

DTC	B1653	SEAT POSITION AIRBAG SENSOR CIRCUIT MALFUNCTION
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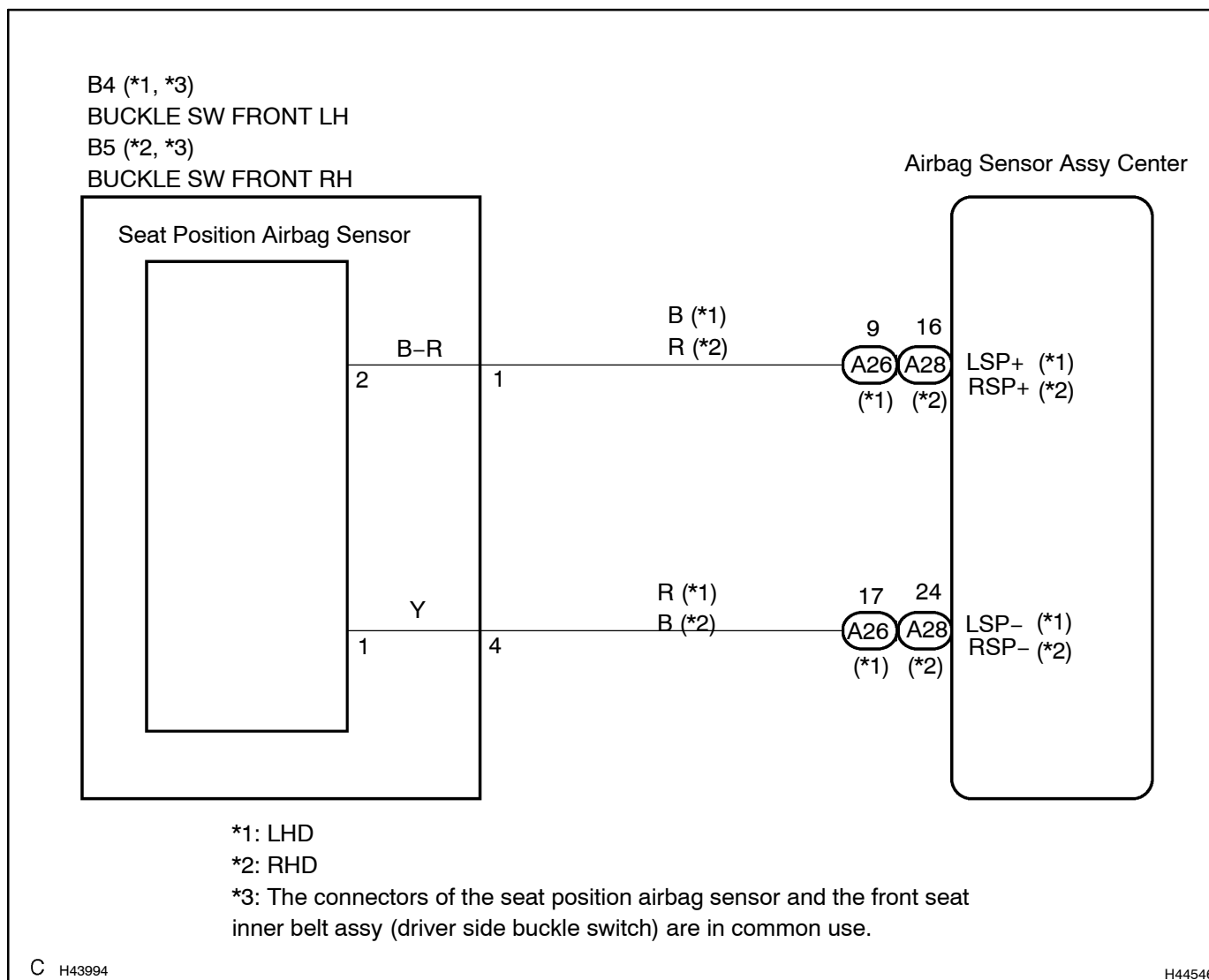
CIRCUIT DESCRIPTION

The seat position airbag sensor circuit consists of the airbag sensor assy center and the seat position airbag sensor.

