

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

## DESCRIPTION

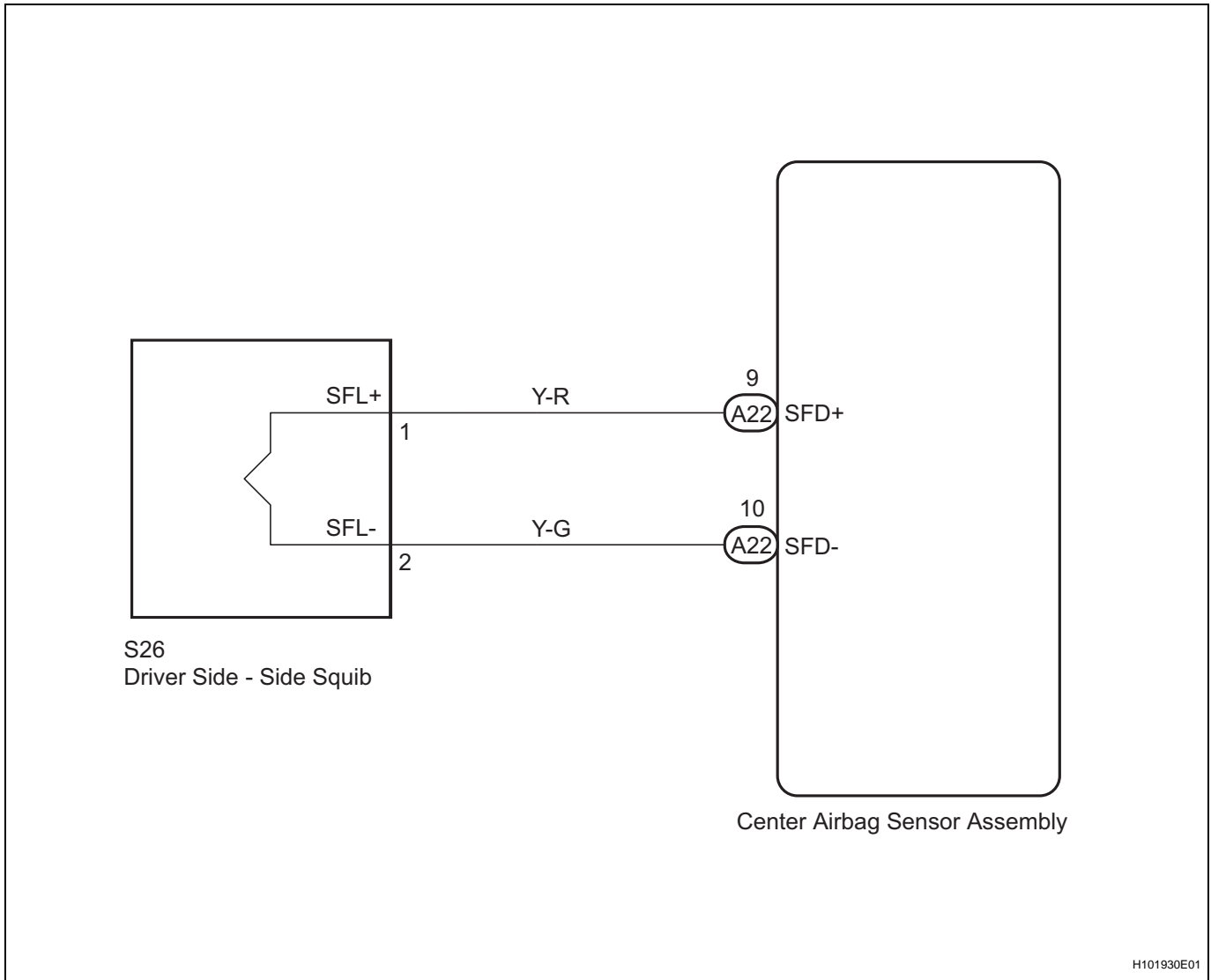
The side squib (driver seat side) circuit consists of the center airbag sensor assembly and the front seat with adjuster frame assembly LH.

