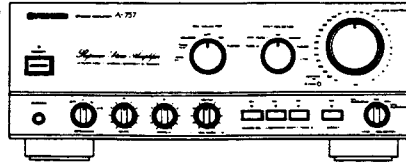


# Service Manual

**PIONEER**  
The future of sound and vision.



ORDER NO.  
ARP1816

STEREO AMPLIFIER

# A-757

MODEL A-757 HAS FIVE VERSIONS:

Type	Power requirement	Export destination
HEZ	AC220V,240V (switchable)	West Germany
HE	AC220V,240V (switchable)	European continent
HB	AC220V,240V (switchable)	United Kingdom
KUC	AC120V only	U.S.A. and Canada
SD	AC110V,120V-127V,220V,240V (switchable)	U.S.Military

- This manual is applicable to the A-757/HEZ and HE types.
- For the HE type, refer to page 21 - 32.
- For the other types, refer to additional service manual.

## CONTENTS

1. EXPLODED VIEWS AND PARTS LIST .....	2	5. FOR HE TYPE .....	21
2. SCHEMATIC DIAGRAM .....	6	6. SPECIFICATIONS .....	33
3. P.C. BOARDS CONNECTION DIAGRAM .....	9	7. PANEL FACILITIES .....	34
4. ELECTRICAL PARTS LIST .....	17		

**PIONEER ELECTRONIC CORPORATION** 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan  
**PIONEER ELECTRONICS SERVICE INC.** P.O. Box 1760, Long Beach, California 90801 U.S.A.  
**PIONEER ELECTRONICS OF CANADA, INC.** 505 Cochrane Drive, Markham, Ontario L3R 8E3 Canada  
**PIONEER ELECTRONIC [EUROPE] N.V.** Keetberglaan 1, 2740 Beveren, Belgium  
**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.** 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911  
 © **PIONEER ELECTRONIC CORPORATION 1989**

YA MAY 1989 Printed in Japan.

# 1. EXPLODED VIEWS AND PARTS LIST

**NOTES:**

- Parts without part number cannot be supplied.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
$\Delta$	1	2SA1265N	TRANSISTOR Q 3	56	AAD1560		DIRECT KNOB
$\Delta$	2	2SA1265N	TRANSISTOR Q 4	57	AAD1561		POWER KNOB
$\Delta$	3	2SA1265N	TRANSISTOR Q 5	58	.....		.....
$\Delta$	4	2SA1265N	TRANSISTOR Q 6	59	ARC1146		OPERATING INSTRUCTIONS
$\Delta$	5	2SC3182N	TRANSISTOR Q 1	60	AEA1010		SPACER SET
$\Delta$	6	2SC3182N	TRANSISTOR Q 2	61	AHA1070		STYROL PROTECTOR
$\Delta$	7	2SC3182N	TRANSISTOR Q 7	62	AHD1632		PACKING CASE
$\Delta$	8	2SC3182N	TRANSISTOR Q 8	63	ANE1075		METAL BONNET
	9	RD1/4PM100J	CARBON FILM RESISTOR	64	.....		.....
	10	RD1/4PM4R7J	CARBON FILM RESISTOR	65			SPEAKER SWITCH
$\Delta$	11	ACH1045	ELECTROLYTIC CAPACITOR	66	AWZ2345		TONE AMP
$\Delta$	12	ATS1087	POWER TRANSFORMER T 1	67			REC OUT
$\Delta$	13	ATS1088	POWER TRANSFORMER T 2	68	AWZ2347		INPUT SELECTOR
$\Delta$	14	ASG-553	PUSH SWITCH S 1	69			
	15	ASU1024	SWITCH S 3	70	AWZ2330		POWER AMP
	16	ASU1025	SWITCH S 2	71	AWZ2331		POWER SUPPLY
	17	ASU1026	SWITCH S 4	72	AWZ2332		SPEAKER TERM
	18	AKM1019	JUMPER PLUG	73	AWZ2333		PHONO AMP
$\Delta$	19	AEK-400	FUSE(T4A)FU 1	74			HEAD PHONE
$\Delta$	20	ADG1049	AC POWER CORD	75			SHIELD
	21	ANL 1024	LONG SHAFT ASSY	76			TERMINAL SCREW
	22	AMR1158	FOOT	77			EARTH LEAD
	23	AMR1159	FOOT	78			TRANS FRAME
	24	ABE1009	WASHER	79			RIGHT FRAME
	25	ABF1017	WASHER	80			REAR PANEL
	26	ABH1034	SPRING	81			PANEL STAY
	27	ABH1056	SPRING	82			BOTTOM PLATE
	28	AEC-818	MICA SHEET	83			HEAT SINK
	29	AEC-882	STRAIN RELIEF	84			HEAT SINK
	30	AEH1005	ADHESIVE TAPE	85			HEAT SINK HOLDER
	31	ABA-298	SCREW	86			VOLUME HOLDER
	32	ABA1004	SCREW (STEEL)	87			SHIELD CASE(SP)
	33	ABA1009	SCREW (STEEL)	88			SHIELD CASE B
	34	ABA1011	SCREW (STEEL)	89			SHIELD PLATE
	35	ABA1034	SCREW	90			CUSHION RUBBER C
	36	ABA1047	SCREW (STEEL)	91			CUSHION SPACER
	37	ABA1048	SCREW (STEEL)	92			CUSHION RUBBER
	38	ABA1050	SCREW (STEEL)	93			.....
	39	ABA1082	SCREW	94			PCB HOLDER
	40	ABA1088	SCREW	95			NYLON RIVET
	41	ABN-048	FLANGE NUT M9	96			SPACER
	42	ABN-065	NUT	97			SPACER
	43	BBZ40P080FZK	SCREW	98			BINDER
	44	NK90FCU	NUT	99			CLAMPER
	45	VMZ30P060FCU	SCREW	100			.....
	46	AMR1178	HOLDER	101			
	47	ANB1294	FRONT PANEL	102			PUSH JOINT
	48	AMB1200	BASE	103			
	49	AAM1029	NAME PLATE (METAL)	104			SHEET
	50	AMR1160	INDICATING LENS				
	51	AAB1107	ROTARY KNOB L				
	52	AAB1108	ROTARY KNOB M				
	53	AAB1109	ROTARY KNOB S				
	54	AAD1016	KNOB (PLASTIC)				
	55	AAD1536	PUSH KNOB				

