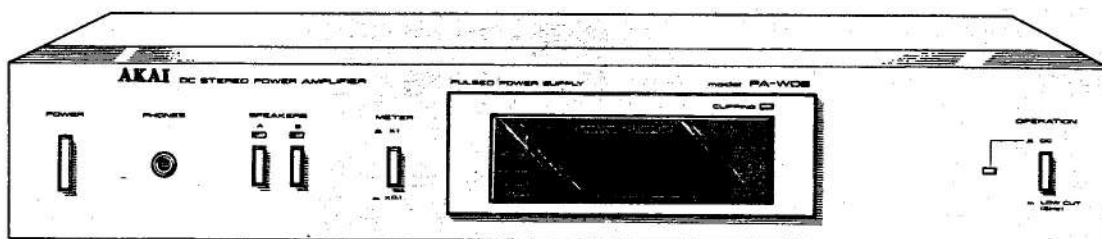
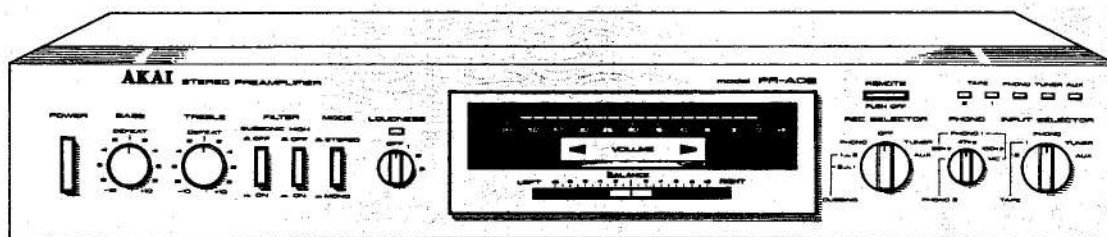


# AKAI SERVICE MANUAL



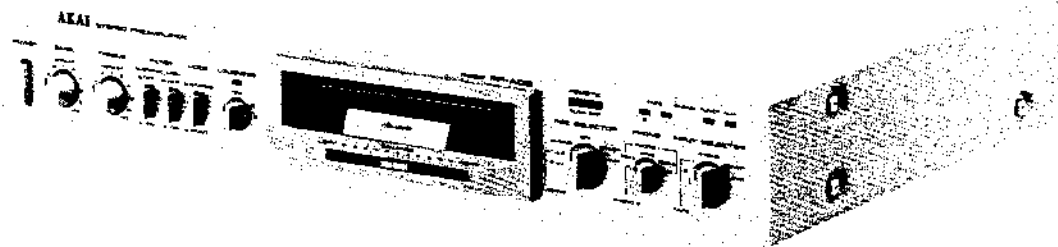
PR-A06  
PA-W06

STEREO PRE-AMPLIFIER

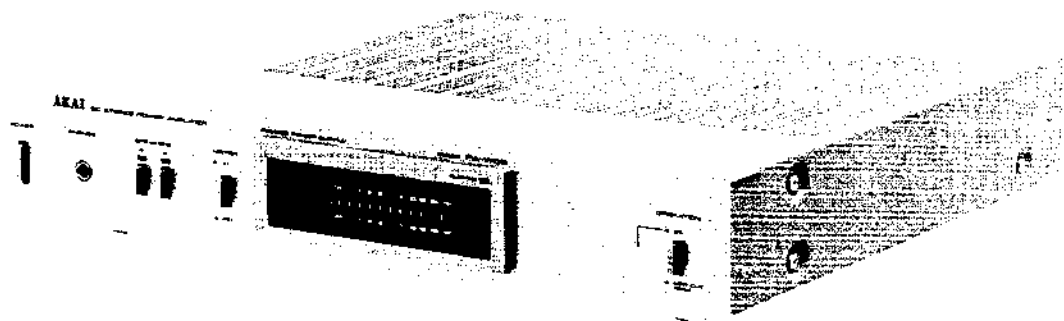
MODEL **PR-A06**

DC STEREO POWER AMPLIFIER

MODEL **PA-W06**



PR-A06



PA-W06

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SECTION 1

**STEREO PRE-AMPLIFIER**

**MODEL PR-A06**

ALSO APPLICABLE TO BLACK PANEL MODEL

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For basic adjustments, measuring methods, and operating principles, refer to **GENERAL TECHNICAL MANUAL**.

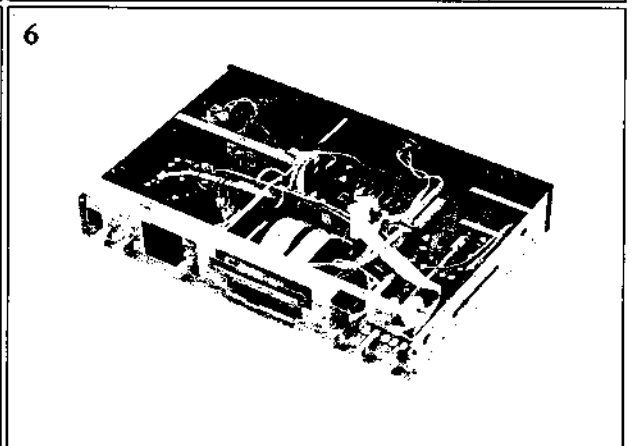
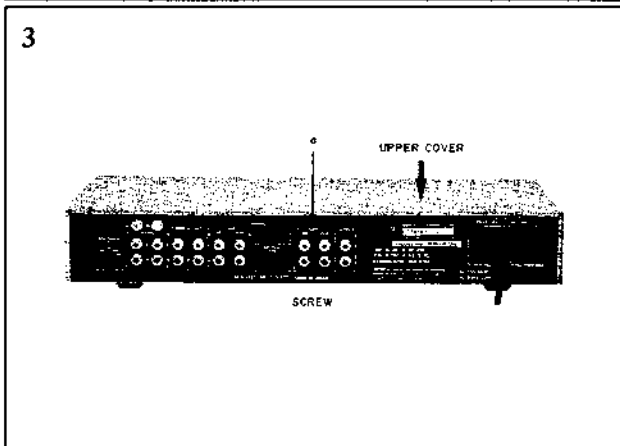
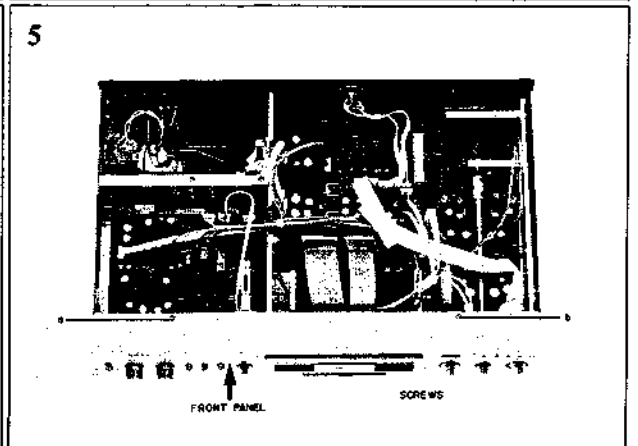
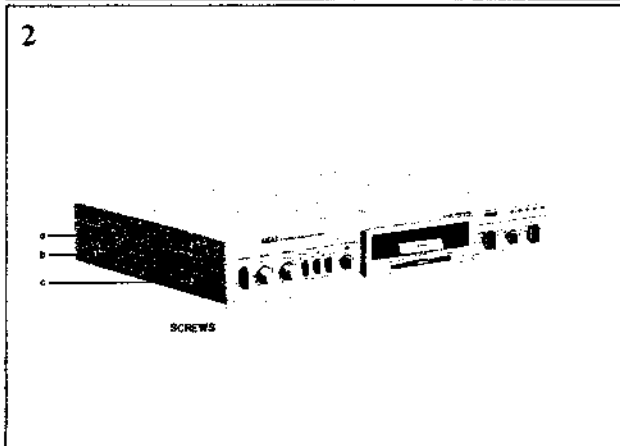
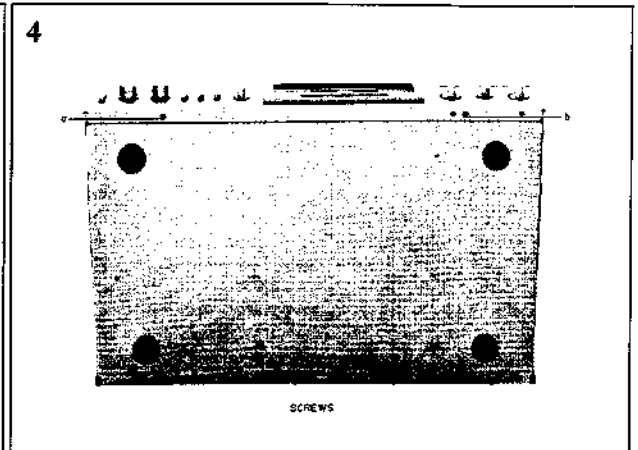
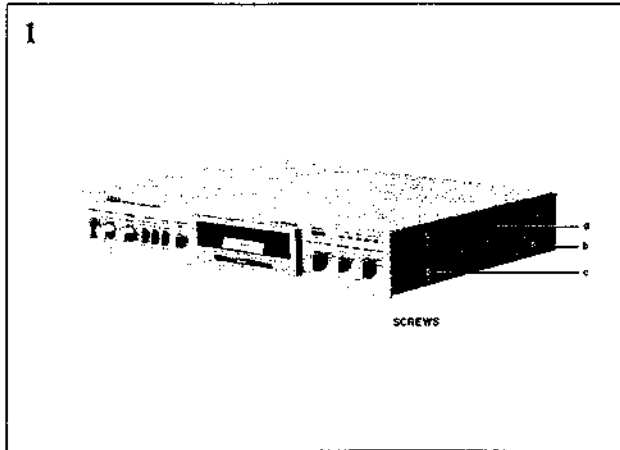
## I. TECHNICAL DATA

INPUT SENSITIVITY/IMPEDANCE/SIGNAL TO NOISE RATIO (IHF "A") PHONO 1  PHONO 2 TUNER AUX TAPE PLAY 1/2	MM: 3 mV/33 k, 47 k, 100 kohms/82 dB MC: 0.08 mV/10 ohms/75 dB MM: 3 mV/47 kohms/82 dB 150 mV/47 kohms/102 dB 150 mV/47 kohms/102 dB 150 mV/47 kohms/102 dB
OUTPUT LEVEL/IMPEDANCE TAPE REC 1/2 OUTPUT RATED LOAD IMPEDANCE	150 mV/600 ohms 1 V/600 ohms 47 kohms
PHONO MAX. INPUT LEVEL (1 kHz) PHONO 1/2	400 mV (MM)
FREQUENCY RESPONSE TUNER/AUX/TAPE PLAY 1/2 PHONO 1/2 (RIAA curve deviation)	5 Hz to 100 kHz $\pm$ 0.5 dB 30 Hz to 15 kHz $\pm$ 0.2 dB
TOTAL HARMONIC DISTORTION (20 Hz to 20 kHz) TUNER/AUX/TAPE PLAY 1/2 (Volume Max.) PHONO 1/2 (Volume Max.)	0.005% at output 10 V 0.005% at output 10 V
TONE CONTROL BASS TREBLE	$\pm$ 8 dB at 100 Hz $\pm$ 8 dB at 10 kHz
SUBSONIC FILTER	12 dB/oct. at 18 Hz
CHANNEL SEPARATION (AUX)	70 dB (shorted circuit)
SEMICONDUCTORS	Transistors 29, Diodes 48, FETs 2, ICs 11
POWER REQUIREMENTS	120 V, 60 Hz for USA and Canada 220 V, 50 Hz for Europe except UK 240 V, 50 Hz for UK and Australia 110/220/240 V, 50/60 Hz internally switchable for other countries
POWER CONSUMPTION	U/T, AAL, CSA Models: 20 W
DIMENSIONS	440 (W) $\times$ 78 (H) $\times$ 313 (D) mm (17.3 $\times$ 3.1 $\times$ 12.3 inches)
WEIGHT	6.3 kg (13.9 lbs)

\* For improvement purposes, specifications and design are subject to change without notice.

## II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.



### III. CONTROLS

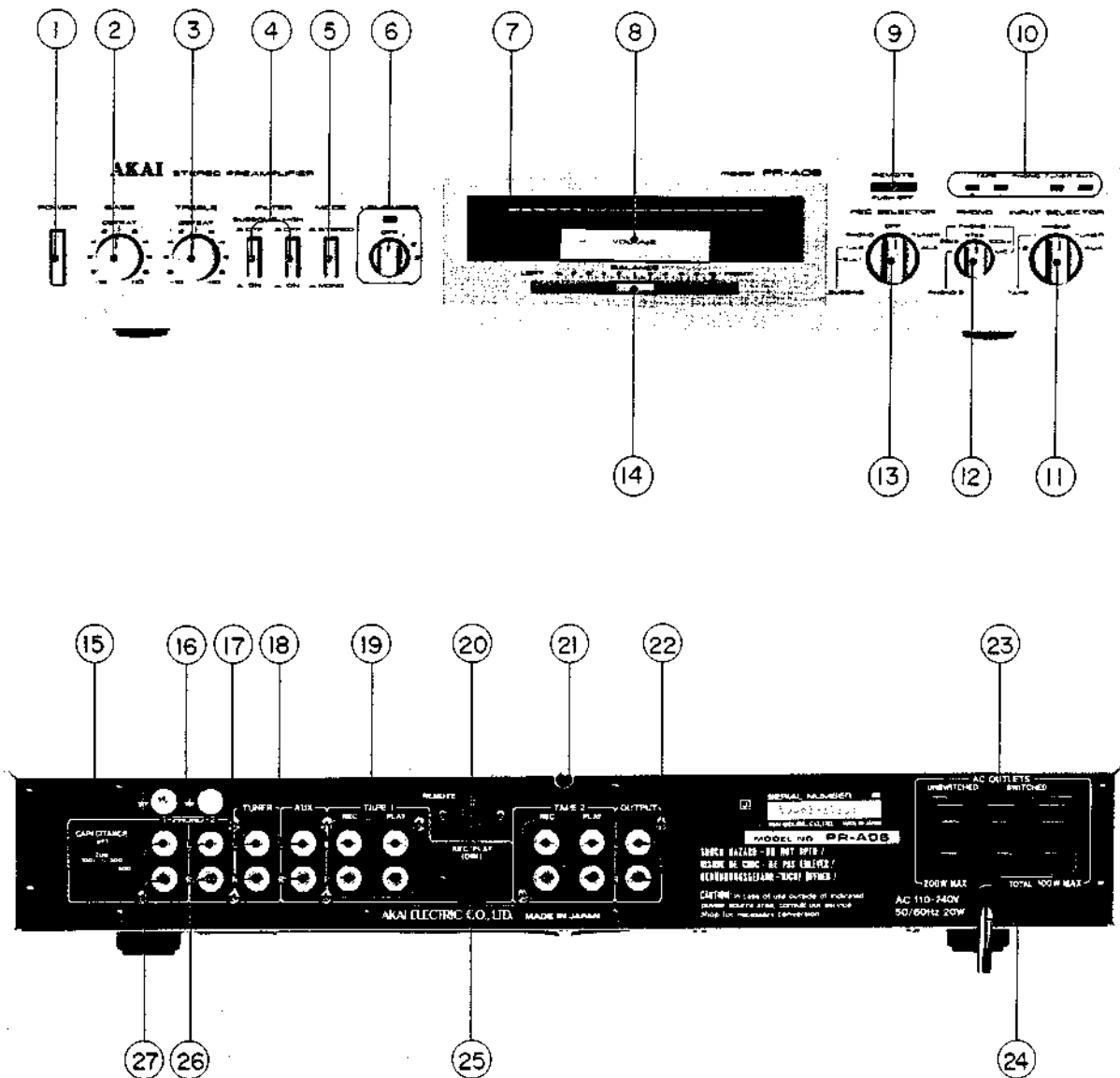


Fig. 1 Controls

- |                                  |  |
|----------------------------------|--|
| 1. POWER SWITCH                  | 15. CAPACITANCE CONTROL  |
| 2. BASS CONTROL                  | 16. GROUND TERMINALS   |
| 3. TREBLE CONTROL                | 17. TUNER JACKS  |
| 4. FILTER SWITCHES               | 18. AUX JACKS  |
| 5. MODE SELECTOR                 | 19. TAPE 1 SYSTEM REC/PLAY JACKS   |
| 6. LOUDNESS SWITCH AND INDICATOR | 20. REMOTE CONTROL JACK  |
| 7. LED dB VOLUME INDICATOR       | 21. TAPE 2 SYSTEM REC/PLAY JACKS   |
| 8. VOLUME CONTROL                | 22. OUTPUT JACKS   |
| 9. REMOTE CONTROL INDICATOR      | 23. AC OUTLETS (Some models are not equipped with this facility.)  |
| 10. INPUT SELECTOR INDICATOR     | 24. AC CORD (Some models are equipped with an AC Inlet instead of an AC cord. Connect with an appropriate power cord.) |
| 11. INPUT SELECTOR               | 25. TAPE 1 SYSTEM DIN JACK (Some models do not have this facility.)  |
| 12. PHONO SELECTOR               | 26. PHONO 2 INPUT JACKS  |
| 13. REC (Recording) SELECTOR     | 27. PHONO 1 INPUT JACKS  |
| 14. STEREO BALANCE CONTROL       |  |

# IV. PRINCIPAL PARTS LOCATION

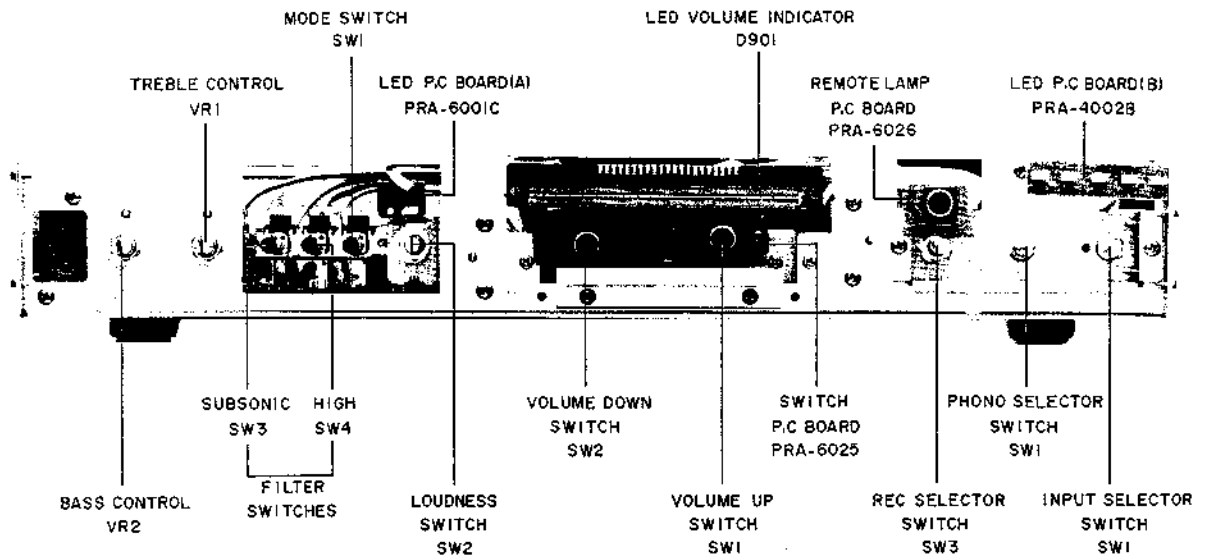


Fig. 2 Front View

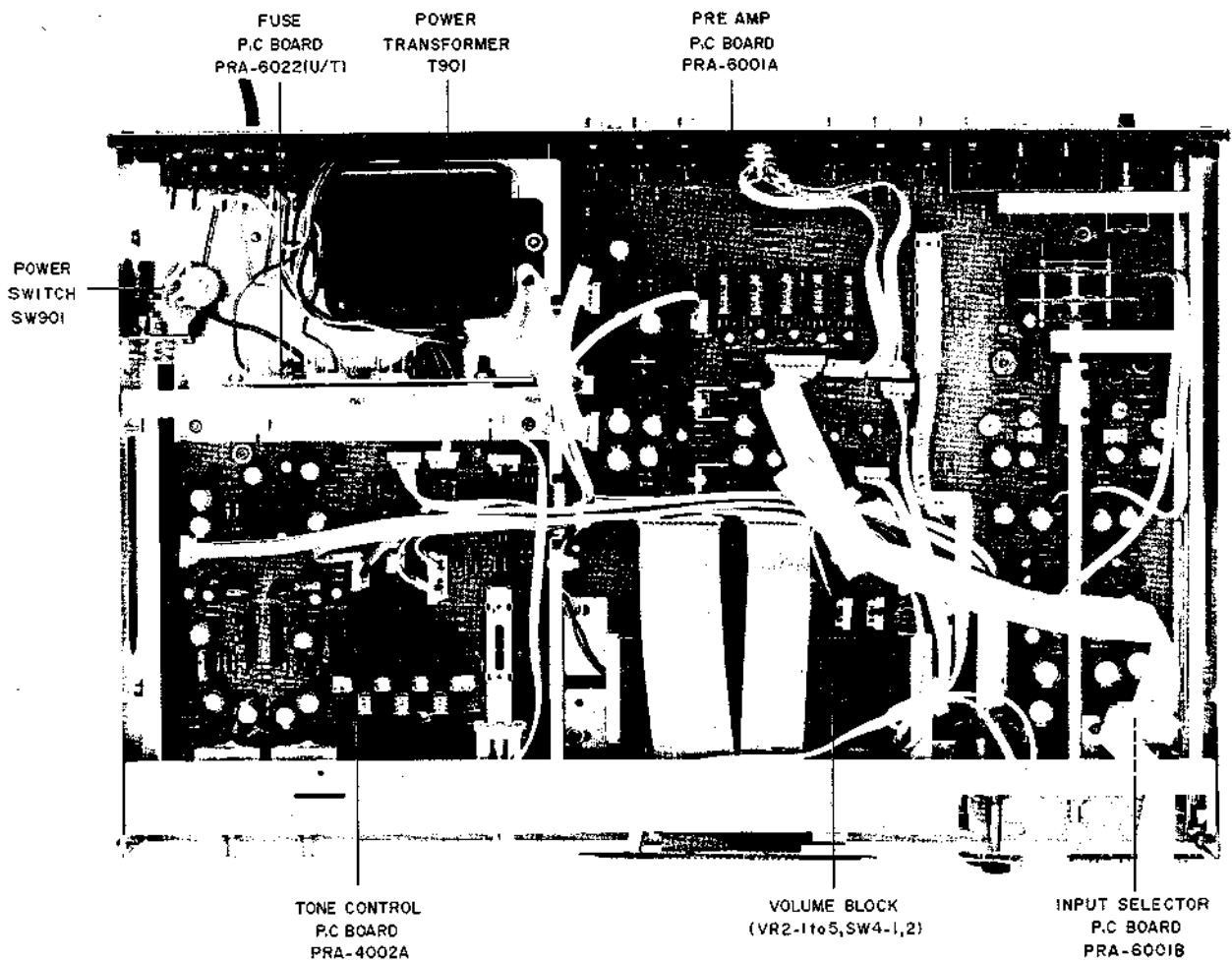


Fig. 3 Top View

## V. VOLTAGE CONVERSION

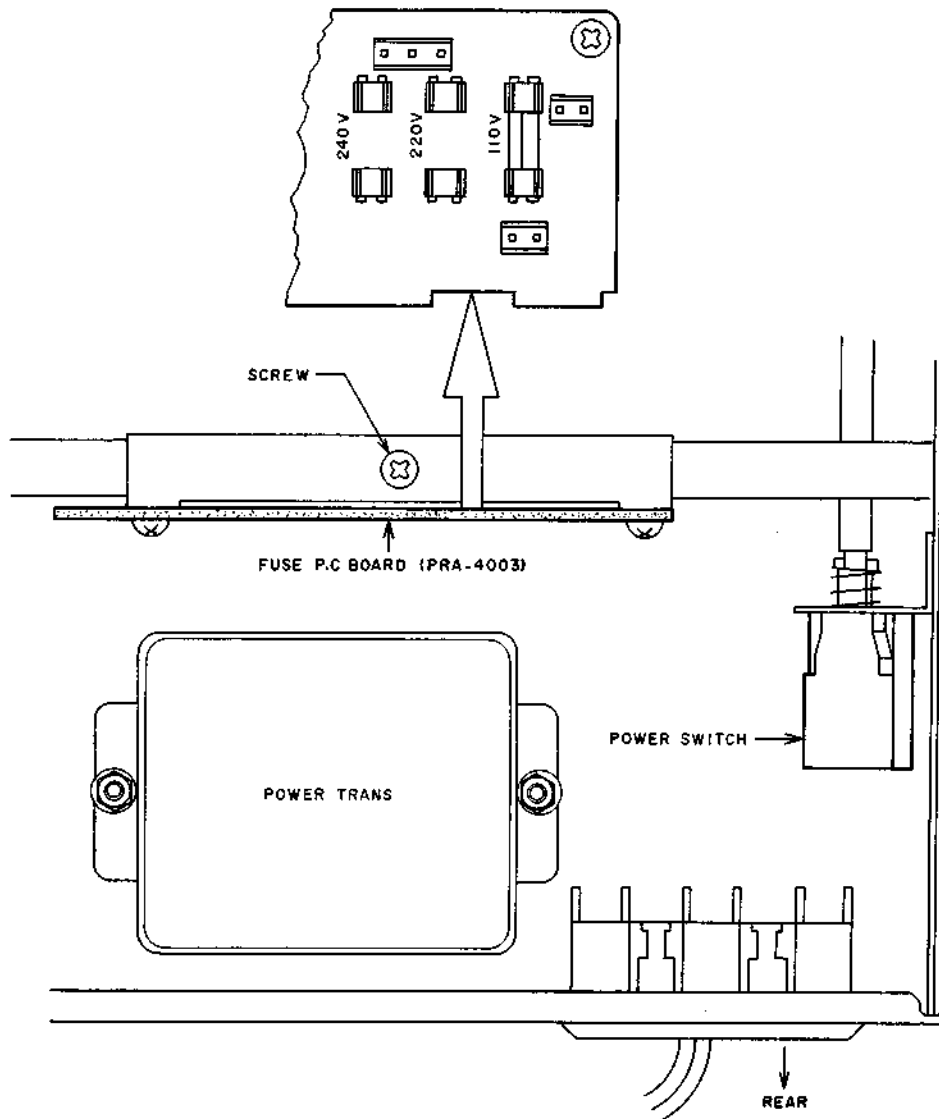


Fig. 4 Voltage Conversion (U/T Model)

### 1. U/T MODEL (Refer to Fig. 4)

1. Switch off the power supply and remove the plug from the mains supply.
2. Loosen holding screws and remove the top panel.
3. Remove the screw holding the Fuse P.C Board located near the power transformer.
4. Remove existing Line Voltage Fuse and insert required Line Voltage Fuse in the proper fuse holder.
  - 110V : 800 mA 250V
  - 220V : 400 mA 250V
  - 240V : 400 mV 250V

### 2. MODEL OTHER THAN U/T

No voltage conversion.



## VI. ADJUSTMENT

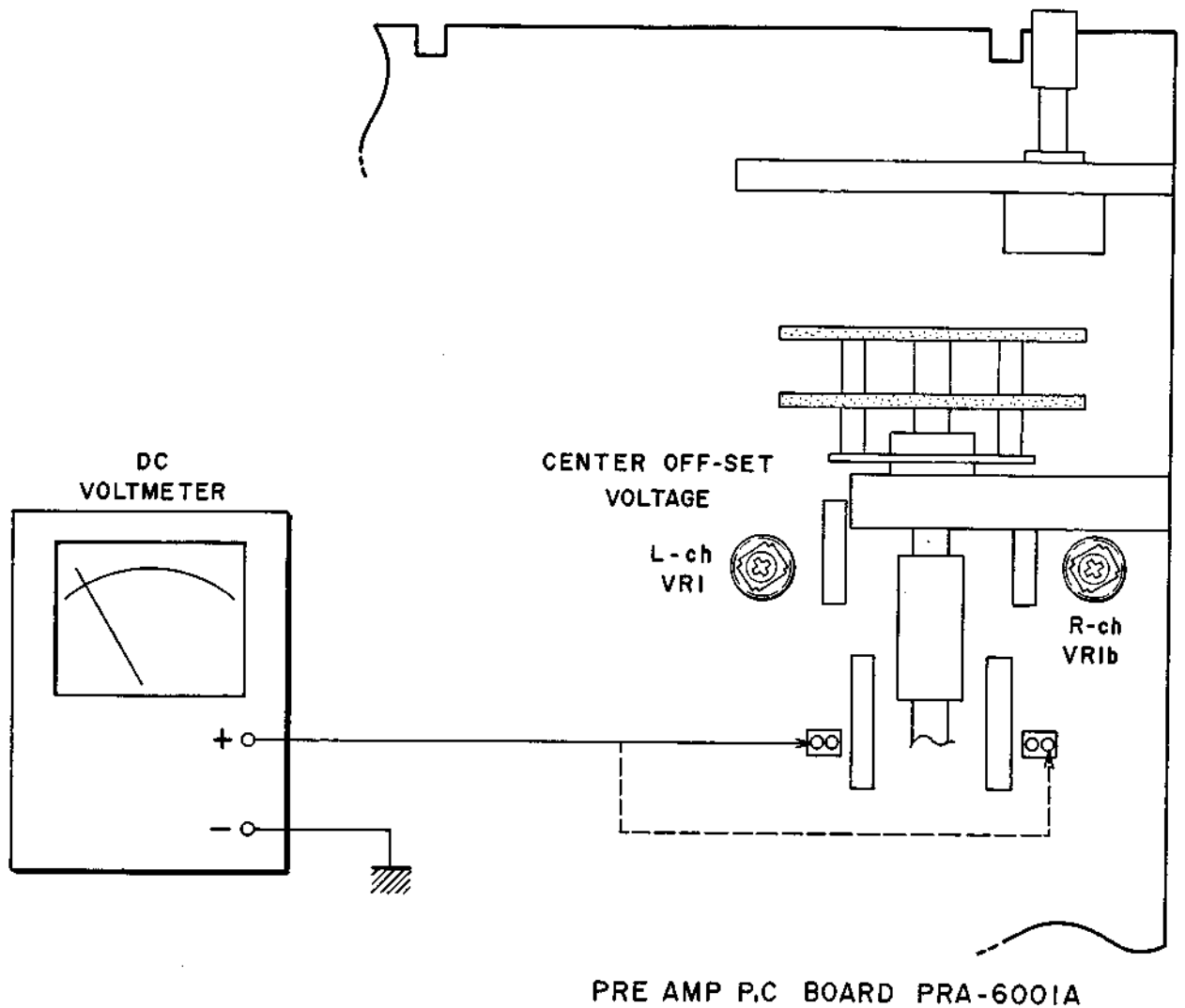


Fig. 5 Pre Amp P.C Board/Instrument Connection

### CENTER OFF-SET VOLTAGE ADJUSTMENT (Refer to Fig. 5)

Connect the Digital Voltmeter or DC Voltmeter between the test points on the Pre Amp P.C Board PRA-6001A and the ground.

Adjust VR1 (L-ch), VR1b (R-ch) 1 k $\Omega$ , so that the voltmeter reads  $0 \pm 0.5V$ .

