

# SERVICE MANUAL



## STEREO AMPLIFIER

# JA 350

(UK)

This is a service manual for model JA 350 (UK) and only items changed from model JA 400 (UK) are indicated.

For other items, refer to Service Manual for model JA 400 (UK, WM-8895).

Δ mark represents a non-interchangeable parts.

Ref. No.	JA 400	JA 350	Description	Remark
	(PACKING & ACCESSORY)			
	141-6-133T-38203	141-6-133T-46001	Individual Carton	Δ
	141-6-410T-80903	141-6-410T-93001	Instruction Manual	Δ
	(CABINET)			
1	141-0-122T-46300	141-0-122T-46301	Front Panel Ass'y	Δ
3	141-2-163T-91900	141-2-163T-91930	Rotary Knob	Δ
4	141-2-163T-81730	141-2-163T-81740	Rotary Knob	Δ
6	141-2-160T-09700	141-2-160T-09701	Push Button	Δ
7	141-2-160T-16500	141-2-160T-16501	Push Button, Power SW	Δ
	(CHASSIS)			
13	141-2-126T-41203	141-2-126T-41208	Back Lid	Δ
	Add	141-2-421T-43900	Special Screw	
	(ELECTRICAL PARTS)			
	Add	4-240T-47673	Socket (Q'ty 12)	
	(GRAPHIC EQUALIZER AMP PCB ASS'Y)			
76	141-4-250T-62103	141-4-250T-62108	PCB Ass'y, Graphic Equalizer Amp.	
	(MAIN AMP PCB ASS'Y)			
77	141-4-250T-62274	141-4-250T-62204	PCB Ass'y, Main Amp	

### RTV servis Horvat

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Croatia

Add this sheet to Model JA 400 Service Manual.

SANYO ELECTRIC TRADING CO., LTD.

33, Hiyoshi-cho 2-chome, Moriguchi-shi,

Osaka-fu, 570, Japan

# SERVICE MANUAL



## STEREO AMPLIFIER

# JA 350A

(UK)

This is a service manual for model JA 350A (UK) and only items changed from model JA 400 (UK) are indicated.  
 For other items, refer to Service Manual for model JA 400 (UK, WM-8895).  
 Δ mark represents a non-interchangeable parts.

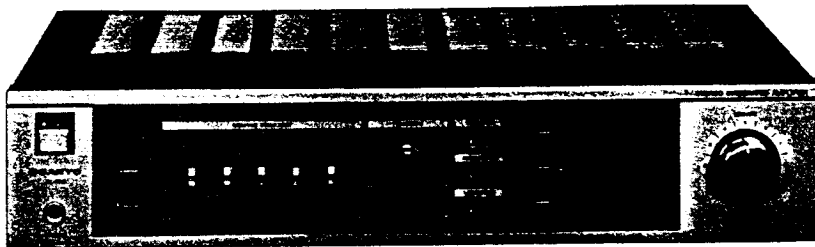
Ref. No.	JA 400	JA 350	Description	Remark
	(PACKING & ACCESSORY)			
	141-6-133T-38203	141-6-133T-46005	Individual Carton	Δ
	141-6-410T-80903	141-6-410T-93005	Instruction Manual	Δ
	(CABINET)			
1	141-0-122T-46300	141-0-122T-46305	Front Panel Ass'y	Δ
3	141-2-163T-91900	141-2-163T-91930	Rotary Knob	Δ
4	141-2-163T-81730	141-2-163T-81740	Rotary Knob	Δ
6	141-2-160T-09700	141-2-160T-09701	Push Button	Δ
7	141-2-160T-16500	141-2-160T-16501	Push Button, Power SW	Δ
	(CHASSIS)			
13	141-2-126T-41203	141-2-126T-41216	Back Lid	Δ
	Add	141-2-421T-43900	Special Screw	
	(ELECTRICAL PARTS)			
	Add	4-240T-47673	Socket (Q'ty 12)	
	(GRAPHIC EQUALIZER AMP PCB ASS'Y)			
76	141-4-250T-62103	141-4-250T-62108	PCB Ass'y, Graphic Equalizer Amp.	
	(MAIN AMP PCB ASS'Y)			
77	141-4-250T-62274	141-4-250T-62204	PCB Ass'y, Main Amp	

Add this sheet to Model JA 400 Service Manual.

SANYO ELECTRIC TRADING CO., LTD.  
 33, Hiyoshi-cho 2-chome, Moriguchi-shi,  
 Osaka-fu, 570, Japan

# SERVICE MANUAL

## POWER AMPLIFIER

 **SANYO****JA 400****(UK)**

### SPECIFICATIONS

Continuous output power	35W x 2 (at 8 ohms, 0.07% dis)
Total harmonic distortion	0.04% (30W output, 8 ohms)
Input sensitivity and impedance	
PHONO	2.5mV/47k ohms
AUX/TUNER/TAPE PLAY	150mV/47k ohms
Phono overload level	130mV RMS (at 1kHz)
Output level	
TAPE REC	150mV
Frequency response	20 – 20000 Hz (AUX) (± 1.0 dB)
Graphic equalizer controls	±10dB (63/250/1000/4000/16000 Hz)
High filter response	7kHz (–6dB/oct.)
Loudness control response	
100Hz/10kHz	+8dB / +4dB
Signal to noise ratio	90 dB (AUX)
Power requirements	AC: 240V, 50 Hz
Power consumption	170W
AC output socket	AC: 18V, 300mA (max.)
Dimensions (Approx.)	420 (W) x 220 (D) x 85 (H) mm (16-1/2" x 8-5/8" x 3-3/8")
Weight (Approx.)	5 kg (11 lbs.)

