

DTC**C1201/51****Engine Control System Malfunction****DESCRIPTION**

If trouble occurs in the engine control system, the ECM transmits the abnormality to the skid control ECU. The skid control ECU sets this DTC and prohibits TRAC and VSC control.

DTC No.	DTC Detection Condition	Trouble Area
C1201/51	Malfunction signal is received from ECM.	Engine control system

INSPECTION PROCEDURE**1****CHECK DTC (FOR ENGINE CONTROL SYSTEM)**

- (a) Check if the engine control system DTC is output (See page [ES-31](#) for 1GR-FE, or [ES-35](#) for 2UZ-FE).

Result

Condition	Proceed to
DTC is not output	A
DTC is output	B

B**INSPECT ENGINE CONTROL SYSTEM****A****BC****REPLACE ECM**

DTC	C1202/52	Brake Fluid Level Low / Open Circuit in Brake Fluid Level Warning Switch Circuit
DTC	C1202/58	Brake Fluid Level Low / Open Circuit in Brake Fluid Level Warning Switch 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. With ECU terminal IG1 voltage at 9.5 V to 17.2 V, an open in the brake fluid level warning switch circuit continues for 2 seconds or more. 2. 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.	- Brake fluid level - Brake fluid level warning switch - Brake fluid level warning switch circuit

HINT:

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

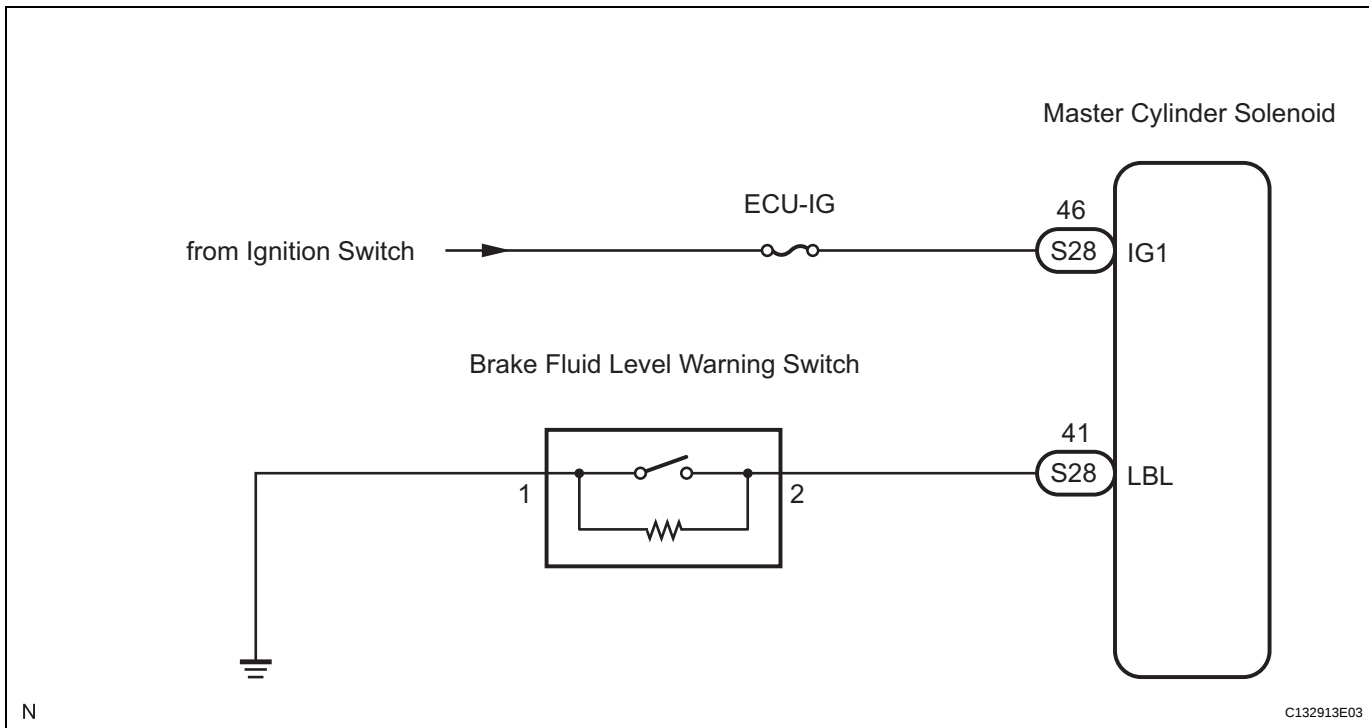
- The VSC TRAC and BRAKE warning lights, and the VSC OFF indicator light will come on.
- Control of all systems other than ABS and EBD is canceled.