## VII. CLASSIFICATION OF VARIOUS P.C BOARDS

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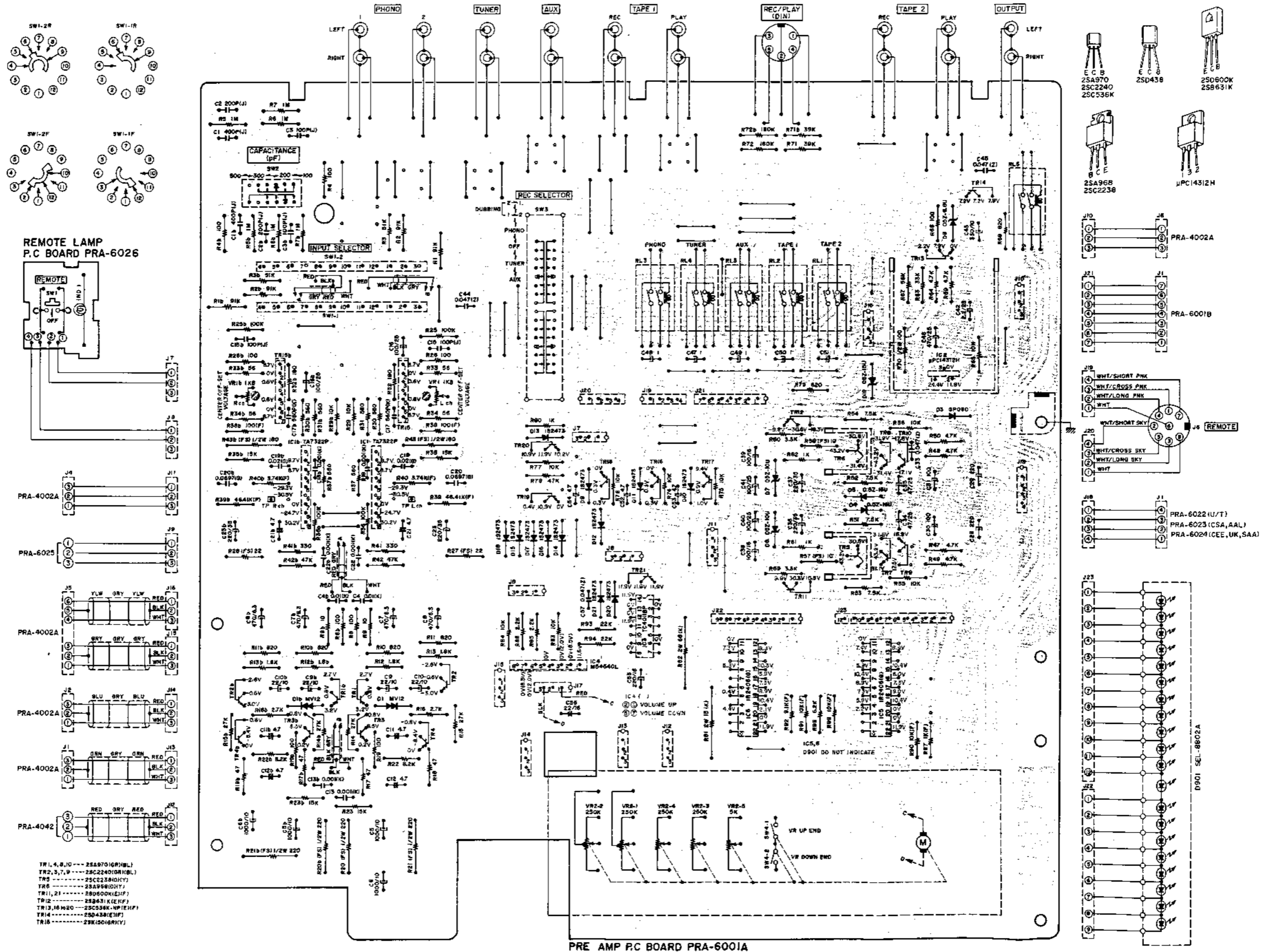
### 1. P.C BOARD TITLES AND IDENTIFICATION NUMBERS

P.C Board Title	P.C Board Number
Pre Amp P.C Board	PRA-6001A
Input Selector P.C Board	PRA-6001B
LED P.C Board (A)	PRA-6001C
Fuse P.C Board (D) (U/T)	PRA-6022
Fuse P.C Board (E) (CSA, AAL)	PRA-6023
Fuse P.C Board (F) (SAA, CEE, UK)	PRA-6024
Switch P.C Board	PRA-6025
Remote Lamp P.C Board	PRA-6026
Tone Control P.C Board	PRA-4002A
LED P.C Board (B)	PRA-4002B
Balance P.C Board	PRA-4042

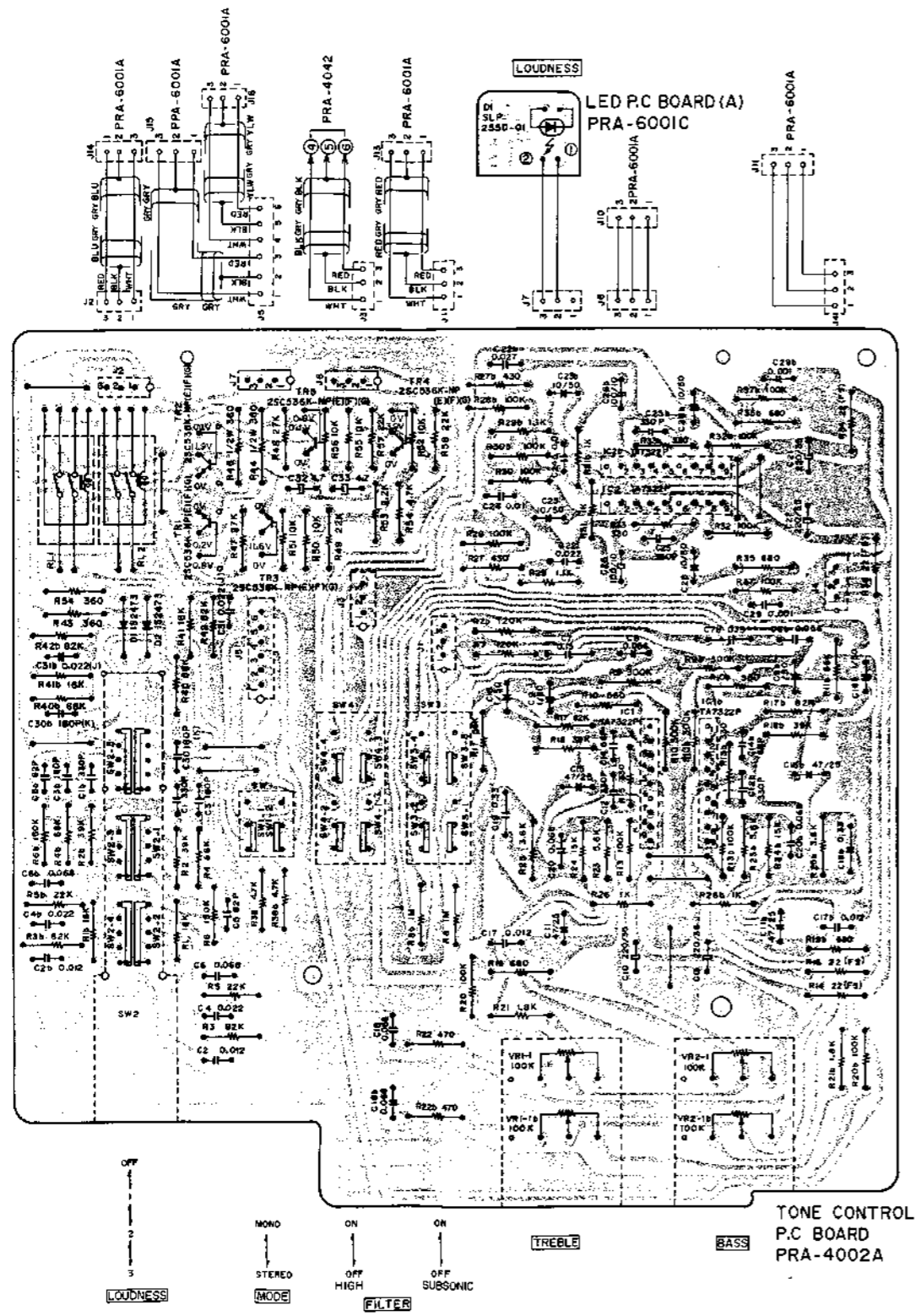
Chart-1

## 2. COMPOSITION OF VARIOUS P.C BOARDS

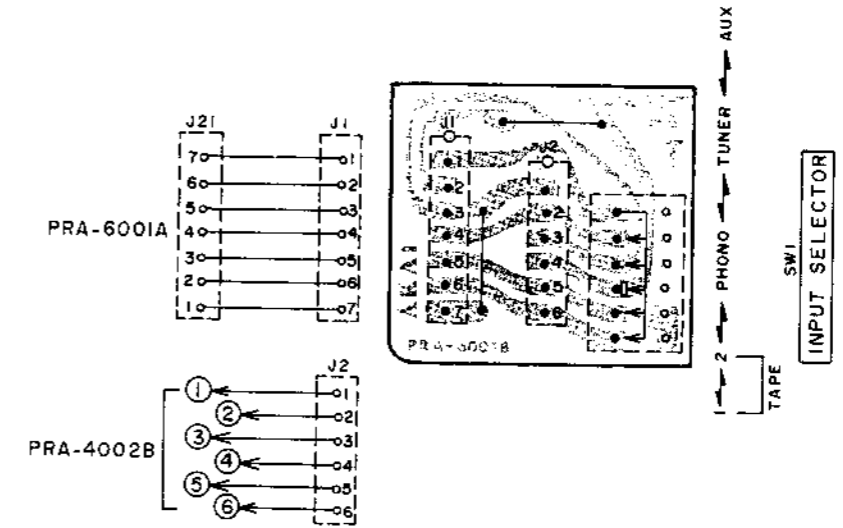
### 1) PRE AMP P.C BOARD PRA-6001A and REMOTE LAMP P.C BOARD PRA-6026



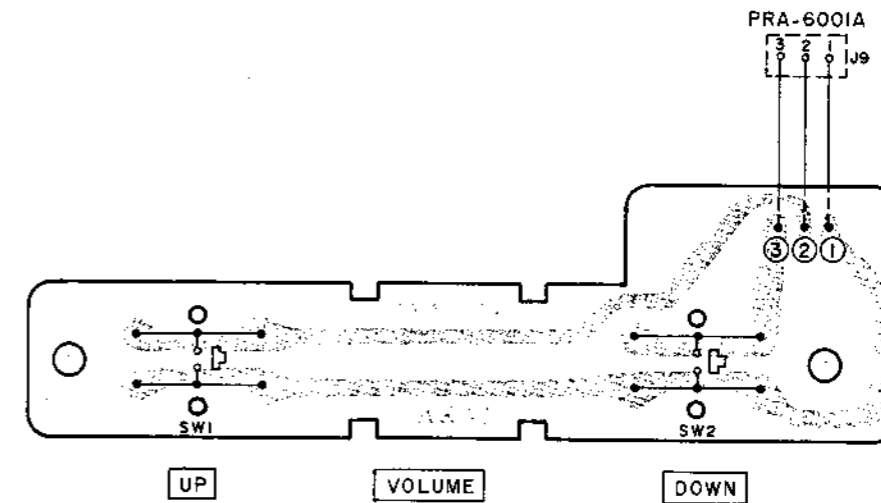
2) TONE CONTROL P.C BOARD PRA-4002A and LED P.C BOARD (A) PRA-6001C



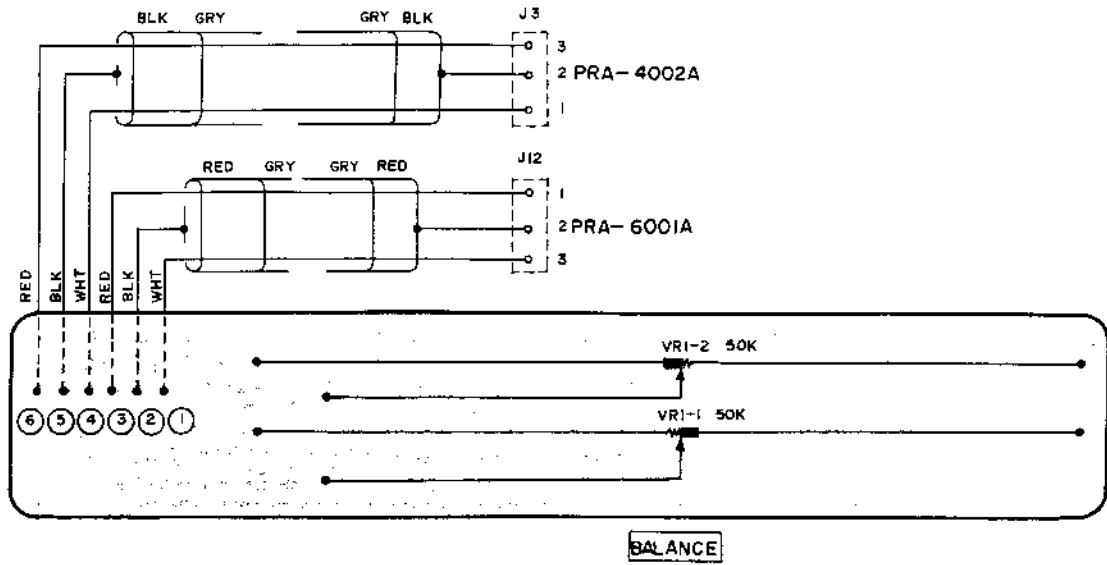
3) INPUT SELECTOR P.C BOARD PRA-6001B



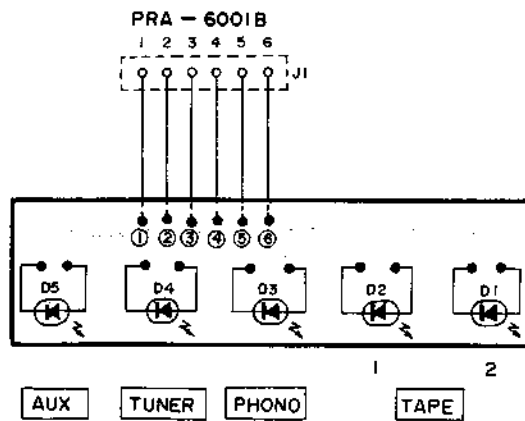
4) SWITCH P.C BOARD PRA-6025



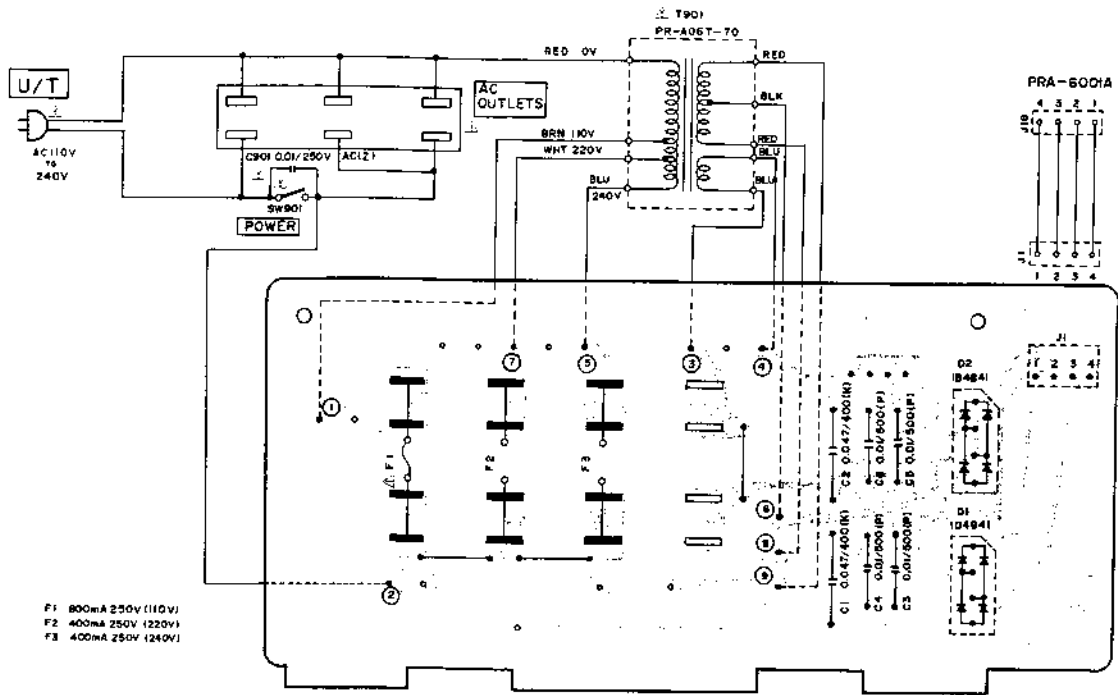
5) BALANCE P.C BOARD PRA-4042



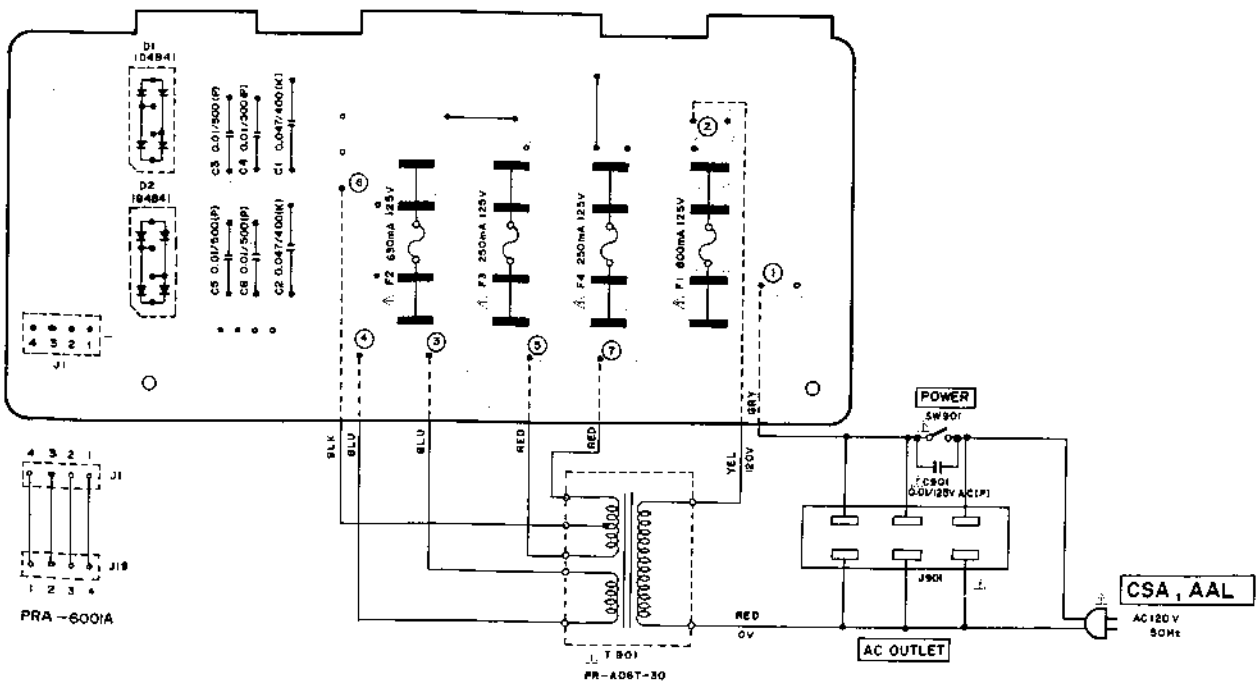
6) LED P.C BOARD (B) PRA-4002B



7) FUSE P.C BOARD (D) (U/T) PRA-6022



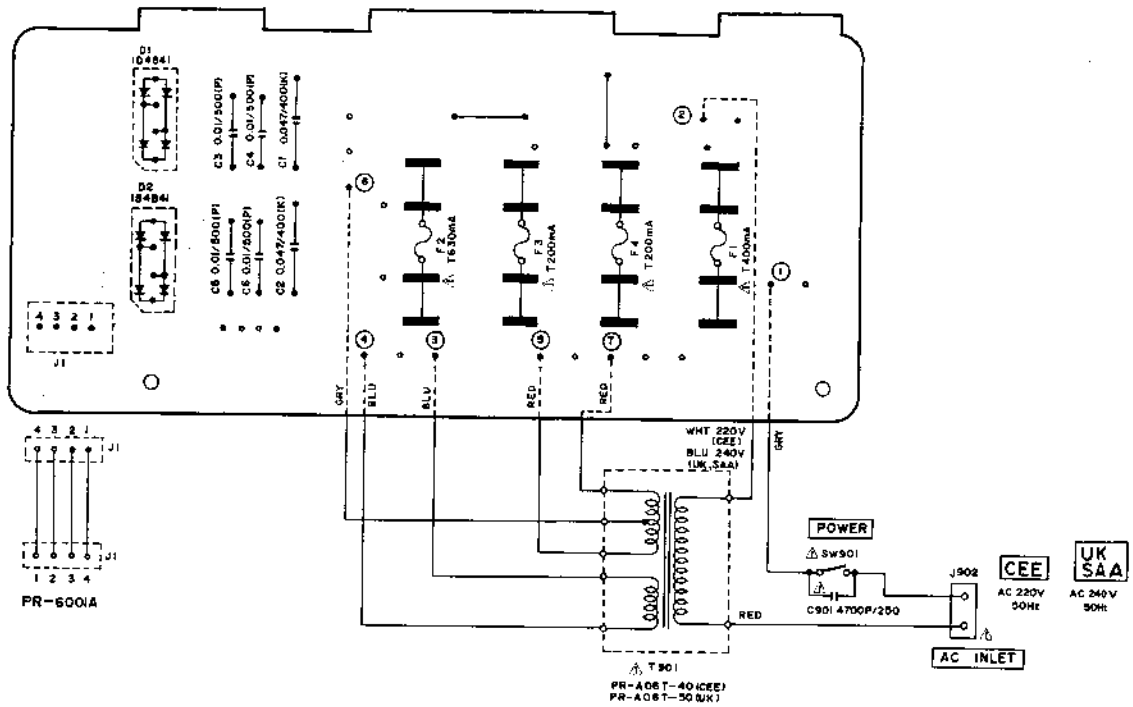
8) FUSE P.C BOARD (E) (CSA, AAL) PRA-6023



WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

9) FUSE P.C BOARD (F) (CEE, UK, SAA) PRA-6024



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SECTION 2

**DC STEREO POWER AMPLIFIER**

**MODEL PA-W06**

ALSO APPLICABLE TO BLACK PANEL MODEL

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2. COMPOSITION OF VARIOUS P.C BOARDS .....	32

For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.



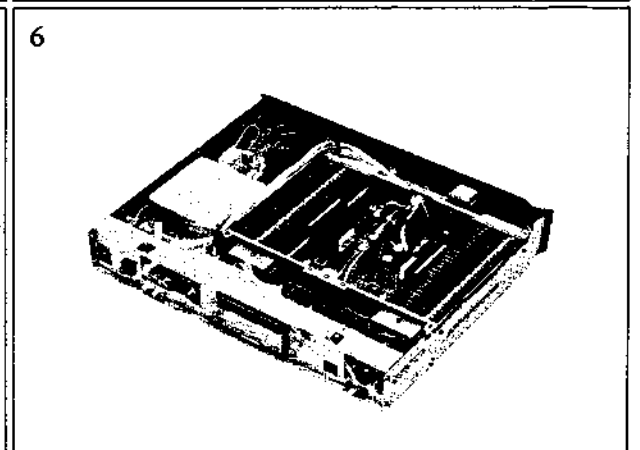
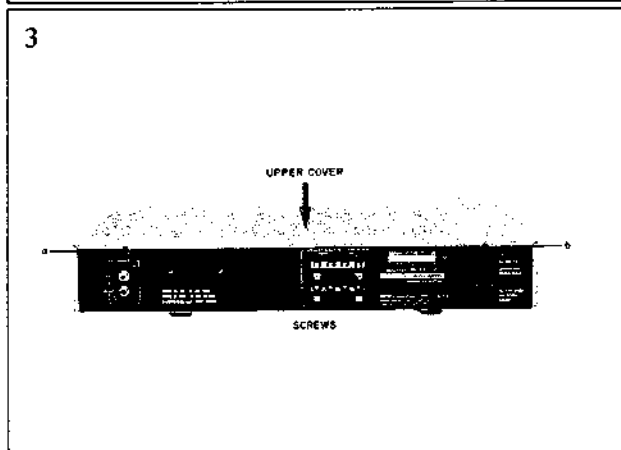
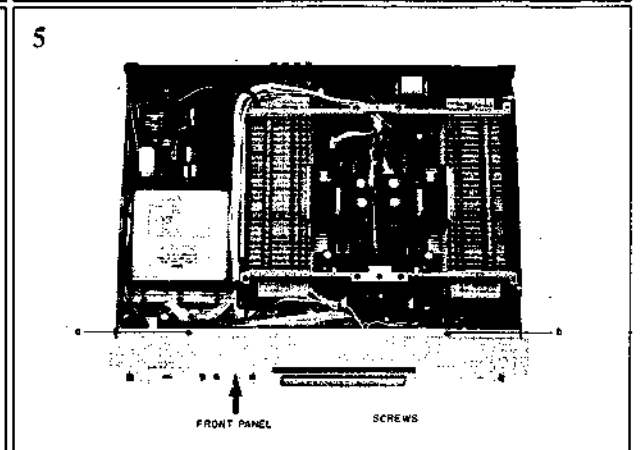
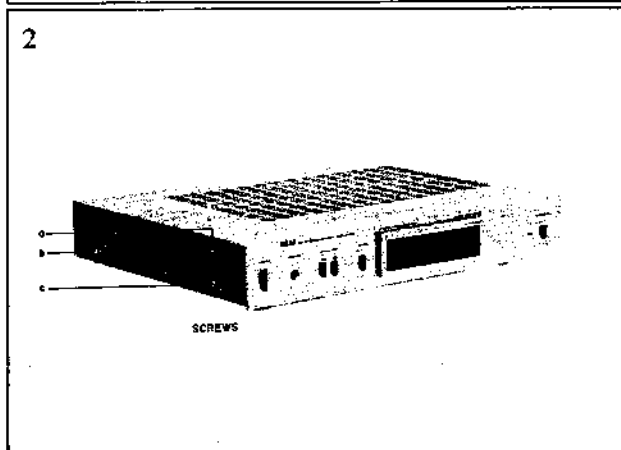
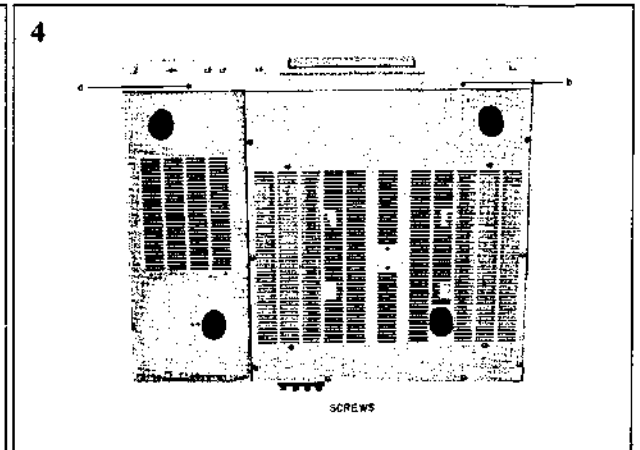
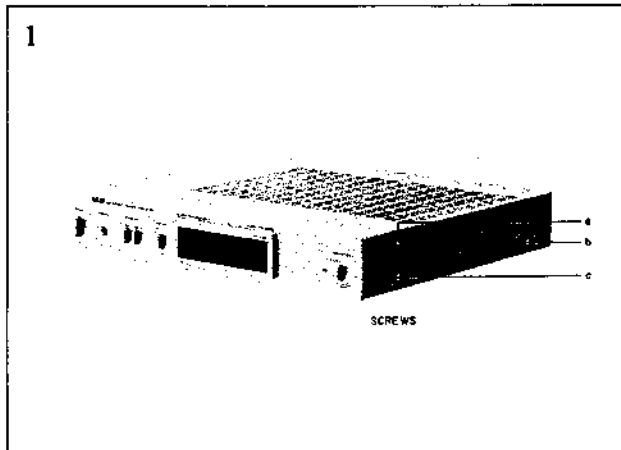
## I. TECHNICAL DATA

RATED POWER OUTPUT (2-channel driven)	68 watts per channel, minimum RMS, at 8 ohms from 20 to 20,000 Hz with no more than 0.008% T.H.D.
TOTAL HARMONIC DISTORTION	0.008% at rated power output
INTERMODULATION DISTORTION	0.008% at rated power output
SIGNAL TO NOISE RATIO (IHF "A")	117 dB
RESIDUAL NOISE (IHF "A" at 8 ohms)	0.05 mV
POWER BANDWIDTH (IHF)	6 Hz to 60 kHz (at 8 ohms, T.H.D. 0.05%)
DAMPING FACTOR (IHF)	More than 100 (1 kHz 8 ohms)
FREQUENCY RESPONSE	DC to 100 kHz +0 dB, -0.5 dB
INPUT SENSITIVITY/IMPEDANCE	1 V/47 kohms
OUTPUT SPEAKERS HEADPHONES	A, B (4 to 16 ohms)/A+B (8 to 16 ohms) 8 to 16 ohms
SUBSONIC FILTER	12 dB/oct. at 5 Hz
SEMICONDUCTORS	Transistors 27, Diodes 50, FETs 2, ICs 7
POWER REQUIREMENTS	120 V, 60 Hz for USA and Canada 220 V, 50 Hz for Europe except UK 240 V, 50 Hz for UK and Australia 110/220/240 V, 50/60 Hz internally switchable for other countries
POWER CONSUMPTIONS	U/T, AAL: 350 W CSA: 250 W CEE, UK: 450 W
DIMENSIONS	440 (W) × 78 (H) × 373 (D) mm (17.3 × 3.1 × 14.7 inches)
WEIGHT	6.8 kg (15.0 lbs)

\* For improvement purposes, specification and design are subject to change without notice.

