DTC	B1153/25	SEAT POSITION AIRBAG SENSOR MALFUNCTION

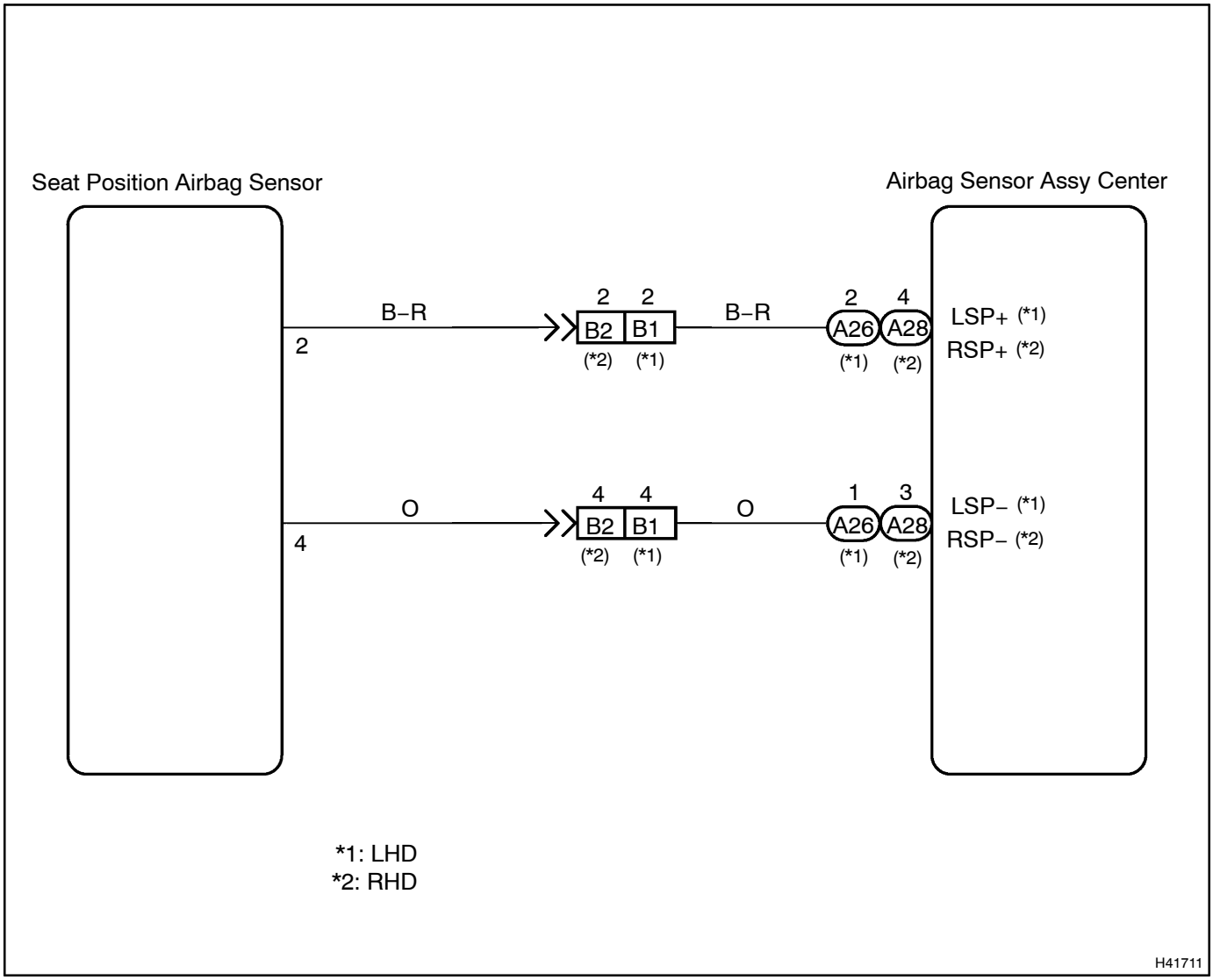
CIRCUIT DESCRIPTION

The seat position airbag sensor circuit consists of the airbag sensor assy center and 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	• Short circuit between LSP+ (RSP+) wire harness and LSP– (RSP–) wire harness (to B+) • Short circuit between LSP+ (RSP+) wire harness and LSP– (RSP–) wire harness (to ground) • Open circuit in LSP+ (RSP+) wire harness or LSP– (RSP–) wire harness • Seat position airbag sensor malfunction • Airbag sensor assy center malfunction	• Seat position airbag sensor • Airbag sensor assy center • Wire harness • Front seat wire

