

DTC	B1100/31	AIRBAG SENSOR ASSY MALFUNCTION
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CIRCUIT DESCRIPTION

The airbag sensor assy center consists of a airbag sensor assy center, a safing sensor, a drive circuit, a diagnosis circuit and an ignition control, etc.

It receives signals from the airbag sensor, judges whether or not the SRS must be activated, and detects a diagnosis system malfunction.

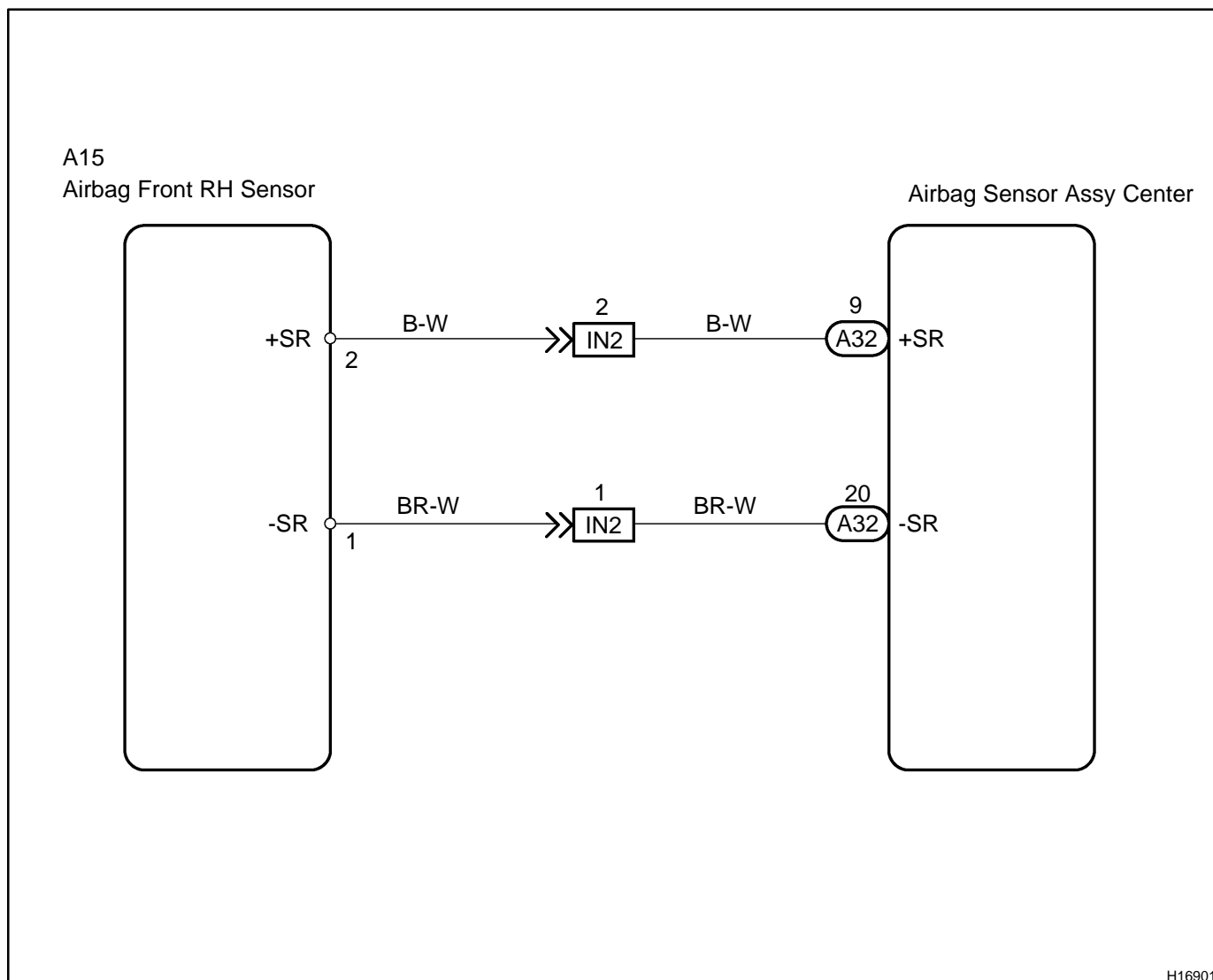
DTC B1100/31 is recorded when occurrence of a malfunction in the airbag sensor assy center is detected.

