

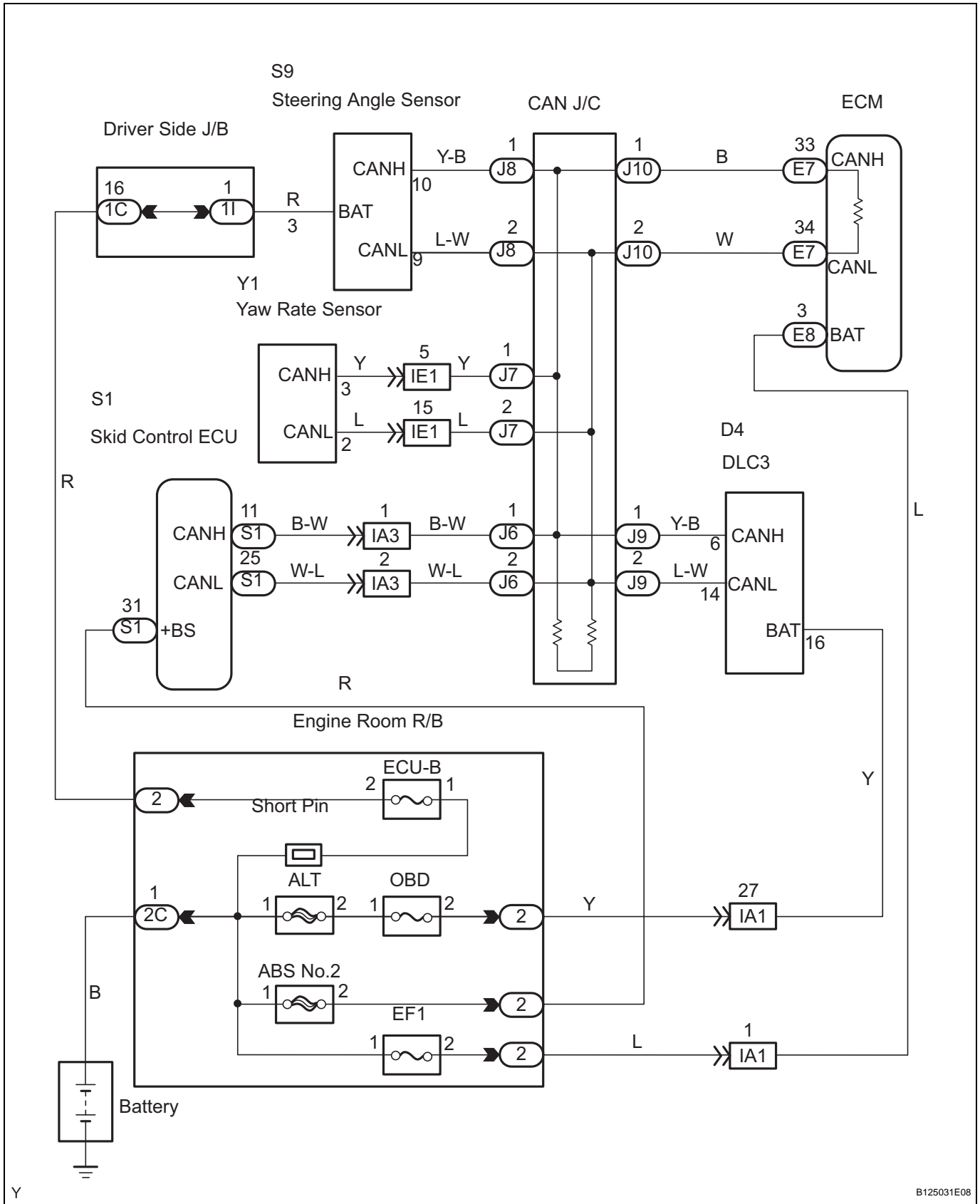
## Short to B+ in CAN Bus Line

### DESCRIPTION

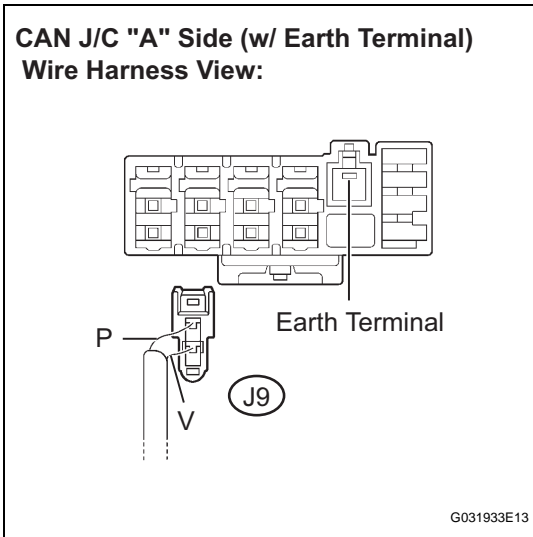
A short to +B is suspected in the CAN bus line when there is continuity between terminals 16 (BAT) and 6 (CANH) or terminals 16 (BAT) and 14 (CANL) of the DLC3.

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

WIRING DIAGRAM



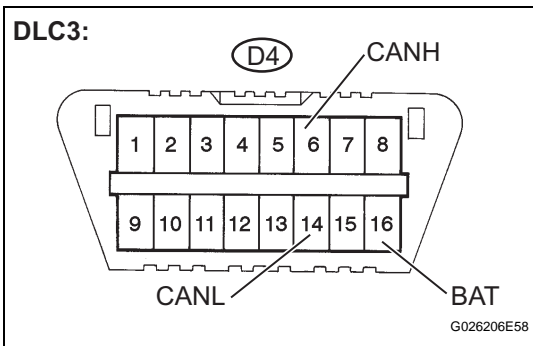
**1 CHECK CAN BUS LINES FOR SHORT TO +B (DLC3 SUB BUS LINE)**



(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)	<ul