## II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.



### III. CONTROLS

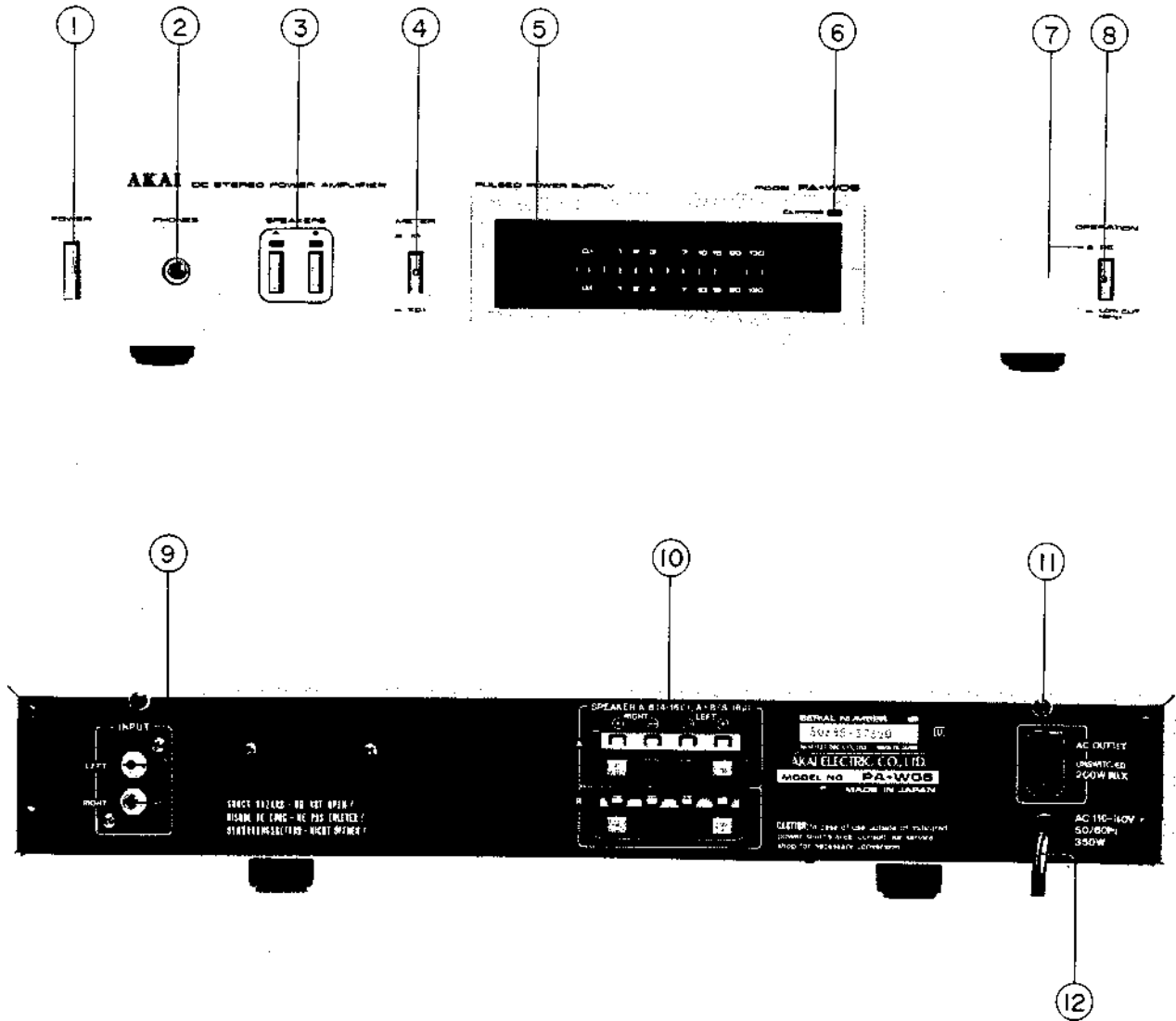


Fig. 1 Controls

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. POWER SWITCH</li> <li>2. HEADPHONE JACK</li> <li>3. SPEAKER SYSTEM SELECTOR SWITCHES AND INDICATORS</li> <li>4. METER SWITCH</li> <li>5. FLD BAR METER</li> <li>6. CLIPPING INDICATOR</li> <li>7. DC OPERATION INDICATOR</li> </ol> | <ol style="list-style-type: none"> <li>8. DC/LOW CUT OPERATION SWITCH</li> <li>9. INPUT JACKS</li> <li>10. SPEAKER OUTPUT JACKS FOR A, B SPEAKER SYSTEMS</li> <li>11. EXTRACT AC OUTLETS<br/>(Some models are not equipped with this facility.)</li> <li>12. AC CORD (Some models are equipped with an AC Inlet instead of an AC cord. Connect with an appropriate power cord.)</li> </ol> |
|---|--|

# IV. PRINCIPAL PARTS LOCATION

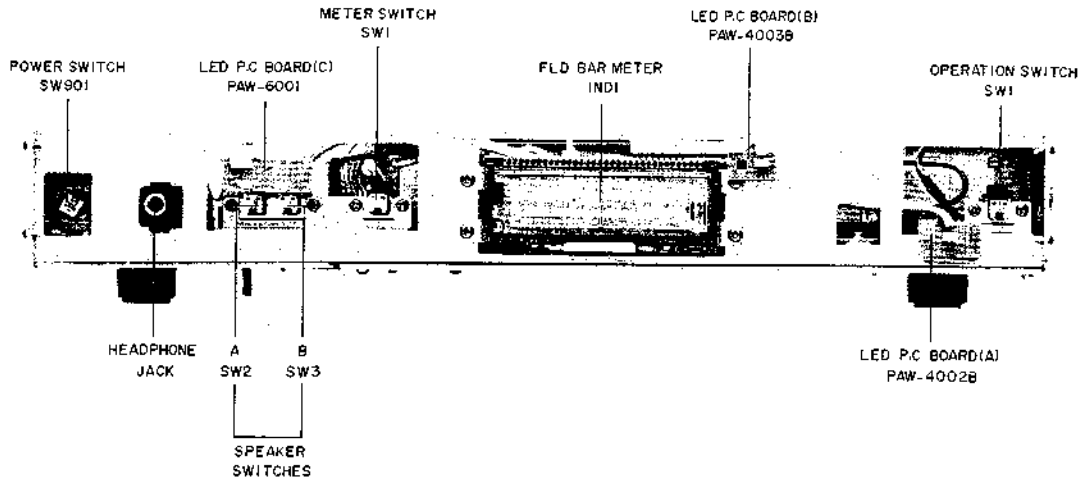


Fig. 2 Front View

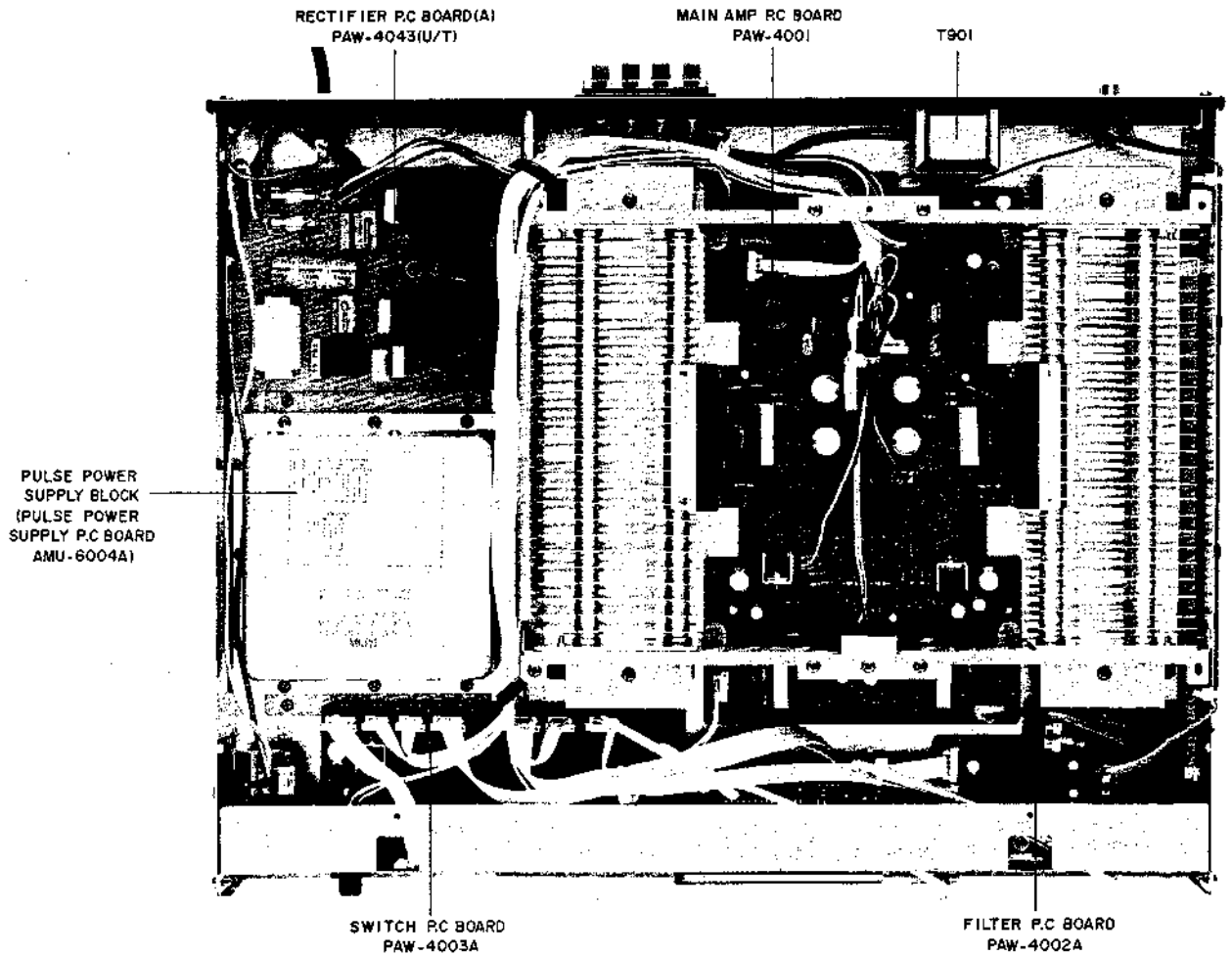


Fig. 3 Top View

## V. VOLTAGE CONVERSION

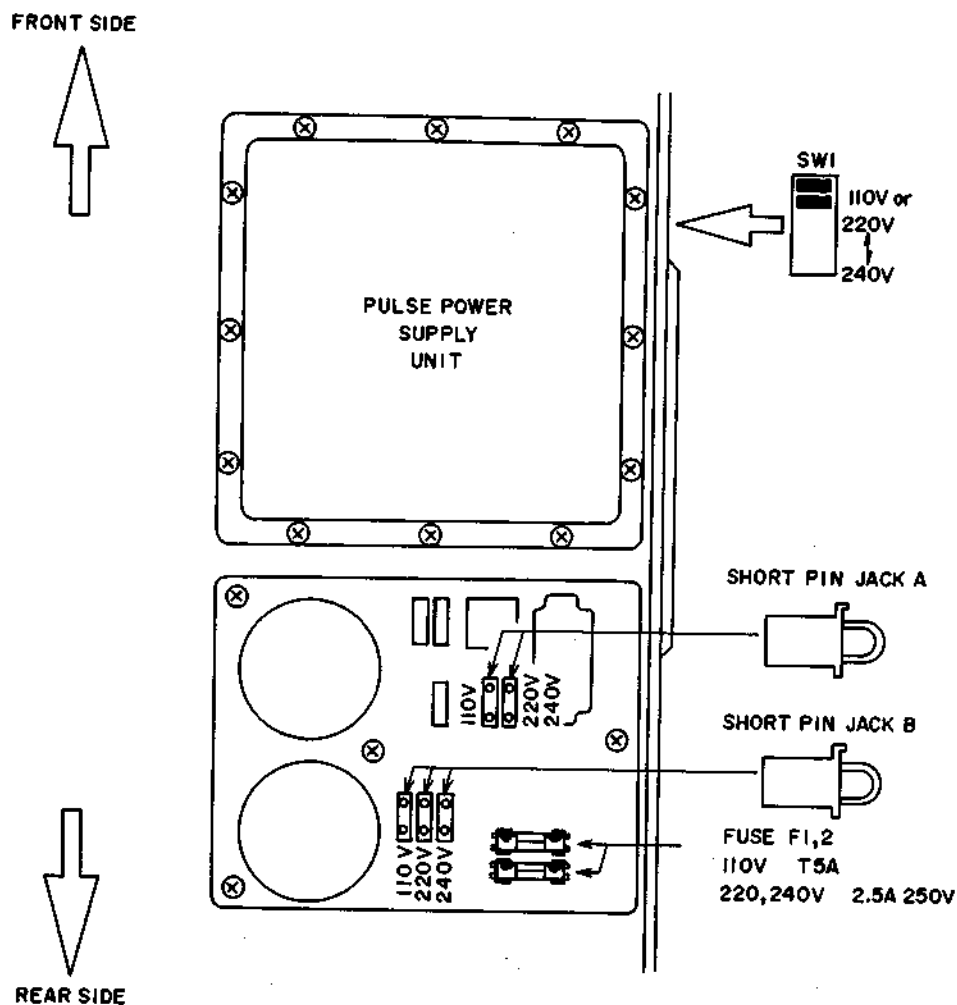


Fig. 4 Voltage Conversion (U/T Model)

### 1. U/T MODEL (Refer to Fig. 4)

1. Switch off the power supply and remove the plug from mains supply.
2. Loosen holding screws and remove top panel.
3. Align the short pin jacks A and B with the position for each voltage area as shown in Fig. 4 and then plug in.
4. Set the slide switch located at the right hand side of the pulse power supply unit in Fig. 1.
5. Change the fuses, 5A for 110V and 2.5A for 220V and 240V areas.

### 2. MODELS OTHER THAN U/T

No voltage conversion.

# VI. OPERATION OF PULSE POWER CIRCUIT

The Pulse Power Circuit is composed of a high-voltage rectifier circuit, oscillator starting circuit, inverter circuit

(blocking oscillator circuit), transformer circuit, rectifier circuit and smoothing circuit as shown below.

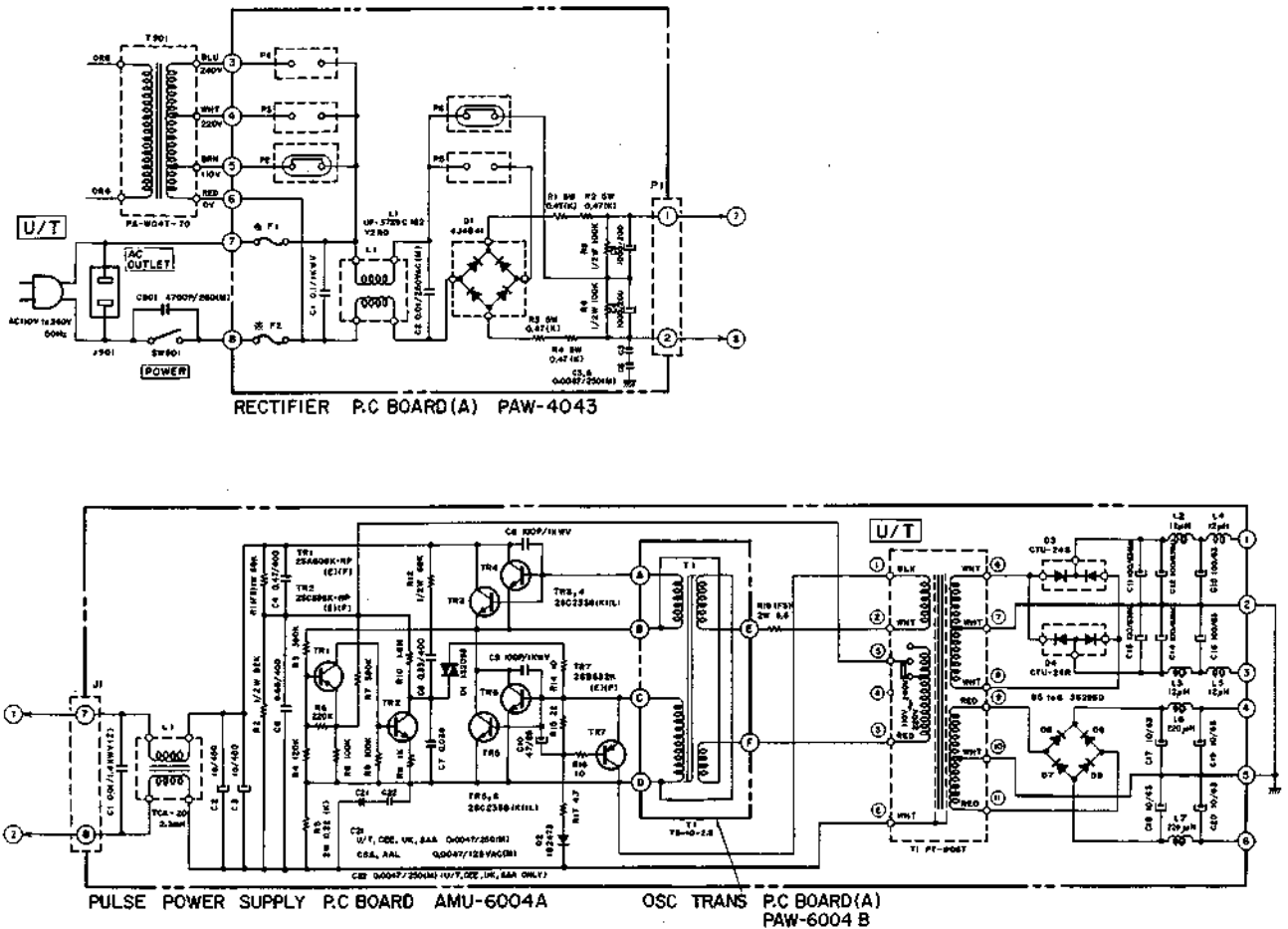


Fig. 5 Schematic Diagram for Power Section

## 1. HIGH-VOLTAGE RECTIFIER CIRCUIT

Either the voltage doubling rectifier system, or the bridge rectifier system is selected according to the difference in the power supply voltage. That is, voltage doubling rectification is adopted for input

voltage of 100 to 120V (for the U.S. Canada and Japan), while bridge rectification is adopted for those of 220 to 240V (for Europe, etc.), to obtain a DC voltage of approximately 300V.

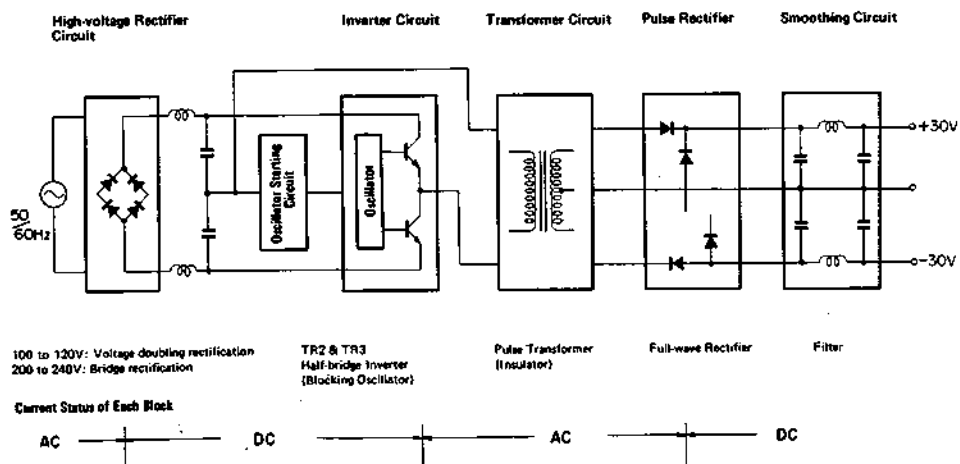


Fig. 6 Block Diagram

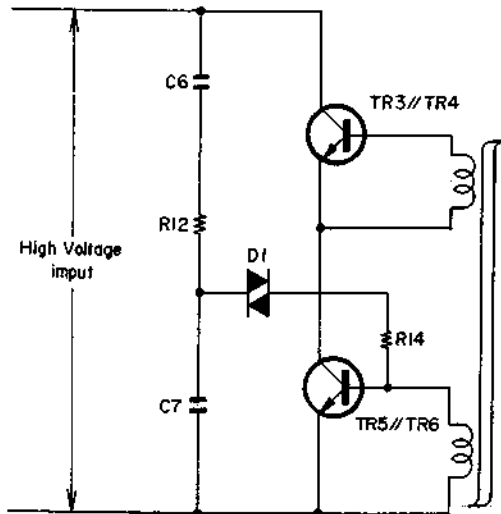


Fig. 7 Principle of Starting Oscillation

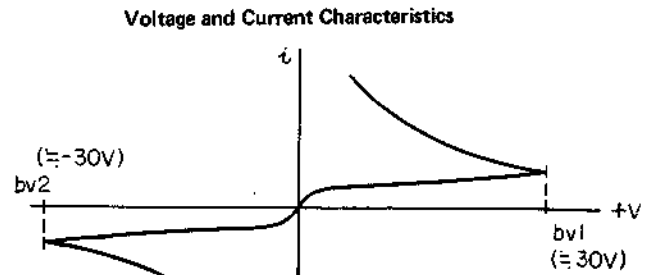


Fig. 8 Diode Characteristics

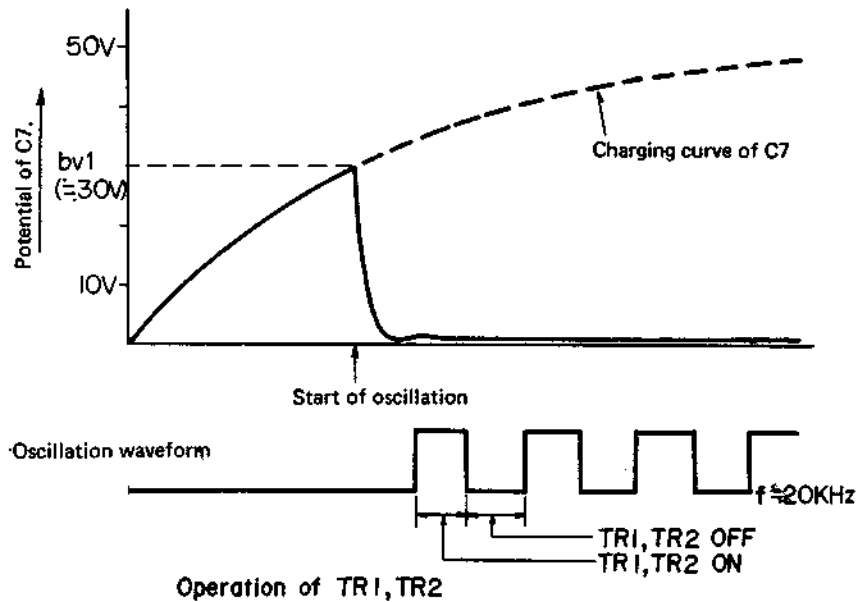


Fig. 9 Operation of TR1

## 2. OSCILLATOR STARTING CIRCUIT

At power switch-on, this circuit creates an initial pulse which starts the inverter circuit of the next stage. D1 is a double-directional trigger diode that quickly turns on when the voltage at both ends exceeds the breakover voltage (approx. 30V) as breakdown voltage flows through it. When the potential of C7 is raised to about 30V by switching-on the power, it will cause a positive trigger pulse to be applied to the bases of TR5//TR6, thereby starting oscillation.

During oscillation, 20 kHz and 300 Vp-p square waves will appear at the intersecting point of TR3//TR4 and TR4//TR5, so that TR1 and TR2 will will repeat the 20 kHz switching operation. That is, the potential of C7 will be discharged when they are turned on, whereas C7 will be charged when turned off. For this reason, the potential of C7 will not reach the break-over voltage of D1, as can be seen from Fig. 9, so that D1 will be in a high-impedance state. And the operations of these circuits are absolutely unrelated to those of other circuits.

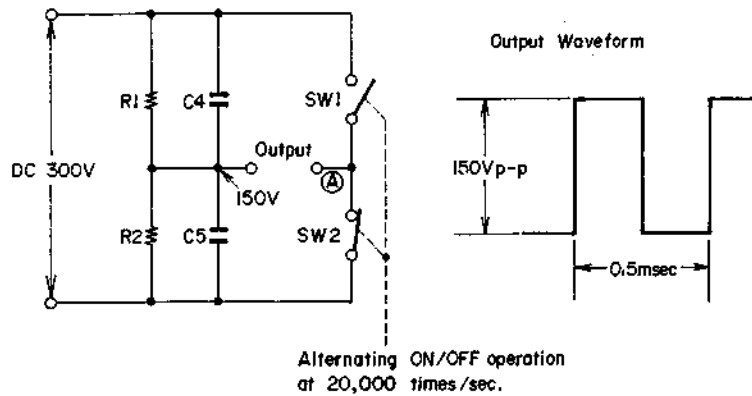


Fig. 10 Principle Diagram of Inverter

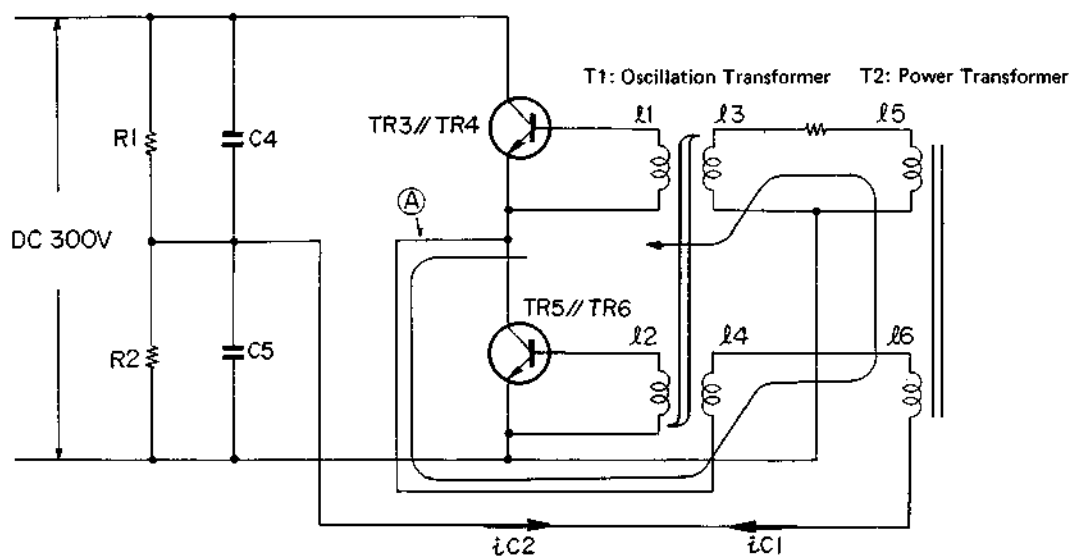


Fig. 11 Basic Schematic Diagram

### 3. INVERTER CIRCUIT (BLOCKING OSCILLATOR CIRCUIT)

As illustrated by Fig. 10, the inverter circuit alternately switches the DC voltage ON and OFF, thus converting it to square wave pulses. The switching is achieved by transistors under the use of a blocking oscillator. The operating principle is shown in Fig. 11. The 300V is divided into 150V and applied to the mid-point of C4 (R1) and C5 (R2). (This will be referred as the mid-point hereinafter.)

First, a trigger pulse is applied to the base of TR3 by the oscillator starting circuit. This causes TR3 to turn on and a collector current  $i_{C2}$  to flow in from the mid-point. Since this current flows from  $l_6$  to  $l_4$ , current will also be induced in  $l_5$  and  $l_3$ . Therefore, this current will be fed back to coil  $l_2$  of TR3's base, following flux variations in T1 (Troidal trans-

former) which accompany current variations in  $l_3$ . As this loop is formed in a direction that realizes positive feedback, collector current  $i_{C2}$  will continue to increase with the increase in the base current of TR3. As a result, the current flowing through  $l_3$  will also continue to increase, causing the flux density to become higher and to eventually reach saturation after the passage of a certain time. When the flux saturates so that the flux no longer varies, the  $l_3$  to  $l_2$  loop will be disconnected as a result. However, even after this positive feedback loop has been disconnected, collector current  $i_{C2}$  will continue to flow for a while, due to the action of the counter electromotive force that works in the direction that permits continued current flow. But, soon, the collector current will start to decrease rapidly.



TR2 ON (TR3 OFF) Period

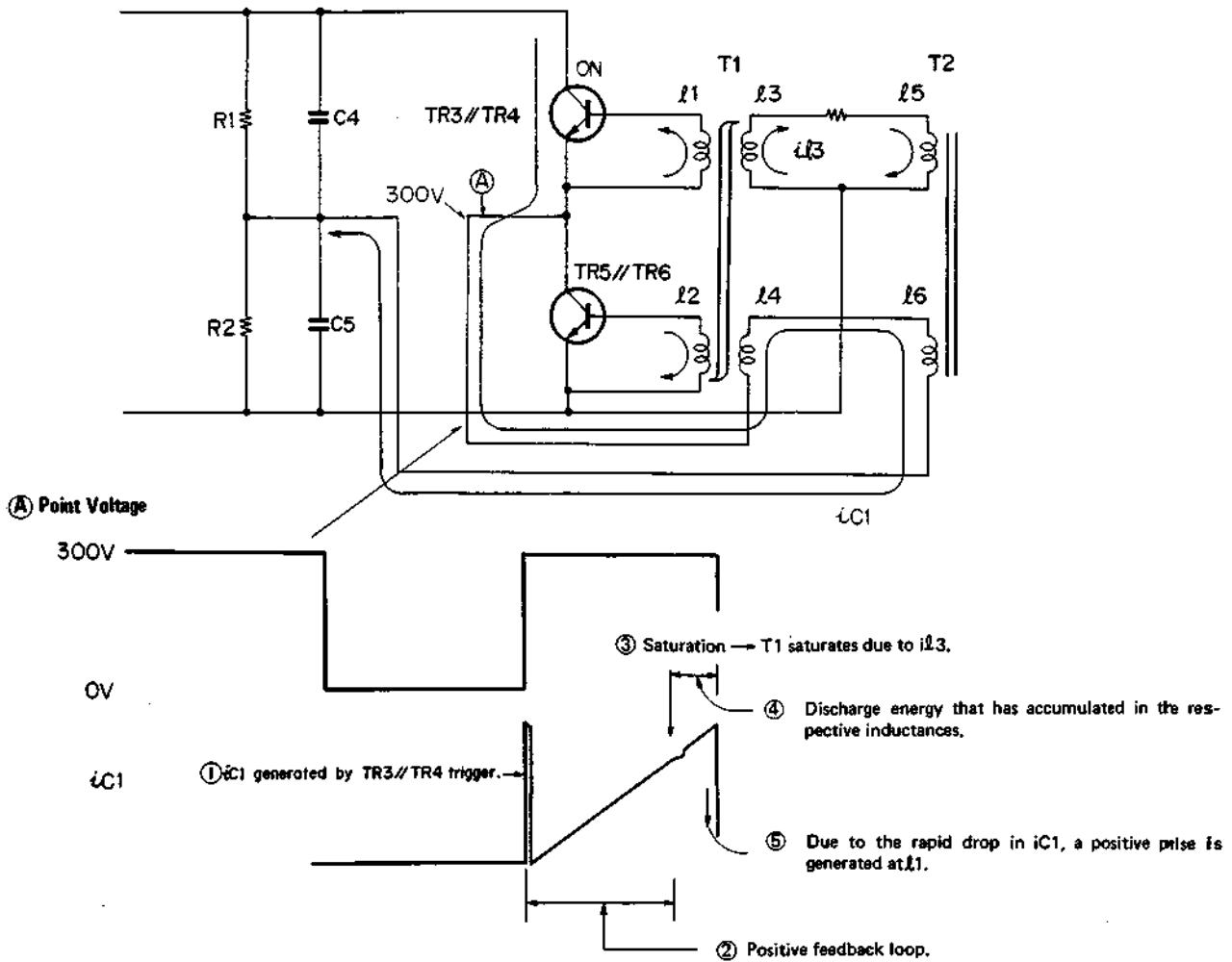


Fig. 12 TR3//TR4 turn-on period

During the above process, TR5//TR6 will be turned on, while TR3//TR4 will be "cut-off". This is because coil  $l1$  of TR3//TR4's base is wound in a direction opposite to which  $l2$  is wound, so that an inverse-direction voltage will be induced for TR3//TR4's base-emitter potential  $V_{BE}$ . For this reason, the potential of the intersecting point of TR3//TR4 and TR5//TR6 will become "0"V. When  $i_{C2}$  starts to decrease rapidly, the resultant flux variation will cause a positive pulse to be generated at  $l1$ , which, in turn, will cause TR3//TR4 to turn on and TR5//TR6 to be cut-off.

Likewise, when the collector (emitter) current  $i_{C2}$  flows in the order of  $l4$  to  $l6$  to mid-point, it will cause a positive feedback loop of  $l6$  to  $l5$  to  $l3$  to  $l1$  to be formed, so that a process similar to that just described will take place.

