

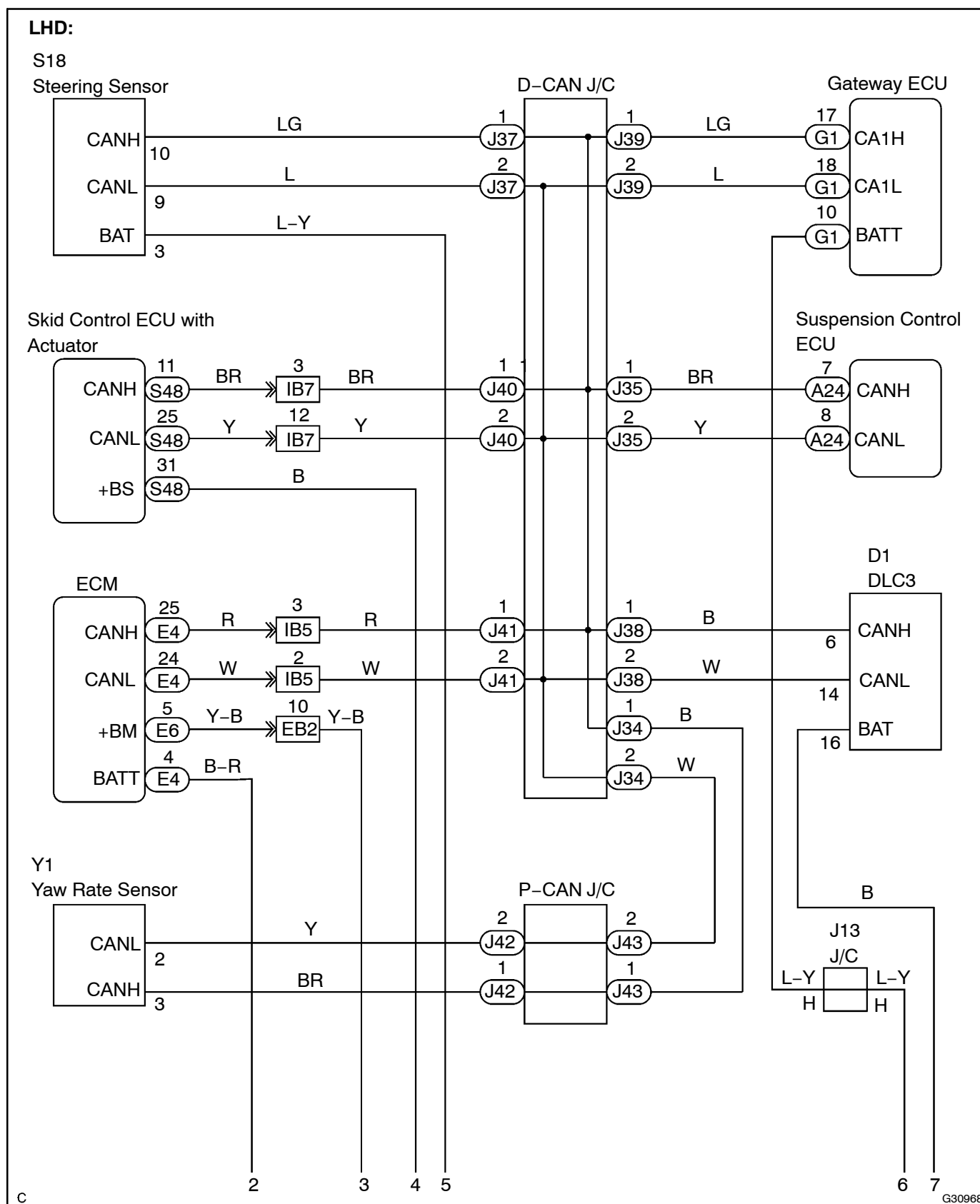
**CHECK CAN BUS LINE FOR SHORT TO +B (LHD, w/o LEXUS Navigation System)**