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

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

<b>DTC No.</b>	<b>DTC Detecting Conditions</b>	<b>Trouble Areas</b>
B1820/55	<ul style="list-style-type: none"> <li>The center airbag sensor assembly receives a line short circuit signal in the side squib (Driver seat side) circuit for 2 seconds</li> <li>Side squib (Driver seat side) malfunction</li> <li>Center airbag sensor assembly malfunction</li> </ul>	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat with adjuster frame assembly LH (Side squib (Driver seat side))</li> <li>Center airbag sensor assembly</li> </ul>
B1821/55	<ul style="list-style-type: none"> <li>The center airbag sensor assembly receives an open circuit signal in the side squib (Driver seat side) circuit for 2 seconds</li> <li>Side squib (Driver seat side) malfunction</li> <li>Center airbag sensor assembly malfunction</li> </ul>	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat with adjuster frame assembly LH (Side squib (Driver seat side))</li> <li>Center airbag sensor assembly</li> </ul>
B1822/55	<ul style="list-style-type: none"> <li>The center airbag sensor assembly receives a short circuit to ground signal in the side squib (Driver seat side) circuit for 0.5 seconds</li> <li>Side squib (Driver seat side) malfunction</li> <li>Center airbag sensor assembly malfunction</li> </ul>	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat with adjuster frame assembly LH (Side squib (Driver seat side))</li> <li>Center airbag sensor assembly</li> </ul>
B1823/55	<ul style="list-style-type: none"> <li>The center airbag sensor assembly receives a short circuit to B+ signal in the side squib (Driver seat side) circuit for 0.5 seconds</li> <li>Side squib (Driver seat side) malfunction</li> <li>Center airbag sensor assembly malfunction</li> </ul>	<ul style="list-style-type: none"> <li>No. 2 floor wire</li> <li>Front seat with adjuster frame assembly LH (Side squib (Driver seat side))</li> <li>Center airbag sensor assembly</li> </ul>

## WIRING DIAGRAM

**CAUTION:**

**In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.**

- (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 center airbag sensor assembly.
- (d) Disconnect the connectors from the steering pad.
- (e) Disconnect the connector from the front passenger airbag assembly.
- (f) Disconnect the connector from the front seat airbag assembly LH.
- (g) Disconnect the connector from the front seat airbag assembly RH.

**HINT:**

Skip the following steps if side and curtain shield airbags are not fitted.

- (h) Disconnect the connector from the curtain shield airbag assembly LH.
- (i) Disconnect the connector from the curtain shield airbag assembly RH.
- (j) Disconnect the connector from the front seat outer belt assembly LH.
- (k) Disconnect the connector from the front seat outer belt assembly RH.

<b>1</b>	<b>CHECK DTC</b>
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(a) Proceed to the appropriate step according to DTC readings.

(1) If using the intelligent tester (read the 5-digit DTCs):  
Using the intelligent tester, check for DTCs (See page [RS-34](#)).

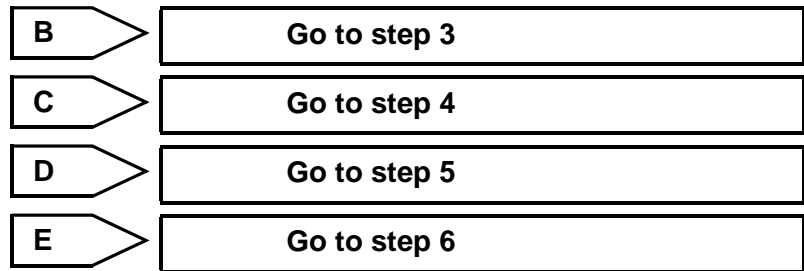
**Result**

Result	Proceed to
DTC B1820 is output.	A
DTC B1821 is output.	B
DTC B1822 is output.	C
DTC B1823 is output.	D

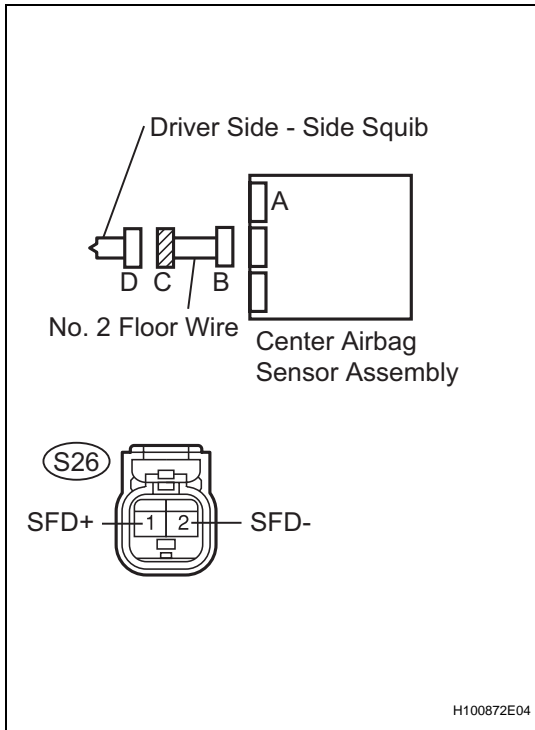
(2) If not using the intelligent tester (read the 2-digit DTCs): Check for DTCs (See page [RS-34](#)).