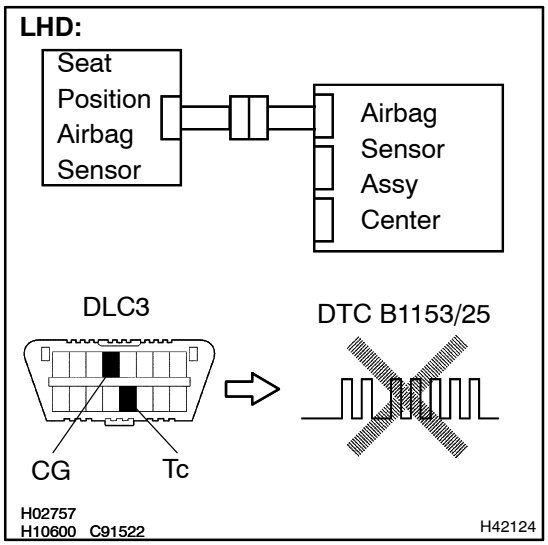
WIRING DIAGRAM

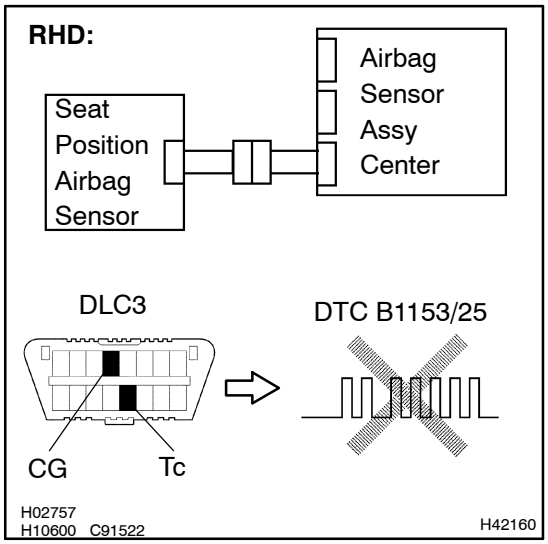


INSPECTION PROCEDURE

1	CHECK SEAT POSITION AIR BAG SENSOR

SST 09843–18040





(a) Turn the ignition switch to ON, and wait at least for 20 seconds.
(b) Clear the DTC stored in memory (See page 05–758).
(c) Turn the ignition switch to LOCK, and wait at least for 20 seconds.
(d) Turn the ignition switch to ON, and wait at least for 20 seconds.
(e) Check the DTC (See page 05–758).

OK:

DTC B1153/25 is not output.

HINT:

Codes other than code B1153/25 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 SEAT POSITION AIRBAG SENSOR CONNECTOR

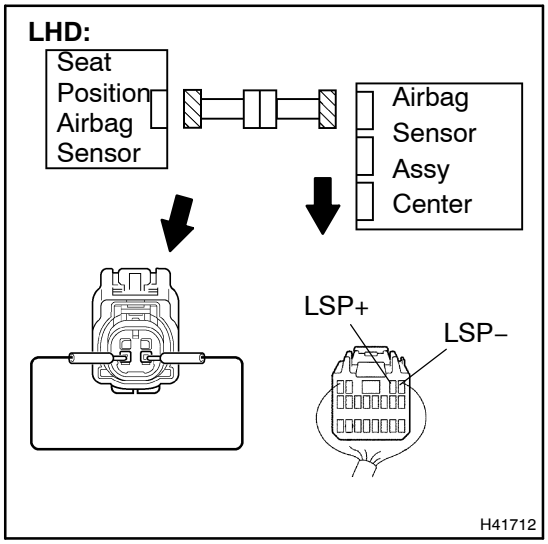
(a) Check that the connector is properly connected to the seat position airbag sensor.
OK:
The connector is connected.

