

DTC	B1653/35	Seat Position Airbag Sensor Circuit Malfunction
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DESCRIPTION

RS

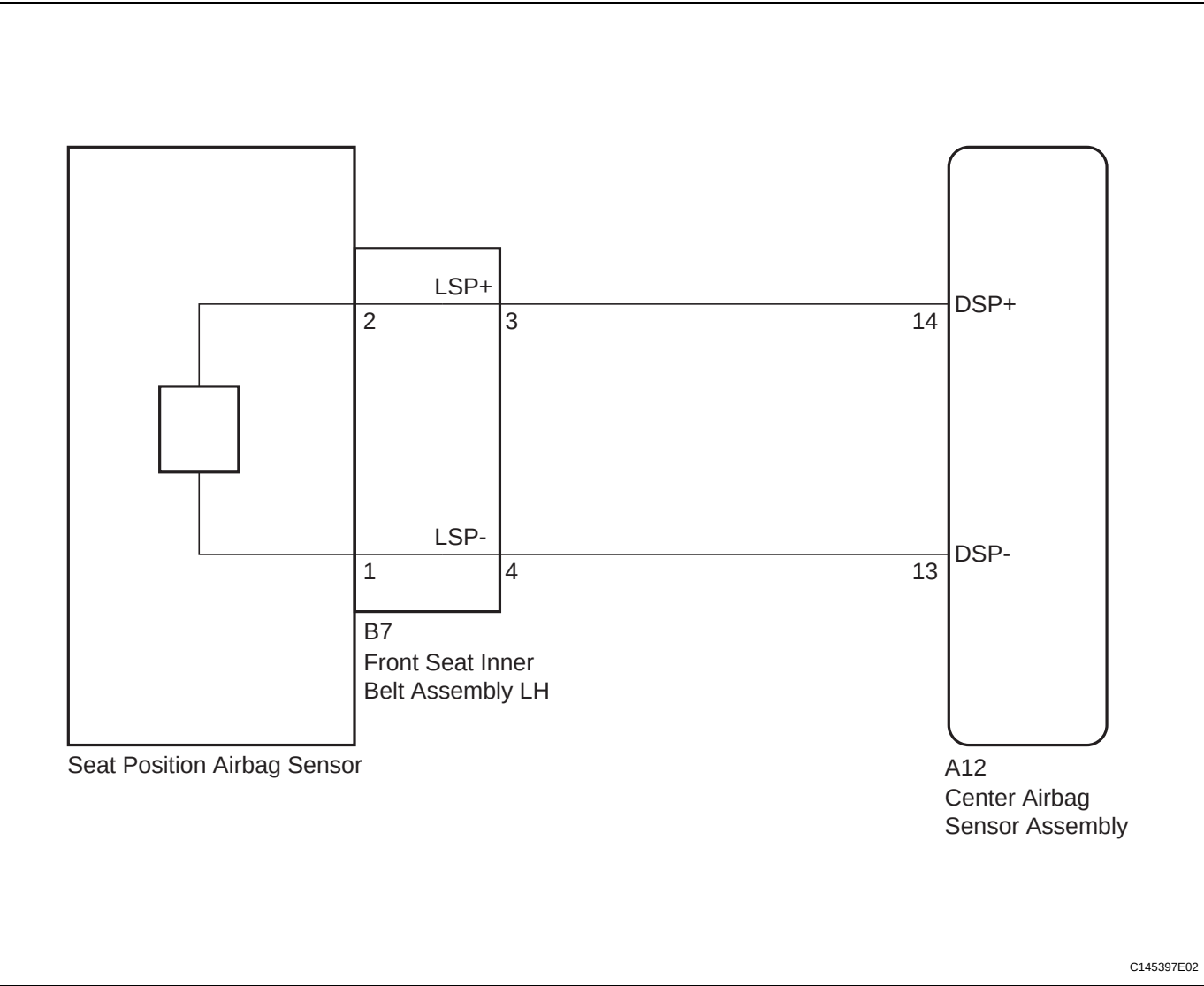
The seat position airbag sensor circuit consists of the center airbag sensor assembly and the seat position airbag sensor.

DTC B1653/35 is recorded when a malfunction is detected in the seat position airbag sensor circuit.

