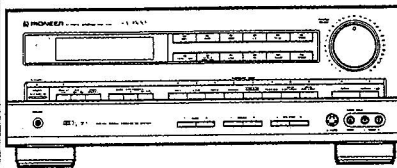


Service Manual

 **PIONEER®**
The Art of Entertainment



ORDER NO.
ARP2277

AV DIGITAL SURROUND AMPLIFIER

VSA-7500

● This manual is applicable to the SD type.

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SI MAY. 1991 Printed in Japan ④

1. EXPLODED VIEWS AND PARTS LIST

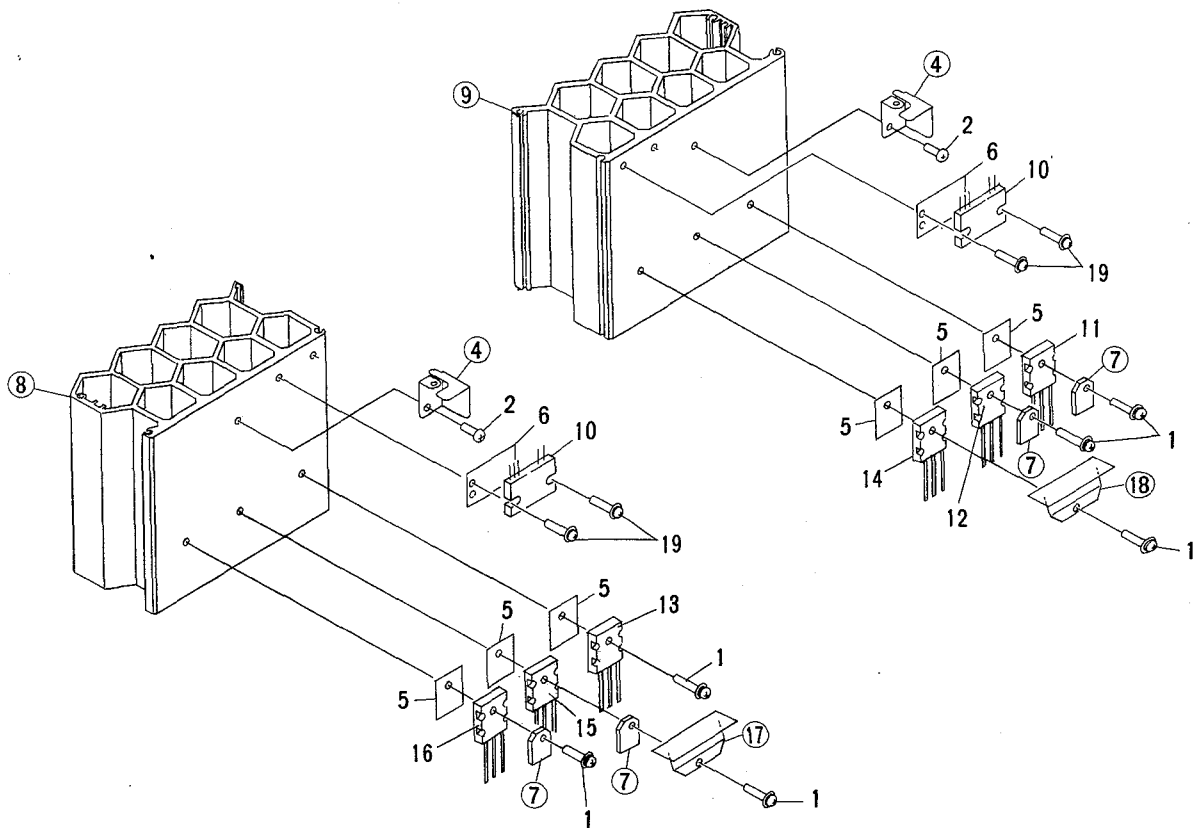
NOTES:

- Parts without part number cannot be supplied.
- The Δ 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.

1.1 HEAT SINK SECTION

Parts List

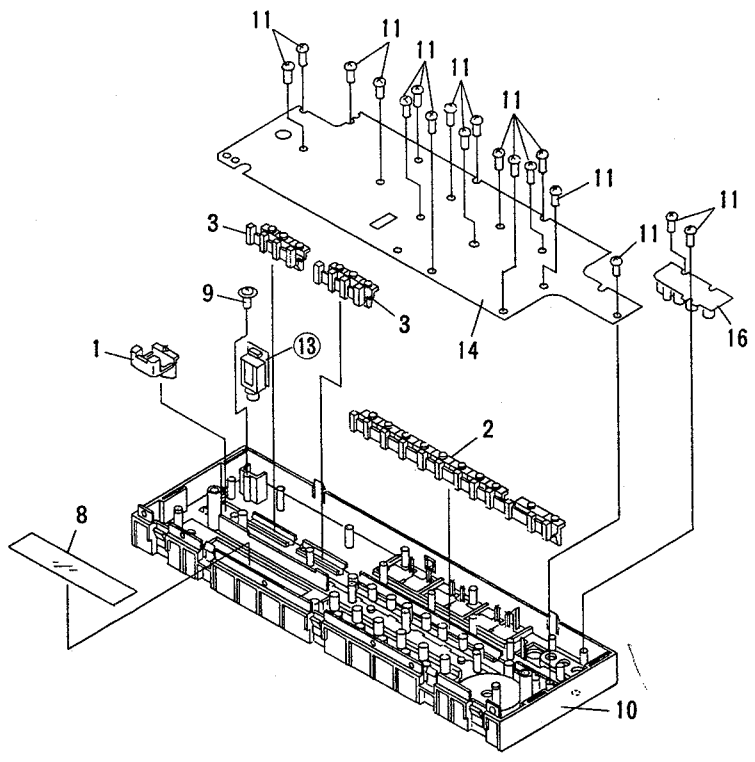
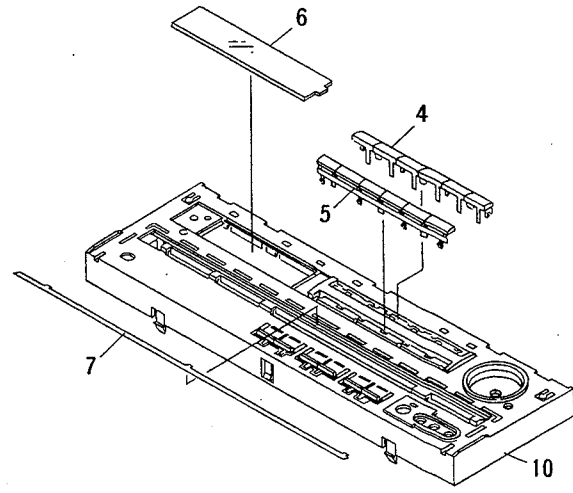
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Screw	ABA - 297	Δ	11	Q1 Transistor	2SA1302
	2	Screw	ABA - 298	Δ	12	Q2 Transistor	2SC3281
	3		Δ	13	Q3 Transistor	2SA1302
	4	PCB support		Δ	14	Q4 Transistor	2SC3281
	5	Sheet	AEE1014	Δ	15	Q5 Transistor	2SA1302
	6	Insulating spacer	AEP - 313	Δ	16	Q6 Transistor	2SC3281
	7	Transistor holder			17	Temperature compensation assembly	
	8	Heat sink R			18	Temperature compensation assembly	
Δ	9	Heat sink L			19	Screw	ABA1082
	10	IC501, 502 AUDIO IC	UPC1188H				



1.2 FRONT PANEL SECTION

Parts List

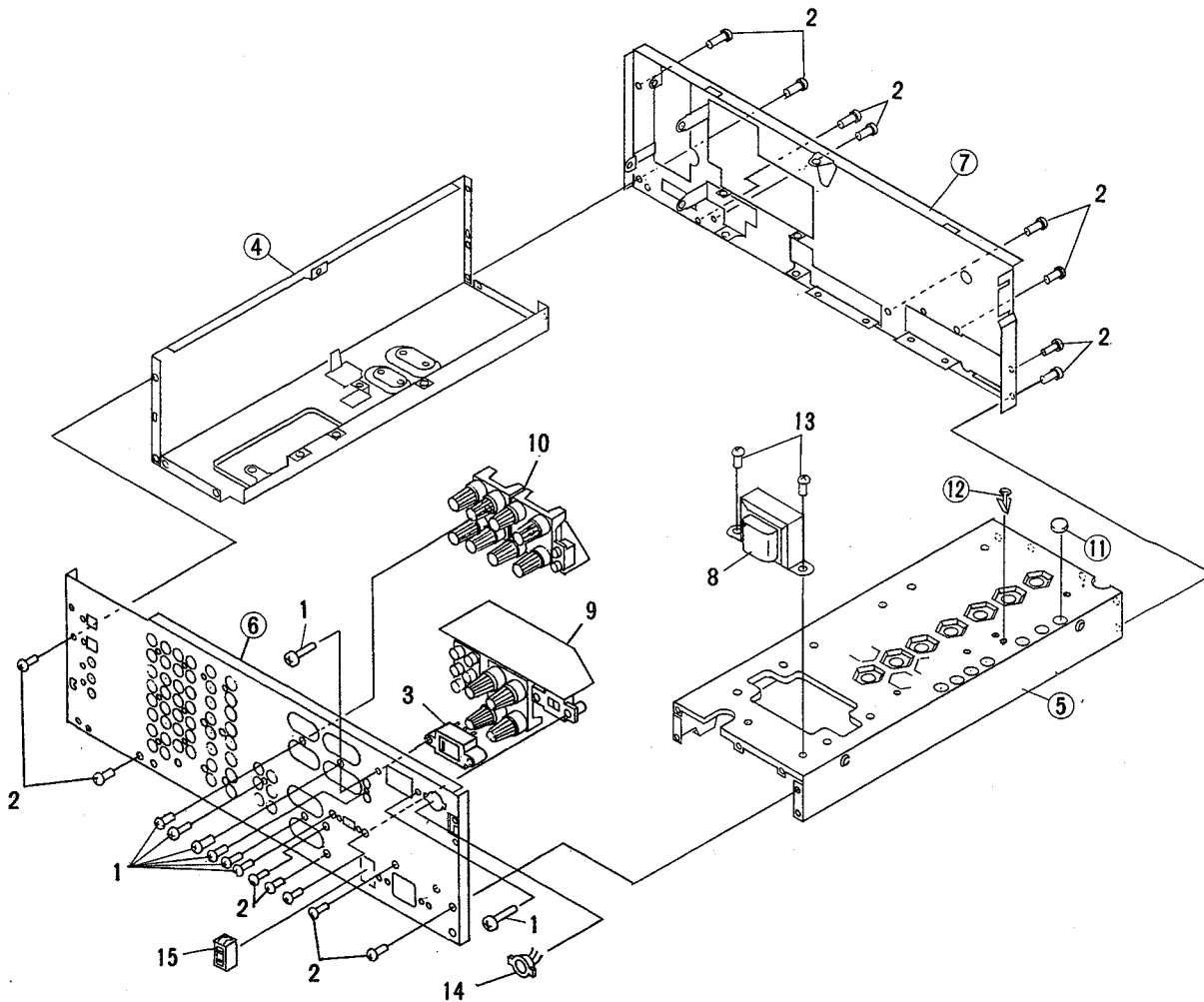
Mark	No.	Description	Part No.
	1	Power button	AAD1878
	2	Surround button	AAD1881
A	3	Hinge button	AAD1882
	4	Function button assembly	AAAD1903
	5	Function button assembly	AAAD1904
	6	Acryl panel	AAK2044
	7	Indicator panel	AAK2045
	8	FL filter	AAK2161
	9	Screw	ABA1095
	10	Panel base	AMB1778
	11	Screw	BPZ26P080FMC
	12	
	13	HEADPHONE assembly	
⊙	14	μ - COM assembly	AWZ3817
	15	
	16	FRONT TERM assembly	



