DTC	C1202/52	BRAKE FLUID LEVEL LOW/OPEN CUIRCUIT IN BRAKE FLUID LEVEL WARNING SWITCH CIRCUIT

DTC	C1202/58	BRAKE FLUID LEVEL LOW/OPEN CIRCUIT IN BRAKE FLUID LEVEL WARNING SWITCH CIRCUIT

CIRCUIT DESCRIPTION

The brake fluid level warning switch sends the appropriate signal to the skid control ECU when the brake fluid level drops.

DTC No.	DTC Detection Condition	Trouble Area
C1202/52 C1202/58	When either of the following conditions is detected: 1. Fluid level of the reservoir tank is LOW for 4 seconds or 40 seconds after the ignition switch is turned ON, or for 7 seconds during pump motor operation. 2. With ECU terminal IG1 voltage at 9.5 V to 17.0 V, an open in the brake fluid level warning switch circuit continues for 2 seconds or more.	• Brake fluid level • Brake fluid level warning switch • Brake fluid level warning switch circuit

HINT:

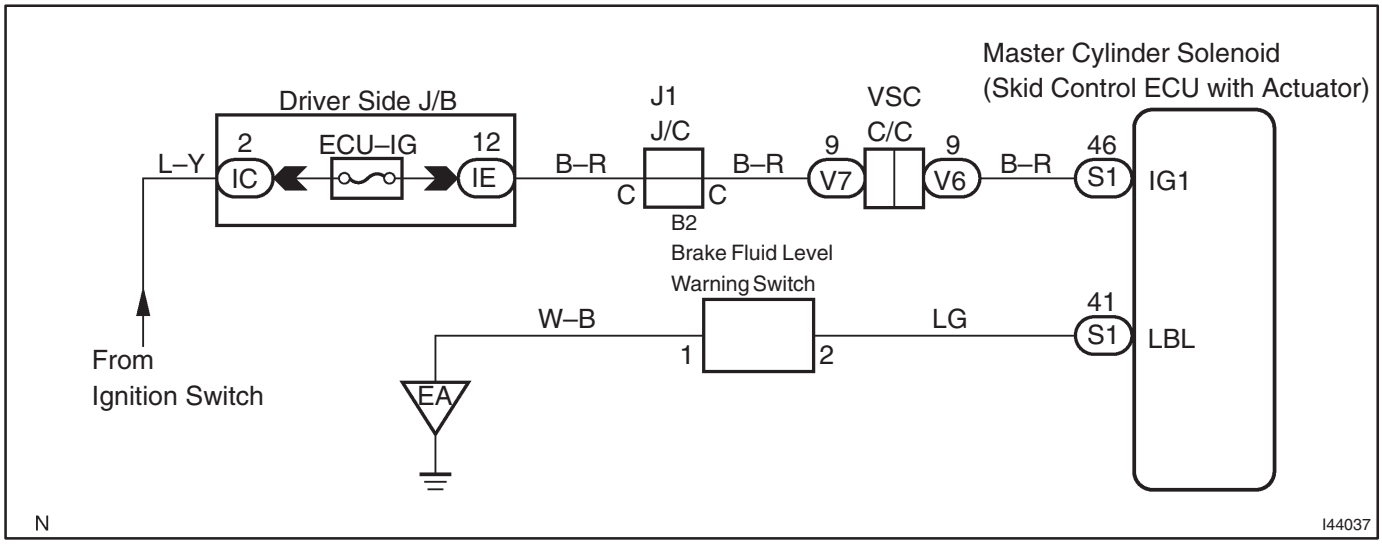
If this code (C1202/52) is output, the following situations will occur:

- The VSC TRC and brake warning lights, and the VSC OFF indicator light will come on.
- Control of all systems other than ABS and EBD is canceled.

If this code (C1202/58) is output, the following situations will occur:

- The ABS, VSC TRC, and brake warning lights, and the slip and VSC OFF indicator lights will come on.
- Control of all systems other than EBD is canceled.

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When replacing the master cylinder solenoid, perform zero point calibration (see page 05–744).

HINT:

When C1241/41 is output together with C1202/52 or C1202/58, inspect and repair the trouble areas indicated by C1241/41 first.

