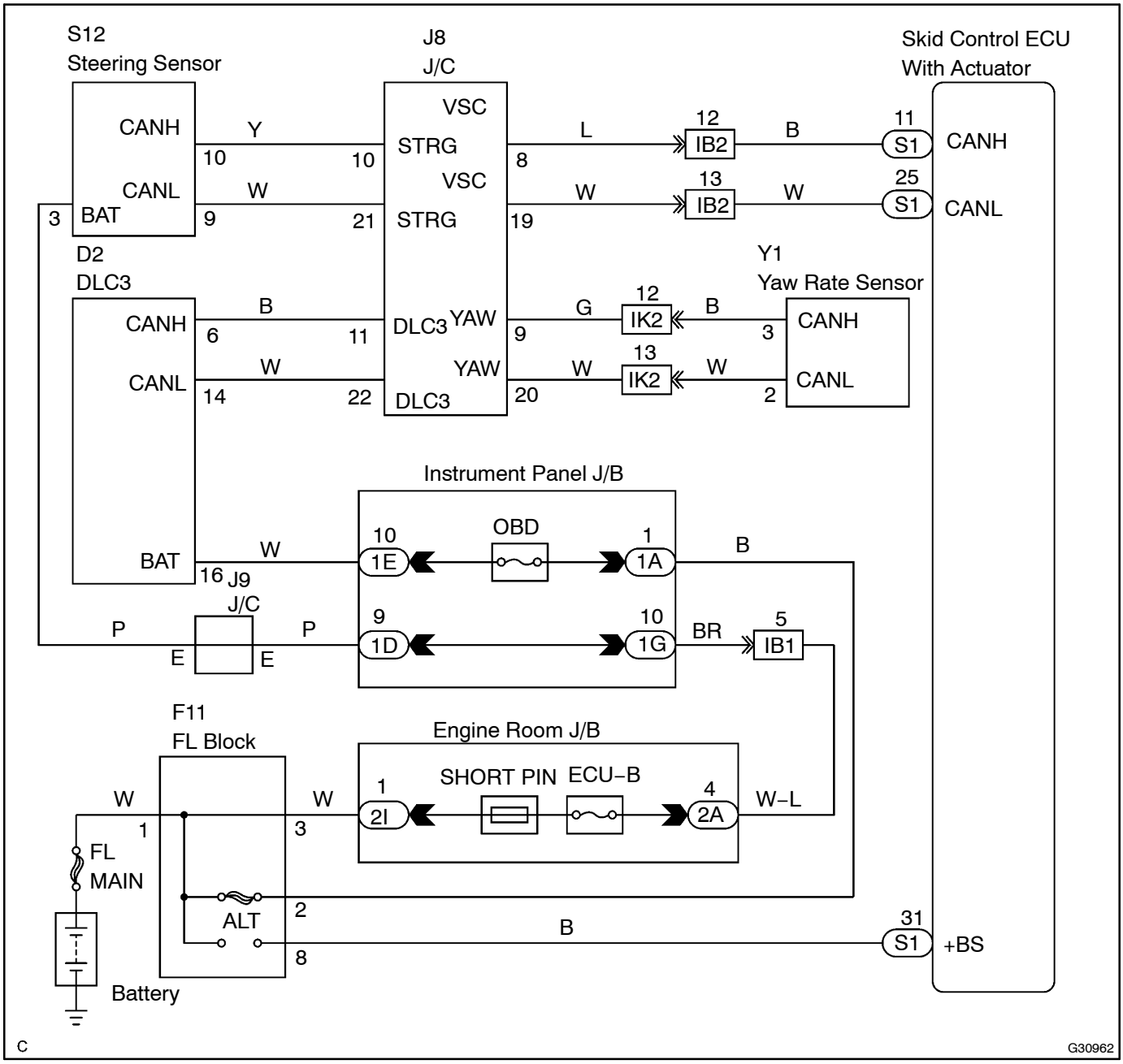
CHECK CAN BUS LINE (CAN–H) FOR SHORT TO +B

CIRCUIT DESCRIPTION

A short to +B is suspected in the CAN bus line when there is continuity between terminals 16 (BAT) and 6 (CANH) of the DLC3.

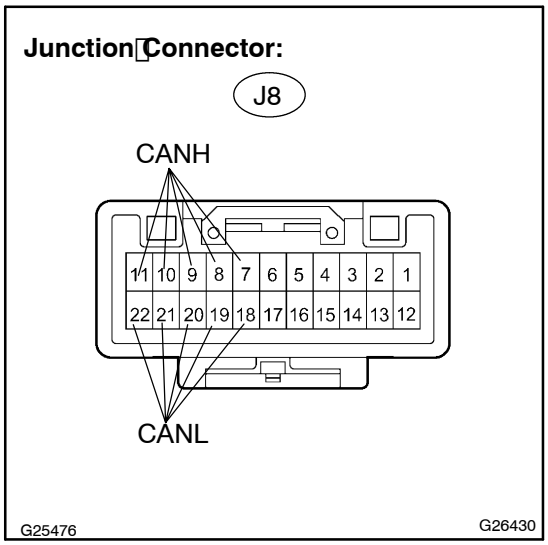
Symptom	Trouble Area
There is continuity between terminals 16 (BAT) and 6 (CANH) of DLC3.	• Short to +B in CAN bus line (CANH) • Skid control ECU • Steering sensor • Yaw rate sensor

WIRING DIAGRAM

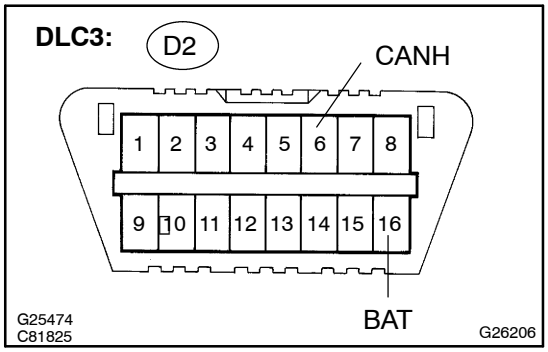


INSPECTION PROCEDURE

1 CHECK CAN BUS LINE FOR SHORT TO +B (DLC3 SUB BUS LINE, CAN–H)



(a) Disconnect the wire harness connector (J8) from the junction connector.



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

Standard:

Tester connection	Condition	Specified value
D2–6 (CANH) – D2–16 (BAT)	IG Switch OFF	1 MΩ or more

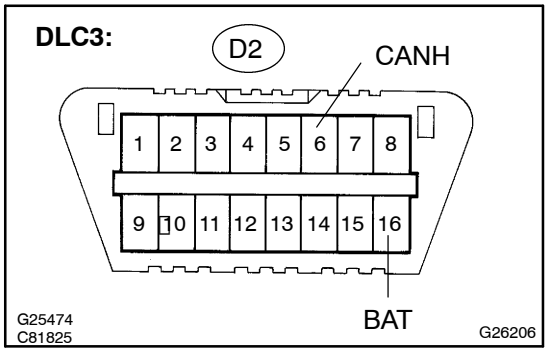
NG → **REPAIR OR REPLACE DLC3 SUB BUS LINE OR CONNECTOR (CAN–H)**

OK

2 CONNECTION OF CONNECTORS

(a) Reconnect the wire harness connectors (J8) to the junction connector.

3 CHECK CAN BUS LINE FOR SHORT TO +B (SKID CONTROL ECU, CAN–H)



(a) Disconnect the connector (S1) from the skid control ECU.

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

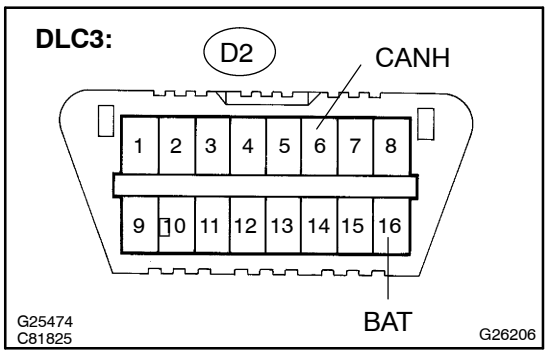
Standard:

Tester connection	Condition	Specified value
D2–6 (CANH) – D2–16 (BAT)	IG Switch OFF	1 MΩ or more

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

NG

4	CHECK CAN BUS LINE FOR SHORT TO +B (STEERING SENSOR, CAN–H)



(a) Reconnect the connector (S1) to the skid control ECU.
(b) Disconnect the connector (S12) from the steering sensor.
(c) Measure the resistance according to the value(s) in the table below.

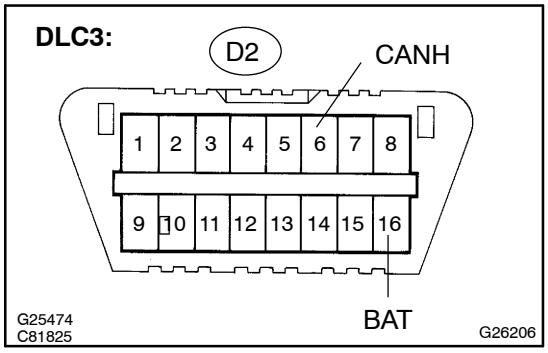
Standard:

Tester connection	Condition	Specified value
D2–6 (CANH) – D2–16 (BAT)	IG Switch OFF	1 MΩ or more

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

NG

5	CHECK CAN BUS LINE FOR SHORT TO +B (YAW RATE SENSOR, CAN–H)



(a) Reconnect the connector (S12) to the steering sensor.
(b) Disconnect the connector (Y1) from the yaw rate sensor.
(c) Measure the resistance according to the value(s) in the table below.

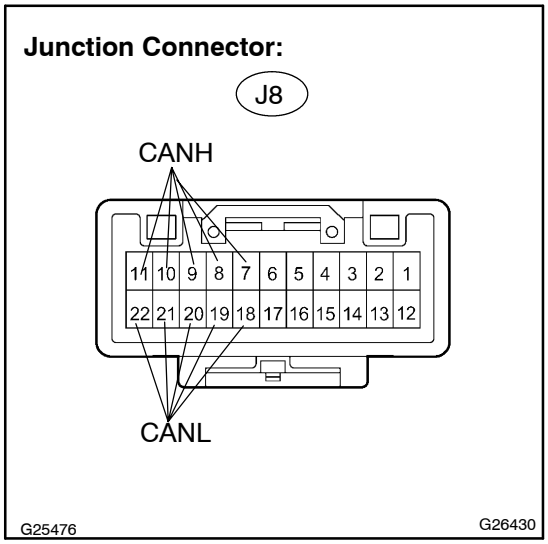
Standard:

Tester connection	Condition	Specified value
D2–6 (CANH) – D2–16 (BAT)	IG Switch OFF	1 MΩ or more

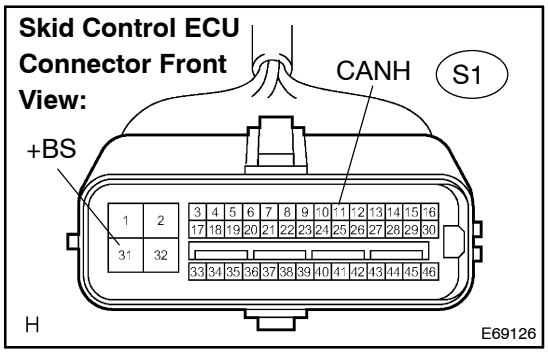
OK → **REPLACE YAW RATE SENSOR (SEE PAGE 32–51)**

NG

6	**CHECK CAN BUS LINE FOR SHORT TO +B (SKID CONTROL ECU – JUNCTION CONNECTOR, CAN–H)**



(a) Reconnect the connector (Y1) to the yaw rate sensor.
(b) Disconnect the wire harness connector (J8) from the junction connector.
(c) Disconnect the connector (S1) from the skid control ECU.



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

Standard:

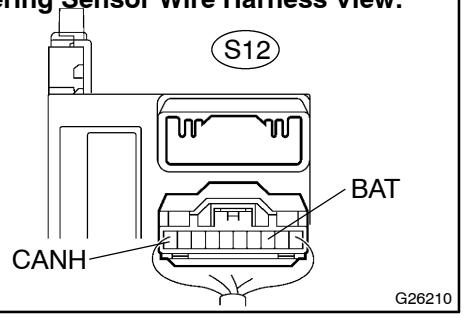
Tester connection	Condition	Specified value
S1–11 (CANH) – S1–31 (+BS)	IG Switch OFF	1 MΩ or more

NG → **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (SKID CONTROL ECU – JUNCTION CONNECTOR, CAN–H)**

OK

7	CHECK CAN BUS LINE FOR SHORT TO +B (STEERING SENSOR – JUNCTION CONNECTOR, CAN–H)

Steering Sensor Wire Harness View:



(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) – S12–3 (BAT)	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 (STEERING SENSOR – JUNCTION CONNECTOR, CAN–H)**

OK

REPAIR OR REPLACE YAW RATE SENSOR SUB BUS LINE OR CONNECTOR (CAN–H)