DTC	B1153/25	Seat Position Airbag Sensor Circuit Malfunction

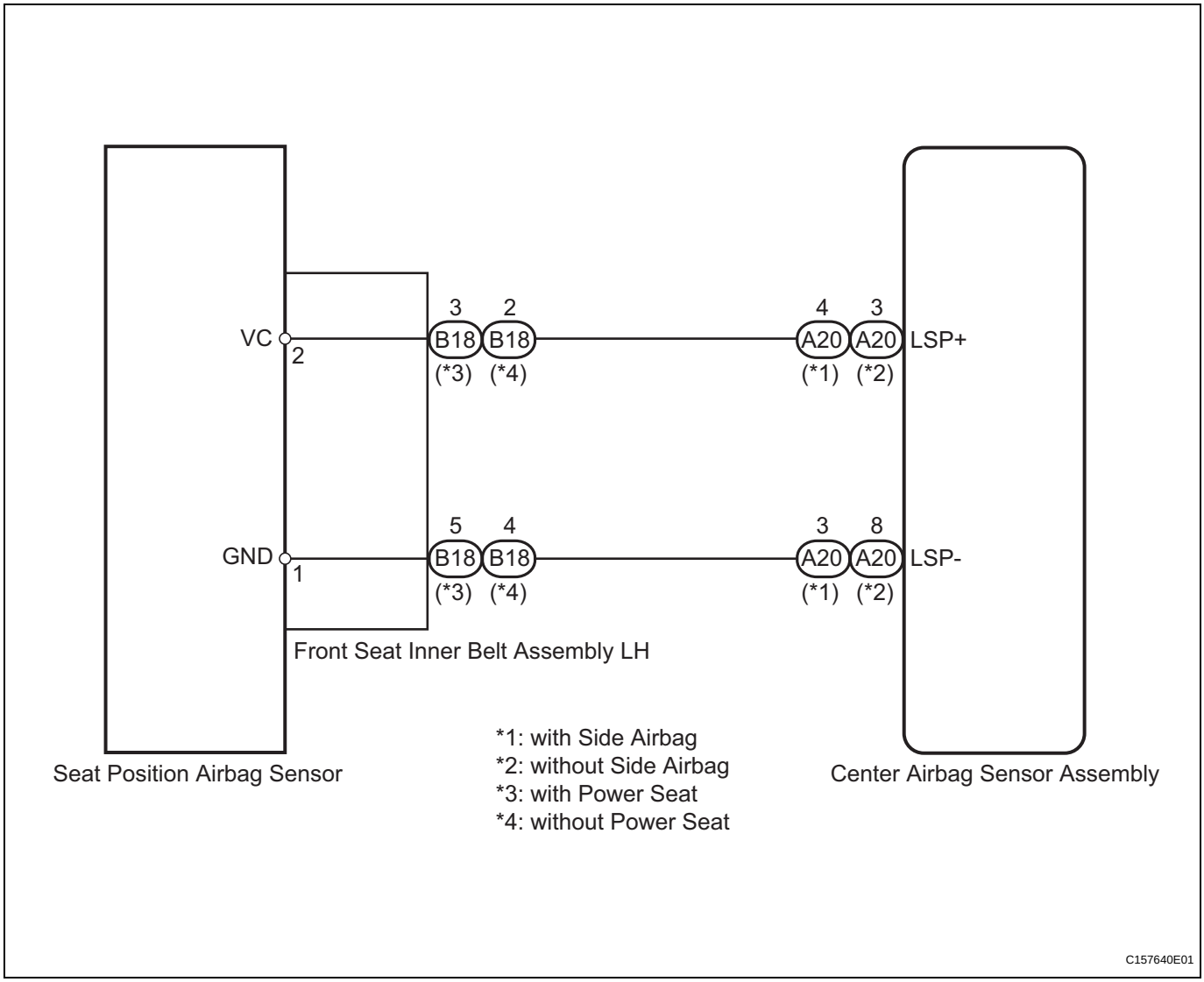
DESCRIPTION

The seat position airbag sensor circuit consists of the center airbag sensor assembly and the seat position airbag sensor.
DTC B1153/25 is recorded when a malfunction is detected in the seat position airbag sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1153/25	• 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 seat position airbag sensor circuit for 2 seconds. • Seat position airbag sensor malfunction • Center airbag sensor assembly malfunction	• Seat position airbag sensor • Center airbag sensor assembly • Front seat inner belt assembly LH • Floor wire