1 CHECK BRAKE FLUID LEVEL

(a) Turn the ignition switch off.

(b) Depress the brake pedal 20 times or more (until the pedal reaction feels light and pedal stroke becomes longer).

(c) Check the amount of fluid in the brake reservoir.

HINT:

When the ignition switch is turned to the ON position, brake fluid is sent to the accumulator and the fluid level decreases by approximately 5 mm from the level when the ignition switch is off (normal).

NOTICE:

Do not move the wheels with the ignition switch off.

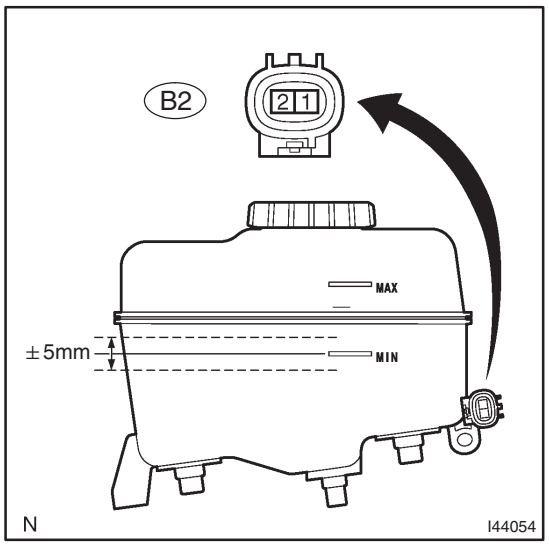
OK:

Brake fluid level is proper.

NG → **CHECK AND REPAIR BRAKE FLUID LEAKAGE**

OK

2 INSPECT BRAKE FLUID LEVEL WARNING SWITCH



(a) Disconnect the brake fluid level warning switch connector.

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

HINT:

- A float is placed inside the reservoir. Its position can be changed by increasing/decreasing the level of brake fluid.
- The warning switch is switched ON/OFF at ± 5 mm from the MIN level.

Standard:

Tester Connection	Condition	Specified Condition
B2–1 – B2–2	Float up (Switch OFF)	1.9 to 2.1 kΩ
B2–1 – B2–2	Float down (Switch ON)	Below 1 Ω

HINT:

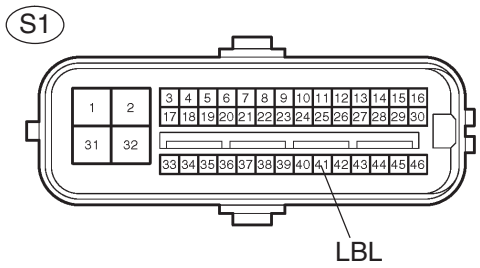
If there is no problem after finishing the above check, adjust the brake fluid level to the MAX level.

NG → **REPLACE BRAKE MASTER CYLINDER RESERVOIR SUB–ASSY (SEE PAGE 32–12)**

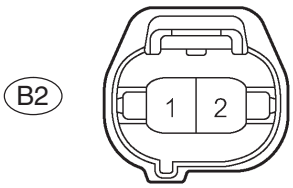
OK

3	CHECK HARNESS AND CONNECTOR (BETWEEN SKID CONTROL ECU, BODY GROUND AND BRAKE FLUID LEVEL WARNING SWITCH) (SEE PAGE 01–26)

Skid Control ECU (Wire Harness Side) Connector Front View:



Brake Fluid Level Warning Switch (Wire Harness Side) Connector Front View:



H I44031 I45330

(a) Disconnect the skid control ECU connector.
(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
S1–41 (LBL) – B2–2	Below 1 Ω
S1–41 (LBL) – Body ground	10 kΩ or higher
B2–1 – Body ground	Below 1 Ω

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

4	RECONFIRM DTC

(a) Clear the DTC (see page 05–766).
(b) Check if the same DTC is detected (see page 05–766).

HINT:
Reinstall the sensors, connectors, etc. and restore the previous vehicle conditions before rechecking for DTCs.

Result:

DTC is output	A
DTC is not output	B

NG → **END**

OK

REPLACE MASTER CYLINDER SOLENOID (SEE PAGE 32–12)