

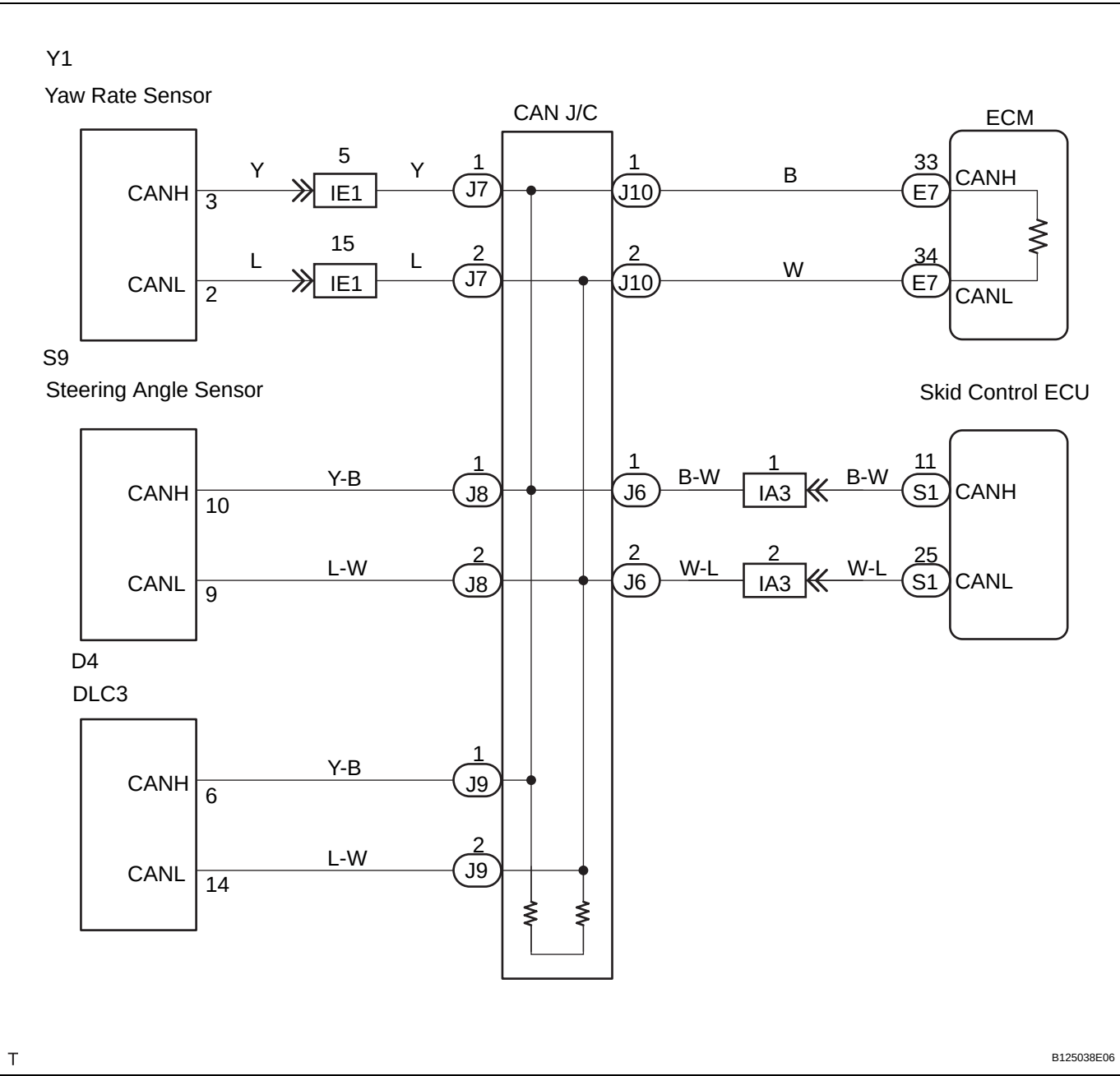
Short in CAN Bus Lines

DESCRIPTION

The CAN bus lines are considered to be shorted when the resistance between terminals 6 (CANH) and 14 (CANL) of the DLC3 is below 54 Ω.