DTC B1653 is recorded when a malfunction is detected in the seat position airbag sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1653	<ul style="list-style-type: none"> When the airbag sensor assy center receives a line short signal, open signal, short to ground signal or B+ short signal in the seat position airbag sensor circuit for 2 seconds. Seat position airbag sensor malfunction Airbag sensor assy center malfunction 	<ul style="list-style-type: none"> Floor wire No.2 Seat position airbag sensor Airbag sensor assy center

WIRING DIAGRAM



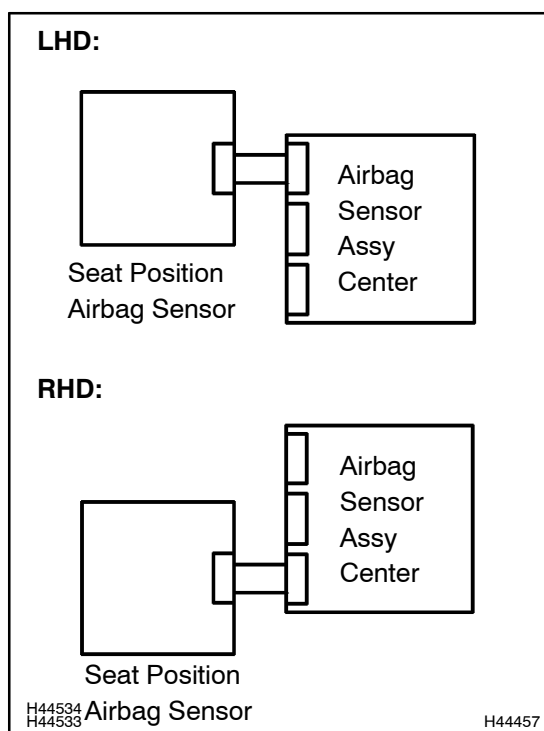
INSPECTION PROCEDURE

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 connector from the front passenger airbag assy.
- (f) Disconnect the connector from the instrument panel airbag assy lower No.1.
- (g) Disconnect the connector from the instrument panel airbag assy lower No.2.
- (h) Disconnect the connector from the front seat airbag assy LH.
- (i) Disconnect the connector from the front seat airbag assy RH.
- (j) Disconnect the connector from the curtain shield airbag assy LH.
- (k) Disconnect the connector from the curtain shield airbag assy RH.
- (l) Disconnect the connector from the front seat outer belt assy LH.
- (m) Disconnect the connector from the front seat outer belt assy RH.
- (n) Disconnect the connectors from the rear seat 3 point type outer belt assy.

1 CHECK DTC



- (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 05-959).
- (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 05-959).

OK:

DTC B1653 is not output.

HINT:

Codes other than code B1653 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 (SEE PAGE 05-954)

2 CHECK CONNECTION OF CONNECTORS

- Turn the ignition switch to the LOCK position.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Check that the connectors are properly connected to the airbag sensor assy center and the seat position airbag sensor.

OK:

The connectors are connected.

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CONNECT CONNECTORS, THEN GO TO STEP 1

OK

3 CHECK VEHICLE

- Check that the steering position of the vehicle.

Result:

A: LHD

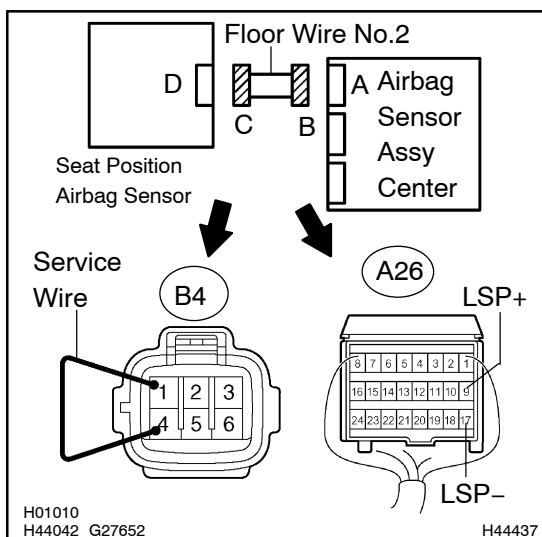
B: RHD

B

Go to step 9

A

4 CHECK FLOOR WIRE NO.2(OPEN)



- Disconnect the connectors from the airbag sensor assy center and the seat position airbag sensor.
- Using a service wire, connect B4-1 and B4-4 of connector "C".

