

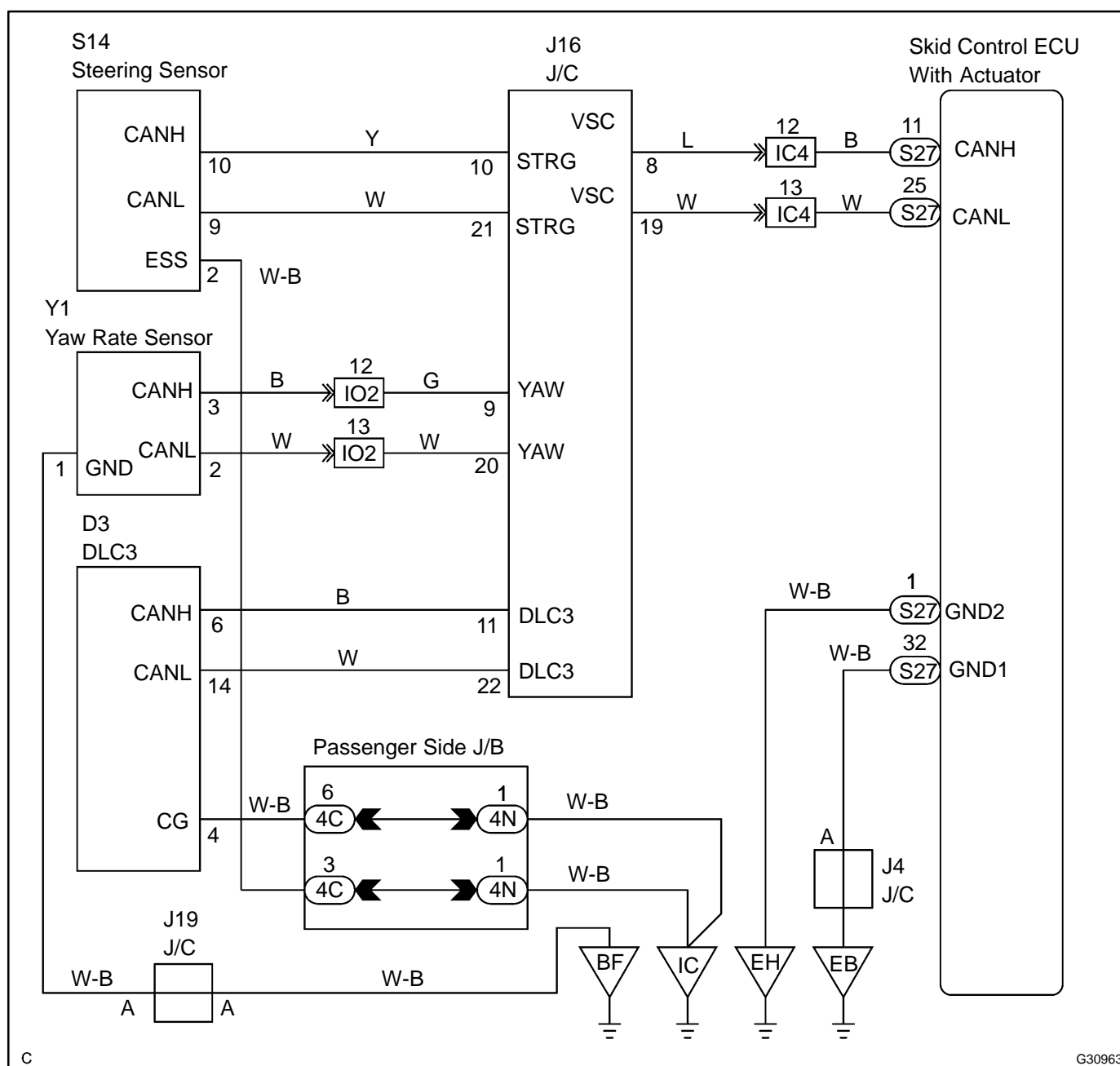
## CHECK CAN BUS LINE (CAN-L) FOR SHORT TO GND

### CIRCUIT DESCRIPTION

A short to GND is suspected in the CAN bus line when there is continuity between terminals 4 (CG) and 14 (CANL) of the DLC3.

