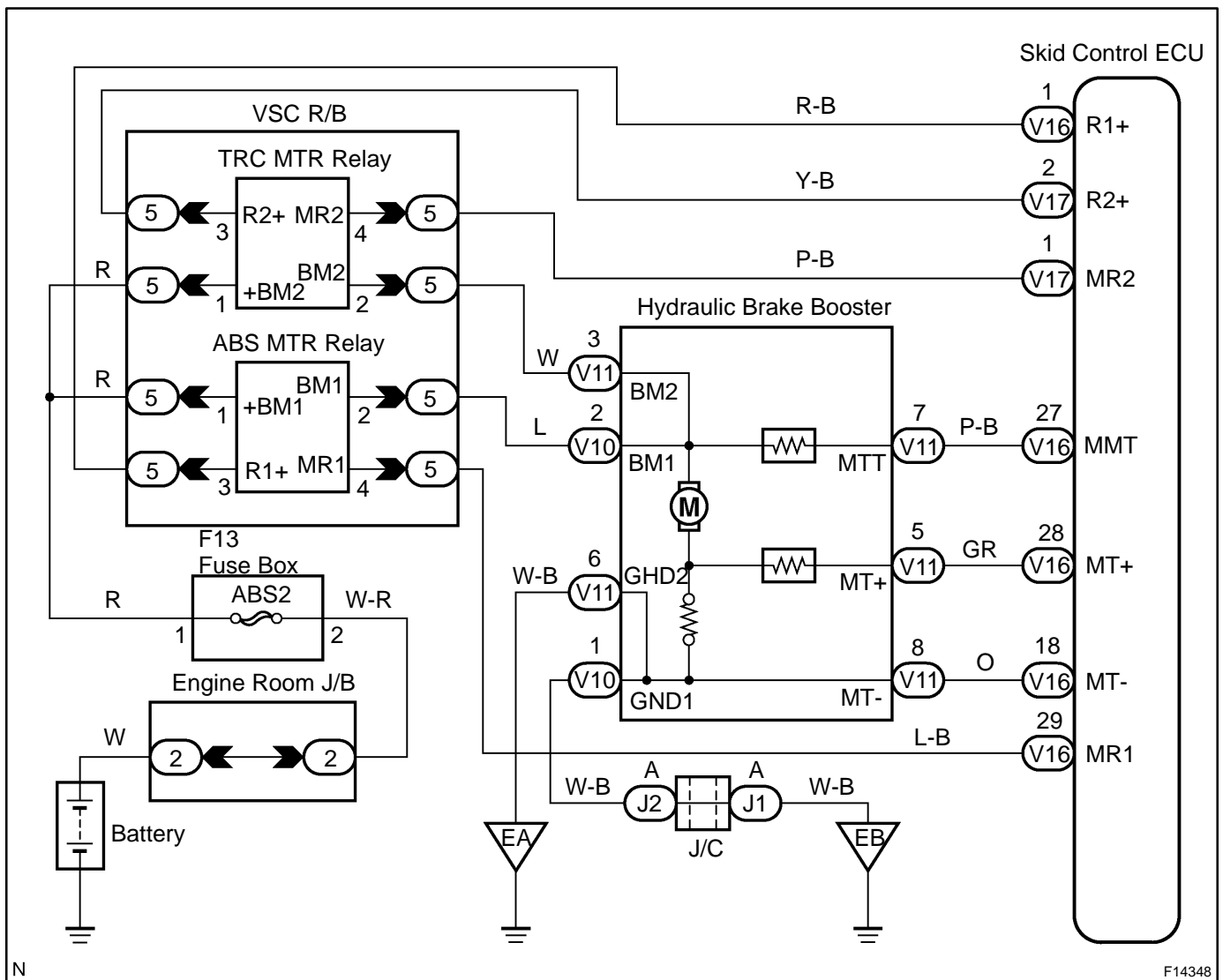


<b>DTC</b>	<b>C1252 / 52</b>	<b>Hydraulic Brake Booster Pump Motor ON Time Abnormally Long</b>
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## CIRCUIT DESCRIPTION

