DTC C1251/51 Open in Pump Motor Circuit

DESCRIPTION

The motor relay (semiconductor relay) is housed in the brake actuator assembly and drives the pump motor based on a signal from the skid control ECU.

DTC No.	DTC Detection Condition	Trouble Area
C1251/51	ABS pump motor is not operating normally during initial check.	• ABS pump motor circuit • Brake actuator assembly

WIRING DIAGRAM

Refer to DTCs C0273/13 and C0274/14 (See page BC-31).

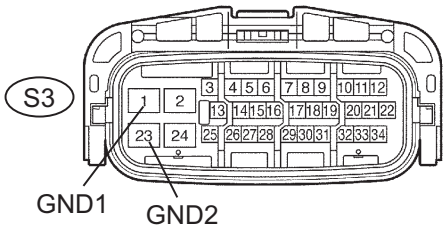
INSPECTION PROCEDURE

HINT:

After step 1 is complete, start the inspection from step 2 when using the intelligent tester, and from step 3 when not using the intelligent tester.

1 INSPECT SKID CONTROL ECU (GND TERMINAL CONTINUITY)

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



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(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
S3-1 (GND1) - Body ground	Below 1 Ω
S3-23 (GND2) - Body ground	Below 1 Ω

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (GND CIRCUIT)**

OK

2 PERFORM ACTIVE TEST BY INTELLIGENT TESTER (ABS MOTOR RELAY)

(a) Reconnect the skid control ECU connector.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position and turn the intelligent tester main switch on.
(d) Start the engine.
(e) Select the ACTIVE TEST mode on the intelligent tester.

ABS:

Item (Display)	Vehicle Condition / Test Details	Diagnostic Note
ABS MOT RELAY	Turns ABS motor relay ON / OFF	Operating sound of motor is heard

(f) Check operating sound of the ABS motor when operating it with the intelligent tester.

OK:

The operating sound of the ABS motor is heard.

NG → **REPLACE BRAKE ACTUATOR ASSEMBLY**

BC

OK

3	RECONFIRM DTC

(a) Clear the DTCs (See page BC-10).
(b) Start the engine.
(c) Drive the vehicle at the speed of 6 km/h (4 mph) or more.
(d) Check that the same DTC is recorded (See page BC-10).

HINT:

- Reinstall the sensors, connectors, etc. and restore the vehicle to its prior condition before rechecking for DTCs.
- If a speed signal of 6 km/h (4 mph) or more is input to the skid control ECU, with the ignition switch on and the stop light switch off, the ECU performs self-diagnosis of the motor and solenoid circuits.

Result

Condition	Proceed to
DTC (C1251/51) is output	A
DTC (C1251/51) not output	B

HINT:

- If any DTCs are output while jiggling a connector or wire harness of the brake actuator (skid control ECU), inspect and repair the connector or wire harness.
- If the normal system code is output, slightly jiggle the connectors, wire harnesses, and fuses of the brake actuator assembly. Make sure that no DTCs are output.
- These DTCs may be stored due to a malfunction in the connector terminal connection, etc.

B → END

A

REPLACE BRAKE ACTUATOR ASSEMBLY