**Result**

Result	Proceed to
DTC 55 is output.	E



**2 CHECK NO. 2 FLOOR WIRE (FOR SHORT)**



- (a) Release the activation prevention mechanism built into connector B (See page RS-28).
- (b) Measure the resistance.

**Standard resistance**

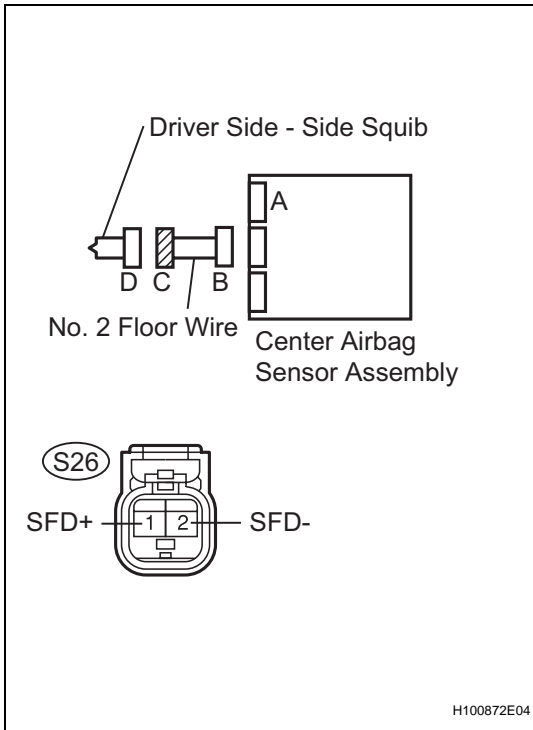
Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	1 MΩ or Higher

**OK** → **Go to step 8**

**NG**

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

**3 CHECK NO. 2 FLOOR WIRE (FOR OPEN)**



(a) Measure the resistance.

**Standard resistance**

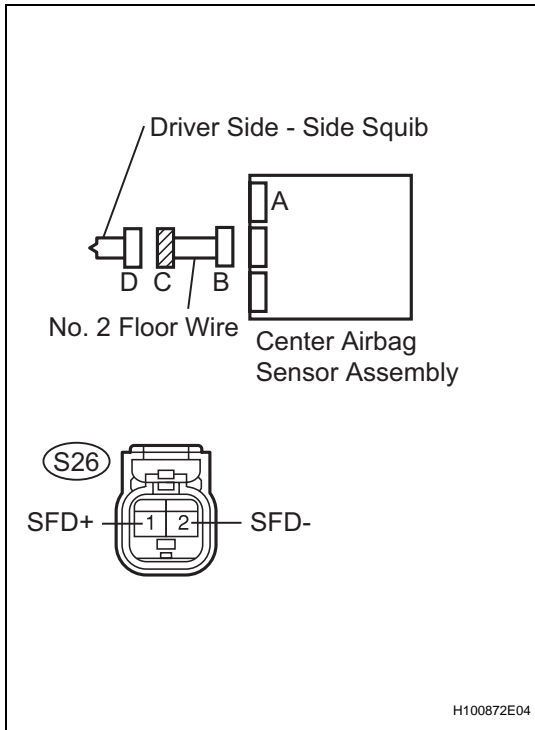
Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	Below 1 Ω