DTC No.	DTC Detecting Condition	Trouble Area
B1100/31	<ul style="list-style-type: none"> • Short in front airbag sensor RH circuit (to ground) • Short in front airbag sensor RH circuit (to B+) • Short in front airbag sensor RH circuit • Short in front airbag sensor LH circuit (to ground) • Short in front airbag sensor LH circuit (to B+) • Short in front airbag sensor LH circuit • Airbag sensor assy center malfunction 	<ul style="list-style-type: none"> • Airbag sensor assy center • Instrument panel wire • Engine room main wire

HINT:

When a malfunction code other than code B1100/31 is displayed at the same time, first repair the malfunction indicated by the malfunction code other than code B1100/31.

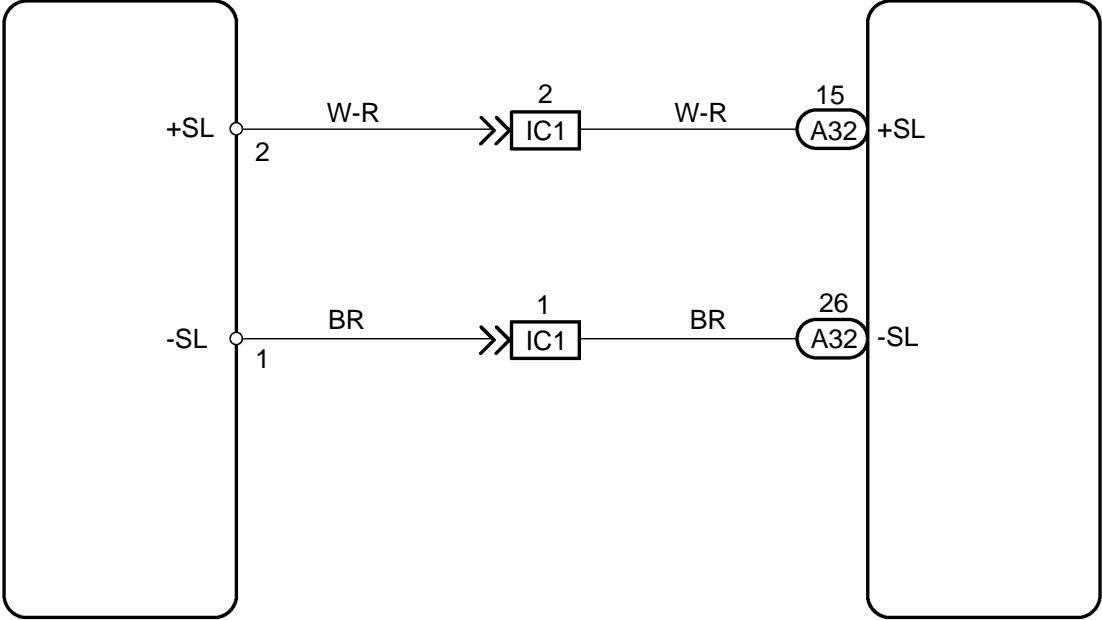
WIRING DIAGRAM



H16901

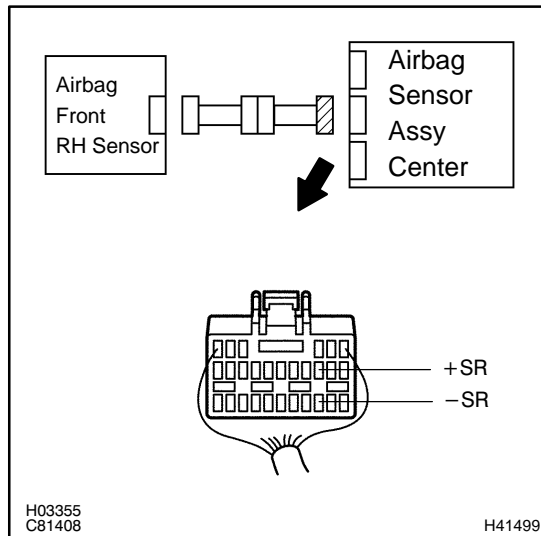
A16
Airbag Sensor Front LH

Airbag Sensor Assy Center

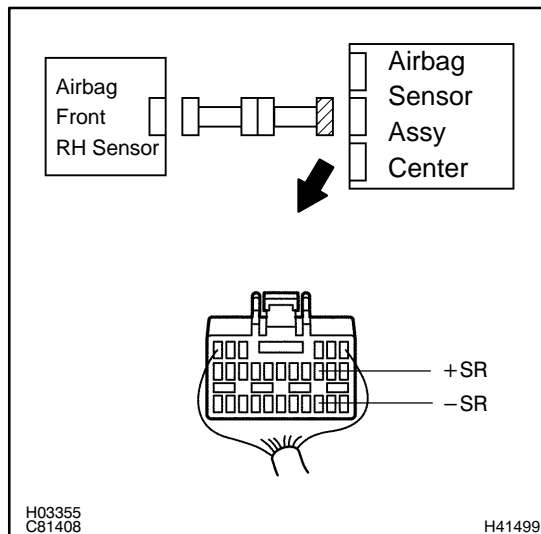


H16901

INSPECTION PROCEDURE

1 CHECK FRONT AIRBAG SENSOR (RH) CIRCUIT (TO GROUND)

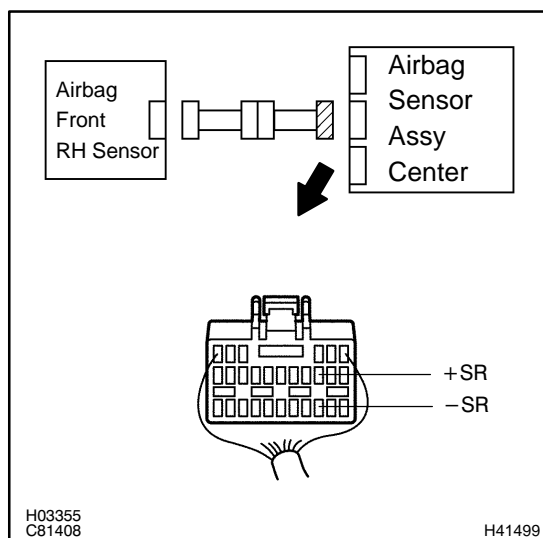
- (a) Turn the ignition switch to LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Disconnect the connectors between the airbag front RH sensor and the airbag sensor assy center.
- (d) Measure the resistance between the body ground and each of +SR and -SR of the connector on the airbag sensor assy center side between the airbag front RH sensor and the airbag sensor assy center.

