

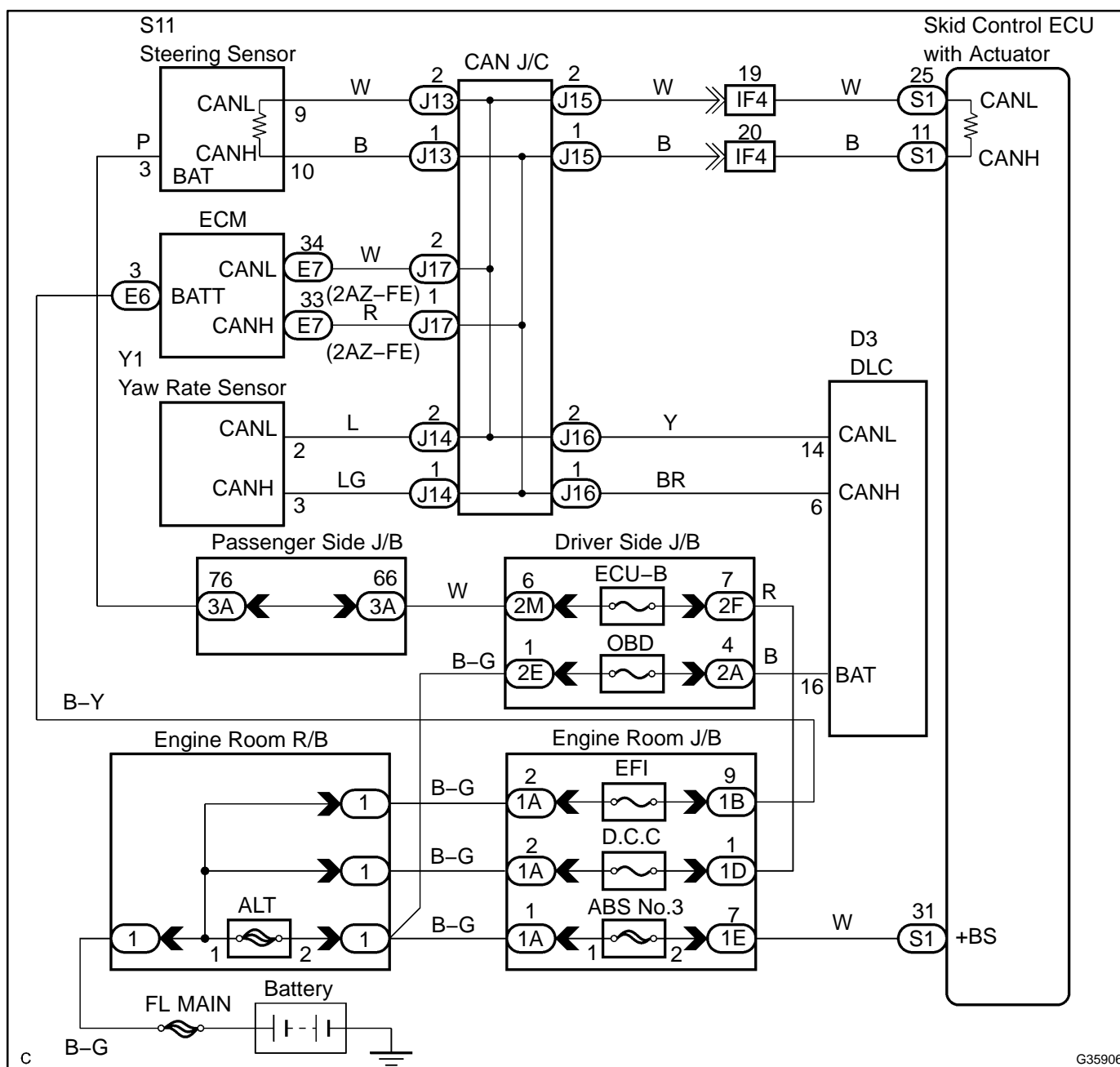
CHECK CAN BUS LINE FOR SHORT TO +B

CIRCUIT DESCRIPTION

A short to +B is suspected in the CAN bus line when there is continuity between terminals 16 (BAT) and 6 (CANH) or terminals 16 (BAT) and 14 (CANL) of the DLC3.

