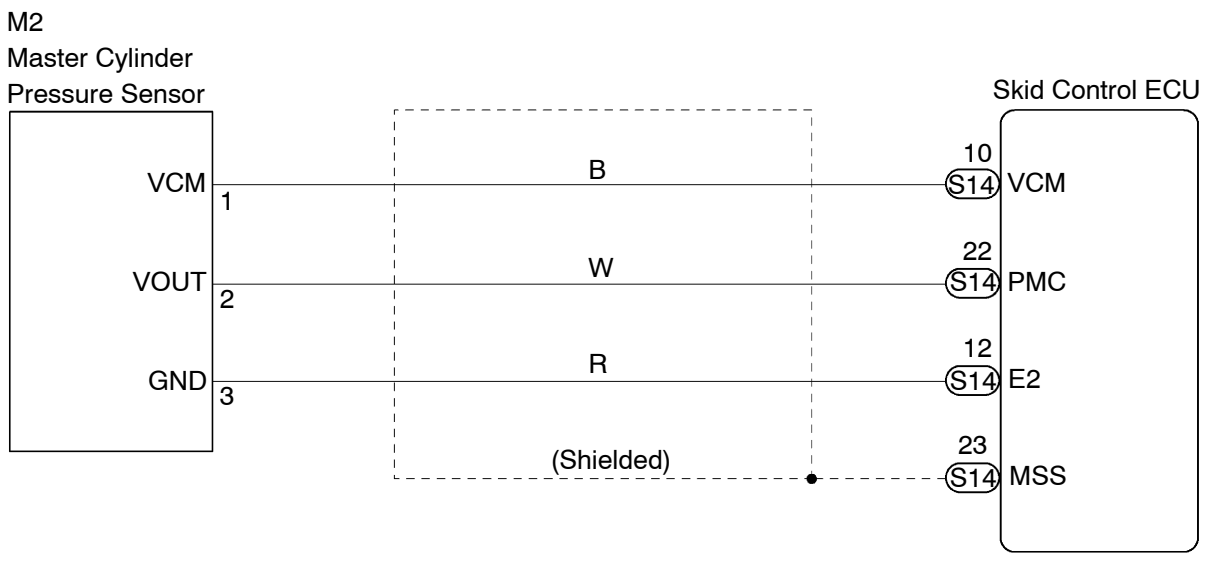
DTC C1246/46 MALFUNCTION IN MASTER CYLINDER PRESSURE SENSOR

CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
C1246/46	Either of the following 1., 2., 3., 4. or 5. is detected: 1. 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. 2. Interference occurs to ECU terminal PMC 7 times or more for 5 sec. 3. 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. 4. The condition that ECU terminal IG1 voltage is 9.5 V to 17.0 V, and terminal VCM voltage other than the range from 4.4 V to 5.6 V continues for 1.2 sec. or more. 5. The condition that ECU terminal VCM voltage is 4.4 V to 5.6 V, and terminal PMC voltage other than the range from 0.14 V to 4.85 V continues for 1.2 sec. or more. 6. While stopping the vehicle by STP ON, more than 0.3 V difference occurs in the ECU self check.	• Master cylinder pressure sensor • Master cylinder pressure sensor circuit

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	READ VALUE OF OIL PRESSURE SENSOR

(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.
(d) Check that the brake fluid pressure value of the oil pressure sensor displayed on the hand–held tester is changing when depressing the brake pedal.
OK:
Brake fluid pressure value must be changing.

OK → **Go to step 3**

NG

2	CHECK HARNESS AND CONNECTOR(OIL PRESSURE SENSOR – SKID CONTROL ECU)

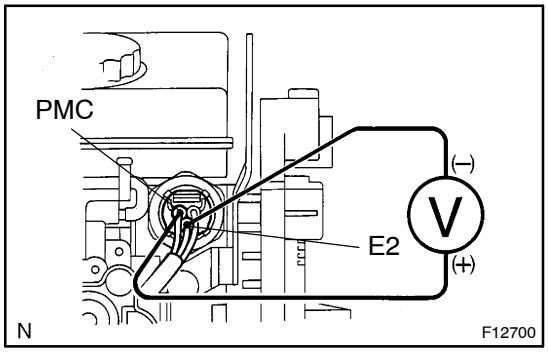
(a) Check for open and short circuit in harness and connector between oil pressure sensor and skid control ECU (See page 01–36).

NG → **REPLACE BRAKE MASTER CYLINDER**

OK

3 INSPECT OIL PRESSURE SENSOR

SST 09709–29018



(a) Install LSPV gauge to the front caliper bleeder plug portion, and bleed LSPV gauge.
(b) Remove the brake master cylinder cover.
(c) 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 oil pressure sensor with connector still connected.
OK:

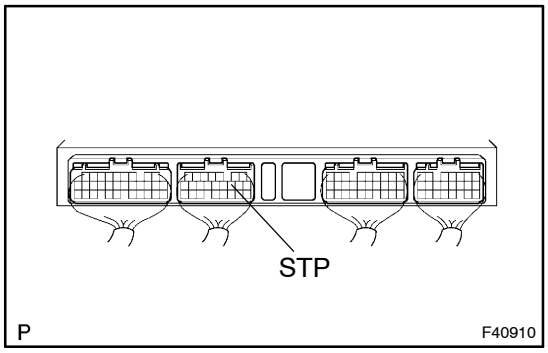
Front brake caliper fluid pressure	Voltage
0 kPa (0 Kgf/cm^2, 0 psi)	0.37 – 0.63 V
5,883 kPa (60 kgf/cm^2, 853 psi)	1.57 – 1.83 V
11,768 kPa (120 kgf/cm^2, 1,706 psi)	2.77 – 3.03 V

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

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

OK

4 INSPECT SKID CONTROL ECU TERMINAL VOLTAGE(STP TERMINAL)



(a) Remove the skid control ECU with connectors still connected.
(b) Check that STP terminal voltage changes in response to the stop light switch ON and OFF.
OK:
Changes

NG → **INSPECT STOP LIGHT SWITCH CIRCUIT**

OK

CHECK AND REPLACE SKID CONTROL ECU ASSY