

POWER AMPLIFIERS

P2350/P2700

SERVICE MANUAL



● P2350



● P2700

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IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification, recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

■ SPECIFICATIONS

P2700	P2350
POWER OUTPUT LEVEL STEREO: 350W + 350W; RL = 8 ohms, f = 20 Hz — 20 kHz, THD ≤ 0.1 % 500W + 500W; RL = 4 ohms, f = 20 Hz — 20 kHz, THD ≤ 0.1 % MONO: 1000W; RL = 8 ohms, f = 20 Hz — 20 kHz, THD ≤ 0.1 %	STEREO: 175W + 175W; RL = 8 ohms, f = 20 Hz — 20 kHz, THD ≤ 0.1 % 250W + 250W; RL = 4 ohms, f = 20 Hz — 20 kHz, THD ≤ 0.1 % MONO: 500W; RL = 8 ohms, f = 20 Hz — 20 kHz, THD ≤ 0.1 %
FREQUENCY RESPONSE 0 dB +0.5, -1.5 dB; f = 10 Hz — 50 kHz, RL = 8 ohms, Po = 1 W	
POWER BANDWIDTH STEREO: 10 Hz — 40 kHz; Po = 175 W, RL = 8 ohms, THD = 0.1 % 10 Hz — 40 kHz; Po = 250 W, RL = 4 ohms, THD = 0.1 % MONO: 10 Hz — 40 kHz; Po = 500 W, RL = 8 ohms, THD = 0.1 %	STEREO: 10 Hz — 40 kHz; Po = 88 W, RL = 8 ohms, THD = 0.1 % 10 Hz — 40 kHz; Po = 125 W, RL = 4 ohms, THD = 0.1 % MONO: 10 Hz — 40 kHz; Po = 250 W, RL = 8 ohms, THD = 0.1 %
TOTAL HARMONIC DISTORTION (THD) STEREO: ≤0.05%; Po = 175 W, RL = 8 ohms, f = 20 Hz — 20 kHz ≤0.07%; Po = 250 W, RL = 4 ohms, f = 20 Hz — 20 kHz MONO: ≤0.07%; Po = 500 W, RL = 8 ohms, f = 20 Hz — 20 kHz	STEREO: ≤0.05%; Po = 88 W, RL = 8 ohms, f = 20 Hz — 20 kHz ≤0.07%; Po = 125 W, RL = 4 ohms, f = 20 Hz — 20 kHz MONO: ≤0.07%; Po = 250 W, RL = 8 ohms, f = 20 Hz — 20 kHz
INTERMODULATION DISTORTION (IMD) STEREO: ≤0.03%; Po = 175 W, RL = 8 ohms, f = 60 Hz : 7 kHz, 4 : 1 ≤0.05%; Po = 250 W, RL = 4 ohms, f = 60 Hz : 7 kHz, 4 : 1 MONO: ≤0.05%; Po = 500 W, RL = 8 ohms, f = 60 Hz : 7 kHz, 4 : 1	STEREO: ≤0.03%; Po = 88 W, RL = 8 ohms, f = 60 Hz : 7 kHz, 4 : 1 ≤0.05%; Po = 125 W, RL = 4 ohms, f = 60 Hz : 7 kHz, 4 : 1 MONO: ≤0.05%; Po = 250 W, RL = 8 ohms, f = 60 Hz : 7 kHz, 4 : 1

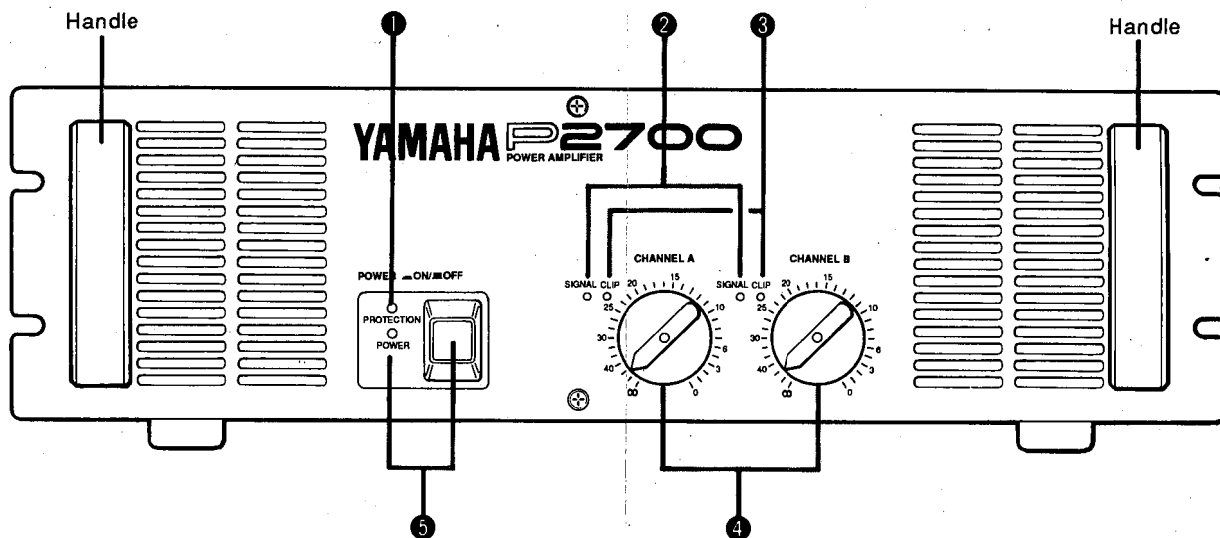
P2700	P2350
CHANNEL SEPARATION ATT max, Input 600 ohms shunt ≥ 70 dB; $P_o = 175$ W, $R_L = 8$ ohms, $f = 20$ Hz — 20 kHz ≥ 80 dB; $P_o = 175$ W, $R_L = 8$ ohms, $f = 1$ kHz	
RESIDUAL NOISE ≤ -75 dBm; ATT min, $f_c = 12.7$ kHz -6 dB/oct LPF ≤ -80 dBm; ATT min, IHF-A network	
SIGNAL-TO-NOISE RATIO ≥ 100 dB; Input 600 ohms shunt, $f_c = 12.7$ kHz -6 dB/oct LPF ≥ 110 dB; Input 600 ohms shunt, IHF-A network	
DAMPING FACTOR > 100 ; $R_L = 8$ ohms, $f = 1$ kHz	
SLEW RATE ± 40 V/ μ sec; Stereo, $R_L = 8$ ohms, Full Swing ± 50 V/ μ sec; Mono, $R_L = 8$ ohms, Full Swing	± 30 V/ μ sec; Stereo, $R_L = 8$ ohms, Full Swing ± 40 V/ μ sec; Mono, $R_L = 8$ ohms, Full Swing
SENSITIVITY $+4$ dBm; $P_o = 350$ W, 8 ohms, ATT max, $f = 1$ kHz	$+4$ dBm; $P_o = 175$ W, 8 ohms, ATT max, $f = 1$ kHz
VOLTAGE GAIN 32.5 dB; ATT max, $f = 1$ kHz, $R_L = 8$ ohms	30.0 dB; ATT max, $f = 1$ kHz, $R_L = 8$ ohms
INPUT IMPEDANCE ≥ 15 kohms; Balance or Unbalance, ATT max	
INDICATORS POWER Red LED; turns on when Power is On PROTECTION Red LED; turns on when protection or muting is On CLIPPING Red LED; turns on when THD $\geq 1\%$ SIGNAL Green LED; turns on when Signal output above 4 ohms, 1 W (20 Hz — 20 kHz)	
PROTECTION CIRCUITS OUTPUT MUTING 5 sec. ± 3 sec.; after power is on DC sense DC ± 2 V; output shunt off THERMAL ≥ 100 degree C.; heat sink temp. PC LIMITER $R_L \leq 2$ ohms	
FAN CIRCUIT FAN HI-SPEED; 70 deg. C. (heat sink temp.) FAN LO-SPEED; 60 deg. C.	
CONTROLS FRONT POWER SWITCH; push on/ push off INPUT ATTENUATOR; 31-position, log-linear, detented and dB-calibrated REAR MODE SWITCH; Stereo/Mono (BTL) (Except for P2700 Canadian model)	
POWER REQUIREMENTS U.S. & Canadian Models; 120 V, 60 Hz General Model; 220/240 V, 50/60 Hz	
POWER CONSUMPTION U.S. Model; 1000 W Canadian Model; 1000 W/1200 VA General Model; 1000 W	U.S. Model; 700 W Canadian Model; 700 W/900 VA General Model; 700 W
DIMENSIONS (W x H x D) 480 x 143.5 x 435.2 mm (18-7/8" x 5-5/8" x 17-1/8")	
WEIGHT 24 kg (52 lbs. 14 oz)	19 kg (41 lbs. 14 oz)

* 0 dB = 0.775 Vr.m.s.

* Specifications and appearance subject to change without notice.

■ PANEL LAYOUT

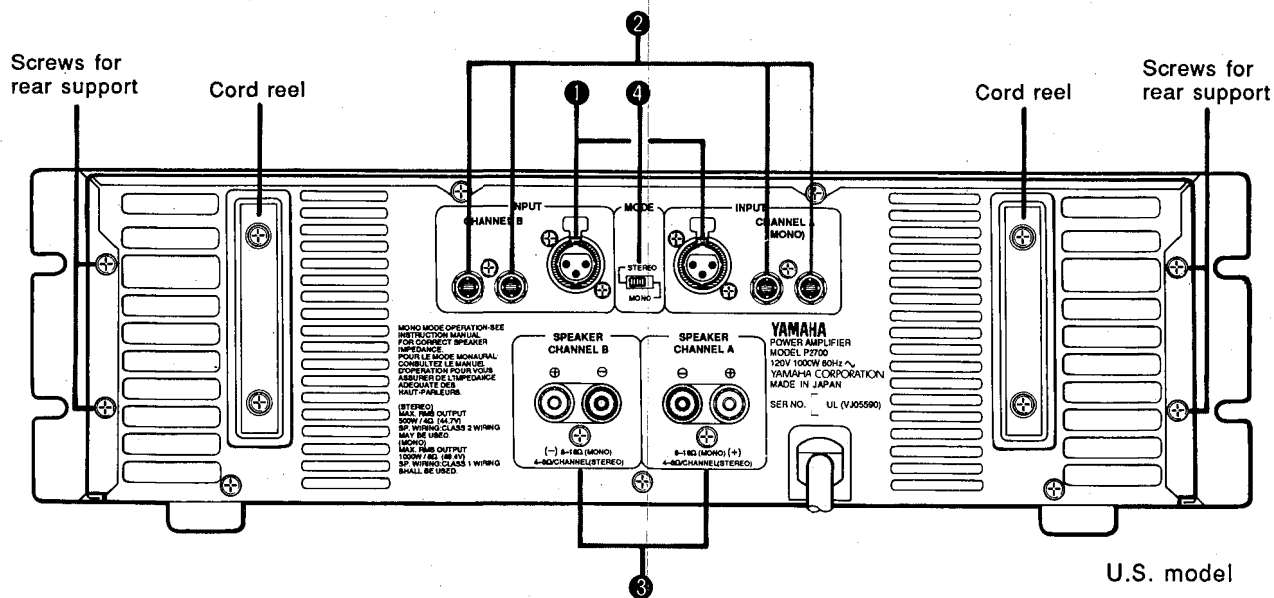
● Front Panel



- ① PROTECTION Indicator
- ③ CLIP Indicators
- ⑤ POWER Switch & Indicator

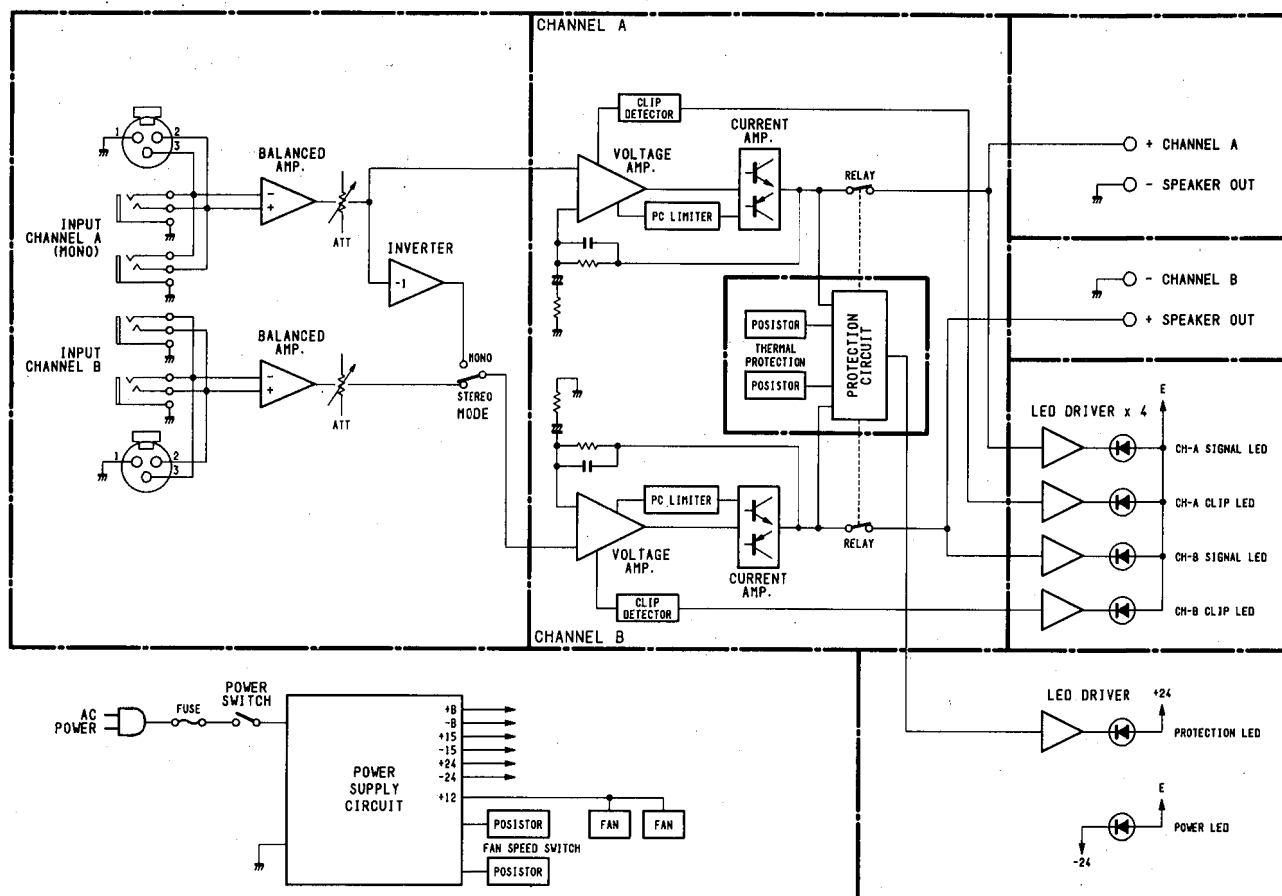
- ② SIGNAL Indicators
- ④ Input Attenuators

● Rear Panel



- ① INPUT Connectors (XLR-3-31 type)
- ③ SPEAKER Terminals
- ② INPUT Connectors (TRS Phone type)
- ④ MODE Switch
(Except for P2700 canadian model)

