

ADDITIONAL

PIONEER®

# Service Manual

STEREO AMPLIFIER

# SA-510 HE HB

- This additional service manual is applicable to the HE and HB types.
- The basic performance of the SA-510/HE and HB types are the same as the SA-510/KU type. Please refer to the SA-510/KU service manual <ART-479> with exception of this supplement.

Model SA-510/HB For United Kingdom model  
 Model SA-510/HE For Europe continent model

## 1. SPECIFICATIONS

### Amplifier Section

Continuous Power Output at 1kHz (both channels driven)  
 T.H.D. 0.03%, 8 ohms . . . . . 33 watts per channel  
 Hum and Noise (DIN, continuous Power/50mW) \*  
 PHONO. . . . . 68dB/58dB  
 TUNER, AUX, TAPE PLAY 1, 2 . . . . . 85dB/60dB

### Miscellaneous

Power Requirements . . . . . 220V/240V (Selectable)  
 50/60Hz  
 Power Consumption . . . . . 220W

### 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

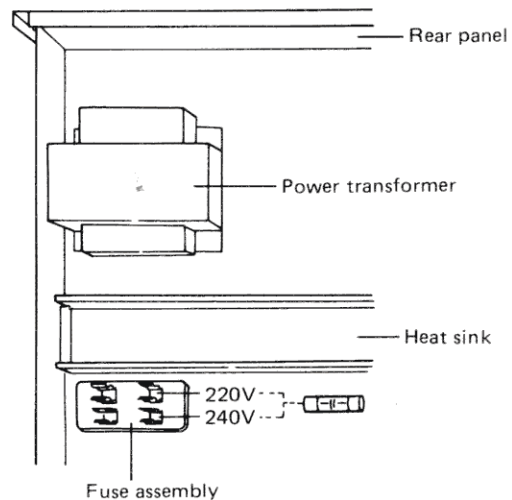
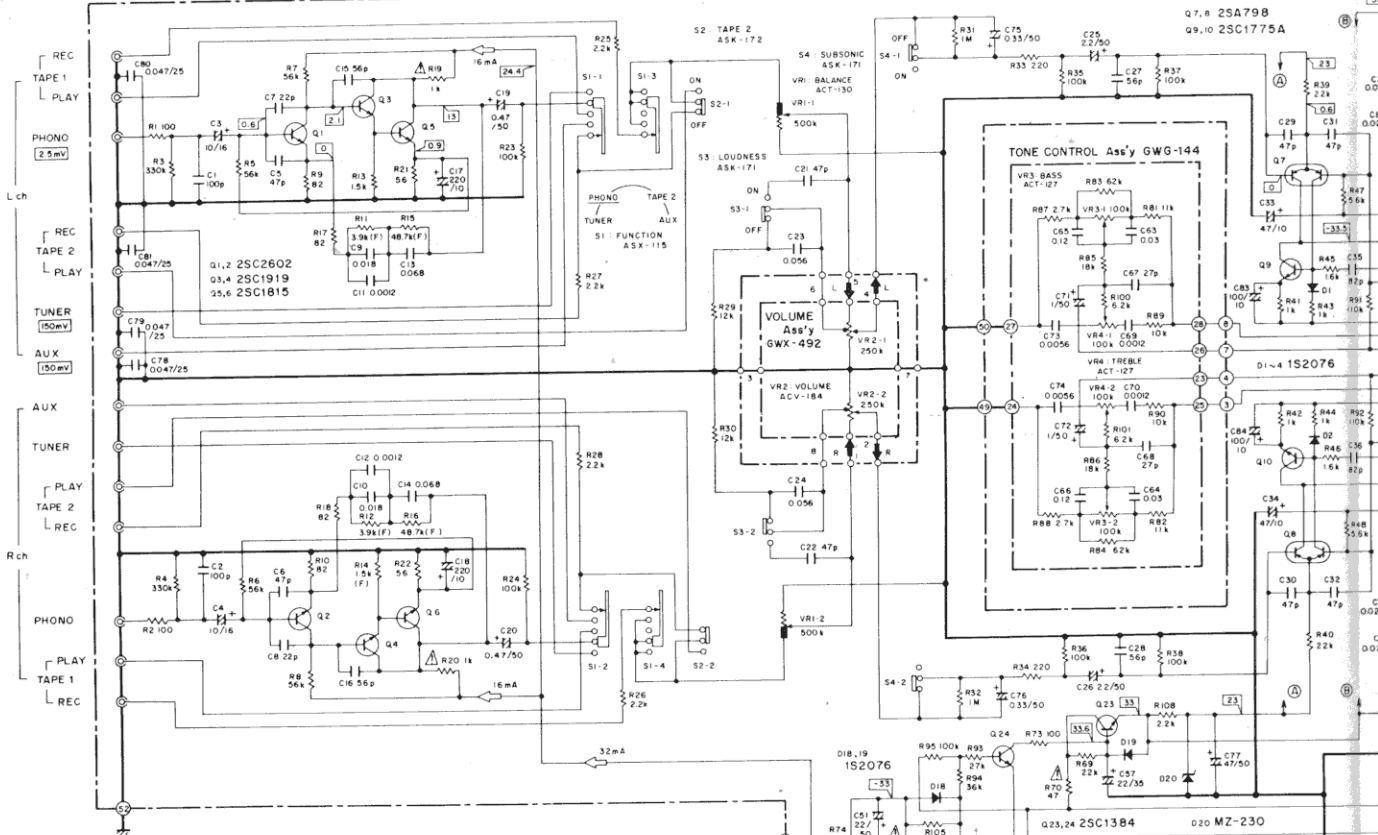


Fig. 1

# 3. SCHEMATIC DIAGRAMS FOR HE AND HB TYPES

AF AMP Ass'y (1/2) GWK-154



1. RESISTORS:  
Indicated in Ω, kΩ, 5% tolerance unless otherwise noted k : k1, M : M1; (F) : 1%, (G) : 2%, (K) : 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 3.0 W + 3.0 W B1 output (1kHz)  
DC voltage (V) at no input signal  
Value in [ ] is DC voltage at rated power.  
mA : DC current at no input signal

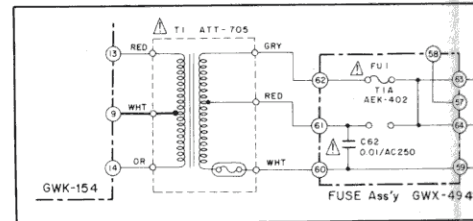
4. OTHERS:  
Signal route.  
Adjusting point.  
The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

- SWITCHES:  
S 1, 7 : FUNCTION  
S 2 : TAPE 2  
S 3 : LOUDNESS  
S 4 : SUBSONIC  
S 5 : SPEAKERS  
S 6 : POWER
- TUNER - PHONO - TAPE 1 - AUX  
OFF - ON  
OFF - ON  
OFF - ON  
OFF - A - B  
OFF - ON

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

The underlined indicates the switch position.

POWER SUPPLY CIRCUIT FOR HB MODEL



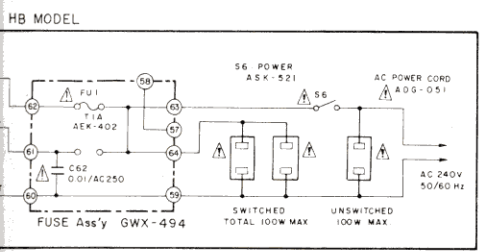
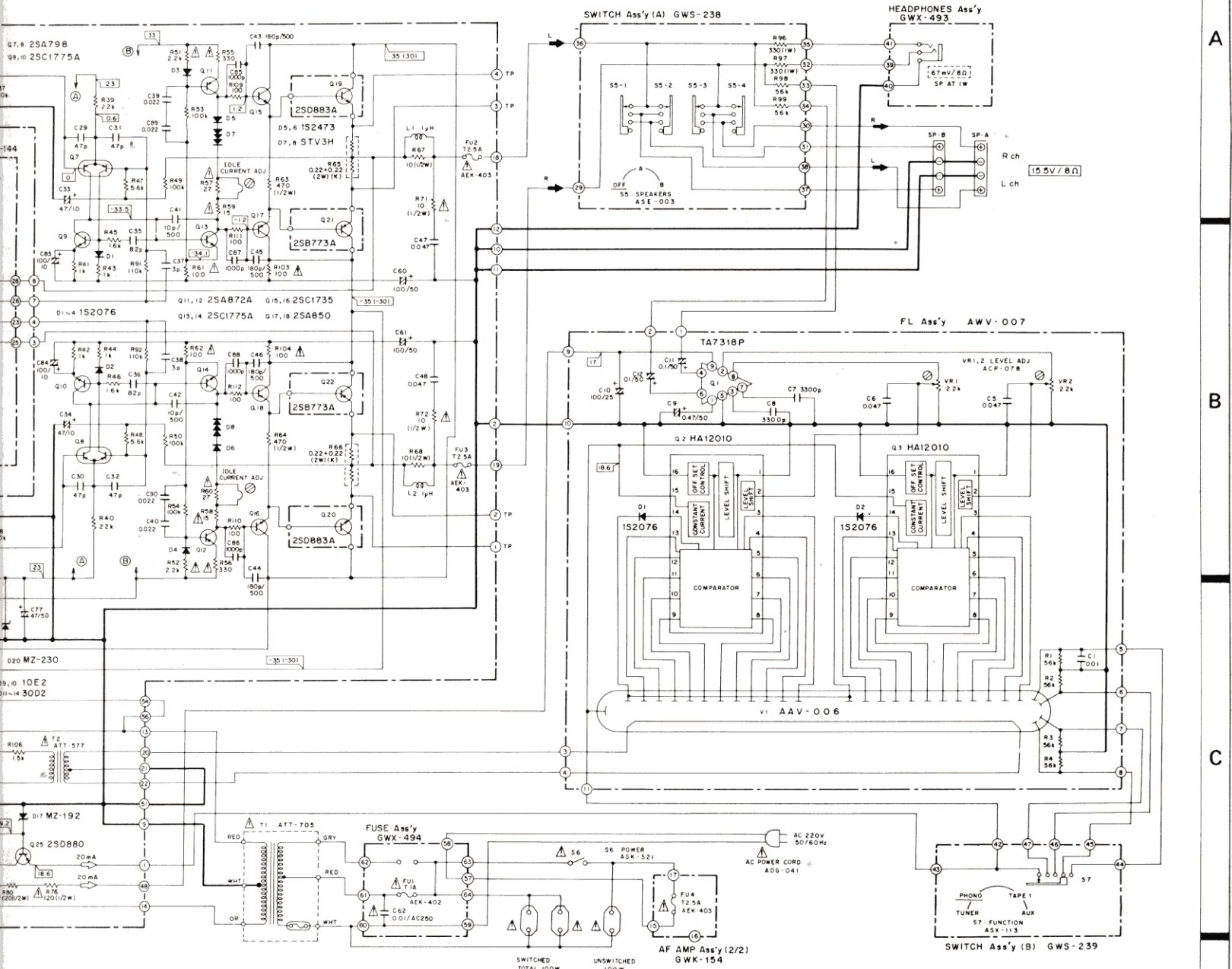
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5

6

PES

**NOTE:**  
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.



4

5

6

A

B

C

D