DTC	B1653	SEAT POSITION AIRBAG SENSOR CIRCUIT MALFUNCTION

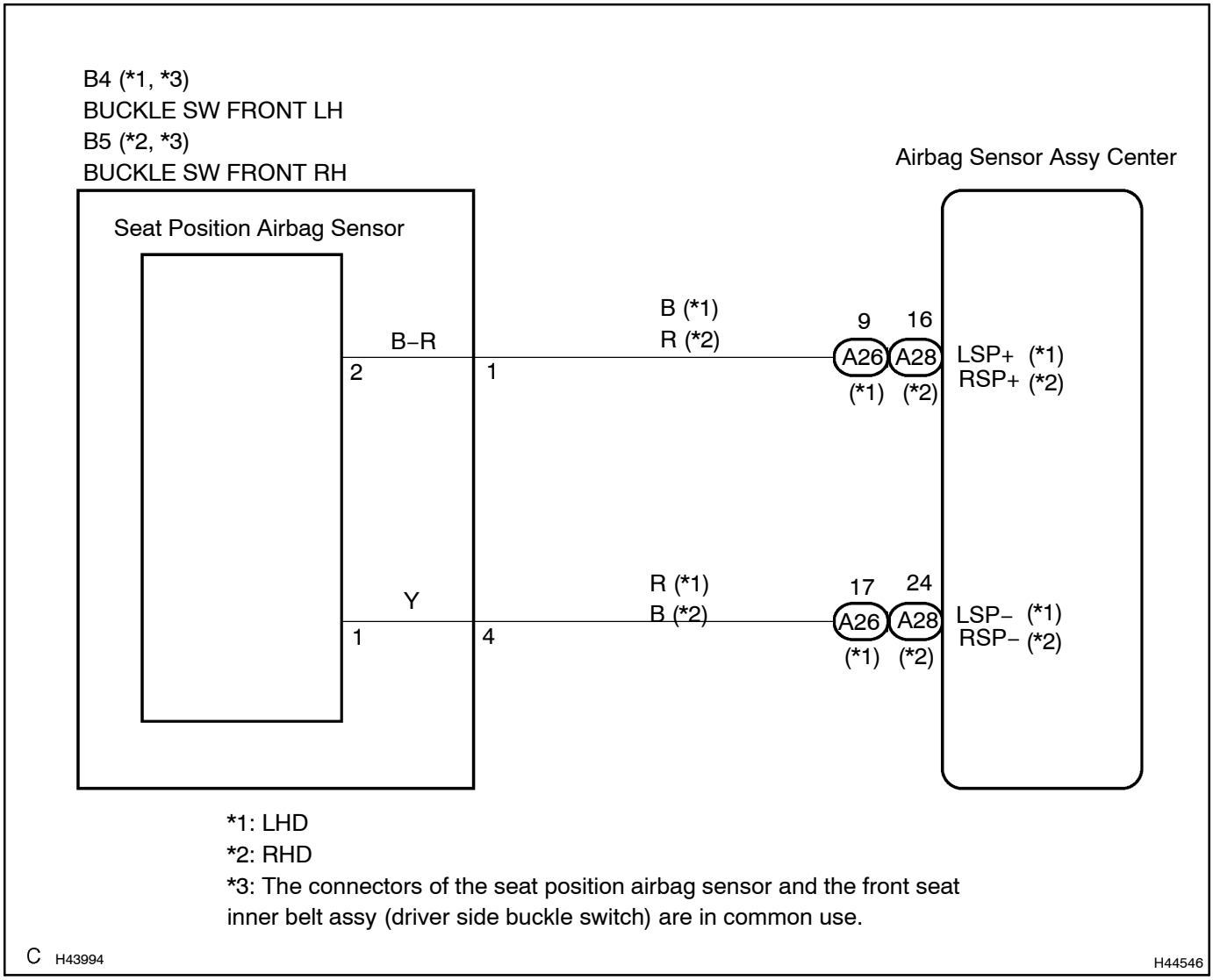
CIRCUIT DESCRIPTION

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	• 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	• Floor wire No.2 • Seat position airbag sensor • Airbag sensor assy center

WIRING DIAGRAM



*1: LHD
*2: RHD
*3: The connectors of the seat position airbag sensor and the front seat inner belt assy (driver side buckle switch) are in common use.

