DTC	C1201/51	Engine Control System Malfunction

## **DESCRIPTION**

If trouble occurs in the engine control system, the skid control ECU disables TRAC, A-TRAC and VSC controls.

DTC No.	DTC Detecting Conditions	Trouble Areas
C1201/51	Malfunction signal received from ECM	Engine control system

## 1 CHECK DTC (ENGINE CONTROL SYSTEM)

(a) Check if any DTC is recorded for the engine control system (See page ES-40 or ES-38).

Result	Proceed to
DTC not output	A
DTC output	В

B REPAIR ENGINE CONTROL SYSTEM



**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

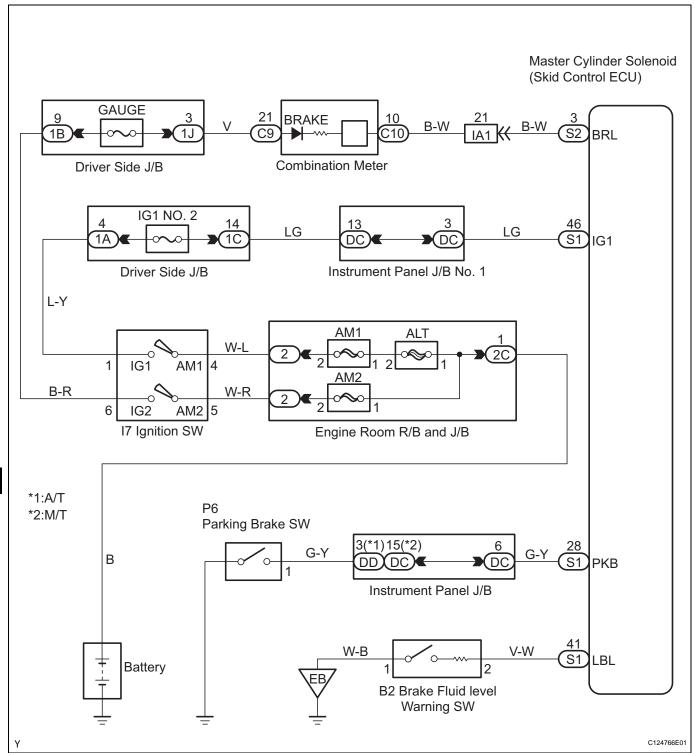
## **DESCRIPTION**

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

DTC No.	DTC Detecting Conditions	Trouble Areas
C1202/52 C1202/58	<ol> <li>When any of the following conditions detected:</li> <li>Fluid level of brake master cylinder reservoir tank stays low for 30 seconds or more when vehicle stops, or for 60 seconds or more when driving.</li> <li>With ECU terminal IG1 voltage 9.5 V to 17.2 V, an open circuit for brake fluid level warning switch circuit continues for 2 seconds or more.</li> <li>Fluid level of master cylinder reservoir tank LOW for 4 seconds or 40 seconds after ignition switch turned ON, of for 7 seconds during pump motor operation.</li> </ol>	<ul> <li>Brake fluid level</li> <li>Brake fluid level warning switch</li> <li>Brake fluid level warning switch circuit</li> <li>Master cylinder solenoid (skid control ECU)</li> </ul>



## WIRING DIAGRAM



#### HINT:

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

## CHECK BRAKE FLUID LEVEL

(a) Turn the ignition switch to OFF.

BC

- (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:

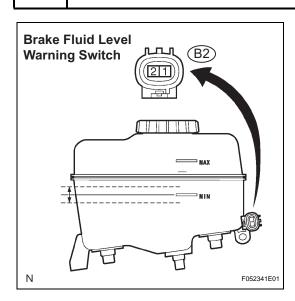
Brake fluid level is correct.

NG

**CHECK FOR LEAKAGE AND REPAIR** 



## 2 INSPECT BRAKE FLUID LEVEL WARNING SWITCH



- (a) Disconnect the brake fluid level warning switch connector.
- (b) Measure the resistance.

#### Standard Resistance

Tester Connection	Condition	Specified Condition
B2-1 - B2-2	Float UP (Switch OFF)	<b>1.9 to 2.1 k</b> Ω
B2-1 - B2-2	Float DOWN (Switch ON)	Below 1 Ω

c) Reconnect the brake fluid level warning switch connector.

HINT:

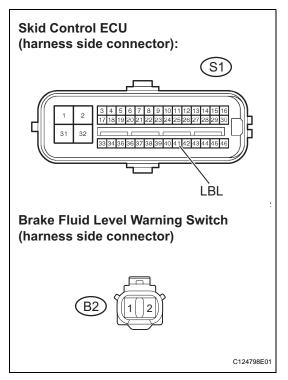
If there is no problem after finishing the above check, adjust the brake fluid level to the maximum level.



REPLACE BRAKE MASTER CYLINDER RESERVOIR SUB-ASSEMBLY



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



- (a) Disconnect the skid control ECU connector.
- (b) Disconnect the brake fluid level warning switch connector.
- (c) Measure the resistance.

#### **Standard Resistance**

Tester Connection	Specified Condition
S1-41 (LBL) - B2-2	Below 1 Ω

- (d) Reconnect the brake fluid level warning switch connector.
- (e) Reconnect the skid control ECU connector.

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

ОК

BC

# RECONFIRM DTC

- (a) Clear the DTCs (See page BC-118).
- (b) Check if the same DTCs are detected.

Result	Proceed to
DTC output	A
DTC not output	В

B END



### REPLACE MASTER CYLINDER SOLENOID