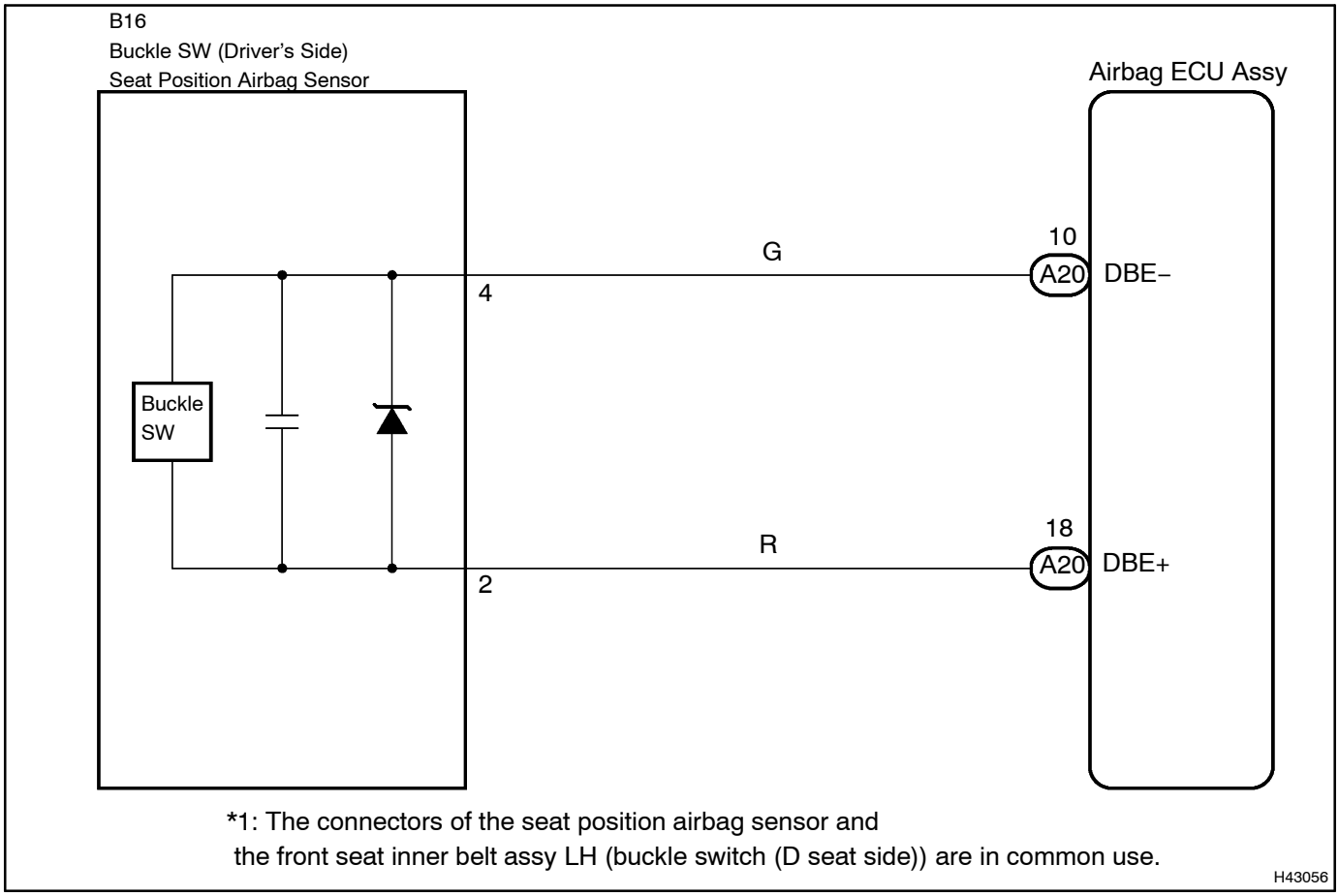
DTC	B1655	SEAT BELT BUCKLE SWITCH (D SEAT SIDE) MALFUNCTION

CIRCUIT DESCRIPTION

The seat belt buckle switch (D seat side) circuit consists of the airbag ECU assy and the front seat inner belt assy LH (buckle switch (D seat side)).
DTC B1655 is recorded when a malfunction is detected in the seat belt buckle switch (D seat side) circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1655	• When the airbag ECU assy receives a line short signal, an open signal, short to ground signal or B+ short signal in the seat belt buckle switch (D seat side) circuit for 2 seconds. • Seat belt buckle switch (D seat side) malfunction • Airbag ECU assy malfunction	• Floor wire • Front seat inner belt assy LH (LHD) (Buckle switch (D seat side)) • Front seat inner belt assy RH (RHD) (Buckle switch (D seat side)) • Airbag ECU assy