OK:**Resistance: 1 MΩ or Higher****NG****Go to step 8****OK****2 CHECK FRONT AIRBAG SENSOR (RH) CIRCUIT (TO B+)**

- (a) Connect the negative (-) terminal cable to the battery.
- (b) Turn the ignition switch to ON position.
- (c) Measure the voltage between the body ground and each of +SR and -SR of the connector on the airbag sensor assy center side between the airbag front RH sensor and the airbag sensor assy center.

OK:**Voltage: Below 1 V****NG****Go to step 9****OK**

3 CHECK FRONT AIRBAG SENSOR (RH) CIRCUIT(SHORT)



- Turn the ignition switch to LOCK position.
- Measure the resistance between +SR and -SR of the connector on the airbag sensor assy center side between the airbag front RH sensor and the airbag sensor assy center.

OK:

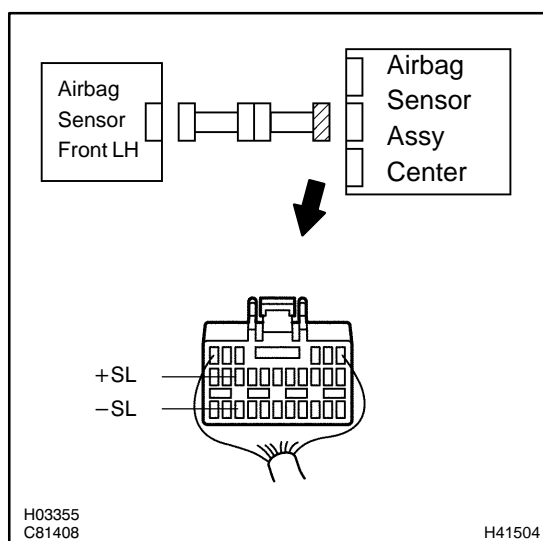
Resistance: 1 MΩ or Higher

NG

Go to step 10

OK

4 CHECK FRONT AIRBAG SENSOR (LH) CIRCUIT (TO GROUND)



- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Disconnect the connectors between the airbag sensor front LH and the airbag sensor assy center.
- Measure the resistance between the body ground and each of +SL and -SL of the connector on the airbag sensor assy center side between the airbag sensor front LH and the airbag sensor assy center.