Symptom	Trouble Area
There is continuity between terminals 4 (CG) and 14 (CANL) of DLC3.	<ul style="list-style-type: none"> <li>• Short to GND in CAN bus line (CANL)</li> <li>• Skid control ECU</li> <li>• Steering sensor</li> <li>• Yaw rate sensor</li> </ul>

### WIRING DIAGRAM

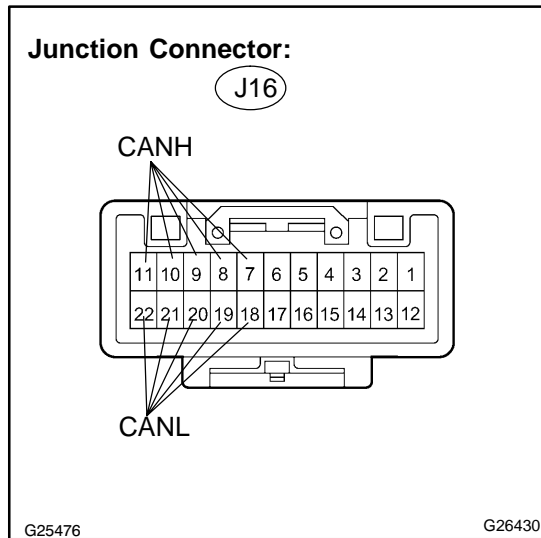


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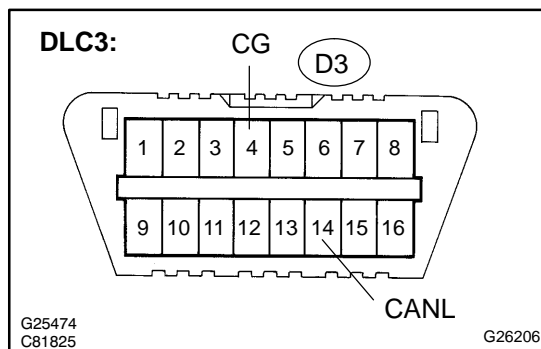
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## INSPECTION PROCEDURE

## 1 CHECK CAN BUS LINE FOR SHORT TO GND(DLC3 SUB BUS LINE, CAN-L)



- (a) Disconnect the wire harness connector (J16) from the junction connector.



- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

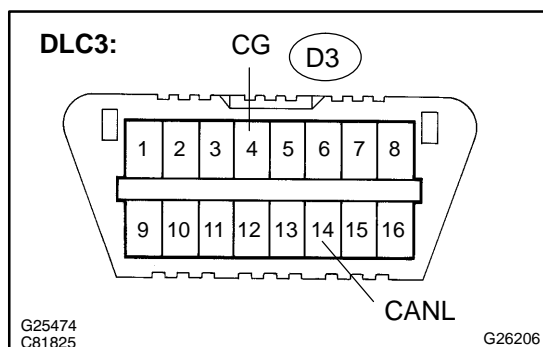
Tester connection	Condition	Specified value
D3-4 (CG) - D3-14 (CANL)	Ignition SW OFF	1 MΩ or more

**NG****REPAIR OR REPLACE DLC3 SUB BUS LINE OR CONNECTOR (CAN-L)****OK**

## 2 CONNECTION OF CONNECTORS

- (a) Reconnect the wire harness connector (J16) to the junction connector.

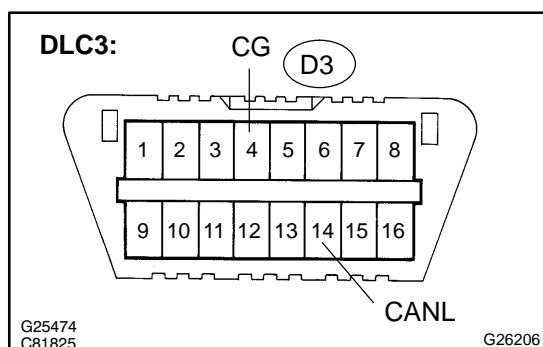


**3 CHECK CAN BUS LINE FOR SHORT TO GND(SKID CONTROL ECU, CAN-L)**

- Disconnect the connector (S27) from the skid control ECU.
- Measure the resistance according to the value(s) in the table below.

**Standard:**

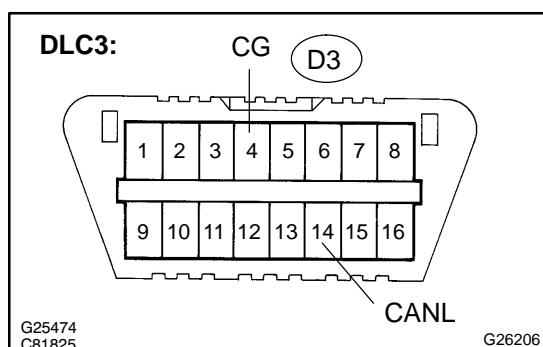
Tester connection	Condition	Specified value
D3-4 (CG) - D3-14 (CANL)	Ignition SW OFF	3 kΩ or more

**OK****REPLACE SKID CONTROL ECU WITH ACTUATOR (SEE PAGE 32-37 )****NG****4 CHECK CAN BUS LINE FOR SHORT TO GND(STEERING SENSOR, CAN-L)**

- Reconnect the connector (S27) to the skid control ECU.
- Disconnect the connector (S14) from the steering sensor.
- Measure the resistance according to the value(s) in the table below.

**Standard:**

Tester connection	Condition	Specified value
D3-4 (CG) - D3-14 (CANL)	Ignition SW OFF	3 kΩ or more

**OK****REPLACE STEERING SENSOR (SEE PAGE 32-48 )****NG****5 CHECK CAN BUS LINE FOR SHORT TO GND(YAW RATE SENSOR, CAN-L)**

- Reconnect the connector (S14) to the steering sensor.
- Disconnect the connector (Y1) from the yaw rate sensor.
- Measure the resistance according to the value(s) in the table below.

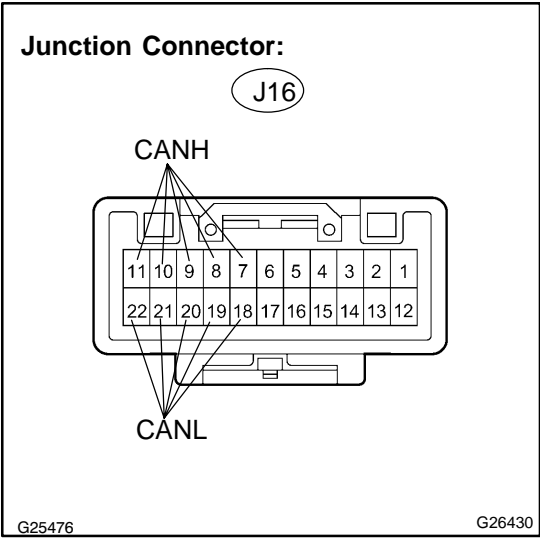
**Standard:**

Tester connection	Condition	Specified value
D3-4 (CG) - D3-14 (CANL)	Ignition SW OFF	3 kΩ or more

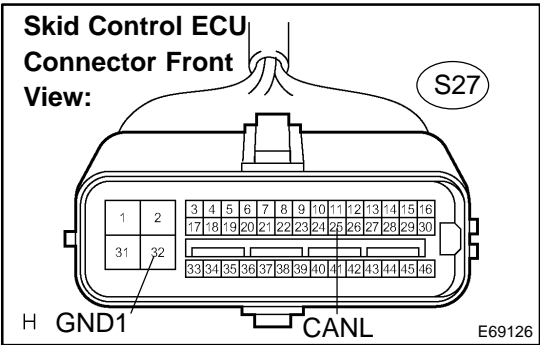
**OK****REPLACE YAW RATE SENSOR (SEE PAGE 32-46 )****NG**

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CHECK CAN BUS LINE FOR SHORT TO GND(SKID CONTROL ECU - JUNCTION CONNECTOR, CAN-L)



- (a) Reconnect the connector (Y1) to the yaw rate sensor.
- (b) Disconnect the wire harness connector (J16) from the junction connector.
- (c) Disconnect the connector (S27) from the skid control ECU.



- (d) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified value
S27-25 (CANL) - S27-32 (GND1)	Ignition SW OFF	1 MΩ more

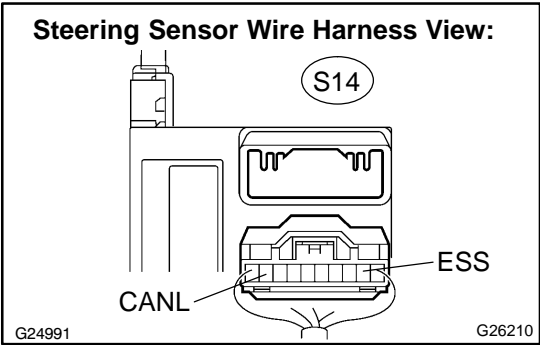
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REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (SKID CONTROL ECU - JUNCTION CONNECTOR, CAN-L)

OK

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CHECK CAN BUS LINE FOR SHORT TO GND(STEERING SENSOR - JUNCTION CONNECTOR, CAN-L)



- (a) Disconnect the connector (S14) from the steering sensor.
- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

Tester connection	Condition	Specified value
S14-2 (ESS) - S14-9 (CANL)	Ignition SW OFF	1 MΩ more

**HINT:**

Check the wire harness connector connected to the junction connector while disconnecting them.

NG

REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (STEERING SENSOR - JUNCTION CONNECTOR, CAN-L)

OK

REPAIR OR REPLACE YAW RATE SENSOR SUB BUS LINE OR CONNECTOR (CAN-L)