WIRING DIAGRAM



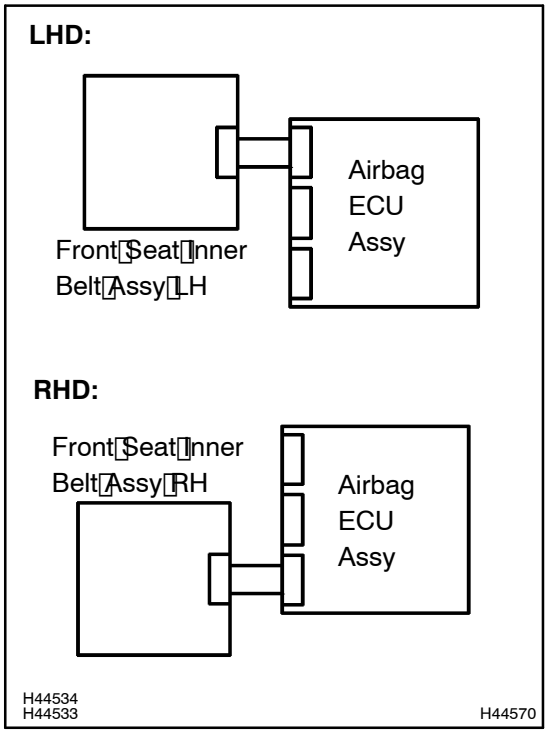
INSPECTION PROCEDURE

CAUTION:

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

(a) Turn the power switch off.
(b) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the airbag ECU assy.
(d) Disconnect the connectors from the horn button assy.
(e) Disconnect the connectors from the front passenger airbag assy.
(f) Disconnect the connector from the front seat airbag assy LH.
(g) Disconnect the connector from the front seat airbag assy RH.
(h) Disconnect the connector from the curtain shield airbag assy LH.
(i) 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 DTC



(a) Connect the connectors to the airbag ECU assy.
(b) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in memory (see page 05–1170).
(e) Turn the power switch off.
(f) Turn the power switch on (IG) and wait for at least 60 seconds.
(g) Check the DTCs (see page 05–1170).
OK:
DTC B1655 is not output.

HINT:
Codes other than code B1655 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 05–1155)

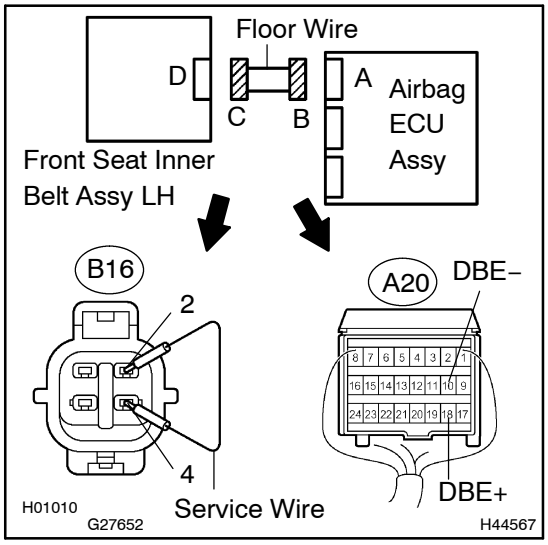
2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(c) LHD:
Check that the connectors are properly connected to the airbag ECU assy and the front seat inner belt assy LH.
(d) RHD:
Check that the connectors are properly connected to the airbag ECU assy and the front seat inner belt assy RH.
OK:
The connectors are connected.

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

OK

3 CHECK FLOOR WIRE(OPEN)



(a) LHD:
  (1) Disconnect the connectors from the airbag ECU assy and the front seat inner belt assy LH.

(b) Using a service wire, connect B16–2 and B16–4 of connector ”C”.

