DTC	B1620/21	Driver Side - Side Airbag Sensor Circuit Malfunction

DESCRIPTION

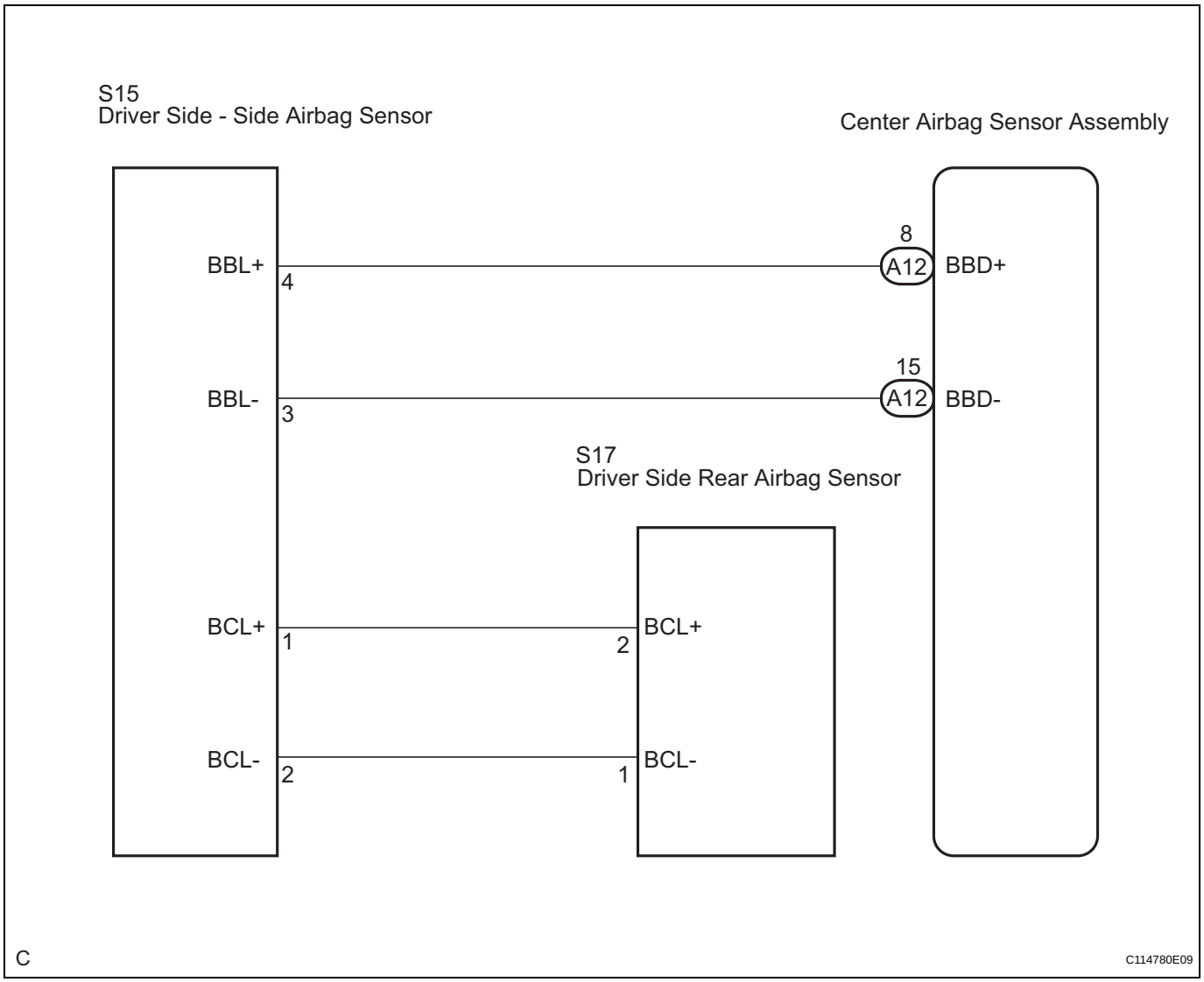
The driver side - side airbag sensor circuit consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.