TR5,6 ON (TR2 OFF) Period

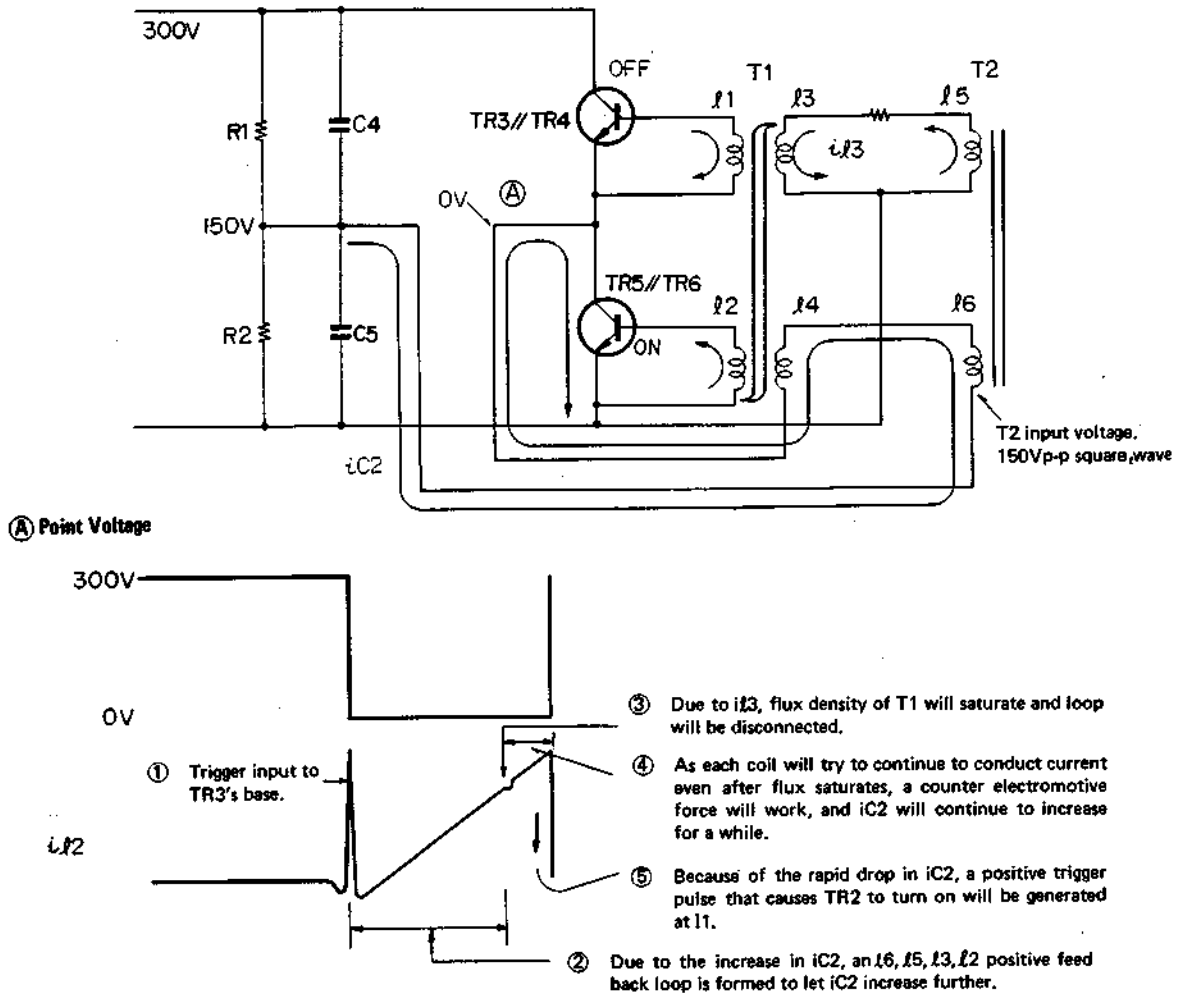


Fig. 13 TR5, 6 turn-on period

In this way, TR3//TR4 and TR5//TR6 will be alternately turned on again and again, causing square waves to be generated. Fig. 13 gives the waveforms appearing at the respective sections during the serial process.

When a potential is produced at R5 (0.22 ohms) due to overload (load shortening, etc.), TR7 goes ON and the base and emitter of TR5//TR6 are shorted, causing the oscillation to stop for overload protection.

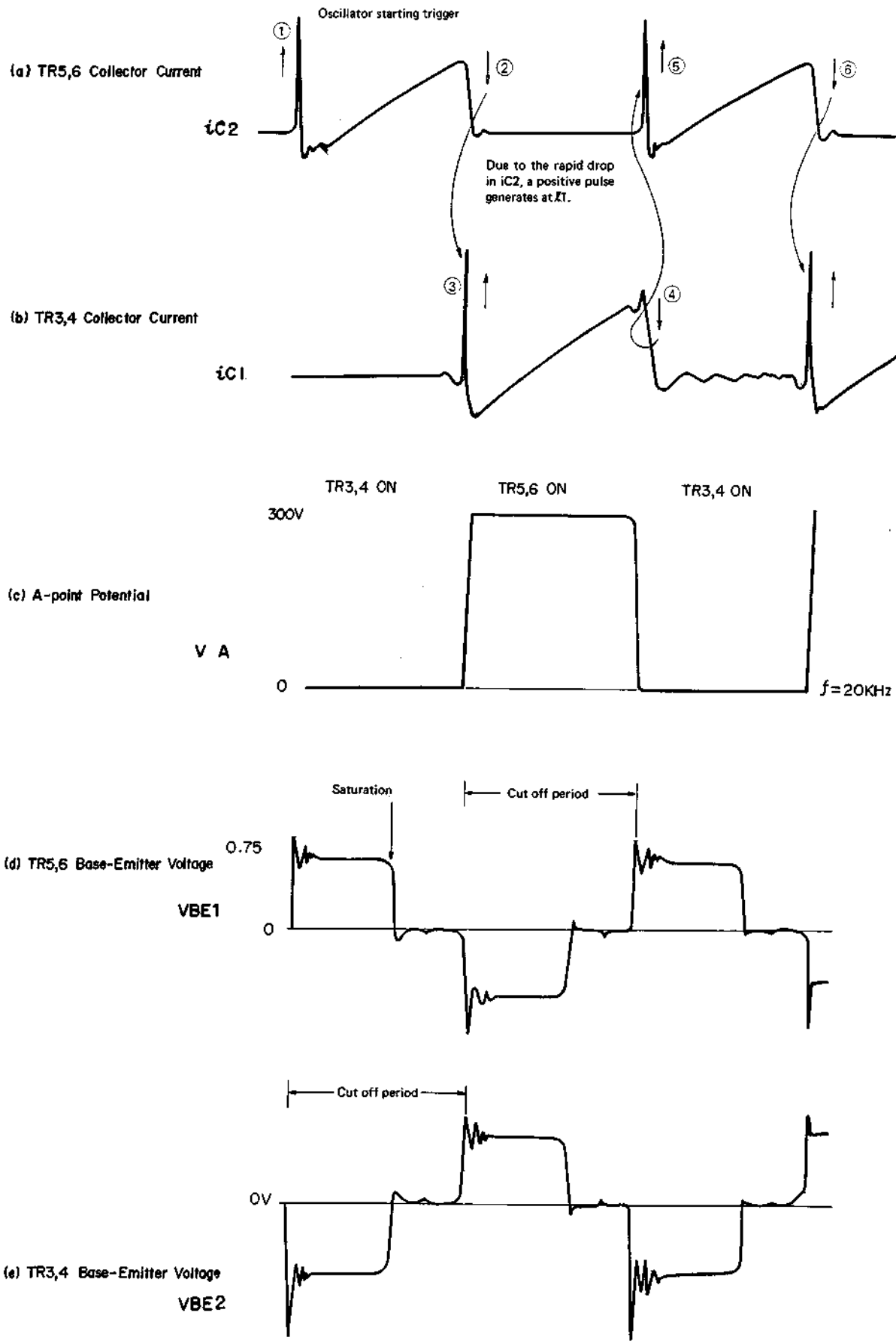


Fig. 14 Summary of waveforms appearing at each section

---

As shown in (d) and (e), the waveform of the base-emitter voltage of TR3//TR4 and TR5//TR6 will become "0" V upon saturation of T1's flux. In the meantime, the base current will flow in the direction similar to that before saturation, because of the counter electromotive force.

Meanwhile, by having a negative feedback applied at the high frequency range, the capacitor provided between the collector and bases of TR3//TR4 and TR5//TR6 will function so as to hold down the wave height to an adequate level to prevent the peak values from rising above the maximum ratings of the respective transistors.

The oscillating frequency of this circuit is determined by such factors as the maximum flux density of T1 and the current flowing through  $\mathcal{L}3$ . It is ordinarily designed to be approximately 20 kHz.

#### 4. TRANSFORMER CIRCUIT

Although it is based on the same principle as that applied to general power transformers, the core material has been changed into ferrite material from the conventional electrical steel plate material to match the input waveform (square wave of approx. 20 kHz). Owing to the high permeability and use of high frequencies, power loss is far less than with conventional transformers. Therefore, it permits miniaturization of circuitry, which is the advantage of using a pulse power supply.

At the same time, the transformer circuit functions to insulate the secondary-side chassis potential from the AC input potential applied to the prime side.

#### 5. RECTIFIER CIRCUIT

Although this is a full-wave rectifier circuit intended for use with both plus and minus power supplied, it employs first recovery diodes having a quick reverse recovery time ( $t_{rr}$ ) to enable high-efficiency rectification of square waves. Ordinary rectifying diodes cannot be used in this circuit.

#### 6. SMOOTHING CIRCUIT

Because of the high frequencies, it enables direct current having a low ripple factor to be obtained with a small-capacity electrolytic capacitor. Since it has to handle square waves and impulsive triggers, and because of large number of harmonics, the pulse power supply is formed into an LPF (smoothing circuit employing a choke coil. At the same time, to avoid interference caused by radiation and induction of electromagnetic waves, the pulse power circuit, excluding the high-voltage rectifier circuit, is enclosed in a shield case to ensure sufficient shield-off. Packing used for the shield case is made of conductive material if it has been damaged during servicing or for other reasons, it must be replaced with new packing. Otherwise, undesirable radiation from the damaged part may cause noise to generate in other circuits.

## VII. ADJUSTMENT

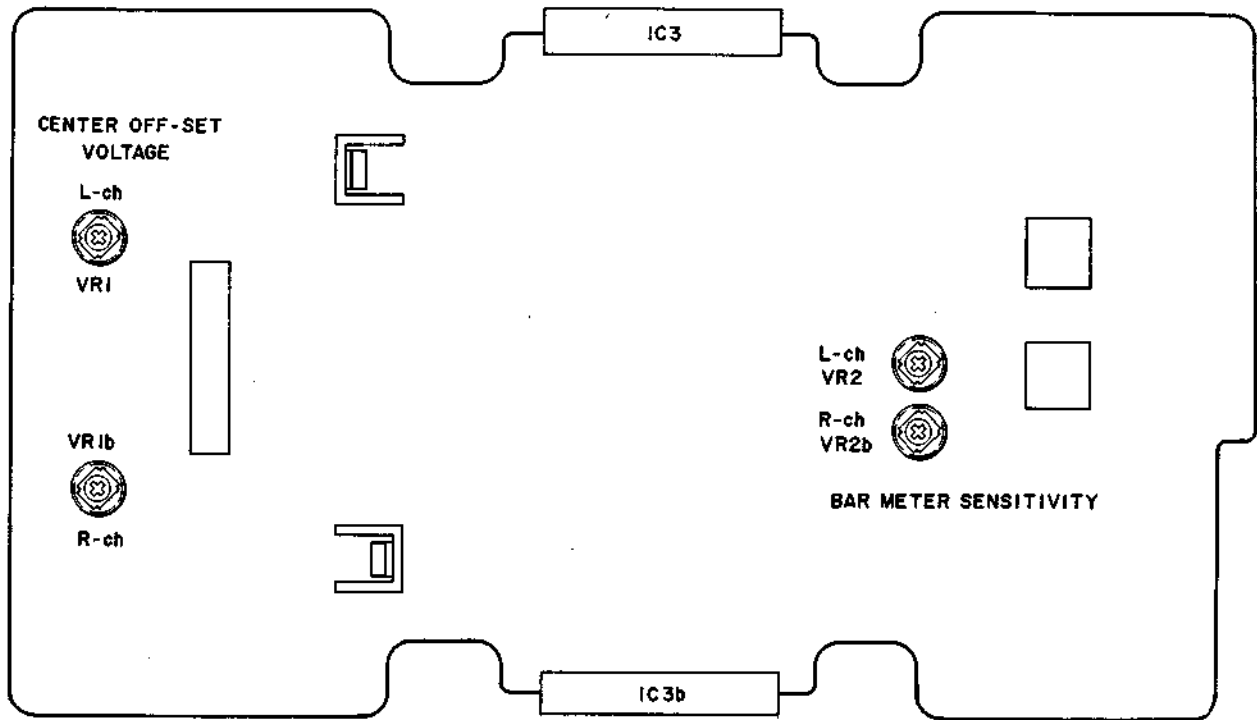


Fig. 15 Main Amp P.C Board

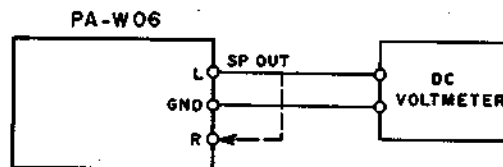


Fig. 16 Instrument Connection for Center off-set Voltage

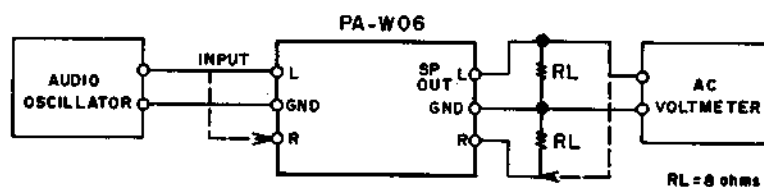


Fig. 17 Instrument Connection for Bar Meter Sensitivity

### 1. CENTER OFF-SET VOLTAGE

#### ADJUSTMENT (Refer to Figs. 15, 16)

Connect the Digital Voltmeter or DC Voltmeter between the SPEAKERS terminal.

Adjust VR1 (L-ch), VR1b (R-ch) 1k $\Omega$ , so that the Voltmeter reads  $0 \pm 50$  mV.

### 2. BAR METER SENSITIVITY

#### ADJUSTMENT (Refer to Figs. 15, 17)

Set the METER switch to "x1" position. Connect load resistors to the SPEAKERS terminal.

Input a sine wave signal of 1 kHz to the INPUT terminal and control the input signal level until the AC Voltmeter connected to the both ends of the load resistor reads 10.95V.

Under this condition, adjust the VR2 (L-ch), VR2b (R-ch) 2.2k $\Omega$  so that the BAR METER indicates 35W.

## VIII. CLASSIFICATION OF VARIOUS P.C BOARDS

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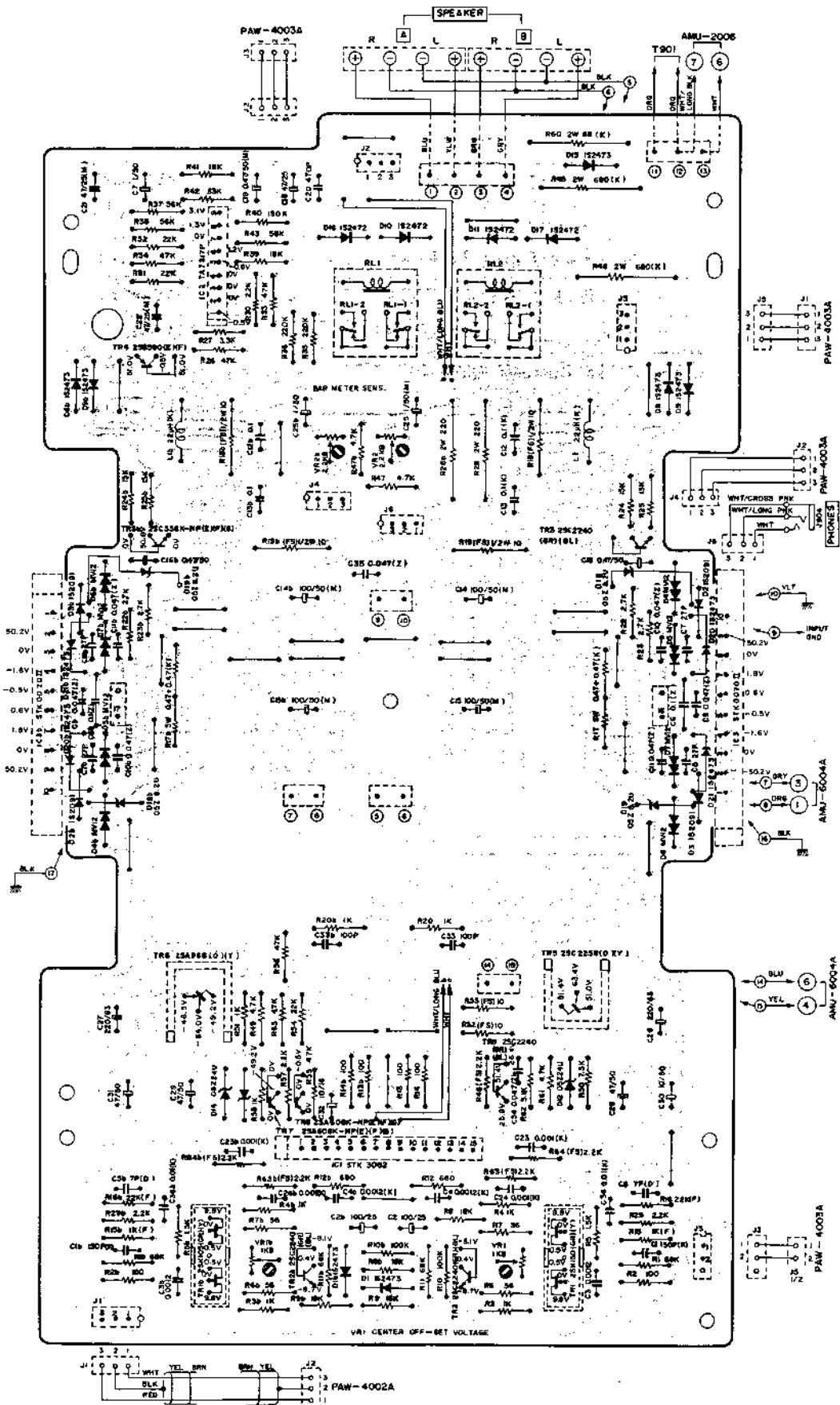
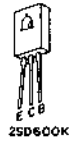
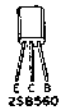
### 1. P.C BOARD TITLES AND IDENTIFICATION NUMBERS

P.C Board Title	P.C Board Number
Main Amp P.C Board	PAW-4001
Filter P.C Board	PAW-4002A
LED P.C Board (A)	PAW-4002B
Switch P.C Board	PAW-4003A
LED P.C Board (B)	PAW-4003B
LED P.C Board (C)	PAW-6001
Pulse Power Supply P.C Board	AMU-6004A
Rectifier P.C Board (A) (U/T)	PAW-4043
Rectifier P.C Board (D) (CSA, AAL)	PAW-6035
Rectifier P.C Board (E) (SAA, CEE, UK)	PAW-6036
Bar Meter P.C Board	AMU-2006

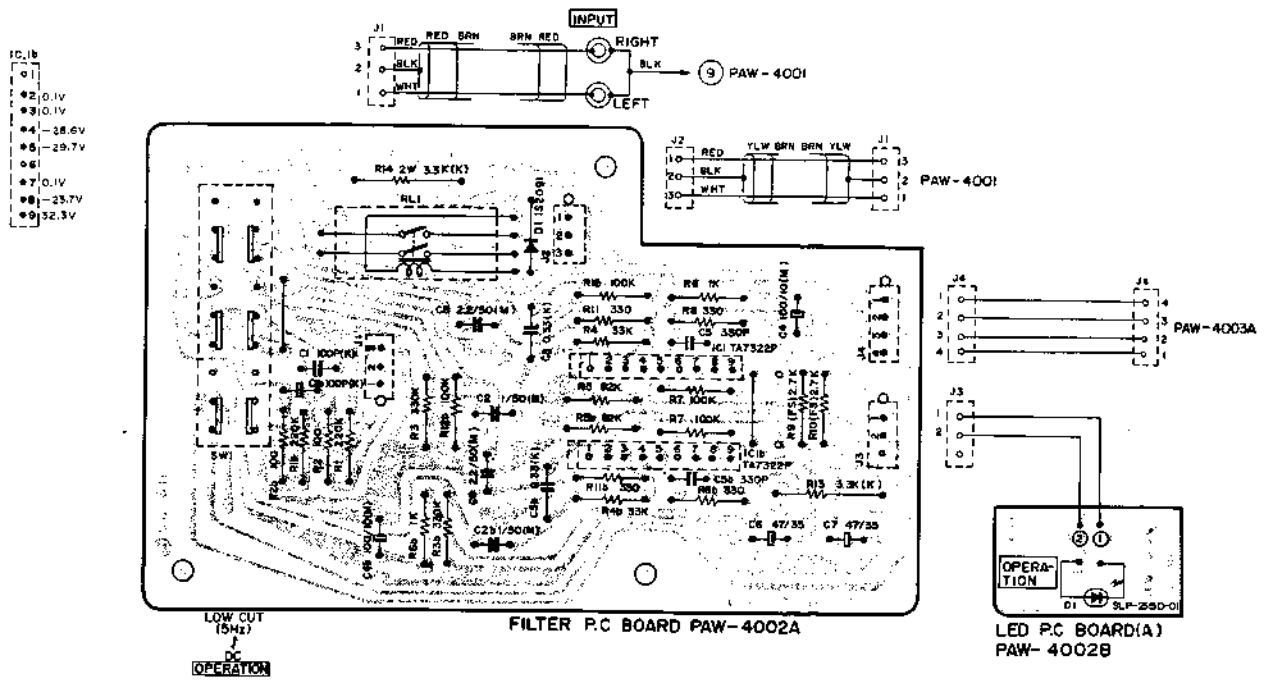
Chart-1

## 2. COMPOSITION OF VARIOUS P.C BOARDS

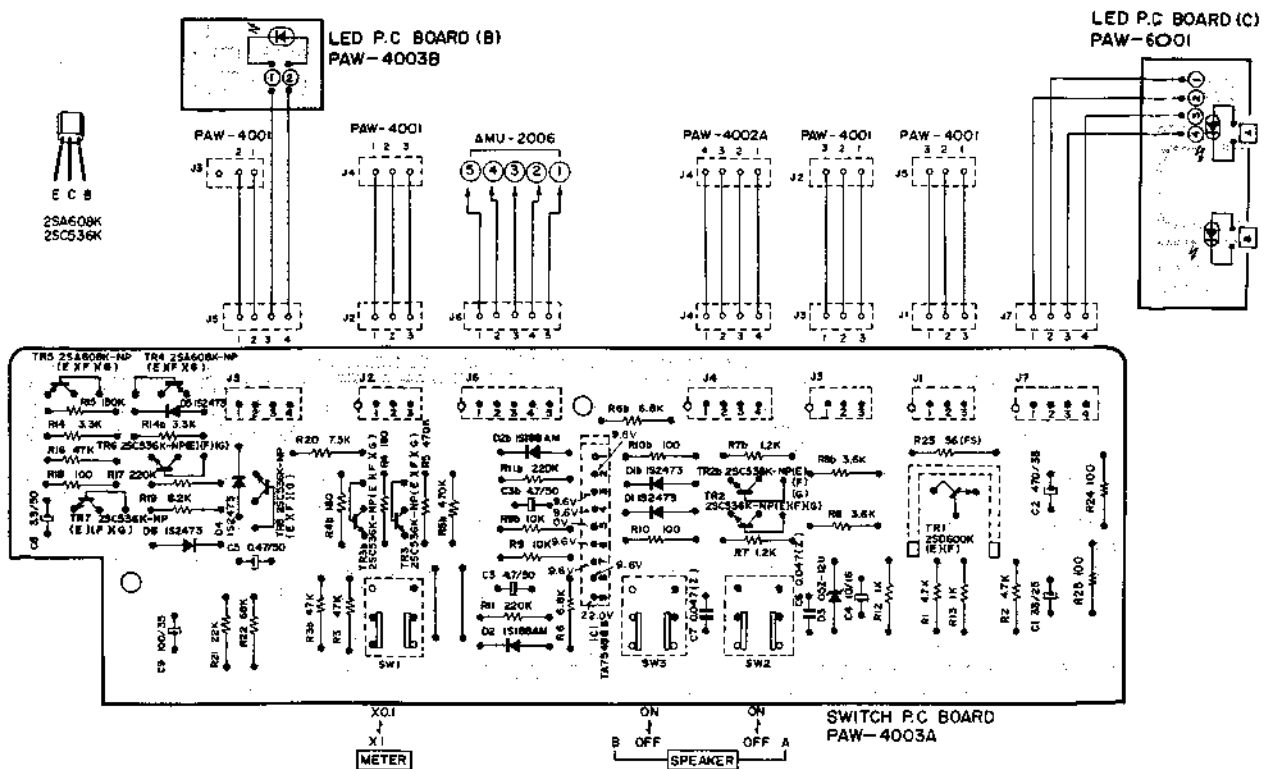
### 1) MAIN AMP P.C BOARD PAW-4001



2) FILTER P.C BOARD PAW-4002A (3ED) and LED P.C BOARD (A) PAW-4002B

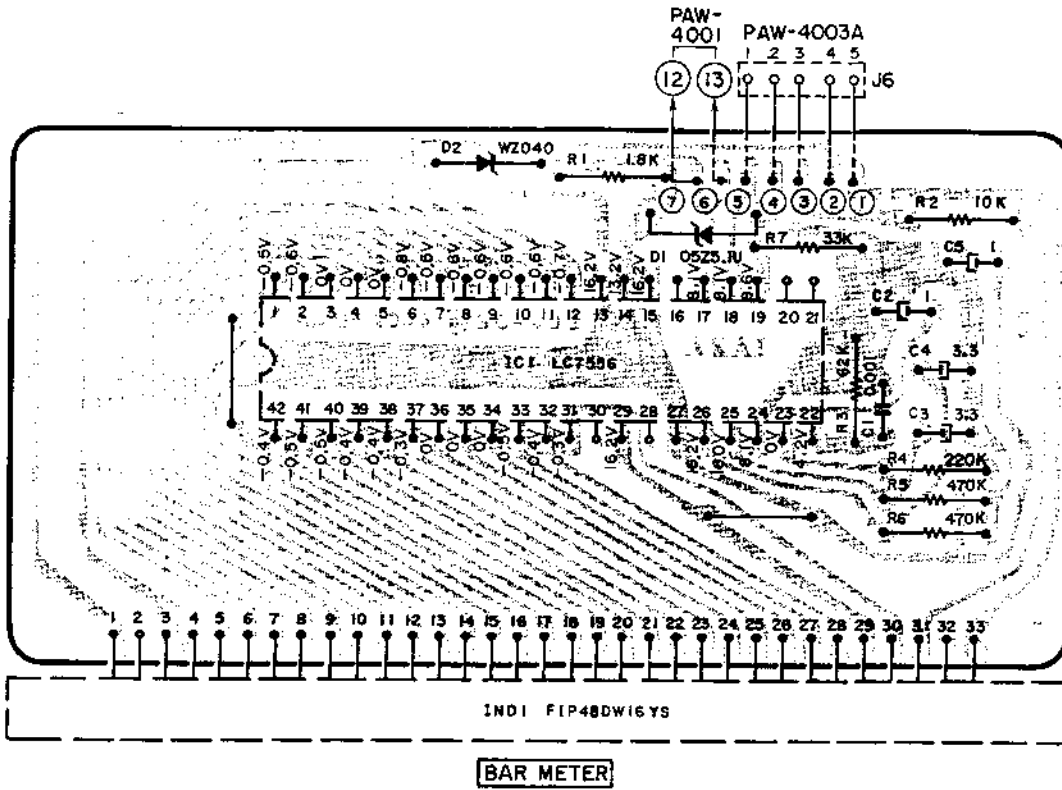


3) SWITCH P.C BOARD PAW-4003A, LED P.C BOARD (B) PAW-4003B and LED P.C BOARD (C) PAW-6001

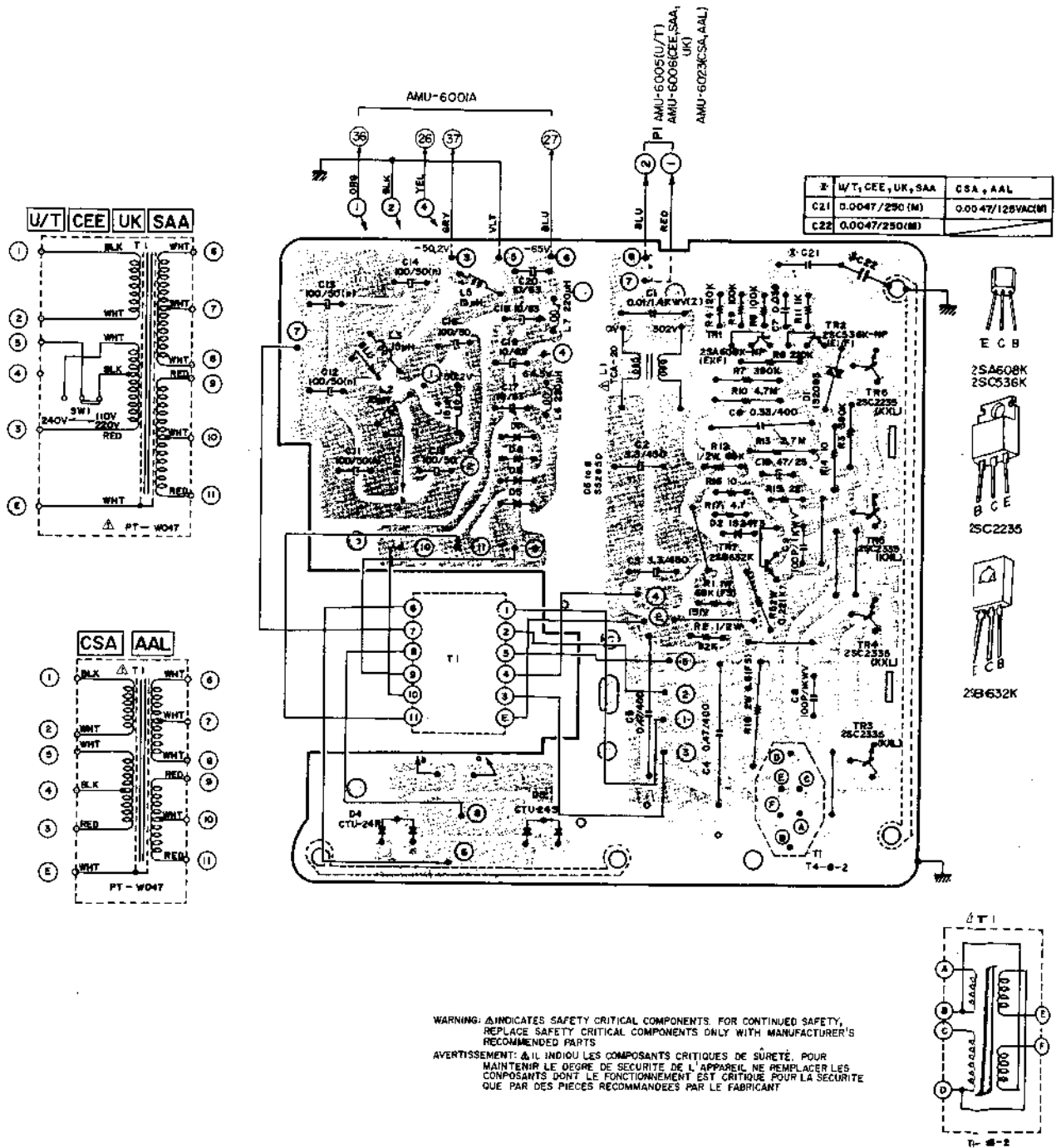




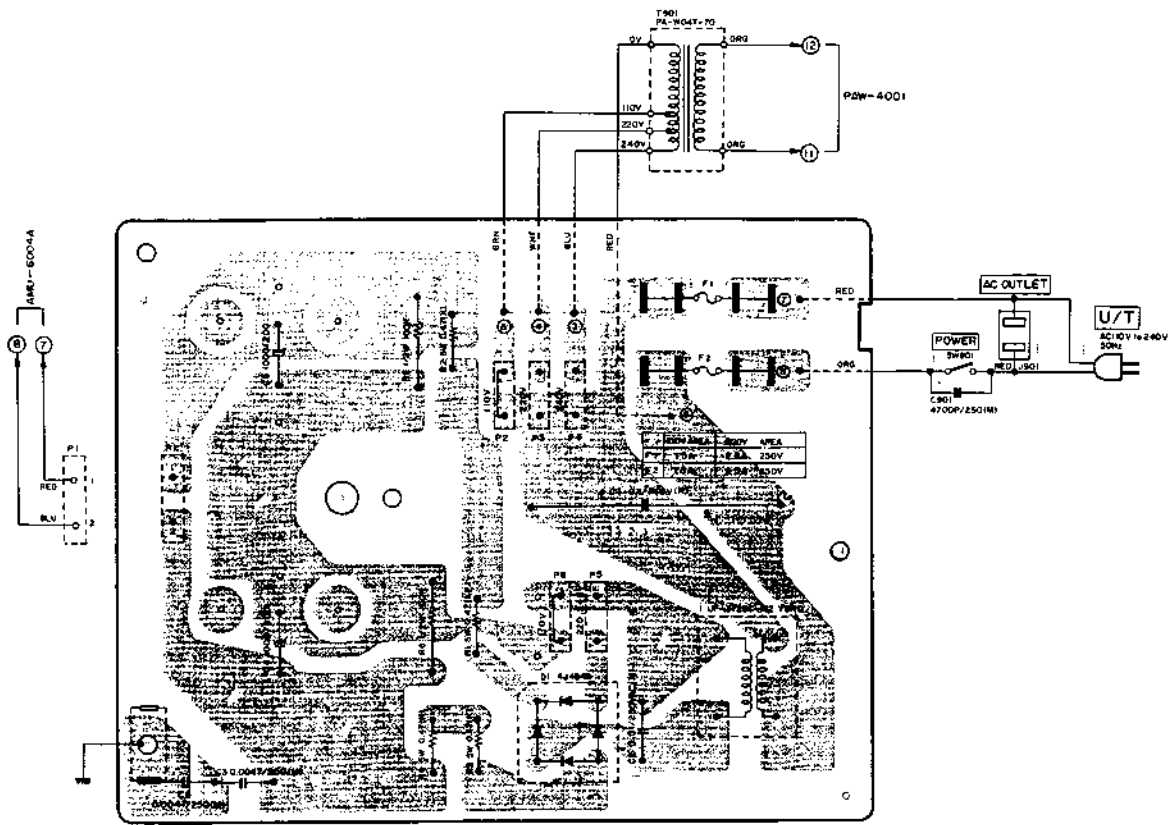
4) METER P.C BOARD AMU-2006 (2ED)



