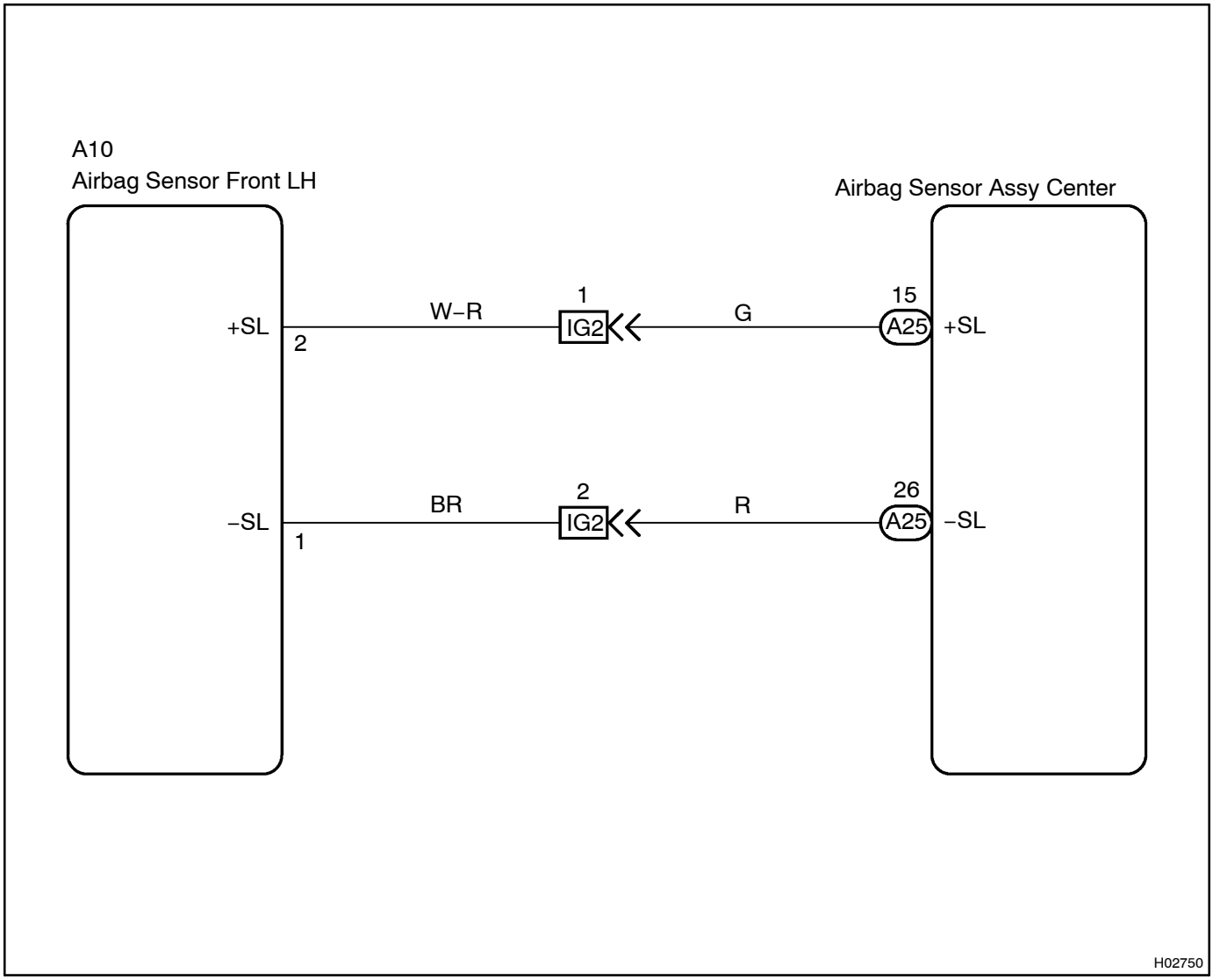
DTC	B1149/37	FRONT AIRBAG SENSOR (LH) MALFUNCTION

CIRCUIT DESCRIPTION

The airbag sensor front LH circuit consists of the diagnostic circuit and the frontal deceleration sensor, etc. If the airbag sensor assy center receives signals from the frontal deceleration sensor, it judges whether or not the SRS should be activated.
DTC B1149/37 is recorded when a malfunction is detected in the airbag sensor front LH circuit.

