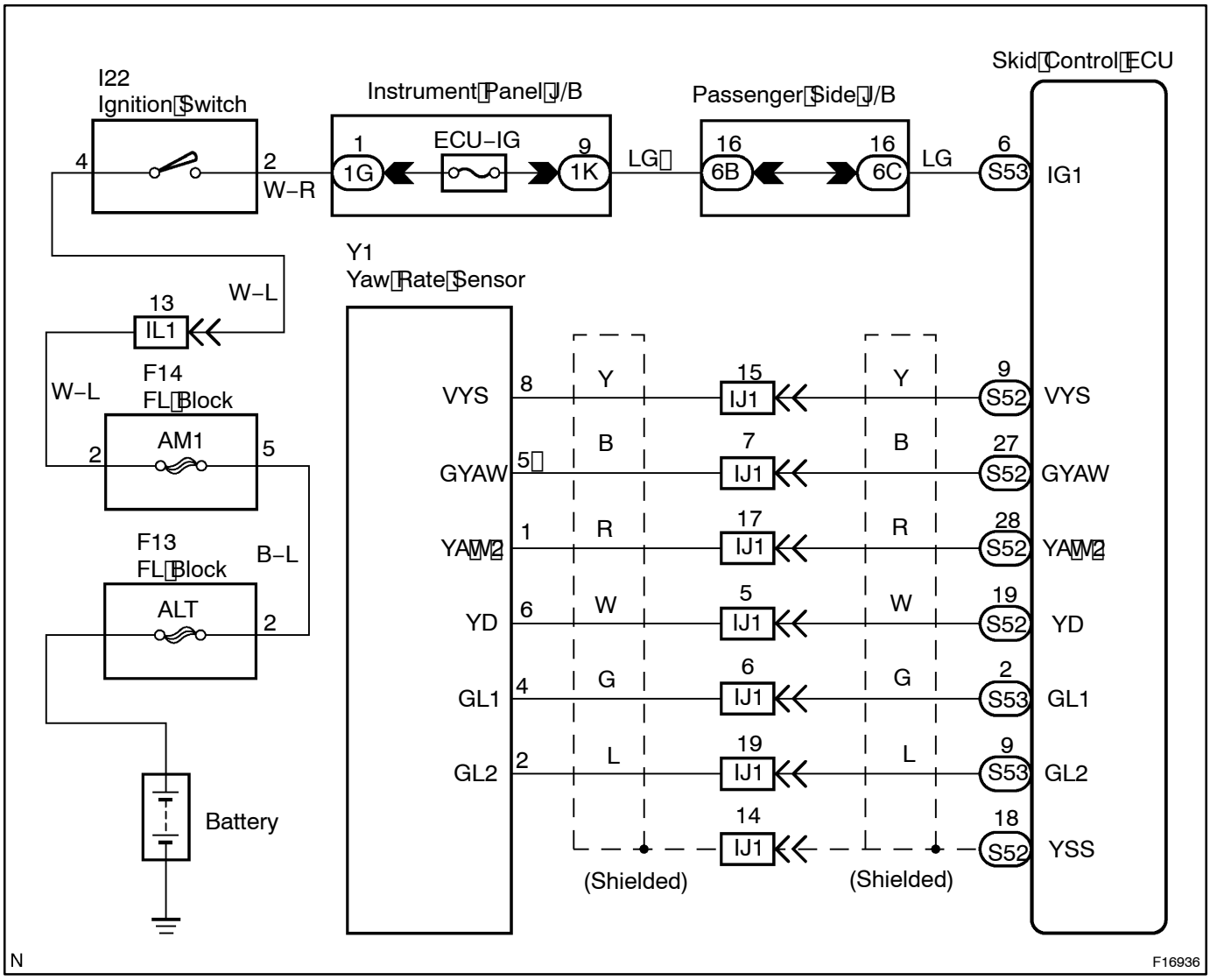
DIA04–01

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) or more, the condition that both GL1 and GL2 signals of ECU terminals do not change 2LSB or more occurs 16 times continuously.	• Deceleration sensor • Wire harness for deceleration sensor system
C1244 / 44	Detection of any of conditions 1. through 4.: 1. The condition that the ECU GL1 and GL2 terminals' values are –1.5 G or less, or 1.5 G or more continues for 1.2 sec. or more. 2. The condition that the deceleration sensor terminal VYS voltage is 4.4 V or less, or 5.6 V or more continues for 1.2 sec. or more. 3. Vehicle speed is 0 km/h (0 mph). After the difference of output values between deceleration sensor terminals GL1 and GL2 becomes 0.6 G or more, the condition that it does not become less than 0.4 G continues for 60 sec. or more. 4. Momentary interruption in the deceleration sensor signal occurs 7 times or more.	• Deceleration sensor • Deceleration sensor circuit
C1245 / 45	At the vehicle speed of 30 km/h (18 mph), the acceleration and deceleration values calculated from the deceleration sensor values and from vehicle speed are different, and the condition that the difference exceeds 0.35 G continues for 60 sec. or more.	• Deceleration sensor • Wire harness for deceleration sensor system

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

After step 1 and 2, go to step 3 in case of using the hand–held tester, and go to step 5 in case of not using the hand–held tester.

1	**Perform zero point calibration of the Deceleration sensor (See page DI–3).**

2	**Is DTC still output?**

Check DTC on page DI–3.

NO → **End.**

YES

3	**Check output value of the 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 DATALIST 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 5.**

NG

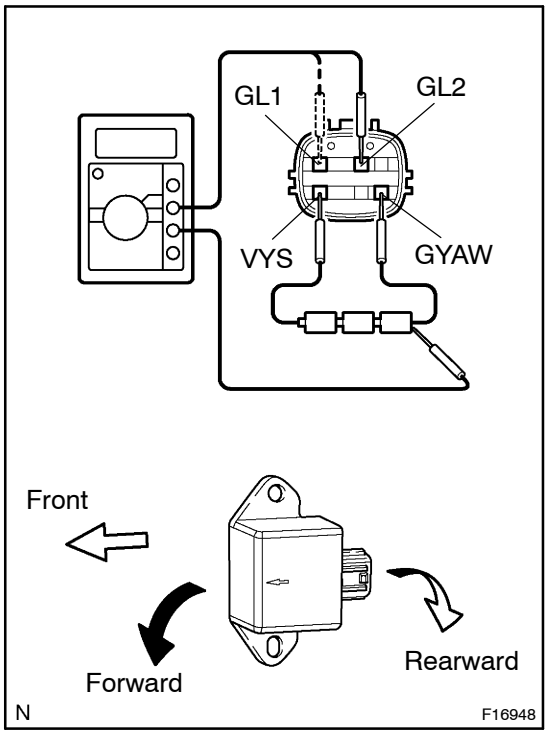
4	**Check for open or short circuit in harness and connector between deceleration sensor and skid control ECU (See page IN–31).**

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

OK

Replace deceleration sensor.

5	Check 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 forrward	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 deceleration sensor.**

OK

6	Check for open or short circuit in harness and connector between deceleration sensor and skid control ECU (See page IN–31).

NG → Repair or replace harness or connector.

OK →

Check and replace skid control ECU.