

DTC	B1153/25	Seat Position Sensor Assembly Malfunction
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CIRCUIT DESCRIPTION

The seat position sensor circuit consists of the airbag sensor assembly and the seat position sensor assembly.

For details of the function of each components, see OPERATION on page RS-3.

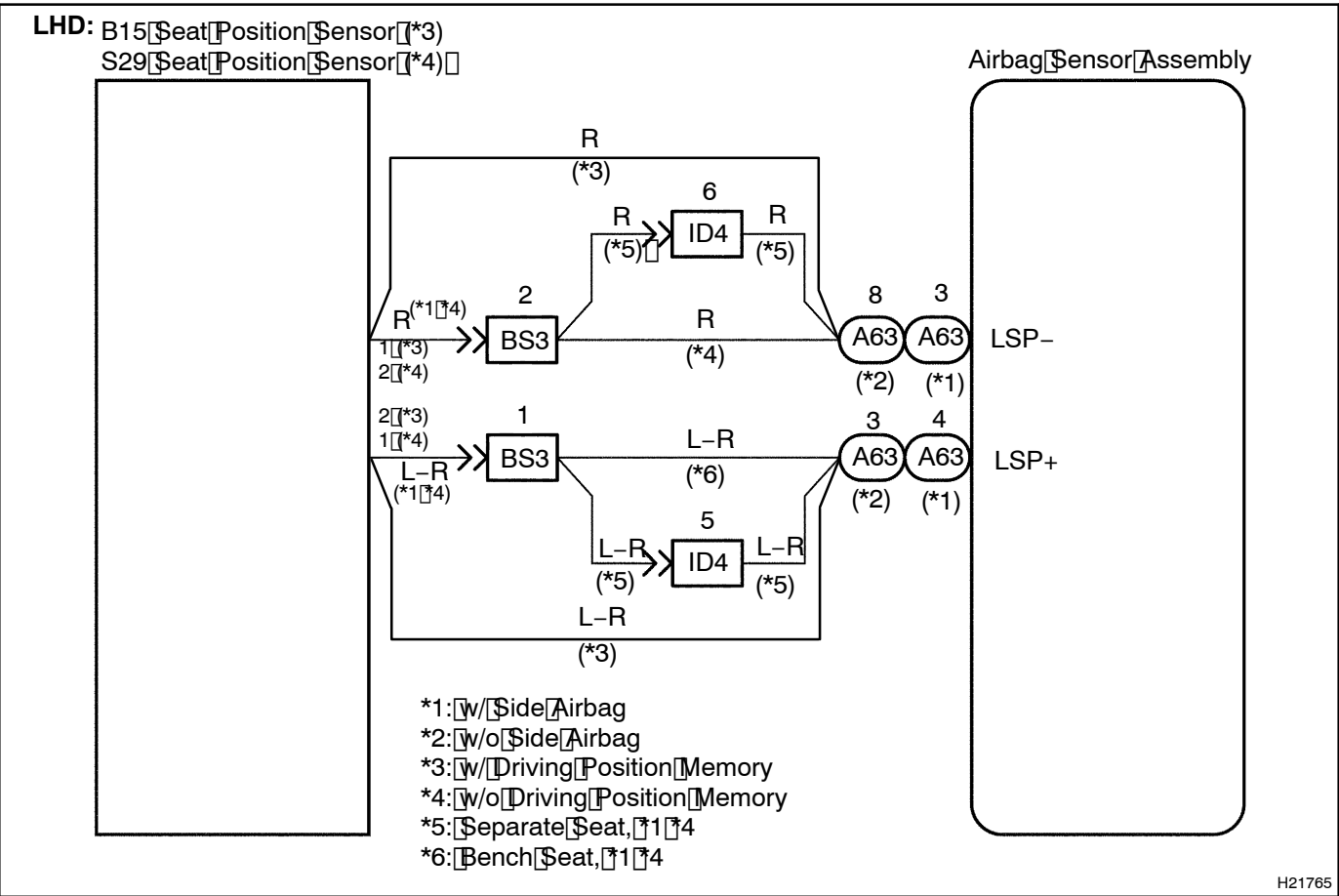
B1153/25 is recorded when a malfunction is detected in the seat position sensor circuit.

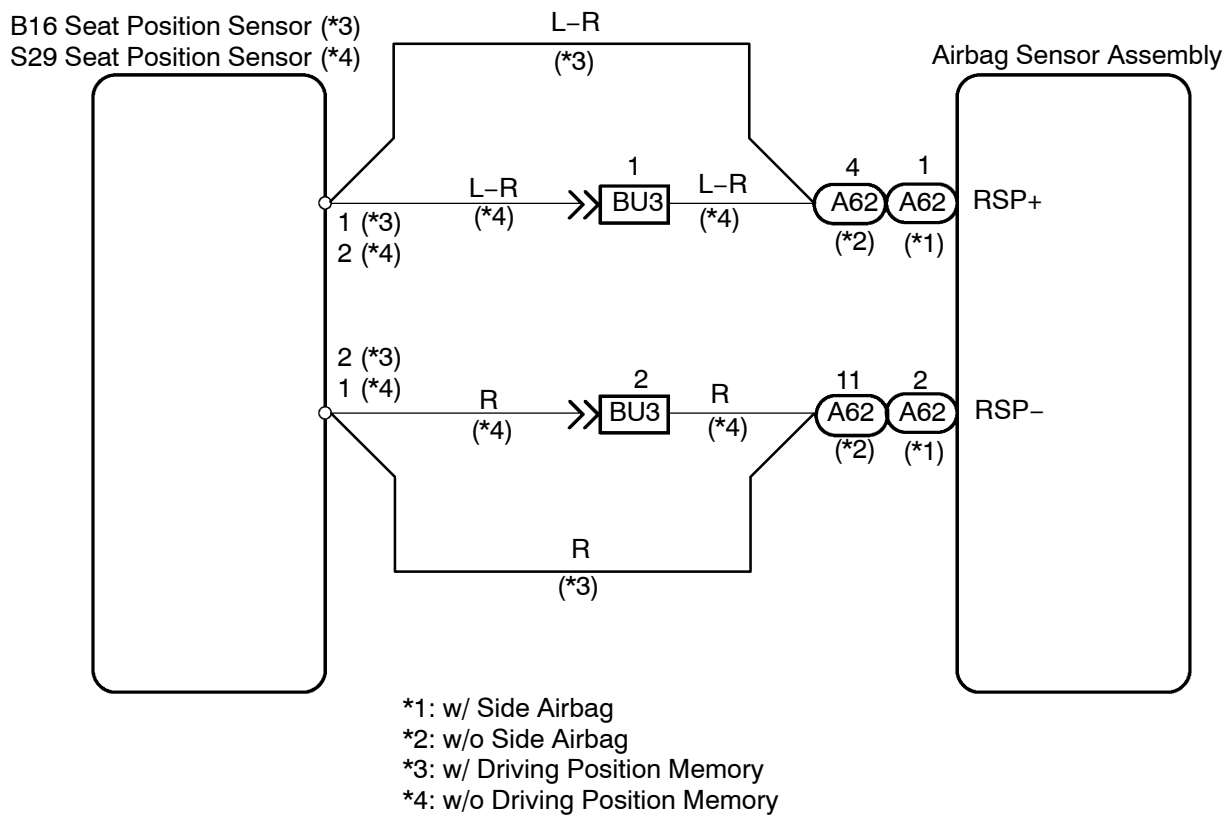
DTC No.	DTC Detecting Condition	Trouble Area
B1153/25	• Seat position sensor assembly malfunction	• Seat position sensor assembly • Airbag sensor assembly • Floor No. 1 wire (LHD) • Floor No. 2 wire (RHD) • Front seat wire LH (LHD) • Front seat wire RH (RHD) • Dash wire (Bench seat)

HINT:

DTC B1153/25 is indicated only for the vehicle equipped with the side airbag and without the side airbag (dual stage airbag).