style="list-style-type: none"> <li>• Ignition switch OFF</li> <li>• Stop light switch OFF</li> </ul>	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

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

**OK**

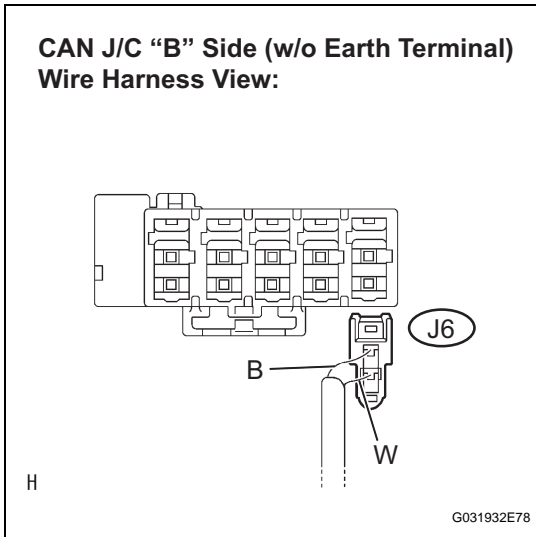
**2 CONNECT CONNECTOR**

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

**NEXT**

CA

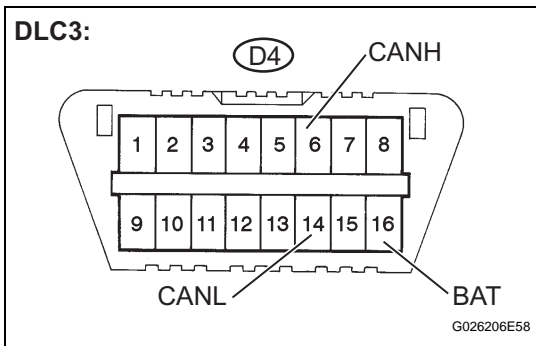
**3 CHECK CAN BUS LINES FOR SHORT TO +B (SKID CONTROL ECU SUB BUS LINE)**



- (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.



