DTC	C1233/33	OPEN OR SHORT CIRCUIT IN YAW RATE SENSOR CIRCUIT

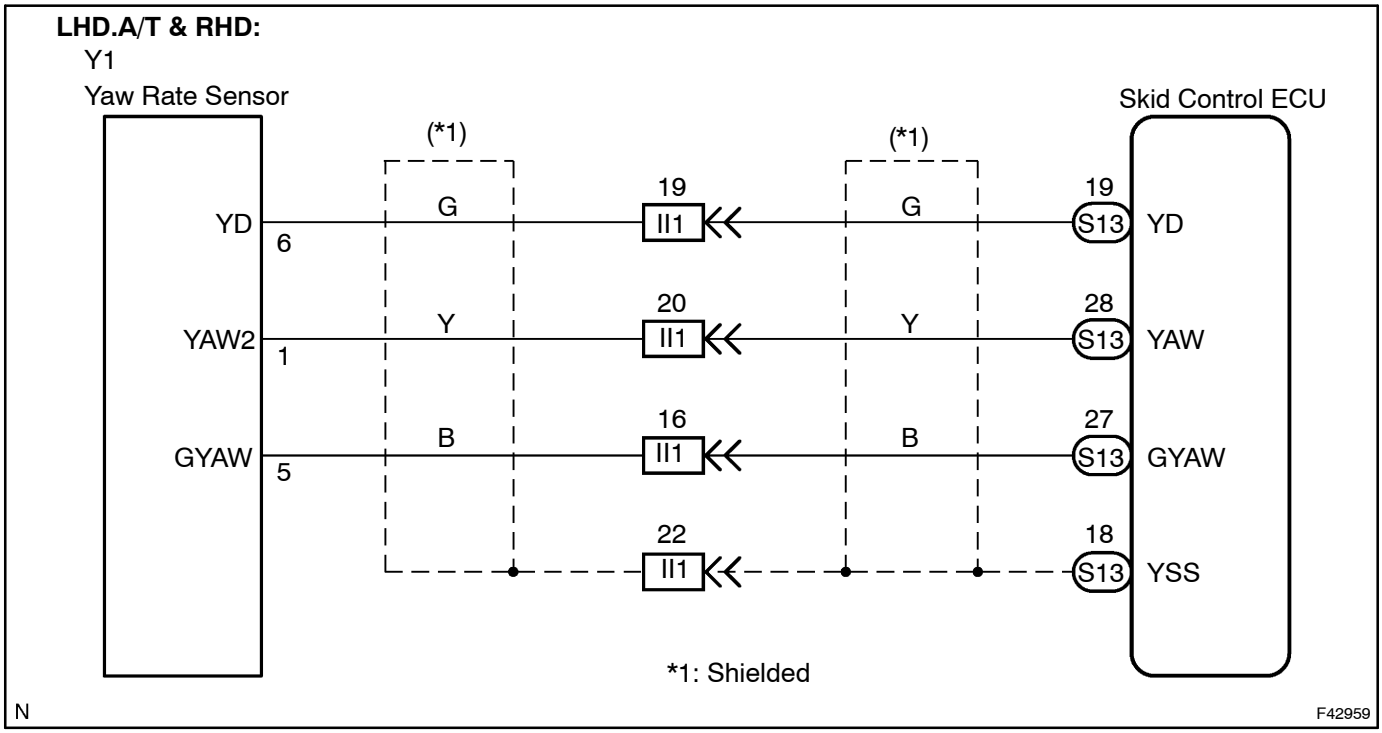
DTC	C1234/34	MALFUNCTION IN YAW RATE SENSOR

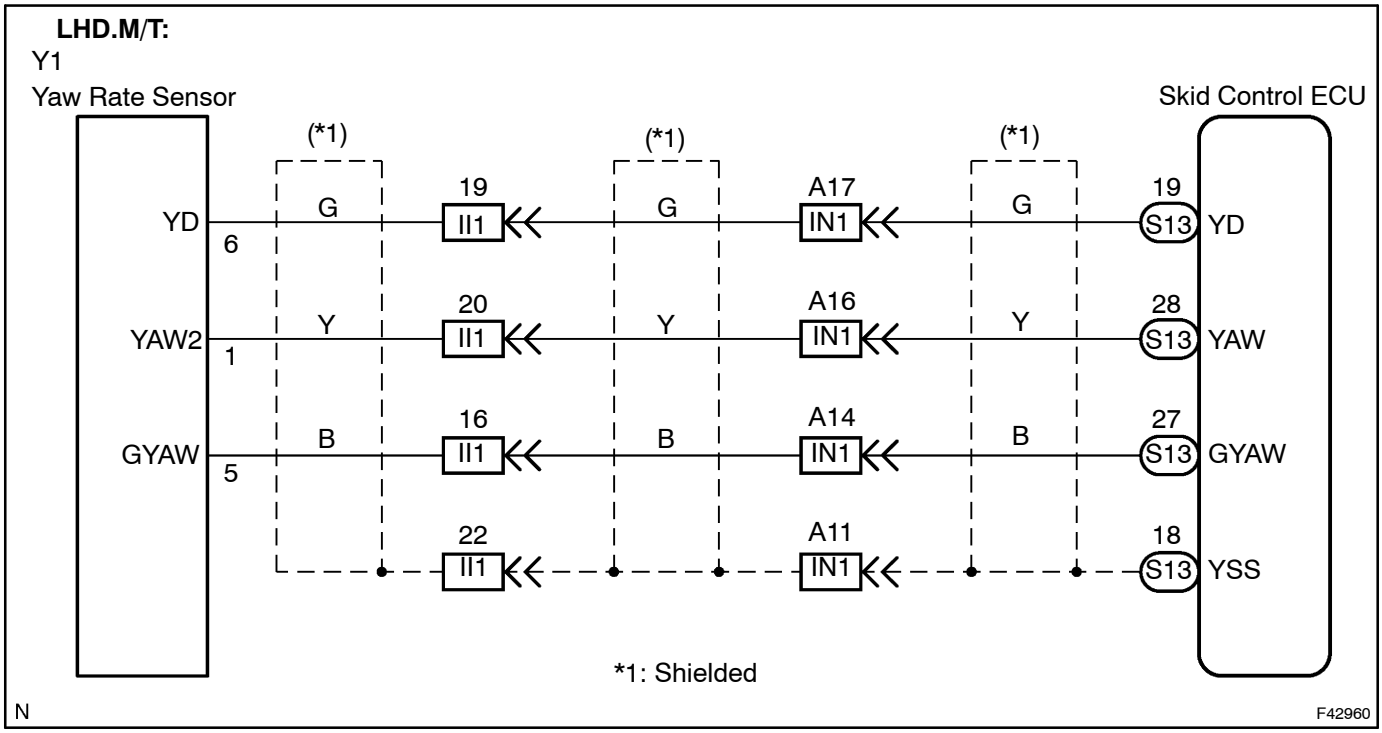
CIRCUIT DESCRIPTION

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 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 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 to 17 V.	• Yaw rate sensor • Yaw rate sensor circuit
C1234/34	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.	

WIRING DIAGRAM

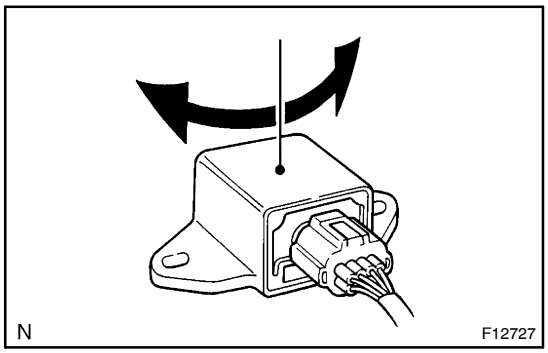
LHD.A/T & RHD:




LHD.M/T:
Y1
Yaw Rate Sensor
Skid Control ECU
(*1)
(*1)
(*1)
YD
6
YAW2
1
GYAW
5
G
Y
B
19
II1
20
II1
16
II1
22
II1
A17
IN1
A16
IN1
A14
IN1
A11
IN1
19
S13
YD
28
S13
YAW
27
S13
GYAW
18
S13
YSS
*1: Shielded
N
F42960

INSPECTION PROCEDURE

1	READ VALUE OF YAWRATE SENSOR

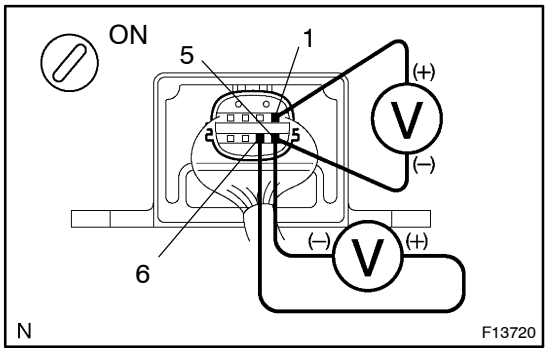


IN CASE OF USING HAND–HELD TESTER:

(a) Remove the console box.
(b) Remove the yaw rate sensor with the connector still connected to it.
(c) Connect the hand–held tester to the DLC3.
(d) Turn the ignition switch ON and push the hand–held tester main switch ON.
(e) Select the DATALIST mode on the hand–held tester.