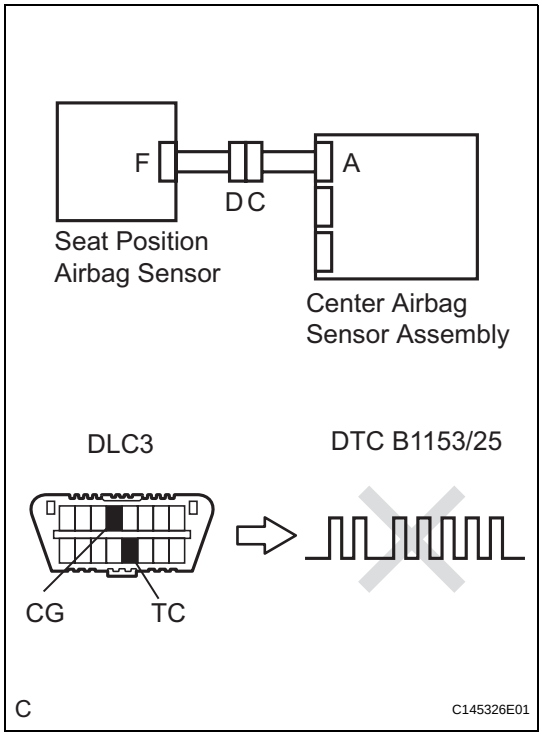
RS

WIRING DIAGRAM



INSPECTION PROCEDURE

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 memory (See page RS-35).
(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-35).

OK:

DTC B1153/25 is not output.

HINT:

Codes other than code B1153/25 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 center airbag sensor assembly, the seat position airbag sensor and front seat inner belt assembly LH.

OK:

The connectors are connected.

NG → **CONNECT CONNECTORS**

OK

3	CHECK CONNECTORS

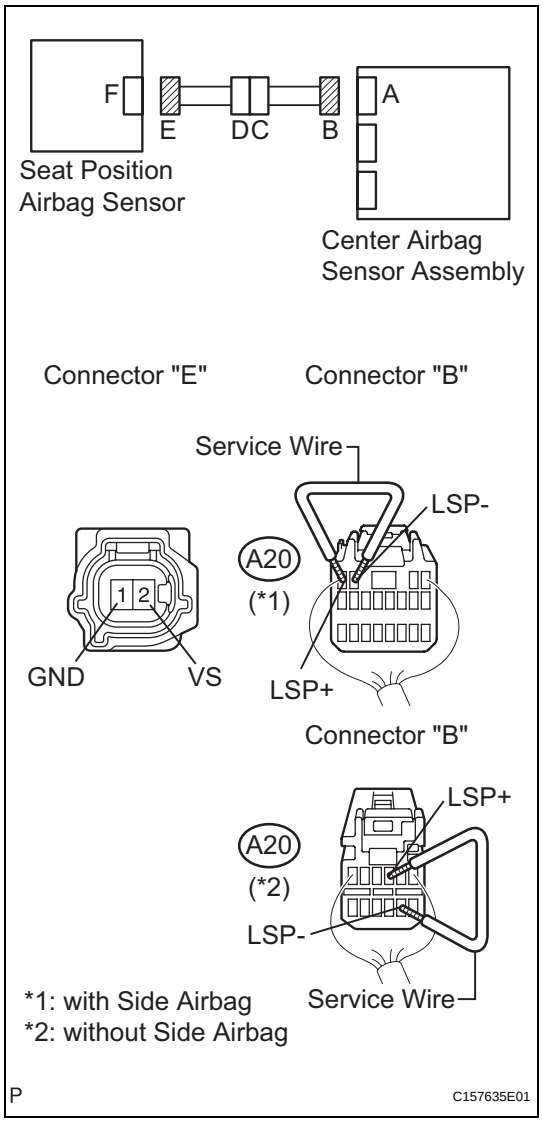
(a) Disconnect the connectors from the center airbag sensor assembly, the seat position airbag sensor and front seat inner belt assembly LH.
(b) Check that the connectors are not damaged.

OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4 CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (OPEN)



(a) Connect the connectors that link the front seat inner belt assembly LH and floor wire.
(b) with Side airbag:
Using a service wire, connect A20-4 (LSP+) and A20-3 (LSP-) of connector "B".
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(c) without Side airbag:
Using a service wire, connect A20-3 (LSP+) and A20-8 (LSP-) of connector "B".
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(d) Measure the resistance between the terminals of connector "E" according to the value(s) in the table below.
Standard resistance

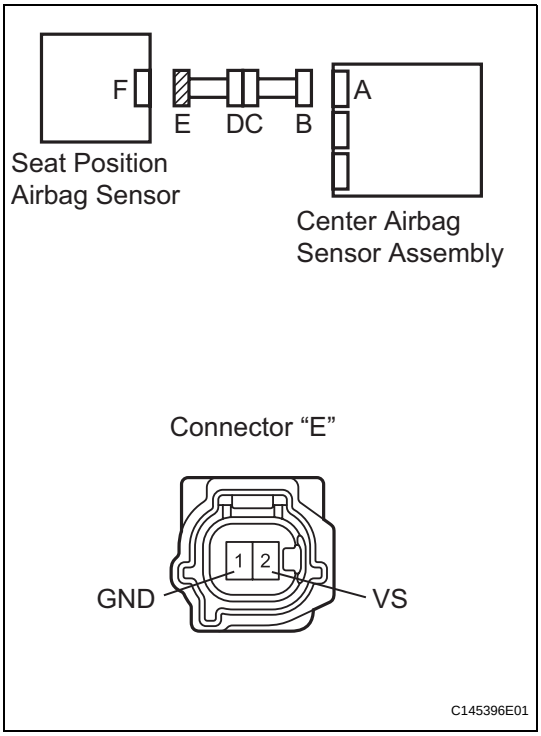
Tester connection	Condition	Specified condition
2 (VS) - 1 (GND)	Always	Below 1 Ω

NG → **Go to step 11**

OK

RS

5 CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (SHORT TO B+)



(a) Disconnect the service wire from connector "B".
(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.
(d) Measure the voltage according to the value(s) in the table below.

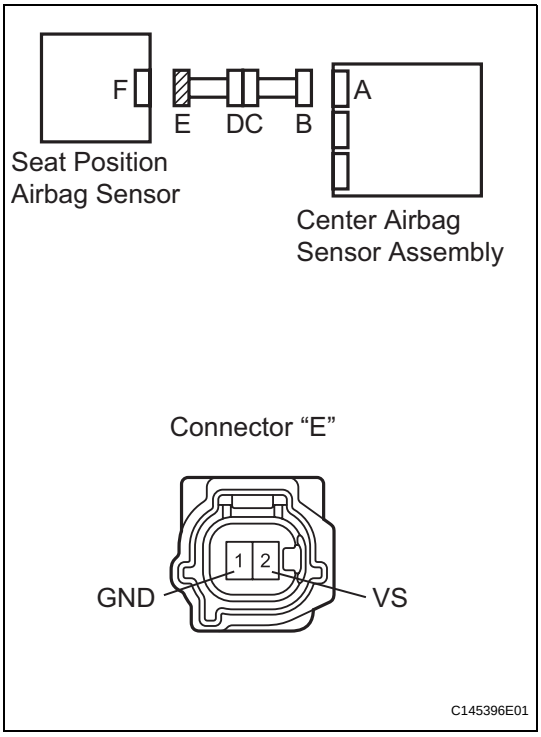
Standard voltage

Tester connection	Condition	Specified condition
2 (VS) - Body ground	Ignition switch ON	Below 1 V
1 (GND) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 12**

