

DTC	C0210/33	RIGHT REAR SPEED SENSOR CIRCUIT
DTC	C0215/34	LEFT REAR SPEED SENSOR CIRCUIT
DTC	C1238/38	FOREIGN MATTER IS ATTACHED ON TIP OF RIGHT REAR SENSOR
DTC	C1239/39	FOREIGN MATTER IS ATTACHED ON TIP OF LEFT REAR SENSOR

CIRCUIT DESCRIPTION

Refer to DTC C0200/31, C0205/32, C1235/35, C1236/36 on page 05-251 .

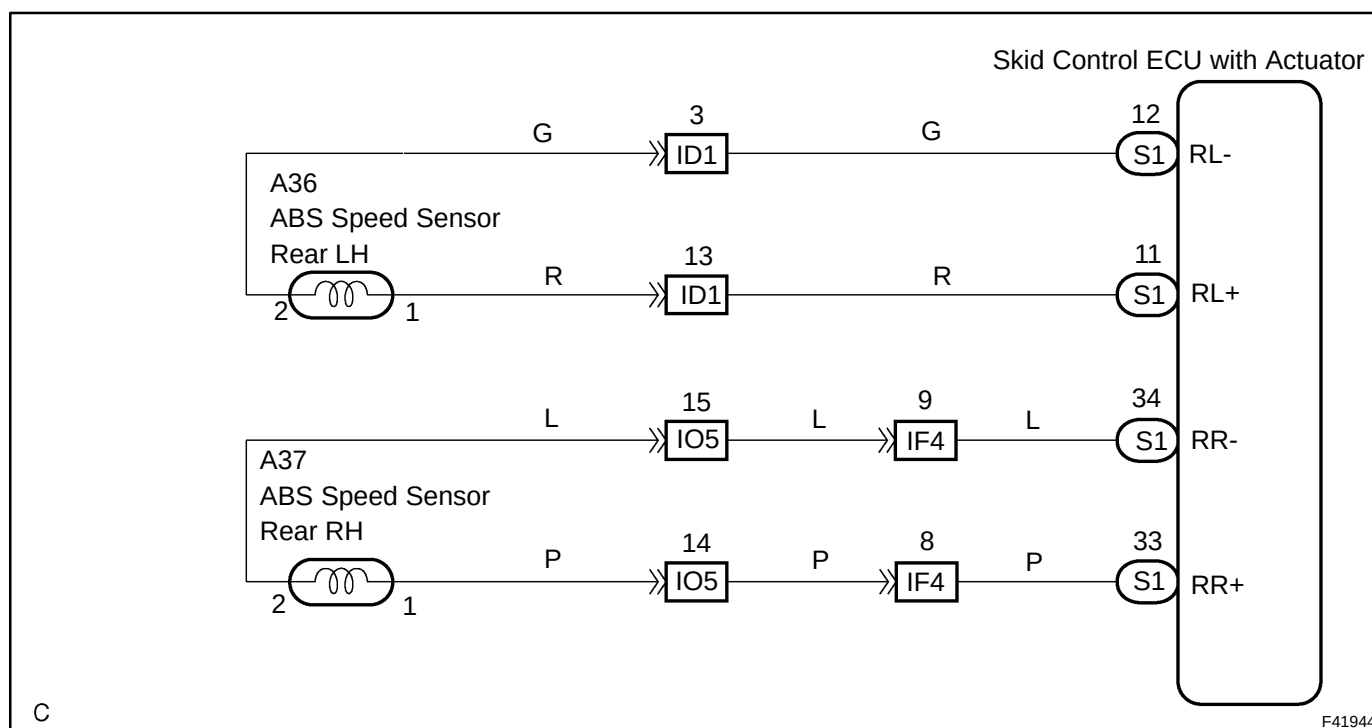
DTC No.	DTC Detecting Condition	Trouble Area
C0210/33 C0215/34	Detection of any of conditions from 1. to 4.: 1. With vehicle speed at 10 km/h or more, sensor signal circuit of faulty wheel is open or short for 15 sec. or longer. 2. Momentary interruption of sensor signal of faulty wheel has occurred 7 times or more. 3. Sensor signal circuit is open for 0.5 sec. or longer.	• Right rear, left rear speed sensor • Each speed sensor circuit • Sensor installation • Sensor rotor
C1238 / 38 C1239 / 39	Continuous noise occurs in to the speed sensor signals with the vehicle speed at 20 km/h (12 mph) or more continues for 5 sec or more.	• Right rear, left rear speed sensor • Speed sensor rotor

HINT:

DTC No. C0210/33, C1238/38 is for the right rear speed sensor.

DTC No. C0215/34, C1239/39 is for the left rear speed sensor.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Start the inspection from step 1 in case of using the hand-held tester and start from step 2 in case of not using hand-held tester.

1 READ VALUE OF HAND-HELD TESTER(SKID CONTROL SENSOR)

- Select the item "WHEEL SPEED RL (RR)" in the DATA LIST and read its value displayed on the hand-held tester.
- Check that there is no difference between the speed value output from the speed sensor displayed on the hand-held tester and the speed value displayed on the speedometer when driving the vehicle.

OK: There is almost no difference from the displayed speed value.