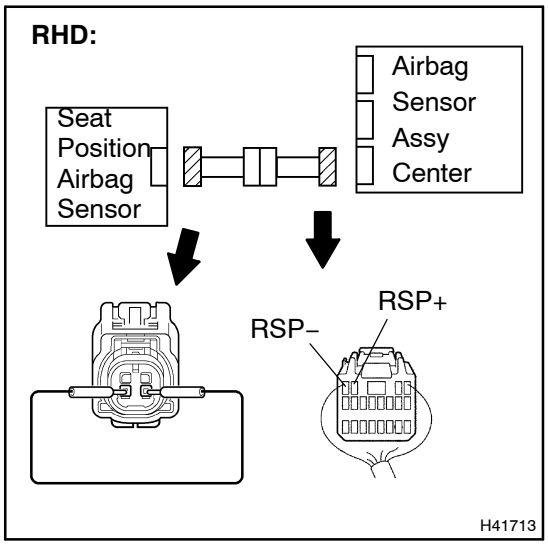
NG → **CONNECT CONNECTORS**

OK

4	CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (OPEN)(AIRBAG SENSOR ASSY CENTER – SEAT POSITION AIRBAG SENSOR)

SST 09843–18040





(a) Disconnect the connectors between the airbag sensor assy center and the seat position airbag sensor.

(b) LHD:
Using a service wire, connect LSP+ and LSP– of the connector (on the seat position airbag sensor side) between the airbag sensor assy center and the seat position airbag sensor.

(c) LHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between LSP+ and LSP–.
OK:
Resistance: Below 1 Ω

(d) RHD:
Using a service wire, connect RSP+ and RSP– of the connector (on the seat position airbag sensor side) between the airbag sensor assy center and the seat position airbag sensor.

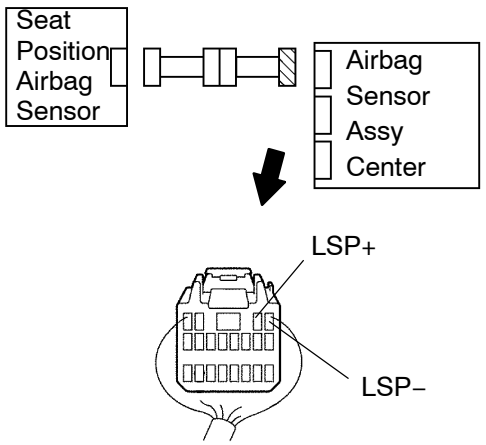
(e) RHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between RSP+ and RSP–.
OK:
Resistance: Below 1 Ω

NG → **Go to step 10**

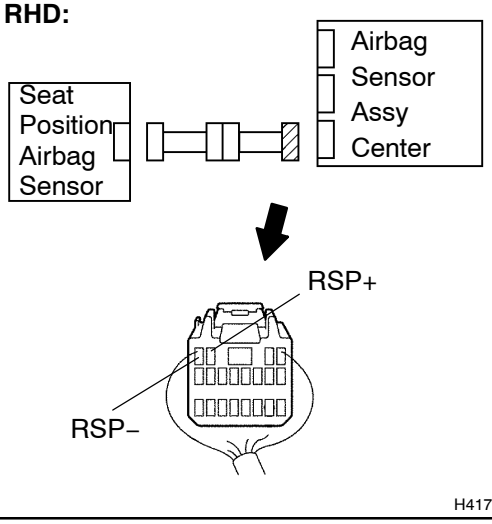
OK

5	CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (TO GROUND)(AIRBAG SENSOR ASSY CENTER – SEAT POSITION AIRBAG SENSOR)

LHD:



RHD:



(a) Release the service wire of the connector (on the seat position sensor side) between the airbag sensor assy center and the seat position airbag sensor.