1

2

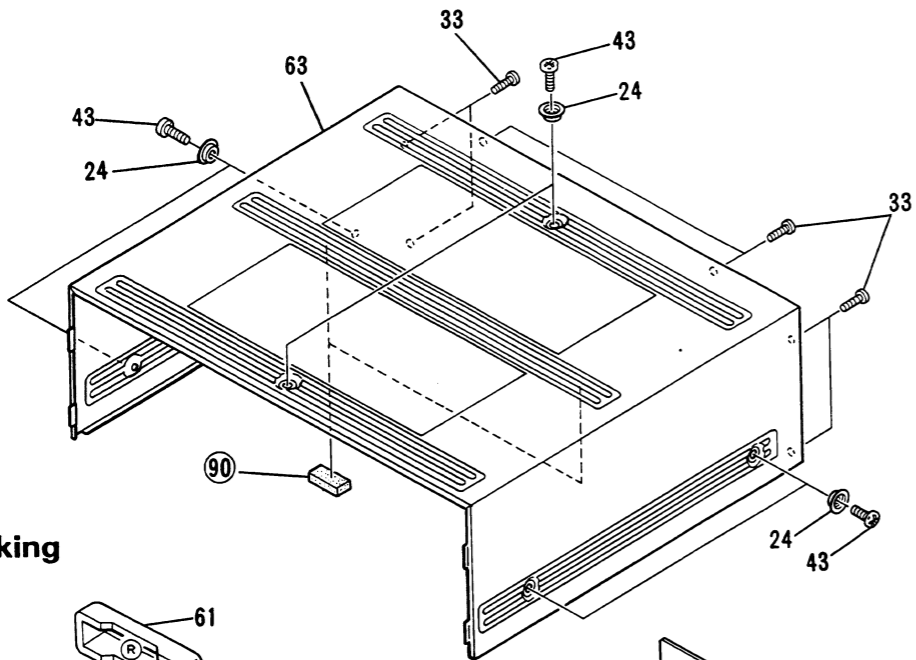
3

4

5

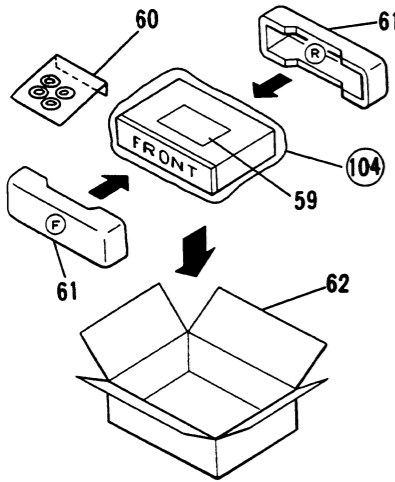
6

A

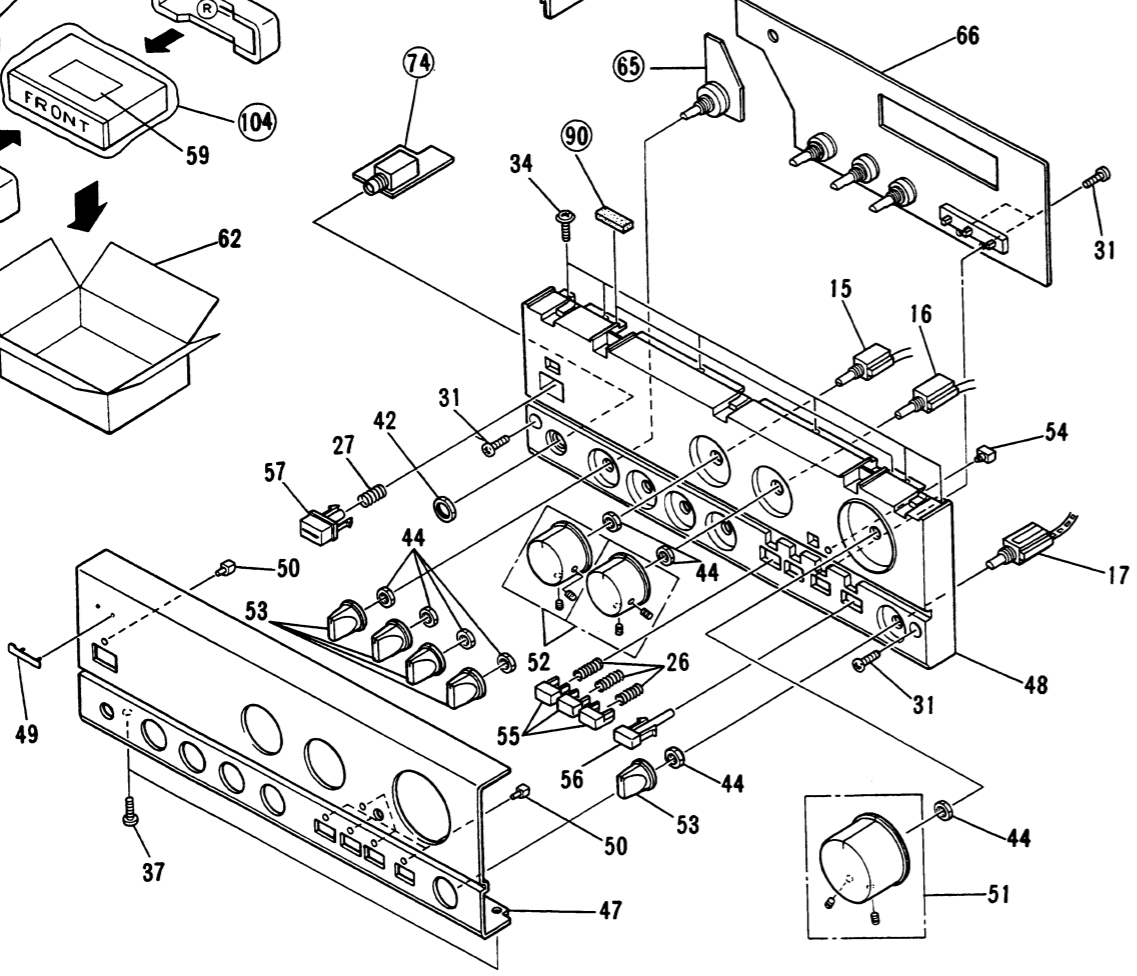


B

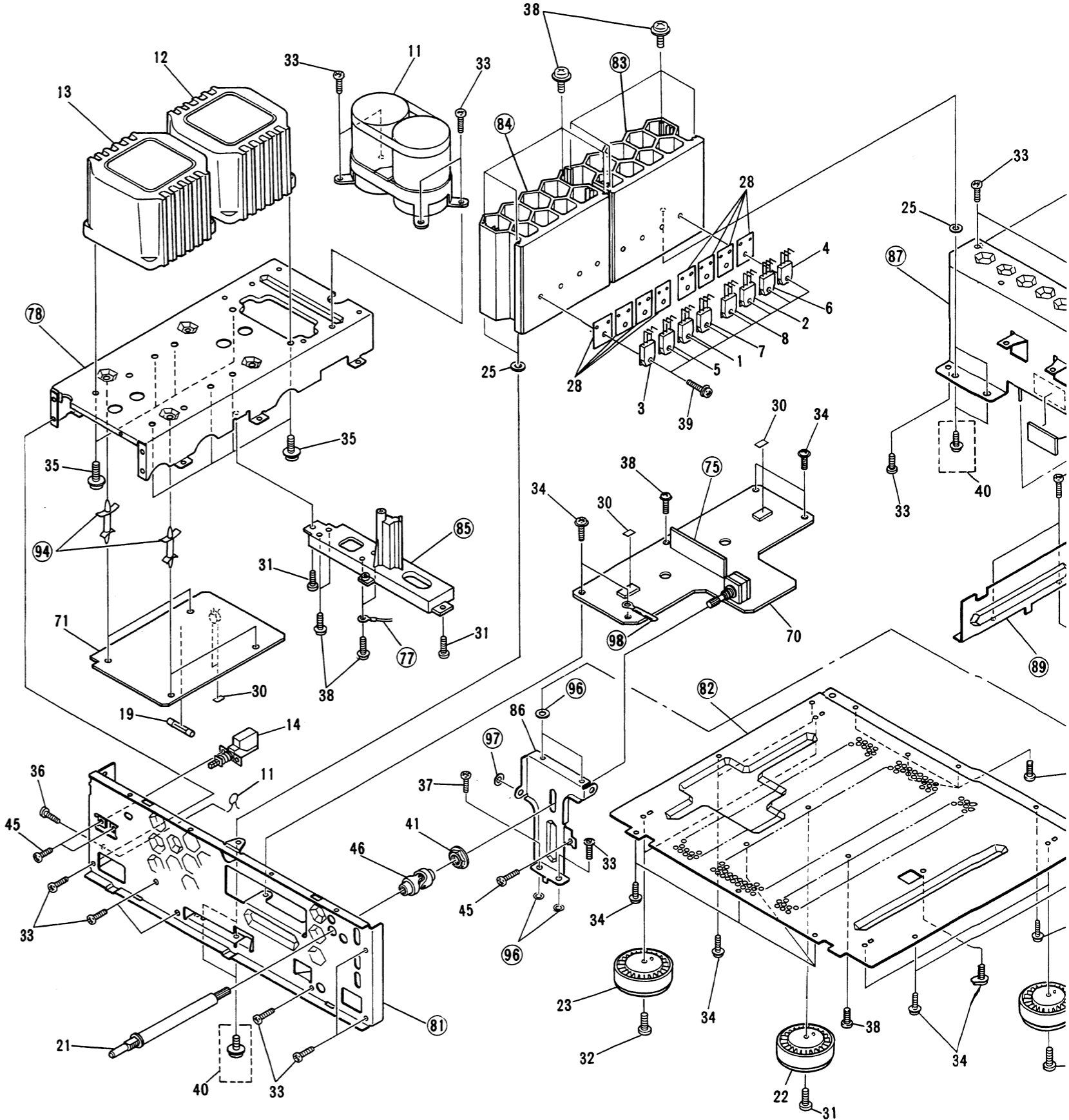
Packing



C



D



1

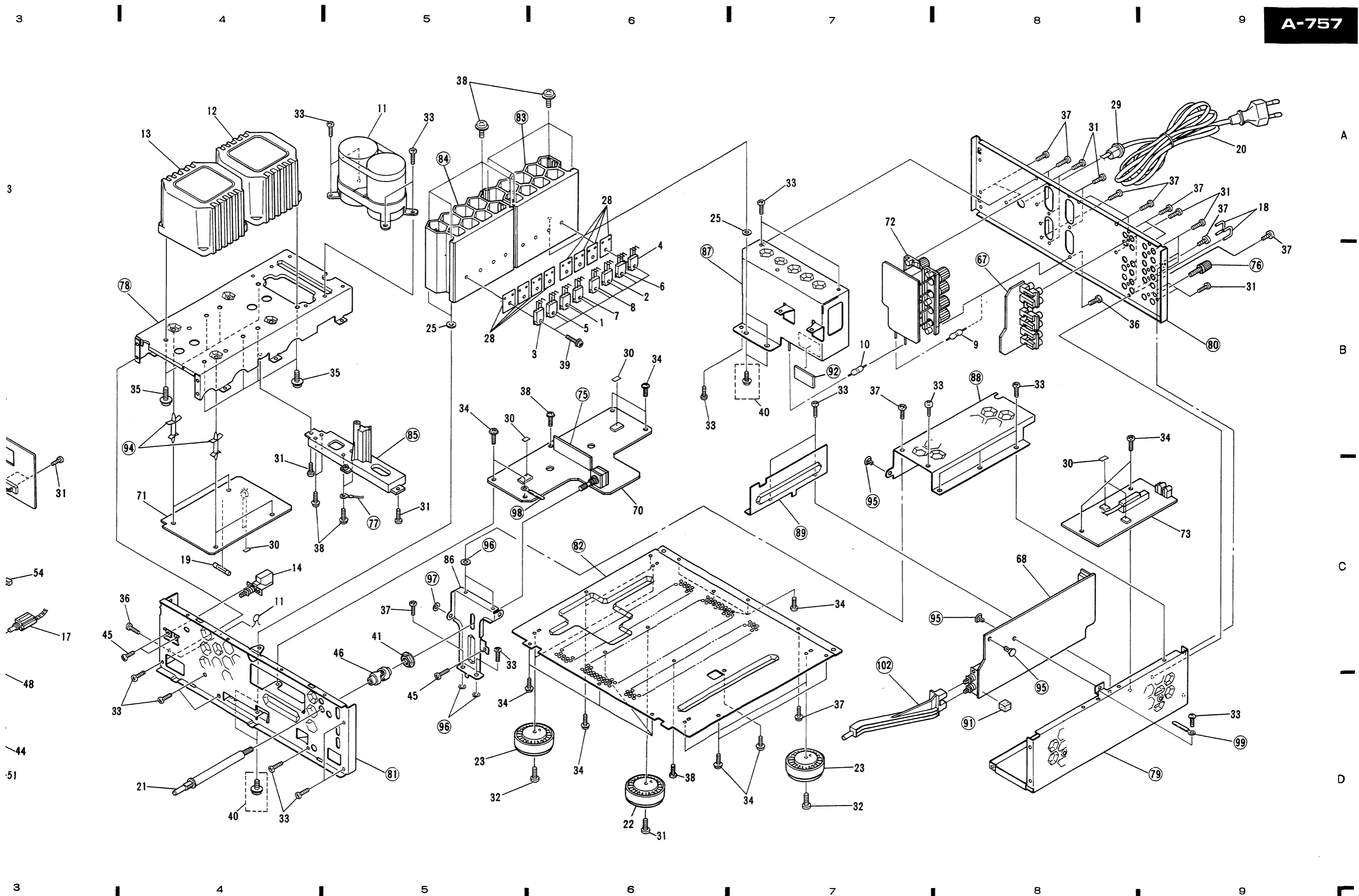
2

3

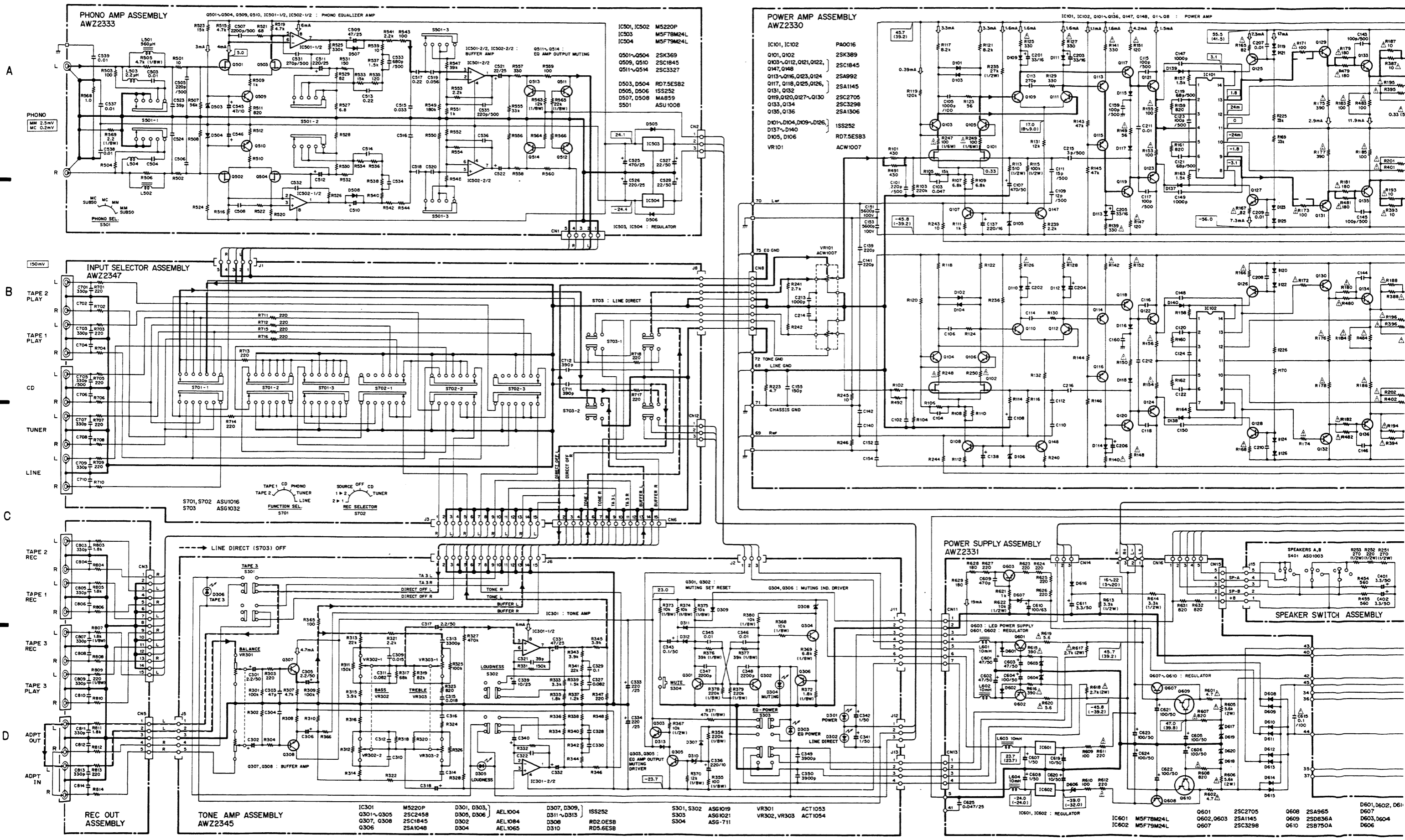
4

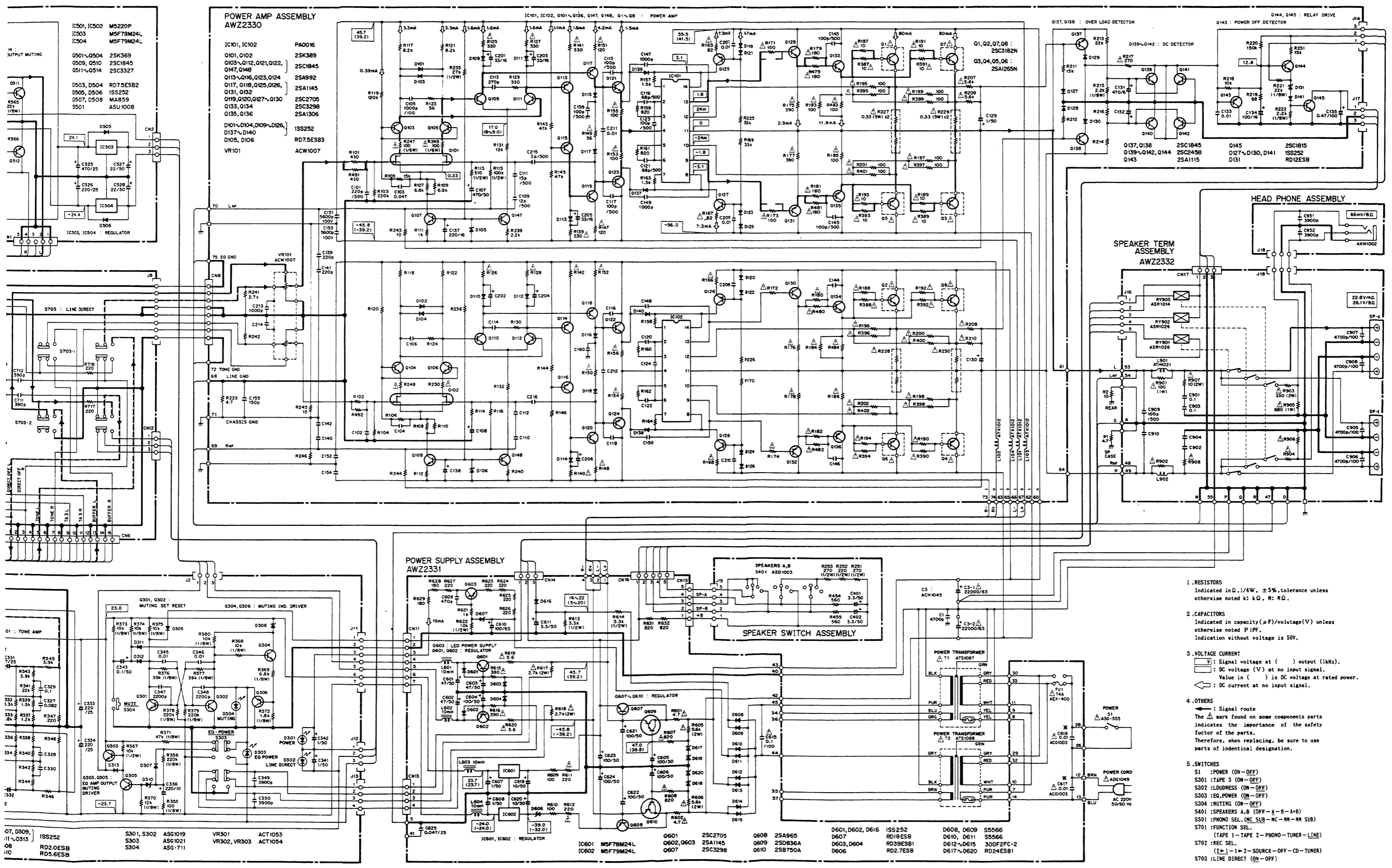
5

6



# 2. SCHEMATIC DIAGRAM





A

B

C

D

- RESISTORS**  
Indicated in Ω, 1/4W, ±5% tolerance unless otherwise noted k: kΩ, M: MΩ.
- CAPACITORS**  
Indicated in capacity (μF)/voltage(V) unless otherwise noted P: pF.  
Indication without voltage is 50V.
- VOLTAGE CURRENT**  
V: Signal voltage at ( ) output (kHz).  
V: DC voltage (V) at no input signal.  
Value in ( ) is DC voltage at rated power.  
A: DC current at no input signal.
- OTHERS**  
←: Signal route  
The Δ mark found on some components parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- SWITCHES**  
S1 :POWER (ON-OFF)  
S301 :TAPE 3 (ON-OFF)  
S302 :LOUDNESS (ON-OFF)  
S303 :EQ POWER (ON-OFF)  
S304 :MUTING (ON-OFF)  
S401 :SPEAKERS A,B (OFF-A-B-A+B)  
S501 :PHONO SEL.(MC SUB-NC-M-NH SUB)  
S701 :FUNCTION SEL.  
(TAPE 1-TAPE 2-PHONO-TUNER-LINE)  
S702 :REC SEL.  
(2=1-1=2-SOURCE-OFF-CD-TUNER)  
S703 :LINE DIRECT (ON-OFF)

### 3. P.C. BOARDS CONNECTION DIAGRAM

NOTE

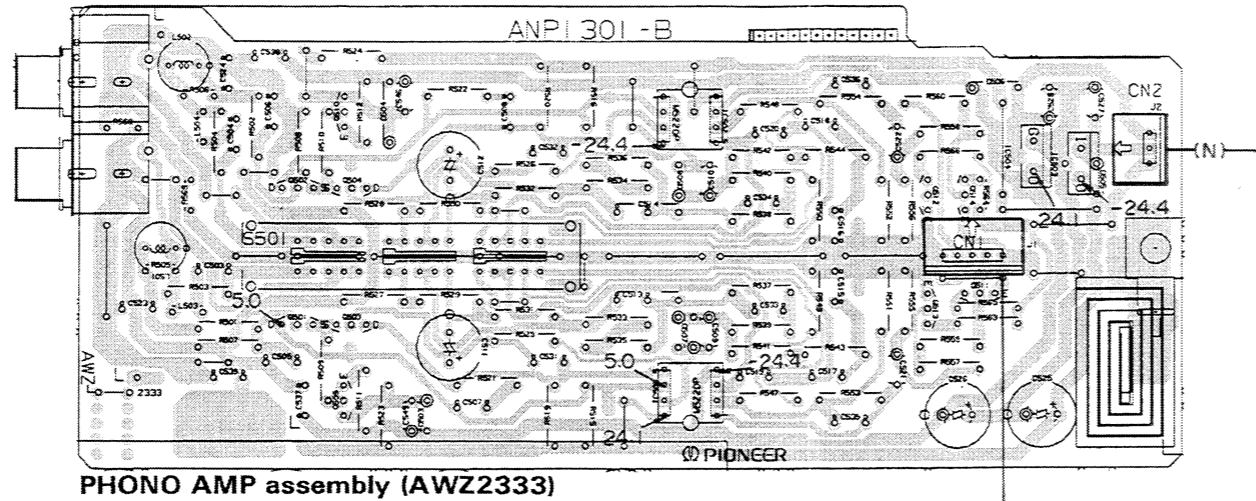
- This P.C.B. connection diagram is viewed from the parts mounted side.
- The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

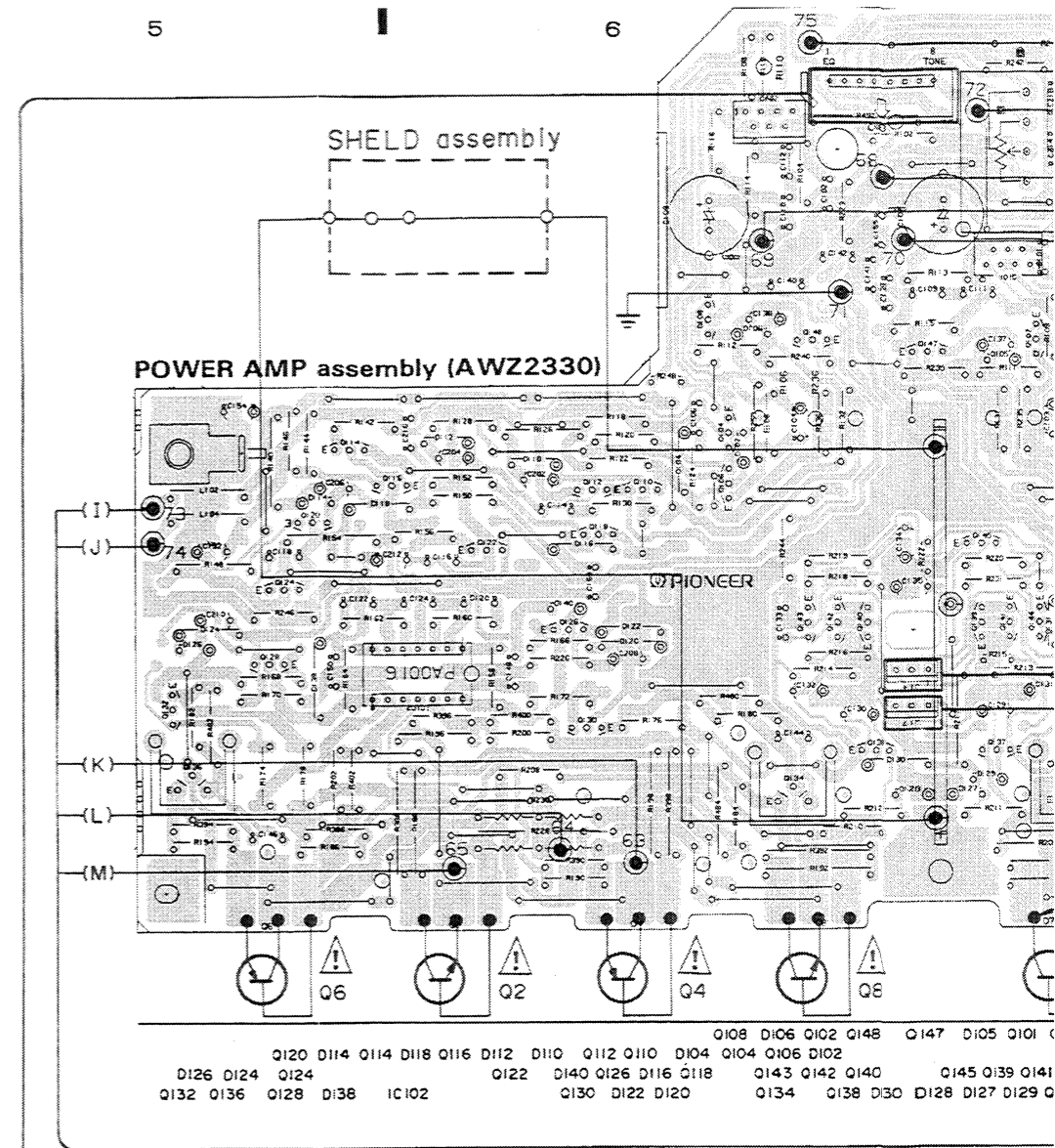
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

- The capacitor terminal marked with ⊙ (double circles) shows negative terminal.
- The diode terminal marked with ⊙ (double circles) shows cathode side.
- The transistor terminal to which E is affixed shows the emitter.

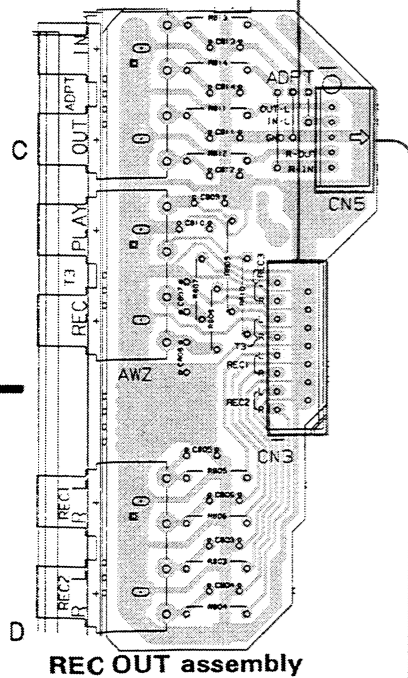


PHONO AMP assembly (AWZ2333)

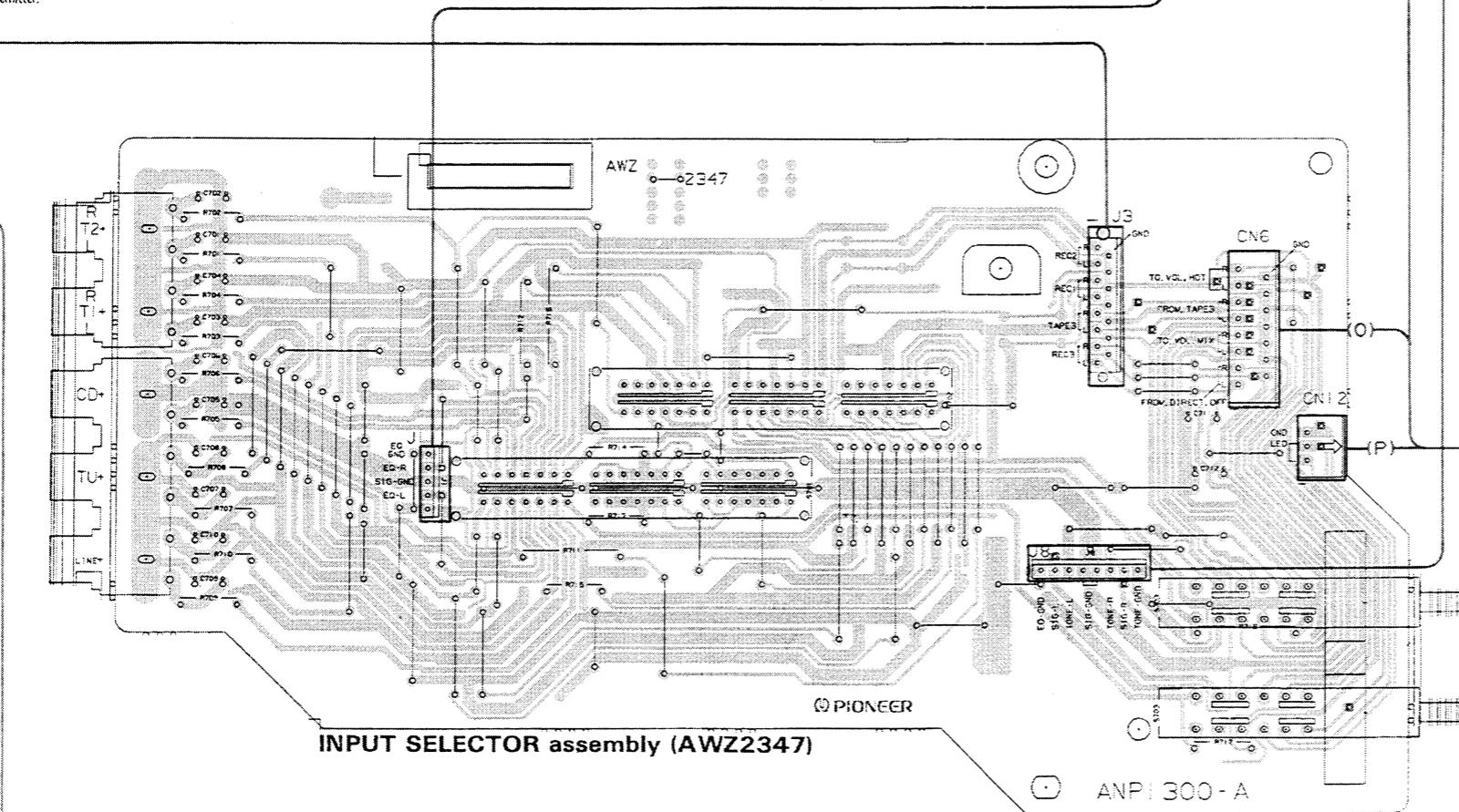


POWER AMP assembly (AWZ2330)

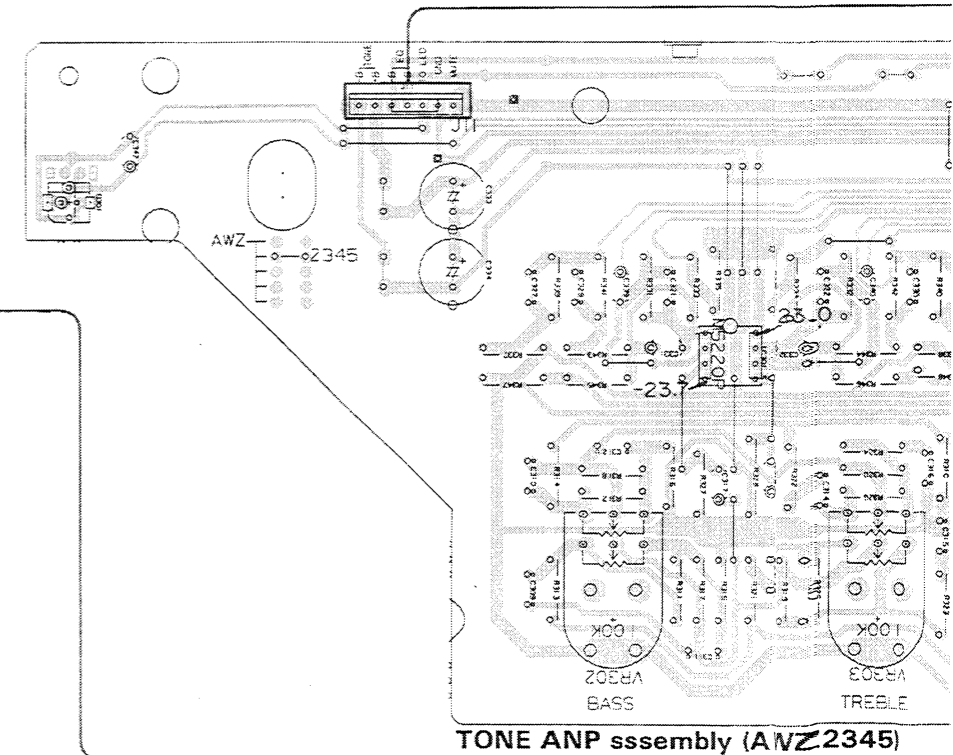
Q108 Q106 Q102 Q148 Q147 Q105 Q101  
 Q126 Q124 Q124 Q114 Q114 Q116 Q112 Q110 Q104 Q104 Q106 Q102  
 Q132 Q136 Q128 Q138 IC102 Q122 Q140 Q126 Q116 Q118 Q143 Q142 Q140 Q145 Q139 Q141  
 Q130 Q122 Q120 Q134 Q138 Q130 Q128 Q127 Q129 Q



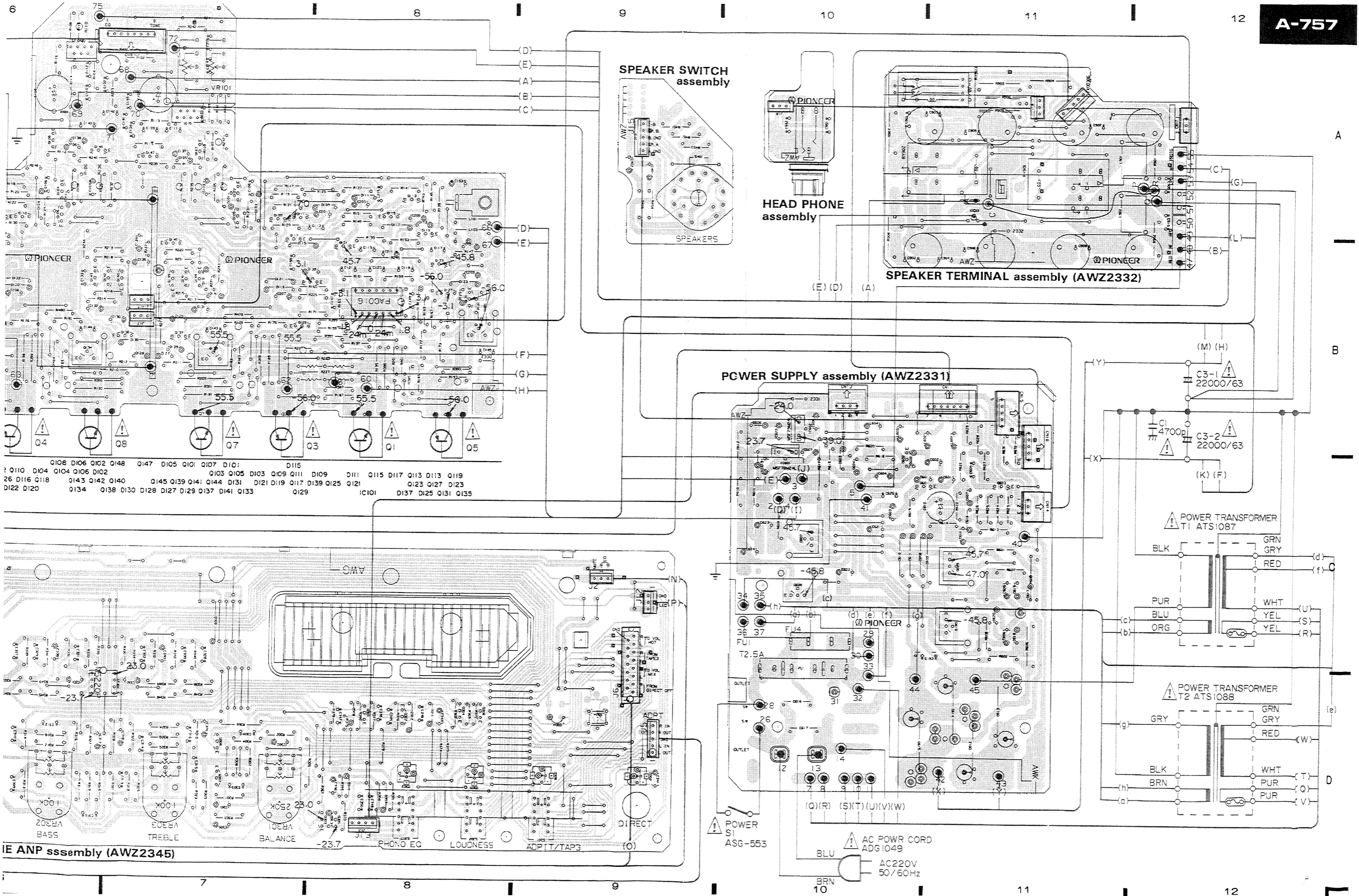
REC OUT assembly



INPUT SELECTOR assembly (AWZ2347)