\* Specifications subject to change without notice.

## DISMOUNTING OF CABINET AND FRONT PANEL

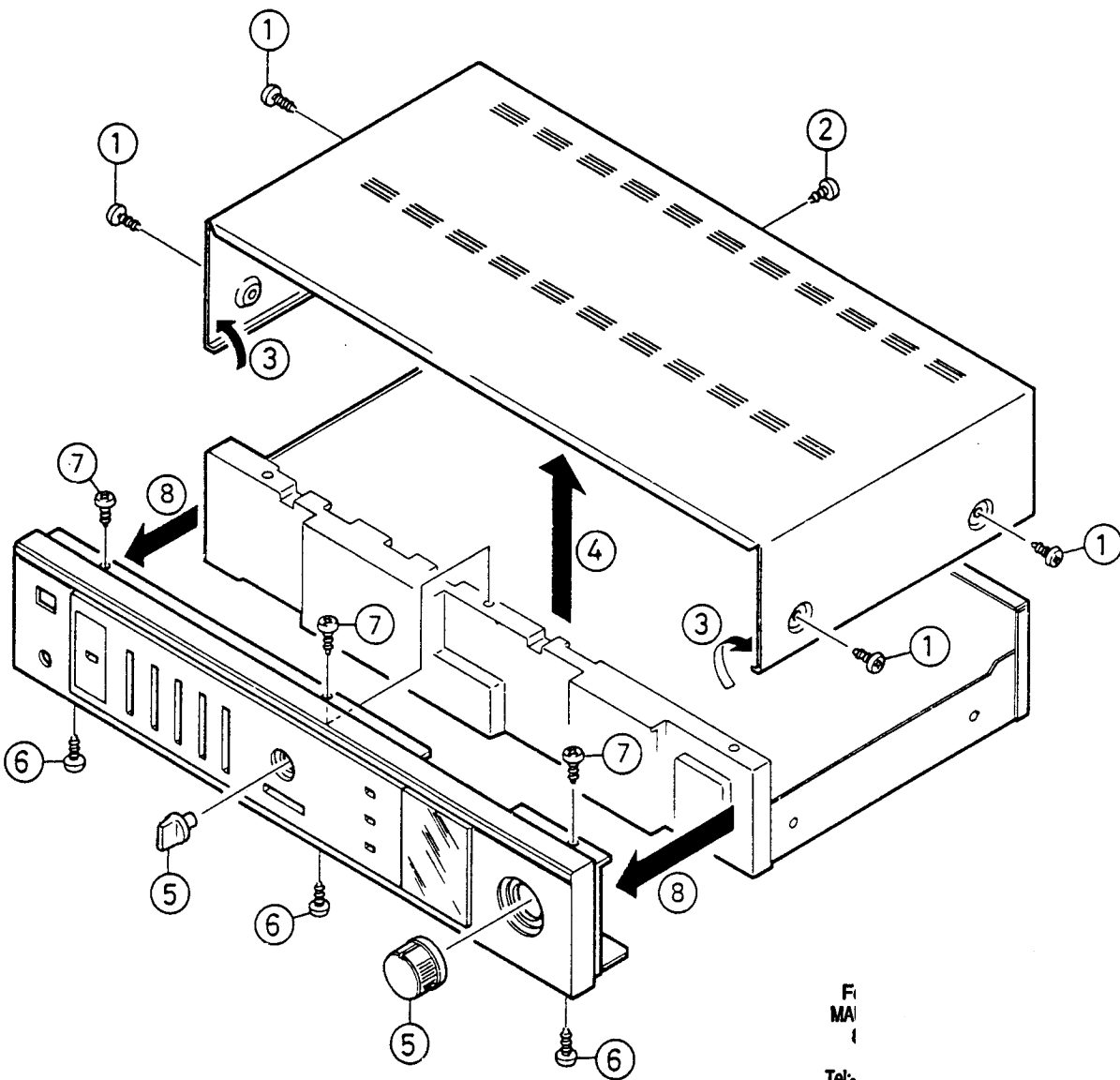
- Perform disassembly of amplifier after removing the power supply cord with out fail.
- Revove parts in order of disassembly as numbered.

### 1. TO DISMOUNT CABINET

- (1). Take out total 4 screws (Binding head tapping 4 x 8mm 1) from cabinet.
- (2). Take out 1 screw (Binding head tapping 3 x 6mm 2 ) from cabinet.

### 2. TO DISMOUNT FRONT – PANEL

- (1). Remove volume control knob and function select knob.
- (2). Take out total 3 screws (Binding head tapping 3 x 12mm 6) from front panel.
- (3). Take out total 3 screws (Binding head tapping 3 x 10mm 7) from front panel.



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## ADJUSTMENT OF BIAS

### CONDITIONS

VOLUME	:	minimum	MONITOR	:	source
BALANCE	:	center	HIGH FILTER	:	off
GRAPHIC EQUALIZER	:	center	LOUDNESS	:	off
			FUNCTION	:	aux
			SPEAKERS	A	: on
				B	: off