C H43994

H44546

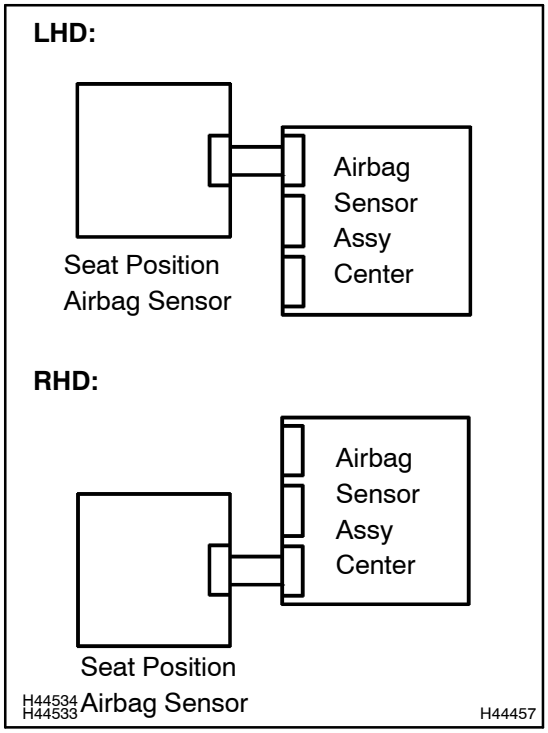
INSPECTION PROCEDURE

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

(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 airbag sensor assy center and the seat position airbag sensor.
OK:
The connectors are connected.

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

OK

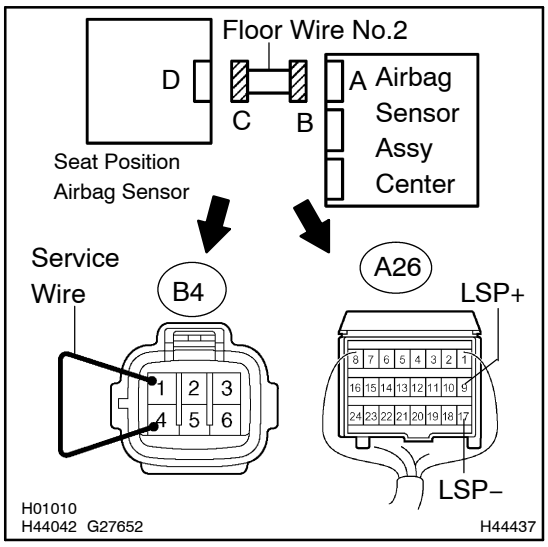
3 CHECK VEHICLE

(a) 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)



(a) Disconnect the connectors from the airbag sensor assy center and the seat position airbag sensor.
(b) 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.

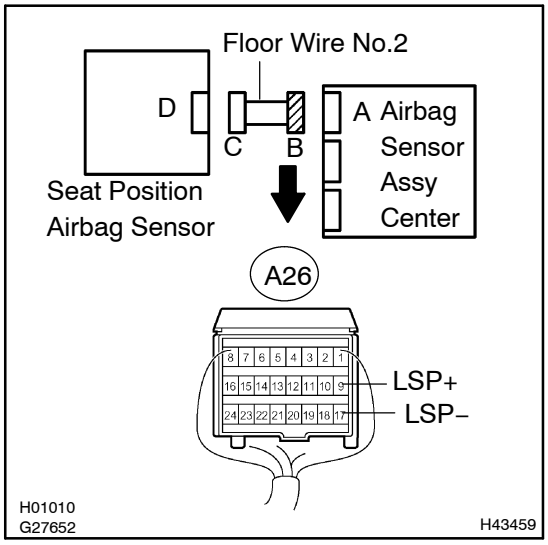
(c) Measure the resistance according to the value(s) in the table below.
Standard:

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.

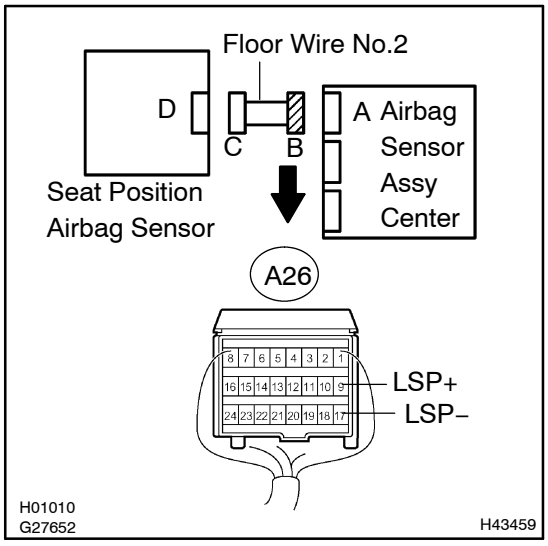
Standard:

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.