- (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)	<ul style="list-style-type: none"> <li>• Ignition switch OFF</li> <li>• Stop light switch OFF</li> </ul>	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

**NG**

**OK** → **Go to step 10**

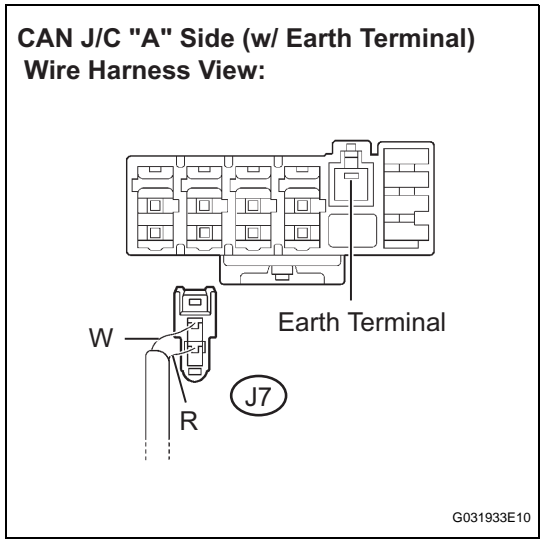
**4 CONNECT CONNECTOR**

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

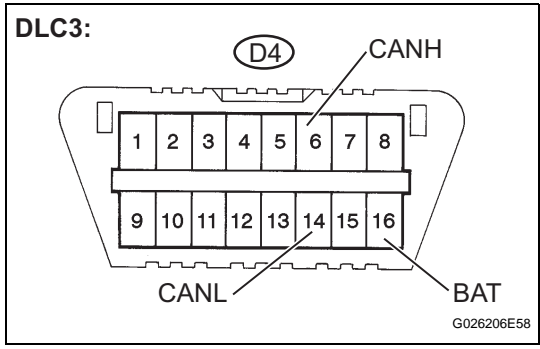
**NEXT**

**CA**

**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)		

CA

NG

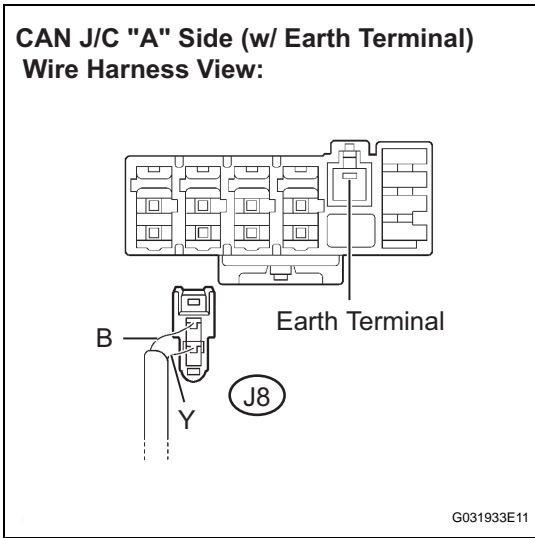
OK → Go to step 12

**6 CONNECT CONNECTOR**

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

NEXT

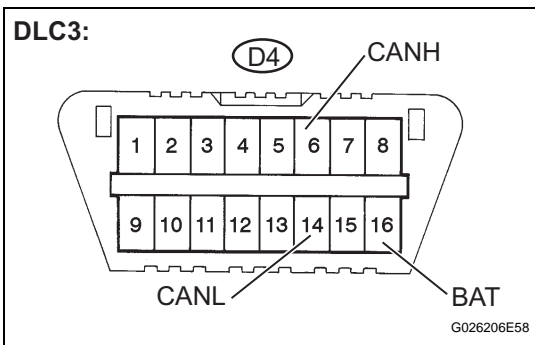
**7 CHECK CAN BUS LINES FOR SHORT TO +B (STEERING ANGLE SENSOR SUB BUS LINE)**



- (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.



