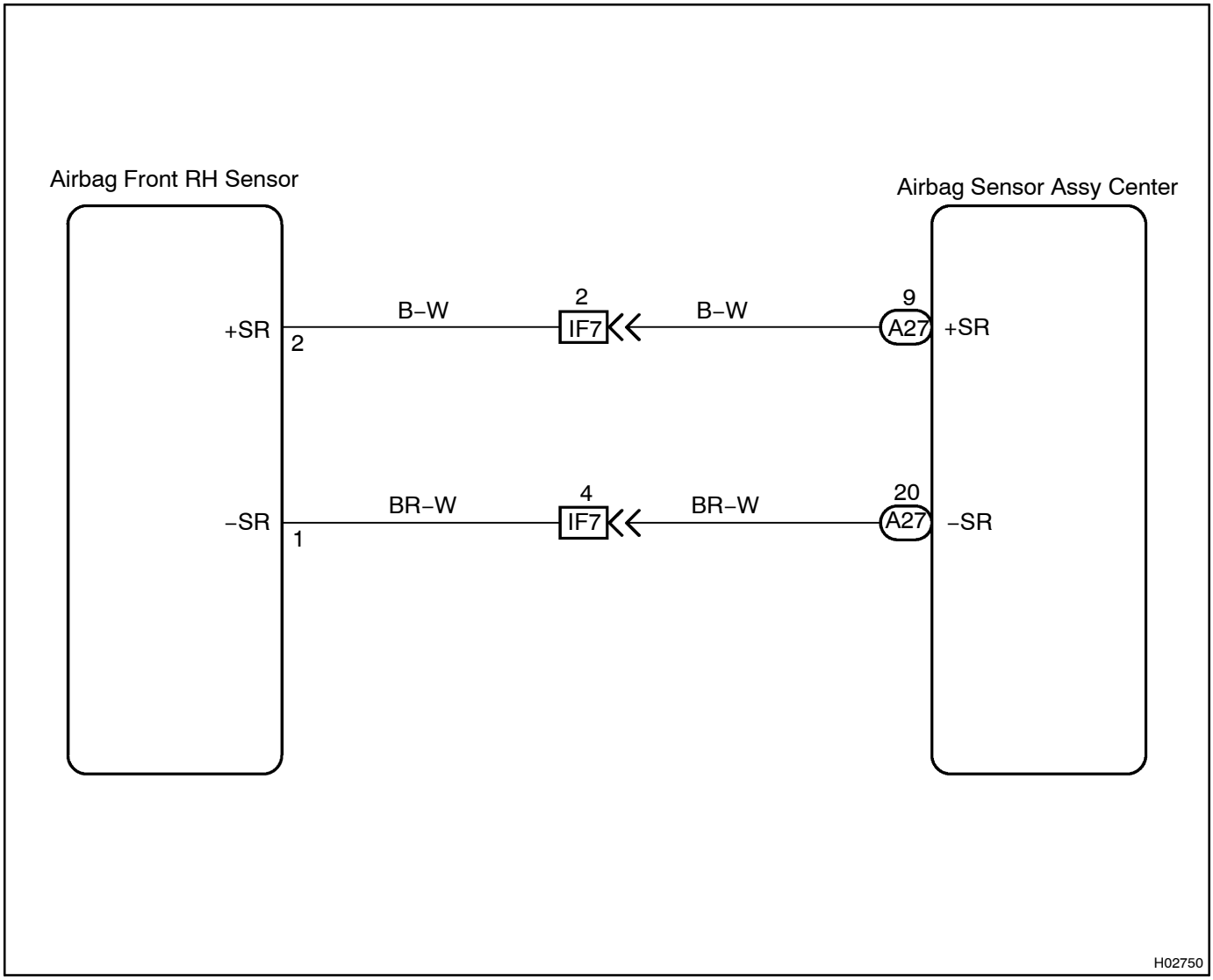
DTC	B1148/36	FRONT AIRBAG SENSOR (RH) MALFUNCTION

CIRCUIT DESCRIPTION

The airbag front RH sensor circuit consists of the diagnosis circuit and frontal deceleration sensor, etc.
If receives signals from the frontal deceleration sensor, judges whether or not the SRS must be activated, and detects diagnosis system malfunction.
DTC B1148/36 is recorded when occurrence of a malfunction in the airbag front RH sensor is detected.