WIRING DIAGRAM

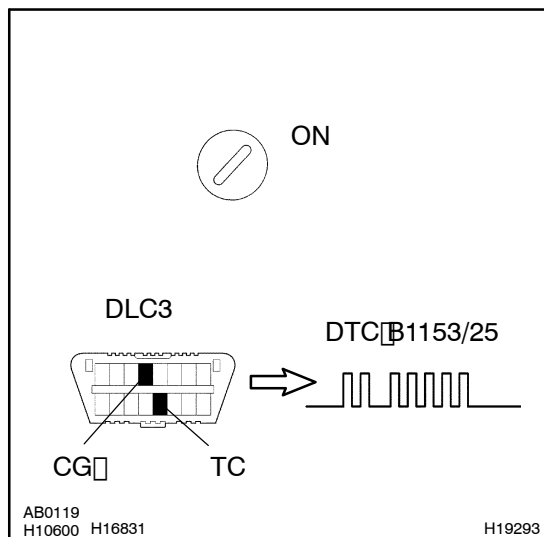


RHD:

H21766

INSPECTION PROCEDURE

1 Is DTC B1153/25 output?

**CHECK:**

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:

DTC B1153/25 is output.

HINT:

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

NO

The malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

YES

2 Is connector of the seat position sensor assembly properly connected ?

NO

Connect connector.

YES

3 Prepare for inspection (See step 1 on DI-764).

4	Check vehicle type.
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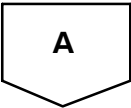
CHECK:

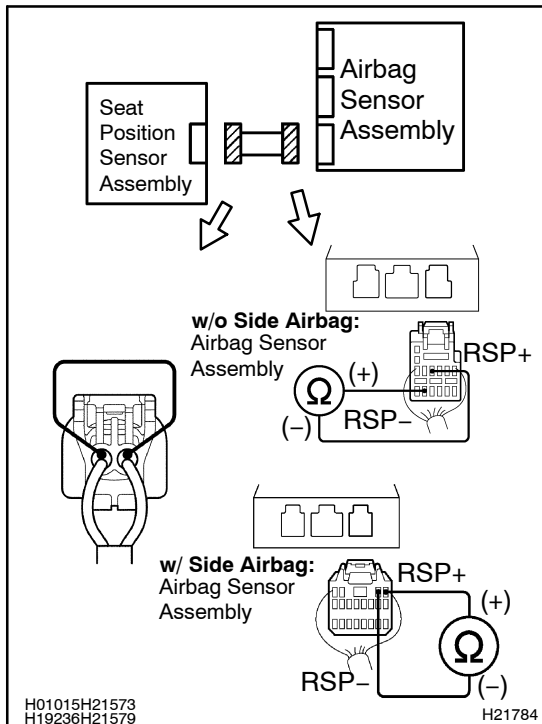
Confirm that the type of the vehicle.

OK:

- A: RHD (w/ Driving Position Memory)
- B: RHD (w/o Driving Position Memory)
- C: LHD (w/ Driving Position Memory)
- D: LHD (Bench seat (w/ Driving Position Memory))
- E: LHD (Separate seat (w/ Driving Position Memory))

B	Go to step 10.
C	Go to step 18.
D	Go to step 23.
E	Go to step 31.



5 Check floor No. 2 wire.**PREPARATION:**

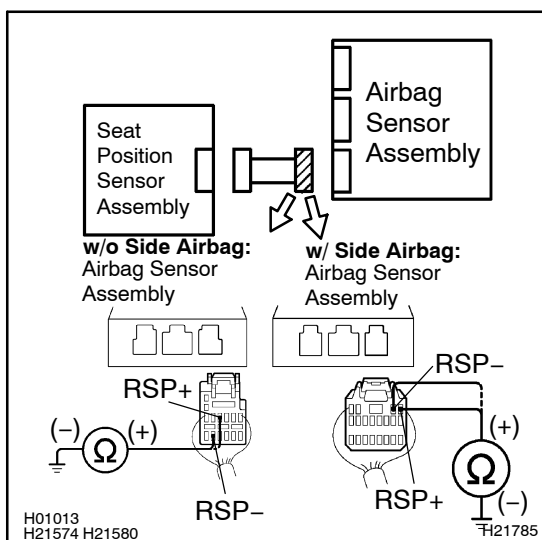
Using a service wire, connect RSP+ and RSP- of the floor No. 2 wire connector on the seat position sensor assembly side.

CHECK:

Measure the resistance between RSP+ and RSP- of the floor No. 2 wire connector on the airbag sensor assembly side.

OK:

Resistance: Below 1 Ω

NG**Repair or replace floor No. 2 wire.****OK****6 Check floor No. 2 wire (to ground).****PREPARATION:**

Release the service wire from the floor No. 2 wire connector on the seat position sensor assembly side.

CHECK:

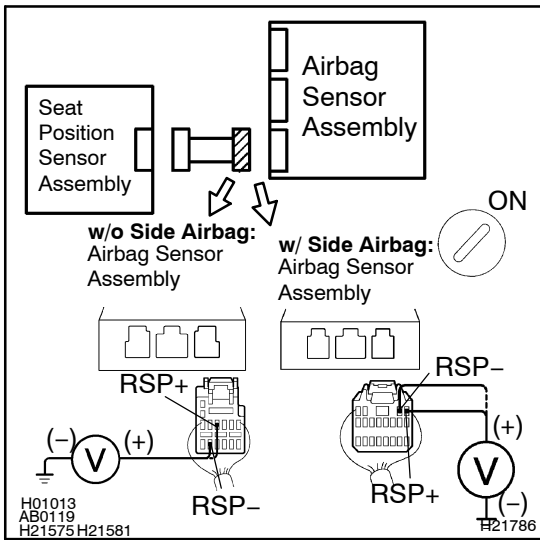
Measure the resistance between the body ground and each of RSP+ and RSP- of the floor No. 2 wire connector on the airbag sensor assembly side.

OK:

Resistance: 10 k Ω or Higher

NG**Repair or replace floor No. 2 wire.****OK**

7 Check floor No. 2 wire (to B+).



PREPARATION:

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

CHECK:

- Turn the ignition switch to ON.
- Measure the voltage between the body ground and each of RSP+ and RSP- of the floor No. 2 wire connector on the airbag sensor assembly side.

OK:

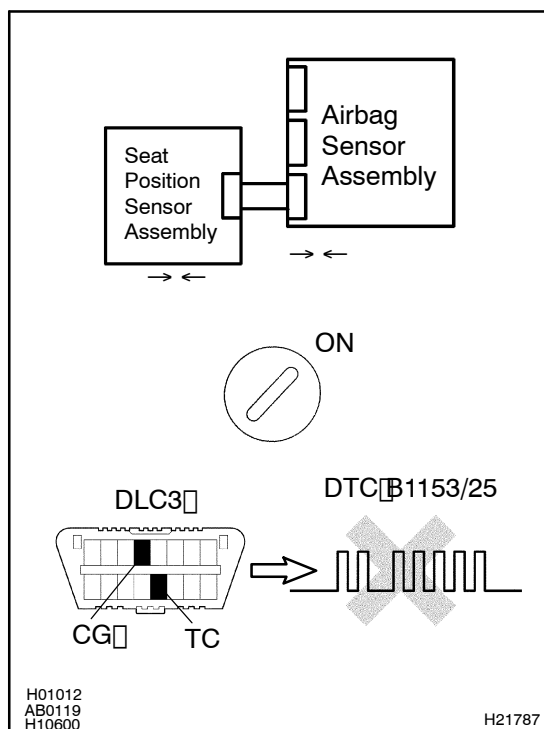
Voltage: Below 1 V

NG

Repair or replace floor No. 2 wire.

