

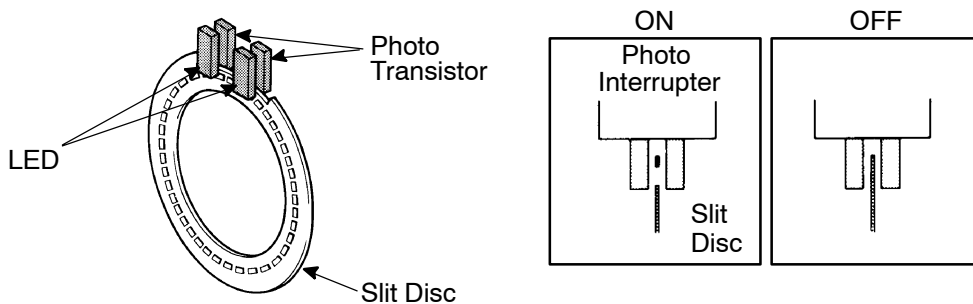
DTC	81	Steering Sensor Circuit
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CIRCUIT DESCRIPTION

The steering sensor is fitted to the turn signal switch assembly and detects the steering rotating direction and angle.

The sensor consists of a slit disc that rotates with the steering wheel as a unit, and a pair of photo interrupters. Each photo interrupter consists of an LED (Light Emitting Diode) and a photo transistor, located facing each other. It converts the change in the light irradiation between the two elements to the on/off signals. The slit disc rotates between the LED and the photo transistor of the pair of photo interrupters. As the steering wheel is operated, the slit disc rotates with the wheel as a unit and shuts and makes the light transmission between the two elements. The pair of photo interrupters have phases and the suspension control ECU detects the steering direction and angle based on the changes of each output.

And when it is judged that the steering wheel's turning angle is large and the speed is greater than the set value, the ECU causes the damping force to increase.