Symptom	Trouble Area
Resistance between terminals 6(CANH) and 14(CANL) of the DLC3 is below 54 Ω.	- Short in CAN bus lines - Skid control ECU - Steering angle sensor - Yaw rate sensor - ECM - CAN junction connector

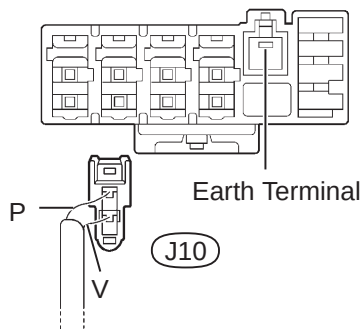
WIRING DIAGRAM



CA

1 CHECK CAN BUS LINES FOR SHORT CIRCUIT (DLC3 SUB BUS LINE)

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



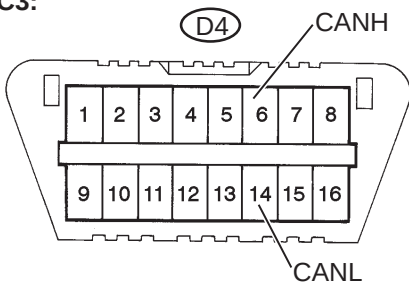
G031933E09

- (a) Disconnect the DLC3 sub bus line connector (J10) 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:



G026206E57

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

Standard resistance

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

NG

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

OK

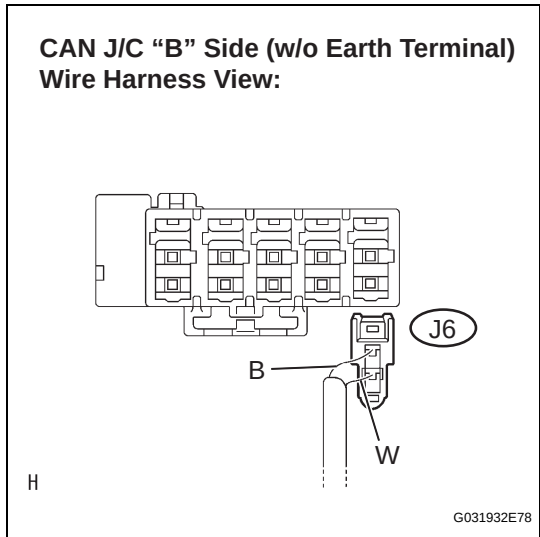
2 CONNECT CONNECTOR

- (a) Reconnect the DLC3 sub bus line connector (J10) to the CAN J/C.

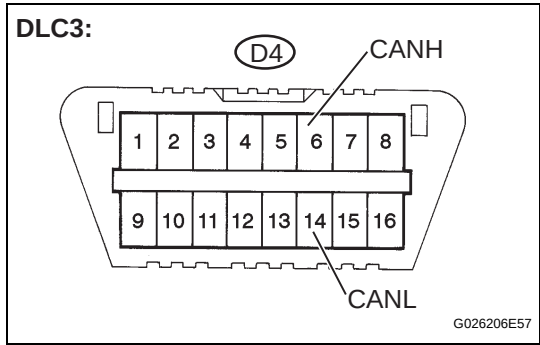
NEXT

3

CHECK CAN BUS LINES FOR SHORT CIRCUIT (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) - D4-14 (CANL)	•Ignition switch OFF •Stop light switch OFF	54 to 69 Ω

OK

Go to step 10

NG

4

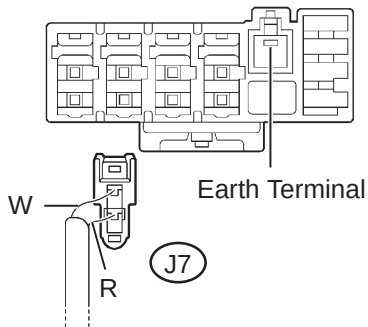
CONNECT CONNECTOR

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

NEXT

5**CHECK CAN BUS LINES FOR SHORT CIRCUIT (YAW RATE SENSOR SUB BUS LINE)**

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



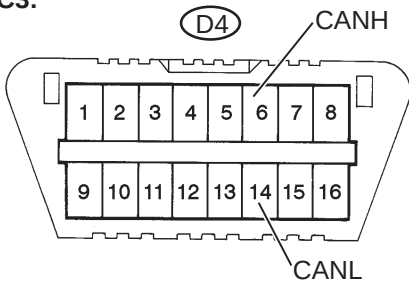
G031933E10

- (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.