1.3 MAIN UNIT (1)

Parts List

Mark	No.	Description	Part No.
	1	Screw	ABA - 298
	2	Screw	ABA1011
△	3	1P AC outlet	AKP1015
	4	Right frame	
	5	Transformer frame	
	6	Rear panel	
	7	Panel stay	
△	8	T2 Power transformer	ATT1161
⊙	9	REAR SP TERM assembly	AWZ3592
⊙	10	FRONT SP TERM assembly	AWZ3092
	11	Bush	
	12	PCB holder	
	13	Screw	ABA1009
	14	Voltage selector A	AKX - 507
	15	Voltage selector B	AKX1004



A

B

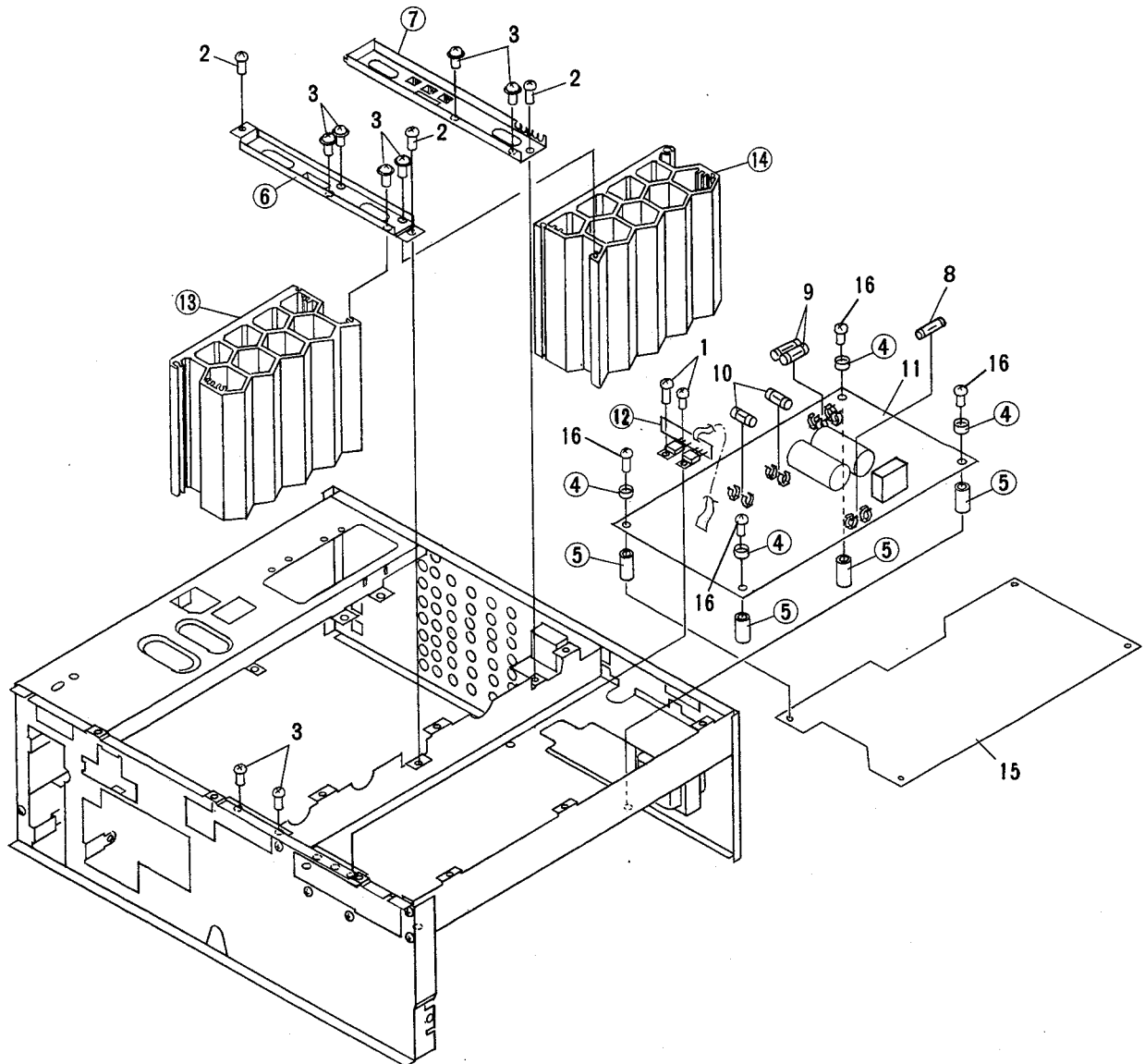
C

D

1.4 MAIN UNIT (2)

Parts List

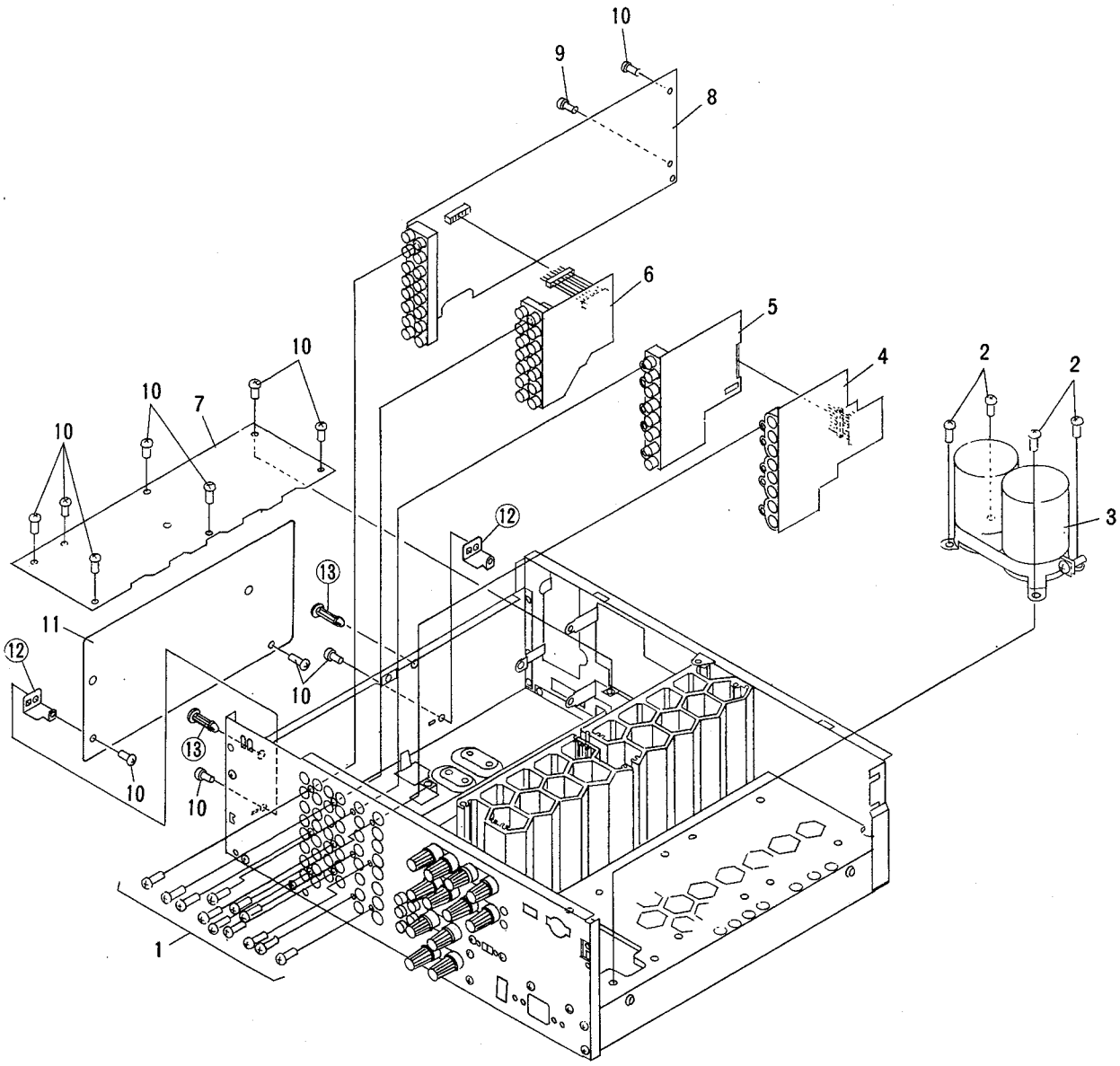
Mark	No.	Description	Part No.
	1	Screw	ABA - 298
	2	Screw	ABA1011
	3	Screw	ABA1050
	4	Bush	
	5	Collar	
	6	Heat sink holder	
	7	Center frame	
△	8	FU1 Fuse	AEK1001
△	9	FU4, 5 Fuse	AEK - 124
△	10	FU6, 7 Fuse	AEK - 124
○	11	POWER SUPPLY (POWER) assembly	AWZ3587
	12	POWER SUPPLY (REG) assembly	
	13	Heat sink	
	14	Heat sink	
	15	Barrier	AEC1316
	16	Screw	VBZ30P250FMC



1.5 MAIN UNIT (3)

Parts List

Mark	No.	Description	Part No.
	1	Screw	ABA - 298
	2	Screw	ABA1011
△	3	Electrolytic capacitor(C1)	ACH1155
⊙	4	S. assembly	AWZ3087
⊙	5	VIDEO assembly	AWZ3593
⊙	6	AV - INPUT SEL assembly	AWZ3591
⊙	7	FRONT POWER AMP assembly	AWZ3098
⊙	8	A - INPUT SEL assembly	AWZ3590
	9	Nylon rivet	AEC1160
	10	Screw	ABA1009
⊙	11	DISP assembly	AWZ3112
	12	PCB mounting plate	
	13	PCB support	



