DTC	B1140/32	SIDE AIRBAG SENSOR ASSY (RH) MALFUNCTION

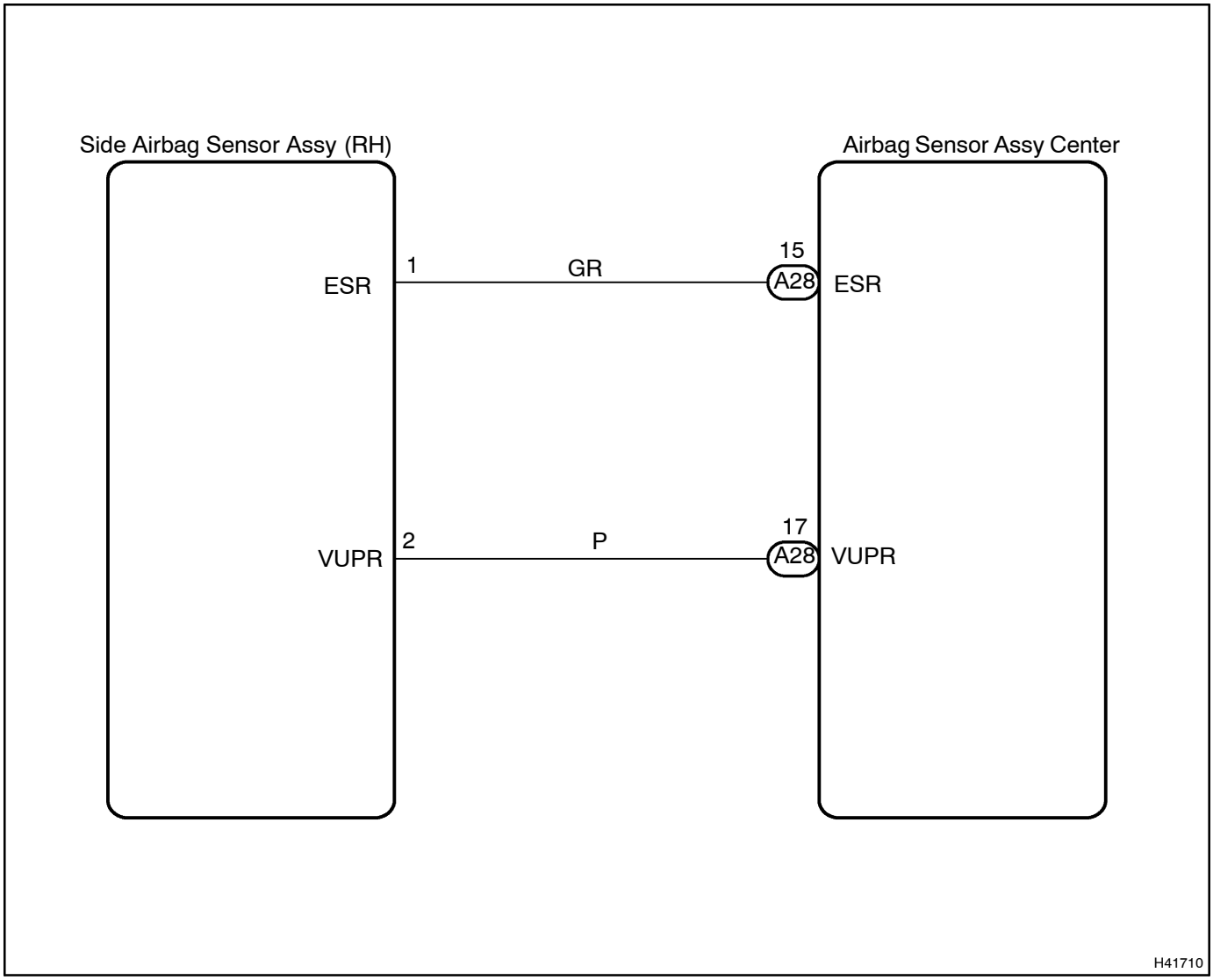
CIRCUIT DESCRIPTION

The side airbag sensor assy (RH) consists of the diagnosis circuit and lateral deceleration sensor, etc. It receives signals from the lateral deceleration sensor, judges whether or not the SRS must be activated, and detects diagnosis system malfunction.

DTC B1140/32 is recorded when occurrence of a malfunction in the side airbag sensor assy (RH) is detected.