(b) LHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between body ground and each of LSP+ and LSP–.
OK:
Resistance: 1 MΩ or Higher

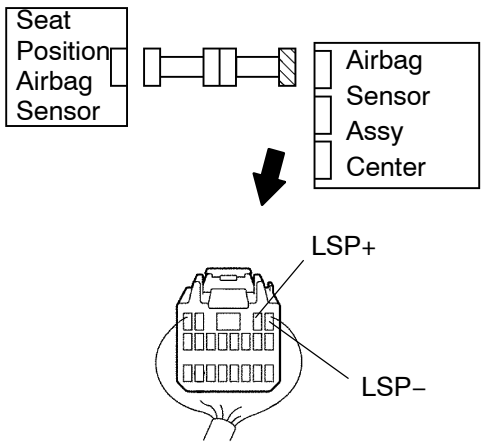
(c) RHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between body ground and each of RSP+ and RSP–.
OK:
Resistance: 1 MΩ or Higher

NG → **Go to step 11**

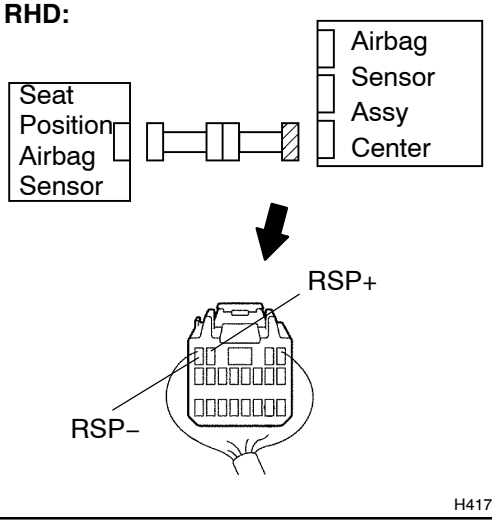
OK

6	CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT(AIRBAG SENSOR ASSY CENTER – SEAT POSITION AIRBAG SENSOR)

LHD:



RHD:



(a) LHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between LSP+ and LSP–.
OK:
Resistance: 1 MΩ or Higher

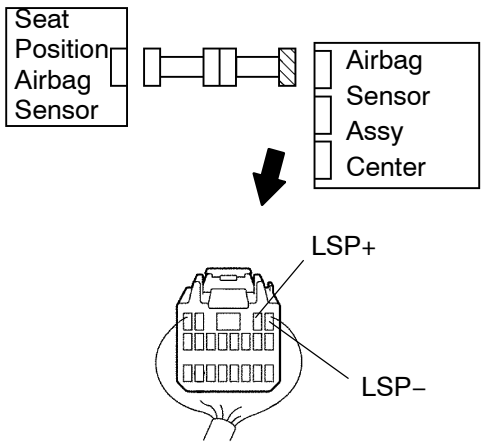
(b) RHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between RSP+ and RSP–.
OK:
Resistance: 1 MΩ or Higher

NG → **Go to step 12**

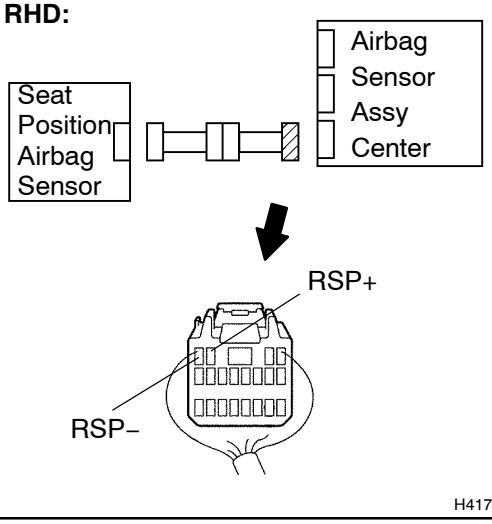
OK

7	CHECK SEAT POSITION AIRBAG SENSOR CIRCUIT (TO B+)(AIRBAG SENSOR ASSY CENTER – SEAT POSITION AIRBAG SENSOR)

LHD:



RHD:



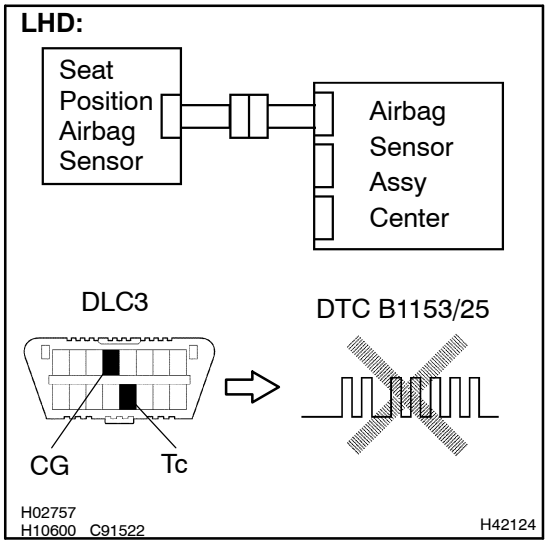
(a) Connect the negative (–) terminal cable to the battery.
(b) Turn the ignition switch to ON.
(c) LHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the voltage between the body ground and each of LSP+ and LSP–.
OK:
Voltage: Below 1 V
(d) RHD:
For the connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the voltage between the body ground and each of RSP+ and RSP–.
OK:
Voltage: Below 1 V

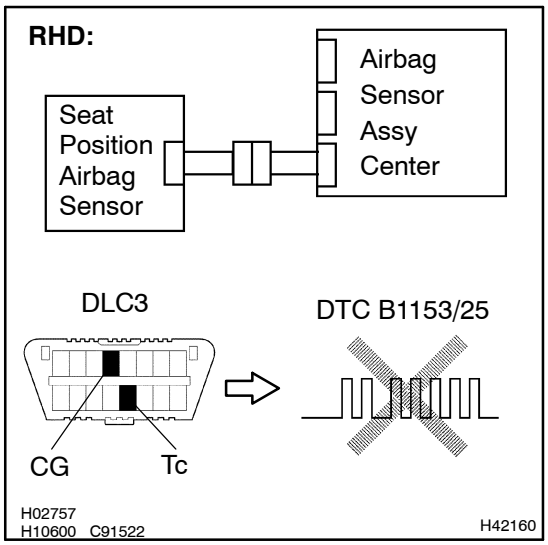
NG → **Go to step 13**

OK

8 CHECK SEAT POSITION AIR BAG 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 connector of the seat position airbag sensor.
(d) Connect the connector of the airbag sensor assy center.
(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:

DTC D1153/25 is not output.

HINT:

Codes other that code B1153/25 may be output at this time, but they are not relevant to this check.