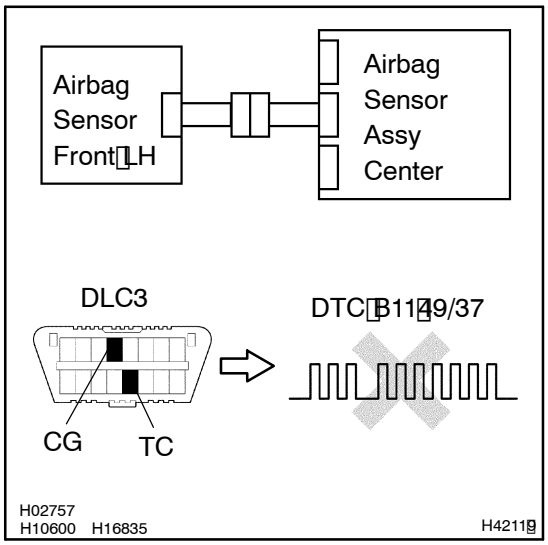
DTC No.	DTC Detecting Condition	Trouble Area
B1149/37	• Short circuit in front airbag sensor LH wire harness (to B+) • Short circuit in front airbag sensor LH wire harness (to ground) • Open circuit in +SL wire harness or –SL wire harness of front airbag sensor LH • Airbag sensor front LH malfunction • Airbag sensor assy center malfunction	• Airbag sensor front LH • Airbag sensor assy center • Cowl wire • Engine room main wire

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 05–513).
(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 05–513).
OK:
DTC B1149/37 is not output.

HINT:
Codes other than code B1149/37 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

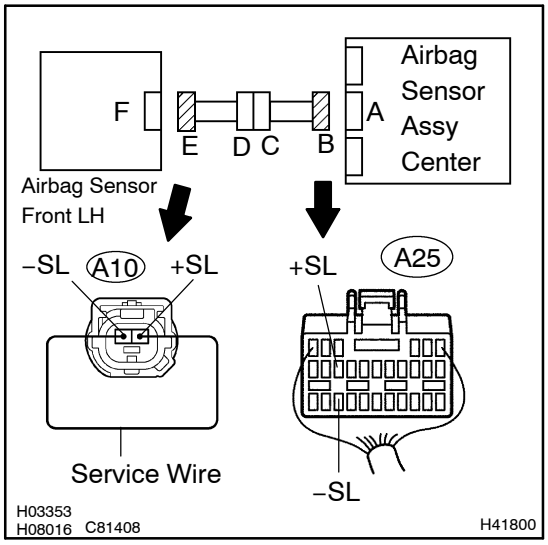
2 CHECK CONNECTION OF CONNECTORS

(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 connector is properly connected to the airbag sensor assy center and the airbag sensor front LH.
OK:
The connectors are connected.

NG → **CONNECT CONNECTORS, THEN GO TO STEP 1**

OK

3 CHECK FRONT AIRBAG SENSOR (LH) CIRCUIT (OPEN)



(a) Disconnect the connectors from the airbag sensor assy center and the airbag sensor front LH.
(b) Using a service wire, connect A10–2 (+SL) and A10–1 (–SL) of connector "E".

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

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

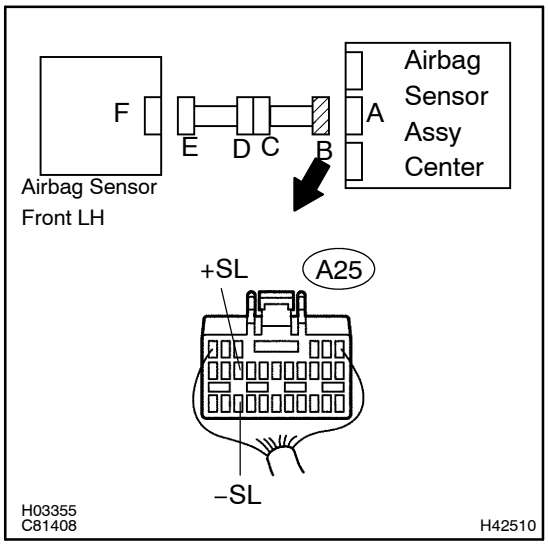
Standard:

Tester connection	Condition	Specified condition
A25–15 (+SL) – A25–26 (–SL)	Always	Below 1 Ω

NG → **Go to step 8**

OK

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



(a) Disconnect the service wire from connector "E".
(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.

