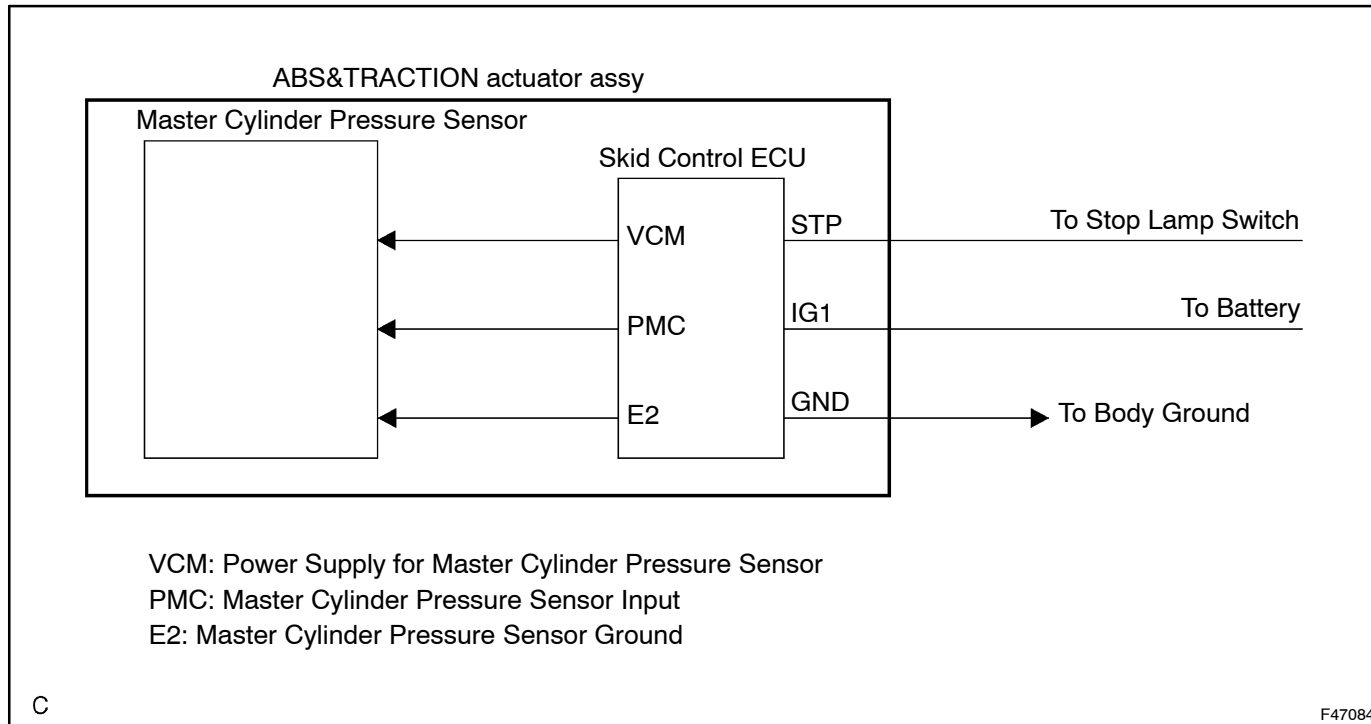| DTC	C1246/46	MALFUNCTION IN MASTER CYLINDER PRESSURE SENSOR

CIRCUIT DESCRIPTION

Master cylinder pressure sensor is connected to the skid control ECU in the actuator.

ABS&TRACTION actuator assy

Master Cylinder Pressure Sensor

Skid Control ECU

VCM   STP   To Stop Lamp Switch

PMC   IG1   To Battery

E2   GND   To Body Ground

VCM: Power Supply for Master Cylinder Pressure Sensor
PMC: Master Cylinder Pressure Sensor Input
E2: Master Cylinder Pressure Sensor Ground

C

F47084

DTC No.	DTC Detecting Condition	Trouble Area
C1246/46	When any of the following (1 to 5) is detected: (1) All of the following conditions continue for at least 30 seconds. • Vehicle speed is more than 7 km/h (4 mph). • PMC terminal voltage does not change by more than 0.005 V once it exceeds 0.86 V. (2) • PMC terminal receives interference at least 7 times within 5 sec. (3) All of the following conditions continue for at least 1.2 seconds. • Stop switch is OFF. • PMC terminal voltage is more than 0.86 V or less than 0.3 V. (4) All of the following conditions continue for at least 1.2 sec. • IG1 terminal voltage is between 9.5 and 17.2 V. • VCM terminal voltage is not within 4.4 and 5.6 V. (5) All of the following conditions continue for at least 1.2 sec. • VCM terminal voltage is between 4.4 and 5.6 V. • PMC terminal voltage is not within 0.14 and 4.85 V.	• Master cylinder pressure sensor • Master cylinder pressure sensor circuit • Stop lamp circuit

INSPECTION PROCEDURE

| 1 | READ VALUE OF INTELLIGENT TESTER II(MASTER CYLINDER PRESSURE SENSOR) |

(a) Connect the intelligent tester II to the DLC3.

(b) Start the engine.

(c) Select the DATA LIST mode on the intelligent tester II.

Item	Measurement Item / Range (Display)	Normal Condition
Master Cylinder Sensor 1	Master cylinder pressure sensor 1 reading / min.: 0 V, max.: 5 V	When brake pedal is released : 0.3 to 0.9 V

(d) Check that the brake fluid pressure value of the master cylinder pressure sensor observed in the intelligent tester II changes when the brake pedal is depressed.

OK:

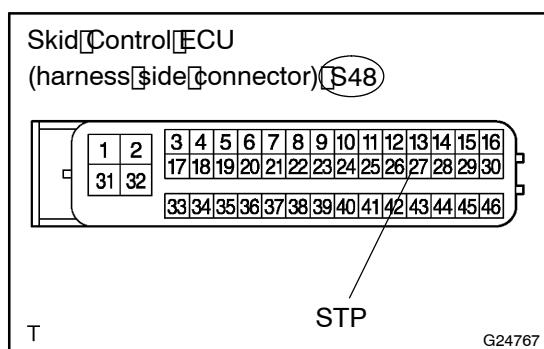**When the pedal is depressed, displayed voltage on the intelligent tester II increases.**

| NG > | Go to step 2 |

| OK |

| REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32–53) |

NOTICE:

When replacing the ABS & TRACTION actuator assy, perform zero point calibration (see page 05–387).

| 2 | INSPECT SKID CONTROL ECU TERMINAL VOLTAGE(STP TERMINAL) |

Skid Control ECU
(harness side connector) (S48)

| 1 | 2 |
| 31 | 32 |

3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30
33 34 35 36 37 38 39 40 41 42 43 44 45 46

STP

T   G24767

(a) Disconnect the skid control ECU connector.

(b) Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection	Switch condition	Specified Condition
S48–27 (STP) – Body ground	Brake pedal depressed	8 to 14 V
S48–27 (STP) – Body ground	Brake pedal released	Below 1 V

| NG > | CHECK AND REPLACE STOP LIGHT SWITCH CIRCUIT |

| OK |

| REPLACE ABS & TRACTION ACTUATOR ASSY (SEE PAGE 32–53) |

NOTICE:

When replacing the ABS & TRACTION actuator assy, perform zero point calibration (see page 05–387).