

DTC	C1252 / 52	Hydraulic brake booster Pump Motor ON Time Abnormally Long
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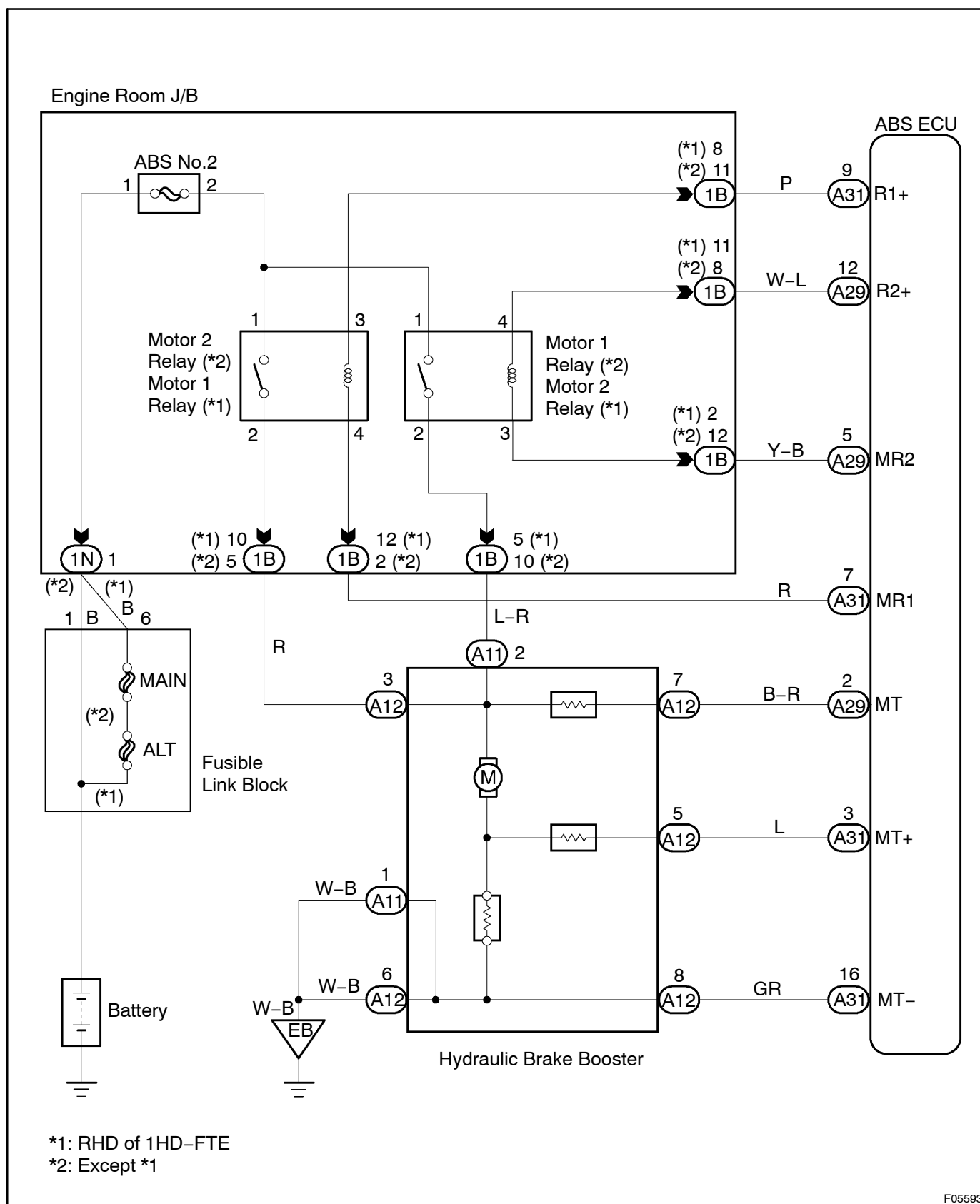
CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
C1252 / 52	After the ignition switch has been turned ON, when the power is supplied to the pump motor for more than 5 minutes.	• Hydraulic brake booster pump motor • Hydraulic brake booster pump motor circuit • Pressure switch (PH or PL)

Fail safe function:

