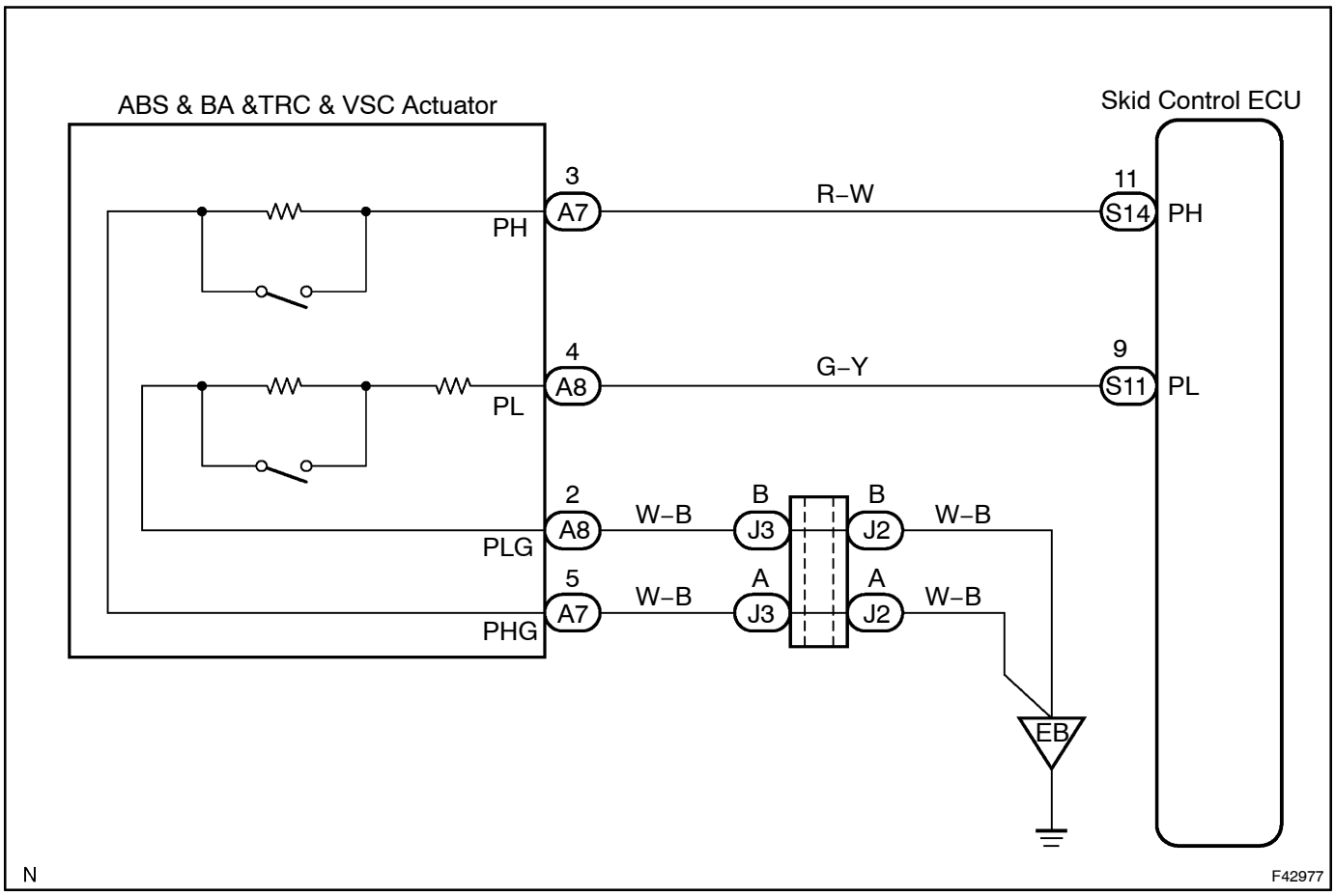
DTC C1256/56 ACCUMULATOR LOW PRESSURE

CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
C1256/56	Either of the following 1. through 7. is detected: 1. With the vehicle running, when the pressure switch (PL) detects high pressure, although ABS, TRC or VSC does not control, the pressure switch (PL) detects low pressure for more than 1.4 sec. 2. With the vehicle running, when the pressure switch (PL) detects high pressure, although ABS, TRC or VSC controls, the pressure switch (PL) detects low pressure for more than 0.2 sec. 3. After the ignition switch is turned ON, the pressure switch (PL) detects low pressure for more than 60 sec. 4. With the vehicle running, after ignition switch has been ON, the pressure switch (PL) detects low pressure for more than 0.2 sec. although ABS, TRC, or VSC does not control and when the pressure switch is ON and stuck under high pressure. 5. With the vehicle running, after ignition switch is ON, the pressure switch (PL) detects low pressure for more than 0.2 sec. when ABS, TRC or VSC controls, the pressure switch is ON and stuck under high pressure. 