### 1. BIAS CURRENT ADJUSTMENT ( No-Input, No-Load )

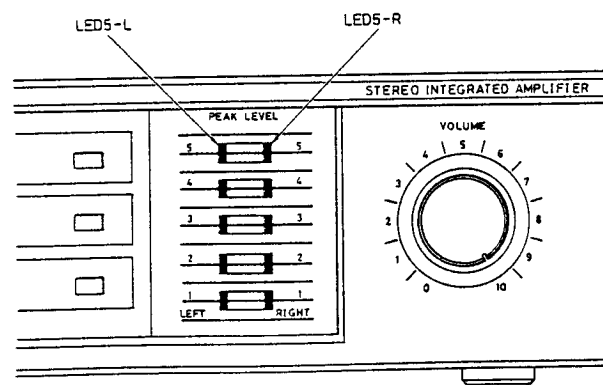
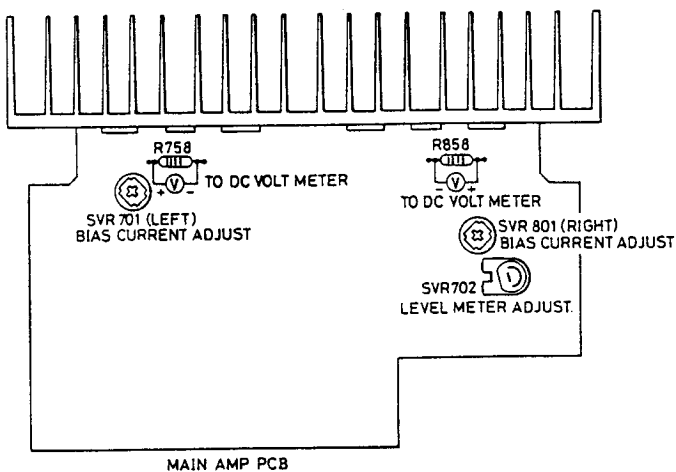
After the power switch is turned on, adjust SVR701 and SVR801 respectively as follows.

- L - Channel : SVR701 for  $4 \pm 1\text{mV}$  reading beteen the both leads of R758.
- R - Channel : SVR801 for  $4 \pm 1\text{mV}$  reading beteen the both leads of R858.

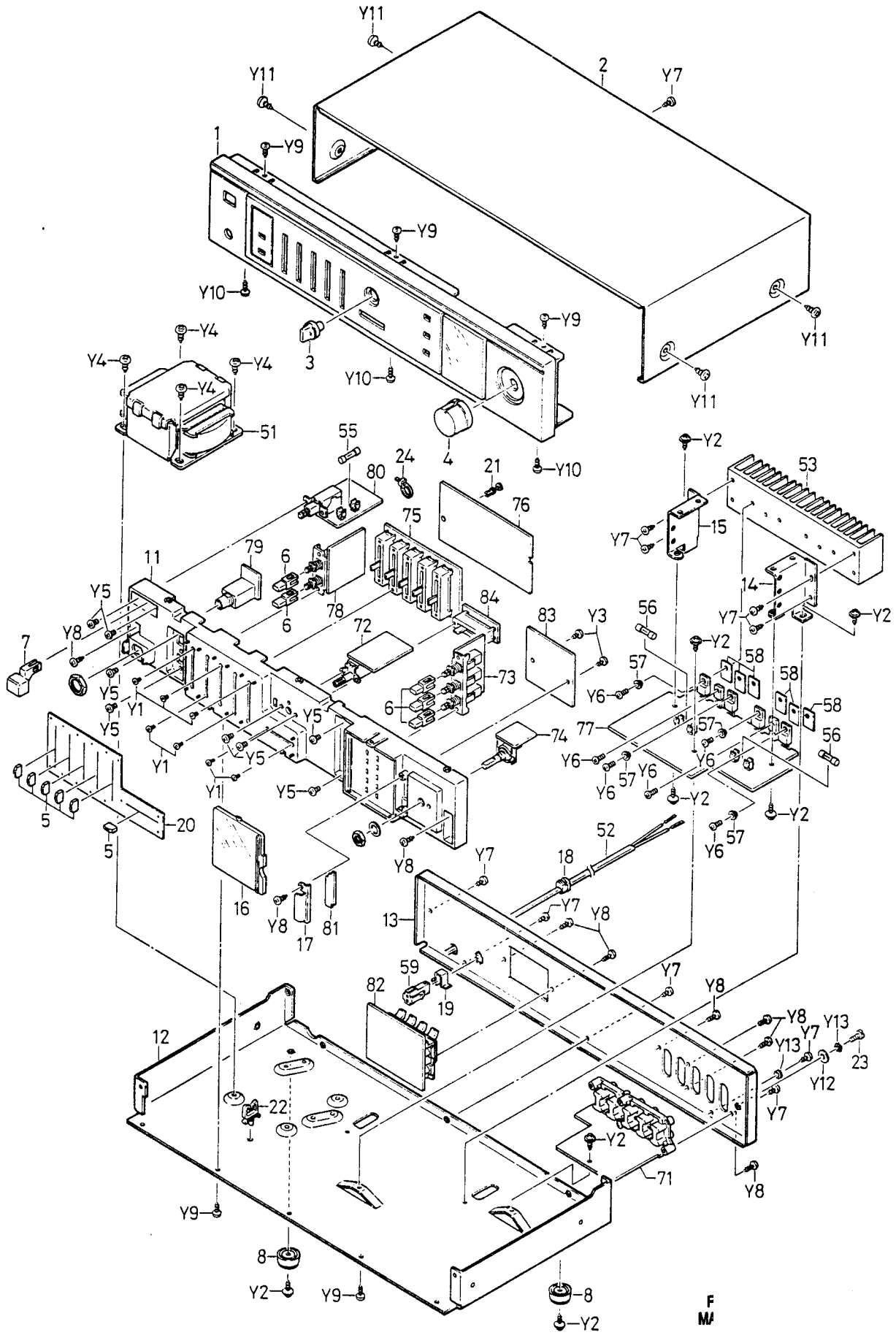
### 2. LEVEL METER ADJUSTMENT

- (1) Connect a 8 ohm load to the speaker terminals.
- (2) Input 1 kHz sine wave to the AUX terminals by means of an oscillator.
- (3) Set the main volume in the maximum position, and adjust the attenuator of oscillator so that 3.8V output voltage is applied to the load.
- (4) Turn the main volume counterclockwise until the 5th right channel LED of LEVEL METER (LED5-R) lights up faintly.
- (5) Adjust SVR702 so that the 5th left channel LED (LED5-L) lights up in the same way as the 5th right channel LED (LED5-R).