**CIRCUIT DESCRIPTION**

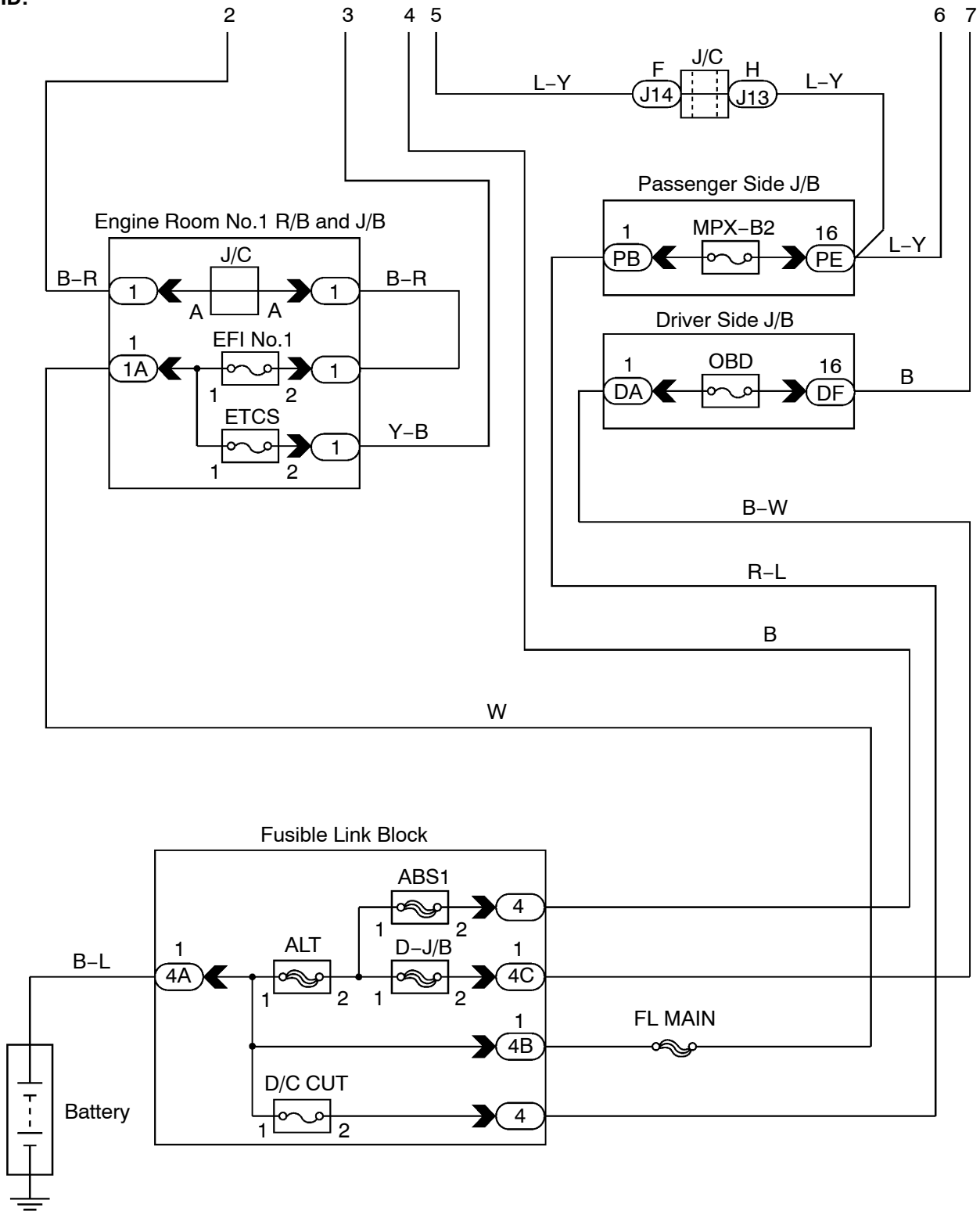
There may be a short circuit between the CAN bus line and +B when there is resistance between terminals 6 (CANH) and 16 (BAT) or terminals 14 (CANL) and 16 (BAT) of the DLC3.

| Symptom                                                                                                      | Trouble Area                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| There is resistance between terminals 6 (CANH) and 16 (BAT) or terminals 14 (CANL) and 16 (BAT) of the DLC3. | <ul style="list-style-type: none"><li>• Short to +B</li><li>• Skid control ECU with actuator</li><li>• Steering sensor</li><li>• Yaw rate sensor</li><li>• Suspension control ECU</li><li>• ECM</li><li>• Gateway ECU</li></ul> |

