

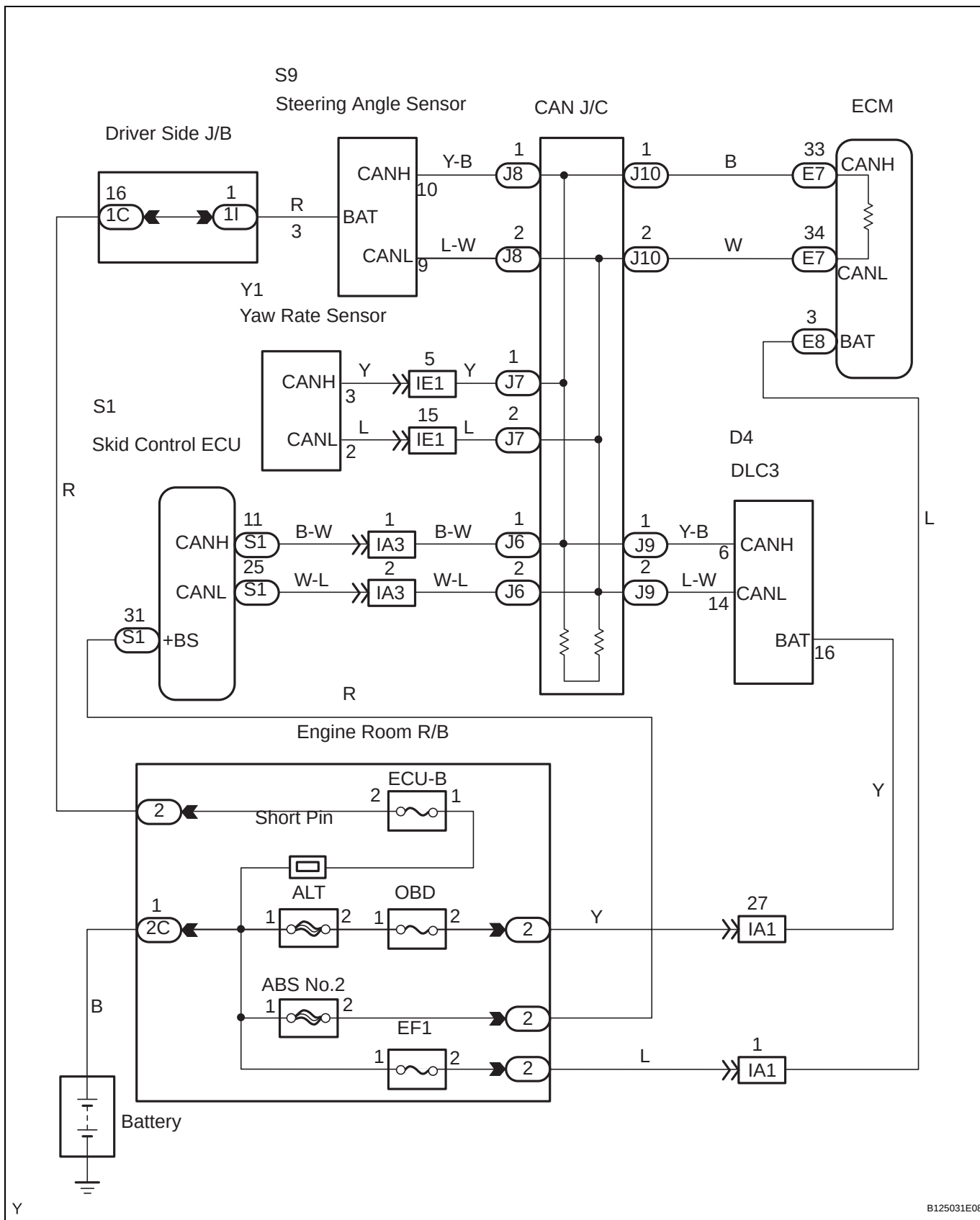
Short to B+ in CAN Bus Line

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.