BC

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

- The ABS, VSC TRAC, 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 BC-20).

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:

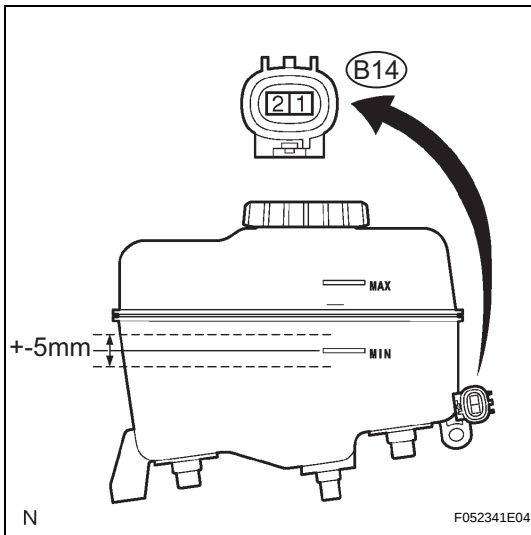
Brake fluid level is proper.

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 resistance

Tester Connection	Condition	Specified Condition
B14-1 - B14-2	Float UP (Switch OFF)	1.9 to 2.1 k Ω
B14-1 - B14-2	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.

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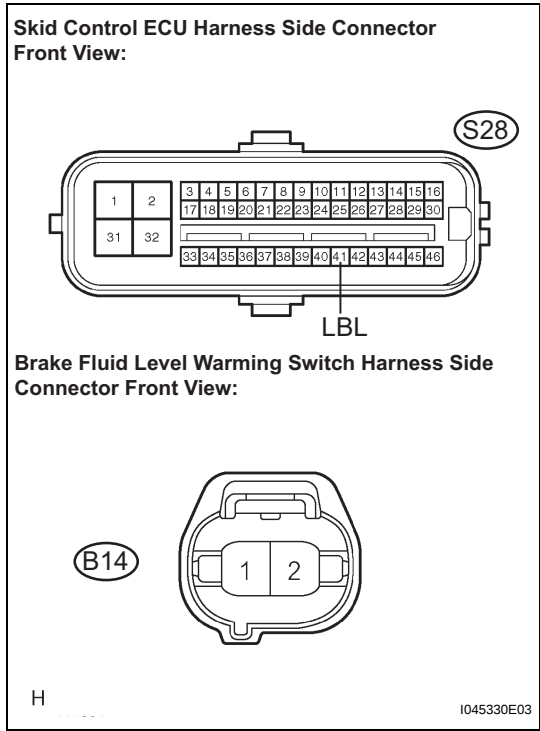
REPLACE BRAKE MASTER CYLINDER RESERVOIR SUB-ASSEMBLY

BC

OK

3

CHECK HARNESS AND CONNECTOR (BRAKE FLUID LEVEL WARNING SWITCH - SKID CONTROL ECU)



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

Standard resistance

Tester Connection	Specified Condition
S28-41 (LBL) - B14-2	Below 1 Ω
S28-41 (LBL) - Body ground	10 kΩ or higher
B14-1 - Body ground	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4

RECONFIRM DTC

- (a) Clear the DTC (See page [BC-39](#)).
(b) Check if the same DTCs are detected (See page [BC-39](#)).
HINT:
Reinstall the sensors, connectors, etc. and restore the previous vehicle conditions before rechecking for DTCs.

Result

Condition	Proceed to
DTC is output	A
DTC is not output	B

A

B

END

REPLACE MASTER CYLINDER SOLENOID