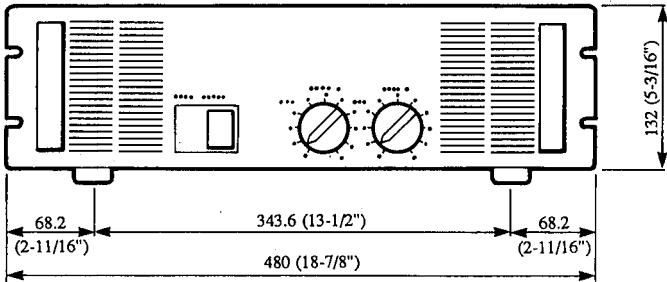
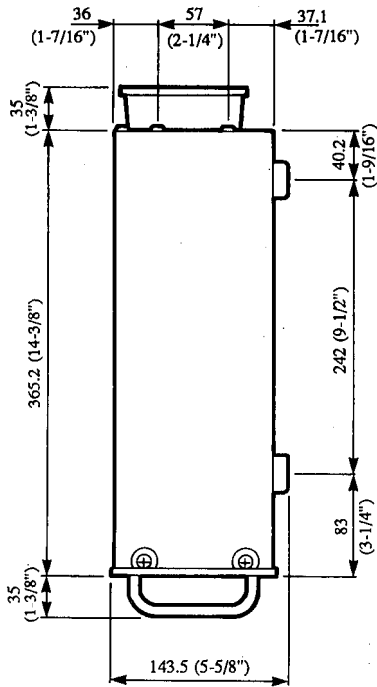
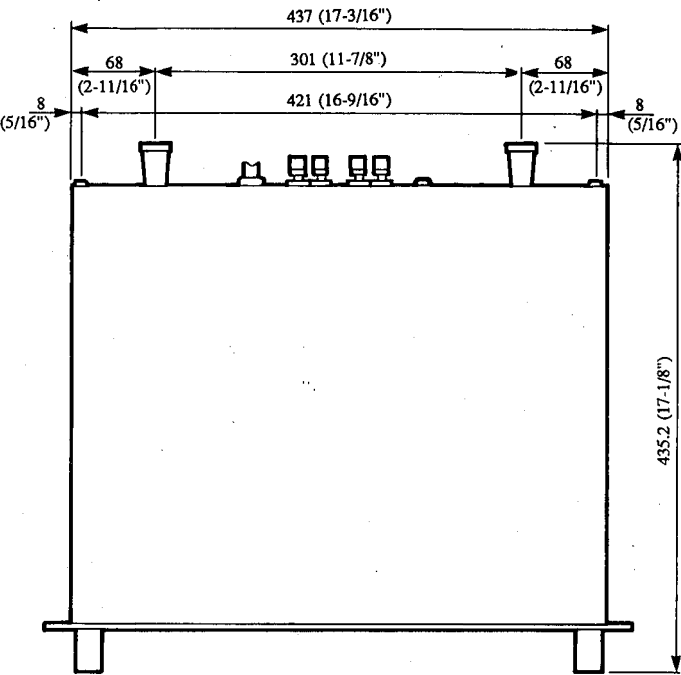
■ BLOCK DIAGRAM



■ PROTECTIVE CIRCUIT OPERATION

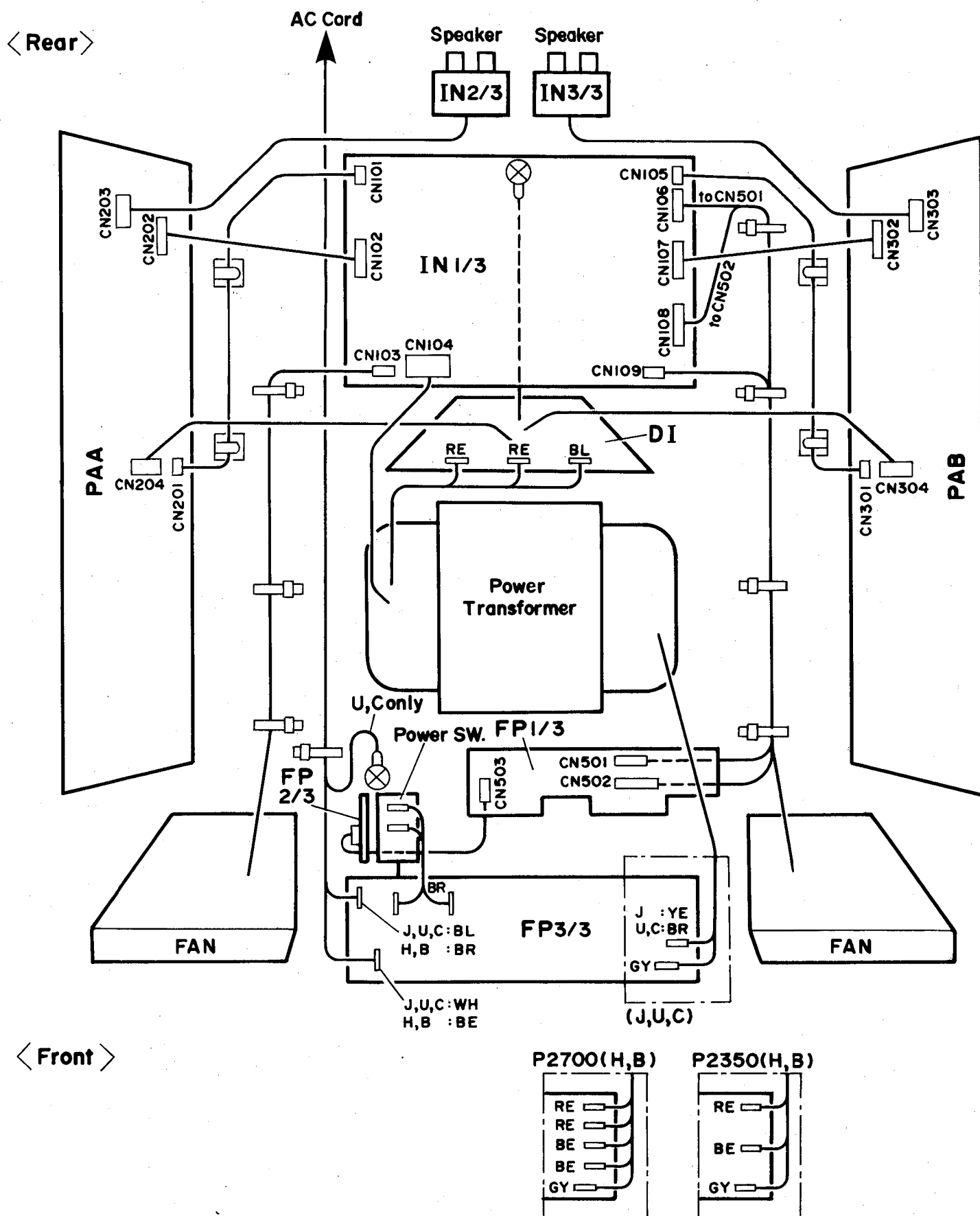
Indicator display	Probable cause	Remedy	Protective circuit operation
CLIP indicator lights.	There is a short at a speaker terminal, amplifier terminal, or wire.	Locate and correct the cause of the short.	The PC limiter circuit operates to protect the power transistors.
	The amplifier load is excessive.	Use a speaker system with an impedance of at least 4 ohms (stereo) or 8 ohms (monaural).	Same as above.
PROTECTION indicator lights.	The heat sink temperature has exceeded 100°C.	Check the amplifier ventilation conditions and take appropriate measures to improve airflow around the amplifier.	The thermal protection circuit operates to protect the power transistors.
	A DC voltage of +/-2V or greater was generated in the power amplifier's output circuit.		The relay operates to protect the speaker system.

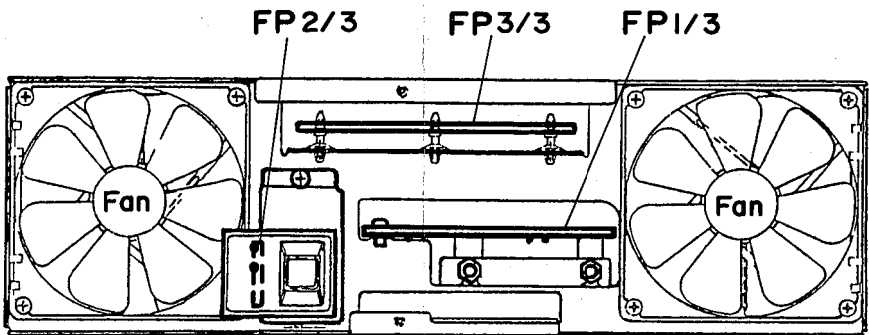
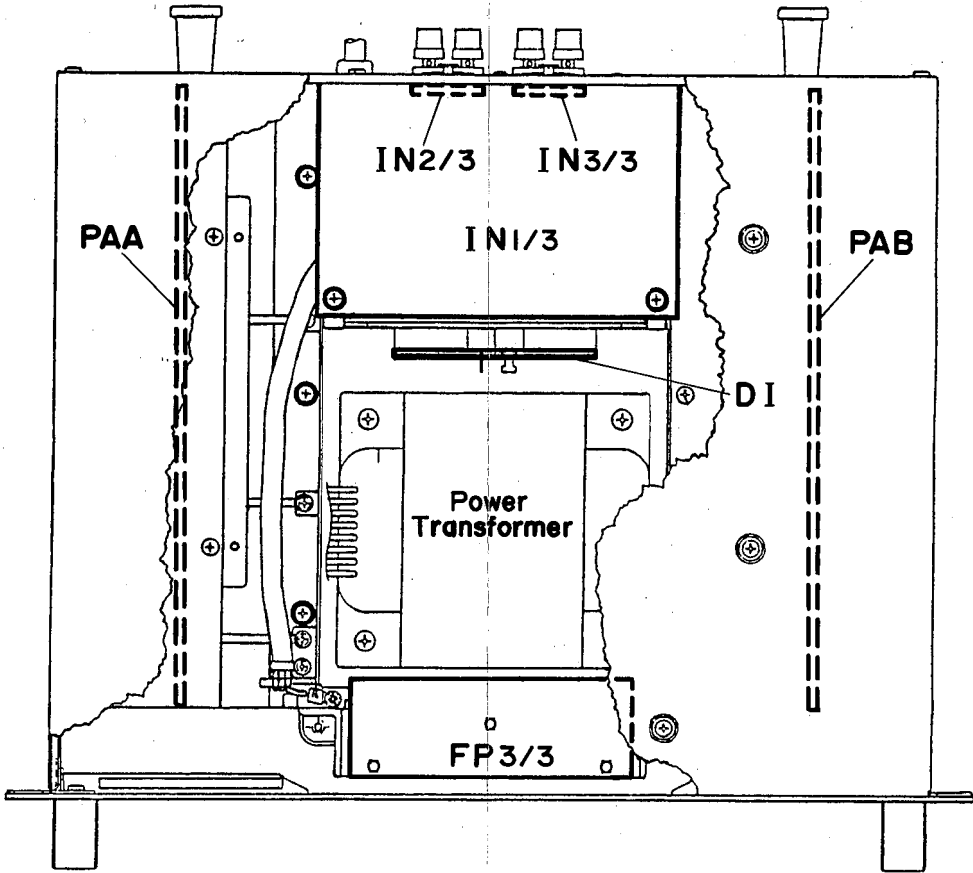
DIMENSIONS



Unit: mm (inch)

CIRCUIT BOARD LAYOUT & WIRING

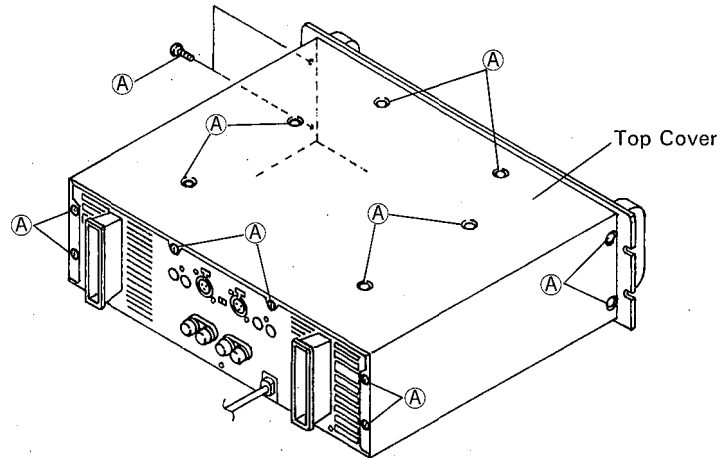




DISASSEMBLY PROCEDURE

1. Top Cover Removal

1-1. Remove the sixteen (16) screws marked in the figure as ① (4 × 8 Bind head tapping screw), then the Top cover can be removed. (Fig. 1)



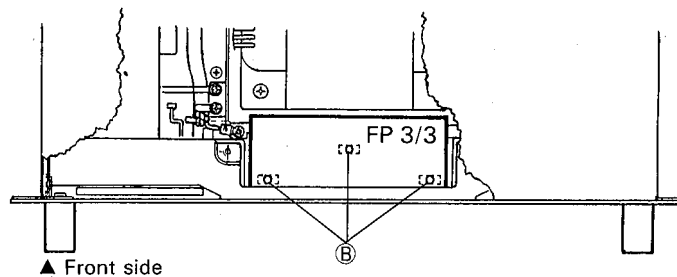
(Fig. 1)

2. FP 3/3 Circuit Board Removal

2-1. Remove the Top cover. (see procedure 1 – Top Cover Removal)

2-2. Lift the FP 3/3 circuit board up, while pushing the fin of three (3) PCB supporters marked ②, the FP 3/3 circuit board can be removed. (Fig. 2)

< Top View >



(Fig. 2)

3. Front Panel Assembly Removal

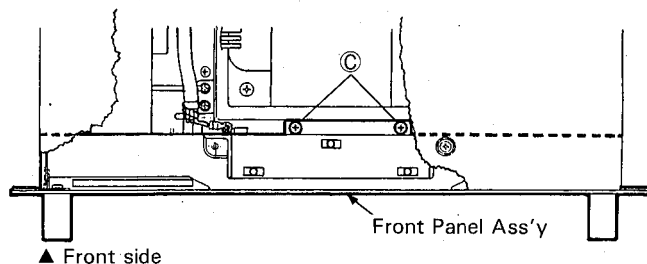
3-1. Remove the Top cover. (see procedure 1.)

3-2. Remove the FP 3/3 circuit board. (see procedure 2.)

3-3. Remove the two (2) screws marked ③ (4 × 8 Bind head screw) and four (4) screws marked ④ (4 × 12 Bind head tapping screw). (Fig. 3 and Fig. 4)

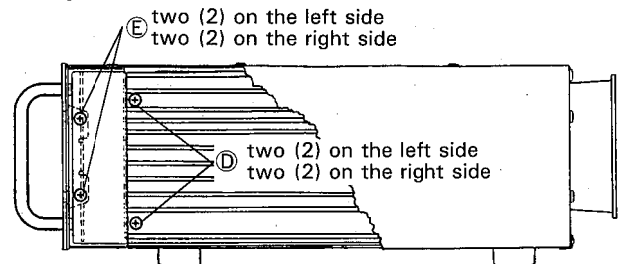
3-4. The Front panel assembly can be removed by disconnecting the wire harnesses.