OK

8 Check seat position sensor assembly.



PREPARATION:

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the connectors of the seat position sensor assembly and the airbag sensor assembly.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

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

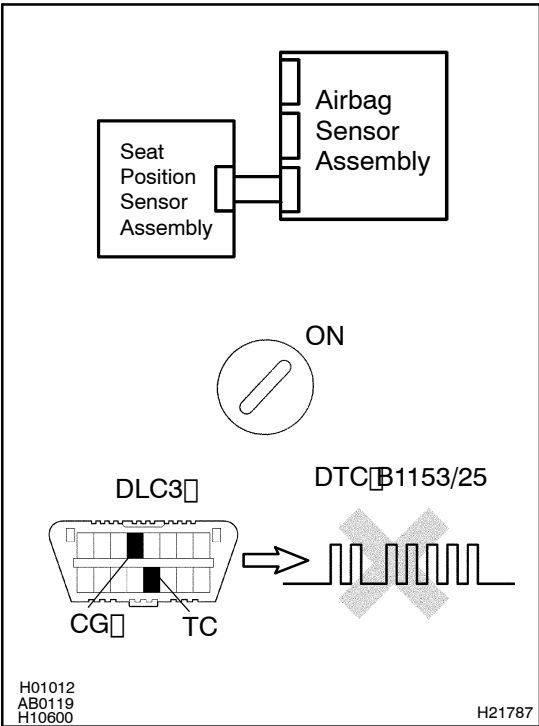
NG

Replace seat position sensor assembly, then go to next step.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

9 Is DTC B1153/25 output again?



PREPARATION:

- (a) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (b) Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (b) Clear the DTC stored in memory (See page DI-432).
- (c) Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- (d) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (e) Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

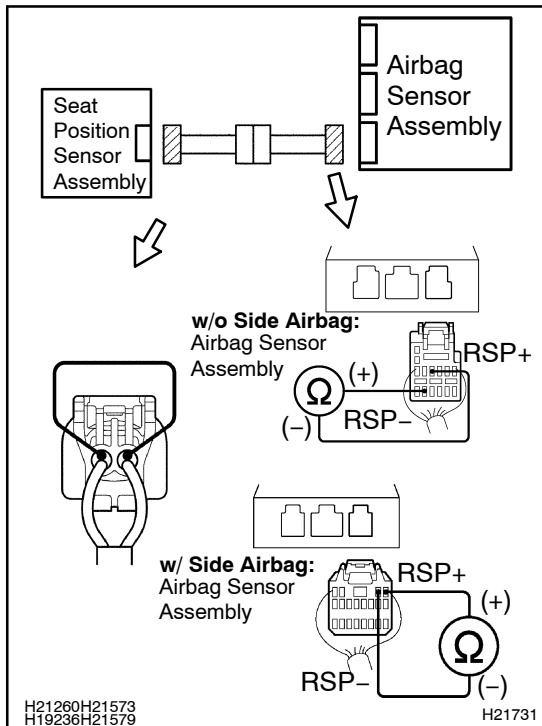
Codes other than code B1153/25 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

10 Check wire harness.**PREPARATION:**

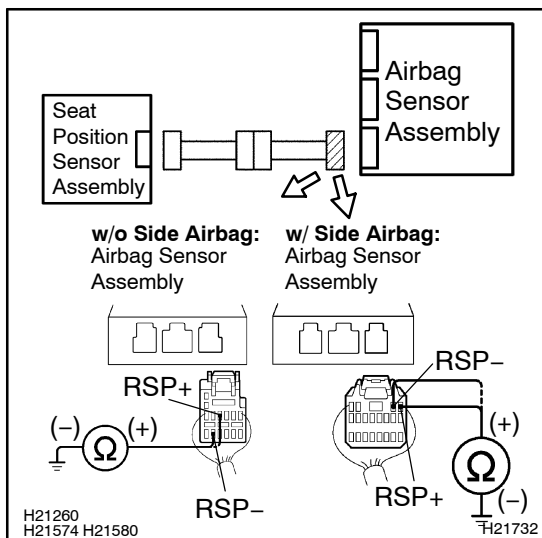
Using a service wire, connect RSP+ and RSP- of the connector on the seat position sensor assembly side between the airbag sensor assembly and the seat position sensor assembly.

CHECK:

Measure the resistance between RSP+ and RSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

OK:

Resistance: Below 1 Ω

NG**Go to step 10.****OK****11 Check wire harness (to ground).****PREPARATION:**

Release the service wire from the connector on the seat position sensor assembly side.

CHECK:

Measure the resistance between the body ground and each of RSP+ and RSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

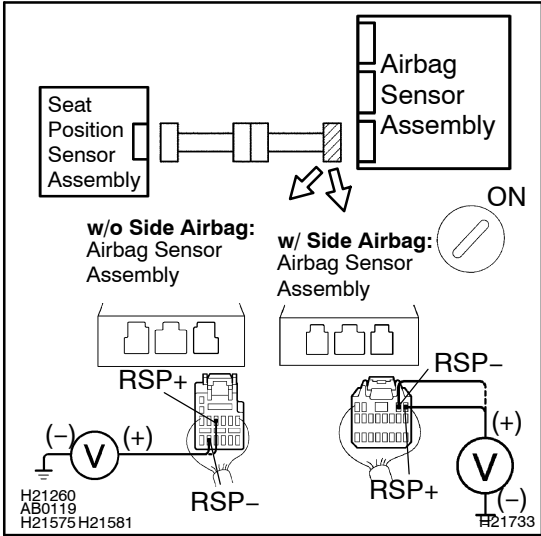
OK:

Resistance: 10 k Ω or Higher

NG**Go to step 11.****OK**

12

Check wire harness (to B+).



PREPARATION:

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

CHECK:

- Turn the ignition switch to ON.
- Measure the voltage between the body ground and each of RSP+ and RSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

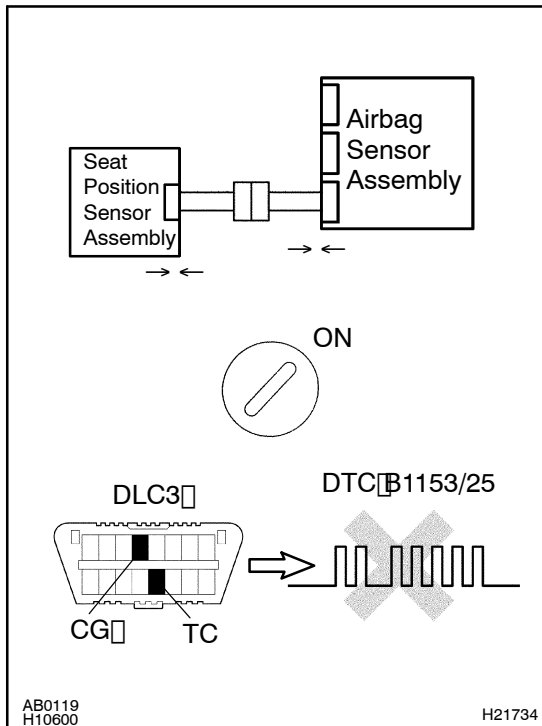
OK:

Voltage: Below 1 V

NG

Go to step 12.