**OK** → **Go to step 9**

**NG**

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

**4 CHECK NO. 2 FLOOR WIRE (TO GROUND)**



(a) Measure the resistance.  
**Standard resistance**

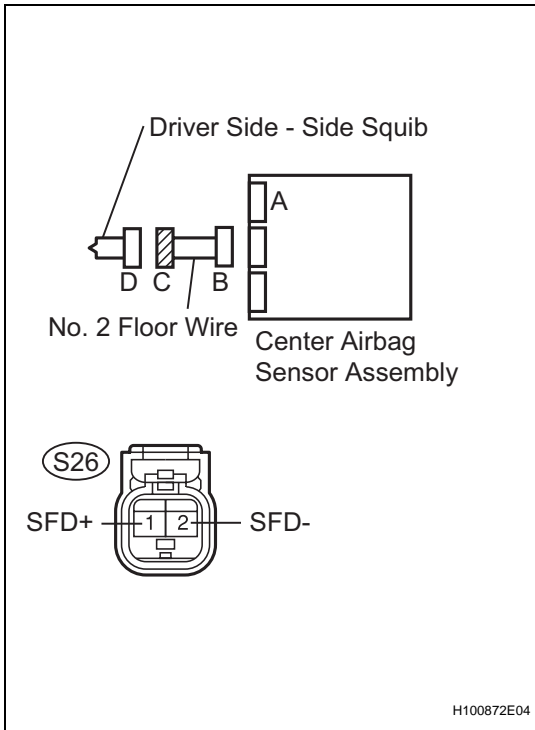
Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - Body ground	Always	1 MΩ or Higher
S26-2 (SFD-) - Body ground	Always	1 MΩ or Higher

**OK** → **Go to step 9**

**NG**

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

**5 CHECK NO. 2 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.

**Standard voltage**

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - Body ground	Ignition switch ON	Below 1 V
S26-2 (SFD-) - Body ground	Ignition switch ON	Below 1 V

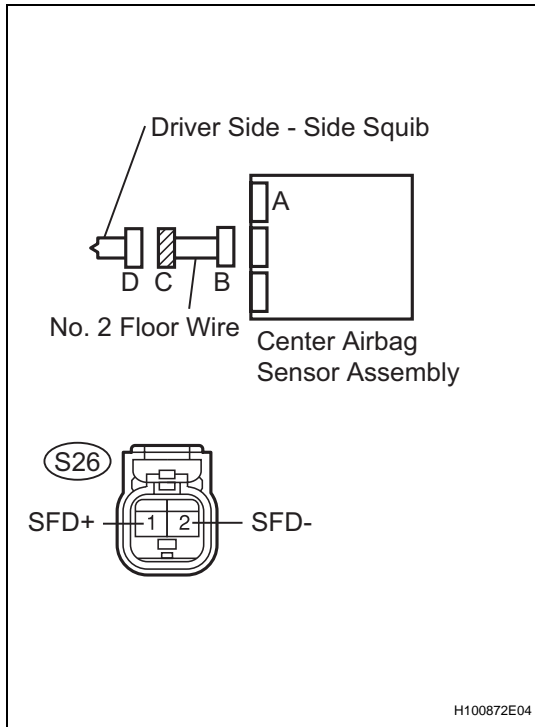
**OK** → **Go to step 9**

**NG**

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

6

## CHECK NO. 2 FLOOR WIRE (SIDE SQUIB (DRIVER 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.

**Standard voltage**

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - Body ground	Ignition switch ON	Below 1 V
S26-2 (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.

**Standard resistance**

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	Below 1 $\Omega$
S26-1 (SFD+) - Body ground	Always	1 M $\Omega$ or Higher
S26-2 (SFD-) - Body ground	Always	1 M $\Omega$ or Higher

- Release the activation prevention mechanism built into connector B (See page RS-28).
- Measure the resistance.

**Standard resistance**

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	1 M $\Omega$ or Higher

NG

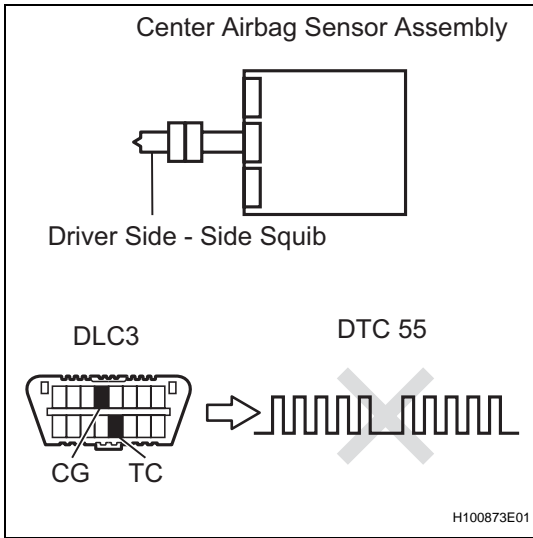
REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

RS



**7 REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH (SIDE SQUIB (DRIVER SEAT SIDE))**



- (a) Replace the front seat with adjuster frame assembly LH (See page [SE-23](#)).
- HINT:  
Perform the inspection using parts from a normal vehicle when possible.
- (b) Connect the connectors to the center airbag sensor assembly.
  - (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 any DTCs stored in the memory (See page [RS-34](#)).
  - (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 for DTCs (See page [RS-34](#)).