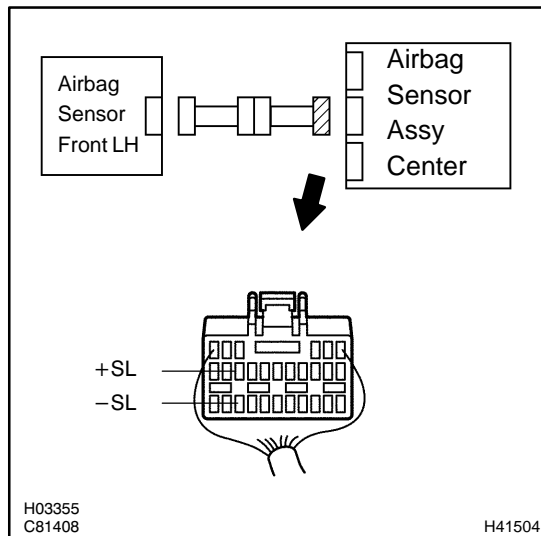
OK:

Resistance: 1 MΩ or Higher

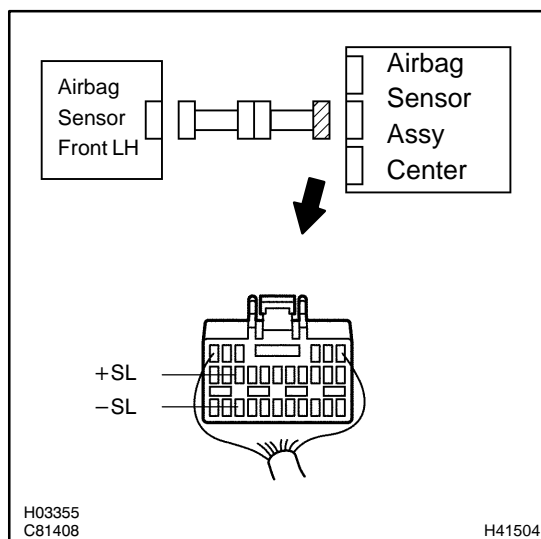
NG

Go to step 11

OK

5 CHECK FRONT AIRBAG SENSOR (LH) CIRCUIT (TO B+)

- (a) Connect the negative (-) terminal cable to the battery.
- (b) Turn the ignition switch to ON position.
- (c) Measure the voltage between the body ground and each of +SL and -SL of the connector on the airbag sensor assy center side between the airbag sensor front LH and the airbag sensor assy center.

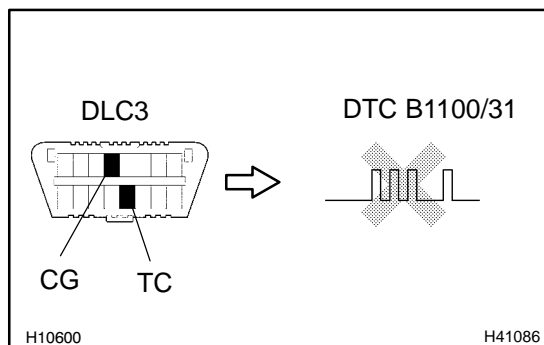
OK:**Voltage: Below 1 V****NG****Go to step 12****OK****6 CHECK FRONT AIRBAG SENSOR (LH) CIRCUIT(SHORT)**

- (a) Turn the ignition switch to LOCK position.
- (b) Measure the resistance between +SL and -SL of the connector on the airbag sensor assy center side between the airbag sensor front LH and the airbag sensor assy center.