If the center airbag sensor assembly receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1620/21 is recorded when a malfunction is detected in the driver side - side airbag sensor circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1620/21	• The center airbag sensor assembly receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the driver side - side airbag sensor circuit for 2 seconds. • Driver side rear airbag sensor malfunction • Driver side - side airbag sensor malfunction • Center airbag sensor assembly malfunction	• Floor wire • Driver side rear airbag sensor • Driver side - side airbag sensor • Center airbag sensor assembly

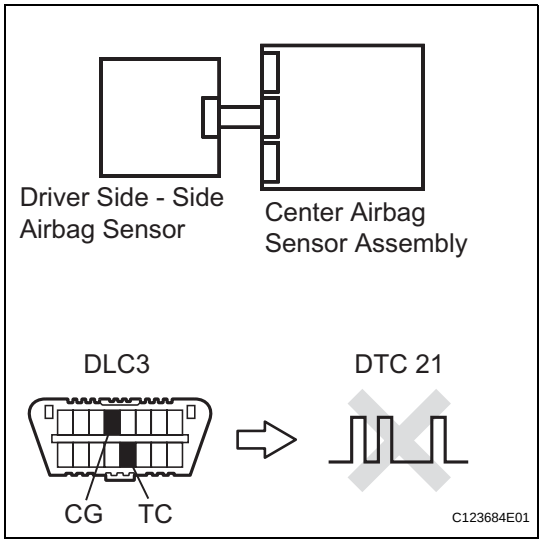
WIRING DIAGRAM



INSPECTION PROCEDURE

RS

1	CHECK DTC



(a) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-34).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-34).
OK:
DTC B1620/21 is not output.
HINT:
Codes other than DTC B1620/21 may be output at this time, but they are not related to this check.

NG → **Go to step 2**

OK

USE SIMULATION METHOD TO CHECK

2	CHECK CONNECTION OF CONNECTORS

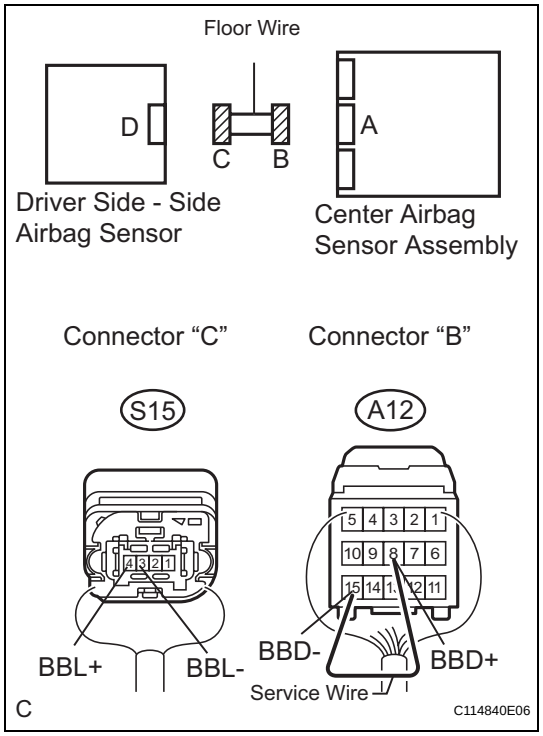
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the driver side - side airbag sensor and the center airbag sensor assembly.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS, THEN GO TO STEP 1**

OK

RS

3 CHECK FLOOR WIRE (OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the driver side - side airbag sensor.

(b) Using a service wire, connect A12-8 (BBD+) and A12-15 (BBD-) of connector "C".

NOTICE:

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

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

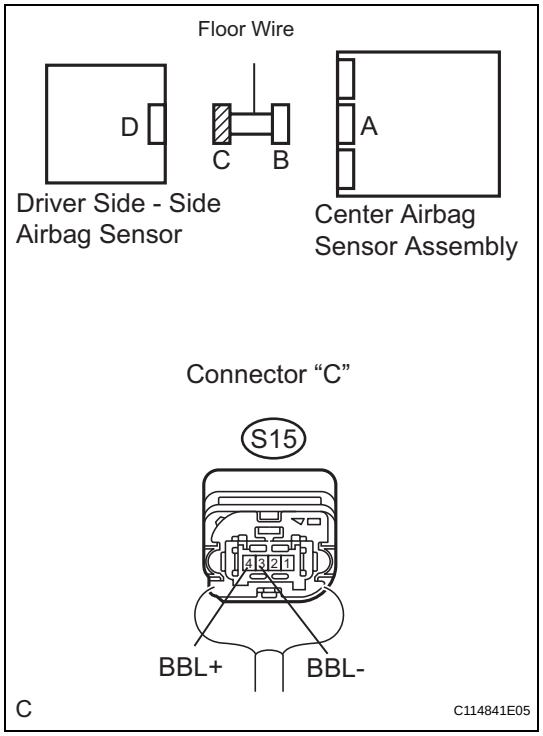
Standard resistance

Tester connection	Condition	Specified condition
S15-4 (BBL+) - S15-3 (BBL-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

4 CHECK FLOOR WIRE (SHORT)



(a) Disconnect the service wire from connector "B".

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

Standard resistance

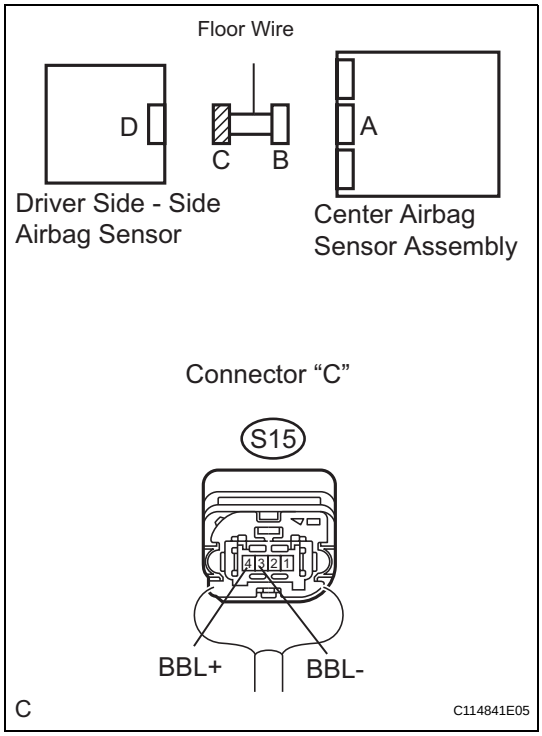
Tester connection	Condition	Specified condition
S15-4 (BBL+) - S15-3 (BBL-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

5 CHECK FLOOR WIRE (SHORT 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.

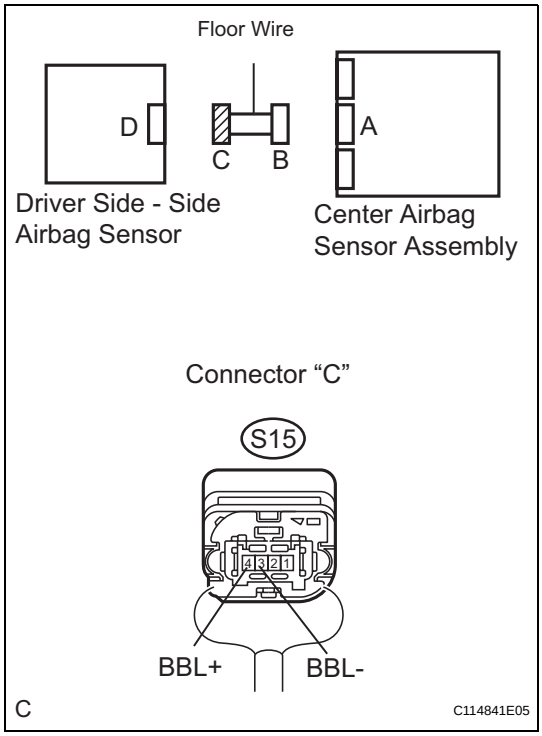
Standard voltage

Tester Connection	Condition	Specified Condition
S15-4 (BBL+) - Body ground	Ignition switch ON	Below 1 V
S15-3 (BBL-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

