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Model Year Start: 2008	Model: GX470	Prod Date Range: [07/2007 -]
Title: SUPPLEMENTAL RESTRAINT SYSTEM: AIRBAG SYSTEM: B1153/25; Seat Position Airbag Sensor Circuit Malfunction; 2008 MY GX470 [07/2007 -]		

DTC	B1153/25	Seat Position Airbag Sensor Circuit Malfunction
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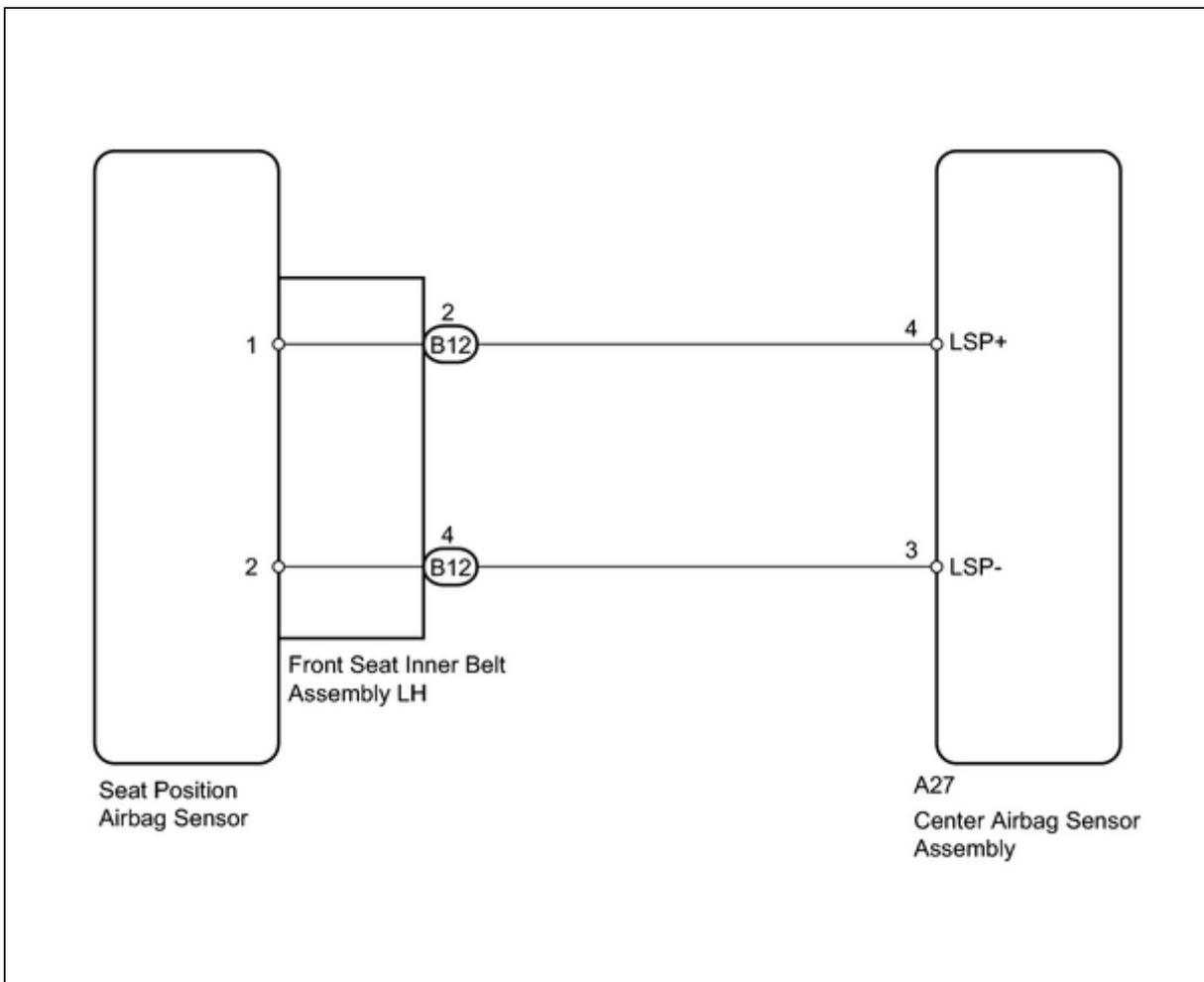
DESCRIPTION