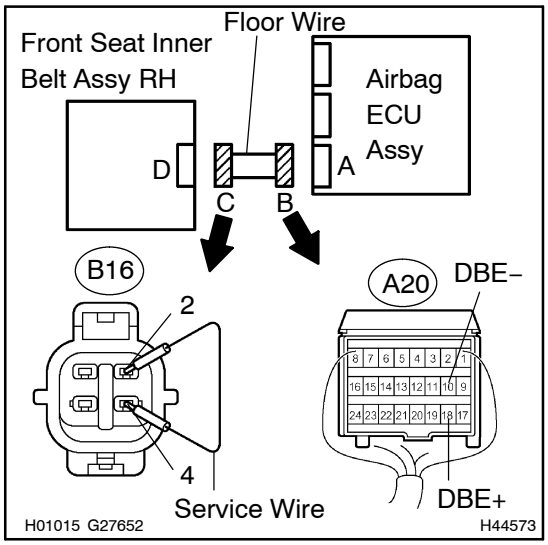
NOTICE:

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
A20–18 (DBE+) – A20–10 (DBE–)	Always	Below 1 Ω



(d) RHD:
  (1) Disconnect the connectors from the airbag ECU assy and the front seat inner belt assy RH.

(e) Using a service wire, connect B16–2 and B16–4 of connector ”C”.

NOTICE:

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

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

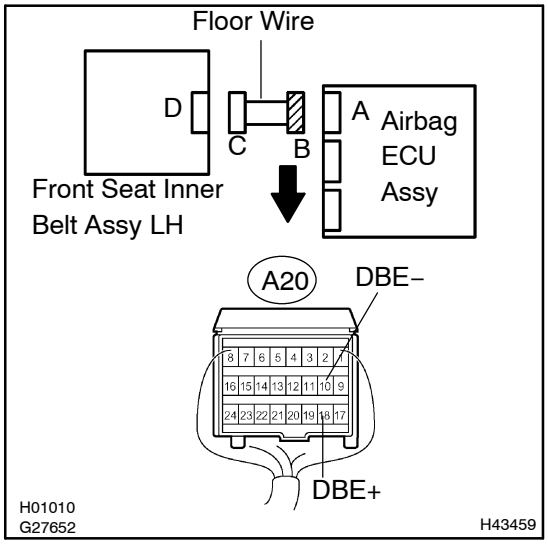
Standard:

Tester connection	Condition	Specified condition
A20–18 (DBE+) – A20–10 (DBE–)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

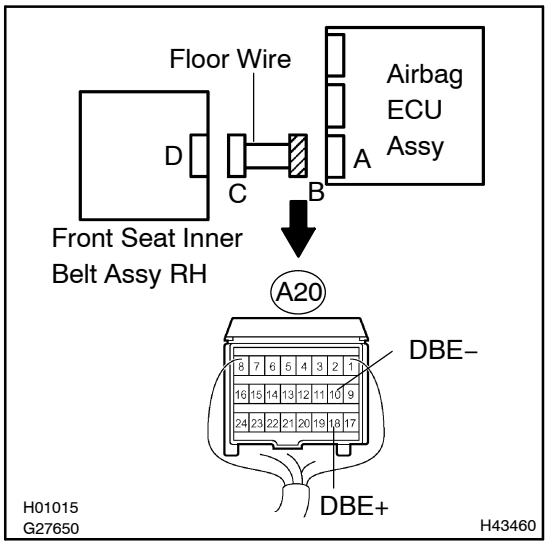
4 CHECK FLOOR WIRE(SHORT)



(a) LHD:
(1) Disconnect the service wire from connector "C".
(2) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A20–18 (DBE+) – A20–10 (DBE–)	Always	1 MΩ or Higher



(b) RHD:
(1) Disconnect the service wire from connector "C".
(2) Measure the resistance according to the value(s) in the table below.