## PART SOCATION



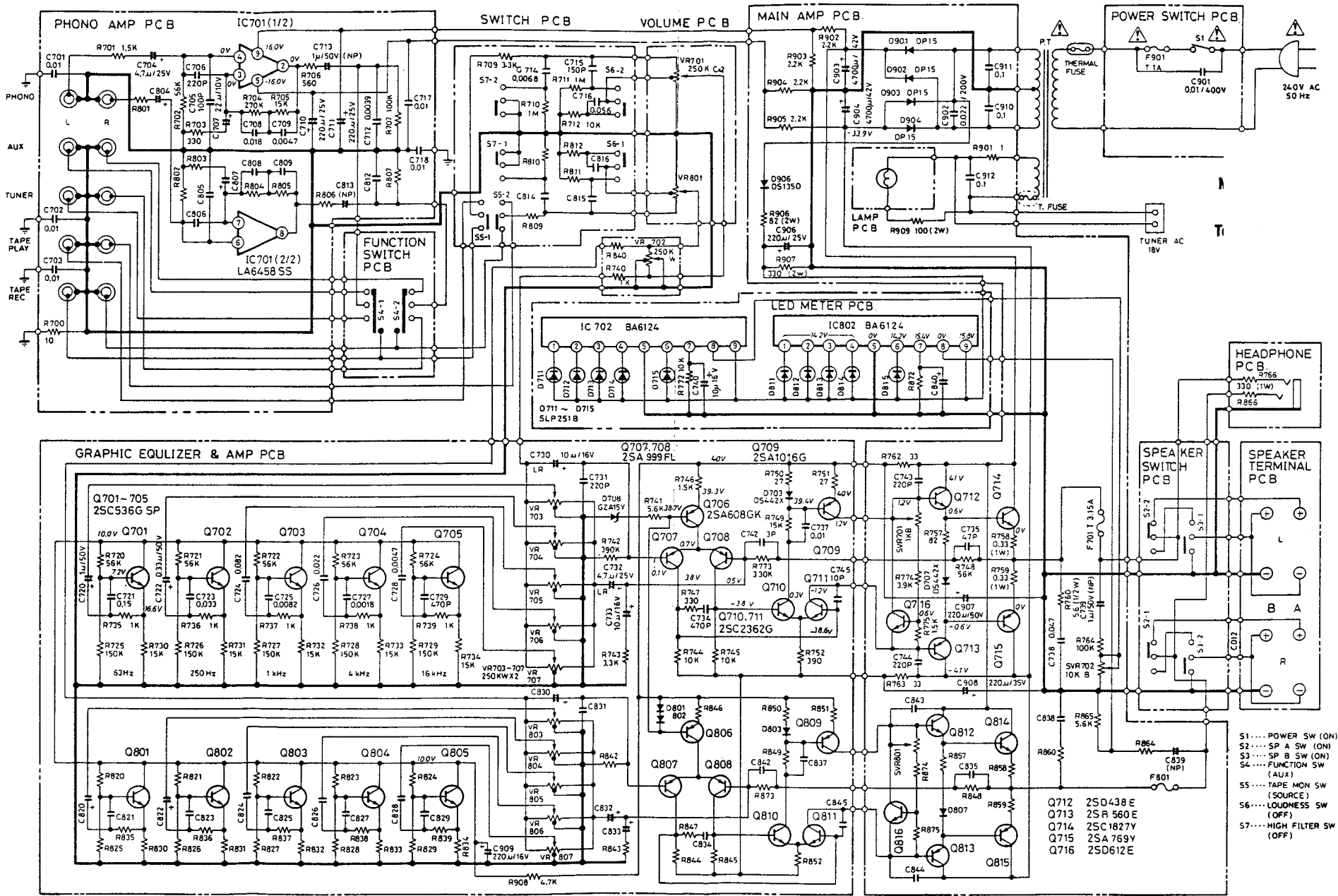
EXPLODED VIEW



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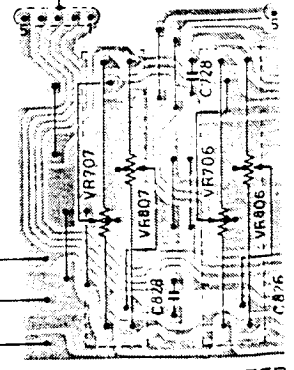
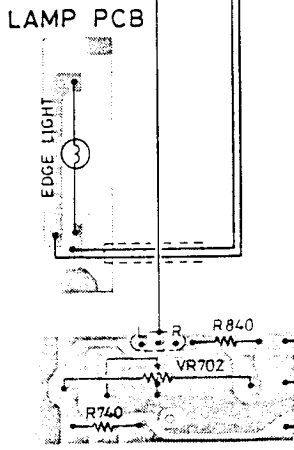
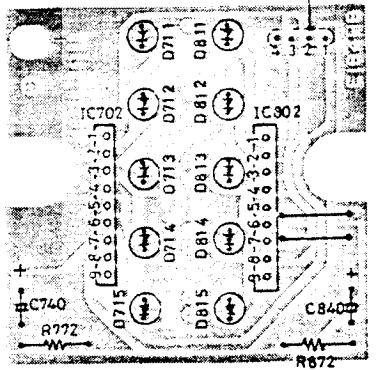
