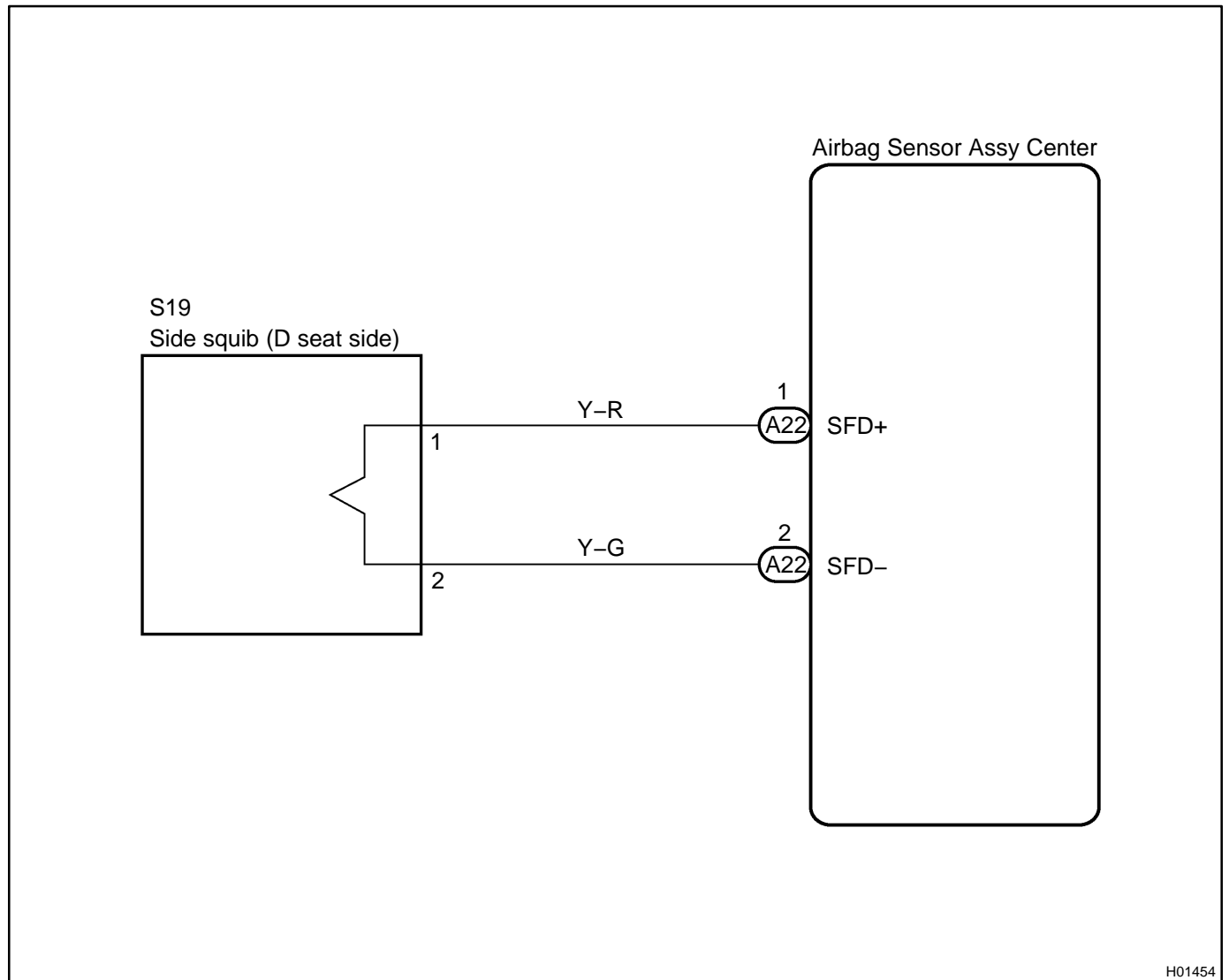
CIRCUIT DESCRIPTION

The side squib (D seat side) circuit consists of the airbag sensor assy center and the front LH seat assy. This circuit instructs the SRS to deploy when deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the side squib (D seat side) circuit.