OK

13 Check seat position sensor assembly.**PREPARATION:**

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the connectors of the seat position sensor assembly and the airbag sensor assembly.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:**DTC B1153/25 is not output.****HINT:**

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

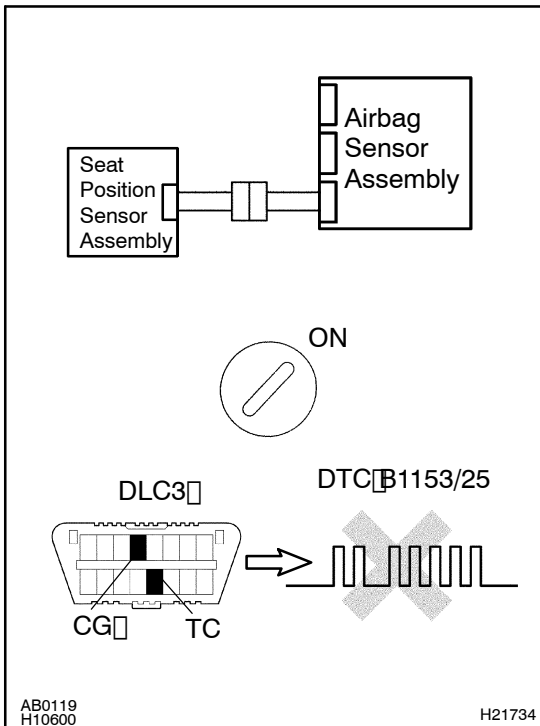
NG

Replace seat position sensor assembly, then go to next step.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

14 Is DTC B1153/25 output again?



PREPARATION:

- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

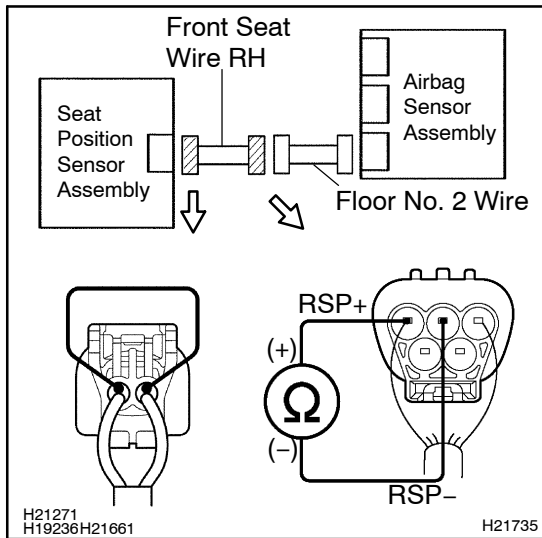
Codes other than code B1153/25 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

15 Check front seat wire RH.**PREPARATION:**

- Disconnect the front seat wire RH connector from the floor No. 2 wire.
Airbag Sensor Assembly
- Using a service wire, connect RSP+ and RSP- of the front seat wire RH connector on the seat position sensor assembly side.

CHECK:

Measure the resistance between RSP+ and RSP- of the front seat wire RH connector on the floor No. 2 wire side.

OK:

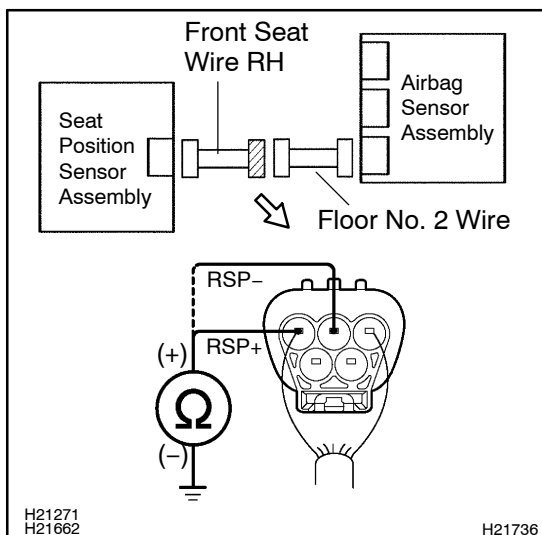
Resistance: Below 1 Ω

NG

Repair or replace front seat wire RH.

OK

Repair or replace floor No. 2 wire.

16 Check front seat wire RH (to ground).**CHECK:**

Measure the resistance between the body ground and each of RSP+ and RSP- of the front seat wire RH connector on the floor No. 2 wire side.

OK:

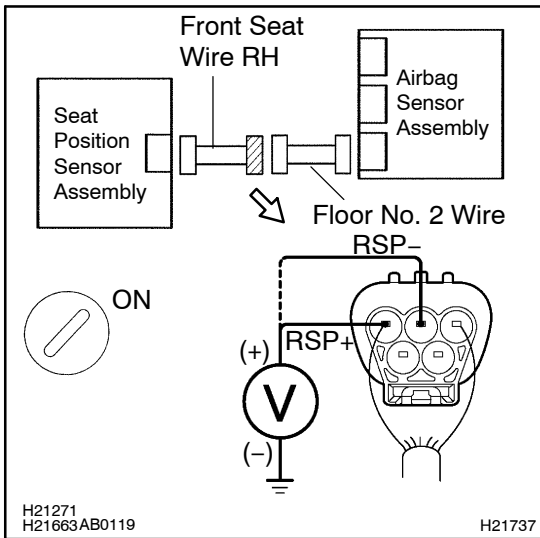
Resistance: 10 kΩ or Higher

NG

Repair and replace front seat wire RH.

OK

Repair or replace floor No. 2 wire.

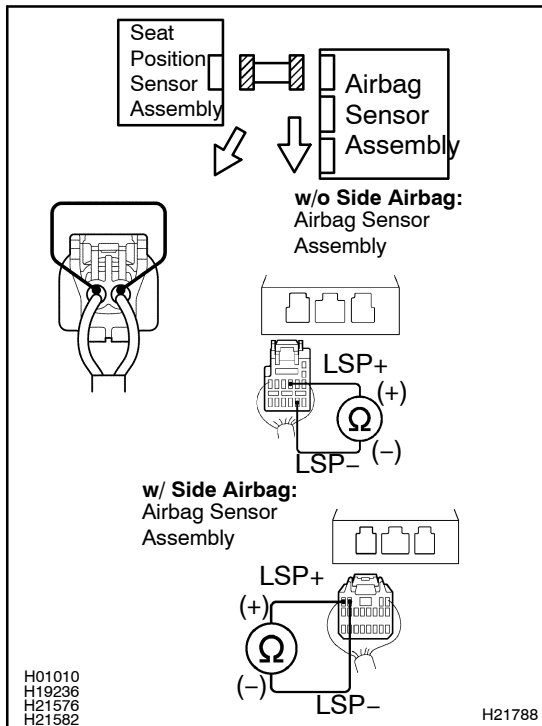
17 Check front seat wire RH (to B+).

PREPARATION:

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Disconnect the front seat wire RH connector from the floor No. 2 wire.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON.
- Measure the voltage between the body ground and each of RSP+ and RSP- of the front seat wire RH connector on the floor No. 2 wire side.

OK:
Voltage: Below 1 V
NG
Repair and replace front seat wire RH.
OK
Repair or replace floor No. 2 wire.

18 Check floor No. 1 wire.**PREPARATION:**

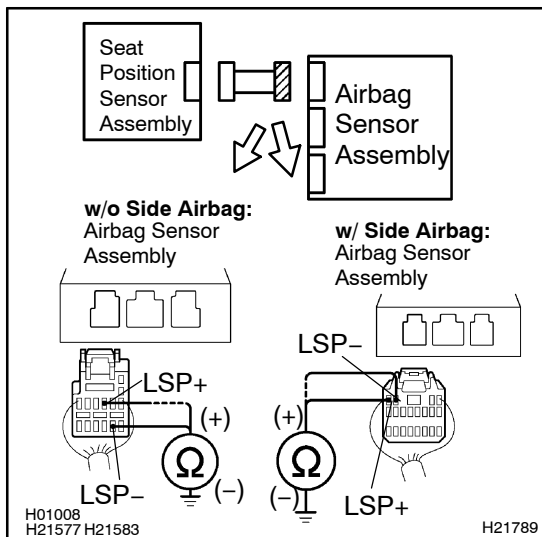
Using a service wire, connect LSP+ and LSP- of the floor No. 1 wire connector on the seat position sensor assembly side.

CHECK:

Measure the resistance between LSP+ and LSP- of the floor No. 1 wire connector on the airbag sensor assembly side.

OK:

Resistance: Below 1 Ω

NG**Repair or replace floor No. 1 wire.****OK****19 Check floor No. 1 wire (to ground).****PREPARATION:**

Release the service wire from the floor No. 1 wire connector on the seat position sensor assembly side.