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	<p>When one of the following conditions is met:</p> <ul style="list-style-type: none"> The center airbag sensor assembly detects a line short signal, open signal, short to ground signal, or short to B+ signal in the seat position airbag sensor circuit. Seat position airbag sensor malfunction Center airbag sensor assembly malfunction 	<ul style="list-style-type: none"> Seat position airbag sensor Center airbag sensor assembly Front seat inner belt assembly LH Floor wire No. 2

WIRING DIAGRAM

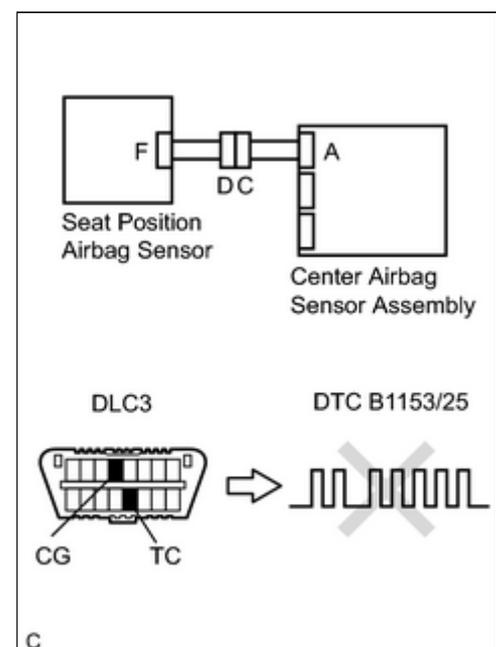


INSPECTION PROCEDURE

PROCEDURE

1.	CHECK DTC
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(a) Turn the ignition switch to the ON position, and wait for at least 60 seconds.



(b) Clear the DTCs stored in memory INFO.

- (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  .

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 CONNECTORS
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- (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, seat position airbag sensor and front seat inner belt assembly LH.

OK:
The connectors are properly connected.

HINT:

If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

- (d) Disconnect the connectors from the center airbag sensor assembly, seat position airbag sensor and front seat inner belt assembly LH.
- (e) Check that the terminals of the connectors are not damaged.

OK:
The terminals are not deformed or damaged.

NG  **REPLACE WIRE HARNESS**

OK

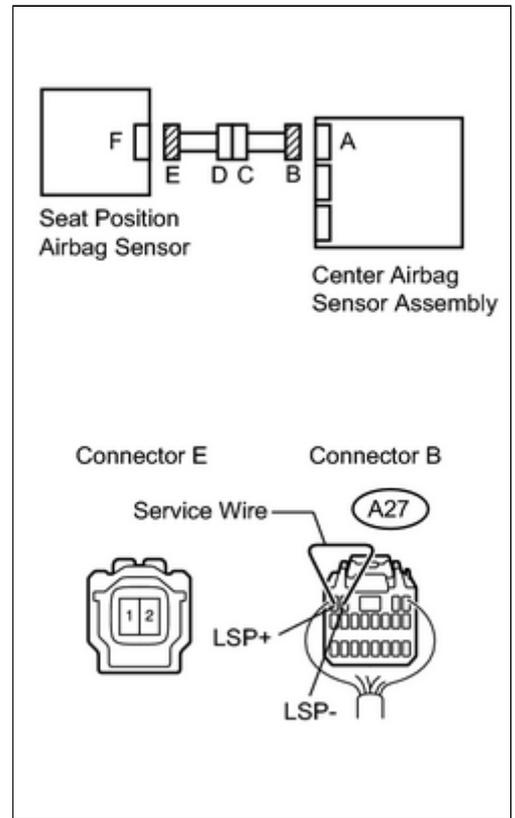


3.	CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (OPEN)
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- (a) Using a service wire, connect A27-4 (LSP+) and A27-3 (LSP-) of connector B.

