

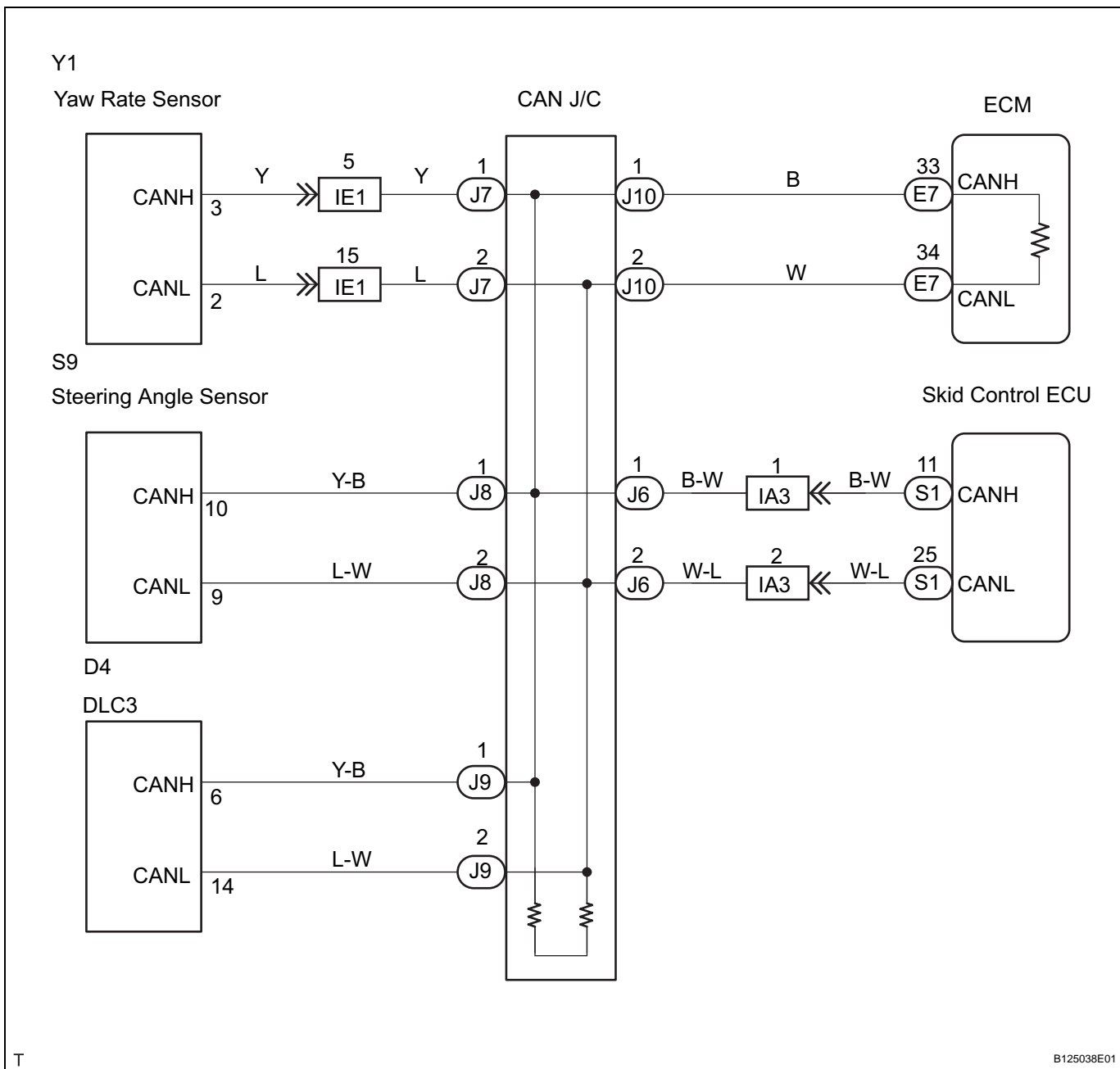
## Open in One Side of CAN Sub Bus Line

### DESCRIPTION

If 2 or more ECUs and/or sensors do not appear on the intelligent tester "BUS CHECK" screen via the CAN VIM , one side of the CAN sub-bus line may be open. (ONE side of the CAN-H [sub-bus line] / CAN-L [sub-bus line] of the ECU and/or sensor is open.)