A

B

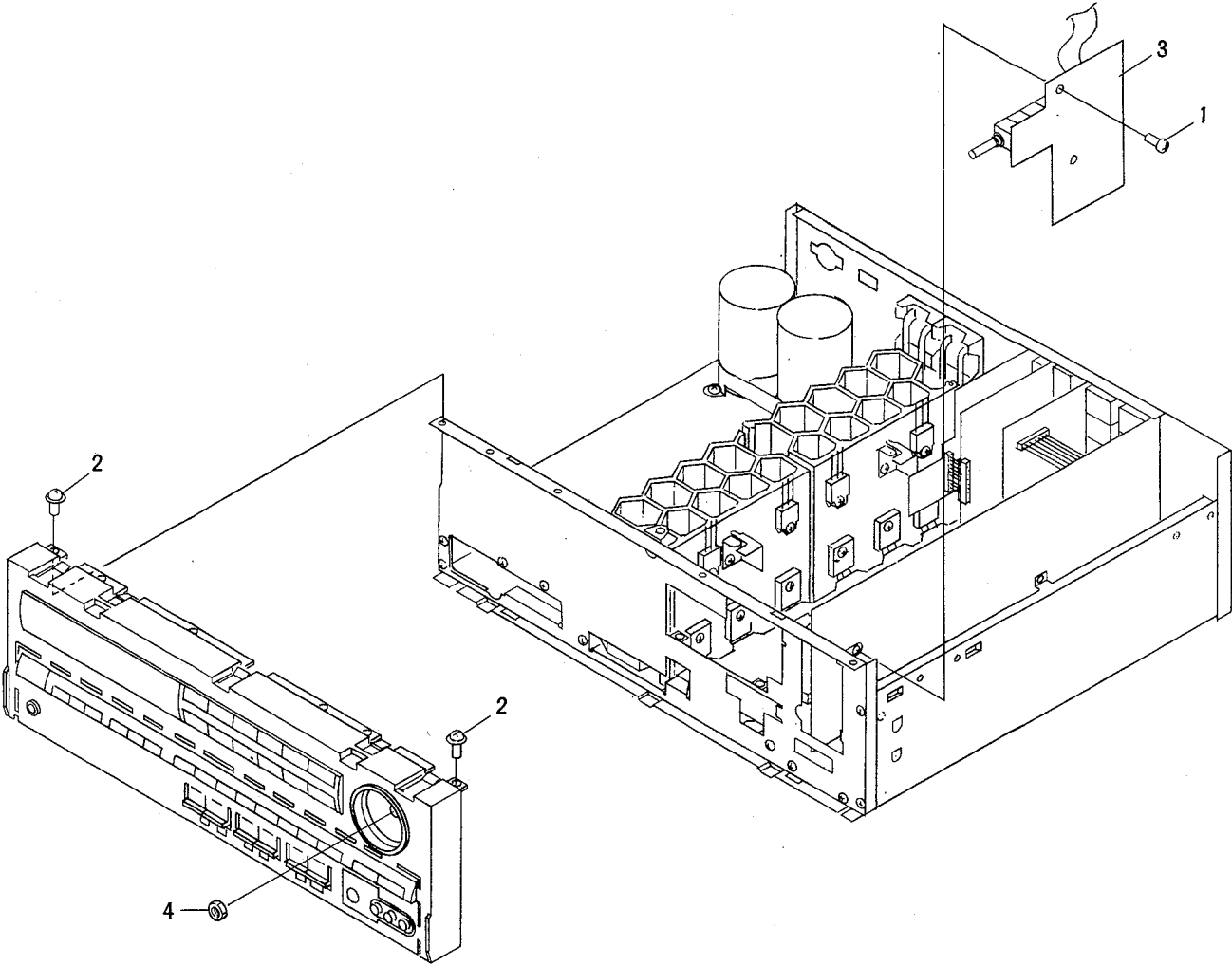
C

D

1.6 MAIN UNIT (4)

Parts List

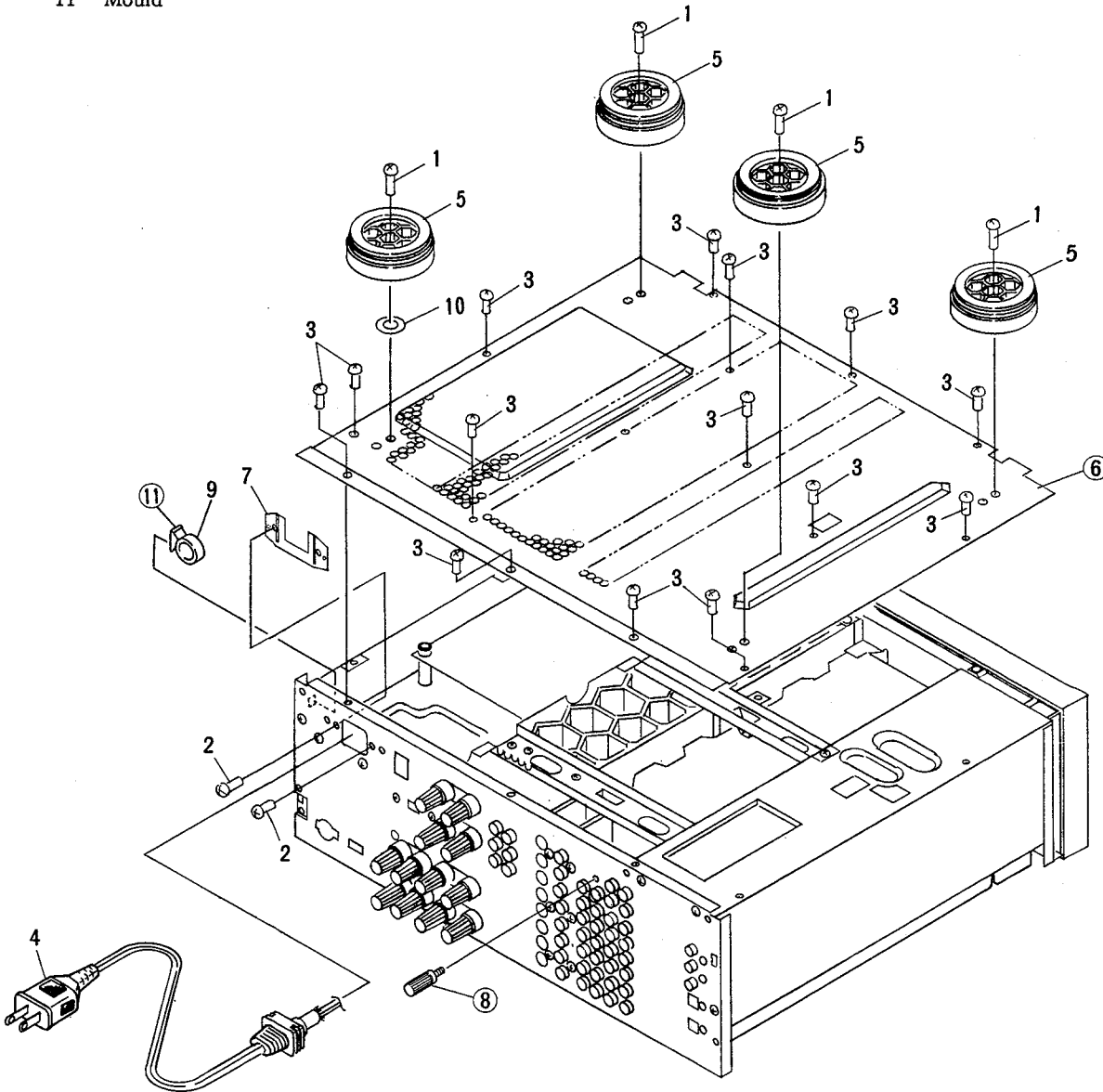
Mark	No.	Description	Part No.	
	1	Screw	ABA1009	
	2	Screw	ABA1011	
A	⊙	3	VR assembly	AWZ3106
	4	Flange nut M9	ABN1006	



1.7 MAIN UNIT (5)

Parts List

Mark No.	Description	Part No.
1	Screw	ABA1004
2	Screw	ABA1009
3	Screw	ABA1011
4	AC Power cord	ADG1073
5	Leg assembly	AMR1159
6	Bottom plate	
7	AC cord spacer	ANG1153
8	Terminal screw	
9	Ferrite core	ATX1019
10	Fiber washer	ABF1003
11	Mould	



A

B

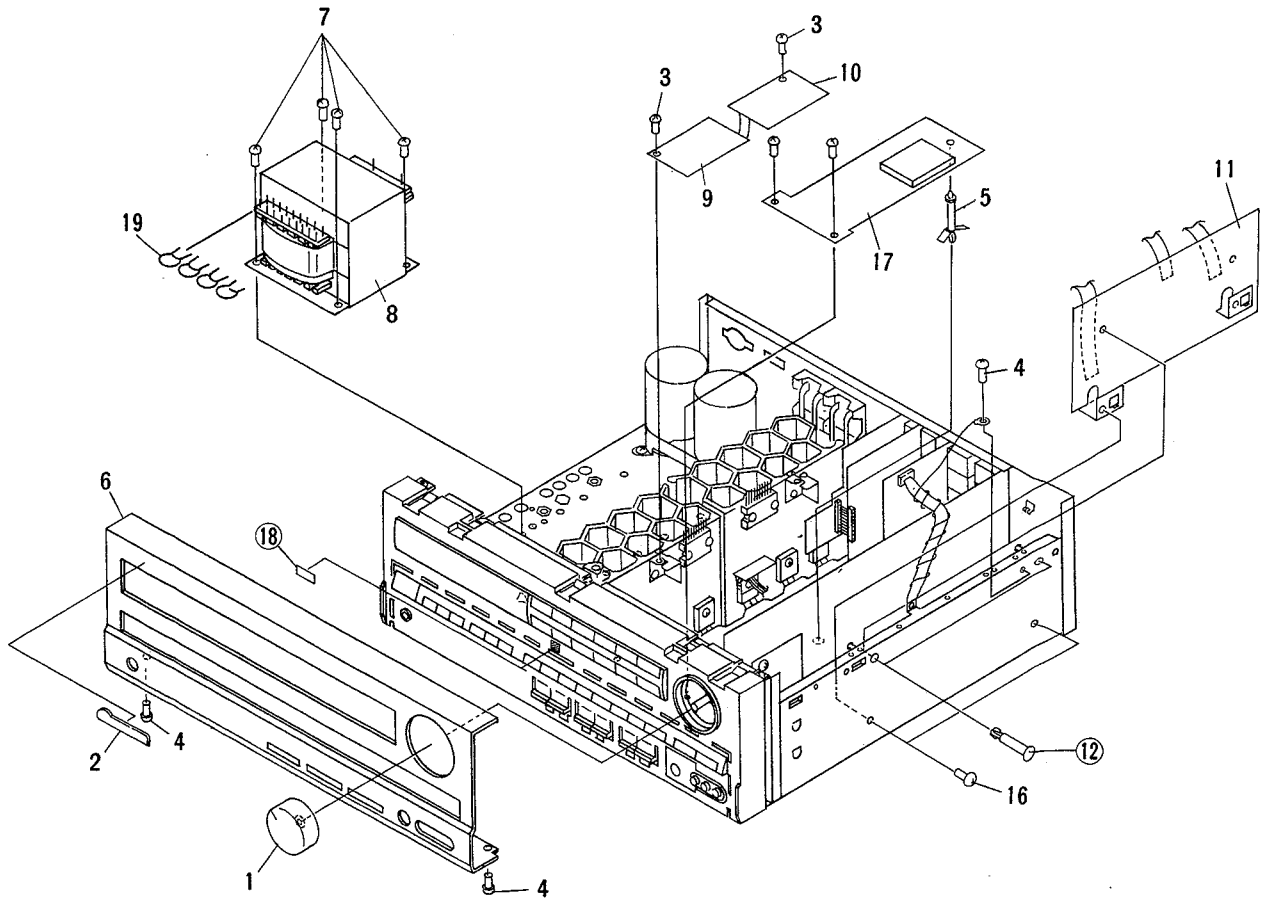
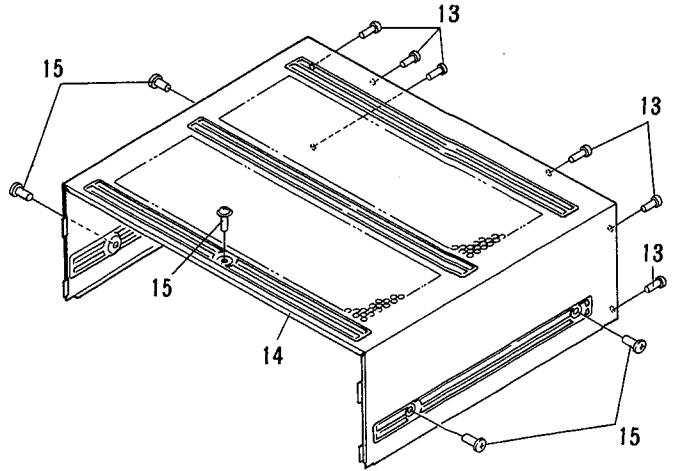
C

D

1.8 MAIN UNIT (6)

Parts List

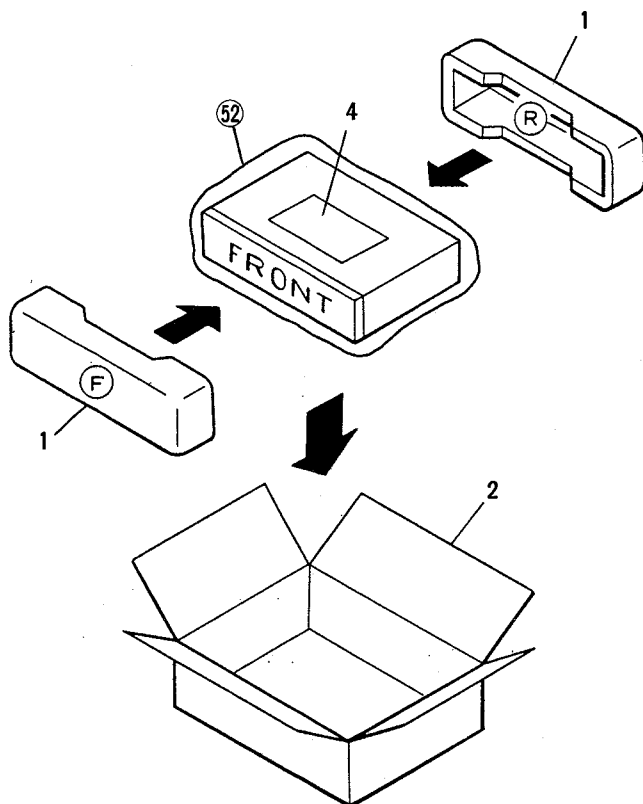
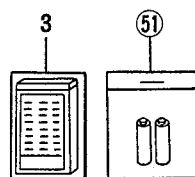
Mark	No.	Description	Part No.
	1	VOL knob	AAB1140
A	2	Name plate	AAM1029
	3	Screw	ABA1011
	4	Screw	ABA1048
	5	Spacer	AEC1292
	6	Front panel	ANB1472
	7	Screw	BBZ40P080FCU
△	8	T1 Power transformer	ATS1358
	9	REAR POWER AMP (A) assembly	
	10	REAR POWER AMP (B) assembly	
⊙	11	DSP assembly	AWZ3112
	12	PCB support	AEC1288
	13	Screw	ABA1011
	14	Bonnet	ANE1288
	15	Screw	FBT40P080FZK
B	16	Screw	ABA1009
	17	SUPER CAPA assembly	AWZ3589
	18	Tape	
	19	Capacitors C3 - 6	CQMA473K250



