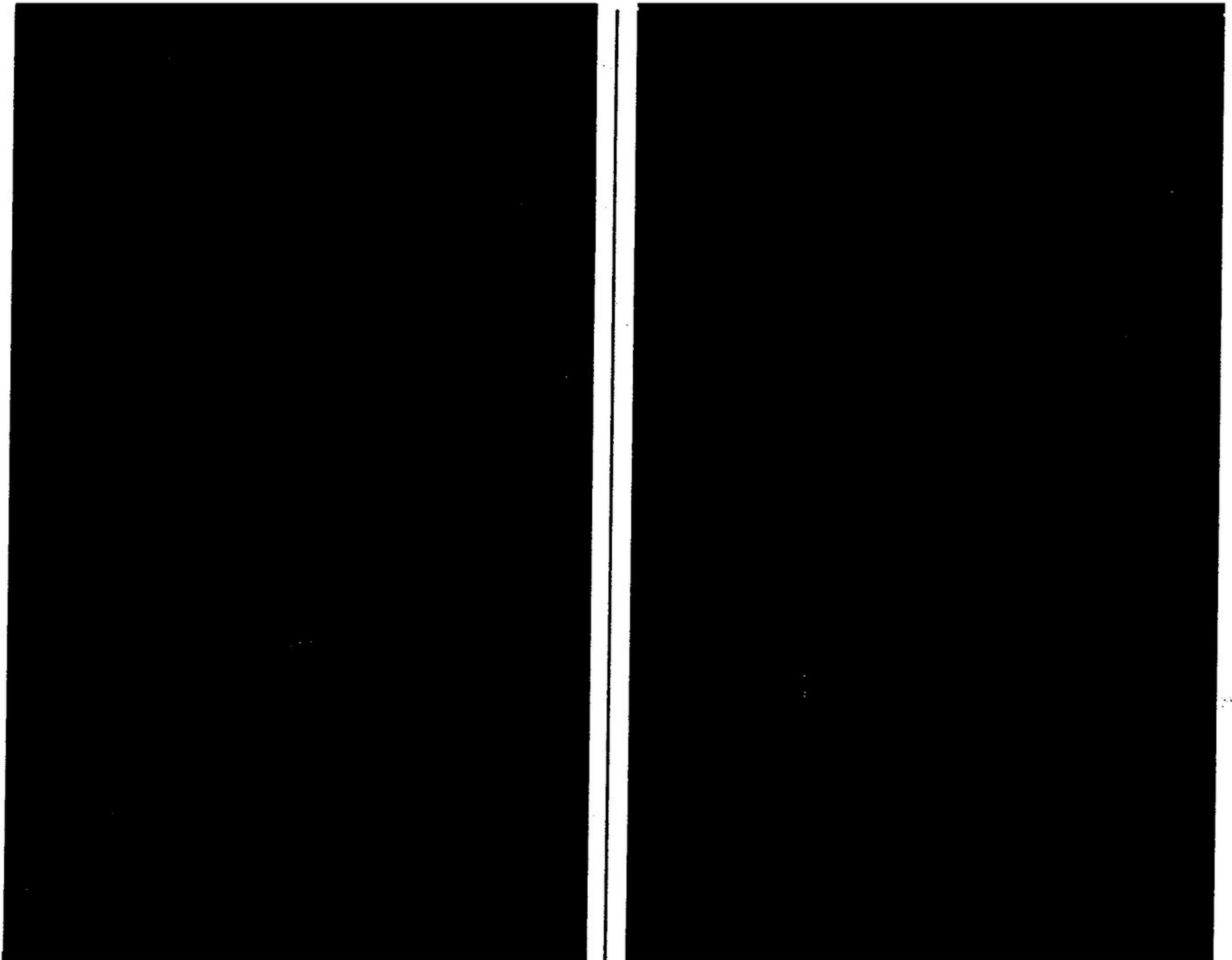


# Service Manual

# A 300

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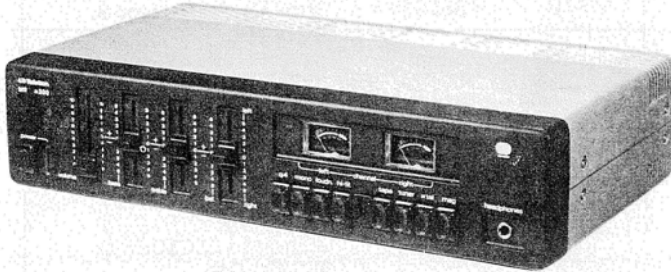




