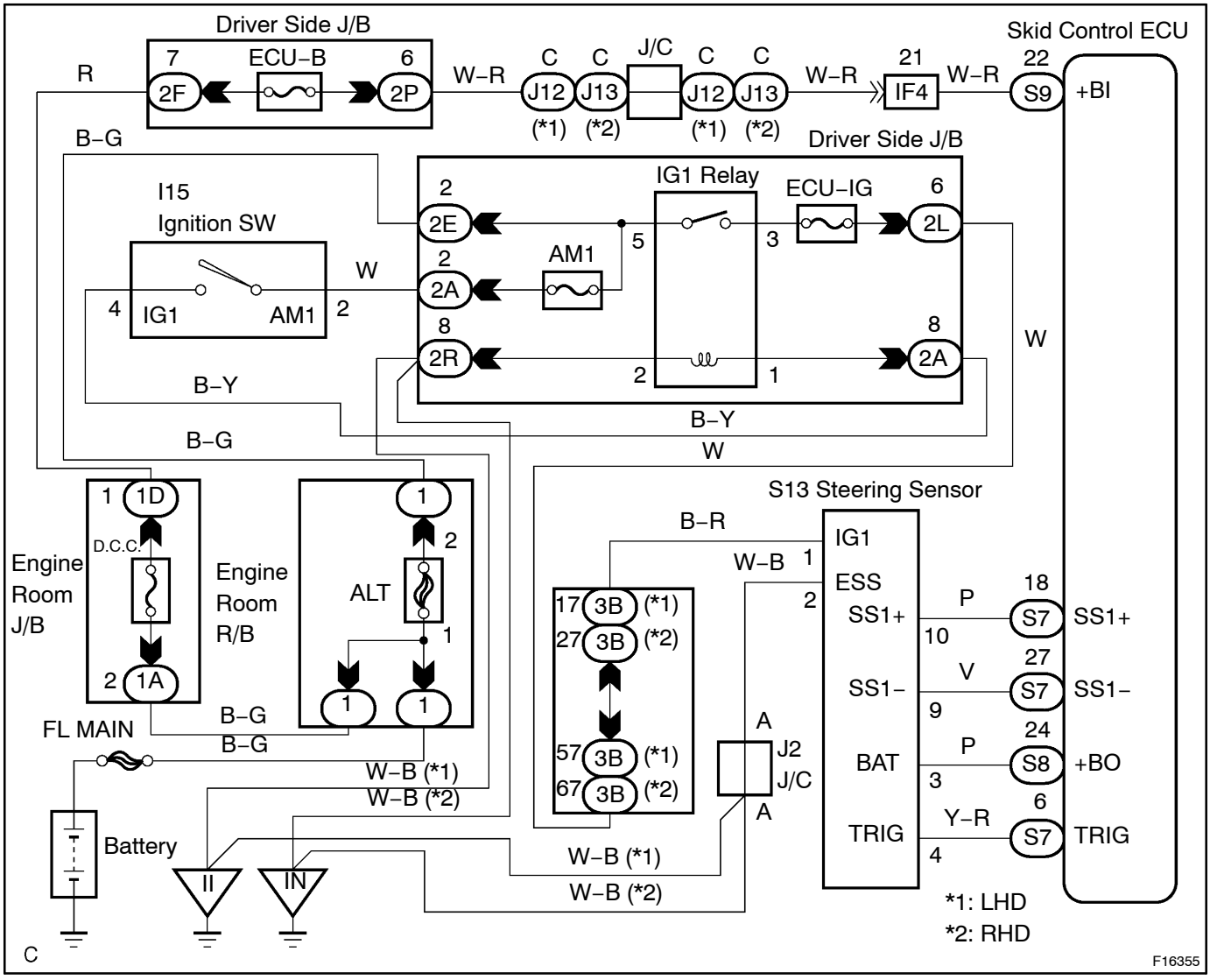
DTC	C1231/31	MALFUNCTION IN STEERING ANGLE SENSOR CIRCUIT

DTC	C1335/35	STEERING ANGLE SENSOR CIRCUIT

CIRCUIT DESCRIPTION

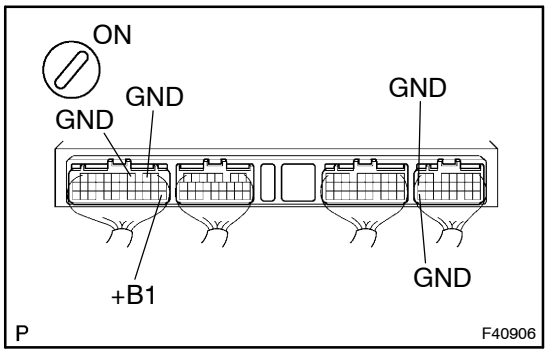
DTC No.	DTC Detecting Condition	Trouble Area
C1231/31	When ECU IG1 terminal voltage is 9.5 V or more, ECU does not receive data from the steering angle sensor for 1 sec. or more.	• Steering angle sensor • Steering angle sensor circuit • +BI circuit
C1335/35	Detection of either condition 1. or 2.: 1. 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. 2. Immediately after the terminal BAT is connected and when IG1 terminal voltage is 9.5 V or more, open circuit of terminal TRIG continues for 15 sec. or more.	• Steering angle sensor • Steering angle sensor circuit

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT SKID CONTROL ECU TERMINAL VOLTAGE(+BI TERMINAL)

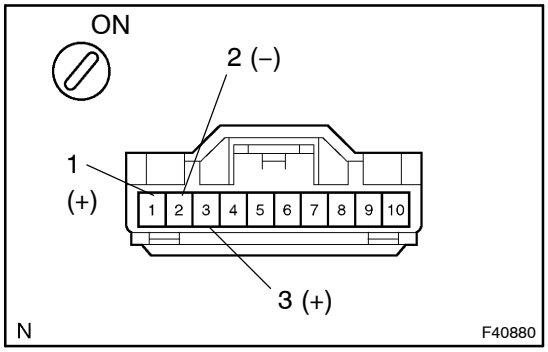


(a) Remove the skid control ECU with the connector still connected.
(b) Turn the ignition switch ON.
(c) Measure voltage between terminal +BI and GND of skid control ECU and body ground.
OK: 10 – 14 V

OK	CHECK AND REPLACE SKID CONTROL ECU ASSY

