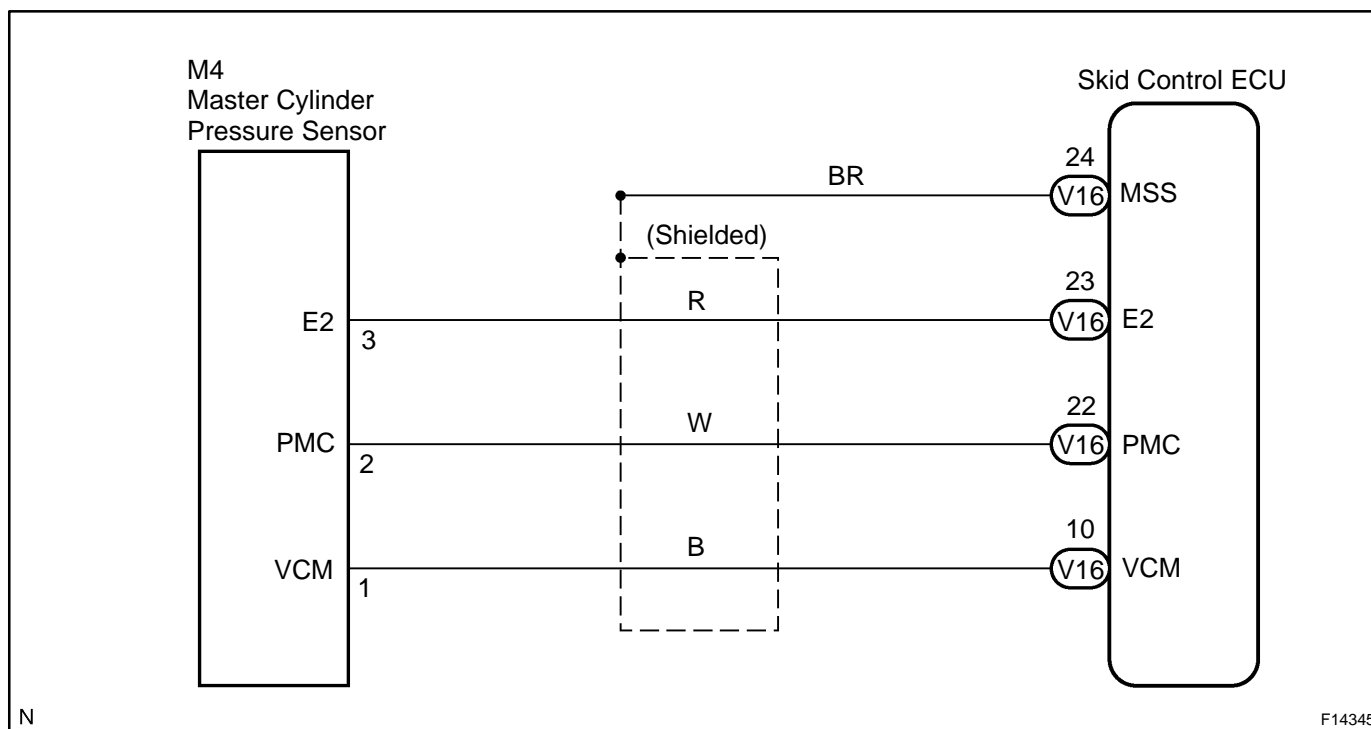


|            |                   |  |
|------------|-------------------|--|
| <b>DTC</b> | <b>C1246 / 46</b> | <b>Master Cylinder Pressure Sensor Circuit</b> |
|------------|-------------------|--|

## CIRCUIT DESCRIPTION

| DTC No.    | DTC Detecting Condition   | Trouble Area   |
|------------|---|--|
| C1246 / 46 | <p>Any of the conditions 1. through 5. is detected:</p> <ol style="list-style-type: none"> <li>At the vehicle speed of 7 km/h (4 mph) or more, ECU terminal PMC voltage becomes more than 0.86 V and the condition that 0.01 V or less does not change continues for 30 sec.</li> <li>Interference occurs to ECU terminal PMC 7 times or more in 5 sec.</li> <li>ECU terminal STP is OFF, and the condition that terminal PMC voltage becomes more than 0.86 V or less than 0.3 V continues for 5 sec. or more.</li> <li>The condition that ECU terminal IG1 voltage is 9.5 V to 17.0 V, and terminal VCM voltage is out of the range from 4.4 V to 5.6 V continues for 1.2 sec. or more.</li> <li>The condition that ECU terminal VCM voltage is 4.4 V to 5.6 V, and terminal PMC voltage is out of the range from 0.14 V to 4.85 V continues for 1.2 sec. or more.</li> </ol> | <ul style="list-style-type: none"> <li>Master cylinder pressure sensor</li> <li>Master cylinder pressure sensor circuit</li> </ul> |

## WIRING DIAGRAM



## INSPECTION PROCEDURE

### HINT:

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

|   |   |
|---|---|
| 1 | <b>Check output value of master cylinder pressure sensor.</b> |
|---|---|

### 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:

Check that the brake fluid pressure value of the master cylinder pressure sensor displayed on the hand-held tester is changing when the brake pedal is depressed.

### OK:

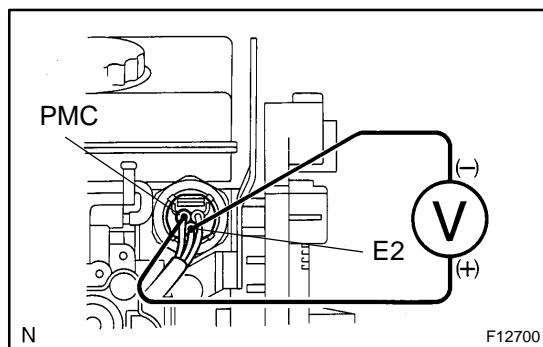
**Brake fluid pressure value must be changing.**

OK

**Go to step 4.**

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|   |   |
|---|---|
| 2 | <b>Check master cylinder pressure sensor.</b> |
|---|---|



### PREPARATION:

Install LSPV gauge to the front caliper bleeder plug portion, and bleed LSPV gauge.

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### CHECK:

Start the engine and depress the brake pedal, then check the relation between the fluid pressure and voltage of PMC and E2 terminals of the master cylinder pressure sensor with the connector still connected.

### OK:

| Front brake caliper fluid pressure              | Voltage       |
|---|---------------|
| 0 kPa (0 Kg/cm <sup>2</sup> , 0 psi)            | 0.37 - 0.63 V |
| 5,883 kPa (60 kg/cm <sup>2</sup> , 853 psi)     | 1.57 - 1.83 V |
| 11,768 kPa (120 kg/cm <sup>2</sup> , 1,706 psi) | 2.77 - 3.03 V |

### HINT:

Voltage of between terminals VCM and E2: 4.7 - 5.3 V

NG

**Replace master cylinder pressure sensor.**

OK

|   |   |
|---|---|
| 3 | Check for open and short circuit in harness and connector between master cylinder pressure sensor and skid control ECU (See page <a href="#">IN-28</a> ). |
|---|---|

NG

Repair or replace harness or connector.

OK

|   |   |
|---|---|
| 4 | Check whether or not ECU terminal STP input voltage is changed when stop light switch is turned on and off. |
|---|---|

NO

Check stop light switch circuit (See page [BE-40](#) ).

YES

Check and replace skid control ECU.