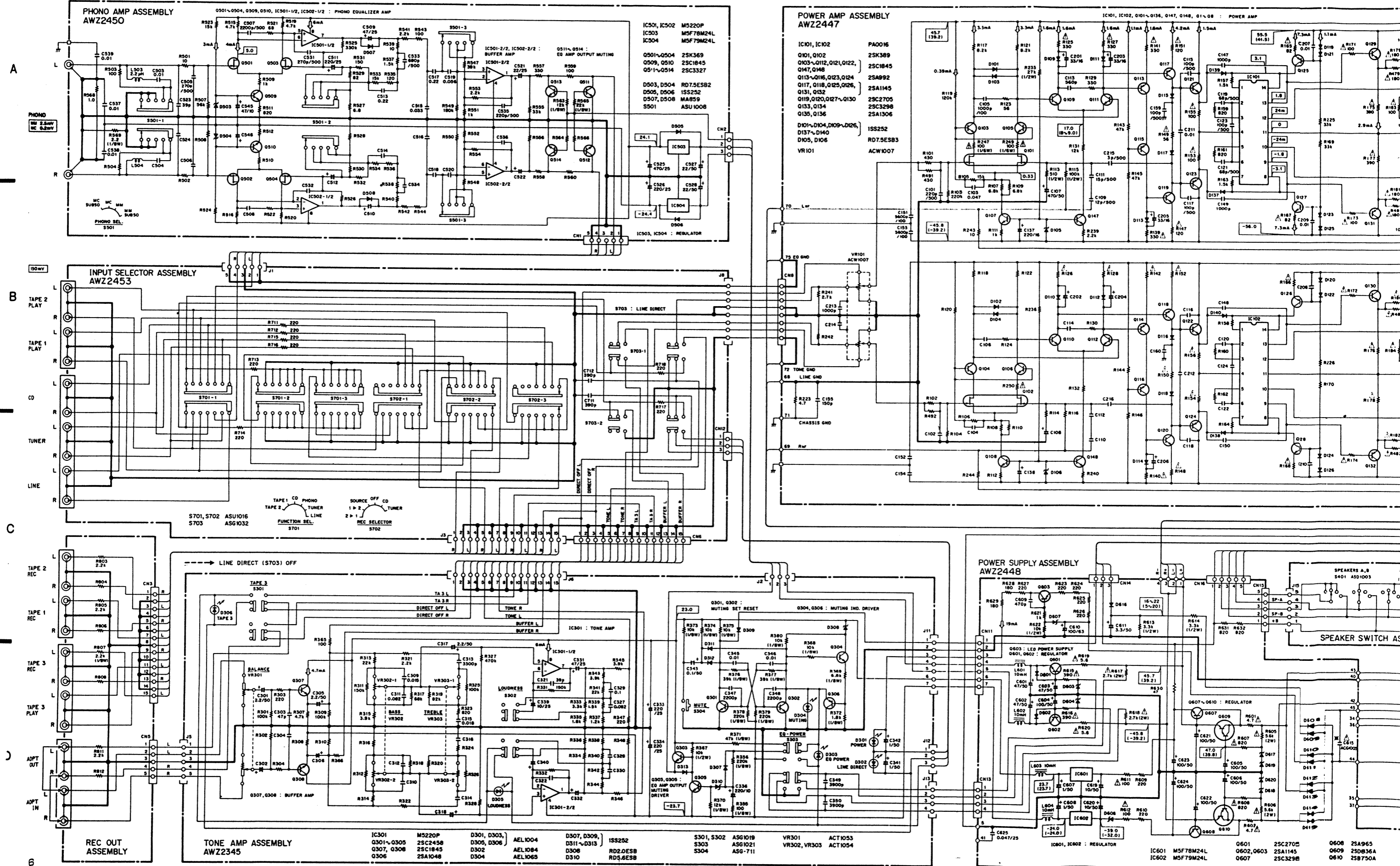


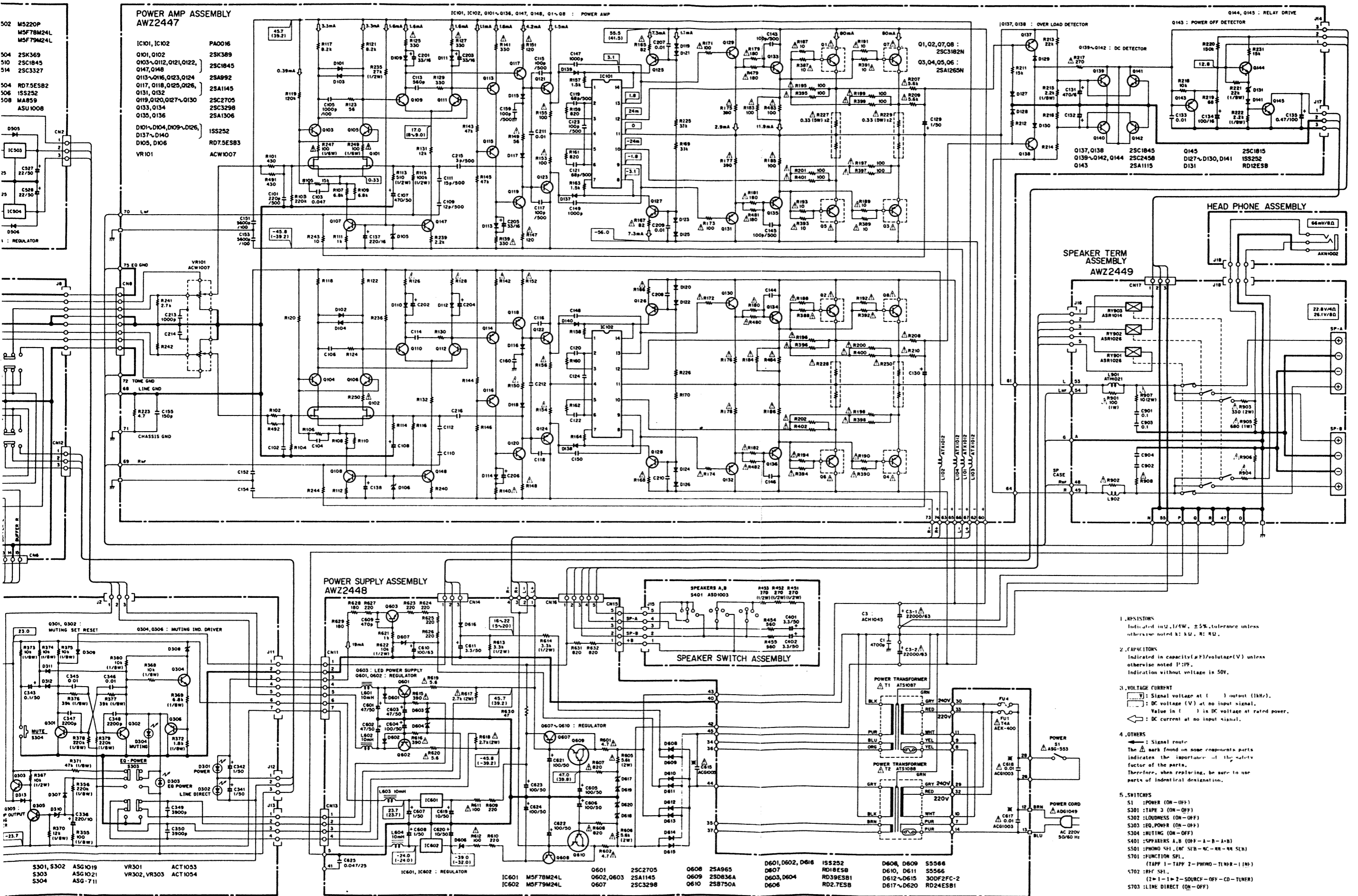
TONE ANP assembly (AWZ2345)





# 2. SCHEMATIC AND P.C. BOARDS DIAGRAM





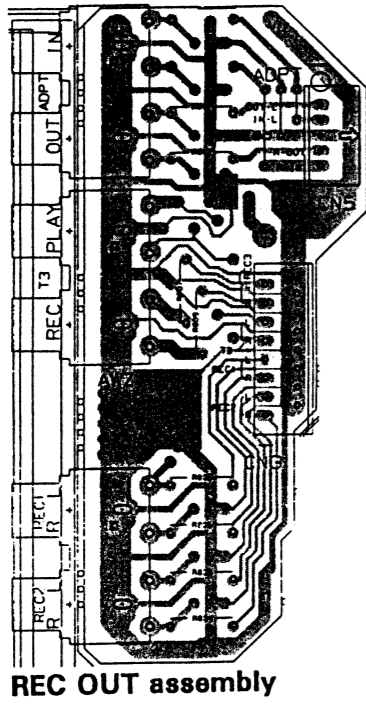
A

B

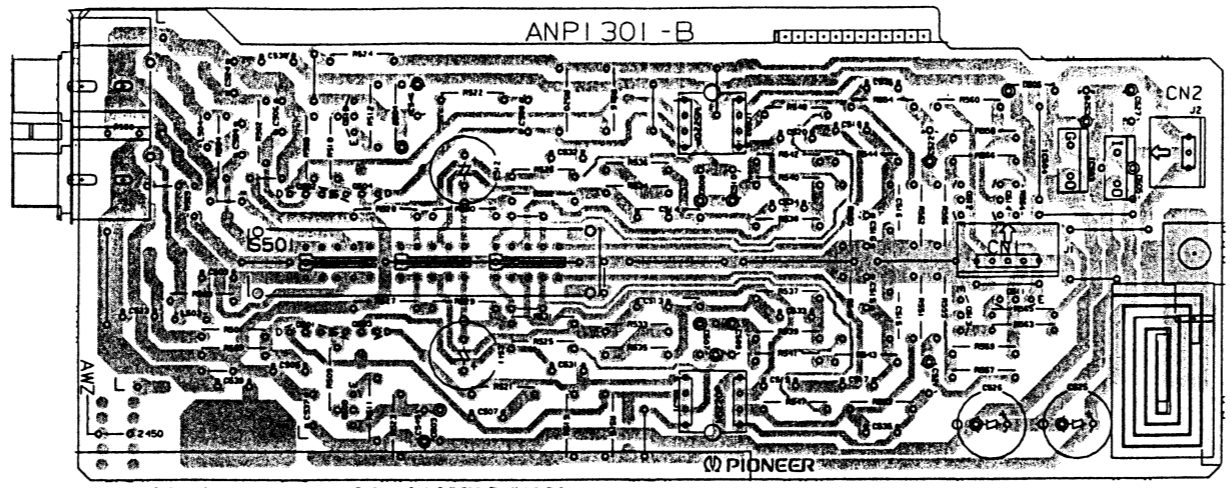
C

D

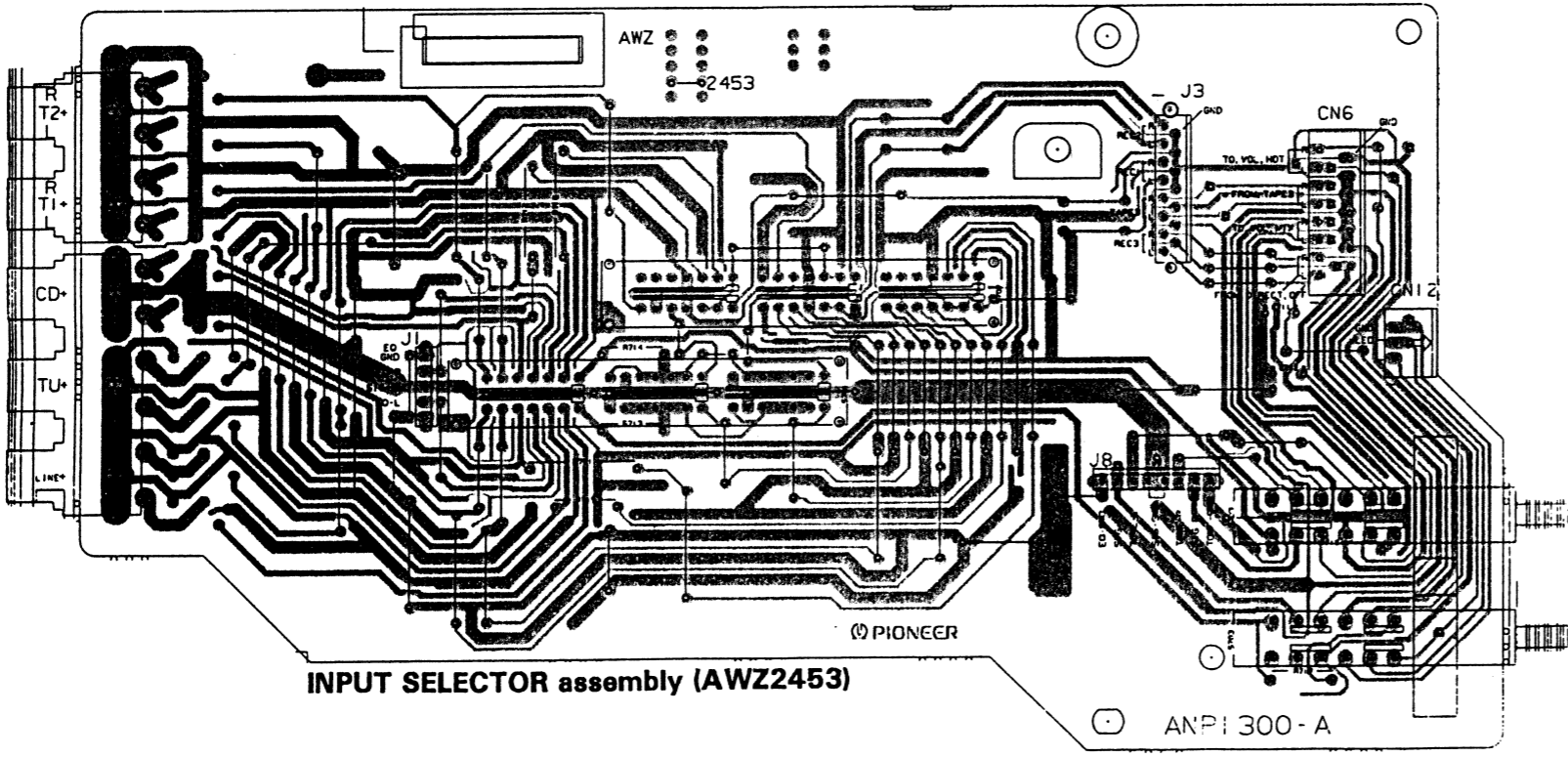
- RESISTORS**  
Indicated in Ω, 1/4W, ±5% tolerance unless otherwise noted: R, 1/2W, R, 1/4W.
- CAPACITORS**  
Indicated in capacity (μF)/voltage (V) unless otherwise noted: C, 1μF, C, 1μF. Indication without voltage is 50V.
- VOLTAGE CURRENT**  
V: Signal voltage at ( ) output (1kHz).  
DC: DC voltage (V) at no input signal.  
Value in ( ) is DC voltage at rated power.  
A: DC current at no input signal.
- OTHERS**  
Signal route.  
The mark found on some components parts indicates the importance of the quality factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- SWITCHES**  
S1: POWER (ON-OFF)  
S301: TAPE 3 (ON-OFF)  
S302: LOUDNESS (ON-OFF)  
S303: EQ POWER (ON-OFF)  
S304: MUTING (ON-OFF)  
S401: SPEAKERS A, B (OFF-A-B-A-B)  
S501: PHONO SP1 (MC SER-NC-MN-SLN)  
S701: FUNCTION SP1.  
(TAPP 1-TAPP 2-PHONO-TUNER-LINE)  
S702: RFF SW.  
(2-1-1-2-SOURCE-OFF-CD-TUNER)  
S703: LINE DIRECT (ON-OFF)



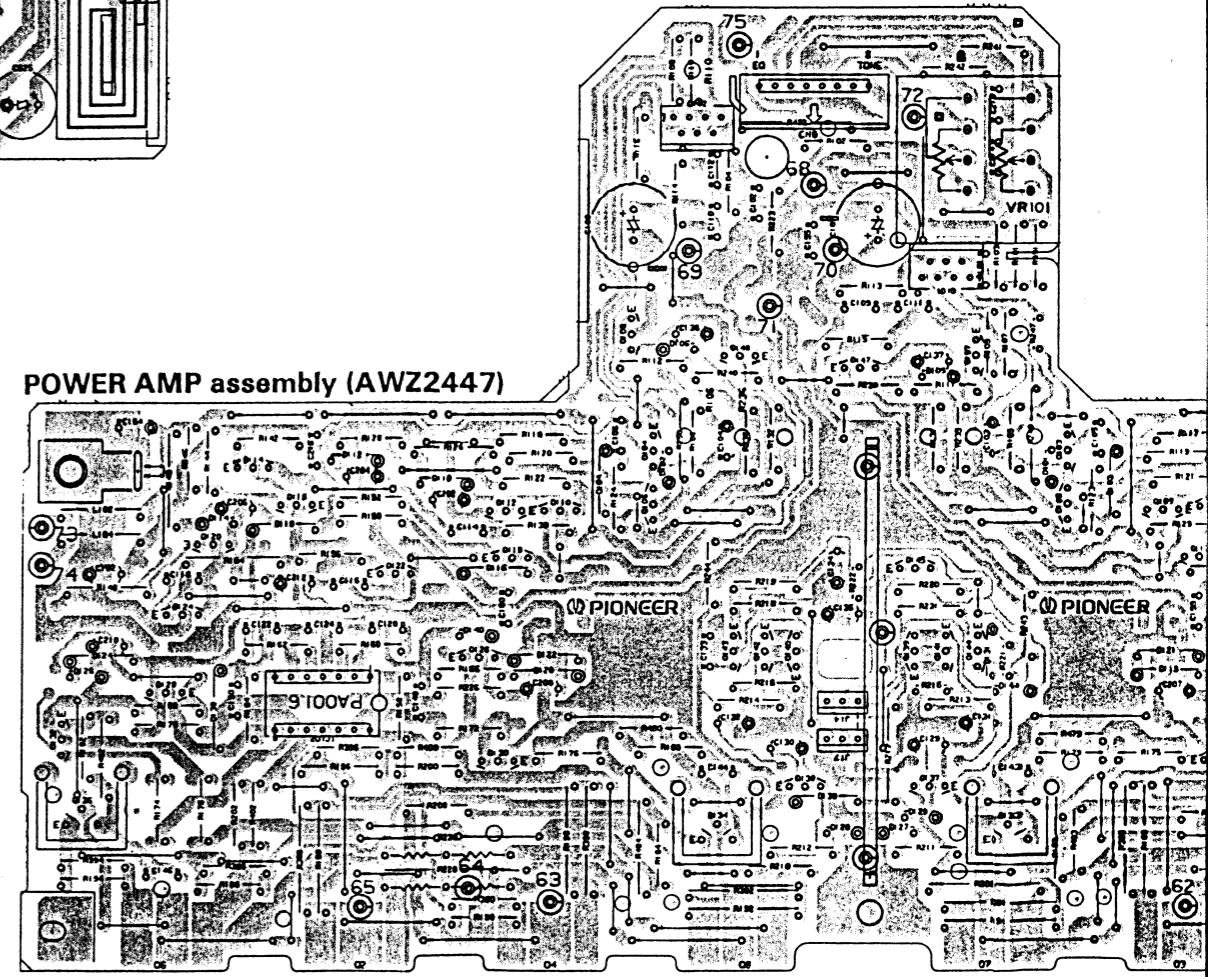
REC OUT assembly



PHONO AMP assembly (AWZ2450)



INPUT SELECTOR assembly (AWZ2453)



POWER AMP assembly (AWZ2447)

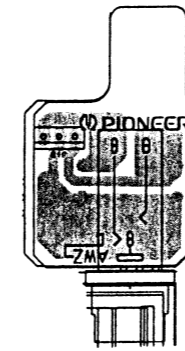
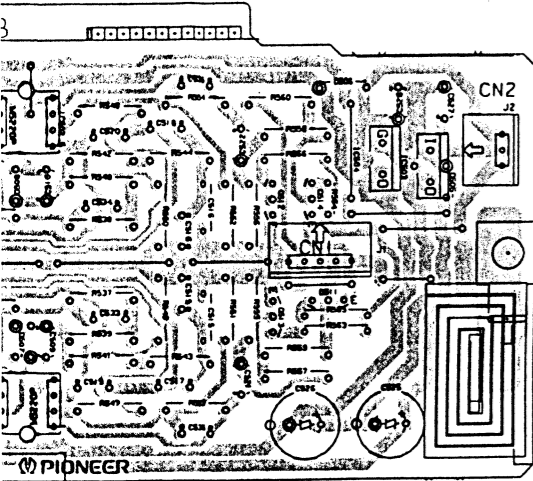
Q108 Q106 Q102 Q148 Q147 D105 Q101 Q07  
 Q103 Q105 D103 Q109 Q  
 D126 D124 Q124 Q122 D140 Q126 D116 Q118 Q143 Q142 Q140 Q145 Q139 Q141 Q144 D131 D121 D119 Q  
 Q132 Q136 Q128 D138 IC102 Q130 D122 D120 Q134 Q138 D130 D128 D127 D129 Q137 D141 Q133

- NOTE
1. This P.C.B. connection diagram is viewed from the parts mounted side.
  2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

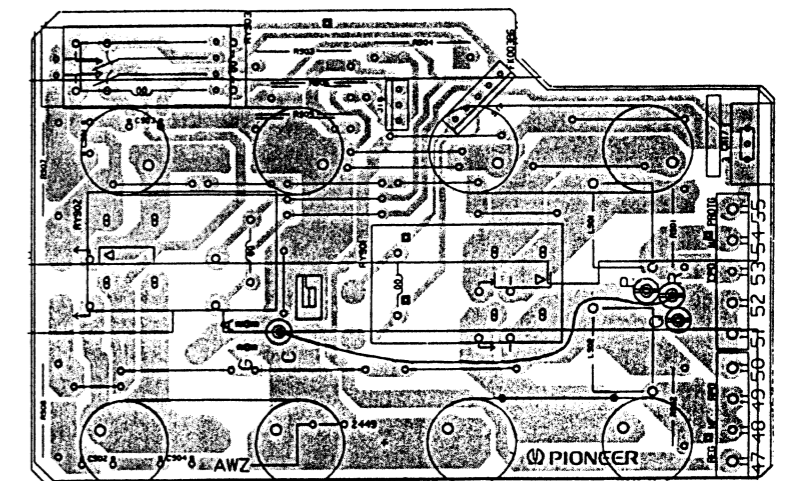
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E0 0504		Transistor
Q215		Radiator type transistor
D203		Diode
R237		Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with ⊖ (double circles) shows negative polarity.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