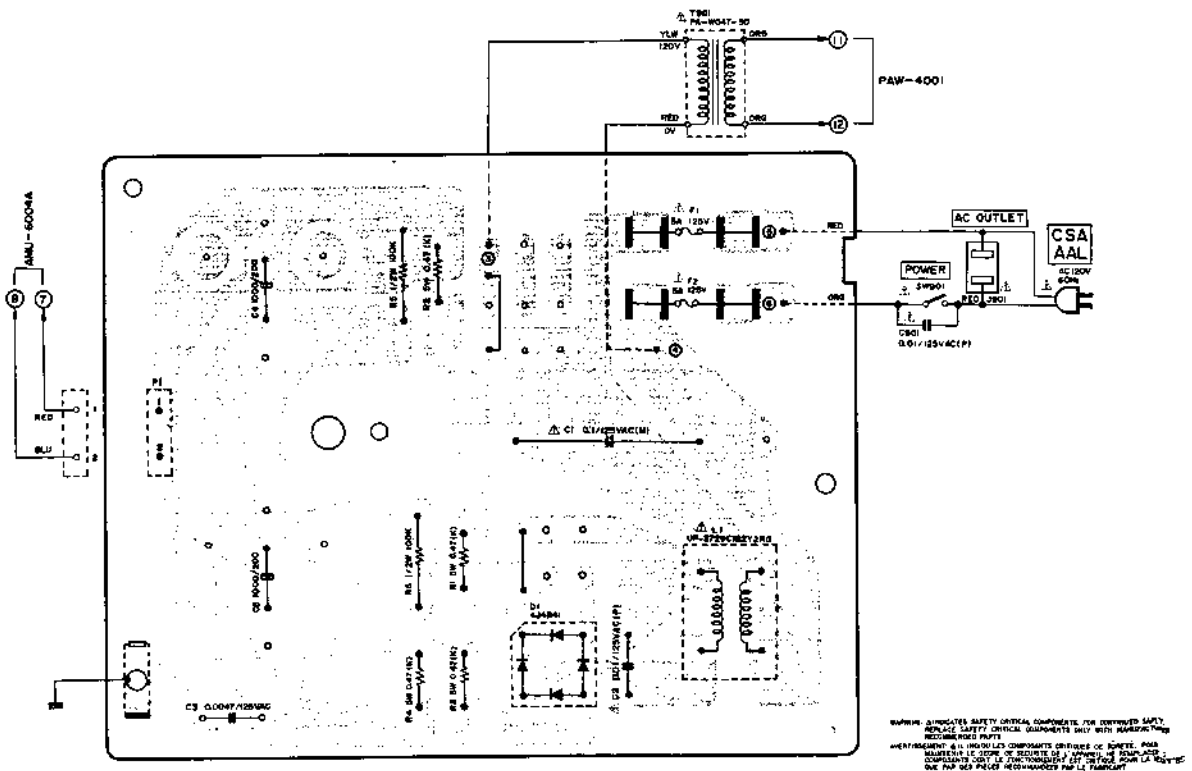
# 5) PULSE POWER SUPPLY P.C BOARD AMU-6004A



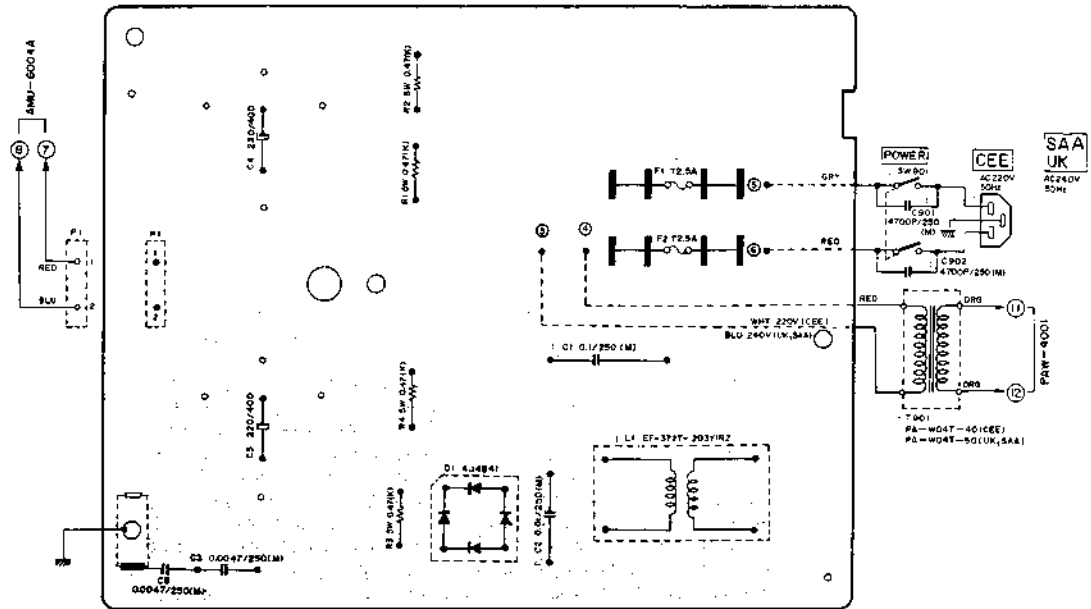
6) RECTIFIER P.C BOARD (A) (U/T) PAW-4043 (3ED)



7) RECTIFIER P.C BOARD (D) (CSA, AAL) PAW-6035



### 8) RECTIFIER P.C BOARD (E) (SAA, CEE, UK) PAW-6036



WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL NE REMPLACEZ LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

SECTION 3

**PARTS LIST**

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II. MODEL PA-W06

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- 9. FINAL ASSEMBLY BLOCK ..... 58

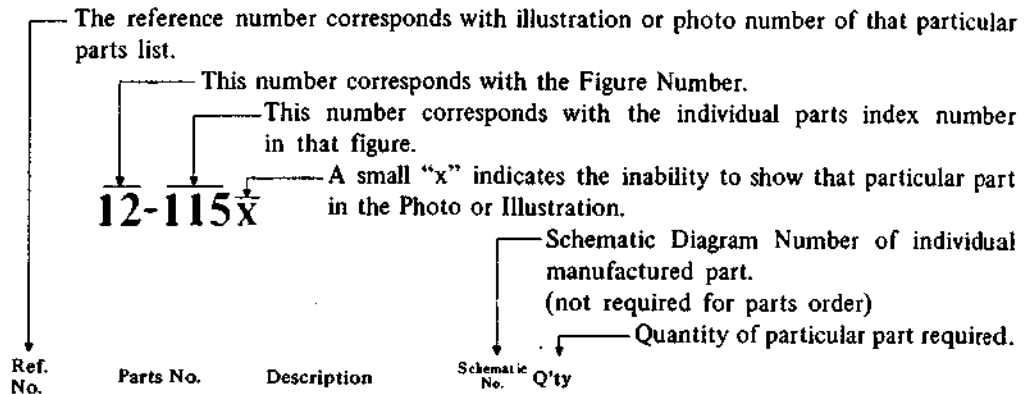
INDEX

- 1. MODEL PR-A06 ..... 59
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Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

## HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read List



Ref. No.	Parts No.	Description	Schematic No.	Q'ty
<b>FLYWHEEL BLOCK #13</b>				
12-115x	800425	Flywheel Block Assy. Comp.	RDG #13	1
12-116	244506	Flywheel Only	RD-233	1
12-117x	244754	Felt, Flywheel	RD-275	1
12-118	251324	Main Metal Case	RD-236	1
12-119	253080	Main Metal	RD-237	1

4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of Components of the Schematic Diagram or Service Manual.
5. Please utilize separate "Common List for Service Parts" for Resistor Parts orders.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.  
It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

- CAUTION:**
1. When placing an order for parts, be sure to list the parts no. model no., and description. There are instances in which if any of this information is omitted, parts cannot be shipped or the wrong parts will be delivered.
  2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
  3. Because parts number and parts unit supply in the Preliminary Service Manual (Basic Parts List) may be partially changed, please use this parts list for all future reference.

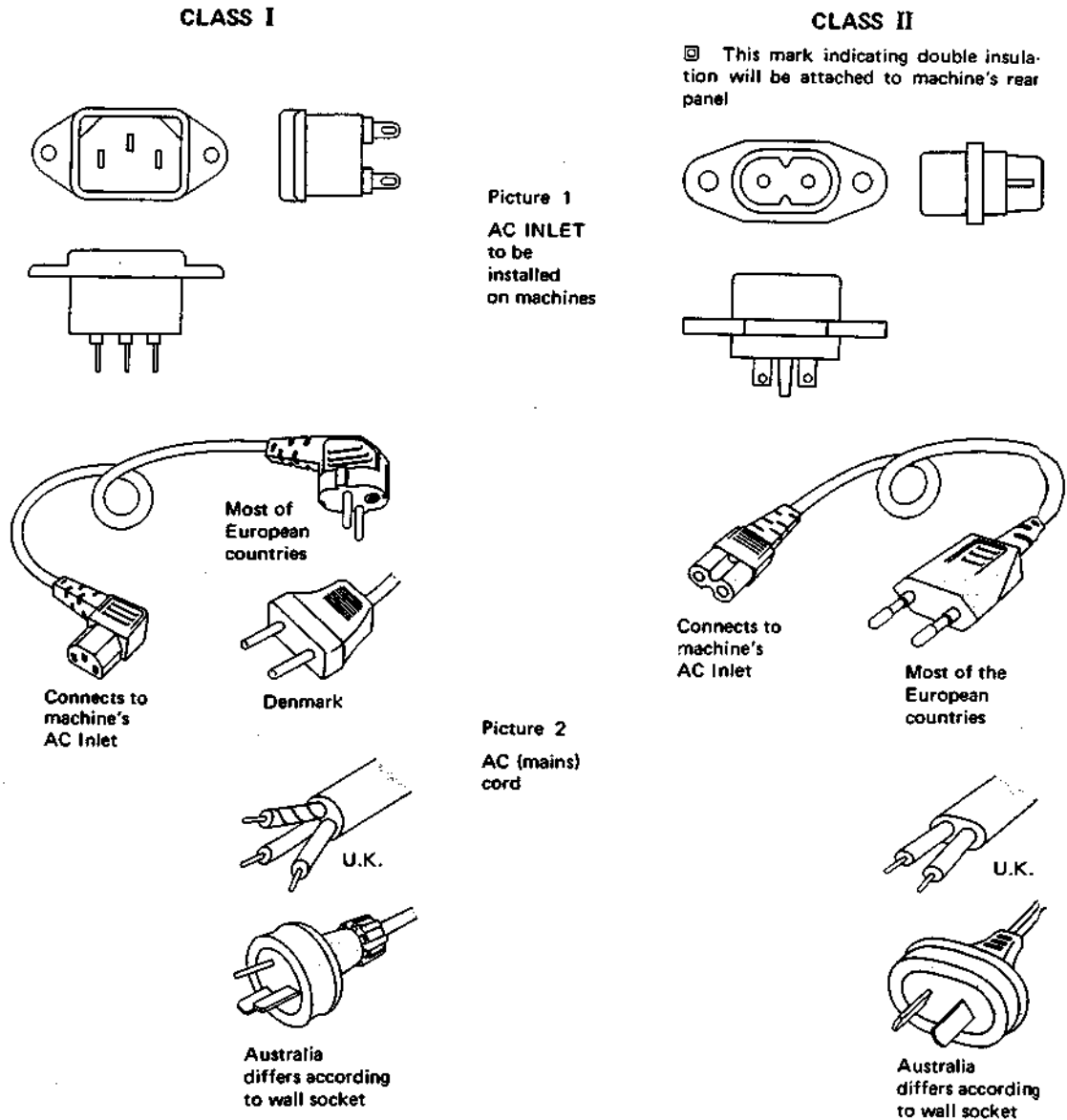
**WARNING:**  $\triangle$  INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

**AVERTISSEMENT:**  $\triangle$  IL INDIQU LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.

## AC INLET SYSTEM

This model is equipped with an AC INLET SYSTEM. Please refer to the AC INLET SYSTEM CHART below for the specific type. By the AC INLET SYSTEM, AC (mains) cord can be connected to and disconnected from the model because the model is provided with socket exclusively for AC (mains) cord on its main body. Please note, however, that certain models are not equipped with this system and has a built-in AC (mains) cord as before.

### AC INLET SYSTEM CHART



#### Parts List for AC (mains) Cord Set

Standard		Description	Type of AC Inlet	Parts No.
Class I	CEE	Cord Set CEE (3 cores)	3P	EW30293
	BEAB	Cord Set BEAB (3 cores)	3P	EW30294
	SAA	Cord Set SAA (3 cores)	3P	EW30296
	U/T	Cord Set U/T (3 cores)	3P	EW30246
Class II	CEE	Cord Set CEE (2 cores)	2P	EW63844
	BEAB	Cord Set BEAB (2 cores)	2P	EW30295
	SAA	Cord Set SAA (2 cores)	2P	EW30291
	U/T	Cord Set U/T (2 cores)	2P	EW30299

# I. MODEL PR-A06

## 1. RECOMMENDED SPARE PARTS LIST

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

Parts No.	Description	Notes
BA326223	Pre Amp P.C Board Comp. PR-A06	
BA326230	Tone Control P.C Board Comp. PR-A06	
BT319224	△ Power Trans. PR-A06T-30	CSA, AAL
BT319225	△ Power Trans. PR-A06T-40	CEE
BT319226	△ Power Trans. PR-A06T-50	UK, SAA
BT319227	△ Power Trans. PR-A06T-70	U/T
ED322773	LED SLP-255D-01	
ED319223	LED, 20 Segments SEL-8802A	
ED300924	Silicon Diode GP08D	
ED316143	Silicon Diode 1S2473-HS	
ED322238	Silicon Stack 1B4B41	
ED324912	Silicon Stack 1D4B41	
ED323057	Silicon Varister MV12	
ED306723	Zener Diode 05Z-10U	
ED323216	Zener Diode 05Z-15U	
ED324936	Zener Diode 05Z-16U	
ED324937	Zener Diode 05Z-6.8U	
EF315334	△ Fuse 250mA 125V	CSA, AAL
EF305703	△ Fuse 630mA 125V	CSA, AAL
EF309391	△ Fuse 800mA 125V	CSA, AAL
EF309388	△ Fuse 800mA 250V	U/T
EF300590	△ Fuse (EAWK) 400MAT	CEE, UK, SAA
EF300592	△ Fuse (EAWK) 630MAT	CEE, UK, SAA
EF300588	△ Fuse (EAWK) 200MAT	CEE, UK, SAA
EI319215	IC IR2406 (G)	
EI319213	IC MPC14312H	
EI319214	IC M54540L	
EI323054	IC TA7322P	
EI304657	IC TC4011BP	
EJ301513	△ Inlet 2P	CEE, UK, SAA
EJ240535	△ 3-Throw AC Outlet	U/T, CSA, AAL
EJ698051	DIN Jack	
EJ319211	DIN Jack 8P	
EJ293365	Pin Jack 4P	
EJ324932	Pin Jack 4P	
EJ293376	Pin Jack 6P	
EL319228	Lamp (Fuse Type) 6.3V 100mA	
EP323350	Relay L-23M DC 12V	
ES324162	△ Push SW. SDG-1P TV-5	U/T
ES679566	△ Push SW. SDG-1P TV-5	CSA, AAL



Parts No.	Description	Notes
ES310839	△ Push SW. SDG1P-E 5A/80A 250V	CEE, UK, SAA
ES315362	Push SW. AKC8S	
ES323369	Remote Rotary Slide SW. SSR24602D	
ES324916	Rotary Selector SRZWM6	
ES319221	Rotary Slide SW. SRZW64S	
ES324930	Rotary SW. SBU1024N	
ES319222	Rotary SW. SBU1025N	
ES324931	Rotary SW. SR26N 2-4-5 25R	
ES324940	3-Throw Push SW. J-K2111	
ET311792	FET 2SK150 (GR) (Y) (BL)	
ET311791	Transistor 2SA968 (O) (Y)	
ET305463	Transistor 2SA970 (GR) (BL)	
ET301165	Transistor 2SB631K (E) (F)	
ET311790	Transistor 2SC2238 (O) (Y)	
ET307195	Transistor 2SC2240 (GR) (BL)	
ET316171	Transistor 2SC536K-NP (E) (F)	
ET322775	Transistor 2SC536K-NP (E) (F) (G)	
ET240671	Transistor 2SD438 (E) (F) RED	
ET300931	Transistor 2SD600K (E) (F)	
EV618052	Semi-Fixed/Vol. CR19R 1k $\Omega$	
EV324942	Single-Axial 2-Throw/Vol. AP25GN (C.S) 100KY $\times$ 2	
EV324941	Single-Axial 2-Throw/Vol. AP25GN (C.O) 100KY $\times$ 2	
EV319212	Single-Axial 6-Throw/Vol. EIECE01	
EV324915	Slide 2-Throw/Vol. VJ608GPVN 50KZ $\times$ 2	
EW306428	△ AC Cord (U/T)	
EW305691	△ AC Cord CUL	CSA, AAL
EW302995	△ AC Cord Set BEAB 2 Cores	
EW315767	△ AC Cord Set CEE 2 Cores	
EW322401	△ AC Cord Set SAA 2 Cores	
SE319197	LED Escutcheon	
SE324877	LED Escutcheon	

## 2. PRE AMP P.C BOARD (PRA-6001A) BLOCK

Symbol No.	Parts No.	Description	Schematic No.	Symbol No.	Parts No.	Description	Schematic No.
2-1	BA326223	Pre Amp P.C Board		2-R87	ER319217	Metal Film/R. 1/4W	
		Comp. PR-A06	PRA-6001A			1k(F)	35-17-22
2-IC1	EI323054	IC TA7322P	45-8-419	2-R89,90	ER319218	Metal Film/R. 1/4W	
2-IC2	EI319213	IC MPC14312H	45-8-484			10k(F)	35-17-22
2-IC3	EI304657	IC TC4011BP	45-8-232	2-R91	ER319219	Metal Film/R. 1/4W	
2-IC4	EI319214	IC M54540L	45-8-485			9.1k(F)	35-17-22
2-IC5,6	EI319215	IC IR2406(G)	45-8-486	2-R92	ER319218	Metal Film/R. 1/4W	
2-TR1	ET305463	Transistor				10k(F)	35-17-22
		2SA970(GR)(BL)	45-1-303	2-C1	EC324896	Styrol/C. 400PF(J) 50WV	24-11-18
2-TR2,3	ET307195	Transistor		2-C2	EC324920	Styrol/C. 200PF(J) 50WV	24-11-18
		2SC2240(GR)(BL)	45-1-302	2-C3	EC324921	Styrol/C. 100PF(J) 50WV	24-11-18
2-TR4	ET305463	Transistor		2-C5,6	EC326588	Elect./C. (Vert.)	
		2SA970(GR)(BL)	45-1-303			1000μF 10WV	24-12-49
2-TR5	ET311790	Transistor 2SC2238(O)(Y)	45-1-339	2-C11,12	EC324922	NP/C. 4.7μF(M) 50WV	24-11-35
2-TR6	ET311791	Transistor 2SA968(P)(Y)	45-1-338	2-C15	EC324921	Styrol/C. 100PF(J) 50WV	24-11-18
2-TR7	ET307195	Transistor		2-C19	EC324102	Polypropylene/C. (Vert.)	
		2SC2240(GR)(BL)	45-1-302			0.02μF(G) 50WV	24-2-10
2-TR8	ET305463	Transistor		2-C20	EC324103	Polypropylene/C. (Vert.)	
		2SA970(GR)(BL)	45-1-303			0.0697μF(G) 50WV	24-2-10
2-TR9	ET307195	Transistor		2-C21	EC324922	NP/C. 4.7μF(M) 50WV	24-11-35
		2SC2240(GR)(BL)	45-1-302	2-C42	EC324115	Solid Aluminum/C.	
2-TR10	ET305463	Transistor				2.2μF(M) 25WV	24-11-3
		2SA970(GR)(BL)	45-1-303	2-C56	EC319220	NP/C. 22μF(M) 16WV	24-11-31
2-TR11	ET300931	Transistor 2SD600K(E)(F)	45-1-278	2-2	SP319203	Sub Rear Panel (B)	PRA-4011
2-TR12	ET301165	Transistor 2SB631K(E)(F)	45-1-277	2-3	ZW698308	Nylon Rivet (NRB)	
2-TR13	ET322775	Transistor				3x5.5 (Black)	2-7-4
		2SC536K-NP(E)(F)(G)	45-1-362	2-4	ZW652408	Washer (SPC)	
2-TR14	ET240671	Transistor				D3.2x10x0.5t	
		2SD438(E)(F) RED	45-1-252	2-5	ZS608185	Screw, Pan 2.6x4 (Black)	
2-TR15	ET311792	FET 2SK150(GR)(Y)(BL)	45-12-22	2-6	ZS325495	Tapping Screw, #2 BR 3x6	
2-TR16to20	ET316171	Transistor					
		2SC536K-NP(E)(F)	45-1-362				
2-TR21	ET300931	Transistor 2SD600K(E)(F)	45-1-278				
2-D1	ED323057	Silicon Varister MV12	45-10-16				
2-D3	ED300924	Silicon Diode GP08D	45-2-68				
2-D4,5	ED324936	Zener Diode 05Z-16U	45-6-76				
2-D6,7	ED306723	Zener Diode 05Z-10U	45-6-76				
2-D8	ED324937	Zener Diode 05Z-6.8U	45-6-76				
2-D9to18	ED316143	Silicon Diode 1S2473-HS	45-3-53				
2-D19	ED323216	Zener Diode 05Z-15U	45-6-76				
2-D20,21	ED316143	Silicon Diode 1S2473-HS	45-3-53				
2-SW1	ES324931	Rotary SW. SR26N					
		2-4-5 25R	25-6-195				
2-SW2	ES324930	Rotary SW. SBU1024N	25-6-196				
2-SW3	ES323369	Remote Rotary Slide SW.					
		SSR24602D	25-14-503				
2-J1	EJ324932	Pin Jack 4P	31-5-165				
2-J2,3	EJ293365	Pin Jack 4P	31-1-197				
2-J4	EJ293376	Pin Jack 6P	31-1-198				
2-J5	EJ698051	DIN Jack	31-1-158				
2-J6	EJ319211	DIN Jack 8P	31-5-167				
2-V R1	EV618052	Semi-Fixed/Vol.					
		CR19R 1kB	36-28-4				
2-V R2	EV319212	Single-Axial					
		6-Throw/Vol. EIECE01	36-37-12				
2-TM901,902	EJ325358	Earth Terminal	32-1-115				
2-RL1to6	EP323350	Relay L-23M DC12V	47-2-34				
2-R20,21	ER306879	Carbon/R. F 1/2W					
		220 ohms(J)	35-11-27				
2-R27,28	ER324934	Carbon/R. F 1/4WS					
		220 ohms(J)	35-11-30				
2-R38	ER323067	Metal Oxide Film/R.					
		1/4W 100 ohms(F)	35-17-20				
2-R39	ER323069	Metal Oxide Film/R.					
		1/4W 46.4k(F)	35-17-20				
2-R40	ER323351	Metal Oxide Film/R.					
		1/4W 3.74k(F)	35-17-20				
2-R43	ER324935	Carbon/R. F 1/2SW					
		180 ohms(J)	35-11-27				
2-R57,58	ER322787	Carbon/R. F 1/4WS					
		10 ohms(J)	35-11-30				
2-R81	ER319216	Metal Oxide Film/R.					
		2W 15 ohms(K)	35-15-8				
2-R82	ER427972	Metal Oxide Film/R.					
		2W 68 ohms(K)	35-15-8				

When ordering parts, please quote Parts Number, Description and Model Number.

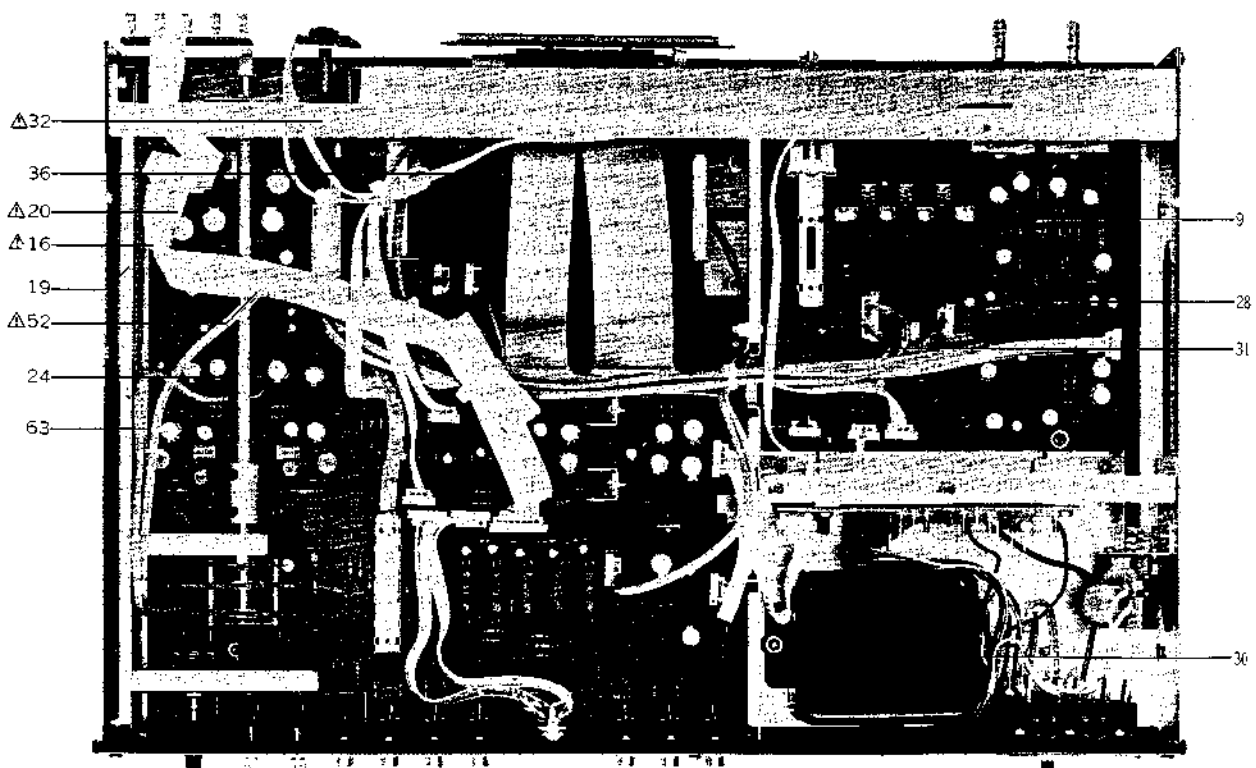
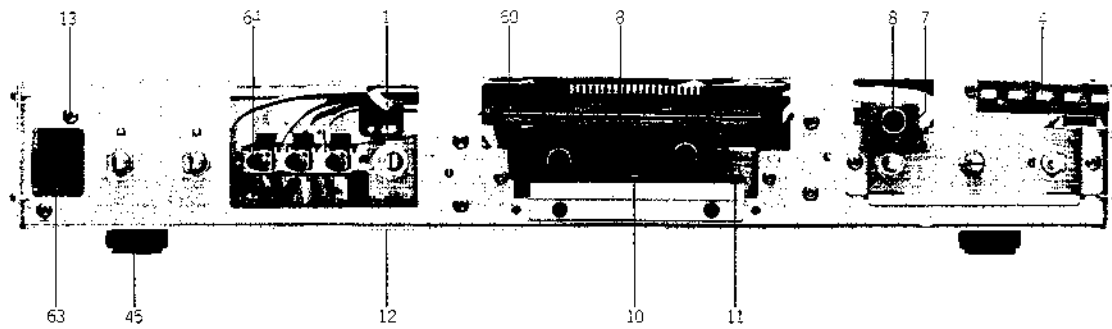
### 3. TONE CONTROL P.C BOARD (PRA-4002A) BLOCK

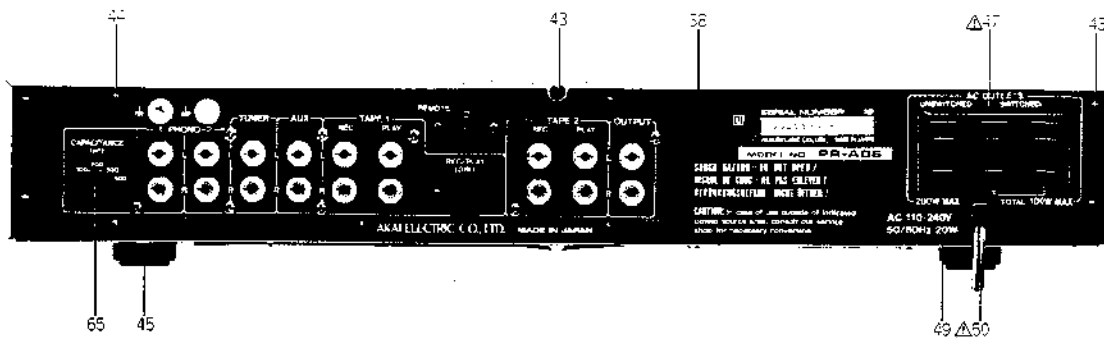
Symbol No.	Parts No.	Description	Schematic No.
3-1	BA326230	Tone Control P.C Board Comp. PR-A06	PRA-4002A
3-IC1,2	EI323054	IC TA7322P	45-8-419
3-TR1to5	ET322775	Transistor 2SC536K-NP(E)(F)(G)	45-1-362
3-D1,2	ED316143	Silicon Diode 1S2473-HS	45-3-53
3-SW1	ES324940	3-Throw Push SW. J-K2111	25-5-374
3-SW2	ES319221	Rotary Slide SW. SRZW64S	25-6-200
3-SW3,4	ES324940	3-Throw Push SW. J-K2111	25-5-374
3-VR1	EV324941	Single-Axial 2-Throw/Vol. AP25GN(C.O) 100KYx2	36-37-9
3-VR2	EV324942	Single-Axial 2-Throw/Vol. AP25GN(C.S) 100KYx2	36-37-10
3-RL1,2	EP323350	Relay L-23M DC12V	47-2-34
3-R14	ER324934	Carbon/R. F 1/4WS 22 ohms(J)	35-11-30
3-R16	ER324934	Carbon/R. F 1/4WS 22 ohms(J)	35-11-30
3-R34	ER324934	Carbon/R. F 1/4WS 22 ohms(J)	35-11-30
3-R36	ER324934	Carbon/R. F 1/4WS 22 ohms(J)	35-11-30
3-C9	EC325272	NP/C. 1 $\mu$ F(M) 50WV	24-17-35
3-C11	EC324924	NP/C. (Vert.) 47 $\mu$ F(M) 25WV	24-17-35
3-C15	EC324924	NP/C. (Vert.) 47 $\mu$ F(M) 25WV	24-17-35
3-C16	EC325272	NP/C. 1 $\mu$ F(M) 50WV	24-17-35
3-C23	EC324926	NP/C. 10 $\mu$ F(M) 50WV	24-17-35
3-C28	EC324926	NP/C. 10 $\mu$ F(M) 50WV	24-17-35