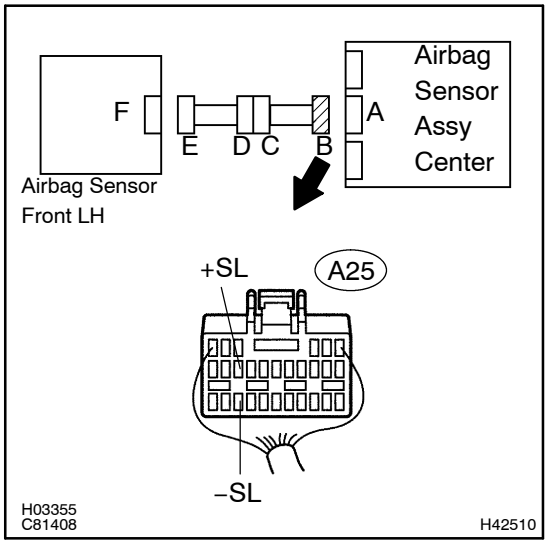
Standard:

Tester connection	Condition	Specified condition
A25–15 (+SL) – Body ground	Ignition switch ON	Below 1 V
A25–26 (–SL) – Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 9**

OK

5 CHECK FRONT AIRBAG SENSOR (LH) CIRCUIT (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.

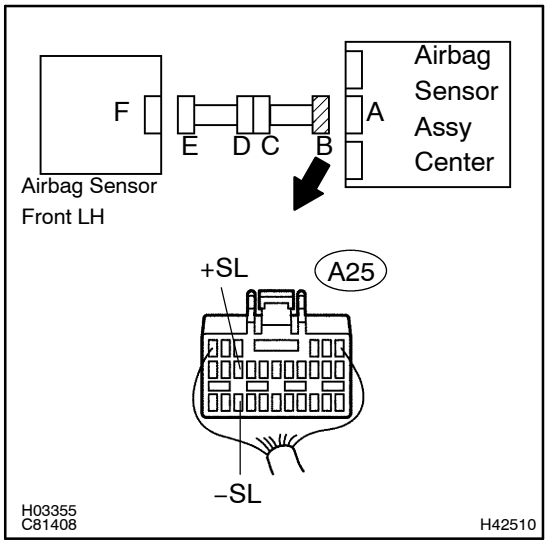
Standard:

Tester connection	Condition	Specified condition
A25–15 (+SL) – Body ground	Always	1 MΩ or Higher
A25–26 (–SL) – Body ground	Always	1 MΩ or Higher

NG → **Go to step 10**

OK

6 CHECK FRONT AIRBAG SENSOR (LH) CIRCUIT (SHORT)



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

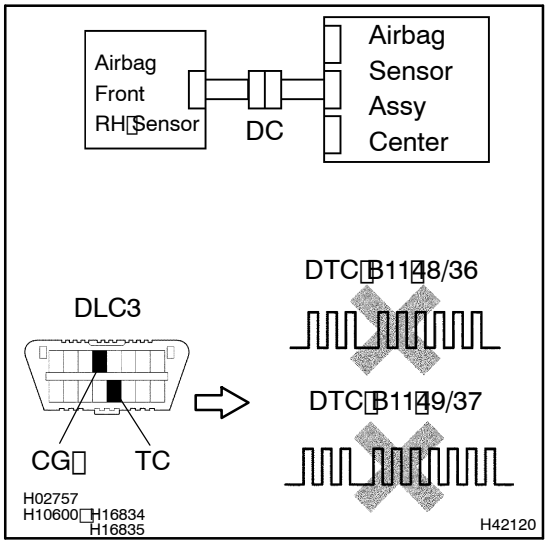
Standard:

Tester connection	Condition	Specified condition
A25–15 (+SL) – A25–26 (–SL)	Always	1 MΩ or Higher

NG → **Go to step 11**

OK

7 CHECK AIR BAG SENSOR FRONT LH



(a) Connect the connector to the airbag sensor assy center.
(b) Interchange the airbag front sensor RH with the airbag sensor front LH and connect the connectors to them.
(c) Connect the negative (–) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear the DTCs stored in memory (see page 05–513).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check the DTCs (see page 05–513).

Result:

NG: A	DTC B1149/37 is output.
NG: B	DTC B1148/36 is output.
OK	DTC B1148/36 and B1149/37 are not output.

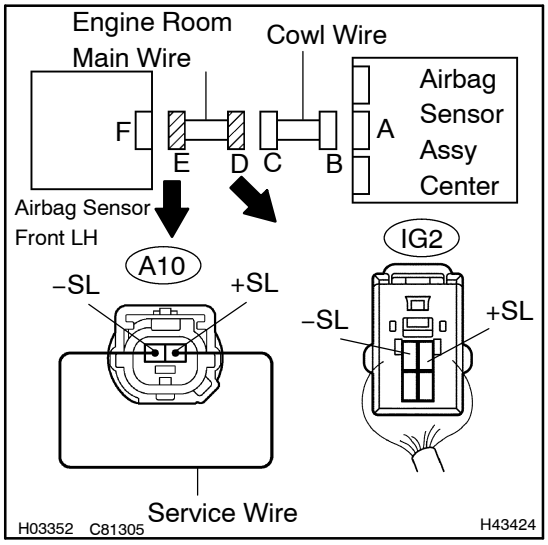
NG:A → **REPLACE AIR BAG SENSOR ASSY CENTER**

NG:B → **REPLACE AIR BAG SENSOR FRONT LH**

OK

USE SIMULATION METHOD TO CHECK

8 CHECK ENGINE ROOM MAIN WIRE(OPEN)



(a) Disconnect the engine room main wire connector from the cowl wire.

