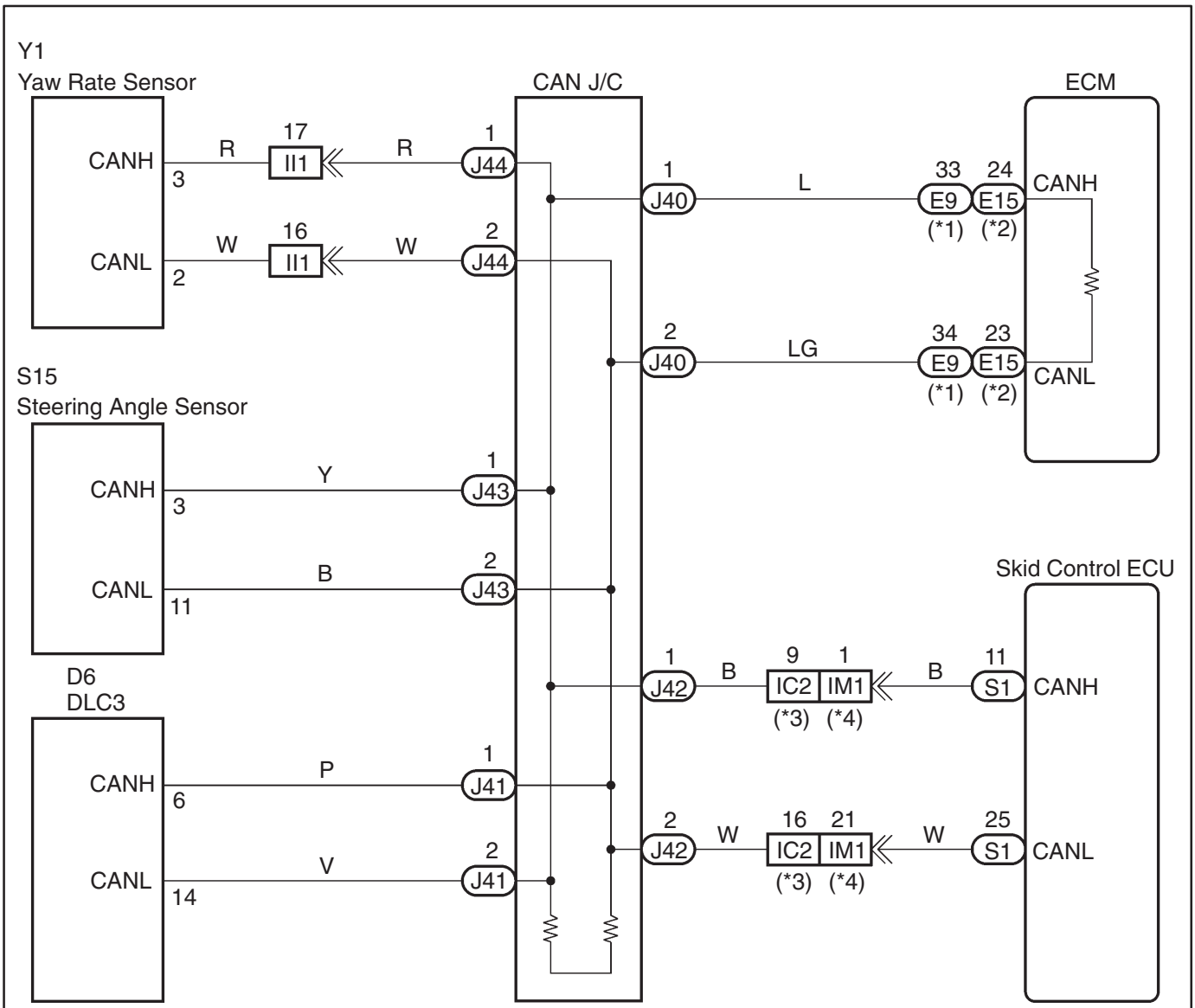
CHECK CAN BUS LINES FOR SHORT CIRCUIT

CIRCUIT 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 J/C

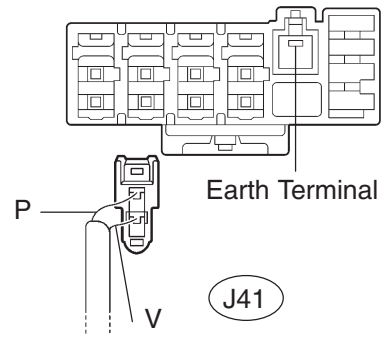
WIRING DIAGRAM



INSPECTION PROCEDURE

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

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



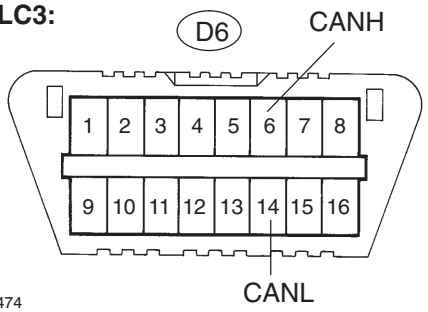
G25695 G31933

(a) Disconnect the DLC3 sub bus line connector (J41) 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:



G25474 C81825 G26206

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

Standard:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	1 MΩ or more

NG → **REPAIR OR REPLACE DLC3 SUB BUS LINE OR CONNECTOR (CAN–H, CAN–L)**

OK