HINT:

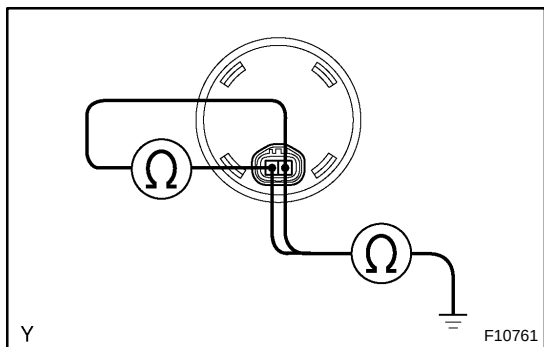
There is tolerance of $\pm 10\%$ in the speedometer indication.

OK

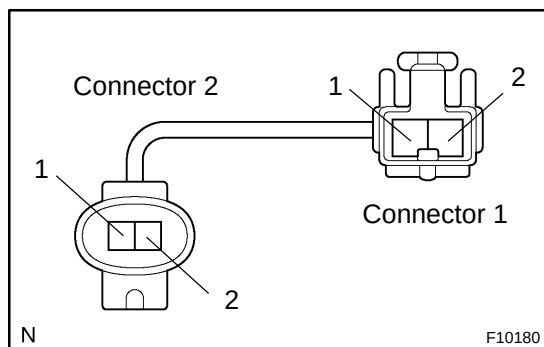
CHECK AND REPLACE BRAKE ACTUATOR ASSY

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2 INSPECT SKID CONTROL SENSOR



- Make sure that there is no looseness at the connector lock part and connecting part of the connector.
- Disconnect the sensor connector.
- Measure resistance between terminals 1 and 2 of sensor connector.
OK: 1.3 - 1.6 k Ω at 20°C
- Measure resistance between terminals 1 and 2 of sensor connector and body ground.
OK: 1 M Ω or higher



Skid control Sensor Sub-Wire Harness:

- Remove the seat cushion and seatback.
- Make sure that there is no looseness at the connector lock part and connecting part of the connector.
- Measure resistance between terminal 1 of connector 1 and terminal 2 of connector 2.
- Measure resistance between terminal 2 of connector 1 and terminal 1 of connector 2.
OK: 1 Ω or lower
- Measure resistance between terminals 1 and 2 of speed sensor connector 1 and body ground.
OK: 10 M Ω or higher

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REPLACE SKID CONTROL SENSOR OR SUB-WIRE HARNESS

NOTICE:

Check the speed sensor signal last (See page 05-239).

OK

3 CHECK HARNESS AND CONNECTOR(SKID CONTROL SENSOR - BRAKE ACTUATOR ASSEMBLY)(See page 01-31)

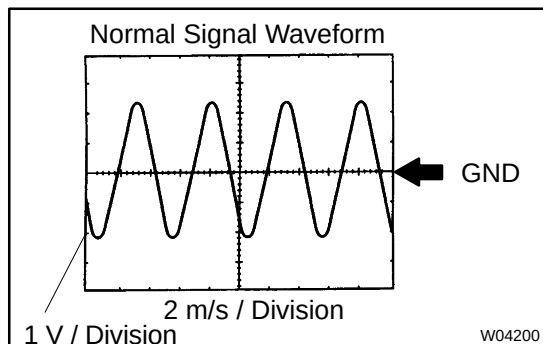
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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4 INSPECT SENSOR AND SENSOR ROTOR SERRATIONS

(REFERENCE) INSPECTION USING OSCILLOSCOPE



- Connect the oscilloscope to the terminals RR+ - RR- or RL+ - RL- of the skid control ECU.
- Drive the vehicle with about 20 km/h (12 mph), and check the signal waveform.

HINT:

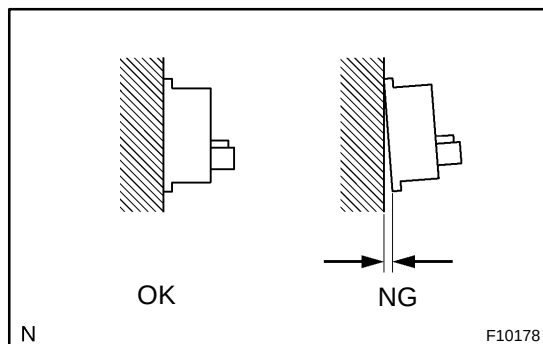
- As the vehicle speed (rpm of the wheels) increases, a cycle of the waveform becomes shorter and the fluctuation in the output voltage becomes greater.
- When noise is identified in the waveform on the oscilloscope, error signals are generated due to the speed sensor rotor's scratches, looseness or foreign matter deposited on it.

OK

CHECK AND REPLACE BRAKE ACTUATOR ASSY

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5 INSPECT SKID CONTROL SENSOR INSTALLATION



- Check the sensor installation.

OK:

There is no clearance between the sensor and rear axle carrier.

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REPLACE SKID CONTROL SENSOR

NOTICE:

Check the speed sensor signal last (See page 05-239).

OK

6**INSPECT SPEED SENSOR ROTOR AND SENSOR TIP****OK****CHECK AND REPLACE BRAKE ACTUATOR
ASSY****NOTICE:**Check the speed sensor signal last (See page [05-239](#)).**NG****CLEAN OR REPLACE SPEED SENSOR AND SENSOR ROTOR**