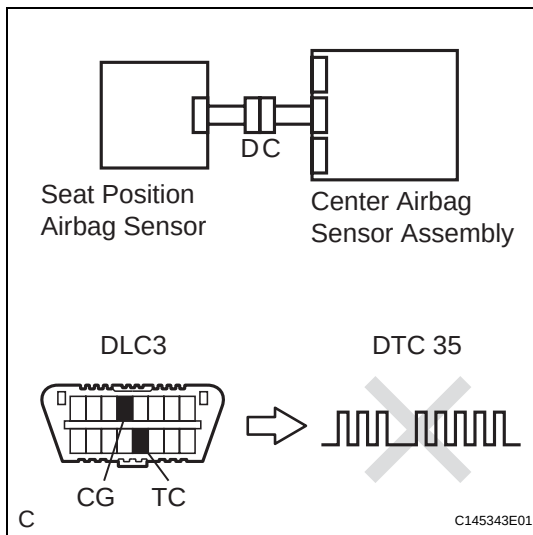
DTC No.	DTC Detecting Condition	Trouble Area
B1653/35	- The center airbag sensor assembly receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the seat position airbag sensor circuit for 2 seconds. - Seat position airbag sensor malfunction - Center airbag sensor assembly malfunction	- Floor wire (*1) - Instrument Panel Wire No. 3 (*2) - Front seat inner belt assembly LH - Seat position airbag sensor - Center airbag sensor assembly

*1: with Side and curtain shield
*2: without Side and curtain shield

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 the memory (See page RS-34).
- (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 for DTCs (See page RS-34).

OK:**DTC B1653/35 is not output.****HINT:**

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

OK**USE SIMULATION METHOD TO CHECK****NG****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 and the seat position airbag sensor.

OK:**The connectors are properly connected.****NG****CONNECT CONNECTORS, THEN GO TO STEP 1****OK****3 CHECK CONNECTORS**

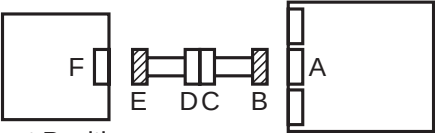
- (a) Disconnect the connectors from the center airbag sensor assembly and the seat position airbag sensor.
- (b) Check that the connectors are not damaged.

OK:**The connectors are not deformed or damaged.****NG****REPAIR OR REPLACE WIRE HARNESS****OK****RS**

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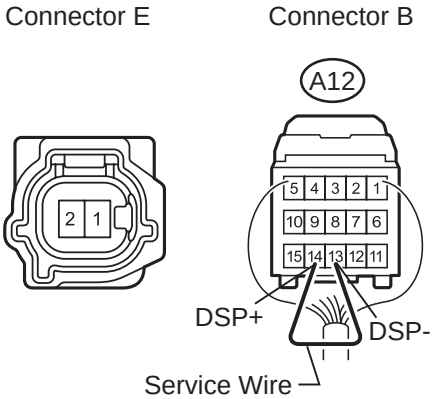
4

CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (OPEN)



Seat Position Airbag Sensor

Center Airbag Sensor Assembly



Connector E

Connector B

DSP+

DSP-

Service Wire

P

C145339E02

- (a) Using a service wire, connect terminals 14 (DSP+) and 13 (DSP-) of connector B.

