DTC	C1251/51	PUMP MOTOR IS LOCKED/OPEN CIRCUIT IN PUMP MOTOR GROUND

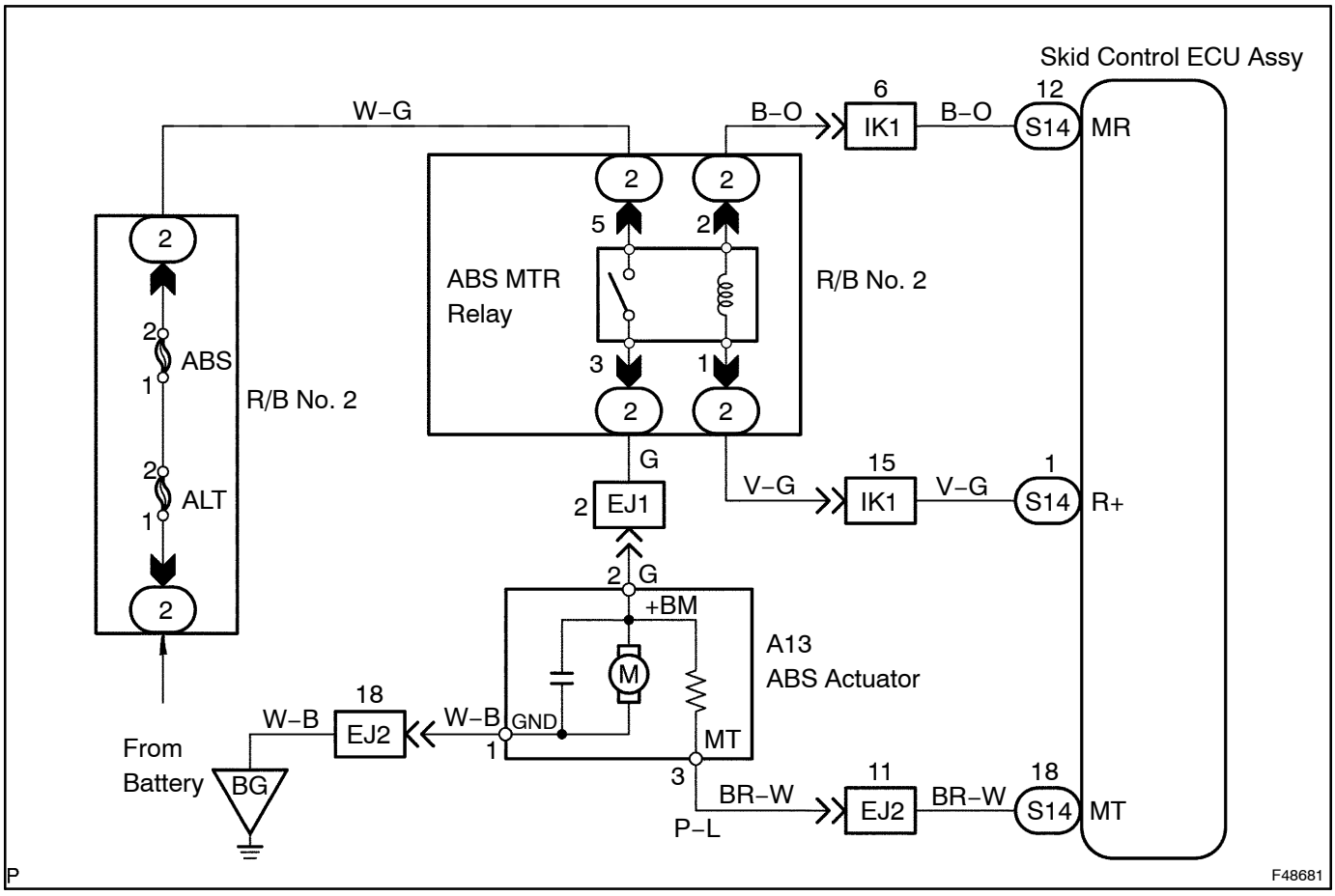
CIRCUIT DESCRIPTION

DTC No.	DTC Detection Condition	Trouble Area
C1251/51	Actuator pump motor does not operate correctly	• ABS actuator • ABS actuator circuit

HINT:

- If the brake pedal is depressed firmly, the brake force may be lowered.
- Fail–safe function:
  If any trouble occurs in the ABS pump motor, the ECU will cut off current to the ABS SOL MAIN relay and prohibit ABS controls and BRAKE ASSIST.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
Start the inspection from step 1 if using the hand–held tester. If not, start from step 2.