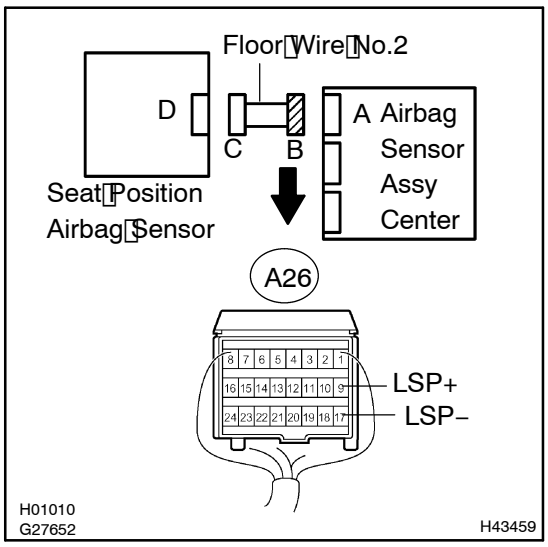
Standard:

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)



(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.

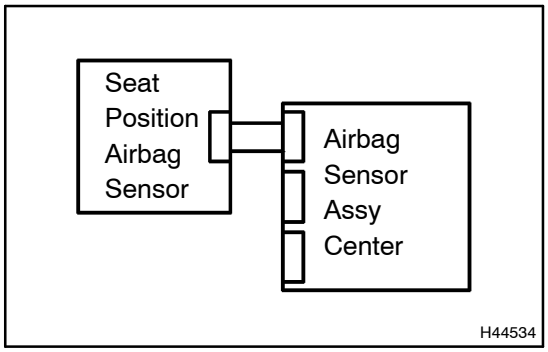
Standard:

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 AIRBAG 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:

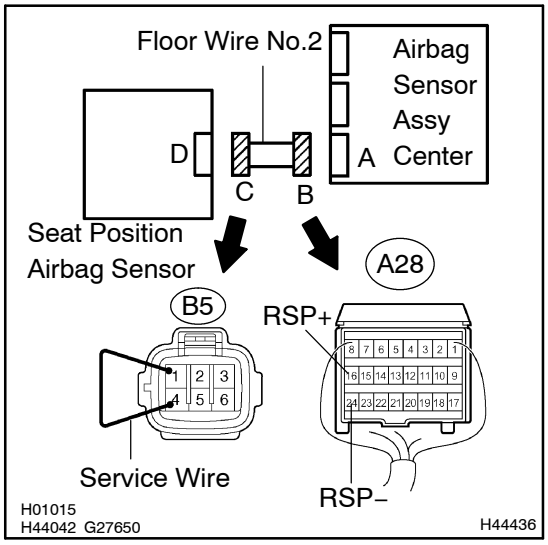
Codes other than code B1653 may be output at this time, but they are not related to this check.

NG → **Go to step 14**

OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–954)

9 CHECK FLOOR WIRE NO.2(OPEN)



(a) Disconnect the connectors from the airbag sensor assy center and the seat position airbag sensor.
(b) 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.

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

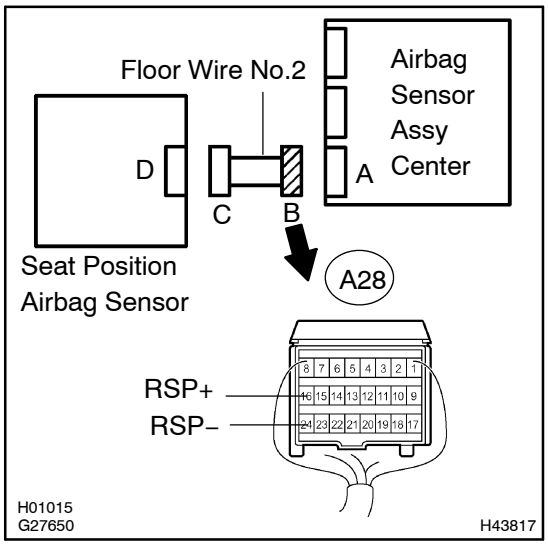
Standard:

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

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

OK

10 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.