< Top View >



(Fig. 3)

< Right Side View >

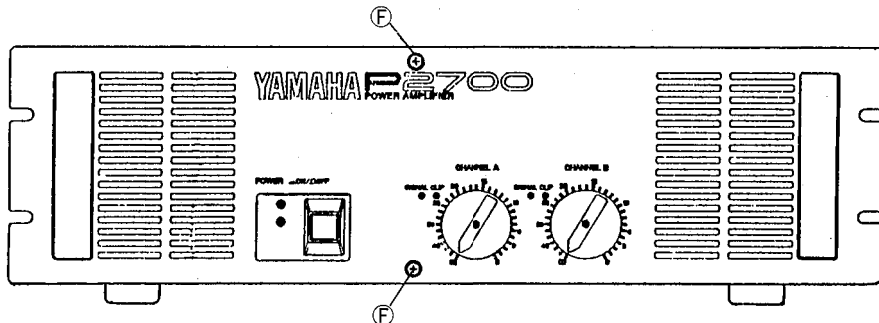


(Fig. 4)

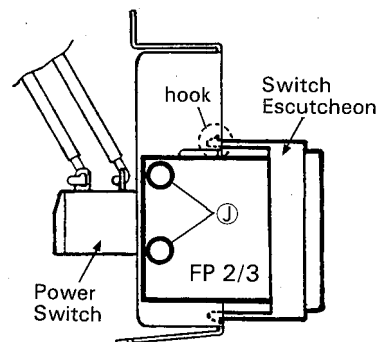
4. FP 1/3, FP 2/3 Circuit Boards and Power Switch Removal

- 4-1. Remove the Top cover. (see procedure 1.)
- 4-2. Remove the FP 3/3 circuit board. (see procedure 2.)
- 4-3. Remove the Front panel assembly. (see procedure 3.)
- 4-4. Remove the four (4) screws marked ⑤ (4 × 8 Bind head screw) and two (2) screws marked ⑥ (3 × 8 Flat head screw) to remove the Front panel. (Fig. 4 and Fig. 5)
- 4-5. Removal of FP 1/3 circuit board
 - 4-5-1. Pull out the two (2) Attenuator knobs.
 - 4-5-2. After the two (2) hex. nuts marked ③ (φ8) and plastic rivet marked ④ have been removed, the FP 1/3 circuit board can be removed. (Fig. 6)
- 4-6. Removal of FP 2/3 circuit board
 - 4-6-1. Remove the screw marked ① (4 × 8 Bind head tapping screw) to remove the switch angle with the Power switch and FP 2/3 circuit board.
 - 4-6-2. Remove the two (2) plastic rivets marked ②, the FP 2/3 circuit board can be removed from the Switch angle. (Fig. 7)
- 4-7. Removal of Power switch
 - 4-7-1. Remove the switch angle. (see procedure 4-6-1.)
 - 4-7-2. Remove the switch escutcheon, while pushing the hooks of the switch escutcheon inward. (Fig. 7)
 - 4-7-3. Pull out the push button and remove the two (2) screws marked ⑦ (3 × 8 Bind head screw), then remove the Power switch from the switch angle. (Fig. 8)

< Front View >

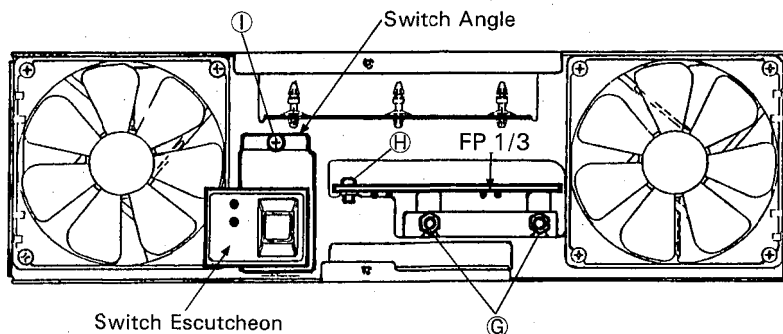


(Fig. 5)

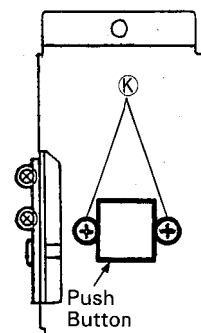


(Fig. 7)

< Front View >



(Fig. 6)



(Fig. 8)

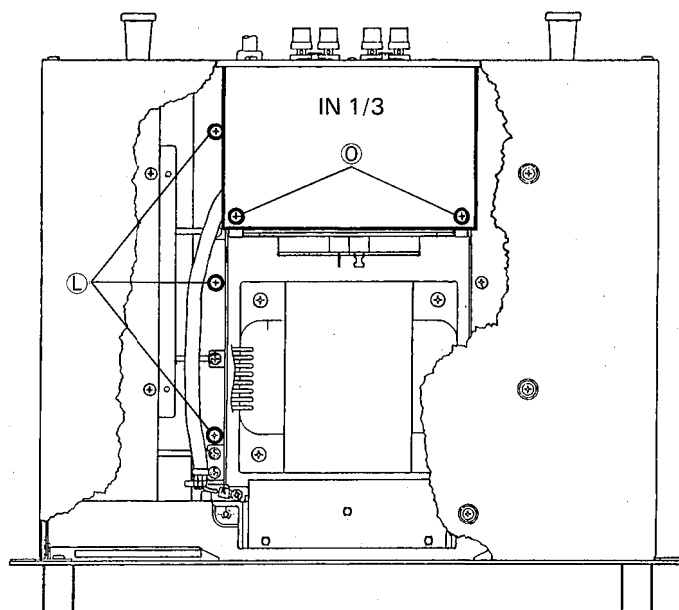
5. PAA and PAB Units Removal

- 5-1. Remove the Top cover. (see procedure 1.)
- 5-2. Remove the FP 3/3 circuit board. (see procedure 2.)
- 5-3. Remove the Front panel assembly. (see procedure 3.)
- 5-4. Remove the three (3) screws marked **L** (4 × 8 Bind head screw) and the screw marked **M** (4 × 12 Bind head tapping screw). (Fig. 9 and Fig. 10)
- 5-5. The PAA unit can be removed by disconnecting the wire harnesses.
- 5-6. The PAB unit can be removed by the same way as in the PAA unit removal.

6. PAA and PAB Circuit Boards Removal

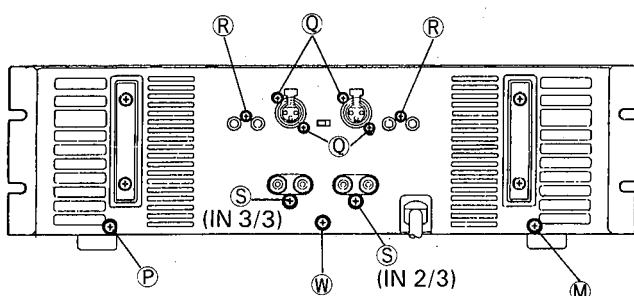
- 6-1. Remove the Top cover. (see procedure 1.)
- 6-2. Remove the FP 3/3 circuit board. (see procedure 2.)
- 6-3. Remove the Front panel assembly. (see procedure 3.)
- 6-4. To remove the PAA circuit board, remove the PAA unit.
In the case of the PAB circuit board removal, remove the PAB unit.
- 6-5. After the screws marked **N** (3 × 12 Pan head screw P2350: 8 pcs, P2700: 10 pcs) have been removed, the transistor holders and the PAA circuit board can be removed. (Fig. 11)
- 6-6. The PAB circuit board can be removed by the same way as in the PAA circuit board removal.

< Top View >



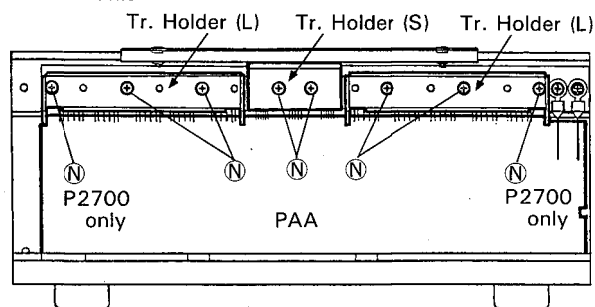
(Fig. 9)

< Rear View >



(Fig. 10)

< PAA Unit >



(Fig. 11)

7. Rear Panel Assembly Removal

- 7-1. Remove the Top cover. (see procedure 1.)
- 7-2. Remove the two (2) screws marked ① (3 × 8 Bind head tapping screw), screw marked ② (4 × 12 Bind head tapping screw), screw marked ③ (4 × 12 Bind head tapping screw) and screw marked ④ (4 × 8 Bind head tapping screw). (Fig. 9 and Fig. 10)
- 7-3. The Rear panel assembly can be removed by disconnecting the wire harnesses.

8. IN 1/3, IN 2/3 and IN 3/3 Circuit Boards Removal

- 8-1. Remove the Top cover assembly. (see procedure 1.)
- 8-2. Remove the Rear panel assembly. (see procedure 7.)
- 8-3. Removal of IN 1/3 circuit board
 - 8-3-1. Remove the four (4) screws marked ⑤ (3 × 8 Bind head screw) and the two (2) screws marked ⑥ (3 × 8 Bind head tapping screw), then remove the IN 1/3 circuit board. (Fig. 10)
- 8-4. Removal of IN 2/3 and IN 3/3 circuit boards
 - 8-4-1. The IN 2/3 and IN 3/3 circuit boards can be removed by removing the screw marked ⑦ (4 × 10 Bind head tapping screw). (Fig. 10)

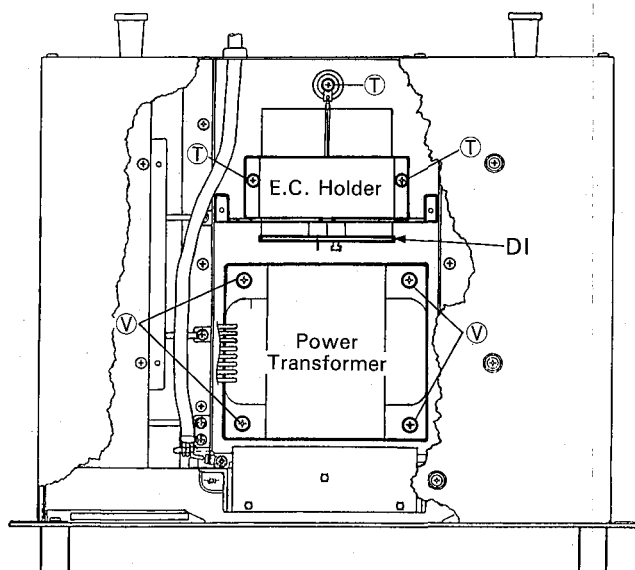
9. DI Circuit Board Removal

- 9-1. Remove the Top cover assembly. (see procedure 1.)
- 9-2. Remove the Rear panel assembly. (see procedure 7.)
- 9-3. Remove the three (3) screws marked ⑧ (4 × 8 Bind head screw) to remove the holder retaining the electrolytic cap. with DI circuit board. (Fig. 12)
- 9-4. The DI circuit board can be removed from the holder by removing the screw ⑨ (4 × 16 Bind head screw). (Fig. 13)

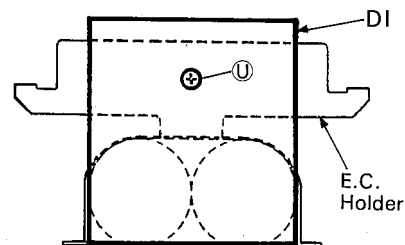
10. Power Transformer Removal

- 10-1. Remove the Top cover. (see procedure 1.)
- 10-2. Remove the four (4) screws marked ⑩ (5 × 10 Bind head screw) and disconnect the wire harnesses, the Power transformer can be removed. (Fig. 12)

< Top View >



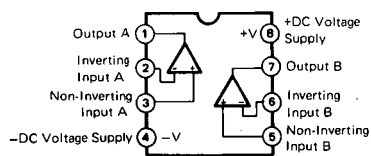
(Fig. 12)



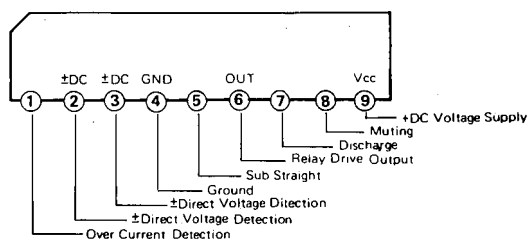
(Fig. 13)

IC BLOCK DIAGRAM

- **M5238P** (XA013001)
Dual Operational Amplifier



- **TA7317P** (IG034800)
Relay Driver



ADJUSTMENTS

Before performing any following adjustments, set the unit as follows:

1. Set the ATTENUATIONS at "0".
2. Input terminal: XLR pin 2 is HOT, pins 1 and 3 GROUND.
3. MODE switch: STEREO.
4. Connect 4 ohm across each of the OUTPUT terminals under test.

ADJUSTMENT SPECIFICATIONS

Before testing for specifications, confirm AC line voltage is the rated value $\pm 10\%$.

First GROUND the INPUT terminal.

Adjustment item	Adjust	Test Point	Rating	Conditions
IDLE CURRENT	VR201	TP + -	9 mV $\pm$ 1 mV	
	VR301	TP + -	9 mV $\pm$ 1 mV	
	VR201	TP + -	15 mV $\pm$ 2 mV	Unit ON 15 minutes
	VR301	TP + -	15 mV $\pm$ 2 mV	Unit ON 15 minutes
DC OFFSET	OUTPUT terminal A		0 V $\pm$ 0.5 V	
	OUTPUT terminal B		0 V $\pm$ 0.5 V	

* VR201 and VR202, TP+ and TP- are located on the PAA and PAB circuit boards.

1. MUTING TEST

After applying power to the unit, the PROTECTION indicator should remain ON for 6 ± 2 seconds and then the indicator should go out.

2. GAIN TEST

When a sinewave of 1 kHz at -10 dB is applied to the INPUT, the OUTPUT should be $+22.3 \pm 1.5$ dB for P2700 or $+20.0 \pm 1.5$ dB for P2350.

3. FREQUENCY RESPONSE TEST

When a sinewave of 20 Hz, 1 kHz and 20 kHz at -10 dB is applied to the INPUT, the OUTPUT should be as follows: (taking the 1 kHz as reference).

20 Hz: $0 \text{ dB} \pm 0.5 \text{ dB}$

20 kHz: $-0.5 \text{ dB} \pm 0.5 \text{ dB}$

4. HARMONIC DISTORTION TEST

When a high quality sinewave is applied at 20 Hz, 1 kHz and 20 kHz, the HARMONIC DISTORTION should be as follows:

Power output level (4 ohm)	T.H.D		
	20 Hz	1 kHz	20 kHz
500W + 500W (P2700)	$\leq 0.1\%$	$\leq 0.01\%$	$\leq 0.1\%$
250W + 250W (P2350)	$\leq 0.1\%$	$\leq 0.01\%$	$\leq 0.1\%$

5. CHANNEL SEPARATION TEST ($R_L = 8 \text{ ohm}$)

5-1 Input a sinewave of -5 dB, 20 kHz into channel A.

5-2 Short the INPUT for channel B with a 600 ohm load.

5-3 Set the OUTPUT of channel A at a reference of 0 dB.

5-4 If channel B ATTENUATOR is set to the same as channel A, channel B should be less than -70 dB.

6. RESIDUAL NOISE

6-1 Set the INPUT ATTENUATOR to "0".

6-2 Short the INPUT with a 600 ohm load, OUTPUT load 4 ohm.

6-3 Measure the OUTPUT, RESIDUAL NOISE level should be -68 dB or lower.

6-4 Set the INPUT ATTENUATOR to MINIMUM, the RESIDUAL should be less than -75 dB.

7. SIGNAL INDICATOR TEST

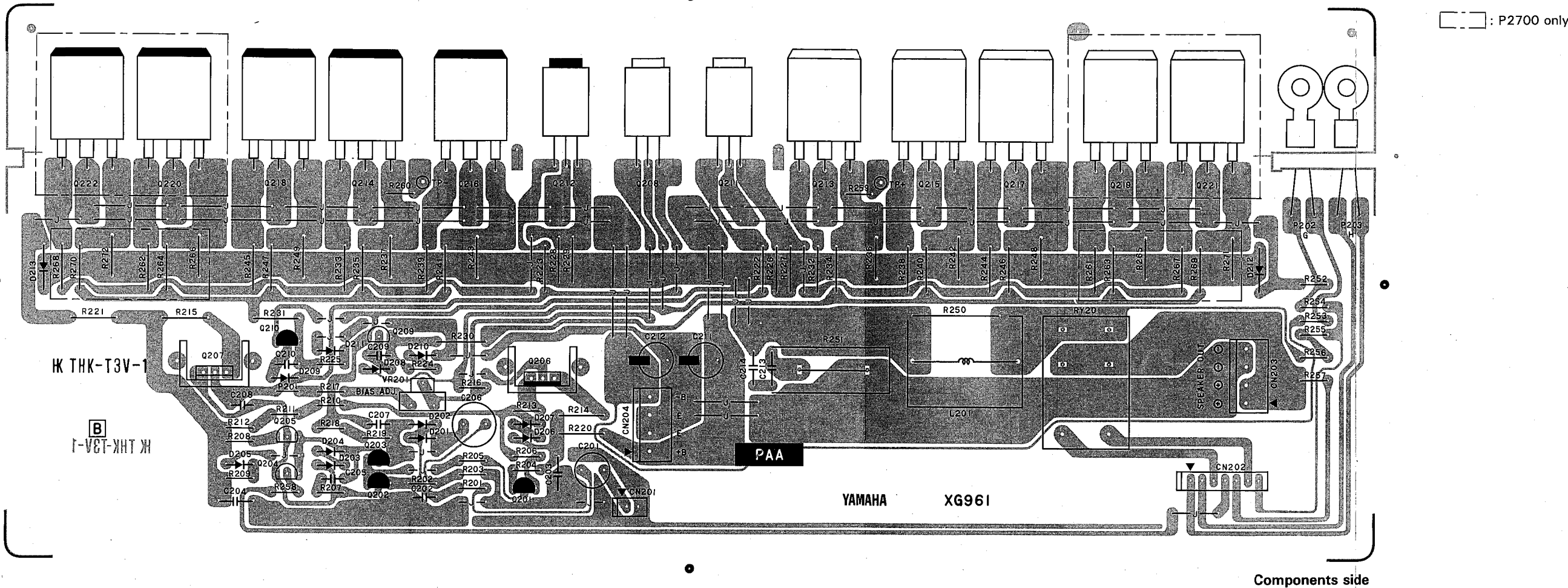
When a sinewave of 1 kHz is input signal level is adjusted to equal to or greater than 2.0 volt output, the SIGNAL INDICATOR should be ON.

