

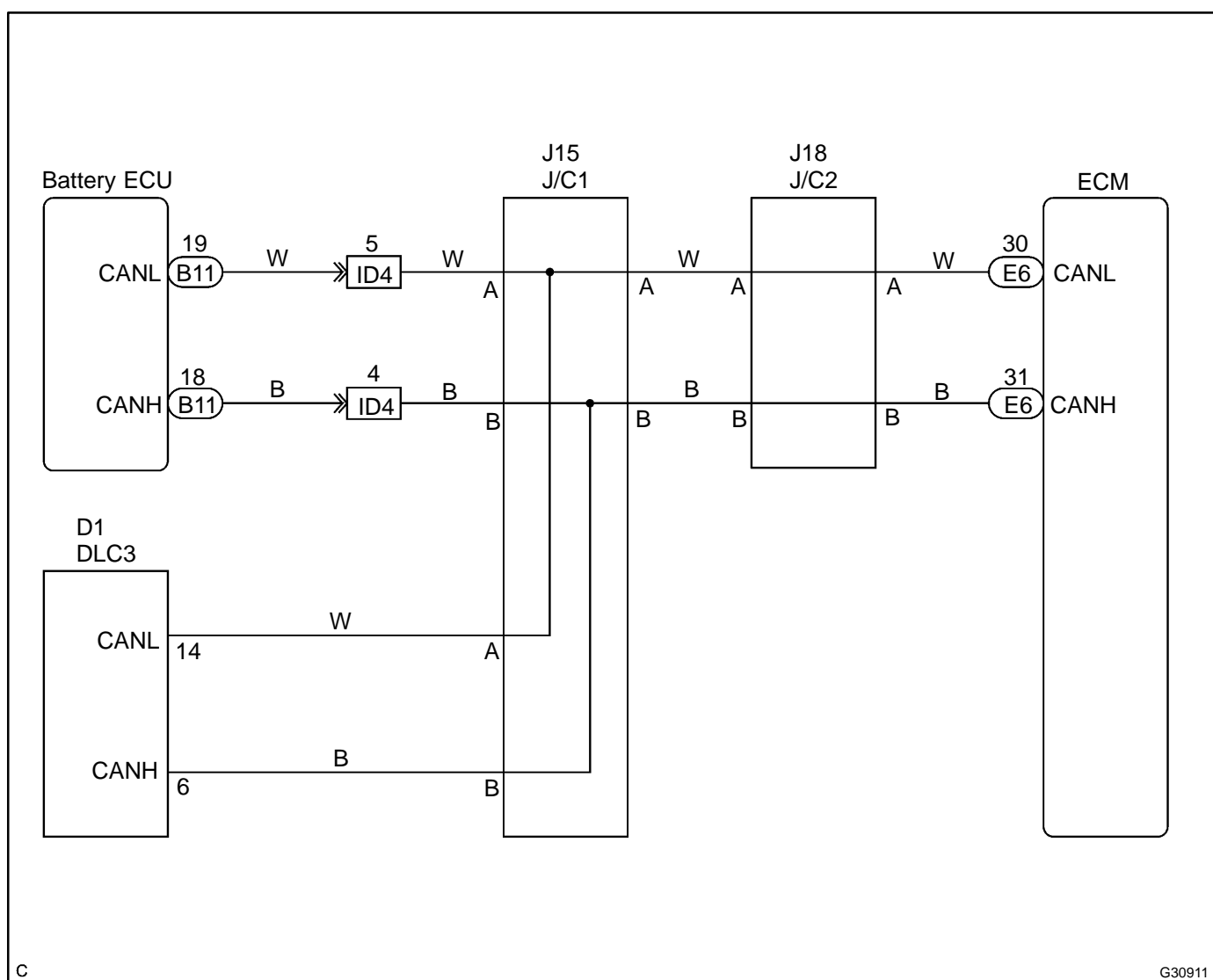
# CHECK CAN MAIN BUS LINE FOR DISCONNECTION

## CIRCUIT DESCRIPTION

There may be an open circuit in the CAN bus main line and/or the DLC3 sub bus line when the resistance between terminals 6 (CANH) and 14 (CANL) of the DLC3 is 69 Ω or more.

