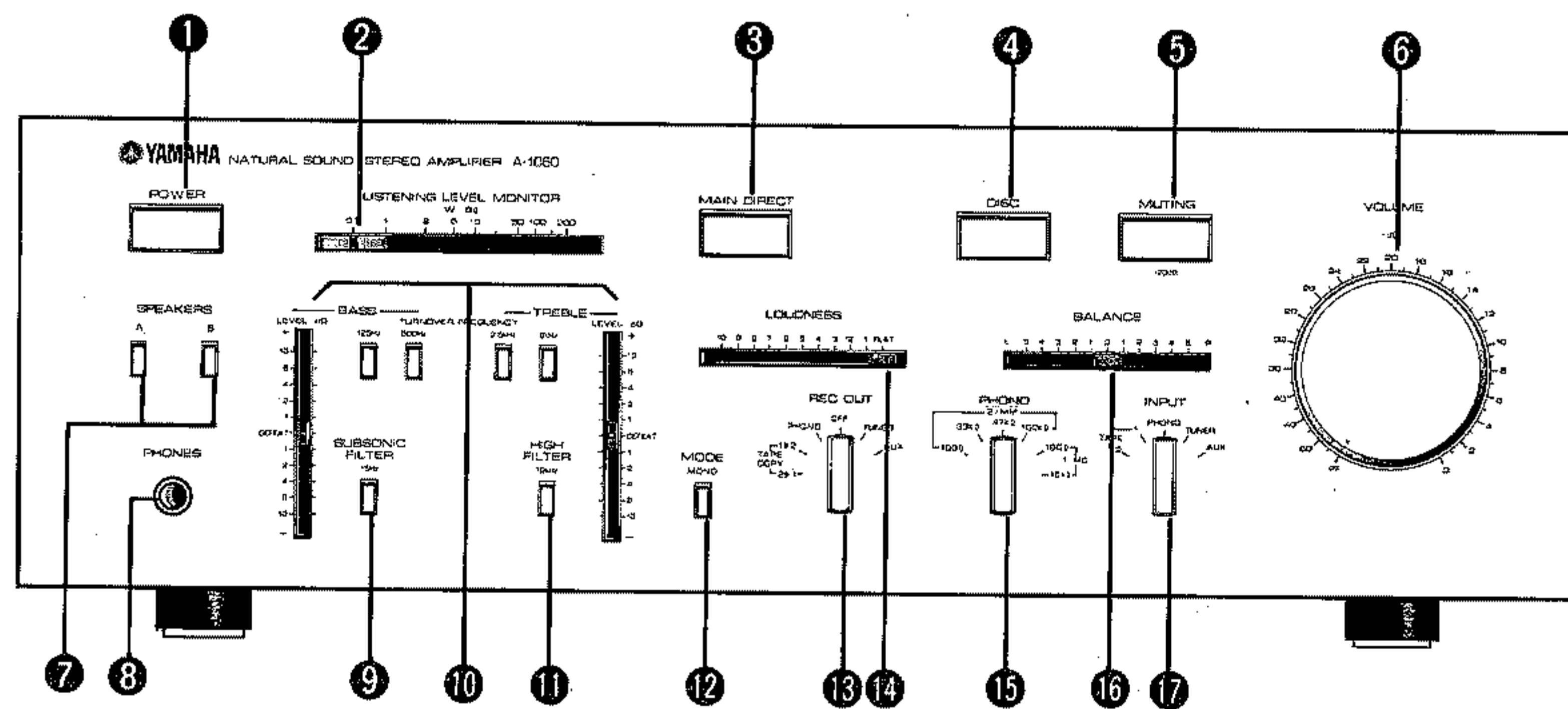


# STEREO INTEGRATED AMPLIFIER

# A-1060

# SERVICE MANUAL

## FRONT PANEL



- |                           |                        |
|---------------------------|------------------------|
| ① POWER SWITCH            | ⑩ BASS, TREBLE CONTROL |
| ② LISTENING LEVEL MONITOR | ⑪ HIGH FILTER SWITCH   |
| ③ MAIN DIRECT SWITCH      | ⑫ MODE SWITCH          |
| ④ DISC SWITCH             | ⑬ REC OUT SELECTOR     |
| ⑤ MUTING SWITCH           | ⑭ LOUDNESS CONTROL     |
| ⑥ VOLUME CONTROL          | ⑮ PHONO SELECTOR       |
| ⑦ SPEAKERS SWITCHES       | ⑯ BALANCE CONTROL      |
| ⑧ PHONES JACK             | ⑰ INPUT SELECTOR       |
| ⑨ SUBSONIC FILTER SWITCH  |                        |

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A-1060

## Australian, North European & British Models

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
*	NA:07:72:30	Control Circuit Board	制御シート			
C801	FR:15:54:70	Metalized Paper Cap.	0.47μF 250V	M P コ ン		
C803 ~ C805	FR:16:36:80	"	0.0068μF 250V	"		
C806	FG:41:21:00	Cramic Cap.	100pF 50V	セラコン		
* C807	UA:25:43:30	Mylar Cap.	0.033μF 50V	マイラーコン		
C808	FA:45:54:70	"	0.47μF 50V	"		
C810	FO:09:46:80	Oil Cap.	0.068μF 450V	オイルコン		
* L801	GD:90:04:20	Coil	150μH	雑防コイル		
R801 ~ R804	HJ:35:84:70	Carbon Resistor	470kΩ RD25	カーボン抵抗		
* R806,807	HL:62:73:90	Metal Oxide Film Resistor	2P39kΩ	酸金抵抗		
R808	HJ:35:91:00	Carbon Resistor	1MΩ RD25	カーボン抵抗		
R809	HV:35:61:00	Flame Proof Carbon Resistor	1kΩ RDF25SF	不燃化カーボン抵抗		
R810	HJ:35:71:50	Carbon Resistor	15kΩ	カーボン抵抗		
R811	HJ:35:91:00	"	1MΩ	"		
R812,813	HJ:35:81:80	"	180kΩ	"		
R815	HJ:35:41:50	"	15Ω	"		
R817,818	HJ:35:54:70	"	470Ω	"		
R820	HL:72:53:90	Metal Oxide Film Resistor	2P 390Ω	酸金抵抗		
R821	HV:35:41:50	Flame Proof Carbon Resistor	15Ω RDF25SF	不燃化カーボン抵抗		
* VR801	HT:18:02:10	Semi Variable Resistor	B5kΩ	半固定抵抗		
IC801	iG:04:08:00	IC	IG04080	トリガーIC (Trigger)		
D801,802	iF:00:19:40	Diode	HZ24	ダイオード		
D803	iH:00:08:80	Diode Bridge	S1WB	ダイオードブリッジ		
D804 ~ D806	iH:00:00:60	Diode	10D4	ダイオード		
SCR801, SCR802	iH:00:09:00	Triac	SMOR5G42 0.5A	トライアック		
* SCR803	iH:00:11:10	"	AC16DGM-L16A	"		
TR801	iK:00:03:00	Photo Coupler	TLP508 (V)	フォトカプラー		
F801	KB:00:17:60	Fuse	Ⓢ T6.3A 250V	ヒューズ		
	LB:20:10:60	Fuse Holder Pin		ヒューズホルダーピン		
	LA:00:24:00	Wrapping Terminal	P=7.5 3P (L Type)	L型ラッピング端子板		
	LA:00:23:90	"	P=7.5 2P "	"		
	LA:00:24:10	"	P=10 2P "	"		
	LA:00:24:20	"	P=10 3P "	"		
	LB:20:09:00	Fuse Holder Pin	YSH402P	ヒューズホルダーピン		
	BA:07:95:30	Heat Sink		放熱板	A-960	
* CB:60:38:40		Coil Cap		コイルキャップ		
* CB:60:40:80		Coil Base		コイルベース		
CB:09:12:90		P.C. Board Holder		基板ホルダー		
CB:06:88:80		Plastic Rivet		プラスチックリベット		
CB:60:52:10		Spacer		スペーサー		
CB:07:28:80		Isolation Bush		絶縁ブッシュ		
iL:00:02:70		Mica Base		マイカベース		
EH:02:60:80		Cums Head Screw	2.6x8 ZMC2-Y	セムスヘッドネジ (セムスネジ)	(Sems Type)	
EN:03:00:20		Bind Tapping Screw	3x8 ZMC2-Y Type II	バインドタッピングネジ (2種)		

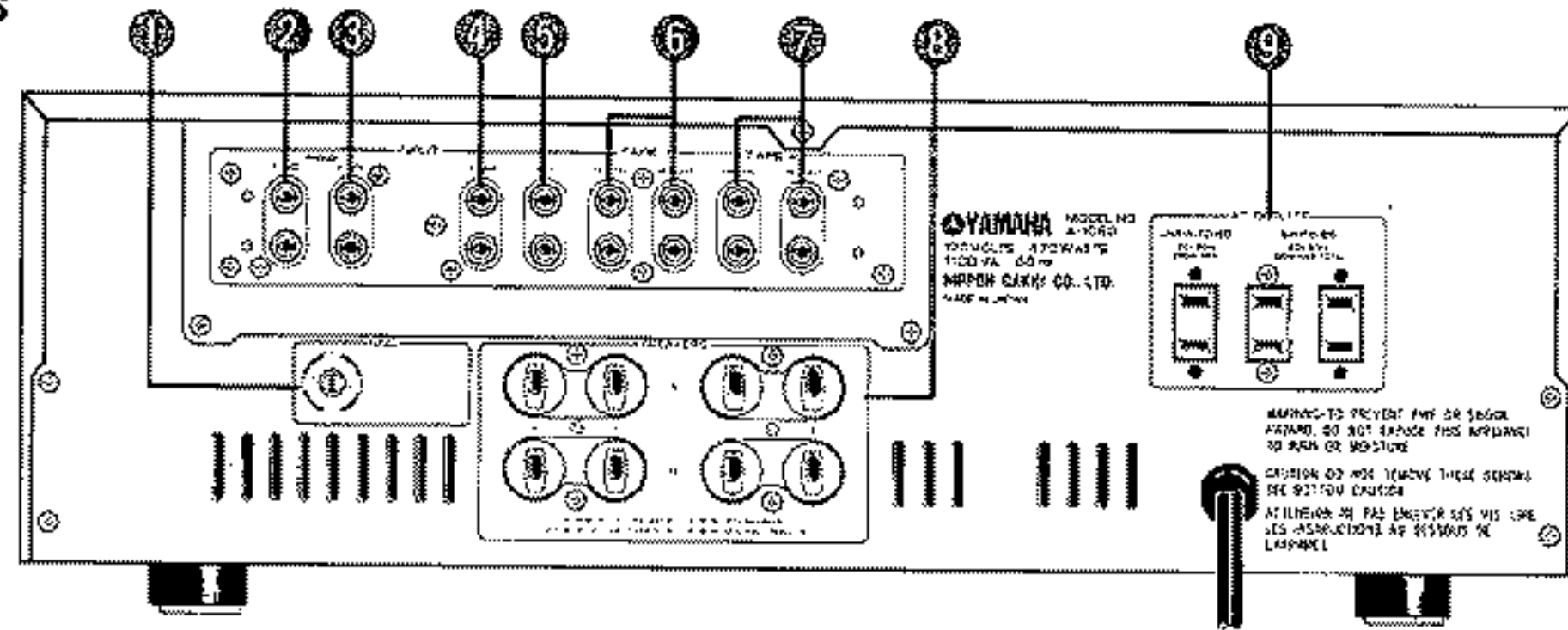
\* New Parts (新規部品)

004436

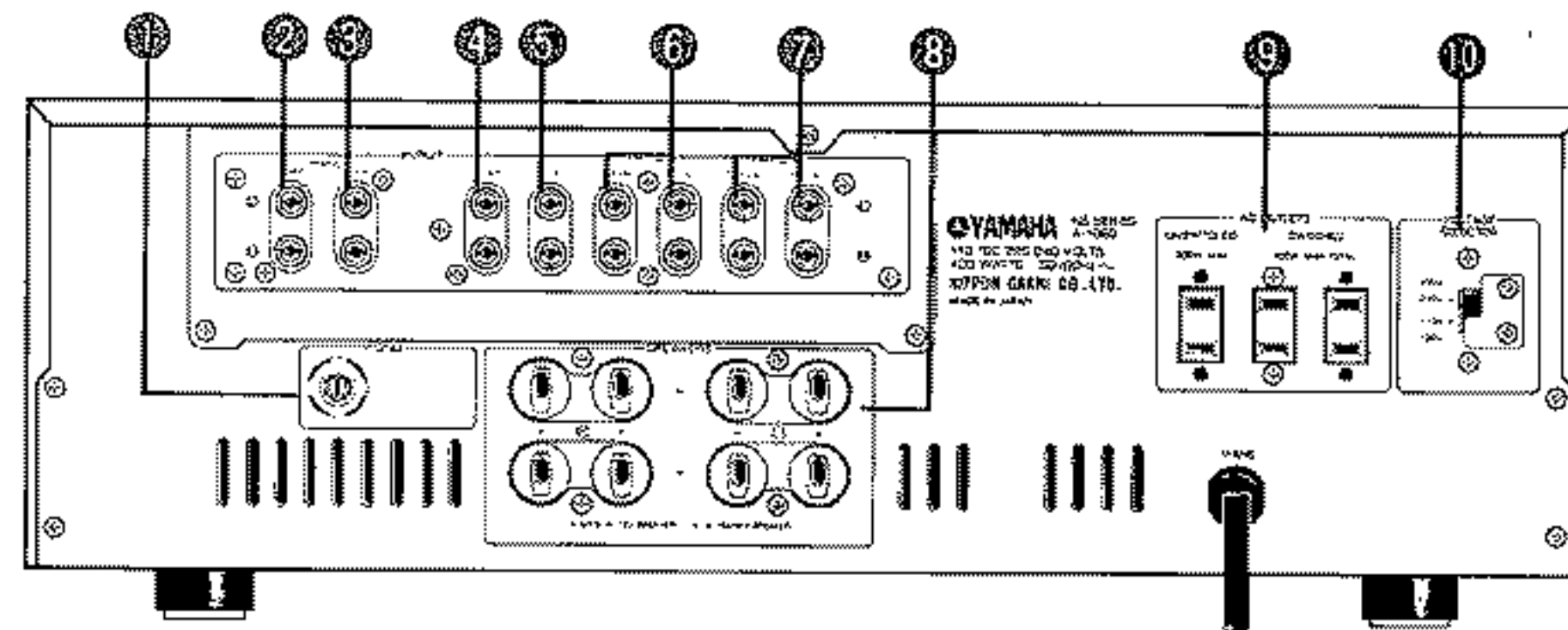
SINCE 1887  **YAMAHA**  
NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN  
Printed in Japan 81.5 Ⓢ 2.5K

REAR PANELS

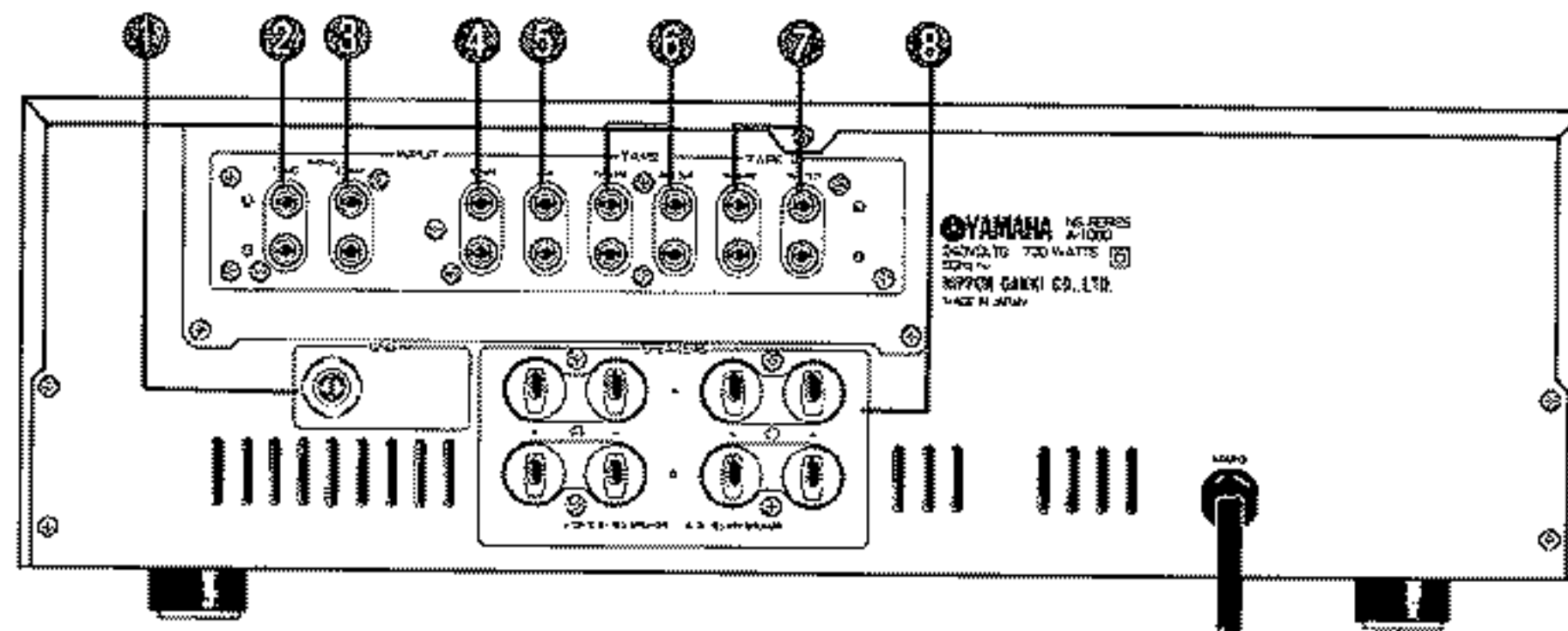
U.S. & CANADIAN MODELS



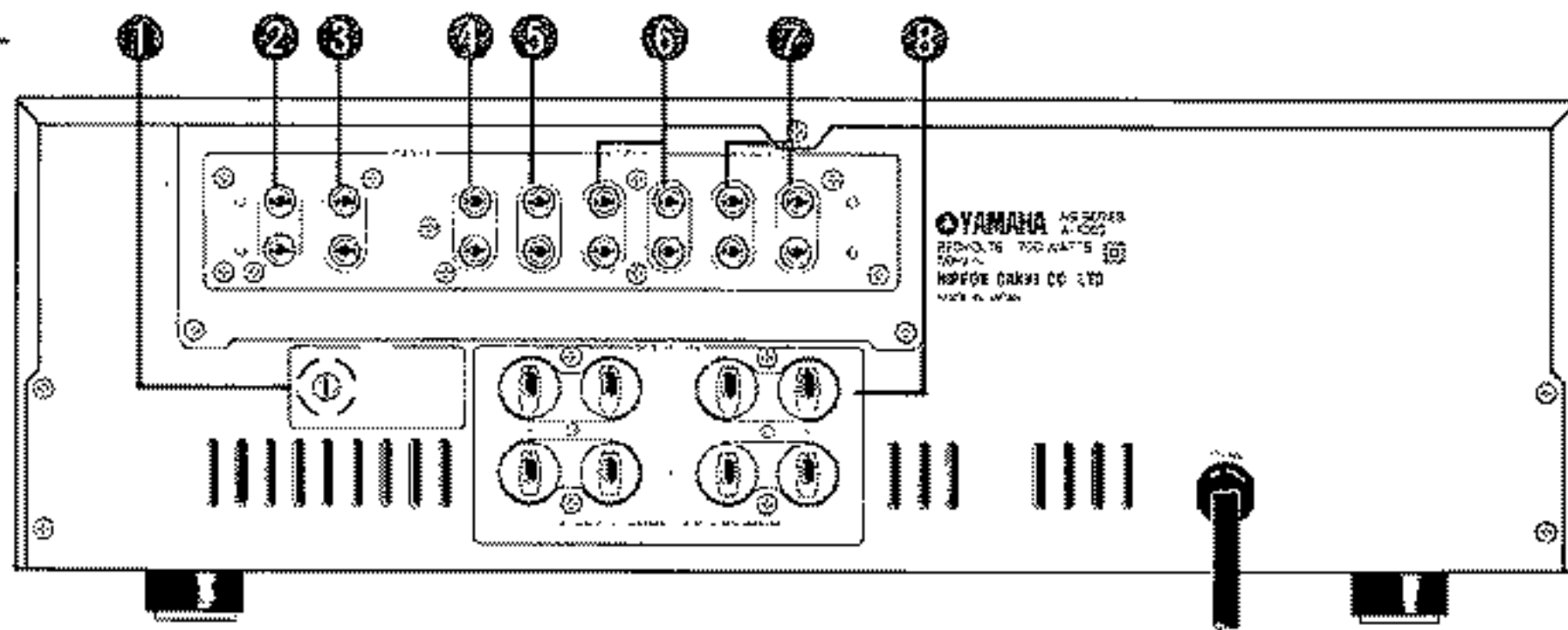
GENERAL MODEL



BRITISH & AUSTRALIAN MODELS



NORTH EUROPEAN MODEL

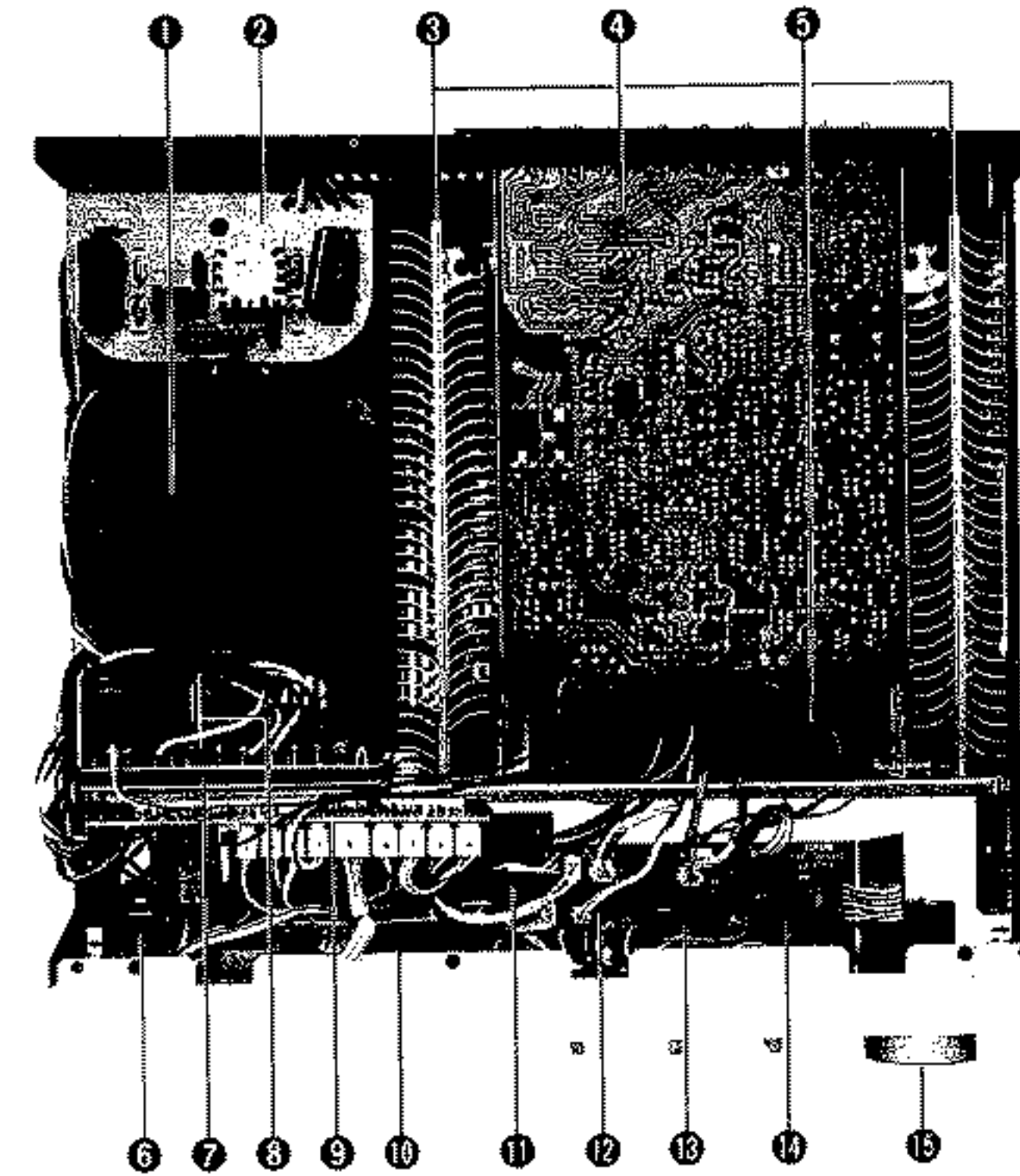


- ① GND TERMINAL
- ② PHONO 1/MC INPUT JACKS
- ③ PHONO 2/MM INPUT JACKS
- ④ TUNER INPUT JACKS
- ⑤ AUX INPUT JACKS

- ⑥ TAPE 1 PB/REC OUT JACKS
- ⑦ TAPE 2 PB/REC OUT JACKS
- ⑧ SPEAKER TERMINALS
- ⑨ AC OUTLETS
- ⑩ VOLTAGE SELECTOR

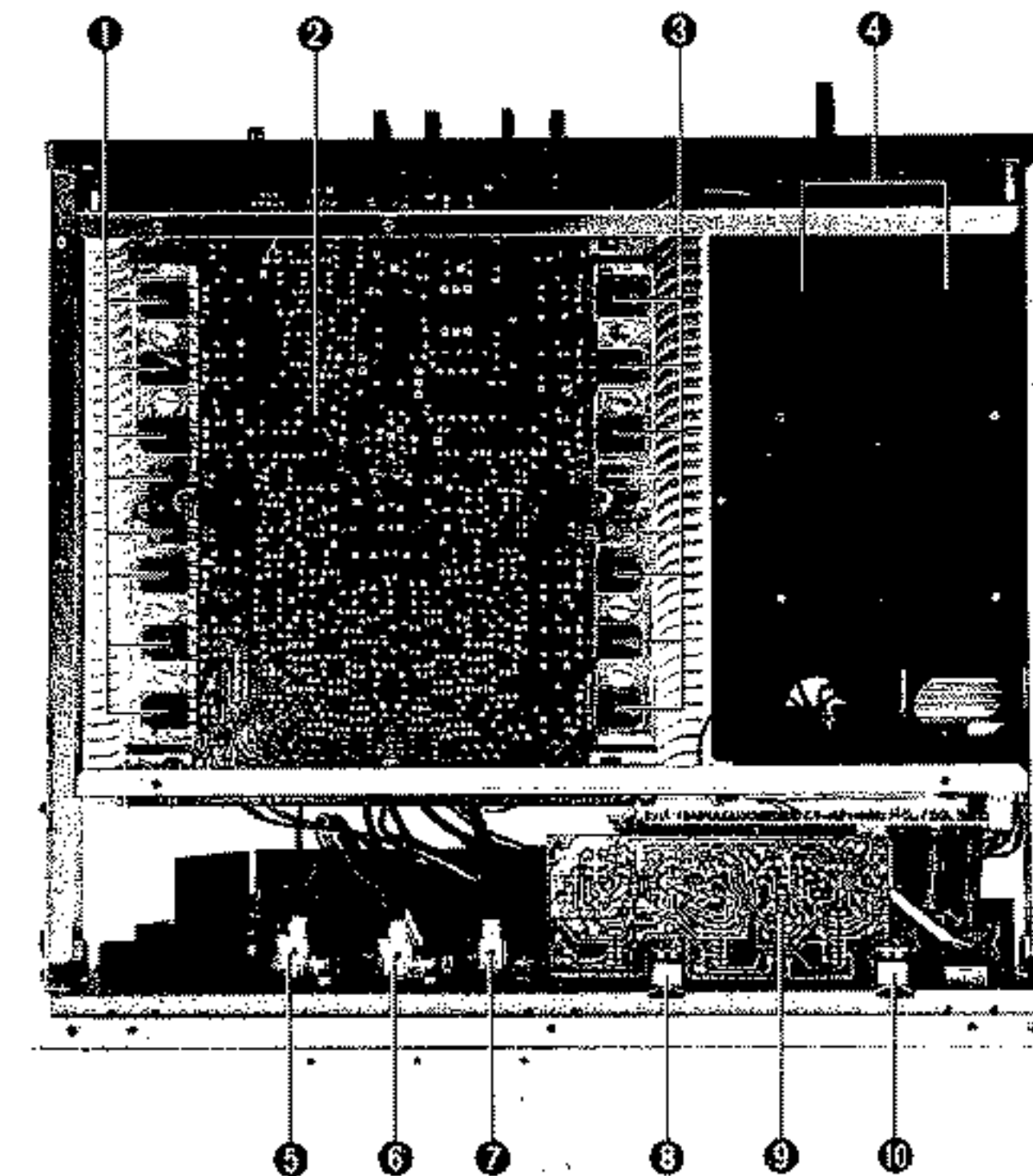
INTERNAL VIEW

TOP VIEW



- ① POWER TRANSFORMER  
U.S.A. model : GA6412  
Canadian model : GA6413  
N. European model : GA6414  
British & Australian models : GA6416  
General model : GA6415
- ② ELECTROLYTIC CAP, CIRCUIT BOARD
- ③ HEAT SINK
- ④ EQUALIZER CIRCUIT BOARD
- ⑤ MAIN CIRCUIT BOARD
- ⑥ POWER SWITCH
- ⑦ CONTROL CIRCUIT BOARD (1/2)
- ⑧ CONTROL CIRCUIT BOARD (2/2)
- ⑨ MUTING CIRCUIT BOARD
- ⑩ LISTENING LEVEL MONITOR VOLUME
- ⑪ MAIN DIRECT SWITCH (SW303)
- ⑫ VOLUME CIRCUIT BOARD (1/6)
- ⑬ DISC SWITCH (SW302)
- ⑭ MUTING SWITCH (SW301)
- ⑮ VOLUME (VR303)

BOTTOM VIEW



- ① POWER TRANSISTOR (R ch)
- ② MAIN CIRCUIT BOARD
- ③ POWER TRANSISTOR (L ch)
- ④ ELECTROLYTIC CAP  
(15000μF 68V) (FZ00269)
- ⑤ INPUT SELECTOR
- ⑥ PHONO SELECTOR
- ⑦ REC OUT SELECTOR
- ⑧ BASS VOLUME (VR401)
- ⑨ TONE CONTROL CIRCUIT BOARD
- ⑩ TREBLE VOLUME (VR402)



## DISASSEMBLY PROCEDURES

### 1. Top cover removal

Remove screws ① and ② from the both left and right sides and screws ③ in photo 1.