DLC3:



G026206E57

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

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-14 (CANL)	•Ignition switch OFF •Stop light switch OFF	54 to 69 Ω

OK

Go to step 12

NG

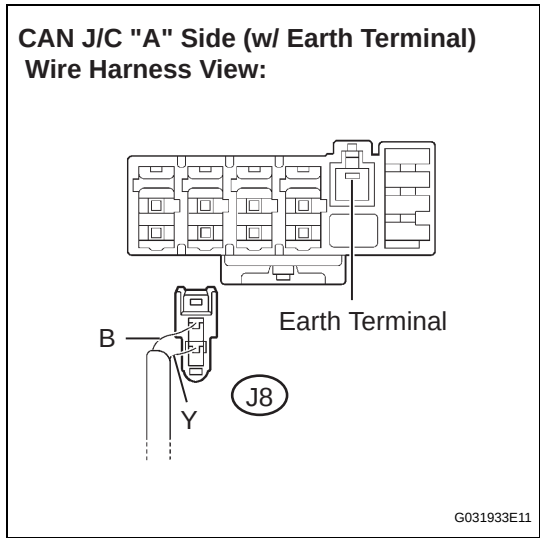
6**CONNECT CONNECTOR**

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

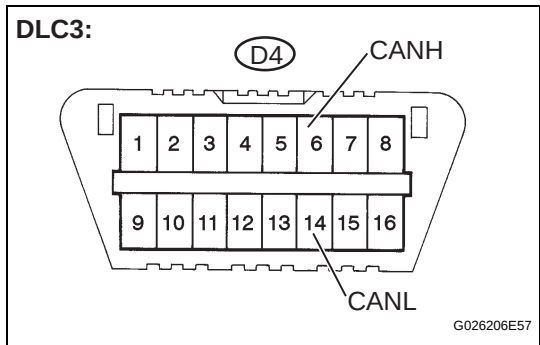
NEXT

7

CHECK CAN BUS LINES FOR SHORT CIRCUIT (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) - D4-14 (CANL)	•Ignition switch OFF •Stop light switch OFF	54 to 69 Ω

OK

Go to step 14

NG

8

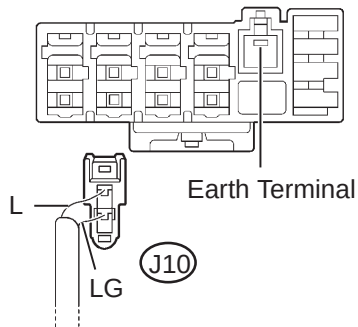
CONNECT CONNECTOR

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

NEXT

9**CHECK CAN BUS LINES FOR SHORT CIRCUIT (ECM MAIN BUS LINE)**

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

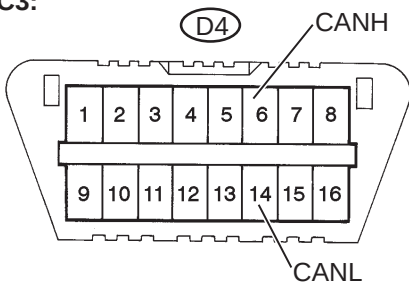


G031933E12

- (a) Disconnect the ECM main bus line connector (J10) 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:

G026206E57

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

Standard resistance

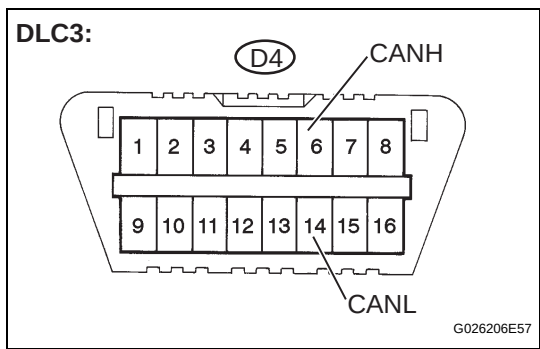
Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-14 (CANL)	•Ignition switch OFF •Stop light switch OFF	108 to 132 Ω

OK**Go to step 16****NG****REPLACE CAN J/C****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 CIRCUIT (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) - D4-14 (CANL)	- Ignition switch OFF - Stop light switch OFF	54 to 69 Ω

OK

REPLACE MASTER CYLINDER SOLENOID

NG

REPAIR OR REPLACE SKID CONTROL ECU WITH ACTUATOR SUB BUS LINE OR CONNECTOR (CAN-H, CAN-L)

12

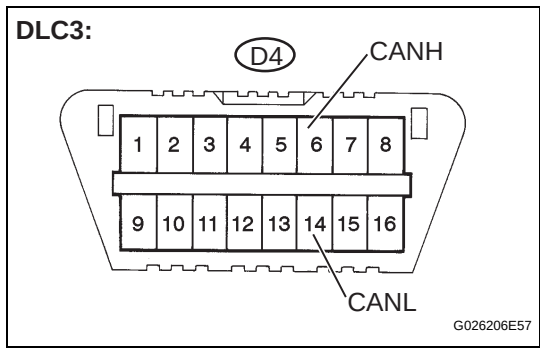
CONNECT CONNECTOR

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

NEXT

13

CHECK CAN BUS LINES FOR SHORT CIRCUIT (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) - D4-14 (CANL)	- Ignition switch OFF - Stop light switch OFF	54 to 69 Ω

OK

REPLACE YAW RATE SENSOR

NG

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

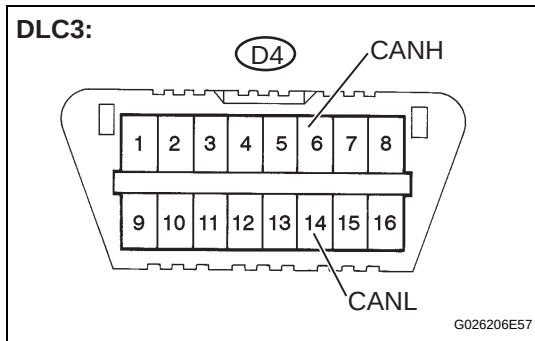
14

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 CIRCUIT (STEERING ANGLE SENSOR SUB BUS LINE)



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

Standard resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-14 (CANL)	- Ignition switch OFF - Stop light switch OFF	54 to 69 Ω

OK

REPLACE STEERING ANGLE SENSOR

NG

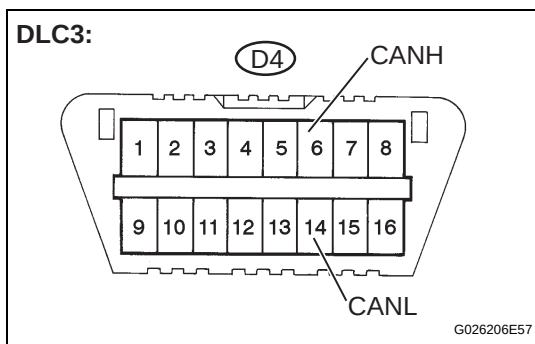
REPAIR OR REPLACE STEERING ANGLE SENSOR BRANCH LINE OR CONNECTOR (CAN-H, CAN-L)

16 CONNECT CONNECTOR

- Reconnect the ECM main bus line connector (J10) to the CAN J/C.

NEXT

17 CHECK CAN BUS LINES FOR SHORT CIRCUIT (ECM MAIN BUS LINE)



- Disconnect the ECM connector (E7).
- Measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Condition	Specified Value
D4-6 (CANH) - D4-14 (CANL)	- Ignition switch OFF - Stop light switch OFF	108 to 132 Ω

OK

REPLACE ECM

NG

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