DIA03-01

DTC

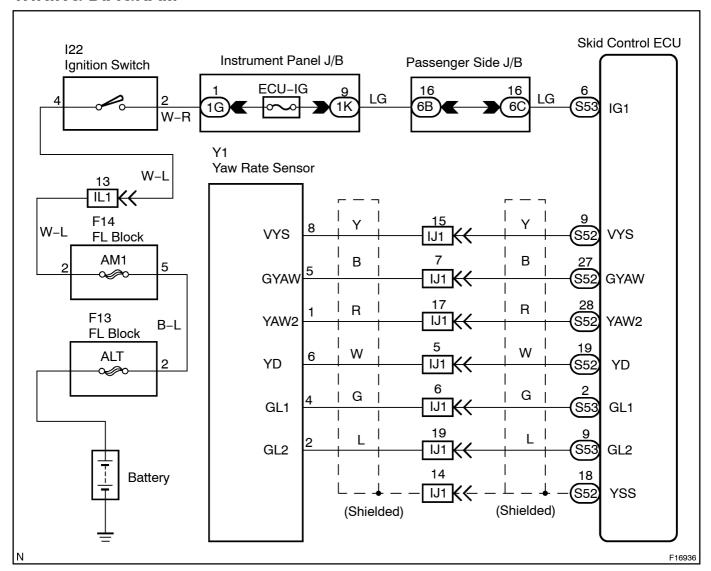
C1233 / 33, C1234 / 34

# **Yaw Rate Sensor Circuit**

# **CIRCUIT DESCRIPTION**

DTC No.	DTC Detecting Condition	Trouble Area
C1233 / 33	<ol> <li>When any of the following 1. through 4. is detected:</li> <li>ECU terminal IG1 voltage is 9.5 to 17.2 V and the yaw rate sensor voltage is continuously out of the range from 0.25 to 4.75 V for 1 sec. or more.</li> <li>ECU terminal IG1 voltage is 9.5 to 17.2 V and the yaw rate sensor open circuit detection signal remains ON for 1 sec. or more.</li> <li>ECU terminal IG1 voltage is 9.5 to 17.2 V and the yaw rate sensor power source voltage remains out of the range from 4.4 to 5.6 V for 1 sec. or more.</li> <li>Momentary interruption of the yaw rate sensor signal occurs 10 times or more.</li> </ol>	Yaw rate sensor     Yaw rate sensor circuit
C1234 / 34	When the condition that yaw rate sensor voltage is 4.4 V to 5.6 V and YD malfunction signal of yaw rate sensor is ON continued for 5 sec. or more.	

### **WIRING DIAGRAM**



# **INSPECTION PROCEDURE**

1 Perform zero point calibration of the yaw rate sensor (See page DI-3).



2 Is DTC still output?

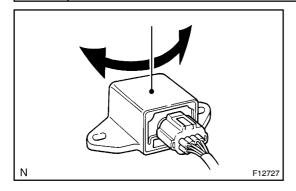
Check DTC on page DI-3.

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.

#### <u>OK:</u>

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:

F13720

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

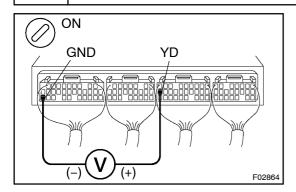
NG

Replace yaw rate sensor.

ОК

ON

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

ок

Check and replace skid control ECU.



5 Check for open and short circuit in harness and connector between yaw rate sensor and skid control ECU (See page IN-31).

NG

Repair or replace harness or connector.

OK

Check and replace skid control ECU.