OK

6 CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (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.

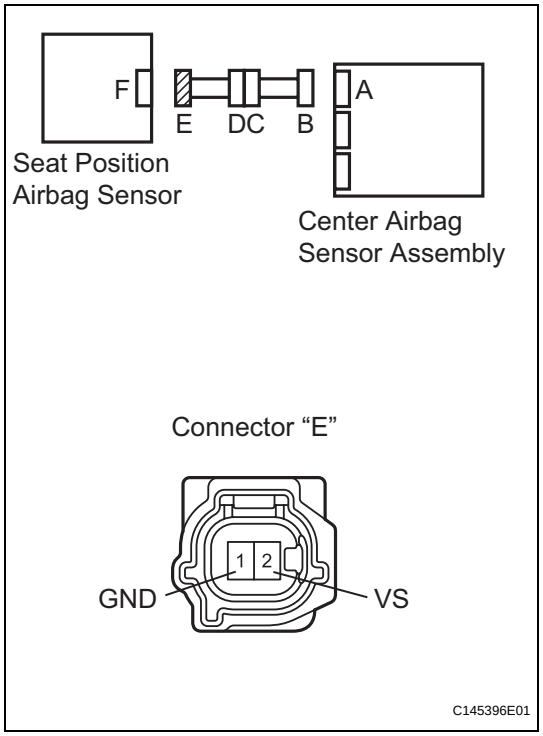
Standard resistance

Tester connection	Condition	Specified condition
2 (VS) - Body ground	Always	1 MΩ or higher
1 (GND) - Body ground	Always	1 MΩ or higher

NG → **Go to step 13**

OK

7 CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (SHORT)



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

Standard resistance

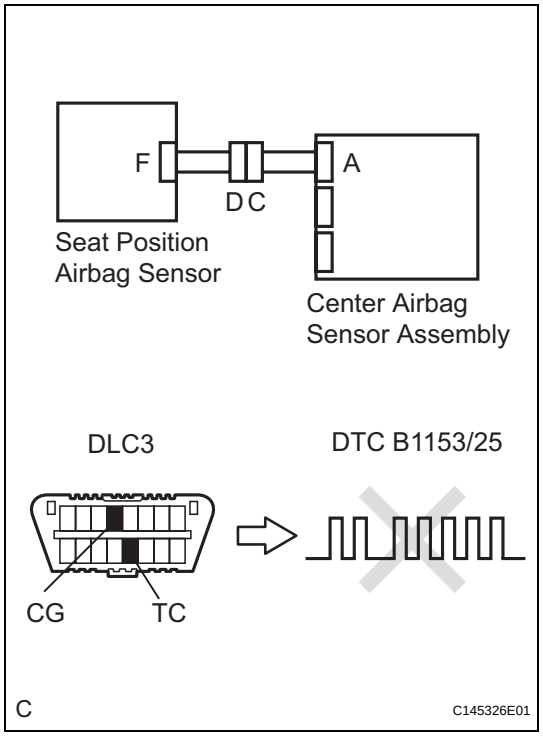
Tester connection	Condition	Specified condition
2 (VS) - 1 (GND)	Always	1 MΩ or higher

NG → **Go to step 14**

RS

OK

8 CHECK SEAT POSITION AIRBAG SENSOR



(a) Connect the connectors to the seat position airbag sensor and 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 the DTCs stored in memory (See page RS-35).
(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 RS-35).

OK:

DTC B1153/25 is not output.

HINT:

Codes other than code B1153/25 may be output at this time, but they are not related to this check.

NG → **Go to step 9**

OK

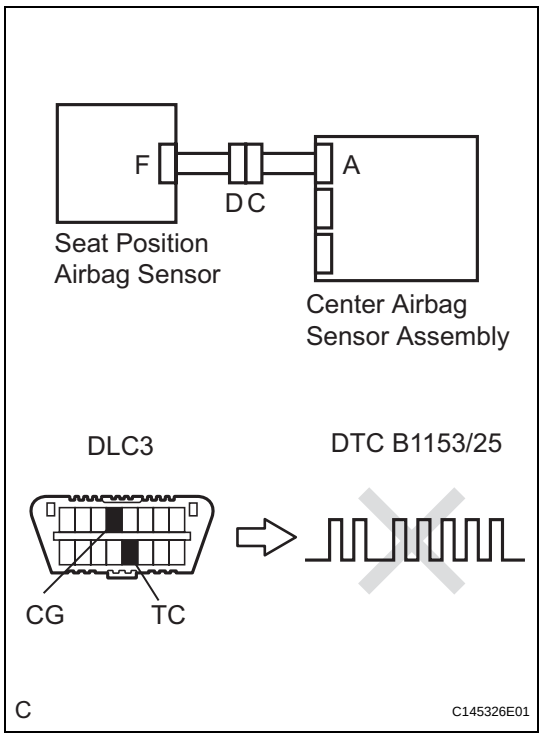
USE SIMULATION METHOD TO CHECK

9	REPLACE SEAT POSITION 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) Replace the seat position airbag sensor (See page RS-481).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

