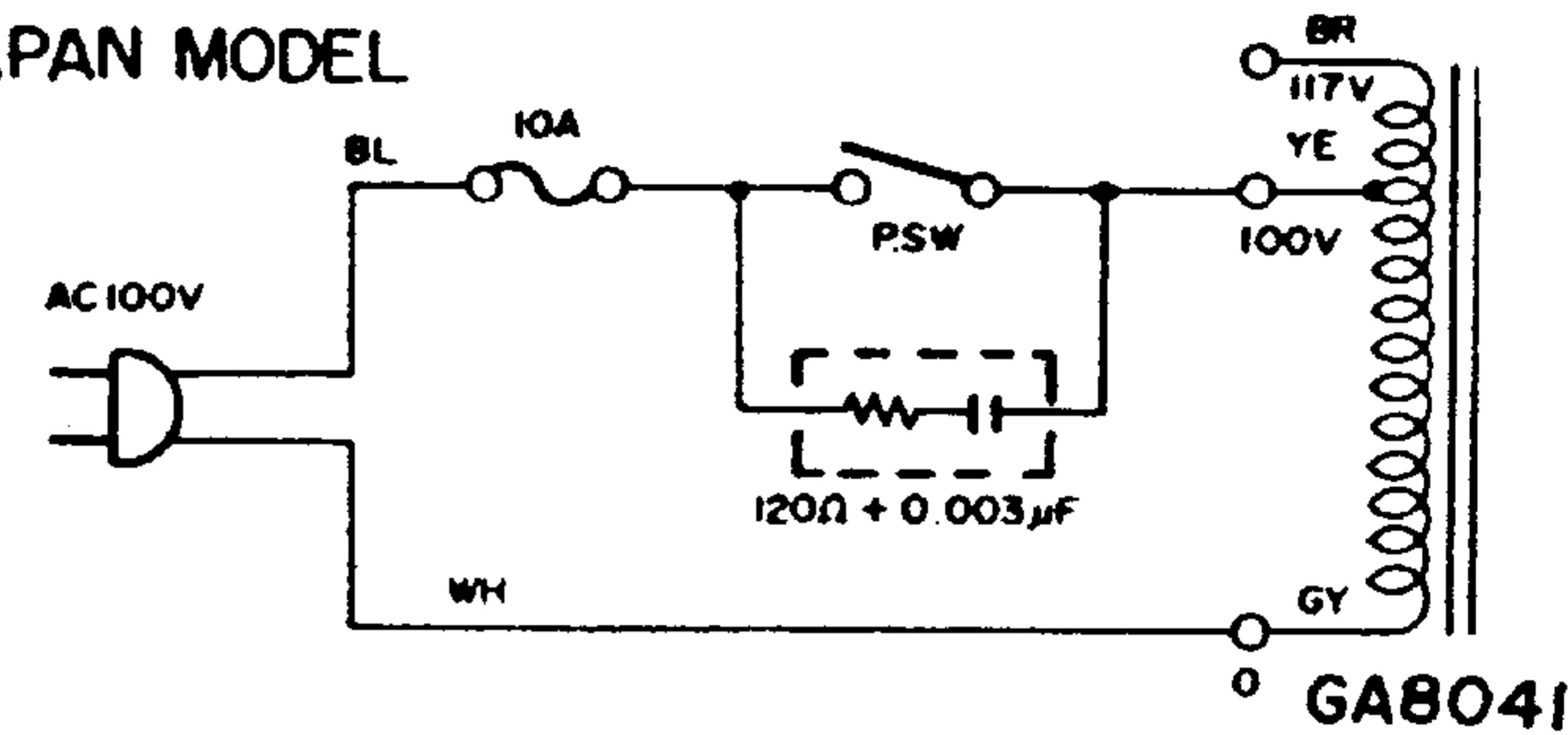
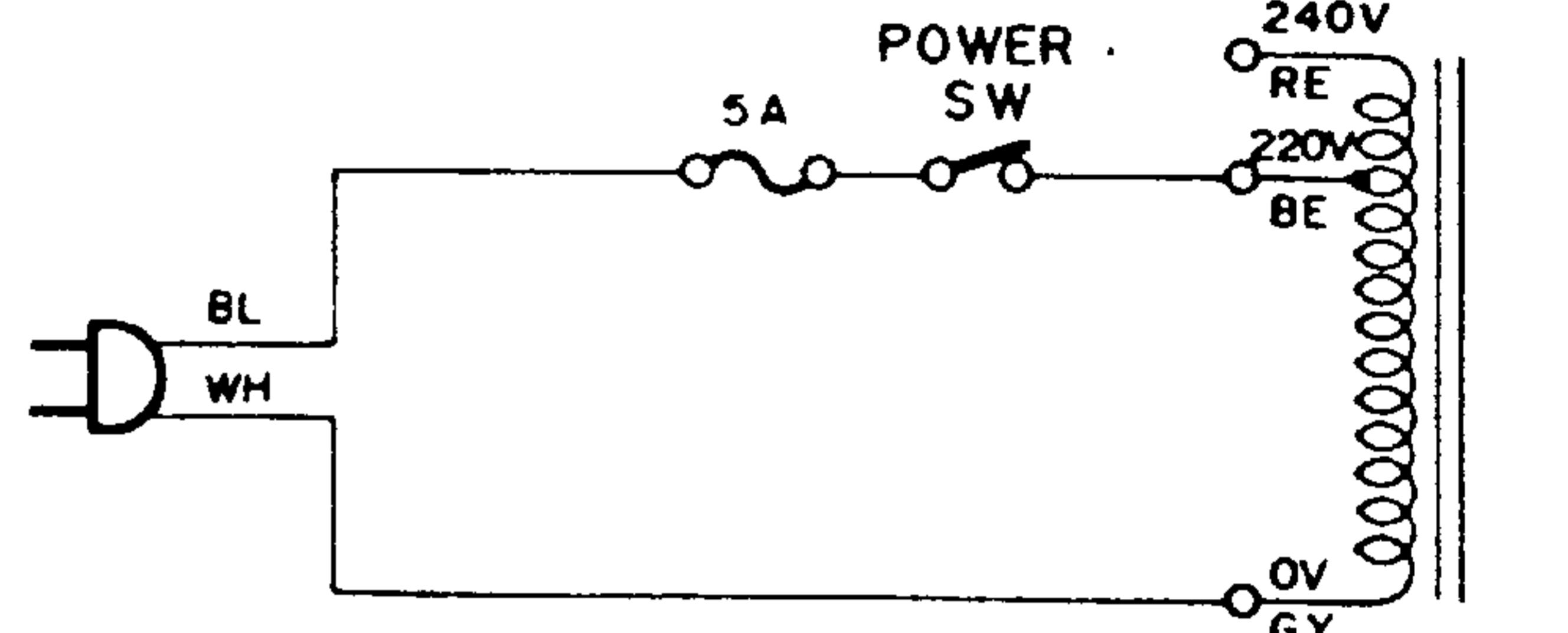


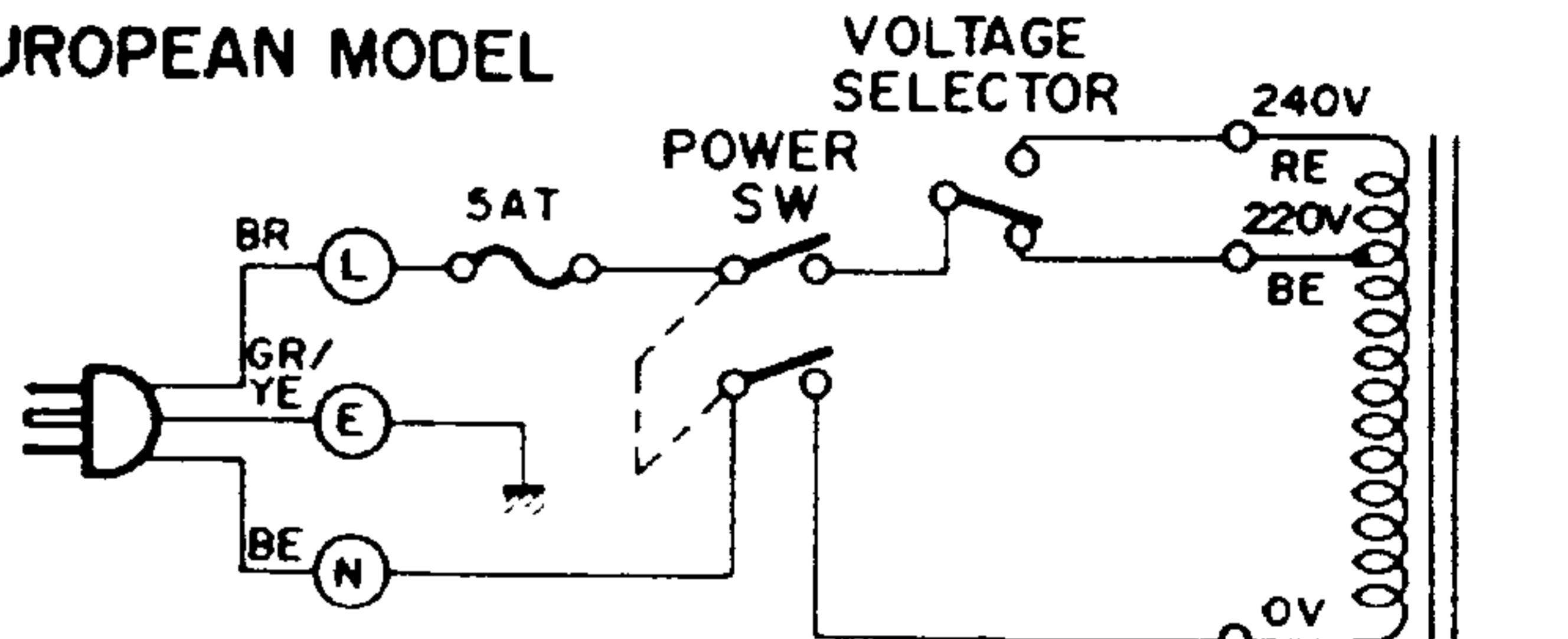
▼ JAPAN MODEL



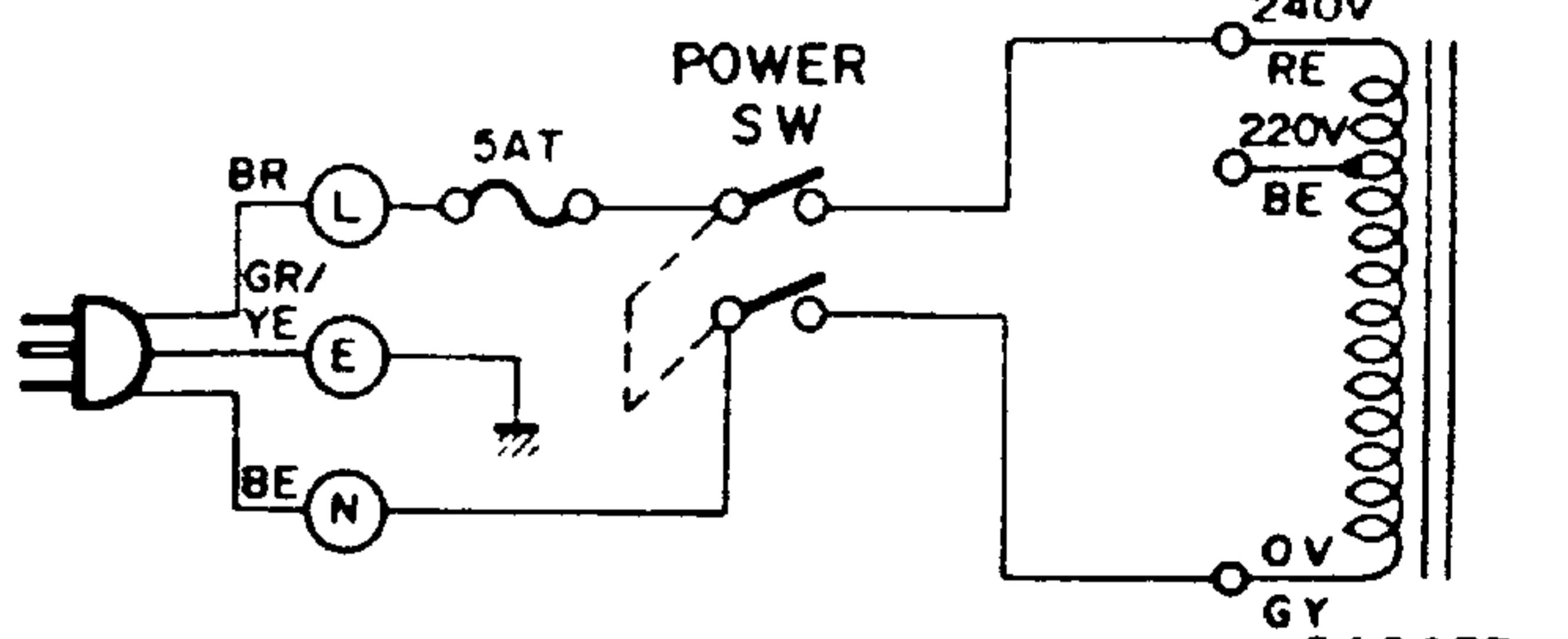
▼ GENERAL MODEL



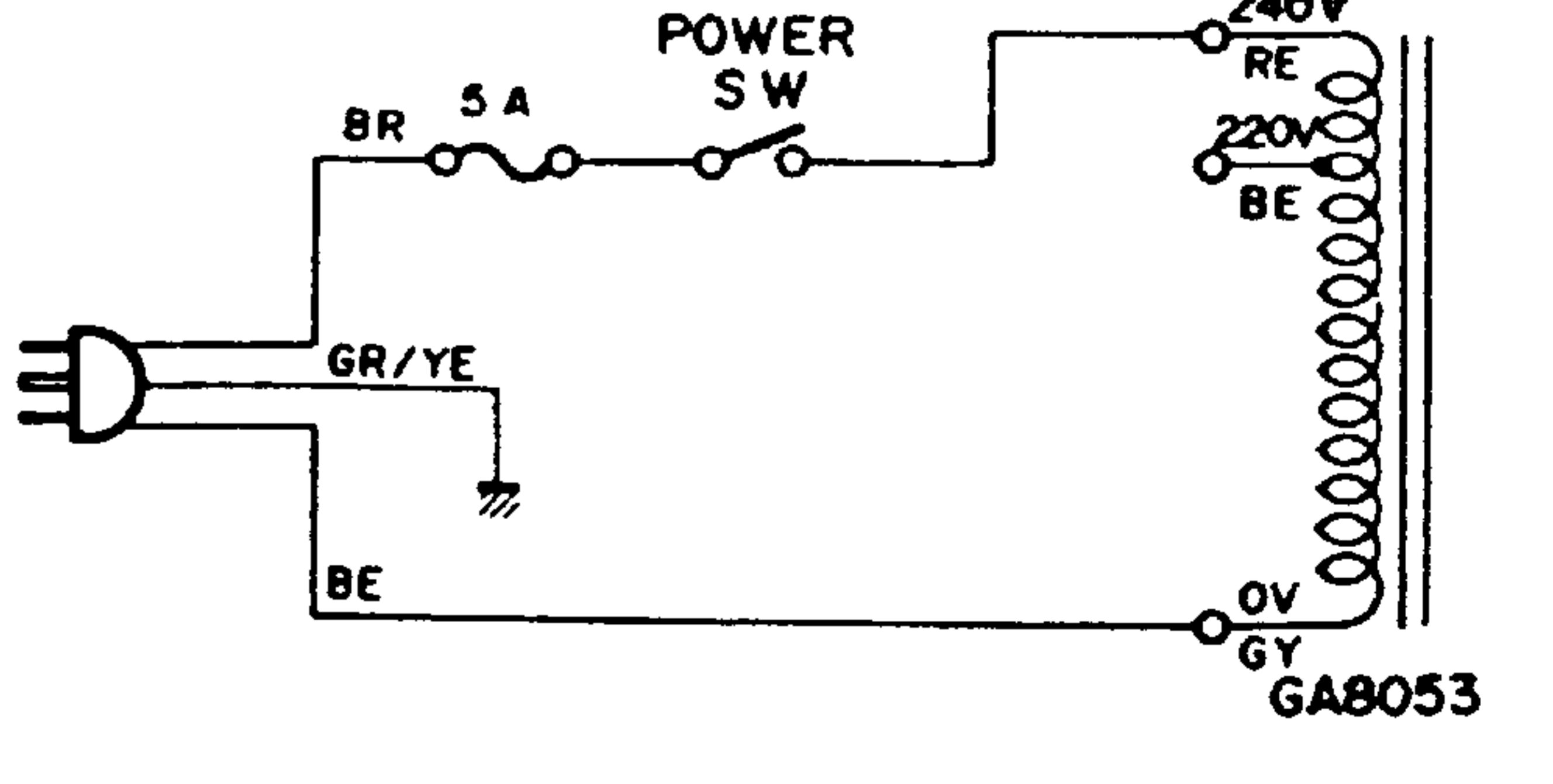
▼ N. EUROPEAN MODEL



▼ BRITISH MODEL



▼ AUSTRALIAN MODEL
S. AFRICAN MODEL

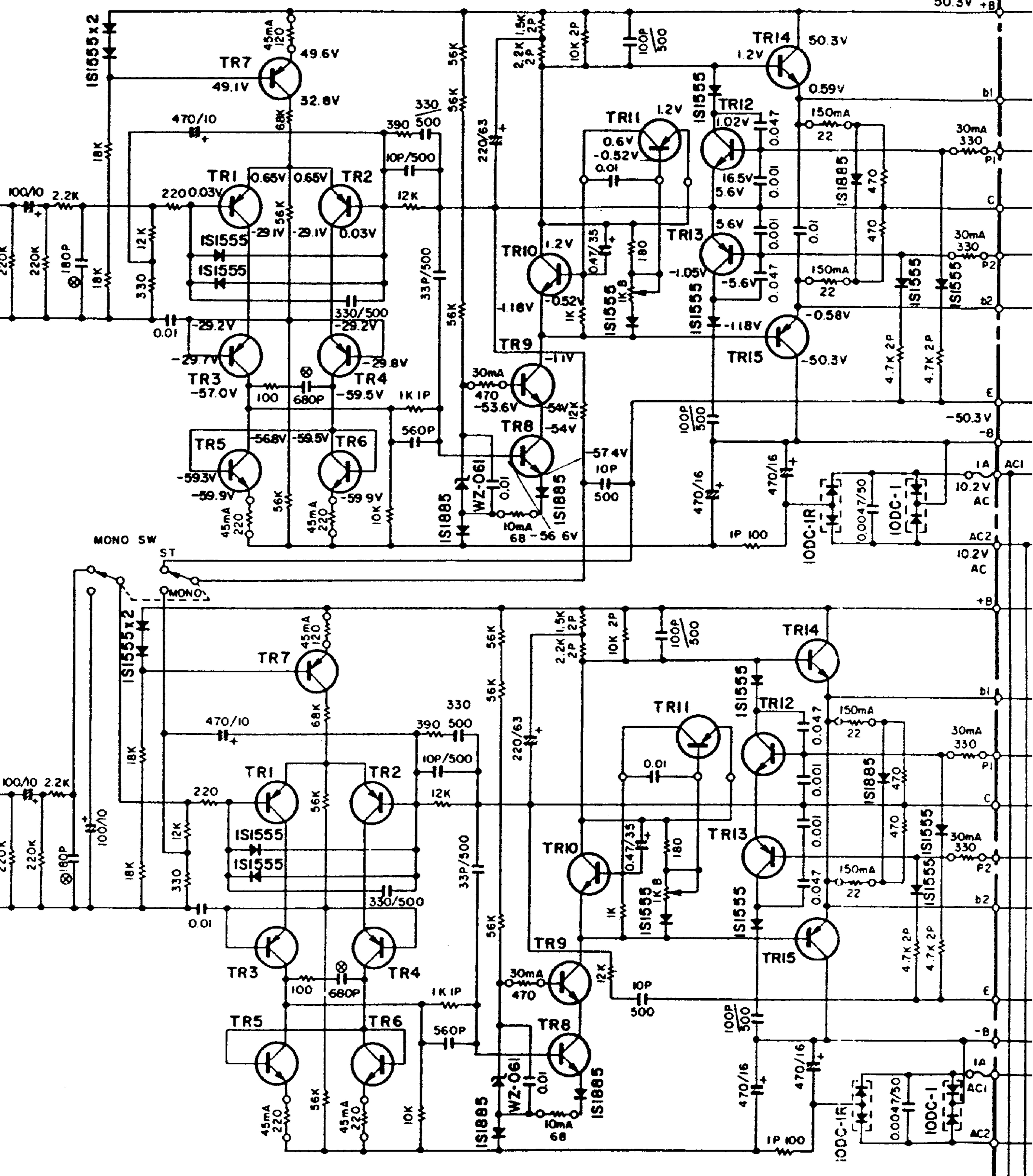


▲ US & CANADIAN MODEL

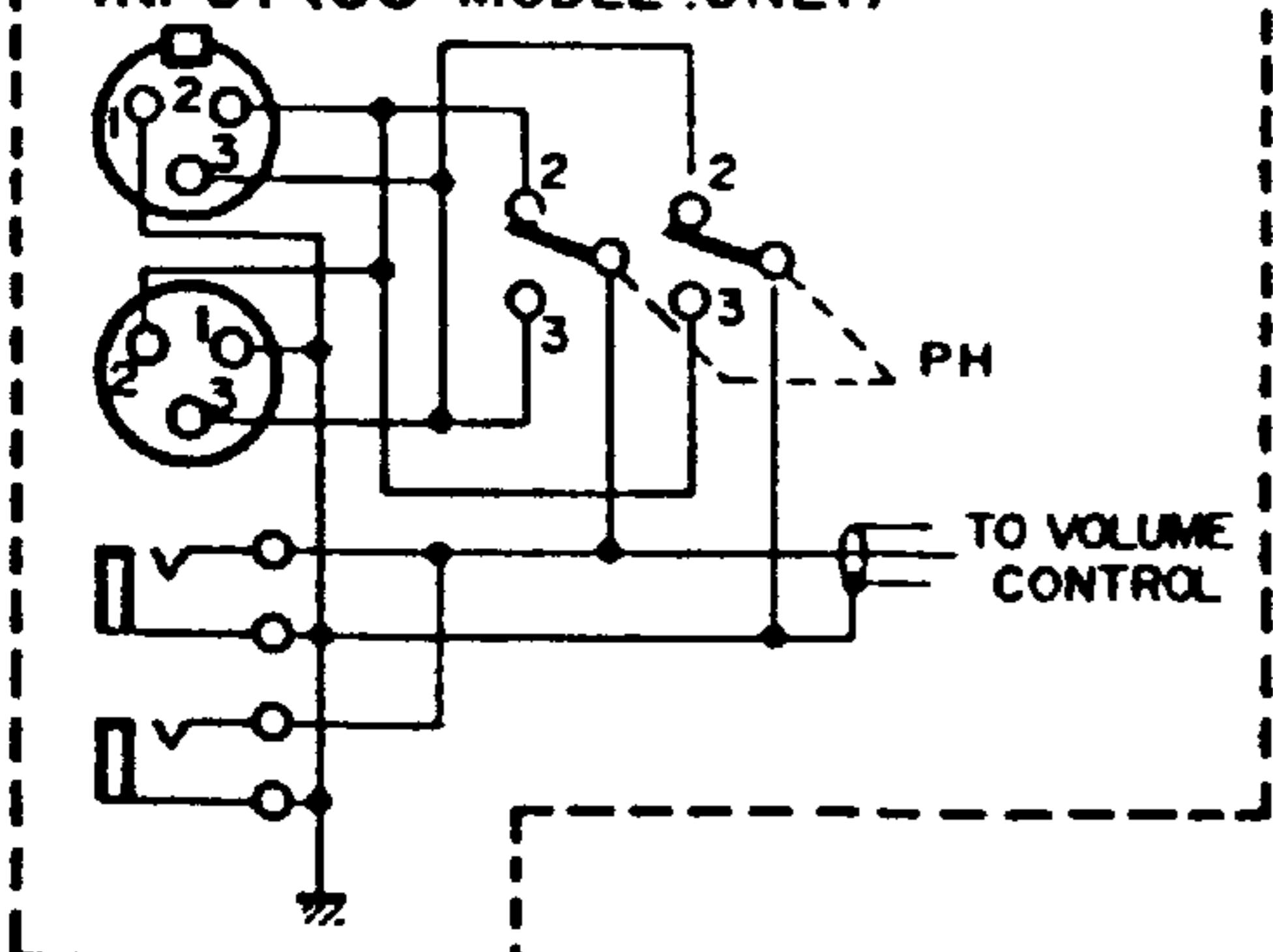
■SCHEMATIC DIAGRAM 総回路図

DA NA80251

INPUT
CHANNEL A
VOLUME
NA80250 1/2



INPUT (US MODEL ONLY)



• WIRE COLOR ABBREVIATIONS

BL ▷ Black	VI ▷ Violet
BR ▷ Brown	GY ▷ Gray
RE ▷ Red	WH ▷ White
OR ▷ Orange	GG ▷ Light Green
YE ▷ Yellow	SB ▷ Light Blue
GR ▷ Green	PK ▷ Pink
BE ▷ Blue	

CAPACITOR		RESISTOR	
⊗	POLYSTYRENE	▲	FIRE PROOFING
△	TANTALUM	—	FUSE RESISTOR

TR1~4	2SA872A
TR5,6,8,10,12	2SC1213A
TR7	2SA810
TR9,14	2SC1624
TR11	2SA682
TR13	2SA673
TR15	2SA814
TR16,18	2SC1116A
TR17,19	2SA747A

■ADJUSTMENT AND INSPECTIONS

- The output impedance of the low-frequency signal generator should be less than 600Ω , and the distortion should be less than 0.005%.
- Use an syncroscope, level meter, distortion meter or other instruments with an input impedance of over $100K\Omega$.
- Discharge the electrolytic capacitors in the power rectifier circuit when the top cover has been removed.
- Turn the semi-fixed variable resistor ($1K\Omega$) on the DA circuit board to its leftmost position (min.) before switching the power on.

1. Idling current adjustment

- Switch the power on, turn the semi-fixed resistor ($1K\Omega$) on the DA circuit board so that the voltage across the TR circuit board test points PE and E is $13mV \pm 1mV$ within 30 seconds, and set. (Fig. 1)
- Perform the same adjustment for the other channel.
- The voltage across test points PE and E fluctuates with ageing (see Table 1) and so check that the voltage across these test points after the tests is $22mV \pm 5mV$ (45mA). (When the ambient temperature is $10^\circ\text{C} - 30^\circ\text{C}$, and the temperature of the Heat Sink is $20^\circ\text{C} - 40^\circ\text{C}$.)

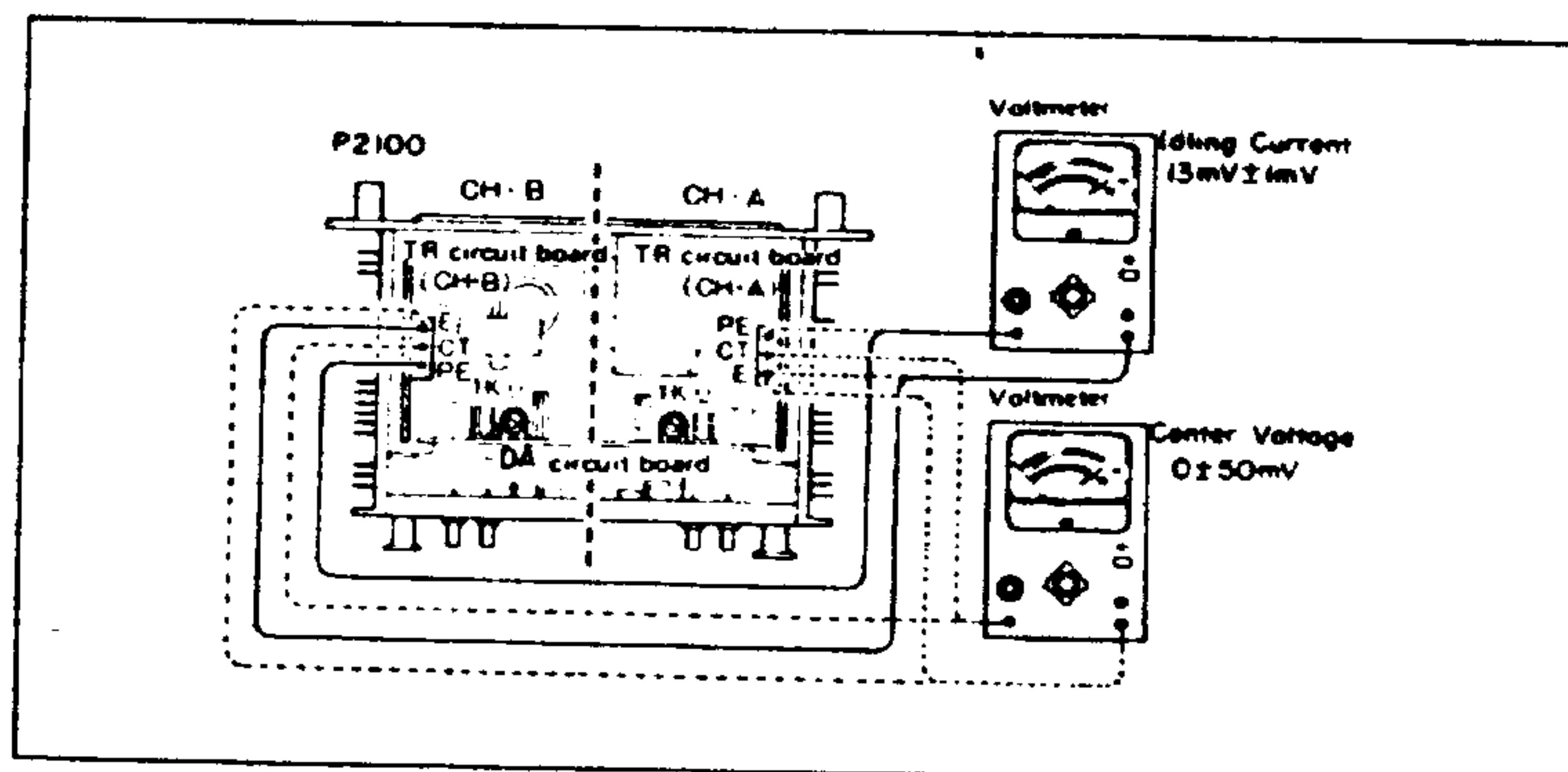


Fig. 1

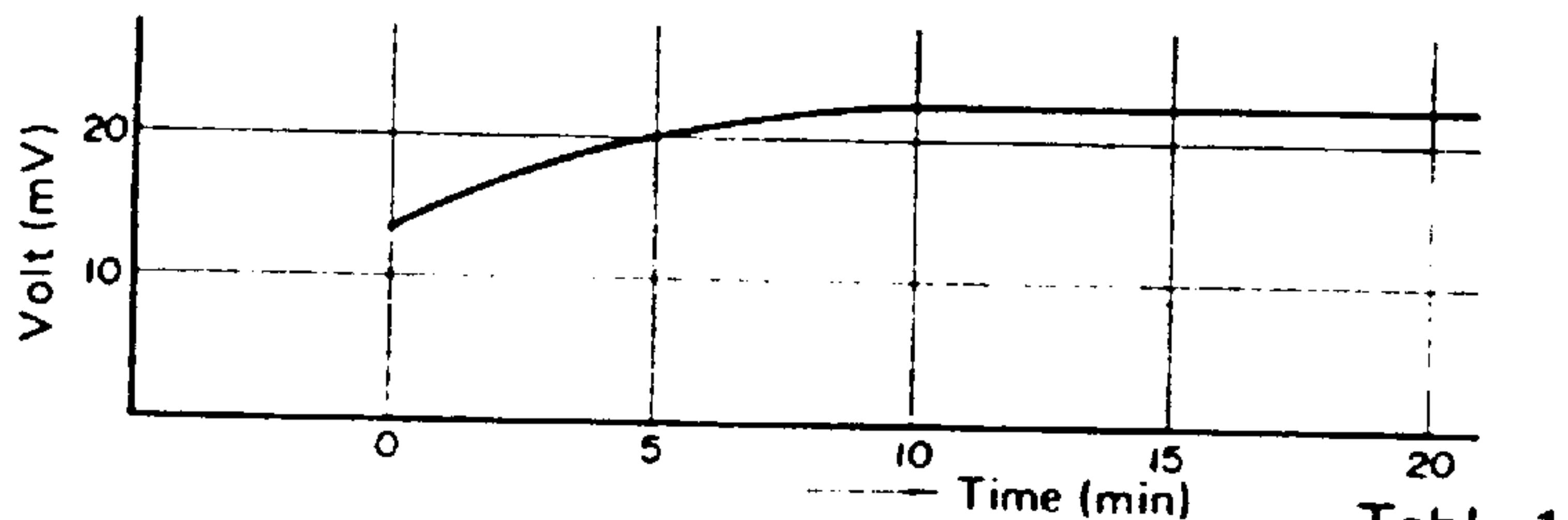


Table 1

2. Center voltage adjustment

Check that the voltage across TR circuit board CT and E terminals and across the speaker output terminals is within $0 \pm 50mV$. (Fig. 1)

3. Amplifying characteristics (stereo)

3-1. Conditions

Input terminal	XLR-3-31
Output terminal	Connect a 4Ω load impedance
Volume	Maximum
DR circuit board MONO switch	Set to stereo (ST)

3-2. Gain

- Connect the equipment as shown in Fig. 2.
- Check that the output at both ends of the load impedance is $+26.5 \pm 1\text{dBm}$ when a -5dBm 1KHz signal is applied to the input terminal.

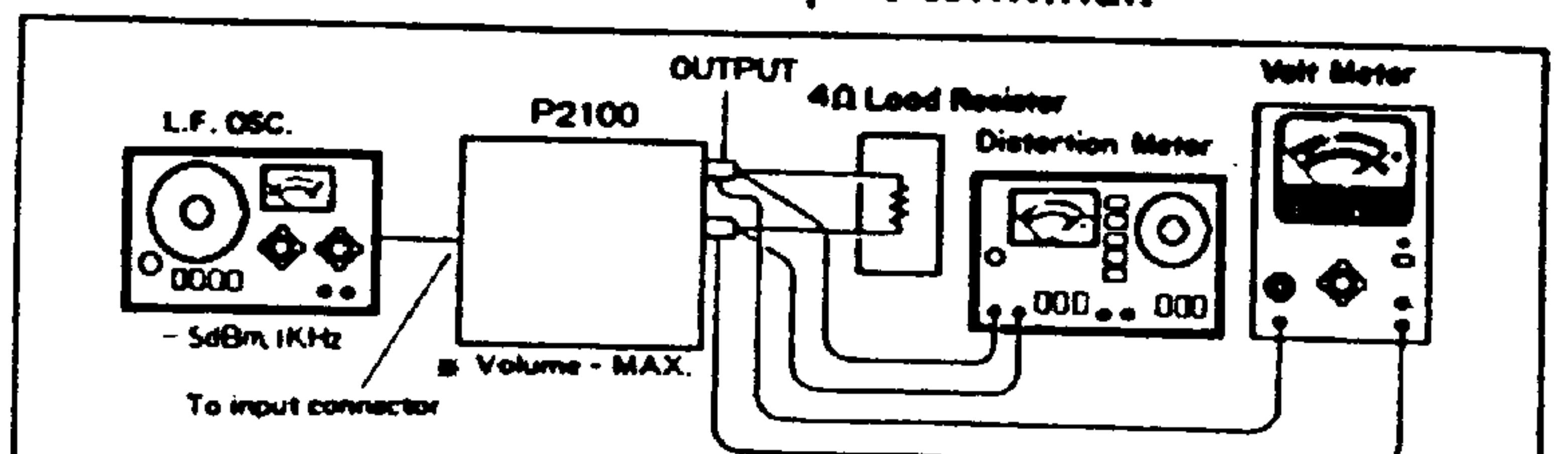


Fig. 2

3-3. Distortion

- Connections are the same as those in Fig. 2, but in addition, connect a distortion meter to the output terminals.
- Check that the distortion is less than 0.03% when 20Hz, 1KHz and 20KHz signals are applied to the input and when an output is provided of $\approx 67\text{W}$ (+26.5dBm).

3-4. Frequency response

- The connections are the same as those in Fig. 2 but the waveform can be observed when an syncroscope is connected.
- Apply 10Hz, 50KHz signals to the input, and based on 1KHz across the output terminals, check that the frequency response is within $10\text{Hz} \pm 0.5\text{dB}$, $50\text{KHz} \pm 0.5\text{dB}$.

3-5. maximum output

- The connections are the same as those shown in Fig. 2. In addition, connect a distortion meter to the output terminals.
- Apply 20Hz ~ 20KHz signals to the input and check that the $140\text{W}/4\Omega$ (+29.7dBm) output is provided at the output terminals at a distortion of less than 0.05%. Furthermore, connect an 8Ω resistor to the load and check that an 85W (+30.5 dBm) output is obtained at a distortion of less than 0.02%. (Single channel drive for this test).

3-6. Noise level and residual noise

- The connections are the same as those in Fig. 2.
- Check that the noise level is less than -67dBm when the input terminals are shorted with a 600Ω resistance.
- Check that the residual noise is less than -70dBm when the volume is set to its leftmost (min.) position.

3-7. Crosstalk

Check that the output of one channel to the output terminals of the other channel is less than -44dBm when a -5dBm , 20KHz signal is applied to the input terminal. Connect a 600Ω resistance to the input terminal to which the signal is not applied, and set the volume to maximum.

4. Stability

- The P2100 should operate stably even if the power voltage is fluctuated as much as $\pm 10\%$ of its specified value.
- There should be no abnormal oscillation under the conditions listed below when the input terminals are open or shorted with a 600Ω resistance.
 - $4 - 100\Omega$ impedance load
 - $100\text{pF} - 0.47\mu\text{F}$ capacitive load
 - $10\mu\text{H} - 1\text{H}$ L load
- Check that the overshoot is less than 0.7 under the conditions listed below with a 10KHz square wave signal and a 40Vp-p output.
 - $10\mu\text{H} - 1\text{H}$ L load
 - $100\text{pF} - 0.47\mu\text{F}$ capacitive load

* Disassembly Procedure