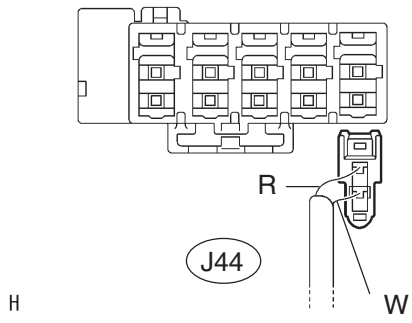
2 CONNECT CONNECTOR

(a) Reconnect the DLC3 sub bus line connector (J41) to the CAN J/C.

NEXT

3 CHECK CAN BUS LINES FOR SHORT(YAW RATE SENSOR SUB BUS LINE)

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

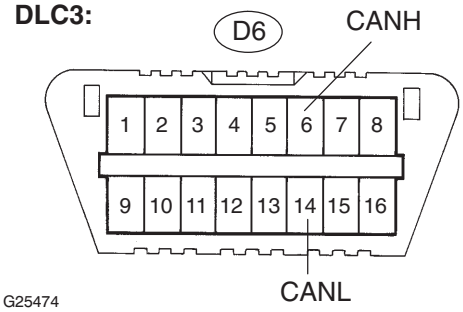


(a) Disconnect the yaw rate sensor sub bus line connector (J44) from the CAN J/C.

NOTICE:

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

DLC3:



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

Standard:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

OK → **Go to step 10**

NG

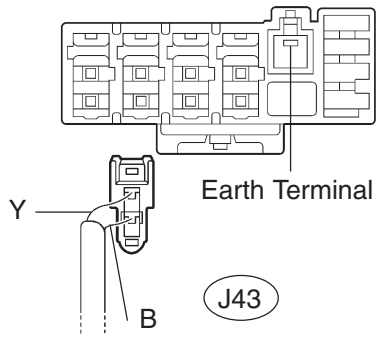
4 CONNECT CONNECTOR

(a) Reconnect the yaw rate sensor sub bus line connector (J44) to the CAN J/C.