6. With the vehicle running, after ignition switch is ON, the pressure switch (PL) is stuck to under low pressure although ABS, TRC or VSC does not control for more than 1.4 sec. 7. With the vehicle running, after ignition switch is ON, the pressure switch (PL) is stuck under low pressure when ABS, TRC or VSC controls for more than 0.2 sec.	• Accumulator • Pressure switch (PH or PL) • Hydraulic brake booster pump motor

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT BRAKE BOOSTER ACCUMULATOR ASSY

SST 09709–29018

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

HINT:

When a pressure in power supply system is released, reaction force becomes lightly.

(b) Install the LSPV gauge (SST) to rear brake caliper and bleed air.

(c) 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 brake caliper pressure when an increase of pressure changes from acutely to mildly.

OK:

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

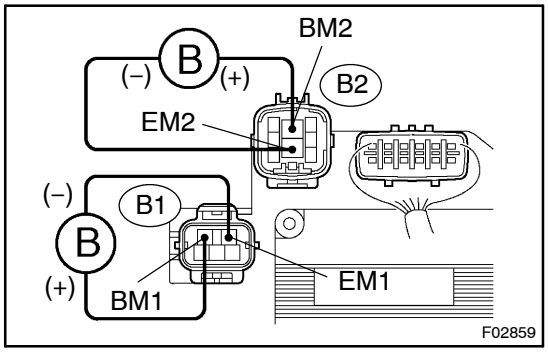
HINT:

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

NG → **REPLACE BRAKE BOOSTER ACCUMULATOR ASSY**

OK

2 INSPECT BRAKE BOOSTER PUMP ASSY



(a) Disconnect the 2 connectors (B1 and B2)from the brake master cylinder.

(b) Connect battery positive ⊕ lead to BM1 or BM2 terminal and battery negative ⊖ lead to EM1 or EM2 terminal of the brake master cylinder (pump motor) connector.

OK:

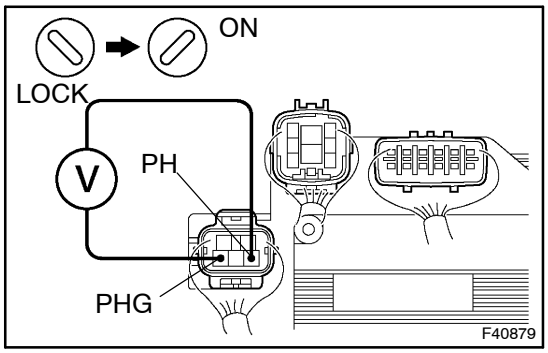
The operation sound of the pump motor should be heard.