CHECK:

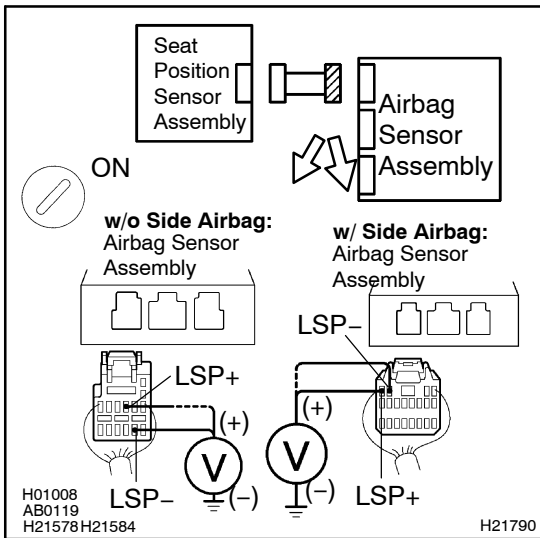
Measure the resistance between the body ground and each of LSP+ and LSP- of the floor No. 1 wire connector on the airbag sensor assembly side.

OK:

Resistance: 10 k Ω or Higher

NG**Repair or replace floor No. 1 wire.****OK**

20

Check floor No. 1 wire (to B+).**PREPARATION:**

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

CHECK:

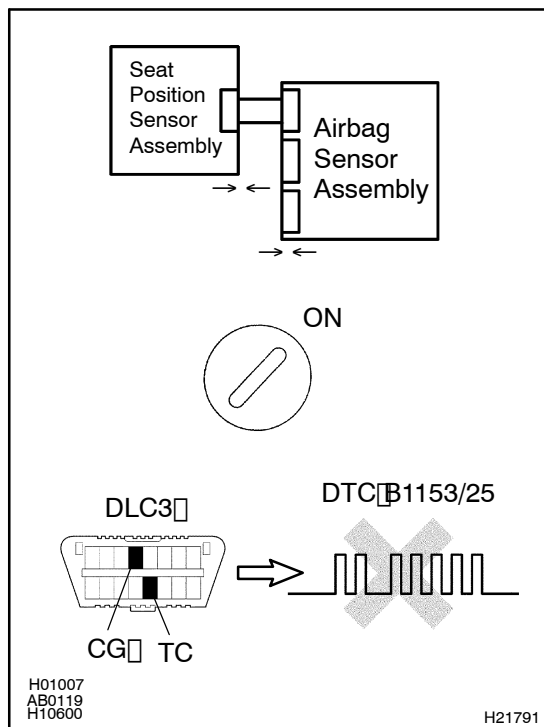
- Turn the ignition switch to ON.
- Measure the voltage between the body ground and each of LSP+ and LSP- of the floor No. 1 wire connector on the airbag sensor assembly side.

OK:

Voltage: Below 1 V

NG**Repair or replace floor No. 1 wire.****OK**

21 Check seat position sensor assembly.



PREPARATION:

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the connectors of the seat position sensor assembly and the airbag sensor assembly.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

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

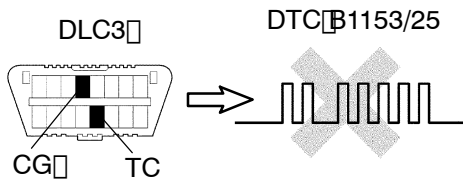
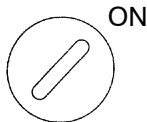
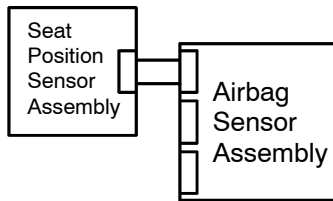
NG

Replace seat position sensor assembly, then go to next step.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

22 Is DTC B1153/25 output again?



H01007
AB0119
H10600

H21791

PREPARATION:

- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

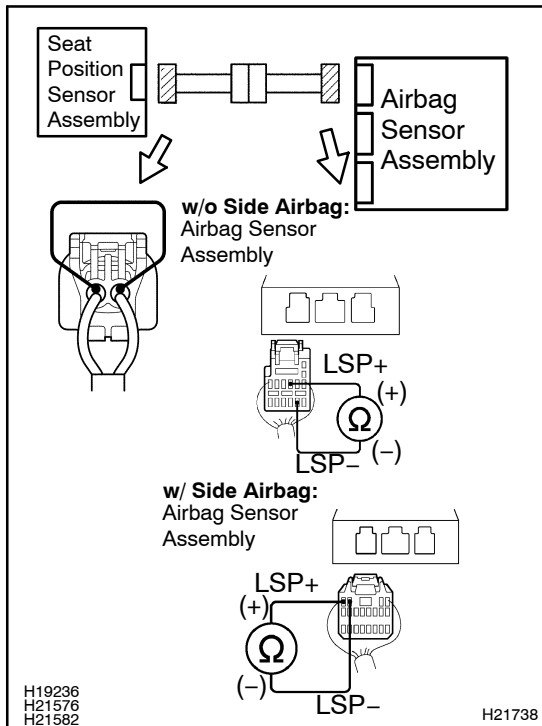
Codes other than code B1153/25 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

23 Check wire harness.**PREPARATION:**

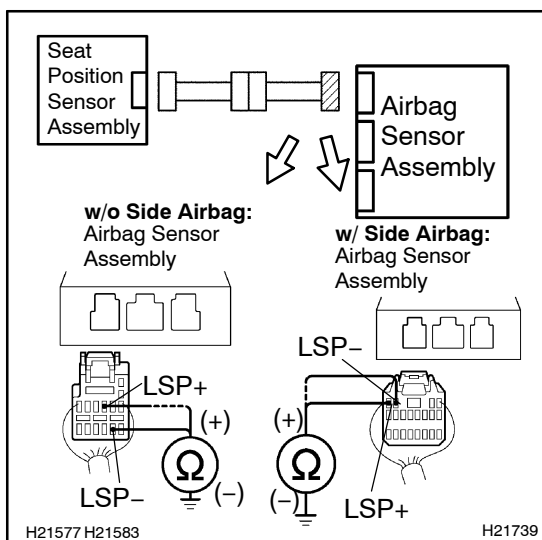
Using a service wire, connect LSP+ and LSP- of the connector on the seat position sensor assembly side between the airbag sensor assembly and the seat position sensor assembly.

CHECK:

Measure the resistance between LSP+ and LSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

OK:

Resistance: Below 1 Ω

NG**Go to step 18.****OK****24 Check wire harness (to ground).****PREPARATION:**

Release the service wire from the connector on the seat position sensor assembly side.

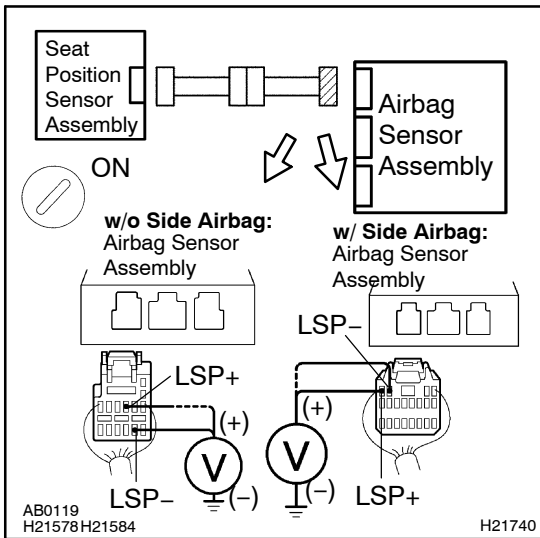
CHECK:

Measure the resistance between the body ground and each of LSP+ and LSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

OK:

Resistance: 10 kΩ or Higher

NG**Go to step 19.****OK**

25**Check wire harness (to B+).****PREPARATION:**

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

CHECK:

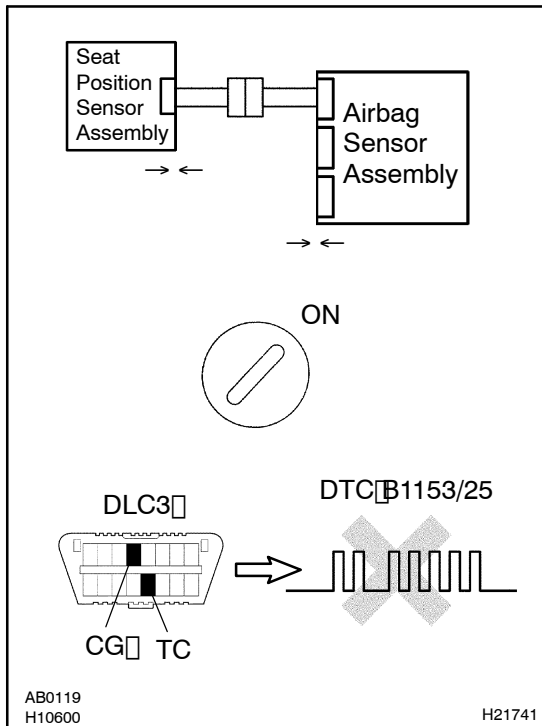
- Turn the ignition switch to ON.
- Measure the voltage between the body ground and each of LSP+ and LSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

OK:

Voltage: Below 1 V

NG**Go to step 20.****OK**

26 Check seat position sensor assembly.



PREPARATION:

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the connectors of the seat position sensor assembly and the airbag sensor assembly.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

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

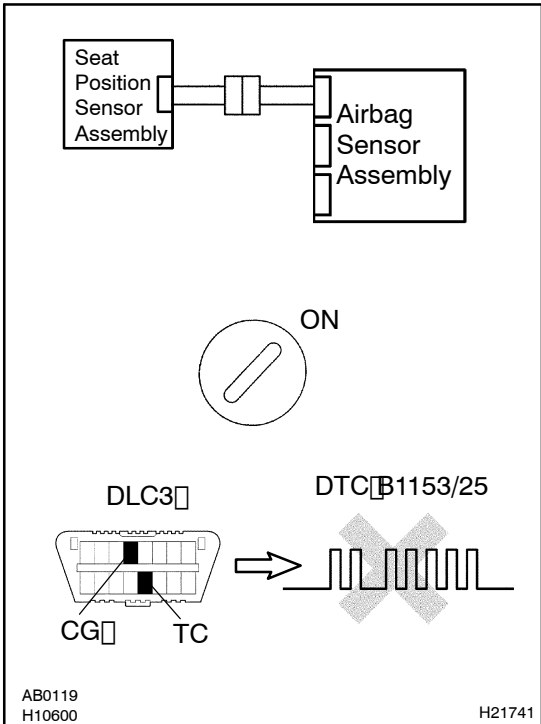
NG

Replace seat position sensor assembly, then go to next step.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

27 Is DTC B1153/25 output again?



PREPARATION:

- (a) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (b) Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- (a) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (b) Clear the DTC stored in memory (See page DI-432).
- (c) Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- (d) Turn the ignition switch to ON, and wait at least for 10 seconds.
- (e) Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

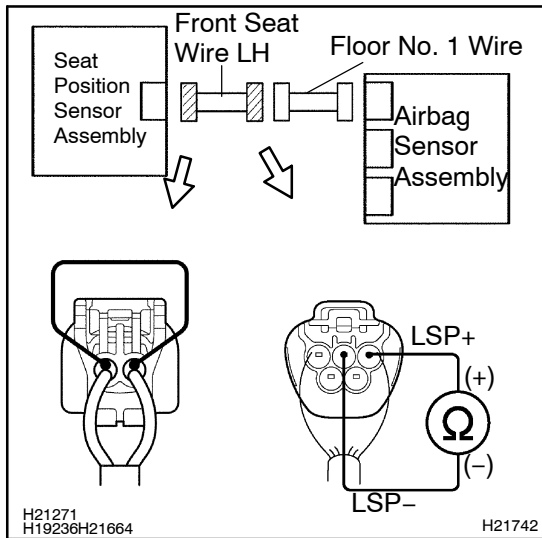
Codes other than code B1153/25 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

28 Check front seat wire LH.**OK****PREPARATION:**

- Disconnect the front seat wire LH connector from the floor No. 1 wire.
- Using a service wire, connect LSP+ and LSP- of the front seat wire LH connector on the seat position sensor assembly side.

CHECK:

Measure the resistance between LSP+ and LSP- of the front seat wire LH connector on the floor No. 1 wire side.

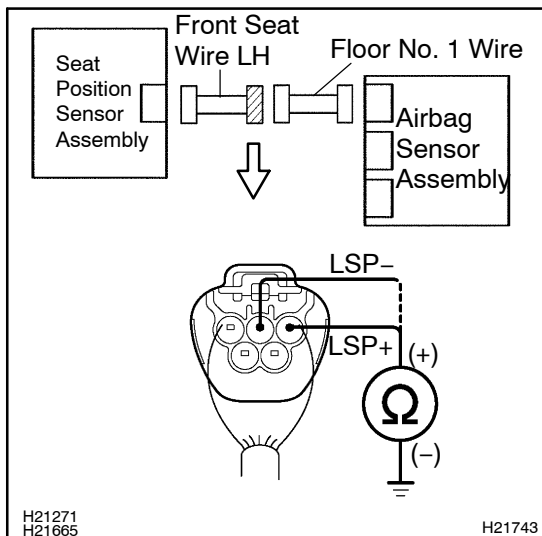
OK:

Resistance: Below 1 Ω

NG

Repair or replace front seat wire LH.

Repair or replace floor No. 1 wire.

29 Check front seat wire LH (to ground).**OK****PREPARATION:**

- Disconnect the front seat wire LH connector from the floor No. 1 wire.
- Release the service wire from the front seat wire LH connector on the seat position sensor assembly side.

CHECK:

Measure the resistance between the body ground and each of LSP+ and LSP- of the front seat wire LH connector on the floor No. 1 wire side.

OK:

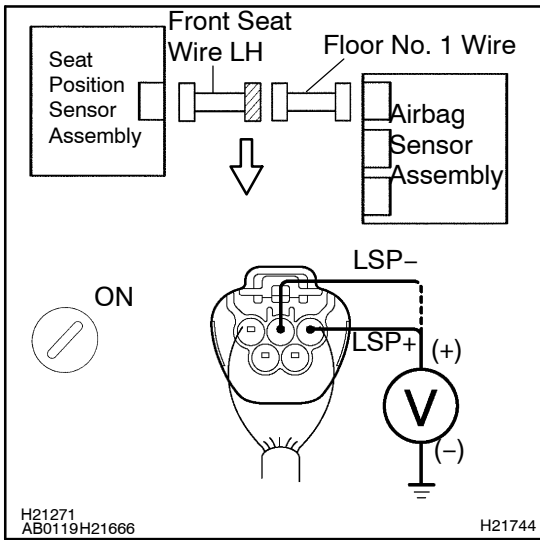
Resistance: 10 k Ω or Higher

NG

Repair and replace floor No. 1 wire.

Repair and replace floor No. 1 wire.

30 Check front seat wire LH (to B+).



PREPARATION:

Disconnect the front seat wire LH connector from the floor No. 1 wire.

CHECK:

Measure the voltage between the body ground and each of LSP+ and LSP- of the front seat wire LH connector on the floor No. 1 wire side.