After detaching the hook of the front panel, remove the top cover by raising it.

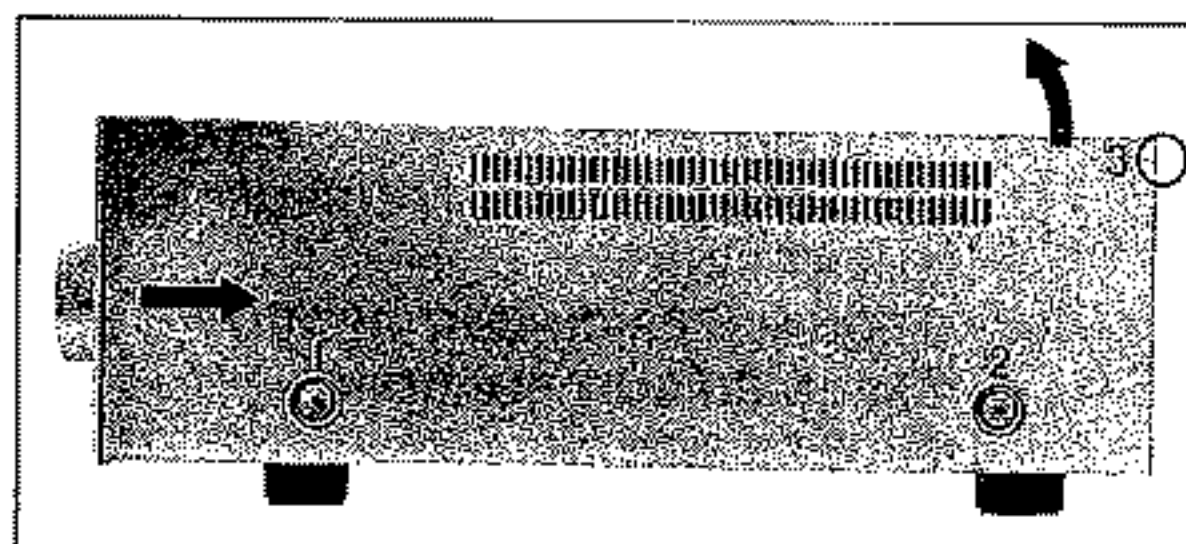


Photo 1

### 2. Bottom cover removal

a. Remove screws ① to ⑦ in photo 2 and then remove the bottom cover.

b. Remove screws ⑧ to ⑬ and legs ⑭ and ⑮ in photo 2, and then remove the bottom cover Ass'y.

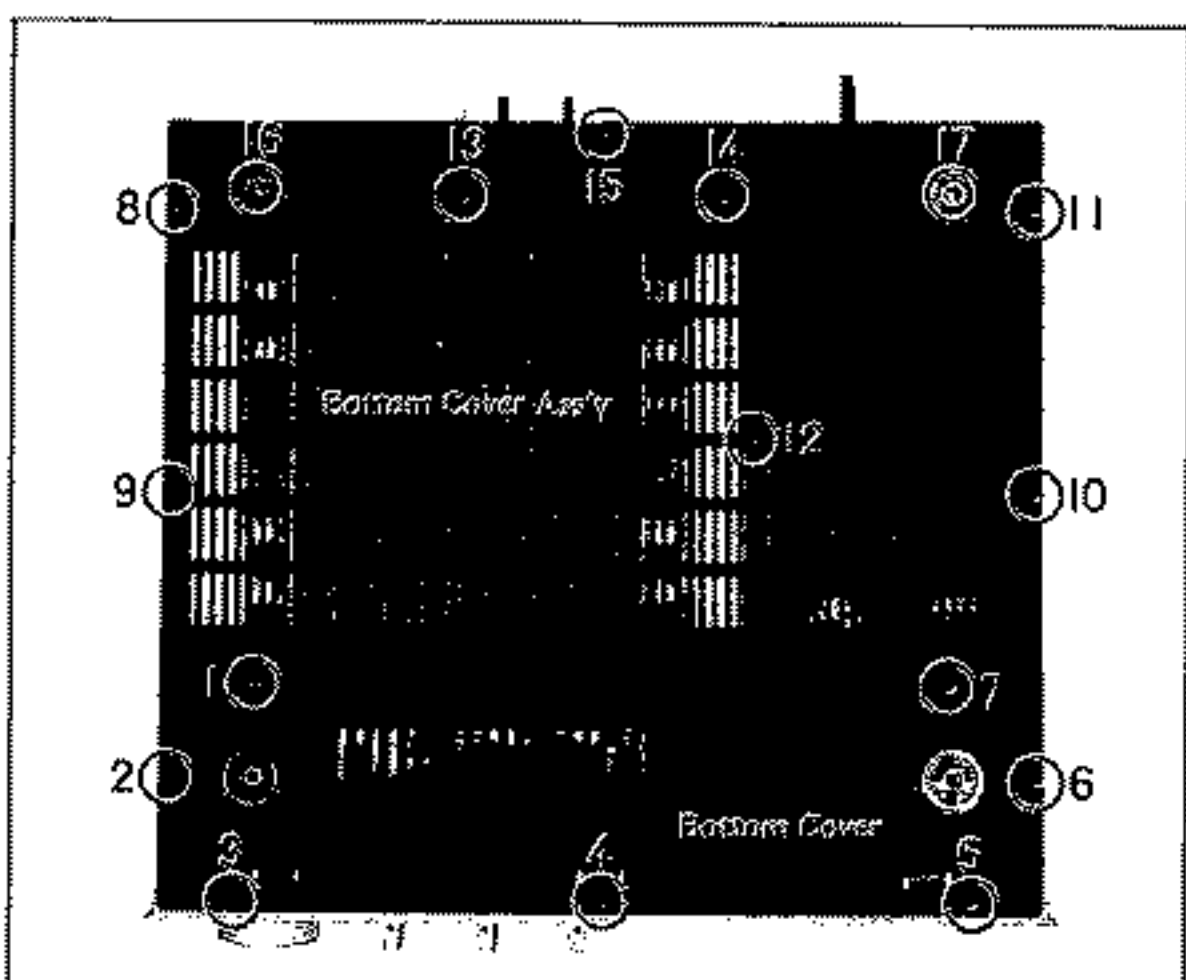


Photo 2

### 3. Main and equalizer p.c. board check

Remove screws ① and ② in photo 3 and screws ① and ② in photo 4 and then open the equalizer unit as shown in photo 5. It is possible for you to check the equalizer p.c. board and to exchange the parts in this condition. When checking the equalizer unit, remove the shield board.

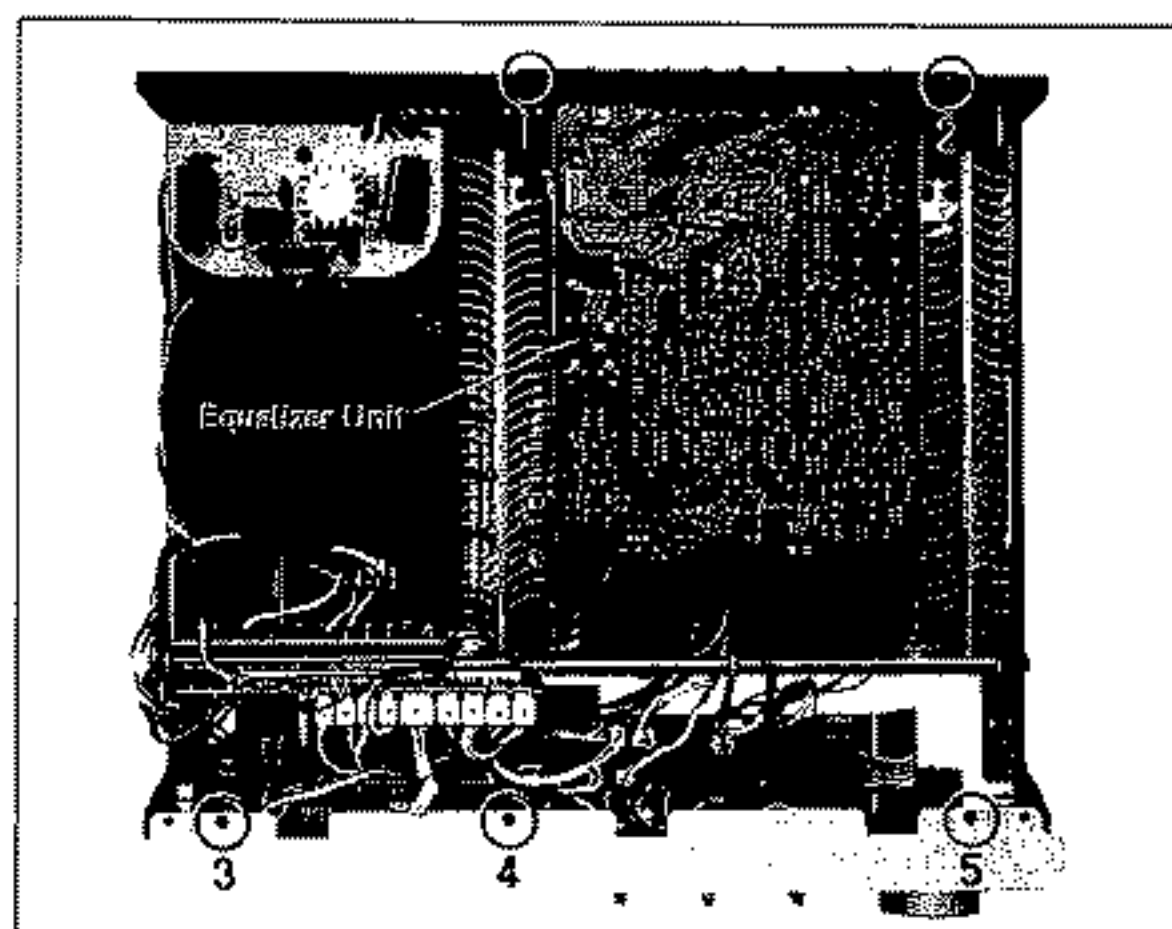


Photo 3

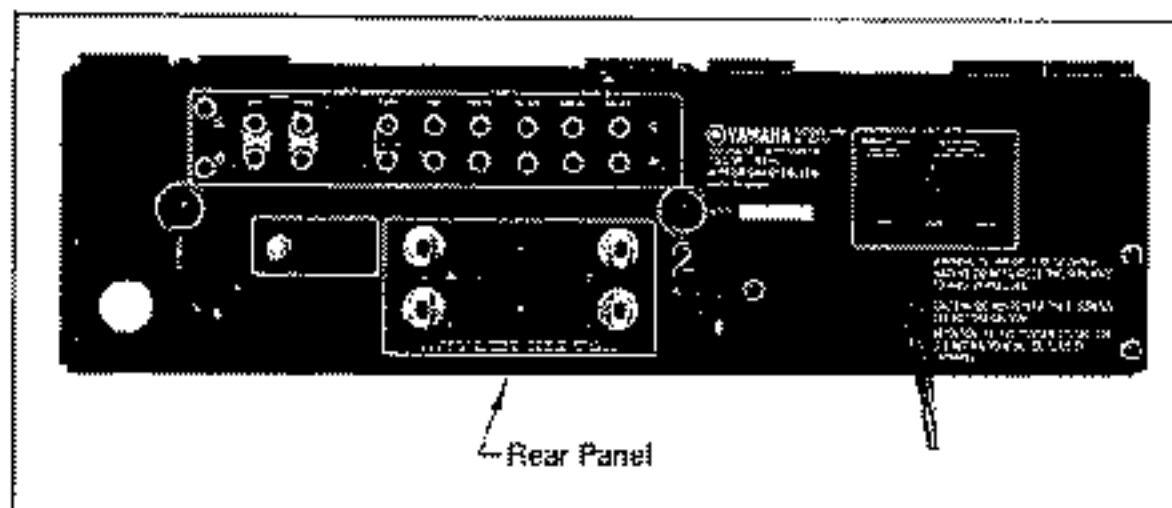


Photo 4

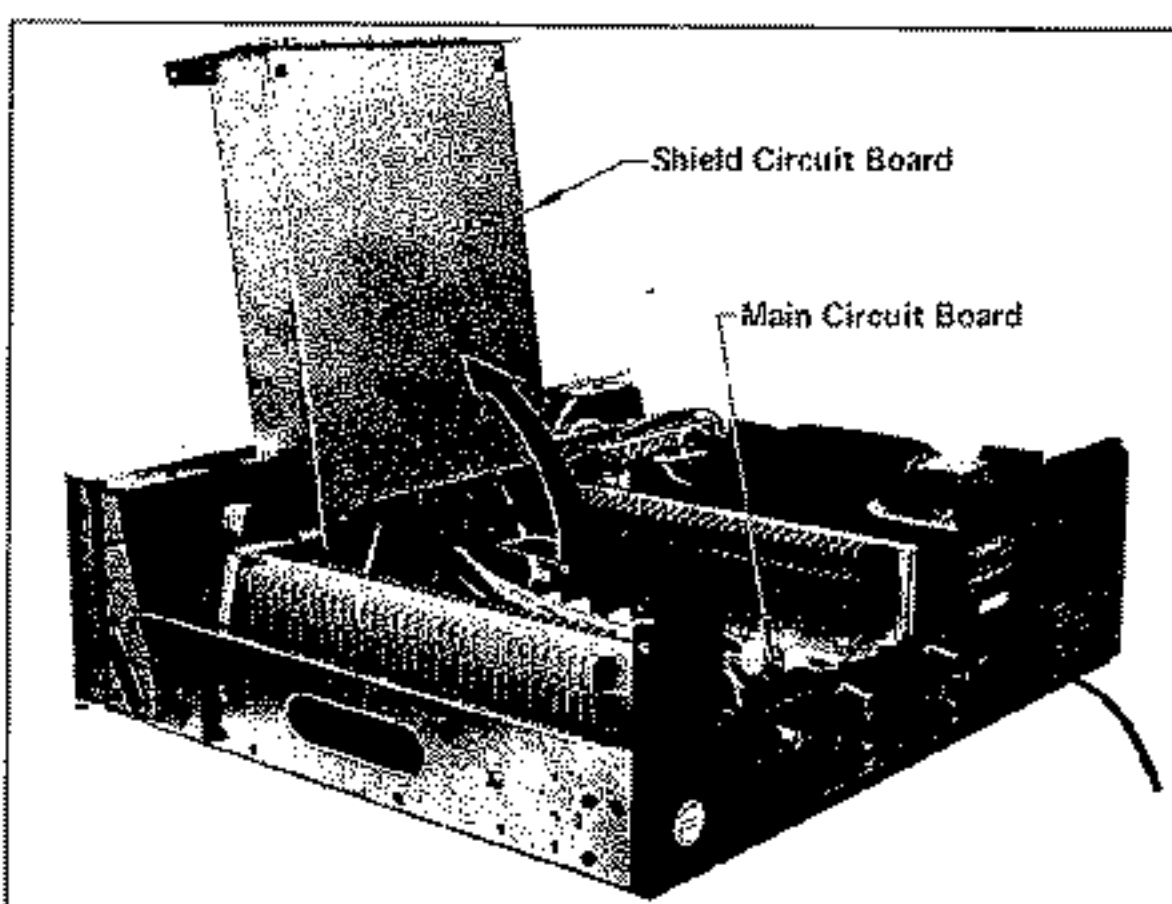


Photo 5

### 4. Front panel removal

a. Using the 1.5φ allen wrench, loosen the screw ① in photo 6 and then remove the volume knob.

b. Using the 1.5φ allen wrench, loosen the screws and then remove REC OUT, PHONO and INPUT knobs.

c. After removing screws ③ to ⑤ in photo 2 and screws ③ to ⑤ in photo 3, the front panel may be lifted out forward gently.

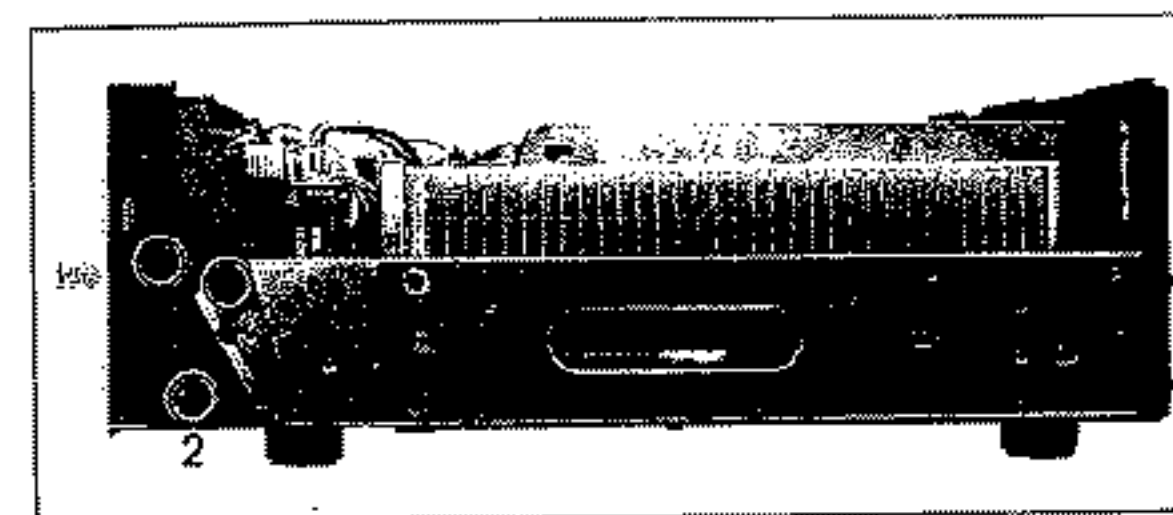


Photo 6

### 5. Tone control and muting p.c. board check

a. Remove screws ② and ③ from the both left and right sides in photo 6 and screw ③ to ⑤ in photo 2.

b. Remove the connectors ① to ⑤ in photo 7.

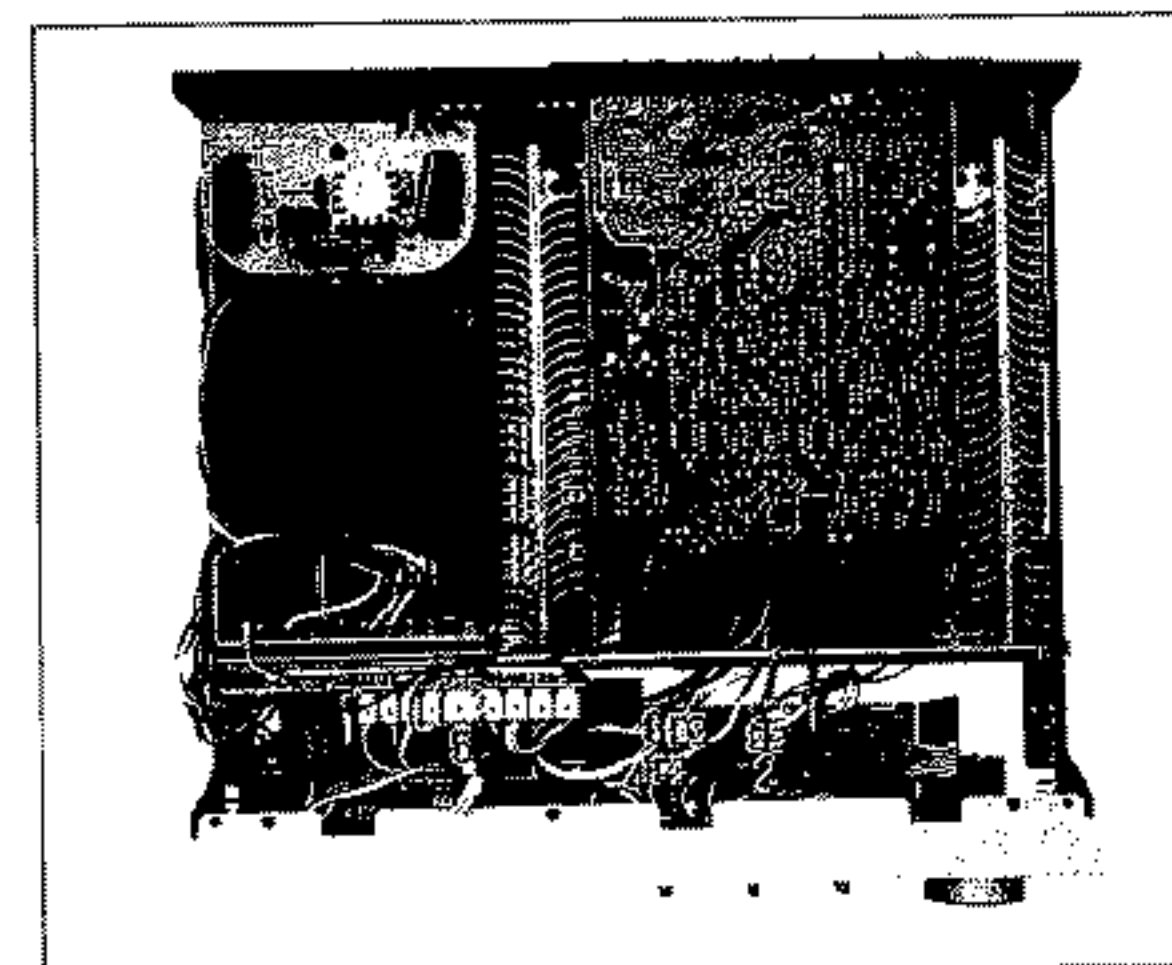


Photo 7

c. Open the sub-chassis as shown in photo 8. It is possible for you to check the tone control and muting p.c. board and to exchange the parts.

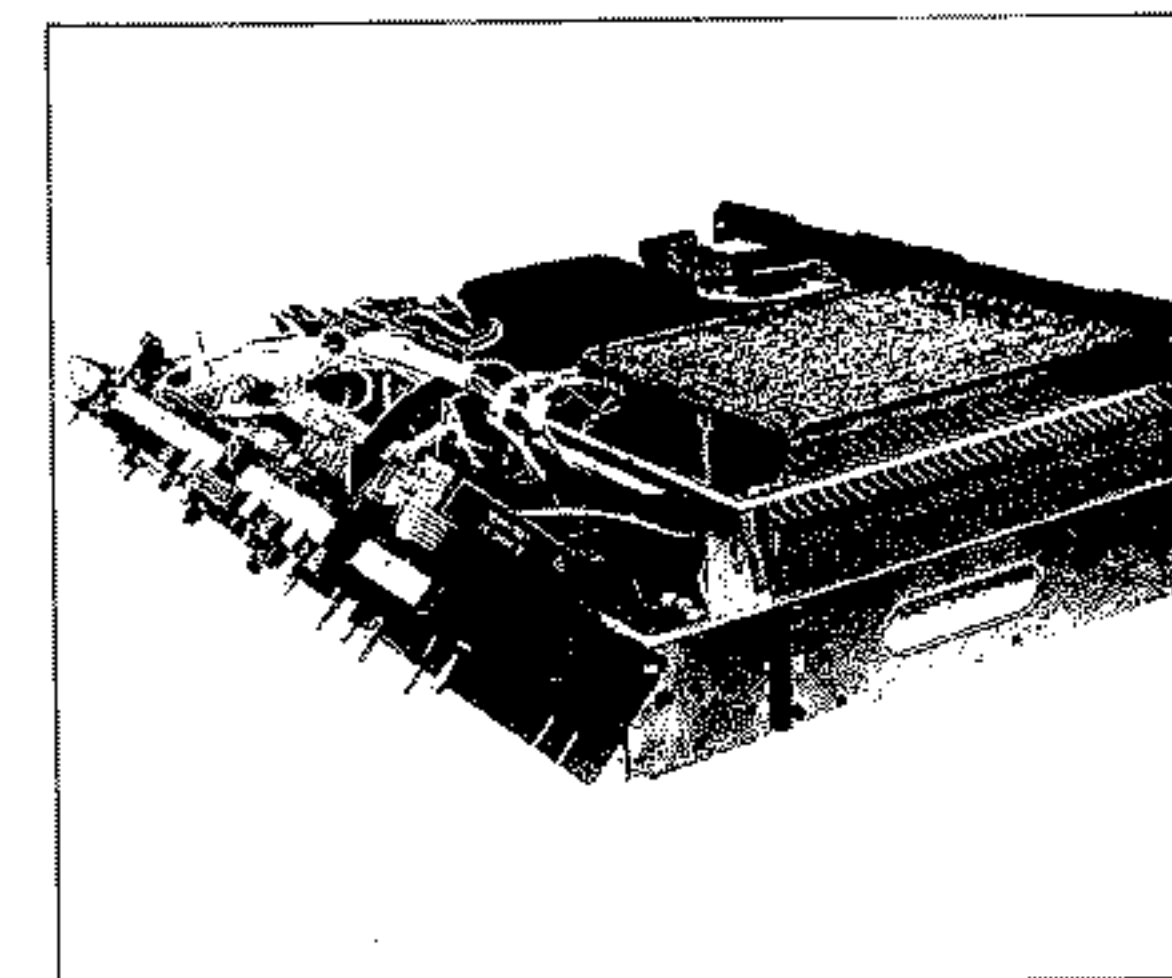


Photo 8

### 6. Electrolytic capacitor p.c. board removal

Loosen the screw ① in the inner part of the hole of the electrolytic capacitor p.c. board in photo 9 and then remove the electrolytic capacitor p.c. board.