DTC No.	DTC Detecting Condition	Trouble Area
B1148/36	• Short circuit in wire harness of airbag front RH sensor (to ground) • Short circuit in wire harness of airbag front RH sensor (to B+) • Open circuit in wire harness of airbag front RH sensor • Airbag front RH sensor malfunction • Airbag sensor assy center malfunction	• Airbag front RH sensor • Airbag sensor assy center • Instrument panel wire • Engine room main wire

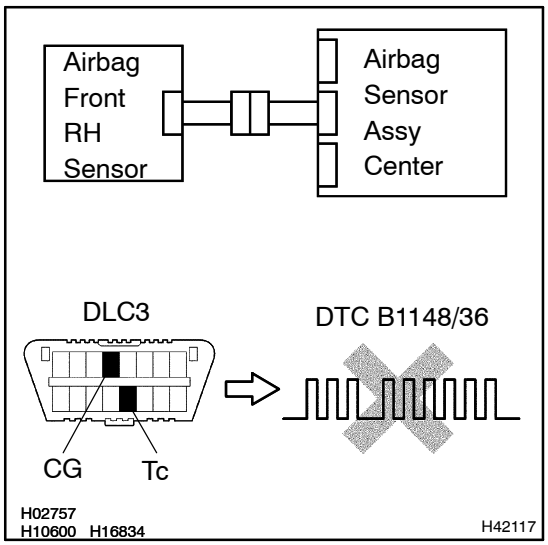
WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK AIR BAG FRONT RH SENSOR

SST 09843–18040



(a) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.
(b) Turn the ignition switch to ON, and wait at least for 20 seconds.
(c) Clear the DTC stored in memory (See page 05–758).
(d) Turn the ignition switch to LOCK, and wait at least for 20 seconds.
(e) Turn the ignition switch to ON, and wait at least for 20 seconds.
(f) Check the DTC (See page 05–758).
OK:
DTC B1148/36 is not output.

HINT:
Codes other than code B1148/36 may be output at this time, but they are not relevant to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2 CHECK AIRBAG SENSOR ASSY CENTER CONNECTOR

(a) Turn the ignition switch to LOCK.
(b) Disconnect the negative (–) terminal cable from the battery, and wait at least for 90 seconds.
(c) Check that the connector is properly connected to the airbag sensor assy center.
OK:
The connectors are connected.

NG → **CONNECT CONNECTORS**

OK

3 CHECK FRONT AIRBAG SENSOR CONNECTOR

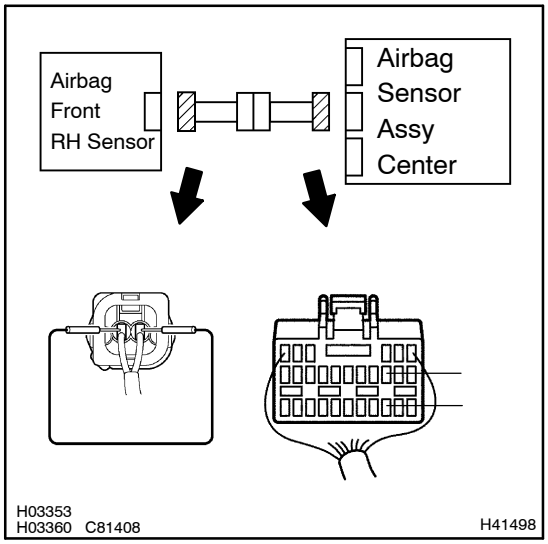
(a) Check that the connector is properly connected to the airbag front RH sensor.
OK:
The connector is connected.