OK:

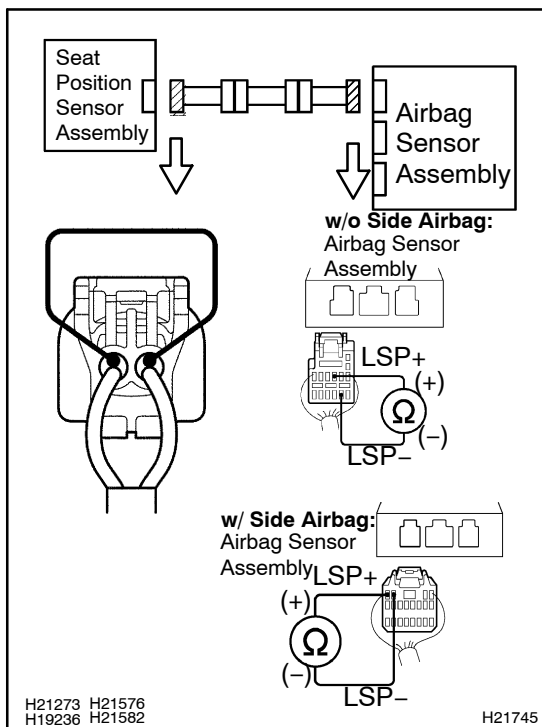
Voltage: Below 1 V

NG

Repair or replace front seat wire LH.

OK

Repair or replace floor No. 1 wire.

31 Check wire harness.**PREPARATION:**

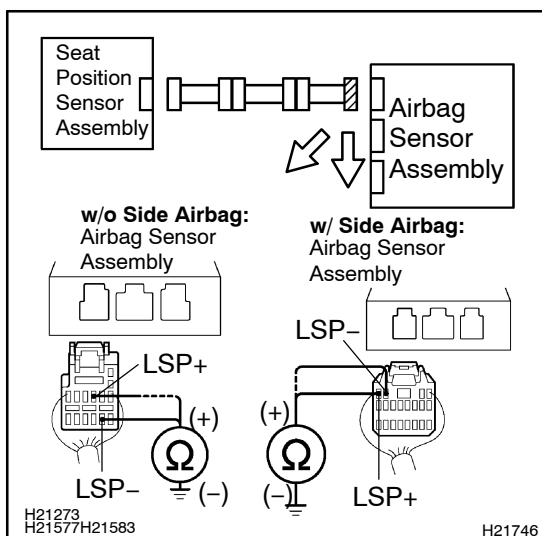
Using a service wire, connect LSP+ and LSP- of the connector on the seat position sensor assembly side between the airbag sensor assembly and the seat position sensor assembly.

CHECK:

Measure the resistance between LSP+ and LSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

OK:

Resistance: Below 1 Ω

NG**Go to step 26.****OK****32 Check wire harness (to ground).****PREPARATION:**

Release the service wire from the connector on the seat position sensor assembly side.

CHECK:

Measure the resistance between the body ground and each of LSP+ and LSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

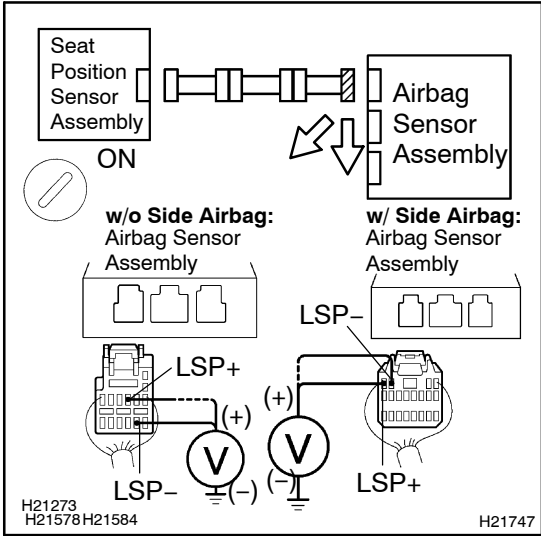
OK:

Resistance: 10 kΩ or Higher

NG**Go to step 28.****OK**

33

Check wire harness (to B+).



PREPARATION:

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

CHECK:

- Turn the ignition switch to ON.
- Measure the voltage between the body ground and each of LSP+ and LSP- of the connector on the airbag sensor assembly side between the seat position sensor assembly and the airbag sensor assembly.

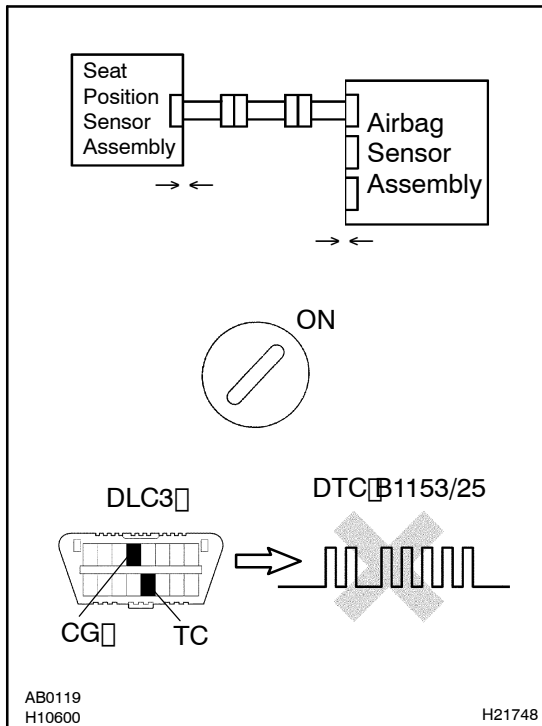
OK:

Voltage: Below 1 V

NG

Go to step 30.

OK

34 Check seat position sensor assembly.**PREPARATION:**

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the connectors of the seat position sensor assembly and the airbag sensor assembly.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:**DTC B1153/25 is not output.****HINT:**

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

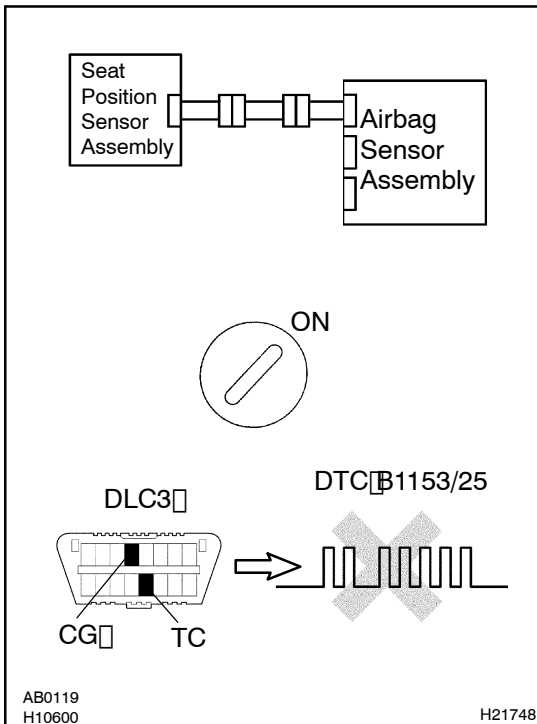
NG

Replace seat position sensor assembly, then go to next step.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

35 Is DTC B1153/25 output again?



PREPARATION:

- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Clear the DTC stored in memory (See page DI-432).
- Turn the ignition switch to LOCK, and wait at least for 10 seconds.
- Turn the ignition switch to ON, and wait at least for 10 seconds.
- Check the DTC (See page DI-432).

OK:

DTC B1153/25 is not output.

HINT:

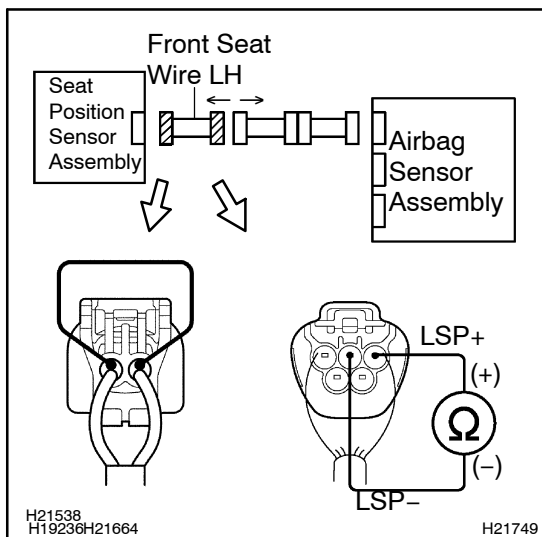
Codes other than code B1153/25 may be output at this time, but they are not relevant to this check.