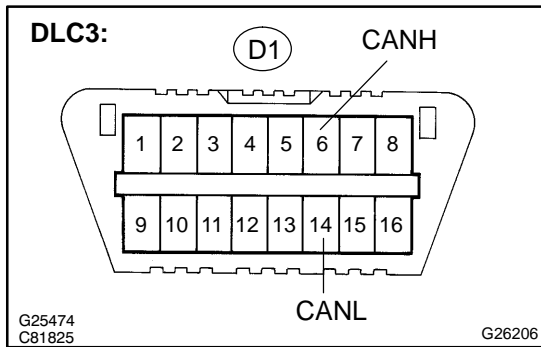
Symptom	Trouble Area
Resistance between terminals 6 (CANH) and 14 (CANL) of the DLC3 is 69 Ω or more.	<ul style="list-style-type: none"> <li>• CAN main bus line or connector</li> <li>• Junction connector (J/C1)</li> <li>• Junction connector (J/C2)</li> <li>• DLC3 sub bus line or connector</li> <li>• ECM</li> <li>• Battery ECU</li> </ul>

## WIRING DIAGRAM



# INSPECTION PROCEDURE

## 1 CHECK DLC3



- (a) Turn the power switch off.
- (b) Measure the resistance according to the value(s) in the table below.

**Result:**

Tester connection	Condition	Specified value	Result
D1-6 (CANH) - D1-14 (CANL)	Power Switch OFF	108 to 132 Ω	A
D1-6 (CANH) - D1-14 (CANL)	Power Switch OFF	132 Ω or more	B

**NOTICE:**

When the measured value is 132 Ω or more and the CAN communication system diagnostic code is output, there may be a fault besides disconnection of the DLC3 sub bus line. For that reason, troubleshooting should be performed again from "HOW TO PROCEED WITH TROUBLESHOOTING" (see page 05-2602) after repairing the trouble area.

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

**A**

## 2 CHECK CAN MAIN BUS LINE FOR DISCONNECTION(BUS CHECK)

- (a) Perform "BUS CHECK" using the hand-held tester via CAN VIM (see page 05-2616).

**Result:**

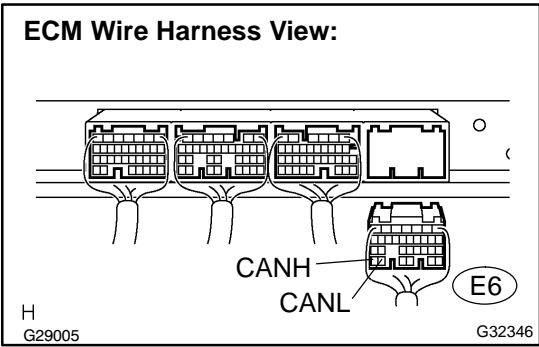
Specified Value	Result
Only "ENGINE" is not displayed	A
Only "HV BATTERY" is not displayed	B
Other	C

**B** → Go to step 4

**C** → Go to step 5

**A**

**3 | CHECK CAN MAIN BUS LINE FOR DISCONNECTION(ECM – J/C2)**



- (a) Disconnect the ECM connector (E6).
- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

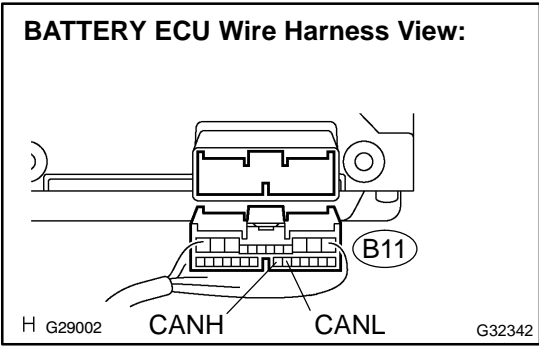
Tester connection	Condition	Specified value
E6-31 (CANH) – E6-30 (CANL)	Power Switch OFF	108 to 132 Ω

**NG** → **REPLACE CAN MAIN BUS LINE OR CONNECTOR (ECM – J/C2)**

**OK**

**REPLACE ECM (SEE PAGE 10-24)**

**4 | CHECK CAN MAIN BUS LINE FOR DISCONNECTION(BATTERY ECU – J/C1)**



- (a) Disconnect the battery ECU connector (B11).
- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

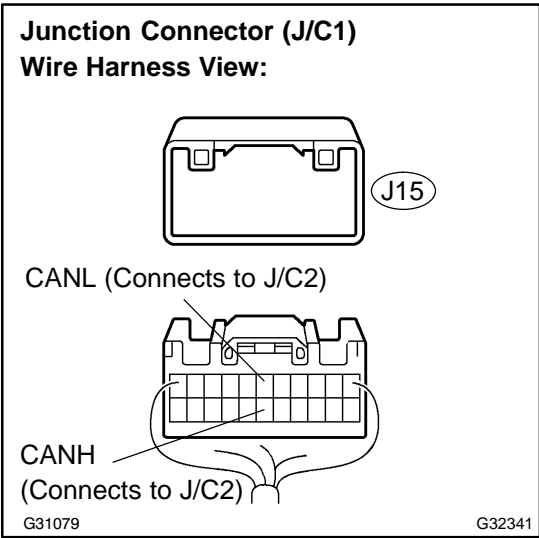
Tester connection	Condition	Specified value
B11-18 (CANH) – B11-19 (CANL)	Power Switch OFF	108 to 132 Ω