6 CHECK FLOOR WIRE (SHORT TO GROUND)



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

Standard resistance

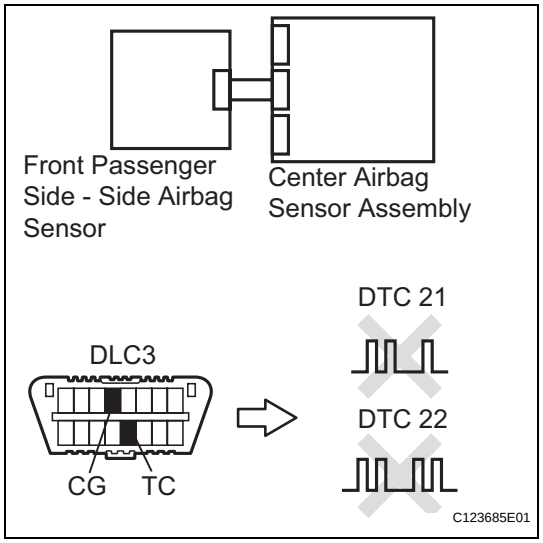
Tester connection	Condition	Specified condition
S15-4 (BBL+) - Body ground	Always	1 MΩ or higher
S15-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

7 CHECK DRIVER SIDE - SIDE AIRBAG SENSOR



(a) Connect the connector to the center airbag sensor assembly.
(b) Interchange the driver side - side airbag sensor with the front passenger side - side airbag sensor and connect the connectors to them.
(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 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 the DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1620/21 is output.	A
DTC B1625/22 is not output.	B
DTC B1620/21 and B1625/22 are not output.	C

HINT:
Codes other than DTC B1620/21 and B1625/22 may be output at this time, but they are not related to this check.

A → **Go to step 8**

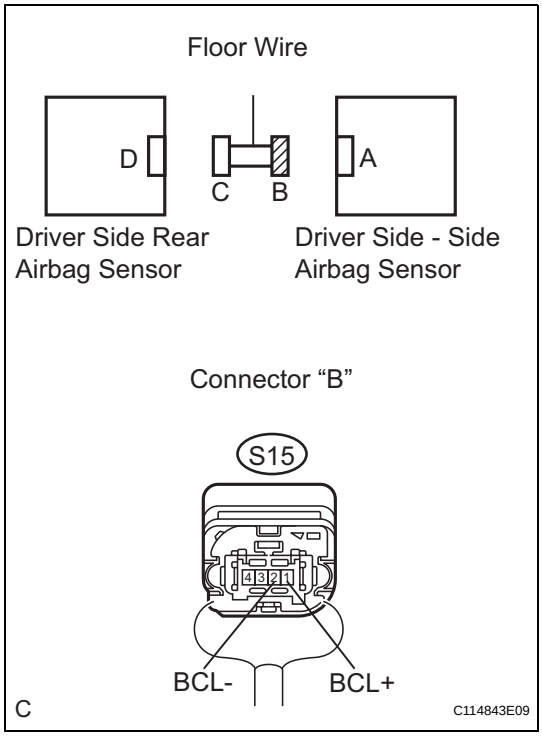
B → **REPLACE DRIVER SIDE - SIDE AIRBAG SENSOR**

C

USE SIMULATION METHOD TO CHECK

RS

8 CHECK FLOOR WIRE (SHORT)



(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) Return the front passenger side - side airbag sensor and driver side - side airbag sensor to their original positions and connect the connectors to them.
(d) Disconnect the connectors from the driver side - rear airbag sensor and driver side - side airbag sensor.
(e) Measure the resistance according to the value(s) in the table below.

