DTC	C1231 / 31, C1335 / 35	Steering Angle Sensor Circuit

CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
C1231 / 31	The condition that the data is not transmitted to the steering angle sensor continues for more than 1.2 sec.	• Steering angle sensor • Steering angle sensor circuit
C1335 / 35	When the ECU IG1 terminal voltage is 9.5 V or more, data transmission from the steering angle sensor is impossible for 1 sec. or more.	

WIRING DIAGRAM

INSPECTION PROCEDURE

HINT:

Start the inspection from step 1 in case of using the hand−held tester and start from step 3 in case of not using the hand−held tester.

1	Check output value of the steering angle sensor.

PREPARATION:

(a)   Connect the hand−held tester to the DLC3.

(b)   Turn the ignition switch to ON and push the hand−held tester main switch to ON.

(c)   Select the DATALIST mode on the hand−held tester.

(d)   Drive the vehicle straight forward at 35 km/h (22 mph) or more for 1 second or longer.

HINT:

•   At this time, the zero point calibration of the steering angle sensor was memorized.

•   Do not stop the engine.

CHECK:

Check that the steering wheel turning angle value of the steering angle sensor displayed by the hand−held tester is changing when turning the steering wheel.

OK:

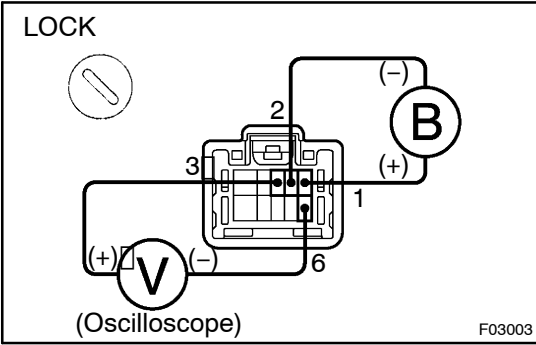> **Steering wheel turning angle value must be changing.**

OK >	Go to step 3.

NG
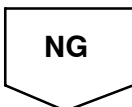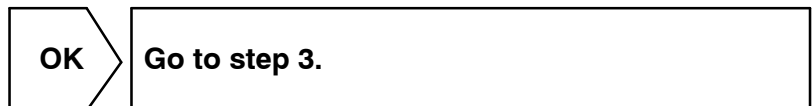
2	Replace the skid control ECU and check whether or not the trouble occurs again.

YES >	Replace steering angle sensor.

NO
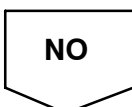
END

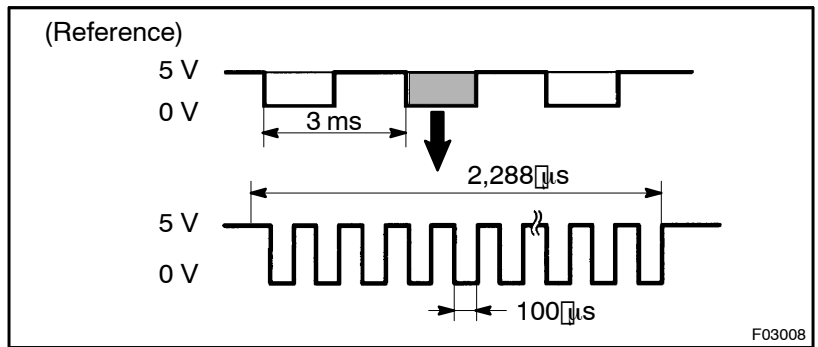| 3	Check steering angle sensor.

(Oscilloscope)   F03003

PREPARATION:
(a) Remove the steering wheel lower No. 2 and No. 3 covers, steering wheel pad, steering wheel, column upper and lower covers.
(b) Disconnect the connector from the steering angle sensor.
(c) Connect the oscilloscope to the terminals 3 and 6 of the combination switch connector (for steering angle sensor).
(d) Apply battery voltage between terminals 1 and 2.

<u>CHECK:</u>
Turn the steering wheel slowly and check the signal waveform.

<u>OK:</u>

F03008

HINT:
The above signal waveform does not repeat ON and OFF regularly and this combination changes according to the data.

NG	Replace steering angle sensor.

OK

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

NG	Repair or replace harness or connector.

OK

Check and replace skid control ECU.