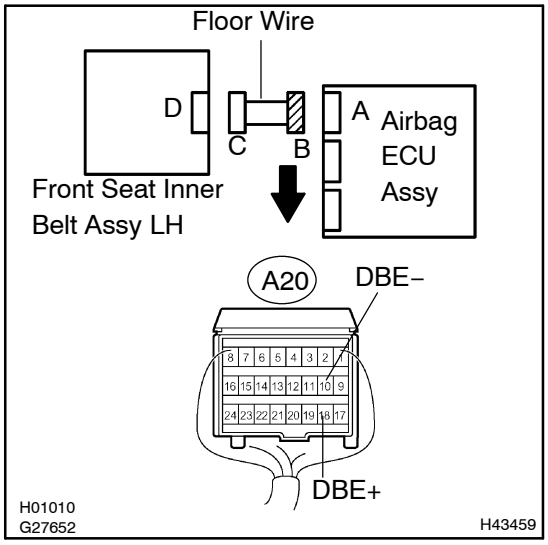
Standard:

Tester connection	Condition	Specified condition
A20–18 (DBE+) – A20–10 (DBE–)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

5 CHECK FLOOR WIRE(TO B+)



(a) LHD:

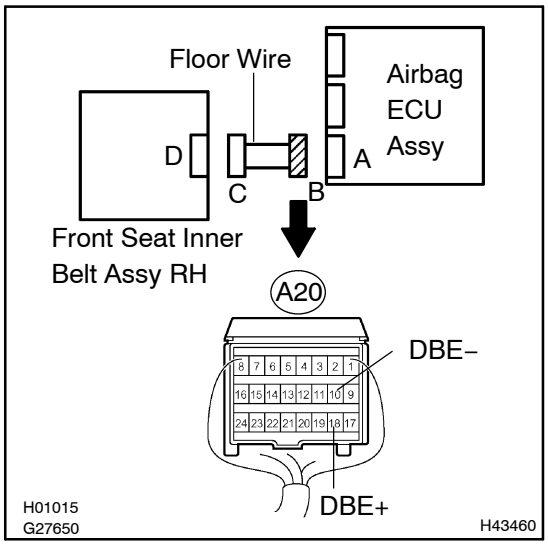
(1) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.

(2) Turn the power switch on (IG).

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

Standard:

Tester connection	Condition	Specified condition
A20–18 (DBE+) – Body ground	Power switch is on (IG)	Below 1 V
A20–10 (DBE–) – Body ground	Power switch is on (IG)	Below 1 V



(b) RHD:

(1) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.

(2) Turn the power switch on (IG).

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

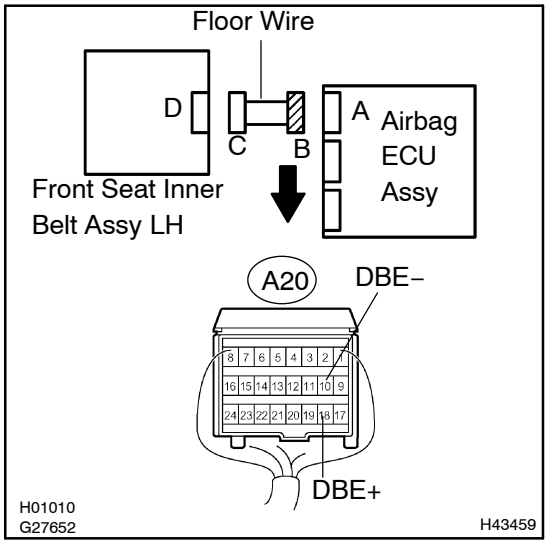
Standard:

Tester connection	Condition	Specified condition
A20–18 (DBE+) – Body ground	Power switch is on (IG)	Below 1 V
A20–10 (DBE–) – Body ground	Power switch is on (IG)	Below 1 V

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

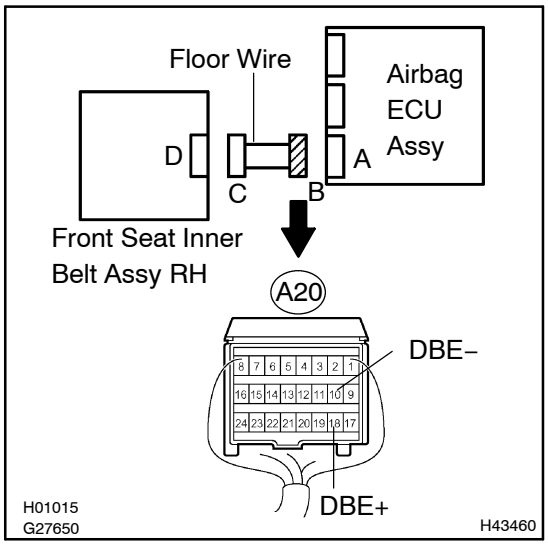
6 CHECK FLOOR WIRE(TO GROUND)



(a) LHD:
(1) Turn the power switch off.
(2) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A20–10 (DBE+) – Body ground	Always	1 MΩ or Higher
A20–18 (DBE+) – Body ground	Always	1 MΩ or Higher



(b) RHD:
(1) Turn the power switch off.
(2) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.