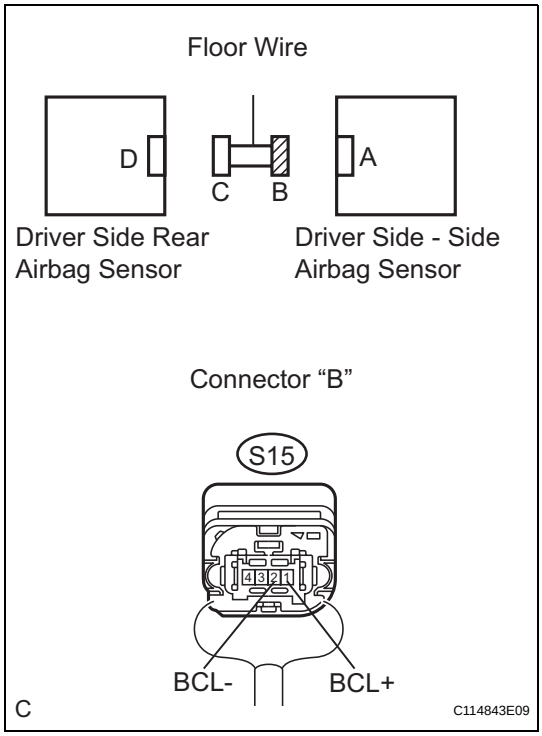
Standard resistance

Tester connection	Condition	Specified condition
S15-1 (BCL+) - S15-2 (BCL-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

9 CHECK FLOOR WIRE (SHORT TO GROUND)



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

Standard resistance

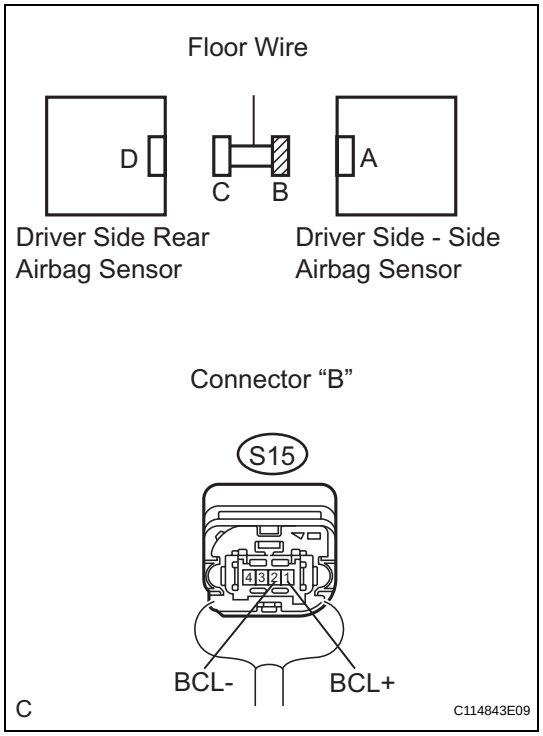
Tester connection	Condition	Specified condition
S15-1 (BCL+) - Body ground	Always	1 MΩ or higher
S15-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

10 CHECK FLOOR WIRE (SHORT 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.

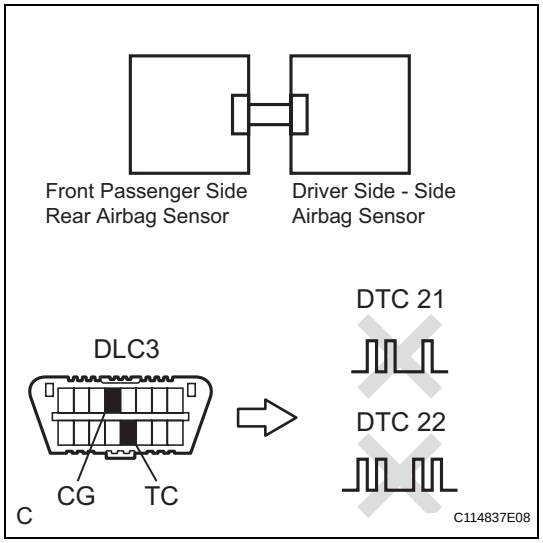
Standard voltage

Tester Connection	Condition	Specified Condition
S15-1 (BCL+) - Body ground	Ignition switch ON	Below 1 V
S15-2 (BCL-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

11 CHECK DRIVER SIDE REAR AIRBAG SENSOR



(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 connector to the driver side - side airbag sensor.
(d) Interchange the driver side rear airbag sensor with the front passenger side rear airbag sensor and connect the connectors to them.
(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).

Result

Result	Proceed to
DTC B1620/21 is output.	A
DTC B1625/22 is output.	B
DTC B1620/21 and B1625/22 are not output.	C

HINT:
Codes other than DTC B1620/21 and B1625/22 may be output at this time, but they are not related to this check.

A → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

B → **REPLACE DRIVER SIDE REAR AIRBAG SENSOR**

RS

C

USE SIMULATION METHOD TO CHECK