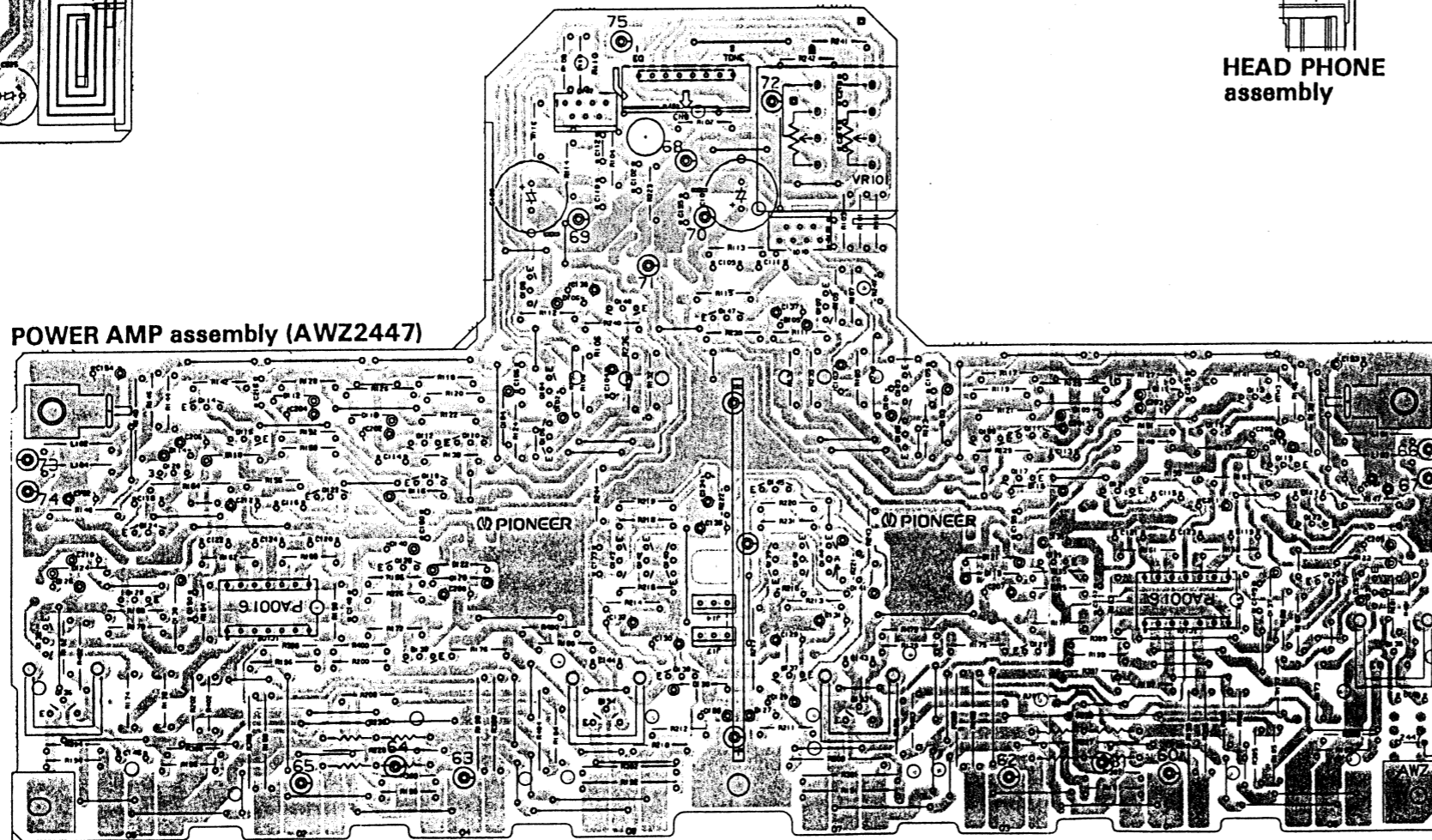


HEAD PHONE assembly



SPEAKER TERMINAL assembly (AWZ2449)

POWER AMP assembly (AWZ2447)



Q108 D106 Q102 Q148 Q147 D105 Q101 Q107 Q103 Q105 D103 Q109 Q111 D109 D111 Q115 D117 Q113 D113 Q119  
 D126 D124 Q124 Q122 D140 Q126 Q116 Q118 Q143 Q142 Q140 Q145 Q139 Q141 Q144 D131 D121 D119 Q117 D139 Q125 Q121 Q123 Q127 D123  
 Q132 Q136 Q128 D138 IC102 Q130 D122 D120 Q134 Q138 D130 D128 D127 D129 Q137 D141 Q133 Q129 IC101 D137 D125 Q131 Q135

NOTE

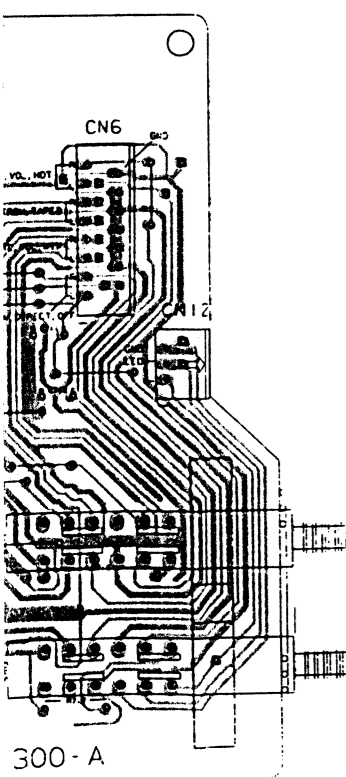
1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

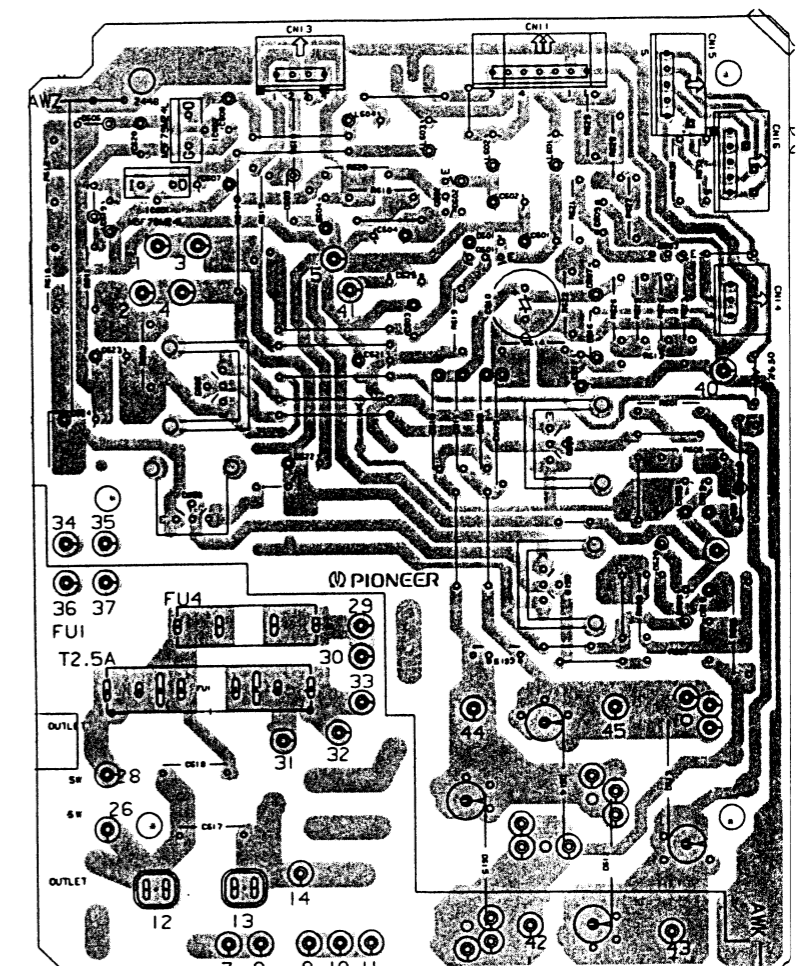
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with ⊙ (double circles) shows negative terminal.
4. The diode terminal marked with ⊙ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



300-A



POWER SUPPLY assembly (AWZ2448)



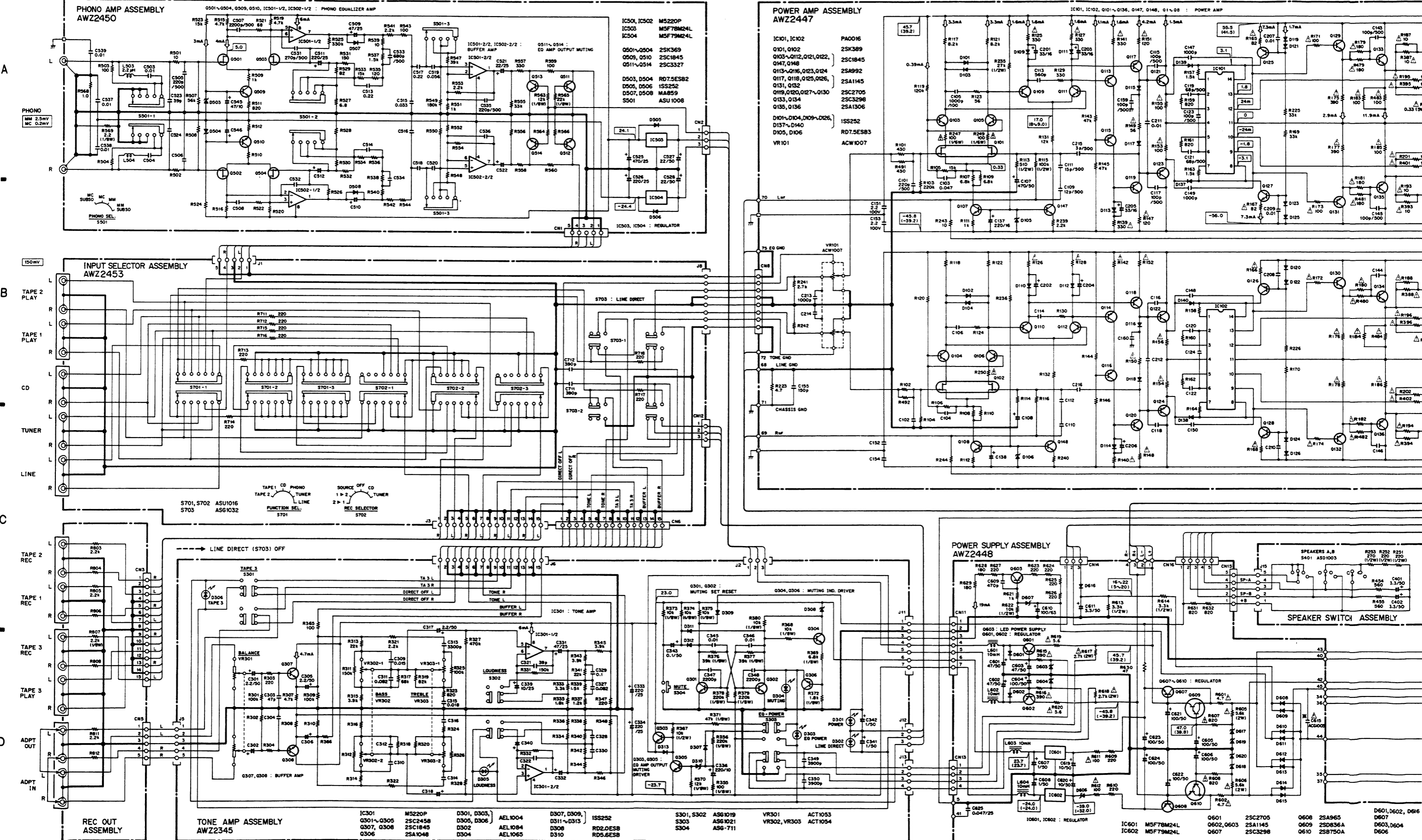


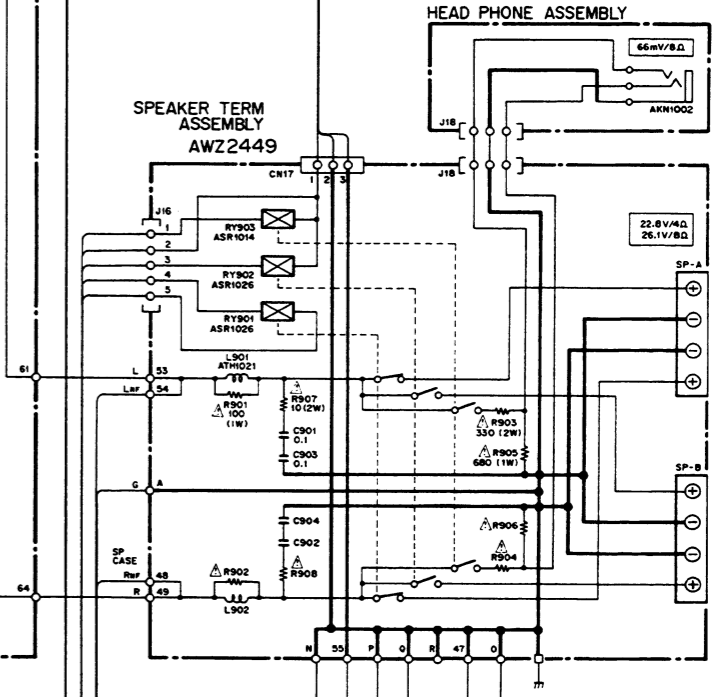
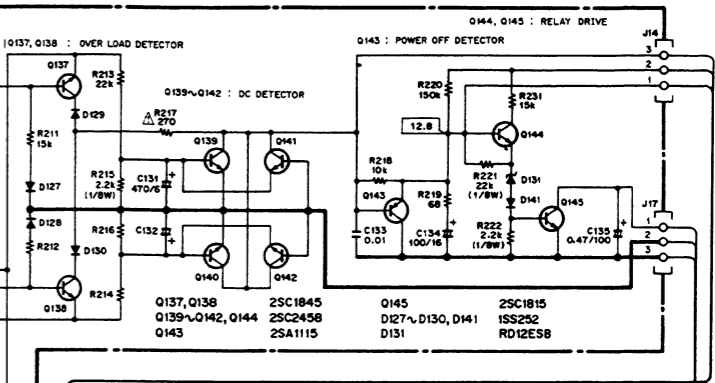
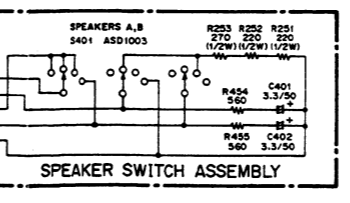
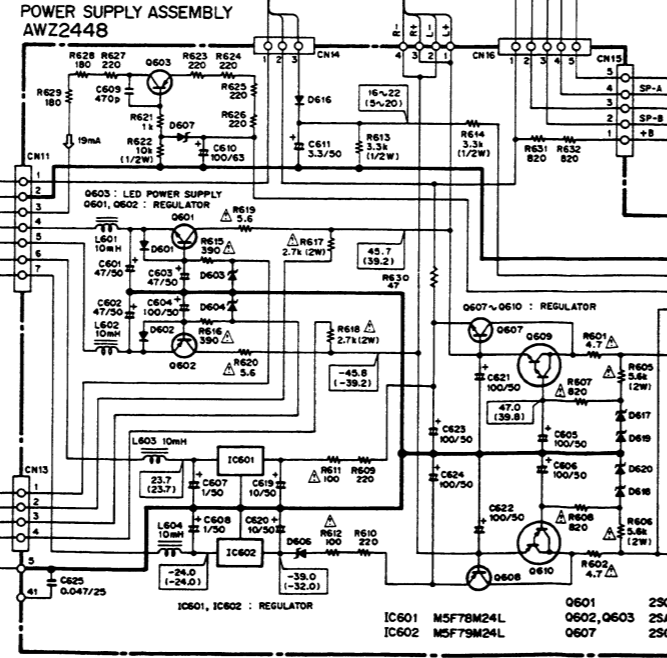
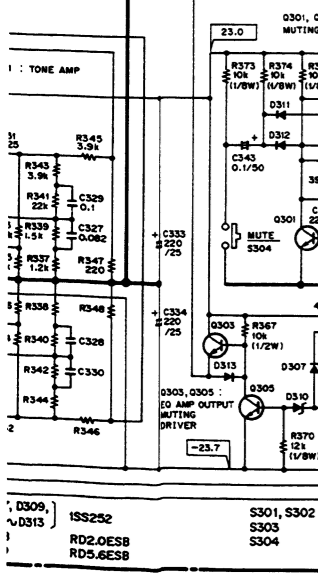
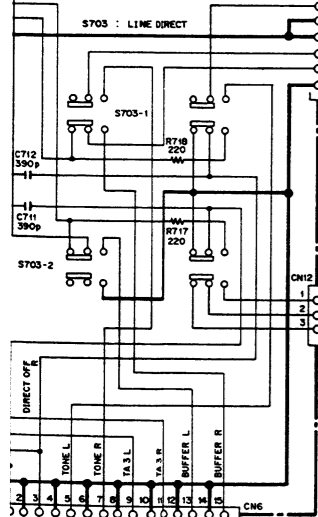
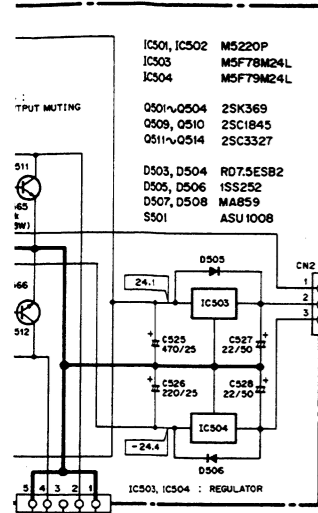
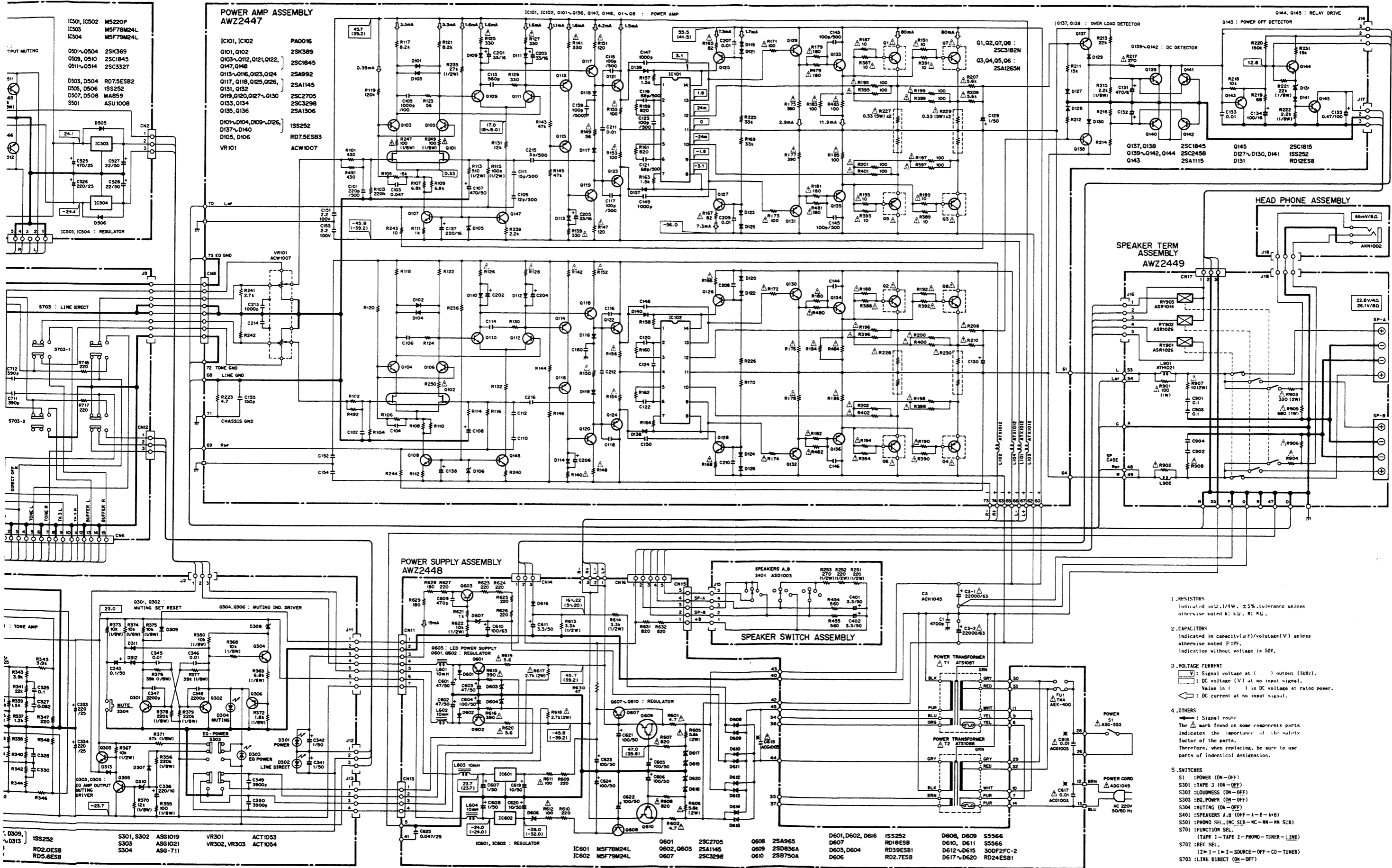




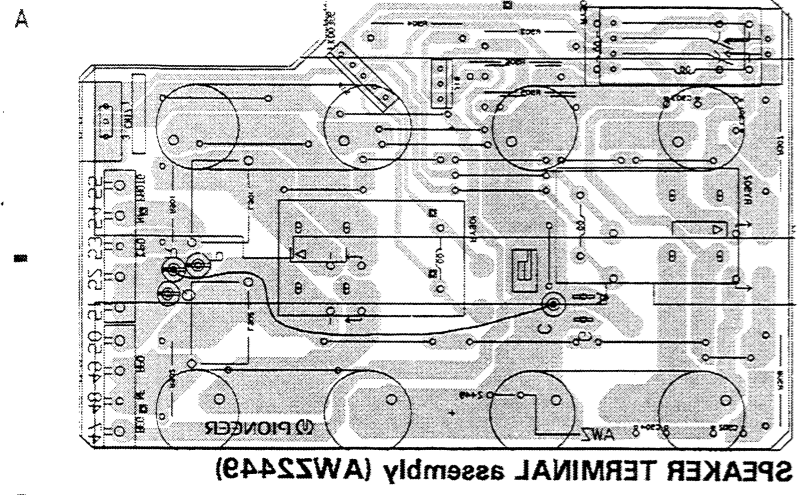


5.2 SCHEMATIC DIAGRAM

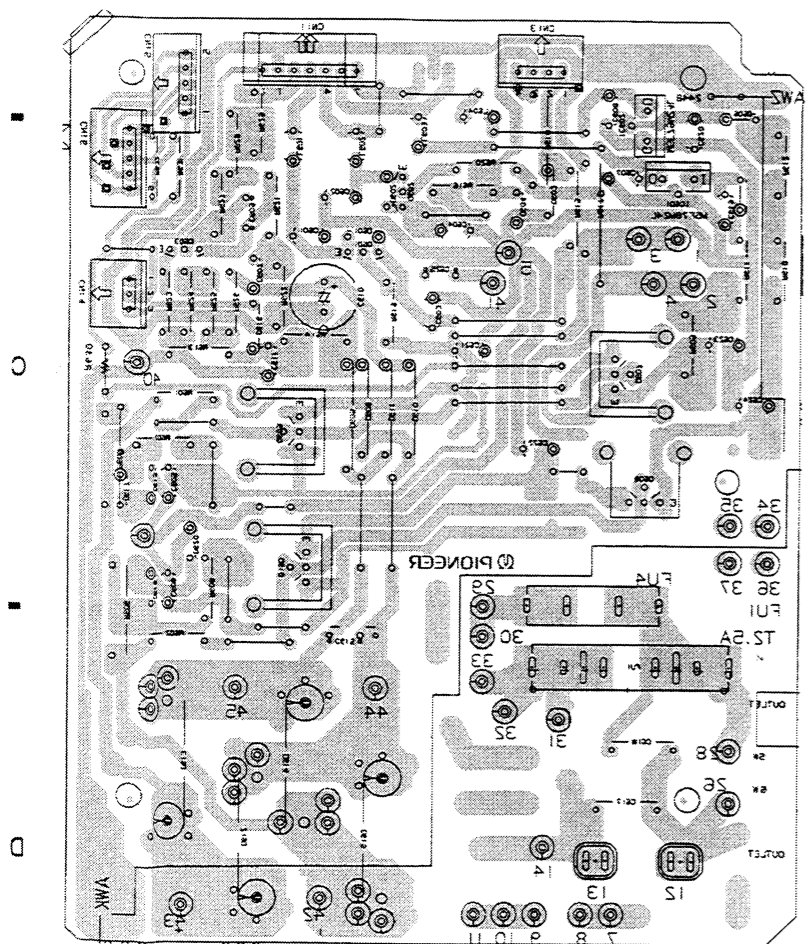




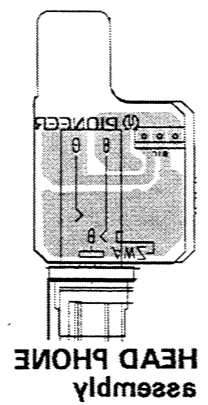
- RESISTORS  
 Indicated in Ω, 1/4W, ±5% tolerance unless otherwise noted; k, M, R, Ω.
- CAPACITORS  
 Indicated in capacity (μF)/voltage (V) unless otherwise noted; P, P.P.  
 Indication without voltage is 50V.
- VOLTAGE CURRENT  
 [Symbol] : Signal voltage at ( ) output (kHz).  
 [Symbol] : DC voltage (V) at no input signal.  
 [Symbol] : Value in ( ) is DC voltage at rated power.  
 [Symbol] : DC current at no input signal.
- OTHERS  
 [Symbol] : Signal route  
 The mark found on some components parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- SWITCHES  
 S1 : POWER (ON-OFF)  
 S301 : TAPE 3 (ON-OFF)  
 S302 : LOUDNESS (ON-OFF)  
 S303 : EQ, POWER (ON-OFF)  
 S304 : MUTING (ON-OFF)  
 S401 : PHONO SEL. (MC, SLB-RC-MN-WN SLB)  
 S701 : FUNCTION SEL.  
 (TAPE 1-TAPE 2-PHONO-TUNER-LINE)  
 S702 : REC SEL.  
 (2-1-1-2-SOURCE-OFF-CD-TUNER)  
 S703 : LINE DIRECT (ON-OFF)



