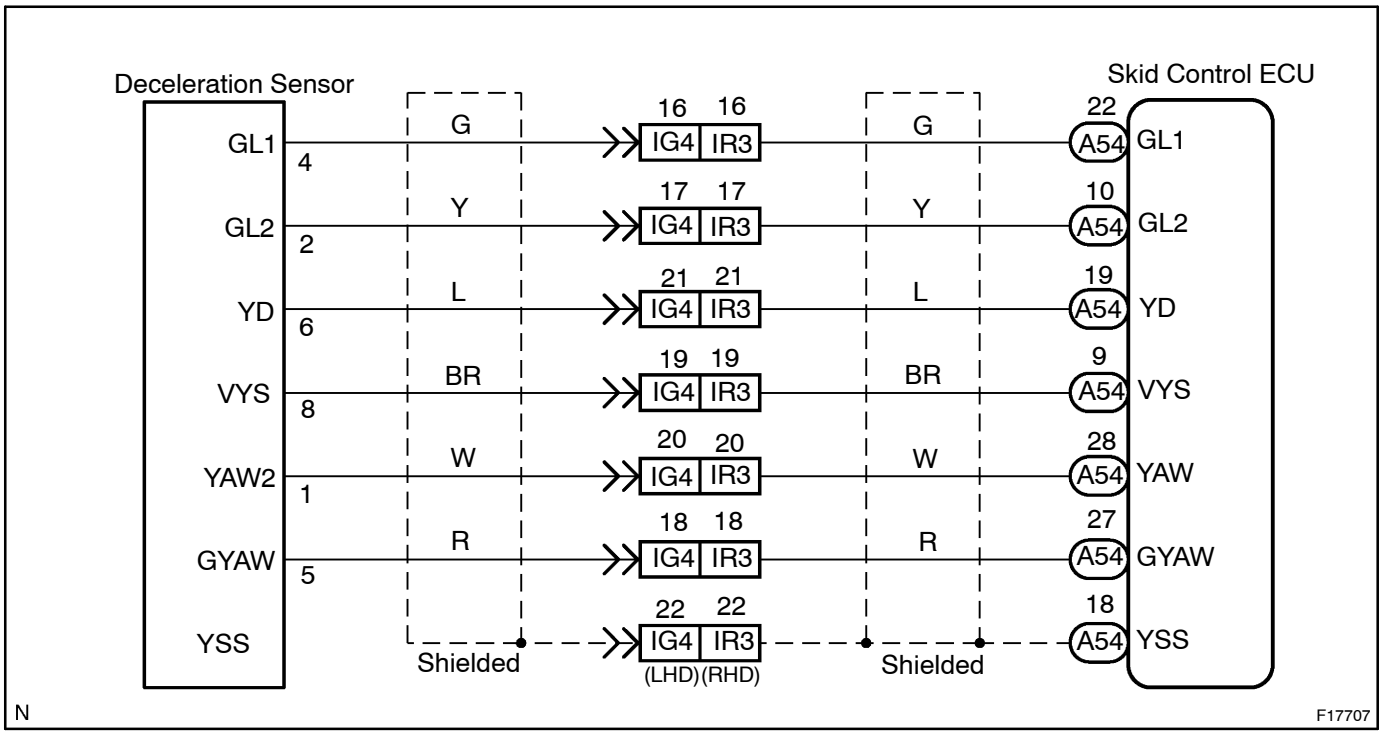
DIARL–01

DTC	C1243 / 43, C1245 / 45	Malfunction in Deceleration Sensor

CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
C1243 / 43	While vehicle speed becomes 0 km/h (0 mph) from 30 km/h (18 mph), and the condition that GL1 and GL2 signals of ECU terminals did not change 40 mV or less continued in a sequence 16 times.	• Deceleration sensor • Wire harness for deceleration sensor system
C1245 / 45	At the vehicle speed of 30 km/h (18 mph) or more, and the condition that the difference between acceleration and deceleration values of computation from deceleration sensor and vehicle speed becomes more than 0.35 G continues for 60 sec. or more.	

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Start the inspection from step 1 in case of using the hand–held tester and start from step 3 in case of not using the hand–held tester.

1	**Check output value of the yaw rate (deceleration) sensor.**

PREPARATION:

(a) Connect the hand–held tester to the DLC3.

(b) Turn the ignition switch to ON and turn the hand–held tester main switch to ON.

(c) Select the DATA LIST mode on the hand–held tester.

CHECK:

Check that the deceleration value of the deceleration sensor observed in the hand–held tester changes when the vehicle is tilted.

OK:

Deceleration value must be changing.

OK → **Go to step 3.**

NG

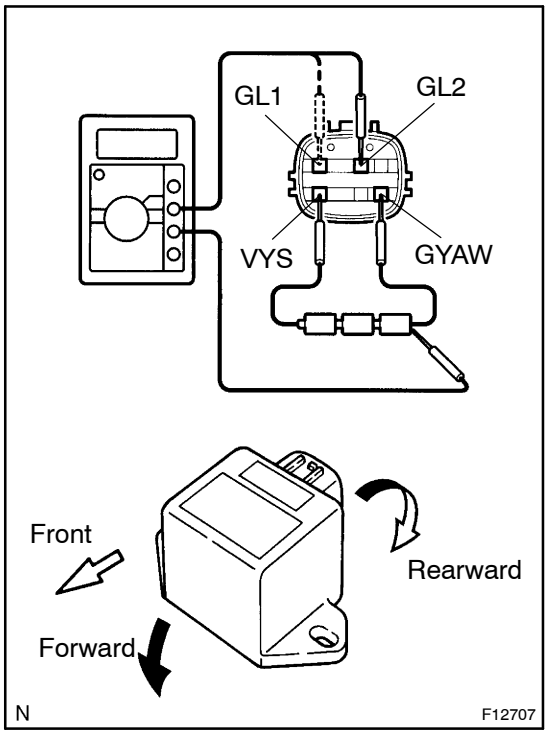
2	**Check for open or short circuit in harness and connector between yaw rate (deceleration) sensor and skid control ECU (See page IN–38).**

NG → **Repair or replace harness or connector.**

OK

Replace yaw rate sensor.

3	Check yaw rate (deceleration) sensor.



PREPARATION:

(a) Connect 3 dry batteries of 1.5 V in series.

(b) Connect VYS terminal to the batteries' positive (+) terminal, and GYAW terminal to the batteries' negative (–) terminal. Apply about 4.5 V between VYS and GYAW terminals.

NOTICE:

Do not apply voltage of 6 V or more to terminals VYS and GYAW.

CHECK:

Check the output voltage of GL1 and GL2 terminals when the sensor is tilted forward and rearward.

OK:

Symbols	Condition	Standard Value
GL1	Horizontal	About 2.3 V
GL1	Lean rearward	1.0 V – about 2.3 V
GL1	Lean forward	About 2.3 V – 3.5 V
GL2	Horizontal	About 2.3 V
GL2	Lean rearward	About 2.3 V – 3.5 V
GL2	Lean forward	1.0 V – about 2.3 V

HINT:

- If the sensor is tilted too much it may show the wrong value.
- If dropped, the sensor should be replaced with a new one.
- The sensor removed from the vehicle should not be placed upside down.

NG → **Replace yaw rate sensor.**

OK

4	Check for open or short circuit in harness and connector between yaw rate (deceleration) sensor and skid control ECU (See page IN–38).

NG → Repair or replace harness or connector.

OK →

Check and replace skid control ECU.