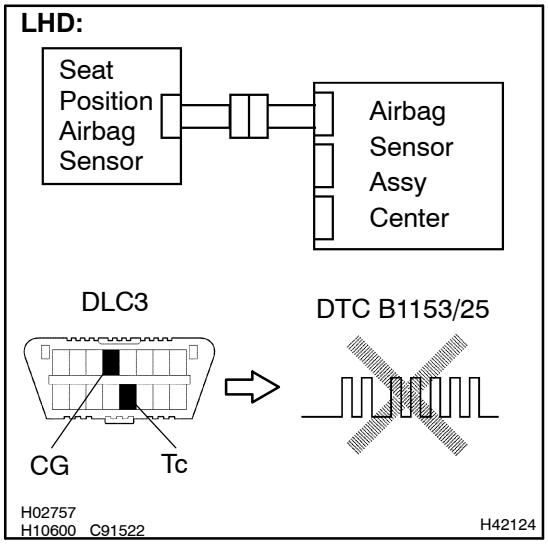
NG → **REPLACE SEAT POSITION AIR BAG SENSOR**

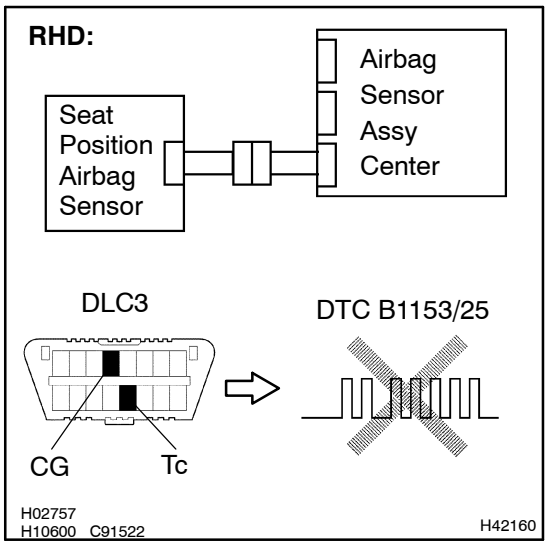
OK →

USE SIMULATION METHOD TO CHECK

9 CHECK AIR BAG SENSOR ASSY CENTER

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 connector of the seat position airbag sensor.
(d) Connect the connector of the airbag sensor assy center.
(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:

DTC D1153/25 is not output.

HINT:

Codes other that code B1153/25 may be output at this time, but they are not relevant to this check.

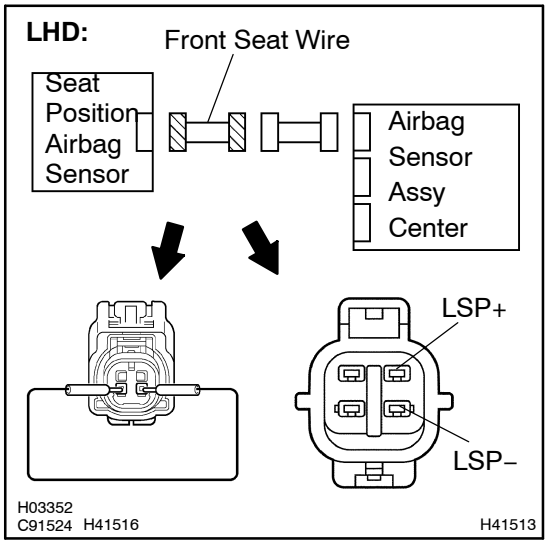
NG → **REPLACE AIR BAG SENSOR ASSY CENTER**

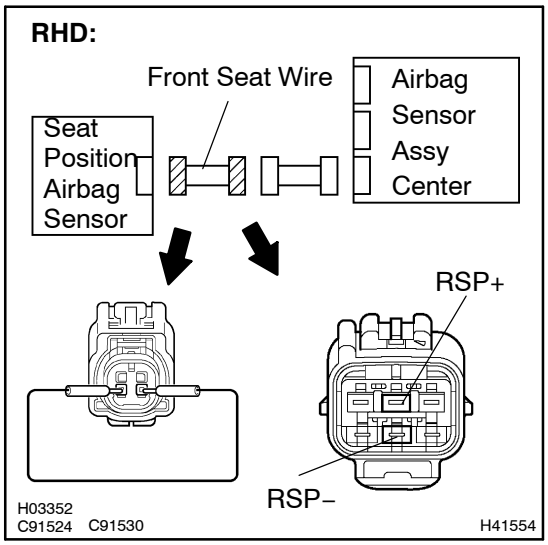
OK

USE SIMULATION METHOD TO CHECK

10	CHECK WIRE HARNESS(SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)

SST 09843–18040





(a) Disconnect the front seat wire connector on the airbag sensor assy center side.

(b) LHD:
For the front seat wire connector (on the airbag sensor assy side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between LSP+ and LSP–.
OK:
Resistance: Below 1 Ω

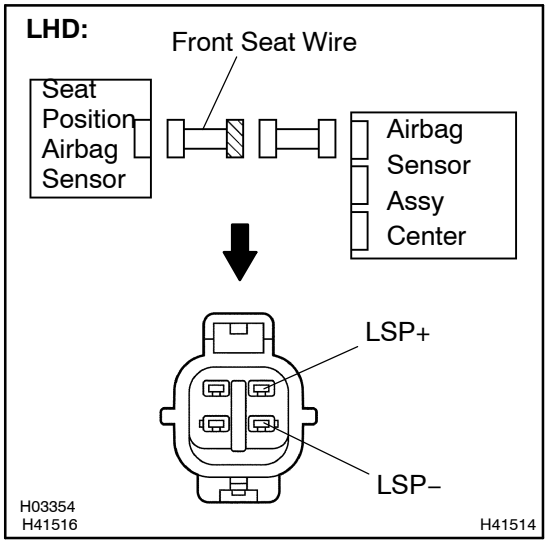
(c) RHD:
For the front seat wire connector (on the airbag sensor assy side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between RSP+ and RSP–.
OK:
Resistance: Below 1 Ω