10	CHECK CENTER AIRBAG SENSOR ASSEMBLY



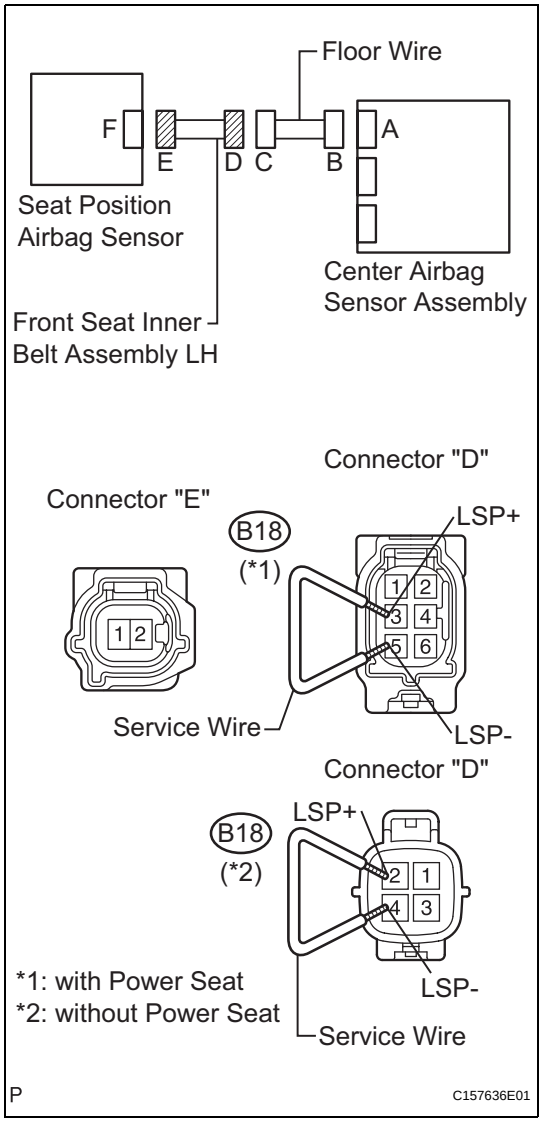
(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(c) Clear the DTCs stored in memory (See page RS-35).
(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-35).
OK:
DTC B1153/25 is not output.
HINT:
Codes other than code B1153/25 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

11	CHECK FRONT SEAT INNER BELT ASSEMBLY LH (OPEN)



(a) Disconnect the service wire from connector "B".
(b) Disconnect the floor wire connector from the front seat inner belt assembly LH.
(c) with Power seat:
Using a service wire, connect B18-3 (LSP+) and B18-5 (LSP-) of connector "D".
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(d) without Power seat:
Using a service wire, connect B18-2 (LSP+) and B18-4 (LSP-) of connector "D".
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(e) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester connection	Condition	Specified condition
2 (VS) - 1 (GND)	Always	Below 1 Ω

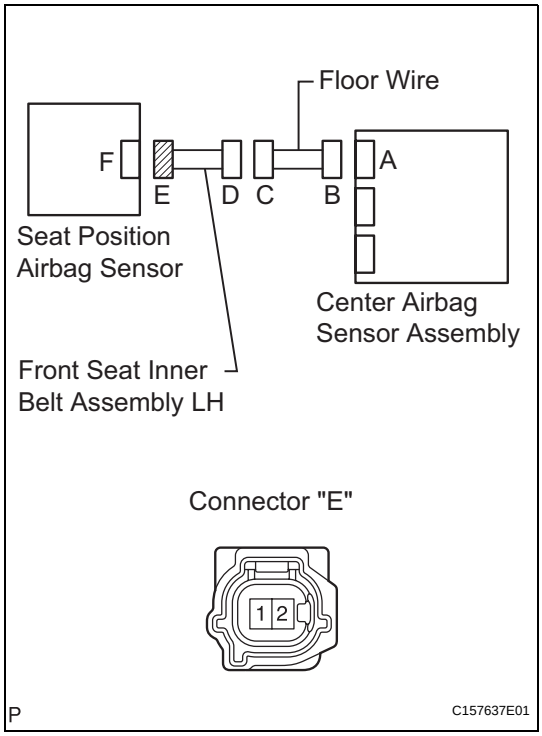
NG → **REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE FLOOR WIRE

RS

12	CHECK FRONT SEAT INNER BELT ASSEMBLY LH (SHORT TO B+)



(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 floor wire connector from the front seat inner belt assembly LH.
(d) Connect the negative (-) terminal cable to the battery, and wait for least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage according to the value(s) in the table below.

