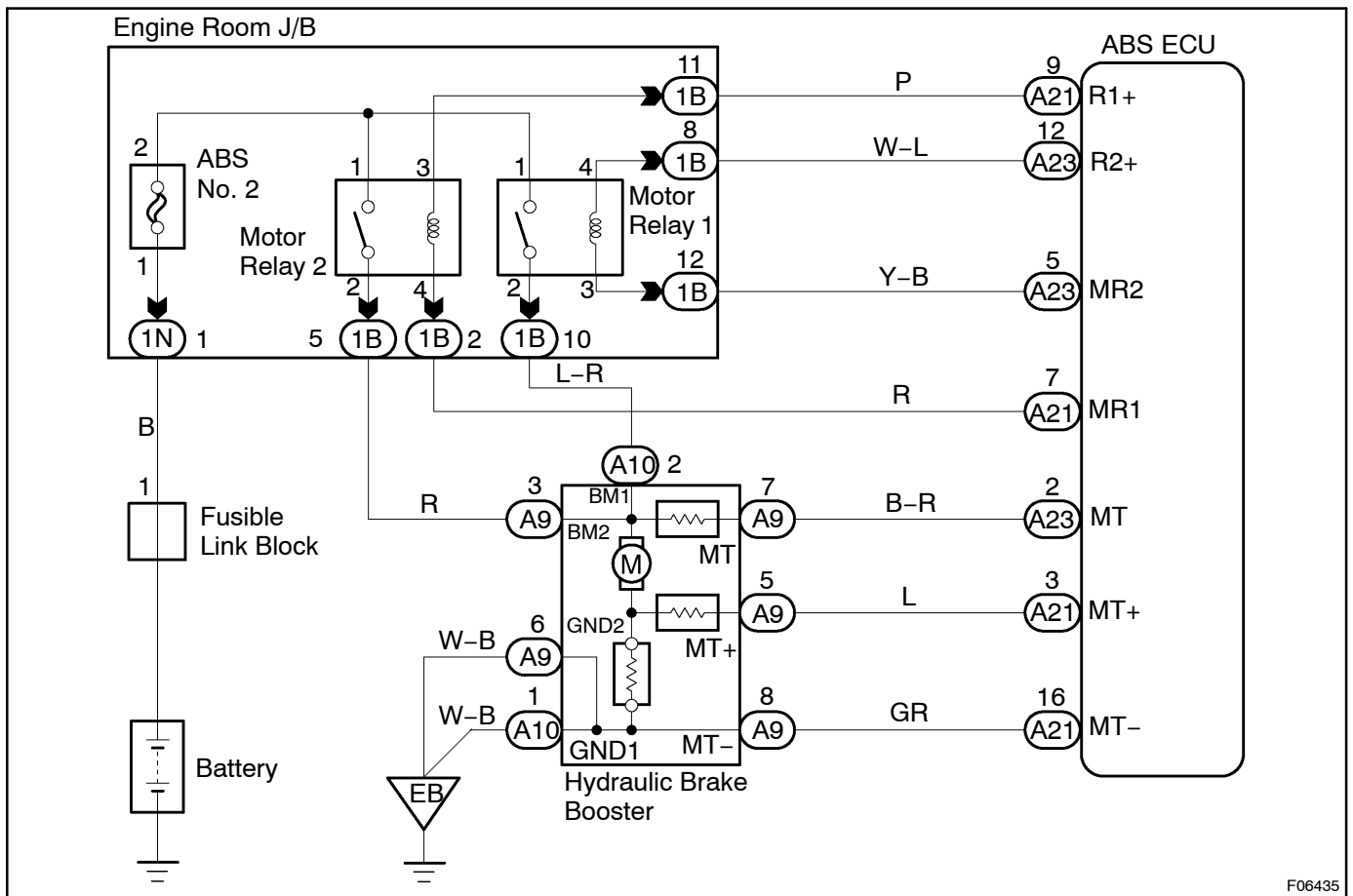


|            |                   |                                                                   |
|------------|-------------------|-------------------------------------------------------------------|
| <b>DTC</b> | <b>C1252 / 52</b> | <b>Hydraulic Brake Booster Pump Motor ON Time Abnormally Long</b> |
|------------|-------------------|-------------------------------------------------------------------|

## 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. | <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> |

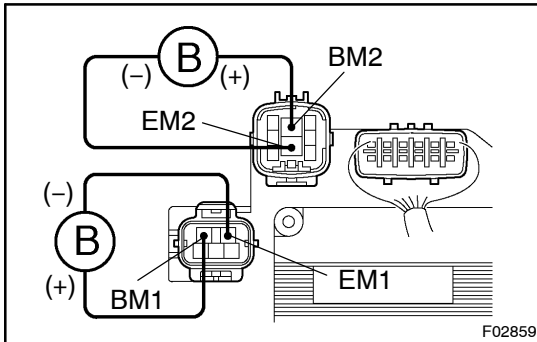
## WIRING DIAGRAM



F06435

## INSPECTION PROCEDURE

|   |                                                               |
|---|---------------------------------------------------------------|
| 1 | <b>Check operation of hydraulic brake booster pump motor.</b> |
|---|---------------------------------------------------------------|

**PREPARATION:**

Disconnect the 2 connectors from the hydraulic brake booster.

**CHECK:**

Connect battery positive  $\oplus$  lead to BM1 or BM2 terminal and battery 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.

NG

Go to step 9.

