

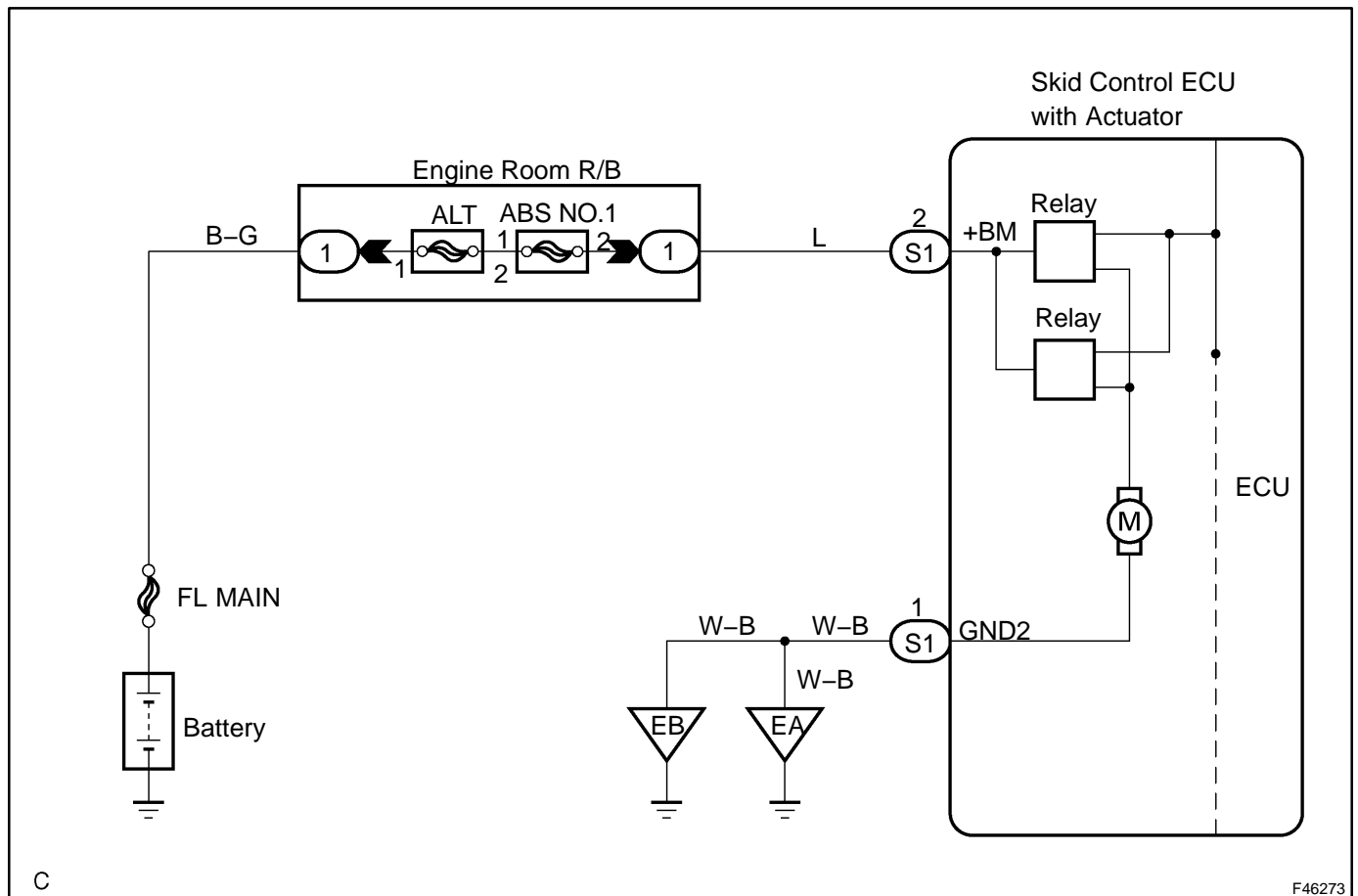
<b>DTC</b>	<b>C0273/13</b>	<b>OPEN OR SHORT CIRCUIT IN ABS MOTOR RELAY CIRCUIT</b>
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## CIRCUIT DESCRIPTION

The ABS motor relay supplies power to the ABS pump motor. While the ABS is activated, the ECU switches the motor relay ON and operates the ABS pump motor.