2. PACKING

Parts List

Mark	No.	Description	Part No.
	1	Styrol protector	AHA1408
	2	Packing case	AHD2081
	3	Remote control unit	AXD1217
	4	Operating instructions (English)	ARB1321
	51	Alkaline dry cell battery (LR03, AAA)	
	52	Sheet	



3. SCHEMATIC DIAGRAM AND P.C. BOARDS CONNECTION DIAGRAM

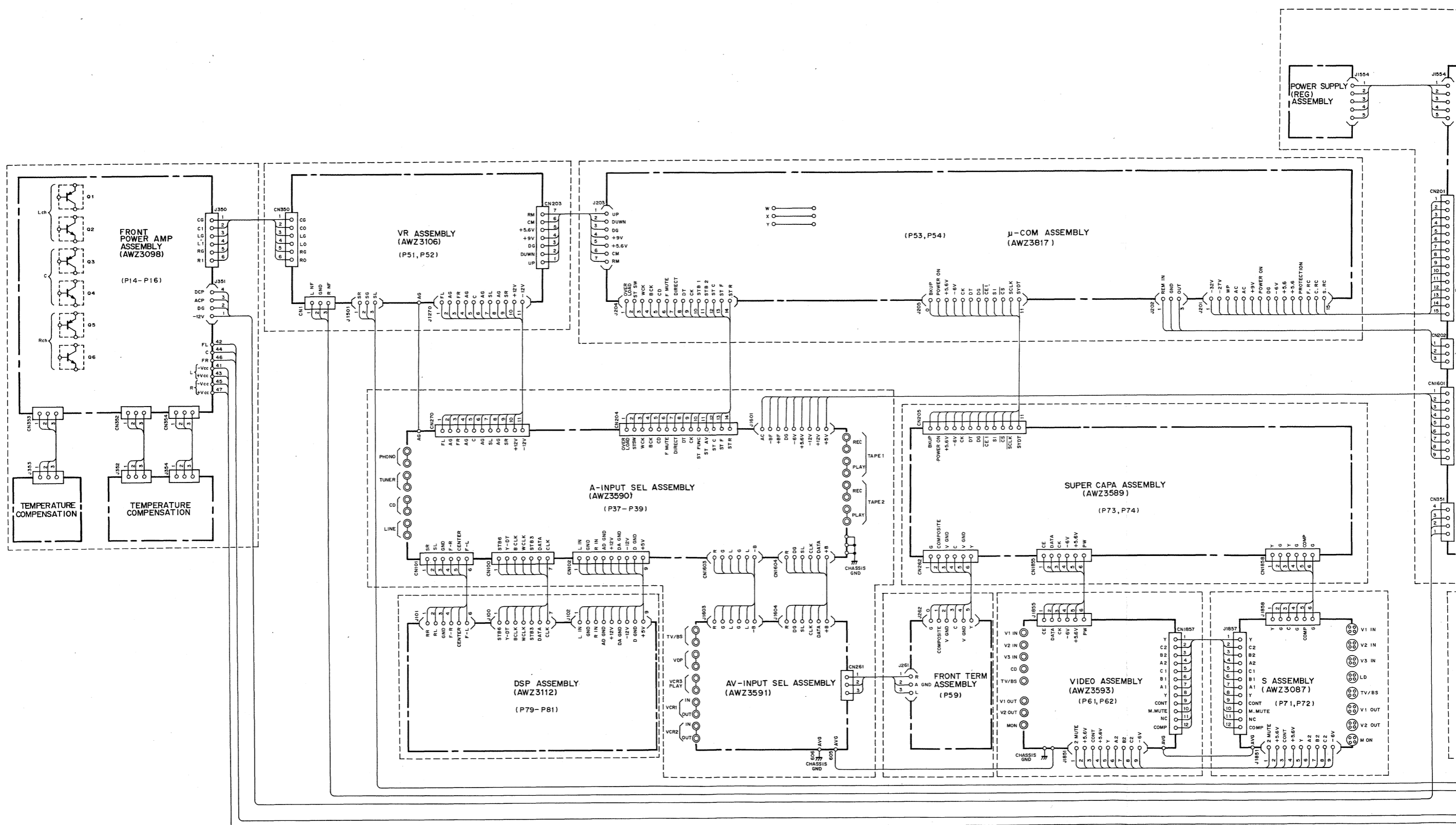
3.1 OVERALL SCHEMATIC DIAGRAM

A

B

C

D



1

2

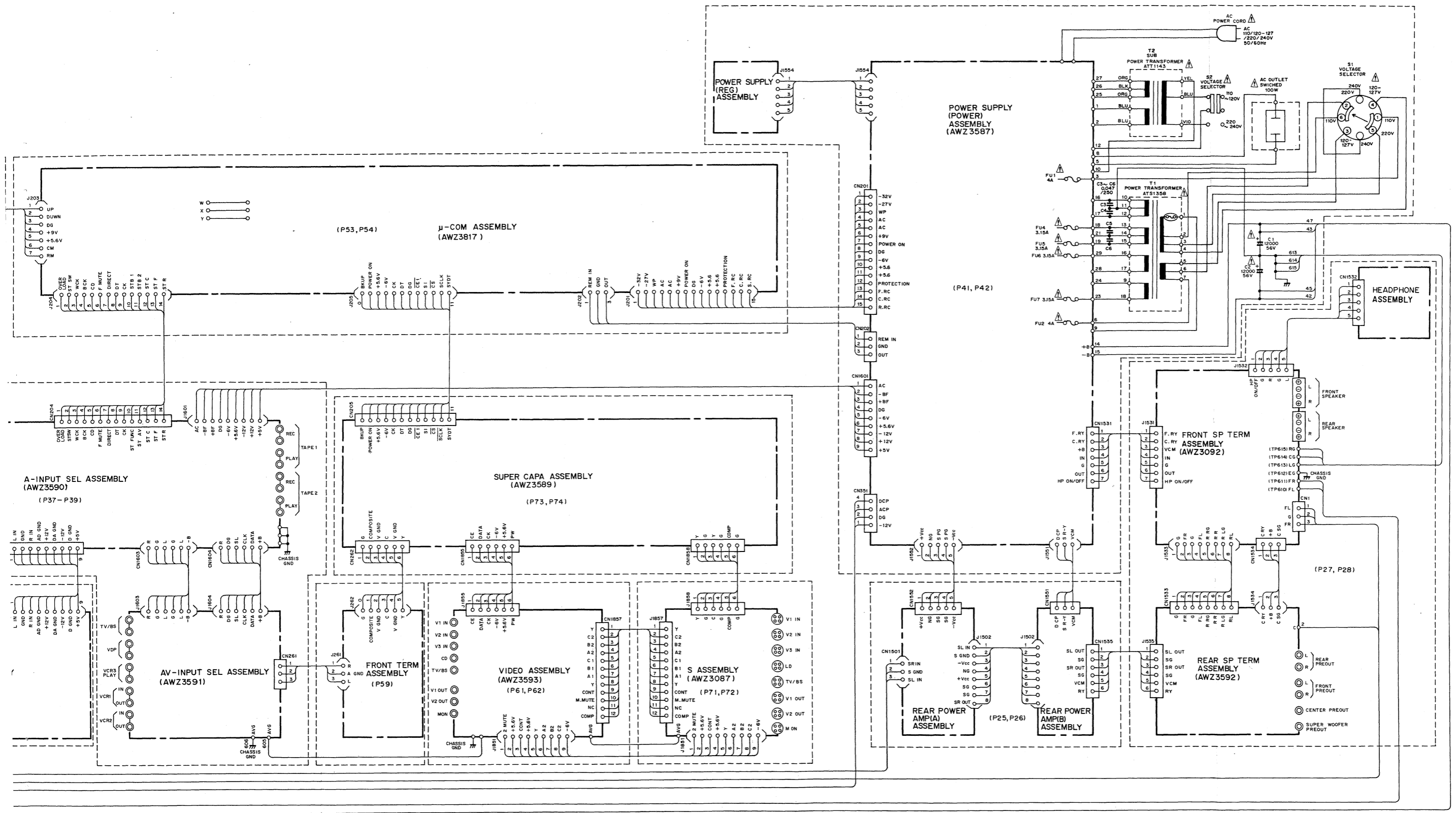
3

4

5

6

CONNECTION DIAGRAM



A
B
C
D

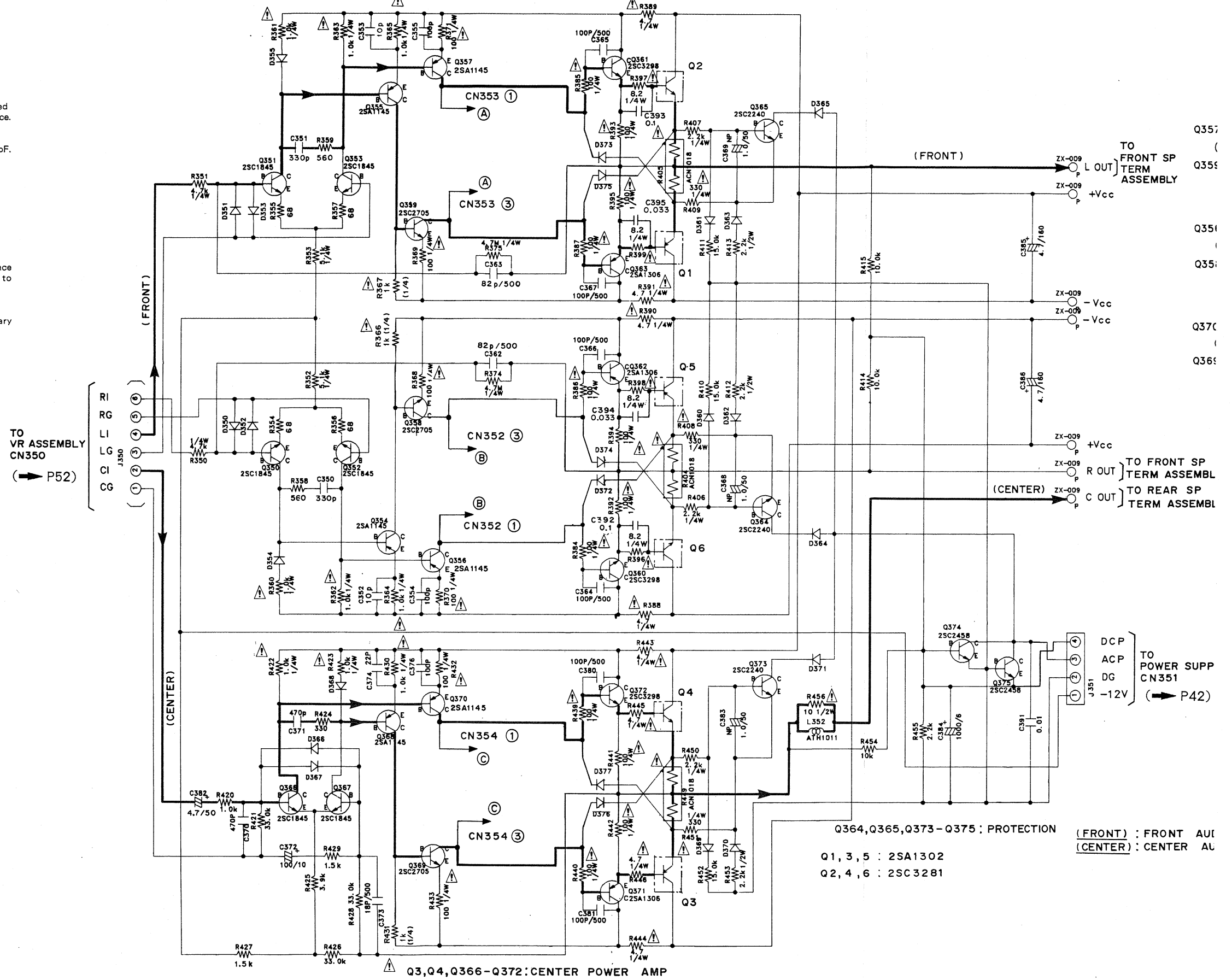
3.2 FRONT POWER AMP (AWZ3098) AND TEMPERATURE COMPENSATION ASSEMBLY

Q1,Q2,Q5,Q6,Q350 - Q363 : FRONT POWER AMP

Q3,Q4,Q366-Q372: CENTER POWER AMP

- RESISTORS:**
Indicated in Ω, 1/4W, 1/8W, ±5% tolerance unless otherwise noted
k: kΩ, M: MΩ, (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% tolerance.
- CAPACITORS:**
Indicated in capacity (μF) / voltage (V) unless otherwise noted p: pF.
Indication without voltage is 50V except electrolytic capacitor.
- VOLTAGE CURRENT:**
□: DC voltage (V) at no input signal.
○: Value in () is DC voltage at rated power.
↺ mA or ↻ mA: DC current at no input signal unless otherwise noted.
- OTHERS:**
→: Signal route.
⊗: Adjusting point.
The Δ 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.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.



Q364,Q365,Q373 - Q375 : PROTECTION
 (FRONT) : FRONT AUI
 (CENTER) : CENTER AU

Q1, 3, 5 : 2SA1302
 Q2, 4, 6 : 2SC3281

TO VR ASSEMBLY
 CN350
 (→ P52)

TO POWER SUPP
 CN351
 (→ P42)

TO FRONT SP TERM ASSEMBLY
 L OUT
 +Vcc
 -Vcc

TO FRONT SP TERM ASSEMBLY
 R OUT
 TO REAR SP TERM ASSEMBLY
 C OUT

Q357
 Q358
 Q351
 Q35:
 Q37C
 Q365

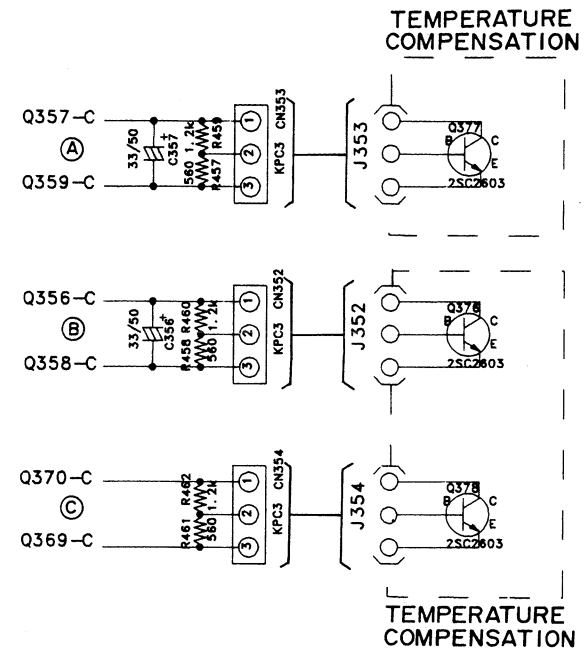
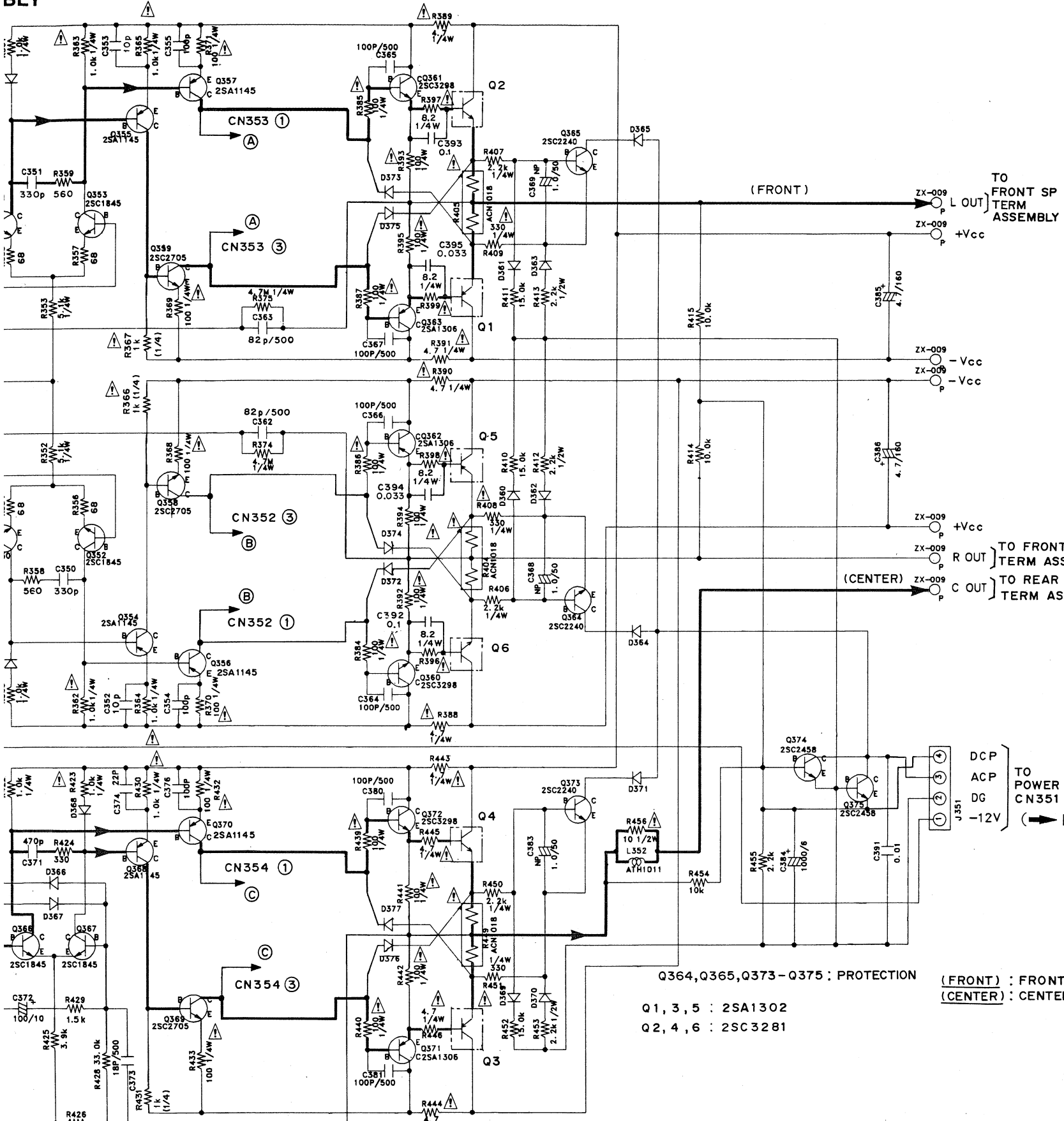
A

B

C

D

Q1,Q2,Q5,Q6,Q350-Q363: FRONT POWER AMP



Q364, Q365, Q373-Q375: PROTECTION
 Q1, 3, 5 : 2SA1302
 Q2, 4, 6 : 2SC3281

(FRONT) : FRONT AUDIO SIGNAL
 (CENTER) : CENTER AUDIO SIGNAL

FRONT POWER AMP ASSEMBLY
 AWZ3098

TO POWER SUPPLY ASSEMBLY
 CN351
 (-12V) (P42)