Symptom	Trouble Area
2 or more ECUs and/or sensors do not appear on the intelligent tester "BUS CHECK" screen via the CAN VIM.	<ul style="list-style-type: none"> <li>• One side of the CAN sub-bus line is open</li> <li>• Skid control ECU</li> <li>• Steering angle sensor</li> <li>• Yaw rate sensor</li> <li>• ECM</li> <li>• CAN J/C</li> </ul>

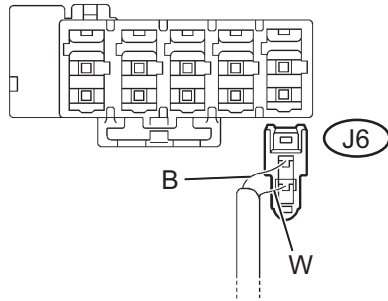
### WIRING DIAGRAM



CA

## 1 CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE (SKID CONTROL ECU SUB BUS LINE)

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



- (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) Connect the intelligent tester via the CAN VIM to the DLC3.  
 (c) Turn the ignition switch ON.  
 (d) Select "BUS CHECK" on the intelligent tester display via the CAN VIM (See page CA-14).

**Result**

A	"ABS/VSC/TRAC" does not appear
B	2 or more ECUs and/or sensors do not appear

A

Go to step 8

B

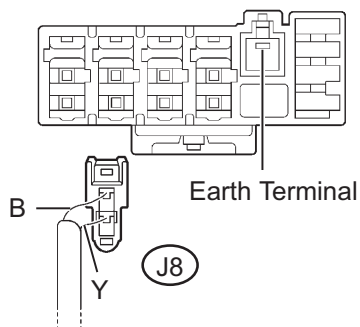
## 2 CONNECT CONNECTOR

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

NEXT

## 3 CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE (STEERING ANGLE SENSOR SUB BUS LINE)

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



- (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) Connect the intelligent tester via the CAN VIM to the DLC3.  
 (c) Turn the ignition switch ON.  
 (d) Select "BUS CHECK" on the intelligent tester display via the CAN VIM (See page CA-14).

**Result**

A	"STEERING SENSOR" does not appear
B	2 or more ECUs and/or sensors do not appear

A

Go to step 10

B

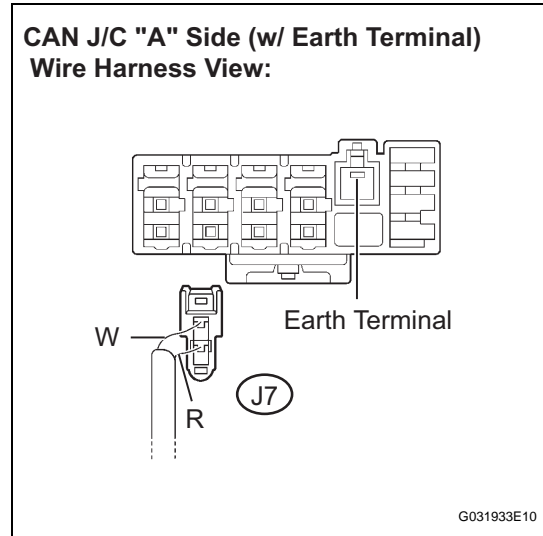
CA

**4 CONNECT CONNECTOR**

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

**NEXT**

**5 CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE (YAW RATE SENSOR SUB BUS LINE)**



- (a) Disconnect the yaw rate sensor sub bus line connector (J7) from the CAN J/C.  
**CAUTION:**
  - Before disconnecting the connector, make a note of where it is connected.
  - Reconnect the connector to its original position.
- (b) Connect the intelligent tester via the CAN VIM to the DLC3.
- (c) Turn the ignition switch ON.
- (d) Select "BUS CHECK" on the intelligent tester display via the CAN VIM (See page CA-14).

**Result**

A	"YAW /DECELERAT" does not appear
B	2 or more ECUs and/or sensors do not appear

**B** Go to step 12

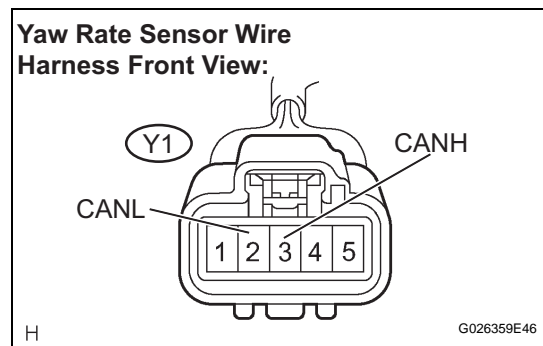
**A**

**6 CONNECT CONNECTOR**

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

**NEXT**

**7 CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE (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
Y1-2 (CANL) - Y1-3 (CANH)	•Ignition switch OFF •Stop light switch OFF	54 to 69 Ω

