

# P5000S/P7000S

## FAILURE REPAIR GUIDE

### PS Circuit Board

## PS sheet trouble repair guide

### 1 The application sheet part number and the line voltage

<Table 1-1>

Part number	Sheet name	Line voltage
WB108400	PS70J	AC100V/50Hz
WB108500	PS70U	AC120V/60Hz
WB108600	PS70H	AC230V/50Hz
WB108700	PS70A	AC240V/50Hz
WC563400	PS70K	AC230V/50Hz
WB108800	PS50J	AC100V/50Hz
WB108900	PS50U	AC120V/60Hz
WB109000	PS50H	AC230V/50Hz
WB109100	PS50A	AC240V/50Hz
WC563600	PS50K	AC230V/50Hz

## 2 Electric performance

### 2-1 Preparation

- It connects sheet PSW (WB17830 the part of the SUB sheet) with CN403, CN404, CN405.
  - The sheet In case of setting which COIL70J or COIL70H are used for, it connects J410-J413.  
(Or, it short-circuits in CN406 and CN415).
  - Connecting load resistor with the  $\pm B$ ,  $\pm 15 V$ . <Table 2-1>
  - It connects power code in CN401, CN402.
  - It adjusts a line voltage to the voltage which suited each sheet. It refers to <table 1-1>
- \* As for the location, refer to Fig.1.

### 2-2 Each part voltage

It is ON in POWER SW when being, each part output voltage is normal if it is stored in the range in <table 2-1>. When a line voltage is shifted, it doesn't sometimes become the output voltage of <table 2-1> when measuring output voltage without the load resistor.

<Table 2-1>

Model	Measurement part	Measurement place	Output voltage(DC)			Load resistor
			J	U,A	H	
P7000S	+ B voltage	W406RE-W407BL	+150.8 $\pm$ 3V	+141.4 $\pm$ 3V	+143.5 $\pm$ 3V	22K $\Omega$ 3W
	- B voltage	W407BL-W408WH	-150.8 $\pm$ 3V	-141.4 $\pm$ 3V	-143.5 $\pm$ 3V	22K $\Omega$ 3W
P5000S	+ B voltage	W406RE-W407BL	+122.5 $\pm$ 3V	+113.1 $\pm$ 3V	+124.3 $\pm$ 3V	22K $\Omega$ 3W
	- B voltage	W407BL-W408WH	-122.5 $\pm$ 3V	-113.1 $\pm$ 3V	-124.3 $\pm$ 3V	22K $\Omega$ 3W
commonness	+15V Power	CN408 1-2pin	+15.0 $\pm$ 0.6V	+15.0 $\pm$ 0.6V	+15.0 $\pm$ 0.6V	10K $\Omega$ 1/4W
	-15V Power	CN408 3-2pin	-15.0 $\pm$ 0.6V	-15.0 $\pm$ 0.6V	-15.0 $\pm$ 0.6V	10K $\Omega$ 1/4W

## 3 Discharge

When treating with simple substance sheet, for the shock guard (discharging in the electric charge of the capacitor), discharge with the following terminal by resistor.

- Terminals of C416 and C417(Power SW OFF there is not need of the discharge but checking voltage for the safe confirmation if leaving later for equal to or more than 10 minutes)
- Between W406RE-W407BL and W407BL-W408WH.
- Terminals of C402

#### 4 Repair concrete instance at the trouble part

All secondary output isn't output.

Check the following instruction.

Confirm the resistor value of R416, R451(6.8Ω 5 W).

Exchange if open the resistor value.

Confirm the resistor value of Q406, Q407 Between C-E.

If short or several value(Ω), remove the part and then exchange IC402 because it is broken.

Conform the resistor value of R420, R421.

Confirm whether or not it is a 10Ω.

Remove if open or a resistor value is increased.

Conform the resistor value of R419.

Confirm whether or not it is a 4.7Ω.

Remove if open or a resistor value is increased.

Conform the resistor value of R429, R430.

Remove if open or a resistor value is increased.

Confirmation of F401.

Confirm the resistor value of F401.

Don't install the test of ends.

Conform a waveform of IC402.

Confirm alternating volts.

#### 【Note】

The earth of the measuring machine doesn't connect.

The parts sometimes damages when using in the connecting condition.

After - ending, it observes a waveform IC402-1Pin(Lo),2Pin(COM) with the oscilloscope.

There is good if being the square wave (0-15V) of the about 70 kHz.

In the waveform malfunction case, confirm that the output of IC403 (regulator) is +15 V.