| DTC No. | DTC Detecting Condition | Trouble Area |
|----------|---|--|
| B1820/55 | <ul style="list-style-type: none"> The airbag sensor assy center receives a line short circuit signal 5 times in the side squib (D seat side) circuit during primary check. Side squib (D seat side) malfunction Airbag sensor assy center malfunction | <ul style="list-style-type: none"> Front LH seat assy (Side squib (D seat side)) Airbag sensor assy center Floor wire |
| B1821/55 | <ul style="list-style-type: none"> The airbag sensor assy center receives an open circuit signal in the side squib (D seat side) circuit for 2 seconds. Side squib (D seat side) malfunction Airbag sensor assy center malfunction | <ul style="list-style-type: none"> Front LH seat assy (Side squib (D seat side)) Airbag sensor assy center Floor wire |
| B1822/55 | <ul style="list-style-type: none"> The airbag sensor assy center receives a short circuit to ground signal in the side squib (D seat side) circuit for 0.5 second. Side squib (D seat side) malfunction Airbag sensor assy center malfunction | <ul style="list-style-type: none"> Front LH seat assy (Side squib (D seat side)) Airbag sensor assy center Floor wire |
| B1823/55 | <ul style="list-style-type: none"> The airbag sensor assy center receives a B+ short circuit signal in the side squib (D seat side) circuit for 0.5 second. Side squib (D seat side) malfunction Airbag sensor assy center malfunction | <ul style="list-style-type: none"> Front LH seat assy (Side squib (D seat side)) Airbag sensor assy center Floor wire |

WIRING DIAGRAM



INSPECTION PROCEDURE

CAUTION:

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

- (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 connectors from the airbag sensor assy center.
- (d) Disconnect the connectors from the horn button assy.
- (e) Disconnect the connectors from the front passenger airbag assy.
- (f) w/ Side airbag:
Disconnect the connector from the front seat airbag assy LH.
- (g) w/ Side airbag:
Disconnect the connector from the front seat airbag assy RH.
- (h) w/ Curtain shield airbag:
Disconnect the connector from the curtain shield airbag assy LH.
- (i) w/ Curtain shield airbag:
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 READ METHOD OF DTC

- (a) Proceed to each step according to DTC readings.
 - (1) If using the hand-held tester (read the 5-digit of DTC):
Using the hand-held tester, check the DTCs (see page 05-1464).

Result:

| | |
|----------------------|---|
| DTC B1820 is output. | A |
| DTC B1821 is output. | B |
| DTC B1822 is output. | C |
| DTC B1823 is output. | D |

- (2) If not using the hand-held tester (read the 2-digit of DTC):
Check the DTCs (see page 05-1464).

Result:

| | |
|-------------------|---|
| DTC 55 is output. | E |
|-------------------|---|