# SERVICE MANUAL

## 12 Watt Solid State Stereo Hi-Fi Amplifier

### MODEL A-300



Germany: TELETON Elektro GmbH.  
Oberhausener Str. 17 4000 Düsseldorf-Rath  
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United Kingdom: TELETON Electro (UK) Co., Ltd.  
Teleton House, Waterhouse Lane,  
Chelmsford/Essex  
Tel. Chelmsford 62 442 TX 99 338

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2200 Borgerhout Belgium  
Prins-Leopold-Straat 28  
Tel. 03/361045 TX32508  
03/357670

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Marconiweg 10. Vianen  
Tel. 03473-3744 TX 40581

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94270 Le Kremlin-Bicêtre  
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Kanzleistrasse 126 8004 Zürich  
Tel. 39 45 60/23 50 40 TX 52 362

Specifications are subject to change without notice.

## ALIGNMENT INSTRUCTION

- Equipment required : (See Fig. 1 and 2)
- Signal Generator (SG) : Output 1 kHz  
with attenuator approx. 10mV – 500mV  
R 10 kohm distortion 0.1%
- Oscilloscope (OSC) : normal
- Amperemeter (AM) : DC 0 – 100mA
- Volt meter (VM) : DC 0 – 50V
- Dummy load (R) : 8 ohm 5% 20W
- For further checks
- Distortion Meter (DM)
- Audio-Voltmeter (AVM)

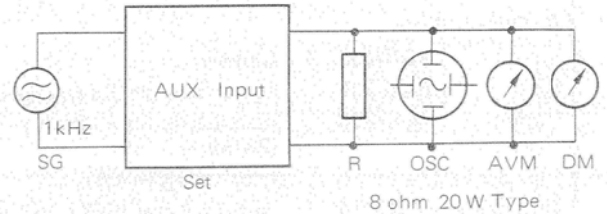


Fig. 1

STEP	OUTPUT	ADJUST	ADJUST FOR
1	0	VR301-L VR302-R or	Vc = 1/2 Vcc
2	0	VR303-L VR304-R or	IC = 17 mA
3	7-9 W	VR101-L VR102-R or	Symmetric sine wave as shown in Fig. 2
4	just 10W	VR101 VR102	VU Meter 0dB

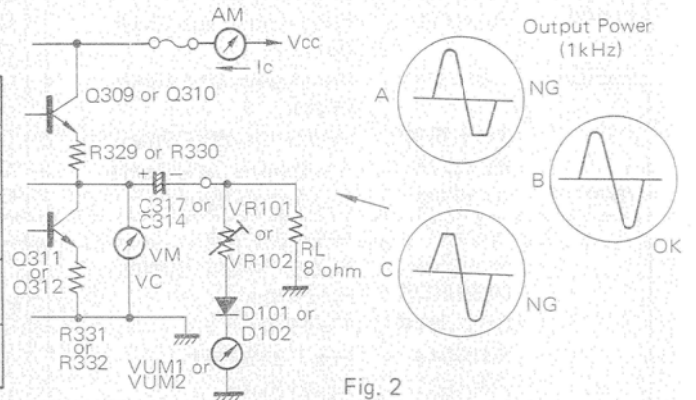
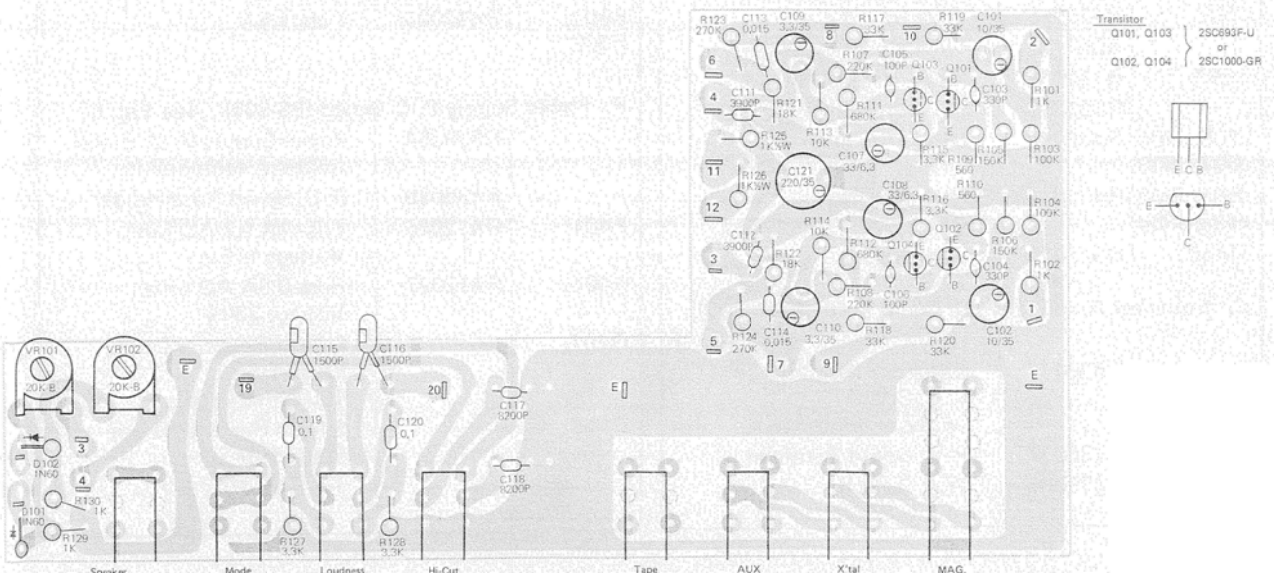