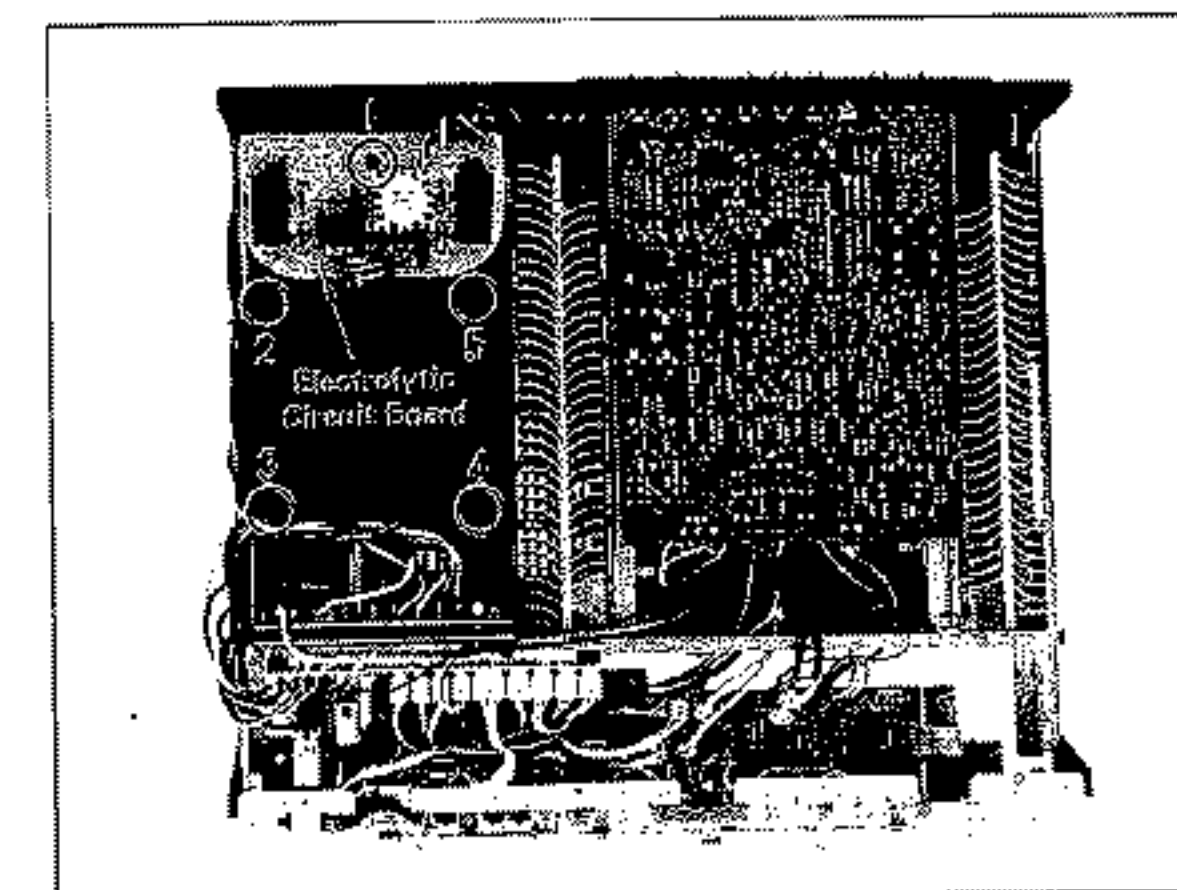


Photo 9

### 7. Power transformer removal

a. Remove screws ② to ⑤ in photo 9 and remove the transformer cover.

b. Detach the lead wires of the transformer.

c. Remove screws ① to ④ in photo 10 and remove the transformer.

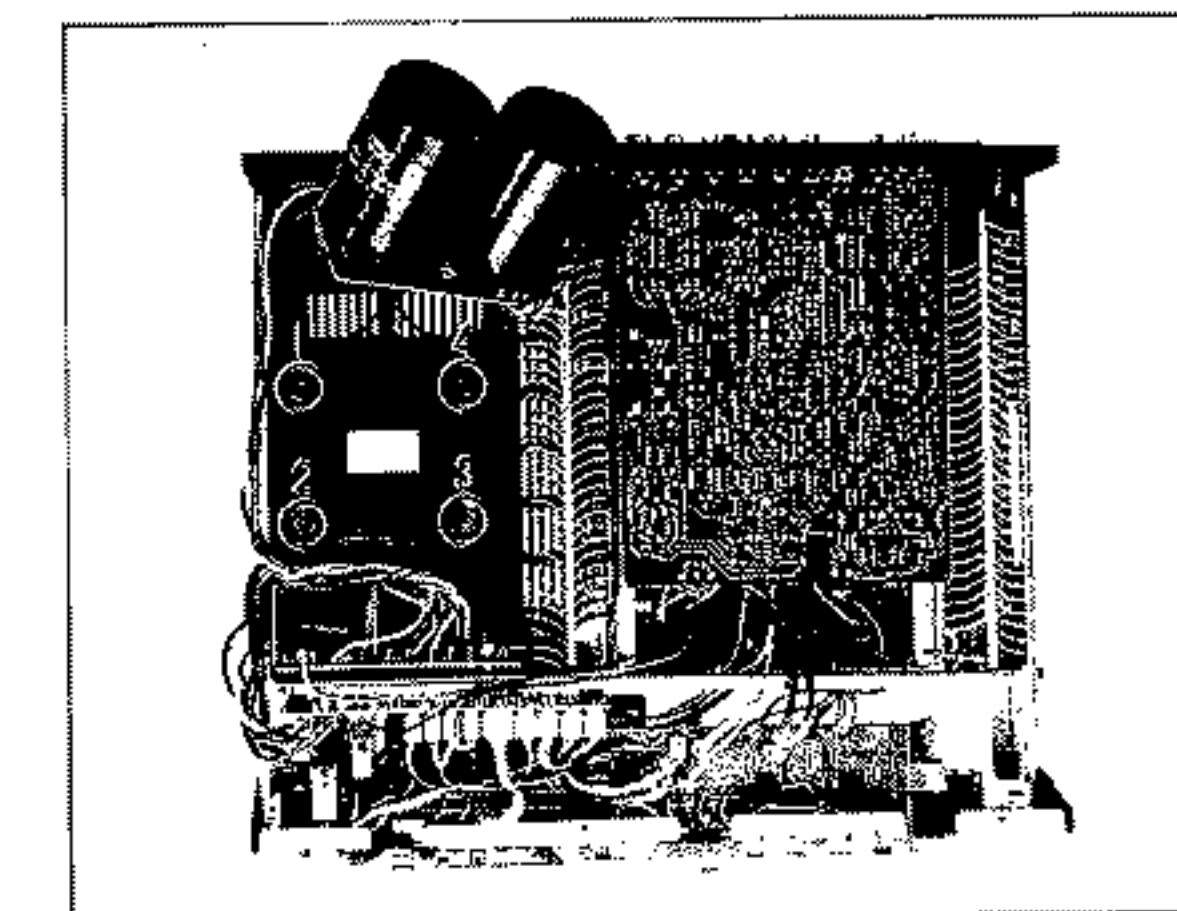


Photo 10

\* The back panel, chassis and bottom covers, etc. are copper-plated for tone character improvement and are coated black. The coating may come off either by knocking them or by knocking them with a metal tool.

## SPECIFICATIONS

<b>Continuous R.M.S. Output Power</b>	
20Hz ~ 20kHz (0.005% THD 8Ω)	140W (U) (C) 120W (R) (A) (G) (B)
1kHz (0.003% THD 8Ω)	140W (U) (C) 120W (R) (A) (G) (B)
<b>Clipping Power</b> (1kHz 4Ω Load THD: 0.5%)	
	230W (U) (C) 220W (R) (A) (G) (B)
<b>DIN Standard, Output Power</b>	
1kHz (0.003% THD 8Ω)	120W (R) (A) (G) (B)
<b>Power Bandwidth</b>	
0.02% THD 70W (8Ω)	10Hz ~ 100kHz (U) (C)
0.02% THD 60W (8Ω)	10Hz ~ 100kHz (R) (A) (G) (B)
<b>Damping Factor</b>	
(1kHz 8Ω)	200 (U) (C)
(DIN 1kHz 8Ω)	200 (R) (A) (G) (B)
<b>Input Sensitivity/Impedance</b>	
Phono MC	100μV/100Ω, 10kΩ
Phono MM	2.5mV/100Ω, 33kΩ, 47kΩ, 100kΩ
Aux, Tape, Tuner	150mV/47kΩ
<b>Input Sensitivity (New IHF)</b>	
Phono MC	9μV
Phono MM	0.23mV
Aux, Tape, Tuner	10mV
<b>Maximum Input Signal (1kHz 0.01% THD)</b>	
Phono MC	11mV
Phono MM	280mV
<b>Over load Margin</b>	
Phono MC	41dB (A) (G) (B)
Phono MM	41dB (A) (G) (B)
<b>Output Level/Impedance</b>	
Rec Out	150mV/560Ω
<b>Intermodulation Distortion</b>	
Aux, Tape, Tuner, Rated Output/8Ω	0.002%
1W/8Ω	0.01%
<b>Signal to Noise Ratio (IHF-A-Network)</b>	
Phono MC (250μV Input Shorted)	78dB
Phono MM (10mV Input Shorted)	100dB
Aux, Tape, Tuner (5.1kΩ)	
MAIN DIRECT ON	103dB
MAIN DIRECT OFF	96dB
<b>Residual Noise (IHF-A-Network)</b>	
MAIN DIRECT ON	80μV
MAIN DIRECT OFF	500μV
<b>Channel Separation (Phono MM, Aux, Tape)</b>	
1kHz (Vol -30dB 0Ω short)	70dB

<b>Tone Control Characteristics</b>	
BASS boost/cut	±10dB (125Hz, 500Hz)
TREBLE boost/cut	±10dB (2.5kHz, 8kHz)
<b>Headphone Jack Rated Output/Impedance</b>	
0.01% THD	115mW/8Ω (U) (C) 100mW/8Ω (R) (G) (A) (B)
<b>Frequency Response (MAIN DIRECT ON)</b>	
Aux, Tape, Tuner	10Hz ~ 100kHz $^{+0}_{-1}$ dB
<b>RIAA Equalization Deviation</b>	
Phono MC	±0.2dB
Phono MM	±0.2dB
<b>Total Harmonic Distortion (20Hz ~ 20kHz)</b>	
Phono MC to Rec out (10V)	0.003%
Phono MM to Rec out (10V)	0.003%
Aux, Tape, Tuner → SP Out (1W/8Ω MAIN DIRECT ON)	0.005%
<b>Filter Characteristics</b>	
Low (Subsonic)	15Hz 12dB/oct
High	10kHz 12dB/oct
<b>Continuous Loudness Control (Level-related equalization)</b>	
Attenuation	-20dB (at 1kHz)
<b>Audio Muting</b>	
	-20dB
<b>Gain Tracking Error</b> (0 to -60dB)	
	2dB
<b>Slew Rate</b>	
	200V/μsec
<b>Semiconductors</b>	
111 Transistors	4 ICs
10 FETs, 10 LEDs	63 Diodes
<b>Power Supply/Power Consumption</b>	
U.S.A. and Canadian models	AC120V, 60Hz/470W
General model	AC110 ~ 120/220 ~ 240V, 60/50Hz/400W
North European model	AC220V, 50Hz/700W
British and Australian models	AC240V, 50Hz/700W
<b>Dimensions (W x H x D)</b>	
	435x114x422mm (17-1/8"x5-11/16"x 16-5/8")
<b>Weight</b>	
	12.5kg (27.5 lbs)

(U) ..... U.S.A. model  
 (C) ..... Canadian model  
 (R) ..... General model  
 (G) ..... North European model  
 (B) ..... British model  
 (A) ..... Australian model

Specifications subject to change without notice.



**ADJUSTMENTS**

**BEFORE COMMENCING**

1. Make sure that primary supply voltage comes within  $\pm 120V \pm 10\%$ . (U, C models).
2. Proceed with the adjustments about 5 minutes after the power has been turned on to stabilize the operation of the amplifier. (The rough adjustments for steps 4 and 5, however, should be carried out beforehand.)
3. Proceed with the adjustments in no signal and no load condition.

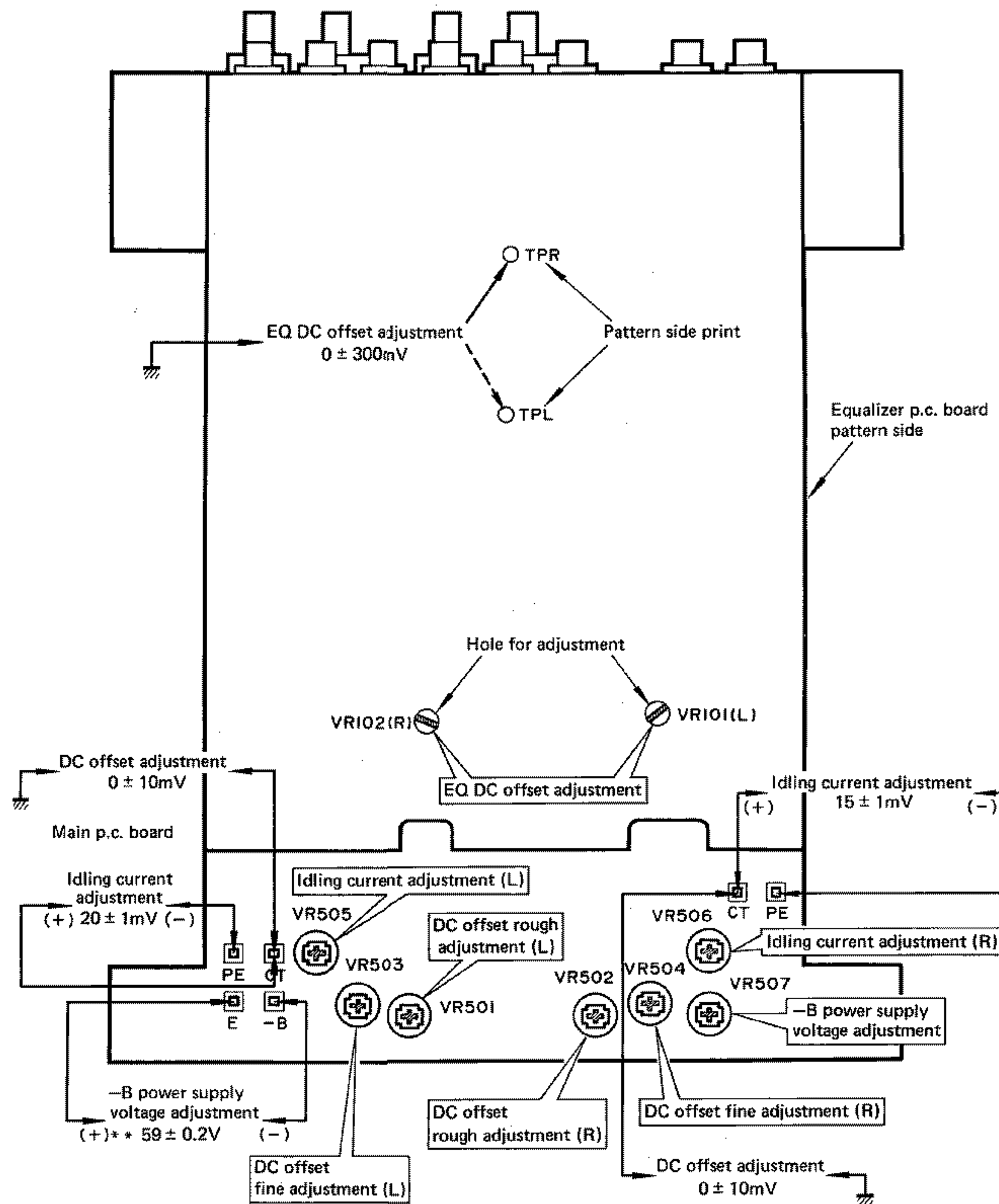
\* G Model 220V  
B. A Models 240V

Step	Adjustment	Adjustment points	Test points	Rating	Remarks
1	-B power supply voltage	Main P.C. board VR507	Main P.C. board -B (-) ~ E (+)	$54 \pm 0.2V$ (A,G,B,R) $59 \pm 0.2V$ (U,C)	
2	Photo coupler voltage check	Control P.C. board VR801	Control P.C. board P1 (+) ~ TP (-)	$1.2 \pm 0.1V$	Repeat step 1 only when the voltage is out of the rating
3	Equalizer DC offset	Equalizer P.C. board VR101 (L) VR102 (R)	Equalizer P.C. board TPL ~ E (L) TPR ~ E (R)	$0 \pm 300mV$	
4	Main amp. DC offset	Main P.C. board Lch VR501 (Rough adjustment) VR503 (Fine adjustment) Rch VR502 (Rough adjustment) VR504 (Fine adjustment)	Main P.C. board CT ~ E (Or speaker terminal + ~ -)	$0 \pm 10mV$	
5	Main amp. Idling current adjustment	Main P.C. board VR505 (L) VR506 (R)	Main P.C. board CT (+) ~ PE (-)	$20 \pm 1mV$	

**ADJUSTMENT POINTS**

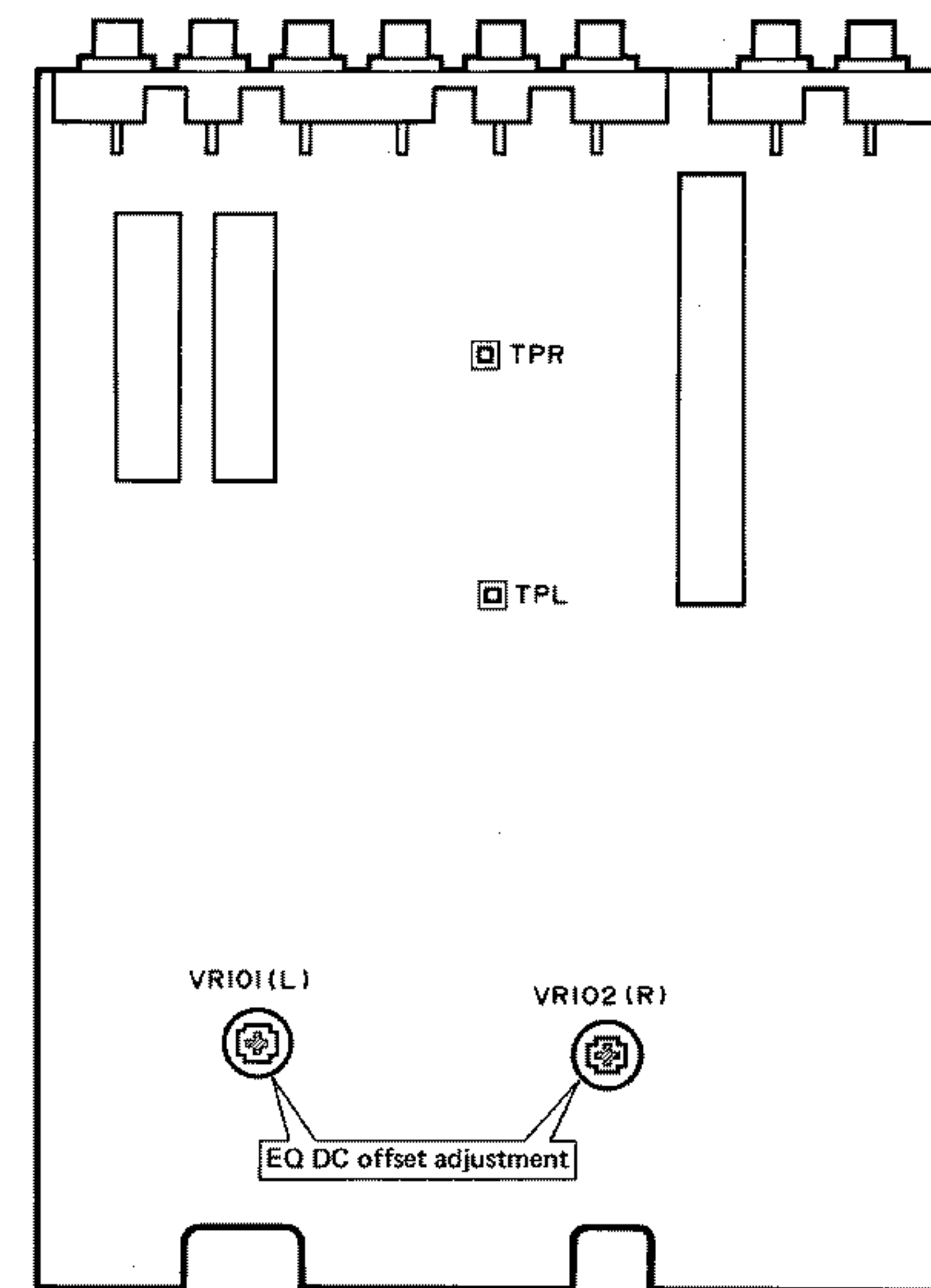
- \* It is possible to adjust by mounting the equalizer and main circuit board.
- ADJUST THE EQUALIZER AND MAIN P.C. BOARD

Top view

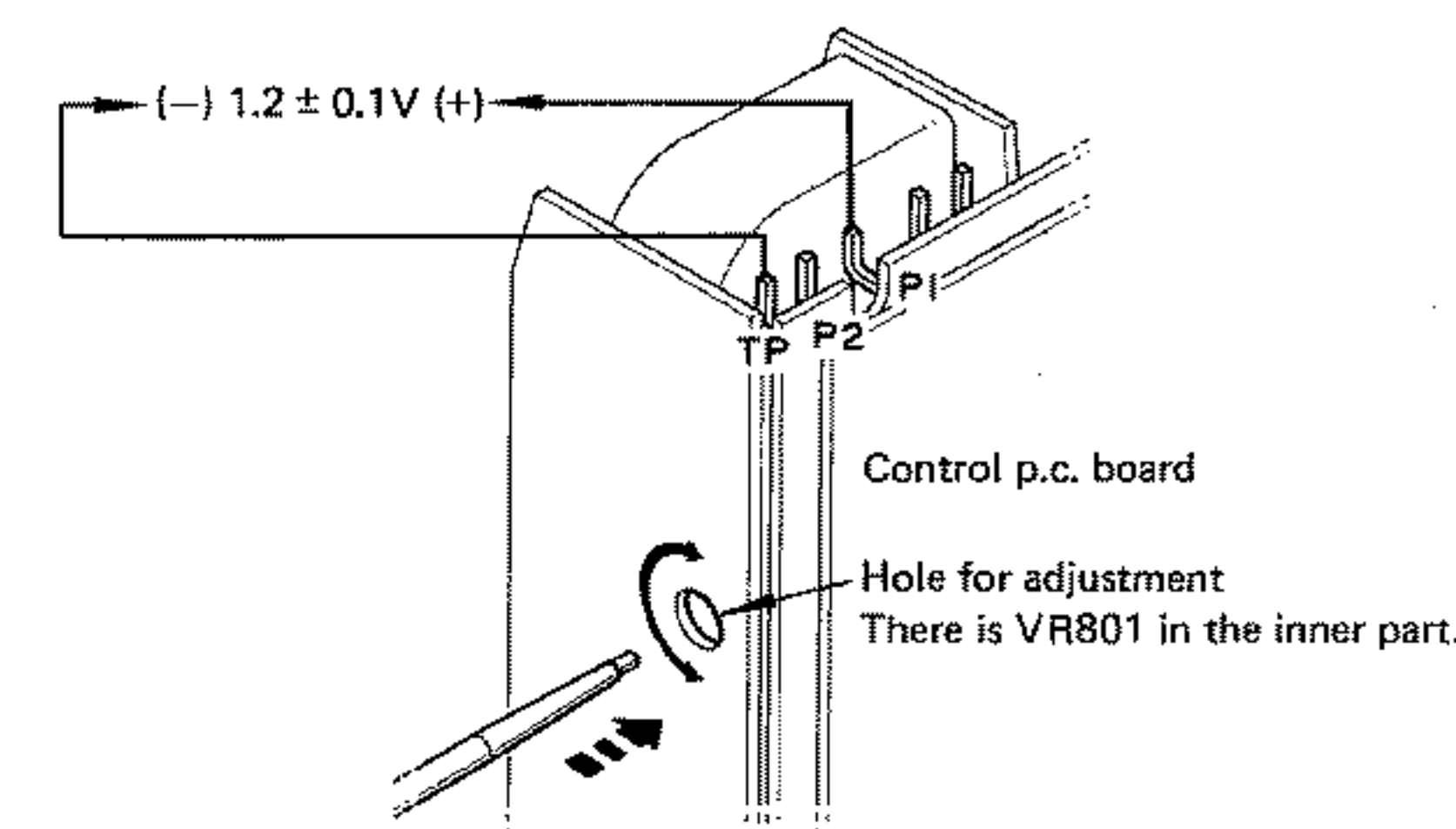


\*\* A, G, B, R Models  $54 \pm 0.2V$

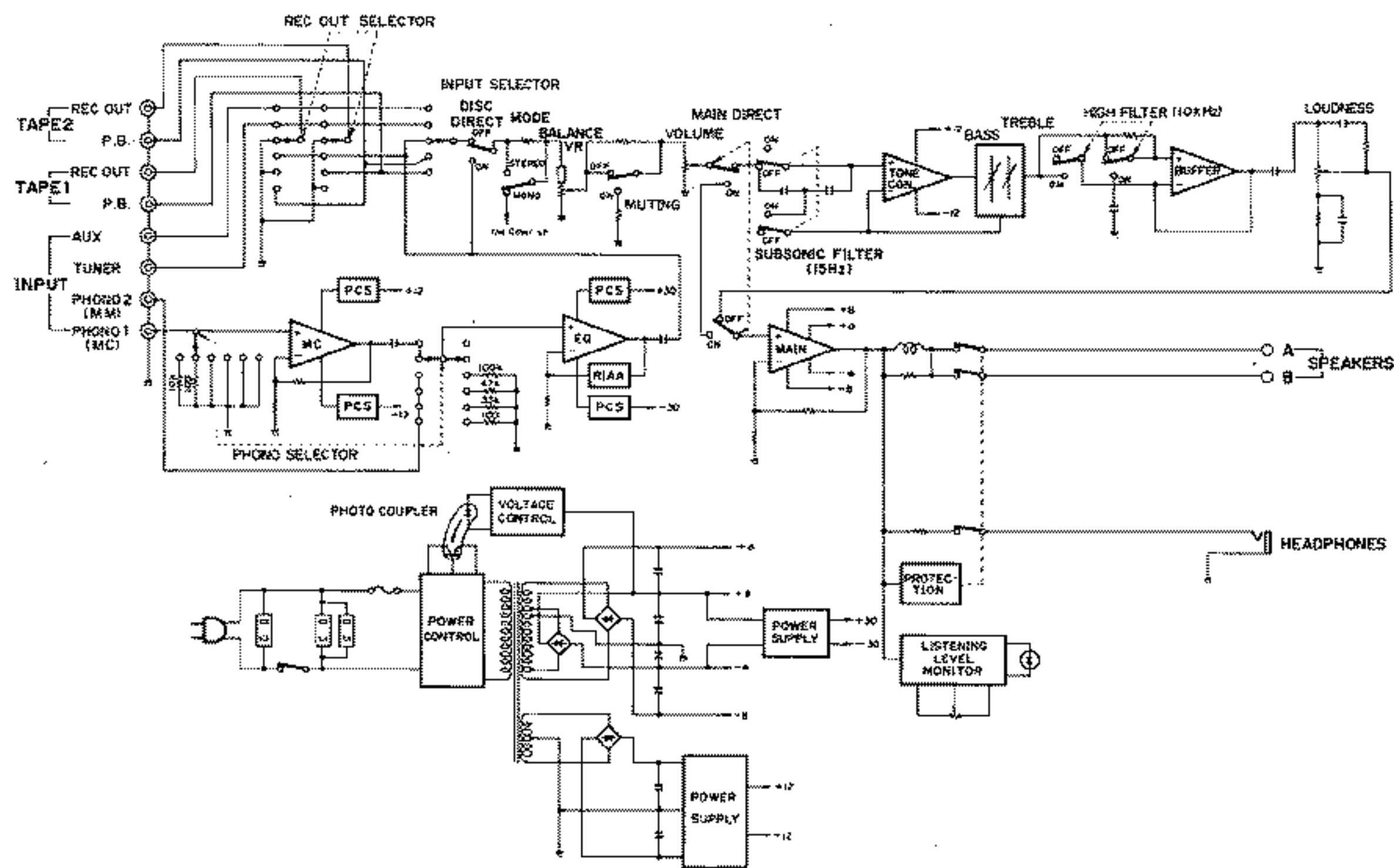
Parts side view



● PHOTO COUPLER VOLTAGE ADJUSTMENT.