TO FRONT SP TERM ASSEMBLY

TO FRONT SP TERM ASSEMBLY
 TO REAR SP TERM ASSEMBLY

A

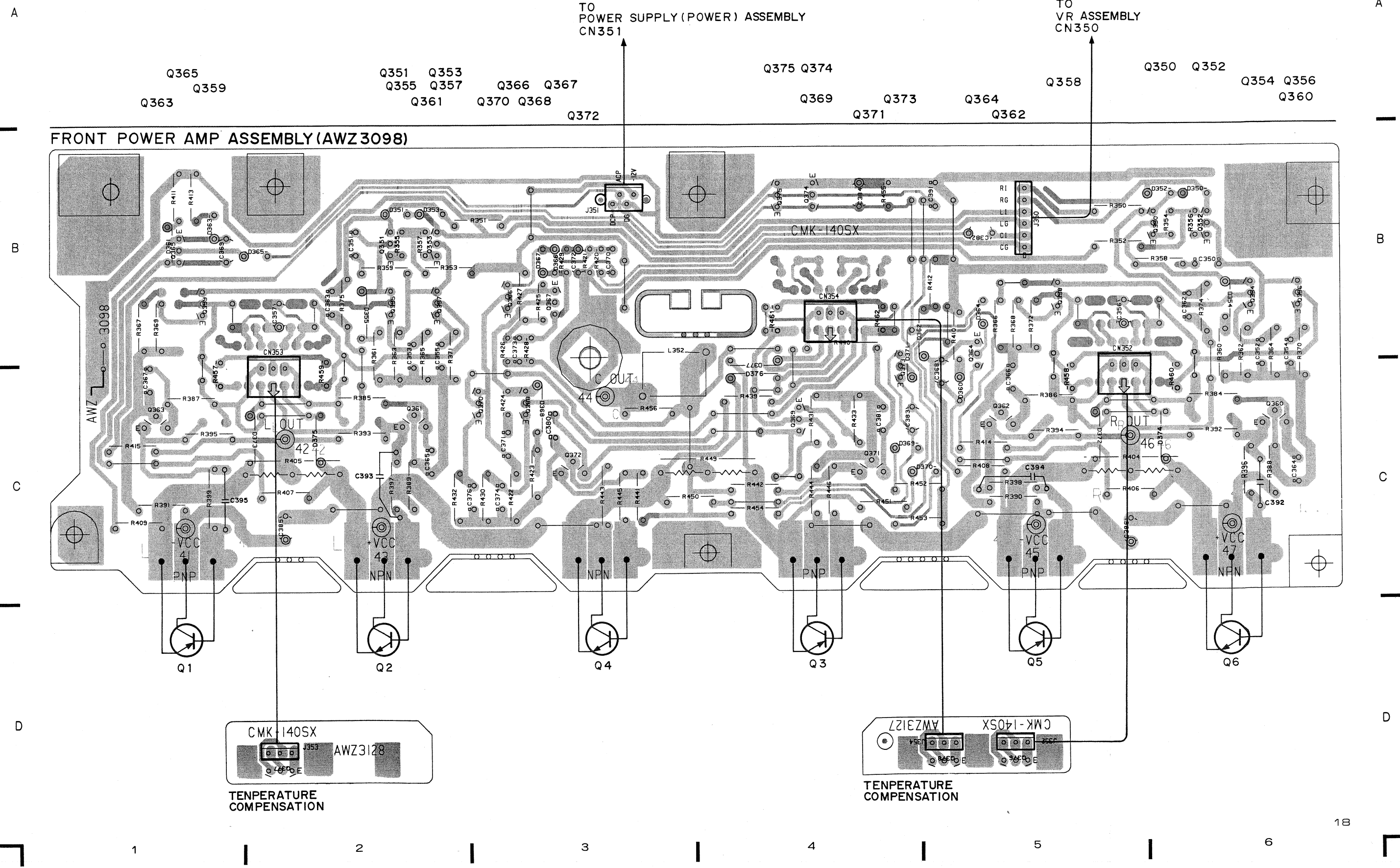
B

C

D

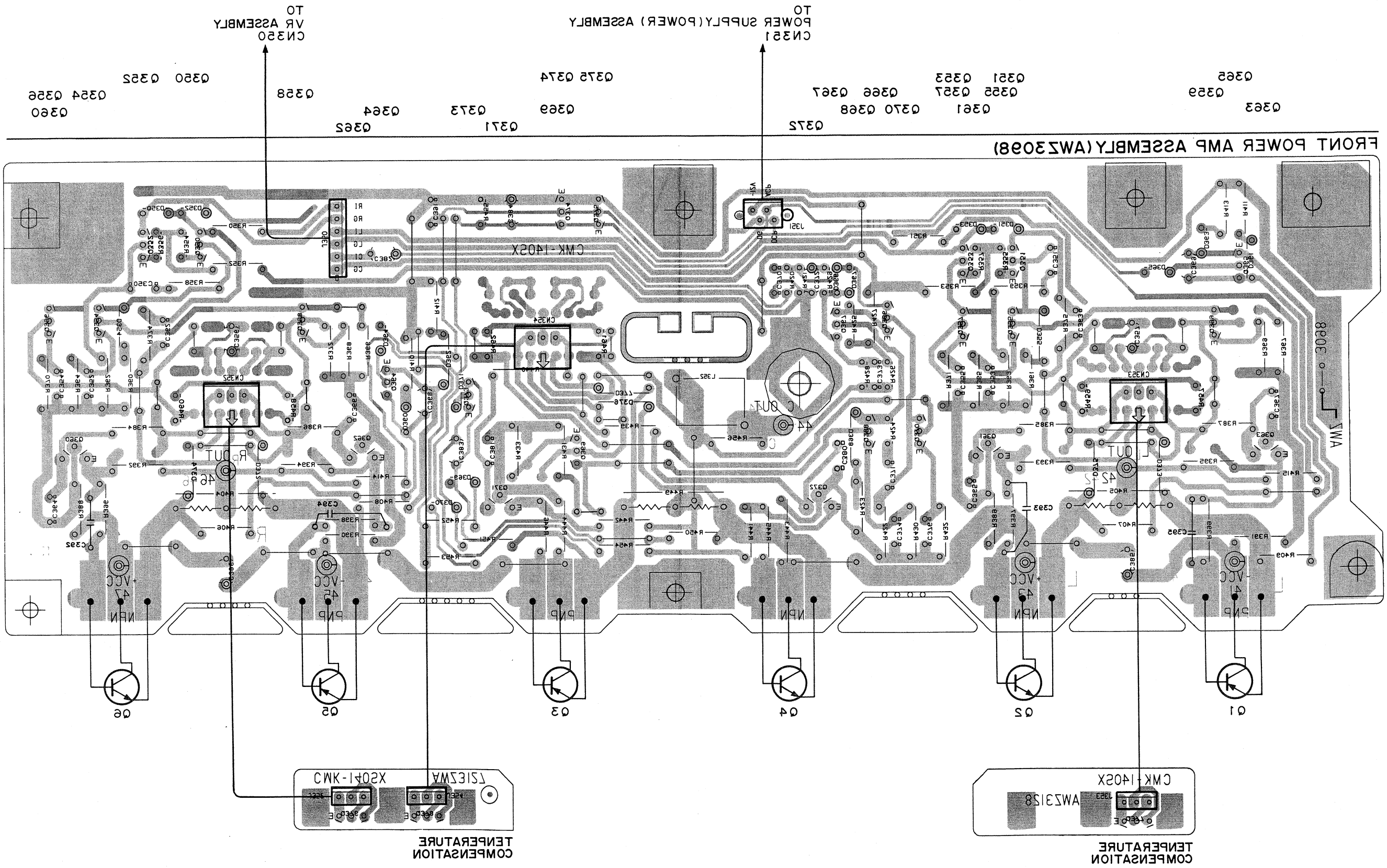
3.2 FRONT POWER AMP (AWZ3098) AND TEMPERATURE COMPENSATION ASSEMBLY

• View from component side



3.2 FRONT POWER AMP (AW33098) AND TEMPERATURE COMPENSATION ASSEMBLY

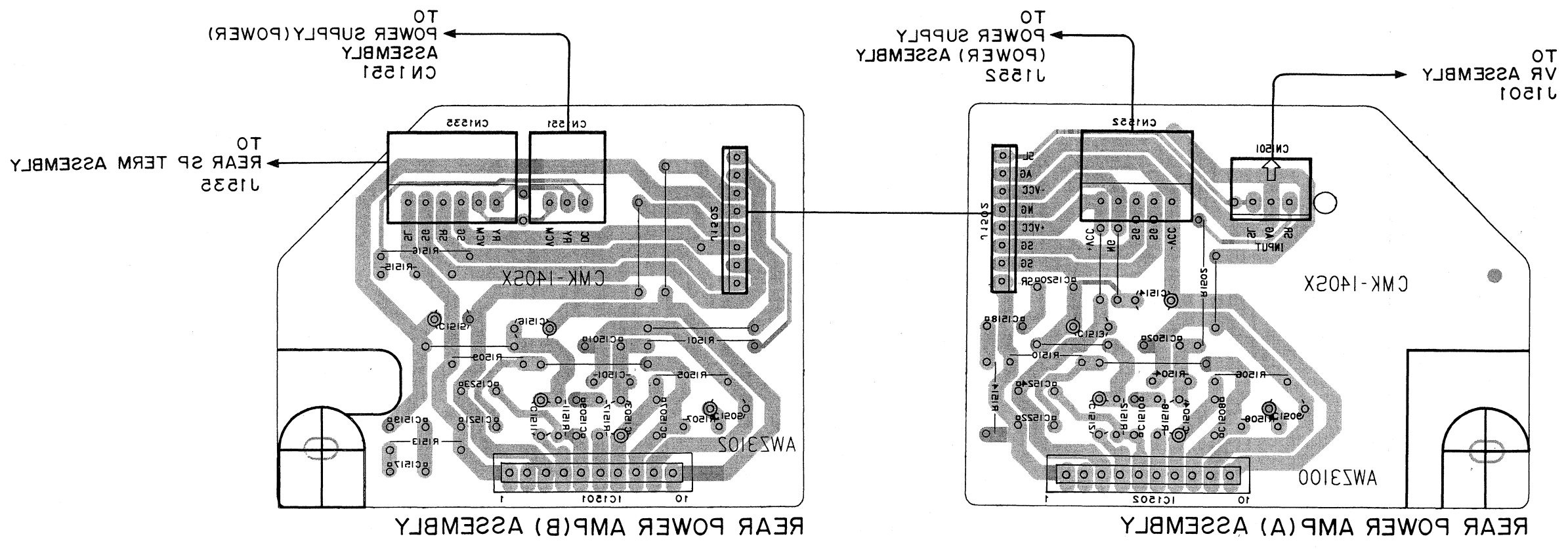
• View from soldering side