8. CLIPPING INDICATOR TEST

When a sinewave of 1 kHz signal is adjusted to produce equal or greater than 1.0% harmonic distortion on the OUTPUT, the CLIP INDICATOR should be ON.

CIRCUIT BOARDS

PAA Circuit Board

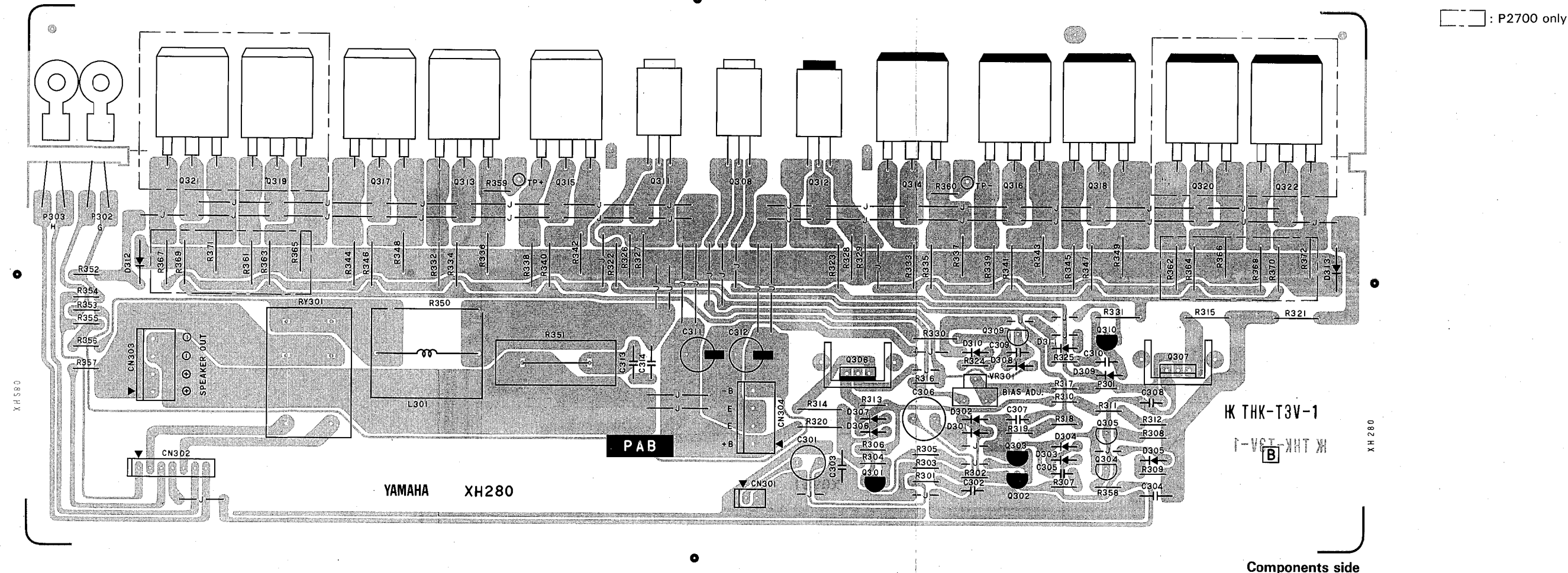


Notes)

Circuit Board:		PAA (VI997600) XG961B0 (P2350) PAA (VI997500) XG961B0 (P2700)			
1. Transistor	Q201~203, 210:	2SA970 GR, BL (IA097000)	7. Trimmer Potentiometer VR201:	B470 3P H1052A (HT410370) BIAS ADJ.	
	Q204, 205, 209:	2SC2240 GR, BL (IC224000)			
	Q206:	2SA1546 (IX805240)			
	Q207:	2SC4001 (IX805250)			
	Q208:	2SC3298 (IC329810)			
	Q211 (P2350):	2SC3298 (IC329810)			
	(P2700):	2SC3298B (IC329850)			
	Q212 (P2350):	2SA1306 (IA130610)			
	(P2700):	2SA1306B (IA130650)			
	Q213, 215, 217:	2SC3856 (IX609760)			
Q214, 216, 218:	2SA1492 (IX609750)	8. Maica Cap. C207: C208:	15P 500V J (FU351150) 5P 500V J (FU350500)		
Q219, 221:	2SC3856 (IX609760)				
Q220, 222:	2SA1492 (IX609750)				
2. Diode	D201~209:		1SS133 (IF003450)	9. Mylar Cap. C203, 204, 213, 214:	0.1μ 100V K (FZ005200)
	D210, 211:		1SS146 (VI783000)		
	D212, 213:		1S1888 (IH000320)		
3. Flame Proof Carbon Resistor	R214, 215:		8Ω 1/4W J (HV354820)	10. Electrolytic Cap. C211, 212 (P2350): (P2700):	4.7μ 100V (UH296470) 4.7μ 160V (UJ706470)
	R220, 221:		10Ω 1/4W J (HV354100)		
	R222, 223,				
	226~229:	220Ω 1/4W J (HV355220)			
	R230, 231:	3.3KΩ 1/4W J (HV356330)			
	R232, 233, 238,				
	239, 244, 245:	4.7Ω 1/4W J (HV353470)			
	R234, 235, 240,				
	241, 246, 247:	100Ω 1/4W J (HV355100)			
	R261, 262, 267, 268:	4.7Ω 1/4W J (HV353470) (P2700 only)			
R263, 264, 269, 270:	100Ω 1/4W J (HV355100) (P2700 only)	11. Coil L201:	2mH GD90058 GY (GD900580)		
4. Wire Wound Resistor	R236, 237, 242,			12. Relay RY201:	DC24V JC2AD (KC001410)
	243, 248, 249:		0.47Ω 5W K (HZ003600)		
	R251:		10Ω 5W (HM654100)		
	R265, 266, 271, 272:	0.47Ω 5W K (HZ003600) (P2700 only)			
5. Metal Oxide Film Resistor	R250:	4.7Ω 2W J (VC769900)			
	6. Positive Thermistor	P201:	PTH59F04BE471TS (VE404900)		
P202:		PTH487A01BG471 (VI518000)			
P203:		PTH487A01BH471 (VJ087200)			

P2350 : 3NA-VI99760
P2700 : 3NA-VI99750

● PAB Circuit Board



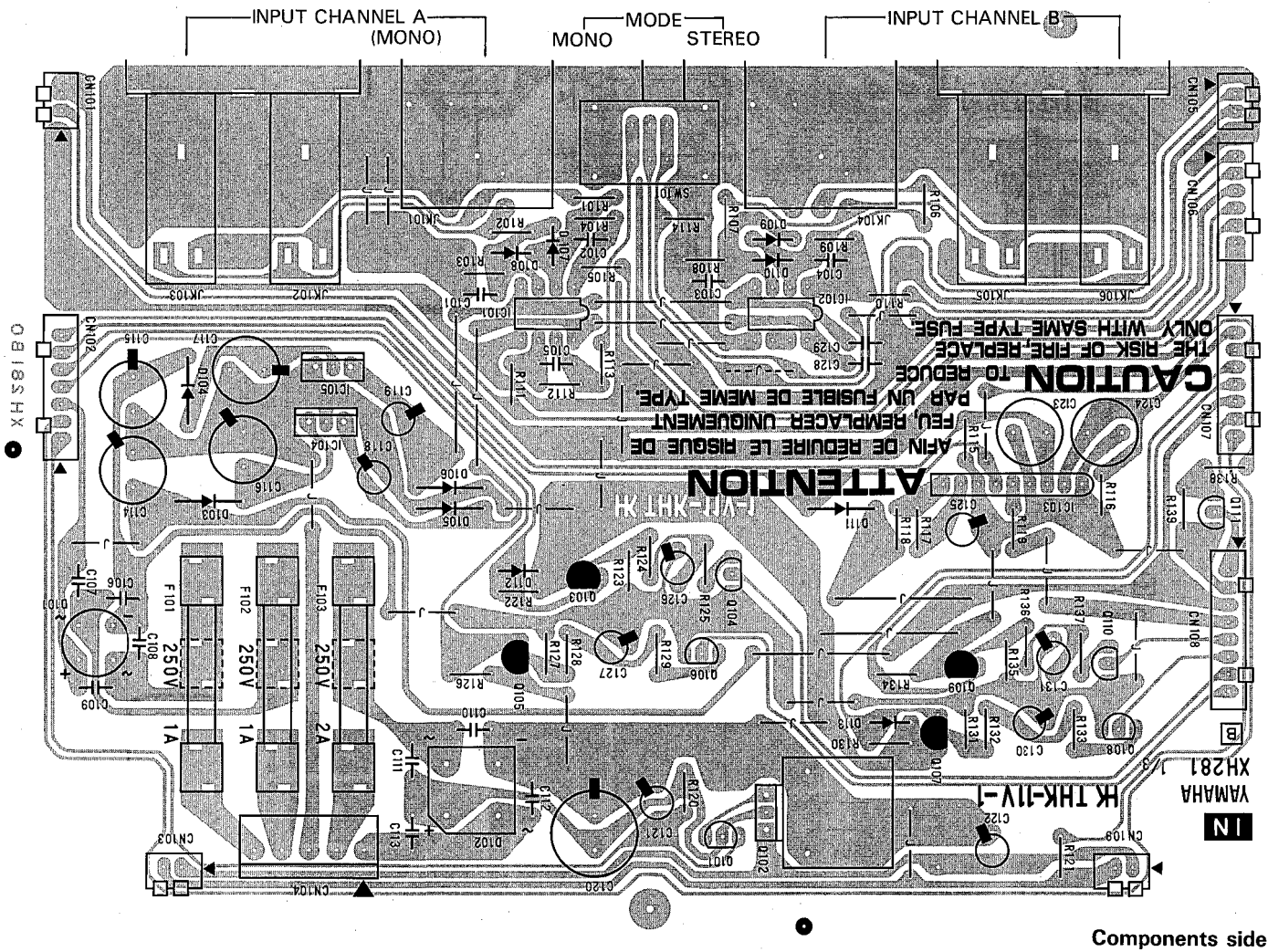
Notes)

Circuit Board:	
PAB (VI997900) XH280B0 (P2350)	
PAB (VI997800) XH280B0 (P2700)	
1. Transistor	
Q301 ~ 303, 310:	2SA970 GR, BL (IA097000)
Q304, 305, 309:	2SC2240 GR, BL (IC224000)
Q306:	2AA1546 (IX805240)
Q307:	2SC4001 (IX805250)
Q308:	2SC3298 (IC329810)
Q311 (P2350):	2SC3298 (IC329810)
(P2700):	2SC3298B (IC329850)
Q312 (P2350):	2SA1306 (IA130610)
(P2700):	2SA1306B (IA130650)
Q313, 315, 317:	2SC3856 (IX609760)
Q314, 316, 318:	2SA1492 (IX609750)
Q319, 321:	2SC3856 (IX609760) (P2700 only)
Q320, 322:	2SA1492 (IX609750) (P2700 only)
2. Diode	
D301 ~ 309:	1SS133 (IF003450)
D310, 311:	1SS146 (VI783000)
D312, 313:	1S1888 (IH000320)

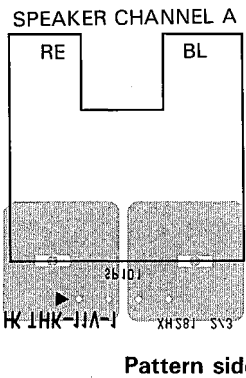
3. Flame Proof Carbon Resistor	
R314, 315:	82Ω 1/4W J (HV354820)
R320, 321:	10Ω 1/4W J (HV354100)
R322, 323,	
326 ~ 329:	220Ω 1/4W J (HV355220)
R330, 331:	3.3KΩ 1/4W J (HV356330)
R332, 333, 338,	
339, 344, 345:	4.7Ω 1/4W J (HV353470)
R334, 335, 340,	
341, 346, 347:	100Ω 1/4W J (HV355100)
R361, 362, 367, 368:	4.7Ω 1/4W J (HV353470) (P2700 only)
R363, 364, 369, 370:	100Ω 1/4W J (HV355100) (P2700 only)
4. Wire Wound Resistor	
R336, 337, 342,	
343, 348, 349:	0.47Ω 5W K (HZ003600)
R351:	10Ω 5W (HM654100)
R365, 366, 371, 372:	0.47Ω 5W K (HZ003600) (P2700 only)
5. Metal Oxide Film Resistor	
R350:	4.7Ω 2W J (VC769900)
6. Positive Thermistor	
P301:	PTH59F04BE471TS (VE404900)
P302:	PTH487A01BG471 (VI518000)
P303:	PTH487A01BH471 (VJ087200)

7. Trimmer Potentiometer	
VR301:	B470 3P H1052A (HT410370) BIAS ADJ.
8. Mica Cap.	
C307:	15P 500V J (FU351150)
C308:	5P 500V J (FU350500)
9. Mylar Cap.	
C303, 304, 313, 314:	0.1μ 100V K (FZ005200)
10. Electrolytic Cap.	
C311, 312 (P2350):	4.7μ 100V (UH296470)
(P2700):	4.7μ 160V (UJ706470)
11. Coil	
L301:	2mH GD90058 GY (GD900580)
12. Relay	
RY301:	DC24V JC2AD (KC001410)

● IN Circuit Boards
IN 1/3

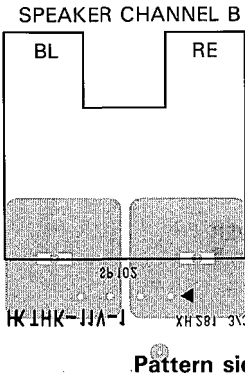


IN 2/3



Pattern side

IN 3/3



Pattern side

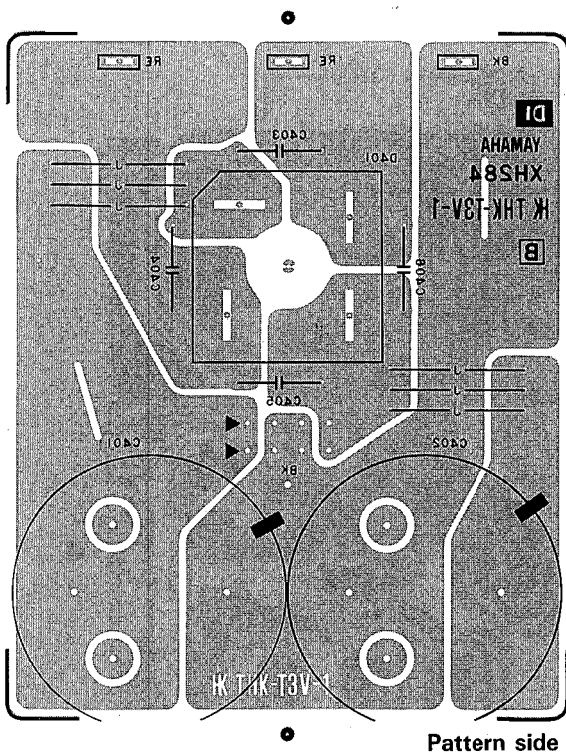
Notes)

- Circuit Board: IN (VJ143200) XH281B0 (P2350 J)
IN (VJ143300) XH281B0 (P2350 U, C)
IN (VJ143500) XH281B0 (P2350 H, B)
IN (VI996000) XH281B0 (P2700 J)
IN (VI996100) XH281B0 (P2700 U)
IN (VI997000) XH281B0 (P2700 C)
IN (VI996200) XH281B0 (P2700 H, B)
- Circuit Board:
- IC
IC101, 102: M5238P (XA013001) OP AMP.
IC103: TA7317P (IG034800) SP PROTECTION
IC104: NJM7815FA (XD853A00) REGULATOR
IC105: NJM7915FA (XD854A00) REGULATOR
 - Transistor
Q101, 104, 106, 108, 110, 111: 2SC2240 GR, BL (IC224000)
Q102: 2SC3298 (IC329840)
Q103, 105, 107, 109: 2SA970 GR, BL (IA097000)
 - Diode
D103~106, 111: 10E-1 (IH001540)
D107~110, 112, 113: 1SS133 (IF003450)

