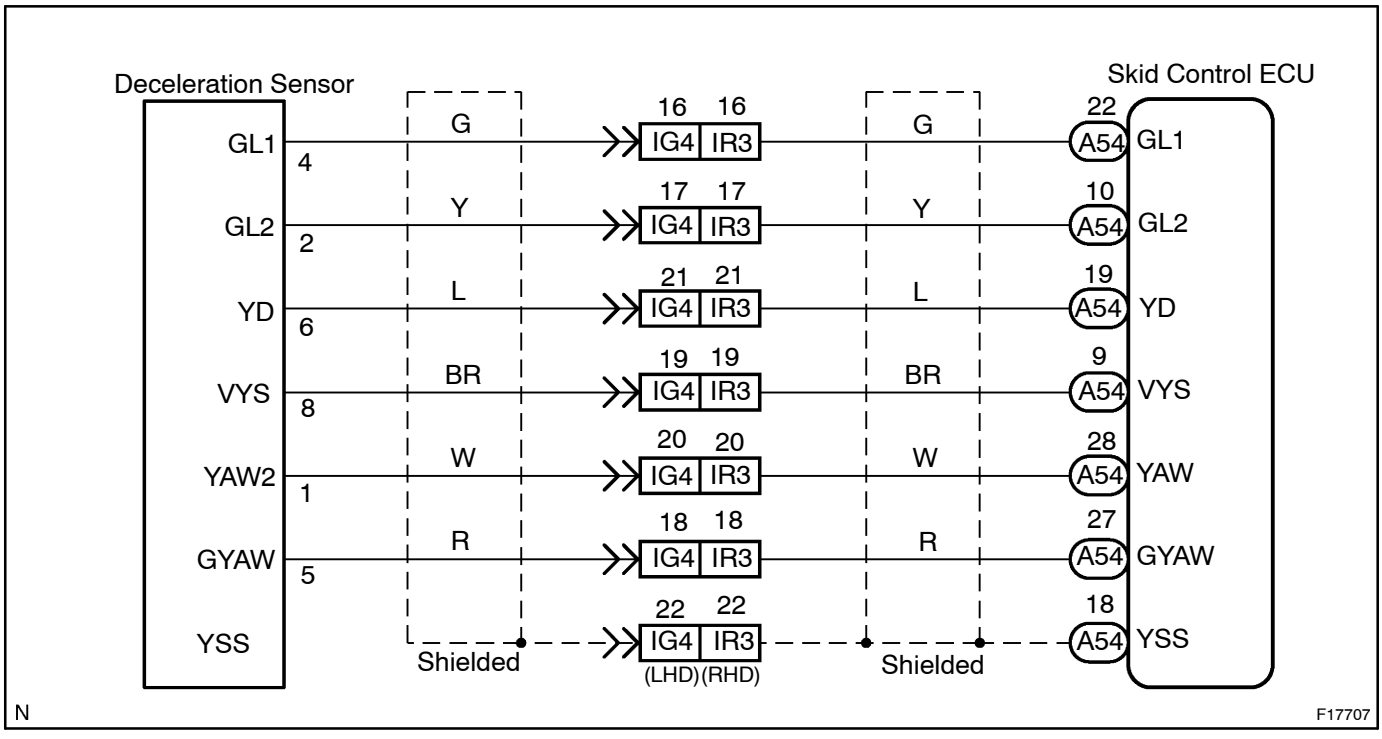
DI6XH–03

DTC	C1233 / 33, C1234 / 34	Yaw Rate Sensor Circuit

CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
C1233 / 33	When any of the following 1. through 4. is detected: 1. ECU terminal IG1 voltage is 9.5 V to 17.0 V, and the condition that yaw rate sensor voltage is out of the range from 0.25 V to 4.75 V continued for 1 sec. or more. 2. The conditions that yaw rate sensor open detect circuit signal is ON and the voltage of ECU terminal IG1 is 9.5 V to 17 V continued for 1 sec. or more. 3. The conditions that yaw rate sensor power source voltage is out of the range from 4.4 V to 5.6 V and the voltage of ECU terminal IG1 is 9.5 V to 17 V continued for 1 sec. or more. 4. When the condition that yaw rate sensor signal is momentarily open occurs 10 times or more and the voltage of ECU terminal IG1 is 9.5 V to 17 V.	• Yaw rate sensor • Yaw rate sensor circuit
C1234 / 34	Condition 1. or 2. is detected: 1. When the condition that yaw rate sensor VYS terminal voltage is 4.75 V to 5.25 V and YD malfunction signal of yaw rate sensor is ON continued for 5 sec. or more. 2. Shift lever position is in P range and output voltage of yaw rate sensor is out of the range from 2.4 V to 2.6 V or after the difference from zero point calibration voltage of yaw rate sensor has become 0.08 V or more and when the condition that the vehicle speed exceeds more than 15 km/h (9 mph) while output condition of yaw rate sensor has been repeated more than 3 times.	