NOTICE:

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



(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	Below 1 Ω

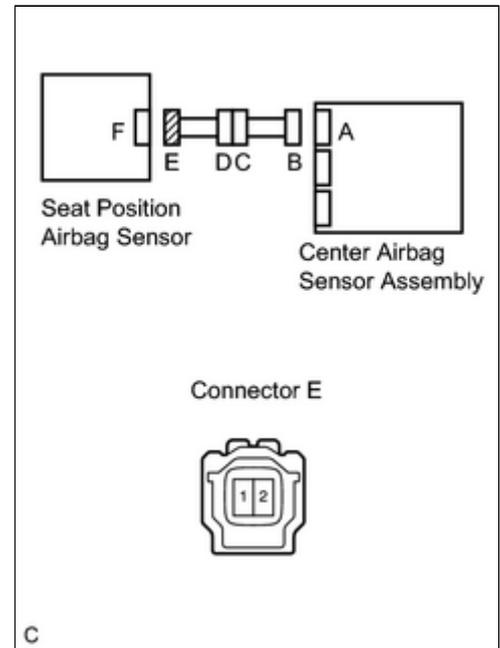
NG ► GO TO STEP 10

OK



4. CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (SHORT TO GROUND)

(a) Disconnect the service wire from connector B.



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

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - Body ground	Always	1M Ω or higher
2 - Body ground	Always	1M Ω or higher

NG ► **GO TO STEP 11**

OK

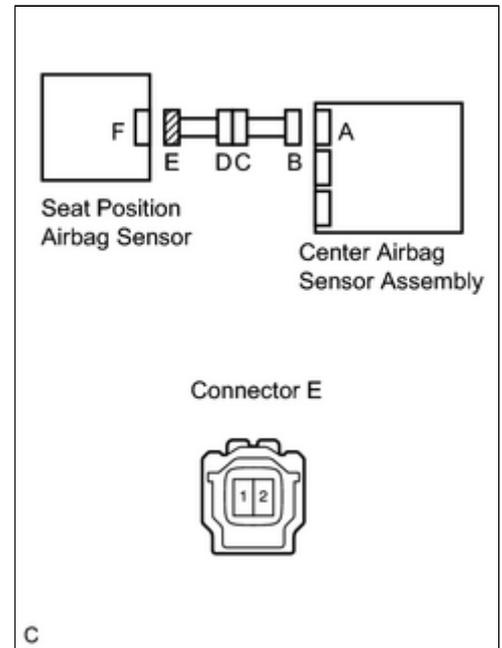


5. CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (SHORT)

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

Standard resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - 2	Always	1M Ω or higher

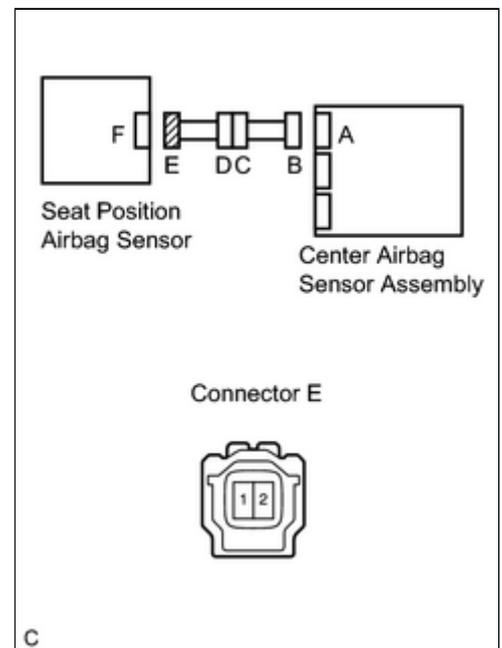


NG ► GO TO STEP 12

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
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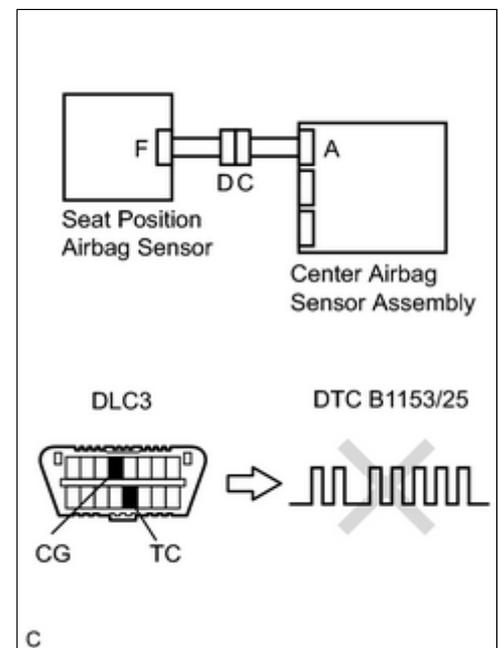
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
1 - Body ground	Ignition switch ON	Below 1 V
2 - Body ground	Ignition switch ON	Below 1 V

NG ► GO TO STEP 13

OK



7. CHECK 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) Connect the connectors to the seat position airbag sensor and the center airbag sensor assembly.