Fig. 2

## Equalizer Amp P. C. Board(EQA-300)

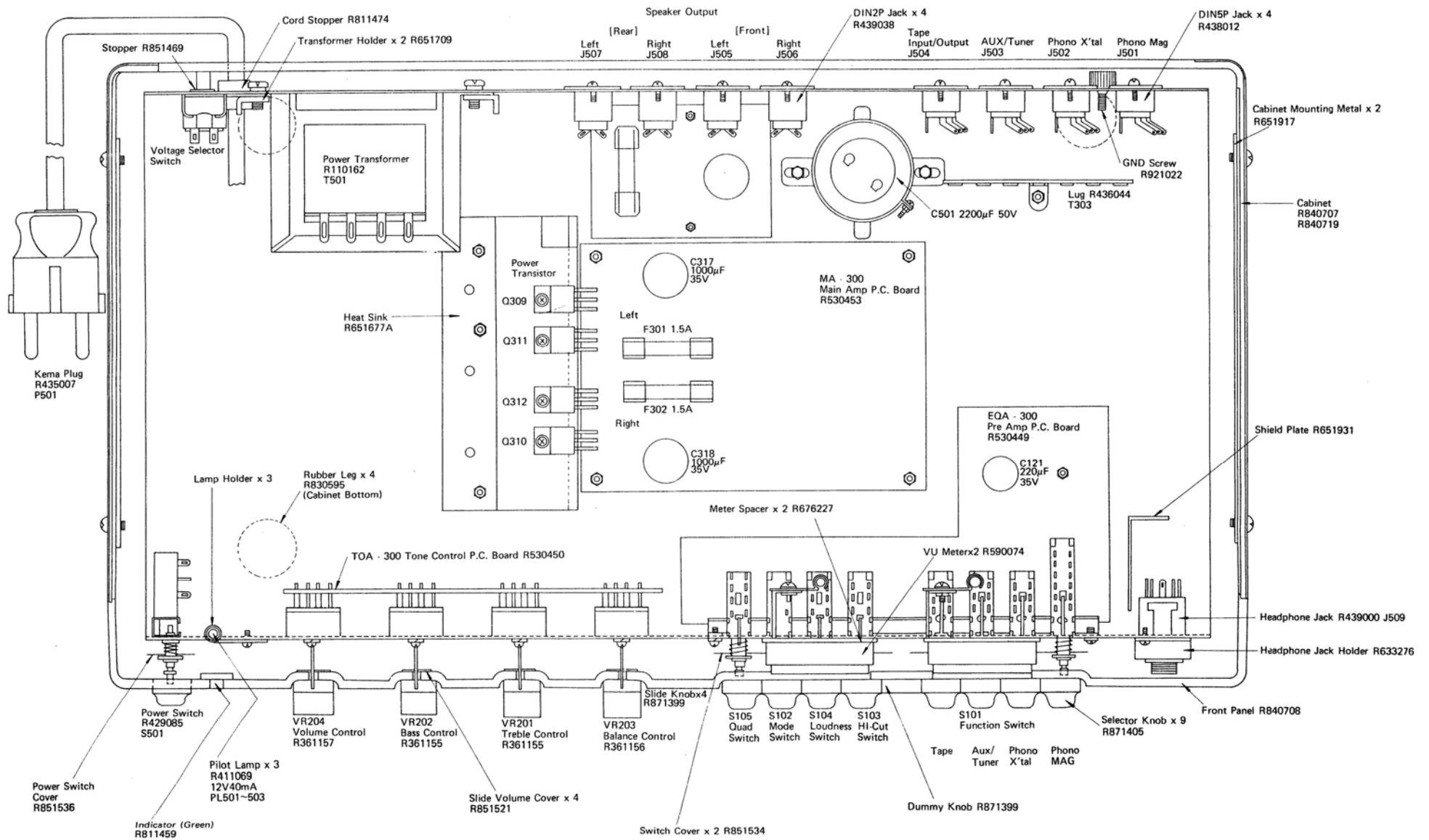


# SPARE PARTS LIST

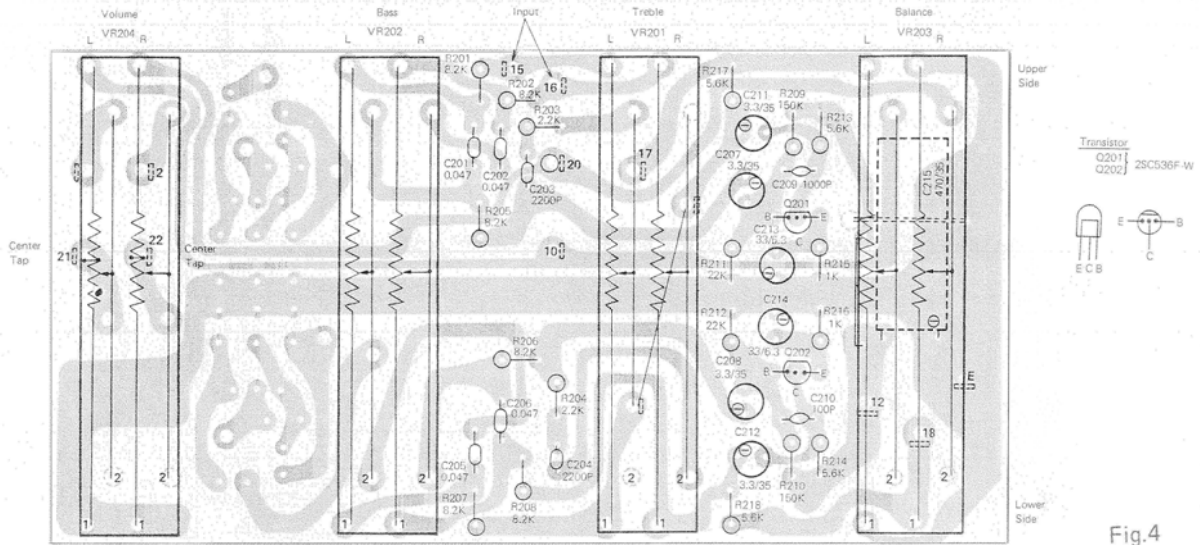
(Standard Parts Resistors, Capacitors are not listed here.)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
<b>A. Cabinet</b>			Q101, Q102, Q103, Q104		
	R840707	Upper Cabinet	Transistor 2SC693-F-U or 2SC1000-GR		
	R840719	Lower Cabinet	D101, D102		
	R811443	Upper Cabinet Sticking Piece	Diode IN60		
	R830595	Rubber Leg	VR101	R382034	Semi-Fixed Resistor B B 20kΩ
	R651917	Cabinet Holder	VR102		
	R871399	Slide Volume Knob	<b>D. Tone Control Amplifier P. C. Board (TOA-300)</b> <b>See Fig. 4</b>		
	R871405	Push Switch Knob		R530450	Tone Control Amplifier P. C. Board (without component)
	R871388	Dummy Knob	Q201, Q202		Transistor 2SC536F or 2SC732-GR
	R811459	Power Indicator Pilot (Green)	VR201, VR202	R361155	B-50kΩ (Tone Control)
	R840708	Front Panel	VR203	R361156	HB-50kΩ (Balance Control)
	H850286	P. S. Paper	VR204	R361157	B-50kΩ With Center Tup (Volume Control)