## WIRING DIAGRAM

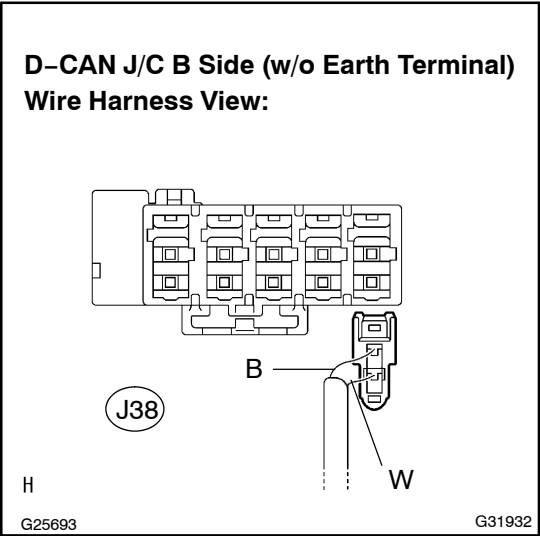


LHD:



INSPECTION PROCEDURE

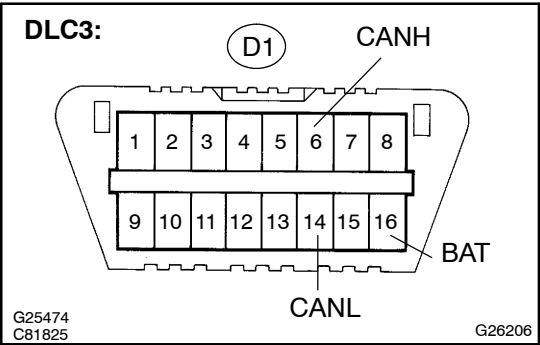
1 CHECK CAN BUS LINE FOR SHORT TO +B(DLC3 SUB BUS LINE)



- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the DLC3 sub bus line connector (J38) from the D-CAN J/C B side (w/o earth terminal).

**NOTICE:**

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



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

**Standard:**

| Tester connection             | Condition           | Specified value |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

NG

**REPAIR OR REPLACE DLC3 SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)**

OK

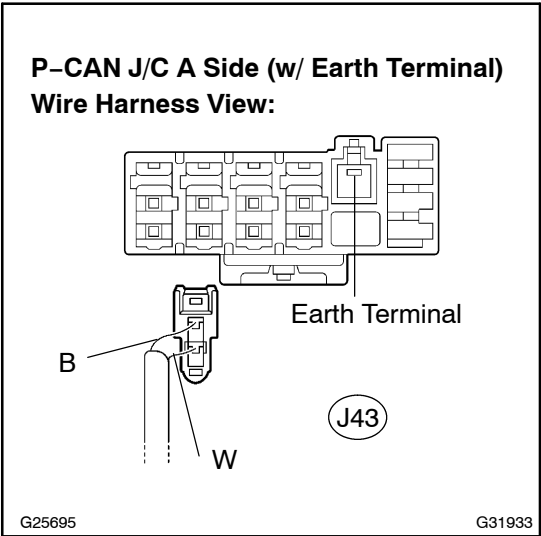
2 CONNECT CONNECTOR

- (a) Reconnect the DLC3 sub bus line connector (J38) to the D-CAN J/C B side (w/o earth terminal).



3

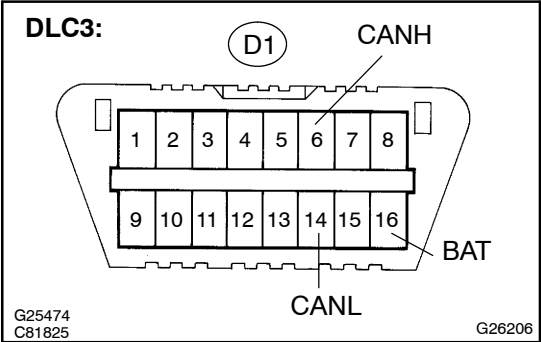
CHECK CAN BUS LINE FOR SHORT TO +B(CAN BUSES TO D-CAN J/C)



- (a) Disconnect the CAN main bus line connector (J43) from the P-CAN J/C A side (w/ earth terminal).