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

CA

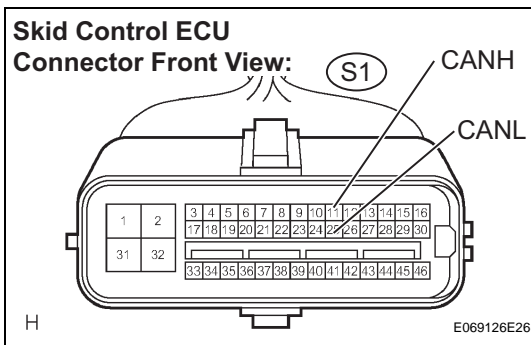
H

OK

**REPLACE YAW RATE SENSOR****8 CONNECT CONNECTOR**

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

NEXT

**9 CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE (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
S1-11 (CANH) - S1-25 (CANL)	<ul style="list-style-type: none"> <li>•Ignition switch OFF</li> <li>•Stop light switch OFF</li> </ul>	54 to 69 $\Omega$

NG

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

OK

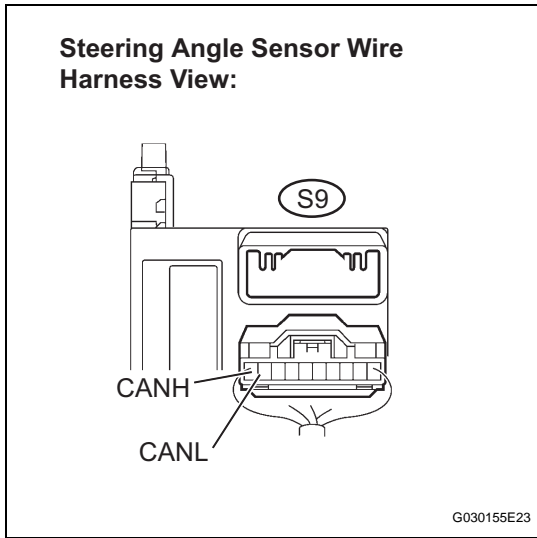
**REPLACE MASTER CYLINDER SOLENOID****10 CONNECT CONNECTOR**

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

NEXT

CA

**11 CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE (STEERING ANGLE SENSOR SUB BUS LINE)**



- (a) Disconnect 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
S9-10 (CANH) - S9-9 (CANL)	<ul style="list-style-type: none"> <li>• Ignition switch OFF</li> <li>• Stop light switch OFF</li> </ul>	54 to 69 Ω

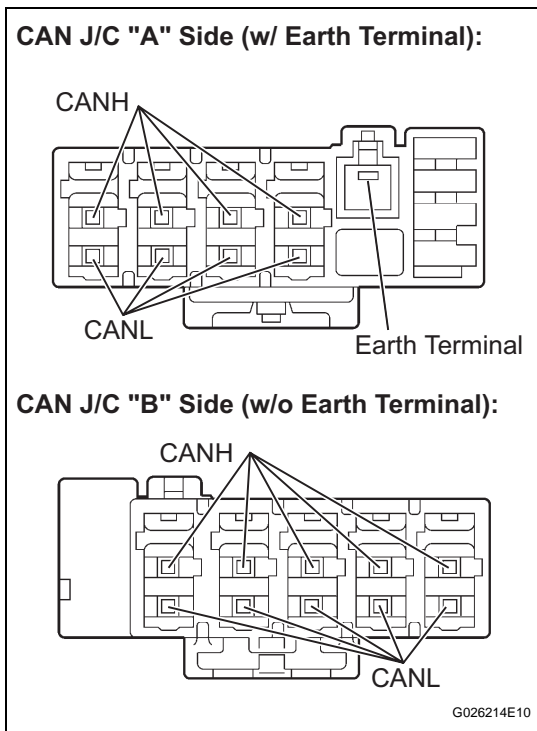
**NG** REPAIR OR REPLACE STEERING ANGLE SENSOR BRANCH LINE OR CONNECTOR (CAN-H or CAN-L)

**OK**

**CA**

**REPLACE STEERING ANGLE SENSOR**

**12 INSPECT CAN J/C**



- (a) Disconnect connectors (J6), (J7), (J8), (J9), and (J10) from the CAN J/C.
- (b) Measure the resistance according to the value(s) in the table below.

**Standard resistance**

Tester connection	Condition	Specified value
1 (CANH) - 2 (CANL)	<ul style="list-style-type: none"> <li>• Ignition switch OFF</li> <li>• Stop light switch OFF</li> </ul>	108 to 132 Ω

**NG** REPLACE CAN J/C

OK

REPLACE ECM