Standard voltage

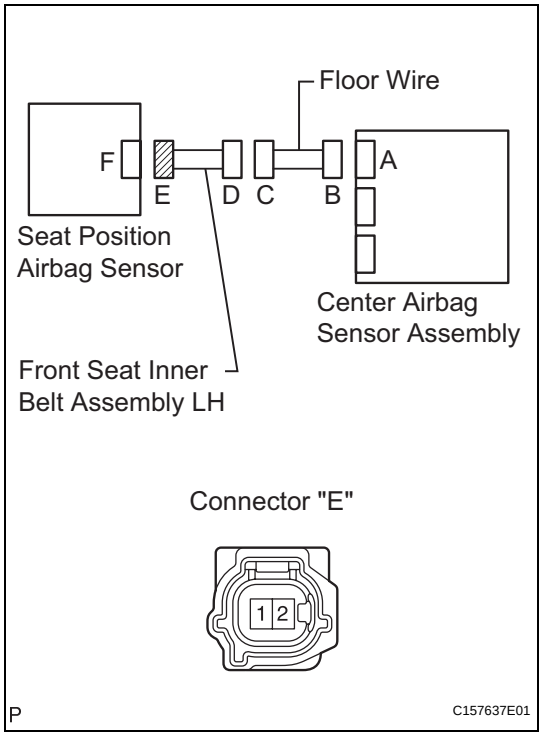
Tester connection	Condition	Specified condition
2 (VS) - Body ground	Ignition switch ON	Below 1 V
1 (GND) - Body ground	Ignition switch ON	Below 1 V

NG → **REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE FLOOR WIRE

13	CHECK FRONT SEAT INNER BELT ASSEMBLY LH (SHORT TO GROUND)



(a) Disconnect the floor wire connector from the front seat inner belt assembly LH.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
2 (VS) - Body ground	Always	1 MΩ or higher
1 (GND) - Body ground	Always	1 MΩ or higher

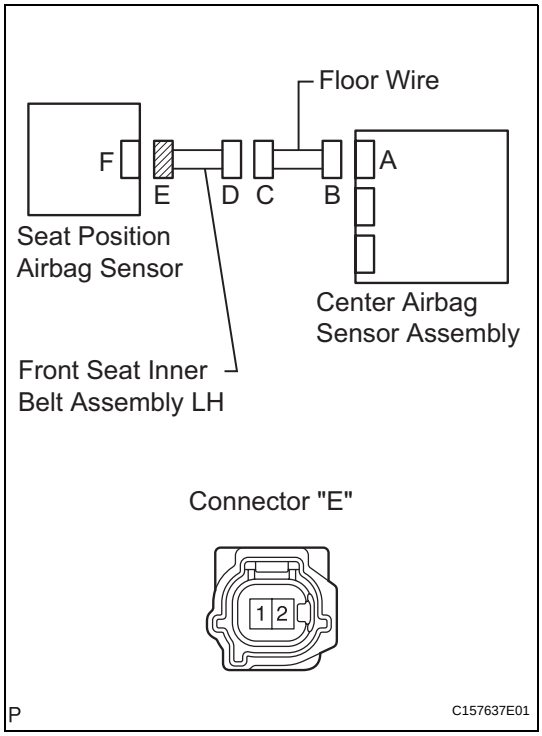
RS

NG → **REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE FLOOR WIRE

14	CHECK FRONT SEAT INNER BELT ASSEMBLY LH (SHORT)



(a) Disconnect the floor wire connector from the front seat inner belt assembly LH.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
2 (VS) - 1 (GND)	Always	1 MΩ or higher

NG → **REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE FLOOR WIRE