SPEAKER TERMINAL assembly (W22443)

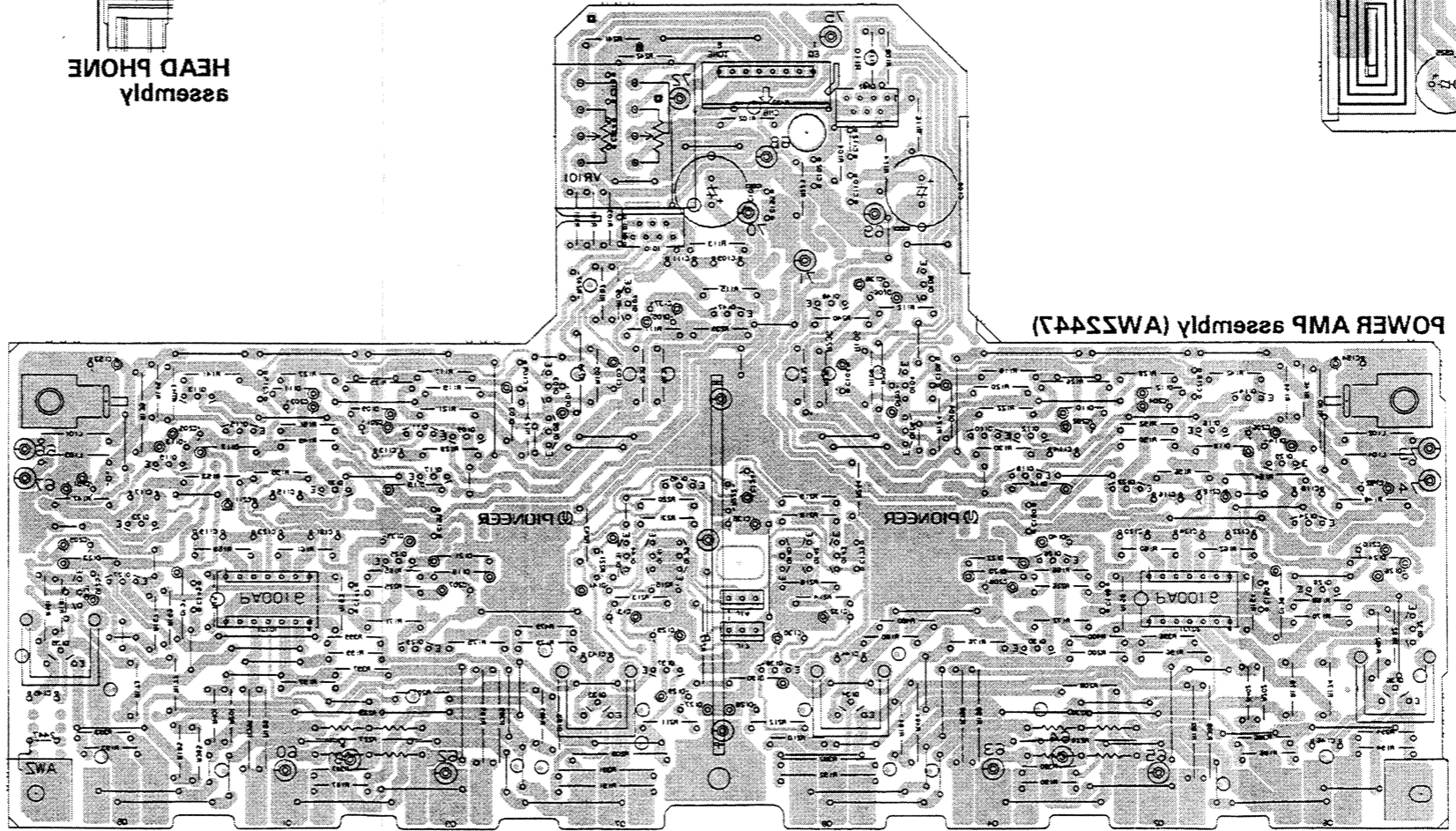


POWER SUPPLY assembly (W22448)



HEAD PHONE assembly

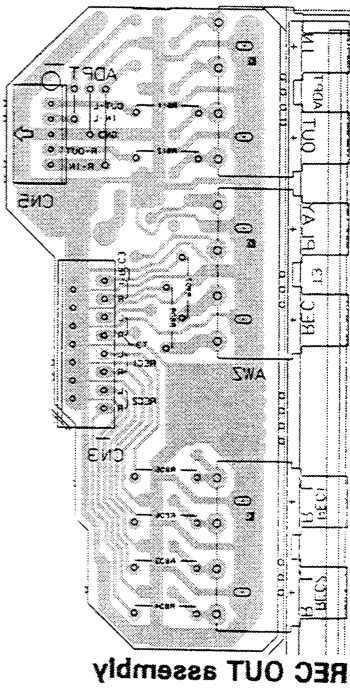
NOTE:  
This picture shows the foil side of the printed circuit.



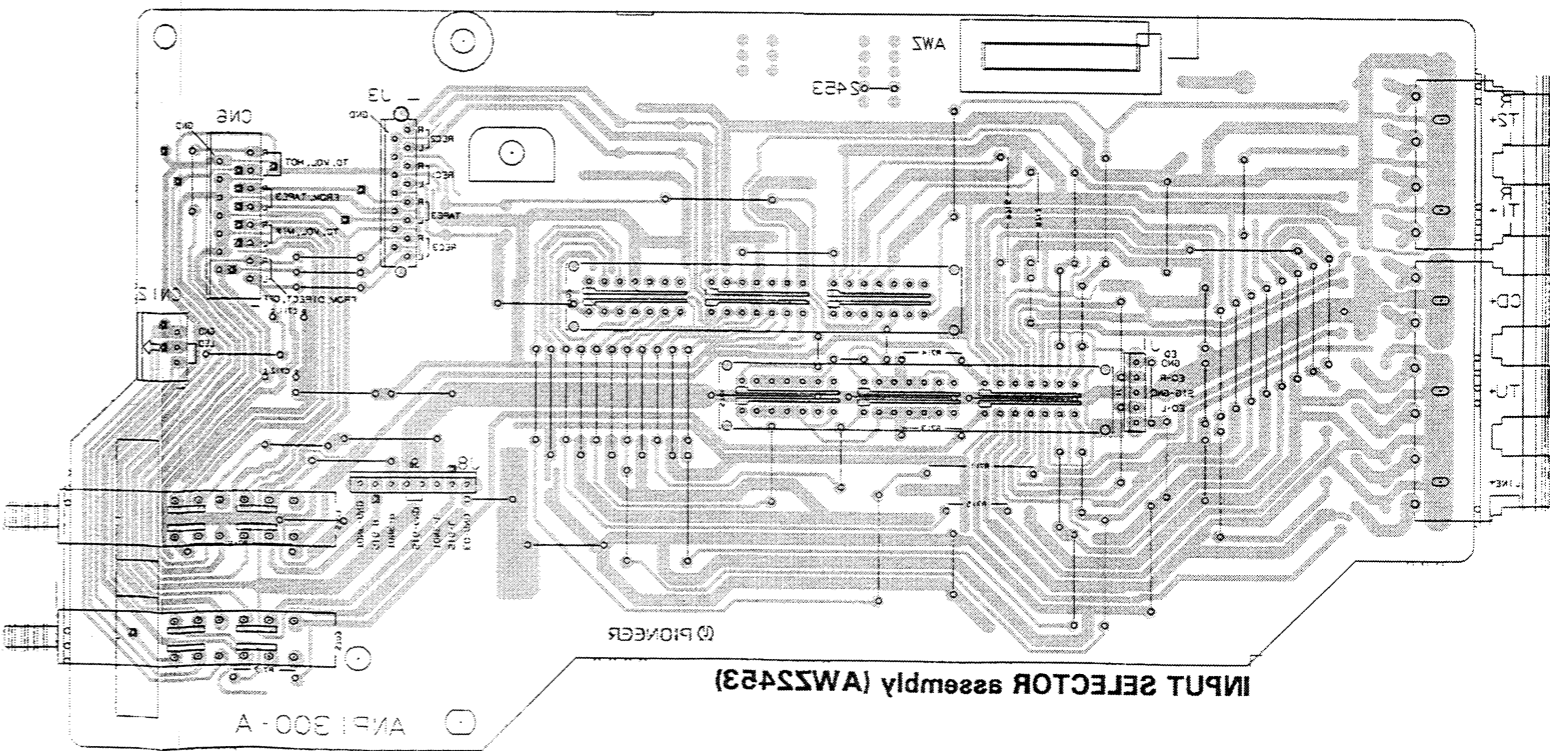
0135 0136 0138 0139 IC105  
0137 0138 0139 0140 IC106  
0141 0142 0143 0144 IC107  
0145 0146 0147 0148 IC108  
0149 0150 0151 0152 IC109  
0153 0154 0155 0156 IC110  
0157 0158 0159 0160 IC111  
0161 0162 0163 0164 IC112  
0165 0166 0167 0168 IC113  
0169 0170 0171 0172 IC114  
0173 0174 0175 0176 IC115  
0177 0178 0179 0180 IC116  
0181 0182 0183 0184 IC117  
0185 0186 0187 0188 IC118  
0189 0190 0191 0192 IC119  
0193 0194 0195 0196 IC120  
0197 0198 0199 0200 IC121  
0201 0202 0203 0204 IC122  
0205 0206 0207 0208 IC123  
0209 0210 0211 0212 IC124  
0213 0214 0215 0216 IC125  
0217 0218 0219 0220 IC126  
0221 0222 0223 0224 IC127  
0225 0226 0227 0228 IC128  
0229 0230 0231 0232 IC129  
0233 0234 0235 0236 IC130  
0237 0238 0239 0240 IC131  
0241 0242 0243 0244 IC132  
0245 0246 0247 0248 IC133  
0249 0250 0251 0252 IC134  
0253 0254 0255 0256 IC135  
0257 0258 0259 0260 IC136  
0261 0262 0263 0264 IC137  
0265 0266 0267 0268 IC138  
0269 0270 0271 0272 IC139  
0273 0274 0275 0276 IC140  
0277 0278 0279 0280 IC141  
0281 0282 0283 0284 IC142  
0285 0286 0287 0288 IC143  
0289 0290 0291 0292 IC144  
0293 0294 0295 0296 IC145  
0297 0298 0299 0300 IC146  
0301 0302 0303 0304 IC147  
0305 0306 0307 0308 IC148  
0309 0310 0311 0312 IC149  
0313 0314 0315 0316 IC150  
0317 0318 0319 0320 IC151  
0321 0322 0323 0324 IC152  
0325 0326 0327 0328 IC153  
0329 0330 0331 0332 IC154  
0333 0334 0335 0336 IC155  
0337 0338 0339 0340 IC156  
0341 0342 0343 0344 IC157  
0345 0346 0347 0348 IC158  
0349 0350 0351 0352 IC159  
0353 0354 0355 0356 IC160  
0357 0358 0359 0360 IC161  
0361 0362 0363 0364 IC162  
0365 0366 0367 0368 IC163  
0369 0370 0371 0372 IC164  
0373 0374 0375 0376 IC165  
0377 0378 0379 0380 IC166  
0381 0382 0383 0384 IC167  
0385 0386 0387 0388 IC168  
0389 0390 0391 0392 IC169  
0393 0394 0395 0396 IC170  
0397 0398 0399 0400 IC171  
0401 0402 0403 0404 IC172  
0405 0406 0407 0408 IC173  
0409 0410 0411 0412 IC174  
0413 0414 0415 0416 IC175  
0417 0418 0419 0420 IC176  
0421 0422 0423 0424 IC177  
0425 0426 0427 0428 IC178  
0429 0430 0431 0432 IC179  
0433 0434 0435 0436 IC180  
0437 0438 0439 0440 IC181  
0441 0442 0443 0444 IC182  
0445 0446 0447 0448 IC183  
0449 0450 0451 0452 IC184  
0453 0454 0455 0456 IC185  
0457 0458 0459 0460 IC186  
0461 0462 0463 0464 IC187  
0465 0466 0467 0468 IC188  
0469 0470 0471 0472 IC189  
0473 0474 0475 0476 IC190  
0477 0478 0479 0480 IC191  
0481 0482 0483 0484 IC192  
0485 0486 0487 0488 IC193  
0489 0490 0491 0492 IC194  
0493 0494 0495 0496 IC195  
0497 0498 0499 0500 IC196  
0501 0502 0503 0504 IC197  
0505 0506 0507 0508 IC198  
0509 0510 0511 0512 IC199  
0513 0514 0515 0516 IC200  
0517 0518 0519 0520 IC201  
0521 0522 0523 0524 IC202  
0525 0526 0527 0528 IC203  
0529 0530 0531 0532 IC204  
0533 0534 0535 0536 IC205  
0537 0538 0539 0540 IC206  
0541 0542 0543 0544 IC207  
0545 0546 0547 0548 IC208  
0549 0550 0551 0552 IC209  
0553 0554 0555 0556 IC210  
0557 0558 0559 0560 IC211  
0561 0562 0563 0564 IC212  
0565 0566 0567 0568 IC213  
0569 0570 0571 0572 IC214  
0573 0574 0575 0576 IC215  
0577 0578 0579 0580 IC216  
0581 0582 0583 0584 IC217  
0585 0586 0587 0588 IC218  
0589 0590 0591 0592 IC219  
0593 0594 0595 0596 IC220  
0597 0598 0599 0600 IC221  
0601 0602 0603 0604 IC222  
0605 0606 0607 0608 IC223  
0609 0610 0611 0612 IC224  
0613 0614 0615 0616 IC225  
0617 0618 0619 0620 IC226  
0621 0622 0623 0624 IC227  
0625 0626 0627 0628 IC228  
0629 0630 0631 0632 IC229  
0633 0634 0635 0636 IC230  
0637 0638 0639 0640 IC231  
0641 0642 0643 0644 IC232  
0645 0646 0647 0648 IC233  
0649 0650 0651 0652 IC234  
0653 0654 0655 0656 IC235  
0657 0658 0659 0660 IC236  
0661 0662 0663 0664 IC237  
0665 0666 0667 0668 IC238  
0669 0670 0671 0672 IC239  
0673 0674 0675 0676 IC240  
0677 0678 0679 0680 IC241  
0681 0682 0683 0684 IC242  
0685 0686 0687 0688 IC243  
0689 0690 0691 0692 IC244  
0693 0694 0695 0696 IC245  
0697 0698 0699 0700 IC246  
0701 0702 0703 0704 IC247  
0705 0706 0707 0708 IC248  
0709 0710 0711 0712 IC249  
0713 0714 0715 0716 IC250  
0717 0718 0719 0720 IC251  
0721 0722 0723 0724 IC252  
0725 0726 0727 0728 IC253  
0729 0730 0731 0732 IC254  
0733 0734 0735 0736 IC255  
0737 0738 0739 0740 IC256  
0741 0742 0743 0744 IC257  
0745 0746 0747 0748 IC258  
0749 0750 0751 0752 IC259  
0753 0754 0755 0756 IC260  
0757 0758 0759 0760 IC261  
0761 0762 0763 0764 IC262  
0765 0766 0767 0768 IC263  
0769 0770 0771 0772 IC264  
0773 0774 0775 0776 IC265  
0777 0778 0779 0780 IC266  
0781 0782 0783 0784 IC267  
0785 0786 0787 0788 IC268  
0789 0790 0791 0792 IC269  
0793 0794 0795 0796 IC270  
0797 0798 0799 0800 IC271  
0801 0802 0803 0804 IC272  
0805 0806 0807 0808 IC273  
0809 0810 0811 0812 IC274  
0813 0814 0815 0816 IC275  
0817 0818 0819 0820 IC276  
0821 0822 0823 0824 IC277  
0825 0826 0827 0828 IC278  
0829 0830 0831 0832 IC279  
0833 0834 0835 0836 IC280  
0837 0838 0839 0840 IC281  
0841 0842 0843 0844 IC282  
0845 0846 0847 0848 IC283  
0849 0850 0851 0852 IC284  
0853 0854 0855 0856 IC285  
0857 0858 0859 0860 IC286  
0861 0862 0863 0864 IC287  
0865 0866 0867 0868 IC288  
0869 0870 0871 0872 IC289  
0873 0874 0875 0876 IC290  
0877 0878 0879 0880 IC291  
0881 0882 0883 0884 IC292  
0885 0886 0887 0888 IC293  
0889 0890 0891 0892 IC294  
0893 0894 0895 0896 IC295  
0897 0898 0899 0900 IC296  
0901 0902 0903 0904 IC297  
0905 0906 0907 0908 IC298  
0909 0910 0911 0912 IC299  
0913 0914 0915 0916 IC300  
0917 0918 0919 0920 IC301  
0921 0922 0923 0924 IC302  
0925 0926 0927 0928 IC303  
0929 0930 0931 0932 IC304  
0933 0934 0935 0936 IC305  
0937 0938 0939 0940 IC306  
0941 0942 0943 0944 IC307  
0945 0946 0947 0948 IC308  
0949 0950 0951 0952 IC309  
0953 0954 0955 0956 IC310  
0957 0958 0959 0960 IC311  
0961 0962 0963 0964 IC312  
0965 0966 0967 0968 IC313  
0969 0970 0971 0972 IC314  
0973 0974 0975 0976 IC315  
0977 0978 0979 0980 IC316  
0981 0982 0983 0984 IC317  
0985 0986 0987 0988 IC318  
0989 0990 0991 0992 IC319  
0993 0994 0995 0996 IC320  
0997 0998 0999 1000 IC321  
1001 1002 1003 1004 IC322  
1005 1006 1007 1008 IC323  
1009 1010 1011 1012 IC324  
1013 1014 1015 1016 IC325  
1017 1018 1019 1020 IC326  
1021 1022 1023 1024 IC327  
1025 1026 1027 1028 IC328  
1029 1030 1031 1032 IC329  
1033 1034 1035 1036 IC330  
1037 1038 1039 1040 IC331  
1041 1042 1043 1044 IC332  
1045 1046 1047 1048 IC333  
1049 1050 1051 1052 IC334  
1053 1054 1055 1056 IC335  
1057 1058 1059 1060 IC336  
1061 1062 1063 1064 IC337  
1065 1066 1067 1068 IC338  
1069 1070 1071 1072 IC339  
1073 1074 1075 1076 IC340  
1077 1078 1079 1080 IC341  
1081 1082 1083 1084 IC342  
1085 1086 1087 1088 IC343  
1089 1090 1091 1092 IC344  
1093 1094 1095 1096 IC345  
1097 1098 1099 1100 IC346  
1101 1102 1103 1104 IC347  
1105 1106 1107 1108 IC348  
1109 1110 1111 1112 IC349  
1113 1114 1115 1116 IC350  
1117 1118 1119 1120 IC351  
1121 1122 1123 1124 IC352  
1125 1126 1127 1128 IC353  
1129 1130 1131 1132 IC354  
1133 1134 1135 1136 IC355  
1137 1138 1139 1140 IC356  
1141 1142 1143 1144 IC357  
1145 1146 1147 1148 IC358  
1149 1150 1151 1152 IC359  
1153 1154 1155 1156 IC360  
1157 1158 1159 1160 IC361  
1161 1162 1163 1164 IC362  
1165 1166 1167 1168 IC363  
1169 1170 1171 1172 IC364  
1173 1174 1175 1176 IC365  
1177 1178 1179 1180 IC366  
1181 1182 1183 1184 IC367  
1185 1186 1187 1188 IC368  
1189 1190 1191 1192 IC369  
1193 1194 1195 1196 IC370  
1197 1198 1199 1200 IC371  
1201 1202 1203 1204 IC372  
1205 1206 1207 1208 IC373  
1209 1210 1211 1212 IC374  
1213 1214 1215 1216 IC375  
1217 1218 1219 1220 IC376  
1221 1222 1223 1224 IC377  
1225 1226 1227 1228 IC378  
1229 1230 1231 1232 IC379  
1233 1234 1235 1236 IC380  
1237 1238 1239 1240 IC381  
1241 1242 1243 1244 IC382  
1245 1246 1247 1248 IC383  
1249 1250 1251 1252 IC384  
1253 1254 1255 1256 IC385  
1257 1258 1259 1260 IC386  
1261 1262 1263 1264 IC387  
1265 1266 1267 1268 IC388  
1269 1270 1271 1272 IC389  
1273 1274 1275 1276 IC390  
1277 1278 1279 1280 IC391  
1281 1282 1283 1284 IC392  
1285 1286 1287 1288 IC393  
1289 1290 1291 1292 IC394  
1293 1294 1295 1296 IC395  
1297 1298 1299 1300 IC396  
1301 1302 1303 1304 IC397  
1305 1306 1307 1308 IC398  
1309 1310 1311 1312 IC399  
1313 1314 1315 1316 IC400  
1317 1318 1319 1320 IC401  
1321 1322 1323 1324 IC402  
1325 1326 1327 1328 IC403  
1329 1330 1331 1332 IC404  
1333 1334 1335 1336 IC405  
1337 1338 1339 1340 IC406  
1341 1342 1343 1344 IC407  
1345 1346 1347 1348 IC408  
1349 1350 1351 1352 IC409  
1353 1354 1355 1356 IC410  
1357 1358 1359 1360 IC411  
1361 1362 1363 1364 IC412  
1365 1366 1367 1368 IC413  
1369 1370 1371 1372 IC414  
1373 1374 1375 1376 IC415  
1377 1378 1379 1380 IC416  
1381 1382 1383 1384 IC417  
1385 1386 1387 1388 IC418  
1389 1390 1391 1392 IC419  
1393 1394 1395 1396 IC420  
1397 1398 1399 1400 IC421  
1401 1402 1403 1404 IC422  
1405 1406 1407 1408 IC423  
1409 1410 1411 1412 IC424  
1413 1414 1415 1416 IC425  
1417 1418 1419 1420 IC426  
1421 1422 1423 1424 IC427  
1425 1426 1427 1428 IC428  
1429 1430 1431 1432 IC429  
1433 1434 1435 1436 IC430  
1437 1438 1439 1440 IC431  
1441 1442 1443 1444 IC432  
1445 1446 1447 1448 IC433  
1449 1450 1451 1452 IC434  
1453 1454 1455 1456 IC435  
1457 1458 1459 1460 IC436  
1461 1462 1463 1464 IC437  
1465 1466 1467 1468 IC438  
1469 1470 1471 1472 IC439  
1473 1474 1475 1476 IC440  
1477 1478 1479 1480 IC441  
1481 1482 1483 1484 IC442  
1485 1486 1487 1488 IC443  
1489 1490 1491 1492 IC444  
1493 1494 1495 1496 IC445  
1497 1498 1499 1500 IC446  
1501 1502 1503 1504 IC447  
1505 1506 1507 1508 IC448  
1509 1510 1511 1512 IC449  
1513 1514 1515 1516 IC450  
1517 1518 1519 1520 IC451  
1521 1522 1523 1524 IC452  
1525 1526 1527 1528 IC453  
1529 1530 1531 1532 IC454  
1533 1534 1535 1536 IC455  
1537 1538 1539 1540 IC456  
1541 1542 1543 1544 IC457  
1545 1546 1547 1548 IC458  
1549 1550 1551 1552 IC459  
1553 1554 1555 1556 IC460  
1557 1558 1559 1560 IC461  
1561 1562 1563 1564 IC462  
1565 1566 1567 1568 IC463  
1569 1570 1571 1572 IC464  
1573 1574 1575 1576 IC465  
1577 1578 1579 1580 IC466  
1581 1582 1583 1584 IC467  
1585 1586 1587 1588 IC468  
1589 1590 1591 1592 IC469  
1593 1594 1595 1596 IC470  
1597 1598 1599 1600 IC471  
1601 1602 1603 1604 IC472  
1605 1606 1607 1608 IC473  
1609 1610 1611 1612 IC474  
1613 1614 1615 1616 IC475  
1617 1618 1619 1620 IC476  
1621 1622 1623 1624 IC477  
1625 1626 1627 1628 IC478  
1629 1630 1631 1632 IC479  
1633 1634 1635 1636 IC480  
1637 1638 1639 1640 IC481  
1641 1642 1643 1644 IC482  
1645 1646 1647 1648 IC483  
1649 1650 1651 1652 IC484  
1653 1654 1655 1656 IC485  
1657 1658 1659 1660 IC486  
1661 1662 1663 1664 IC487  
1665 1666 1667 1668 IC488  
1669 1670 1671 1672 IC489  
1673 1674 1675 1676 IC490  
1677 1678 1679 1680 IC491  
1681 1682 1683 1684 IC492  
1685 1686 1687 1688 IC493  
1689 1690 1691 1692 IC494  
1693 1694 1695 1696 IC495  
1697 1698 1699 1700 IC496  
1701 1702 1703 1704 IC497  
1705 1706 1707 1708 IC498  
1709 1710 1711 1712 IC499  
1713 1714 1715 1716 IC500  
1717 1718 1719 1720 IC501  
1721 1722 1723 1724 IC502  
1725 1726 1727 1728 IC503  
1729 1730 1731 1732 IC504  
1733 1734 1735 1736 IC505  
1737 1738 1739 1740 IC506  
1741 1742 1743 1744 IC507  
1745 1746 1747 1748 IC508  
1749 1750 1751 1752 IC509  
1753 1754 1755 1756 IC510  
1757 1758 1759 1760 IC511  
1761 1762 1763 1764 IC512  
1765 1766 1767 1768 IC513  
1769 1770 1771 1772 IC514  
1773 1774 1775 1776 IC515  
1777 1778 1779 1780 IC516  
1781 1782 1783 1784 IC517  
1785 1786 1787 1788 IC518  
1789 1790 1791 1792 IC519  
1793 1794 1795 1796 IC520  
1797 1798 1799 1800 IC521  
1801 1802 1803 1804 IC522  
1805 1806 1807 1808 IC523  
1809 1810 1811 1812 IC524  
1813 1814 1815 1816 IC525  
1817 1818 1819 1820 IC526  
1821 1822 1823 1824 IC527  
1825 1826 1827 1828 IC528  
1829 1830 1831 1832 IC529  
1833 1834 1835 1836 IC530  
1837 1838 1839 1840 IC531  
1841 1842 1843 1844 IC532  
1845 1846 1847 1848 IC533  
1849 1850 1851 1852 IC534  
1853 1854 1855 1856 IC535  
1857 1858 1859 1860 IC536  
1861 1862 1863 1864 IC537  
1865 1866 1867 1868 IC538  
1869 1870 1871 1872 IC539  
1873 1874 1875 1876 IC540  
1877 1878 1879 1880 IC541  
1881 1882 1883 1884 IC542  
1885 1886 1887 1888 IC543  
1889 1890 1891 1892 IC544  
1893 1894 1895 1896 IC545  
1897 1898 1899 1900 IC546  
1901 1902 1903 1904 IC547  
1905 1906 1907 1908 IC548  
1909 1910 1911 1912 IC549  
1913 1914 1915 1916 IC550  
1917 1918 1919 1920 IC551  
1921 1922 1923 1924 IC552  
1925 1926 1927 1928 IC553  
1929 1930 1931 1932 IC554  
1933 1934 1935 1936 IC555  
1937 1938 1939 1940 IC556  
1941 1942 1943 1944 IC557  
1945 1946 1947 1948 IC558  
1949 1950 1951 1952 IC559  
1953 1954 1955 1956 IC560  
1957 1958 1959 1960 IC561  
1961 1962 1963 1964 IC562  
1965 1966 1967 1968 IC563  
1969 1970 1971 1972 IC564  
1973 1974 1975 1976 IC565  
1977 1978 1979 1980 IC566  
1981 1982 1983 1984 IC567  
1985 1986 1987 1988 IC568  
1989 1990 1991 1992 IC569  
1993 1994 1995 1996 IC570  
1997 1998 1999 2000 IC571  
2001 2002 2003 2004 IC572  
2005 2006 2007 2008 IC573  
2009 2010 2011 2012 IC574