- (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)	<ul style="list-style-type: none"> <li>• Ignition switch OFF</li> <li>• Stop light switch OFF</li> </ul>	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

CA

**OK** → **Go to step 14**

**NG**

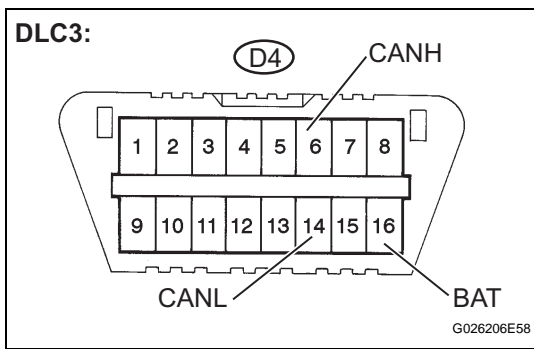
**8 CONNECT CONNECTOR**

- (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).



(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)	<ul style="list-style-type: none"> <li>• Ignition switch OFF</li> <li>• Stop light switch OFF</li> </ul>	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

**OK** → **REPLACE ECM**

**NG**

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

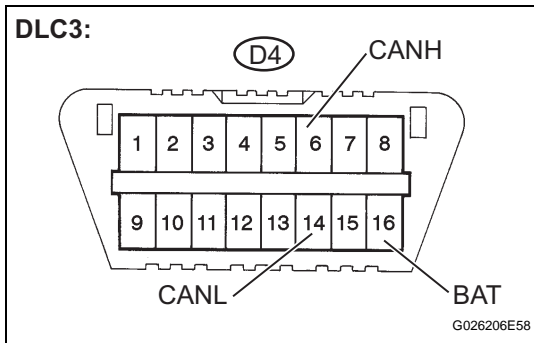
**10 CONNECT CONNECTOR**

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

**NEXT**

**CA**

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



(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)	<ul style="list-style-type: none"> <li>• Ignition switch OFF</li> <li>• Stop light switch OFF</li> </ul>	1 MΩ or more
D4-14 (CANL) - D4-16 (BAT)		

**OK** → **REPLACE MASTER CYLINDER SOLENOID**

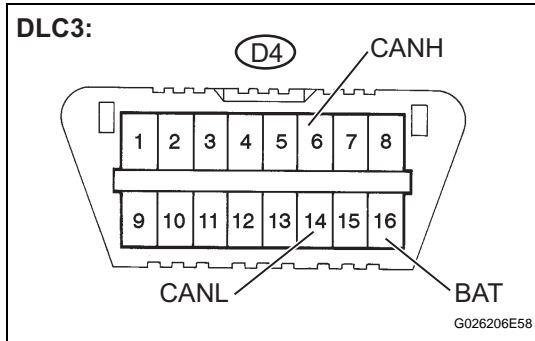
**NG**

**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)	<ul style="list-style-type: none"> <li>Ignition switch OFF</li> <li>Stop light switch OFF</li> </ul>	1 M $\Omega$ or more
D4-14 (CANL) - D4-16 (BAT)		

OK

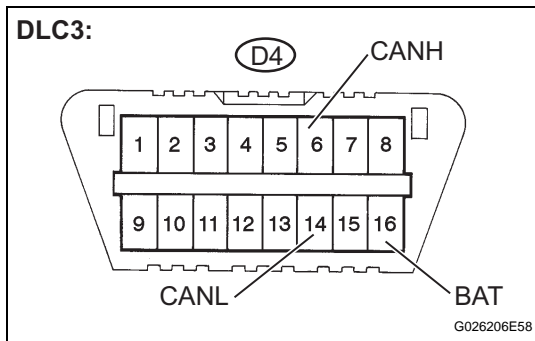
**REPLACE YAW RATE SENSOR**

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)	<ul style="list-style-type: none"> <li>Ignition switch OFF</li> <li>Stop light switch OFF</li> </ul>	1 M $\Omega$ 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)**

CA