A
B
C
D

3.3 REAR POWER AMP (A) AND REAR POWER AMP (B) ASSEMBLY

• View from soldering side



A

A

B

B

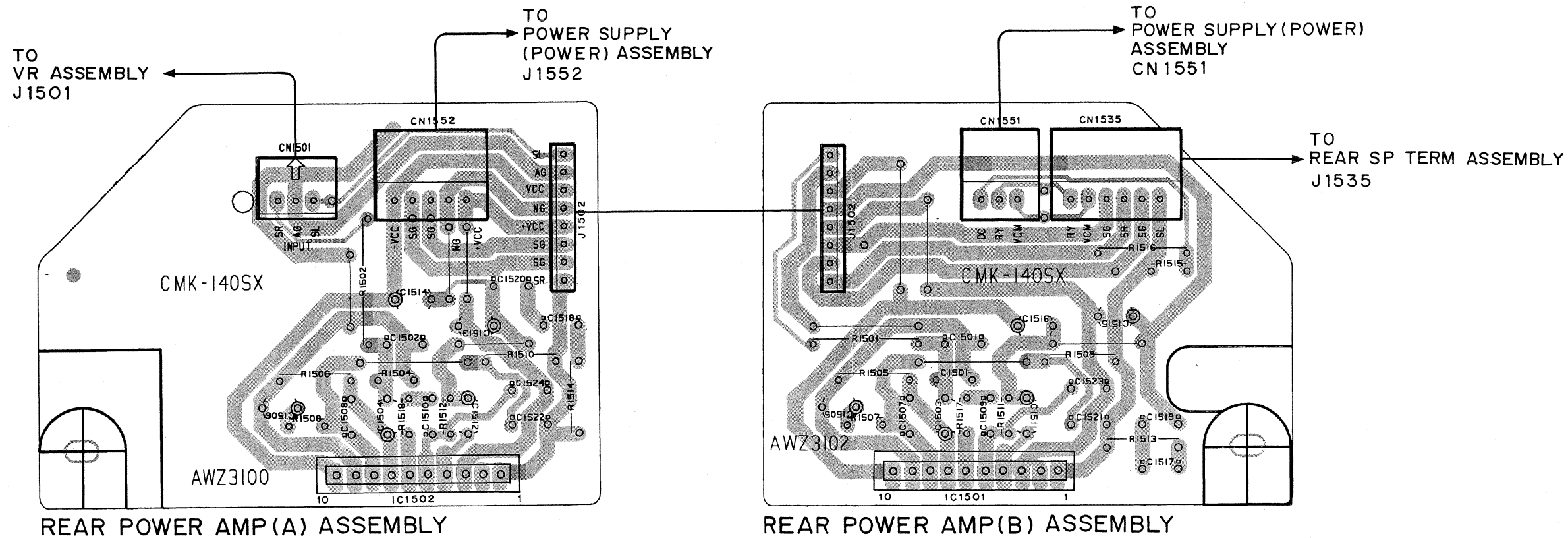
C

C

D

D

3.3 REAR POWER AMP (A) AND REAR POWER AMP (B) ASSEMBLY



A

B

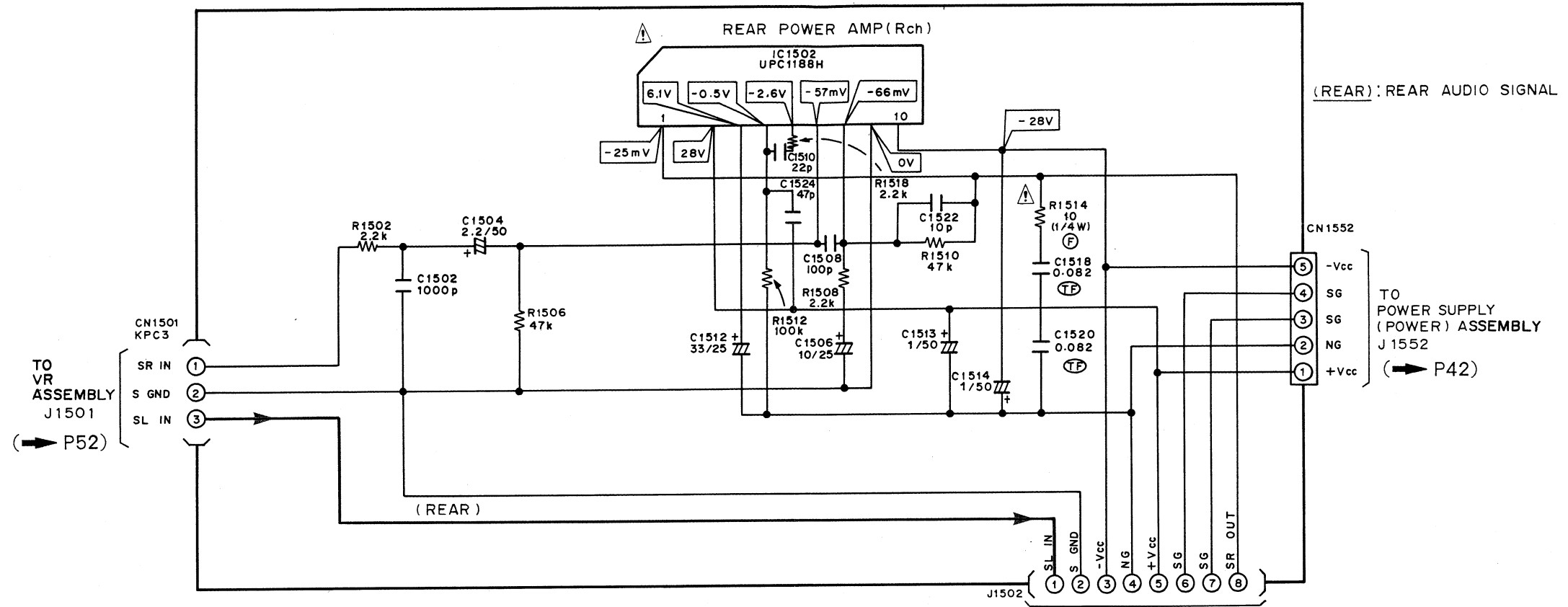
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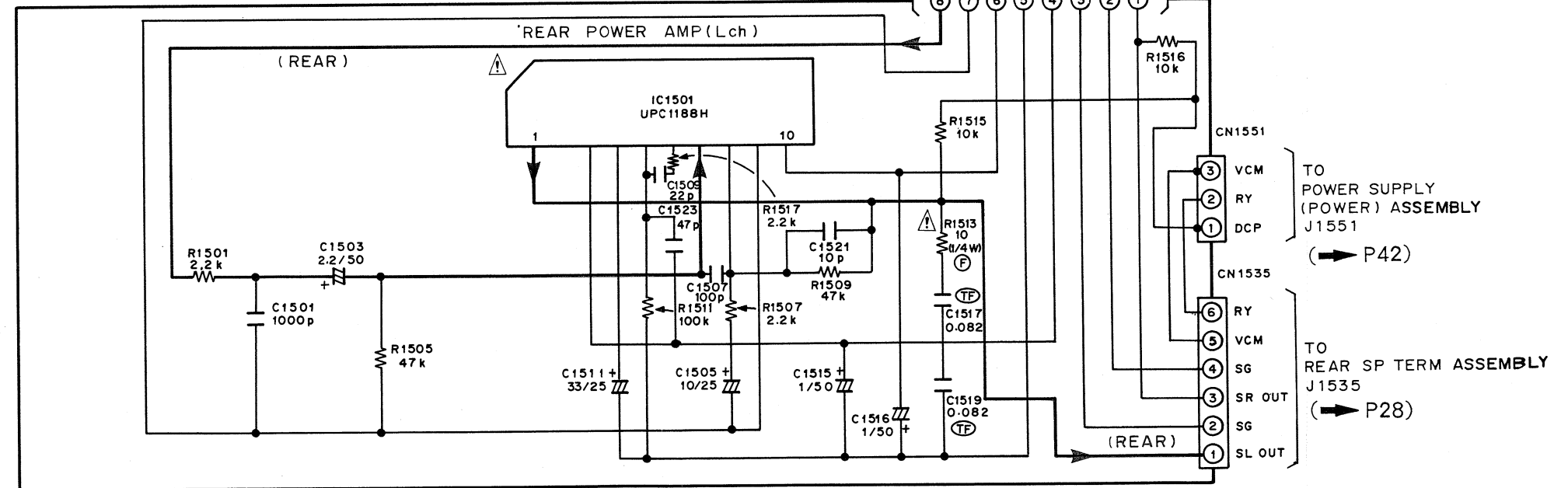
3.3 REAR POWER AMP (A) AND REAR POWER AMP (B) ASSEMBLY