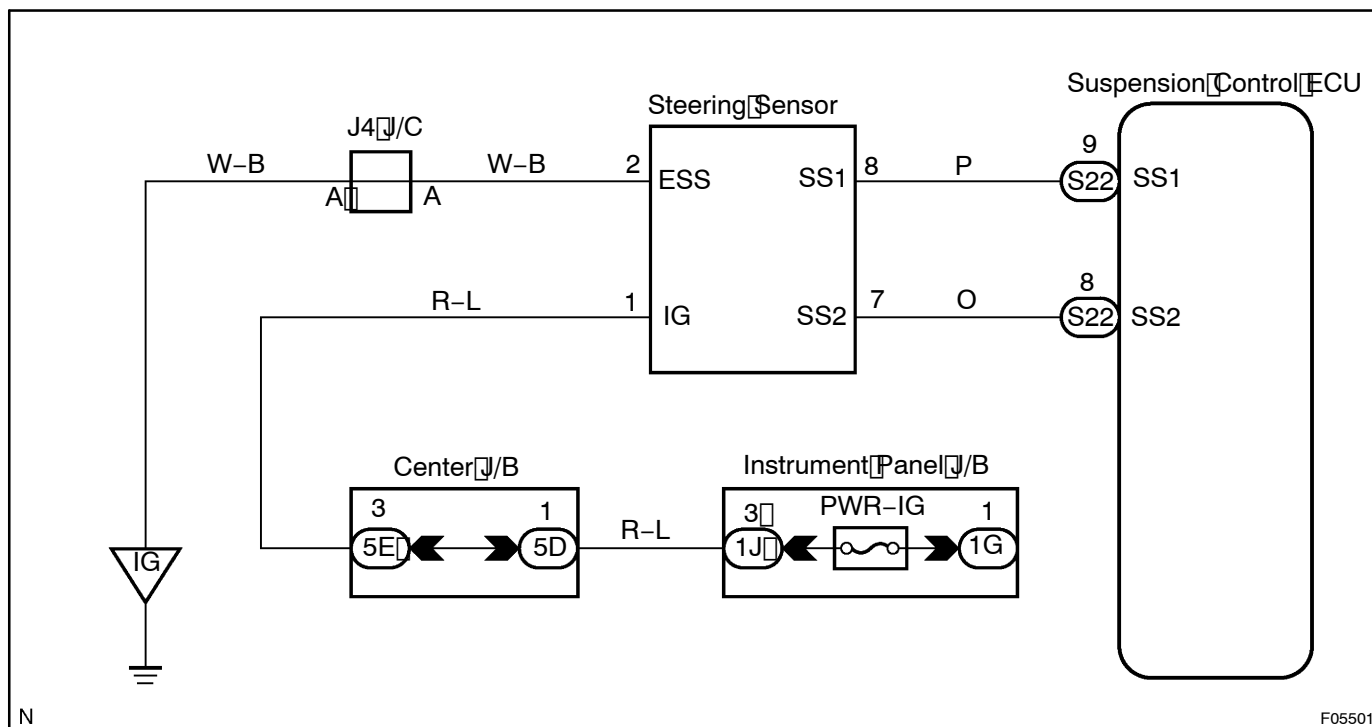


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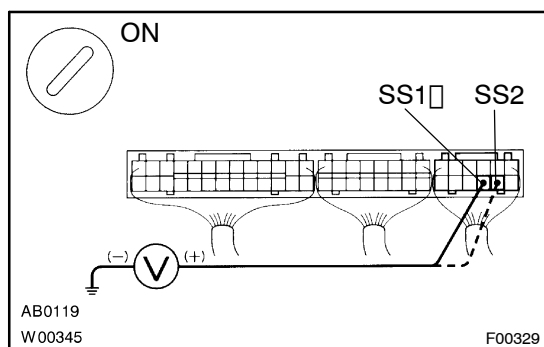
DTC No.	DTC Detecting Condition	Trouble Area
81	Steering angle 36° or larger signal is not input	<ul style="list-style-type: none"> • Steering sensor • Steering sensor circuit • Suspension control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

- 1 Check voltage between terminals SS1 and SS2 of suspension control ECU connector and body ground.

**PREPARATION:**

- (a) LHD: Remove the RH scuff plate, instrument panel under cover No. 2, glove compartment and CD changer (See page BO-96).
- (b) RHD: Remove the RH scuff plate, instrument panel under cover No. 1, instrument panel lower pad and heater to register duct No. 2 (See page BO-96).

CHECK:

- (a) Turn the ignition switch ON.
- (b) Measure the voltage between terminal SS1 and SS2 of the suspension control ECU connector and body ground when steering wheel is being turned slowly.

OK:

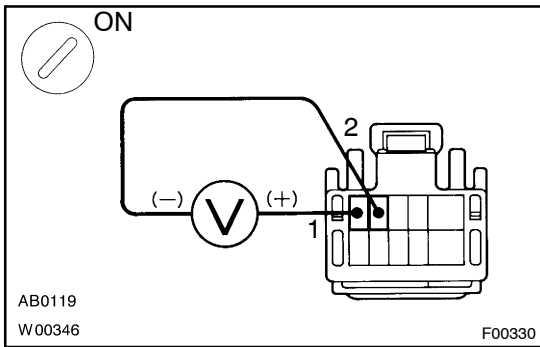
Changes between 1.2 V and approx. 5 V.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI-79).

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2 Check voltage between terminal 1 and 2 of steering sensor connector.



PREPARATION:

- Remove the steering wheel and upper and lower covers (See page SR-12).
- Disconnect the steering sensor connector.

CHECK:

- Turn the ignition switch ON.
- Measure the voltage between terminals 1 and 2 of steering sensor connector.

OK:

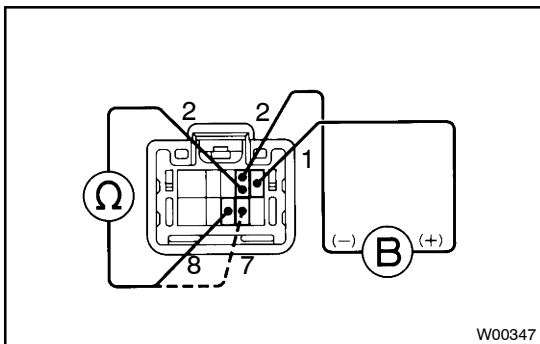
Voltage: 10 - 14 V

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Check and repair harness and connectors between battery and steering sensor, steering sensor and body ground (See page N-30).

OK

3 Check steering sensor.



PREPARATION:

Apply battery between terminals 1 and 2.

CHECK:

Measure the resistance between terminal 7, 8 and 2 of steering sensor connector when the rotating part of steering sensor is turned slowly.

OK:

Changes between 0 Ω and ∞ Ω

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Replace steering sensor.

OK

4 Check for open and short circuit in harness and connector between suspension control ECU and steering sensor (See page IN-30).

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Repair or replace harness or connector.

OK

Check and replace suspension control ECU.