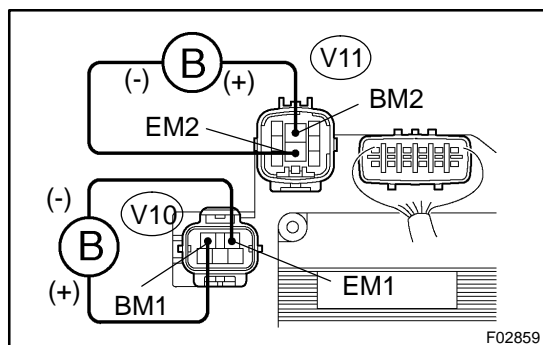
DTC No.	DTC Detecting Condition	Trouble Area
C1252 / 52	After the ignition switch has been turned ON, the power is supplied to the pump motor for more than 5 minutes.	<ul style="list-style-type: none"> <li>Hydraulic brake booster pump motor</li> <li>Hydraulic brake booster pump motor circuit</li> <li>Pressure switch (PH or PL)</li> </ul>

## WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 Check operation of hydraulic brake booster pump motor.

**PREPARATION:**

Disconnect the 2 connectors from (V10, V11) the hydraulic brake booster.

**CHECK:**

Connect battery positive (+) lead to BM1 or BM2 terminal and battery negative (-) 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.

NG

Go to step 9.

OK

2 Check for short circuit (to B+) in harness and connector between BM1 or BM2 of hydraulic brake booster and ABS MTR relay or TRC MTR relay (See page [IN-28](#)).

NG

Repair or replace harness or connector.

OK

3 Check for short circuit (to B+) in harness and connector between MT of hydraulic brake booster and skid control ECU (See page [IN-28](#)).

NG

Repair or replace harness or connector.

OK

<b>4</b>	<b>Check pressure switch (PH).</b>
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**In case of using the hand-held tester:**

**PREPARATION:**

- (a) Connect the hand-held tester to 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 (PH) condition.

**HINT:**

When the pressure in power supply system is released, reaction force becomes heavy and stroke becomes shorter.

**OK:**

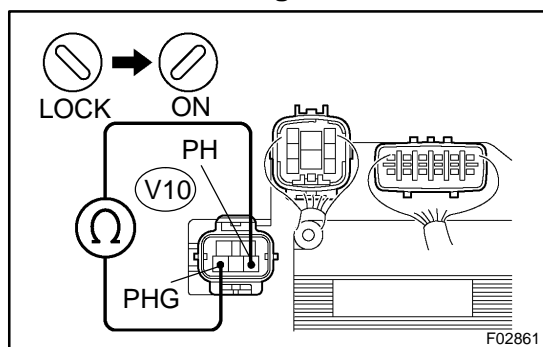
**"OFF" turns to "ON".**

**HINT:**

OFF: Low pressure

ON: High pressure

**In case of not using the hand-held tester:**



**PREPARATION:**

- (a) Disconnect the connector (V10) from the hydraulic brake booster.
- (b) With the ignition switch OFF, depress the brake pedal more than 40 times to decrease the accumulator pressure.

**HINT:**

When the pressure in power supply system is released, reaction force becomes heavy and stroke becomes shorter.

**CHECK:**

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

**OK:**

**Resistance: 1.0 kΩ**

**PREPARATION:**

- (a) Connect the connector (V10) to the hydraulic brake booster.
- (b) Disconnect the connector (V10) after the ignition switch has been ON and the pump motor has stopped.

**CHECK:**

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

**OK:**

**Resistance: 0 Ω**

**HINT:**

After inspection, connect the connector and clear the DTC (See page [DI-224](#) ).

**NG**

**Replace hydraulic brake booster assembly.**

OK

**5 Check pressure switch (PL).****In case of using the hand-held tester:****PREPARATION:**

- (a) Connect the hand-held tester to 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.