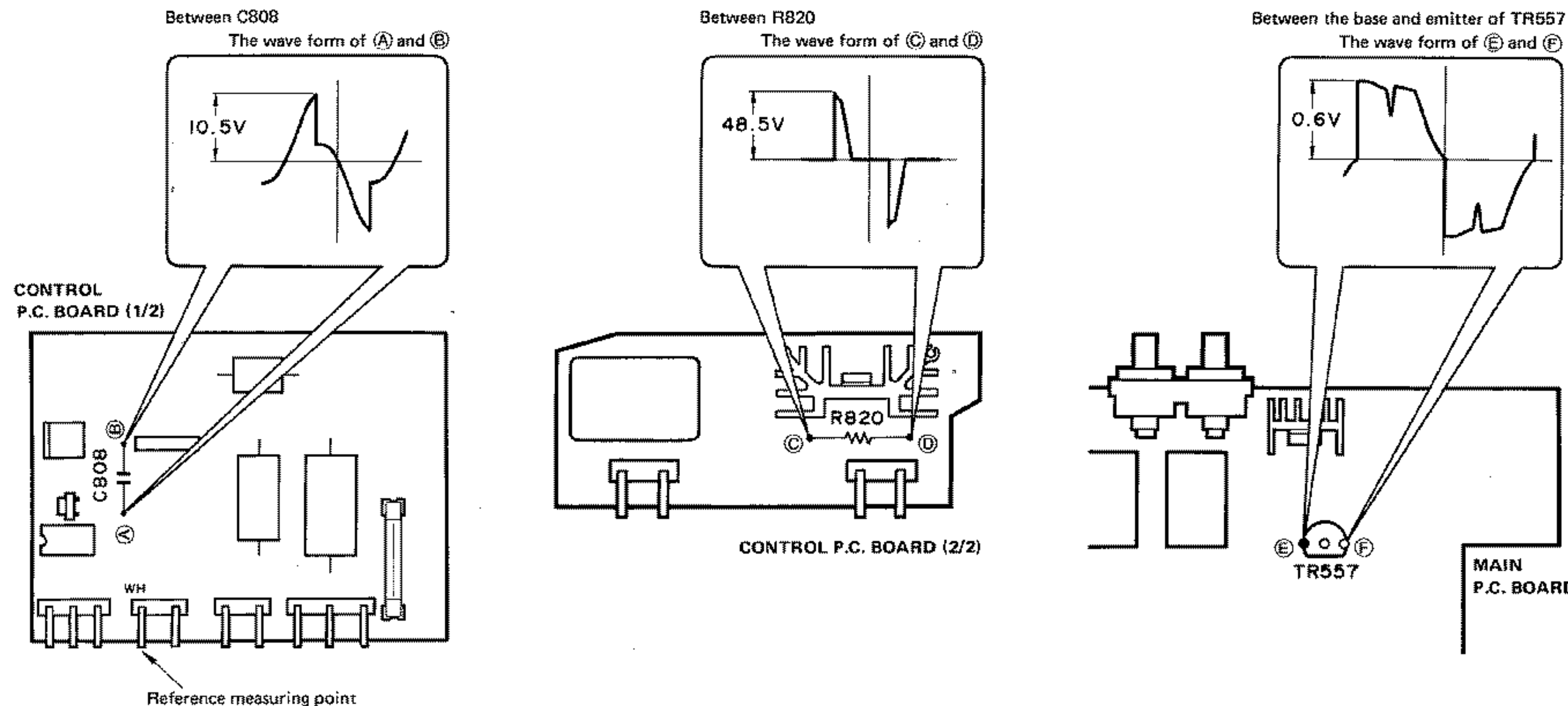
**BLOCK DIAGRAM**



● Precautions in adjusting the control p.c. board.

- Note 1) Since the AC mains is connected directly to the control, p.c. board, be particularly careful against electric shock.
- Note 2) Always check voltages by measuring the voltage between the reference measuring point and check point.
- Note 3) Use floating inputs for wave form measuring purposes. If the oscilloscope body is grounded the measuring circuit will be in danger of being short circuit. In this case, however, do not touch the oscilloscope body by hand since the voltage applied to the oscilloscope could possibly result in an electric shock.
- Note 4) Check the quality of the TRIAC by monitoring the wave form across R820 (2P390Ω).

\*The marks (A) to (E) mean the test points of monitoring the wave form.





U.S.A. and Canadian Models

General Model

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
	NA 07 72 10	Control Circuit Board	制御シート			
C801	FR 15 52 20	Metalized Paper Cap.	M P コン			
C803 ~ C805	FR 16 36 80	"	"			
C806	FG 41 21 00	Ceramic Cap.	セラコン			
C807	UA 25 43 30	Mylar Cap.	マイラーコン			
C808	FA 45 54 70	"	"			
C810	FQ 09 46 80	Oil Cap.	オイルコン			
L801	GD 90 04 20	Coil	雑防コイル			
R801 ~ R804	HJ 35 84 70	Carbon Resistor	カーボン抵抗			
R806, R807	HL 62 73 90	Metal Oxide Film Resistor	酸金抵抗			
R808	HJ 35 91 00	Carbon Resistor	カーボン抵抗			
R809	HV 35 61 00	Flame Proof Carbon Resistor	不燃化カーボン抵抗			
R810	HJ 35 71 50	Carbon Resistor	カーボン抵抗			
R811	HJ 35 91 00	Carbon Resistor	"			
R812	HJ 35 81 20	"	"			
R813	HJ 35 75 60	"	"			
R814	HJ 35 73 30	"	"			
R815	HJ 35 41 50	"	"			
R817, R18	HJ 35 54 70	"	"			
R820	HL 72 53 90	Metal Oxide Film Resistor	酸金抵抗			
R821	HV 35 41 50	Flame Proof Carbon Resistor	不燃化カーボン抵抗			
VR801	HT 18 02 10	Semi Variable Resistor	半固定抵抗			
D801, D802	IF 00 19 40	Zener Diode	ツェナーダイオード			
D803	IH 00 08 80	Diode Bridge	ダイオードブリッジ			
D804 ~ D806	IH 00 00 60	Diode	ダイオード			
IC801	IG 04 08 00	IC	トリガー IC (Trigger)			
SCR801, SCR802	IH 00 09 00	Triac	トライアック			
SCR803	IH 00 10 50	"	"			
TR801	iK 00 03 00	Photo Coupler	フォトカプラー			
F801	KB 00 13 80	Fuse	ヒューズ			
LA 00 23 90	Wrapping Terminal	P=7.5 2P (L Type)	L型ラッピング端子板			
LA 00 26 50	"	(φ) 2P	"			
LA 00 24 00	"	P=7.5 3P	"			
LA 00 24 10	"	P=10 2P	"			
LA 00 24 20	"	P=10 3P	"			
LB 20 09 00	Fuse Holder Pin	YSH402P	ヒューズホルダーピン			
BA 07 95 30	Heat Sink		放熱板		A-960	
CB 60 38 40	Coil Cap		コイルキャップ			
CB 60 40 80	Coil Base		コイルベース			
CB 09 12 90	P.C. Board Holder		基板ホルダー			
CB 06 88 80	Plastic Rivet		プラスチックリベット			
CB 60 52 10	Spacer		スペーサー			
CB 07 28 80	Isolation Bush		絶縁ブッシュ			
iL 00 02 70	Mica Base		マイカベース			
EH 02 60 80	Cums Head Screw	2.6x8 ZMC2-Y	カムスナベ小ネジ (ダブルセムス)	(Sems Type)		
EN 03 00 20	Bind Tapping Screw	3x8 ZMC2-Y Type II	バインドタッピングネジ (2種)			

\* New Parts (新規部品)

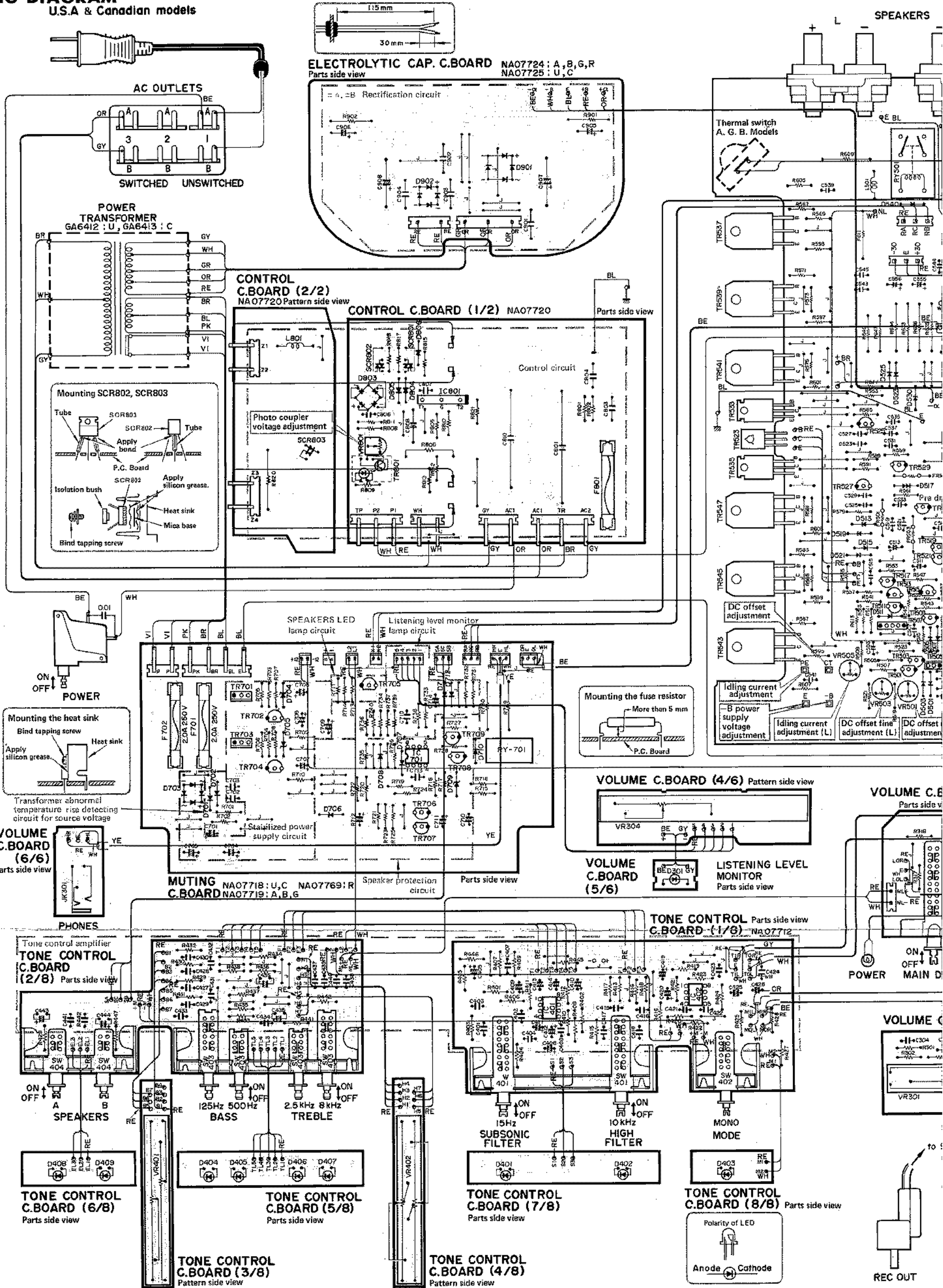
Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
	NA 07 72 20	Control Circuit Board	制御シート			
C801	FC 24 52 20	Metallized Mylar Cap.	M M コン			
C803, 804	FI 34 33 30	Ceramic Cap.	セラコン			
C806	FG 41 21 00	"	"			
C807	UA 25 43 30	Mylar Cap.	マイラーコン			
C808	FA 45 54 70	"	"			
C810	FC 24 51 00	Metallized Mylar Cap.	M M コン			
L801	GD 90 04 10	Coil	雑防コイル			
R801, 802	HJ 35 82 20	Carbon Resistor	カーボン抵抗			
R805	HJ 35 62 70	"	"			
R806	HL 62 71 80	Metal Oxide Film Resistor	酸金抵抗			
R808	HJ 35 91 00	Carbon Resistor	カーボン抵抗			
R809	HV 35 61 00	Flame Proof Carbon Resistor	不燃化カーボン抵抗			
R810	HJ 35 71 50	Carbon Resistor	カーボン抵抗			
R811	HJ 35 91 00	"	"			
R812	HJ 35 81 20	"	"			
R813	HJ 35 75 60	"	"			
R815	HJ 35 41 50	"	"			
R817, 818	HJ 35 54 70	"	"			
R820	HL 72 53 90	Metal Oxide Film Resistor	酸金抵抗			
R821	HV 35 41 50	Flame Proof Carbon Resistor	不燃化カーボン抵抗			
VR801	HT 18 02 10	Semi Variable Resistor	半固定抵抗			
IC801	IG 04 08 00	IC	トリガー IC (Trigger)			
D803	IH 00 08 80	Diode Bridge	ダイオードブリッジ			
D804 ~ D806	IH 00 00 60	Diode	ダイオード			
SCR801, SCR802	IH 00 09 00	Triac	トライアック			
SCR803	IH 00 11 10	"	"			
TR801	iK 00 03 00	Photo Coupler	フォトカプラー			
F801	KB 00 15 40	Fuse	ヒューズ			
CB 07 28 80	Isolation Bush		絶縁ブッシュ			
LA 00 24 00	Wrapping Terminal	P=7.5 3P (L Type)	L型ラッピング端子板			
LA 00 23 90	"	P=7.5 2P	"			
LA 00 24 10	"	P=10 2P	"			
LA 00 24 20	"	P=10 3P	"			
LB 20 09 00	Fuse Holder Pin	YSH402P	ヒューズホルダーピン			
BA 07 95 30	Heat Sink		放熱板		A-960	
CB 60 38 40	Coil Cap		コイルキャップ			
CB 60 40 80	Coil Base		コイルベース			
CB 09 12 90	P.C. Board Holder		基板ホルダー			
CB 06 88 80	Plastic Rivet		プラスチックリベット			
CB 60 52 10	Spacer		スペーサー			
CB 07 28 80	Isolation Bush		絶縁ブッシュ			
iL 00 02 70	Mica Base		マイカベース			
EH 02 60 80	Cums Head Screw	2.6x8 ZMC2-Y	カムスナベ小ネジ (ダブルセムス)	(Sems Type)		
EN 03 00 20	Bind Head Tapping Screw	3x8 ZMC2-Y Type II	バインドタッピングネジ (2種)			

\* New Parts (新規部品)