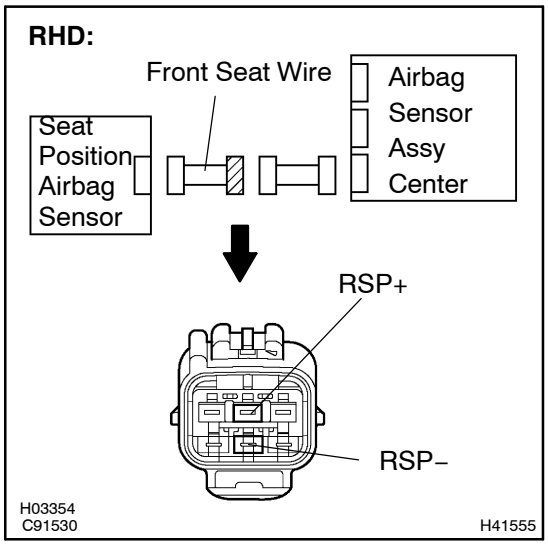
NG → **REPLACE WIRE HARNESS(SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)**

OK

REPAIR OR REPLACE WIRE HARNESS(AIRBAG SENSOR ASSY CENTER – FRONT SEAT INNER BELT ASSY)

11	CHECK WIRE HARNESS(SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)





(a) Disconnect the front seat wire connector on the airbag sensor assy center side.

(b) LHD:
For the front seat wire connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between body ground and each of LSP+ and LSP–.
OK:
Resistance: 1 MΩ or Higher

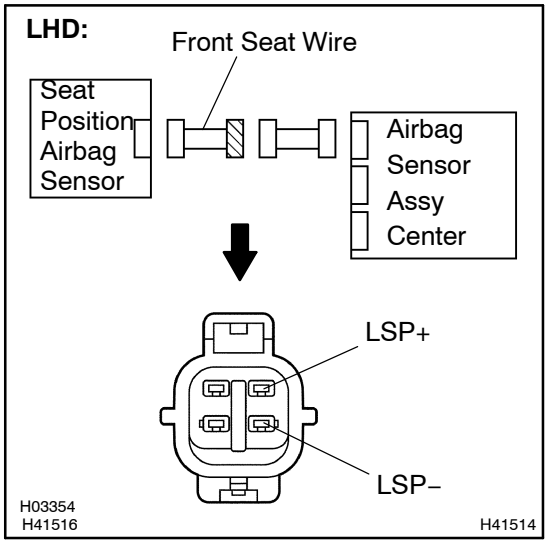
(c) RHD:
For the front seat wire connector (on the airbag sensor assy center side) between the airbag sensor assy center and the seat position airbag sensor, measure the resistance between body ground and each of RSP+ and RSP–.
OK:
Resistance: 1 MΩ or Higher

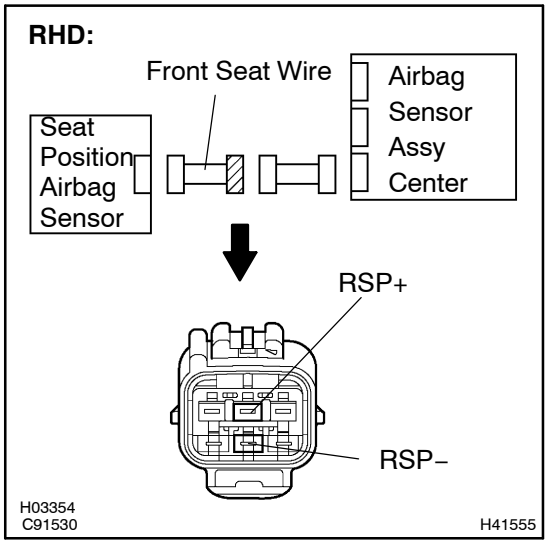
NG → **REPLACE WIRE HARNESS(SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)**

OK

REPAIR OR REPLACE WIRE HARNESS(AIRBAG SENSOR ASSY CENTER – FRONT SEAT INNER BELT ASSY)

12	CHECK WIRE HARNESS(SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)





(a) Disconnect the front seat wire connector on the airbag sensor assy center side.