WIRING DIAGRAM



INSPECTION PROCEDURE

1	Perform zero point calibration of the yaw rate sensor (See page DI–185).

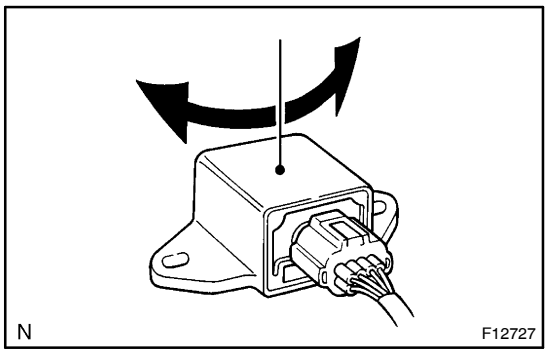
2	Is DTC still output?

Check DTC on page DI–185.

NO → No problem.

YES

3	Check output value of the yaw rate sensor.



In case of using the hand–held tester:

PREPARATION:

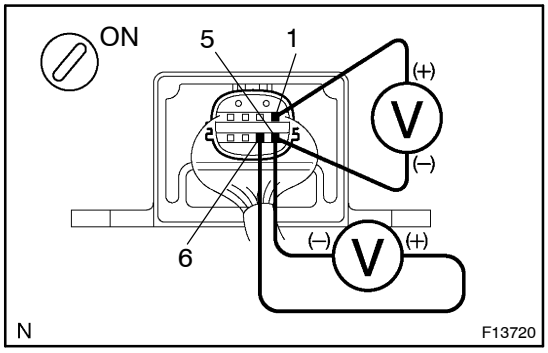
(a) Remove the 2 bolts and yaw rate sensor with connector still connected.
(b) Connect the hand–held tester to the DLC3.
(c) Turn the ignition switch to ON and push the hand–held tester main switch to ON.
(d) Select the DATALIST mode on the hand–held tester.

CHECK:

Check that the yaw rate value of the yaw rate sensor displayed on the hand–held tester changes. Place the yaw rate sensor vertically to the ground and turn the sensor pivoted on its center.

OK:

Yaw rate value must be changing.



In case of not using the hand–held tester:

PREPARATION:

(a) Remove the yaw rate sensor with the connector still connected to it.
(b) Turn the ignition switch to ON.

CHECK:

Measure voltage between terminals YAW2 (1) – GYAW (5), and terminals YD (6) – GYAW (5) of the yaw rate sensor.

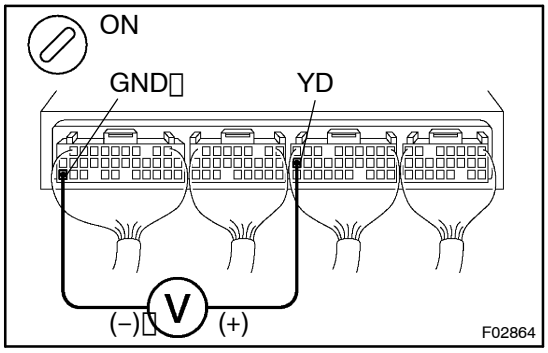
OK:

Terminals 1 and 5 (YAW2 – GYAW)	About 2.42 V – 2.58 V
Terminals 6 and 5 (YD – GYAW)	About 4.5 V – 5.3 V

NG → Replace yaw rate sensor.

OK

4	Check voltage between terminals YD and GND of skid control ECU.



PREPARATION:

Remove the skid control ECU with the connector still connected.

CHECK:

(a) Turn the ignition switch to ON.

(b) Measure voltage between terminals YD and GND of skid control ECU.

OK:

Voltage: 4.5 – 5.3 V

OK → Check and replace skid control ECU.

NG

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

NG → Repair or replace harness or connector.

OK

Check and replace skid control ECU.