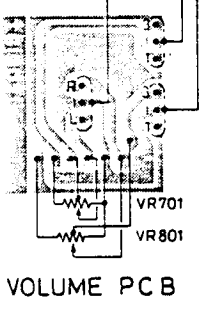
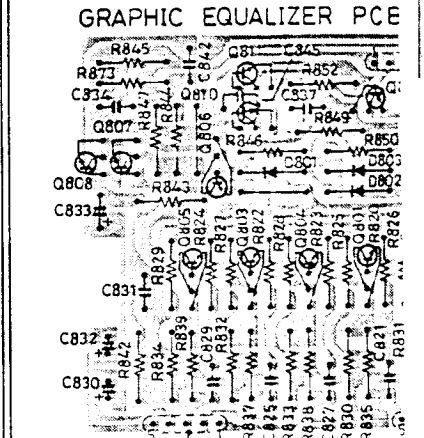
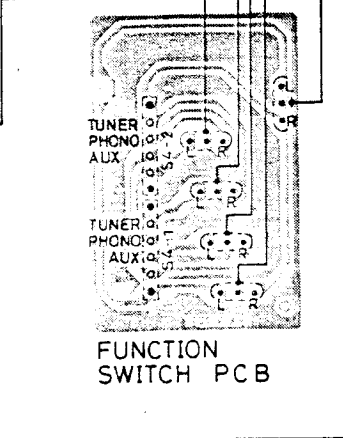
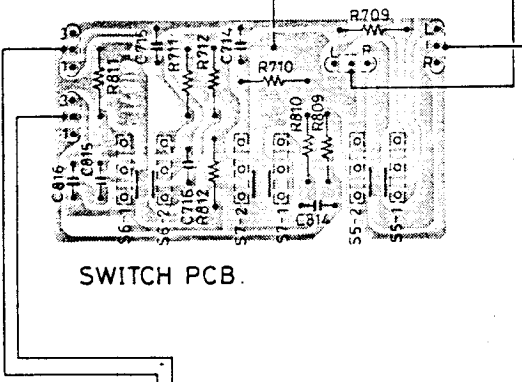
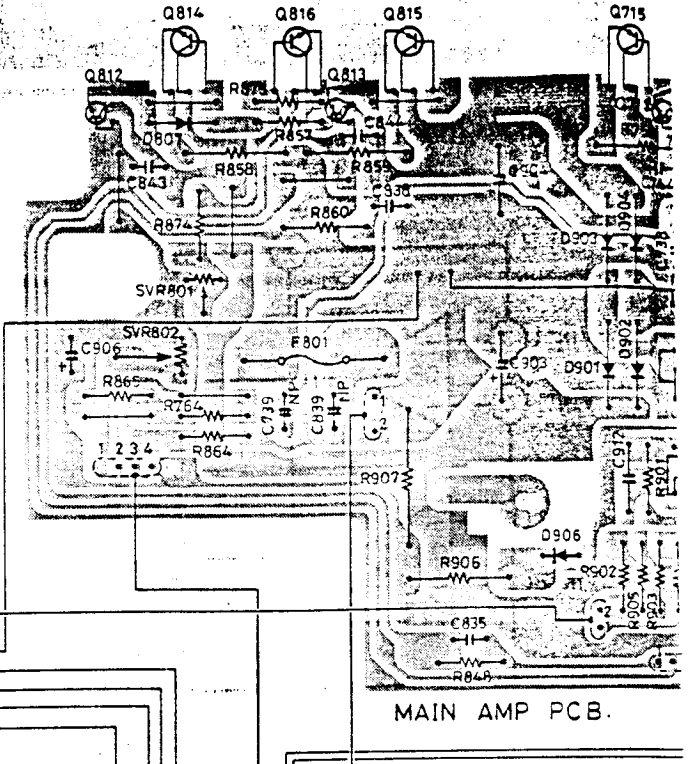
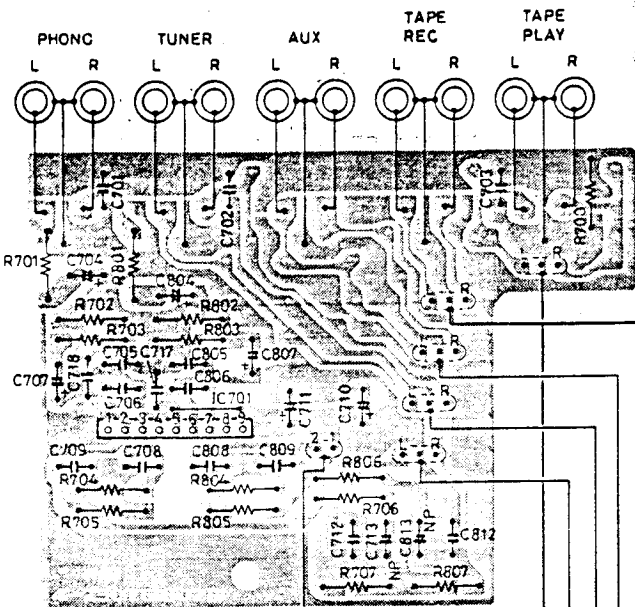


SCHEMATIC DIAGRAM

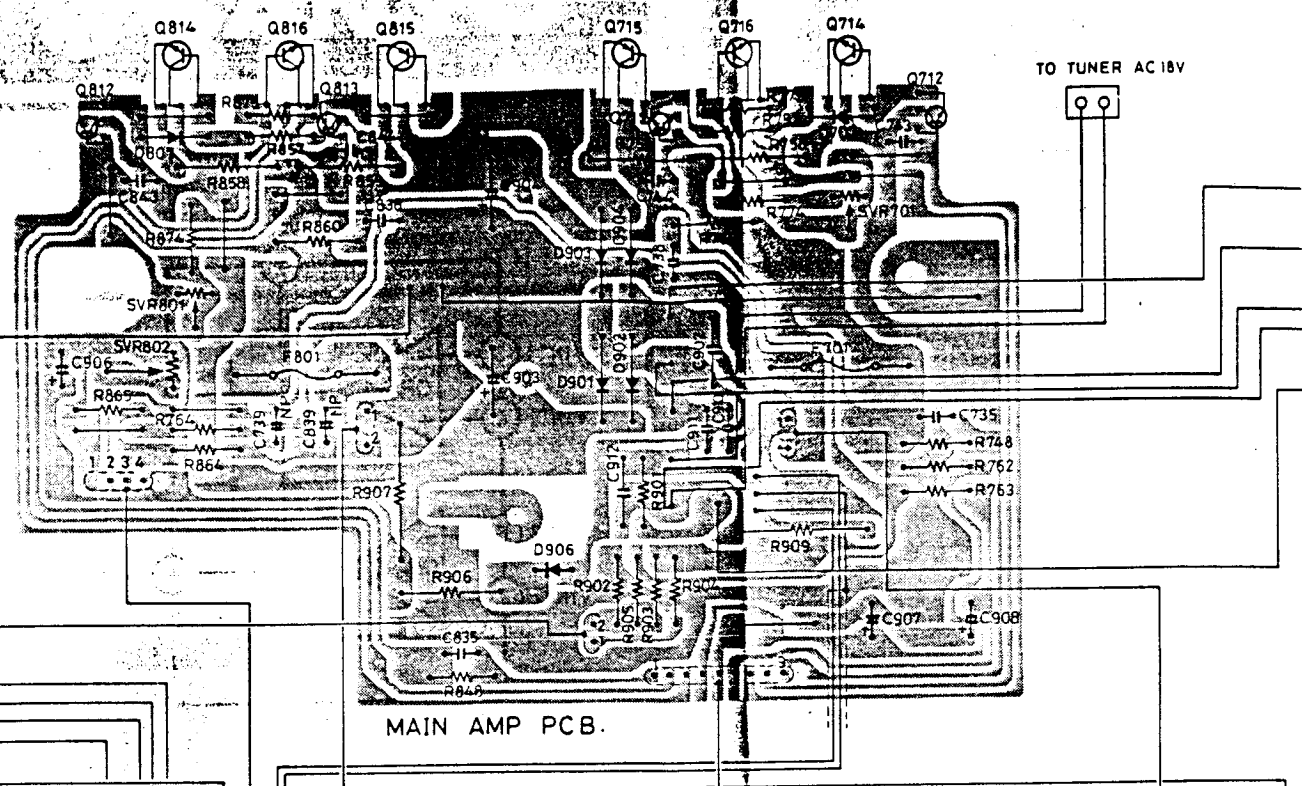
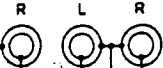




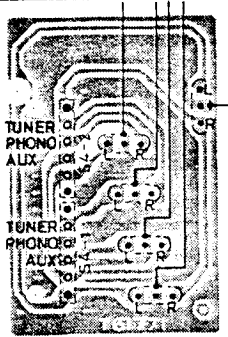
# WIRING DIAGRAM



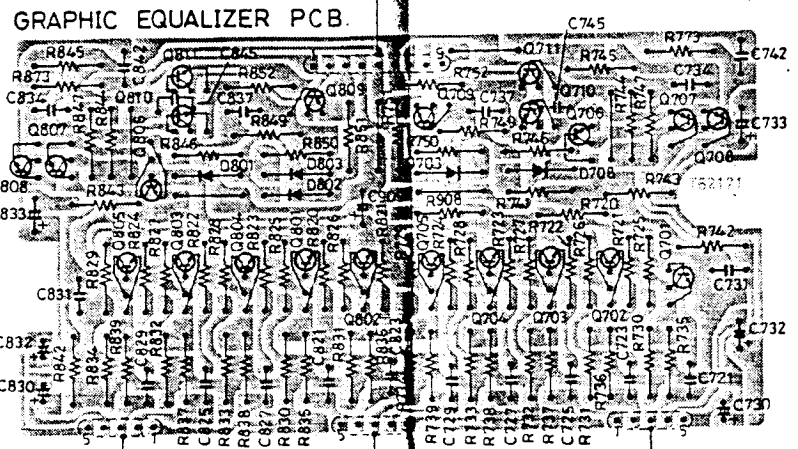
TAPE PLAY  
R L R



MAIN AMP PCB.

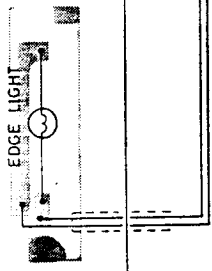


FUNCTION SWITCH PCB

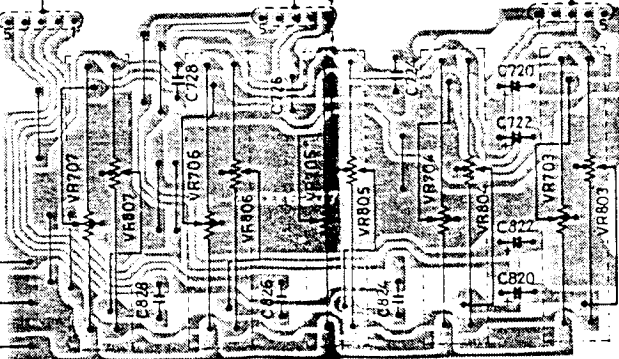
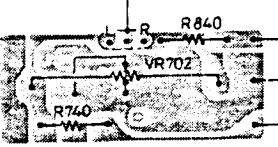


GRAPHIC EQUALIZER PCB.

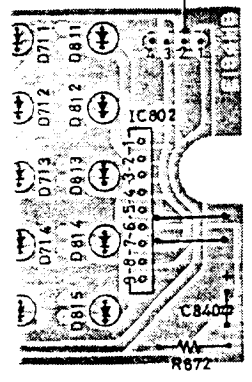
LAMP PCB



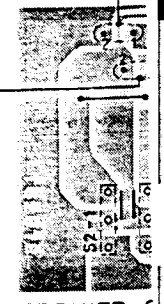
BALANCE PCB.



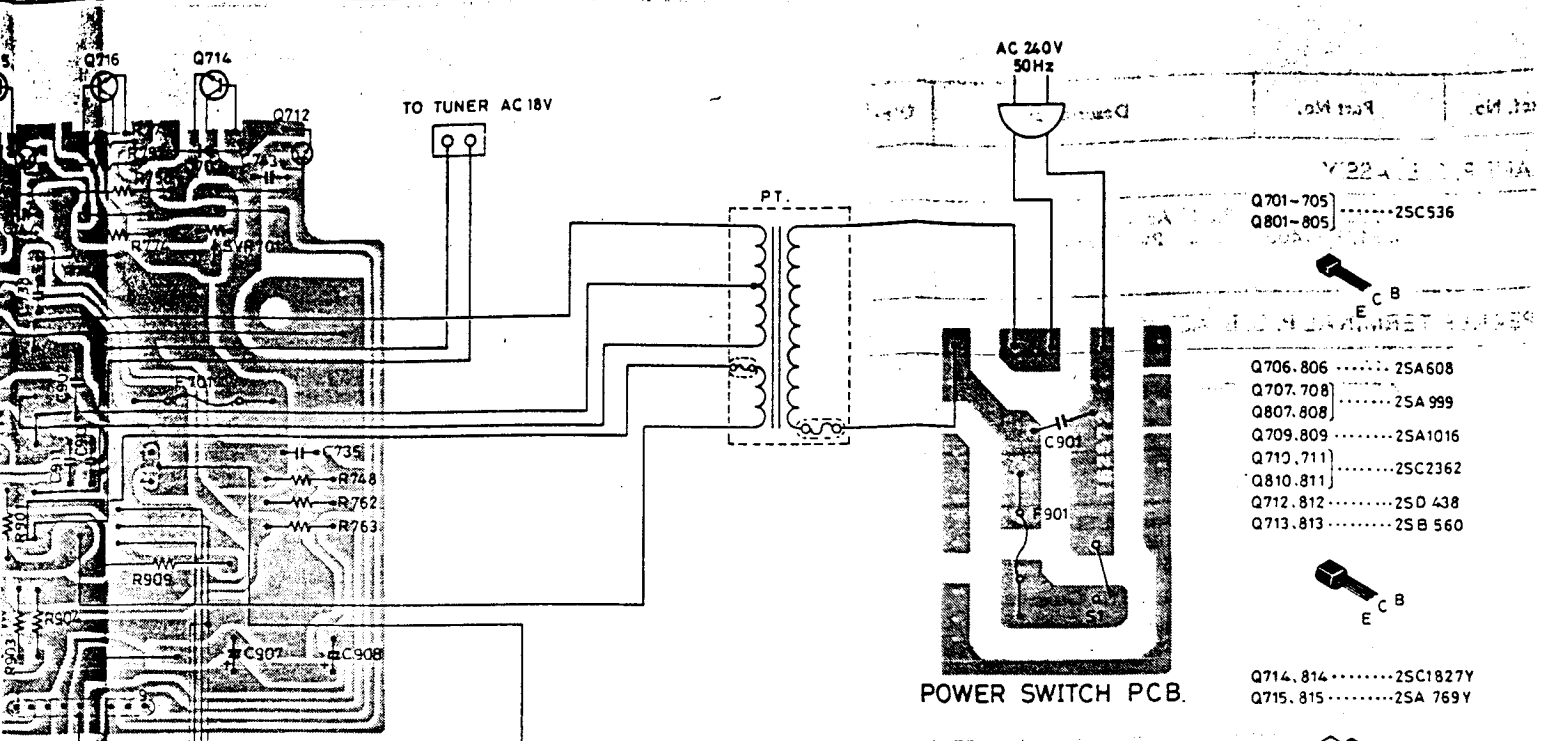
GRAPHIC EQUALIZER CONTROL PCB.



R PCB.



SPEAKER S



Q701-705 ..... 2SC536  
 Q801-805

Q706, 806 ..... 2SA608  
 Q707, 708 ..... 2SA999  
 Q807, 808 ..... 2SA1016  
 Q709, 809 ..... 2SA1016  
 Q710, 711 ..... 2SC2362  
 Q810, 811 ..... 2SC2362  
 Q712, 812 ..... 2SD438  
 Q713, 813 ..... 2SB560