1	PERFORM ACTIVE TEST BY HAND–HELD TESTER (ABS PUMP MOTOR OPERATION)

(a) Connect the hand–held tester (with 24 V VIM) to the DLC3.
(b) Start the engine.
(c) Select the ACTIVE TEST on the hand–held tester.
(d) Operate only the ABS motor. Check the operating sound of the ABS motor.
Skid control ECU assy:

Item	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
ABS MOT RELAY	ABS motor relay / ON or OFF	–	–

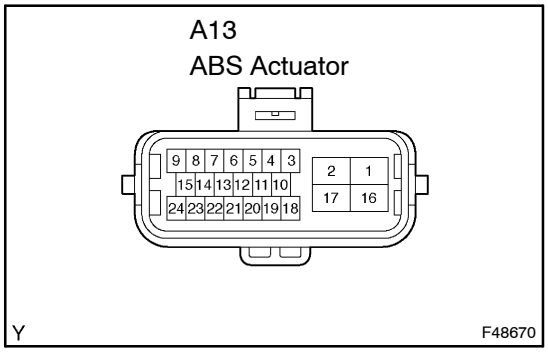
OK: The operation sound of the ABS motor is heard.

NG → **Go to step 2**

OK

REPLACE SKID CONTROL ECU ASSY

2	INSPECT ABS ACTUATOR (ABS PUMP MOTOR OPERATION)

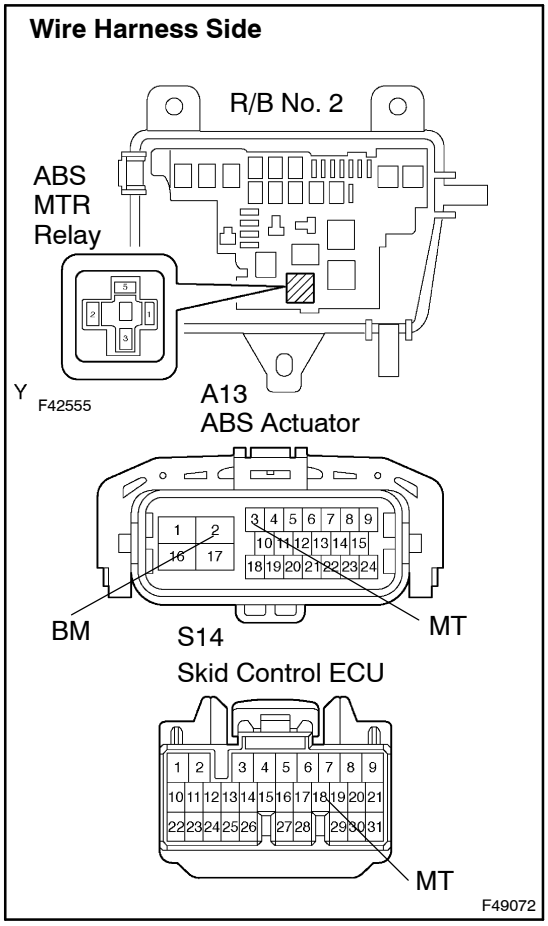


(a) Disconnect the A13 actuator connector.
(b) Connect the battery's positive (+) lead to terminal A13–2 (+BM) and the negative (–) lead to terminal A13–1 (GND) of the A13 actuator connector. Then check that the ABS pump motor is operating.
OK:
The operation sound of the ABS pump motor is heard.

NG → **REPLACE ABS ACTUATOR**

OK

3 CHECK WIRE HARNESS (ABS MTR RELAY – ABS ACTUATOR – SKID CONTROL ECU ASSY)



(a) Remove the ABS MTR relay from the R/B No. 2.
(b) Disconnect the A13 ABS actuator connector.
(c) Disconnect the S14 ECU connector.
(d) Measure the resistance according to the table below.

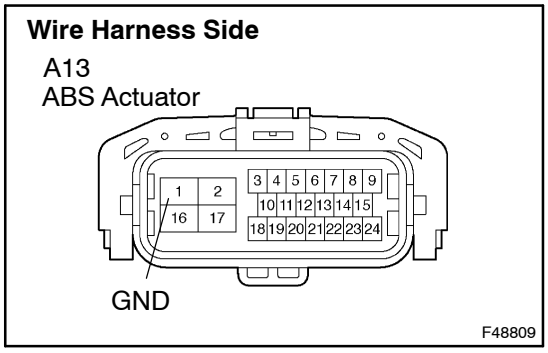
Standard:

Tester Connection	Specified Condition
R/B No. 2 ABS MTR relay terminal 3 – A13–2 (BM)	Below 1 Ω
A13–3 (MT) – S14–18 (MT)	Below 1 Ω

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

OK

4 CHECK WIRE HARNESS (ABS ACTUATOR – BODY GROUND)



(a) Disconnect the A13 actuator connector.
(b) Measure the resistance according to the table below.

Standard:

Tester Connection	Specified Condition
A13–1 (GND) – Body ground	Below 1 Ω

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

OK

5	RECONFIRM DTC

(a) Check the DTC (see page 05–191).

HINT:

After erasing the DTC and driving the vehicle at more than 7 km/h (4 mph), check for DTCs.

A	Malfunction Code
B	No DTC code output

A → **NO PROBLEM**

B

REPLACE SKID CONTROL ECU ASSY (See page 01–27)