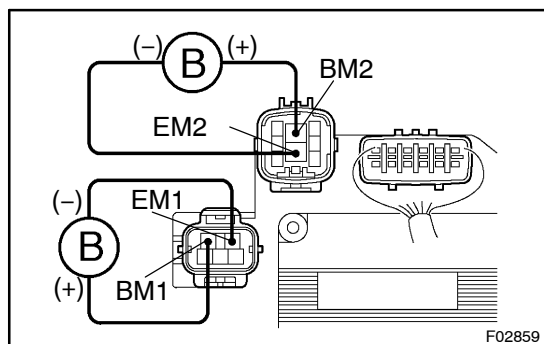
If trouble occurs in the pump motor, the ECU cuts off current to the ABS solenoid relay and prohibits ABS control.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check operation of hydraulic brake booster pump motor.

**PREPARATION:**

Disconnect the 2 connectors from hydraulic brake booster connector.

CHECK:

Connect positive $\oplus$ lead to BM1 or BM2 terminal and negative $\ominus$ lead to EM1 or EM2 terminal of the hydraulic brake booster (pump motor) connector.

OK:

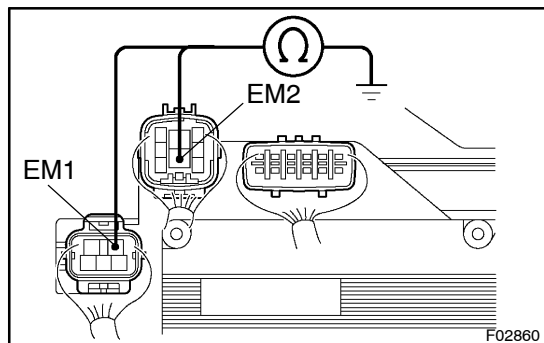
The operation sound of the pump motor should be heard.

OK

Go to step 3.

NG

2 Check continuity between GND terminal of hydraulic brake booster (pump motor) connector and body ground.

**CHECK:**

Check continuity between EM1 or EM2 terminal of hydraulic brake booster (pump motor) connector and body ground.

OK:

Continuity

NG

Repair or replace harness or connector.

OK

Replace hydraulic brake booster pump motor.

3	Check for short circuit in harness and connector between hydraulic brake booster (pump motor) and ABS ECU (See page IN-24).
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NG

Repair or replace harness or connector.

OK

4	Check for short circuit (to B+) in harness and connector between MT of hydraulic brake booster and ABS ECU (See page IN-24).
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OK

Check and replace ABS ECU.

NG

5	Check pressure switch (PH).
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IN CASE OF USING HAND-HELD TESTER:

PREPARATION:

- Connect the hand-held tester to the DLC3.
- Turn the ignition switch ON and push the hand-held tester main switch ON.
- Select the DATALIST mode on the hand-held tester.

CHECK:

Depress the brake pedal more than 40 times with the ignition switch OFF then turn the ignition switch ON and check the pressure switch (PH) condition.

HINT:

When a pressure in power supply system is released, reaction force becomes light and stroke becomes longer.

OK:

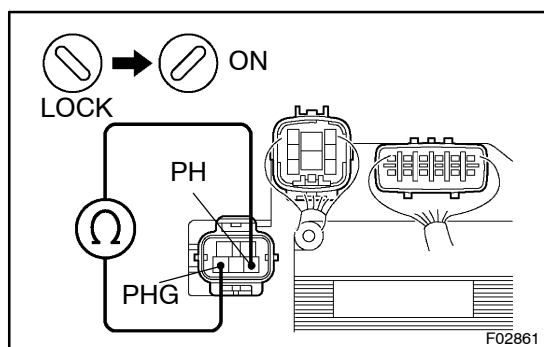
"OFF" turns to "ON".

HINT:

OFF: Low pressure

ON: High pressure

IN CASE OF NOT USING HAND-HELD TESTER:



PREPARATION:

- Disconnect the connector from the hydraulic brake booster.
- With ignition switch OFF, depress the brake pedal more than 40 times to decrease the accumulator pressure.

HINT:

When a pressure in power supply system is released, reaction force becomes light and stroke becomes longer.

CHECK:

Measure resistance between terminals PH and PHG of hydraulic brake booster connector.

OK:

Resistance: 1 kΩ

PREPARATION:

- (a) Connect the connector to the hydraulic brake booster.
- (b) Disconnect the connector after ignition switch has been ON and the pump motor has been stopped.