DTC No.	DTC Detecting Condition	Trouble Area
C0273/13	Detection of any conditions from 1 to 3: 1. Pump motor voltage is 2.0 V or more for 1 sec. or more at motor relay OFF. 2. Pump motor voltage is (IG – 4.0 V) or less for 0.1 sec. or more at motor relay ON. 3. After the end of the actuation of the motor relay slow down, condition of motor does not meet the specification.	<ul style="list-style-type: none"> <li>• ABS motor relay</li> <li>• ABS motor relay circuit</li> </ul>

## WIRING DIAGRAM



## INSPECTION PROCEDURE

### HINT:

Start the inspection from step 1 when using the hand-held tester and start from step 2 when not using the hand-held tester.

### 1 PERFORM ACTIVE TEST BY HAND-HELD TESTER(ABS MOTOR RELAY)

- (a) Connect the hand-held tester to the DLC3.
- (b) Start the engine.
- (c) Select the ACTIVE TEST mode on the hand-held tester.

Item	Vehicle Condition / Test Details	Diagnostic Note
ABS MOT RELAY	Turns ABS motor relay ON / OFF	Operation of motor can be heard

- (d) Check the operation sound of the ABS motor individually when operating it with the hand-held tester.

#### Standard:

The operation sound of the ABS motor should be heard.

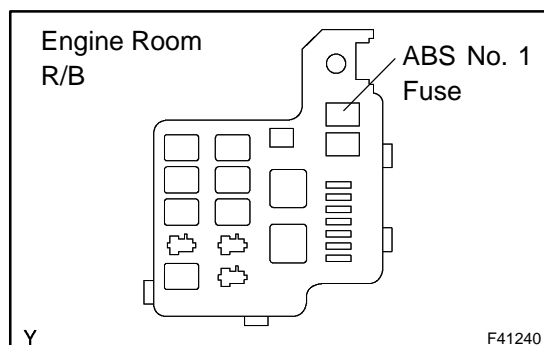
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Go to step 2

OK

### REPLACE BRAKE ACTUATOR ASSY(See page 32-58)

### 2 INSPECT FUSE(ABS NO.1 FUSE)



- (a) Remove the ABS No.1 fuse from the engine room R/B.
- (b) Measure the resistance according to the value(s) in the table below.

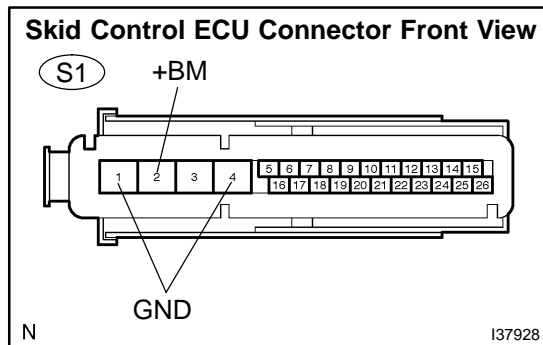
#### Standard:

ABS No.1 fuse	1 $\Omega$ or less
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CHECK FOR SHORT IN ALL HARNESS AND CONNECTOR CONNECTED TO FUSE AND REPLACE FUSE

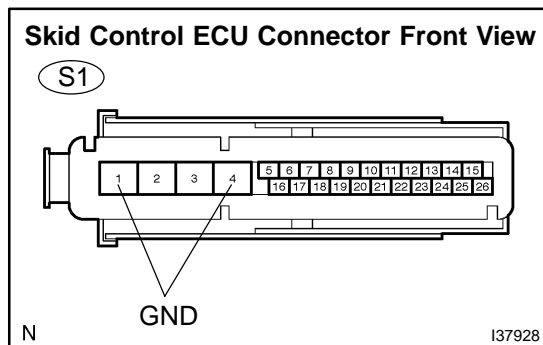
OK

**3 INSPECT SKID CONTROL ECU CONNECTOR(+BM TERMINAL VOLTAGE)**

- Disconnect the skid control ECU connector.
- Turn the ignition switch to the ON position.
- Measure the voltage according to the value(s) in the table below.

**Standard:**

Tester Connection	Specified Condition
S1-2 (+BM) – S1-4 (GND1)	10 to 14 V
S1-2 (+BM) – S1-1 (GND2)	10 to 14 V

**NG****REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****4 INSPECT SKID CONTROL ECU CONNECTOR(GND1 AND GND2 TERMINAL)**

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

**Standard:**

Tester Connection	Specified Condition
S1-4 (GND1) – Body ground	1 $\Omega$ or less
S1-1 (GND2) – Body ground	1 $\Omega$ or less

**NG****REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****5 RECONFIRM DTC**

- Clear the DTCs (See page 05-873).
- Drive the vehicle at a speed of 4 mph (6 km/h) or more.
- Are the same DTCs recorded? (See page 05-873).

**NO****PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (See page 05-883)****YES****REPLACE BRAKE ACTUATOR ASSY (See page 32-58)**