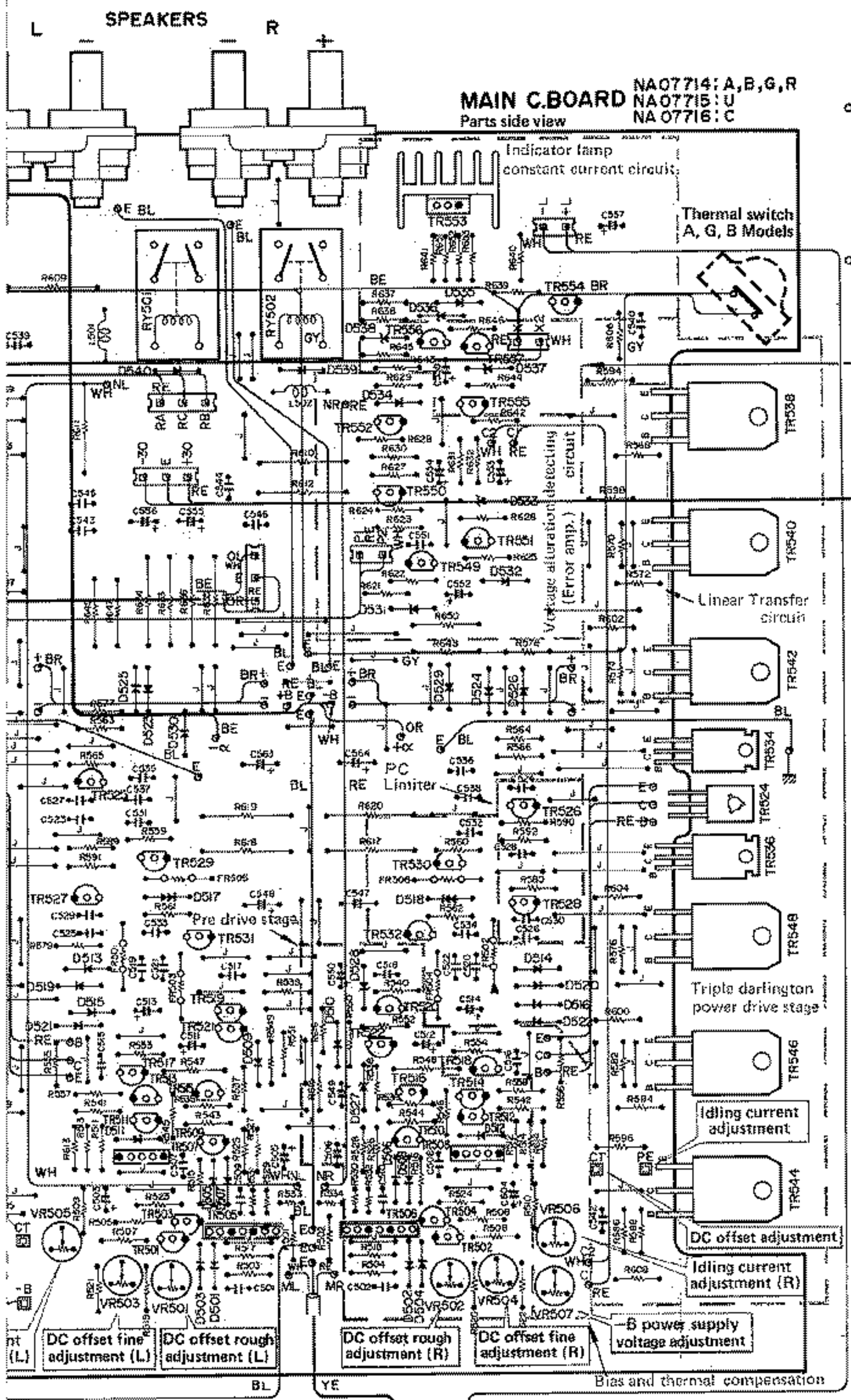


# WIRING DIAGRAM

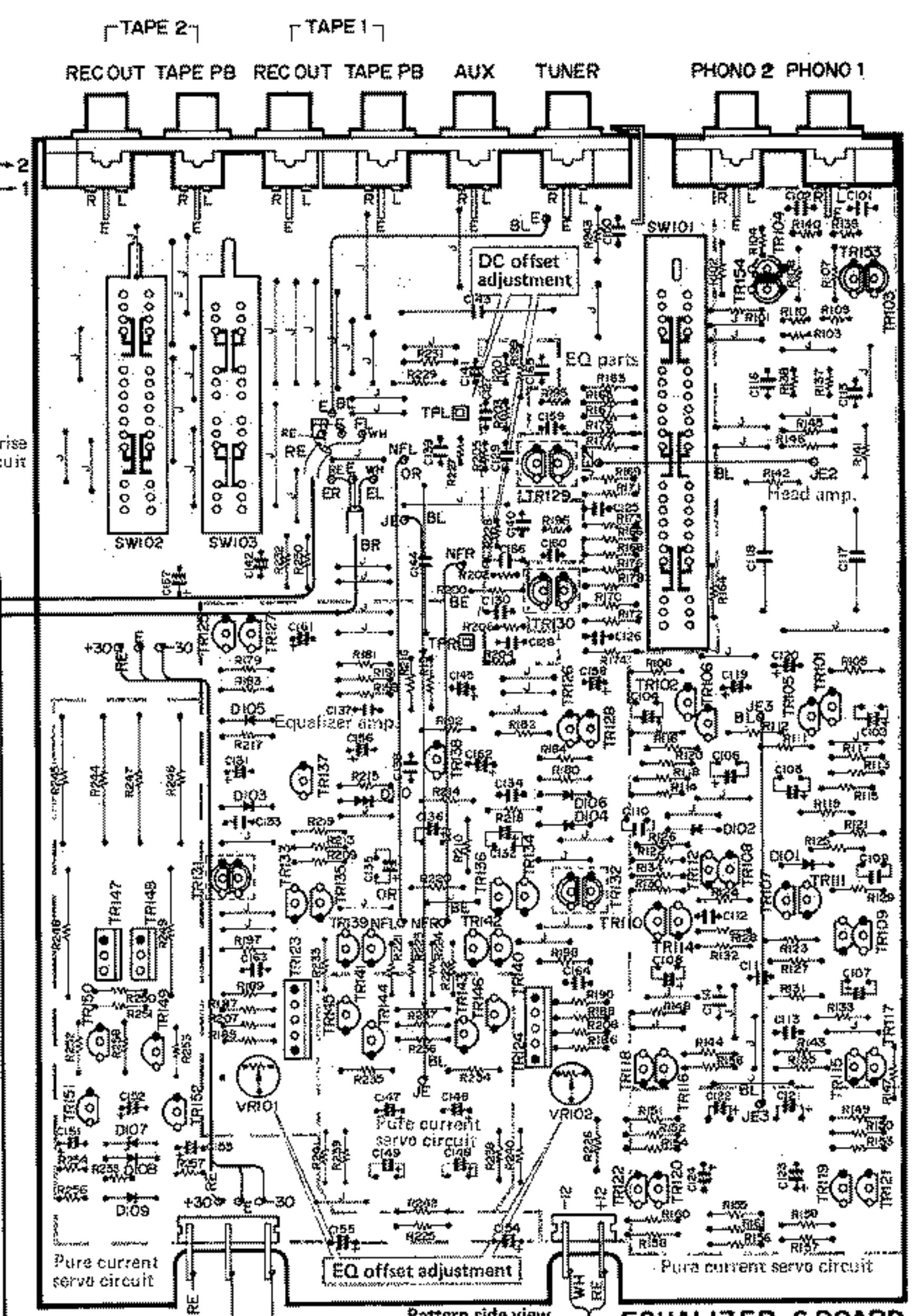
U.S.A. & Canadian models



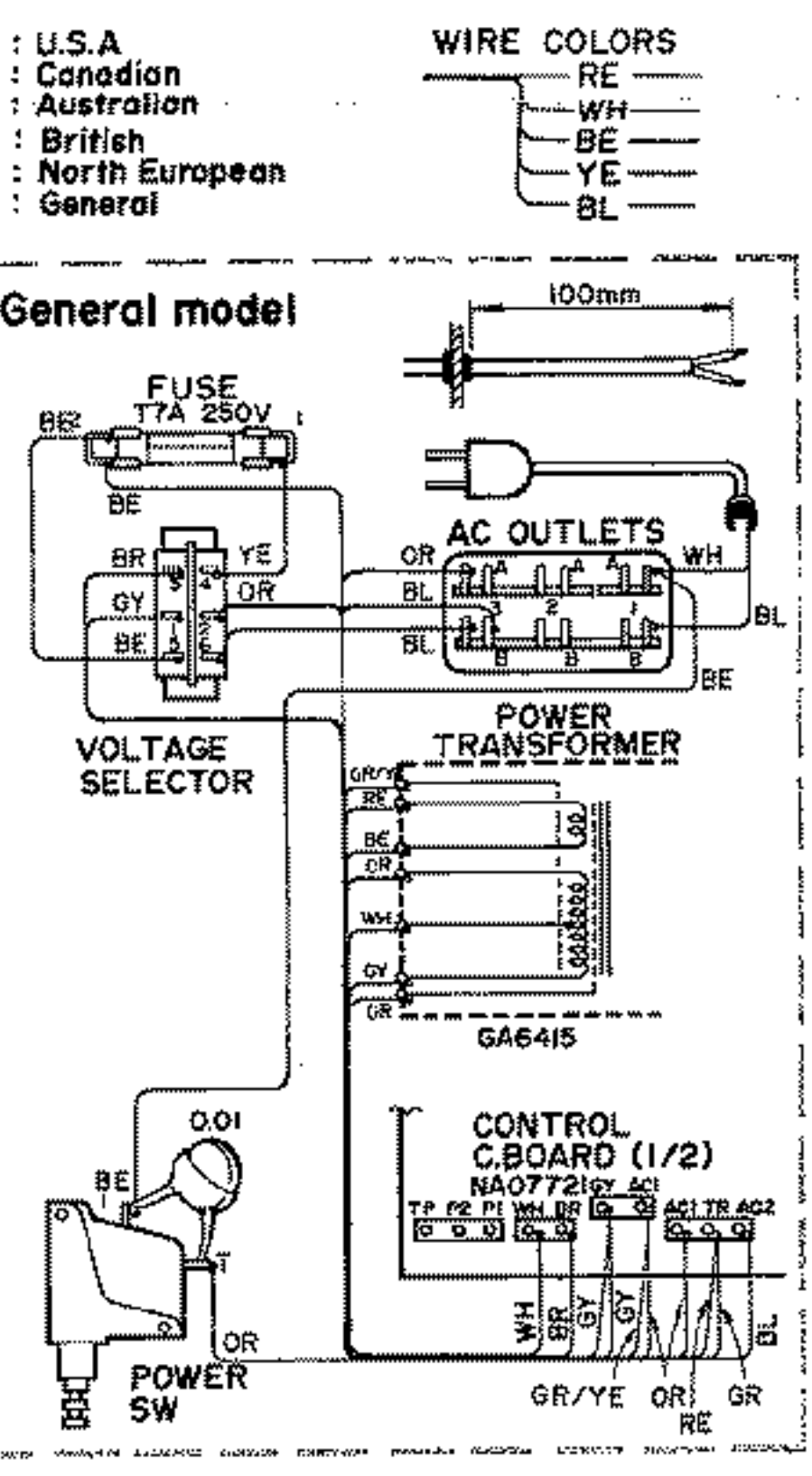
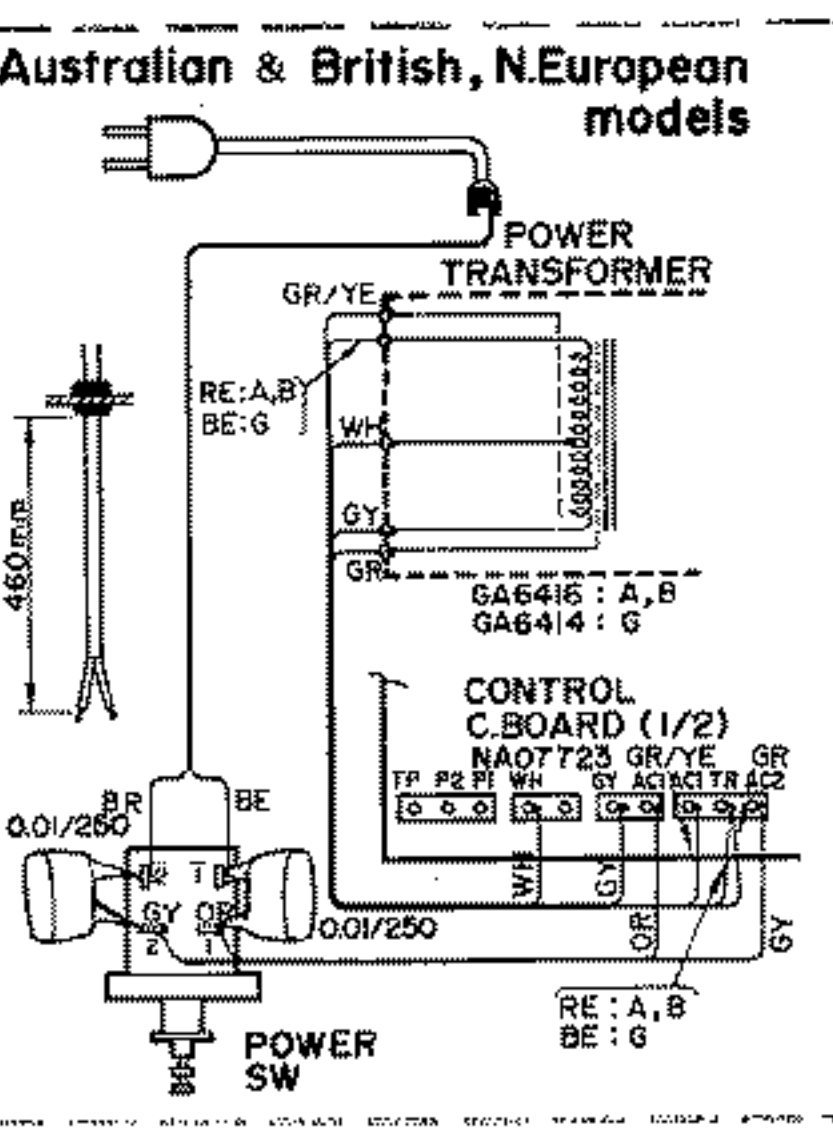
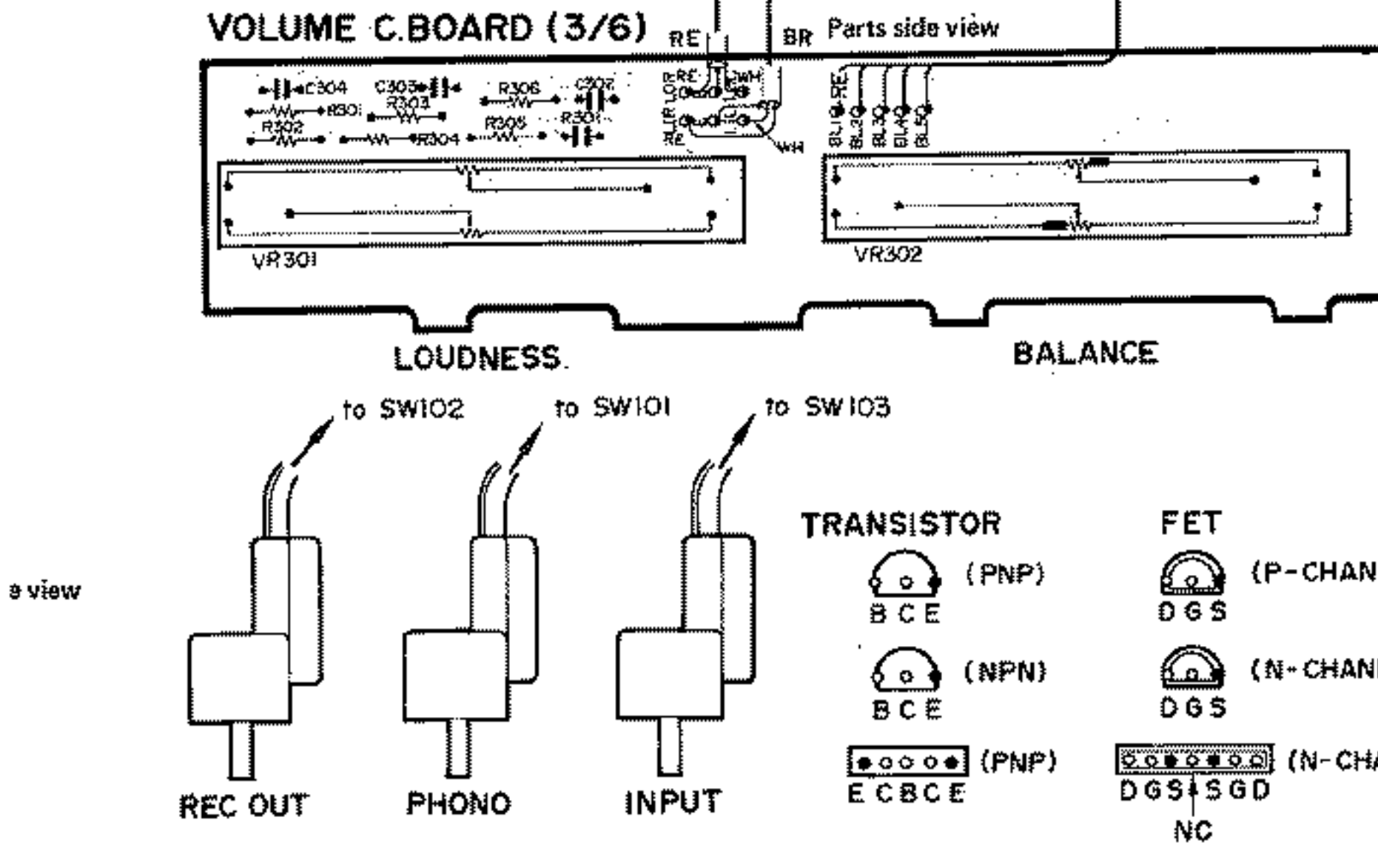
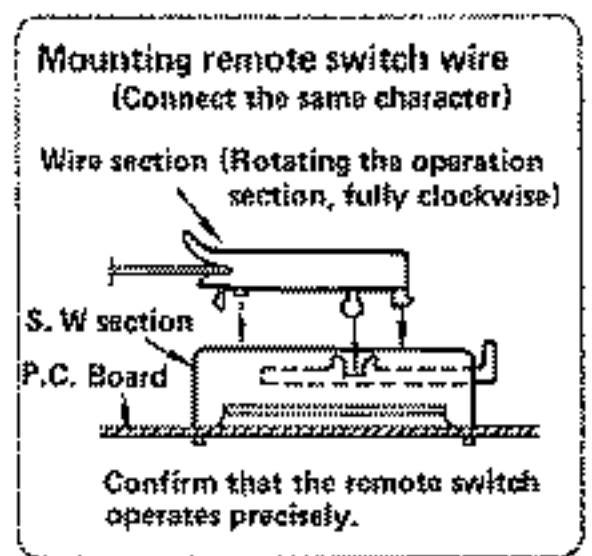
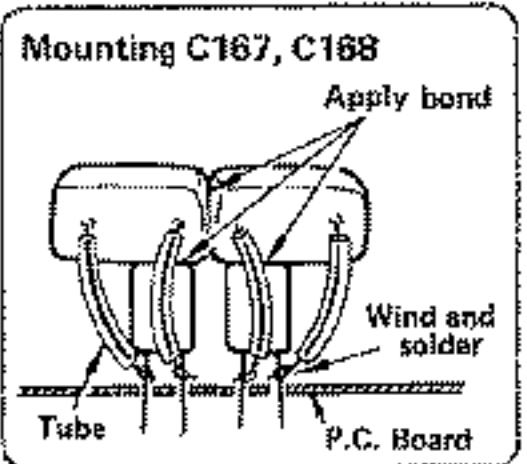
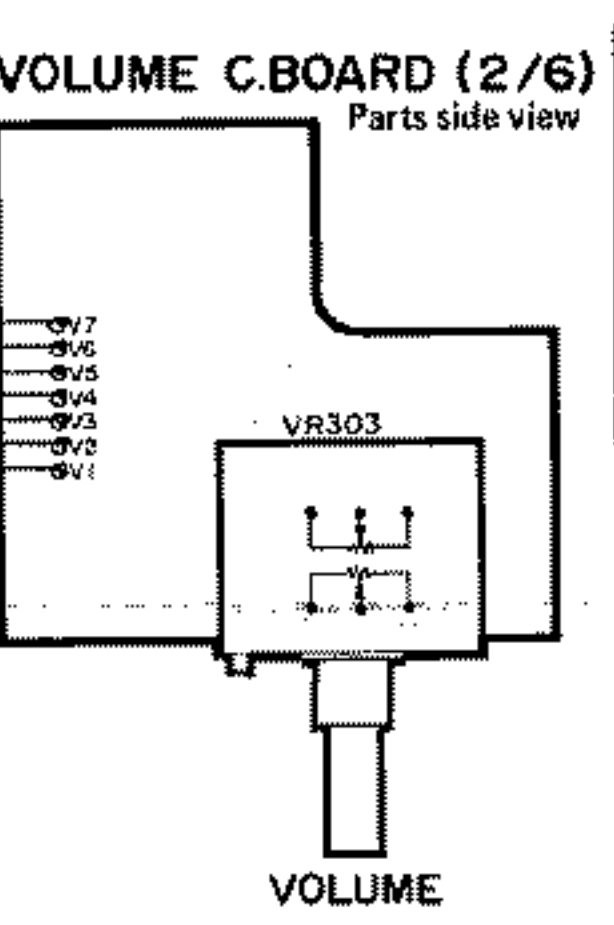
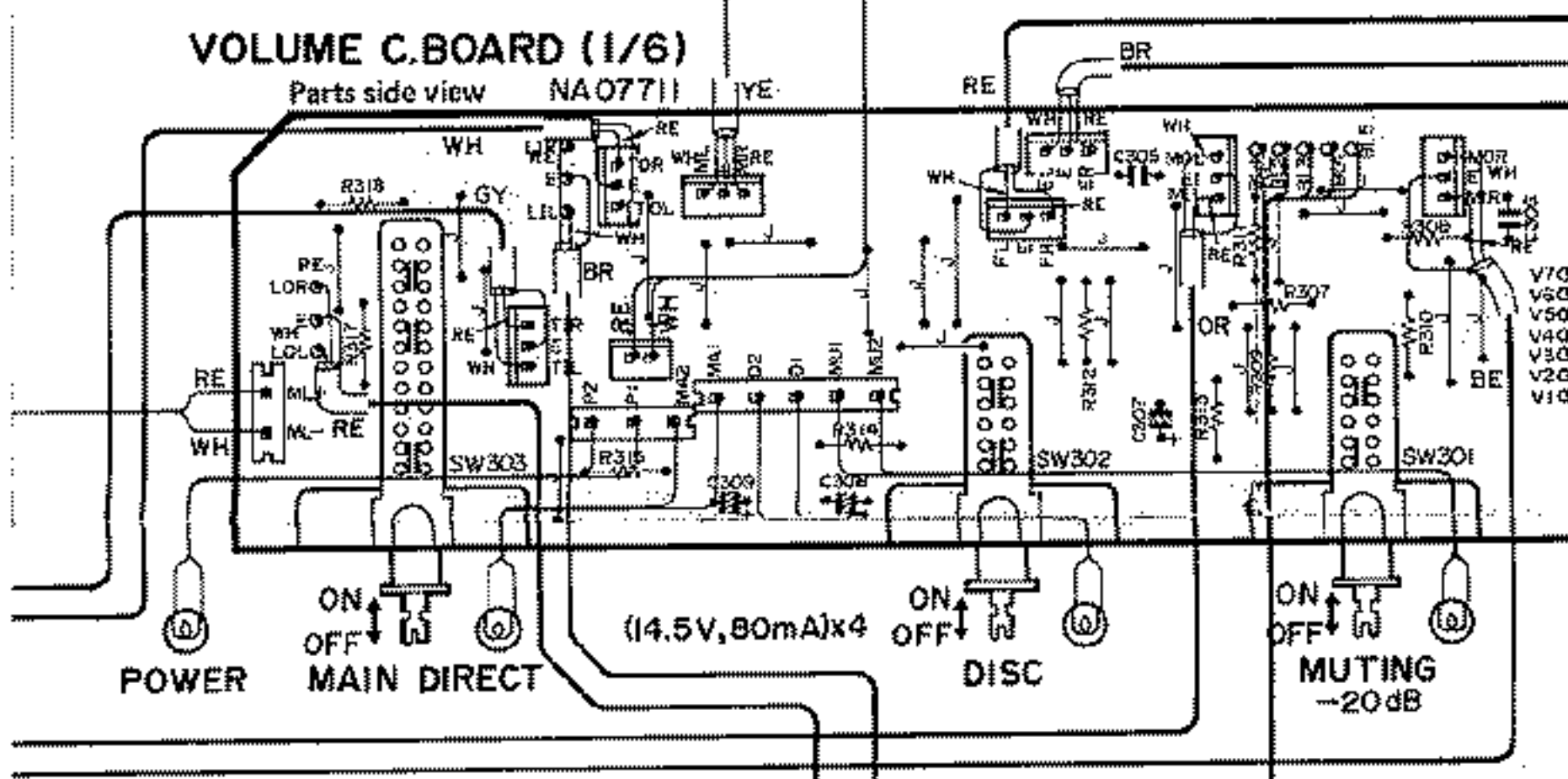
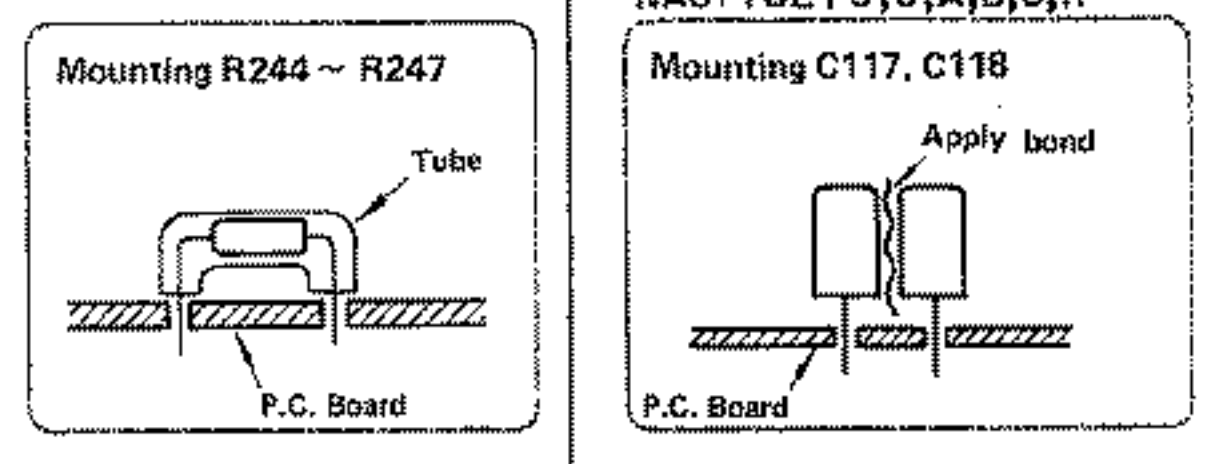




- SW102  
 ○ AUX  
 ○ TUNER  
 ○ OFF
- PHONO  
 ○ TAPE 1 → 2  
 ○ TAPE 2 → 1
- SW103  
 ○ AUX  
 ○ TUNER
- PHONO  
 ○ TAPE 1  
 ○ TAPE 2
- Transformer abnormal temperature rise detecting circuit



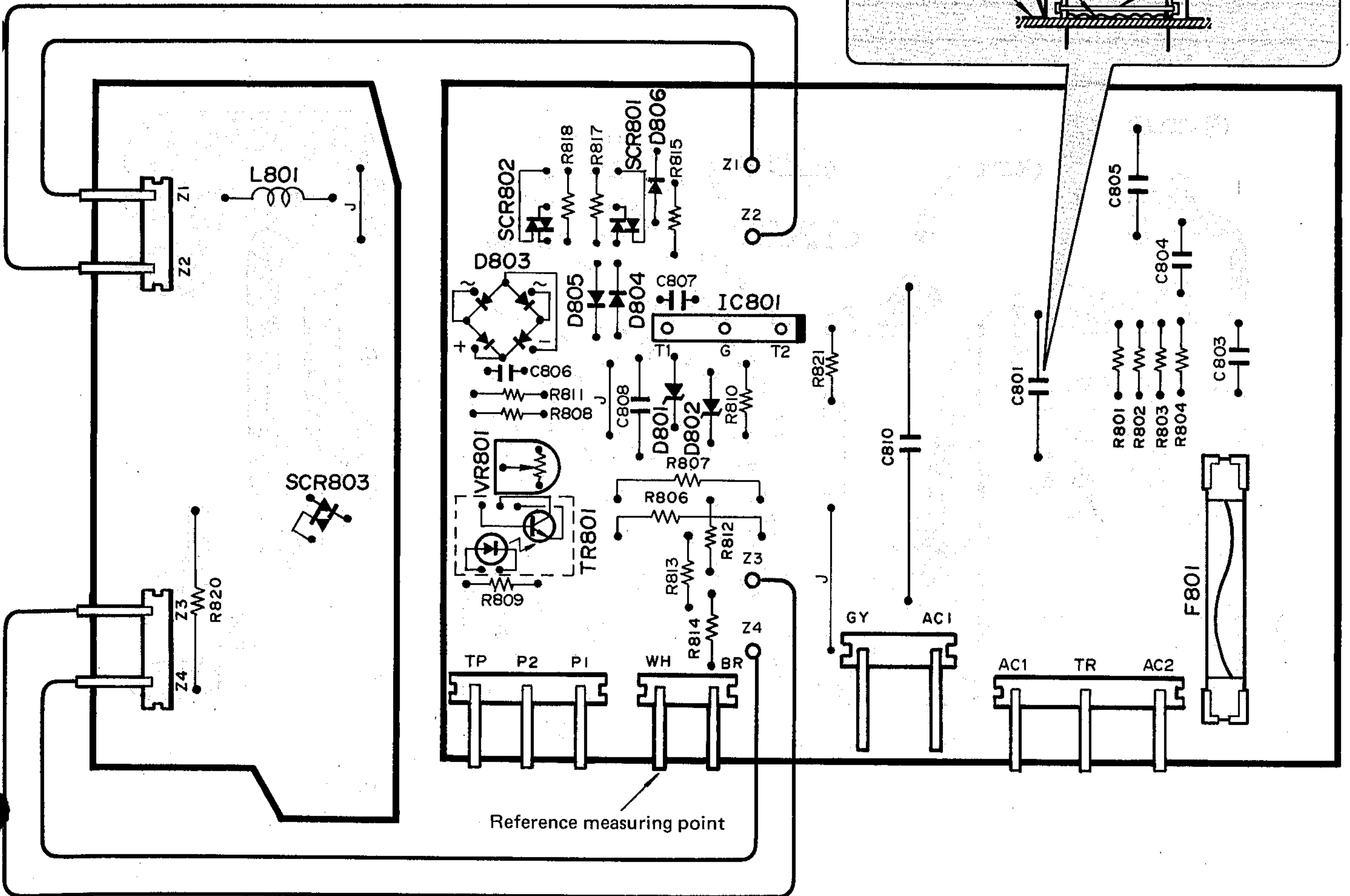
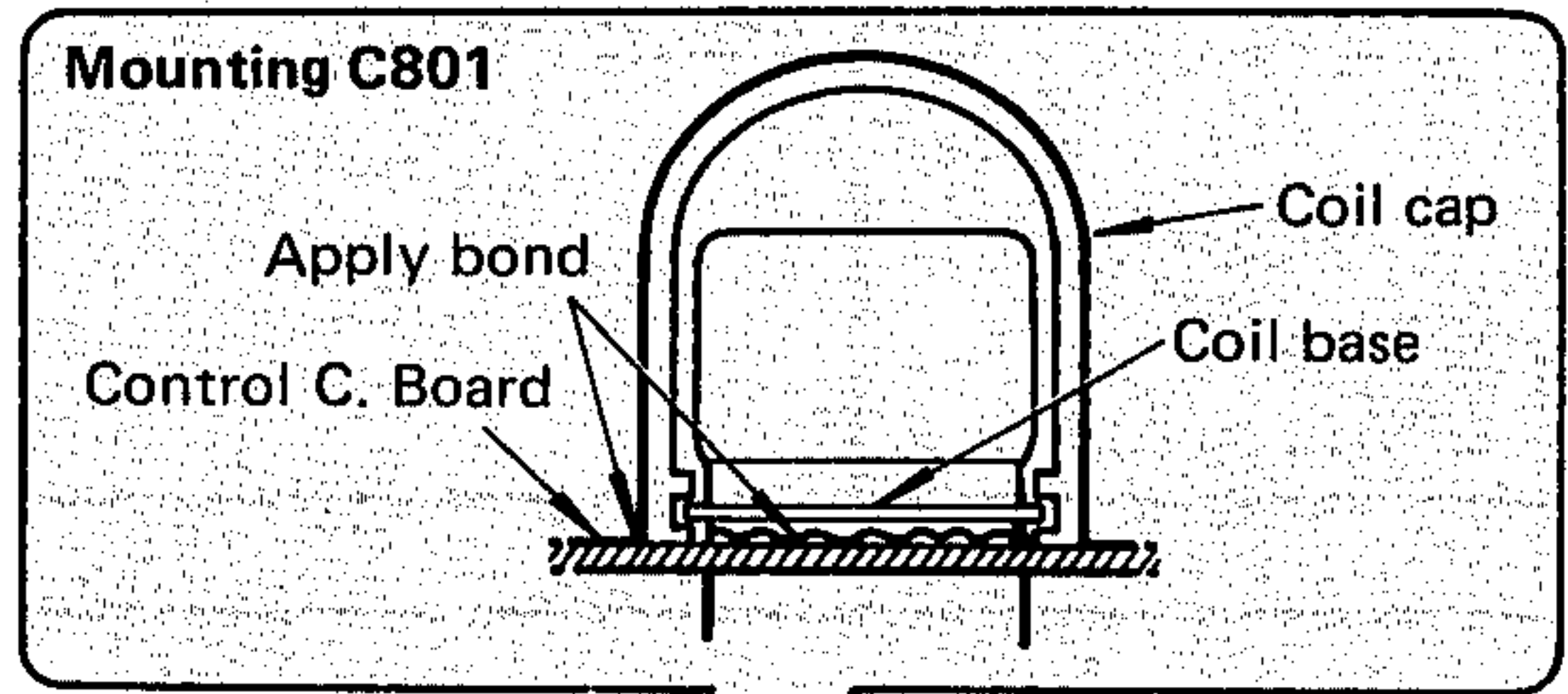
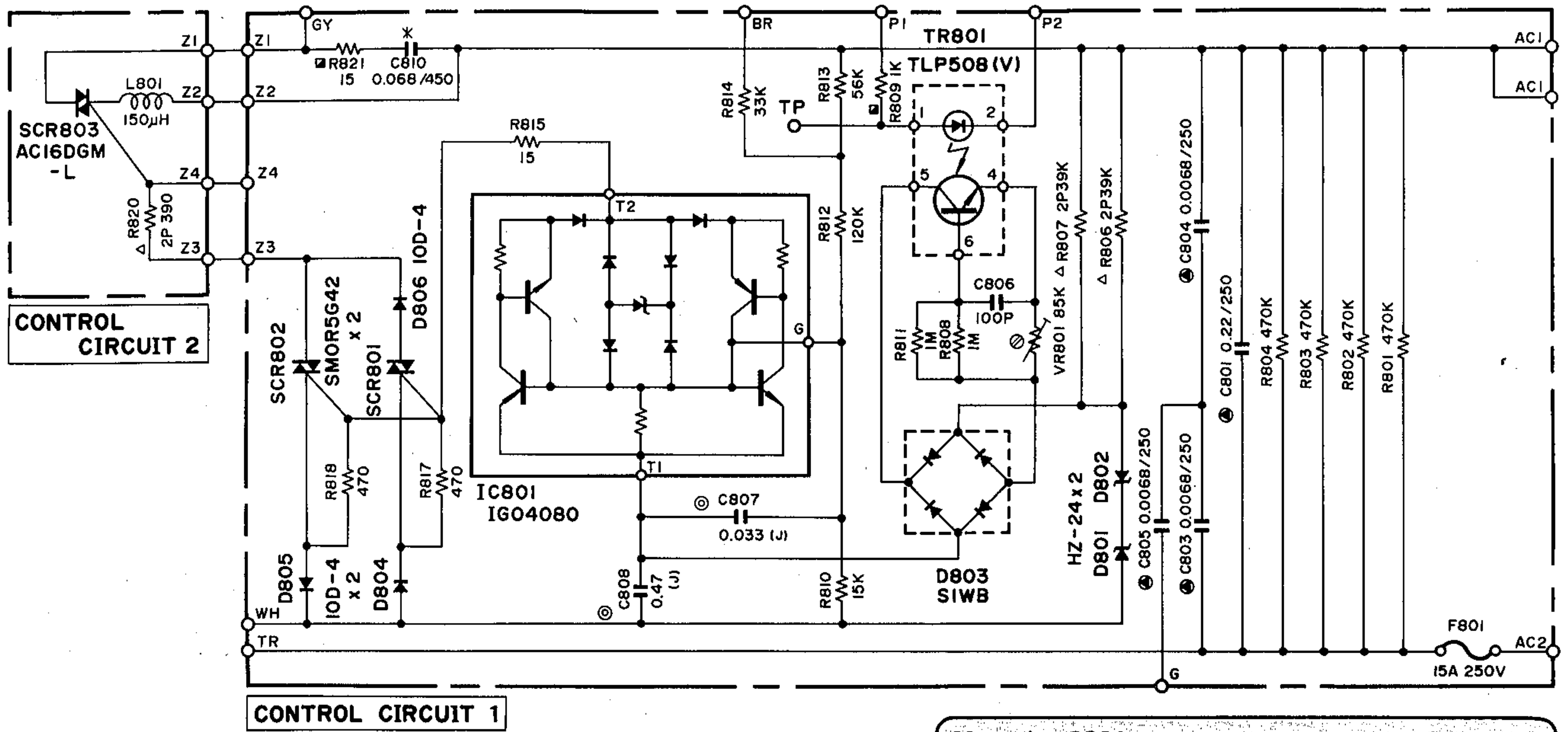
- SW101  
 ○ 10k  
 ○ 100k  
 ○ 100k
- 47k  
 ○ 33k  
 ○ 100k
- PHONO 1 MC  
 PHONO 2 MM



NOTE: Copper screws are used for power transistor. The screws may be damaged by tightening strongly. Do not tighten them strongly.



**CONTROL C. BOARD / SCHEMATIC DIAGRAM (General model)**





Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
D537	IF 00:15:20	Zener Diode	HZ12B1L	ツェナーダイオード		
D538	IF 00:15:10	"	HZ6C1L	"		
0539,640	IF 00:00:40	Diode	1S1555	ダイオード	Inter-changeable	
"	IF 00:06:70	"	1S2473	"		
RY901, RY902	KC 00:11:30	Relay	DC24V JC2a	リレー		R, A, G, C, B
"	KC 00:11:50	"	"	"		U
	LA 00:21:10	Wrapping Terminal	P=5 2P (i Type)	i型ラッピング端子板		
	LA 00:21:20	"	P=5 3P	"		
	LA 00:41:20	Test-Point Pin	1P	テストポイントピン		
	LA 00:35:10	Push Terminal	4P	4Pプッシュターミナル	Speaker	
	LA 00:35:20	"	"	"		
	BA 06:77:80	Heat Sink		放熱器		
	BB 06:83:70	Metal, Earth		アース金具		
	ED 33:00:60	Bind Head Screw	3x6 FCM3-B8	バインド小ネジ		
	CB 03:54:20	Cable Clip		ケーブルクリップ		
	NA 07:76:90	Muting Circuit Board		ミュートイングシート		R
	NA 07:71:80	"		"		U, C
	NA 07:71:90	"		"		A, G, B
C701	UW 56:51:00	Electrolytic Cap.	0.1μF 50V	ケミコン		
C702,703	UA 25:51:00	Mylar Cap.	0.1μF 50V	マイラーコン		
C704,705	UW 54:52:20	Electrolytic Cap.	2200μF 25V	ケミコン		
C706,707	UW 93:31:00	"	100μF 16V	"		
C708,709	FV 63:74:70	"	47μF 16V	プラスチックケミコン		
C710	FM 11:51:00	"	10μF 50V	B P コン	NP-Type	
C711	UW 91:74:70	"	47μF 6.3V	ケミコン		
C712	FM 39:31:00	"	100μF 16V	Z コン		
C713	FG 41:21:00	Ceramic Cap.	100pF 50V	セラコン		
C714	UW 56:52:20	Electrolytic Cap.	0.22μF 50V	ケミコン		
C715	FG 41:31:00	Ceramic Cap.	0.001μF 50V	セラコン		
R701	HJ 35:71:50	Carbon Resistor	15kΩ RD25	カーボン抵抗		
R702	HJ 35:56:30	"	6.8kΩ "	"		
R703,704	HJ 35:51:00	"	1kΩ "	"		
R705,706	HJ 35:55:60	"	560Ω "	"		
R707,708	HJ 35:51:00	"	1kΩ "	"		
R709,710	HV 35:34:70	Flame Proof Carbon Resistor	4.7Ω RDF25SF	不燃化カーボン抵抗		
R711	HJ 35:71:20	Carbon Resistor	12kΩ RD25	カーボン抵抗		
R713	HJ 35:54:70	"	470Ω "	"		
R714	HJ 35:53:90	"	3.9kΩ "	"		
R715,716	HJ 35:72:20	"	22kΩ "	"		
R717	HJ 35:51:00	"	100kΩ "	"		
R718	HJ 35:76:80	"	68kΩ "	"		
R719	HJ 35:74:70	"	47kΩ "	"		
R720	HJ 35:52:20	"	220kΩ "	"		
R721	HJ 35:51:80	"	1.8kΩ "	"		
R722	HJ 35:51:50	"	150kΩ "	"		
R723	HJ 35:51:00	"	100kΩ "	"		
R724	HJ 35:74:70	"	47kΩ "	"		
R725	HJ 35:53:90	"	3.9kΩ "	"		
R726	HJ 35:55:60	"	5.6kΩ "	"		
R727,728	HJ 35:51:20	"	1.2kΩ "	"		
R729,730	HM 53:52:70	Cement Moleded Resistor	3P 270Ω	セメント抵抗		
R731,732	HJ 35:51:00	Carbon Resistor	1kΩ RD25	カーボン抵抗		

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
R733	HJ 35:72:70	Carbon Resistor	27kΩ RD25	カーボン抵抗		
R734	HJ 35:54:70	"	4.7kΩ "	"		
R735,736	HJ 35:71:00	"	10kΩ "	"		
R737	HJ 35:52:20	"	2.2kΩ "	"		
R738	HJ 35:51:20	"	1.2kΩ "	"		
R739	HJ 35:92:20	"	2.2MΩ "	"		
R740	HJ 35:52:70	"	2.7kΩ "	"		
TR701	IA 09:58:00	Transistor	2SA968 (O,Y)	トランジスタ		
TR702	IC 18:15:70	"	2SC1815 (O,Y)	"	Inter-changeable	
"	IC 23:20:00	"	2SC2320	"		
TR703	IC 22:38:00	"	2SC2238 (O,Y)	"		
TR704	IA 09:59:00	"	2SA999	"	Inter-changeable	
"	IA 10:15:70	"	2SA1015 (O,Y)	"		
TR705	ID 04:00:00	"	2SD400	"		
TR706	IC 18:15:70	"	2SC1815 (O,Y)	"	Inter-changeable	
"	IC 23:20:00	"	2SC2320	"		
TR707	IA 09:59:00	"	2SA999	"	Inter-changeable	
"	IA 10:15:70	"	2SA1015 (O,Y)	"		
TR708	IC 18:15:70	"	2SC1815 (O,Y)	"	Inter-changeable	
"	IC 23:20:00	"	2SC2320	"		
TR709	IB 05:44:00	"	2S9544	"		
D701,702	IF 00:00:40	Diode	1S1555	ダイオード	Inter-changeable	
"	IF 00:06:70	"	1S2473	"		
D703	IH 00:11:20	Diode Bridge	S2VB20	ダイオードブリッジ		
D704,705	IF 00:15:20	Zener Diode	HZ12B1L	ツェナーダイオード		
D706,707,708	IF 00:00:40	Diode	1S1555	ダイオード	Inter-changeable	
"	IF 00:06:70	"	1S2473	"		
D709	IF 00:15:10	Zener Diode	HZ6C1L	ツェナーダイオード		
D710	IF 00:00:40	Diode	1S1555	ダイオード	Inter-changeable	
"	IF 00:06:70	"	1S2473	"		
D711,712	IF 00:14:00	"	1SS82	"		
IC701	IG 00:13:90	IC	NJM4558DV	I C	Inter-changeable	
"	IG 02:34:00	"	NJM4558DY	"		
F701,702	KB 00:03:50	Fuse	T2.0A 250V	ヒューズ		R
"	KB 00:07:50	"	⑤T2.0A 250V	"		A, G, B
"	KB 00:10:30	"	UL SS-2 T2.0A 250V	"		U, C
RY701	KC 00:09:40	Relay	HB-2 DC24V	リレー		
	LB 20:18:80	Fuse Holder Pin	PC-FH1	ヒューズホルダーピン		
	LB 20:13:90	Base Pin	TEB2P-SHF 2.5 Pitch	2.5ピッチベースピン		
	LB 30:07:30	"	TEB3P-SHF	"		
	LB 50:02:50	"	TEB5P-SHF	"		
	BA 07:72:90	Heat Sink		放熱板		
	EN 03:00:20	Bind Head Tapping Screw	3x8 ZMC2-Y Type II	バインドタッピングネジ(2種)		
	NA 07:72:40	Electrolytic Cap. Circuit Board		ケミコンシート		R, A, G, B
	NA 07:72:50	"		"		U, C
C901~C904	FC 28:41:00	Polypropylene Film Cap.	0.01μF 250V	ポリプロピレンフィルムコン		
C905,906	FV 63:92:20	Electrolytic Cap.	2200μF 16V	プラスチックケミコン		
R901,902	HL 81:51:50	Metal Oxide Film Resistor	1P 1.5kΩ	酸化金抵抗		
D901	IH 00:11:30	Diode Bridge	D5FB20	ダイオードブリッジ		R, A, G, B
"	IH 00:11:90	"	D4BB20	"		U, C
D902	IH 00:11:20	"	S2VB20	"		
	BB 06:95:10	Land Metal Fitting		ランド金具		