B

Go to step 3

C

Go to step 4

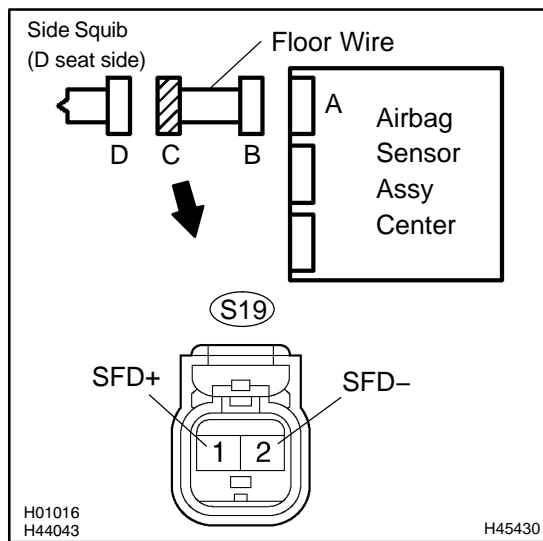
D

Go to step 5

E

Go to step 6

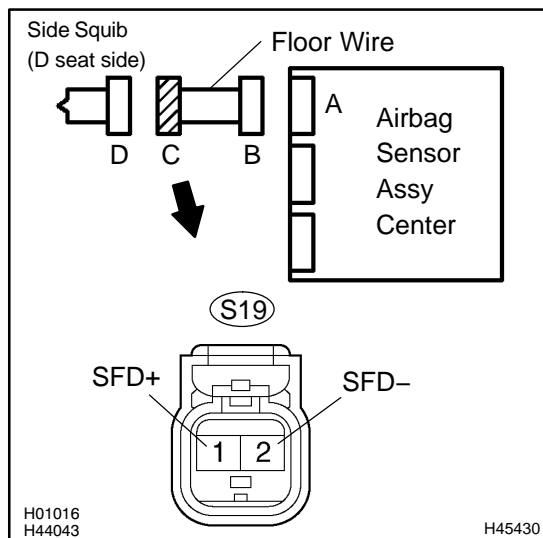
A

2 CHECK FLOOR WIRE (SHORT)

- (a) Release the activation prevention mechanism built into connector "B" (see page 05-1456).
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

| Tester connection | Condition | Specified condition |
|-----------------------------|-----------|---------------------|
| S19-1 (SFD+) – S19-2 (SFD-) | Always | 1 MΩ or Higher |

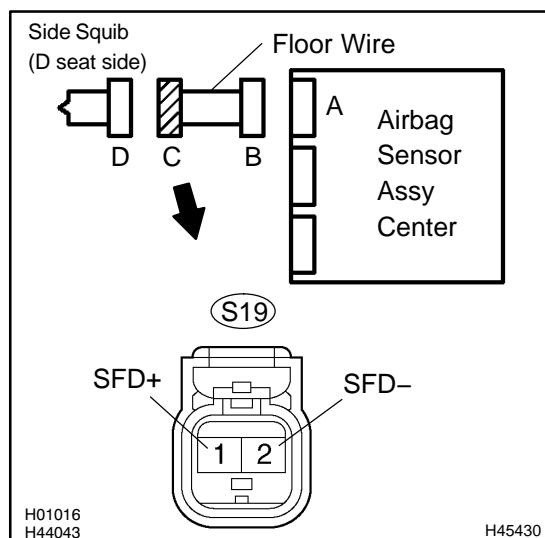
NG**REPAIR OR REPLACE FLOOR WIRE****OK****GO TO STEP 8****3 CHECK FLOOR WIRE (OPEN)**

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

Standard:

| Tester connection | Condition | Specified condition |
|-----------------------------|-----------|---------------------|
| S19-1 (SFD+) – S19-2 (SFD-) | Always | Below 1 Ω |

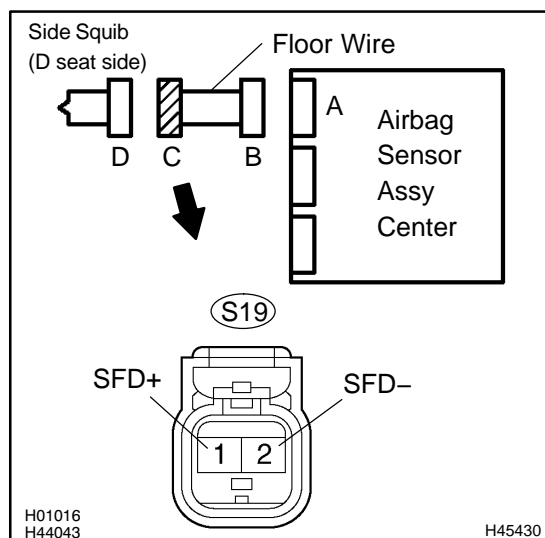
NG**REPAIR OR REPLACE FLOOR WIRE****OK****GO TO STEP 9**

4 CHECK FLOOR WIRE (TO GROUND)

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

Standard:

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

NG**REPAIR OR REPLACE FLOOR WIRE****OK****GO TO STEP 9****5 CHECK FLOOR WIRE (TO B+)**

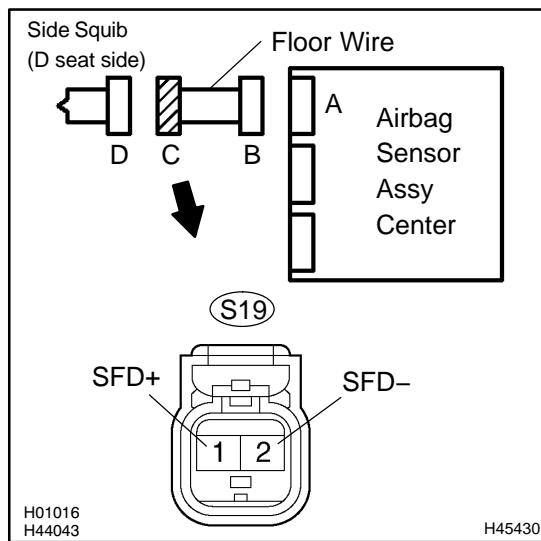
- (a) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
- (b) Turn the ignition switch to the ON position.
- (c) Measure the voltage according to the value(s) in the table below.

Standard:

| Tester connection | Condition | Specified condition |
|----------------------------|--------------------|---------------------|
| S19-1 (SFD+) – Body ground | Ignition switch ON | Below 1 V |
| S19-2 (SFD-) – Body ground | Ignition switch ON | Below 1 V |

NG**REPAIR OR REPLACE FLOOR WIRE****OK****GO TO STEP 9**

6 CHECK FLOOR WIRE (SIDE SQUIB (D SEAT SIDE) CIRCUIT)



- Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch to the ON position.
- Measure the voltage according to the value(s) in the table below.

Standard:

| Tester connection | Condition | Specified condition |
|----------------------------|--------------------|---------------------|
| S19-1 (SFD+) – Body ground | Ignition switch ON | Below 1 V |
| S19-2 (SFD-) – Body ground | Ignition switch ON | Below 1 V |

- Turn the ignition switch to the LOCK position.
- Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
- Measure the resistance according to the value(s) in the table below.

Standard:

| Tester connection | Condition | Specified condition |
|-----------------------------|-----------|---------------------|
| S19-1 (SFD+) – S19-2 (SFD-) | Always | Below 1 Ω |
| S19-1 (SFD+) – Body ground | Always | 1 MΩ or Higher |
| S19-2 (SFD-) – Body ground | Always | 1 MΩ or Higher |

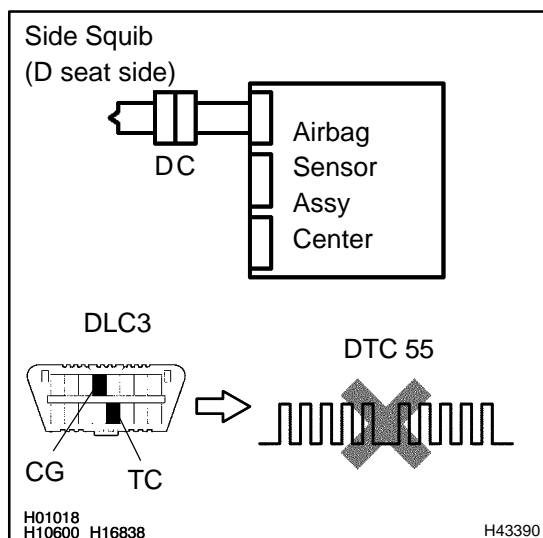
- Release the activation prevention mechanism built into connector "B" (see page 05-1456).
- Measure the resistance according to the value(s) in the table below.

Standard:

| Tester connection | Condition | Specified condition |
|-----------------------------|-----------|---------------------|
| S19-1 (SFD+) – S19-2 (SFD-) | Always | 1 MΩ or Higher |

NG**REPAIR OR REPLACE FLOOR WIRE****OK**

7 REPLACE FRONT LH SEAT ASSY (SIDE SQUIB (D SEAT SIDE))



- (a) Replace the front LH seat assy (see page [72-23](#), [72-15](#)).

HINT:

Perform the inspection using parts from a normal vehicle if possible.

- (b) Connect the connectors to the airbag sensor assy center.
- (c) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
- (d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- (e) Clear the DTCs stored in memory (see page [05-1464](#)).
- (f) Turn the ignition switch to the LOCK position.
- (g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- (h) Check the DTCs (see page [05-1464](#)).

OK:

DTC 55 is not output.