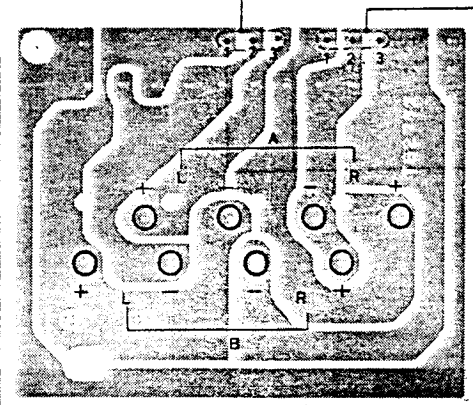
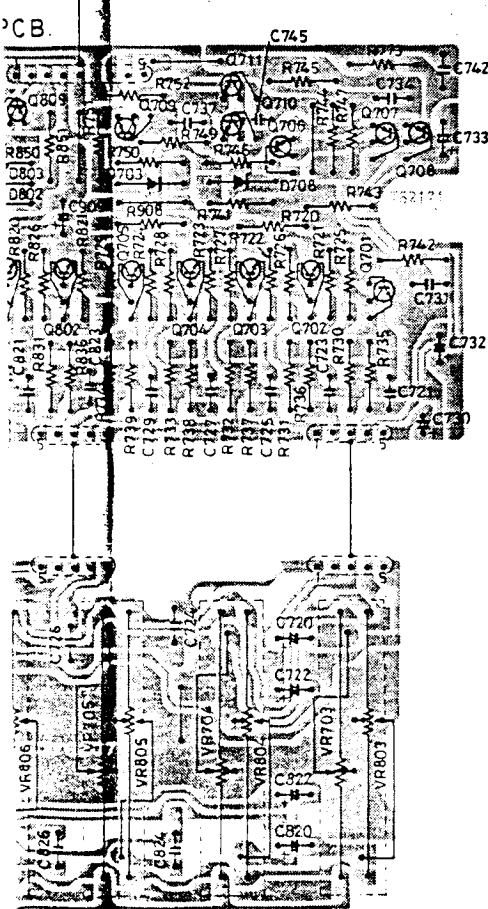
Q714, 814 ..... 2SC1827Y  
 Q715, 815 ..... 2SA769Y

Q716, 816 ..... 2SD612

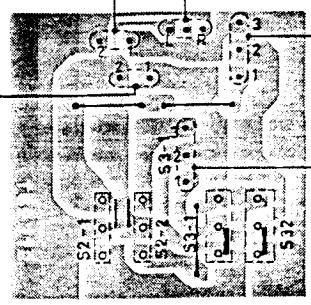
IC701 ..... LA6458

IC702, 802 ..... BA6124

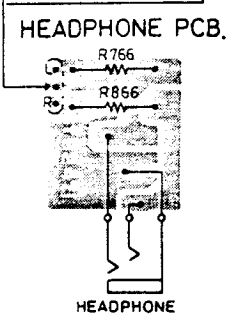
POWER SWITCH PCB.



SPEAKER TERMINAL PCB



SPEAKER SWITCH PCB.



HEADPHONE PCB.

TUNER CONTROL PCB.

## PARTS LIST

Ref. No.	Part No.	Description	Q'ty
<b>LAMP P. C. B. ASS'Y</b>			
81	141-4-250T-62671 4-612T-17400	P.C.B. Ass'y, Lamp Lamp 12V, 100mA	1 1
<b>SPEAKER TERMINAL P. C. B. ASS'Y</b>			
82	141-4-250T-62701 4-237T-09871	P.C.B. Ass'y, Speaker Terminal Terminal Board	1 1
<b>LED METER P. C. B. ASS'Y</b>			
83	141-4-250T-64500	P.C.B. Ass'y, LED Meter	1
IC702,802		IC LB1403	2
IC702,802		IC BA6124 or	2
D711 ~ 715, D811 ~ 815		LED SLP251B Green	10
C740,840		Electrolytic 10 $\mu$ F 16V	2
R722,872		Carbon 10K ohm P-type 1/4W	2
<b>BALANCE P. C. B. ASS'Y</b>			
84	141-4-250T-64671	P.C.B. Ass'y, Balance	1
VR702	4-220T-03600	Variable Resistor	1
R840		Carbon 1K ohm T-type 1/4W	1
R740		Carbon 1K ohm P-type 1/4W	1

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Kešinci, 31402 Semeljci

031-856-139

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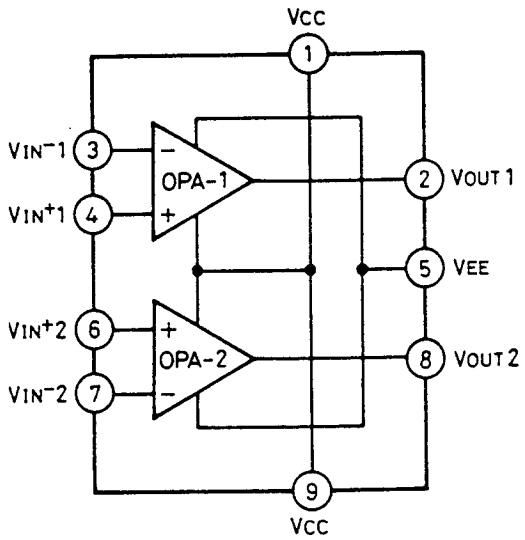
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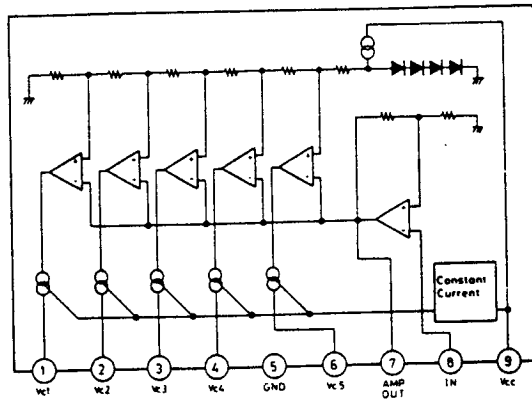
Croatia

C BLOCK DIAGRAM

LA 6458S (Dual Operation Amplifier)



BA6124 (LED Level Meter)



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