NG → **CONNECT CONNECTORS**

OK

4	CHECK FRONT AIRBAG SENSOR (RH) CIRCUIT(OPEN)(AIRBAG SENSOR ASSY CENTER – AIRBAG FRONT RH SENSOR)

SST 09843–18040



(a) Disconnect the connectors between the airbag sensor assy center and the airbag front RH sensor.
(b) Using a service wire, connect +SR and –SR of the connector (on the airbag front RH sensor side) between the airbag sensor assy center and the airbag front RH sensor.
(c) For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the resistance between +SR and –SR.

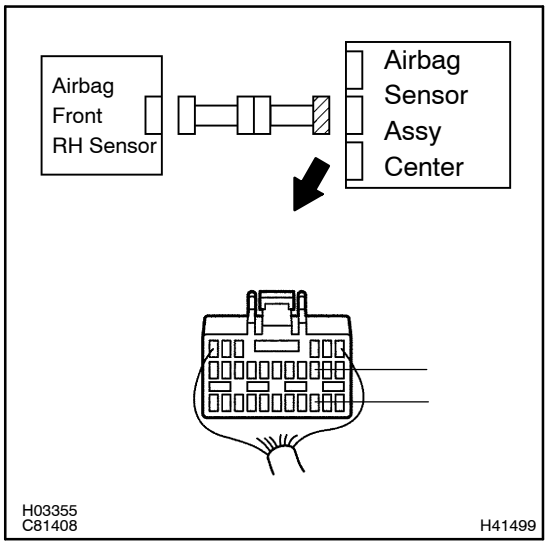
OK:

Resistance: Below 1 Ω

NG → **Go to step 9**

OK

5	CHECK FRONT AIRBAG SENSOR (RH) CIRCUIT (TO GROUND)(AIRBAG SENSOR ASSY CENTER – AIRBAG FRONT RH SENSOR)



(a) Disconnect the connection between the +SR and –SR.
(b) For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the resistance between body ground and each of +SR and –SR.

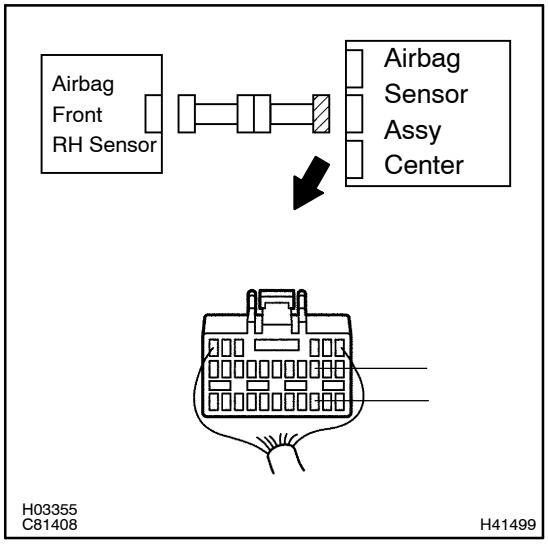
OK:

Resistance: 1 MΩ or Higher

NG → **Go to step 10**

OK

6	CHECK FRONT AIRBAG SENSOR (RH) CIRCUIT(AIRBAG SENSOR ASSY CENTER – AIRBAG FRONT RH SENSOR)



(a) For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the resistance between +SR and –SR.

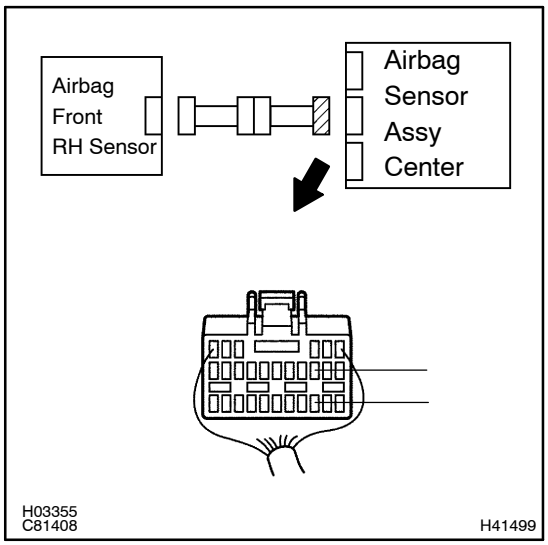
OK:

Resistance: 1 MΩ or Higher

NG → **Go to step 11**

OK

7	CHECK FRONT AIRBAG SENSOR (RH) CIRCUIT (TO B+)(AIRBAG SENSOR ASSY CENTER – AIRBAG FRONT RH SENSOR)



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

(b) Turn the ignition switch to ON.