OK

|   |                                                                                                                                                                     |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 | <b>Check for short circuit (to B+) in harness and connector between BM1 or BM2 of hydraulic brake booster and ABS motor relay (See page <a href="#">IN-34</a>).</b> |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NG

Repair or replace harness or connector.

OK

|   |                                                                                                                                                     |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | <b>Check for short circuit (to B+) in harness and connector between MT of hydraulic brake booster and ABS ECU (See page <a href="#">IN-34</a>).</b> |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------|

NG

Repair or replace harness or connector.

OK

|          |                                    |
|----------|------------------------------------|
| <b>4</b> | <b>Check pressure switch (PH).</b> |
|----------|------------------------------------|

**In case of using the TOYOTA hand-held tester:**

**PREPARATION:**

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

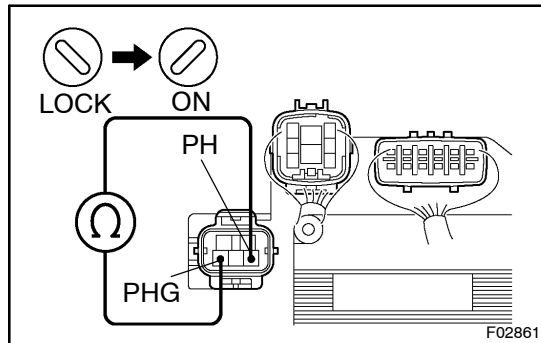
**OK:**

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

**HINT:**

OFF: Low pressure

ON: High pressure



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

**PREPARATION:**

- (a) Disconnect the connector (5P) 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 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: 1.0 kΩ**

**PREPARATION:**

- (a) Connect the connector (5P) to the hydraulic brake booster.
- (b) Disconnect the connector (5P) after ignition switch has been ON and the pump motor has stopped.

**CHECK:**

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

**OK:**

**Resistance: 0 Ω**

**HINT:**

After inspection, connect the connector and clear the DTC (See page [DI-229](#)).

**NG**

**Replace hydraulic brake booster assembly.**

OK

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

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

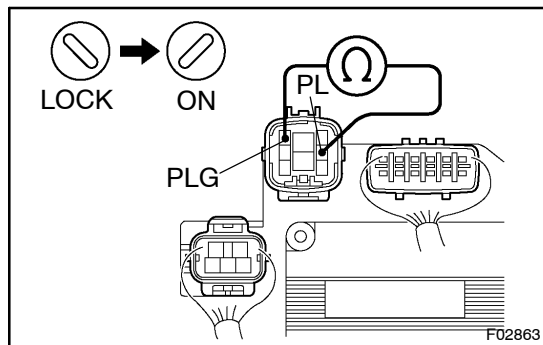
**OK:**

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

**HINT:**

OFF: Low pressure

ON: High pressure

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

- (a) Disconnect the connector (8P) 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 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:**

- (a) Connect the connector (8P) to the hydraulic brake booster.
- (b) Disconnect the connector (8P) after ignition switch has been ON and the pump motor has stopped.

**CHECK:**

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

**OK:**

**Resistance: 1.0 kΩ**

**HINT:**

After inspection, connect the connector and clear the DTC (See page [DI-229](#)).

**NG**

**Replace hydraulic brake booster assembly.**

**OK**

**6**

**Check for short circuit (to B+) in harness and connector between pressure switch and ABS ECU (See page [IN-34](#)).**

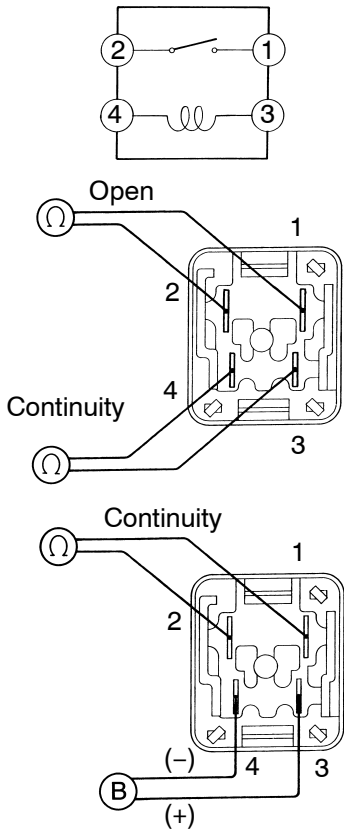
**NG**

**Repair or replace harness or connector.**

**OK**

**7**

**Check ABS motor relay.**



BE1840  
R15257  
R15258

F00044

**PREPARATION:**

Remove the 2 ABS motor relays from the engine room J/B.

**CHECK:**

Check continuity between each pair of terminal of motor relays.

**OK:**

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

\*<sup>1</sup>: ABS motor 1 relay 62 Ω  
ABS motor 2 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 |
|-------------------|------------|

NG

Replace ABS motor relay.

OK

8

Check for short circuit in harness and connector between ABS motor relays and ABS ECU (See page [IN-34](#)).

NG

Repair or replace harness or connector.

OK

Check and replace ABS ECU.

9

Check for open or short circuit in harness and connector between hydraulic brake booster pump motor and hydraulic brake booster (See page [IN-34](#)).

NG

Replace wire harness.

OK

10

Check hydraulic brake booster pump motor (See page [BR-64](#)).

NG

Replace hydraulic brake booster pump motor.

OK

Replace hydraulic brake booster.