	R851521	Slide Volume Mask	<b>E. Main Amplifier P. C. Board (MA-300) See Fig. 5</b>		
	R851534	Switch Cover		R530453	Main Amplifier P. C. Board (without component)
	R851535	Switch Cover (AC Power Switch)	Q301, Q302		Transistor 2SC 536-F or 2SC732-GR
	R890869	Name Plate	Q303, Q304		Transistor 2SC1175-F or 2SC 734-Y
<b>B. Chassis Parts</b>			Q305		Transistor 2SC1384-R or 2SC1384-Q
	R610403	Chassis	Q306		Transistor 2SA684-R or 2SA684-Q
S501	R429085	Power Switch (Push Type)	Q307		Transistor 2SD313-D With Accessories
PL501	R411069	Pilot Lamp 12V 40mA (Power)	Q308		
		Pilot Lamp Holder	Q309, Q310, Q311, Q312		
ME1, ME2	R590074	Output Meter 650Ω 250μA	D301, D302		Silicon Varistor Diode MV-13
	R676227	Meter Spacer	VR303, VR304,	R382021	Semi-Fixed Resistor B-500Ω
PL502	R411070	Pilot Lamp 12V 40mA (Meter )	VR301	R382023	Semi-Fixed Resistor B-100kΩ
PL503	R411071	Pilot Lamp 12V 40mA (Meter )	VR302		P. C. Board Fuse Holder Fuse 1.5A
	R676202A	Spacer (height 6.5mm)	F301, F302	H430028 R412006	
J509	R633276	Headphone Jack Holder	<b>F. Power Supply P. C. Board (PS-300) See Fig. 6</b>		