OK:**Resistance: 1 MΩ or Higher****NG****Go to step 13****OK**

7 CHECK AIR BAG SENSOR ASSY CENTER

SST 09843-18040

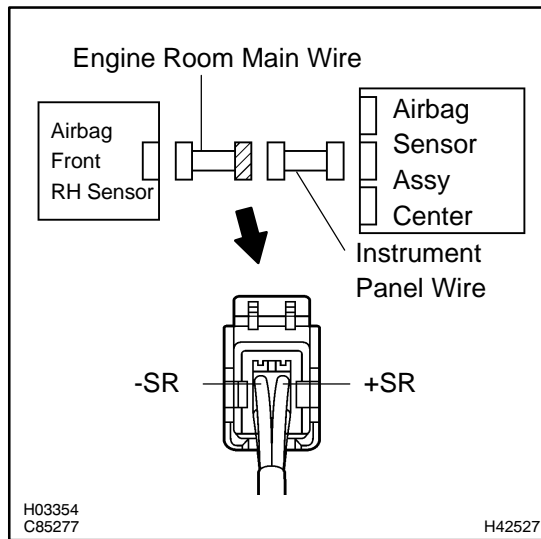


- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Connect the connectors of all the SRS components.
- Connect the negative (-) terminal cable to the battery, and wait at least for 2 seconds.
- Turn the ignition switch to ON position, and wait at least for 10 seconds.
- Clear the DTC stored in the memory (See page 05-615).
- Turn the ignition switch to LOCK position, and wait at least for 10 seconds.
- Turn the ignition switch to ON position, and wait at least for 10 seconds.
- Check the DTC (See page 05-615).

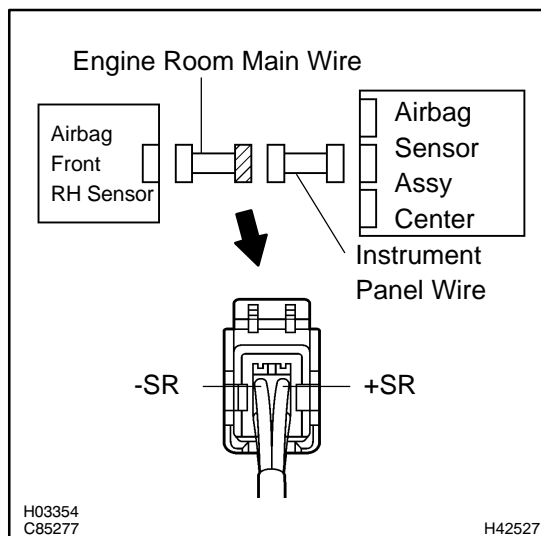
OK:**DTC B1100/31 is not output.****HINT:**

Codes other than code B1100/31 may be output at this time, but they are not relevant to this check.

NG**REPLACE AIR BAG SENSOR ASSY CENTER****OK****USE SIMULATION METHOD TO CHECK**

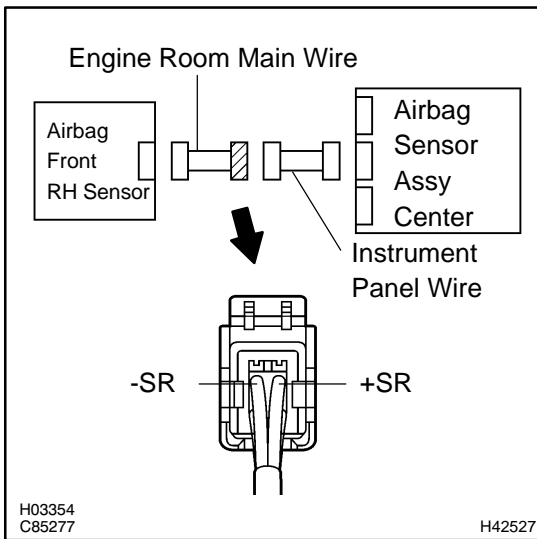
8 CHECK ENGINE ROOM MAIN WIRE(TO GROUND)

- (a) Turn the ignition switch to LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Disconnect the engine room main wire connector from the instrument panel wire.
- (d) Measure the resistance between the body ground and each of +SR and -SR of the engine room main wire connector on the instrument panel wire side.