**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 |
|----------------------------|---------------------|-----------------|
| D1-6 (CANH) - D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) - D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

OK

Go to step 24

NG

4

CONNECT CONNECTOR

- (a) Reconnect the CAN main bus line connector (J43) to the P-CAN J/C A side (w/ earth terminal).



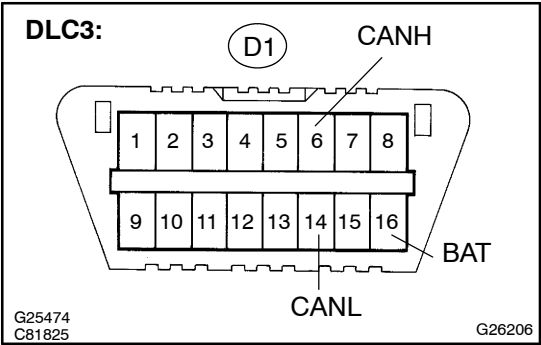
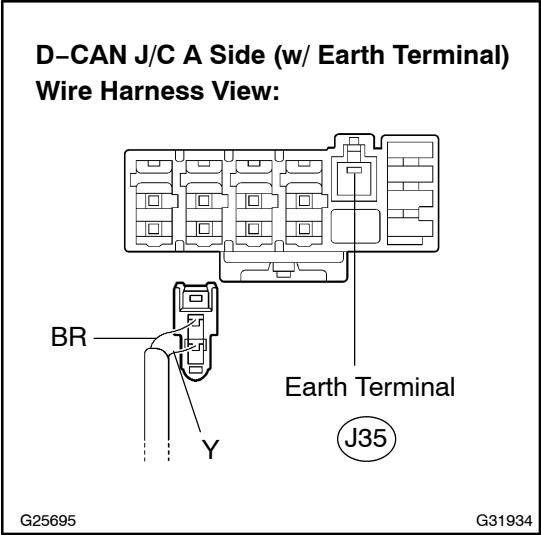
**5 CHECK CAN BUS LINE FOR SHORT TO +B(SUSPENSION CONTROL ECU SUB BUS LINE)**

**NOTICE:**  
For vehicles without electronic modulated air suspension, go to step 7.

- (a) Disconnect the suspension control ECU sub bus line connector (J35) from the D-CAN J/C A side (w/ earth terminal).

**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 |
|----------------------------|---------------------|-----------------|
| D1-6 (CANH) - D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) - D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK**

**Go to step 14**

**NG**

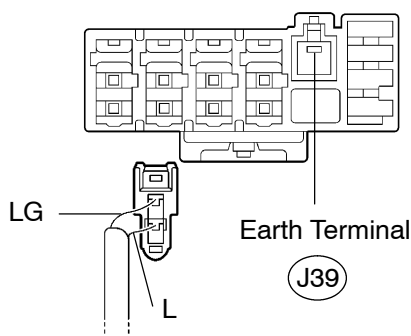
**6 CONNECT CONNECTOR**

- (a) Reconnect the suspension control ECU sub bus line connector (J35) to the D-CAN J/C A side (w/ earth terminal).



## 7 CHECK CAN BUS LINE FOR SHORT TO +B(GATEWAY ECU SUB BUS LINE)

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



G25695

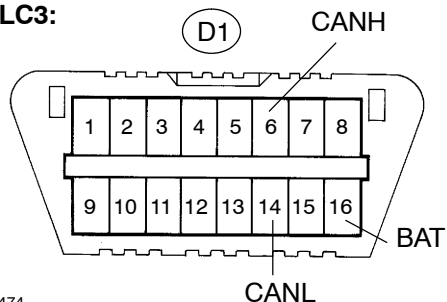
G31934

- (a) Disconnect the gateway ECU sub bus line connector (J39) from the D-CAN J/C A side (w/ earth terminal).