	R439000	Headphone Jack		R530354	Power Supply P. C. Board (without component)
	A65412	Lead Clamper	F401	R430028	P. C. Board Fuse Holder
	H810231	Spacer (height 12mm)	F401	R412026	Fuse 1A for AC Line Voltage 115V
	R851402A	Fuse Fiber	D201	R412027	Fuse 0.5A AC Line Voltage 230V
	R651667A	Heat Sink	D202		Silicon Rectifier Diode Stack Type 10DC-R-2 (Red)
	R436044	Lug T-303 (6P)			Silicon Rectifier Diode Stack Type 10DC-N-2 (Black)
	R651931	Shield Plate	<b>C. Equalizer Amplifier P. C. Board Parts (EQA-300)</b> <b>See Fig. 3</b>		
	R440095	AC Line Cord		R530449	Equalizer Amplifier P. C. Board (without component)
P501	R435007	AC Line Cord Plug (KEMA)		R436031	P. C. Board Terminal
	R811474	Cord Stopper SN-4		R429086	Push Switch
S502	H425020	Slide Switch	<b>S101 ~ S105</b>		
	R851469	Slide Switch Stopper B			
T501	R110162	Power Transformer			
	R651709	Transformer Holder			
J505, J506 J507, J508	R439038	DIN 2P Jack			
J501, J502 J503, J504	R438012	DIN 5P Jack			
TM501	R921022	GND Screw			