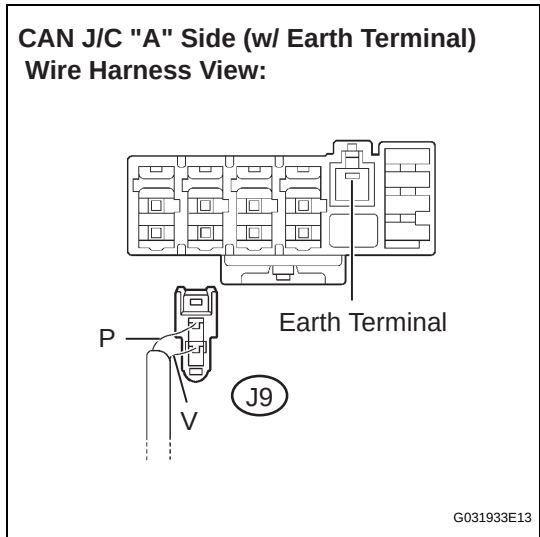
Symptom	Trouble Area
There is continuity between terminals 16 (BAT) and 6 (CANH) or 16 (BAT) and 14 (CANL) of the DLC3.	• Short to +B in CAN bus line • ECM • Skid control ECU • Steering angle sensor • Yaw rate sensor

WIRING DIAGRAM

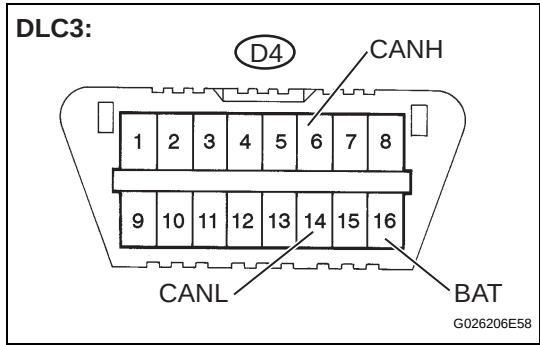


1

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



- (a) Disconnect the DLC3 sub bus line connector (J9) 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 resistance**

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	• Ignition switch OFF • Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

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REPAIR OR REPLACE DLC3 BRANCH LINE OR CONNECTOR (CAN-H,CAN-L)

OK

2

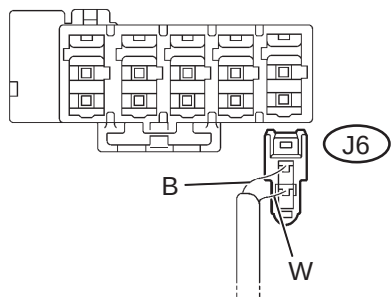
CONNECT CONNECTOR

- (a) Reconnect the DLC3 sub bus line connector (J9) to the CAN J/C.

NEXT

3 CHECK CAN BUS LINES FOR SHORT TO +B (SKID CONTROL ECU SUB BUS LINE)

CAN J/C "B" Side (w/o Earth Terminal)
Wire Harness View:



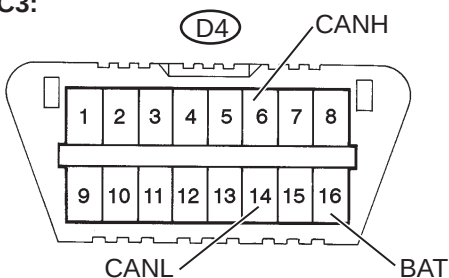
G031932E78

- (a) Disconnect the skid control ECU sub bus line connector (J6) 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:



G026206E58

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

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	• Ignition switch OFF • Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