\* New Parts (新規部品)



# PARTS LIST

## A-1060 STEREO INTEGRATED AMPLIFIER

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EXPLODED VIEW (REAR) .....	3
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- R: General model
- U: U.S.A. model
- C: Canadian model
- A: Australian model
- G: North European model
- B: British model

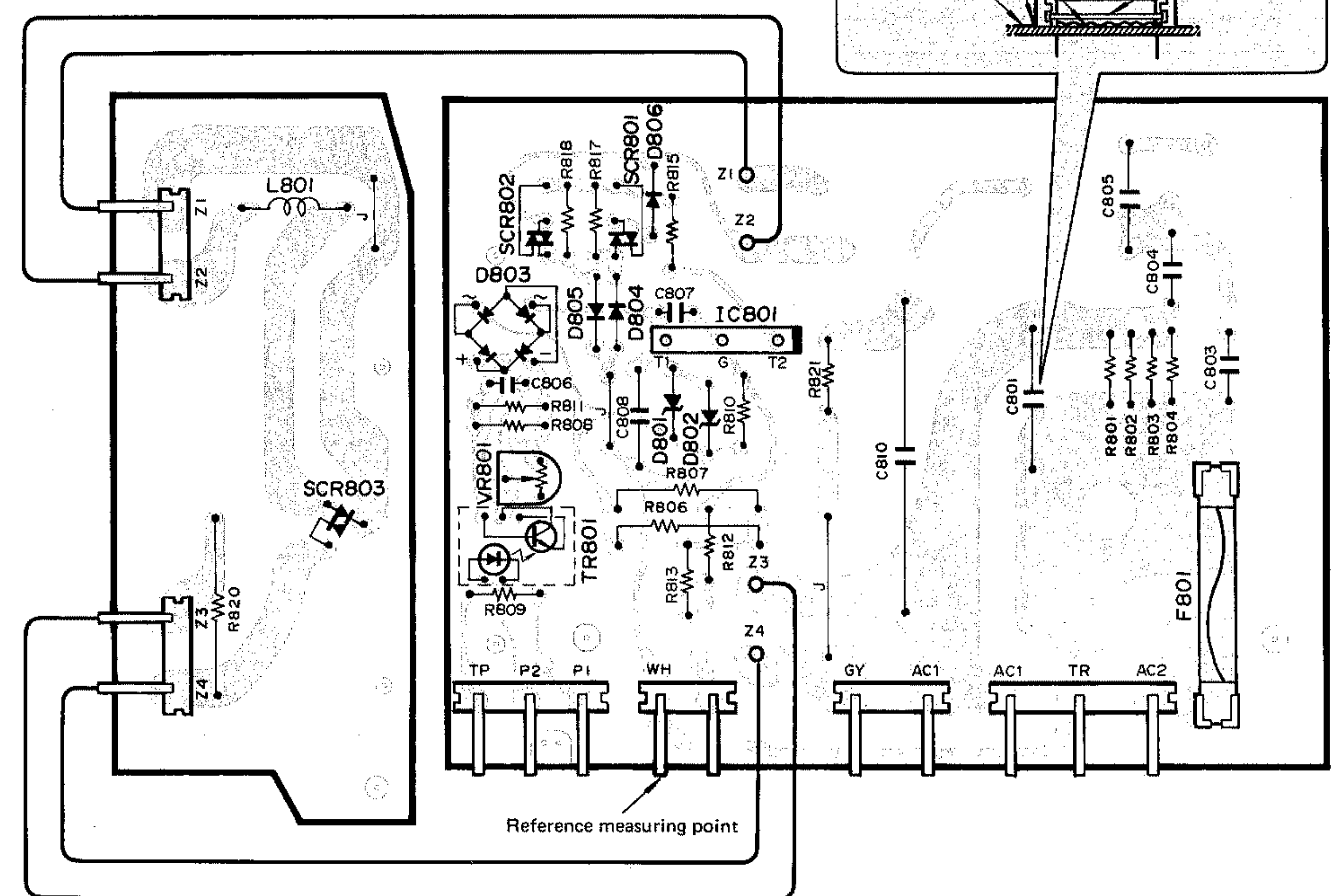
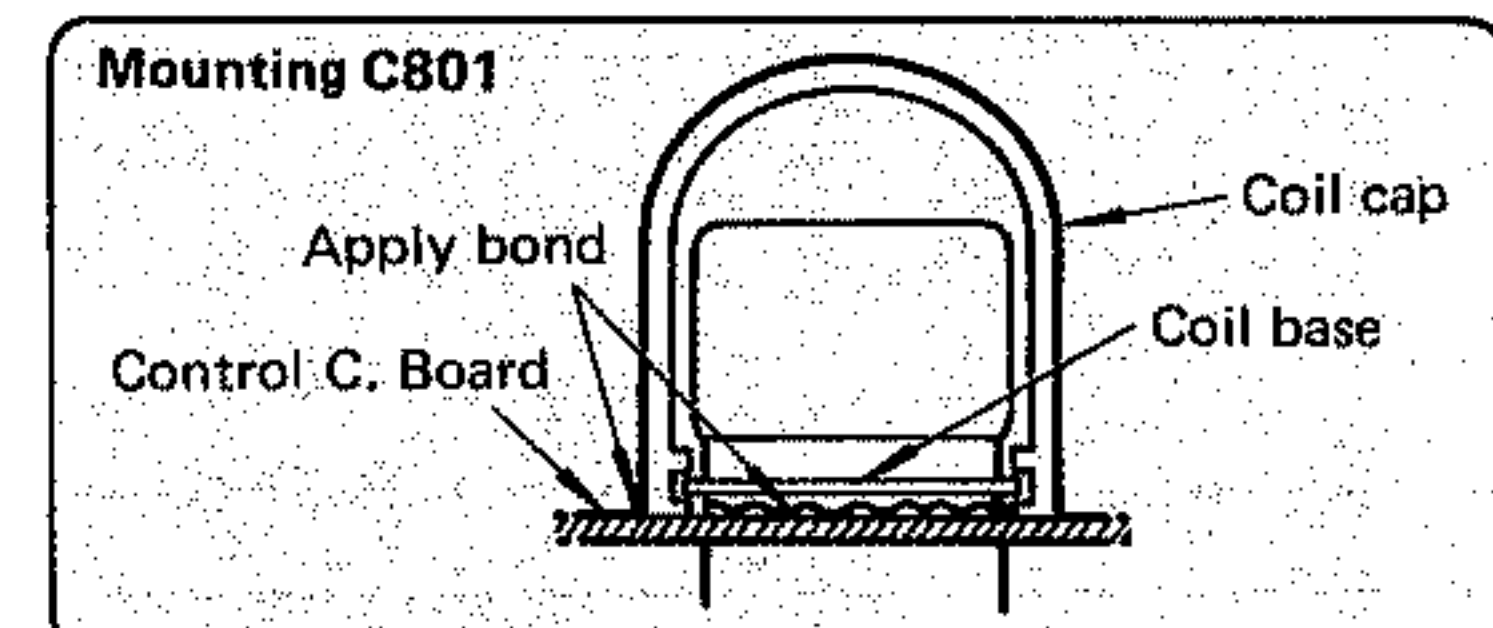
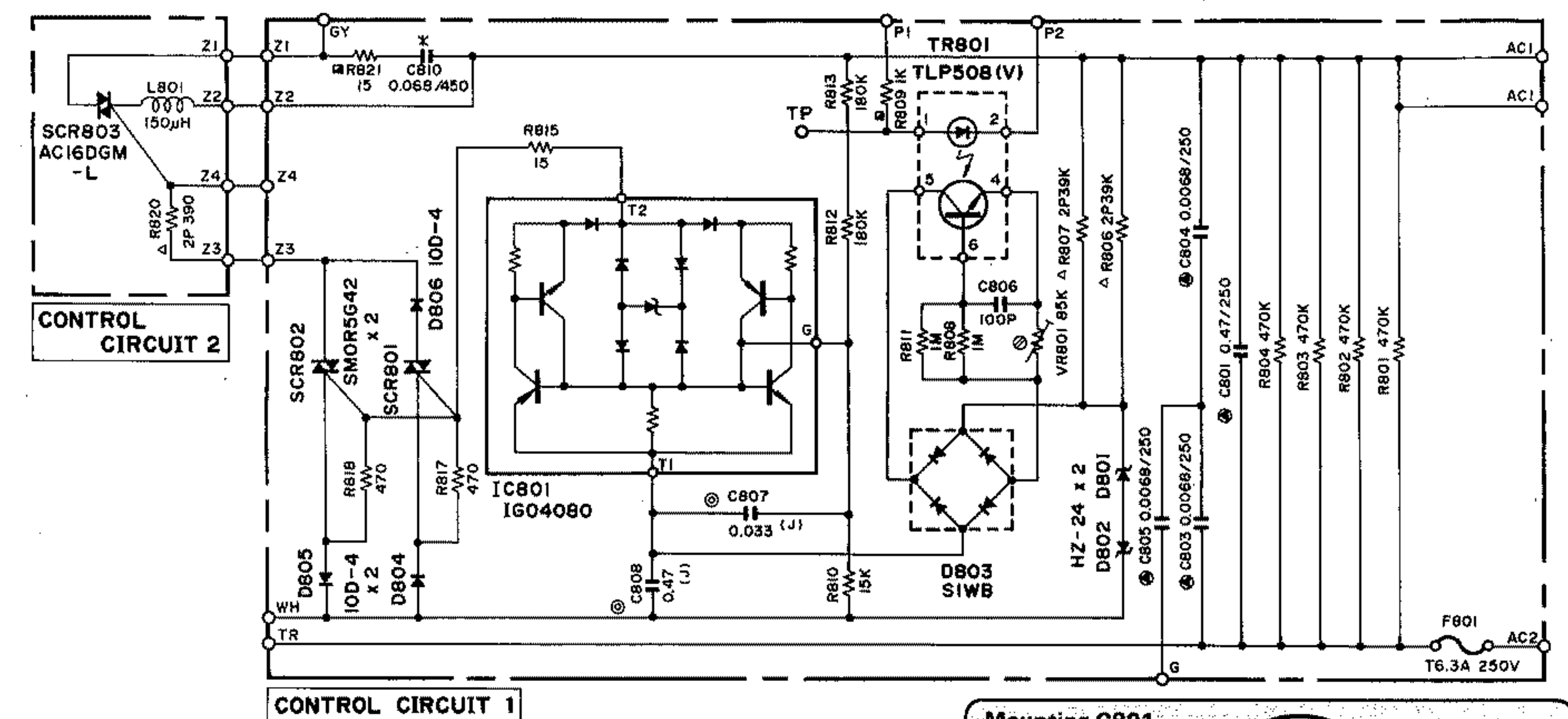


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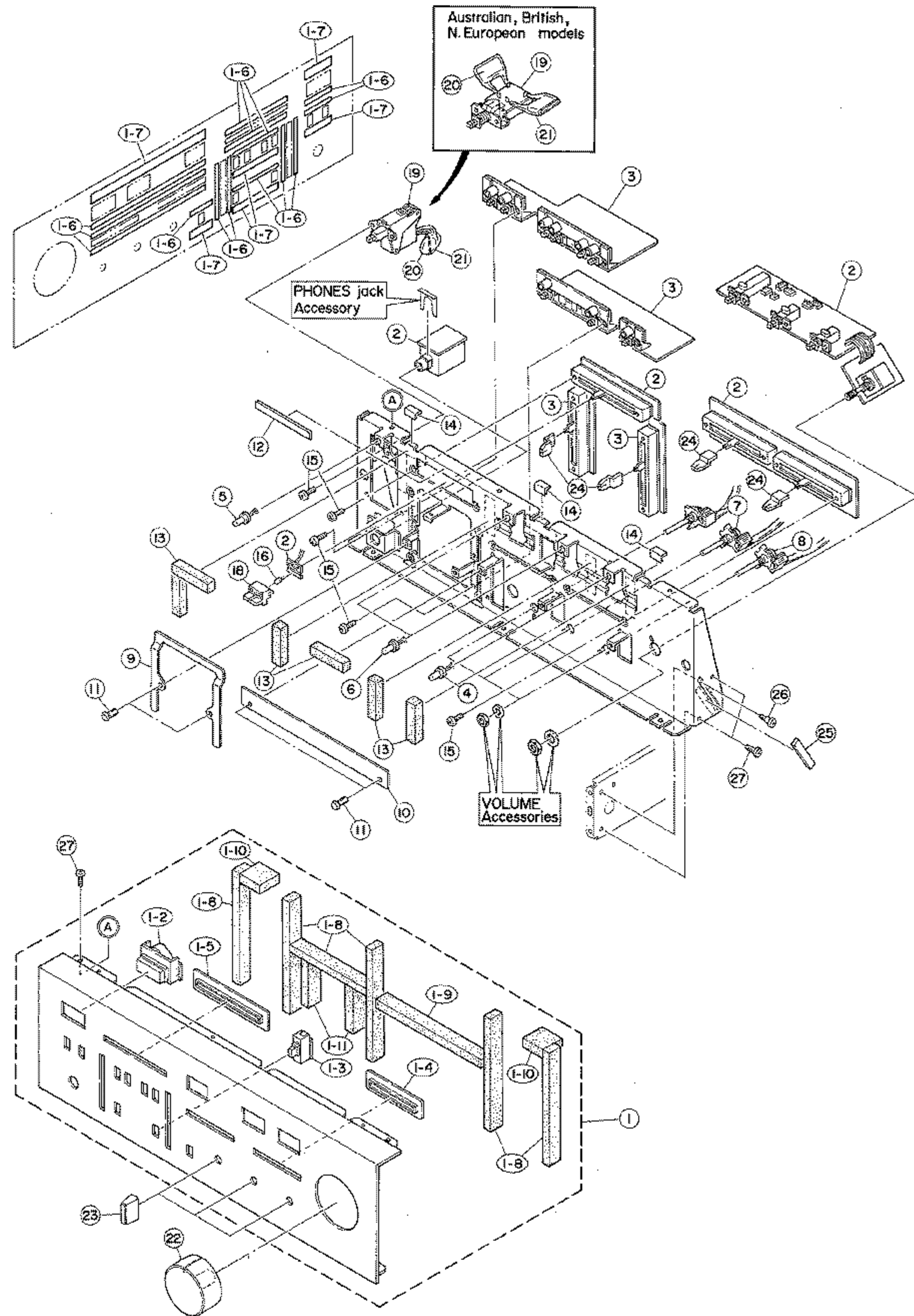
A-1060

### CONTROL C. BOARD / SCHEMATIC DIAGRAM (British, Australian and North European models)





EXPLODED VIEW(FRONT)



PARTS LIST

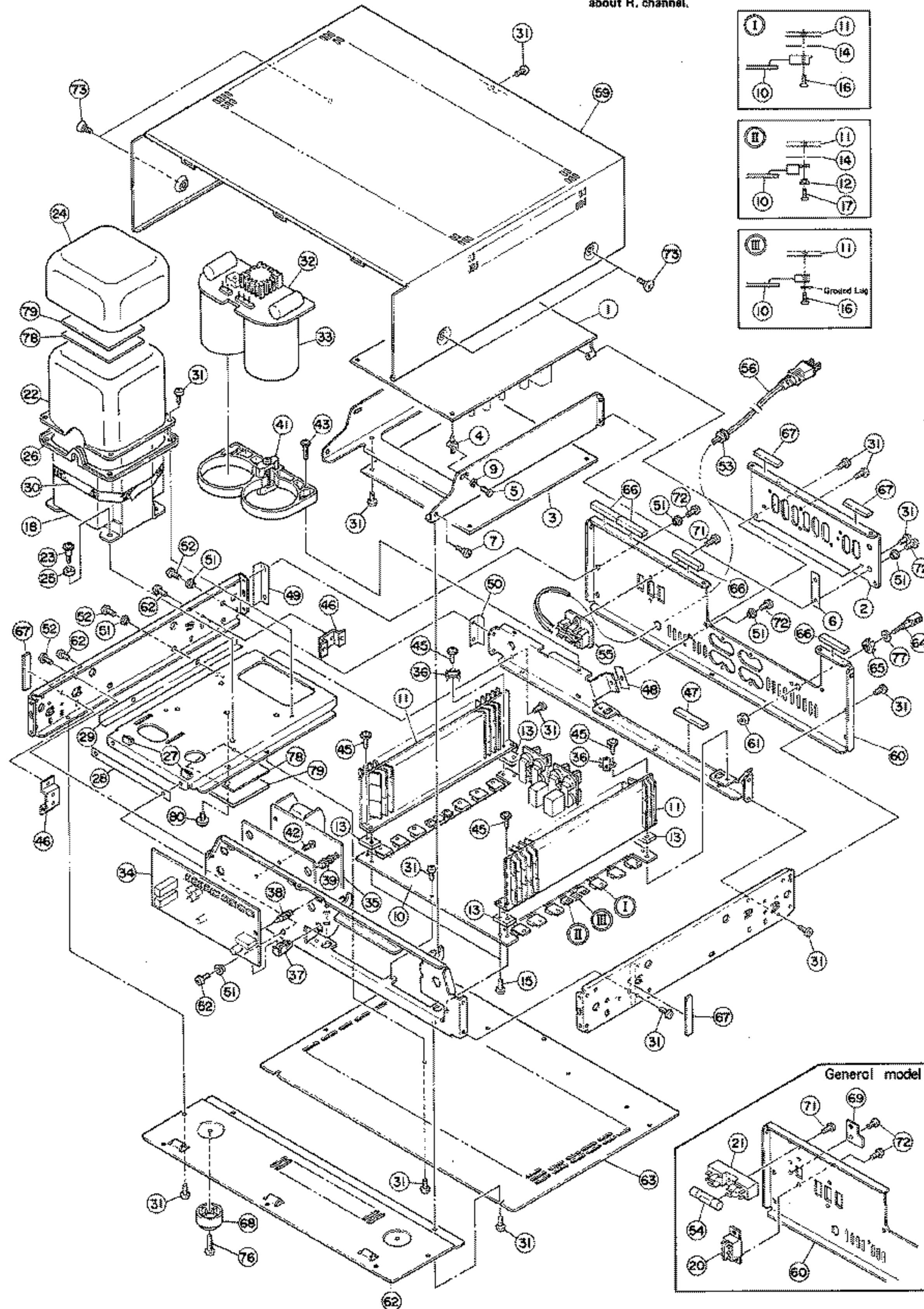
Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
1	NB 60:12:50	Front Panel Unit	フロントパネルユニット			
1-2	NB 09:99:30	Push Button Ass'y	プッシュボタン Ass'y (大)		R-700	
1-3	NB 09:59:10	"	" Ass'y (小)			
1-4	CB 09:98:80	Frame	スリット枠		A-960	
1-5	CB 09:98:70	"	"		A-960	
1-6	CB 07:41:90	Adhesive Tape	ダブルタックテープ			
1-7	CB 07:42:00	"	"			
1-8	CB 09:32:10	Shade Tape B	シャコウテープ B			
1-9	CB 60:46:30	Shade Tape A	シャコウテープ A			
1-10	CB 08:47:50	Damper	ダンパー			
1-11	CB 09:32:00	Shade Tape	シャコウテープ			
2	NA 07:71:10	Volume Circuit Board	ボリュームシート			
3	NA 07:71:20	Tone Control Circuit Board	トーンコントロールシート			
4	JB 00:10:10	Pilot Lamp with Cap	14.5V 80mA	パイロットランプリード式 (Red)		
5	JB 00:09:70	"	"	" ( " )		
6	JB 00:09:80	"	"	" (Green)		
7	KA 90:20:40	Remot Rotary Switch	φ=310 wire length	リモートロータリースイッチ 兼作ワイヤ部 PHONO REC OUT		
8	KA 90:20:50	"	φ=340 wire length	" INPUT		
9	CB 60:38:20	Slit Cover (S)	スリッドカバー S			
10	CB 60:38:30	" (L)	スリッドカバー L			
11	CB 06:88:80	Plastic Rivet	プラスチックリベット			
12	CB 09:45:30	Tape	アセテートクロステープ			
13	CB 09:32:00	Shade Tape	シャコウテープ			
14	CB 08:01:00	Tape	アセテートクロステープ			
15	ED 03:00:60	Bind Head Screw	M3 x 6 ZMC2-Y	バインド小ネジ		
16	IF 00:18:90	LED	SLR-34URG	LED		
17	Mi 06:99:50	Ribbon Wire	2P	リボンワイヤー 捻巻 2P		
18	NB 09:79:20	Knob Ass'y		ツマミ Ass'y	A-760	
19	KA 80:25:50	Push Switch		プッシュスイッチ		R,U,C
	KA 80:21:70	"		"		A,G,B
20	Fi 34:41:00	Ceramic Cap.	0.01μF	セラコン		R,U,C
	FR 16:41:00	Metalinged Paper Cap.	0.01μF 250V	M P コン		A,G,B
21	CB 07:21:90	Cover		コンデンサーカバー		A,G,B
	CB 60:08:10	"		"		R,U,C
22	BA 08:09:40	Knob		ツマミ	Main Volume	
23	BA 07:59:70	Knob, Switch		スイッチツマミ	A-550	
24	CB 09:98:40	Knob, Slide		スライドツマミ	A-960	
25	CB 60:41:20	Antivibration Rubber		防振ゴム		
26	EN 93:70:10	Bind Head Tapping Screw with Step	3 x 8 ZMC2-B2	段付バインドタッピングネジ		
27	EN 30:00:10	Bind Head Bonding Tapping Screw	Type II 3x8 ZMC3-B2	バインドボンディングタッピングネジ		

\* New Parts (新規部品)



EXPLODED VIEW(REAR)

The diagrams ①, ② and ③ showing the transistor's mounting are common between L and R channels. Refer the diagram about R channel.



PARTS LIST

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
* 1	NA 07 78:20	Equalizer Circuit Board	イコライザーシート			
* 2	AA 60 73:20	Sub-Rear Panel	サブリアパネル			
* 3	LC 72 88:00	Shield Printed Circuit Board	シールドシート			
* 4	CB 09 12:90	P.C. Board Holder	基板ホルダー			
* 5	CB 06 88:80	Plastic Rivet	プラスチックリベット			
* 6	CB 60 40:90	Isolation Spacer	絶縁スペーサー			
* 7	EN 93 70:10	Bind Head Tapping Screw with Step	3x8 ZMC2-BR	段付バインドタッピングネジ		
* 8	EN 30 00:10	Bind Bonding Head Tapping Screw	Type II 3x8 FCM3-BR	バインドボンディングタッピングネジ		
* 9	EV 90 02:20	Washer	t0.25 x 4.1 x 6.5	ポリワッシャー		
* 10	NA 07 71:40	Main Circuit Board		メインシート		R,A,G,B
* "	NA 07 71:50	"	"	"		U
* "	NA 07 71:60	"	"	"		C
* 11	BA 08 09:60	Heat Sink		放熱板		R,U,A,C,B
* "	BA 08 10:20	"	Black	"		G
* 12	CB 07 28:80	Isolation Bush		絶縁ブッシュ		
* 13	CB 60 38:50	Spacer		断熱スペーサー		
* 14	CB 60 38:10	Mica Spacer		マイカスペーサー		
* 15	EN 33 01:20	Bind Head Tapping Screw	Type II 3x15 ZMC2-BR	バインドタッピングネジ		
* 16	ED 33 01:00	Bind Head Screw	M3x10 FCM3-BR	バインド小ネジ		
* 17	ED 32 81:00	"	M2.6x10 FCM3-BR	"		
* 18	GA 64 12:10	Power Transformer		電源トランス		U
* "	GA 64 13:10	"	"	"		C
* "	GA 64 14:10	"	"	"		G
* "	GA 64 16:10	"	"	"		A,B
* "	GA 64 15:10	"	"	"		R
* 20	KA 40 07:40	Slide Switch		スライドスイッチ		R
* 21	LB 20 13:00	Fuse Holder		ヒューズホルダー		R
* 22	BA 08 09:50	Cover, Power Transformer		トランスカバー		
* 23	AA 60 38:50	Screw with Step		段付ネジ	A-760	
* 24	CB 60 41:00	Cover Packing	177.5g	カバーパッキン		R,A,G,B
* "	CB 60 53:80	"	106.5g	"		U,C
* 25	CB 09 99:10	Antivibration Rubber		防振ゴム	A-760	
* 26	CB 60 38:60	Lead Bush		リードブッシュ		
* 27	CB 08 37:20	P.C. Board Holder		基板ホルダー	A-1	
* 28	CB 60 54:30	Isolation Spacer		絶縁スペーサー		
* 29	CB 60 54:50	Isolation Spacer		"		
* 30	CB 08 01:00	Tape	15 x 350	アセテートクロステープ		
* 31	EN 30 00:10	Bind Bonding Head Tapping Screw	Type II 3x8 FCM3-BR	バインドボンディングタッピングネジ		R,A,G,B
* "	NA 07 72:50	"	"	"		U,C
* 33	FZ 00 26:90	Electrolytic Cap.	15000μF 68V	プラスチックケミコン		
* 34	NA 07 71:80	Muting Circuit Board		ミュートイングシート		U,C
* "	NA 07 71:90	"	"	"		A,G,B
* "	NA 07 76:90	"	"	"		R
* 35	NA 07 72:10	Control Circuit Board		制御シート		R
* "	NA 07 72:20	"	"	"		U,C
* "	NA 07 72:30	"	"	"		A,G,B
* 36	KA 00 01:20	Thermal Reed Switch		感温リードスイッチ		A,G,B
* 37	AA 60 37:40	P.C. Board Holder		シートホルダー		
* 38	CB 09 76:10	C. Board Holder		基板ホルダー		
* 39	CB 60 37:30	P.C. Support		P.C. サポート		
* 41	NB 60 14:10	Electrolytic Cap. Holder Ass'y		ケミコンホルダー-Ass'y		

\* New Parts (新規部品)