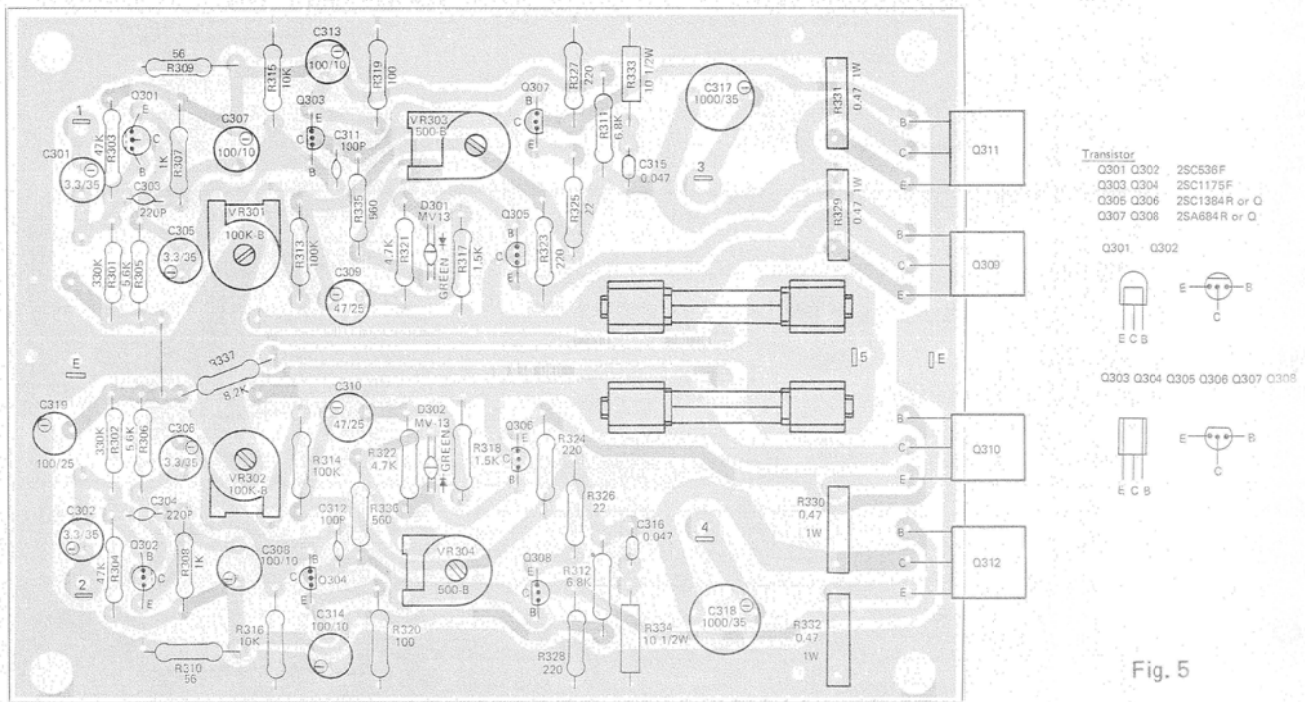
# COMPONENT DIAGRAM(TOP VIEW)



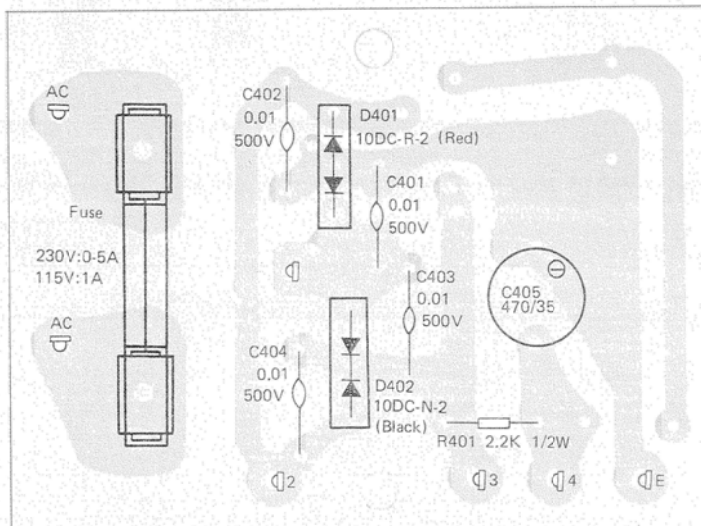
## Tone Control Amp. P. C. Board(TOA-300)