- Diode Stack
D101: 1G4B1 1.5A 400V (IH001400)
D102: S2VB20 2A 200V (IH001120)
- Metal Film Resistor
R101, 102, 106, 107: 15KΩ 1/5W F (VA074600)
R103, 104, 108, 109: 12KΩ 1/5W F (VB067600)
R111, 112, 114: 51KΩ 1/5W F (VB068900)
- Ceramic Cap.
C106~113: 0.0047μ 500V M (FH223470)
- Electrolytic Cap.
C116, 117: 470μ 35V (UJ658470)
C120: 1000μ 25V (UJ849100)
- Slide Switch
SW101: SSP32204 (KA401280) MODE (J, U, H, B)
- Phone Jack
JK102, 103, 105, 106: HLJ1520 (LB202300) INPUT CH.A/B
- XLB Connector
JK101, 104: XLB-3-31PCV (LB302320) INPUT CHANNEL A, B

- Fuse
F101, 102 (J): T 1A 250V (KB000330)
(U, C): T 1A 250V (KB001060)
(H, B): T 1A 250V S (KB001770)
F103 (J): T 2A 250V (KB000350)
(U, C): T 2A 250V (KB001240)
(H, B): T 2A 250V S (KB001330)
- Speaker Terminal
SP101 (P2350): 2P #554 (LA005540) CHANNEL A
(P2700): MSP202-1 (VI356300) CHANNEL A
SP102 (P2350): 2P #553 (LA005530) CHANNEL B
(P2700): MSP202 (VI314700) CHANNEL B
- Marked : Jumper wire: P2700 Canadian model only

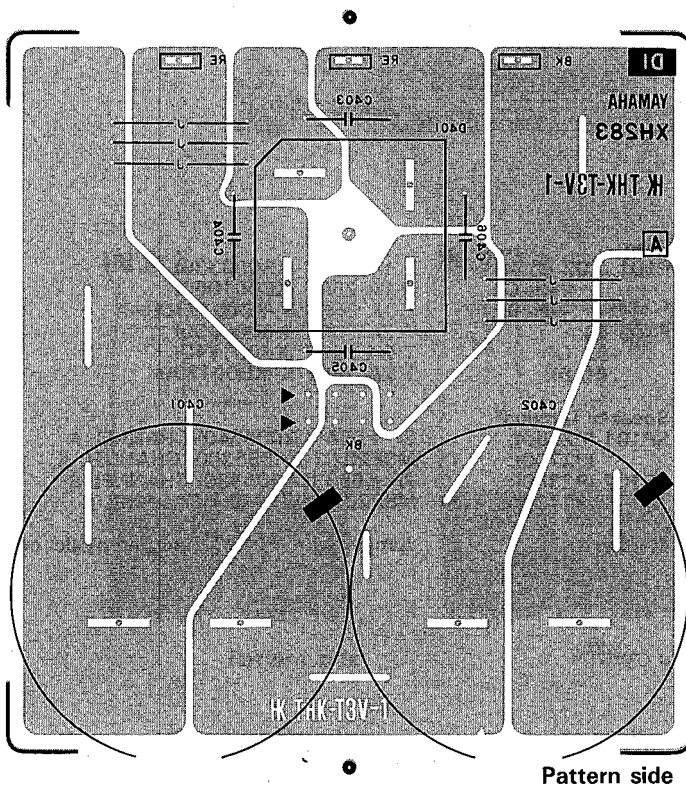
● DI Circuit Board (P2350)



Notes)

Circuit Board:	DI (VI996700) XH284B0 (P2350)
1. Diode Stack D401:	KBPC25-04 (IH000390) 20A 40V
2. Mylar Cap. C403 ~ 406:	0.01 μ 630V (FZ000650)
3. Electrolytic Cap. C401, 402:	15000 μ 80V (FZ006780)
4. Terminal:	(VA855400) 3 pcs

● DI Circuit Board (P2700)



Notes)

Circuit Board:	DI (VI996600) XH283A0 (P2700)
1. Diode Stack D401:	KBPC25-04 (IH000390) 20A 40V
2. Mylar Cap. C403 ~ 406:	0.01 μ 630V (FZ000650)
3. Electrolytic Cap. C401, 402:	18000 μ 110V (VI575500)
4. Terminal:	(VA855400) 3 pcs

FP 1/3

FP 2/3

PROTECTION

POWER

0505 R510 0506

R509

R512

R511

CN504

XH550K 12V-13A

YAMAHA

W THK 13V-1

Components side

FP BR BR BL L G501 F501 250V 15A U J J YE BR GY

XH550 3/3

[B] YAMAHA

HK THK-13V-1

N WH

CAUTION

TO REDUCE THE RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE FUSE.

ATTENTION

AFIN DE RÉDUIRE LE
RISQUE DE FEU, REMPLACER UNIQUEMENT PAR UN
FUSIBLE DE MEME TYPE.

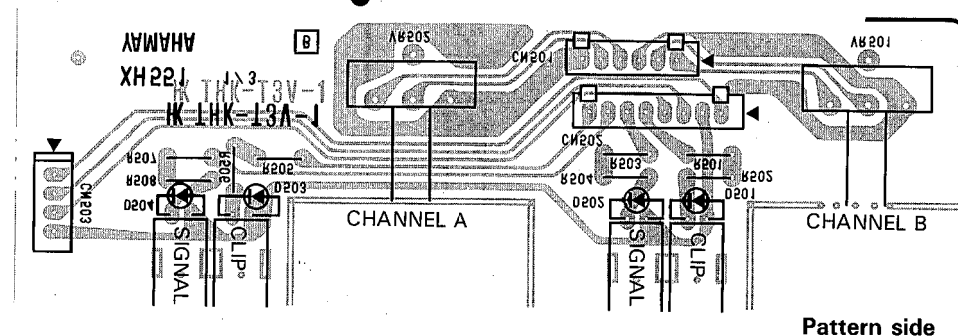
Components side

Circuit Board: FP (VJ051500) XH550B0 (P2350 J)
FP (VJ051600) XH550B0 (P2350 U, C)

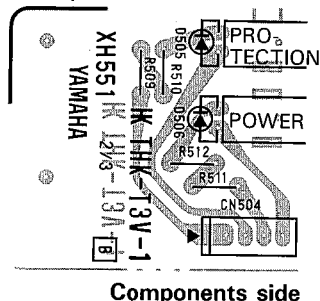
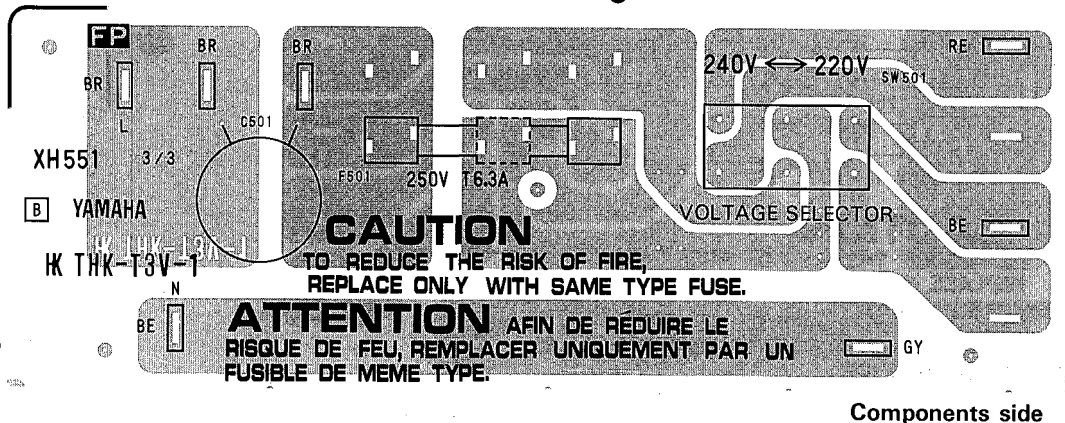
- DI (2350) : 3NA-VI99670** 
DI (P2700) : 3NA-VI99660
FP (P2350 J.U.C) : 3NA-VI99630

●FP Circuit Boards (P2350 North European & British models)

FP 1/3



FP 2/3

**FP 3/3**

Notes)

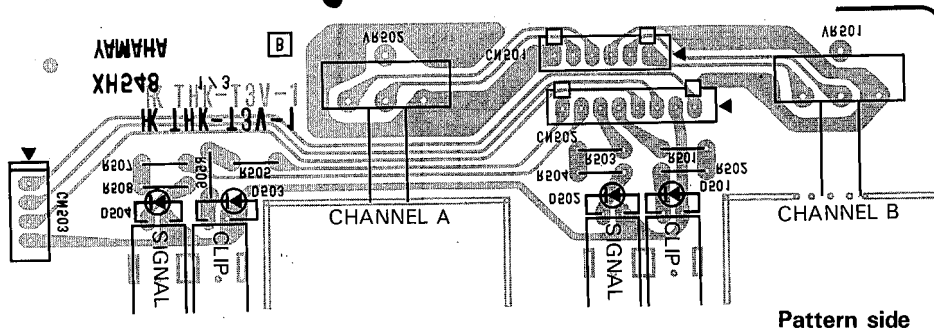
Circuit Board: FP (VJ051700) XH551B0 (P2350 H, B)

1. LED
D501, 503, 505, 506: TLR124 RE (IF001190) CLIP, PROTECT, POWER
D502, 504: TLG124 GR (VA767800) SIGNAL CHANNEL A, B
2. Variable Resistor
VR501, 502: 5K (VI575600) Input Att. A, B
3. Ceramic Cap.
C501: 0.01 μ 400V (FI384100)
4. Slide Switch
SW501: VOLTAGE SELECT (VE206000)

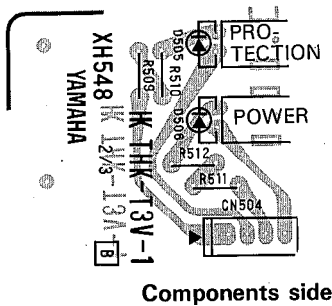
5. Fuse
F501: T6.3A 250V S (KB000770)
6. Terminal: (VA855400) 7 pcs

● FP Circuit Boards (P2700 Japanese & Canadian models)

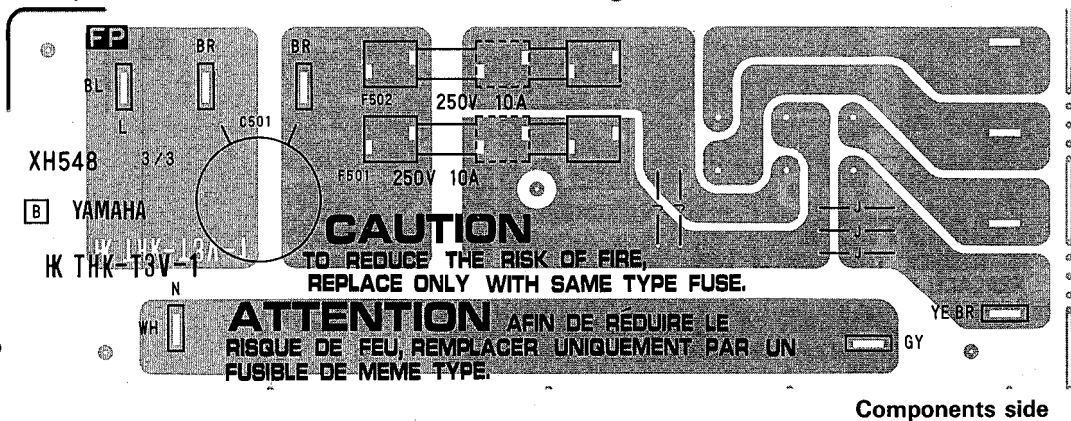
FP 1/3



FP 2/3



FP 3/3

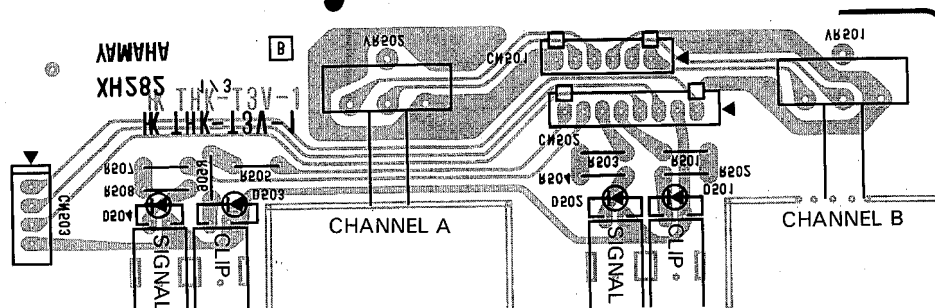


Notes)

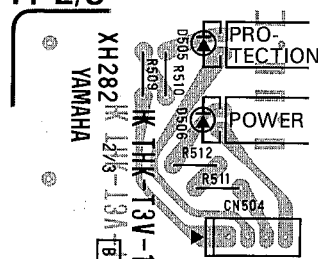
Circuit Board: FP (VI996300) XH548B0 (P2700 J)
FP (VJ143600) XH548B0 (P2700 C)

- LED
D501, 503, 505, 506: TLR124 RE (IF001190) CLIP, PROTECT, POWER
D502, 504: TLG124 GR (VA767800) SIGNAL CHANNEL A, B
- Variable Resistor
VR501, 502: 5K (VI575600) Input Att. A, B
- Ceramic Cap.
C501: 0.01 μ 400V (FI384100)
- Fuse
F501, 502 (J): 10A 250V (KB001490)
(C): 10A 250V (KB001390)
- Terminal: (VA855400) 6 pcs

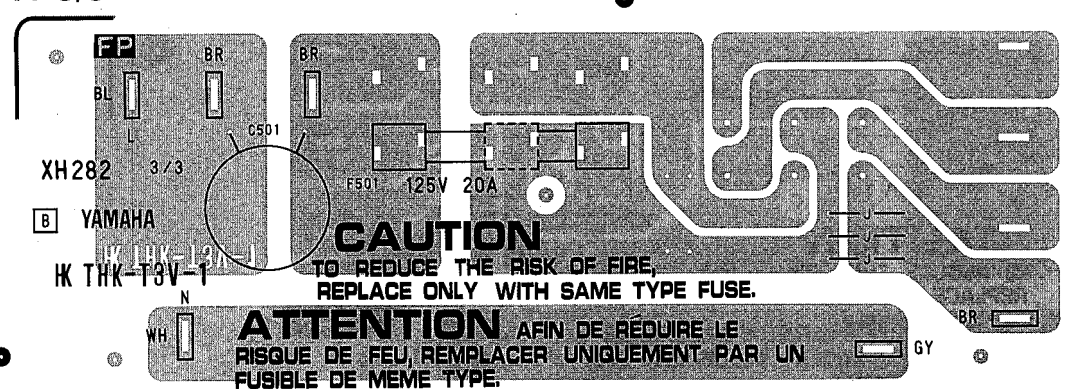
● **FP Circuit Boards (P2700 U.S. model)**

FP 1/3

FP 2/3



FP 3/3



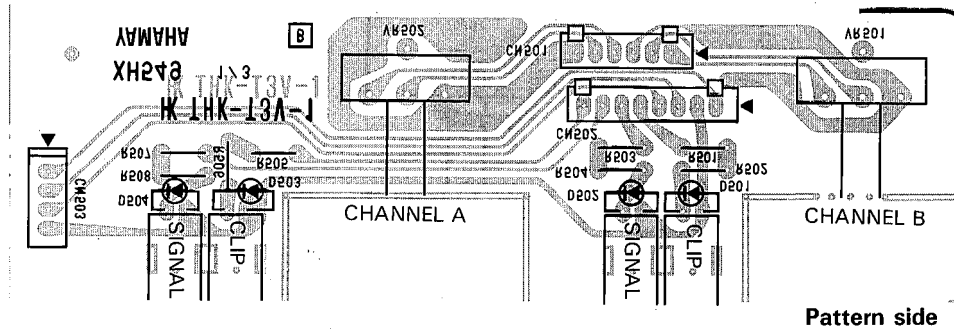
Notes)

Circuit Board: FP (VI996400) XH282B0 (P2700 U)

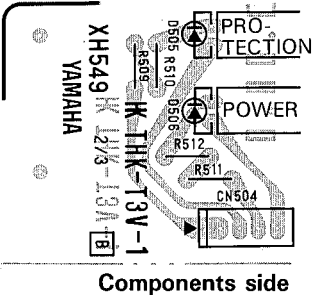
1. LED
D501, 503, 505, 506: TLR124 RE (IF001190) CLIP, PROTECT, POWER
D502, 504: TLG124 GR (VA767800) SIGNAL CHANNEL A, B
2. Variable Resistor
VR501, 502: 5K (VI575600) Input Att. A, B
3. Ceramic Cap.
C501: 0.01 μ 400V (FI384100)
4. Fuse
F501: 20A 125V (VJ087400)
5. Terminal: (VA855400) 6 pcs