NOTICE:

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

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

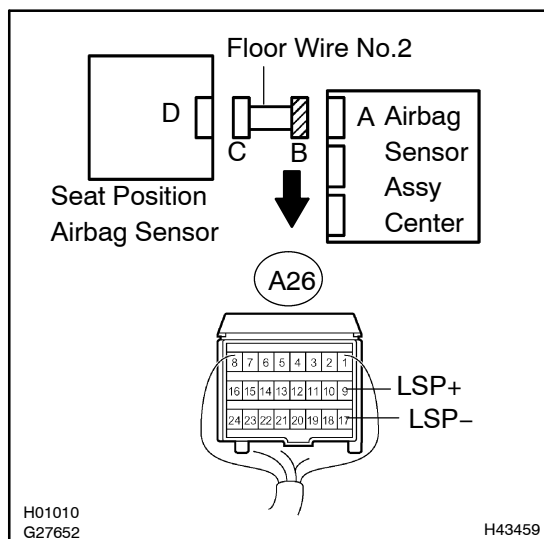
Standard:

Tester connection	Condition	Specified condition
A26-9 (LSP+) - A26-17 (LSP-)	Always	Below 1 Ω

NG

REPAIR OR REPLACE FLOOR WIRE NO.2

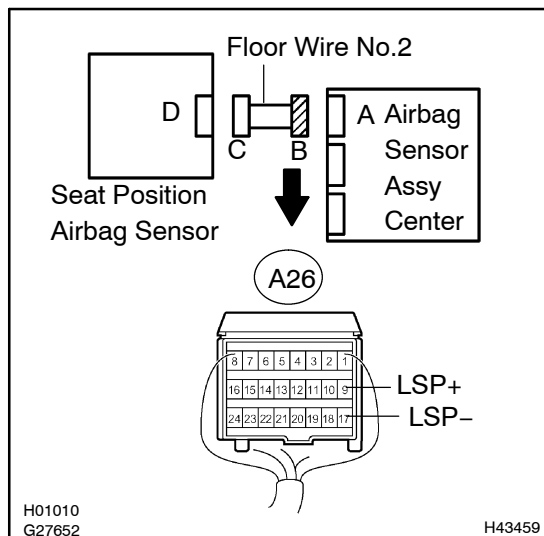
OK

5 CHECK FLOOR WIRE NO.2(SHORT)

- (a) Disconnect the service wire from connector "C".
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A26-9 (LSP+) - A26-17 (LSP-)	Always	1 MΩ or Higher

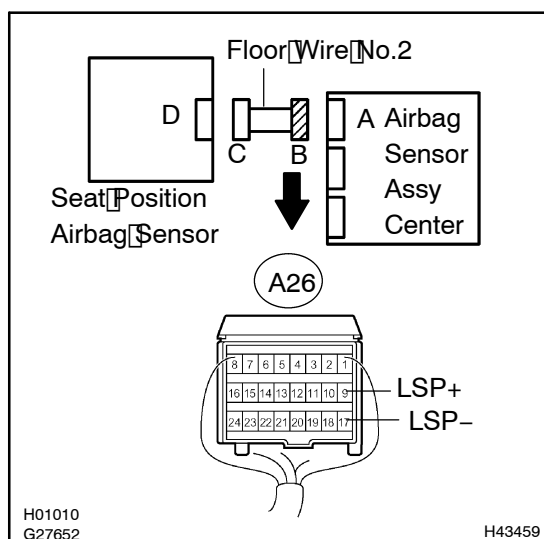
NG**REPAIR OR REPLACE FLOOR WIRE NO.2****OK****6 CHECK FLOOR WIRE NO.2(TO B+)**

- (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
A26-9 (LSP+) - Body ground	Ignition switch ON	Below 1 V
A26-17 (LSP-) - Body ground	Ignition switch ON	Below 1 V

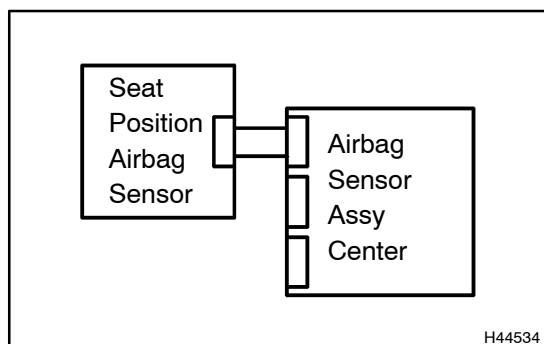
NG**REPAIR OR REPLACE FLOOR WIRE NO.2****OK**

7 CHECK FLOOR WIRE NO.2 (TO GROUND)

- 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
A26-9 (LSP+) - Body ground	Always	1 MΩ or Higher
A26-17 (LSP-) - Body ground	Always	1 MΩ or Higher

