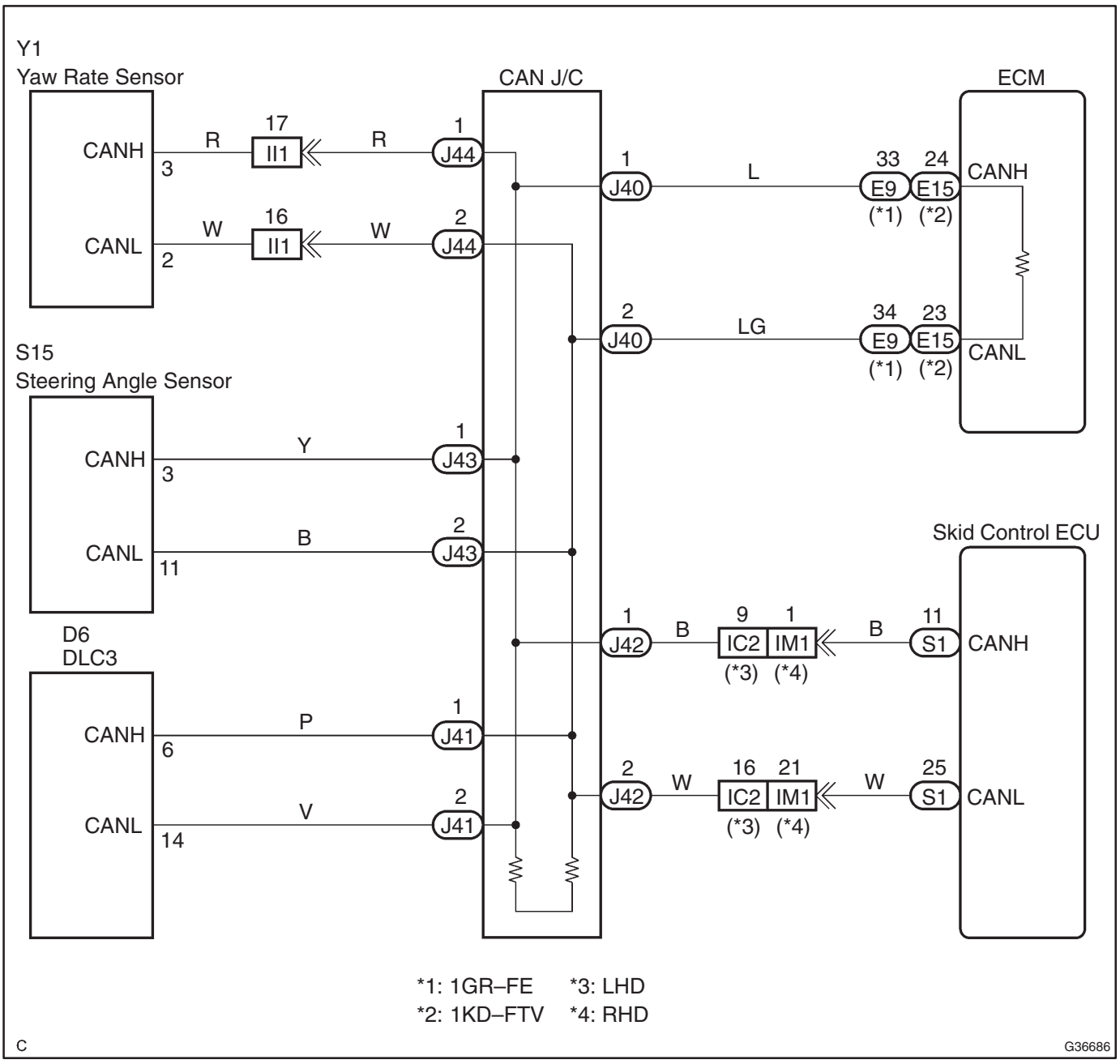
CHECK FOR AN OPEN IN ONE SIDE OF CAN SUB BUS LINE

CIRCUIT DESCRIPTION

If 2 or more ECUs and/or sensors do not appear on the intelligent tester II's "Communication 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 hand–held tester's "Communication Bus Check" screen via the CAN VIM.	• One side of the CAN sub–bus line is open • Skid control ECU • Steering angle sensor • Yaw rate sensor • ECM • CAN J/C

WIRING DIAGRAM



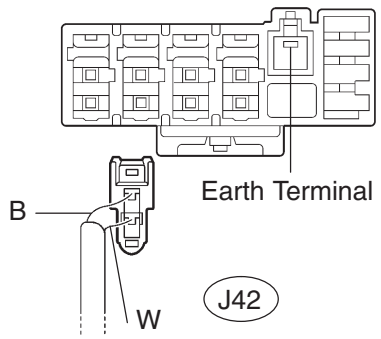
C

G36686

INSPECTION PROCEDURE

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

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



(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.**

(b) Connect the intelligent tester II to the DLC3.
(c) Turn the ignition switch ON.
(d) Select "Communication Bus Check" on the intelligent tester II display (see page 05–1443).

Result:

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

A	Go to step 8

B

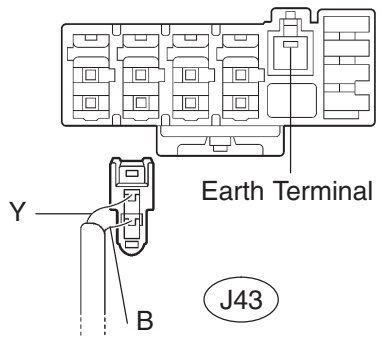
2	CONNECT CONNECTOR

(a) Reconnect the skid control ECU sub bus line connector (J42) 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 (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.**

(b) Connect the intelligent tester II to the DLC3.
(c) Turn the ignition switch ON.
(d) Select "Communication Bus Check" on the intelligent tester II display (see page 05–1443).