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

(e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.

(f) Clear the DTCs stored in memory **INFO** .

(g) Turn the ignition switch to the LOCK position.

(h) Turn the ignition switch to the ON position, and wait for at least 60 seconds.

(i) Check the DTCs **INFO** .

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 8

OK ► **USE SIMULATION METHOD TO CHECK**

8. 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 **INFO**.

HINT:

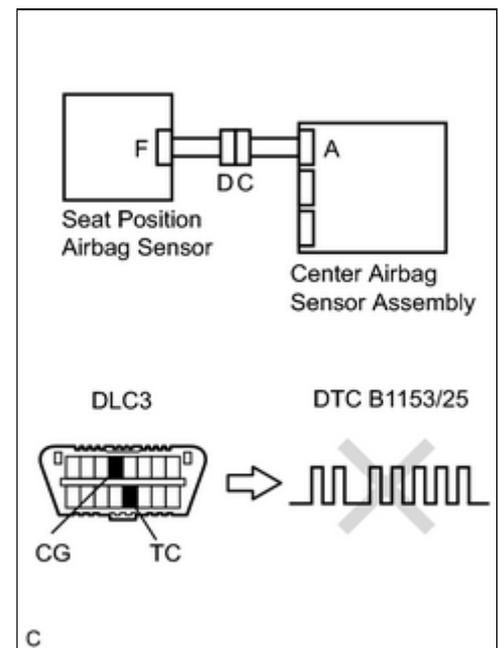
Perform the inspection using parts from a normal vehicle if possible.

NEXT



9. 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 **INFO**.
- (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 **INFO**.

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

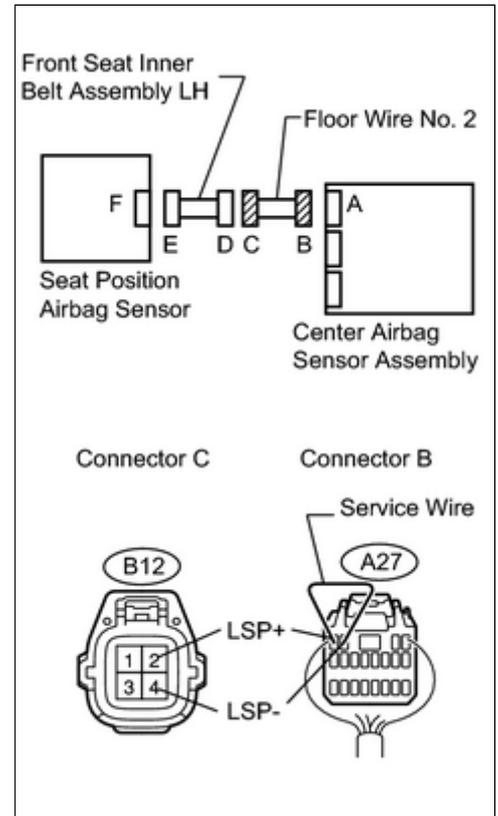
OK ▶ END

10. CHECK FLOOR WIRE NO. 2 (OPEN)

(a) Disconnect the front seat inner belt assembly LH connector from the floor wire No. 2 connector.

HINT:

The service wire has already been inserted into connector B.