2.3 P.C. BOARD PATTERNS

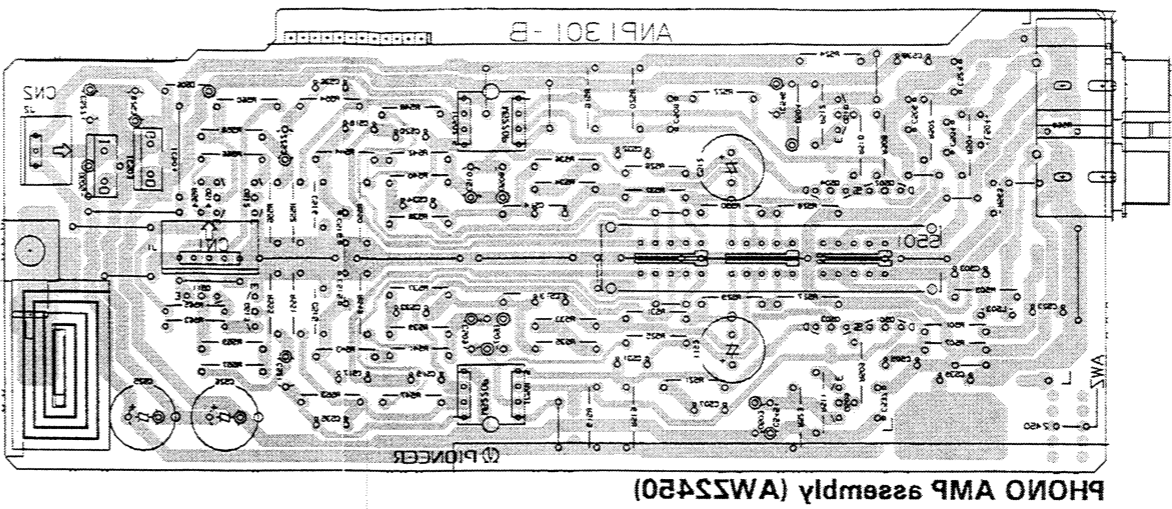
A



B

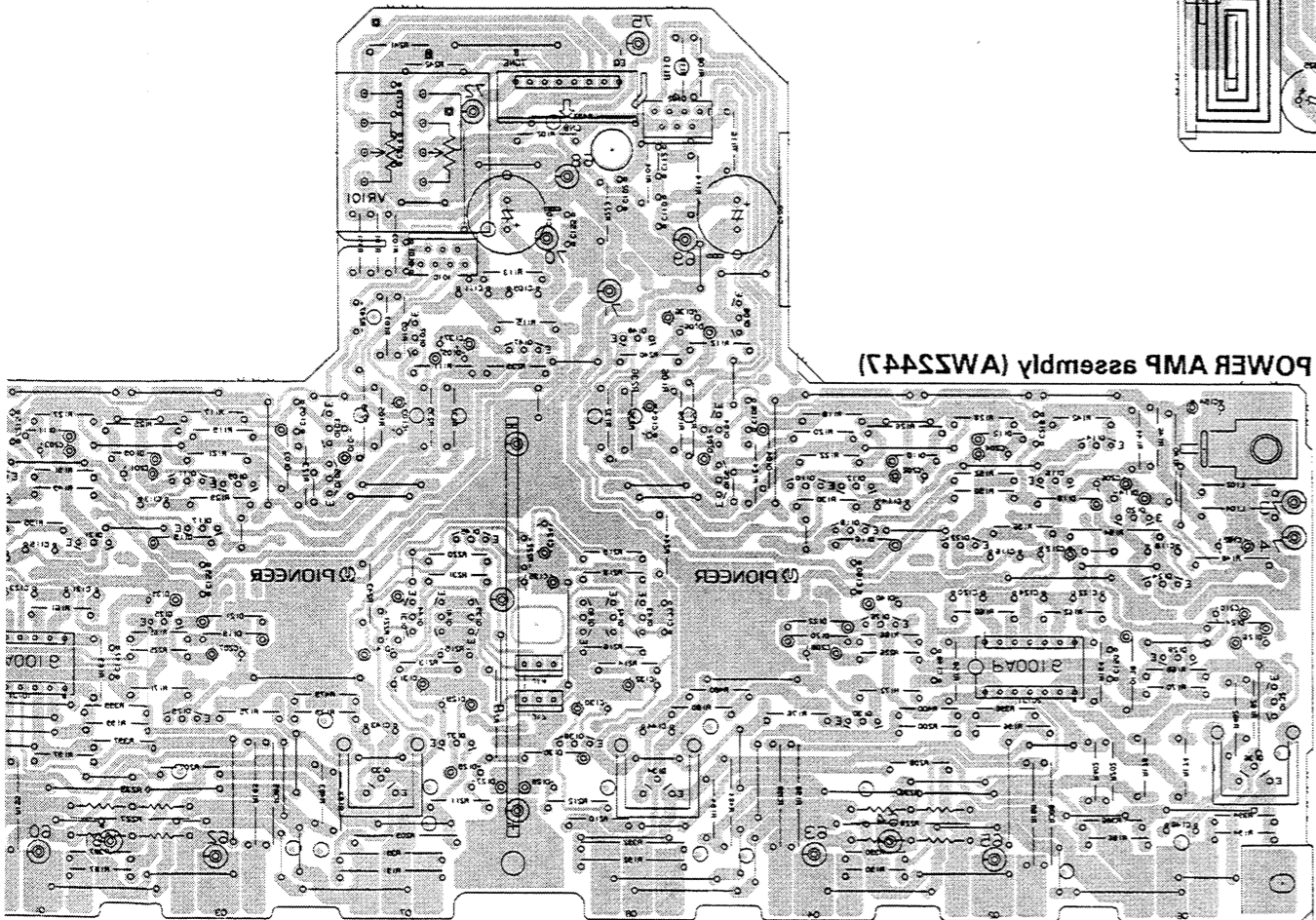


D



NOTE:

This picture shows the foil side of the printed circuit.



IC101  
 01S9 01S8 01S7 01S6 01S5 01S4 01S3 01S2 01S1  
 0130 DIS5 DIS0 0134 0138 DIS8 DIS2 DIS4 DIS12 DIS14 DIS16 DIS18 DIS20 DIS22 DIS24 DIS26 DIS28 DIS30 DIS32 DIS34 DIS36 DIS38 DIS40 DIS42 DIS44 DIS46 DIS48 DIS50 DIS52 DIS54 DIS56 DIS58 DIS60 DIS62 DIS64 DIS66 DIS68 DIS70 DIS72 DIS74 DIS76 DIS78 DIS80 DIS82 DIS84 DIS86 DIS88 DIS90 DIS92 DIS94 DIS96 DIS98 DIS100

e

2

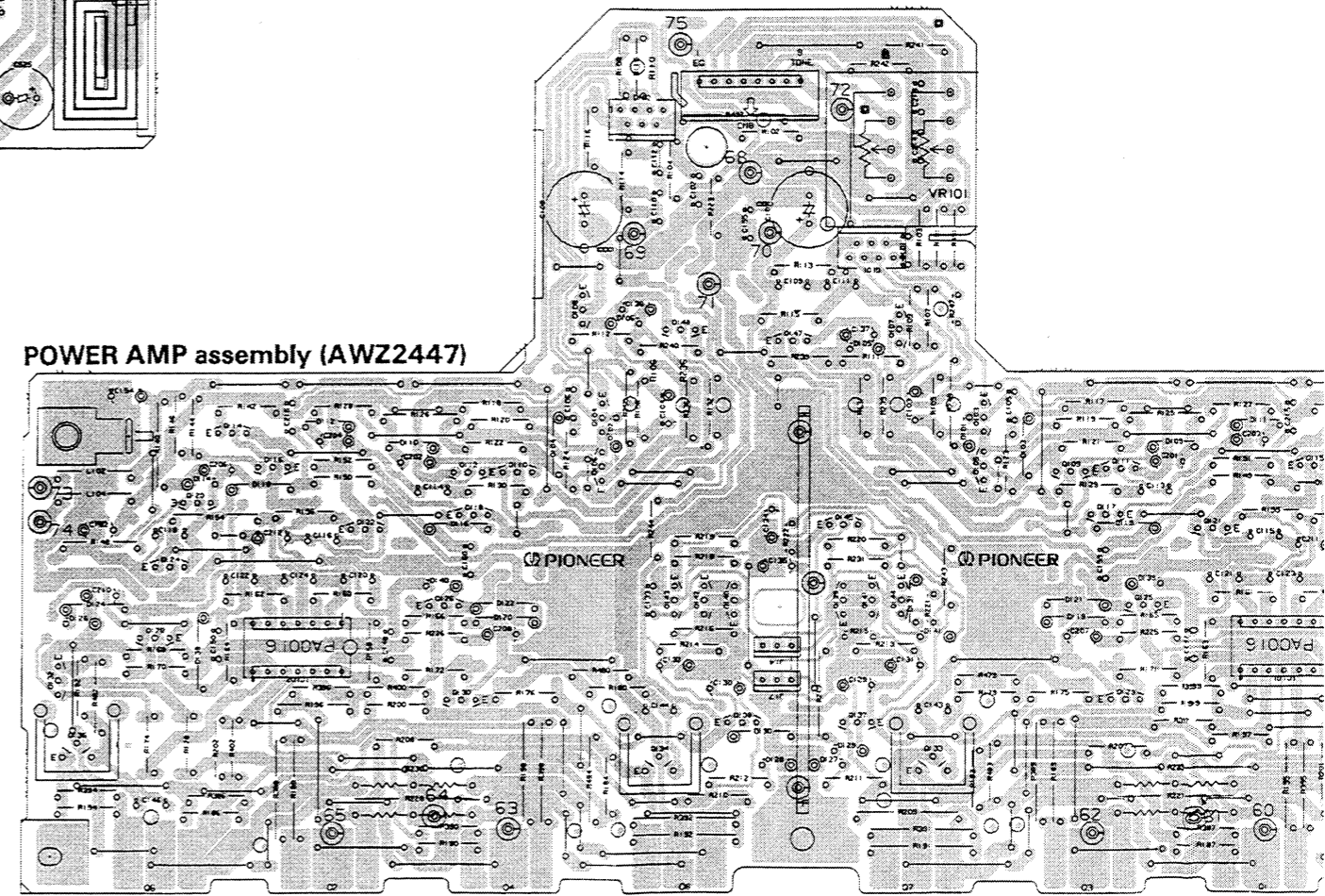
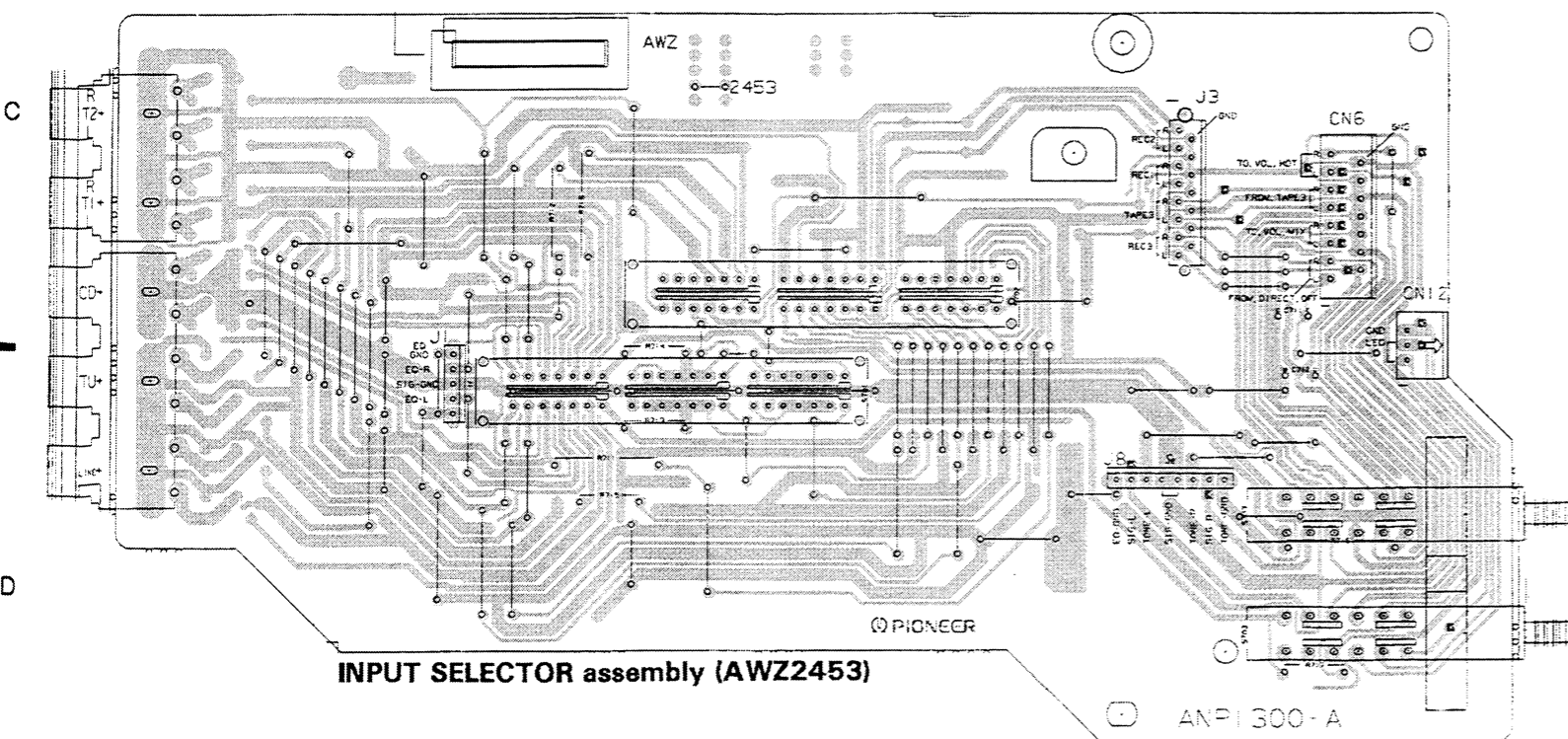
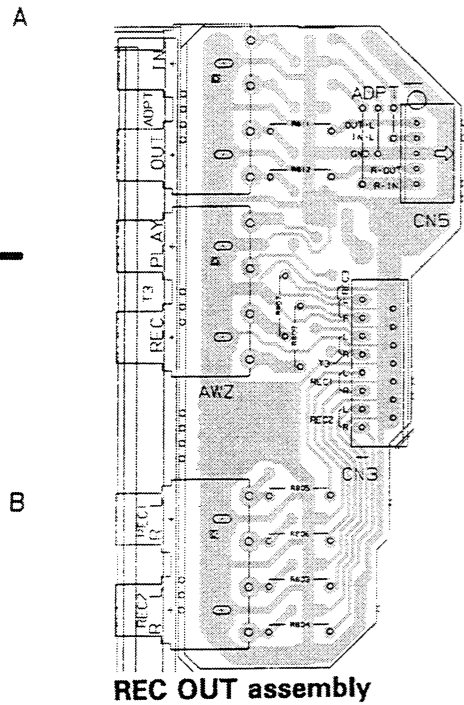
4