● FP Circuit Boards (P2700 North European & British models)

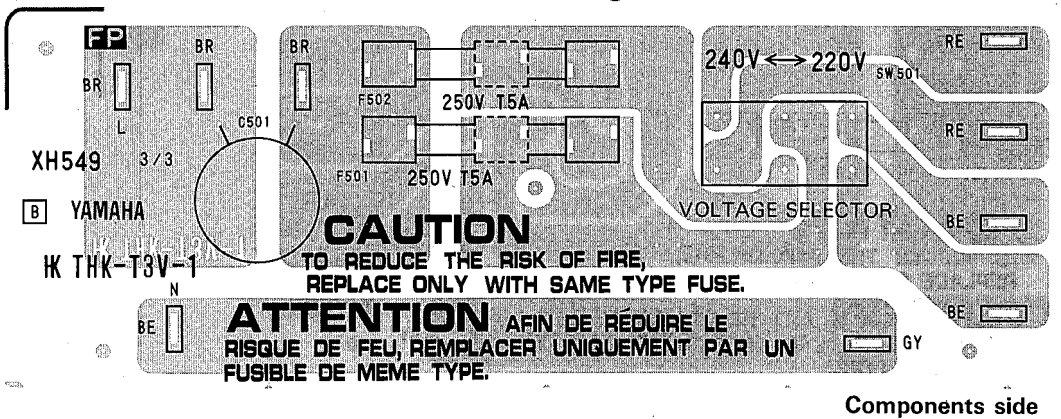
FP 1/3



FP 2/3



FP 3/3



Notes)

- | | | | |
|----------------------|--|--------------|----------------------------------|
| Circuit Board: | FP (VI996500) XH549B0 (P2700 H, B) | 5. Fuse | F501, 502: T5A 250V S (KB000780) |
| 1. LED | D501, 503, 505, 506: TLR124 RE (IF001190) CLIP, PROTECT, POWER | 6. Terminal: | (VA855400) 9 pcs |
| | D502, 504: TLG124 GR (VA767800) SIGNAL CHANNEL A, B | | |
| 2. Variable Resistor | VR501, 502: 5K (VI575600) Input Att. A, B | | |
| 3. Ceramic Cap. | C501: 0.01 μ 400V (FI384100) | | |
| 4. Slide Switch | SW501: VOLTAGE SELECT (VE206000) | | |

POWER AMPLIFIER

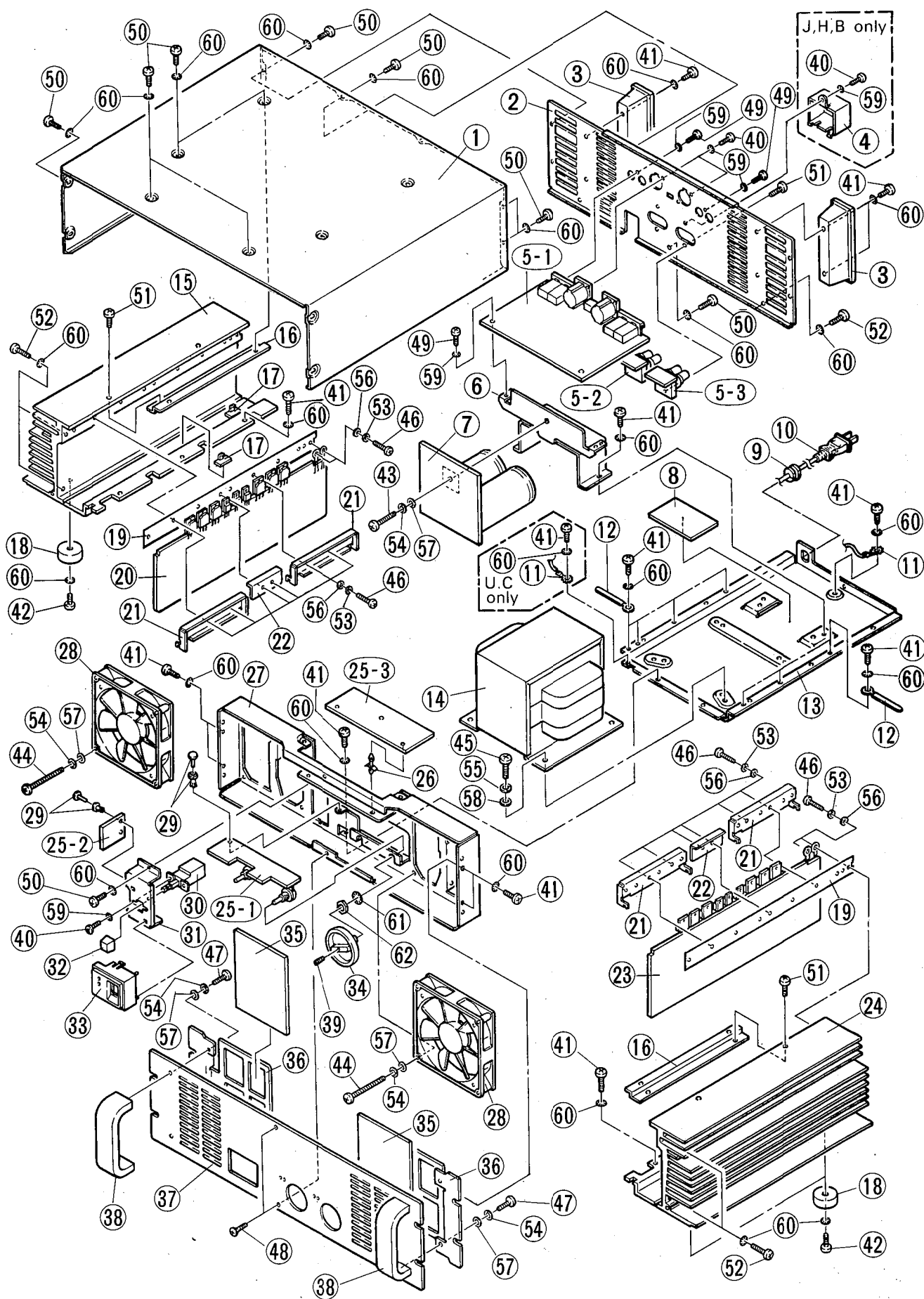
P2350

PARTS LIST

Notes DESTINATION ABBREVIATIONS

J : Japanese model	A : Australian model
U : U.S. model	E : European model
C : Canadian model	D : West German model
X : General model	B : British model
M : South African model	I : Indonesian model
H : North European model	

[J,H,B only]



Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
1	VJ054200	Top Cover	トップカバー	P2350	
2	VJ055300	Rear Panel	リアパネル	J	
2	VJ055400	Rear Panel	リアパネル	U	
2	VJ055500	Rear Panel	リアパネル	C	
2	VJ055600	Rear Panel	リアパネル	H	
2	VJ055700	Rear Panel	リアパネル	B	
3	CB808650	Cord Reel	コードリール		03
4	VE845600	Cover, SP Terminal	端子カバー	J, H, B	03
5	VJ143200	Circuit Board	IN	J	
5	VJ143300	Circuit Board	IN	U, C	
5	VJ143500	Circuit Board	IN	H, B	
5-1		Circuit Board	IN 1/3		
5-2		Circuit Board	IN 2/3		
5-3		Circuit Board	IN 3/3		
6	VJ054400	Holder, E.C.	ケミコンホルダー		
7	V1996700	Circuit Board	DI		
8	VJ057400	Spacer, E.C.	ケミコンスペーサー		
9	CB806850	Cord Strain Relief	コードストッパー	J	02
9	VB669000	Cord Strain Relief	コードストッパー	U, C	02
9	CB032840	Cord Strain Relief	コードストッパー	H, B	01
10	NG000610	AC Cord	電源コード		06
10	VD280500	AC Cord	電源コード	U, C	08
10	VD280100	AC Cord	電源コード	H	07
10	VH890300	AC Cord	電源コード	B	09
11	LA003690	Lug Terminal	電源プラグ端子	2pcs	01
12	CB817510	Cord Clamper	S-14B	7pcs	01
13	VJ078400	Chassis, Transformer	トランスシャーシ	J	
13	VJ078500	Chassis, Transformer	トランスシャーシ	U, C	
13	VJ078600	Chassis, Transformer	トランスシャーシ	H, B	
14	XH244A00	Power Transformer	電源トランス	J	
14	XH245A00	Power Transformer	電源トランス	U, C	
14	XH246A00	Power Transformer	電源トランス	H, B	
15	VJ054500	Heat Sink	放熱板(左)		
16	VJ226000	Angle Bracket, Heat Sink	ヒートシンクアングル		
17	CB095100	Holder, Cord	ヒードキープ	4pcs	01
18	CB806590	Foot	ABS (BL)		01
19	VJ098900	Insulation Sheet	放熱シート		
20	V1997600	Circuit Board	PAA		
21	VJ054600	Holder-L, Transistor	P A A シート		
22	VJ054700	Holder-S, Transistor	トランジスタ押え金具(大)		
23	V1997900	Circuit Board	トランジスタ押え金具(小)		
24	VJ225800	Heat Sink	P A B シート		
25	VJ051500	Circuit Board	放熱板(右)		
25	VJ051600	Circuit Board	F P シート	J	
25	VJ051700	Circuit Board	F P シート	U, C	
25	VJ051700	Circuit Board	F P シート	H, B	
25-1		Circuit Board	F P シート 1/3		
25-2		Circuit Board	F P シート 2/3		
25-3		Circuit Board	F P シート 3/3		
26	CB035390	Supporter	サポーター	3pcs	01
27	VJ055800	Sub Chassis	サブシャーシ		
28	VJ290100	Fan Assembly	ファン Ass'y		
29	CB602970	Plastic Rivet	プラスチックリベット	3pcs	01
30	KA804970	Push Switch	ブッシュスイッチ	POWER (J)	06
30	VG023100	Push Switch	ブッシュスイッチ	POWER (U)	
30	KA804980	Push Switch	ブッシュスイッチ	POWER (C)	06
30	KA804990	Push Switch	ブッシュスイッチ	POWER (H, B)	06
31	VJ056400	Angle Bracket, SW	スイッチアングル		
32	CB812380	Push Button	ブッシュボタン	POWER	01
33	VJ056500	Escutcheon, SW	スイッチエスカッション		
34	VJ099000	Attenuator Knob	アッテネーターノブ	Input Att. A/B	
35	VJ057300	Fan Filter	ファンフィルター		
36	VJ056300	Panel Angle	パネルアングル		
37	VJ056100	Front Panel	フロントパネル		
38	VJ056200	Handle	ハンドル		
39	VJ099100	Set Screw	4.0×8 FCM3BL	すりわり付止めネジ	
40	ED330086	Bind Head Screw	3.0×8 FCM3BL	バインド小ネジ	01
41	ED340086	Bind Head Screw	4.0×8 FCM3BL	バインド小ネジ	01
42	ED340106	Bind Head Screw	4.0×10 FCM3BL	バインド小ネジ	01
43	ED340166	Bind Head Screw	4.0×16 FCM3BL	バインド小ネジ	01
44	VE702700	Bind Head Screw	4.0×35 FCM3BL	バインド小ネジ	
45	ED350106	Bind Head Screw	5.0×10 FCM3BL	バインド小ネジ	01
46	EA030126	Pan Head Screw	3.0×12 ZMC2Y	ナベ小ネジ	01
47	EA340106	Pan Head Screw	4.0×10 FCM3BL	ナベ小ネジ	01
48	EB330086	Flat Head Screw	3.0×8 FCM3BL	皿小ネジ	01
49	EI330086	Bind Head Tapping Screw	3.0×8 FCM3BL	ハ・イント・タッピ・ンク・ネジ	01
50	EI340086	Bind Head Tapping Screw	4.0×8 FCM3BL	ハ・イント・タッピ・ンク・ネジ	01
51	EI340106	Bind Head Tapping Screw	4.0×10 FCM3BL	ハ・イント・タッピ・ンク・ネジ	01
52	EI340126	Bind Head Tapping Screw	4.0×12 FCM3BL	ハ・イント・タッピ・ンク・ネジ	01
53	EV300036	Spring Washer	φ 3.0 ZMC2Y	バネ座金	01

* New Parts (新規部品)

ランク : Japan only

[illegible]

* New Parts (新規部品)

ランク : Japan only

ELECTRICAL PARTS

Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
	VI997600	Circuit Board	P A A シー ト	P2350	
	VI997900	Circuit Board	P A B シー ト		
	VI996700	Circuit Board	D I シー ト		
	VJ143200	Circuit Board	I N シー ト	J	
	VJ143300	Circuit Board	I N シー ト	U, C	
	VJ143500	Circuit Board	I N シー ト	H, B	
	VJ051500	Circuit Board	F P シー ト	J	
	VJ051600	Circuit Board	F P シー ト	U, C	
	VJ051700	Circuit Board	F P シー ト	H, B	
	VI997600	Circuit Board	P A A シー ト		
	IA097000	Transistor	ト ラ ン ジ ス タ		03
	IC224000	Transistor	ト ラ ン ジ ス タ		03
	IC329810	Transistor	ト ラ ン ジ ス タ		03
	IX805240	Transistor	ト ラ ン ジ ス タ		03
	IX805250	Transistor	ト ラ ン ジ ス タ		03
	IA130610	Transistor	ト ラ ン ジ ス タ		03
	IX609750	Transistor	ト ラ ン ジ ス タ		05
	IX609760	Transistor	ト ラ ン ジ ス タ		05
	IH000320	Diode	ダ イ オード		01
	IF003450	Diode	ダ イ オード		01
	VI783000	Diode	ダ イ オード		
	HV353470	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV354100	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV354820	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV355100	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV355220	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV356330	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HZ003600	Wire Wound Resistor	セ メ ン ト 抵 抗		02
	HM654100	Wire Wound Resistor	セ メ ン ト 抵 抗		02
	VC769900	Metal Oxide Film Resistor	酸 化 金 属 被 膜 抵 抗		
	VE404900	Positive Thermistor	温 度 検 知 用 ボ ジ ス タ		04
	VI518000	Positive Thermistor	温 度 補 償 用 ボ ジ ス タ		04
	VJ087200	Positive Thermistor	温 度 補 償 用 ボ ジ ス タ		
	HT410370	Trimmer Potentiometer	半 固 定 抵 抗	BIAS ADJ	02
	FU350500	Maica Cap.	マ イ カ コ ン		01
	FU351150	Maica Cap.	マ イ カ コ ン		01
	FZ005200	Mylar Cap.	マ イ ラー コ ン		01
	UH296470	Electrolytic Cap.	ケ ミ コ ン		
	GD900580	Coil	空 芯 コ イ ル		01
	KC001410	Relay	リ レー		07
	VG864300	Heat Sink	ヒートシンク		02
	LA004870	Terminal Pin	ス ト ッ パ ー 付 カ ク ビ ン		01
	ED330086	Bind Head Screw	バ イ ン ド 小 ネ ジ	for TR (2pcs)	01
	EV303306	Spring Washer	バ ネ 座 金	for TR (2pcs)	01
	VI997900	Circuit Board	P A B シー ト		
	IA097000	Transistor	ト ラ ン ジ ス タ		03
	IC224000	Transistor	ト ラ ン ジ ス タ		03
	IC329810	Transistor	ト ラ ン ジ ス タ		03
	IX805240	Transistor	ト ラ ン ジ ス タ		03
	IX805250	Transistor	ト ラ ン ジ ス タ		03
	IA130610	Transistor	ト ラ ン ジ ス タ		03
	IX609750	Transistor	ト ラ ン ジ ス タ		05
	IX609760	Transistor	ト ラ ン ジ ス タ		05
	IH000320	Diode	ダ イ オード		01
	IF003450	Diode	ダ イ オード		01
	VI783000	Diode	ダ イ オード		
	HV353470	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV354100	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV354820	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV355100	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV355220	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HV356330	Flame Proof C. Resistor	不 燃 化 カ ー ボ ン 抵 抗		01
	HZ003600	Wire Wound Resistor	セ メ ン ト 抵 抗		02
	HM654100	Wire Wound Resistor	セ メ ン ト 抵 抗		02
	VC769900	Metal Oxide Film Resistor	酸 化 金 属 被 膜 抵 抗		
	VE404900	Positive Thermistor	温 度 検 知 用 ボ ジ ス タ		04
	VI518000	Positive Thermistor	温 度 補 償 用 ボ ジ ス タ		04
	VJ087200	Positive Thermistor	温 度 補 償 用 ボ ジ ス タ		
	HT410370	Trimmer Potentiometer	半 固 定 抵 抗	BIAS ADJ.	02
	FU350500	Maica Cap.	マ イ カ コ ン		01
	FU351150	Maica Cap.	マ イ カ コ ン		01
	FZ005200	Mylar Cap.	マ イ ラー コ ン		01
	UH296470	Electrolytic Cap.	ケ ミ コ ン		
	GD900580	Coil	空 芯 コ イ ル		01
	KC001410	Relay	リ レー		07
	VG864300	Heat Sink	ヒートシンク		02
	LA004870	Terminal Pin	ス ト ッ パ ー 付 カ ク ビ ン		01