NG	Go to step 6

OK

3 INSPECT PRESSURE SWITCH(PH)

SST 09709–29018



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

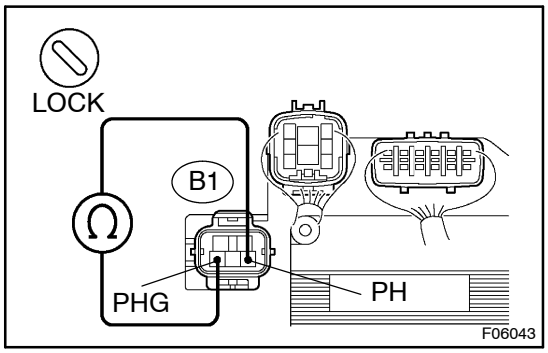
HINT:

When a pressure in power supply system is released, reaction force becomes lightly.

(b) Install the LSPV gauge (SST) to the rear brake caliper and bleed air.

(c) While checking the voltage between terminals PH and PHG of brake master cylinder, 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.

12,553 – 20,104 kpa (128 – 205 kgf·cm^2, 1,820 – 2,916 psi)



(d) Turn the ignition switch OFF and disconnect the connector (B1) from the brake master cylinder.

(e) 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 kΩ to 1 kΩ between PH and PHG.

OK:

11,964 – 18,240 kpa (122 – 186 kgf·cm^2, 1,735 – 2,645 psi)

HINT:

After inspection, connect the connector, fill brake reservoir with brake fluid and clear the DTC (See page 05–730).

OK	Go to step 5

NG

4	CHECK HARNESS AND CONNECTOR(BRAKE MASTER CYLINDER – SKID CONTROL ECU)

(a) Check for open and short circuit in harness and connector between terminal PH of the brake master cylinder and skid control ECU (See page 01–36).

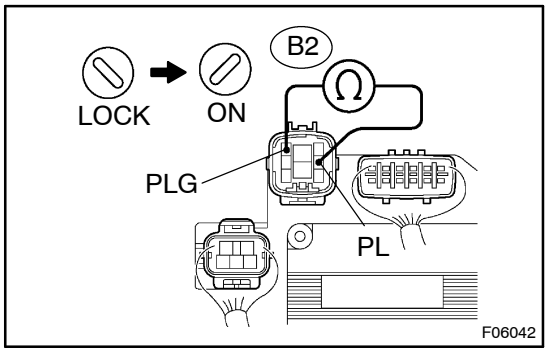
NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE BRAKE MASTER CYLINDER

5	INSPECT PRESSURE SWITCH(PL)

SST 09709–29018



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

HINT:
When a pressure in power supply system is released , reaction force becomes lightly.

(b) Install the LSPV gauge (SST) to the rear brake caliper and bleed air.

(c) Disconnect the connector (B2) from the brake master cylinder.

(d) While checking the resistance between terminals PL and PLG of brake master cylinder, 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 kΩ to 1.0 kΩ.

OK:

9,022 – 15,102 kpa (92 – 154 kgf·cm^2, 1,308 – 2,190 psi)

(e) Turn the ignition switch OFF and disconnect the connector (B2) from the brake master cylinder.

(f) While checking the resistance between terminals PL and PLG of brake master cylinder, 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 kΩ to 5.7 kΩ.

OK:

8,532 – 13,337 kpa (87 – 136 kgf·cm^2, 1,237 – 1,934 psi)

HINT:
After inspection, connect the connector, fill brake reservoir with brake fluid and clear the DTC (See page 05–730).

NG → **REPLACE BRAKE MASTER CYLINDER**

OK

CHECK AND REPLACE SKID CONTROL ECU ASSY

6	**CHECK HARNESS AND CONNECTOR(BRAKE MASTER CYLINDER – BRAKE BOOSTER PUMP MOTOR)**

(a) Check for open and short circuit in harness and connector between brake master cylinder and brake booster pump motor (See page 01–36).

NG → **REPLACE BRAKE CONTROL WIRE**

OK

7	**INSPECT BRAKE BOOSTER PUMP ASSY**

(a) Inspect the brake booster pump motor operation (See page 32–46).

NG → **REPLACE BRAKE BOOSTER PUMP ASSY**

OK

REPLACE BRAKE MASTER CYLINDER