■PARTS LIST

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
1	NA:07:78:20	Equalizer Circuit Board	イコライザーシート			
2	AA:60:73:20	Sub-Rear Panel	サブリアパネル			
3	LC:72:88:00	Shield Printed Circuit Board	シールドシート			
4	CB:09:12:90	P.C. Board Holder	基板ホルダー			
5	CB:06:88:80	Plastic Rivet	プラスチックリベット			
6	CB:60:40:90	Isolation Spacer	絶縁スペーサー			
7	EN:83:70:10	Bind Head Tapping Screw with Step	3x8 ZMC2-B2 段付バインドタッピングネジ			
8	EN:30:30:10	Bind Bonding Head Tapping Screw	Type II 3x8 FCM3-B2 バインドボンディングタッピングネジ			
9	EV:90:02:20	Washer	t0.25 x 4.1 x 6.5 ポリワッシャー			
10	NA:07:71:40	Main Circuit Board	メインシート			R,A,G,B
	NA:07:71:50	"	"			U
	NA:07:71:60	"	"			C
11	BA:08:09:60	Heat Sink	放熱板			R,U,A,C,B
	BA:08:10:20	"	Black			G
12	CB:07:28:80	Isolation Bush	絶縁ブッシュ			
13	CB:60:38:50	Spacer	断熱スペーサー			
14	CB:60:38:10	Mica Spacer	マイカスペーサー			
15	EN:33:01:20	Bind Head Tapping Screw	Type II 3x15 ZMC2-B2 バインドタッピングネジ			
16	ED:33:01:00	Bind Head Screw	M3x10 FCM3-B2 バインド小ネジ			
17	ED:32:61:00	"	M2.6x10 FCM3-B2			
18	GA:64:12:10	Power Transformer	電源トランス			U
	GA:64:13:10	"	"			C
	GA:64:14:10	"	"			G
	GA:64:16:10	"	"			A,B
	GA:64:15:10	"	"			R
20	KA:40:07:40	Slide Switch	スライドスイッチ			R
21	LB:20:13:00	Fuse Holder	ヒューズホルダー			R
22	BA:08:09:50	Cover, Power Transformer	トランスカバー			
23	AA:60:38:50	Screw with Step	段付ネジ	A-760		
24	CB:60:41:00	Cover Packing	177.5g カバーパッキング			R,A,G,B
	CB:60:53:80	"	106.5g			U,C
25	CB:09:99:10	Antivibration Rubber	防振ゴム	A-760		
26	CB:60:38:60	Lead Bush	リードブッシュ			
27	CB:08:37:20	P.C. Board Holder	基板ホルダー	A-1		
28	CB:60:54:30	Isolation Spacer	絶縁スペーサー			
29	CB:60:54:50	Isolation Spacer	"			
30	CB:08:01:00	Tape	15 x 350 アセテートクロステープ			
31	EN:30:00:10	Bind Bonding Head Tapping Screw	Type II 3x8 FCM3-B2 バインドボンディングタッピングネジ			
32	NA:07:72:40	Electrolytic Cap. Circuit Board	ケミコンシート			R,A,G,B
	NA:07:72:50	"	"			U,C
33	FZ:00:26:90	Electrolytic Cap.	15000μF 68V プラスチックケミコン			
34	NA:07:71:80	Muting Circuit Board	ミュートイングシート			U,C
	NA:07:71:90	"	"			A,G,B
	NA:07:76:90	"	"			R
35	NA:07:72:10	Control Circuit Board	制御シート			R
	NA:07:72:20	"	"			U,C
	NA:07:72:30	"	"			A,G,B
36	KA:00:01:20	Thermal Reed Switch	感温リードスイッチ			A,G,B
37	AA:60:37:40	P.C. Board Holder	シートホルダー			
38	CB:09:76:10	C. Board Holder	基板ホルダー			
39	CB:60:37:30	P.C. Support	P.C サポート			
41	NB:60:14:10	Electrolytic Cap. Holder Ass'y	ケミコンホルダーAss'y			

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
42	CB:06:88:80	Plastic Rivet	プラスチックリベット			
43	EK:03:00:40	B.W. Head Tapping Screw	Type II 3x20 ZMC2-Y プレザータッピングネジ			
45	EN:33:01:00	Bind Head Tapping Screw	Type II 3x16 FCM3-B2 バインドタッピングネジ			
46	AA:08:20:10	Terminal Holder	端子ステイ			A,G,B
47	CB:60:41:10	Antivibration Rubber	防振ゴム			
48	CB:60:54:10	Isolation Spacer	絶縁スペーサー			
49	CB:60:54:20	"	"			
50	CB:60:54:40	"	"			
51	CB:60:53:90	Isolation Bush	絶縁ブッシュ			
52	ED:03:00:60	Bind Head Screw	M3x6 ZMC2-Y バインド小ネジ			
53	CB:07:27:50	Cord Stopper	SR-4N-4 コードストッパー			
54	KB:00:13:00	Fuse	T7A 250V ヒューズ			R
55	LB:60:29:80	AC Socket (Triple)	ACアウトレット(3連)			
56	MG:00:07:80	Power Cord	6A 250V 電源コード			R
	MG:00:08:90	"	13A 125V			U,C
	MG:00:09:10	"	6A 250V			G
	MG:00:09:20	"	7.5A 250V			A
	MG:00:10:00	"	6A 300/500V			B
58	CB:09:95:80	Fuse Holder Cover	ヒューズホルダーカバー			U
59	AA:60:73:00	Top Cover	トップカバー			
60	AA:60:74:30	Rear Panel	リアパネル			U,C
	AA:60:74:40	"	"			A,B
	AA:60:74:50	"	"			G
	AA:60:74:60	"	"			R
61	AA:09:57:20	Bonding Nut	ボンディングナット		C-6	
62	AA:60:73:10	Bottom Cover	ボトムカバー			
63	NB:60:34:60	Bottom Cover Ass'y	ボトムカバー Ass'y			
64	NB:08:14:80	Terminal Unit	ターミナルユニット			
65	CB:07:81:70	Saucer	受皿			
66	CB:60:54:60	Antivibration Rubber	防振ゴム			
67	CB:60:41:10	"	"			
68	CB:07:94:90	Leg	脚			
69	CB:60:14:40	Switch Guard	V S ストッパー			R
71	EN:33:00:10	Bind Head Tapping Screw	Type II 3x8 ZMC2-B2 バインドタッピングネジ			R,U,C
72	ED:33:00:60	Bind Head Screw	M3x6 ZMC2-B2 バインド小ネジ			
73	AA:60:77:50	Make Up Screw	M4 化粧ネジ			
76	EK:03:00:40	B.W. Head Tapping Screw	Type II 3x20 ZMC2-Y プレザータッピングネジ			
77	EV:90:13:60	Plain Washer	86.5x4.0x1.0 FNM3-3g Sems-type セムス平座金			
78	CB:60:71:90	Damper Tape	ダンパーテープ			
79	AA:60:96:20	Plate	プレート			
80	EK:03:00:60	8W Head Tapping Screw	Type II 3x8 ZMC2-B2 プレザータッピングネジ			
		Accessories Ass'y	付属品 Ass'y			
	TX:90:07:80	Hexagonal Lench 1.5φ	六角レンチ 1.5φ			

\* New Parts (新規部品)



■PARTS LIST(CIRCUIT BOARD)

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
	NA:07:78:20	Equalizer Circuit Board	イコライザーシート			
C101,102	FC 28:41:00	Polypropylene Film Cap.	ポリプロピレンフィルムコン			
C103~C108	FV 63:71:00	Electrolytic Cap.	プラスチックケミコン			
C109~C112	FD 65:24:70	Polystyrene Film Cap.	スチコン			
C113,114	FU 35:21:00	Mica Cap.	マイカコン			
C115,116	FC 32:31:00	Polypropylene Film Cap.	ポリプロピレンフィルムコン			
C117,118	FZ 00:28:70	Metallized Mylar Cap.	メタライズドマイラーコン			
C119,120	FV 63:74:70	Electrolytic Cap.	プラスチックケミコン			
C121,122	FV 62:81:00	"	"			
C123,124	FV 63:71:00	"	"			
C125,126	FT 95:32:20	Polypropylene Film Capacitor	ポリプロピレンフィルムコン			
C127,128	FT 18:41:60	"	"			
C129,130	FD 65:22:70	Polystyrene Film Cap.	スチコン			
C131,132	FV 65:71:00	Electrolytic Cap.	プラスチックケミコン			
C133,134	FU 35:12:20	Mica Cap.	マイカコン			
C135,136	FV 63:71:00	Electrolytic Cap.	プラスチックケミコン			
C137,138	FU 35:14:70	Mica Cap.	マイカコン			
C139,140	FT 16:34:30	Polypropylene Film Cap.	ポリプロピレンフィルムコン			
C141,142	FM 22:64:70	Electrolytic Cap.	B P コン	NP-Type		
C143,144	FZ 00:28:60	Metallized Mylar Cap.	メタライズドマイラーコン			
C145	FV 65:74:70	Electrolytic Cap.	プラスチックケミコン			
C146,147	FV 65:81:00	"	"			
C148,149	FV 65:71:00	"	"			
C150	UA 25:44:70	Mylar Cap.	マイラーコン			
C151	UW 95:64:70	Electrolytic Cap.	ケミコン			
C152	FV 62:81:00	"	プラスチックケミコン			
C153	UW 95:64:70	"	"			
C154,155	FV 65:74:70	"	"			
C156	FV 62:81:00	"	"			
C157,158	FV 65:74:70	"	"			
C159,160	FD 65:22:20	Polystyrene Film Cap.	スチコン			
C161,162	FV 63:71:00	Electrolytic Cap.	プラスチックケミコン			
C163,164	FD 65:28:20	Polystyrene Film Cap.	スチコン			
C165,166	FT 16:46:60	Polypropylene Film Cap.	ポリプロピレンフィルムコン			
C167,168	FC 27:51:00	"	"			
R101,102	HJ 35:92:20	Carbon Resistor	カーボン抵抗			
R103,104	HU 07:51:00	Metal Film Resistor	金属皮膜抵抗			
R105,108	HJ 35:52:20	Carbon Resistor	カーボン抵抗			
R107,108	HJ 35:33:30	"	"			
R109,110	HU 07:71:00	Metal Oxide Film Resistor	金属皮膜抵抗			
R111,112	HJ 35:52:20	Carbon Resistor	カーボン抵抗			
R113~R120	HJ 35:61:20	"	"			
R121~R124	HJ 35:71:00	"	"			
R125~R128	HJ 35:42:70	"	"			
R129~R132	HJ 35:44:70	"	"			
R133,134	HJ 35:56:60	"	"			
R135,136	HJ 35:41:50	"	"			
R137,138	HU 27:51:10	Metal Film Resistor	金属皮膜抵抗			
R139,140	HU 25:34:70	"	"			
R141,142	HJ 35:44:70	Carbon Resistor	カーボン抵抗			
R143,144	HJ 35:41:50	"	"			
R145,146	HJ 35:81:00	"	"			
R147,148	HV 35:41:20	Flame Proof Carbon Resistor	不燃化カーボン抵抗			

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
R149~R152	HV 35:52:20	Flame Proof Carbon Resistor	220Ω RDF25SF	不燃化カーボン抵抗		
R153,154	HV 35:51:80	"	180Ω "	"		
R155,156	HJ 35:62:70	Carbon Resistor	2.7kΩ RD25	カーボン抵抗		
R157,158	HJ 35:53:30	"	330Ω "	"		
R159,160	HJ 35:63:30	"	3.3kΩ "	"		
R161	HJ 35:66:60	"	5.6kΩ "	"		
R163~R168	HJ 35:92:20	"	2.2MΩ "	"		
R169,170	HK 35:79:10	"	91kΩ "	"		
R171,172	HK 35:75:10	"	51kΩ "	"		
R173,174	HJ 35:51:00	"	100Ω "	"		
R175,176	HJ 35:81:00	"	100kΩ "	"		
R177,178	HJ 35:42:20	"	22Ω "	"		
R179,180	HJ 35:72:70	"	27kΩ "	"		
R181,182	HJ 35:64:70	"	4.7kΩ "	"		
R183,184	HJ 35:53:30	"	330Ω "	"		
R186~R188	HJ 35:54:70	"	470Ω "	"		
R189~R192	HJ 35:61:80	"	1.8kΩ "	"		
R193,194	HJ 35:61:50	"	1.5kΩ "	"		
R195,196	HU 27:51:00	Metal Film Resistor	100Ω SHR	金属皮膜抵抗		
R197,198	HJ 35:46:60	Carbon Resistor	56Ω RD25	カーボン抵抗		
R199,200	HJ 35:88:20	"	820kΩ "	"		
R201,202	HU 07:76:20	Metal Film Resistor	62kΩ RE35	金属皮膜抵抗		
R203,204	HU 07:64:70	"	4.7kΩ "	"		
R206,206	HU 07:51:00	"	100Ω "	"		
R207,208	HJ 35:54:70	Carbon Resistor	470Ω RD25	カーボン抵抗		
R209,210	HJ 35:53:30	"	330Ω "	"		
R213,214	HJ 35:56:20	"	820Ω "	"		
R215,216	HJ 35:53:30	"	330Ω "	"		
R217,218	HJ 35:61:80	"	1.8kΩ "	"		
R219,220	HJ 35:72:20	"	22kΩ "	"		
R221~R224	HJ 35:44:70	"	47Ω "	"		
R225,226	HV 35:41:20	Flame Proof Carbon Resistor	12Ω RDF25SF	不燃化カーボン抵抗		
R227,228	HU 07:55:60	Metal Film Resistor	560Ω RE35	金属皮膜抵抗		
R229,230	HJ 35:84:70	Carbon Resistor	470kΩ RD25	カーボン抵抗		
R231,232	HJ 35:74:70	"	47kΩ "	"		
R233	HV 35:41:20	Flame Proof Carbon Resistor	12Ω RDF25SF	不燃化カーボン抵抗		
R234,235	HV 35:51:20	"	120Ω "	"		
R236,237	HJ 35:71:20	Carbon Resistor	12kΩ RD25	カーボン抵抗		
R239,239	HJ 35:53:30	"	330Ω "	"		
R240,241	HJ 35:63:30	"	3.3kΩ "	"		
R242	HJ 35:74:70	"	47kΩ "	"		
R243	HJ 35:34:70	"	4.7Ω "	"		
R244~R247	HL 82:53:30	Metal Oxide Film Resistor	2P 330Ω	酸金抵抗		
R248,249	HL 72:56:80	"	2P 680Ω	"		
R250,251	HJ 35:71:50	Carbon Resistor	15kΩ RD25	カーボン抵抗		
R252,253	HJ 35:61:20	"	1.2kΩ "	"		
R254	HU 07:73:90	Metal Film Resistor	39kΩ RE35	金属皮膜抵抗		
R255	HU 07:71:00	"	10kΩ "	"		
R256,257	HU 07:72:20	"	22kΩ "	"		
R258	HJ 35:53:90	Carbon Resistor	390Ω RD25	カーボン抵抗		
VR101~VR102	HT 41:00:70	Solid Type Variable Resistor	B10kΩ SR19R	ソリッド抵抗		
TR101~TR102	IA 09:99:30	Transistor	2SA999L	トランジスター		
TR103~TR104	IP 00:89:00	FET	2SK147, 2SJ72 (8L)	F E T	Pair supply	

\* New Parts (新規部品)



Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
R149~R152	HV 35:52:20	Flame Proof Carbon Resistor	220Ω RDF25SF	不燃化カーボン抵抗		
R153,154	HV 35:51:80	"	180Ω "	"		
R155,156	HJ 35:62:70	Carbon Resistor	2.7kΩ RD25	カーボン抵抗		
R157,158	HJ 35:53:30	"	330Ω "	"		
R159,160	HJ 35:63:30	"	3.3kΩ "	"		
R161	HJ 35:65:60	"	5.6kΩ "	"		
R163~R169	HJ 35:92:20	"	2.2MΩ "	"		
R169,170	HK 35:79:10	"	91kΩ "	"		
R171,172	HK 35:75:10	"	51kΩ "	"		
R173,174	HJ 35:51:00	"	100Ω "	"		
R175,176	HJ 35:81:00	"	100kΩ "	"		
R177,178	HJ 35:42:20	"	22Ω "	"		
R179,180	HJ 35:72:70	"	27kΩ "	"		
R181,182	HJ 35:64:70	"	4.7kΩ "	"		
R183,184	HJ 35:53:30	"	330Ω "	"		
R185~R188	HJ 35:54:70	"	470Ω "	"		
R189~R192	HJ 35:61:80	"	1.8kΩ "	"		
R193,194	HJ 35:61:50	"	1.5kΩ "	"		
R195,196	HU 27:51:00	Metal Film Resistor	100Ω SHR	金属皮膜抵抗		
R197,198	HJ 35:45:60	Carbon Resistor	56Ω RD25	カーボン抵抗		
R199,200	HJ 35:88:20	"	820kΩ "	"		
R201,202	HU 07:76:20	Metal Film Resistor	62kΩ RE35	金属皮膜抵抗		
R203,204	HU 07:64:70	"	4.7kΩ "	"		
R205,206	HU 07:51:00	"	100Ω "	"		
R207,208	HJ 35:54:70	Carbon Resistor	470Ω RD25	カーボン抵抗		
R209,210	HJ 35:53:30	"	330Ω "	"		
R213,214	HJ 35:58:20	"	820Ω "	"		
R215,216	HJ 35:53:30	"	330Ω "	"		
R217,218	HJ 35:61:80	"	1.8kΩ "	"		
R219,220	HJ 35:72:20	"	22kΩ "	"		
R221~R224	HJ 35:44:70	"	47Ω "	"		
R225,226	HV 35:41:20	Flame Proof Carbon Resistor	12Ω RDF25SF	不燃化カーボン抵抗		
R227,228	HU 07:55:60	Metal Film Resistor	560Ω RE35	金属皮膜抵抗		
R229,230	HJ 35:84:70	Carbon Resistor	470kΩ RD25	カーボン抵抗		
R231,232	HJ 35:74:70	"	47kΩ "	"		
R233	HV 35:41:20	Flame Proof Carbon Resistor	12Ω RDF25SF	不燃化カーボン抵抗		
R234,235	HV 35:51:20	"	120Ω "	"		
R236,237	HJ 35:71:20	Carbon Resistor	12kΩ RD25	カーボン抵抗		
R238,239	HJ 35:53:30	"	330Ω "	"		
R240,241	HJ 35:63:30	"	3.3kΩ "	"		
R242	HJ 35:74:70	"	47kΩ "	"		
R243	HJ 35:34:70	"	4.7Ω "	"		
R244~R247	HL 82:53:30	Metal Oxide Film Resistor	2P 330Ω	酸化金抵抗		
R248,249	HL 72:56:80	"	2P 680Ω	"		
R250,251	HJ 35:71:50	Carbon Resistor	15kΩ RD25	カーボン抵抗		
R252,253	HJ 35:61:20	"	1.2kΩ "	"		
R254	HU 07:73:90	Metal Film Resistor	39kΩ RE35	金属皮膜抵抗		
R255	HU 07:71:00	"	10kΩ "	"		
R256,257	HU 07:72:20	"	22kΩ "	"		
R258	HJ 35:53:90	Carbon Resistor	390Ω RD25	カーボン抵抗		
VR101, VR102	HT 41:00:70	Solid Type Variable Resistor	B10kΩ SR19R	ソリッド抵抗		
TR101, TR102	IA 09:99:30	Transistor	2SA999L	トランジスタ		
TR103, TR104	IP 00:89:00	FET	2SK147, 2SJ72 (BL)	F E T Pair supply		

\* New Parts (新規部品)

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
TR105	IC 23:20:30	Transistor	2SC2320L (BL)	トランジスタ		
TR106	IC 18:15:70	"	2SC1815 (O,Y)	"		
TR107	IC 18:15:70	"	2SC1815 (O,Y)	"		
TR108	IA 10:15:70	"	2SA1015 (O,Y)	"		
TR109	IA 09:70:00	"	2SA970 (GR,BL)	"		
TR110	IC 22:40:00	"	2SC2240 (GR,BL)	"		
TR111, TR112	IC 18:15:70	"	2SC1815 (O,Y)	"		
TR113, TR114	IA 10:15:70	"	2SA1015 (O,Y)	"		
TR115, TR116	IC 27:05:00	"	2SC2705 (O,Y)	"		
TR117, TR118	IA 11:45:00	"	2SA1145 (O,Y)	"		
TR119	IC 09:70:00	"	2SA970 (GR,BL)	"		
TR120	IC 22:40:00	"	2SC2240 (GR,BL)	"		
TR121	IA 09:95:00	Dual Transistor	2SA995	デュアルトランジスタ		
TR122	IC 22:40:00	Transistor	2SC2240 (GR,BL)	トランジスタ		
TR123, TR124	IE 10:22:00	FET	2SK146 (BL,V)	F E T		
TR125~TR128	IE 20:05:00	Dual FET	2SJ75 (GR,BL)	デュアル F E T		
TR129, TR130	IA 10:15:70	Transistor	2SA1015 (O,Y)	トランジスタ		
TR131, TR132	IC 18:15:70	"	2SC1815 (O,Y)	"		
TR133~TR136	IA 10:15:70	"	2SA1015 (O,Y)	"		
TR137~TR140	IC 27:05:00	"	2SC2705 (O,Y)	"		
TR141, TR142	IA 11:45:00	"	2SA1145 (O,Y)	"		
TR143	IC 22:40:00	"	2SC2240 (GR,BL)	"		
TR144	IA 09:70:00	"	2SA970 (GR,BL)	"		
TR145	IC 22:38:00	"	2SC2238 (O,Y)	"		
TR146	IA 09:68:00	"	2SA968 (O,Y)	"		
TR147	IC 22:40:00	"	2SC2240 (GR,BL)	"		
TR148	IA 09:70:00	"	2SA970 (GR,BL)	"		
TR149	IC 22:40:00	"	2SC2240 (GR,BL)	"		
TR150	IC 22:40:00	"	2SC2240 (GR,BL)	"		
TR151	IA 09:70:00	"	2SA970 (GR,BL)	"		
TR152	IP 00:89:00	FET	2SJ72, 2SK147(BL)	F E T Pair supply		
D101~D106	IF 00:00:40	Diode	1S1555	ダイオード		
"	IF 00:06:70	"	1S2473	"	Inter-changeable	
D107	IF 00:15:10	Zener Diode	HZ-6C1L	ツェナーダイオード		
D108, D109	IF 00:00:40	Diode	1S1555	ダイオード		
"	IF 00:06:70	"	1S2473	"	Inter-changeable	
D110	IF 00:07:90	Varistor	MV12	バリスタ		
SW101	KA 90:20:30	Remote Rotary Switch	6 circuit 6 point	リモートロータリースイッチ		
SW102	KA 90:10:70	"	4 circuit 6 point	"		
SW103	KA 90:26:70	"	4 circuit 5 point	"		
PJ101	LB 40:09:30	Pin Jack	4P	4 P ピンジャック		
PJ102, PJ103	LB 60:42:20	Pin Jack	6P	6 P ピンジャック		
"	LA 00:24:70	Wrapping Terminal	P=7.5 2P (U Type)	U型ラッピング端子板		
"	LA 00:19:60	"	P=7.5 3P "	"		
"	LA 00:41:20	Test-Point Pin	1P	テストポイントピン		
"	NA 07:71:10	Volume Circuit Board		ポリウムシート		
C301,302	FG 41:23:90	Ceramic Cap.	390pF 50V	セラコン		
C303,304	UA 25:43:30	Mylar Cap.	0.033μF 50V	マイラーコン		
C305,306	FD 61:24:70	Polystyrene Film Cap.	470pF 50V	スチコン		
C307~C309	UW 94:81:00	Electrolytic Cap.	100μF 25V	ケミコン		
R301,302	HJ 35:71:00	Carbon Resistor	10kΩ RD25	カーボン抵抗		
R303,304	HJ 35:82:20	"	220kΩ "	"		
R305,306	HJ 35:73:90	"	39kΩ "	"		

\* New Parts (新規部品)

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Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
R307,308	HJ 35:74:70	Carbon Resistor	47kΩ RD25	カーボン抵抗		
R309,310	HJ 35:65:60	"	5.6kΩ "	"		
R311,312	HJ 35:52:20	"	220Ω "	"		
R313~R315	HV 35:41:50	Flame Proof Carbon Resistor	15Ω	不燃化カーボン抵抗		
R317,318	HJ 35:91:00	Carbon Resistor	1MΩ RD25	カーボン抵抗		
VR301	HQ 41:00:70	Slide Variable Resistor	100kΩ x 2	スライド抵抗器		
VR302	HQ 41:00:60	"	22kΩ x 2	"		
VR303	HY 00:12:20	Variable Resistor	60kΩ x 2	ミニデジタリ抵抗器		
VR304	HQ 20:02:70	Slide Variable Resistor	200kΩ	スライド抵抗器		
D301	IF 00:18:90	LED	SLR-34URG	L E D		
SW301, SW302	KA 80:27:10	Push Switch	4 circuit 2 point	プッシュスイッチ		
SW303	KA 80:26:70	"	8 circuit 2 point	"		
JK301	LB 30:13:50	Headphones Jack		ヘッドホンジャック		
	LA 00:21:10	Wrapping Terminal	P=5 2P (i Type)	i型ラッピング端子板		
	LA 00:21:20	"	P=5 3P "	"		
	LA 00:20:40	"	P=5 5P "	"		
	LB 20:13:90	Base Pin	TEB2P-SHF 2.5 Pitch	2.5ピッチベースピン		
	LB 30:07:30	"	TEB3P-SHF "	"		
	NA 07:71:20	Tone Control Circuit Board		トーンコントロールシート		
C401,402	UA 25:51:30	Mylar Cap.	0.13μF 50V	マイラーコン		
C403,404	UA 25:45:60	"	0.056μF 50V	"		
C405,406	FZ 00:05:70	Electrolytic Cap.	1μF 50V	M S コン		
C407,408	FG 41:15:60	Ceramic Cap.	56pF 50V	セラコン		
C409,410	UW 91:73:30	Electrolytic Cap.	33μF 6.3V	ケミコン		
C411,412	UW 93:71:00	"	10μF 16V	"		
C413,414	FM 22:62:20	"	2.2μF 25V	B P コン	NP-Type	
C415,416	UA 25:35:60	Mylar Cap.	0.0056μF 50V	マイラーコン		
C417,418	UA 25:41:20	"	0.012μF 50V	"		
C419,420	FZ 00:02:50	Electrolytic Cap.	0.47μF 50V	M S コン		
C421,422	FG 41:21:00	Ceramic Cap.	100pF 50V	セラコン		
C423,424	FG 41:24:70	"	470pF 50V	"		
C425,426	FM 22:61:00	Electrolytic Cap.	1μF 25V	B P コン	NP-Type	
C427~C430	UA 25:32:20	Mylar Cap.	0.0022μF 50V	マイラーコン		
C431,432	UA 25:43:30	"	0.033μF 50V	"		
C433,434	UA 25:51:00	"	0.1μF 50V	"		
C435,436	UW 91:73:30	Electrolytic Cap.	33μF 6.3V	ケミコン		
C437,438	UA 25:38:20	Mylar Cap.	0.0082μF 50V	マイラーコン		
C439,440	UA 25:41:60	"	0.016μF 50V	"		
C441,442	UA 25:41:00	"	0.01μF 50V	"		
C443,444	UW 94:74:70	Electrolytic Cap.	47μF 25V	ケミコン		
R401,402	HJ 35:78:20	Carbon Resistor	82kΩ RD25	カーボン抵抗		
R403,404	HJ 35:92:20	"	2.2MΩ "	"		
R405,406	HJ 35:84:70	"	470kΩ "	"		
R407,408	HJ 35:52:20	"	220Ω "	"		
R409,410	HJ 35:83:30	"	330kΩ "	"		
R411,412	HJ 35:84:70	"	470kΩ "	"		
R413~R416	HJ 35:92:20	"	2.2MΩ "	"		
R417,418	HK 35:62:00	"	2kΩ "	"		
R419,420	HJ 35:91:00	"	1MΩ "	"		
R421,422	HJ 35:55:60	"	560Ω "	"		
R423,424	HJ 35:81:00	"	1kΩ "	"		
R425,426	HJ 35:64:70	"	4.7kΩ "	"		

※ New Parts (新規部品)