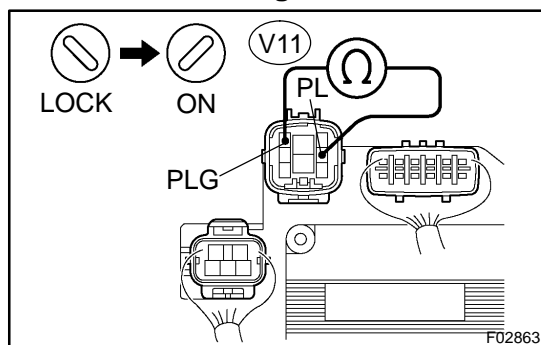
**HINT:**

When the pressure in power supply system is released, reaction force becomes heavy and stroke becomes shorter.

**OK:****"OFF" turns to "ON".****HINT:**

OFF: Low pressure

ON: High pressure

**In case of not using the hand-held tester:****PREPARATION:**

- (a) Disconnect the connector (V11) from the hydraulic brake booster.
- (b) With the ignition switch OFF, depress the brake pedal more than 40 times to decrease the accumulator pressure.

**HINT:**

When the pressure in power supply system is released, reaction force becomes heavy and stroke becomes shorter.

**CHECK:**

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

**OK:****Resistance: 5.7 kΩ****PREPARATION:**

- (a) Connect the connector (V11) to the hydraulic brake booster.
- (b) Disconnect the connector (V11) after the ignition switch has been ON and the pump motor has stopped.

**CHECK:**

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

**OK:****Resistance: 1.0 kΩ**

**HINT:**

After inspection, connect the connector and clear the DTC (See page [DI-224](#) ).

**NG**

**Replace hydraulic brake booster assembly.**

**OK**

**6**

**Check for short circuit (to B+) in harness and connector between pressure switch and skid control ECU (See page [IN-28](#) ).**

**NG**

**Repair or replace harness or connector.**

**OK**

**7**

**Check ABS MTR relay and TRC MTR relay.**

**PREPARATION:**

Remove the ABS MTR relay and TRC MTR relay from VSC R/B.

**CHECK:**

Check continuity between each pair of terminals of the motor relay.

**OK:**

Terminals 3 and 4	Continuity (Reference value * <sup>1</sup> )
Terminals 1 and 2	Open

\*<sup>1</sup>: ABS MTR relay 62 Ω

TRC MTR relay 54 Ω

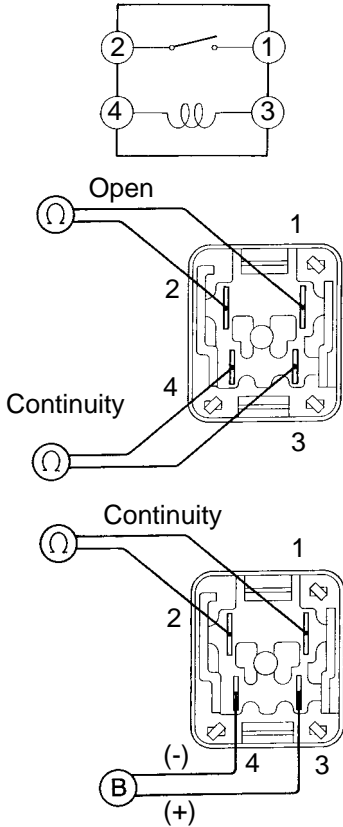
**CHECK:**

(a) Apply battery positive voltage between terminals 3 and 4.

(b) Check continuity between terminals.

**OK:**

Terminals 1 and 2	Continuity
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BE1840  
R15257  
R15258

F00044

NG

Replace ABS MTR relay or TRC MTR relay.

OK

8

Check for short circuit in harness and connector between ABS MTR relay or TRC MTR relay and skid control ECU (See page [IN-28](#) ).

NG

Repair or replace harness or connector.

OK

Check and replace skid control ECU.

9

Check for open and short circuit in harness and connector between hydraulic brake booster pump motor and hydraulic brake booster (See page [IN-28](#) ).

NG

Replace wire harness.

OK

10

Check hydraulic brake booster pump motor (See page [BR-42](#) ).

NG

Replace hydraulic brake booster pump motor.

OK

Replace hydraulic brake booster.