3

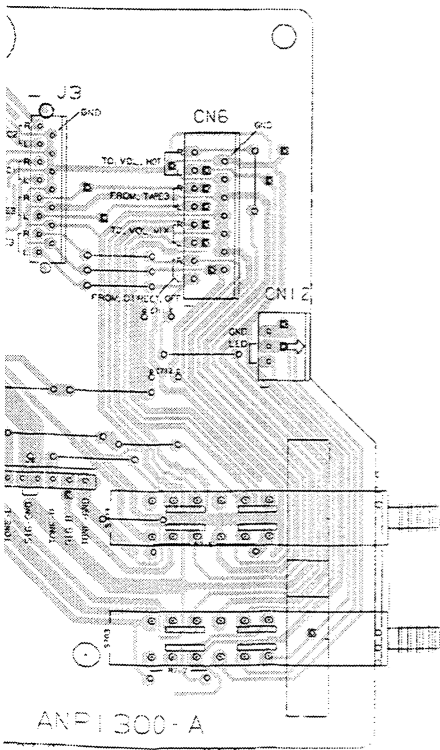
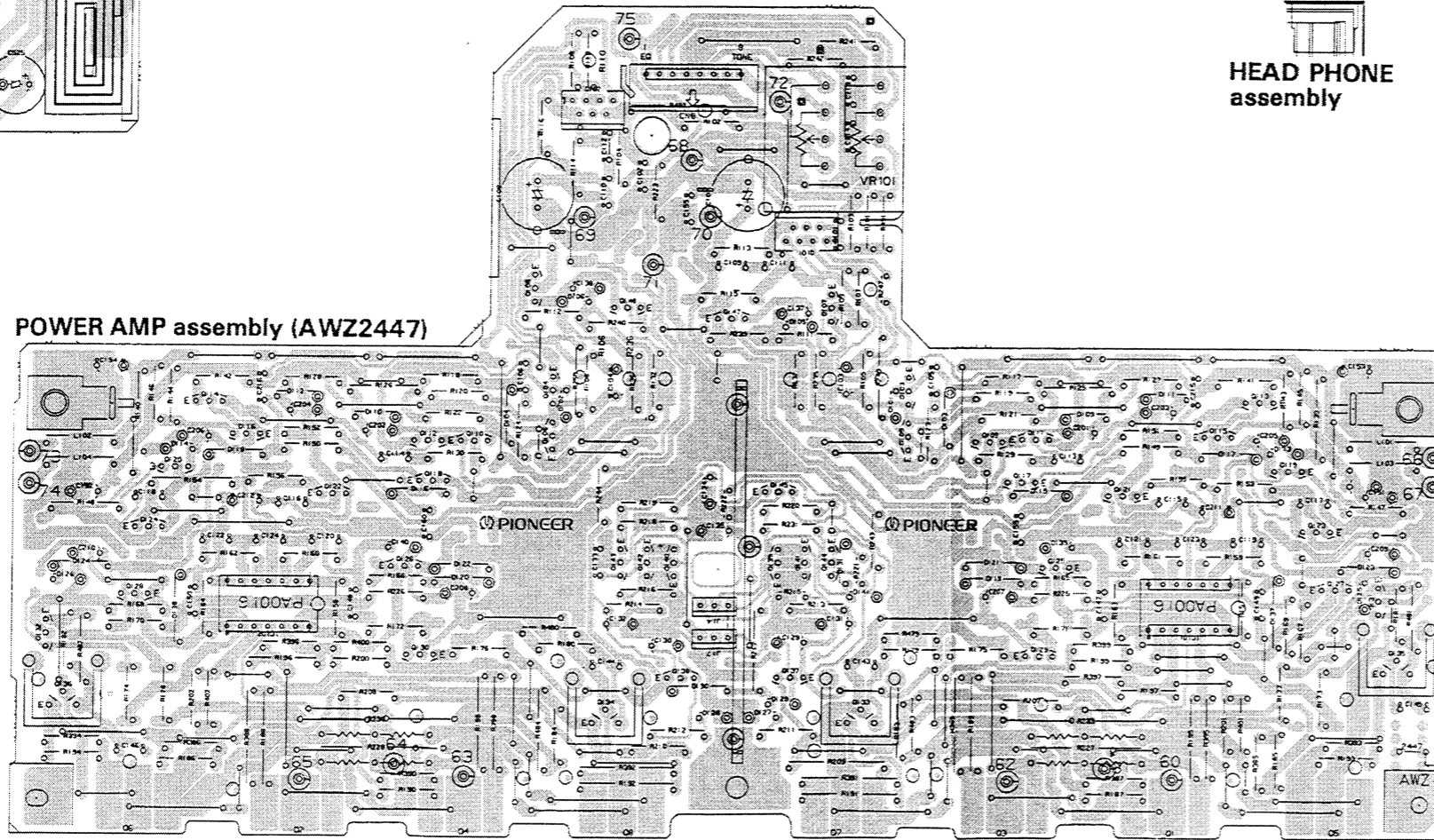
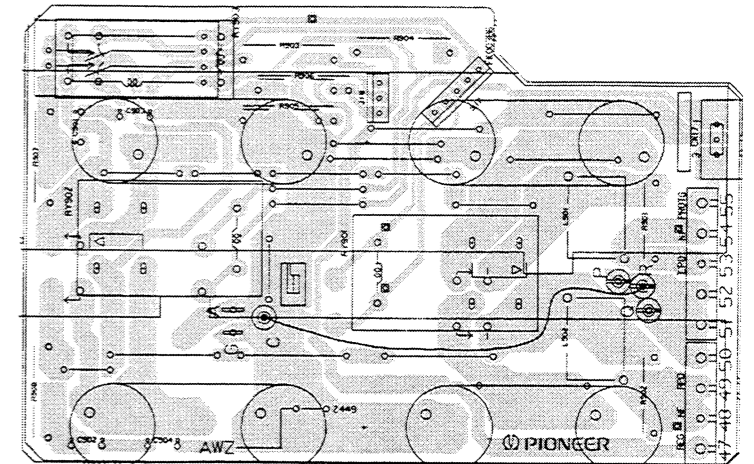
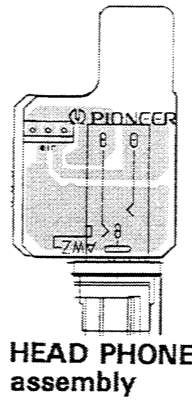
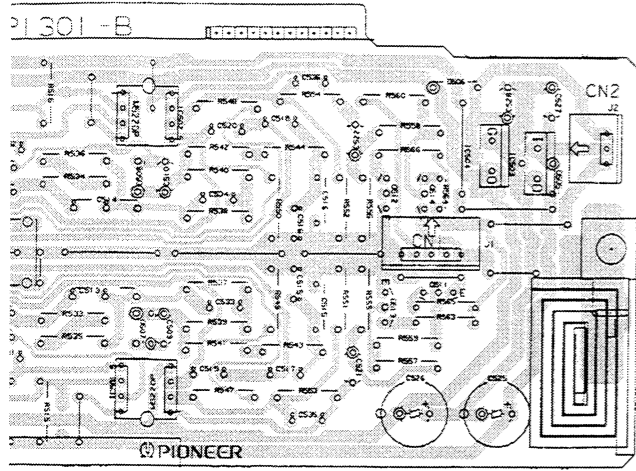
5

1

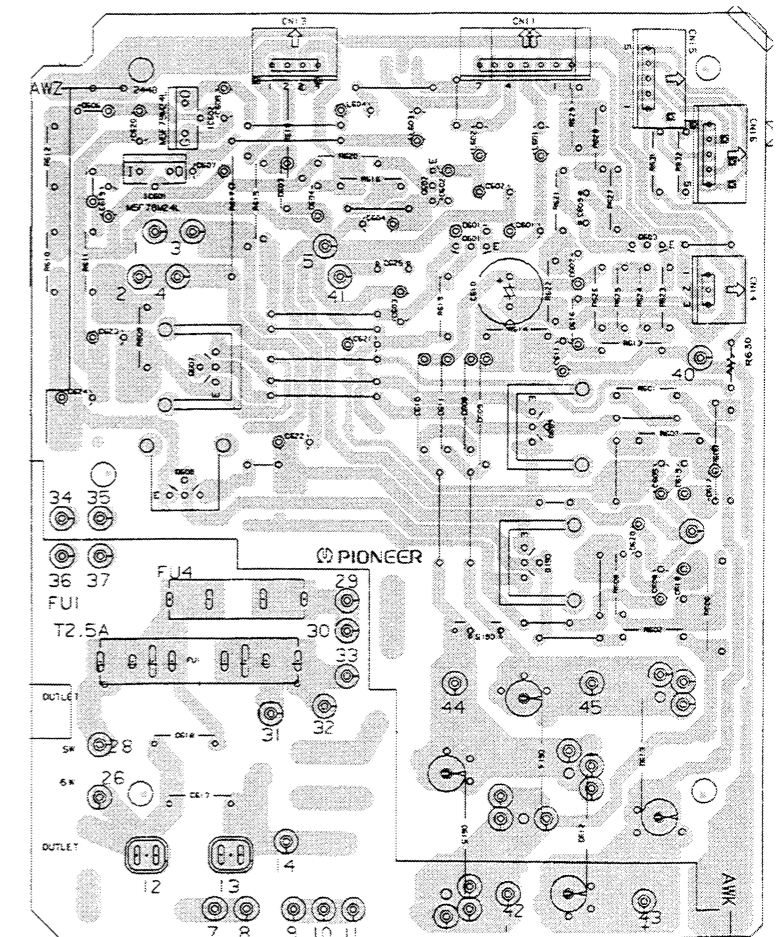
5.3 P.C. BOARD PATTERNS



Q120	D114	Q114	D118	Q116	D112	D110	Q112	Q110	D104	Q104	Q106	D102	Q108	D106	Q102	Q148	Q147	D105	Q101	Q107	Q103	Q105	D103	Q109	Q111	D109	D111	Q115	D126	D124	Q124	Q122	D140	Q126	D116	Q118	Q143	Q142	Q140	Q145	Q139	Q141	Q144	D131	D121	D119	Q117	D139	Q25	Q121	Q132	Q136	Q128	D138	IC102	Q130	Q122	D120	Q134	Q138	D130	D128	D127	D129	Q137	D141	Q133	Q129	IC101
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	------	------	------	------	------	-------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------



Q108 D106 Q102 Q148 Q147 D105 Q101 Q107  
 Q120 D114 Q114 D118 Q116 D112 D110 Q112 Q110 D104 Q104 Q106 Q102 Q103 Q105 D103 Q109 Q111 D109 D111 Q115 D117 Q113 D113 Q119  
 Q126 D124 Q124 Q122 D140 Q126 D116 Q118 Q143 Q142 Q140 Q145 Q139 Q141 Q144 D131 D121 D119 Q117 D139 Q125 Q121 Q123 Q127 D123  
 Q132 Q136 Q128 D138 IC102 Q130 D122 D120 Q134 Q138 D130 D128 D127 D129 Q137 D141 Q135 Q129 IC101 D137 Q125 Q131 Q135



**SWITCHES**

Mark	Symbol & Description	Part No.
	S304 Tact switch (MUTING)	ASG-711
	S301,S302 Push switch (TAPE 3, LOUDNESS)	ASG1019
	S303 Push switch (EQ.POWER)	ASG1021

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C321,C322	CCCSL390J50
	C303,C304	CCCSL470J50
	C343	CEASOR1M50
	C341,C342	CEASO10M50
	C339,C340	CEAS100M25
	C301,C302,C305,C306,C317,C318	CEAS2R2M50
	C336	CEAS221M10
	C333,C334	CEAS221M25
	C331,C332	CEAS470M25
	C329,C330	CFTXA104J50
	C309,C310	CFTXA153J50
	C315,C316	CFTXA183J50
	C311,C312,C327,C328	CFTXA823J50
	C347,C348	CKCYB222K50
	C349,C350	CKCYB392K50
	C345,C346	CKCYF103Z50
	C313,C314	CQMA332K50

**RESISTORS**

Mark	Symbol & Description	Part No.
	VR301 (250k x 2)	ACT1053
	VR302,VR303 (100k x 2)	ACT1054
	R367	RD1/2PM103J
	R355,R356,R368-R380	RD1/8PM□□□J
	Other resistors	RD1/4PM□□□J

**REC OUT assembly**

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C803-C814	CKCYB331K50

**RESISTORS**

Mark	Symbol & Description	Part No.
	R803-R806,R811-R814	RD1/4PM□□□J
	R807-R810	RD1/8PM□□□J

**OTHERS**

Mark	Symbol & Description	Part No.
	Terminal 4P (TAPE 1-3,ADAPTER)	AKB1009

**INPUT SELECTOR assembly (AWZ2347)**

**SWITCHES**

Mark	Symbol & Description	Part No.
	S703 Push switch (LINE DIRECT)	ASG1032
	S701,S702 Remote slide switch (FUNCTION SEL., REC SEL.)	ASU1016

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C701-C704,C707-C710	CKCYB331K50
	C711,C712	CKCYB391K50
	C705,C706	CKCYB331K500

**RESISTORS**

Mark	Symbol & Description	Part No.
	R701-R712	RDR1/4PM221J
	R713-R718	RD1/4PM221J

**OTHERS**

Mark	Symbol & Description	Part No.
	Terminal 4P (TAPE 1,TAPE 2)	AKB1007
	Terminal 6P (CD,TUNER,LINE)	AKB1029

**POWER AMP assembly (AWZ2330)**

**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
	IC101,IC102	PA0016
	Q143	2SA1115
	Q117,Q118,Q125,Q126,Q131,Q132	2SA1145
	Q135,Q136	2SA1306
	Q113-Q116,Q123,Q124	2SA992
	Q145	2SC1815
	Q103-Q112,Q121,Q122,Q137,Q138,Q147,Q148	2SC1845
	Q139-Q142,Q144	2SC2458
	Q119,Q120,Q127-Q130	2SC2705
	Q133,Q134	2SC3298
	Q101,Q102	2SK389
	D131 Zener diode	RD11ESB
	D105,D106 Zener diode	RD7.5ESB3
	D101-D104,D109-D130,D137-D140,D141	1SS252

**COILS**

Mark	Symbol & Description	Part No.
	L101-L104 (Bead filter)	ATX1012

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C139-C142	CCCSL221J50

## 4. ELECTRICAL PARTS LIST

**NOTES:**

- Parts without part number cannot be supplied.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	56 × 10 <sup>1</sup>	561.....	RD1/4PS	Ⓜ	Ⓜ	Ⓜ	J
47kΩ	47 × 10 <sup>3</sup>	473.....	RD1/4PS	Ⓜ	Ⓜ	Ⓜ	J
0.5Ω	0R5.....		RN2H	Ⓜ	Ⓜ	Ⓜ	K
1Ω	010.....		RSIP	Ⓜ	Ⓜ	Ⓜ	K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	562 × 10 <sup>1</sup>	5621.....	RN1/4SR	Ⓜ	Ⓜ	Ⓜ	F
--------	-----------------------	-----------	---------	---	---	---	---

**Miscellaneous parts**

**P.C. BOARD ASSEMBLIES**

Mark	Symbol & Description	Part No.
	SPEAKER SWITCH assembly	
	TONE AMP assembly	AWZ2345
	REC OUT assembly	
	INPUT SELECTOR assembly	AWZ2347
	POWER AMP assembly	AWZ2330
	POWER SUPPLY assembly	AWZ2331
	SPEAKER TERMINAL assembly	AWZ2332
	PHONO AMP assembly	AWZ2333
	HEAD PHONE assembly	
	SHIELD assembly	

**OTHERS**

Mark	Symbol & Description	Part No.
⚠	Q3-Q6 Transistor	2SA1265N
⚠	Q1,Q2,Q7,Q8 Transistor	2SC3182N
⚠	S1 Push switch (POWER)	ASG-553
	S3 Remote slide rotary switch	ASU1024
	S2 Remote slide rotary switch	ASU1025
	S4 Remote slide rotary switch	ASU1026
⚠	T1 Power transformer (AC220V/240V)	ATS1087
⚠	T2 Power transformer (AC220V/240V)	ATS1088
⚠	FU1 Fuse (T4A/250V)	AEK-400
⚠	C3 Electrolytic capacitor (22000μF/63)	ACH1045
⚠	R2 Carbon film resistor	RD1/4PM100J
⚠	R1 Carbon film resistor	RD1/4PM4R7J
⚠	AC Power cord	ADG1049
	Strain relief	AEC-882

**SPEAKER SWITCH assembly SWITCH**

Mark	Symbol & Description	Part No.
	S401 Rotary switch (SPEAKERS)	ASD1003

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C401,C402	CEAS3R3M50

**RESISTORS**

Mark	Symbol & Description	Part No.
	R451 - R453	RD1/2PM□□□J
	R454,R455	RD1/4PM561J

**TONE ANP assembly (AWZ2345)**

**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
	IC301	M5220P
	Q306	2SA1048
	Q301 - Q305	2SC2458
	Q307,Q308	2SC1845
	D301,D303,D305,D306	AEL1004
	LED assembly	
	D304 LED	AEL1005
	D302 LED	AEL1004
	D308 Zener diode	RD2.0:SB
	D310 Zener diode	RD5.6:SB
	D307,D309,D311 - D313	1SS25Z



**COILS**

Mark	Symbol & Description	Part No.
	L901,L902 AF Choke coil (2.7 $\mu$ H)	ATH1021

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C909,C910	CCDSL101K500
	C901 - C904	CFTXA104J50
	C905 - C908	CQMXA472J100

**RESISTORS**

Mark	Symbol & Description	Part No.
$\triangle$	R901,R902	RS1LMF101J
$\triangle$	R905,R906	RS1PMF681J
$\triangle$	R903,R904,R907,R908	RS2LMF□□□J

**OTHER**

Mark	Symbol & Description	Part No.
	Terminal 4P (SPEAKER)	AKE1006

**PHONO AMP assembly (AWZ2333)**

**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
	IC503	M5F78M24L
	IC504	M5F79M24L
	IC501,IC502	M5220P
	Q509,Q510	2SC1845
	Q511 - Q514	2SC3327
	Q501 - Q504	2SK369
	D503,D504 Zener diode	RD7.5ESB2
	D507,D508	MA859
	D505,D506	1SS252

**SWITCH**

Mark	Symbol & Description	Part No.
	S501 Remote slide switch (PHONO SEL.)	ASU1008

**COILS**

Mark	Symbol & Description	Part No.
	L501,L502 (560 $\mu$ H)	ATH1024
	L503,L504 (2.2 $\mu$ H)	LAU2R2M

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C535,C536,C505,C506	CCCSL221K500
	C531,C532	CCCSL271K500
	C545,C546	CEAS470M10
	C521,C522	CEXA220M25
	C527,C528	CEXA220M50
	C523,C524	CCDSL390J50

Mark	Symbol & Description	Part No.
	C511,C512,C526	CEXA221M25
	C509,C510	CEXA470M25
	C525	CEXA471M25
	C503,C504	CFTXA103J50
	C517,C518	CFTXA224J50
	C519,C520	CFTXA563J50
	C507,C508	CKCYB222K500
	C533,C534	CKCYB681K500
	C537,C538	CKCYF103Z50
	C539	CKDYF103Z50
	C513,C514	CQPXA224J2A
	C515,C516	CQPXA333J2A

**RESISTORS**

Mark	Symbol & Description	Part No.
	R505,R506,R563 - R566,R568, R569	RD1/8PM□□□J
	R501 - R504,R507,R508, R527 - R544	RDR1/4PM□□□J
	Other resistors	RD1/4PM□□□J

**OTHERS**

Mark	Symbol & Description	Part No.
	Terminal 1P (PHONO L)	AKB1027
	Terminal 1P (PHONO R)	AKB1028

**HEAD PHONE assembly**

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C951,C952	CKCYB392K50

**OTHERS**

Mark	Symbol & Description	Part No.
	Jack (HEAD PHONE)	AKN1002

**SHIELD assembly**

No parts are supplied with SHIELD assembly

Mark	Symbol & Description	Part No.
	C113,C114	CCCSL271J50
	C135	CEASR47M100
	C129,C130	CEAS010M50
	C155	CCDSL151J50
	C134	CEAS101M16
	C131,C132	CEAS471M6
	C137,C138	CEEA221M16
	C107,C108	CEEA471M50
	C201-C206	CEYA330M16
	C103,C104	CFTXA473J50
	C147-C150	CKCYB102K50
	C133	CKCYF103Z50
	C207-C212	CKDYF103K50
	C213,C214	CKDYF102Z50
	C215,C216	CMA030D500
	C115-C118,C123,C124, C143-C146,C159,C160	CMA101J500
	C111,C112	CMA150J500
	C101,C102	CMA221J500
	C109,C110	CMA120J500
	C119-C122	CMA680J500
	C105,C106	CQMXA102J100
	C151-C154	CQMXA562J100

**RESISTORS**

Mark	Symbol & Description	Part No.
	VR101 (60k x 2)	ACW1007
△	R227-R230 (0.33 x 2) R113-R116 R101-R104,R111,R112,R123, R124,R129,R130,R223, R239-R246,R491,R492	ACN-139 RDR1/2PM□□□J RDR1/4PM□□□J
△	R131,R132,R235,R236 R247-R250	RD1/2PM□□□J RDR1/6PU101J
	R105-R110,R117-R122, R143-R146,R157-R164,R169, R170,R211-R214,R218-R220, R225,R226,R231	RD1/4PM□□□J
△	R125-R128,R139-R142,R149, R150,R153-R156,R183-R186 R195-R202,R385,R386 R395-R402,R483,R484 R215,R216,R221,R222	RFA1/4PS□□□J RD1/8PM□□□J
△	Other resistors	RD1/4PMF□□□J

**POWER SUPPLY assembly (AWZ2331)**

**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
	IC601	M5F78M24L
	IC602	M5F79M24L

Mark	Symbol & Description	Part No.
	Q602,Q603	2SA1145
	Q608	2SA965
	Q610	2SB750A
	Q601	2SC2705
	Q607	2SC3298
	Q609	2SD836A
	D607 Zener diode	RD18ESB
	D606 Zener diode	RD2.7ESB
	D617-D620 Zener diode	RD24ESB1
	D603,D604 Zener diode	RD39ESB1
	D610,D611,D608,D609	S5566
	D601,D602,D616	1SS252
	D612-D615	30DF2FC-2

**COILS**

Mark	Symbol & Description	Part No.
	L601-L604 Inductor (10mH)	LTA103J

**CAPACITORS**

Mark	Symbol & Description	Part No.
△	C617,C618 (0.01/400V) C607,C608 C619,C620 C604-C606,C621-C624 C610	ACG1003 CEAS010M50 CEAS100M50 CEAS101M50 CEAS101M63
	C611 C601-C603 C609 C625 C615	CEAS3R3M50 CEAS470M50 CKCYB471K50 CKCYX473M25 CQMXA104J100

**RESISTORS**

Mark	Symbol & Description	Part No.
△	R613,R614,R622 R615,R616 R608 R601,R602,R611,R612,R619, R620	RD1/2PM□□□J RD1/4PMF391J RD1/4PM821J RFA1/4PS□□□J
△	R605,R606 R617,R618	RS2LMF562J RS2LMF272J
	Other resistors	RD1/4PM□□□J

**SPEAKER TERMINAL assembly (AWZ2332)**

**RELAIRES**

Mark	Symbol & Description	Part No.
	RY901,RY902 Relay	ASR1026
	RY903 Relay	ASR1014

## 5. FOR HE TYPE

### 5.1 CONTRAST OF MISCELLANEOUS PARTS

**NOTES:**

- Parts without part number cannot be supplied.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "©" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

The A-757/HE type is the same as the A-757/HEZ type with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		A-757/HEZ type	A-757/HE type	
	REC OUT assembly	Non supply	Non supply	
	INPUT SELECTOR assembly	AWZ2347	AWZ2453	
	POWER AMP assembly	AWZ2330	AWZ2447	
	POWER SUPPLY assembly	AWZ2331	AWZ2448	
	SPEAKER TERMINAL assembly	AWZ2332	AWZ2449	
	PHONO AMP assembly	AWZ2333	AWZ2450	
	HEAD PHONE assembly	Non supply	Non supply	
$\Delta$	R2 Carbon film resistor	RD1/4PM100J	.....	
$\Delta$	R1 Carbon film resistor	RD1/4PM4R7J	.....	
	Operating instructions (German)	ARC1146	.....	
	Operating instructions (English, German, French, Italian, Dutch, Swedish, Spanish, Portuguese)	.....	ARE1126	

#### REC OUT assembly

The REC OUT assembly (HE type) is the same as the REC OUT assembly (HEZ type) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HEZ type	HE type	
	C803-C814	CKCYB331K50	.....	
	R803-R806,R811,R812	RD1/4PM182J	RD1/4PM222J	
	R807,R808	RD1/8PM182J	RD1/8PM222J	
	R809,R810	RD1/8PM221J	.....	
	R813,R814	RD1/4PM221J	.....	