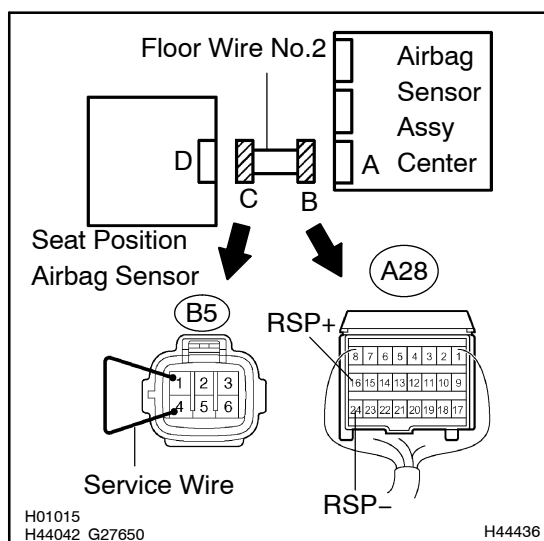
NG**REPAIR OR REPLACE FLOOR WIRE NO.2****OK****8 CHECK SEAT POSITION AIR BAG SENSOR**

- Connect the connectors to the airbag sensor Assy center and the seat position airbag sensor.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Clear the DTCs stored in memory (see page 05-959).
- Turn the ignition switch to the LOCK position.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Check the DTCs (see page 05-959).

OK:**DTC B1653 is not output.****HINT:**

Codes other than code B1653 may be output at this time, but they are not related to this check.

NG**Go to step 14****OK****USE SIMULATION METHOD TO CHECK (SEE PAGE 05-954)**

9 CHECK FLOOR WIRE NO.2(OPEN)

- Disconnect the connectors from the airbag sensor assy center and the seat position airbag sensor.
- Using a service wire, connect B5-1 and B5-4 of connector "C".

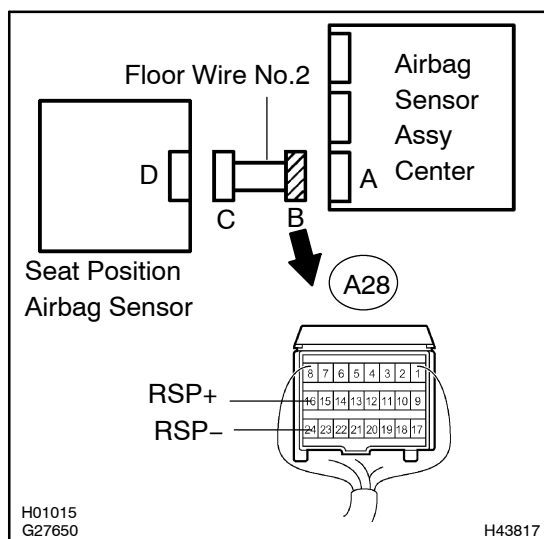
NOTICE:

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

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

Standard:

Tester connection	Condition	Specified condition
A28-16 (RSP+) - A28-24 (RSP-)	Always	Below 1 Ω

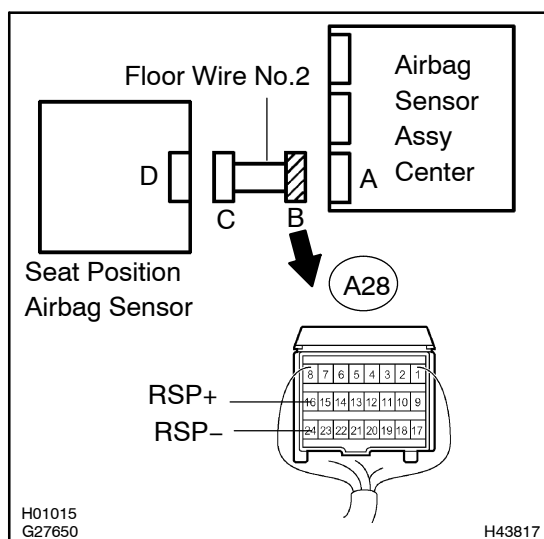
NG**REPAIR OR REPLACE FLOOR WIRE NO.2****OK****10 CHECK FLOOR WIRE NO.2(SHORT)**

- Disconnect the service wire from connector "C".
- Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A28-16 (RSP+) - A28-24 (RSP-)	Always	1 M Ω or Higher