#### 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 |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

OK

Go to step 16

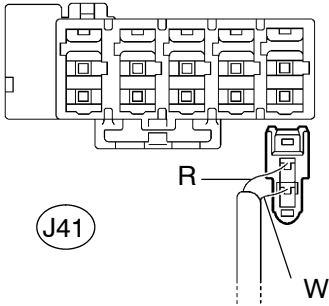
NG

## 8 CONNECT CONNECTOR

- (a) Reconnect the gateway ECU sub bus line connector (J39) to the D-CAN J/C A side (w/ earth terminal).

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

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

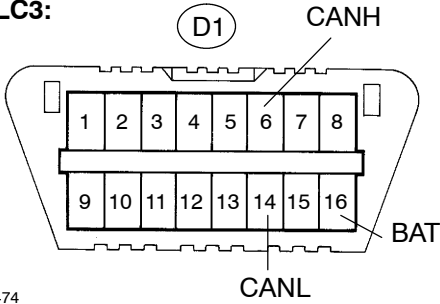


- (a) Disconnect the ECM sub bus line connector (J41) from the D-CAN J/C B side (w/o earth terminal).

**NOTICE:**

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

**DLC3:**



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

**Standard:**

| Tester connection             | Condition           | Specified value |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

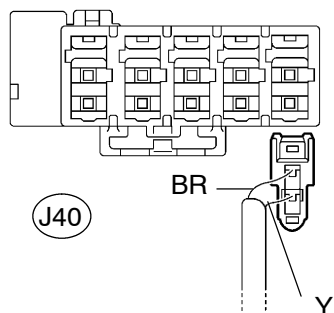
OK

Go to step 18

NG

10 CONNECT CONNECTOR

- (a) Reconnect the ECM sub bus line connector (J41) to the D-CAN J/C B side (w/o earth terminal).

**11 CHECK CAN BUS LINE FOR SHORT TO +B(SKID CONTROL ECU SUB BUS LINE)****D-CAN J/C B Side (w/o Earth Terminal)  
Wire Harness View:**

H

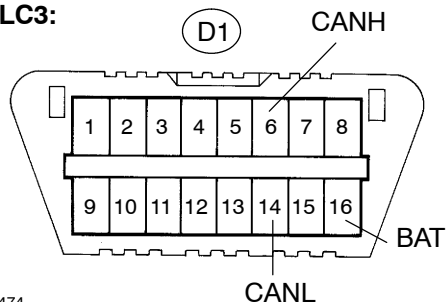
G25693

G31932

- (a) Disconnect the skid control ECU sub bus line connector (J40) from the D-CAN J/C B side (w/o earth terminal).

**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:**

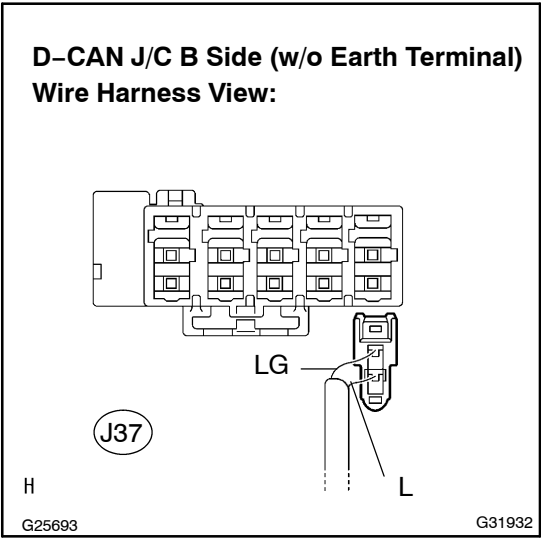
| Tester connection             | Condition           | Specified value |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK****Go to step 20****NG****12 CONNECT CONNECTOR**

- (a) Reconnect the skid control ECU sub bus line connector (J40) to the D-CAN J/C B side (w/o earth terminal).