(b) LHD:

For the front seat wire connector (on the airbag sensor assy center side) between the front seat inner belt assy RH and the seat position airbag sensor, measure the resistance between body ground and each of LSP+ and LSP–.

OK:

Resistance: 1 MΩ or Higher

(c) RHD:

For the front seat wire connector (on the airbag sensor assy center side) between the front seat inner belt assy RH and the seat position airbag sensor, measure the resistance between body ground and each of RSP+ and RSP–.

OK:

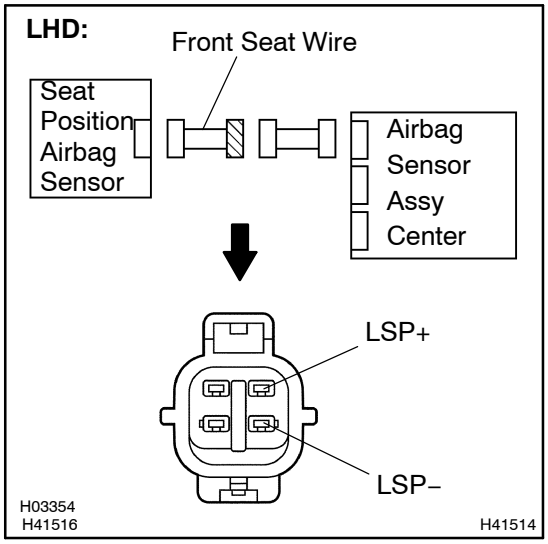
Resistance: 1 MΩ or Higher

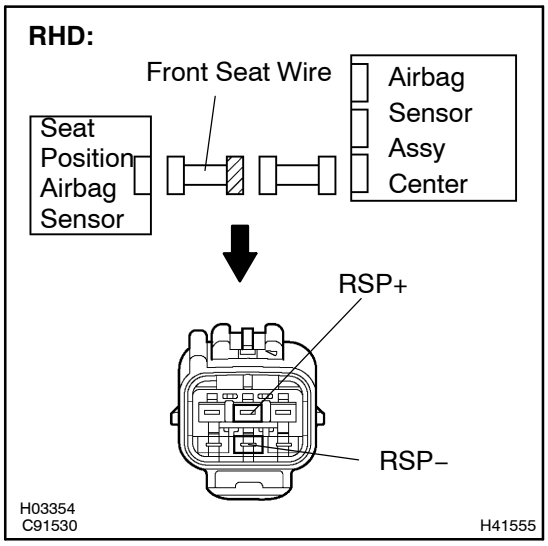
NG → **REPLACE WIRE HARNESS(SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)**

OK

REPAIR OR REPLACE WIRE HARNESS(AIRBAG SENSOR ASSY CENTER – FRONT SEAT INNER BELT ASSY)

13	CHECK WIRE HARNESS(SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)





(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 front seat wire connector on the airbag sensor assy center side.
(d) Connect the negative (–) terminal cable to the battery, and wait at least for 2 seconds.
(e) Turn the ignition switch to ON.
(f) LHD:
For the front seat wire connector (on the airbag sensor assy center side) between the front seat inner belt assy RH and the seat position airbag sensor, measure the voltage between body ground and each of LSP+ and LSP–.
OK:
Voltage: Below 1 V
(g) RHD:
For the front seat wire connector (on the airbag sensor assy center side) between the front seat inner belt assy RH and the seat position airbag sensor, measure the voltage between body ground and each of RSP+ and RSP–.
OK:
Voltage: Below 1 V

NG → **REPLACE WIRE HARNESS (SEAT POSITION AIRBAG SENSOR – FRONT SEAT INNER BELT ASSY)**

OK

REPAIR OR REPLACE WIRE HARNESS (AIRBAG SENSOR ASSY CENTER – FRONT SEAT INNER BELT ASSY)