

ADDITIONAL

 PIONEER®

Service Manual

STEREO AMPLIFIER

SA-410 HE HB

MODEL SA-410 COMES IN FIVE VERSIONS DISTINGUISHED AS FOLLOWS:

Type	Voltage	Remarks
KU	120V only	U.S.A. model
S	110V, 120V, 220V and 240V (Switchable)	General export model
HE	220V and 240V	Europe model
HB	220V and 240V	United Kingdom model
YP	240V only	Australia model

- This additional service manual is applicable to the HE and HB types.
- The basic performance of the SA-410/HE and HB types are the same as the SA-410/KU type. Please refer to the SA-410/KU service manual <ART-480> with exception of this supplement.

1. SPECIFICATIONS

The specifications for SA-410/HE and HB types are the same as the SA-410/KU type except for following section;

Miscellaneous

Power Requirements

HE type 220V, 240V, 50/60Hz
 HB type 220V, 240V, 50/60Hz

Power Consumption

HE, HB types 140W

Weight (without package) 5dg (11 lb)

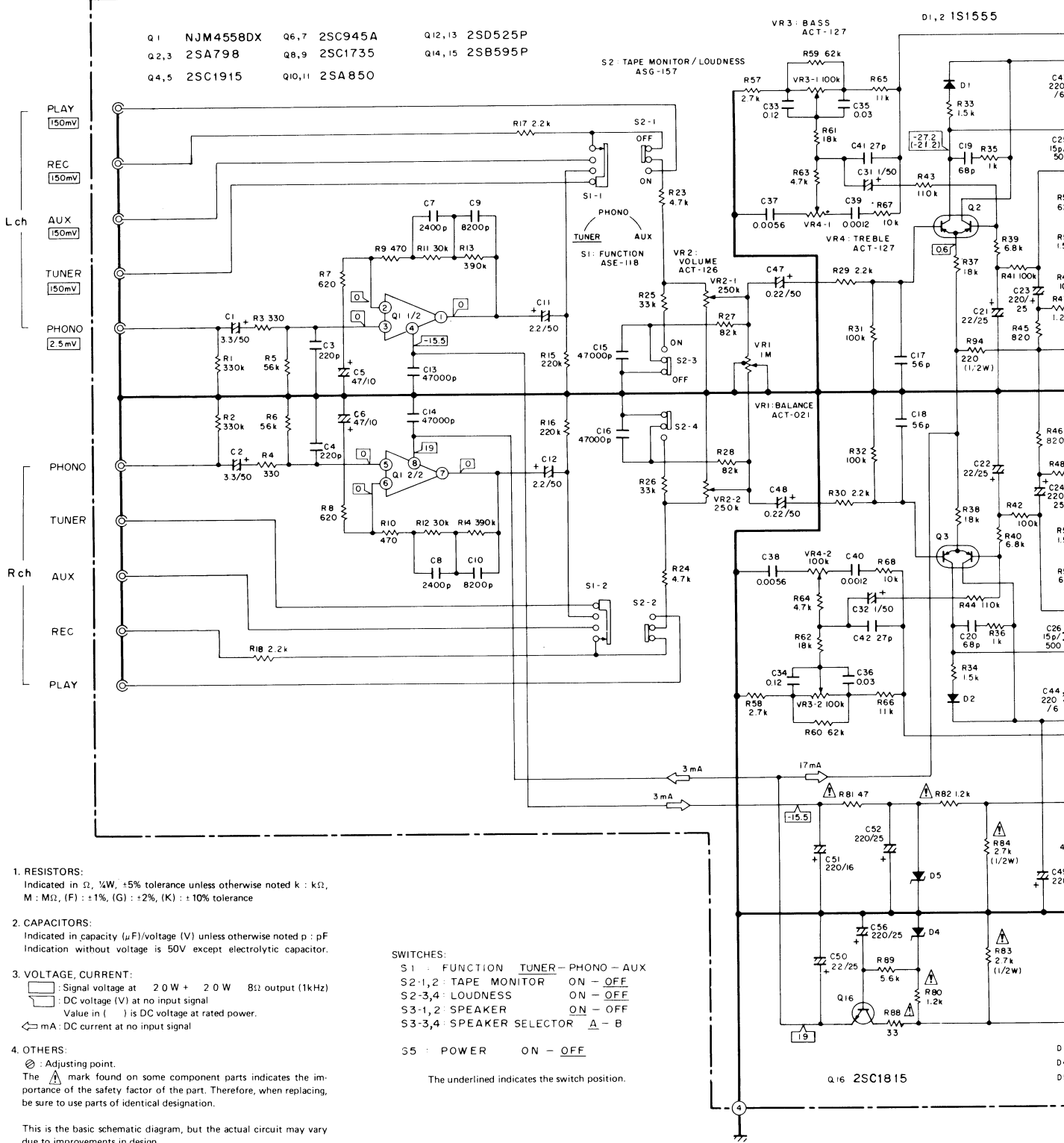
Hum and Noise (DIN continuous power/50mW)

PHONO. 67dB/61dB
 TUNER, AUX, TAPE PLAY 83dB/63dB

3. SCHEMATIC DIAGRAM FOR HE AND HB TYPES

AF AMP Ass'y GWK-149

Q1 NJM4558DX Q6,7 2SC945A Q12,13 2SD525P
 Q2,3 2SA798 Q8,9 2SC1735 Q14,15 2SB595P
 Q4,5 2SC1915 Q10,11 2SA850



1. RESISTORS:

Indicated in Ω , $\frac{1}{4}W$, $\pm 5\%$ tolerance unless otherwise noted k : k Ω , M : M Ω , (F) : $\pm 1\%$, (G) : $\pm 2\%$, (K) : $\pm 10\%$ tolerance

2. CAPACITORS:

Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:

: Signal voltage at $20W + 20W$ 8 Ω output (1kHz)
 : DC voltage (V) at no input signal
 Value in () is DC voltage at rated power.
 mA : DC current at no input signal

4. OTHERS:

: Adjusting point.
 The mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

SWITCHES:

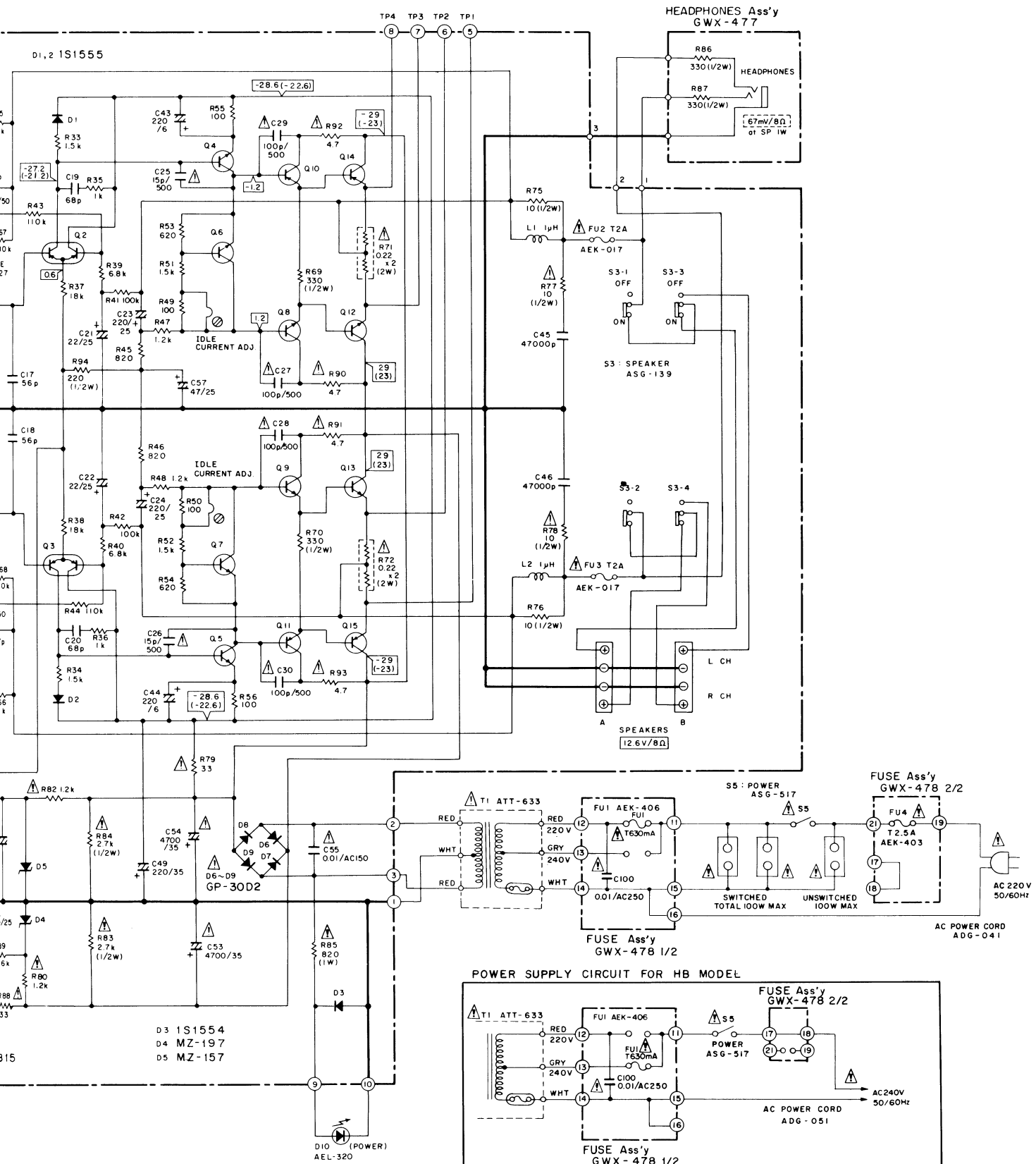
S1 : FUNCTION TUNER - PHONO - AUX
 S2-1,2 : TAPE MONITOR ON - OFF
 S2-3,4 : LOUDNESS ON - OFF
 S3-1,2 : SPEAKER ON - OFF
 S3-3,4 : SPEAKER SELECTOR A - B
 S5 : POWER ON - OFF

The underlined indicates the switch position.

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A

B

C

D

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4. P.C. BOARD CONNECTION DIAGRAM FOR HE TYPE

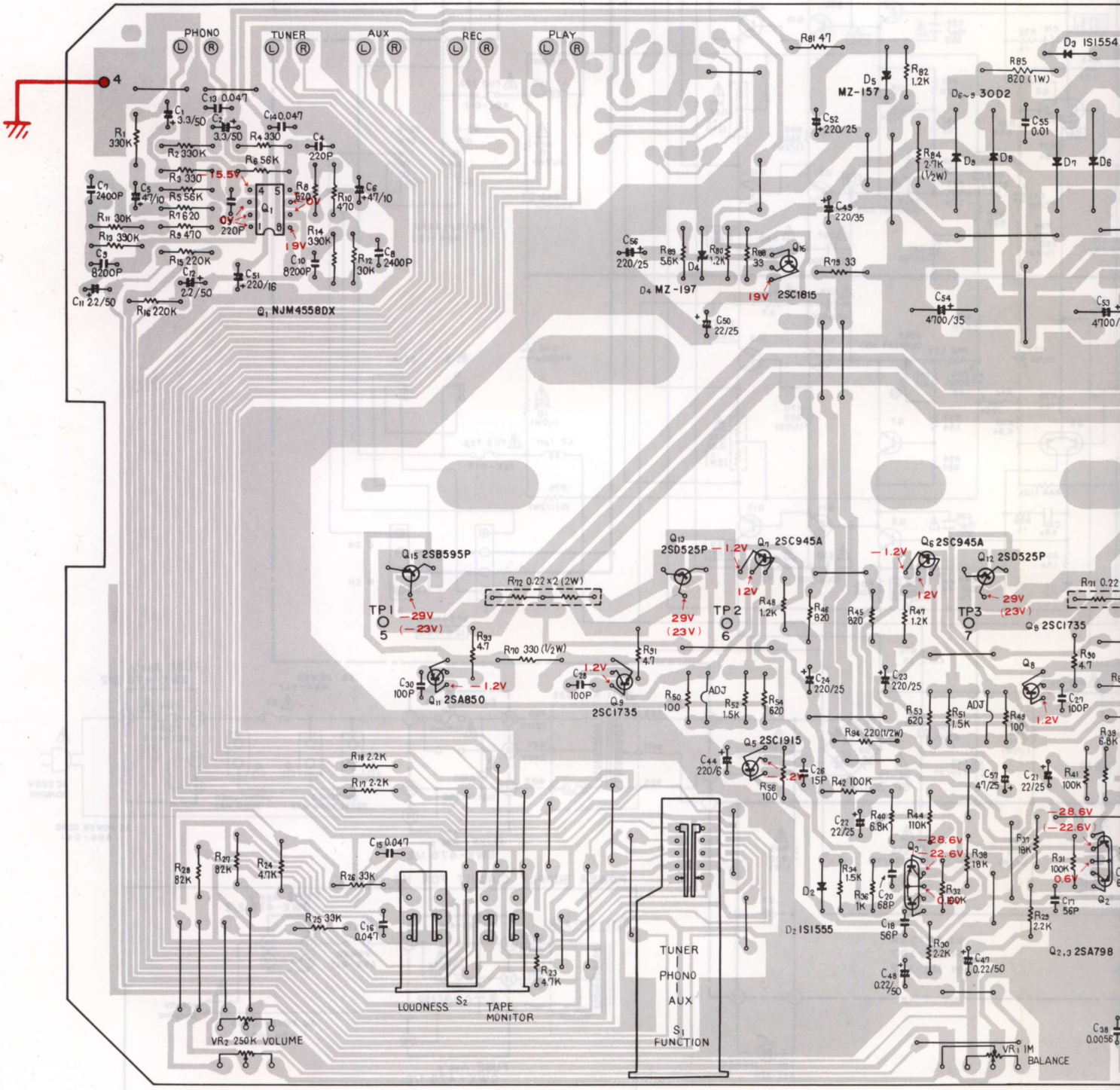
A

B

C

D

AF AMP ASS'Y (GWK-149)

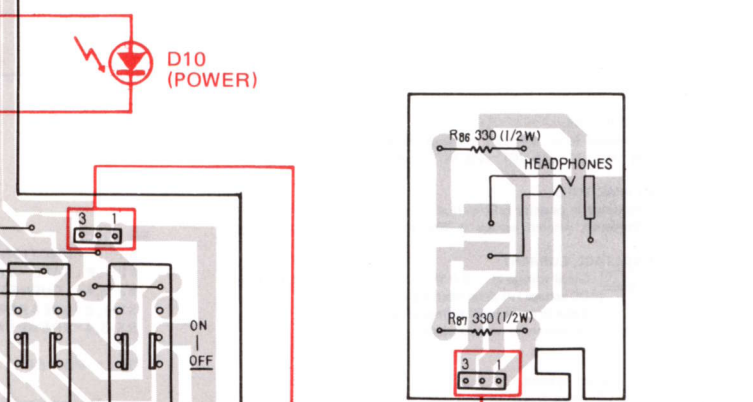
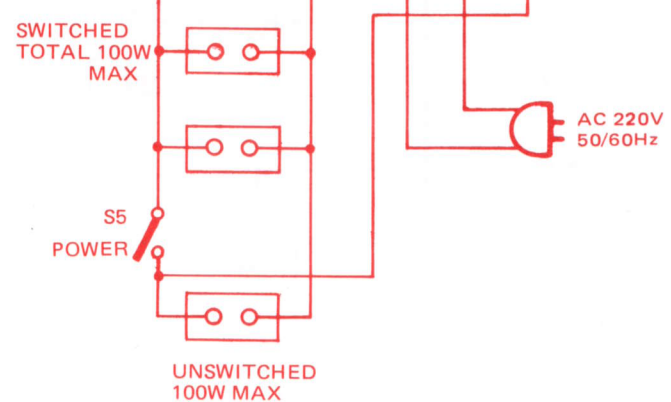
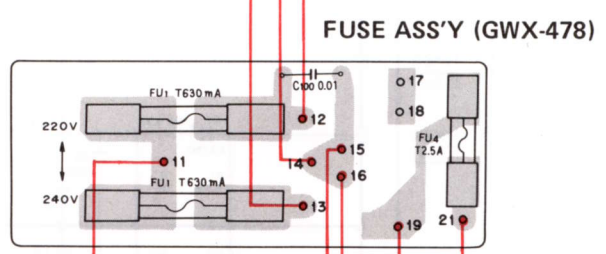
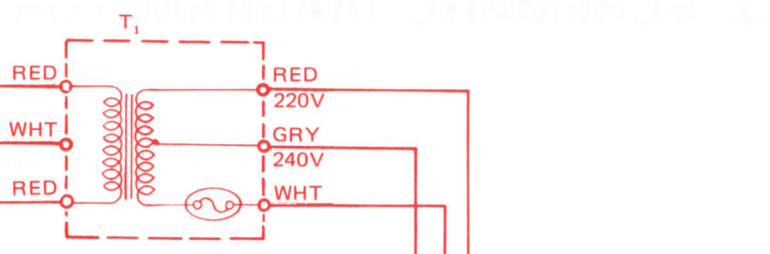
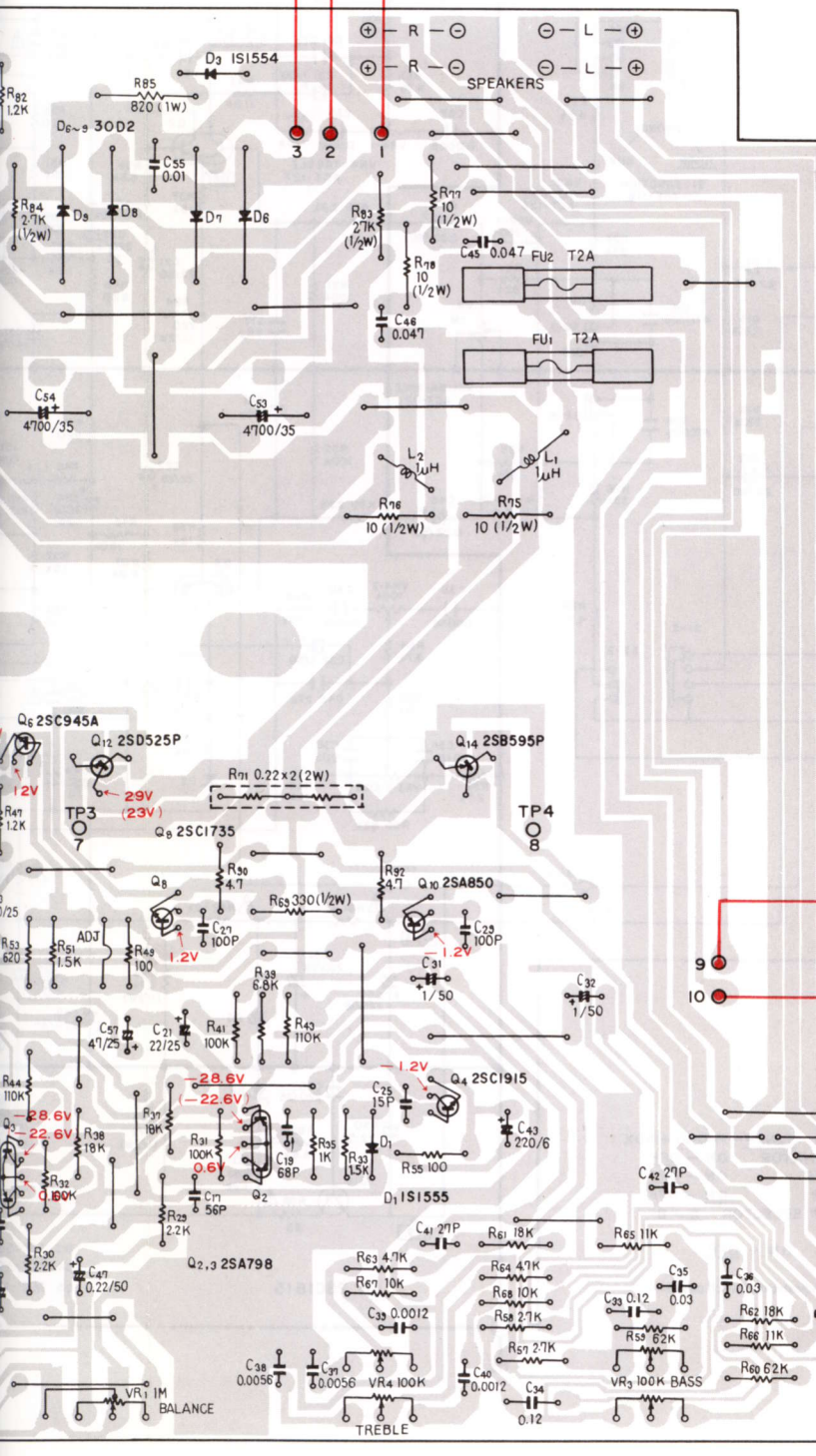


TYPE

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A

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6. LINE VOLTAGE SELECTION

Line voltage can be changed with following steps.

1. Disconnect the AC power cord.
2. Remove the bonnet cover.
3. Take out the fuse from the fuse assembly.
4. Re-install the fuse in the correct voltage indication (see Fig. 1).
5. Stick the line voltage label on the rear panel.

Part No.	Description
AAX-193	220V label
AAX-192	240V label