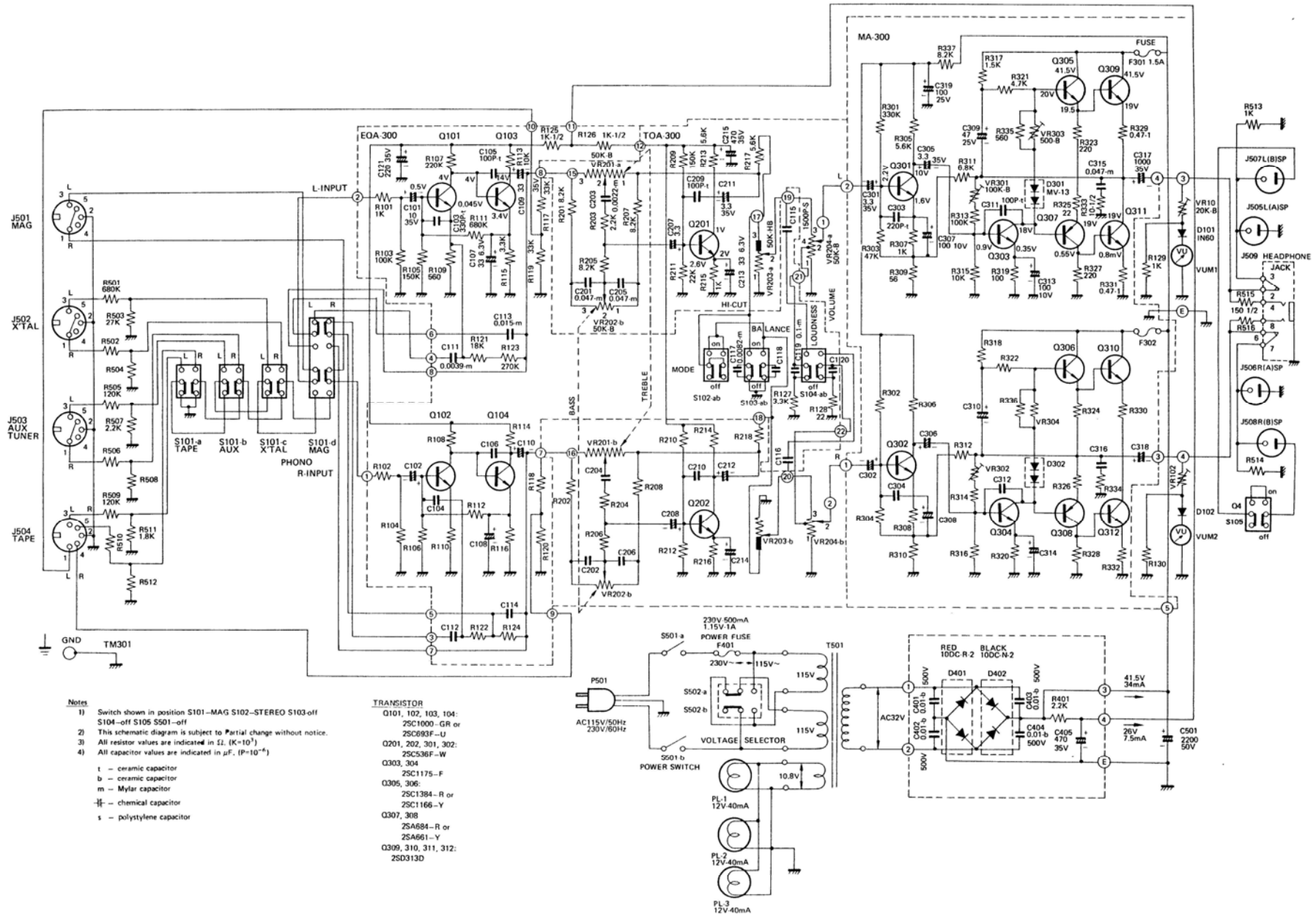
## MAIN Amp. P. C. Board(MA-300)



## Power Supply P. C. Board(PS-300)







- Notes**
- 1) Switch shown in position S101-MAG S102-STEREO S103-off S104-off S105 S501-off
  - 2) This schematic diagram is subject to Partial change without notice.
  - 3) All resistor values are indicated in Ω (K-10<sup>3</sup>)
  - 4) All capacitor values are indicated in μF (P-10<sup>-6</sup>)

t - ceramic capacitor  
 b - ceramic capacitor  
 m - Mylar capacitor  
 - chemical capacitor  
 s - polystyrene capacitor

**TRANSISTOR**

Q101, 102, 103, 104:  
 2SC1000 - GR or  
 2SC693F - U

Q201, 202, 301, 302:  
 2SC536F - W

Q303, 304  
 2SC1175 - F

Q305, 306:  
 2SC1384 - R or  
 2SC1166 - Y

Q307, 308  
 2SA684 - R or  
 2SA681 - Y

Q309, 310, 311, 312:  
 2SD313D