• View from component side

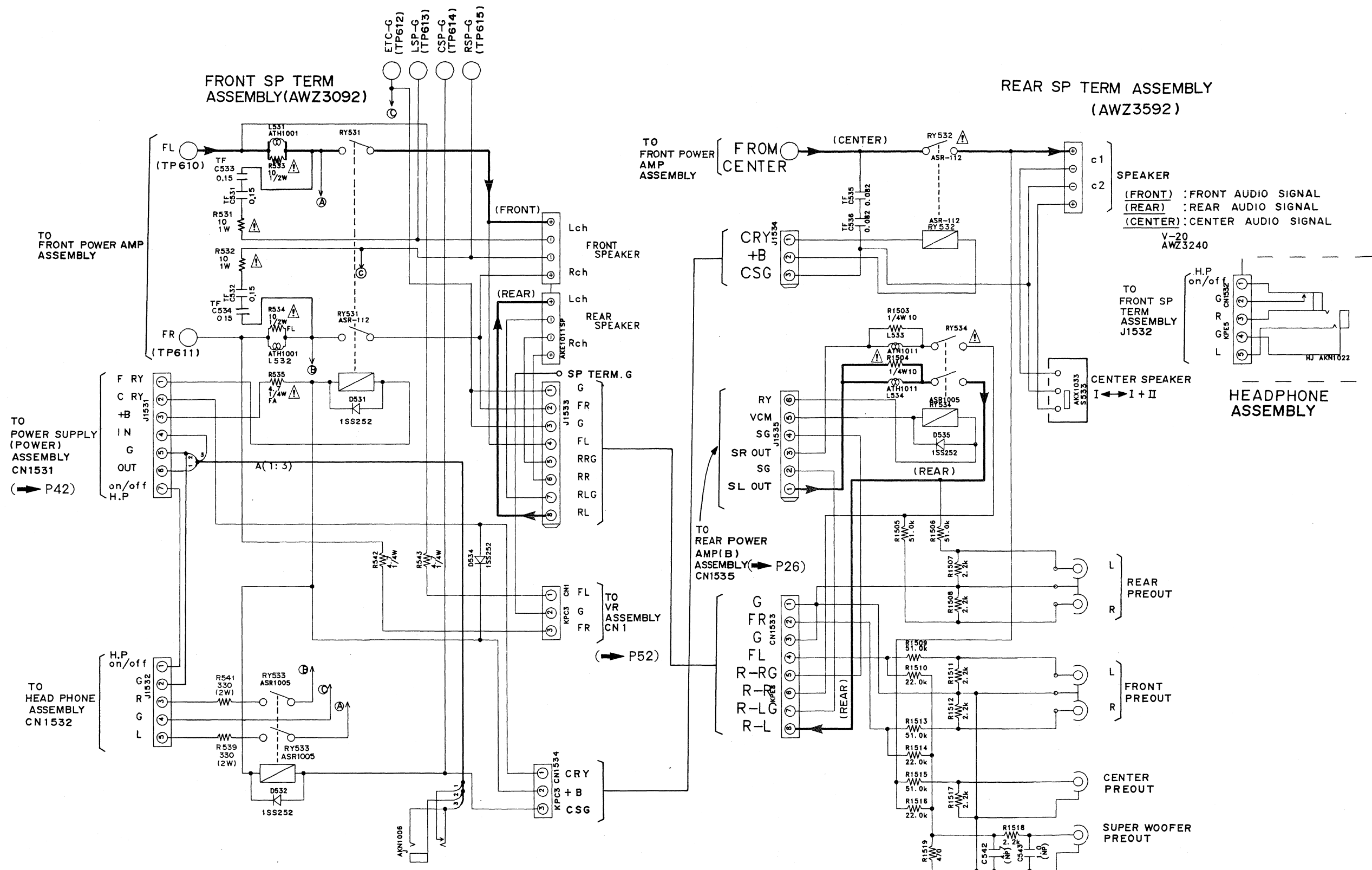
REAR POWER AMP (A) ASSEMBLY



REAR POWER AMP (B) ASSEMBLY

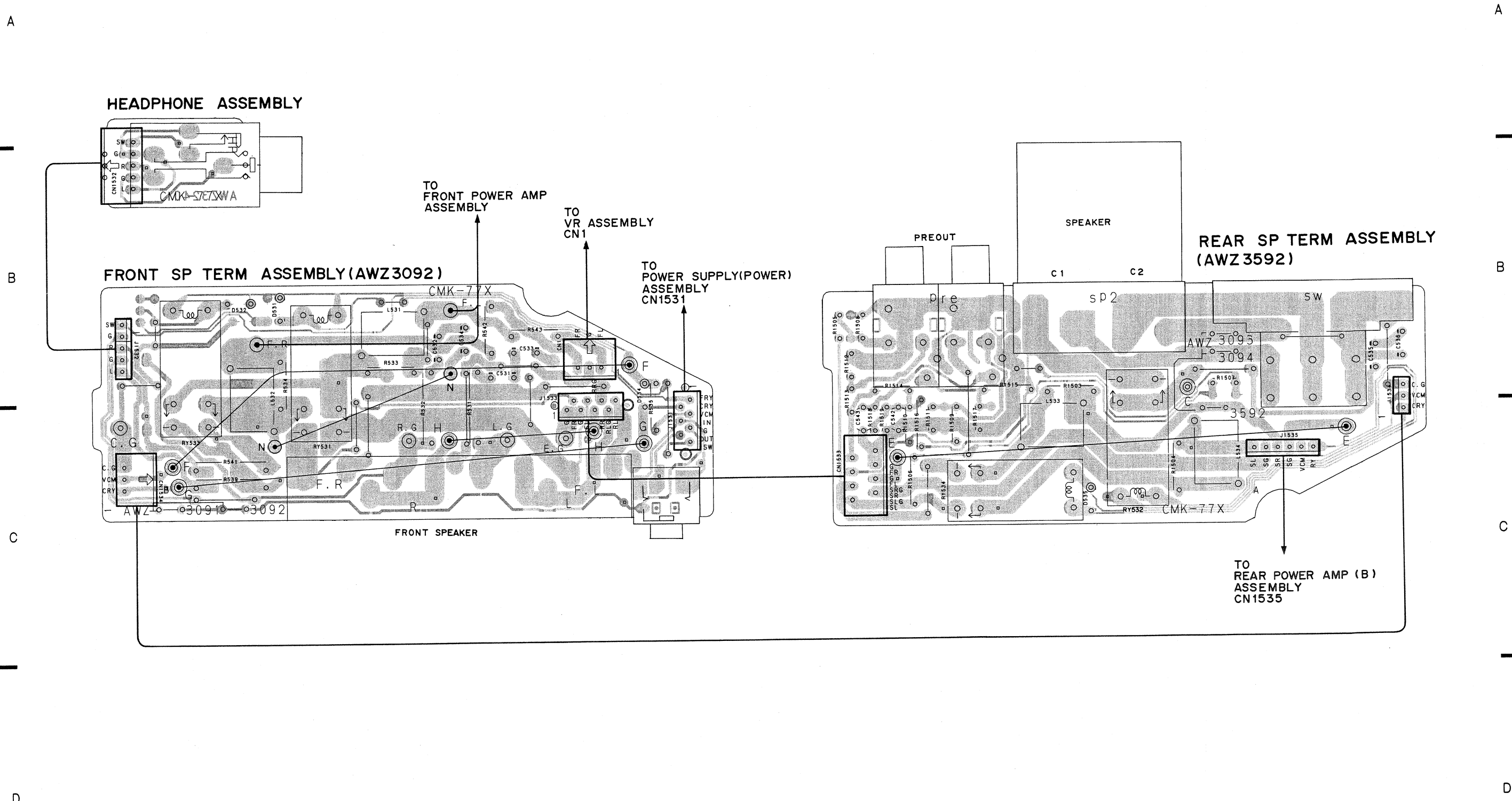


3.4 FRONT SP TERM (AWZ3092), REAR SP TERM (AWZ3592) AND HEADPHONE ASSEMBLY



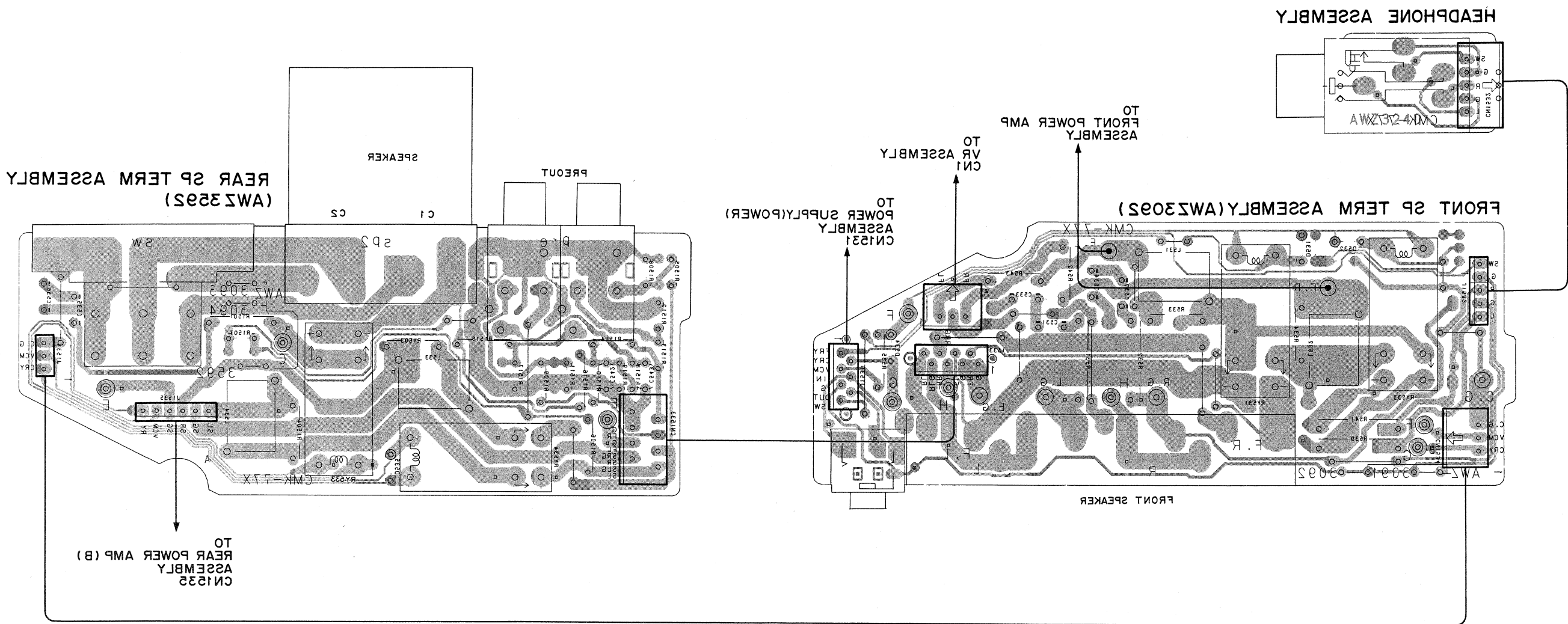
3.4 FRONT SP TERM (AWZ3092) , REAR SP TERM (AWZ3592) AND HEADPHONE ASSEMBLY

• View from component side



3.4 FRONT SP TERM (AW3302) , REAR SP TERM (AW3522) AND HEADPHONE ASSEMBLY

• View from soldering side



A

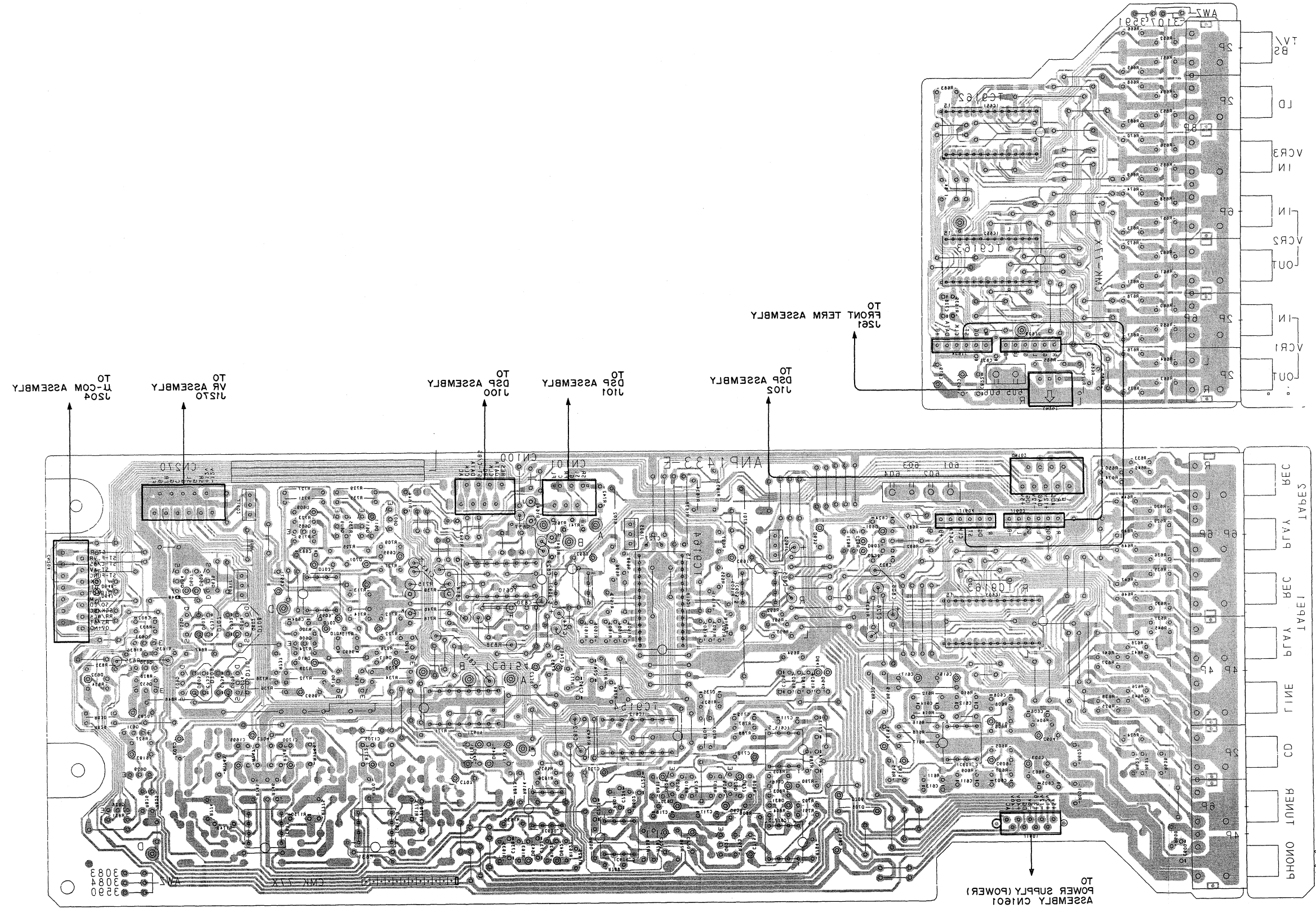
B

C

D

3.2 A-INPUT SEL (WAZ350) AND VA-INPUT SEL (WAZ351) ASSEMBLY

• View from soldering side



A-INPUT SEL ASSEMBLY (WAZ 350)

IC601 IC602 IC603 IC604 IC605 IC606 IC607 IC608 IC609 IC610 IC611 IC612 IC613 IC614 IC615 IC616 IC617 IC618 IC619 IC620 IC621 IC622 IC623 IC624 IC625 IC626 IC627 IC628 IC629 IC630 IC631 IC632 IC633 IC634 IC635 IC636 IC637 IC638 IC639 IC640 IC641 IC642 IC643 IC644 IC645 IC646 IC647 IC648 IC649 IC650 IC651 IC652 IC653 IC654 IC655 IC656 IC657 IC658 IC659 IC660 IC661 IC662 IC663 IC664 IC665 IC666 IC667 IC668 IC669 IC670 IC671 IC672 IC673 IC674 IC675 IC676 IC677 IC678 IC679 IC680 IC681 IC682 IC683 IC684 IC685 IC686 IC687 IC688 IC689 IC690 IC691 IC692 IC693 IC694 IC695 IC696 IC697 IC698 IC699 IC700