HINT:

Codes other than code 55 may be output at this time, but they are not related to this check.

NG

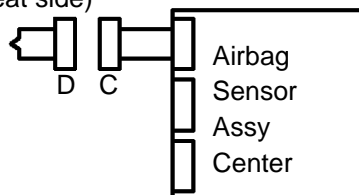
**REPLACE AIR BAG SENSOR ASSY CENTER
(SEE PAGE [60-59](#))**

OK

END

8 CHECK AIR BAG SENSOR ASSY CENTER

Side Squib
(D seat side)



H01017

H44394

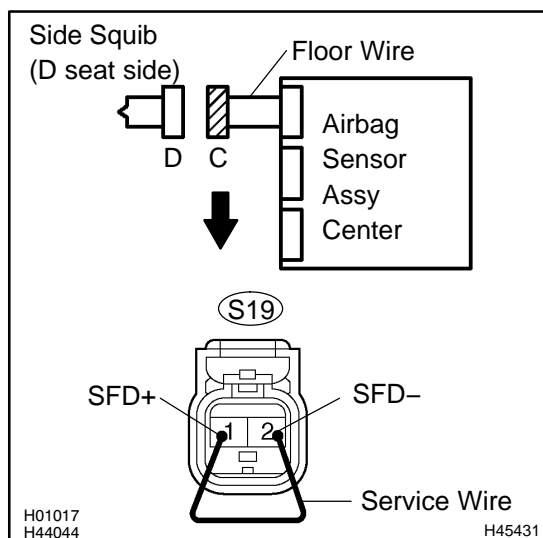
- (a) Connect the connectors to the airbag sensor assy center.
- (b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- (d) Clear the DTCs stored in memory (see page 05-1464).
- (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 05-1464).

OK:**DTC B1820 is not output.****HINT:**

Codes other than code B1820 may be output at this time, but they are not related to this check.

NG**REPLACE AIR BAG SENSOR ASSY CENTER
(SEE PAGE 60-59)****OK****GO TO STEP 10**

9 CHECK AIR BAG SENSOR ASSY CENTER



- (a) From the step 5:
Turn the ignition switch to the LOCK position.
- (b) From the step 5:
Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Connect the connectors to the airbag sensor assy center.
- (d) Using a service wire, connect S19–1 (SFD+) and S19–2 (SFD–) of connector "C".

NOTICE:

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

- (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 memory (see page 05-1464).
- (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 05-1464).

OK:

DTC B1821, B1822 or B1823 is not output.

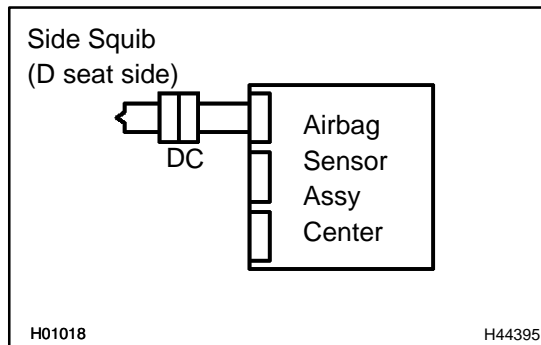
HINT:

Codes other than code B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG

**REPLACE AIR BAG SENSOR ASSY CENTER
(SEE PAGE 60-59)**

OK

10 CHECK FRONT LH SEAT ASSY (SIDE SQUIB (D SEAT SIDE))

- (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) From the step 9:
Disconnect the service wire from connector "C".
- (d) Connect the connector to the front LH seat assy.
- (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 memory (see page 05-1464).
- (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 05-1464).

OK:**DTC B1820, B1821, B1822 or B1823 is not output.****HINT:**

Codes other than code B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG

REPLACE FRONT LH SEAT ASSY
(SEE PAGE 72-23, 72-15)

OK**USE SIMULATION METHOD TO CHECK (SEE PAGE 05-1456)****HINT:**

- Perform the simulation method by selecting the check mode with the hand-held tester (see page 05-1452).
- After selecting the check mode, perform the simulation method by wiggling each connector of the air-bag system or driving the vehicle on a city or rough road (see page 05-1452).