CHECK CAN MAIN BUS LINE FOR DISCONNECTION (LHD, w/ LEXUS Navigation System)

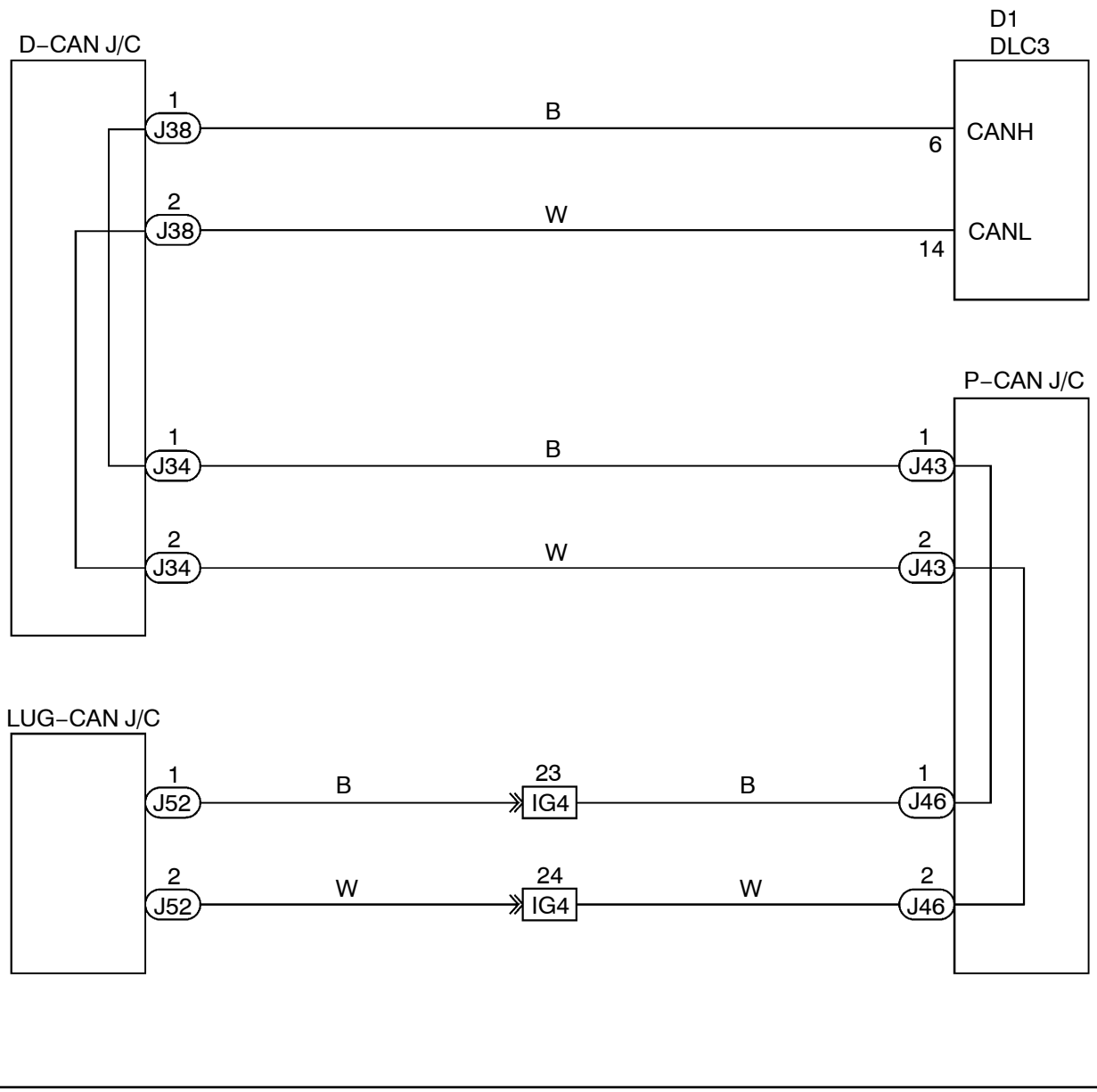
CIRCUIT DESCRIPTION

There may be an open circuit in the CAN main bus 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.	• CAN main bus line or connector • Junction connector (LUG–CAN J/C) • Junction connector (P–CAN J/C) • Junction connector (D–CAN J/C) • DLC3 sub bus line or connector

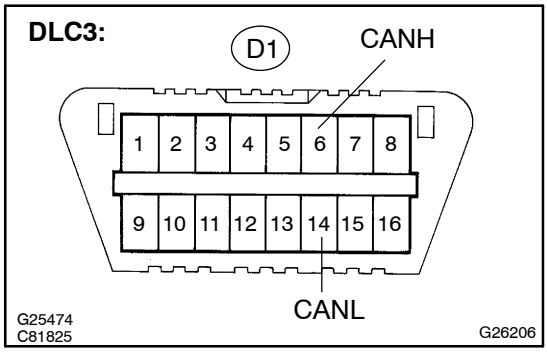
WIRING DIAGRAM

LHD:



C G29525

1 CHECK DLC3



(a) Turn the ignition switch to the LOCK position.
(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)	Ignition Switch OFF	108 to 132 Ω	A
D1–6 (CANH) – D1–14 (CANL)	Ignition Switch OFF	132 Ω or more	B

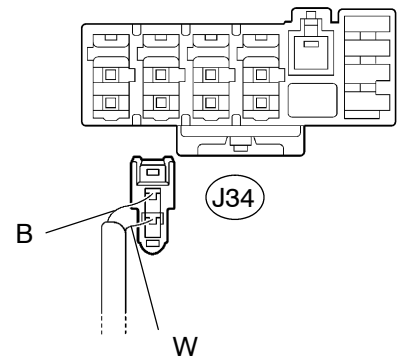
NOTICE:
When the measured value is 132 Ω or more and a CAN communication system diagnostic trouble code is output, there may be a fault besides disconnection of the DLC3 sub bus line. For that reason, troubleshooting should be performed again from "HOW TO PROCEED WITH TROUBLESHOOTING" (see page 05–3306) after repairing the trouble area.

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

A

2 CHECK CAN MAIN BUS LINE FOR DISCONNECTION(D–CAN J/C)

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



(a) Disconnect the CAN main bus line connector (J34) from the D–CAN J/C A side (w/ earth terminal).

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:

Tester connection	Condition	Specified value
J34–1 (CANH) – J34–2 (CANL)	Ignition Switch OFF	108 to 132 Ω

OK → **REPLACE JUNCTION CONNECTOR (D–CAN J/C)**

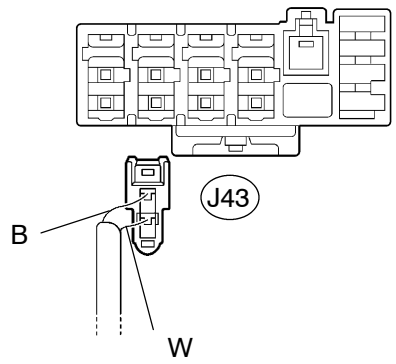
NG

3	CONNECT CONNECTOR

(a) Reconnect the CAN main bus line connector (J34) to the D–CAN J/C.

4	CHECK CAN MAIN BUS LINE FOR DISCONNECTION(D–CAN J/C– P–CAN J/C)

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



G25695 G31957

(a) Disconnect the CAN main bus line connector (J43) from the P–CAN J/C A side (w/ earth terminal).

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:

Tester connection	Condition	Specified value
J43–1 (CANH) – J43–2 (CANL)	Ignition Switch OFF	108 to 132 Ω

NG → **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (P–CAN J/C – D–CAN J/C)**

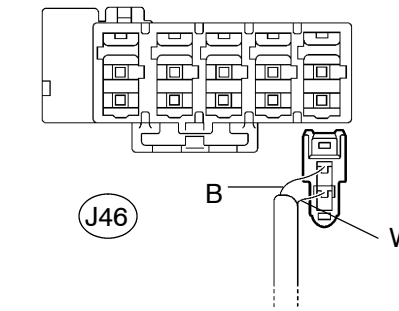
OK

5	CONNECT CONNECTOR

(a) Reconnect the CAN main bus line connector (J43) to the P–CAN J/C A side (w/ earth terminal).

6	CHECK CAN MAIN BUS LINE FOR DISCONNECTION(P–CAN J/C)

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



H

G25693 G31936

(a) Disconnect the CAN main bus line connector (J46) from the P–CAN J/C B side (w/o earth terminal).

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:

Tester connection	Condition	Specified value
J46–1 (CANH) – J46–2 (CANL)	Ignition Switch OFF	108 to 132 Ω

OK → **REPLACE JUNCTION CONNECTOR (P–CAN J/C)**

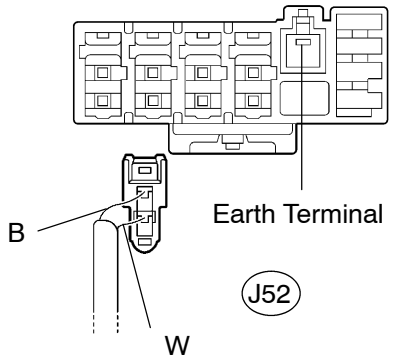
NG

7	CONNECT CONNECTOR

(a) Reconnect the CAN main bus line (J46) to the P–CAN J/C B side (w/o earth terminal).

8	CHECK CAN MAIN BUS LINE FOR DISCONNECTION(LUG–CAN J/C)

LUG–CAN J/C (w/ Earth Terminal) :



G25695 G31957

(a) Disconnect the CAN main bus line connector (J52) from the LUG–CAN J/C A side (w/ earth terminal).

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:

Tester connection	Condition	Specified value
J52–1 (CANH) – J52–2 (CANL)	Ignition Switch OFF	108 to 132 Ω

OK → **REPLACE JUNCTION CONNECTOR (LUG–CAN J/C)**

NG

REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (P–CAN J/C – LUG–CAN J/C)