DI6BW-08

DTC	C1256 / 56	Accumulator Low Pressure Malfunction
		tion

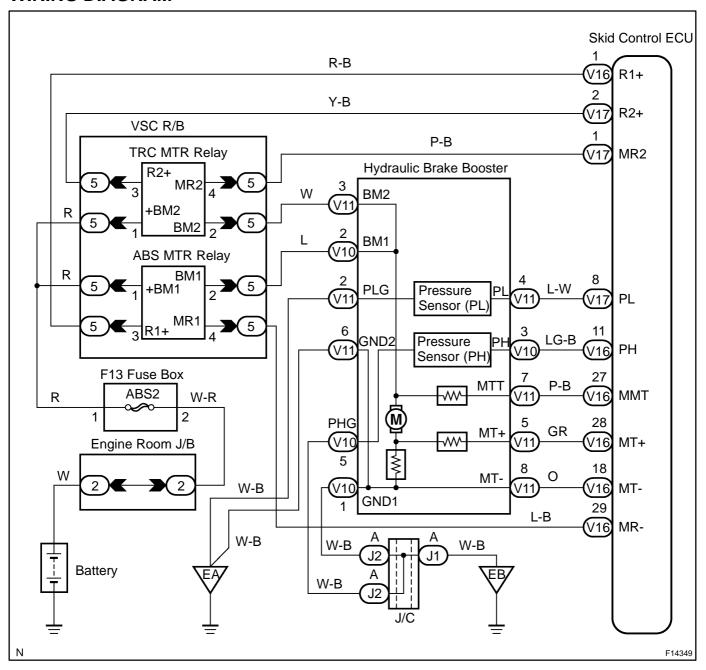
# **CIRCUIT DESCRIPTION**

DTC No.	DTC Detecting Condition	Trouble Area
C1256 / 56	<ol> <li>Any of the conditions 1. through 5. is detected:</li> <li>With the vehicle running and ABS, TRAC or VSC not in operation, the pressure switch (PL) detects low pressure for 1.4 sec. or more while the pressure switch (PH) detects high pressure.</li> <li>With the vehicle running and ABS, TRAC or VSC not in operation, the pressure switch (PL) detects low pressure for 0.2 sec. or more while the pressure switch (PH) detects high pressure.</li> <li>After the ignition switch is turned ON, the pressure switch (PL) detects low pressure for 60 sec. or more.</li> <li>With the vehicle running and after the ignition switch is turned ON, the pressure switch (PL) remains ON while ABS, TRAC or VSC does not operate for 1.4 sec. or more.</li> <li>With the vehicle running and after the ignition switch is turned OFF, the pressure switch (PL) remains ON while ABS, TRAC or VSC operates for 0.2 sec. or more.</li> </ol>	Accumulator     Pressure switch (PH or PL)     Hydraulic brake booster pump motor

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# **WIRING DIAGRAM**



# INSPECTION PROCEDURE

1

Check accumulator operation.

#### PREPARATION:

(a) Turn the ignition switch OFF, and depress the brake pedal 40 times or more.

#### HINT:

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

(b) Install the LSPV gauge (SST) to the rear wheel cylinder and bleed air.

SST 09709-29018

#### CHECK:

Depress the brake pedal with force of more than 343 N (35 kgf, 77 lbf) and turn the ignition switch ON, then check the rear wheel cylinder pressure when an increase of pressure changes from acutely to mildly.

#### OK:

5,099 - 8,924 kPa (52 - 91 kgf/cm<sup>2</sup>, 740 - 1,294 psi) at 20°C (68°F)

#### HINT:

If the value is not within the standard, cool the engine room and check it again.

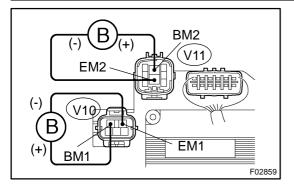
NG

Replace accumulator.

OK

2

Check operation of hydraulic brake booster pump motor.



#### **PREPARATION:**

Disconnect the 2 connectors (V10, V11) from 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:

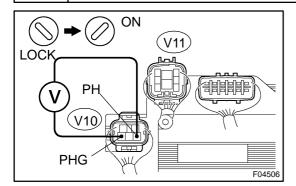
The operation sound of the pump motor should be heard.

NG Go to step 7.