NG

Replace airbag sensor assembly.

OK

From the results of the above inspection, the malfunctioning part can now be considered normal. To make sure of this, use the simulation method to check.

36 Check front seat wire LH.**OK****PREPARATION:**

- Disconnect the front seat wire LH connector on the airbag sensor assembly side.
- Using a service wire, connect LSP+ and LSP- of the front seat wire LH connector on the seat position sensor assembly side.

CHECK:

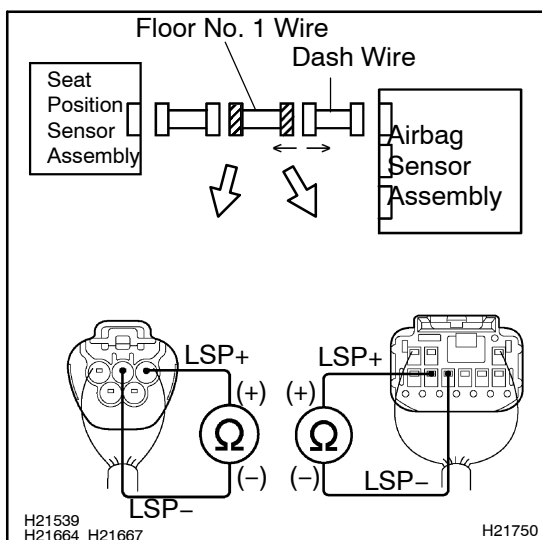
Measure the resistance between LSP+ and LSP- of the front seat wire LH connector on the airbag sensor assembly side.

OK:

Resistance: Below 1 Ω

NG

Repair or replace front seat wire LH.

37 Check floor No. 1 wire.**OK****PREPARATION:**

- Disconnect the floor No. 1 wire connector from the dash wire.
- Using a service wire, connect LSP+ and LSP- of the floor No. 1 wire connector on the front seat wire LH side.

CHECK:

Measure the resistance between LSP+ and LSP- of the floor No. 1 wire connector on the dash wire side.

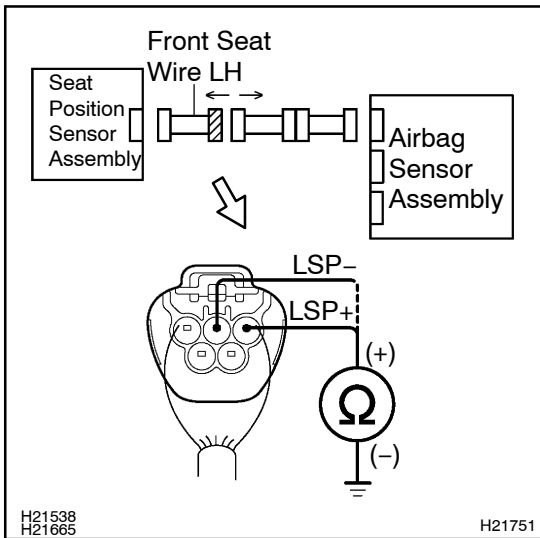
OK:

Resistance: Below 1 Ω

NG

Repair or replace floor No. 1 wire.

Repair or replace dash wire.

38 Check front seat wire LH (to ground).**PREPARATION:**

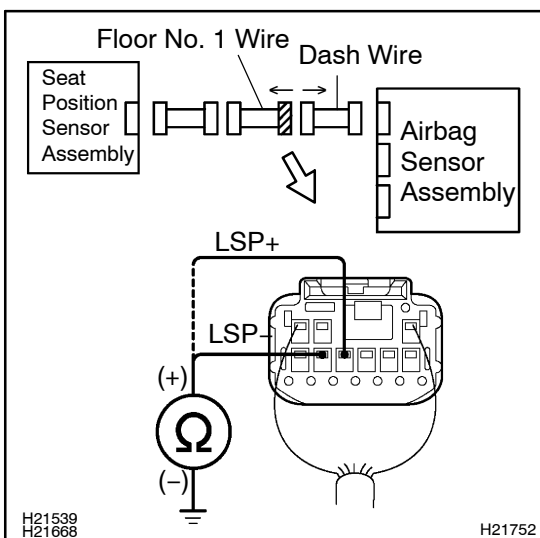
Disconnect the front seat wire LH connector from the airbag sensor assembly side.

CHECK:

Measure the resistance between the body ground and each of LSP+ and LSP- of the front seat wire LH connector on the airbag sensor assembly side.

OK:

Resistance: 10 kΩ or Higher

NG**Repair and replace front seat wire LH.****OK****39 Check floor No. 1 wire (to ground).****PREPARATION:**

Disconnect the floor No. 1 wire connector from the dash wire.

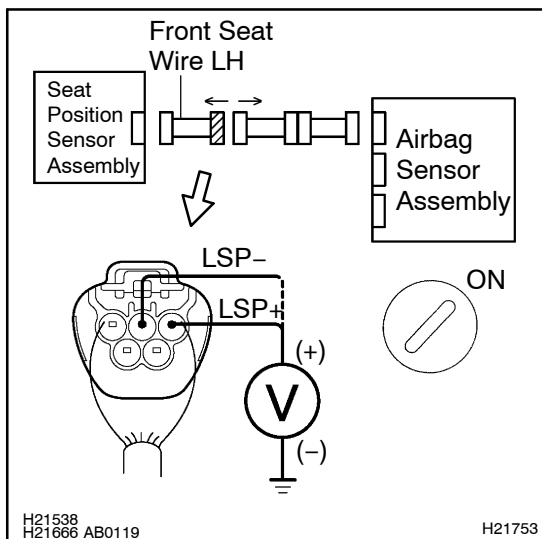
CHECK:

Measure the resistance between the body ground and each of LSP+ and LSP- of the floor No. 1 wire connector on the dash wire side.

OK:

Resistance: 10 kΩ or Higher

NG**Repair and replace floor No. 1 wire.****OK****Repair or replace dash wire.**

40 Check front seat wire LH (to B+).**PREPARATION:**

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Disconnect the front seat wire LH connector on the airbag sensor assembly side.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

Measure the voltage between the body ground and each of LSP+ and LSP- of the front seat wire LH connector on the airbag sensor assembly side.

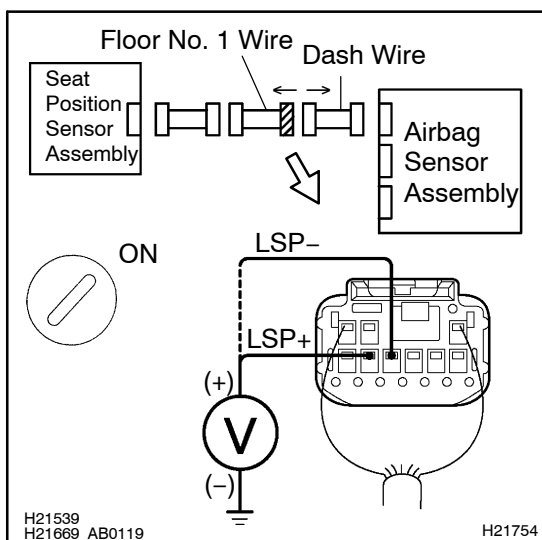
OK:

Voltage: Below 1 V

NG

Repair and replace front seat wire LH.

OK

41 Check floor No. 1 wire (to B+).**PREPARATION:**

- Turn the ignition switch to LOCK.
- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Disconnect the floor No. 1 wire connector from the dash wire.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.

CHECK:

Measure the voltage between the body ground and each of LSP+ and LSP- of the floor No. 1 wire connector on the dash wire side.

OK:

Voltage: Below 1 V

NG

Repair and replace floor No. 1 wire.

OK

Repair or replace dash wire.