NEXT

5	CHECK CAN BUS LINES FOR SHORT(STEERING ANGLE SENSOR SUB BUS LINE)

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



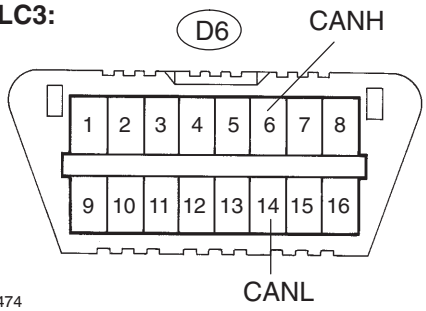
G25695 G31933

(a) Disconnect the steering angle sensor sub bus line connector (J43) 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:



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

Standard:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

OK → **Go to step 12**

NG

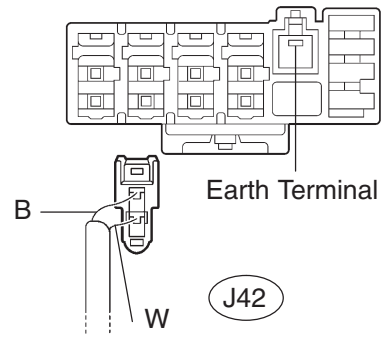
6	CONNECT CONNECTOR

(a) Reconnect the steering angle sensor sub bus line connector (J43) to the CAN J/C.

NEXT

7 CHECK CAN BUS LINES FOR SHORT(SKID CONTROL ECU SUB BUS LINE)

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



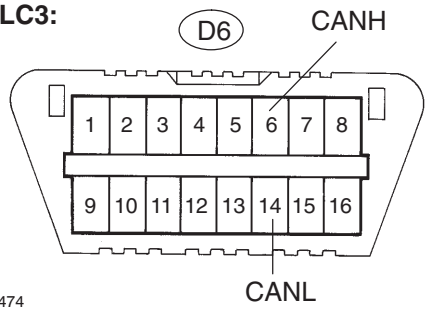
G25695 G31933

(a) Disconnect the skid control ECU sub bus line connector (J42) 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:



G25474 C81825 G26206

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

Standard:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

OK → **Go to step 14**

NG

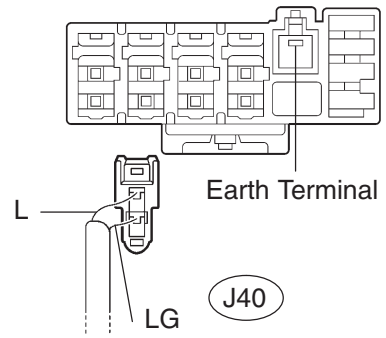
8 CONNECT CONNECTOR

(a) Reconnect the skid control ECU sub bus line connector (J42) to the CAN J/C.

NEXT

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

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



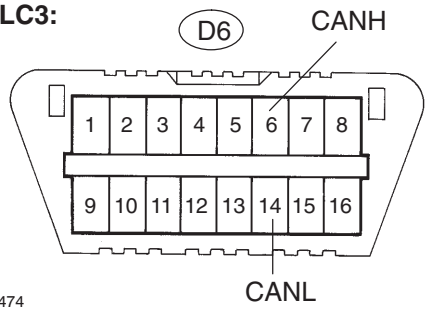
G25695 G31933

(a) Disconnect the ECM main bus line connector (J40) 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:



G25474 C81825 G26206

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

Standard:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	108 to 132 Ω

OK → **Go to step 16**

NG

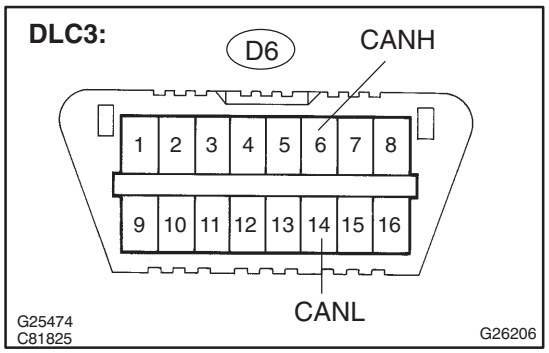
REPLACE CAN J/C

10 CONNECT CONNECTOR

(a) Reconnect the yaw rate sensor sub bus line connector (J44) to the CAN J/C.