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

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

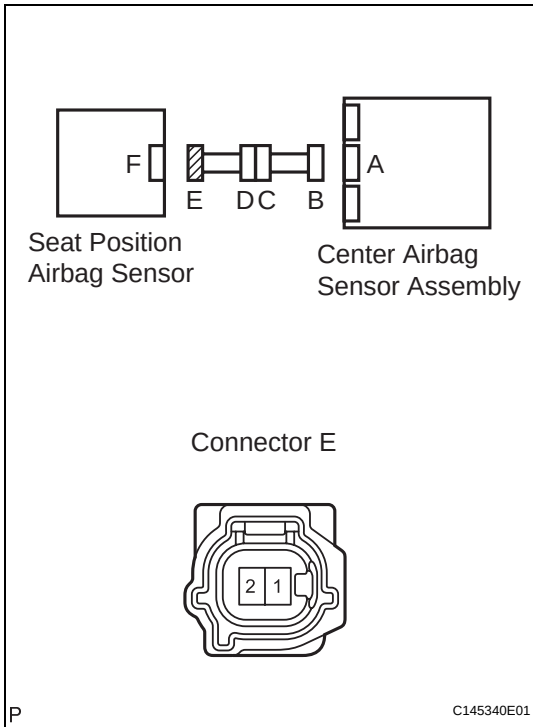
Standard resistance

Tester Connection	Condition	Specified Condition
1 - 2	Always	Below 1 Ω

NG

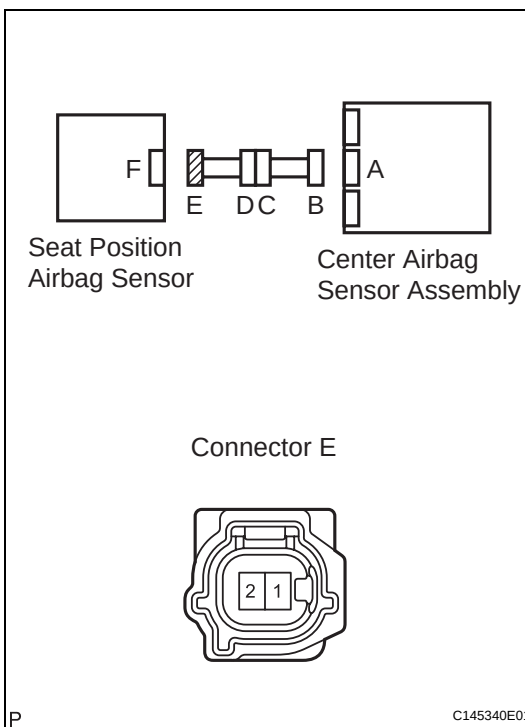
Go to step 11

OK

5 CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (SHORT)

- (a) Disconnect the service wire from connector B.
 (b) 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
1 - 2	Always	1 MΩ or higher

NG**Go to step 12****OK****6 CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (SHORT 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 voltage**

Tester Connection	Condition	Specified Condition
1 - Body ground	Ignition switch ON	Below 1 V
2 - Body ground	Ignition switch ON	Below 1 V

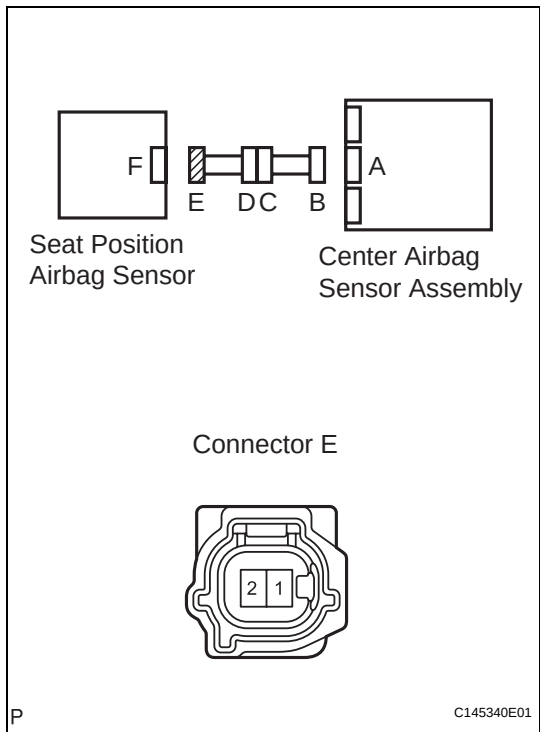
NG**Go to step 13****OK**

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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
1 - Body ground	Always	1 MΩ or higher
2 - Body ground	Always	1 MΩ or higher

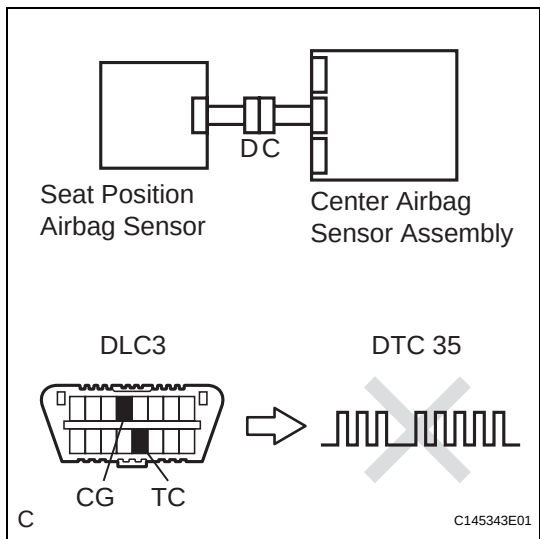
NG

Go to step 14

OK

8

CHECK SEAT POSITION AIRBAG SENSOR



- (a) Connect the connectors to the center airbag sensor assembly 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 the memory (See page RS-34).
- (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 for DTCs (See page RS-34).

OK:

DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

OK

USE SIMULATION METHOD TO CHECK

NG

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REPLACE SEAT POSITION AIRBAG SENSOR

- (a) Turn the ignition switch to the LOCK position.