### 4. FUSE P.C BOARD (PRA-6022/6023/6024) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
4-D1	ED324912	Silicon Stack 1D4B41	45-2-100
4-D2	ED322238	Silicon Stack 1B4B41	45-2-97
4-C1,2	EC326583	Metallized Mylar/C. (Vert.) 0.047 $\mu$ F(K) 400WV	24-16-29
4-C3to6	EC204671	Ceramic/C. DD31-4E 0.01 $\mu$ F(P) 500WV	24-5-66
4-1	ZS325495	Tapping Screw, #2 BR 3x6	

## 5. ASSEMBLY BLOCK



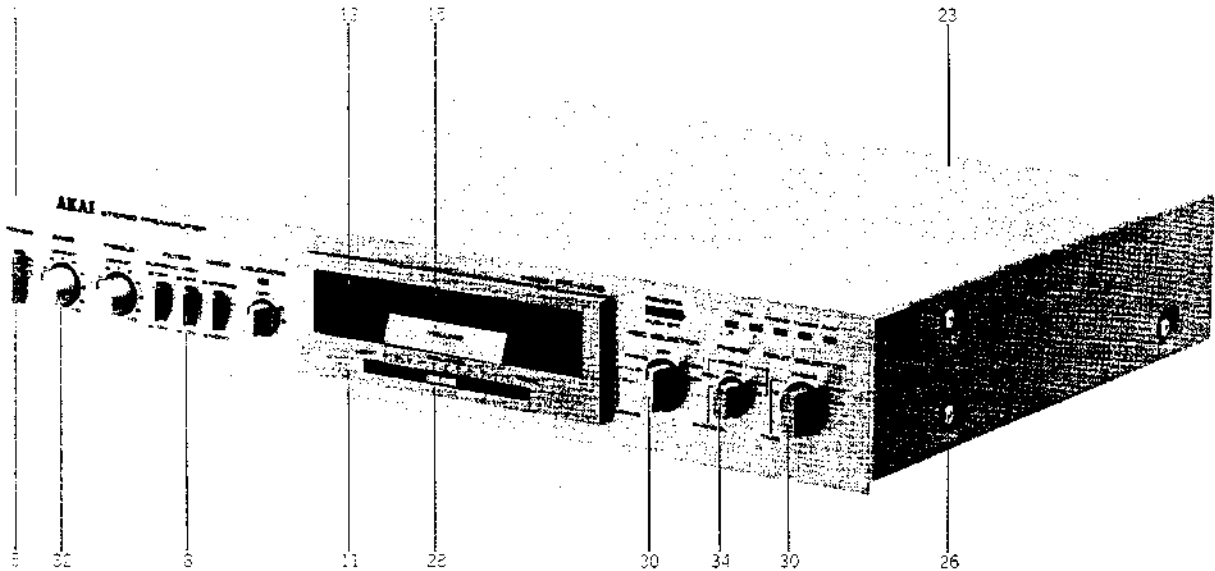


**ASSEMBLY BLOCK**

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
<b>LED P.C BOARD (A) BLOCK</b>				<b>LED P.C BOARD (B) BLOCK</b>			
5-1	ED322773	LED SLP-255D-01	45-15-37	5-4	ED322773	LED SLP-255D-01	45-15-37
5-2x	SE319197	LED Escutcheon	PRA-6016	5-5x	SE324877	LED Escutcheon	PRA-4038
5-3x	ZS296381	Tapping Screw, #2 BR 2.3x8		5-6x	ZS296381	Tapping Screw, #2 BR 2.3x8	
<b>REMOTE LAMP P.C BOARD BLOCK</b>				<b>INPUT SELECTOR P.C BOARD BLOCK</b>			
5-7	EL319228	Lamp (Fuse Type) 6.3V 100mA	28-2-89	5-9	ES319222	Rotary SW. SBU1025N	25-6-201
5-8	ES315362	Push SW. AKC8S	25-5-317	<b>BALANCE VOL. P.C BOARD BLOCK</b>			
<b>ASSEMBLY BLOCK</b>				5-10	EV324915	Slide 2-Throw/Vol. VJ608GPVN 50KZx2	36-27-10
5-11	ZS417216	Screw, Pan 3x4		5-11	ZS417216	Screw, Pan 3x4	
5-12	SP324840	Bottom Plate	PRA-4006	5-12	SP324840	Bottom Plate	PRA-4006
5-13	ZS325495	Tapping Screw, #2 BR 3x6		5-13	ZS325495	Tapping Screw, #2 BR 3x6	
5-14x	ZS306021	S-Tight Screw, Pan 3x6		5-14x	ZS306021	S-Tight Screw, Pan 3x6	
5-15x	ZS300506	S-Tight Screw, Pan 3x5		5-15x	ZS300506	S-Tight Screw, Pan 3x5	
5-16	ES324162	△ Push SW. SDG-1P TV-5(U/T)	25-5-377	5-16	ES324162	△ Push SW. SDG-1P TV-5(U/T)	25-5-377
5-17x	ES679566	△ Push SW. SDG1P TV-5 (CSA, AAL)	25-5-204	5-17x	ES679566	△ Push SW. SDG1P TV-5 (CSA, AAL)	25-5-204
5-18x	ES310839	△ Push SW. SDG1P-E 5A/80A 250V (CEE, UK, SAA)	25-5-310	5-18x	ES310839	△ Push SW. SDG1P-E 5A/80A 250V (CEE, UK, SAA)	25-5-310
5-19	ZS422076	Screw, Pan 3x5		5-19	ZS422076	Screw, Pan 3x5	
5-20	EC320548	△ Ceramic/C. (Vert.) F 0.01μF(Z) 250VAC (U/T)	24-5-112	5-20	EC320548	△ Ceramic/C. (Vert.) F 0.01μF(Z) 250VAC (U/T)	24-5-112
5-21x	EC314688	△ Ceramic/C. DE7150 0.01μF(P) 125VAC (CSA, AAL)	24-5-87	5-21x	EC314688	△ Ceramic/C. DE7150 0.01μF(P) 125VAC (CSA, AAL)	24-5-87
5-22x	EC327382	△ MP/C. (Vert.) 0.0047μF(M) 250WV (CEE, UK, SAA)	24-9-134	5-22x	EC327382	△ MP/C. (Vert.) 0.0047μF(M) 250WV (CEE, UK, SAA)	24-9-134
5-23x	ZS325495	Tapping Screw, #2 BR 3x6		5-23x	ZS325495	Tapping Screw, #2 BR 3x6	
5-24	ZS462194	Tapping Screw, #2 Pan 3x8 W=8		5-24	ZS462194	Tapping Screw, #2 Pan 3x8 W=8	
5-25x	ZS306486	Tapping Screw, #2 BR 3x8 w/Washer		5-25x	ZS306486	Tapping Screw, #2 BR 3x8 w/Washer	
5-26x	ZW322110	Washer (Nylon) D6.1x10x1t		5-26x	ZW322110	Washer (Nylon) D6.1x10x1t	
5-27x	ZW270123	'E' Ring 4M	6-1-9	5-27x	ZW270123	'E' Ring 4M	6-1-9
5-28	TC300422	Joint	AC-3556	5-28	TC300422	Joint	AC-3556
5-29x	ZS379350	Screw, Pan 3x6		5-29x	ZS379350	Screw, Pan 3x6	
5-30	ES324916	Rotary Selector SRZWM6	25-14-105	5-30	ES324916	Rotary Selector SRZWM6	25-14-105
5-31	EW319235	Remote Wire SWR6132	25-14-306	5-31	EW319235	Remote Wire SWR6132	25-14-306
5-32	BT319227	△ Power Trans. PR-A06T-70 (U/T)	38-4-847	5-32	BT319227	△ Power Trans. PR-A06T-70 (U/T)	38-4-847
5-33x	BT319224	△ Power Trans. PR-A06T-30 (CSA, AAL)	38-4-844	5-33x	BT319224	△ Power Trans. PR-A06T-30 (CSA, AAL)	38-4-844
5-34x	BT319225	△ Power Trans. PR-A06T-40 (CIE)	38-4-845	5-34x	BT319225	△ Power Trans. PR-A06T-40 (CIE)	38-4-845
5-35x	BT319226	△ Power Trans. PR-A06T-50 (UK, SAA)	38-4-846	5-35x	BT319226	△ Power Trans. PR-A06T-50 (UK, SAA)	38-4-846
5-36	ZW413267	Flange Nut M4		5-36	ZW413267	Flange Nut M4	
5-37x	ZS413201	Screw, Pan 4x8		5-37x	ZS413201	Screw, Pan 4x8	
5-38	SP319198	Rear Panel (F) (U/T)	PRA-6017	5-38	SP319198	Rear Panel (F) (U/T)	PRA-6017
5-39x	SP319199	Rear Panel (G) (CSA)	PRA-6017	5-39x	SP319199	Rear Panel (G) (CSA)	PRA-6017
5-40x	SP319200	Rear Panel (H) (AAL)	PRA-6017	5-40x	SP319200	Rear Panel (H) (AAL)	PRA-6017
5-41x	SP319201	Rear Panel (I) (CEE)	PRA-6018	5-41x	SP319201	Rear Panel (I) (CEE)	PRA-6018
5-42x	SP319202	Rear Panel (J) (UK, SAA)	PRA-6018	5-42x	SP319202	Rear Panel (J) (UK, SAA)	PRA-6018
5-43	ZS308846	Tapping Screw, #2 BR 3x8 (Oval Neck) (Black)	7-1-69	5-43	ZS308846	Tapping Screw, #2 BR 3x8 (Oval Neck) (Black)	7-1-69
5-44	ZS319460	Tapping Screw, #2 BR 3x6 (Oval Neck) (Black)	7-1-69	5-44	ZS319460	Tapping Screw, #2 BR 3x6 (Oval Neck) (Black)	7-1-69
5-45	SA311742	Circular Foot	PC-2032	5-45	SA311742	Circular Foot	PC-2032
5-46x	ZS565942	Tapping Screw, #2 Pan 4x8		5-46x	ZS565942	Tapping Screw, #2 Pan 4x8	
5-47	EJ240535	△ 3-Throw AC Outlet (U/T, CSA, AAL)	31-1-173	5-47	EJ240535	△ 3-Throw AC Outlet (U/T, CSA, AAL)	31-1-173
5-48x	EJ301513	△ Inlet 2P (CEE, UK, SAA)	31-1-200	5-48x	EJ301513	△ Inlet 2P (CEE, UK, SAA)	31-1-200
5-49	EZ631945	Strain Relief SR-4N-4	2-7-49	5-49	EZ631945	Strain Relief SR-4N-4	2-7-49
5-50	EW306428	△ AC Cord (U/T)	26-3-64	5-50	EW306428	△ AC Cord (U/T)	26-3-64
5-51x	EW305691	△ AC Cord CUL (CSA, AAL)	26-3-65	5-51x	EW305691	△ AC Cord CUL (CSA, AAL)	26-3-65
5-52	EF309388	△ Fuse 800mA 250V (U/T)	39-1-64	5-52	EF309388	△ Fuse 800mA 250V (U/T)	39-1-64
5-53x	EF309391	△ Fuse 800mA 125V (CSA, AAL)	39-1-65	5-53x	EF309391	△ Fuse 800mA 125V (CSA, AAL)	39-1-65
5-54x	EF305703	△ Fuse 630mA 125V (CSA, AAL)	39-1-65	5-54x	EF305703	△ Fuse 630mA 125V (CSA, AAL)	39-1-65
5-55x	EF315334	△ Fuse 250mA 125V (CSA, AAL)	39-1-65	5-55x	EF315334	△ Fuse 250mA 125V (CSA, AAL)	39-1-65
5-56x	EF300590	△ Fuse (EAWK) 400mA T (CEE, UK, SAA)	39-1-60	5-56x	EF300590	△ Fuse (EAWK) 400mA T (CEE, UK, SAA)	39-1-60
5-57x	EF300592	△ Fuse (EAWK) 630mA T (CEE, UK, SAA)	39-1-60	5-57x	EF300592	△ Fuse (EAWK) 630mA T (CEE, UK, SAA)	39-1-60
5-58x	EF300588	△ Fuse (EAWK) 200mA T (CEE, UK, SAA)	39-1-60	5-58x	EF300588	△ Fuse (EAWK) 200mA T (CEE, UK, SAA)	39-1-60
<b>FINAL ASSEMBLY BLOCK</b>				<b>FINAL ASSEMBLY BLOCK</b>			
5-59x	ZS322402	Special Tapping Screw, Pan 3x3	7-1-70	5-59x	ZS322402	Special Tapping Screw, Pan 3x3	7-1-70
5-60	ED319223	LED, 20 Segments SEL-8802A	59-2-3	5-60	ED319223	LED, 20 Segments SEL-8802A	59-2-3
5-61x	ZS306001	Tapping Screw, #2 Pan 2.6x8		5-61x	ZS306001	Tapping Screw, #2 Pan 2.6x8	
5-62x	ZW301012	Washer (SPC) D3.2x10x1t		5-62x	ZW301012	Washer (SPC) D3.2x10x1t	
5-63	TA324862	Push Rod	PRA-4027	5-63	TA324862	Push Rod	PRA-4027
5-64	TA322261	Push Rod	AMU-2056	5-64	TA322261	Push Rod	AMU-2056
5-65	SK323199	Knob (B)	ATV-4042	5-65	SK323199	Knob (B)	ATV-4042

When ordering parts, please quote Parts Number, Description and Model Number.

## 6. FINAL ASSEMBLY BLOCK



### FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
<b>FRONT PANEL BLOCK</b>				6-21x	SB319196	Button	PRA-015
6-1	SP326248	Front Panel Part PR-A06	PRA-6050	<b>FINAL ASSEMBLY BLOCK</b>			
6-2x	SE322578	Escutcheon (A)	ATK-2013	6-22x	ZS447840	Tapping Screw, #2 BR 3x8	
6-3x	SE325061	Escutcheon (A)	ATV-4029	6-23	BC322209	Upper Cover (A)	ATK-234
6-4x	SP326249	Front Panel (BL) Part PR-A06-BL	PRA-6050	6-24x	BC322212	Upper Cover (B) (AAL)	ATK-234
6-5	SB322576	Button (A)	ATK-2012	6-25x	BC322210	Upper Cover (A-BL)	ATK-234
6-6x	SB322577	Button (A-BL)	ATK-2012	6-26	ZS322570	S-Tight Screw, Bind 4x8	
6-7x	ZG322579	Spring (A)	ATK-2014	6-27x	ZS322580	S-Tight Screw, Bind 4x8 (Black)	
6-8	SB322557	Button	AMU-2044	6-28	SK324871	Knob (A)	PRA-035
6-9x	SB322558	Button (BL)	AMU-2044	6-29x	SK324872	Knob (A-BL)	PRA-035
6-10x	ZG322566	Spring	AMU-2050	6-30	SK324875	Knob (B)	PRA-037
6-11	SP319187	Sub Panel	PRA-6007.4031	6-31x	SK324876	Knob (B-BL)	PRA-037
6-12x	SP319188	Sub Panel (BL)	PRA-6007.4031	6-32	SK323042	Knob	AMU-037
6-13	SZ319189	Vol. Filter	PRA-6009	6-33x	SK323043	Knob (BL)	AMU-037
6-14x	SE319190	Vol. Escutcheon	PRA-6010	6-34	SK322555	Knob (C)	AMU-043
6-15	SB319191	Vol. Button	PRA-6011	6-35x	SK322556	Knob (C-BL)	AMU-043
6-16x	SB319192	Vol. Button (BL)	PRA-6011	6-36x	ZW305013	Pop Rivet D3.2 (AAL)	7-69
6-17x	ZG319193	Plate Spring	PRA-6012	6-37x	EW315767	Δ AC Cord Set CEE 2 Cores	26-3-71
6-18x	ZS296381	Tapping Screw, #2 BR 2.3x8		6-38x	EW302995	Δ AC Cord Set BEAB 2 Cores	26-3-51
6-19x	MH319194	Pin	PRA-6013	6-39x	EW322401	Δ AC Cord Set SAA 2 Cores	26-3-71
6-20x	SE319195	Button Escutcheon	PRA-6014				

When ordering parts, please quote Parts Number, Description and Model Number.

## II. MODEL PA-W06

### 1. RECOMMENDED SPARE PARTS LIST

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

Parts No.	Description	Notes
BA326128	Main Amp P.C Board Comp. PA-W06	
BT325299	△ Power Trans. PA-W04T-30	CSA, AAL
BT325300	△ Power Trans. PA-W04T-40	CEE
BT325301	△ Power Trans. PA-W04T-50	UK, SAA
BT325302	△ Power Trans. PA-W04T-70	U/T
BT326607	Pulse Trans. PT-W06T	
ED562386	Germanium Diode 1S188AM	
ED322772	LED SLP-155D-01	
ED322773	LED SLP-255D-01	
ED323513	Silicon Diode CTU-24R	
ED323512	Silicon Diode CTU-24S	
ED325275	Silicon Diode S5295D	
ED323056	Silicon Diode 1S2091	
ED214457	Silicon Diode 1S2472	
ED624903	Silicon Diode 1S2473	
ED560913	Silicon Diode 1S2473-VE	
ED316143	Silicon Diode 1S2473-HS	
ED326605	Silicon Stack 4J4B41	
ED323057	Silicon Varister MV12	
ED323573	Trigger Diode 1S2093	
ED322810	Zener Diode WZ-040	
ED323530	Zener Diode 05Z-12U	
ED303123	Zener Diode 05Z-24U	
ED322774	Zener Diode 05Z-5.1U	
ED326835	Zener Diode 05Z-8.2U	
EF306951	△ Fuse 2.5A 250V	U/T
EF300580	△ Fuse (EAK) 2.5AT	CEE, UK, SAA
EF300577	△ Fuse (EAK) 5AT	CSA, AAL
EI322791	IC LC7556	
EI326595	IC STK-3062	
EI326832	IC STK0070 (2)	
EI323564	IC TA7317P	
EI323054	IC TA7322P	
EI322599	IC TA75458S	
EI325947	Osc. Trans. P.C Board Assy AM-U06	
EJ650261	△ AC Outlet S-I 6432	U/T, CSA, AAL
EJ296853	△ 3P Inlet CM-3	CEE, UK, SAA
EJ301199	Headphone Jack 3P64M	
EJ322582	Push Terminal 4P	
EJ308834	2P Pin Jack T-5511	

Parts No.	Description	Notes
EP245305	Relay MS24D4-0Z	
EP323350	Relay L-23M DC 12V	
ER325268	△ Power Filter BF-3727-203Y1R2	CEE, UK, SAA
ER325265	△ Power Filter UF-3729 C 182Y2R0	U/T, CSA, AAL
ES324162	△ Push SW. SDG-1P TV-5	U/T
ES679566	△ Push SW. SDG-1P TV-5	CSA, AAL
ES665807	△ Push SW. SDG5P-E 5A/80A 250V	CEE, UK, SAA
ES323786	Push SW. J-K2083	
ES324344	Push SW. J-K2102	
ES324118	Push SW. J-K2105	
ES306725	Slide SW. J-S4017	
ET311792	FET 2SK150 (GR) (Y) (BL)	
ET323529	Transistor 2SA608K-NP (E) (F)	
ET322778	Transistor 2SA608K-NP (E) (F) (G)	
ET311791	Transistor 2SA968 (O) (Y)	
ET219868	Transistor 2SB560 (E) (F)	
ET322598	Transistor 2SB632K (E) (F)	
ET311790	Transistor 2SC2238 (O) (Y)	
ET307195	Transistor 2SC2240 (GR) (BL)	
ET323572	Transistor 2SC2335 (K)	
ET316171	Transistor 2SC536K-NP (E) (F)	
ET322775	Transistor 2SC536K-NP (E) (F) (G)	
ET300931	Transistor 2SD600K (E) (F)	
EV618052	Semi-Fixed/Vol. CR19R 1kB	
EV623193	Semi-Fixed/Vol. CR19R 2.2kB	
EW306428	△ AC Cord (U/T)	
EW305691	△ AC Cord CUL	CSA, AAL



## 2. MAIN AMP P.C BOARD (PAW-4001) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
2-1	BA326128	Main Amp P.C Board Comp. PA-W06	PAW-6028
2-IC1	EI326595	IC STK-3062	45-8-481
2-IC2	EI323564	IC TA7317P	45-8-424
2-TR1	ET311792	FET 2SK150(GR)(Y)(BL)	45-12-22
2-TR2,3	ET307195	Transistor 2SC2240(GR)(BL)	45-1-302
2-TR4	ET219868	Transistor 2SB560(E)(F)	45-1-232
2-TR5	ET311790	Transistor 2SC2238(O)(Y)	45-1-339
2-TR6	ET311791	Transistor 2SA968(O)(Y)	45-1-338
2-TR7,8	ET322778	Transistor 2SA608K-NP(E)(F)(G)	45-1-375
2-TR9	ET307195	Transistor 2SC2240(GR)(BL)	45-1-302
2-D1	ED316143	Silicon Diode 1S2473-HS	45-3-53
2-D2,3	ED323056	Silicon Diode 1S2091	45-3-66
2-D4to7	ED323057	Silicon Varistor MV12	45-10-16
2-D8,9	ED316143	Silicon Diode 1S2473-HS	45-3-53
2-D10,11	ED214457	Silicon Diode 1S2472	45-3-41
2-D12to14	ED303123	Zener Diode 05Z-24U	45-6-76
2-D15	ED316143	Silicon Diode 1S2473-HS	45-3-53
2-D16,17	ED214457	Silicon Diode 1S2472	45-3-41
2-D18,19	ED326835	Zener Diode 05Z-8.2U	45-6-76
2-D20,21	ED624903	Silicon Diode 1S2473	45-3-26
2-VR1	EV618052	Semi-Fixed/Vol. CR19R 1k $\Omega$	36-28-4
2-VR2	EV623193	Semi-Fixed/Vol. CR19R 2.2k $\Omega$	36-28-4
2-RL1,2	EP245305	Relay MS2404-0Z	47-1-28
2-L1	EO324150	Phase Compensation Coil 2.2 $\mu$ H(K)	23-1-397
2-R15	ER317686	Metal Oxide Film/R. 1/4WS 1k(F)	35-17-20
2-R16	ER326837	Metal Film/R. 1/4WS 22k(F)	35-17-20
2-R17	ER322590	Cement/R. (Metal Plate) 5W (0.47+0.47) ohm(K)	35-16-84
2-R18,19	ER308875	Carbon/R. F 1/2W 10 ohms(J)	35-11-27
2-R28	ER409814	Metal Oxide Film/R. 2W 220 ohms(K)	35-15-8
2-R45,46	ER517072	Metal Oxide Film/R. 2W 680 ohms(K)	35-15-8
2-R48	ER325269	Carbon/R. F 1/4WS 2.2k(J)	35-11-30
2-R52,53	ER663232	Carbon/R. F 1/4W 10 ohms(J)	35-11-12
2-R60	ER427972	Metal Oxide Film/R. 2W 68 ohms(K)	35-15-8
2-R63,64	ER325269	Carbon/R. F 1/4WS 2.2k(J)	35-11-30
2-C21,22	EC325305	NP/C. 47 $\mu$ F(M) 25WV	24-17-31

## 3. FILTER P.C BOARD (PAW-4002A) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
3-IC1	EI323054	IC TA7322P	45-8-419
3-D1	ED323056	Silicon Diode 1S2091	45-3-66
3-RL1	EP323350	Relay L-23M DC 12V	47-2-34
3-SW1	ES323786	Push SW. J-K2083	25-5-351
3-R9,10	ER326838	Carbon/R. F 1/4WS 2.7k(J)	35-11-30
3-R13,14	ER311673	Metal Oxide Film/R. 2W 3.3k(K)	35-15-8
3-C2	EC325272	NP/C. 1 $\mu$ F(M) 50WV	24-17-35
3-C8	EC325320	NP/C. 2.2 $\mu$ F(M) 50WV	24-17-35

## 4. SW. P.C BOARD (PAW-4003A) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
4-IC1	EI322599	IC TA75458S	45-8-415
4-TR1	ET300931	Transistor 2SD600K(E)(F)	45-1-278
4-TR2,3	ET322775	Transistor 2SC536K-NP(E)(F)(G)	45-1-362
4-TR4,5	ET322778	Transistor 2SA608K-NP(E)(F)(G)	45-1-375
4-TR6to8	ET322775	Transistor 2SC536K-NP(E)(F)(G)	45-1-362
4-D1	ED316143	Silicon Diode 1S2473-HS	45-3-53
4-D2	ED562386	Germanium Diode 1S188AM	45-3-24
4-D3	ED323530	Zener Diode 05Z-12U	45-6-76
4-D4to6	ED316143	Silicon Diode 1S2473-HS	45-3-53
4-SW1	ES324118	Push SW. J-K2105	25-5-367
4-SW2,3	ES324344	Push SW. J-K2102	25-5-383
4-R23	ER322221	Carbon/R. F 1/4W 56 ohms(J)	35-11-25

**5. PULSE POWER SUPPLY P.C BOARD  
(AMU-6004A) BLOCK**

Symbol No.	Parts No.	Description	Schematic No.
5-TR1	ET323529	Transistor 2SA608K-NP(E)(F)	45-1-375
5-TR2	ET316171	Transistor 2SC536K-NP(E)(F)	45-1-362
5-TR3to6	ET323572	Transistor 2SC2335(K)	45-1-381
5-TR7	ET322598	Transistor 2SB632K(E)(F)	45-1-374
5-D1	ED323573	Trigger Diode 1S2093	45-3-65
5-D2	ED560913	Silicon Diode 1S2473 VE	45-3-23
5-D3	ED323512	Silicon Diode CTU-24S	45-2-101
5-D4	ED323513	Silicon Diode CTU-24R	45-2-102
5-D5to8	ED325275	Silicon Diode S5295D	45-2-105
5-L1	EO325281	Choke Coil TCA-20	23-1-411
5-L2,3	EO325278	Inductor TCD-35	23-1-412
5-L4,5	EO325278	Inductor TCD-35	23-1-412
5-L6,7	EO325280	Choke Coil 220μH	23-1-413
5-T1	EI325947	Osc. Trans. P.C Board Assy AM-U06	AMU-6034
5-T1	BT326607	Pulse Trans. PT-W06T	23-1-418
5-SW1	ES306725	Slide SW. J-S4017	25-3-157
5-R1	ER325277	Metal Oxide Film/R. F 1W 68k(J)	35-19-1
5-R5	ER324222	Metal Plate/R. 2W 0.22 ohm(K)	35-16-38
5-R18	ER325288	Metal Oxide Film/R. F 2W 6.8 ohms(J)	35-19-2
5-C1	EC551160	Ceramic/C. DB821 NA 0.01μF(Z) 1.4kWV	24-5-55
5-C2,3	EC326608	Elect./C. (Vert.) 10μF 450WV	24-12-76
5-C4,5	EC326609	Metallized Mylar/C. (Vert.) 0.68μF(K) 400WV	24-16-28
5-C6	EC325316	Metallized Mylar/C. (Vert.) 0.33μF(K) 400WV	24-16-28
5-C8,9	EC323517	Ceramic/C. (Vert.) DP3100 B 100PF(K) 1kWV	24-5-101
5-C21	EC325286	Ceramic/C. (Vert.) HS D 0.0022μF(M) 400VAC (U/T, CEE, UK, SAA)	24-5-104
5-C21	EC328246	Ceramic/C. DE7150 F 0.0047μF(M) 125VAC (CEE, AAL)	24-5-87
5-1	ZG323474	Hold Spring	UCW-5023
5-2	ZG323474	Hold Spring	UCW-5023
5-3	ZS419670	Screw, Pan 3x12	
5-4	ZS379350	Screw, Pan 3x6	
5-5	ZS558101	Screw, Pan 3x6 w/Washer	
5-6	ZS380046	Screw, Pan 3x10	
5-7	TA323481	Packing (A)	UCW-5029

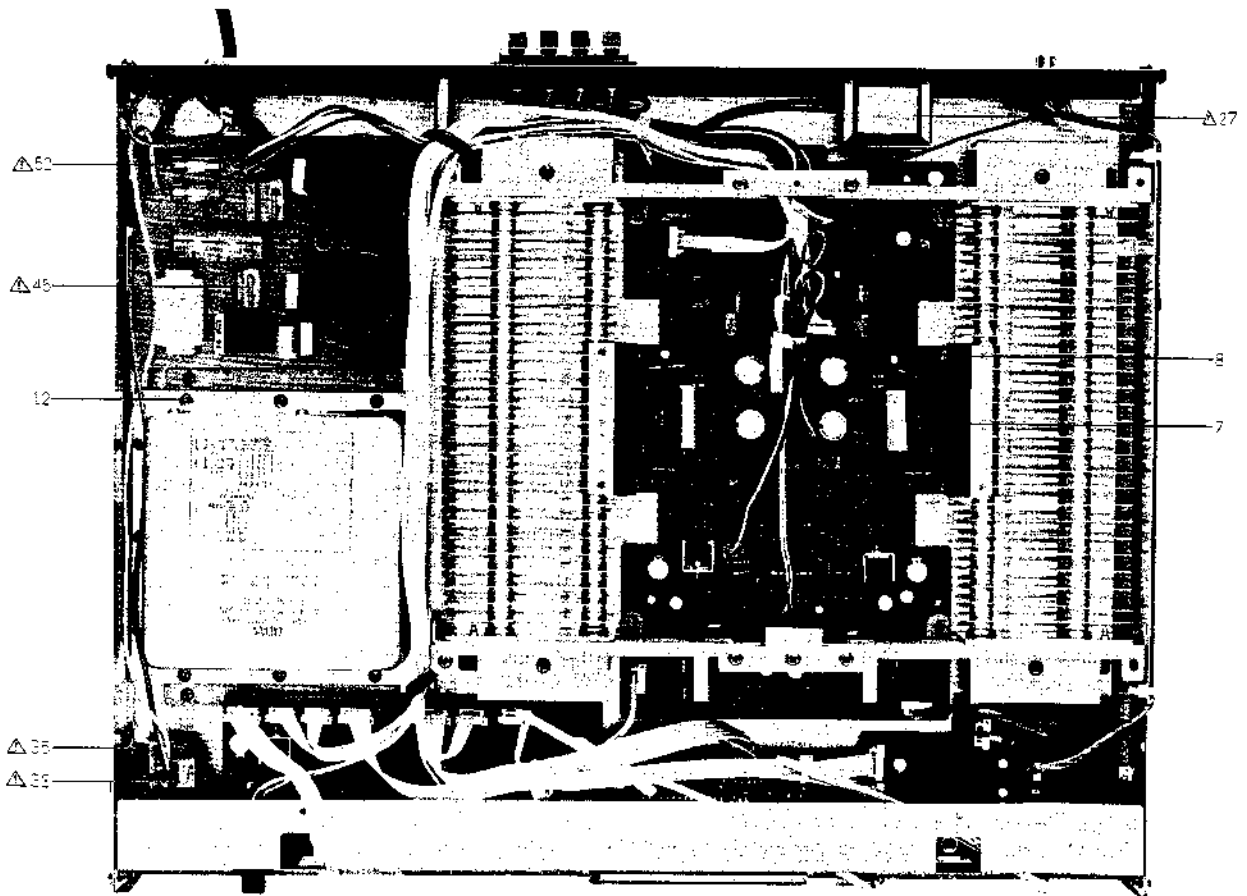
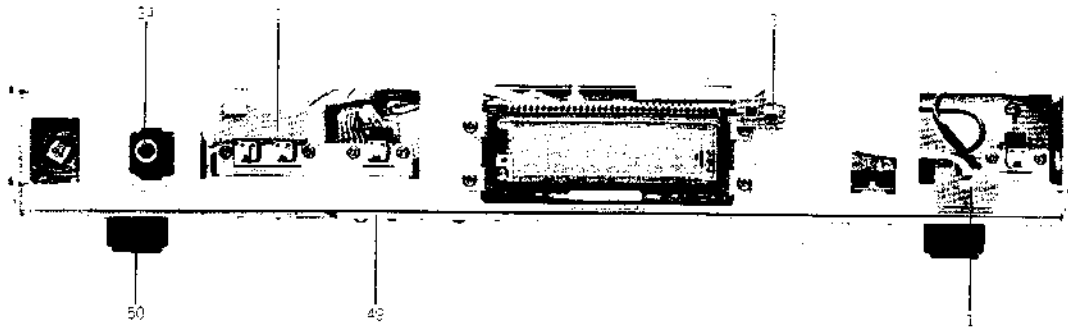
**6. RECTIFIER P.C BOARD  
(PAW-4043/6035/6036) BLOCK**