(f) Check that the yaw rate sensor value of the yaw rate sensor observed in the hand–held tester is changing: Place the yaw rate sensor vertically to the ground and turn the sensor pivoted on its center.

OK:

Yaw rate value must be changing. (Reference)
When the yaw rate sensor is stationary output value: ±4 deg/s.



IN CASE OF NOT USING HAND–HELD TESTER:

(a) Remove the console box then remove the yaw rate sensor with the connector still connected to it.
(b) Turn the ignition switch ON.
(c) Measure voltage between terminals YAW2 (1) –GYAW (5), and terminals YD (6)–GYAW (5) of the yaw rate sensor.

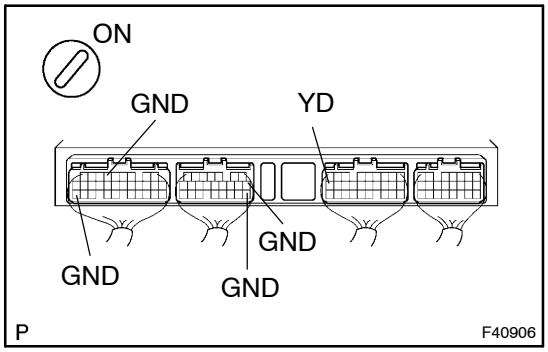
OK:

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

NG → **REPLACE YAWRATE SENSOR**

OK

2	INSPECT SKID CONTROL ECU TERMINAL VOLTAGE(YD TERMINAL)



(a) Remove the skid control ECU with the connector still connected.
(b) Turn the ignition switch ON.
(c) 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 ASSY

NG

3	CHECK HARNESS AND CONNECTOR(YAW RATE SENSOR – SKID CONTROL ECU)

(a) Check for open and short circuit in harness and connector between terminal YD of yaw rate sensor and skid control ECU (See page 01–36).

NG	REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE SKID CONTROL ECU ASSY