HINT:

Connector "E" has already been inserted into the service wire.

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

Standard:

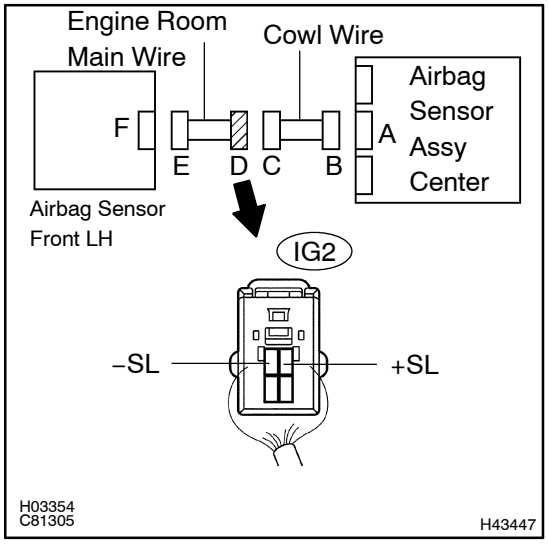
Tester connection	Condition	Specified condition
IG2–1 (+SL) – IG2–2 (–SL)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE COWL WIRE

9 CHECK ENGINE ROOM MAIN WIRE(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 engine room main wire connector from the cowl wire.

(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:

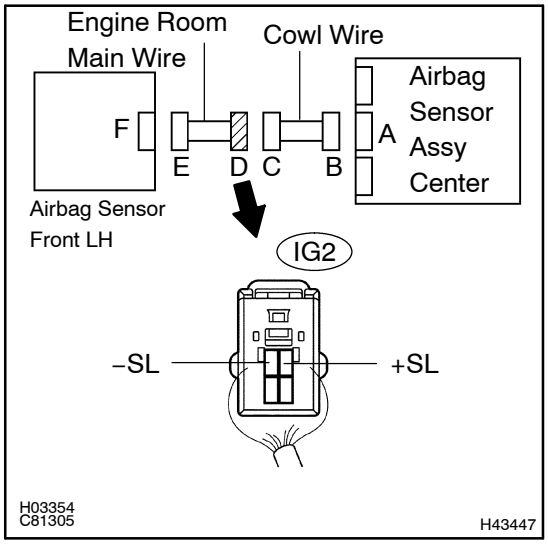
Tester connection	Condition	Specified condition
IG2–1 (+SL) – Body ground	Ignition switch ON	Below 1 V
IG2–2 (–SL) – Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE COWL WIRE

10 CHECK ENGINE ROOM MAIN WIRE(TO GROUND)



(a) Disconnect the engine room main wire connector from the cowl wire.

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

Standard:

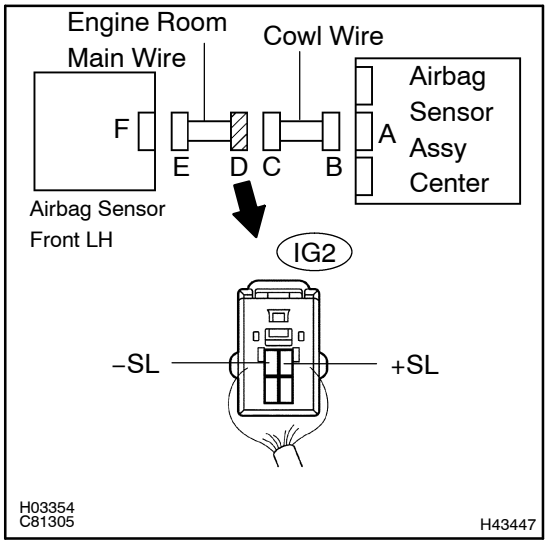
Tester connection	Condition	Specified condition
IG2–1 (+SL) – Body ground	Always	1 MΩ or Higher
IG2–2 (–SL) – Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE COWL WIRE

11 CHECK ENGINE ROOM MAIN WIRE(SHORT)



(a) Disconnect the engine room main wire connector from the cowl wire.

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

Standard:

Tester connection	Condition	Specified condition
IG2–1 (+SL) – IG2–2 (–SL)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE COWL WIRE