**NG** → **REPLACE CAN MAIN BUS LINE OR CONNECTOR (BATTERY ECU – J/C1)**

**OK**

**REPLACE BATTERY ECU ASSY (SEE PAGE 21-98)**

**5 CHECK CAN MAIN BUS LINE FOR DISCONNECTION(J/C1 - ECM)**



- (a) Disconnect the J/C1 connector (J15).
- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

Tester connection	Condition	Specified value
J15-17 (CANH) - J15-6 (CANL)	Power Switch OFF	108 to 132 Ω

**NG** → **Go to step 8**

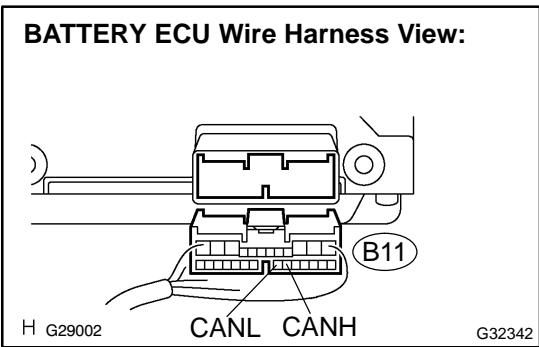
**OK**

**6 CONNECT CONNECTOR**

- (a) Reconnect the J/C1 connector (J15).

**OK**

**7 CHECK CAN MAIN BUS LINE FOR DISCONNECTION(BATTERY ECU - J/C1)**



- (a) Disconnect the battery ECU connector (B11).
- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

Tester connection	Condition	Specified value
B11-18 (CANH) - B11-19 (CANL)	Power Switch OFF	108 to 132 Ω

**NG** → **REPLACE CAN MAIN BUS LINE OR CONNECTOR (BATTERY ECU - J/C1)**

**OK**

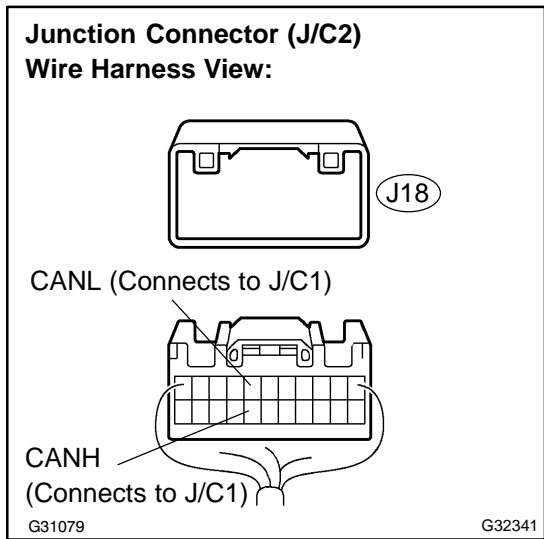
**REPLACE BATTERY ECU ASSY (SEE PAGE 21-98)**

**8 | CONNECT CONNECTOR**

(a) Reconnect the J/C1 connector (J15).



**9 | CHECK CAN MAIN BUS LINE FOR DISCONNECTION(J/C2 - J/C1)**



- (a) Disconnect the J/C2 connector (J18).
- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

Tester connection	Condition	Specified value
J18-18 (CANH) - J18-7 (CANL)	Power Switch OFF	108 to 132 Ω

**NG** → **REPLACE CAN MAIN BUS LINE OR CONNECTOR (J/C2 - J/C1)**

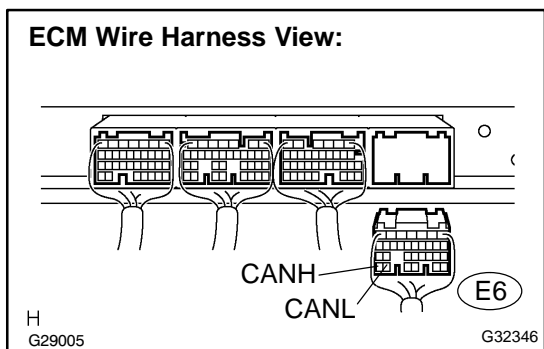


**10 | CONNECT CONNECTOR**

(a) Reconnect the J/C2 connector (J18).



**11 | CHECK CAN MAIN BUS LINE FOR DISCONNECTION(ECM - J/C2)**



- (a) Disconnect the ECM connector (E6).
- (b) Measure the resistance according to the value(s) in the table below.

**Standard:**

Tester connection	Condition	Specified value
E6-31 (CANH) - E6-30 (CANL)	Power Switch OFF	108 to 132 Ω

**NG** → **REPLACE CAN MAIN BUS LINE OR CONNECTOR**



**REPLACE ECM (SEE PAGE 10-24)**