DTC No.	DTC Detecting Condition	Trouble Area
B1140/32	• Short circuit in wire harness of side airbag sensor RH (to ground) • Short circuit in wire harness of side airbag sensor RH (to B+) • Open circuit in wire harness of side airbag sensor RH • Side airbag sensor assy (RH) malfunction • Airbag sensor assy center malfunction	• Side airbag sensor assy (RH) • Airbag sensor assy center • Wire harness

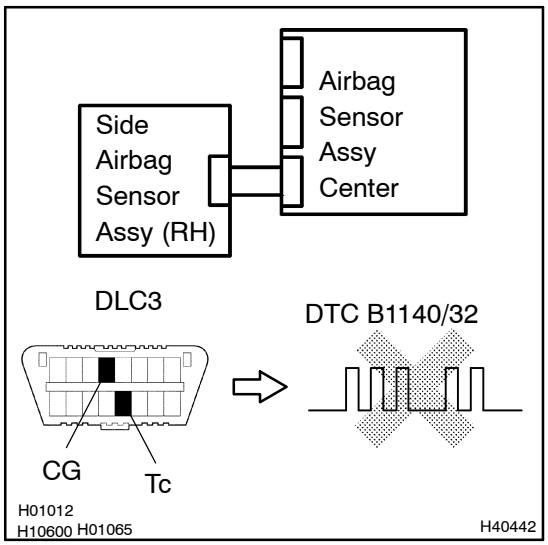
WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK SIDE AIR BAG SENSOR ASSY RH

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 B1140/32 is not output.

HINT:
Codes other than code B1140/32 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 SIDE AIRBAG SENSOR ASSY CONNECTOR

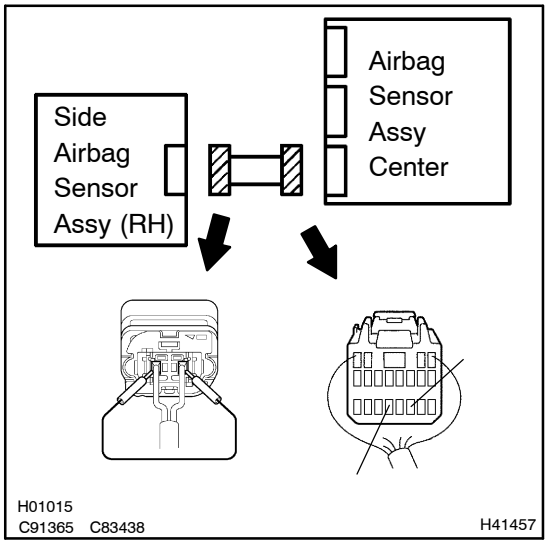
(a) Check that the connector is properly connected to the side airbag sensor assy (RH).
OK:
The connector is connected.

NG → **CONNECT CONNECTORS**

OK

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

SST 09843–18040



(a) Disconnect the connectors between the airbag sensor assy center and the side airbag sensor assy (RH).

(b) Using a service wire, connect VUPR and ESR of the connector (on the side airbag sensor assy RH side) between the airbag sensor assy center and the side airbag sensor assy (RH).

(c) For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the side airbag sensor assy (RH), measure the resistance between terminal VUPR and ESR.

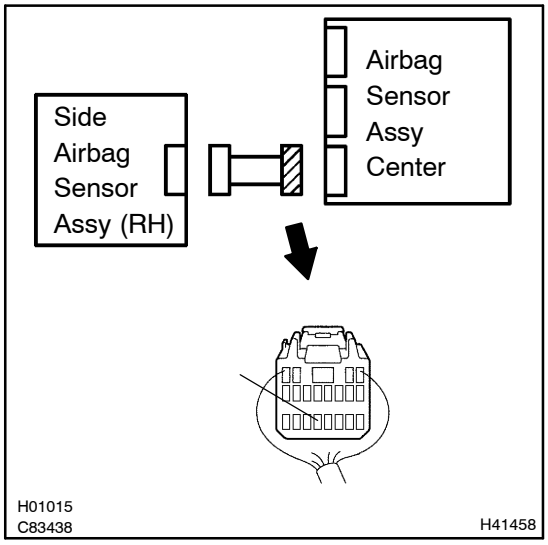
OK:

Resistance: Below 1 Ω

NG → **REPAIR OR REPLACE WIRE HARNESS(AIRBAG SENSOR ASSY CENTER – SIDE AIRBAG SENSOR ASSY RH)**

OK

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



(a) Disconnect the connection between VUPR and ESR.

(b) For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the side airbag sensor assy (RH), measure the resistance between VUPR and body ground.