NG

2	CHECK HARNESS AND CONNECTOR(STEERING ANGLE SENSOR – SKID CONTROL ECU ASSY)(See page 01–31)

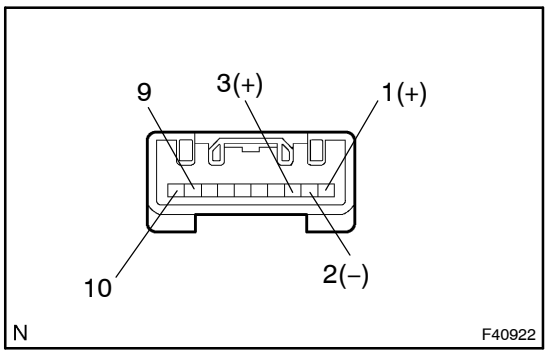


(a) Remove the steering wheel and column lower cover (See page 50–6).
(b) Disconnect the steering sensor connector.
(c) Turn the ignition switch ON.
(d) Measure voltage between terminal 1 and 2, 2 and 3 of the steering sensor harness side connector.
OK: 10 – 14 V

NG	REPAIR OR REPLACE HARNESS OR CONNECTOR

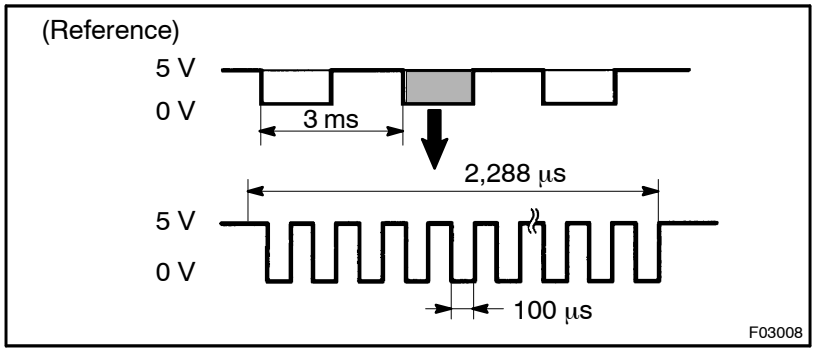
OK

3	INSPECT STEERING SENSOR



(a) Remove the steering wheel, No. 1 under cover, No. 1 safety pad, lower and upper column covers (See page 50–6).
(b) Disconnect the steering angle sensor connector.
(c) Apply battery positive voltage between terminals 1 and 2, 2 and 3.
(d) Connect the oscilloscope to the terminals 9 and 10 of the steering angle sensor.
(e) Turn the steering wheel slowly and check the signal waveform.

OK:



The above signal wave form does not repeat ON and OFF regularly and this ON–OFF interval changes case by case according to the data.

NG → **REPLACE STEERING SENSOR**

OK

CHECK AND REPLACE SKID CONTROL ECU ASSY