CHECK:

Measure resistance between terminals PH and PHG of hydraulic brake booster connector.

OK:

Resistance: 0 Ω

HINT:

After inspection, clear the DTC ([See page DI-312](#)).

NG

Replace hydraulic brake booster.

OK

6

Check pressure switch (PL).

IN CASE OF USING HAND-HELD TESTER:**PREPARATION:**

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON and push the hand-held tester main switch ON.
- (c) Select the DATALIST mode on the hand-held tester.

CHECK:

Depress the brake pedal more than 40 times with the ignition switch OFF then turn the ignition switch ON and check the pressure switch (PL) condition.

HINT:

When a pressure in power supply system is released, reaction force becomes light and stroke becomes longer.

OK:

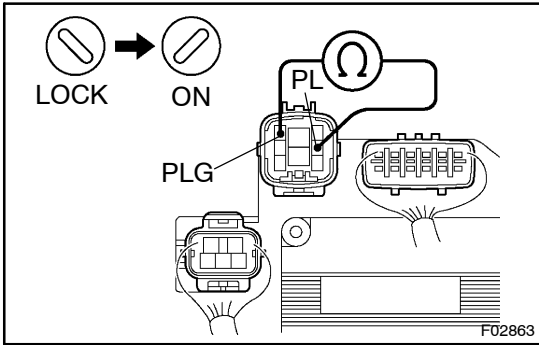
"OFF" turns to "ON".

HINT:

OFF: Low pressure

ON: High pressure

IN CASE OF NOT USING HAND-HELD TESTER:



PREPARATION:

- Disconnect the connector from the hydraulic brake booster.
- With ignition switch OFF, depress the brake pedal more than 40 times to decrease the accumulator pressure.

HINT:

When a pressure in power supply system is released, reaction force becomes light and stroke becomes longer.

CHECK:

Measure resistance between terminals PL and PLG of hydraulic brake booster connector.

OK:

Resistance: 5.7 kΩ

PREPARATION:

- Connect the connector to the hydraulic brake booster.
- Disconnect the connector after ignition switch has been ON and the pump motor has been stopped.

CHECK:

Measure resistance between terminals PL and PLG of hydraulic brake booster connector.

OK:

Resistance: 1.0 kΩ

HINT:

After inspection, clear the DTC ([See page DI-312](#)).

NG

Replace hydraulic brake booster.

OK

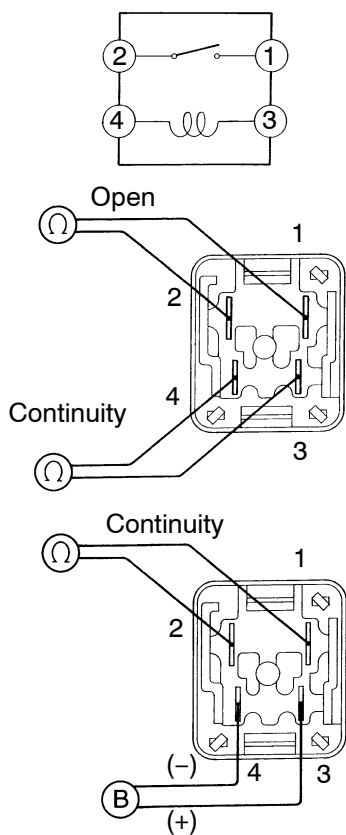
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Check for open and short circuit in harness and connector between pressure switch and ABS ECU ([See page IN-24](#)).

NG

Repair or replace harness or connector.

OK

8 Check ABS motor relays.BE1840
R15257
R15258

F00044

PREPARATION:

Remove the 2 ABS motor relays from Engine Room R/B No. 2.

CHECK:

Check continuity between each pair of terminal of motor relay.

OK:

Terminals 3 and 4	Continuity (Reference value *1)
Terminals 1 and 2	Open

***1: Motor relay 1 62 Ω** **Motor relay 2 54 Ω** **CHECK:**

- (a) Apply battery voltage between terminals 3 and 4.
- (b) Check continuity between terminals.

OK:

Terminals 1 and 2	Continuity
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NG**Replace ABS motor relay.****OK****9 Check for short circuit in harness and connector between ABS motor relay and ABS ECU (See page IN-24).****NG****Repair or replace harness or connector.****OK****Check and replace ABS ECU.**