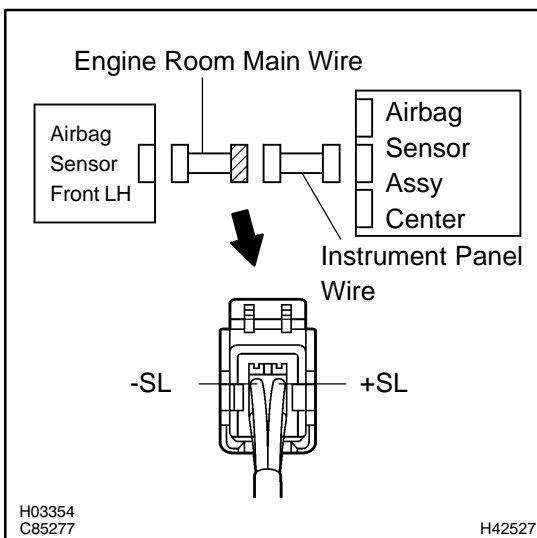
OK:**Resistance: 1 MΩ or Higher****NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****REPAIR OR REPLACE INSTRUMENT PANEL WIRE****9 CHECK ENGINE ROOM MAIN WIRE(TO B+)**

- (a) Turn the ignition switch to LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Disconnect the engine room main wire connector from the instrument panel wire.
- (d) Connect the negative (-) terminal cable to the battery.
- (e) Turn the ignition switch to ON position.
- (f) Measure the voltage between the body ground and each of +SR and -SR of the engine room main wire connector on the instrument panel wire side.

OK:**Voltage: Below 1 V****NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

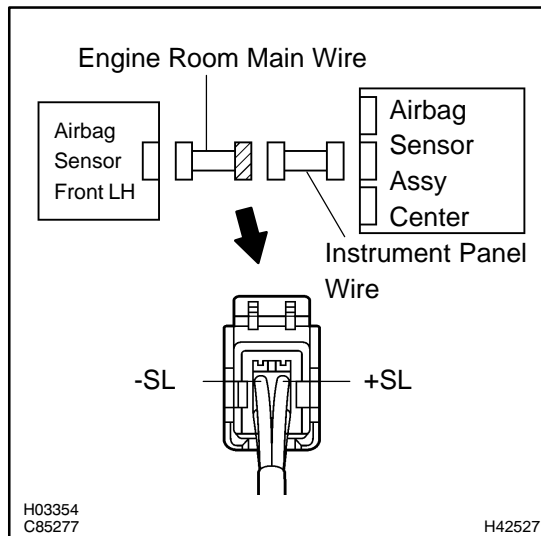
10 CHECK ENGINE ROOM MAIN WIRE(SHORT)

- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Disconnect the engine room main wire connector from the instrument panel wire.
- Measure the resistance between +SR and -SR of the engine room main wire connector on the instrument panel wire side.

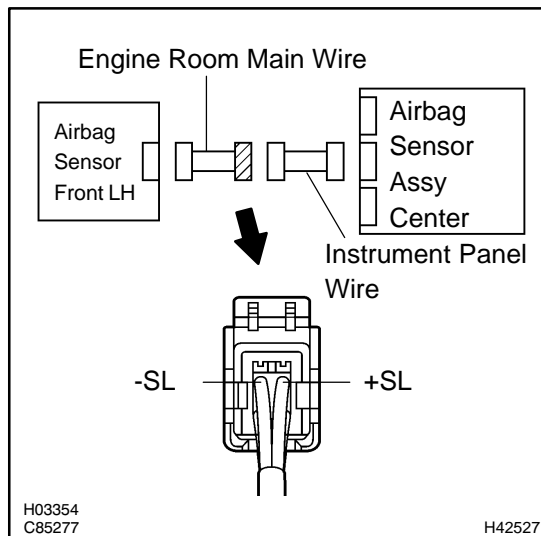
OK:**Resistance: 1 MΩ or Higher****NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****REPAIR OR REPLACE INSTRUMENT PANEL WIRE****11 CHECK ENGINE ROOM MAIN WIRE(TO GROUND)**

- Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- Disconnect the engine room main wire connector from the instrument panel wire.
- Measure the resistance between the body ground and each of +SL and -SL of the engine room main wire connector on the instrument panel wire side.

OK:**Resistance: 1 MΩ or Higher****NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

12 CHECK ENGINE ROOM MAIN WIRE(TO B+)

- (a) Turn the ignition switch to LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (c) Disconnect the engine room main wire connector from the instrument panel wire.
- (d) Connect the negative (-) terminal cable to the battery.
- (e) Turn the ignition switch to ON position.
- (f) Measure the voltage between the body ground and each of +SL and -SL of the engine room main wire connector on the instrument panel wire side.