In case of equal to or less than 15V, it exchanges IC402 and it observes a waveform once again.

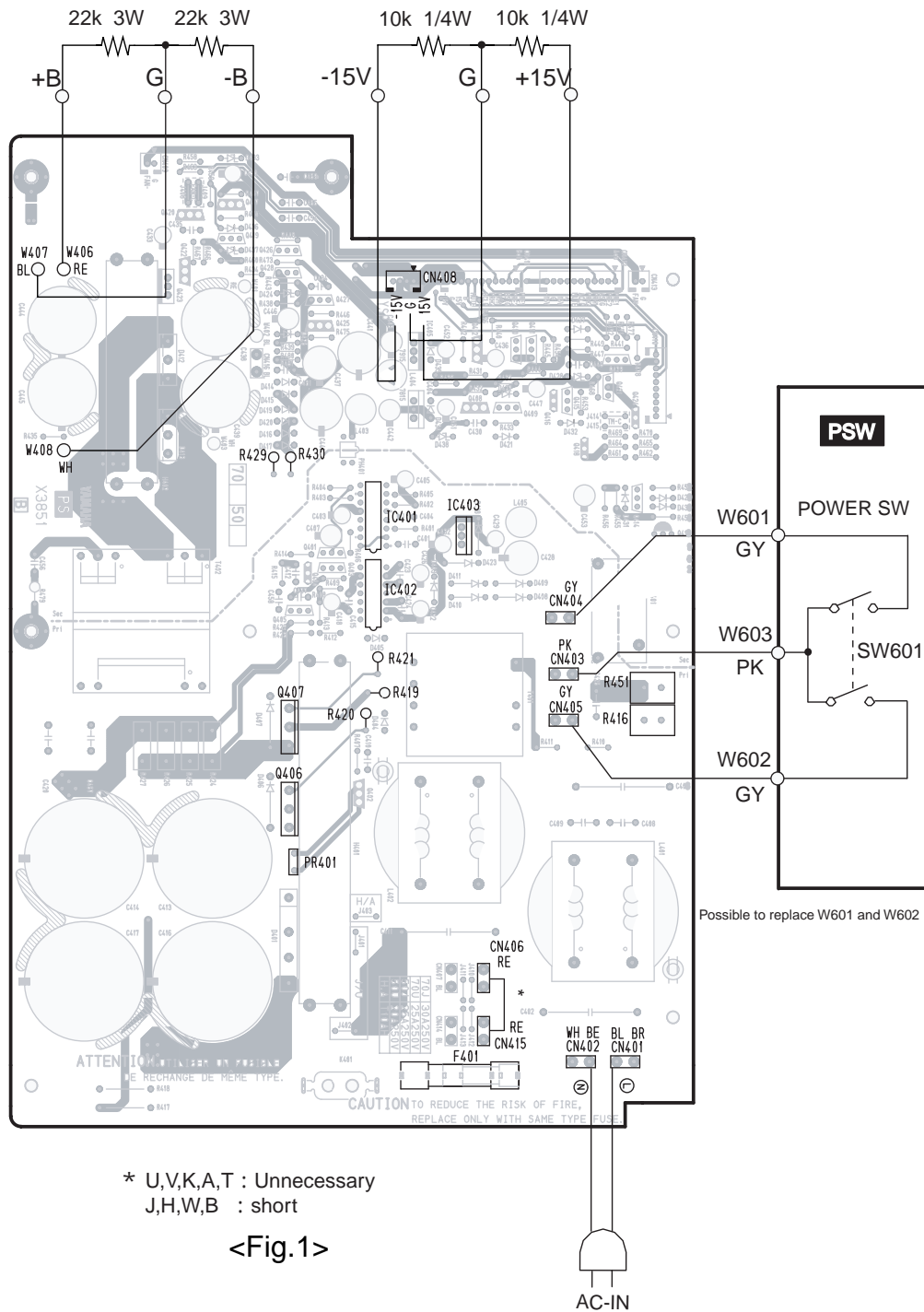
(When exchanging IC402 already by , you exchange IC401).

\* When observing a waveform, do short-circuiting of PR401.

Exchange the parts which was removed by - for the normal part.

It is repair completion if confirming "6-2. Electric performance" and not being in the problem.

• Wiring/Check Parts



7. Preparation of Delivery

- Attenuator : MIN
- MODE switch : STEREO
- SUBWOOFER/LOW CUT switch : OFF
- YS Processing switch : OFF
- FREQUENCY : 25Hz