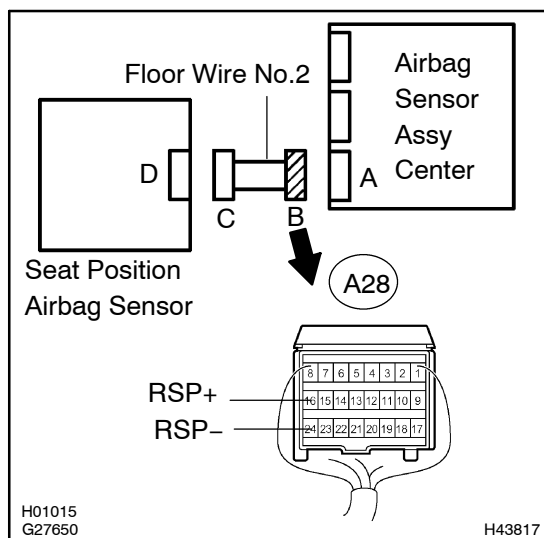
NG**REPAIR OR REPLACE FLOOR WIRE NO.2****OK**

11 CHECK FLOOR WIRE NO.2(TO B+)

- 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
A28-16 (RSP+) - Body ground	Ignition switch ON	Below 1 V
A28-24 (RSP-) - Body ground	Ignition switch ON	Below 1 V

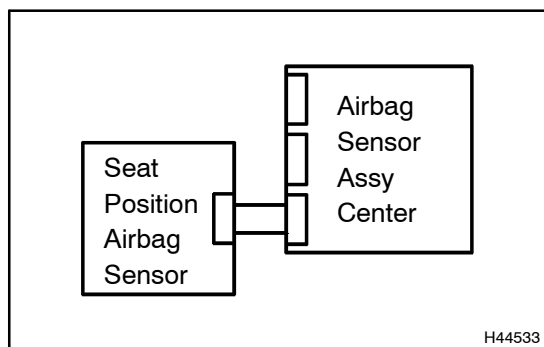
NG**REPAIR OR REPLACE FLOOR WIRE NO.2****OK****12 CHECK FLOOR WIRE NO.2(TO GROUND)**

- 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
A28-16 (RSP+) - Body ground	Always	1 MΩ or Higher
A28-24 (RSP-) - Body ground	Always	1 MΩ or Higher

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

13 CHECK SEAT POSITION AIR BAG SENSOR

- (a) Connect the connectors to the airbag sensor Assy center and the seat position airbag sensor.
- (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 05-959).
- (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 05-959).

OK:**DTC B1653 is not output.****HINT:**

Codes other than code B1653 may be output at this time, but they are not related to this check.

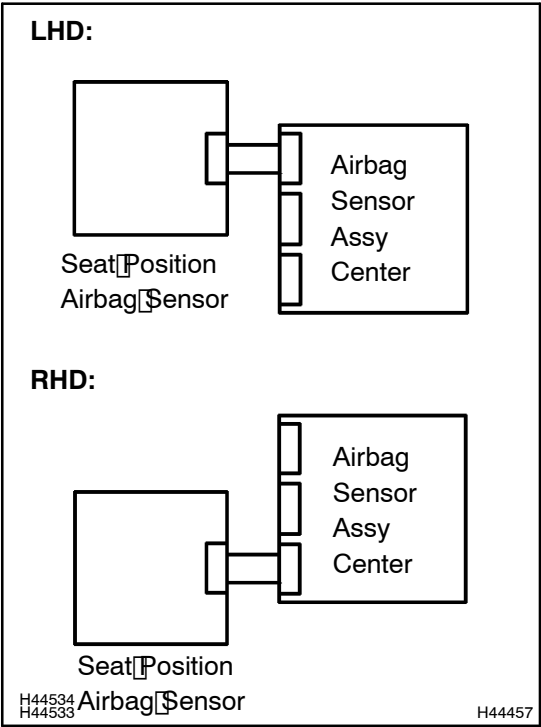
NG**Go to step 14****OK****USE SIMULATION METHOD TO CHECK (SEE PAGE 05-954)****14 REPLACE SEAT POSITION AIR BAG SENSOR**

- (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) Replace the seat position airbag sensor (see page 60-85).

HINT:

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

15 CHECK AIR BAG SENSOR ASSY CENTER



- (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, and wait for at least 60 seconds.
- (c) Clear the DTCs stored in memory (see page 05-959).
- (d) Turn the ignition switch to the LOCK position.
- (e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- (f) Check the DTCs (see page 05-959).

OK:

DTC B1653 is not output.

HINT:

Codes other than code B1653 may be output at this time, but they are not related to this check.

NG **REPLACE AIR BAG SENSOR ASSY CENTER (SEE PAGE 60-74)**

OK

END