OK

Go to step 10

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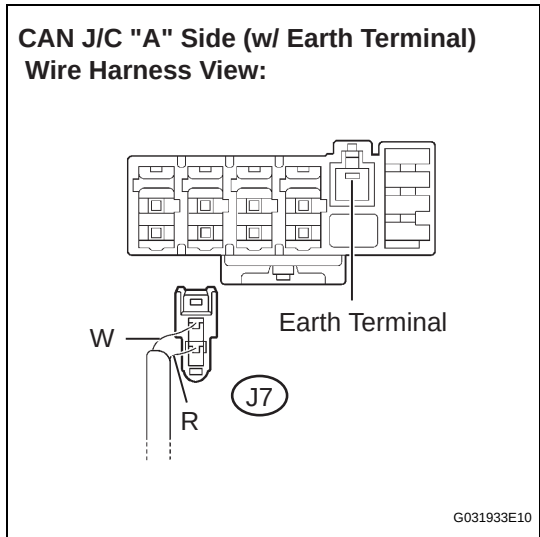
4 CONNECT CONNECTOR

- (a) Reconnect the skid control ECU sub bus line connector (J6) to the CAN J/C.

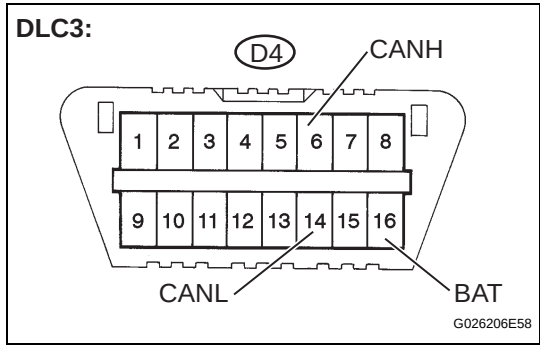
NEXT

5

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



- (a) Disconnect the yaw rate sensor sub bus line connector (J7) 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 resistance**

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	•Ignition switch OFF •Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

OK

Go to step 12

NG

6

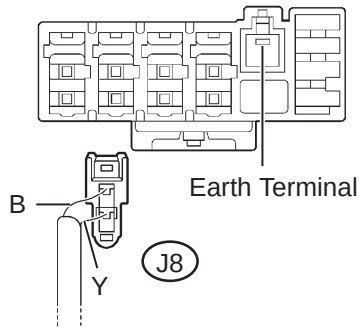
CONNECT CONNECTOR

- (a) Reconnect the yaw rate sensor sub bus line connector (J7) to CAN J/C.

NEXT

7**CHECK CAN BUS LINES FOR SHORT TO +B (STEERING ANGLE SENSOR SUB BUS LINE)**

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



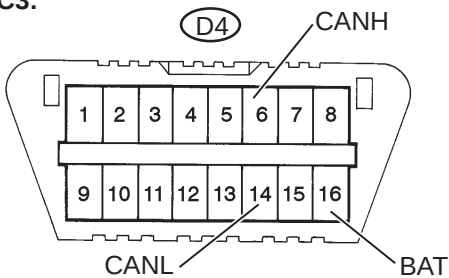
G031933E11

- (a) Disconnect the steering angle sensor sub bus line connector (J8) 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:



G026206E58

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

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	• Ignition switch OFF • Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

OK

Go to step 14

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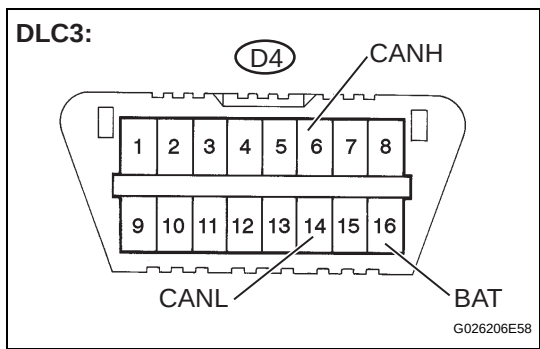
8**CONNECT CONNECTOR**

- (a) Reconnect the steering angle sensor sub bus line connector (J8) to the CAN J/C.