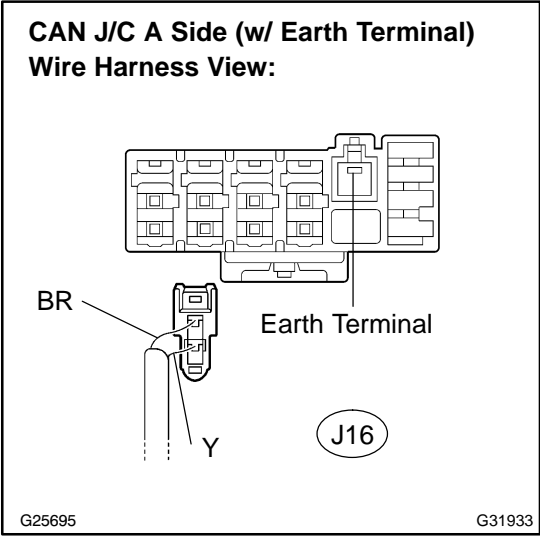
Symptom	Trouble Area
There is continuity between terminals 16 (BAT) and 6 (CANH) or 16 (BAT) and 14 (CANL) of DLC3.	<ul style="list-style-type: none"> • Short to +B in CAN bus line • Skid control ECU • Steering sensor • Yaw rate sensor • ECM (2AZ-FE)

WIRING DIAGRAM



INSPECTION PROCEDURE

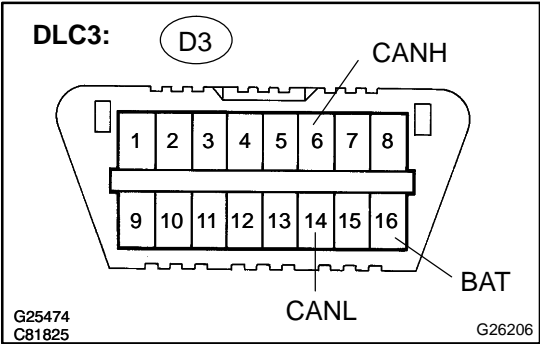
1 | CHECK CAN BUS LINE FOR SHORT TO +B(DLC3 SUB BUS LINE)



- (a) Disconnect the DLC3 sub bus line connector (J16) from the CAN J/C.

NOTICE:

- **Before disconnecting the connector, make a note of where it is connected.**
- **Reconnect the connector to its original position.**



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

Standard:

Tester connection	Condition	Specified value
D3-6 (CANH) - D3-16 (BAT)	IG switch OFF	1 MΩ or higher
D3-14 (CANL) - D3-16 (BAT)	IG switch OFF	1 MΩ or higher

NG

REPAIR OR REPLACE DLC3 SUB BUS LINE OR CONNECTOR

OK

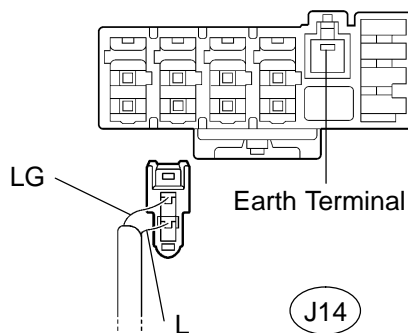
2 | CONNECT CONNECTOR

- (a) Reconnect the DLC3 sub bus line connector (J16) to the CAN J/C.

NEXT

3 CHECK CAN BUS LINE FOR SHORT TO +B(YAW RATE SENSOR SUB BUS LINE)

CAN J/C A Side (w/ Earth Terminal) Wire Harness View:



G25695

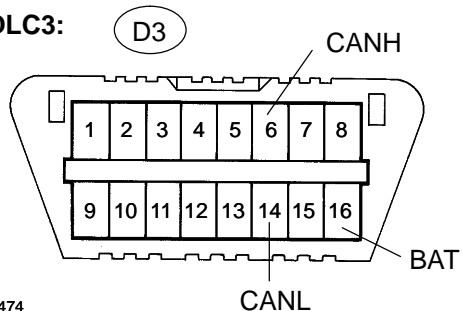
G31933

- (a) Disconnect the yaw rate sensor sub bus line connector (J14) from the CAN J/C.