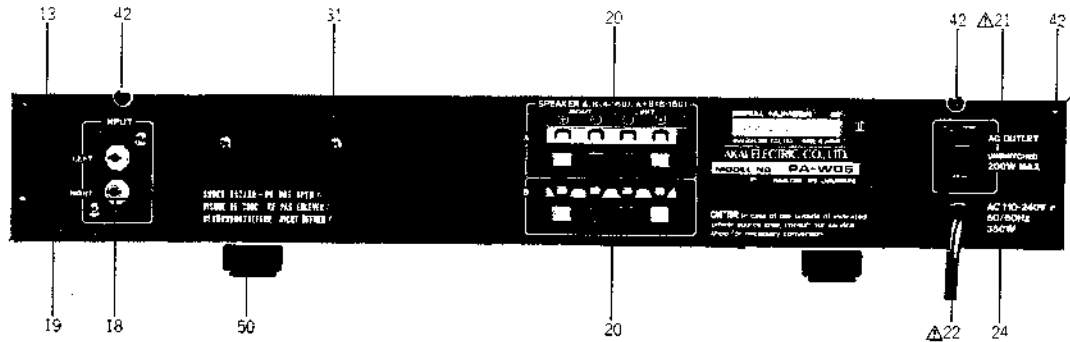
Symbol No.	Parts No.	Description	Schematic No.
6-D1	ED326605	Silicon Stack 4J4B41	45-2-106
6-L1	ER325265	Δ Power Filter UF-3729 C 182Y2R0 (U/T, CSA, AAL)	23-1-415
6-L1	ER325268	Δ Power Filter EF3727-203Y1R2 (CEE, UK, SAA)	23-1-414
6-R1to4	ER622978	Metal Plate/R. MPC71F1 5W 0.47 ohm(K)	35-16-48
6-C1	EC323557	Oil Paper/C. 0.1μF(K) 1kWV (U/T)	24-8-7
6-C1	EC326827	Metallized Mylar/C. (Vert.) 0.1μF(M) 125VAC (CSA, AAL)	24-16-30
6-C1	EC258298	MP/C. PEM271 0.1μF(M) 250WV (CEE, UK, SAA)	24-9-118
6-C2	EC325671	MP/C. (Vert.) 0.01μF(M) 250WV (U/T, CEE, UK, SAA)	24-9-134
6-C2	EC314688	Ceramic/C. DE7150 FZ 0.01μF(P) 125VAC (CSA, AAL)	24-5-87
6-C3	EC325286	Ceramic/C. (Vert.) HS D 0.0022μF(M) 400VAC (U/T, CEE, UK, SAA)	24-5-104
6-C3	EC326828	Ceramic/C. DE7100 F 0.0022μF(M) 125VAC (CSA, AAL)	24-5-87
6-C4,5	EC326604	Elect./C. 100μF 200WV (U/T, CSA, AAL)	24-12-74
6-C4,5	EC326606	Elect./C. 220μF 400WV (CEE, UK, SAA)	24-12-75

**7. BAR METER P.C BOARD (AMU-2006)  
BLOCK**

Symbol No.	Parts No.	Description	Schematic No.
7-IC1	EI322791	IC LC7556	45-8-425
7-D1	ED322774	Zener Diode 05Z-5.1U	45-6-76
7-D2	ED322810	Zener Diode WZ-040	45-6-67
7-IND1	EM322584	Bar Meter FIP48DW16YS	59-1-2
7-1	ZS422076	Screw, Pan 3x5	

## 8. ASSEMBLY BLOCK



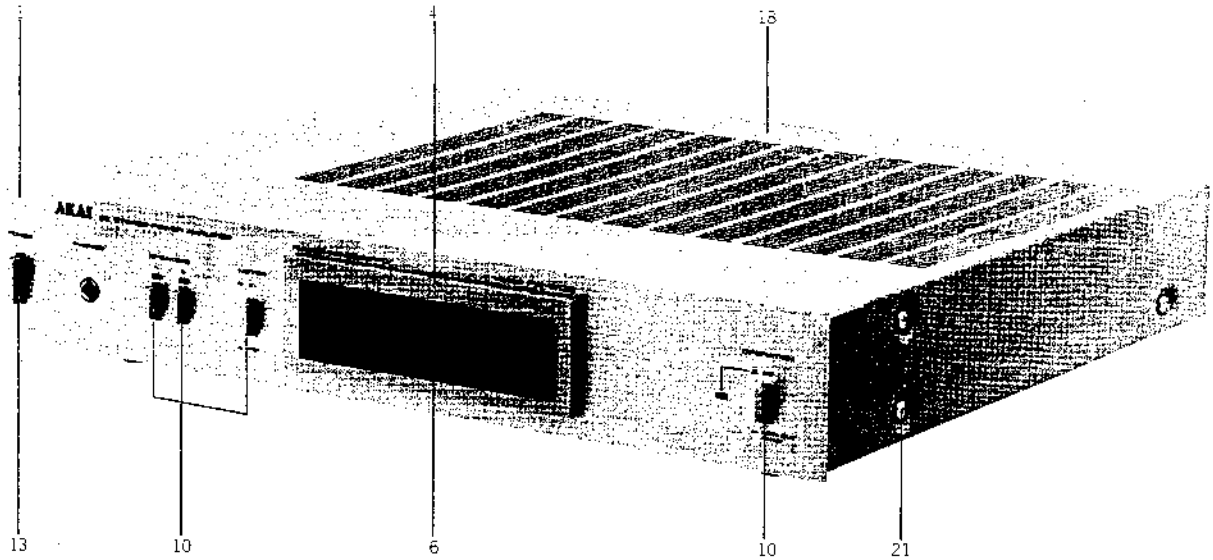


### ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
<b>LED P.C BOARD (A) BLOCK</b>				<b>ASSEMBLY BLOCK</b>			
8-1	ED322773	LED SLP-255D-01	45-15-37	8-28x	BT325299	△ Power Trans. PA-W04T-30 (CSA, AAL)	38-4-823
8-2x	SE325230	Escutcheon (A)	PAW-4025	8-29x	BT325300	△ Power Trans. PA-W04T-40 (CEE)	38-4-824
<b>LED P.C BOARD (B) BLOCK</b>				8-30x	BT325301	△ Power Trans. PA-W04T-50 (UK, SAA)	38-4-825
8-3	ED322772	LED SLP-155D-01	45-15-38	8-31	ZS396044	Screw, Bind 3x8 (Black)	
8-4x	SE325231	Escutcheon (B)	PAW-4026	8-32x	ZW609434	Flange Nut M3	
<b>MAIN AMP BLOCK</b>				<b>ASSEMBLY BLOCK</b>			
8-5x	ZS498273	Tapping Screw, #2 BR 3x8 W=8		8-33x	ZS422076	Screw, Pan 3x5	
8-6x	ZS325495	Tapping Screw, #2 BR 3x6		8-34	EJ301199	Headphone Jack 3P64M	31-2-83
<b>HEAT PAIP BLOCK</b>				8-35	ES324162	△ Push SW. SDG-1P TV-5 (U/T)	25-5-377
8-7	EI326832	IC STK0070(2)	45-8-488	8-36x	ES679566	△ Push SW. SDG1P TV-5 (CSA, AAL)	25-5-204
8-8	ZS310615	Tapping Screw, #2 BR 3x16		8-37x	ES665807	△ Push SW. SDG5P-E 5A/80A 250V (CEE, UK, SAA)	25-5-182
8-9x	ZS447840	Tapping Screw, #2 BR 3x8		8-38	EC327382	△ MP/C. (Vert.) 0.0047μF(M) 250WV (U/T)	24-9-134
<b>PULSE POWER BLOCK</b>				8-39x	EC314688	△ Ceramic/C. DE7150 FZ 0.01μF(P) 125VAC (CSA, AAL)	24-5-87
8-10x	ZS379350	Screw, Pan 3x6		8-40x	EC327382	△ MP/C. (Vert.) 0.0047μF(M) 250WV (CEE, UK, SAA)	24-9-134
8-11x	TA325261	Packing	AMU-6018	8-41x	ZS306021	S-Tight Screw, Pan 3x6	
8-12	ZS306459	B-Tight Screw, BR 3x8		8-42	ZS308846	Tapping Screw, #2 BR 3x8 (Oval Neck) (Black)	7-1-69
<b>REAR PANEL BLOCK</b>				8-43x	ZS290597	Tapping Screw, #2 BR 3x8 W=11 w/Washer	
8-13	SP326802	Rear Panel (F) (U/T)	PAW-6002	8-44x	ZS306486	Tapping Screw, #2 BR 3x8 (U/T)	26-6-323
8-14x	SP326803	Rear Panel (G) (CSA)	PAW-6002	8-46x	ZS447805	Tapping Screw, #2 BR 3x12	
8-15x	SP326804	Rear Panel (H) (AAL)	PAW-6002	8-47x	ZS434250	Screw, Pan 4x8 w/Washer (CEE, UK, SAA)	
8-16x	SP326805	Rear Panel (I) (CEE)	PAW-6003	8-48x	ZW413188	Nut #1 M4 (CEE, UK, SAA)	
8-17x	SP326806	Rear Panel (J) (UK, SAA)	PAW-6003	8-49	SP325208	Bottom Plate	PAW-4009 CA-6014
8-18	EJ308834	2P Pin Jack T-5511	31-5-143	8-50	SA312465	Circular Foot (A) Part CA	
8-19	ZS522865	Tapping Screw, #2 BR 3x12 (Black)		8-51x	ZS565942	Tapping Screw, #2 Pan 4x8	
8-20	EJ322582	Push Terminal 4P	32-1-107	8-52	EF306951	△ Fuse 2.5A 250V (U/T)	3-9-1-64
8-21	EJ650261	△ AC Outlet S-1 6432 (U/T, CSA, AAL)	31-1-147	8-53x	EF300577	△ Fuse (EAK) 5AT (CSA, AAL)	3-9-1-59
8-22	EW306428	△ AC Cord (U/T)	26-3-64	8-54x	EF300580	△ Fuse (EAK) 2.5AT (CEE, UK, SAA)	3-9-1-59
8-23x	EW305691	△ AC Cord CUL (CSA, AAL)	26-3-65				
8-24	EZ631945	Strain Relief SR-4N-4 (U/T, CSA, AAL)	2-7-49				
8-25x	EJ296853	△ 3P Inlet CM-3 (CEE, UK, SAA)	31-1-199				
8-26x	ZS463353	Tapping Screw, #2 BR 3x8 (Black)					
8-27	BT325302	△ Power Trans. PA-W04T-70 (U/T)	38-4-826				

When ordering parts, please quote Parts Number, Description and Model Number.

## 9. FINAL ASSEMBLY BLOCK



### FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.
<b>FRONT PANEL BLOCK</b>			
9-1	BD326104	Front Panel Block PA-W06	PAW 6029
9-2x	BD326105	Front Panel Block PA-W06-BL	PAW 6029
9-3x	SE322578	Escutcheon (A)	ATK 2013
9-4	SP326809	Sub Panel	PAW 6006;O07
9-5x	SP326810	Sub Panel (BL)	PAW 6006;O07
9-6	SZ326811	Bar Meter Plate	PAW 6008
9-7x	SZ326813	Bar Meter Filter (A)	PAW 6008;O10
9-8x	ZW301012	Washer (SPC) D3.2x10x1t	
9-9x	ZS322402	Special Tapping Screw, Pan 3x8	7170
9-10	SB322557	Button	AMU 2044
9-11x	SB322558	Button (BL)	AMU 2044
9-12x	ZG322566	Spring	AMU 2050
9-13	SB322576	Button (A)	ATK 2012
9-14x	SB322577	Button (A-BL)	ATK 2012
9-15x	ZG322579	Spring (A)	ATK 2014
9-16x	ZS296381	Tapping Screw, #2 BR 2.3x8	
<b>FINAL ASSEMBLY BLOCK</b>			
9-17x	ZS447840	Tapping Screw, #2 BR 3x8	
9-18	SP325223	Upper Plate (A)	PAW 4020
9-19x	SP325225	Upper Plate (B) (AAL)	PAW 4020
9-20x	SP325224	Upper Plate (A-BL)	PAW 4020
9-21	ZS322570	S-Tight Screw, Bind 4x8	
9-22x	ZS322580	S-Tight Screw, Bind 4x8 (Black)	
9-23x	ZW305013	Pop Rivet D3.2 (AAL)	7-6-9
9-24x	ZW452395	Washer (SPC) D2.3x7x0.5t	

When ordering parts, please quote Parts Number, Description and Model Number.

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BA326223	2-1	ER324934	3-R14	SP326248	6-1		
BA326230	3-1	ER324934	3-R16	SP326249	6-4x		
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BT319226	5-35x	ES315362	5-8	ZG322566	6-10x		
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EC314688	5-21x	ES323369	2-SW3	ZS296381	5-6x		
EC319220	2-C56	ES324162	5-16	ZS296381	6-18x		
EC320548	5-20	ES324916	5-30	ZS300506	5-15x		
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ER319218	2-R92	SP319198	5-38				
ER319219	2-R91	SP319199	5-39x				
ER322787	2-R57,58	SP319200	5-40x				
ER323067	2-R38	SP319201	5-41x				
ER323069	2-R39	SP319202	5-42x				
ER323351	2-R40	SP319203	2-2				
ER324934	2-R27,28	SP324840	5-12				

# INDEX

## 2. MODEL PA-W06

Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.
BA326128	2-1	ER311673	3-R13,14	ZS322570	9-21		
BD326104	9-1	ER317686	2-R15	ZS322580	9-22x		
BD326105	9-2x	ER322221	4-R23	ZS325495	8-6x		
BT325299	8-28x	ER322590	2-R17	ZS379350	5-4		
BT325300	8-29x	ER324222	5-R5	ZS379350	8-10x		
BT325301	8-30x	ER325265	6-L1	ZS380046	5-6		
BT325302	8-27	ER325268	6-L1	ZS396044	8-31		
BT326607	5-T1	ER325269	2-R48	ZS419670	5-3		
EC258298	6-C1	ER325269	2-R63,64	ZS422076	7-1		
EC314688	6-C2	ER325277	5-R1	ZS422076	8-33x		
EC314688	8-39x	ER325288	5-R18	ZS434250	8-47x		
EC323517	5-C8,9	ER326837	2-R16	ZS447805	8-46x		
EC323557	6-C1	ER326838	3-R9,10	ZS447840	8-9x		
EC325272	3-C2	ER409814	2-R28	ZS447840	9-17x		
EC325286	5-C21	ER427972	2-R60	ZS463353	8-26x		
EC325286	6-C3	ER517072	2-R45,46	ZS498273	8-5x		
EC325305	2-C21,22	ER622978	6-R1to4	ZS522865	8-19		
EC325316	5-C6	ER663232	2-R52,53	ZS558101	5-5		
EC325320	3-C8	ES306725	5-SW1	ZS565942	8-51x		
EC325671	6-C2	ES323786	3-SW1	ZW301012	9-8x		
EC326604	6-C4,5	ES324118	4-SW1	ZW305013	9-23x		
EC326606	6-C4,5	ES324162	8-35	ZW413188	8-48x		
EC326608	5-C2,3	ES324344	4-SW2,3	ZW452395	9-24x		
EC326609	5-C4,5	ES665807	8-37x	ZW609434	8-32x		
EC326827	6-C1	ES679566	8-36x				
EC326828	6-C3	ET219868	2-TR4				
EC327382	8-38	ET300931	4-TR1				
EC327382	8-40x	ET307195	2-TR2,3				
EC328246	5-C21	ET307195	2-TR9				
EC551160	5-C1	ET311790	2-TR5				
ED214457	2-D10,11	ET311791	2-TR6				
ED214457	2-D16,17	ET311792	2-TR1				
ED303123	2-D12to14	ET316171	5-TR2				
ED316143	2-D1	ET322598	5-TR7				
ED316143	2-D8,9	ET322775	4-TR2,3				
ED316143	2-D15	ET322775	4-TR6to8				
ED316143	4-D1	ET322778	2-TR7,8				
ED316143	4-D4to6	ET322778	4-TR4,5				
ED322772	8-3	ET323529	5-TR1				
ED322773	8-1	ET323572	5-TR3to6				
ED322774	7-D1	EV618052	2-VR1				
ED322810	7-D2	EV623193	2-VR2				
ED323056	2-D2,3	EW305691	8-23x				
ED323056	3-D1	EW306428	8-22				
ED323057	2-D4to7	EZ631945	8-24				
ED323512	5-D3	SA312465	8-50				
ED323513	5-D4	SB322557	9-10				
ED323530	4-D3	SB322558	9-11x				
ED323573	5-D1	SB322576	9-13				
ED325275	5-D5to8	SB322577	9-14x				
ED326605	6-D1	SE322578	9-3x				
ED326835	2-D18,19	SE325230	8-2x				
ED560913	5-D2	SE325231	8-4x				
ED562386	4-D2	SP325208	8-49				
ED624903	2-D20,21	SP325223	9-18				
EF300577	8-53x	SP325224	9-20x				
EF300580	8-54x	SP325225	9-19x				
EF306951	8-52	SP326802	8-13				
EI322599	4-IC1	SP326803	8-14x				
EI322791	7-IC1	SP326804	8-15x				
EI323054	3-IC1	SP326805	8-16x				
EI323564	2-IC2	SP326806	8-17x				
EI325947	5-T1	SP326809	9-4				
EI326595	2-IC1	SP326810	9-5x				
EI326832	8-7	SZ326811	9-6				
EJ296853	8-25x	SZ326813	9-7x				
EJ301199	8-34	TA323481	5-7				
EJ308834	8-18	TA325261	8-11x				
EJ313601	8-45	ZG322566	9-12x				
EJ322582	8-20	ZG322579	9-15x				
EJ650261	8-21	ZG323474	5-1				
EM322584	7-IND1	ZG323474	5-2				
EO324150	2-L1	ZS290597	8-43x				
EO325278	5-L2,3	ZS296381	9-16x				
EO325278	5-L4,5	ZS306021	8-41x				
EO325280	5-L6,7	ZS306459	8-12				
EO325281	5-L1	ZS306486	8-44x				
EP245305	2-RL1,2	ZS308846	8-42				
EP323350	3-RL1	ZS310615	8-8				
ER308875	2-R18,19	ZS322402	9-9x				

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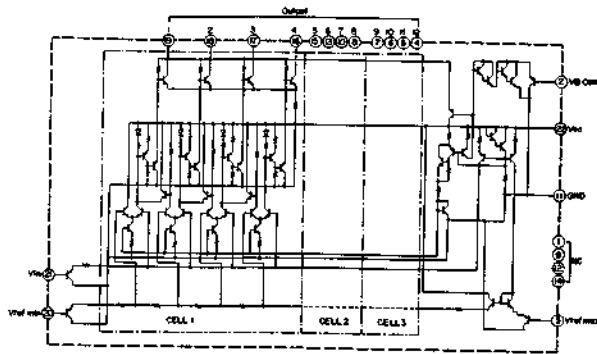
SECTION 4

**SCHEMATIC DIAGRAM**

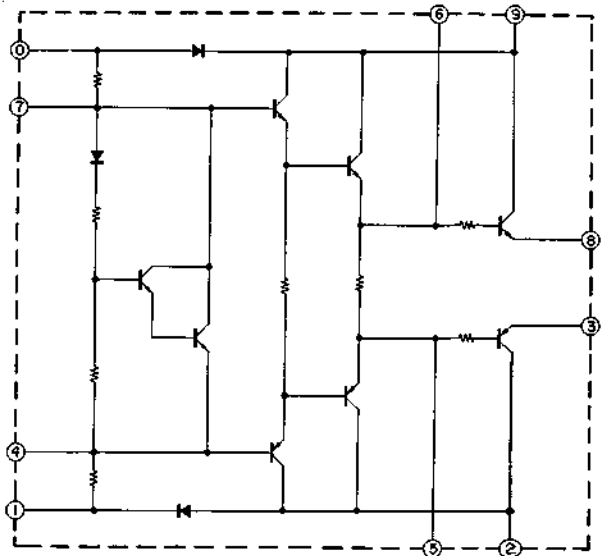
1. SCHEMATIC DIAGRAM OF ICs
2. PR-A06 NO. 1601238A SCHEMATIC DIAGRAM
3. PA-W06 NO. 1601240A SCHEMATIC DIAGRAM



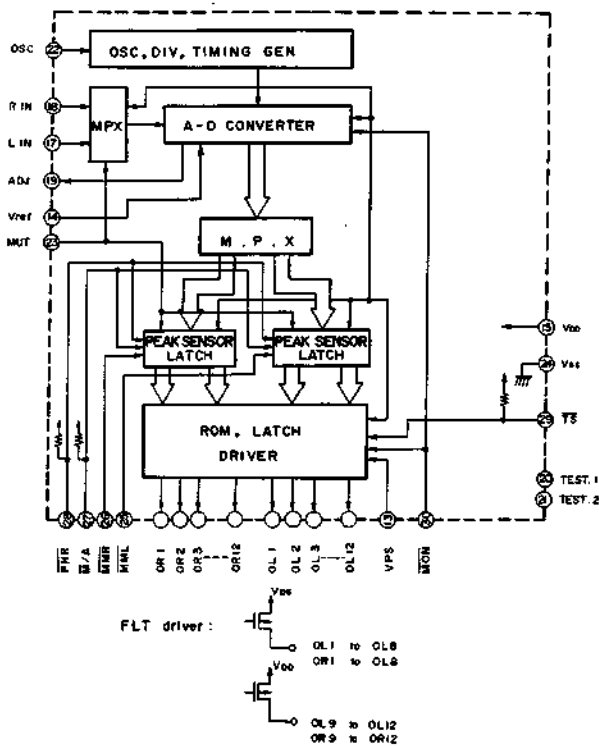
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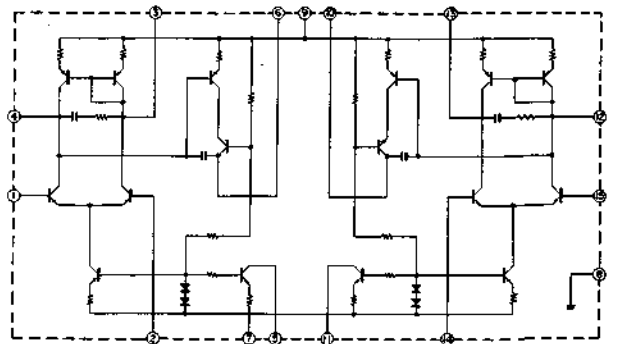
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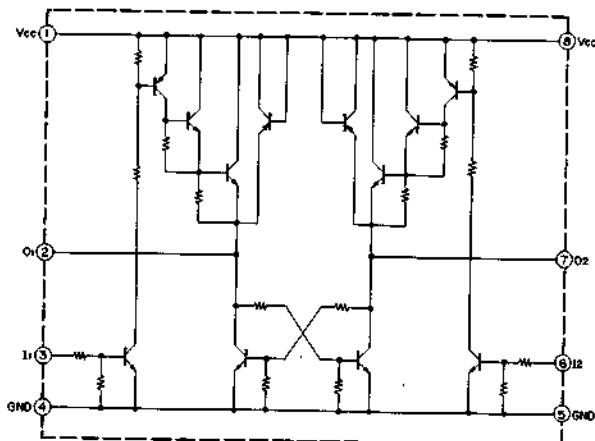
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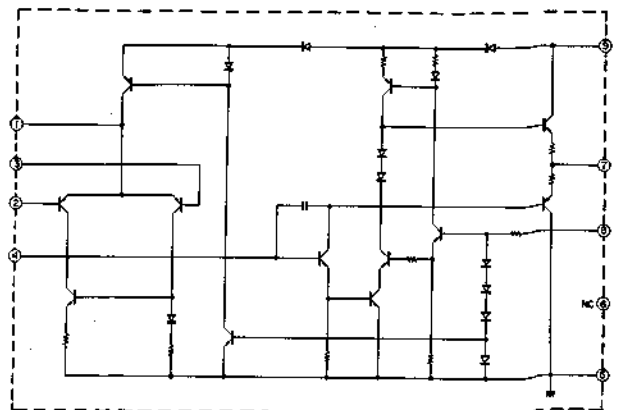
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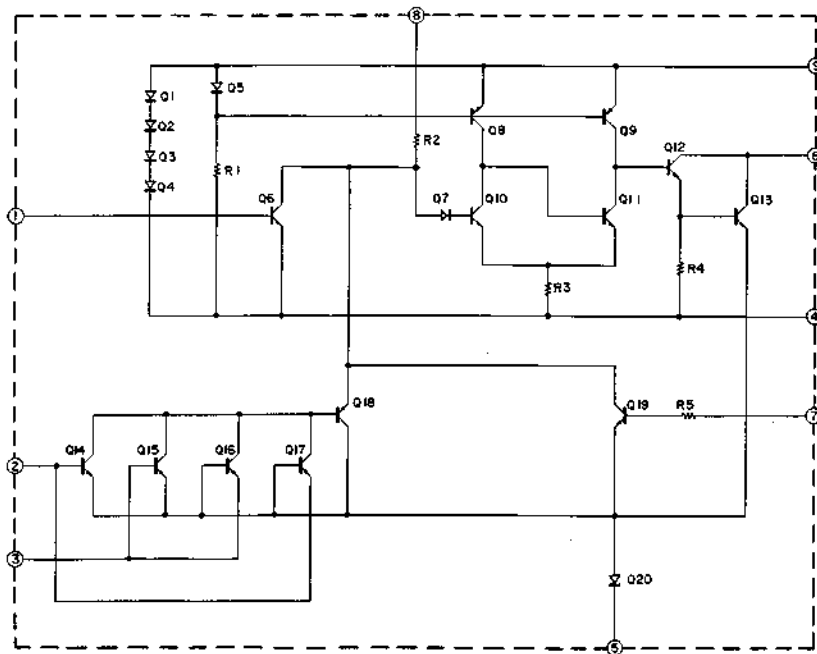
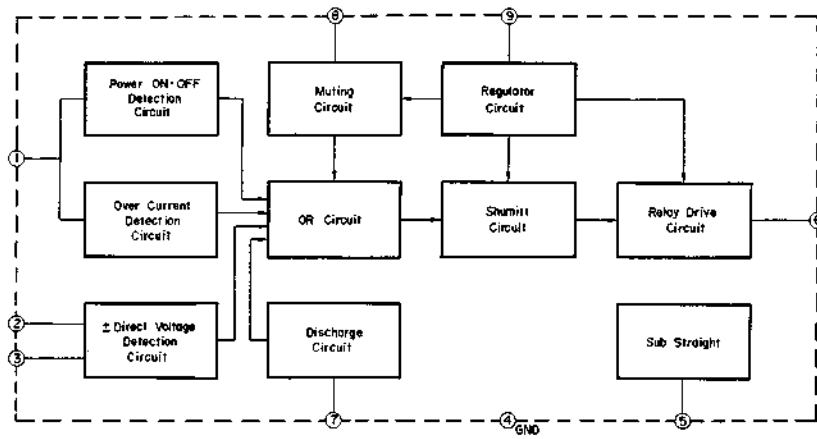
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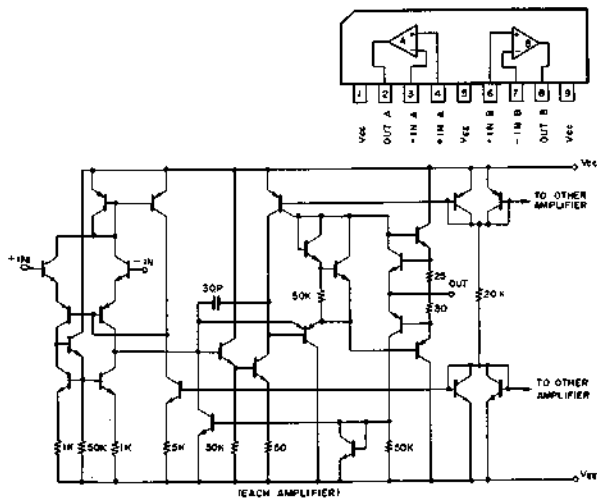
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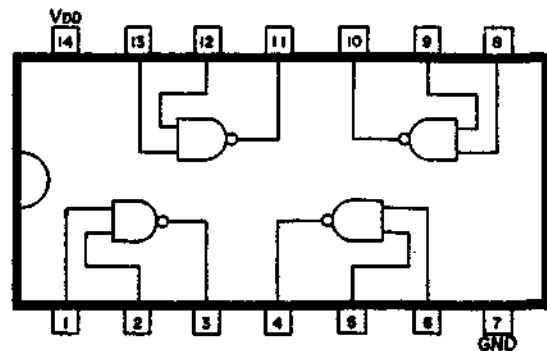
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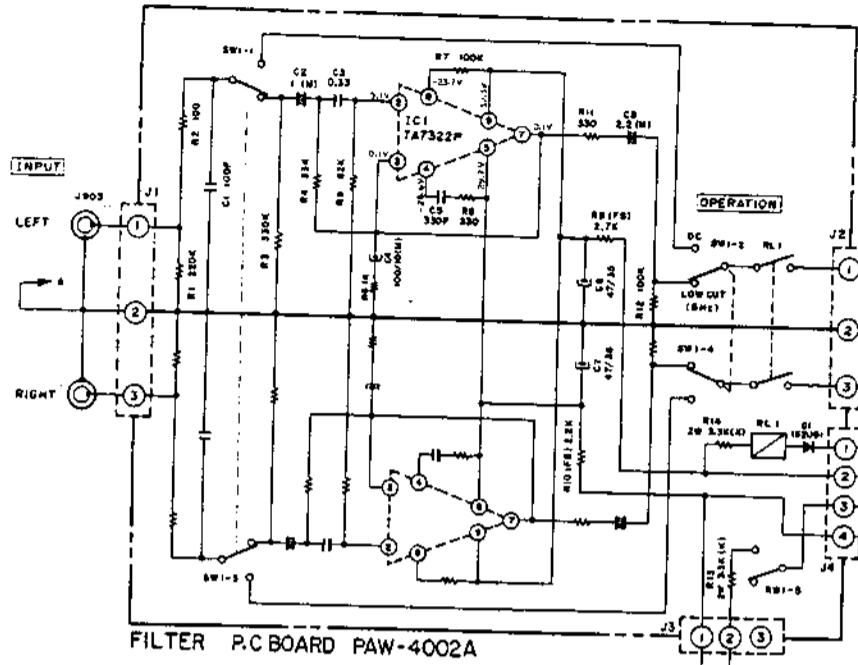
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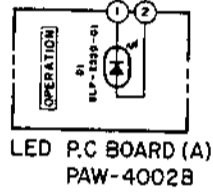
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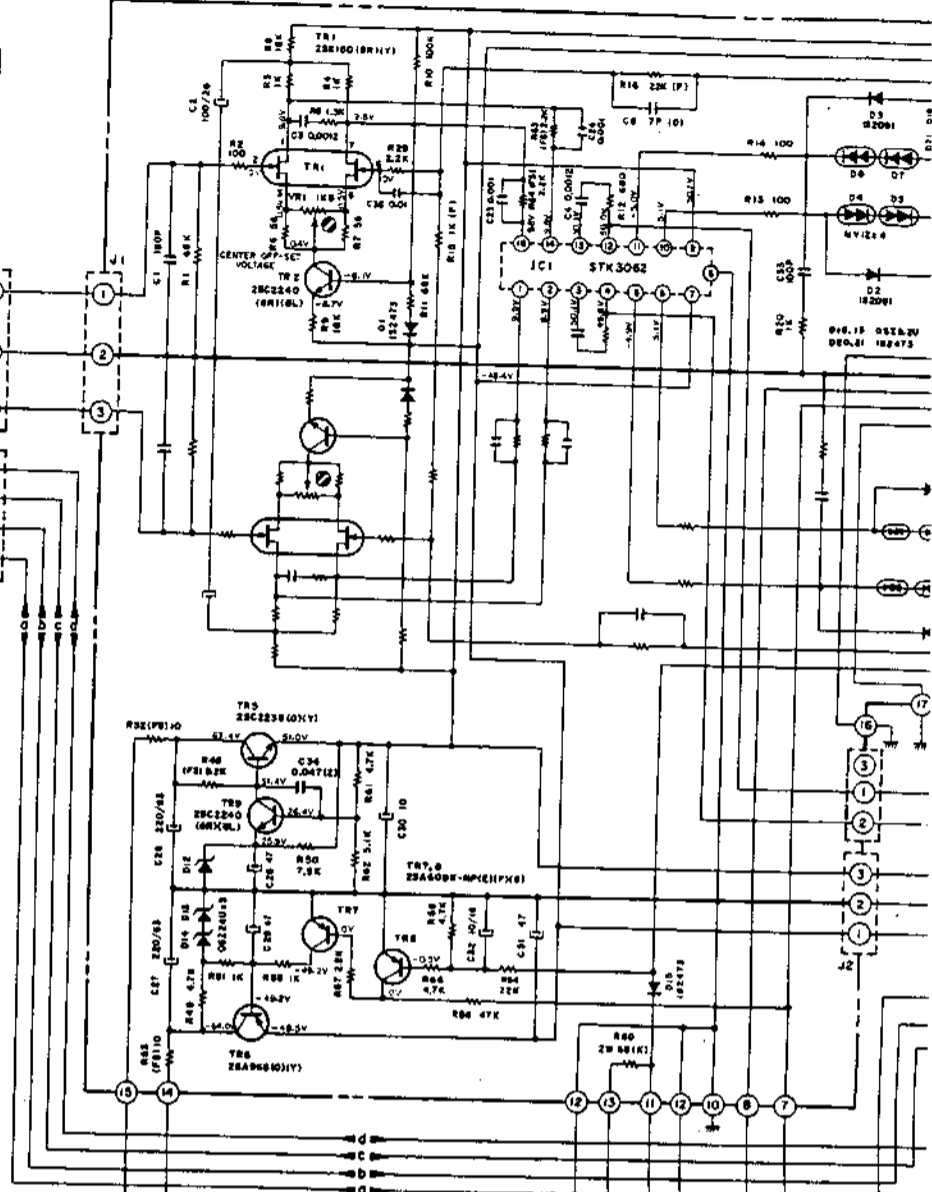
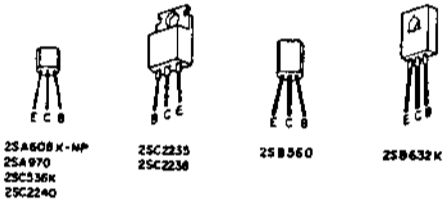
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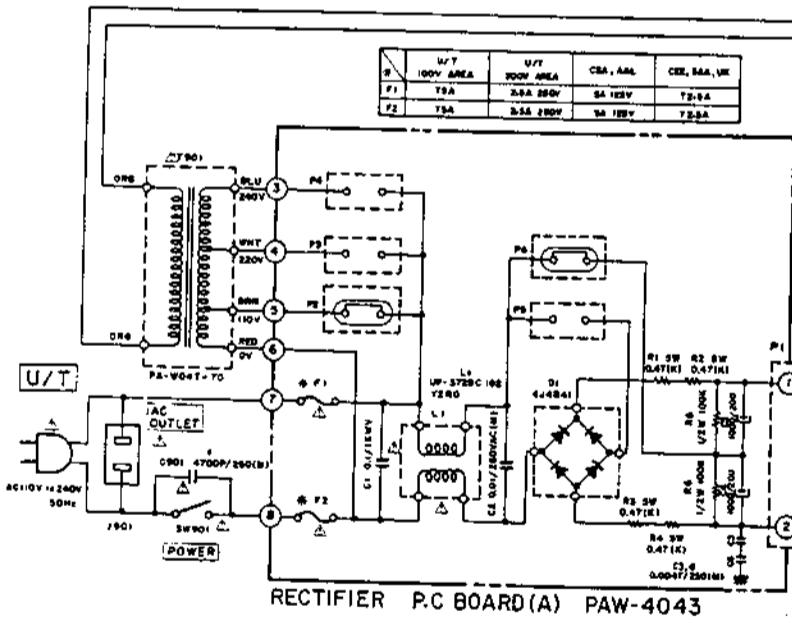
FILTER P.C BOARD PAW-4002A