Result:

A	"Steering Angle Sensor" does not appear
B	2 or more ECUs and/or sensors do not appear

A	Go to step 10

B

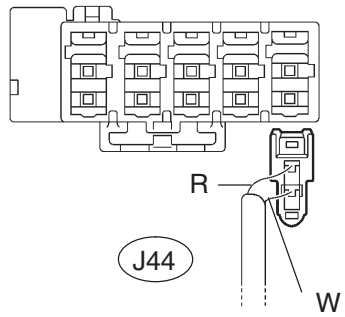
4	CONNECT CONNECTOR

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

NEXT

5	CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE(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.**

(b) Connect the intelligent tester II to the DLC3.
(c) Turn the ignition switch ON.
(d) Select "Communication Bus Check" on the intelligent tester II display (see page 05–1443).

Result:

A	"Yaw Rate/Deceleration Sensor" does not appear
B	2 or more ECUs and/or sensors do not appear

B → **Go to step 12**

A

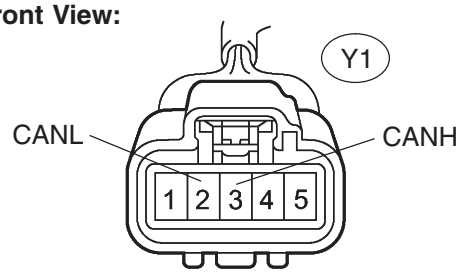
6	CONNECT CONNECTOR

(a) Reconnect the yaw rate sensor sub bus line connector (J44) 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)

Yaw Rate Sensor Connector Front View:



(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
Y1–2 (CANL) – Y1–3 (CANH)	• IG 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)**

OK

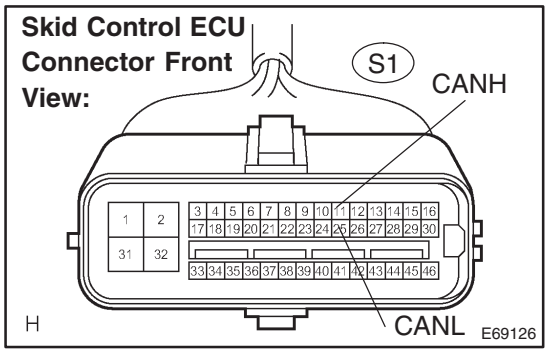
REPLACE YAW RATE SENSOR (SEE PUB. No. RM990E, PAGE 32–91)

8	CONNECT CONNECTOR

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

Tester connection	Condition	Specified value
S1–11 (CANH) – S1–25 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

NG → **REPAIR OR REPLACE SKID CONTROL ECU SUB BUS LINE OR CONNECTOR (CAN–H or CAN–L)**

OK

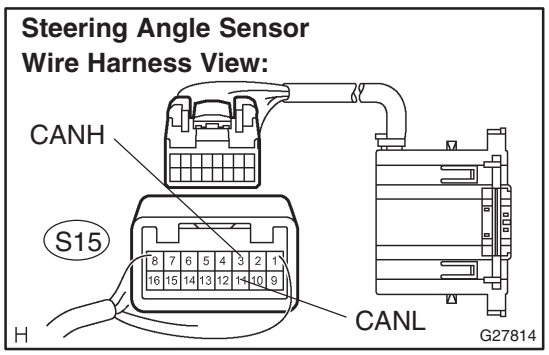
REPLACE MASTER CYLINDER SOLENOID (SEE PAGE 32–12)

10	CONNECT CONNECTOR

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

NEXT

11	CHECK FOR AN OPEN IN ONE SIDE OF THE CAN SUB BUS LINE(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
S15–3 (CANH) – S15–11 (CANL)	• IG switch OFF • Stop light switch OFF	54 to 69 Ω

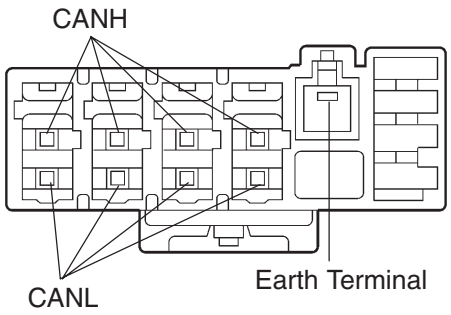
NG → **REPAIR OR REPLACE STEERING ANGLE SENSOR SUB BUS LINE OR CONNECTOR (CAN–H or CAN–L)**

OK

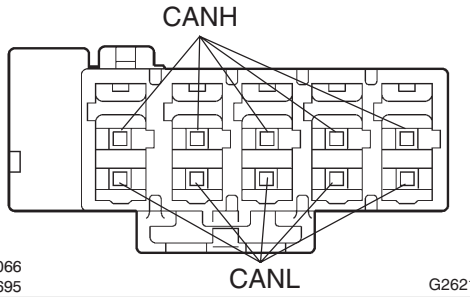
REPLACE STEERING ANGLE SENSOR (SEE PAGE 32–26)

12 INSPECT CAN J/C

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



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



G26066
G25695
G26214

(a) Disconnect all connectors (J40), (J41), (J42), (J43) and (J44) from the CAN J/C

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

Standard:

Tester connection	Condition	Specified value
1 (CANH) – 2 (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

REPLACE CAN J/C