NOTICE:

- Before disconnecting the connector, make a note of where it is connected.
- Reconnect the connector to its original position.

DLC3:

G25474
C81825

G26206

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

Standard:

Tester connection	Condition	Specified value
D3-6 (CANH) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher
D3-14 (CANL) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher

OK

Go to step 10

NG

4 CONNECT CONNECTOR

- (a) Reconnect the yaw rate sensor sub bus line connector (J14) to the CAN J/C.

NEXT

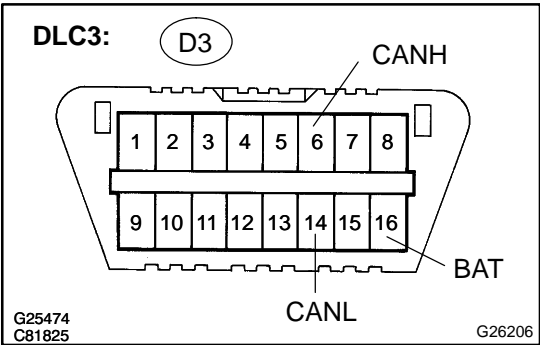
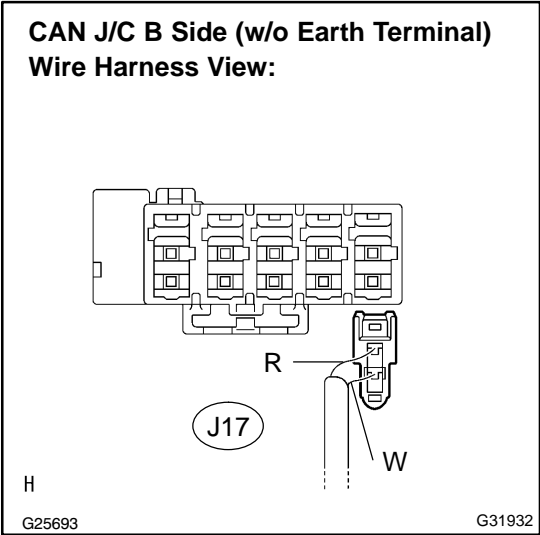
5

CHECK CAN BUS LINE FOR SHORT TO +B(ECM SUB BUS LINE)

NOTICE:
For vehicles without enhanced 2AZ-FE engine go to step 7.

- (a) Disconnect the ECM sub bus line connector (J17) from the CAN J/C.

- NOTICE:**
- Before disconnecting the connector, make a note of where it is connected.
 - Reconnect the connector to its original position.



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

Standard:

Tester connection	Condition	Specified value
D3-6 (CANH) - D3-16 (BAT)	IG switch OFF	1 MΩ or higher
D3-14 (CANL) - D3-16 (BAT)	IG switch OFF	1 MΩ or higher

OK

Go to step 12

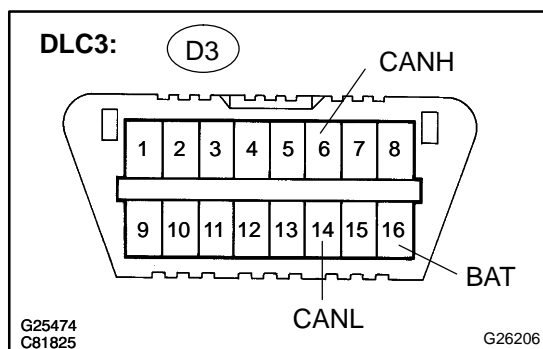
NG

6

CONNECT CONNECTOR

- (a) Reconnect the ECM sub bus line connector (J17) to the CAN J/C.