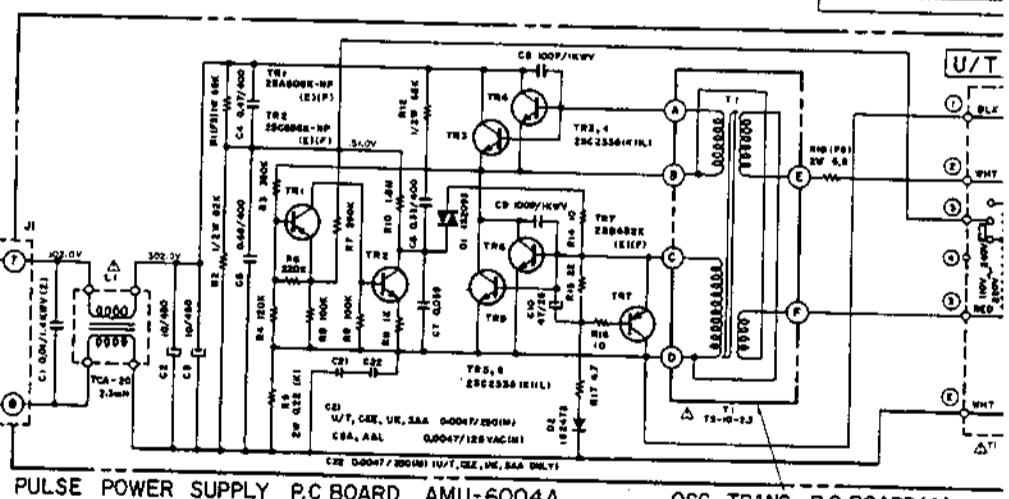
LED P.C BOARD (A)  
PAW-4002B



LED F

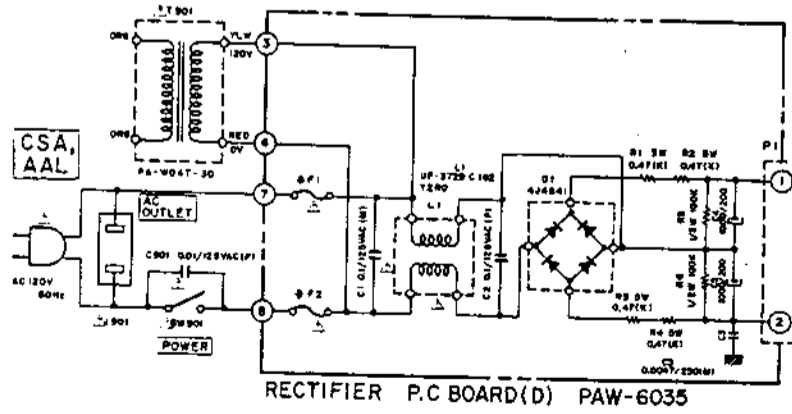


RECTIFIER P.C BOARD (A) PAW-4043

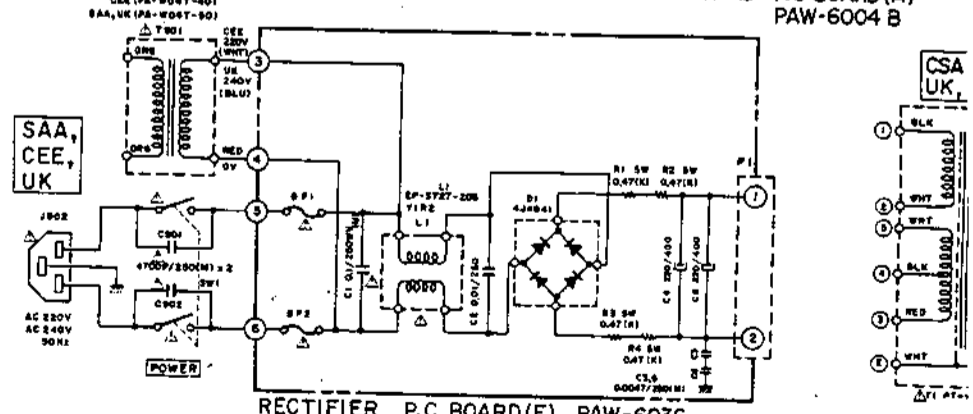


PULSE POWER SUPPLY P.C BOARD AMU-6004A

OSC TRANS P.C BOARD (A)  
PAW-6004 B



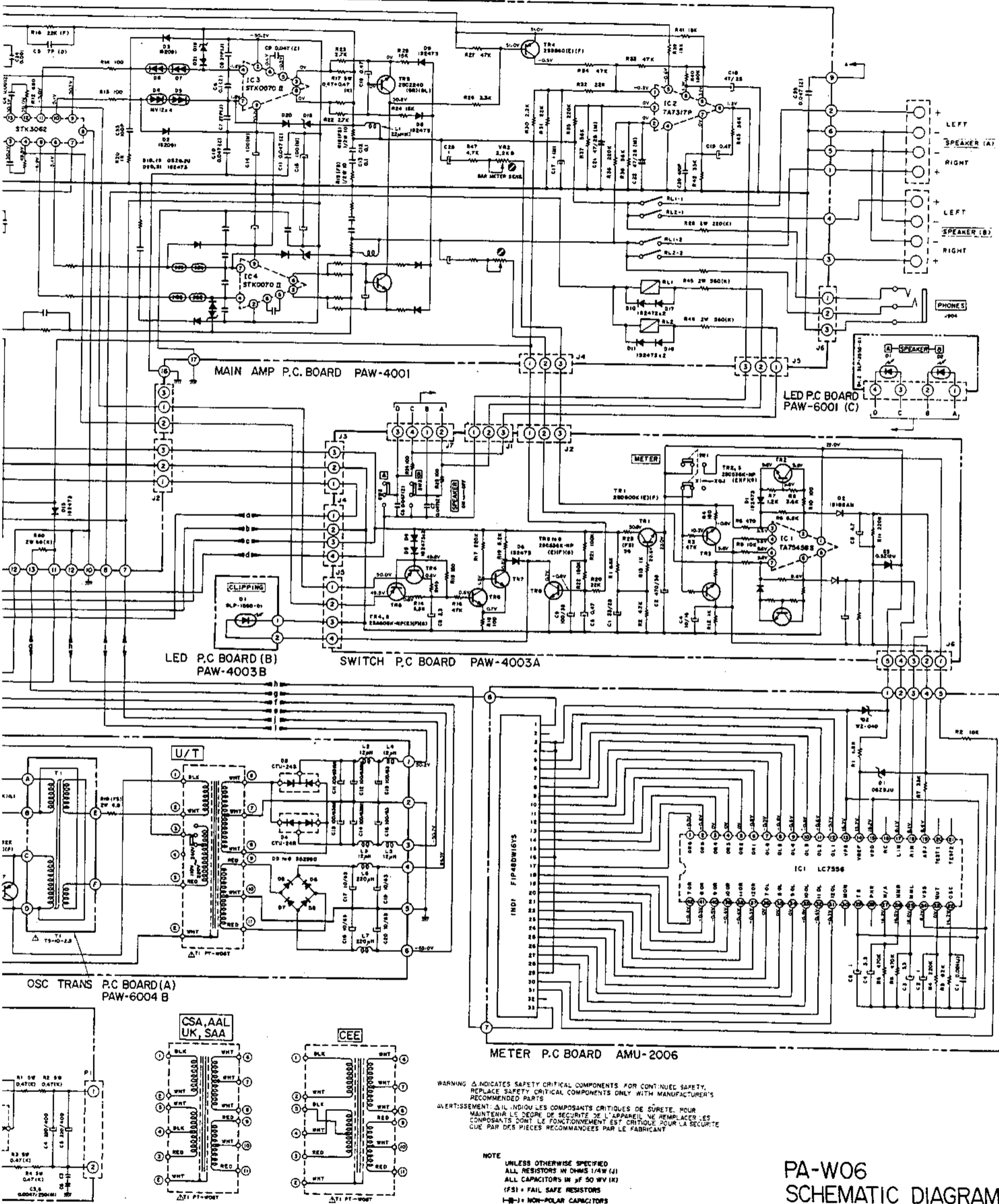
RECTIFIER P.C BOARD (D) PAW-6035



RECTIFIER P.C BOARD (E) PAW-6036

U/T	100V AREA	250V AREA	CSA, AAL	CEE, SAA, UK
F1	T3A	25A 250V	SA 125V	T3-BA
F2	T3A	2.5A 250V	SA 125V	T3-BA

F G H I J K

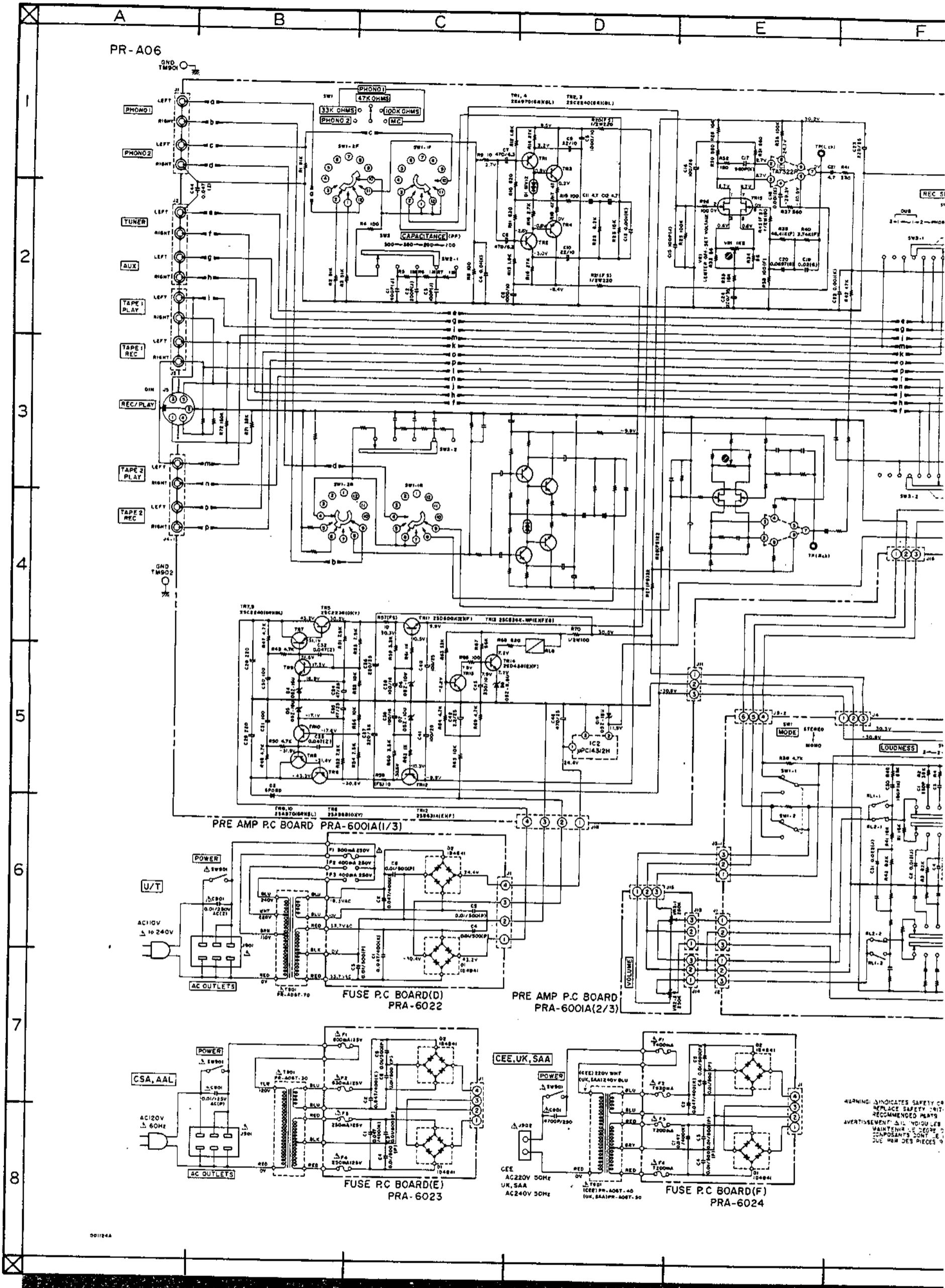


WARNING Δ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.  
 AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACEZ LES COMPOSANTS QU'AVEC LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

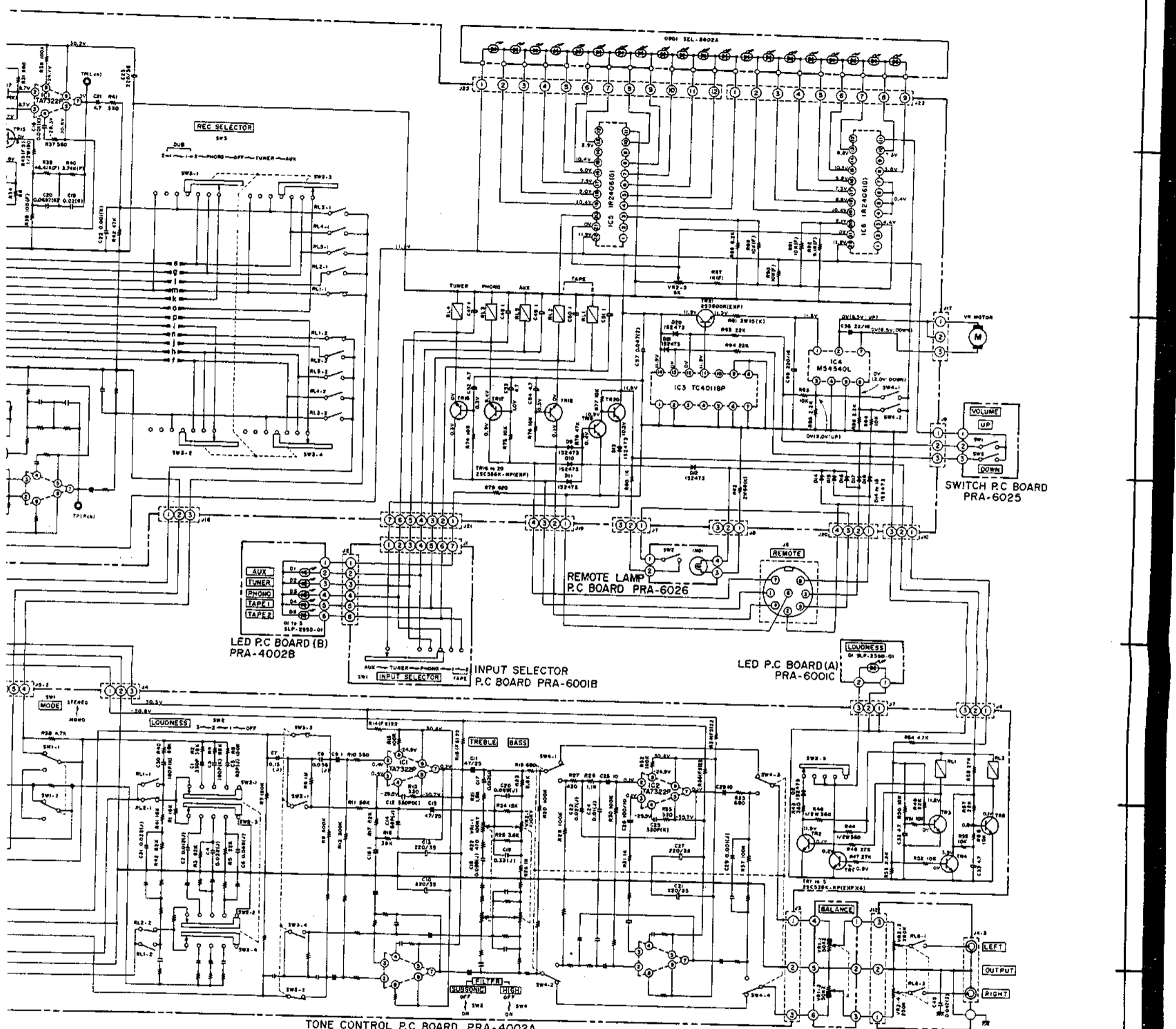
NOTE  
 UNLESS OTHERWISE SPECIFIED  
 ALL RESISTORS IN OHMS (1/4W (J))  
 ALL CAPACITORS IN μF (50 WV (K))  
 (FS) = FAIL SAFE RESISTORS  
 (N) = NON-POLAR CAPACITORS  
 POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

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 No. 1601240A

PAW-6036



WARNING: INDICATES SAFETY TO REPLACE SAFETY PARTS RECOMMENDED PARTS MAINTENANCE DESERVE TO COMPONENTS DON'T ETC. POUR DES PIÈCES 9

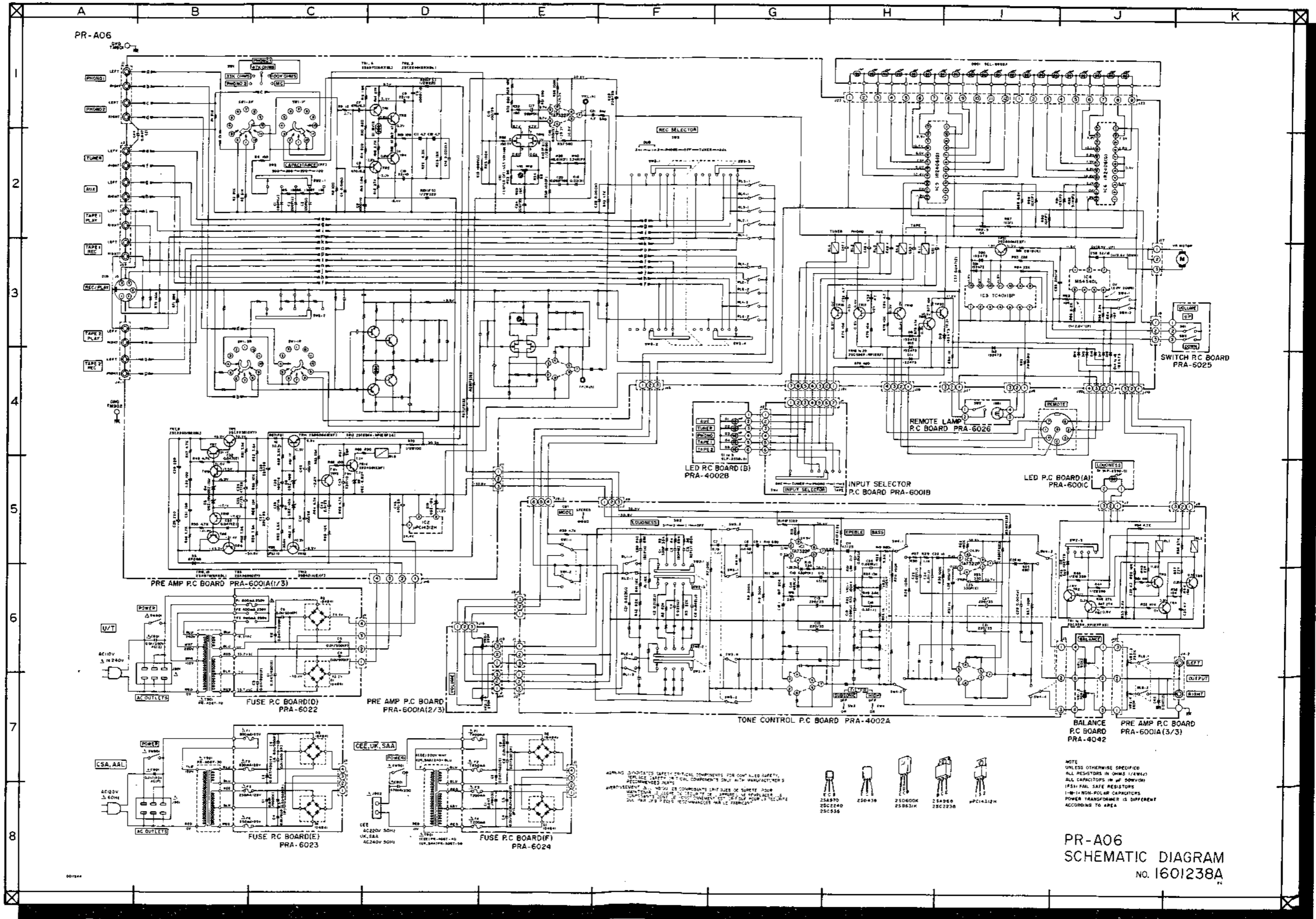


WARNINGS: INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.  
 AVERTISSEMENT: Δ INDICQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACER LES COMPOSANTS Δ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

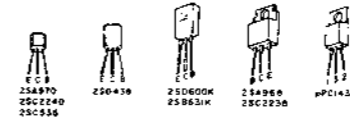
- 25A970
- 25C2240
- 25C536
- 25D438
- 25D600K
- 25B631K
- 25A988
- 25C2238
- MPC14312H

NOTE  
 UNLESS OTHERWISE SPECIFIED  
 ALL RESISTORS IN OHMS (Ω/W/L)  
 ALL CAPACITORS IN μF (50V/10V)  
 (FS) = FAIL SAFE RESISTORS  
 (-) = NON-POLAR CAPACITORS  
 POWER TRANSFORMER IS DIFFERENT  
 ACCORDING TO AREA

PR-A06  
 SCHEMATIC DIAGRAM  
 NO. 1601238A



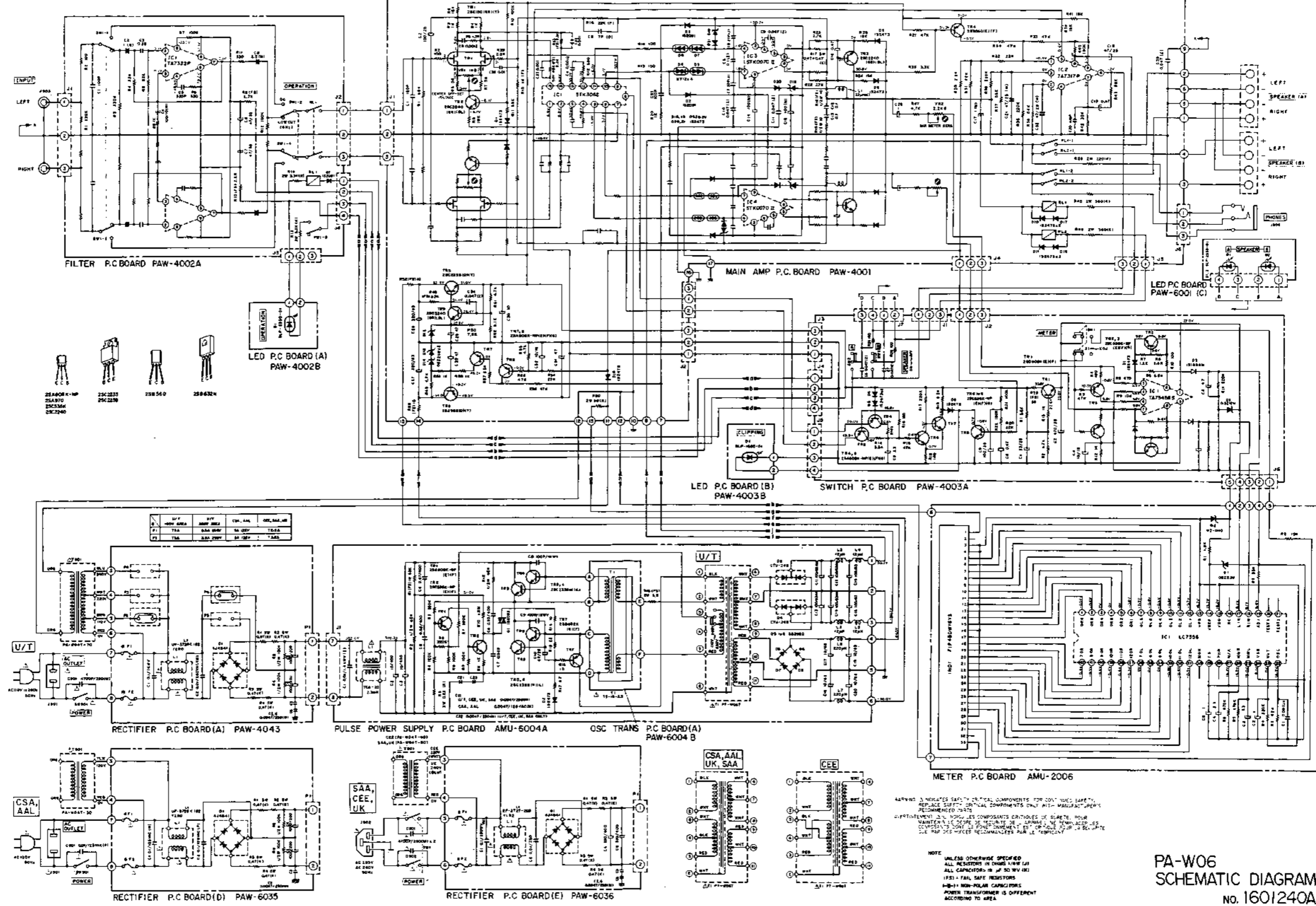
WARNING: INDICATED SAFETY CRITICAL COMPONENTS FOR COMPLETE SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S APPROVED EQUIVALENTS. NEVER EXCEED COMPONENT'S RATED VOLTAGE OR CURRENT. ALWAYS USE THE CORRECT POLARITY OF POLARIZED COMPONENTS. ALWAYS USE THE CORRECT POLARITY OF POLARIZED COMPONENTS.



NOTE: UNLESS OTHERWISE SPECIFIED ALL RESISTORS IN OHMS (1/W4) ALL CAPACITORS IN UF (5/W4) (FS) FUL SAFE RESISTORS 1-W4 NON-POLAR CAPACITORS POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

PR-A06  
SCHEMATIC DIAGRAM  
NO. 1601238A

PA-W06



NOTE: 1. INDICATES SAFETY CRITICAL COMPONENTS FOR WHICH USER SHOULD REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.  
 2. UNLESS OTHERWISE SPECIFIED, ALL CAPACITORS IN THIS DRAWING ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 3. ALL RESISTORS IN THIS DRAWING ARE 5% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 4. ALL CAPACITORS ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 5. ALL CAPACITORS ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 6. ALL CAPACITORS ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 7. ALL CAPACITORS ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 8. ALL CAPACITORS ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 9. ALL CAPACITORS ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
 10. ALL CAPACITORS ARE 50% TOLERANCE UNLESS OTHERWISE SPECIFIED.

PA-W06  
 SCHEMATIC DIAGRAM  
 NO. 1601240A



## REVISED EDITION

There were errors in the Service Manual Model  
PR-A06/PA-W06 page 48. Correction are as follows.

