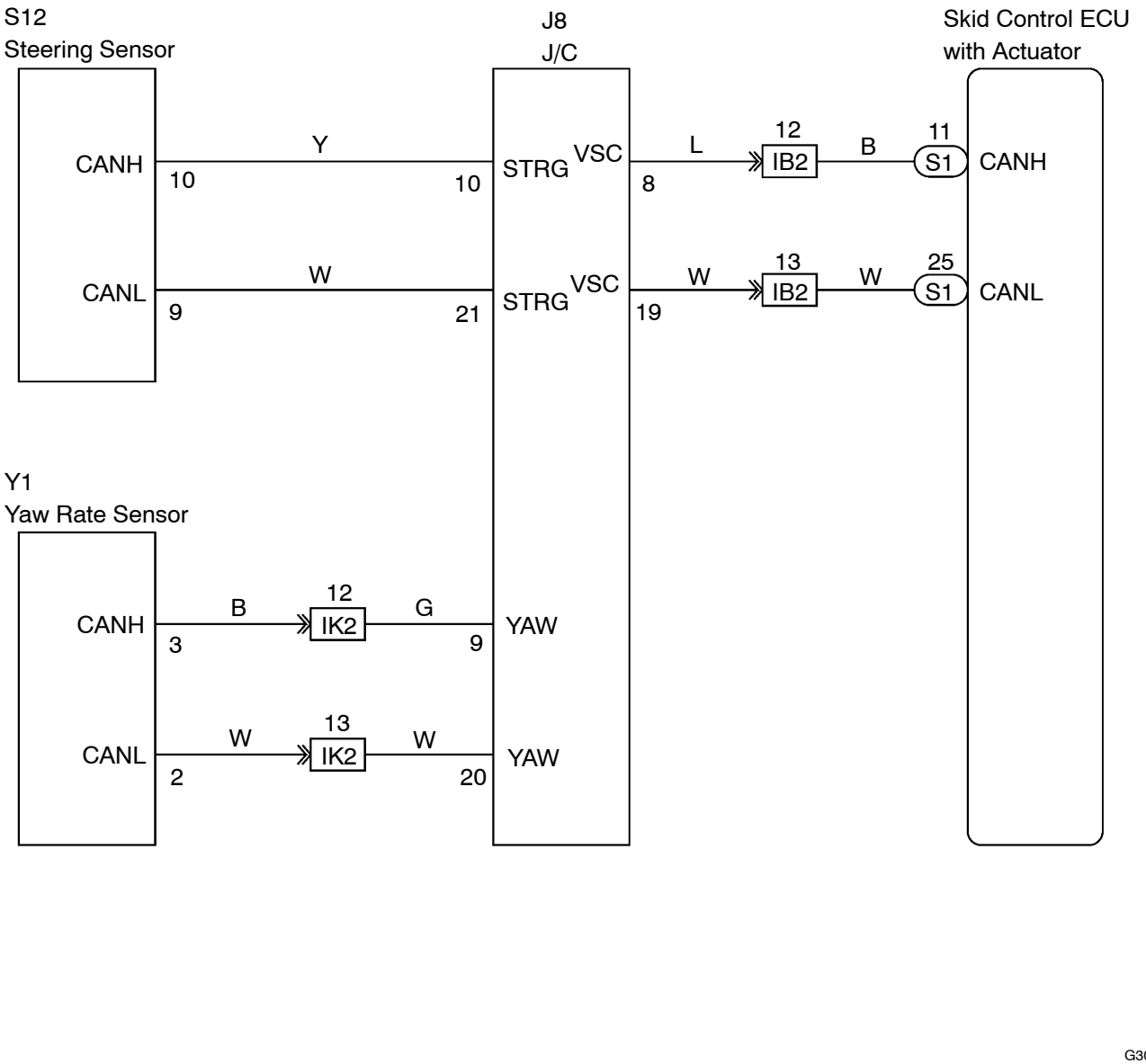
CHECK CAN BUS LINES FOR SHORT CIRCUIT

CIRCUIT DESCRIPTION

The CAN bus lines are considered to be shorted when the resistance between terminals 6 (CANH) and 14 (CANL) of the DLC3 is below 54 Ω.

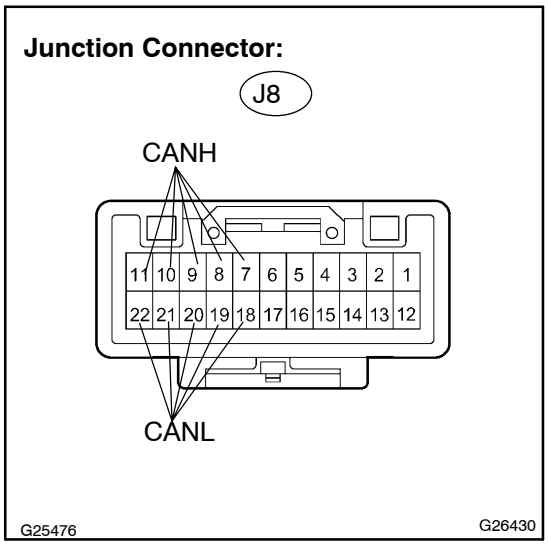
Symptom	Trouble Area
Resistance between terminals 6 (CANH) and 14 (CANL) of DLC3 is below 54 Ω.	• Short in CAN bus lines • Skid control ECU • Steering sensor • Yaw rate sensor

WIRING DIAGRAM

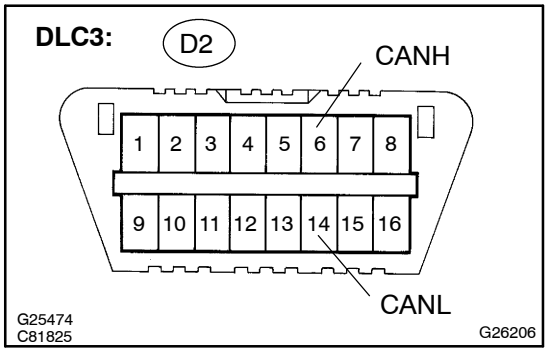


INSPECTION PROCEDURE

1	CHECK CAN BUS LINES FOR SHORT (DLC3 SUB BUS LINE)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the wire harness connector (J8) from the junction connector.



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

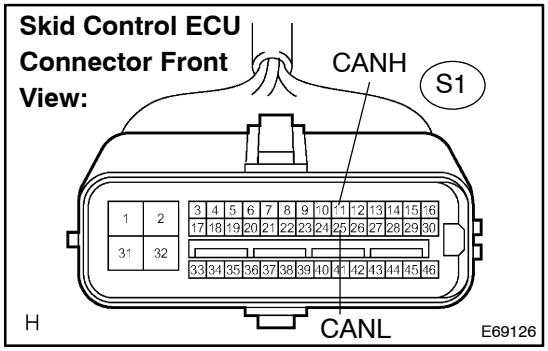
Standard:

Tester connection	Condition	Specified value
D2–6 (CANH) – D2–14 (CANL)	IG Switch OFF	1 MΩ or more

NG → **REPAIR OR REPLACE DLC3 SUB BUS LINE OR CONNECTOR (CAN–H, CAN–L)**

OK

2	CHECK CAN BUS LINES FOR SHORT (SKID CONTROL ECU – JUNCTION CONNECTOR)



(a) Disconnect the connector (S1) from the skid control ECU.
(b) Measure the resistance according to the value(s) in the table below.

Standard:

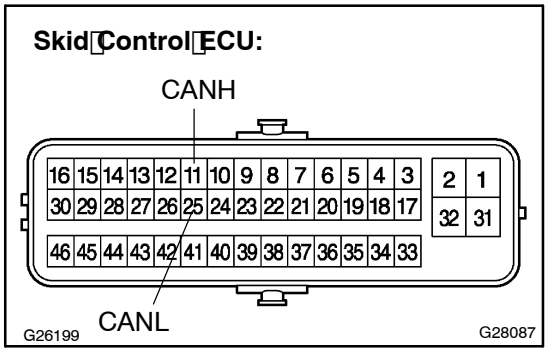
Tester connection	Condition	Specified value
S1–11 (CANH) – S1–25 (CANL)	IG Switch OFF	1 MΩ or more

HINT:
Check the wire harness connector connected to the junction connector while disconnecting it.

NG → **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (CAN–H, CAN–L)**

OK

3 INSPECT SKID CONTROL ECU WITH ACTUATOR (CANH – CANL)



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

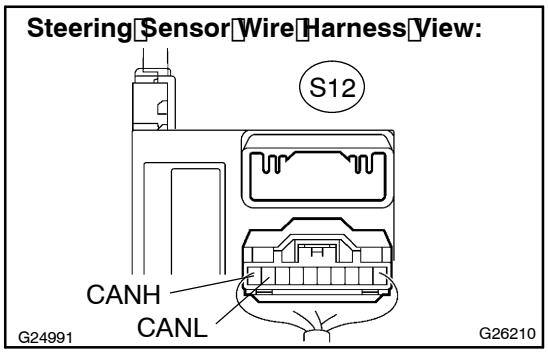
Standard:

Tester connection	Condition	Specified value
11 (CANH) – 25 (CANL)	IG Switch OFF	108 to 132 Ω

NG → **REPLACE SKID CONTROL ECU WITH ACTUATOR (SEE PAGE 32–43)**

OK

4 CHECK CAN BUS LINES FOR SHORT (STEERING SENSOR – JUNCTION CONNECTOR)



(a) Disconnect the connector (S12) from the steering sensor.

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

Standard:

Tester connection	Condition	Specified value
S12–10 (CANH) – S12–9 (CANL)	IG Switch OFF	1 MΩ or more

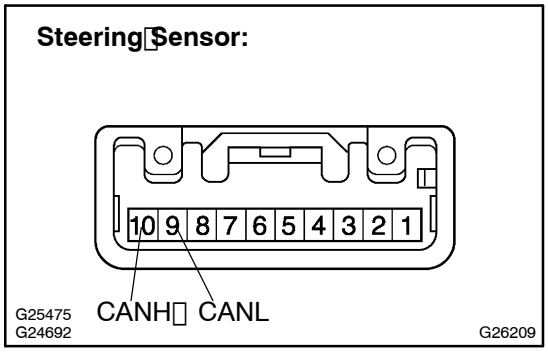
HINT:

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

NG → **REPAIR OR REPLACE STEERING SENSOR SUB BUS LINE OR CONNECTOR (CAN–H, CAN–L)**

OK

5 INSPECT STEERING SENSOR (CANH – CANL)



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

Standard:

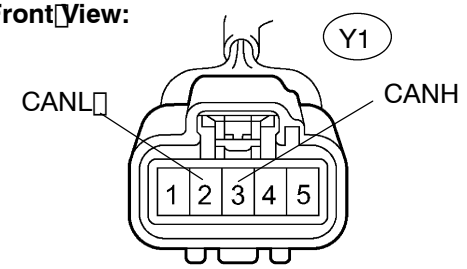
Tester connection	Condition	Specified value
10 (CANH) – 9 (CANL)	IG Switch OFF	108 to 132 Ω

NG → **REPLACE STEERING SENSOR (SEE PAGE 32–53)**

OK

6	CHECK CAN BUS LINES FOR SHORT (YAW RATE SENSOR SUB BUS LINE)

Yaw Rate Sensor Connector
Front View:



(a) Disconnect the connector (Y1) from the yaw rate sensor.
(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified value
Y1–3 (CANH) – Y1–2 (CANL)	IG Switch OFF	1 MΩ or more

HINT:
Check the wire harness connector connected to the junction connector while disconnecting it.

NG → **REPAIR OR REPLACE YAW RATE SENSOR SUB BUS LINE OR CONNECTOR (CAN–H, CAN–L)**

OK

REPLACE YAW RATE SENSOR (SEE PAGE 32–51)