**OK:**

**DTC 55 is not output.**

HINT:

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

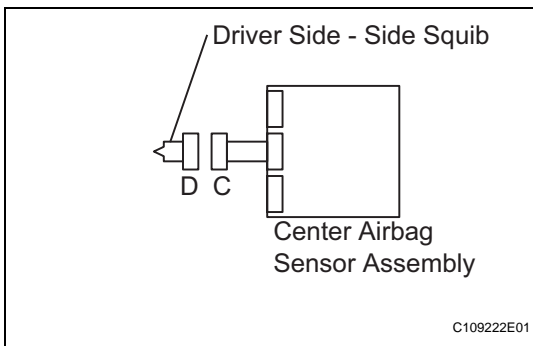
**NG**

**REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

**OK**

**END**

**8 CHECK CENTER AIRBAG SENSOR ASSEMBLY**



- (a) Connect the connectors to 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 any 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 for DTCs (See page [RS-34](#)).

**OK:**

**DTC B1820 is not output.**

**RS**

HINT:

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

OK

Go to step 10

NG

## REPLACE CENTER AIRBAG SENSOR ASSEMBLY

## 9 CHECK CENTER AIRBAG SENSOR ASSEMBLY

HINT:

If continuing from step 5, begin from (a). If continuing from any other step, begin from (c).

- (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) Connect the connectors to the center airbag sensor assembly.
- (d) Using a service wire, connect S26-1 (SFD+) and S26-2 (SFD-) of connector C.

**NOTICE:**

**Do not forcibly insert the 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 any 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 for DTCs (See page [RS-34](#)).

**OK:**

**DTC B1821, B1822 and B1823 are not output.**

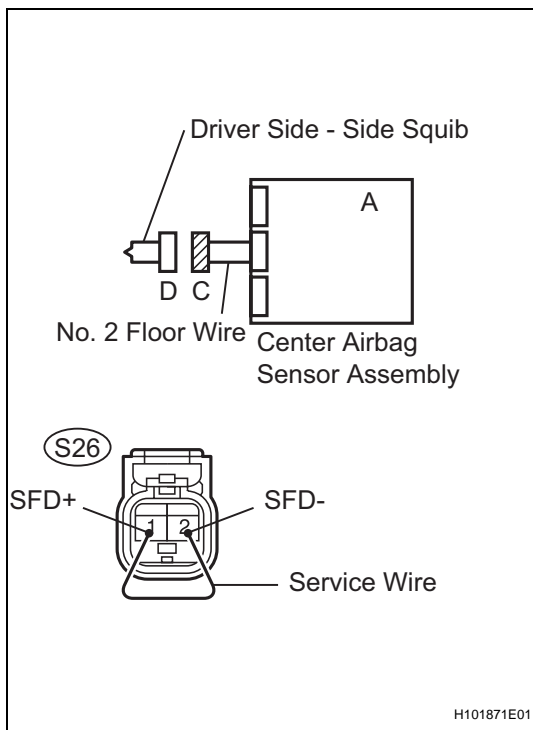
HINT:

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

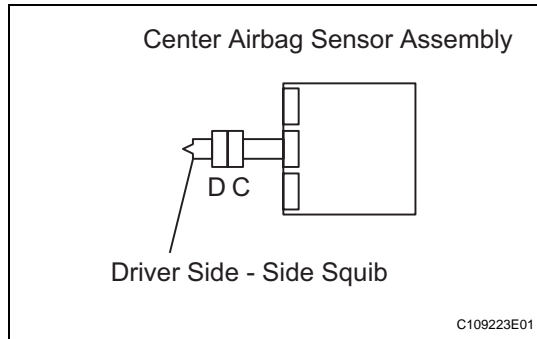
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REPLACE CENTER AIRBAG SENSOR ASSEMBLY

OK



RS

**10 CHECK FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH****HINT:**

If continuing from step 9, begin from (c). If continuing from any other step, begin from (a).

- (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 service wire from connector C.
- (d) Connect the connector to the front seat with adjuster frame assembly LH.
- (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 any 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 for DTCs (See page [RS-34](#)).

**OK:**

**DTC B1820, B1821, B1822 and B1823 are not output.**

**HINT:**

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

**NG**

**REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH**

**OK**

**USE SIMULATION METHOD TO CHECK**