ОК

3

# Check pressure switch (PH) operation.



#### PREPARATION:

(a) Connect the 2 connectors (V10, V11), and depress the brake pedal 40 times or more.

#### HINT:

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

(b) Install the LSPV gauge (SST) to the rear wheel cylinder and bleed air.

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#### CHECK:

While checking the voltage between terminals PH and PHG of the hydraulic brake booster, depress the brake pedal with force of more than 343 N (35 kgf, 77 lbf) and turn the ignition switch ON, then check the rear wheel cylinder pressure when voltage changes from 6 V to 0 V.

#### OK:

12,553 - 20,104 kpa (128 - 205 kgf-cm<sup>2</sup>, 1,820 - 2,916 psi)



Turn the ignition switch OFF and disconnect the connector (V10) from the hydraulic brake booster.

# **CHECK:**

While checking the resistance between terminals PH and PHG, depress the brake pedal changing the force in the range of 197 N (20 kgf, 44 lbf) to 343 N (35 kgf, 77 lbf) and check the rear wheel cylinder pressure when resistance changes from 0 k $\Omega$  to 1 k $\Omega$  between PH and PHG.

# OK:

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11,964 - 18,240 kpa (122 - 186 kgf·cm<sup>2</sup>, 1,735 - 2,645 psi)

# HINT:

After inspection, connect the connector, fill the brake reservoir with brake fluid and clear the DTC (See page DI-224).



Go to step 5.



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V10

PHG

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4 Check for open circuit in harness and connector between pressure switch (PH) and skid control ECU (See page IN-28).

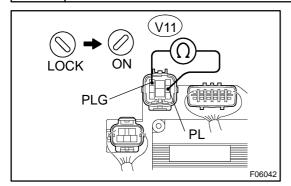
NG

Repair or replace harness or connector.

OK

Replace hydraulic brake booster assembly.

5 Check pressure switch (PL) operation.



### **PREPARATION:**

(a) Turn the motor switch OFF, and depress the brake pedal 40 times or more.

#### HINT:

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

- (b) Install the LSPV gauge (SST) to the rear wheel cylinder and bleed air.
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- (c) Disconnect the connector (V11) from the hydraulic brake booster.

#### CHECK:

While checking the resistance between terminals PL and PLG of the hydraulic brake booster, depress the brake pedal with force of more than 343 N (35 kgf, 77 lbf) and turn the ignition switch ON, then check the rear wheel cylinder pressure when the resistance changes from 5.7 k $\Omega$  to 1.0 k $\Omega$ .

# 0<u>K:</u>

9,022 - 15,102 kpa (92 - 154 kgf-cm<sup>2</sup>, 1,308 - 2,190 psi) PREPARATION:

Turn the ignition switch OFF and disconnect the connector (V11) from the hydraulic brake booster.

# **CHECK:**

While checking the resistance between terminals PL and PLG of the hydraulic brake booster, depress the brake pedal changing the force in the range of 197 N (20 kgf, 44 lbf) to 343 N (35 kgf, 77 lbf) and check the rear wheel cylinder pressure when resistance changes from 1.0 k $\Omega$  to 5.7 k $\Omega$ .

#### OK:

8,532 - 13,337 kpa (87 - 136 kgf-cm<sup>2</sup>, 1,237 - 1,934 psi)

#### HINT:

After inspection, connect the connector, fill the brake reservoir with brake fluid and clear the DTC (See page DI-224).

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NG

Replace hydraulic brake booster assembly.

OK

6 Check pressure switch (PH) and pressure switch (PL)

#### **CHECK:**

Compare the pressure value of the rear wheel cylinder measured in the check pressure switch (PL) operation with the one measured in the check pressure switch (PH) operation.

# OK:

- Pressure when the voltage between PH and PHG becomes 6 to 0 V > pressure when the resistance between PL and PLG becomes 5.7 k $\Omega$  to 1.0 k $\Omega$ .
- Pressure when the resistance between PH and PHG becomes 0 k $\Omega$  to 1 k $\Omega$  > pressure when the resistance between PL and PLG becomes 1.0 k $\Omega$  to 5.7 k $\Omega$ .

NG

Replace hydraulic brake booster assembly.

OK

Check and replace skid control ECU.

7 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

8

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

NG

Replace hydraulic brake booster pump motor.

OK

498

Replace hydraulic brake booster.

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