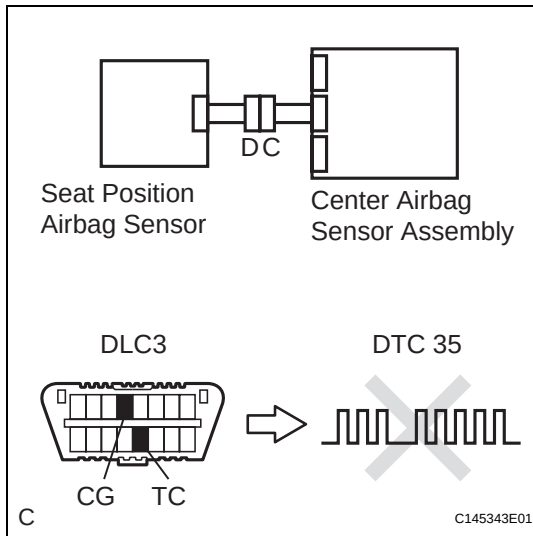
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Replace the seat position airbag sensor (See page RS-328).

HINT:

Perform 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 the memory (See page RS-34).
- (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 for DTCs (See page RS-34).

OK:

DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

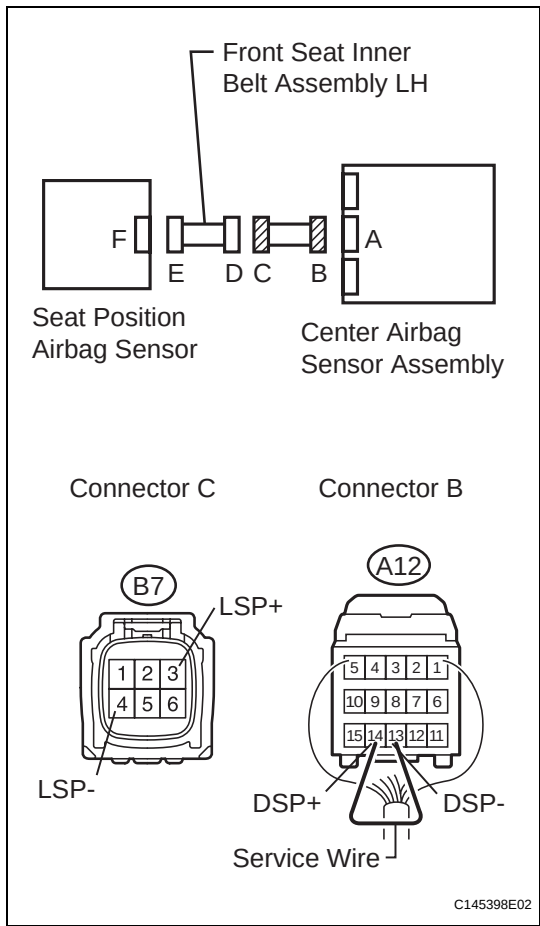
OK

END

RS

11

CHECK WIRE HARNESS (OPEN)



- (a) with Side and curtain shield airbag:
Disconnect the floor wire connector from the front seat inner belt assembly LH.
HINT:
The service wire has already been inserted into connector B.
- (b) without Side and curtain shield airbag:
Disconnect the instrument panel wire No. 3 connector from the front seat inner belt assembly LH.
HINT:
The service wire has already been inserted into connector B.
- (c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
B7-3 (LSP+) - B7-4 (LSP-)	Always	Below 1 Ω

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

B

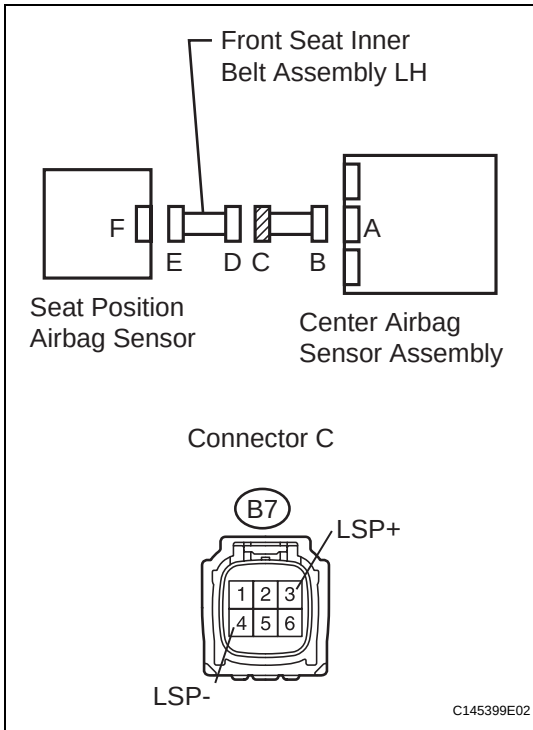
REPAIR OR REPLACE FLOOR WIRE

C

REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3

A

REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

12 CHECK WIRE HARNESS (SHORT)

- (a) with Side and curtain shield airbag:
Disconnect the floor wire connector from the front seat inner belt assembly LH.
- (b) without Side and curtain shield airbag:
Disconnect the instrument panel wire No. 3 connector from the front seat inner belt assembly LH.
- (c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
B7-3 (LSP+) - B7-4 (LSP-)	Always	1 MΩ or higher