NEXT

9**CHECK CAN BUS LINES FOR SHORT TO +B (ECM MAIN BUS LINE)**

- (a) Disconnect the ECM sub bus line connector (E7).



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

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	•Ignition switch OFF •Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

OK **REPLACE ECM**

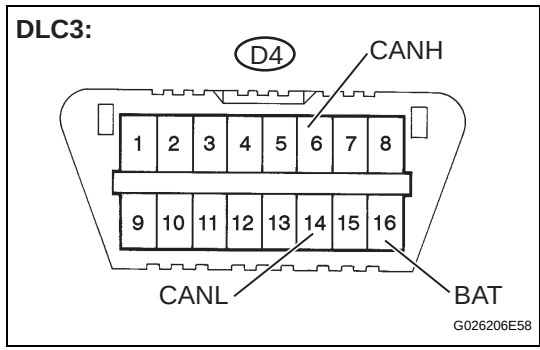
REPAIR OR REPLACE ECM MAIN BUS LINE OR CONNECTOR (CAN-H,CAN-L)

10 CONNECT CONNECTOR

(a) Reconnect the skid control ECU sub bus line connector (J6) to the CAN J/C.

NEXT

11 CHECK CAN BUS LINES FOR SHORT TO +B (SKID CONTROL ECU SUB BUS LINE)



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

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	• Ignition switch OFF • Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

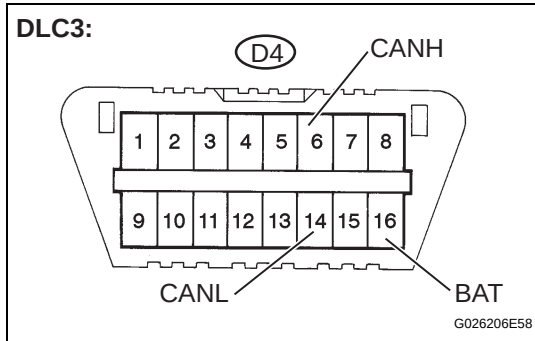
OK **REPLACE MASTER CYLINDER SOLENOID**

REPAIR OR REPLACE SKID CONTROL ECU BRANCH LINE OR CONNECTOR (CAN-H,CAN-L)

12 CONNECT CONNECTOR

(a) Reconnect the yaw rate sensor sub bus line connector (J7) to the CAN J/C.

NEXT

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

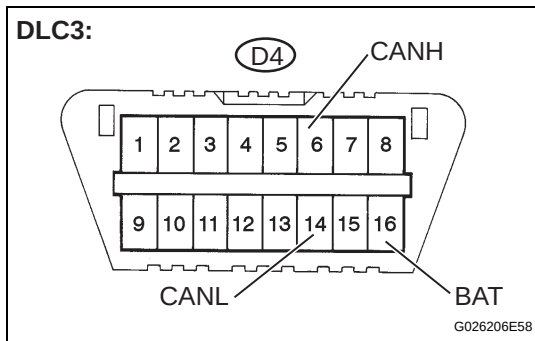
- (a) Disconnect the yaw rate sensor connector (Y1).
 (b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	- Ignition switch OFF - Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

OK**REPLACE YAW RATE SENSOR****NG****REPAIR OR REPLACE YAW RATE SENSOR SUB BUS LINE CONNECTOR (CAN-H,CAN-L)****14 CONNECT CONNECTOR**

- (a) Reconnect the steering angle sensor sub bus line connector (J8) to the CAN J/C.

NEXT**15 CHECK CAN BUS LINES FOR SHORT TO +B (STEERING SENSOR SUB BUS LINE)**

- (a) Disconnect the steering angle sensor connector (S9).
 (b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-16 (BAT)	- Ignition switch OFF - Stop light switch OFF	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

OK**REPLACE STEERING ANGLE SENSOR****NG****REPAIR OR REPLACE STEERING ANGLE SENSOR BRANCH LINE OR CONNECTOR (CAN-H,CAN-L)**