Ref. No.	Part No.	Description	部品名	Remarks	Common Model	Markets
R427	HJ 35:54:70	Carbon Resistor	470Ω RD25	カーボン抵抗		
R428	HJ 35:41:50	"	15Ω "	"		
R429,430	HJ 35:61:00	"	1kΩ "	"		
R431,432	HK 35:62:00	"	2kΩ "	"		
R433,434	HK 35:69:10	"	9.1kΩ "	"		
R435,436	HJ 35:84:70	"	470kΩ "	"		
R437,438	HK 35:69:10	"	9.1kΩ "	"		
R441,422	HK 35:59:10	"	910Ω "	"		
R445,446	HJ 35:92:20	"	2.2MΩ "	"		
R447	HJ 35:41:50	"	15Ω "	"		
VR401	HQ 41:00:30	Slide Variable Resistor	30kΩ x 2	スライド抵抗器		
VR402	HQ 41:00:40	"	5kΩ x 2	"		
D401,402	IF 00:19:90	LED	SLR-55GC5	L E D (GR)		
D403	IF 00:18:90	"	SLR-34URG	" (RE)		
D404~D405	IF 00:19:90	"	SLR-55GC5	" (GR)		
IC401, IC402	IG 04:00:00	IC	NJM4560	I C		
SW401	KA 80:27:00	Push Switch	6 Circuit 2 Point	プッシュスイッチ	High Filter	
SW402	KA 80:27:10	"	4 Circuit 2 Point	"	Mode	
SW403	KA 80:26:90	"	4 Circuit 2 Point	"	Turnover frequency (Bass)	
SW404	KA 80:26:80	"	2 Circuit 2 Point	"	Turnover frequency (Treble)	
CB 06:92:50	Binding Tie	BK-1		インシュロックタイ		
CB 09:56:10	LED Stand			LEDスタンド (L)		
CB 09:55:20	"			" (R)		
CB 09:75:20	LED Holder			LEDホルダー		
NA 07:71:40	Main Circuit Board			メインシート		R,A,B,G
NA 07:71:50	"			"		U
NA 07:71:60	"			"		C
C501,502	FU 35:14:70	Mica Cap.	47pF 500V	マイカコン		
C503,504	FV 63:71:00	Electrolytic Cap.	10μF 16V	プラスチックケミコン		
C505,506	FV 66:71:00	"	10μF 50V	"		
C507,508	FD 65:25:60	Polystyrene Film Cap.	560pF 50V	ステコン		
C509,510	FU 35:12:20	Mica Cap.	22pF 500V	マイカコン		
C511,512	FV 68:61:00	Electrolytic Cap.	1μF 80V	プラスチックケミコン		
C513,514	FV 63:71:00	"	10μF 16V	"		
C515,516	FT 91:41:00	Polypropylene Film Cap.	0.01μF 100V	ポリプロピレンフィルムコン		
C517,518	FU 35:13:30	Mica Cap.	33pF 500V	マイカコン		
C519~C522	FT 91:31:00	Polypropylene Film Cap.	0.001μF 100V	ポリプロピレンフィルムコン		
C523~C526	UA 25:44:70	Mylar Cap.	0.047μF 50V	マイラーコン		
C527~C530	UA 25:34:70	"	0.0047μF 50V	"		
C531~C534	FT 91:31:50	Polypropylene Film Cap.	0.0015μF 100V	ポリプロピレンフィルムコン		
C535~C538	FT 91:44:70	"	0.047μF 100V	"		
C539~C542	FT 91:42:20	"	0.022μF 100V	"		
C543~C546	FT 91:44:70	"	0.047μF 100V	"		
C547,548	FV 68:82:20	Electrolytic Cap.	220μF 80V	ケミコン		
C549,550	FV 63:71:00	"	10μF 16V	"		
C551	FG 41:21:00	Ceramic Cap.	100pF 50V	セラコン		
C552	UW 93:72:20	Electrolytic Cap.	22μF 16V	ケミコン		
C553,554	UW 94:64:70	"	4.7μF 25V	"		
C555,556	UW 97:74:70	"	47μF 63V	"		
C557	UW 88:72:20	"	22μF 80V	"		
C558	UW 96:54:70	"	0.47μF 50V	"		
C563,564	FV 68:82:20	Electrolytic Cap.	220μF 80V	プラスチックケミコン		

※ New Parts (新規部品)



Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
L601,802	GD 90:03:70	Coil	1.5μH 空 芯 コ イ ル			
R501,502	HJ 35:44:70	Carbon Resistor	47Ω RD25 カ ー ボ ン 抵 抗			
R503,504	HJ 35:84:70	"	470kΩ " " "			
R505 ~ R508	HJ 35:53:30	"	330Ω " " "			
R509,510	HJ 35:64:70	"	4.7kΩ " " "			
R511 ~ R514	HJ 35:61:00	"	1kΩ " " "			
R515 ~ R518	HJ 35:41:50	"	15Ω " " "			
R519 ~ R522	HJ 35:52:20	"	220Ω " " "			
R523 ~ R528	HJ 35:64:70	"	4.7kΩ " " "			
R529,530	HU 07:74:70	Metal Film Resistor	47kΩ RE35 金 属 皮 膜 抵 抗			
R531,532	HU 07:73:60	"	36kΩ " " "		R,A,G,B	
"	HU 07:74:30	"	43kΩ " " "		U,C	
R533,534	HU 27:51:00	"	100Ω SHR " "			
R535 ~ R540	HJ 35:53:30	Carbon Resistor	330Ω RD25 カ ー ボ ン 抵 抗			
R541,542	HJ 35:51:20	"	120Ω " " "			
R543 ~ R546	HJ 35:41:80	"	18Ω " " "			
R547,548	HL 71:71:00	Metal Oxide Film Resistor	1P 10kΩ 酸 金 抵 抗			
R549 ~ R552	HJ 35:52:70	Carbon Resistor	270Ω RD25 カ ー ボ ン 抵 抗			
R553 ~ R556	HJ 35:61:20	"	1.2kΩ " " "			
R557,558	HJ 35:85:60	"	5.6kΩ " " "			
R559 ~ R562	HV 35:45:60	Flame Proof Carbon Resistor	56Ω RDF25SF 不 燃 化 カ ー ボ ン 抵 抗			
R563 ~ R566	HV 35:33:30	"	3.3Ω " " "			
R567,568	HV 35:34:70	"	4.7Ω " " "			
R569 ~ R574	HV 35:32:20	"	2.2Ω " " "			
R575,576	HV 35:52:20	"	220Ω " " "			
R577 ~ R580	HV 35:54:70	"	470Ω " " "			
R581 ~ R586	HV 35:32:20	"	2.2Ω " " "			
R587,588	HV 35:34:70	"	4.7Ω " " "			
R589,592	HV 35:33:30	"	3.3Ω " " "			
R593 ~ R604	HZ 00:10:30	Cement Molded Resistor	5P 0.47Ω 金 属 板 型 セ メ ン ト 抵 抗			
R605 ~ R608	HV 35:34:70	Flame Proof Carbon Resistor	4.7Ω RDF25SF 不 燃 化 カ ー ボ ン 抵 抗			
R609 ~ R612	HL 72:41:00	Metal Oxide Film Resistor	2P 10Ω 酸 金 抵 抗			
R613 ~ R616	HJ 35:75:60	Carbon Resistor	56kΩ RD25 カ ー ボ ン 抵 抗			
R617,618	HL 72:51:50	Metal Oxide Film Resistor	2P 150Ω 酸 金 抵 抗			
R619,620	HL 72:66:80	"	2P 6.8kΩ " "			
R621	HJ 35:74:70	Carbon Resistor	47kΩ RD25 カ ー ボ ン 抵 抗			
R622	HJ 35:71:00	"	10kΩ " " "			
R623,624	HV 35:51:50	Flame Proof Carbon Resistor	150Ω RDF25SF 不 燃 化 カ ー ボ ン 抵 抗			
R625	HJ 35:63:90	Carbon Resistor	3.9kΩ RD25 カ ー ボ ン 抵 抗			
R626	HJ 35:81:00	"	100kΩ " " "			
R627	HJ 35:64:70	"	4.7kΩ " " "			
R628 ~ R630	HJ 35:65:60	"	5.6kΩ " " "			
R631	HJ 35:72:20	"	22kΩ " " "		R,A,G,B	
"	HJ 35:72:70	"	27kΩ " " "		U,C	
R632	HJ 35:75:60	"	56kΩ " " "			
R633 ~ R635	HL 72:52:70	Metal Oxide Film Resistor	2P 270Ω 酸 金 抵 抗		U,C	
"	HL 72:51:80	"	2P 180Ω " "		R,A,G,B	
R637	HV 35:42:20	Flame Proof Carbon Resistor	22Ω RDF25SF 不 燃 化 カ ー ボ ン 抵 抗			
R638	HJ 35:71:00	Carbon Resistor	10kΩ RD25 カ ー ボ ン 抵 抗			
R639	HJ 35:45:60	"	56Ω " " "			
R640	HJ 35:56:20	"	820Ω " " "			
R641	HJ 35:53:30	"	330Ω " " "			
R642	HJ 35:51:00	"	100Ω " " "			

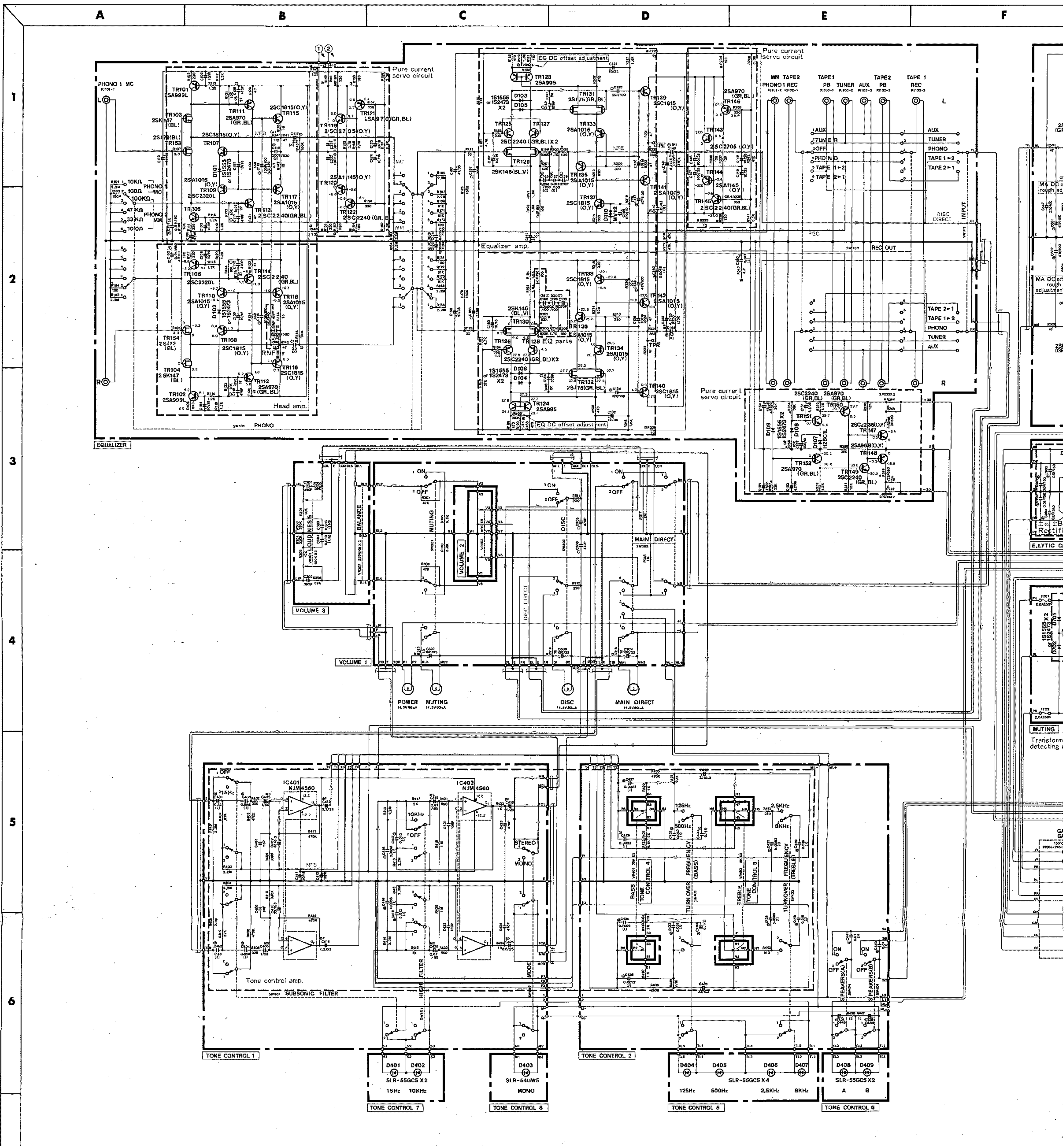
\* New Parts (新規部品)

Ref. No.	Part No.	Description	部 品 名	Remarks	Common Model	Markets
R643	HJ 35:72:70	Carbon Resistor	27kΩ RD25 カ ー ボ ン 抵 抗			
R644	HJ 35:82:20	"	220kΩ " " "			
R645	HJ 35:61:80	"	1.8kΩ " " "			
R646	HJ 35:73:30	"	33kΩ " " "			
R647 ~ R650	HL 71:71:00	Metal Oxide Film Resistor	1P 10kΩ 酸 金 抵 抗			
R651 ~ R653	HJ 35:53:30	Carbon Resistor	330Ω RD25 カ ー ボ ン 抵 抗			
VR501 ~ VR504	HT 41:02:20	Solid Variable Resistor	B100Ω SR19R ソ リ ッ ド 抵 抗 器			
VR505, VR506	HT 41:00:30	"	B2.2kΩ " " "			
VR507	HT 41:00:80	"	B22kΩ " " "			
FR501 ~ FR504	HW 89:53:90	Fuse Resistor	25mA 390Ω ヒ ュ ー ズ 抵 抗			R,A,G,C,B
"	HW 99:53:90	"	" " " "			U
FR505, FR506	HW 89:54:70	"	23mA 470Ω " " "			R,A,G,C,B
"	HW 99:54:70	"	" " " "			U
TR501 ~ TR504	IC 22:40:00	Transistor	2SC2240 (GR,BL) ト ラ ン ジ ス タ			
TR505, TR506	IE 10:27:00	Dual FET	2SK270 (GR,BL) デ ュ ア ル F E T			
TR507, TR508	IA 09:95:00	Dual Transistor	2SA995 デ ュ ア ル ト ラ ン ジ ス タ			
TR509 ~ TR512	IA 10:15:70	Transistor	2SA1015 (O,Y) ト ラ ン ジ ス タ			
TR513 ~ TR516	IA 11:45:00	"	2SA1145 (O,Y) " "			
TR517, TR518	IA 10:15:70	"	2SA1015 (O,Y) " "			
TR519, TR520	IC 27:05:00	"	2SC2705 (O,Y) " "			
TR521, TR522	IC 18:15:70	"	2SC1815 (O,Y) " "			
TR523, TR524	IC 19:53:00	"	2SC1953 (S,T) " "			
TR525, TR526	IC 18:15:70	"	2SC1815 (O,Y) " "			
TR527, TR528	IA 10:15:70	"	2SA1015 (O,Y) " "			
TR529, TR530	IC 27:05:00	"	2SC2705 (O,Y) " "			
TR531, TR532	IA 11:45:00	"	2SA1145 (O,Y) " "			
TR533, TR534	IC 22:38:20	"	2SC22388 (R,O,Y) " "			
TR535, TR536	IA 09:88:20	"	2SA968B (R,O,Y) " "			
TR537 ~ TR542	IC 27:06:10	"	2SC2706 (O,Y) " "			
TR543, TR544	IA 11:46:10	"	2SA1146 (O,Y) " "			
TR545, TR546	IC 20:88:00	"	2SC2088 (BL,V) " "			
TR551	IC 22:29:00	"	2SC2229 (O,Y) " "			
TR552	IA 09:70:00	"	2SA970 (GR,BL) " "			
TR553	IC 19:83:00	"	2SC1983 " "			
TR554	IC 15:09:50	"	2SC1509 (R) " "			
TR555	IA 09:70:00	"	2SA970 (GR,BL) " "			
TR556	IA 07:77:60	"	2SA777 (S) " "			
TR557	IC 22:40:00	"	2SC2240 (GR,BL) " "			
D501 ~ D516	IF 00:00:40	Diode	1S1555 ダ イ オ ー ド	Inter.		
"	IF 00:06:70	"	1S2473 " "	changeable		
D517,518	IF 00:07:90	Varistor	MV12 バ リ ス タ			
D519 ~ D522	IF 00:14:00	Diode	1SS82 ダ イ オ ー ド			
D523 ~ D526	IF 00:00:40	"	1S1555 " "	Inter.		
"	IF 00:06:70	"	1S2473 " "	changeable		
D527,528	IF 00:15:10	Zener Diode	HZ6C1L ツ ェ ナ ー ダ イ オ ー ド			
D529,530	IH 00:07:10	Diode	W06C ダ イ オ ー ド			
D531	IF 00:15:10	Zener Diode	HZ6C1L ツ ェ ナ ー ダ イ オ ー ド			
D532	IF 00:00:40	Diode	1S1555 ダ イ オ ー ド	Inter.		
"	IF 00:06:70	"	1S2473 " "	changeable		
D533	IF 00:15:20	Zener Diode	HZ12B1L ツ ェ ナ ー ダ イ オ ー ド			
D534,535	IF 00:00:40	Diode	1S1555 ダ イ オ ー ド	Inter.		
"	IF 00:06:70	"	1S2473 " "	changeable		
D536	IF 00:15:10	Zener Diode	HZ6C1L ツ ェ ナ ー ダ イ オ ー ド			

\* New Parts (新規部品)



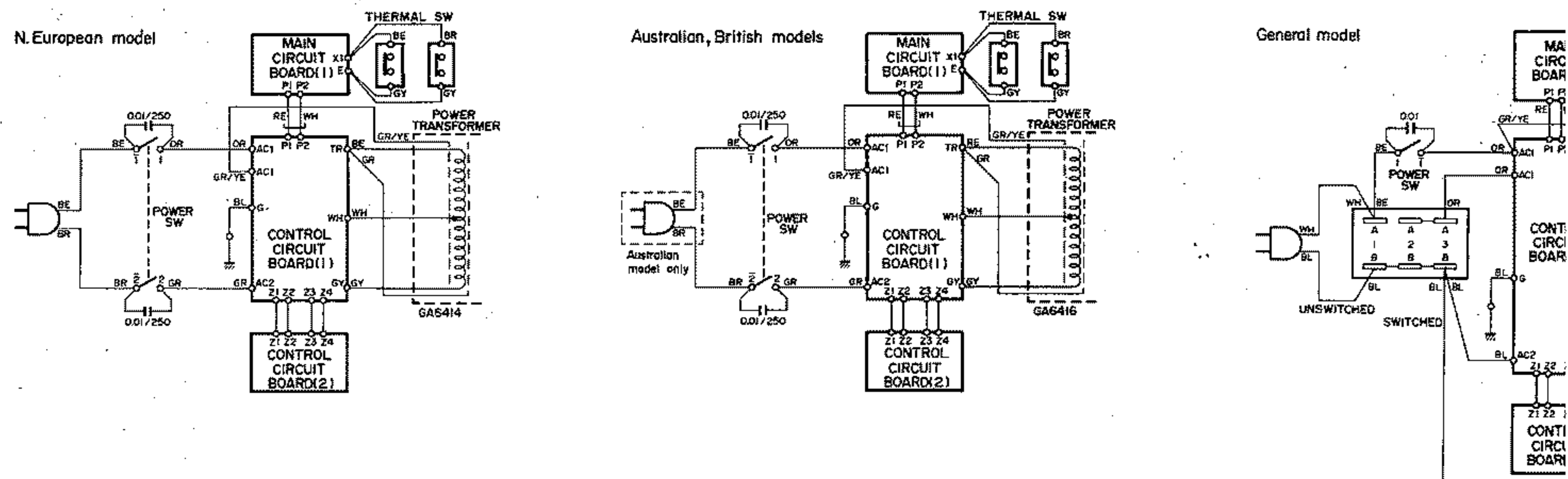
# SCHEMATIC DIAGRAM



This schematic diagram is for U.S. and Canadian models. As the following parts and values differ from each model, so refer to the corresponding column.

No.	R	U, C	A, B	G
R631	22k	27k	22k	22k
R633-636	2P180	270	2P180	2P180
R531, 532	36k	43k	36k	36k
F701, 702	T2.0A 250V	2.0A 250V	T2.0A 250V	T2.0A 250V
D901	D5FB20	D4BB20	D5FB20	D5FB20

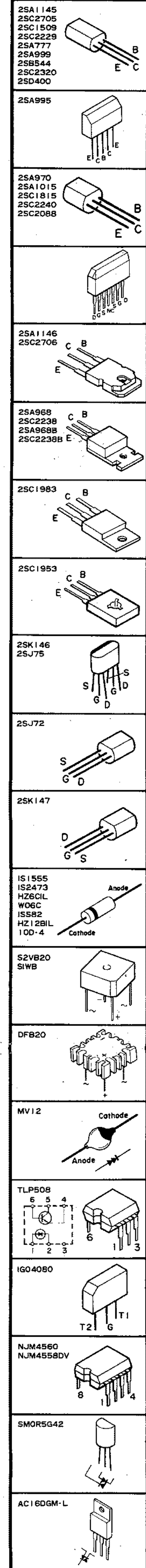
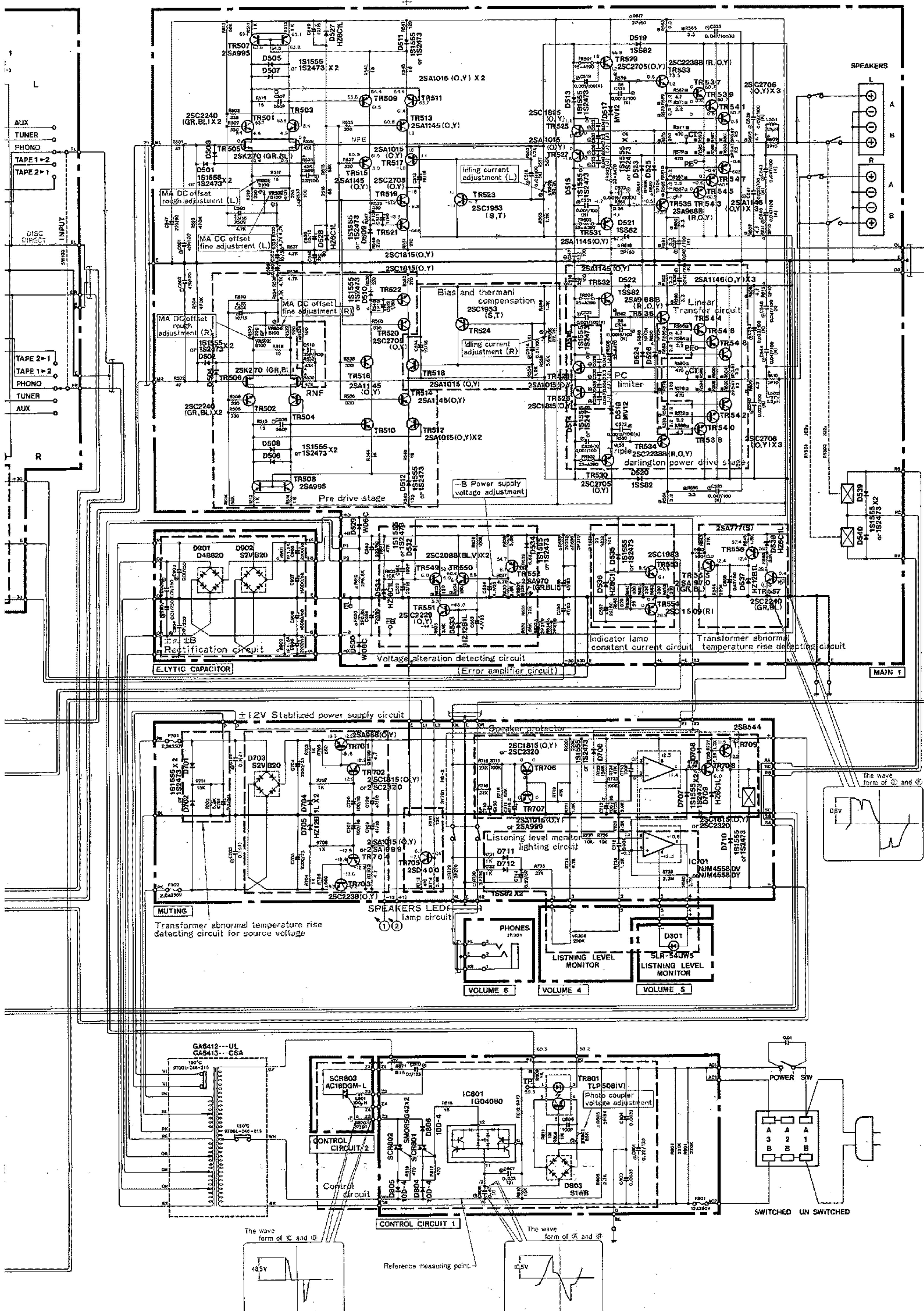
\* All voltages are measured with a 10MΩ/V DC electric volt meter.  
 \* Schematic diagram is subject to change without notice.



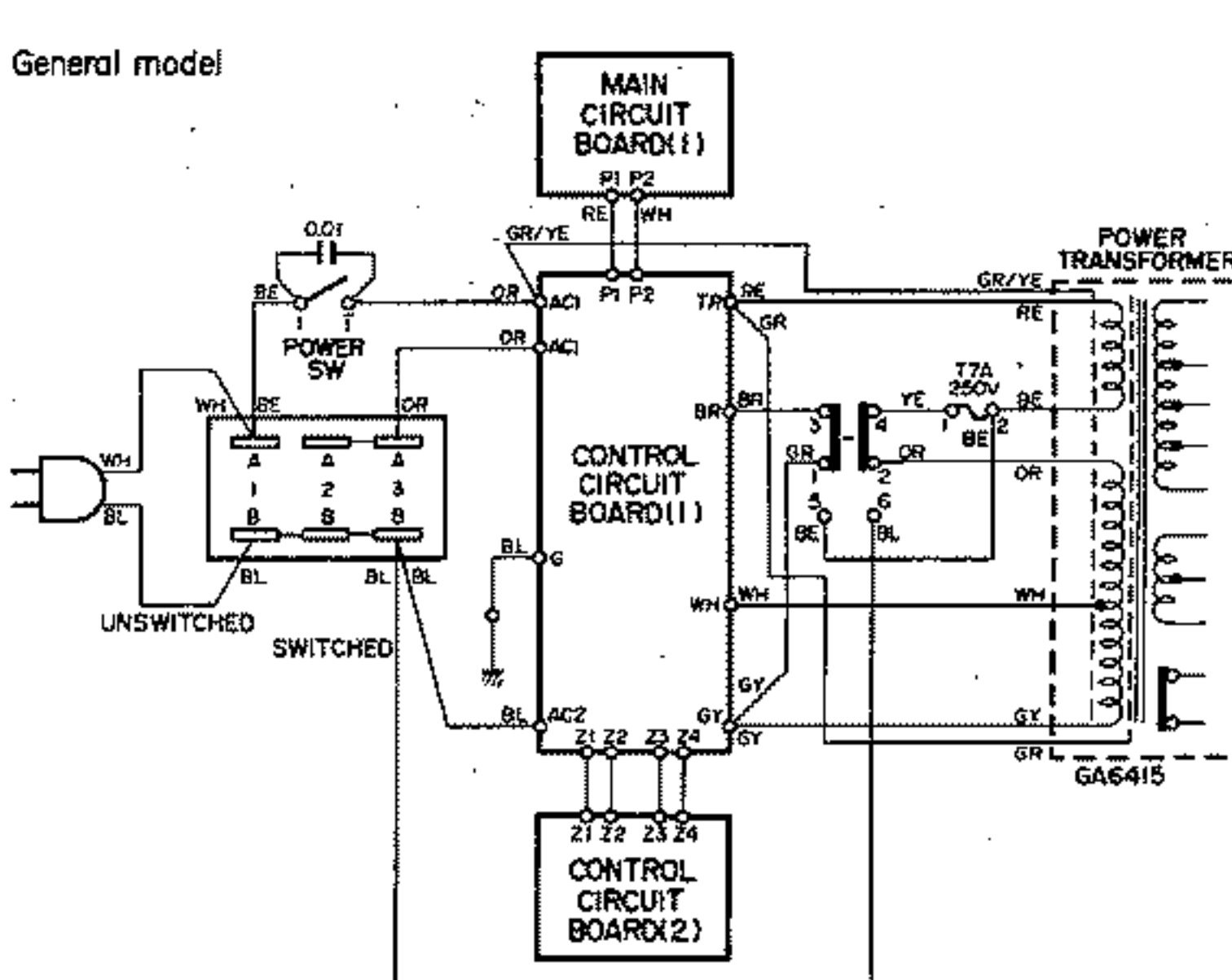


F G H I J K

PIN-CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.



RESISTOR		CAPACITOR	
REMARKS	PARTS NAME	REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR	NO ARK	CERAMIC CAPACITOR
•	METAL FILM RESISTOR	⊙	POLYESTER FILM CAPACITOR
(-)	TANTALUM NITRIDE RESISTOR	○	POLYSTYRENE FILM CAPACITOR
•	METAL OXIDE FILM RESISTOR	⊙	MICA CAPACITOR
•	METAL PLATE RESISTOR	⊙	POLYPROPYLENE FILM CAPACITOR
○	CEMENT MOLDED RESISTOR		
•	FLAME PROOF CARBON RESISTOR		
•	SEMI VARIABLE RESISTOR		



Note 1) When measuring control p.c. board wave forms, voltages are applied very readily to the oscilloscope body etc. For this reason do not touch oscilloscope and other related objects during these measurements. It is also necessary to check that the oscilloscope body is not connected to ground in any way.

Note 2) Always check voltages by measuring the voltage between reference measuring point and check points.

Note 3) Check the quality of the TRIAC by monitoring the wave form across R820 (2P 390Ω). The TRIAC is OK as long as the prescribed wave form is obtained.

Note 4) Do not touch E (emitter) of TR557 in the main p.c. board error amplifier circuit with the multimeter electrode since this will increase the noise and heat generated by the transformer.

\* The marks (A) to (F) mean the test points of monitoring the waveform.