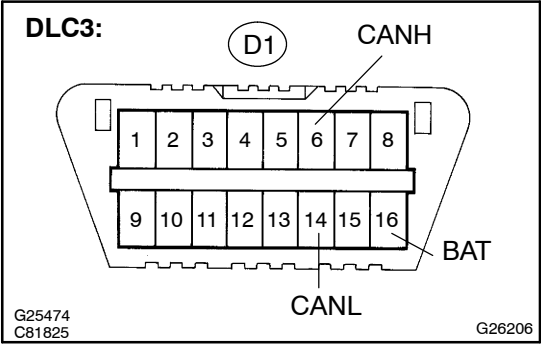
13 CHECK CAN BUS LINE FOR SHORT TO +B(STEERING SENSER SUB BUS LINE)



- (a) Disconnect the steering sensor sub bus line connector (J37) from the D-CAN J/C B side (w/o earth terminal).

**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 |
|----------------------------|---------------------|-----------------|
| D1-6 (CANH) - D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) - D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

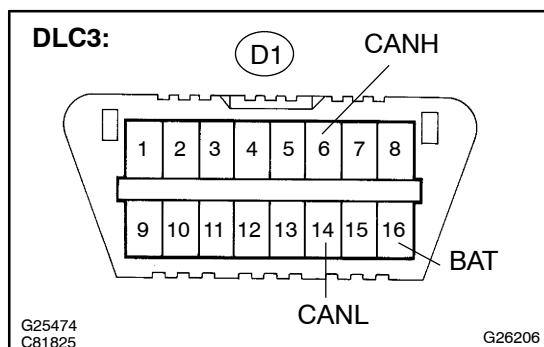
**OK** Go to step 22

**NG**

**REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (D-CAN J/C - P-CAN J/C)**

**14 CONNECT CONNECTOR**

- (a) Reconnect the suspension control ECU sub bus line connector (J35) to the D-CAN J/C A side (w/ earth terminal).

**15 CHECK CAN BUS LINE FOR SHORT TO +B(SUSPENSION CONTROL ECU SUB BUS LINE)**

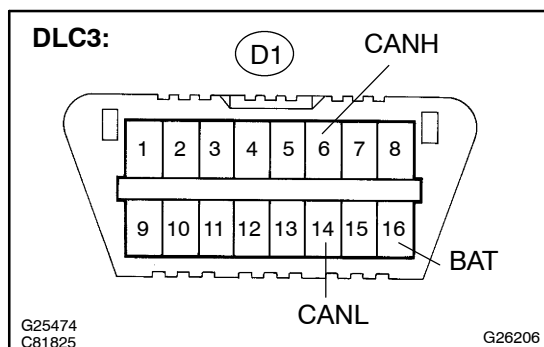
- (a) Disconnect the suspension control ECU connector (A24).  
 (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

| Tester connection          | Condition           | Specified value |
|----------------------------|---------------------|-----------------|
| D1-6 (CANH) - D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) - D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK****REPLACE SUSPENSION CONTROL ECU**  
(SEE PAGE 25-20)**NG****REPAIR OR REPLACE SUSPENSION CONTROL ECU SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)****16 CONNECT CONNECTOR**

- (a) Reconnect the gateway ECU sub bus line connector (J39) to the D-CAN J/C (w/ earth terminal).

**17 CHECK CAN BUS LINE FOR SHORT TO +B(GATEWAY ECU SUB BUS LINE)**

- (a) Disconnect the gateway ECU connector (G1).  
 (b) Measure the resistance according to the value(s) in the table below.

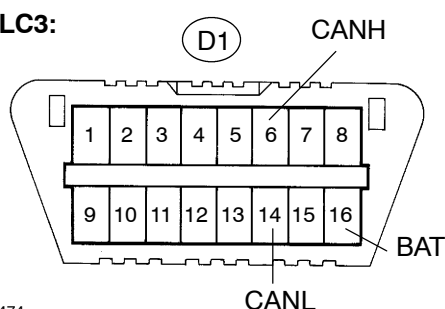
**Standard:**

| Tester connection          | Condition           | Specified value |
|----------------------------|---------------------|-----------------|
| D1-6 (CANH) - D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) - D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK****REPLACE GATEWAY ECU****NG****REPAIR OR REPLACE GATEWAY ECU SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)**

**18 CONNECT CONNECTOR**

- (a) Reconnect the ECM sub bus line connector (J41) to the D-CAN J/C B side (w/o earth terminal).