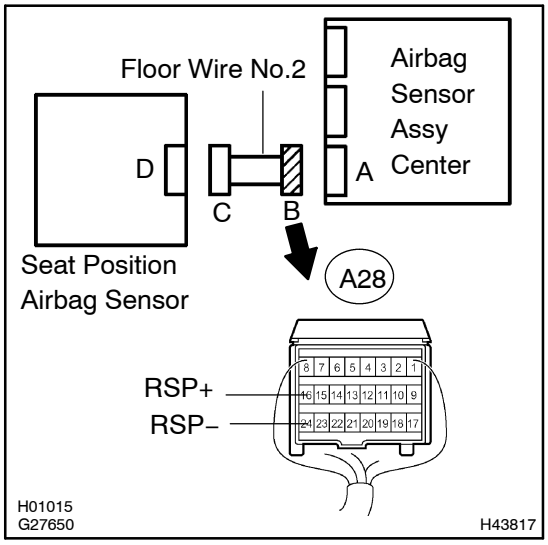
Standard:

Tester connection	Condition	Specified condition
A28–16 (RSP+) – A28–24 (RSP–)	Always	1 MΩ or Higher

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

OK

11 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.

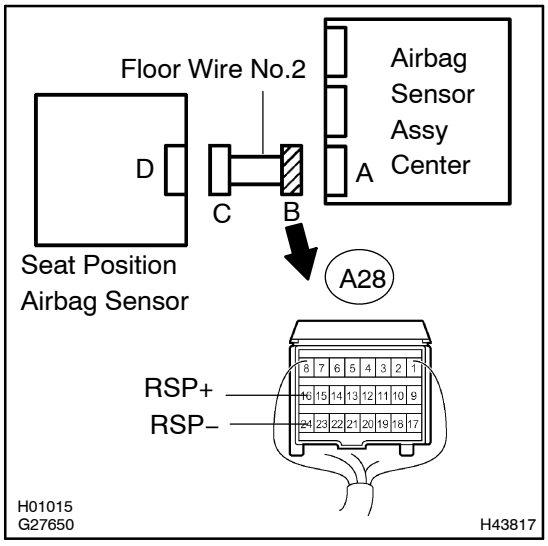
Standard:

Tester connection	Condition	Specified condition
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)



(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.

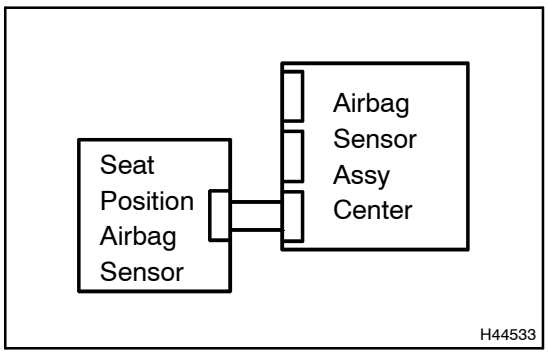
Standard:

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

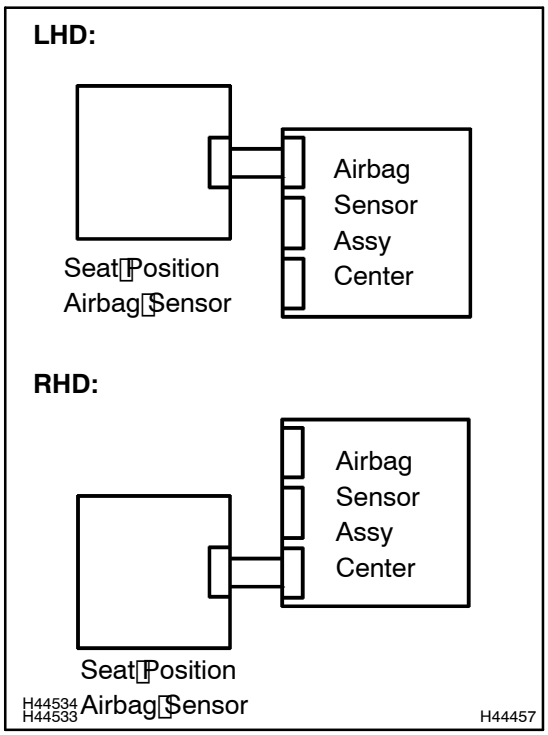
USE SIMULATION METHOD TO CHECK (SEE PAGE 05–954)

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