(c) For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the voltage between body ground and each of +SR and –SR.

OK:

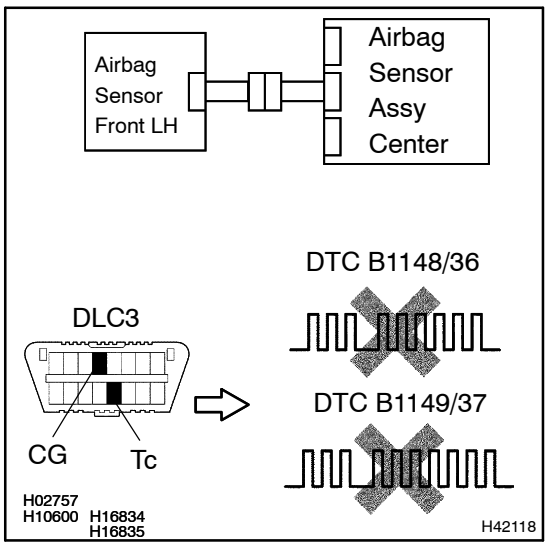
Voltage: Below 1 V

NG → **Go to step 12**

OK

8 CHECK AIR BAG FRONT RH SENSOR

SST 09843–18040



(a) Turn the ignition switch to LOCK.
(b) Disconnect the negative (–) terminal cable from the battery, and wait at least for 90 seconds.
(c) Connect the airbag sensor assy center connector.
(d) Interchange the airbag front sensor RH and LH and connect the connectors to them.
(e) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.
(f) Turn the ignition switch to ON, and wait at least for 20 seconds.
(g) Clear the DTC stored in memory (See page 05–758).
(h) Turn the ignition switch to LOCK, and wait at least for 20 seconds.
(i) Turn the ignition switch to ON, and wait at least for 20 seconds.
(j) Check the DTC (See page 05–758).

OK:
(A): DTC B1148/36 is not output.
(B): DTC B1149/37 is not output.

NG(A) → **REPLACE AIR BAG SENSOR ASSY CENTER**

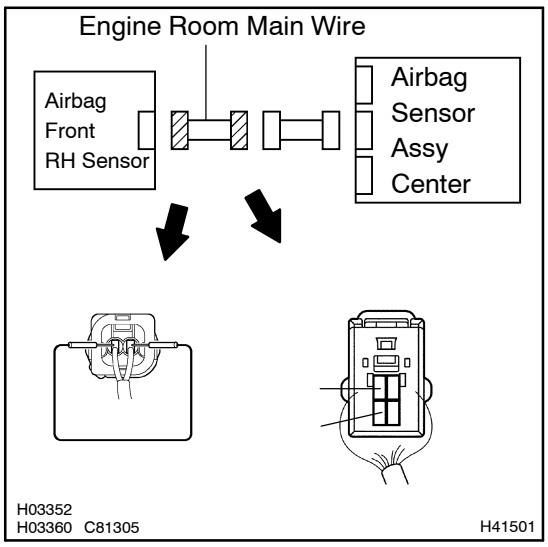
NG(B) → **REPLACE AIR BAG FRONT RH SENSOR**

OK

USE SIMULATION METHOD TO CHECK

9 CHECK ENGINE ROOM MAIN WIRE HARNESS(OPEN)

SST 09843–18040



(a) Disconnect the connector between the engine room main wire and the instrument panel wire.

(b) For the engine room main wire connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the resistance between +SR and –SR.