**19 CHECK CAN BUS LINE FOR SHORT TO +B(ECM SUB BUS LINE)****DLC3:**G25474  
C81825

G26206

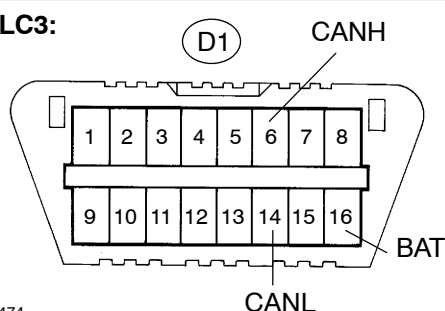
- (a) Disconnect the ECM connector (E4).  
 (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

| Tester connection             | Condition           | Specified value |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK****REPLACE ECM (SEE PAGE 10-21)****NG****REPAIR OR REPLACE ECM SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)****20 CONNECT CONNECTOR**

- (a) Reconnect the skid control ECU sub bus line connector (J40) to the D-CAN J/C B side (w/o earth terminal).

**21 CHECK CAN BUS LINE FOR SHORT TO +B(SKID CONTROL ECU SUB BUS LINE)****DLC3:**G25474  
C81825

G26206

- (a) Disconnect the skid control ECU connector (S48).  
 (b) Measure the resistance according to the value(s) in the table below.

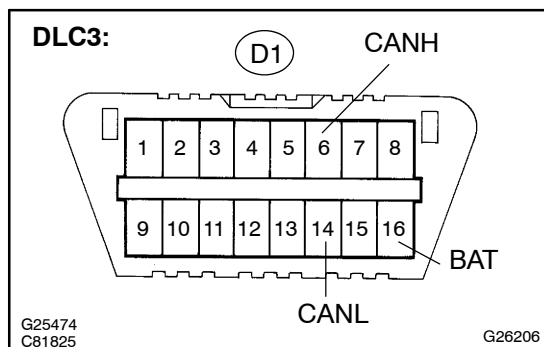
**Standard:**

| Tester connection             | Condition           | Specified value |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK****REPLACE SKID CONTROL ECU WITH ACTUATOR (SEE PAGE 32-53)****NG****REPAIR OR REPLACE SKID CONTROL ECU SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)**

**22 CONNECT CONNECTOR**

- (a) Reconnect the steering sensor sub bus line connector (J37) to the D-CAN J/C B side (w/o earth terminal).

**23 CHECK CAN BUS LINE FOR SHORT TO +B(STEERING SENSOR SUB BUS LINE)**

- (a) Disconnect the steering sensor connector (S18).  
 (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

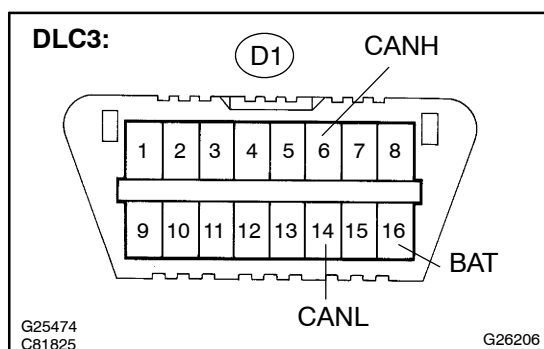
| Tester connection             | Condition           | Specified value |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK**

**REPLACE STEERING SENSOR**  
 (SEE PAGE 32-65)

**NG****REPAIR OR REPLACE STEERING SENSOR SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)****24 CONNECT CONNECTOR**

- (a) Reconnect the CAN main bus line connector (J43) to the P-CAN J/C A side (w/ earth terminal).

**25 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 |
|-------------------------------|---------------------|-----------------|
| D1-6 (CANH) -<br>D1-16 (BAT)  | Ignition Switch OFF | 1 MΩ or more    |
| D1-14 (CANL) -<br>D1-16 (BAT) | Ignition Switch OFF | 1 MΩ or more    |

**OK**

**REPLACE YAW RATE SENSOR**  
 (SEE PAGE 32-63)

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