#### INPUT SELECTOR assembly (AWZ2453)

The INPUT SELECTOR assembly (AWZ2453) is the same as the INPUT SELECTOR assembly (AWZ2347) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2347	AWZ2453	
	C701,C704,C707-C710	CKCYB331K50	.....	
	C705,C706	CKCYP331K500	.....	
	R701-R710	RDR1/4PM221J	.....	

#### POWER AMP assembly (AWZ2447)

The POWER AMP assembly (AWZ2447) is the same as the POWER AMP assembly (AWZ2330) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2330	AWZ2447	
	C113,C114	CCCSL271J50	CKCYB561K50	
	C139-C142	CCCSL221J50	.....	
	C151-C154	CQMXA582J100	CEXA2R2M2A	
	C155	CCDSL151J50	.....	
$\Delta$	R245,R246	RD1/4PM100J	.....	
$\Delta$	R171-R174	RD1/4PMF181J	RFA1/4PS101J	
$\Delta$	R175-R178	RD1/4PMF821J	RFA1/4PS391J	
$\Delta$	R179-R182	RD1/4PMF181J	RFA1/4PS181J	

#### POWER SUPPLY assembly (AWZ2448)

The POWER SUPPLY assembly (AWZ2448) is the same as the POWER SUPPLY assembly (AWZ2331) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2331	AWZ2448	
$\Delta$	C615	CQMXA104J100	ACG1005	
	R609,R610	RD1/4PM101J	RFA/4PS221J	
	D611,R612	RFA1/4PS221J	RD1/4PM101J	
	R626	RD1/4PM221J	RAF1/4PS221J	
	R630	.....	RAF1/4PS470J	

**SPEAKER TERMINAL assembly (AWZ2449)**

The SPEAKER TERMINAL assembly (AWZ2449) is the same as the SPEAKER TERMINAL assembly (AWZ2332) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2332	AWZ2449	
	C905-C908 C909,C910	CQMXA472J100 CCDSL101K500	..... .....	

**PHONO AMP assembly (AWZ2450)**

The PHONO AMP assembly (AWZ2450) is the same as the PHONO AMP assembly (AWZ2333) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2333	AWZ2450	
	L501,L502 (560 $\mu$ H) L503,L504	ATH1024 LAU2R2M	..... .....	
	C505,C506 C523,C524	CCCSL221K500 CCDSL390J50	CCCSL271K500 .....	
	R505,R506	RD1/BPM472J	.....	

**HEAD PHONE assembly**

The HEAD PHONE assembly (HE type) is the same as the HEAD PHONE assembly (HEZ type) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HEZ type	HE type	
	C951,C952	CKCYB392K50	.....	

## 5. FOR HE TYPE

### 5.1 CONTRAST OF MISCELLANEOUS PARTS

**NOTES:**

- Parts without part number cannot be supplied.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

The A-757/HE type is the same as the A-757/HEZ type with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		A-757/HEZ type	A-757/HE type	
	REC OUT assembly	Non supply	Non supply	
	INPUT SELECTOR assembly	AWZ2347	AWZ2453	
	POWER AMP assembly	AWZ2330	AWZ2447	
	POWER SUPPLY assembly	AWZ2331	AWZ2448	
	SPEAKER TERMINAL assembly	AWZ2332	AWZ2449	
	PHONO AMP assembly	AWZ2333	AWZ2450	
	HEAD PHONE assembly	Non supply	Non supply	
$\triangle$	R2 Carbon film resistor	RD1/4PM100J	.....	
$\triangle$	R1 Carbon film resistor	RD1/4PM4R7J	.....	
	Operating instructions (German)	ARC1146	.....	
	Operating instructions (English, German, French, Italian, Dutch, Swedish, Spanish, Portuguese)	.....	ARE1126	

#### REC OUT assembly

The REC OUT assembly (HE type) is the same as the REC OUT assembly (HEZ type) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HEZ type	HE type	
	C803-C814	CKCYB331K50	.....	
	R803-R806,R811,R812	RD1/4PM182J	RD1/4PM222J	
	R807,R808	RD1/8PM182J	RD1/8PM222J	
	R809,R810	RD1/8PM221J	.....	
	R813,R814	RD1/4PM221J	.....	

**INPUT SELECTOR assembly (AWZ2453)**

The INPUT SELECTOR assembly (AWZ2453) is the same as the INPUT SELECTOR assembly (AWZ2347) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2347	AWZ2453	
	C701,C704,C707-C710 C705,C706  R701-R710	CKCYB331K50 CKCYP331K500  RDR1/4PM221J	..... .....  .....	

**POWER AMP assembly (AWZ2447)**

The POWER AMP assembly (AWZ2447) is the same as the POWER AMP assembly (AWZ2330) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2330	AWZ2447	
⚠ ⚠ ⚠ ⚠	C113,C114 C139-C142 C151-C154 C155  R245,R246 R171-R174 R175-R178 R179-R182	CCCSL271J50 CCCSL221J50 CQMXA562J100 CCDSL151J50  RD1/4PM100J RD1/4PMF181J RD1/4PMF821J RD1/4PMF181J	CKCYB581K50 ..... CEXA2R2M2A .....  ..... RFA1/4PS101J RFA1/4PS391J RFA1/4PS181J	

**POWER SUPPLY assembly (AWZ2448)**

The POWER SUPPLY assembly (AWZ2448) is the same as the POWER SUPPLY assembly (AWZ2331) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2331	AWZ2448	
⚠	C615  R609,R610 D611,R612 R626 R630	CQMXA104J100  RD1/4PM101J RFA1/4PS221J RD1/4PM221J .....	ACG1005  RFA/4PS221J RD1/4PM101J RAF1/4PS221J RAF1/4PS470J	

**SPEAKER TERMINAL assembly (AWZ2449)**

The SPEAKER TERMINAL assembly (AWZ2449) is the same as the SPEAKER TERMINAL assembly (AWZ2332) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2332	AWZ2449	
	C905 - C908 C909, C910	CQMXA472J100 CCDSL101K500	..... .....	

**PHONO AMP assembly (AWZ2450)**

The PHONO AMP assembly (AWZ2450) is the same as the PHONO AMP assembly (AWZ2333) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2333	AWZ2450	
	L501, L502 (560 $\mu$ H) L503, L504	ATH1024 LAU2R2M	..... .....	
	C605, C506 C523, C524	CCCSL221K500 CCDSL390J50	CCCSL271K500 .....	
	R605, R506	RD1/8PM472J	.....	

**HEAD PHONE assembly**

The HEAD PHONE assembly (HE type) is the same as the HEAD PHONE assembly (HEZ type) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HEZ type	HE type	
	C951, C952	CKCYB392K50	.....	

## 6. SPECIFICASIONS

### [A-757]

Continuous power output (both channels driven at 20 Hz to 20 kHz) **	
T.H.D. 0.003%, 8 Ω	95W + 95W *
T.H.D. 0.005%, 4 Ω	140W + 140W *
DIN continuous power output (both channels driven)	
1 kHz, T.H.D. 1.0%, 8 Ω	100W + 100W
1 kHz, T.H.D. 1.0%, 4 Ω	150W + 150W
Power bandwidth	
0.05%, 8 Ω	5 Hz – 70 kHz *
Damping factor	
(1 kHz/20 Hz to 20 kHz), 8 Ω	200/70
Dynamic power output (on EIA dynamic test signal)	
4 Ω / 2 Ω	200W/300W
Total harmonic distortion **	
20 Hz to 20 kHz, 95W, 8 Ω	0.003% *
20 Hz to 20 kHz, 140W, 4 Ω	0.005% *
Inter-modulation distortion (at rated output)	0.003% *
Input sensitivity/impedance	
PHONO (MM)	2.5 mV/50 k Ω
PHONO (MC)	0.2 mV/100 Ω
CD, TUNER, LINE, TAPE	150 mV/50 k Ω
PHONO overload level	
1 kHz, T.H.D. 0.008% (MM/MC)	200 mV/19 mV
Output level/impedance	
TAPE REC, ADAPTOR OUTPUT	150 mV/2.2 k Ω
Frequency response	
PHONO (MM), 20 Hz to 20 kHz	± 0.2 dB
PHONO (MC), 20 Hz to 20 kHz	± 0.3 dB
CD, TUNER, LINE, TAPE (1 Hz to 150 kHz)	+0 -3 dB *

Tone control (volume control set at -40 dB position)

BASS	± 8 dB (100 Hz)
TREBLE	± 8 dB (10 kHz)
MUTING	-∞
Loudness contour (volume control set at -40 dB position)	
	+5 dB (100 Hz)/+3 dB (10 kHz)
Filter (SUBSONIC)	17 Hz (12 dB/oct.)
Signal-to-Noise ratio (IHF short circuit, A network)	
PHONO (MM, 5 mV input/MC, 0.5 mV input)	95 dB/77 dB *
CD, TUNER, LINE, TAPE	110 dB *
Signal-to-Noise ratio (DIN, continuous power/50 mW)	
PHONO (MM)	74 dB/65 dB *
CD, TUNER, LINE, TAPE	92 dB/68 dB *

### Power Supply/Miscellaneous

Power requirements	a.c. 220 Volts ~, 50/60 Hz
Power consumption	820W
Dimensions	420 (W) × 435 (D) × 162 (H) mm
Weight (without package)	19.5 kg

### Accessories

Operating instructions	1
Cushion spacer set	1

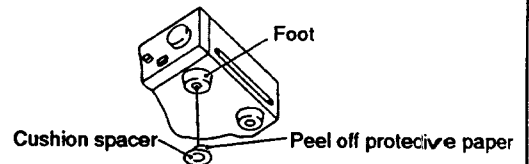
#### NOTE:

Specifications and design subject to possible modification without notice, due to improvements.

\* Measured with the DIRECT switch set to ON.

\*\* Measured by Audio Spectrum Analyzer.

Be sure to place the unit on a level surface so that it stands firmly on all its feet. If wobbly, adjust by attaching the supplied cushion spacers to one or more feet.





## 7. PANEL FACILITIES

The illustration shows model A-757.  
Model A-656 is not equipped ⑦ and ⑬.

L'illustration montre le modèle A-757.  
Le modèle A-656 n'est pas équipé des éléments ⑦ et ⑬.

Die Abbildung zeigt Modell A-757.  
Modell A-656 ist nicht mit Bedienelementen ⑦ und ⑬  
ausgestattet.

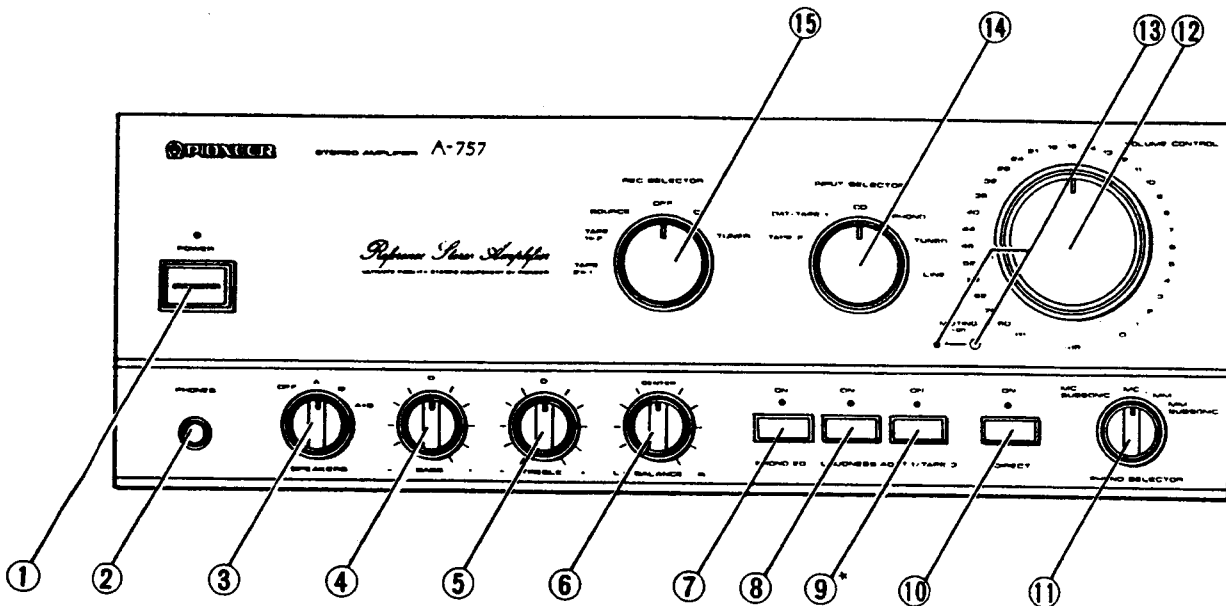
Il modello nell'illustrazione è l' A-757.  
Il modello A-656 non possiede i No. ⑦ e ⑬.

De afbeelding toont model A-757.  
Model A-656 is niet uitgerust met de bedieningsorganen  
⑦ en ⑬.

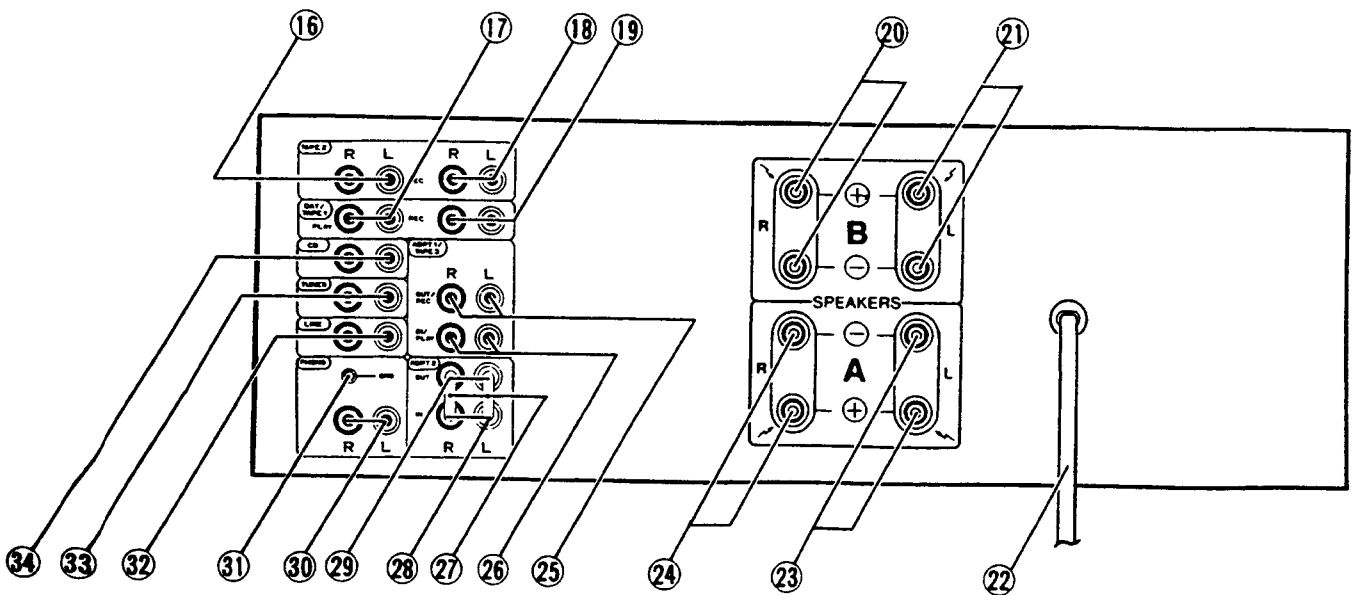
På bildeln visas modell A-757.  
Modell A-656 saknar ⑦ och ⑬.

Il modello nell'illustrazione è l' A-757.  
Il modello A-656 non possiede i No. ⑦ e ⑬.

Esta ilustração mostra o modelo A-757.  
O modelo A-656 não possui os recursos ⑦ e ⑬.



\* A-656...ADPT/TAPE 3  
A-757...ADPT 1/TAPE 3



See page 2 for Panel Facilities.

## [FRONT PANEL]

### ① POWER switch/Indicator

Press to turn power to the unit ON and OFF.  
When the power is ON, indicator lights.

### ② PHONES jack

When using headphones, insert the plug into this jack.

### ③ SPEAKERS selector switch

Use this switch to listen to the speaker systems connected to the SPEAKERS terminals.

#### OFF:

Released position: No sound is heard from the speaker system.  
Set to this position when listening with headphones.

#### A:

For reproduction of sound with the speaker systems connected to the SPEAKERS A terminals.

#### B:

For reproduction of sound with the speaker systems connected to the SPEAKERS B terminals.

#### A + B:

For reproduction of sound with the speaker systems connected to SPEAKERS A and B terminals.

### ④ BASS tone control

Use to adjust the low-frequency tone at low volume level. The center position is the flat (normal) position. When turned to the right, low-frequency tones are emphasized; when turned to the left, low-frequency tones are de-emphasized.

#### NOTE:

*This function does not operate when the DIRECT switch is in the ON position.*

### ⑤ TREBLE tone control

Use to adjust the high-frequency tone at low volume level. The center position is the flat (normal) position. When turned to the right, high-frequency tones are emphasized; when turned to the left, high-frequency tones are de-emphasized.

#### NOTE:

*This function does not operate when the DIRECT switch is in the ON position.*

### ⑥ BALANCE control

Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the LEFT position and if the left side is louder, turn toward the RIGHT position.

#### NOTE:

*This function does not operate when the DIRECT switch is in the ON position.*

### ⑦ PHONO EQ switch/Indicator (A-757 only)

When not using a phono input, turn the phono equalizer power circuit off in order to prevent it from collecting noise during playback of other sources.

#### ON:

The indicator lights: Always set to this position when using a phono input. Immediately after turning ON, audio signal will be muted for several seconds until circuit operation becomes stable.

#### OFF:

The indicator goes off: Set to this position when not using a phono input.

### ⑧ LOUDNESS switch/Indicator

Use when listening at low volume levels.

#### ON:

The indicator lights: Boosts low and high frequencies to give added punch to playback even at low-volume.

#### OFF:

The indicator goes off: Should normally be left in this position.

#### NOTE:

*This switch does not operate when the DIRECT switch is in the ON position.*

### ⑨ ADPT 1/TAPE 3 switch/Indicator (ADPT/TAPE 3 switch in the A-656)

Use this switch to listen to tape playback, or to listen to the sounds being recorded during tape recording.

#### ON:

The indicator lights: Press when listening to the playback sound of the tape deck or the adaptor connected to the ADPT 1/TAPE 3 IN/PLAY terminals, or to monitor the sound being recorded on the tape deck connected to the ADPT 1/TAPE 3 OUT/REC terminals.

#### OFF:

The indicator goes off: Normally leave the switch in this position.

#### NOTE:

*When the DIRECT switch is set to ON, this function does not operate and no signal is output at the ADPT 1/TAPE 3 OUT/REC terminals.*

### ⑩ DIRECT switch/Indicator

Use this switch when you do not wish to pass the output from input terminal equipment through the various frequency adjusting circuits and adaptor terminals (ADPT 1/TAPE 3, ADPT 2, BASS, TREBLE, BALANCE, LOUDNESS).

#### ON:

When the switch is in this position, the indicator lights and the signals input from the input terminals are reproduced without passing through the various frequency-adjusting circuits. This results in flat, pure sound which is a more faithful reproduction of the input source.

#### OFF:

When the switch is in this position the indicator goes out and the signal passes through the various frequency adjusting circuits.

**⑪ PHONO SELECTOR switch**

Set in accordance with the type of cartridge used in your turntable.

**MM:**

Set to this position when using a moving magnet cartridge, or a MC (moving coil) cartridge with high output of 1 mV or more.

**MC:**

Set to this position when using a moving coil cartridge.

**MM SUBSONIC/MC SUBSONIC:**

Subsonic filter for moving coil or moving magnet cartridges to cut ultralow frequency noise less than 17 Hz generated when playing a warped record.

When using a high-output moving coil cartridge, set this switch to MM or MM SUBSONIC.

**⑫ VOLUME CONTROL**

Use to adjust volume level.

**NOTE:**

*This unit is equipped with a circuit that attenuates the effect of tone and loudness controls at volume is turned up.*

**⑬ MUTING switch/Indicator (A-757 only)**

Use to temporarily cut sound volume.

**ON:**

The indicator lights. The sound volume will be cut off.

**OFF:**

The indicator goes off. The sound will return to its previous volume.

**⑭ INPUT SELECTOR switch**

Use to select playback source.

**LINE:**

Set to this position when listening to the programs from a component connected to the LINE terminals.

**TUNER:**

Set to this position when listening to AM or FM broadcasts with a tuner.

**PHONO:**

Set to this position when listening to record playback on a turntable.

**CD:**

Set to this position when listening to a compact disc playback with a CD player.

**DAT/TAPE 1:**

For playback with a tape deck or digital audio tape deck connected to the DAT/TAPE 1 terminals.

**TAPE 2:**

For playback with a tape deck connected to the TAPE 2 terminals.

**⑮ REC SELECTOR switch**

Switch to select recording signal. When set at other than SOURCE or OFF position, signals can be recorded during playback of the equipment selected by INPUT SELECTOR switch.

**TUNER:**

To record from a TUNER.

**CD:**

To record from a CD player.

**OFF:**

In this position nothing from the REC terminals of DAT/TAPE 1 and TAPE 2 will be output. Select it when not recording; output to tape decks will be disconnected, improving sound quality.

**SOURCE:**

To record the equipment selected by INPUT SELECTOR switch.

**TAPE:****1 ► 2**

To record (copy) from the tape deck of DAT/TAPE 1 terminals, over to the tape deck of TAPE 2 terminals.

**2 ► 1**

To record (copy) from the tape deck of TAPE 2 terminals, over to the tape deck of DAT/TAPE 1 terminals.

**NOTE:**

*The REC SELECTOR switch has no effect on the recording output of the ADPT 1/TAPE 3 terminals.*

**[REAR PANEL]**

⑮ TAPE 2 PLAY terminals.

⑰ DAT/TAPE 1 PLAY terminals.

⑱ TAPE 2 REC terminals.

⑲ DAT/TAPE 1 REC terminals.

⑳ SPEAKERS B terminals (right channel).

㉑ SPEAKERS B terminals (left channel).

㉒ Power cord.

Connect this cord to an AC wall socket, or the AC outlet of an audio timer.

㉓ SPEAKERS A terminals (left channel).

㉔ SPEAKERS A terminals (right channel).

㉕ ADPT 1/TAPE 3 OUT/REC terminals.

ADPT/TAPE 3 OUT/REC terminals. (A-656 only).

㉖ ADPT 1/TAPE 3 IN/PLAY terminals.

ADPT/TAPE 3 IN/PLAY terminals. (A-656 only).

㉗ Shorting bars. (A-757 only).

㉘ ADPT 2 IN terminals. (A-757 only).

㉙ ADPT 2 OUT terminals. (A-757 only).

㉚ PHONO terminals.

㉛ Turntable ground terminal (GND).

㉜ LINE terminals.

㉝ TUNER terminals.

㉞ CD terminals.