OK:**Voltage: Below 1 V****NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****REPAIR OR REPLACE INSTRUMENT PANEL WIRE****13 CHECK ENGINE ROOM MAIN WIRE(SHORT)**

- (a) Disconnect the negative (-) terminal cable from the battery, and wait at least for 90 seconds.
- (b) Disconnect the engine room main wire connector from the instrument panel wire.
- (c) Measure the resistance between +SL and -SL of the engine room main wire connector on the instrument panel wire side.

OK:**Resistance: 1 MΩ or Higher****NG****REPAIR OR REPLACE ENGINE ROOM MAIN WIRE****OK****REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

DTC	B1135/24	HALF CONNECTION IN AIRBAG SENSOR ASSY CENTER CONNECTORS
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CIRCUIT DESCRIPTION

The airbag sensor assy center detects partial connection of the connectors.

DTC B1135/24 is recorded when the airbag sensor assy center detects an open in the electrical connection check mechanism of the airbag sensor connector or in the airbag sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1135/24	<ul style="list-style-type: none"> • Malfunction of electrical connection check mechanism of airbag sensor assy center connector • Airbag sensor assy center malfunction 	<ul style="list-style-type: none"> • Electrical connection check mechanism • Airbag sensor assy center

INSPECTION PROCEDURE

1	CHECK AIRBAG SENSOR ASSY CENTER CONNECTOR
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- Turn the ignition switch to the LOCK position.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Check the connection of the airbag sensor assy center connectors.

OK:

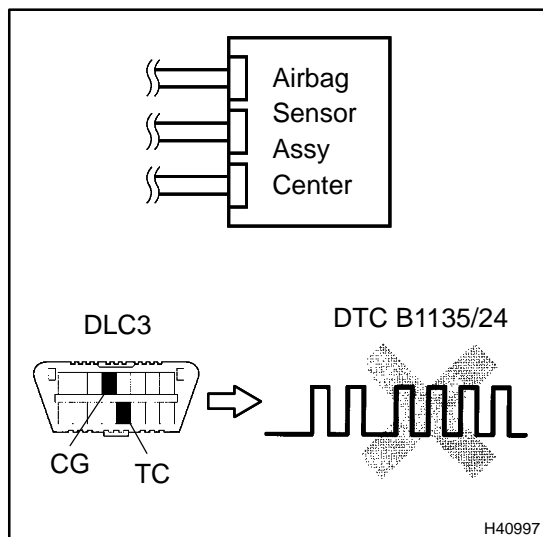
The connectors are connected.

HINT:

When the connectors are not firmly connected, disconnect them once and reconnect them securely.

NEXT

2	CHECK AIR BAG SENSOR ASSY CENTER
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- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Clear the DTCs stored in memory (see page 05-614).
- Turn the ignition switch to the LOCK position.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Check the DTCs (see page 05-614).

OK:

DTC B1135/24 is not output.

HINT:

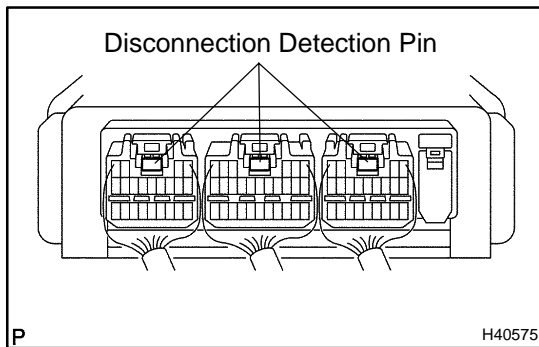
Codes other than code B1135/24 may be output at this time, but they are not related to this check.

NG

Go to step 3

OK

USE SIMULATION METHOD TO CHECK

3 PERFORM A VISUAL CHECK OF THE DISCONNECTION DETECTION PIN

(a) Check the disconnection detection pin of the connector.
HINT:

Compare one connector with the other 2 connectors.

OK:

No deformation is identified.

NG

**REPAIR OR REPLACE AIRBAG SENSOR ASSY
CENTER CONNECTOR**

OK

REPLACE AIR BAG SENSOR ASSY CENTER (SEE PAGE [60-47](#))