* New Parts (新規部品)

ランク : Japan only

Ref. No.	Part No.	Description		部 品 名	Remarks	ランク
	ED330086 EV303306	Bind Head Screw Spring Washer	3.0×8 FCM3BL φ 3.0 ZMC2BL	バインド小ネジ バネ座金	for TR (2pcs) for TR (2pcs)	01 01
	VI996700 IH000390	Circuit Board. Diode Stack	DI KBPC25-04	D I シート ダイオードスタック	20A 40V	09
	FZ000650 FZ006780 VA855400 LA003690	Mylar Cap. Electrolytic Cap. Terminal Lug Terminal	0.01μ 630V 15000μ 80V	マイラーコン ケミコン P C 用カラゲ端子 ラゲ端子	3pcs 1pc.	02 10 01 01
	VJ143200 VJ143300 VJ143500 XA013001 XD853A00	Circuit Board Circuit Board Circuit Board IC IC	IN IN IN M5238P NJM7815FA	I N シート I N シート I N シート I C I C	J U.C H,B OP AMP. REGULATOR	04 03
	XD854A00 IG034800 IA097000 IC224000 IC329840	IC IC Transistor Transistor Transistor	NJM7915FA TA7317P 2SA970 GR,BL 2SC2240 GR,BL 2SC3298	I C I C トランジスタ トランジスタ トランジスタ	REGULATOR SP PROTECTION	03 04 03 03 03
	IF003450 IH001540 IH001120 IH001400 VB087600	Diode Diode Diode Stack Diode Stack Metal Film Resistor	ISS133 10E-1 S2VB20 2A 200V 1G4B1 1.5A 400V 12KΩ 1/5W F	ダイオード ダイオード ダイオードスタック ダイオードスタック 金属皮膜抵抗		01 01 03 03
	VA074600 VB068900 FH223470 UJ658470 UJ849100	Metal Film Resistor Metal Film Resistor Ceramic Cap. Electrolytic Cap. Electrolytic Cap.	15KΩ 1/5W F 51KΩ 1/5W F 0.0047μ 500V M 470μ 35V 1000μ 25V	金属皮膜抵抗 金属皮膜抵抗 セラコン (E) ケミコン ケミコン		01 02
	KA401280 LB202300 LB302320 KB000330 KB000350	Slide Switch Phone Jack XLB Connector Fuse Fuse	SSP32204 HLJ1520 XLB-3-31PCV T 1A 250V T 2A 250V	スライドスイッチ ホンジャック キヤノンジャック ヒューズ ヒューズ	MODE (J,U,H,B) INPUT CH.A/B INPUT CH.A/B J J	03 02 07 01 01
	KB001060 KB001240 KB001330 KB001770 LB201530	Fuse Fuse Fuse Fuse Fuse Holder	T 1A 250V T 2A 250V T2A 250V S T1A 250V S PC-FH1	ヒューズ ヒューズ ヒューズ ヒューズ ヒューズホルダー	U.C U.C H,B H,B	02 03 02 02 01
	LA005530 LA005540 BA808520 VG223500 ED330086 EV303306	Speaker Terminal Speaker Terminal Heat Sink Angle Bracket, Jack Bind Head Screw Spring Washer	2P #553 2P #554 T220M 25L 3.0×8 FCM3BL φ 3.0 ZMC2BL	スピーカ端子 スピーカ端子 放熱板 J A C K アングル バインド小ネジ バネ座金	SPEAKER CH.B SPEAKER CH.A	06 06 03 02 01 01
	VJ051500 VJ051600 VJ051700	Circuit Board Circuit Board Circuit Board	FP FP FP	F P シート F P シート F P シート	J U.C H,B	
	IF001190 VA767800 VI575600 FI384100 VE206000	LED LED Variable Resistor Ceramic Cap. Slide Switch	TLR124 RE TLG124 GR 5K 0.01μ 400V VOLTAGE SELECT	L E D L E D ロータリーボリューム 規格認定コン スライドスイッチ	CLIP, PROTECT, PW SIGNAL CH.A/B Input Att. A/B	02 01 01 03
	VH870600 KB001270 KB001380 KB000770 LB201530	LED Socket Fuse Fuse Fuse Fuse Holder	15A 125V 15A 250V T6.3A 250V S PC-FH1	L E D ソケット ヒューズ ヒューズ ヒューズ ヒューズホルダー	6pcs J U.C H,B	01 01 04 03 01
	VA855400	Terminal		P C 用カラゲ端子	6pcs (H:7pcs)	01
	KA804970 VG023100 KA804980	Push Switch Push Switch Push Switch	ESB-99119R-F SDDZA1 ESB-9933T-F	プッシュスイッチ プッシュスイッチ プッシュスイッチ	POWER (J) POWER (U) POWER (C)	06 06 06
	KA804990	Push Switch	ESB-9917S-F	プッシュスイッチ	POWER (H,B)	06
	VJ290100	Fan Assembly		ファン Ass'y		
	XH244A00 XH245A00 XH246A00	Power Transformer Power Transformer Power Transformer		電源トランス 電源トランス 電源トランス	J U.C H,B	
	MG000610 VD280500	AC Cord AC Cord	15A 2.1m 15A 2.5m	電源コード 電源コード	J U.C	06 08
	VD280100 VH890300	AC Cord AC Cord	6A 2.5m 6A 2.5m	電源コード 電源コード	H B	07 09

POWER AMPLIFIER

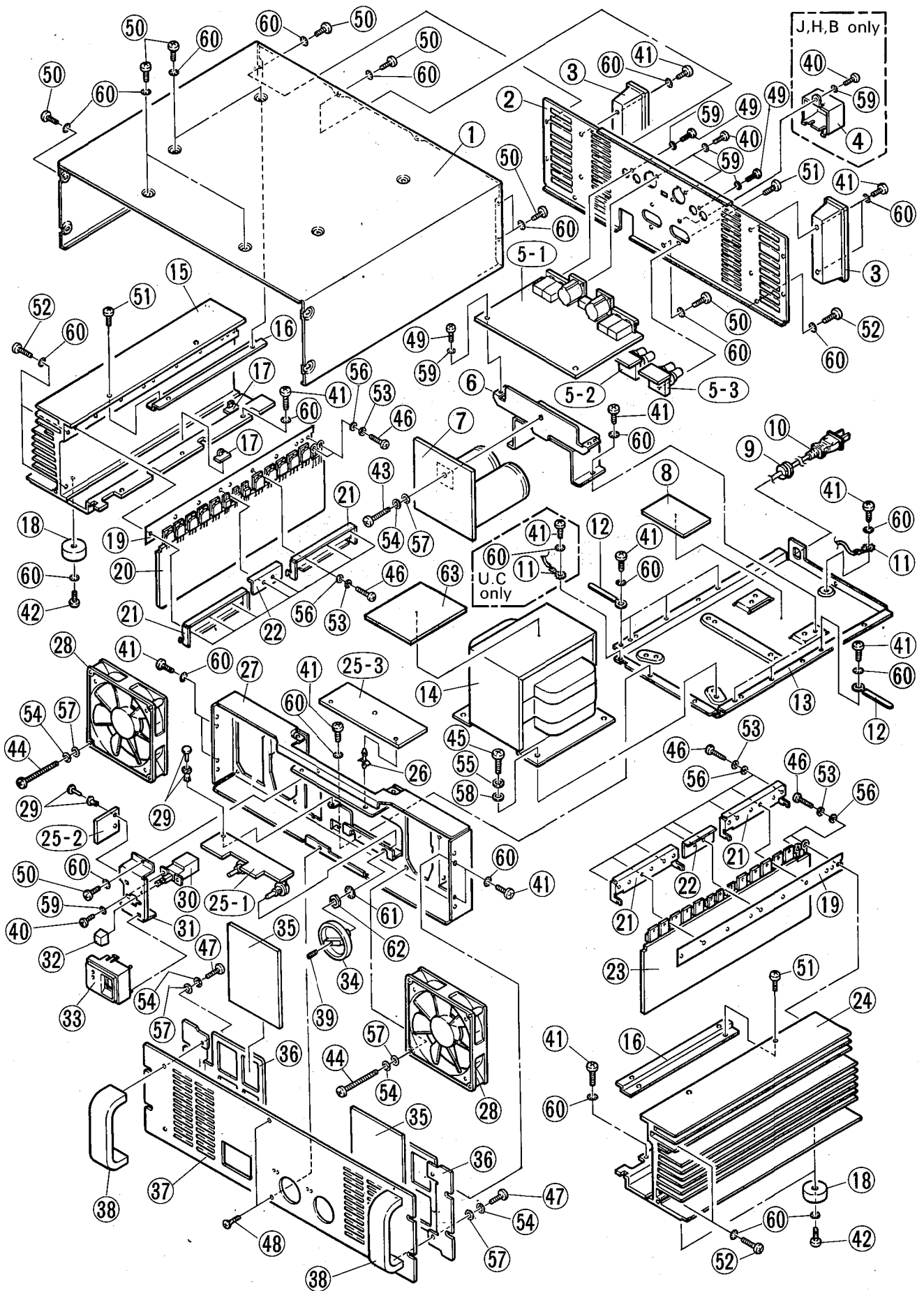
P2700

PARTS LIST

Notes DESTINATION ABBREVIATIONS

J : Japanese model	A : Australian model
U : U.S. model	E : European model
C : Canadian model	D : West German model
X : General model	B : British model
M : South African model	I : Indonesian model
H : North European model	

OVERALL ASSEMBLY



Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
1	VJ054200	Top Cover	トッパカバー	P2700	
2	VJ054800	Rear Panel	リアパネル	J	
2	VJ054900	Rear Panel	リアパネル	U	
2	VJ055000	Rear Panel	リアパネル	C	
2	VJ055100	Rear Panel	リアパネル	H	
2	VJ055200	Rear Panel	リアパネル	B	
3	CB808650	Cord Reel	コードリール		03
4	VE845600	Cover, SP Terminal	スปีドターミナル端子カバー	J, H, B	03
5	VI996000	Circuit Board	IN シート	J	
5	VI996100	Circuit Board	IN シート	U	
5	VI997000	Circuit Board	IN シート	C	
5	VI996200	Circuit Board	IN シート	H, B	
5-1		Circuit Board	IN 1/3		
5-2		Circuit Board	IN 2/3		
5-3		Circuit Board	IN 3/3		
6	VJ054300	Holder E.C.	ケミコンホルダー		
7	VI996600	Circuit Board	DI シート		
8	VJ057400	Spacer, E.C.	ケミコンスペーサー		
9	CB806850	Cord Strain Relief	コードストッパー	J	02
9	VB669000	Cord Strain Relief	コードストッパー	U, C	02
9	CB032840	Cord Strain Relief	コードストッパー	H, B	01
10	MG000610	AC Cord	電源コード	J	06
10	VD280500	AC Cord	電源コード	U, C	08
10	VD280100	AC Cord	電源コード	H	07
10	VH890300	AC Cord	電源コード	B	09
11	LA003690	Lug Terminal	ラグ端子	2pcs	01
12	CB817510	Cord Clamper	束線止め	7pcs	01
13	VJ078400	Chassis, Transformer	トランスシャーシ	J	
13	VJ078500	Chassis, Transformer	トランスシャーシ	U, C	
13	VJ078600	Chassis, Transformer	トランスシャーシ	H, B	
14	XH059A00	Power Transformer	電源トランス	J	
14	XH060A00	Power Transformer	電源トランス	U, C	
14	XH061A00	Power Transformer	電源トランス	H, B	
15	VJ054500	Heat Sink	放熱板(左)		
16	VJ226000	Angle Bracket, Heat Sink	ヒートシンクアングル		
17	CB095100	Holder, Cord	コードキープ	4pcs	01
18	CB806590	Foot	アンブレグ		01
19	VJ098900	Insulation Sheet	放熱シート		
20	VI997500	Circuit Board	PAA シート		
21	VJ054600	Holder-L, Transistor	トランジスタ押え金具(大)		
22	VJ054700	Holder-S, Transistor	トランジスタ押え金具(小)		
23	VI997800	Circuit Board	PAB シート		
24	VJ225800	Heat Sink	放熱板(右)		
25	VI996300	Circuit Board	FP シート	J	
25	VI996400	Circuit Board	FP シート	U	
25	VJ143600	Circuit Board	FP シート	C	
25	VI996500	Circuit Board	FP シート	H, B	
25-1		Circuit Board	FP シート 1/3		
25-2		Circuit Board	FP シート 2/3		
25-3		Circuit Board	FP シート 3/3		
26	CB035390	Supporter	サポート	3pcs	01
27	VJ055800	Sub Chassis	サブシャーシ		
28	VJ290100	Fan Assembly	ファン Ass'y		
29	CB602970	Plastic Rivet	プラスチックリベット	3pcs	01
30	KA804970	Push Switch	ブッシュスイッチ	POWER (J)	06
30	VG023100	Push Switch	ブッシュスイッチ	POWER (U)	
30	KA804980	Push Switch	ブッシュスイッチ	POWER (C)	06
30	KA804990	Push Switch	ブッシュスイッチ	POWER (H, B)	06
31	VJ056400	Angle Bracket, SW	スイッチアングル		
32	CB812380	Push Button	ブッシュボタン	POWER	01
33	VJ056500	Escutcheon, SW	スイッチカッション		
34	VJ099000	Attenuator Knob	アッテネーターノブ	Input Att. A/B	
35	VJ057300	Fan Filter	ファンフィルター		
36	VJ056300	Panel Angle	パネルアングル		
37	VJ056000	Front Panel	フロントパネル		
38	VJ056200	Handle	ハンドル		
39	VJ099100	Set Screw	すりわり付止めネジ		
40	ED330056	Bind Head Screw	3.0×8 FCM3BL		01
41	ED340086	Bind Head Screw	3.0×8 FCM3BL		01
42	ED340106	Bind Head Screw	4.0×8 FCM3BL		01
43	ED340166	Bind Head Screw	4.0×10 FCM3BL		01
44	VE702700	Bind Head Screw	4.0×16 FCM3BL		01
45	ED350106	Bind Head Screw	4.0×35 FCM3BL		
46	EA030126	Pan Head Screw	5.0×10 FCM3BL		01
47	EA340106	Pan Head Screw	3.0×12 ZMC2Y		01
48	EB330086	Flat Head Screw	4.0×10 FCM3BL		01
49	EI330086	Bind Head Tapping Screw	皿小ネジ		01
50	EI340086	Bind Head Tapping Screw	ハイトタッピングネジ		01
51	EI340106	Bind Head Tapping Screw	ハイトタッピングネジ		01

* New Parts (新規部品)