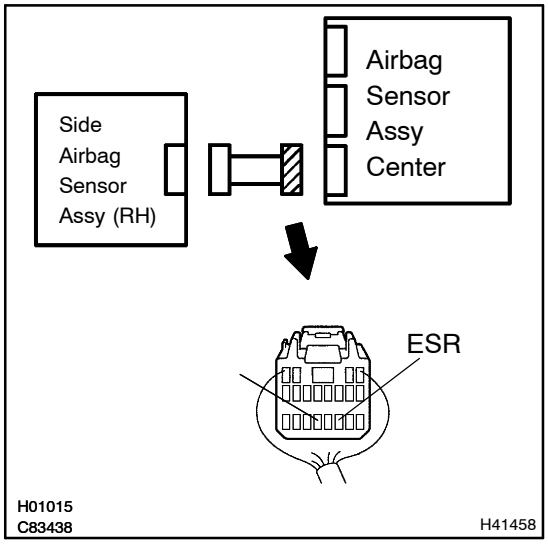
OK:

Resistance: 1MΩ or Higher

NG → **REPAIR OR REPLACE WIRE HARNESS(AIRBAG SENSOR ASSY CENTER – SIDE AIRBAG SENSOR ASSY RH)**

OK

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



(a) For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the side airbag sensor assy (RH), measure the resistance between VUPR and ESR.

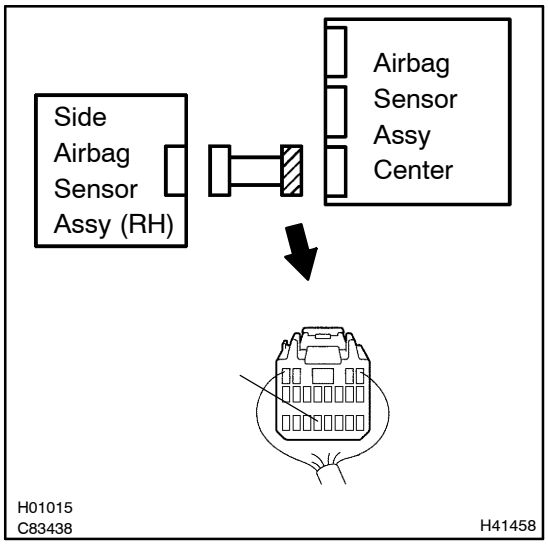
OK:

Resistance: 1MΩ or Higher

NG → **REPAIR OR REPLACE WIRE HARNESS(AIRBAG SENSOR ASSY CENTER – SIDE AIRBAG SENSOR ASSY RH)**

OK

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



(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 side airbag sensor assy (RH), measure the voltage between VUPR and body ground.

OK:

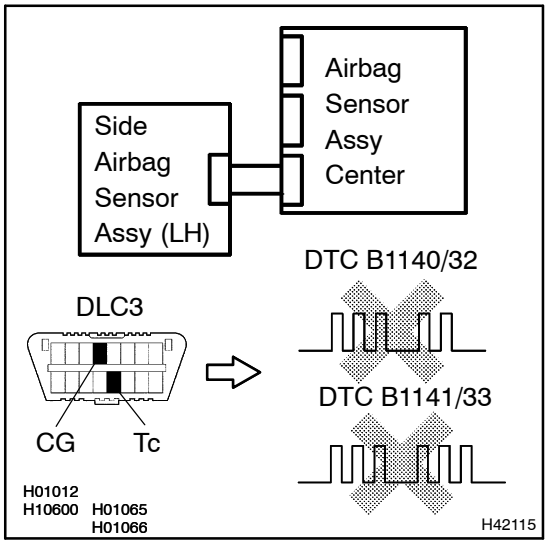
Voltage: Below 1 V

NG → **REPAIR OR REPLACE WIRE HARNESS(AIRBAG SENSOR ASSY CENTER – SIDE AIRBAG SENSOR ASSY RH)**

OK

8	CHECK SIDE AIR BAG SENSOR ASSY RH

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 side airbag sensor assy (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 B1140/32 is not output.
(B): DTC B1141/33 is not output.

NG(A)	REPLACE AIR BAG SENSOR ASSY CENTER

NG(B)	REPLACE SIDE AIR BAG SENSOR ASSY RH

OK

9	USE SIMULATION METHOD TO CHECK

NG	Go to step 1

OK

REPLACE ALL SRS COMPONENTS INCLUDING THE WIRE HARNESS