NEXT

7 CHECK CAN BUS LINE FOR SHORT TO +B(SKID CONTROL ECU)

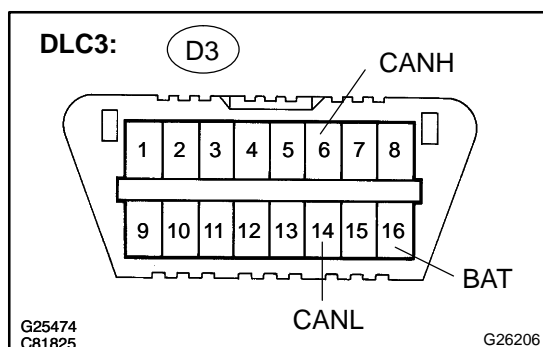
- (a) Disconnect the skid control ECU connector (S1).
 (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified value
D3-6 (CANH) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher
D3-14 (CANL) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher

OK**REPLACE SKID CONTROL ECU WITH ACTUATOR (SEE PAGE 32-63)****NG****8 CONNECT CONNECTOR**

- (a) Reconnect the connector (S1) to the skid control ECU.

NEXT**9 CHECK CAN BUS LINE FOR SHORT TO +B(STEERING SENSOR)**

- (a) Disconnect the steering sensor connector (S11).
 (b) Measure the resistance according to the value(s) in the table below.

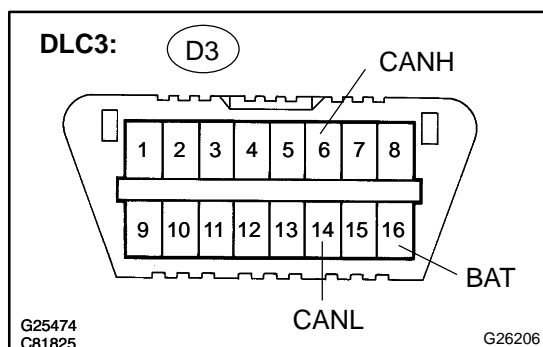
Standard:

Tester connection	Condition	Specified value
D3-6 (CANH) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher
D3-14 (CANL) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher

OK**REPLACE STEERING SENSOR (SEE PAGE 32-72)****NG****REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (SKID CONTROL ECU – STEERING SENSOR)**

10 CONNECT CONNECTOR

- (a) Reconnect the yaw rate sensor sub bus line connector (J14) to the CAN J/C.

NEXT**11 CHECK CAN BUS LINE FOR SHORT TO +B(YAW RATE SENSOR SUB BUS LINE)**

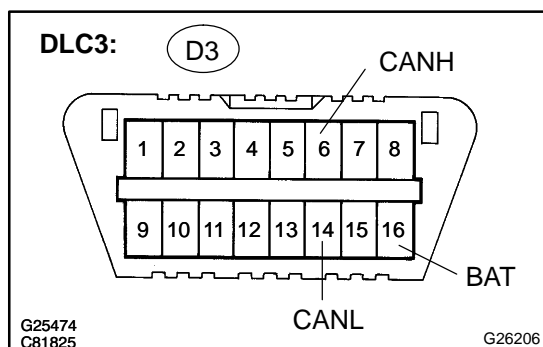
- (a) Disconnect the yaw rate sensor connector (Y1).
 (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified value
D3-6 (CANH) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher
D3-14 (CANL) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher

OK**REPLACE YAW RATE SENSOR
(SEE PAGE 32-71)****NG****REPAIR OR REPLACE YAW RATE SENSOR SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)****12 CONNECT CONNECTOR**

- (a) Reconnect the ECM sub bus line connector (J17) to the CAN J/C.

NEXT**13 CHECK CAN BUS LINE FOR SHORT TO +B(ECM SUB BUS LINE)**

- (a) Disconnect the ECM connector (E7).
 (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified value
D3-6 (CANH) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher
D3-14 (CANL) – D3-16 (BAT)	IG switch OFF	1 MΩ or higher

OK**REPLACE ECM (SEE PAGE 10-9)****NG****REPAIR OR REPLACE ECM SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)**