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

Standard resistance:

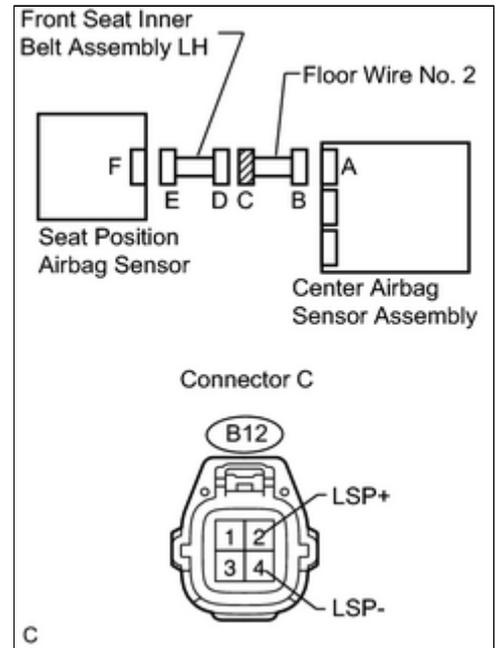
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
B12-2 (LSP+) - B12-4 (LSP-)	Always	Below 1 Ω

NG ▶ REPLACE FLOOR WIRE NO. 2

OK ▶ REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

11. CHECK FLOOR WIRE NO. 2 (SHORT TO GROUND)

(a) Disconnect the front seat inner belt assembly LH connector from the floor wire No. 2 connector.



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

Standard resistance:

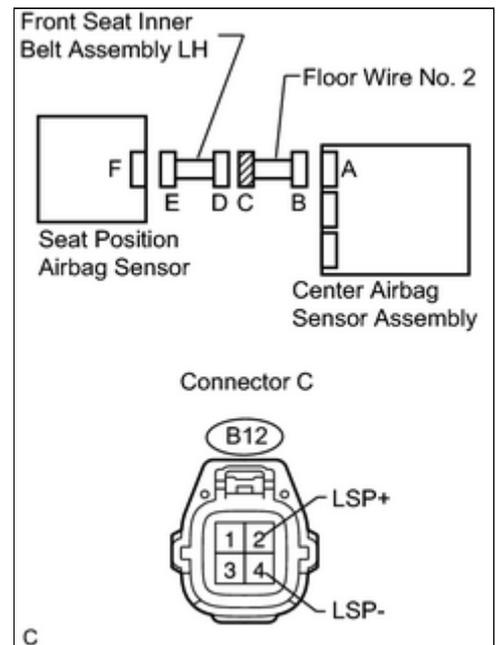
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
B12-2 (LSP+) - Body ground	Always	1MΩ or higher
B12-4 (LSP-) - Body ground	Always	1MΩ or higher

NG ► REPLACE FLOOR WIRE NO. 2

OK ► REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

12. CHECK FLOOR WIRE NO. 2 (SHORT)

(a) Disconnect the front seat inner belt assembly LH connector from the floor wire No. 2 connector.



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

Standard resistance:

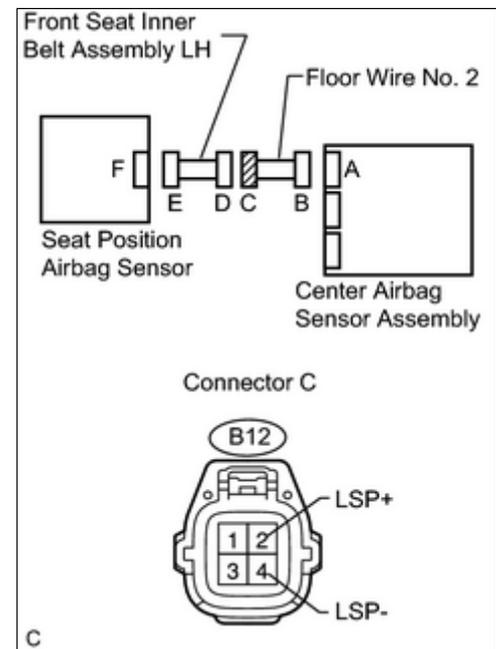
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
B12-2 (LSP+) - B12-4 (LSP-)	Always	1MΩ or higher

NG ▶ REPLACE FLOOR WIRE NO. 2

OK ▶ REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

13. CHECK FLOOR WIRE NO. 2 (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 front seat inner belt assembly LH connector from the floor wire No. 2 connector.

(d) Connect the negative (-) terminal cable to the battery, and wait for at 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
B12-2 (LSP+) - Body ground	Ignition switch ON	Below 1 V
B12-4 (LSP-) - Body ground	Ignition switch ON	Below 1 V

NG ▶ REPLACE FLOOR WIRE NO. 2

OK ▶ REPLACE FRONT SEAT INNER BELT ASSEMBLY LH