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

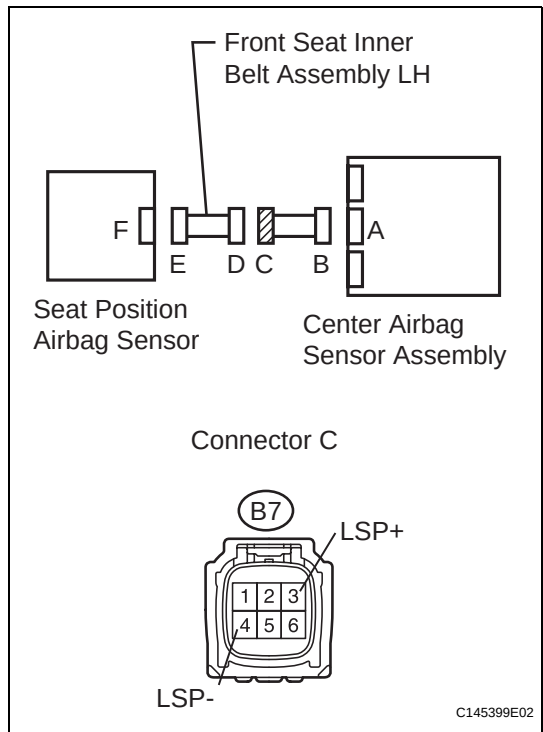
B**REPAIR OR REPLACE FLOOR WIRE****C****REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3****A****REPLACE FRONT SEAT INNER BELT ASSEMBLY LH****RS**

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RS

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CHECK WIRE HARNESS (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) with Side and curtain shield airbag:
Disconnect the floor wire connector from the front seat inner belt assembly LH.
- (d) without Side and curtain shield airbag:
Disconnect the instrument panel wire No. 3 connector from the front seat inner belt assembly LH.
- (e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (f) Turn the ignition switch to the ON position.
- (g) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
B7-3 (LSP+) - Body ground	Ignition switch ON	Below 1 V
B7-4 (LSP-) - Body ground	Ignition switch ON	Below 1 V

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

B

REPAIR OR REPLACE FLOOR WIRE

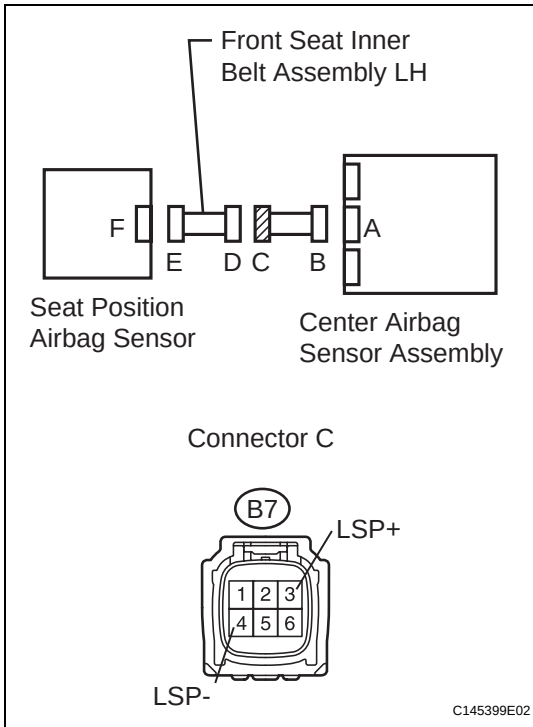
C

REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3

A

REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

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14 CHECK WIRE HARNESS (SHORT 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.
- with Side and curtain shield airbag:
Disconnect the floor wire connector from the front seat inner belt assembly LH.
- without Side and curtain shield airbag:
Disconnect the instrument panel wire No. 3 connector from the front seat inner belt assembly LH.
- Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
B7-3 (LSP+) - Body ground	Always	1 MΩ or higher
B7-4 (LSP-) - Body ground	Always	1 MΩ or higher

Result

Result	Proceed to
OK	A
NG (with Side and curtain shield airbag)	B
NG (without Side and curtain shield airbag)	C

B**REPAIR OR REPLACE FLOOR WIRE****C****REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO. 3****A****REPLACE FRONT SEAT INNER BELT ASSEMBLY LH****RS**

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