ランク : Japan only

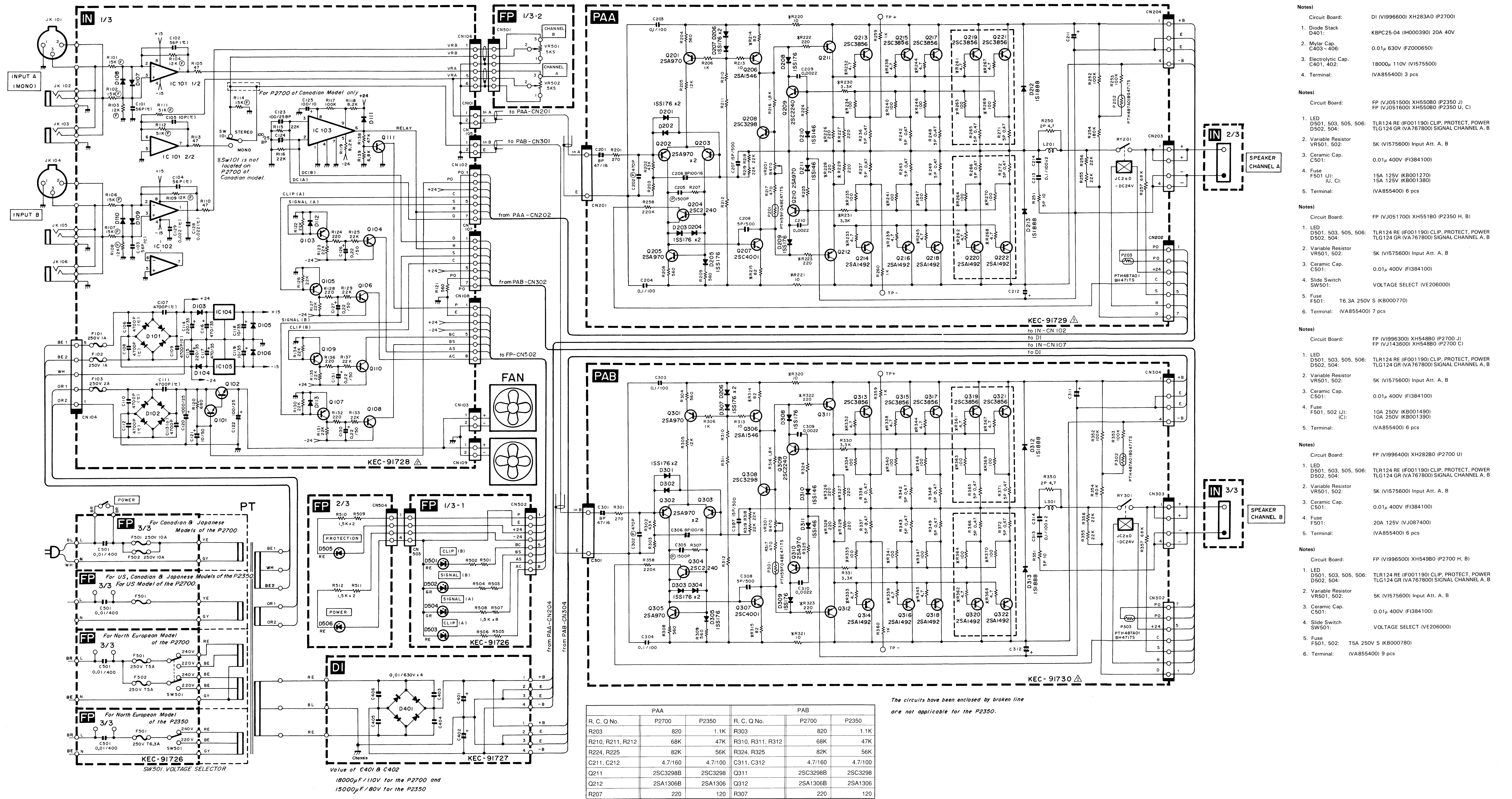
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P2350/P2700

Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
	VI997500	Circuit Board	PAA	P2700	
	VI997800	Circuit Board	PAB		
	VI996600	Circuit Board	DI		
	VI996000	Circuit Board	IN	J	
	VI996100	Circuit Board	IN	U	
	VI997000	Circuit Board	IN	C	
	VI996200	Circuit Board	IN	H, B	
	VI996300	Circuit Board	FP	J	
	VI996400	Circuit Board	FP	U	
	VJ143600	Circuit Board	FP	C	
	VI996500	Circuit Board	FP	H, B	
	VI997500	Circuit Board	PAA		
	IA097000	Transistor	2SA970 GR,BL		03
	IC224000	Transistor	2SC2240 GR,BL		03
	IC329810	Transistor	2SC3298		03
	IX805240	Transistor	2SA1546		03
	IX805250	Transistor	2SC4001		03
	IA130650	Transistor	2SA1306B		03
	IC329850	Transistor	2SC3298B		03
	IX609750	Transistor	2SA1492		05
	IX609760	Transistor	2SC3856		05
	IH000320	Diode	1S1888		01
	IF003450	Diode	1SS133		01
	VI783000	Diode	1SS146		
	HV353470	Flame Proof C. Resistor	4.7Ω 1/4W J	不燃化カーボン抵抗	01
	HV354100	Flame Proof C. Resistor	10Ω 1/4W J	不燃化カーボン抵抗	01
	HV354820	Flame Proof C. Resistor	82Ω 1/4W J	不燃化カーボン抵抗	01
	HV355100	Flame Proof C. Resistor	100Ω 1/4W J	不燃化カーボン抵抗	01
	HV355220	Flame Proof C. Resistor	220Ω 1/4W J	不燃化カーボン抵抗	01
	HV356330	Flame Proof C. Resistor	3.3KΩ 1/4W J	不燃化カーボン抵抗	
	HZ003600	Wire Wound Resistor	0.47Ω 5W K	不セメント抵抗	02
	HM654100	Wire Wound Resistor	10Ω 5W	セメント抵抗	02
	VC769900	Metal Oxide Film Resistor	4.7Ω 2W J	酸化金属被膜抵抗	
	VE404900	Positive Thermistor	PTH59F04BE471TS	温度検知用ボジスタ	04
	VI518000	Positive Thermistor	PTH487A01BG471	温度補償用ボジスタ	04
	VJ087200	Positive Thermistor	PTH487A01BH471	温度補償用ボジスタ	
	HT410370	Trimmer Potentiometer	B470 3P H1052A	半固定抵抗	BIAS ADJ. 02
	FU350500	Maica Cap.	5P 500V J	マイカコン	01
	FU351150	Maica Cap.	15P 500V J	マイカコン	01
	FZ005200	Mylar Cap.	0.1μ 100V K	マイラコン	01
	UJ706470	Electrolytic Cap.	4.7μ 160V	ケミコン	
	GD900580	Coil	2mH GD90058 GY	空芯コイル	01
	KC001410	Relay	DC24V JC2AD	リレー	07
	VG864300	Heat Sink	DPS(15)-30	ヒートシンク	02
	LA004870	Terminal Pin	1.0mm 14L	ストッパ付カクピン	01
	ED330086	Bind Head Screw	3.0×8 FCM3BL	バインド小ネジ	01
	EV303306	Spring Washer	φ3.0 ZMC2BL	バネ座金	01
	VI997800	Circuit Board	PAB		
	IA097000	Transistor	2SA970 GR,BL		03
	IC224000	Transistor	2SC2240 GR,BL		03
	IC329810	Transistor	2SC3298		03
	IX805240	Transistor	2AA1546		03
	IX805250	Transistor	2SC4001		03
	IA130650	Transistor	2SA1306B		03
	IC329850	Transistor	2SC3298B		03
	IX609750	Transistor	2SA1492		05
	IX609760	Transistor	2SC3856		05
	IH000320	Diode	1S1888		01
	IF003450	Diode	1SS133		01
	VI783000	Diode	1SS146		
	HV353470	Flame Proof C. Resistor	4.7Ω 1/4W J	不燃化カーボン抵抗	01
	HV354100	Flame Proof C. Resistor	10Ω 1/4W J	不燃化カーボン抵抗	01
	HV354820	Flame Proof C. Resistor	82Ω 1/4W J	不燃化カーボン抵抗	01
	HV355100	Flame Proof C. Resistor	100Ω 1/4W J	不燃化カーボン抵抗	01
	HV355220	Flame Proof C. Resistor	220Ω 1/4W J	不燃化カーボン抵抗	01
	HV356330	Flame Proof C. Resistor	3.3KΩ 1/4W J	不燃化カーボン抵抗	
	HZ003600	Wire Wound Resistor	0.47Ω 5W K	不セメント抵抗	02
	HM654100	Wire Wound Resistor	10Ω 5W	セメント抵抗	02
	VC769900	Metal Oxide Film Resistor	4.7Ω 2W J	酸化金属被膜抵抗	
	VE404900	Positive Thermistor	PTH59F04BE471TS	温度検知用ボジスタ	04
	VI518000	Positive Thermistor	PTH487A01BG471	温度補償用ボジスタ	04
	VJ087200	Positive Thermistor	PTH487A01BH471	温度補償用ボジスタ	
	HT410370	Trimmer Potentiometer</			

Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
	GD900580	Coil	2mH GD90058 GY	空 芯 コイル	01
	KC001410	Relay	DC24V JC2AD	リレー	07
	VG864300	Heat Sink	DPS(15)-30	ヒートシンク	02
	LA004870	Terminal Pin	1.0mm 14L	ストッパ付カクビン	01
	ED330086	Bind Head Screw	3.0×8 FCM3BL	バインド小ネジ	01
	EV303306	Spring Washer	φ 3.0 ZMC2BL	バネ座金	for TR (2pcs) for TR (2pcs)
	VI996600	Circuit Board	DI	D I シート	
	IH000390	Diode Stack	KBPC25-04	ダイオードスタック	20A 40V
	FZ000650	Mylar Cap.	0.01μ 630V	マイラーコン	09 02
	VI575500	Electrolytic Cap.	18000μ 110V	ケミコン	
	VA855400	Terminal		P C 用 カ ラ ゲ 端 子	3pcs
	LA003690	Lug Terminal		ラグ端子	1pc. 01 01
	VI996000	Circuit Board	IN	I N シート	J
	VI996100	Circuit Board	IN	I N シート	U
	VI997000	Circuit Board	IN	I N シート	C
	VI996200	Circuit Board	IN	I N シート	H, B
	XA013001	IC	M5238P	I C	OP AMP.
	XD853A00	IC	NJM7815FA	I C	REGULATOR
	XD854A00	IC	NJM7915FA	I C	REGULATOR
	IG034800	IC	TA7317P	I C	SP PROTECTION
	IA097000	Transistor	2SA970 GR, BL	トランジスタ	
	IC224000	Transistor	2SC2240 GR, BL	トランジスタ	03
	IC329840	Transistor	2SC3298	トランジスタ	03 03
	IF003450	Diode	1SS133	ダイオード	01
	IH001540	Diode	10E-1	ダイオード	01
	IH001120	Diode Stack	S2VB20 2A 200V	ダイオードスタック	03
	IH001400	Diode Stack	1G4B1 1.5A 400V	ダイオードスタック	03
	VB067600	Metal Film Resistor	12KΩ 1/5W F	金属皮膜抵抗	
	VA074600	Metal Film Resistor	15KΩ 1/5W F	金属皮膜抵抗	01
	VB068900	Metal Film Resistor	51KΩ 1/5W F	金属皮膜抵抗	
	FH223470	Ceramic Cap.	0.0047μ 500V M	セラコン (E)	01
	UJ658470	Electrolytic Cap.	470μ 35V	ケミコン	02
	UJ849100	Electrolytic Cap.	1000μ 25V	ケミコン	
	KA401280	Slide Switch	SSP32204	スライドスイッチ	MODE (J, U, H, B)
	LB202300	Phone Jack	HLJ1520	ホーンジャック	INPUT CH. A/B
	LB302320	XLB Connector	XLB-3-31PCV	キャノンジャック	INPUT CH. A/B
	KB000330	Fuse	T 1A 250V	ヒューズ	J
	KB000350	Fuse	T 2A 250V	ヒューズ	J
	KB001060	Fuse	T 1A 250V	ヒューズ	U, C
	KB001240	Fuse	T 2A 250V	ヒューズ	U, C
	KB001330	Fuse	T2A 250V S	ヒューズ	H, B
	KB001770	Fuse	T1A 250V S	ヒューズ	H, B
	LB201530	Fuse Holder	PC-FH1	ヒューズホルダー	01
	VI314700	Speaker Terminal	MSP202	スピーカ端子	SPEAKER CH. B
	VI356300	Speaker Terminal	MSP202-1	スピーカ端子	SPEAKER CH. A
	BA808520	Heat Sink	T220M 25L	放熱板	03
	VG223500	Angle Bracket, Jack	EMX	J A C K アングル	02
	ED330086	Bind Head Screw	3.0×8 FCM3BL	バインド小ネジ	for TR (1pc.)
	EV303306	Spring Washer	φ 3.0 ZMC2BL	バネ座金	for TR (1pc.)
	VI996300	Circuit Board	FP	F P シート	J
	VI996400	Circuit Board	FP	F P シート	U
	VJ143600	Circuit Board	FP	F P シート	C
	VI996500	Circuit Board	FP	F P シート	H, B
	IF001190	LED	TLR124 RE	L E D	CLIP, PROTECT, PW
	VA767800	LED	TLG124 GR	L E D	SIGNAL CH. A/B
	VI575600	Variable Resistor	5K	ロータリーボリューム	Input Att. A/B
	FI384100	Ceramic Cap.	0.01μ 400V	規格認定コン	01
	VE206000	Slide Switch	VOLTAGE SELECT	スライドスイッチ	H, B
	VH870600	LED Socket		L E D ソケット	6pcs
	KB001490	Fuse	10A 250V	ヒューズ	J
	VJ087400	Fuse	20A 125V	ヒューズ	U
	KB001390	Fuse	10A 250V	ヒューズ	C
	KB000780	Fuse	T5A 250V S	ヒューズ	H, B
	LB201530	Fuse Holder	PC-FH1	ヒューズホルダー	01
	VA855400	Terminal		P C 用 カ ラ ゲ 端 子	6pcs (H:9pcs)
	KA804970	Push Switch	ESB-99119R-F	プッシュスイッチ	POWER (J)
	VG023100	Push Switch	SDDZA1	プッシュスイッチ	POWER (U)
	KA804980	Push Switch	ESB-9933T-F	プッシュスイッチ	POWER (C)
	KA804990	Push Switch	ESB-9917S-F	プッシュスイッチ	POWER (H, B)
	VJ290100	Fan Assembly		ファン Ass'y	06
	XH059A00	Power Transformer		電源トランス	J
	XH060A00	Power Transformer		電源トランス	U, C
	XH061A00	Power Transformer		電源トランス	H, B

■ P2350/P2700 OVERALL CIRCUIT DIAGRAM



Notes

Circuit Board: PAA (V1997600) XG961B0 (P2350)
PAA (V1997500) XG961B0 (P2700)

- Transistor
Q201 ~ 203, 210:
Q204, 205, 209:
Q206:
Q207:
Q208:
Q211 (P2350):
Q212 (P2350):
Q213, 215, 217:
Q214, 216, 218:
Q219, 221:
Q220, 222:

- Diode
D201 ~ 209:
D210, 211:
D212, 213:
- Flame Proof Carbon Resistor
R214, 215:
R220, 221:
R222, 223:
R226 ~ 229:
R230, 231:
R232, 233, 238:
R239, 244, 245:
R234, 235, 240:
R241, 246, 247:
R261, 262, 267, 268:
R263, 264, 269, 270:

- Wire Wound Resistor
R236, 237, 242:
R251, 243, 248, 249:
R265, 266, 271, 272:
R250:
R252:
R253:
R254:
R255:
R256:
R257:
R258:
R259:
R260:
R261:
R262:
R263:
R264:
R265:
R266:
R267:
R268:
R269:
R270:

- Positive Thermistor
P201:
P202:
P203:
P204:
P205:
P206:
P207:
P208:
P209:
P210:
P211:
P212:
P213:
P214:
P215:
P216:
P217:
P218:
P219:
P220:
P221:
P222:
P223:
P224:
P225:
P226:
P227:
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P246:
P247:
P248:
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P250:
P251:
P252:
P253:
P254:
P255:
P256:
P257:
P258:
P259:
P260:
P261:
P262:
P263:
P264:
P265:
P266:
P267:
P268:
P269:
P270:

- Trimmer Potentiometer
VR201:
VR202:
VR203:
VR204:
VR205:
VR206:
VR207:
VR208:
VR209:
VR210:
VR211:
VR212:
VR213:
VR214:
VR215:
VR216:
VR217:
VR218:
VR219:
VR220:
VR221:
VR222:
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VR255:
VR256:
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VR258:
VR259:
VR260:
VR261:
VR262:
VR263:
VR264:
VR265:
VR266:
VR267:
VR268:
VR269:
VR270:

- Maica Cap.
C207:
C208:
C209:
C210:
C211:
C212:
C213:
C214:
C215:
C216:
C217:
C218:
C219:
C220:
C221:
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C269:
C270:

- Relay
RY201:
RY202:
RY203:
RY204:
RY205:
RY206:
RY207:
RY208:
RY209:
RY210:
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RY212:
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RY264:
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RY267:
RY268:
RY269:
RY270:

- Coil
L201:
L202:
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- Relay
RY201:
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