NEXT

11 CHECK CAN BUS LINES FOR SHORT(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
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

OK → **REPLACE YAW RATE SENSOR (SEE PUB. No. RM990E, PAGE 32–91)**

NG

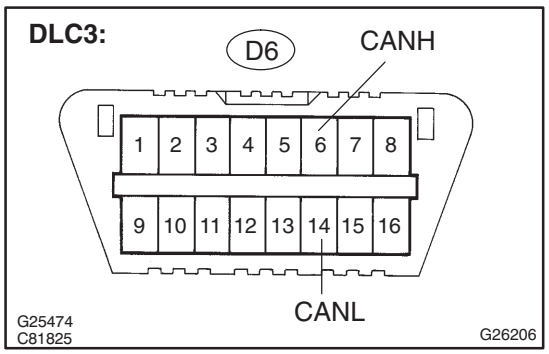
REPAIR OR REPLACE YAW RATE SENSOR SUB BUS LINE OR CONNECTOR (CAN–H, CAN–L)

12 CONNECT CONNECTOR

(a) Reconnect the steering angle sensor sub bus line connector (J43) to the CAN J/C.

NEXT

13 CHECK CAN BUS LINES FOR SHORT(STEERING ANGLE SENSOR SUB BUS LINE)



(a) Disconnect the steering angle sensor connector (S15).
(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

OK → **REPLACE STEERING ANGLE SENSOR (SEE PAGE 32–26)**

NG

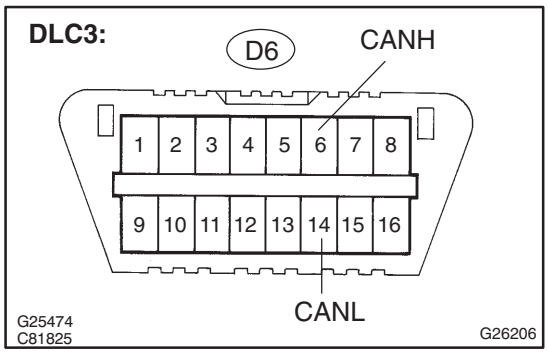
REPAIR OR REPLACE STEERING ANGLE SENSOR SUB BUS LINE OR CONNECTOR (CAN–H, CAN–L)

14 CONNECT CONNECTOR

(a) Reconnect the skid control ECU sub bus line connector (J42) to the CAN J/C.

NEXT

15 CHECK CAN BUS LINES FOR SHORT(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:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

OK → **REPLACE MASTER CYLINDER SOLENOID (SEE PAGE 32–12)**

NG

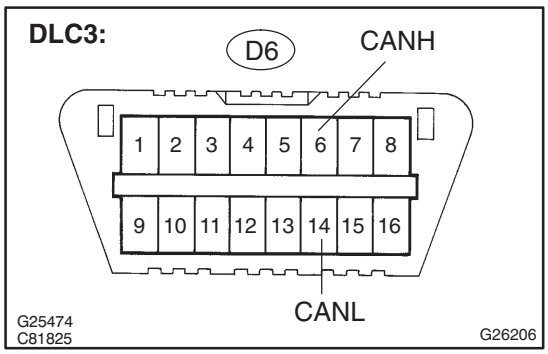
REPAIR OR REPLACE SKID CONTROL ECU SUB BUS LINE OR CONNECTOR (CAN–H, CAN–L)

16 CONNECT CONNECTOR

(a) Reconnect the ECM main bus line connector (J40) to the CAN J/C.

NEXT

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



(a) Disconnect the ECM connector (E9) or (E14).

HINT:
- E9 ..... 1GR–FE
- E14 ..... 1KD–FTV

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

Standard:

Tester connection	Condition	Specified value
D6–6 (CANH) – D6–14 (CANL)	• IG switch OFF • Stop light switch OFF	108 to 132 Ω

HINT:
- OK–A..... 1GR–FE
- OK–B..... 1KD–FTV

OK–A → **REPLACE ECM (SEE PUB. No. RM1017E, PAGE 10–11)**

OK–B → **REPLACE ECM (SEE PUB. No. RM990E, PAGE 10–34)**

NG

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