OK:

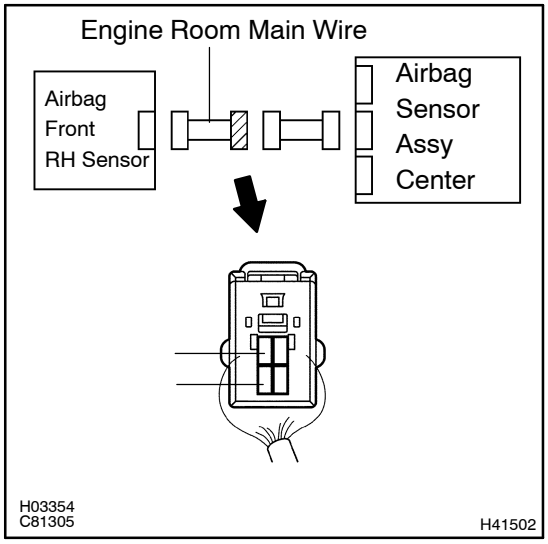
Resistance: Below 1 Ω

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

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

10 CHECK ENGINE ROOM MAIN WIRE HARNESS (TO GROUND)



(a) Disconnect the connector between the engine room main wire and the instrument panel wire.

(b) For the engine room main wire connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the resistance between body ground and each of +SR and –SR.

OK:

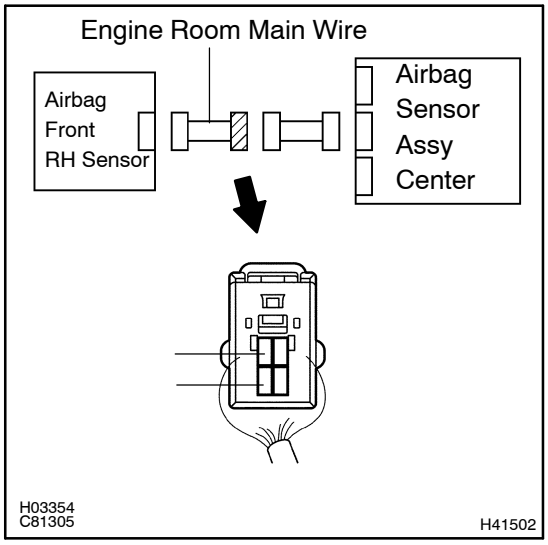
Resistance: 1 MΩ or Higher

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

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

11 CHECK ENGINE ROOM MAIN WIRE HARNESS



(a) For the engine room main wire connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the resistance between +SR and −SR.

OK:

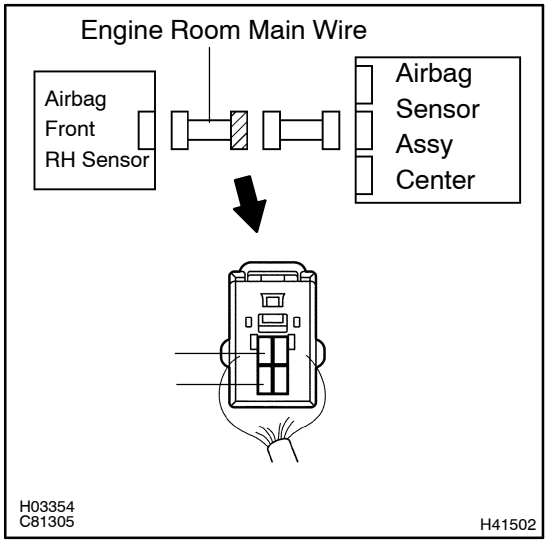
Resistance: 1 MΩ or Higher

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

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

12 CHECK ENGINE ROOM MAIN WIRE HARNESS (TO B+)



(a) Turn the ignition switch to LOCK.
(b) Disconnect the negative (–) terminal cable from the battery, and wait at least for 90 seconds.
(c) Disconnect the connector between the engine room main wire and the instrument panel wire.
(d) Connect the negative (–) terminal to the battery.
(e) Turn the ignition switch to ON.
(f) For the engine room main wire connector (on the airbag sensor assy center side) between the airbag sensor assy center and the airbag front RH sensor, measure the voltage between body ground and each of +SR and −SR.

OK:

Voltage Below 1 V

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

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE