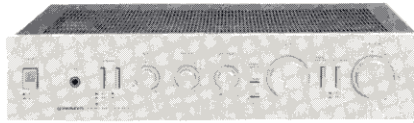


# Service Manual

**REPAIR & ADJUSTMENTS**



**ORDER NO.  
ART-646-0**

**STEREO AMPLIFIER**

# SA-420

**MODEL SA-420 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 |
| YP   | 240V only                              | Australia model      |
| HE   | 220V and 240V (Switchable)             | Europe model         |
| HB   | 220V and 240V (Switchable)             | United Kingdom model |

- This service manual is applicable to the KU type (pp. 1 – 17), YP and S types (pp. 19 – 27). When repairing the HE, HB types, please see the additional service manual (ART-647).
- For the circuit description, please refer to the supplement of model SA-720 service manual (ART-765).
- Ce manuel d'instruction se réfère au mode de réglage, en français.
- Este manual de servicio trata del método de ajuste escrito en español.

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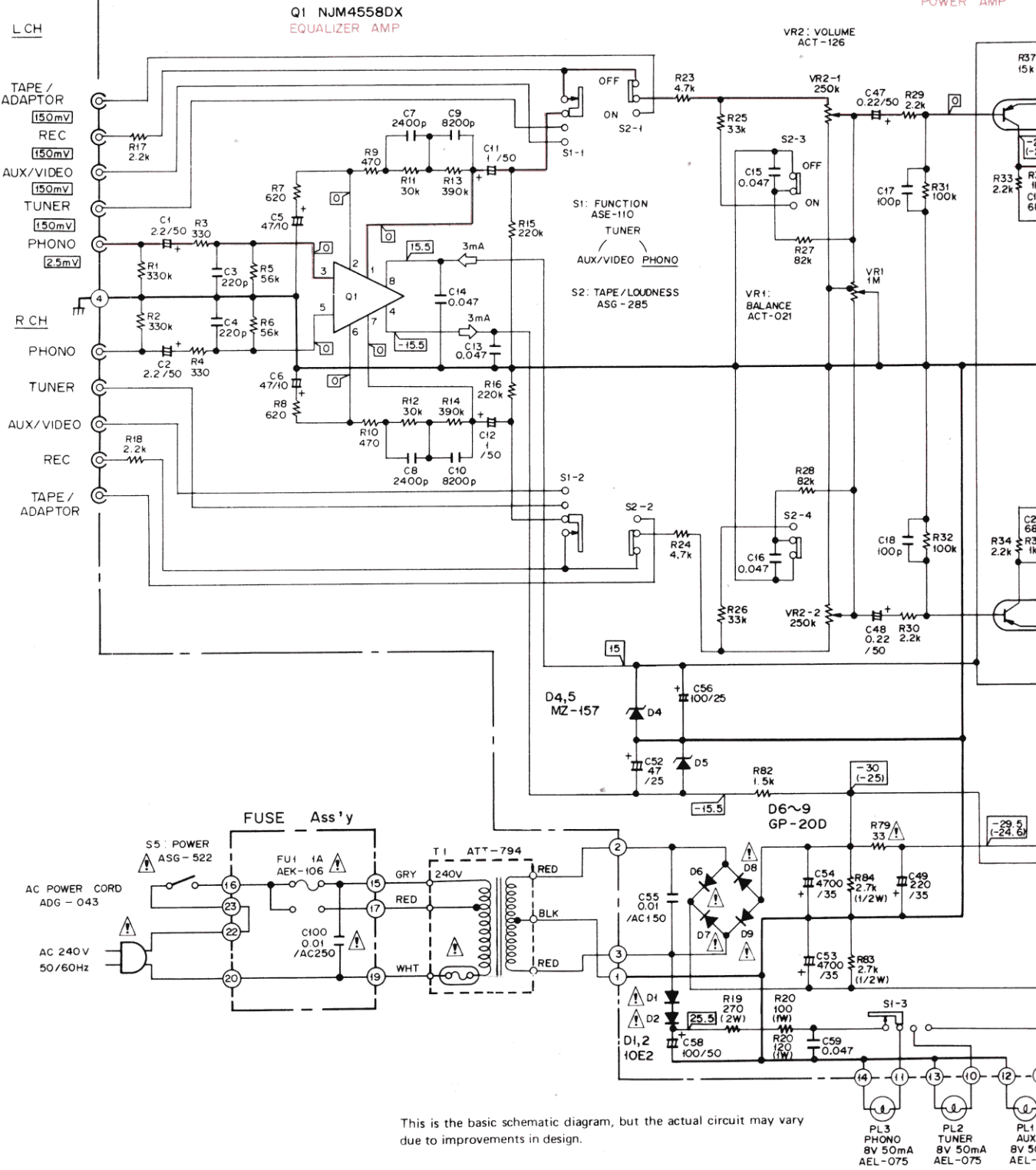
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# SCHEMATIC DIAGRAMS

For YP Type

AF Ass'y\_GWK-

- Q2,3 2SA798
- Q4,5 2SC1775A
- Q6,7 2SC945A
- Q8,9 2SC1735
- Q10,11 2SA850
- Q12,13 2SD525P
- Q14,15 2SB595P
- POWER AMP

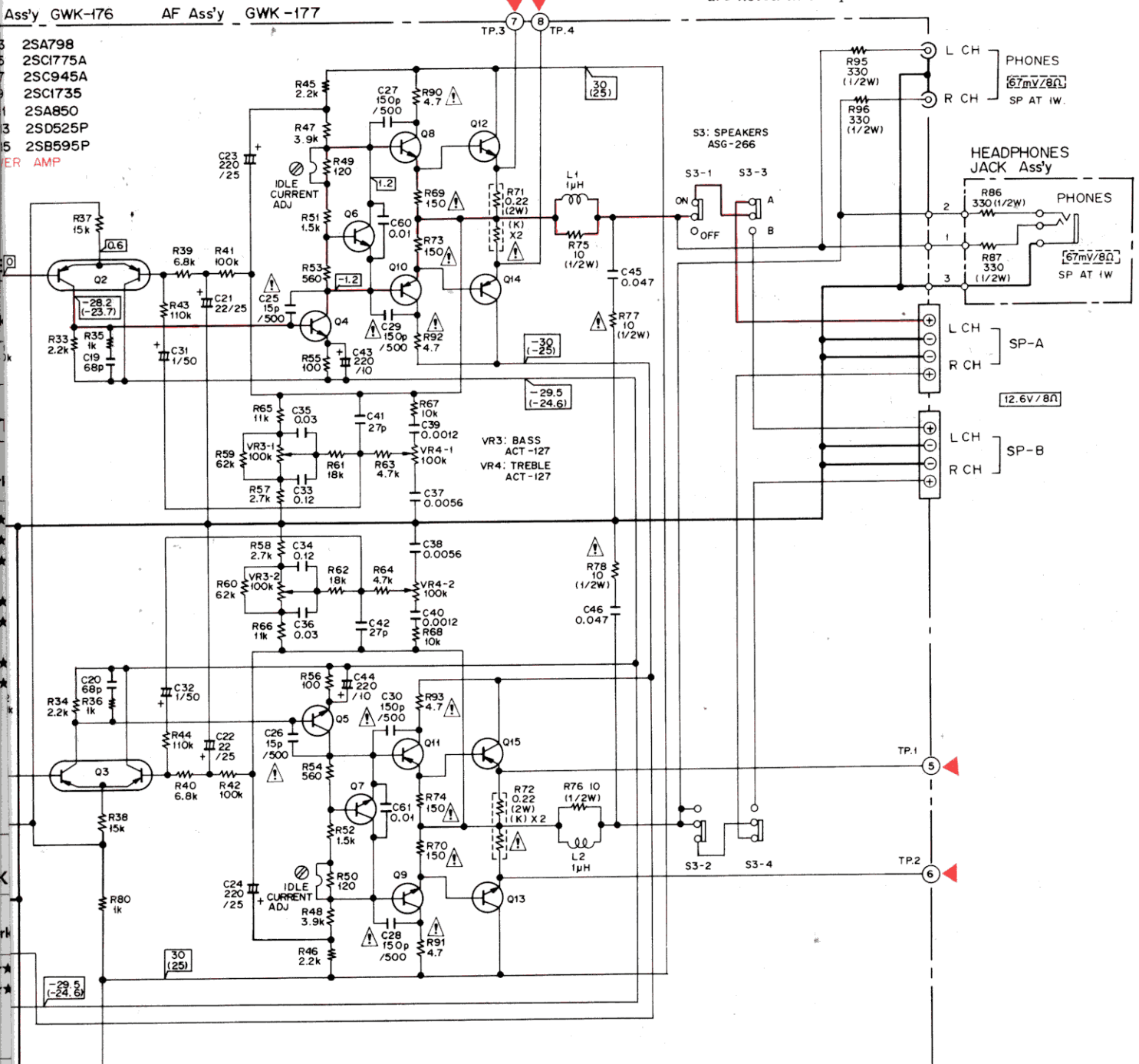


This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

- PL3 PHONO 8V 50mA AEL-075
- PL2 TUNER 8V 50mA AEL-075
- PL1 AUX 8V 50mA AEL-

NOTE:

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



1. RESISTORS:  
Indicated in Ω, ¼W, ±5% tolerance unless otherwise noted k : kΩ,  
M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10%, (M) : ±20% 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:  
[Symbol] : Signal voltage at 20 W + 20 W 8Ω output (1kHz)  
[Symbol] : 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.

SWITCHES:  
S1: FUNCTION AUX/VIDEO - TUNER - PHONO  
S2-1,2 : TAPE / ADAPTOR ON - OFF  
S2-3,4 : LOUDNESS ON - OFF  
S3-1,2 : SPEAKERS ON - OFF  
S3-3,4 : SPEAKERS A - B  
S5: POWER ON - OFF  
S6 LINE VOLTAGE SELECTOR  
110V - 120V - 220V - 240V

The underlined indicates the switch position.

A

B

C

D