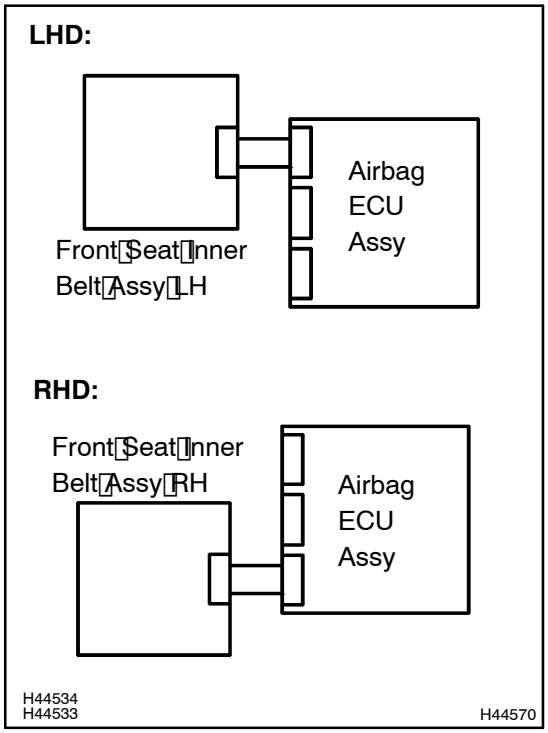
Standard:

Tester connection	Condition	Specified condition
A20–10 (DBE+) – Body ground	Always	1 MΩ or Higher
A20–18 (DBE+) – Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

7	CHECK FRONT SEAT INNER BELT ASSY



(a) Connect the connectors to the airbag ECU assy.
(b) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in memory (see page 05–1170).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (see page 05–1170).
OK:
DTC B1655 is not output.

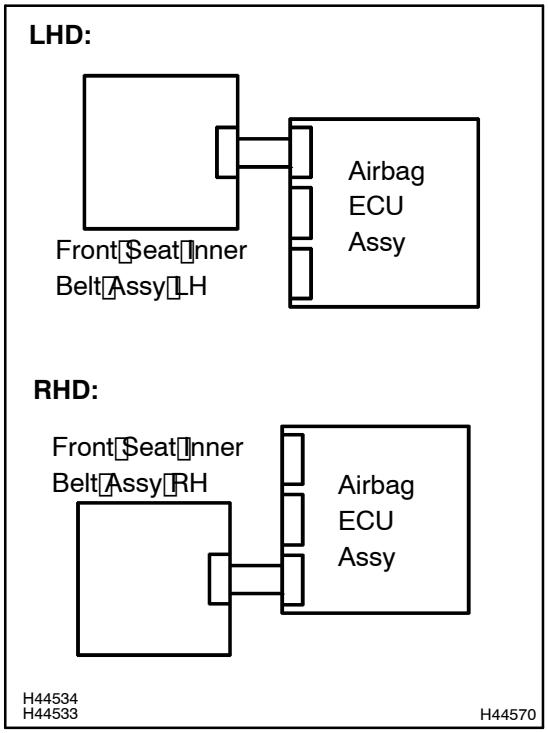
HINT:
Codes other than code B1655 may be output at this time, but they are not related to this check.

NG → **Go to step 8**

OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 60–29)

8	REPLACE FRONT SEAT INNER BELT ASSY



(a) Turn the power switch off.
(b) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(c) LHD:
Replace the front seat inner belt assy LH (see page 72–2).
(d) RHD:
Replace the front seat inner belt assy RH (see page 72–2).

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

(e) Connect the connectors to the airbag ECU assy.
(f) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
(g) Turn the power switch on (IG), and wait for at least 60 seconds.
(h) Clear the DTCs stored in memory (see page 05–1170).
(i) Turn the power switch off.
(j) Turn the power switch on (IG), and wait for at least 60 seconds.
(k) Check the DTCs (see page 05–1170).
OK:
DTC B1655 is not output.

HINT:
Codes other than code B1655 may be output at this time, but they are not related to this check.

NG	REPLACE AIR BAG ECU ASSY (SEE PAGE 60–54)

OK

END