IC701 IC702 IC703 IC704 IC705 IC706 IC707 IC708 IC709 IC710 IC711 IC712 IC713 IC714 IC715 IC716 IC717 IC718 IC719 IC720 IC721 IC722 IC723 IC724 IC725 IC726 IC727 IC728 IC729 IC730 IC731 IC732 IC733 IC734 IC735 IC736 IC737 IC738 IC739 IC740 IC741 IC742 IC743 IC744 IC745 IC746 IC747 IC748 IC749 IC750 IC751 IC752 IC753 IC754 IC755 IC756 IC757 IC758 IC759 IC760 IC761 IC762 IC763 IC764 IC765 IC766 IC767 IC768 IC769 IC770 IC771 IC772 IC773 IC774 IC775 IC776 IC777 IC778 IC779 IC780 IC781 IC782 IC783 IC784 IC785 IC786 IC787 IC788 IC789 IC790 IC791 IC792 IC793 IC794 IC795 IC796 IC797 IC798 IC799 IC800

IC801 IC802 IC803 IC804 IC805 IC806 IC807 IC808 IC809 IC810 IC811 IC812 IC813 IC814 IC815 IC816 IC817 IC818 IC819 IC820 IC821 IC822 IC823 IC824 IC825 IC826 IC827 IC828 IC829 IC830 IC831 IC832 IC833 IC834 IC835 IC836 IC837 IC838 IC839 IC840 IC841 IC842 IC843 IC844 IC845 IC846 IC847 IC848 IC849 IC850 IC851 IC852 IC853 IC854 IC855 IC856 IC857 IC858 IC859 IC860 IC861 IC862 IC863 IC864 IC865 IC866 IC867 IC868 IC869 IC870 IC871 IC872 IC873 IC874 IC875 IC876 IC877 IC878 IC879 IC880 IC881 IC882 IC883 IC884 IC885 IC886 IC887 IC888 IC889 IC890 IC891 IC892 IC893 IC894 IC895 IC896 IC897 IC898 IC899 IC900

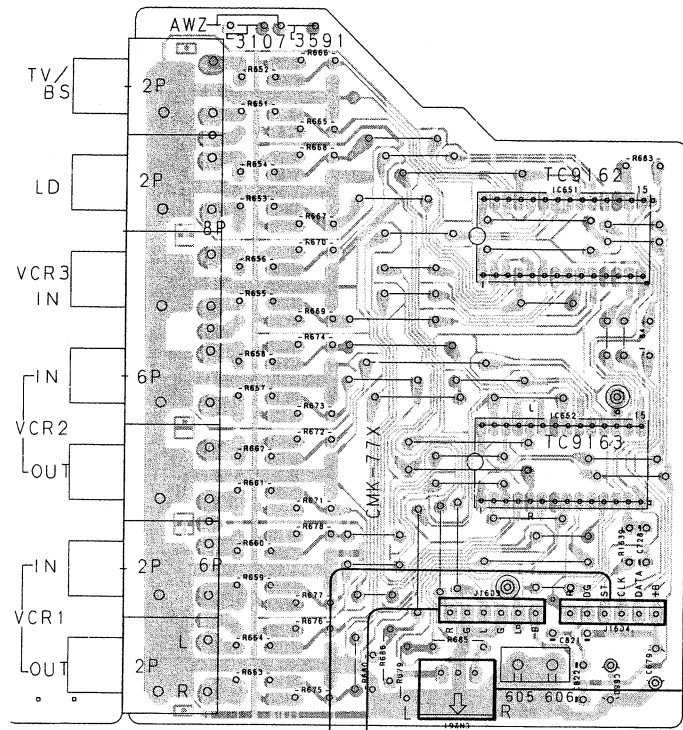
IC901 IC902 IC903 IC904 IC905 IC906 IC907 IC908 IC909 IC910 IC911 IC912 IC913 IC914 IC915 IC916 IC917 IC918 IC919 IC920 IC921 IC922 IC923 IC924 IC925 IC926 IC927 IC928 IC929 IC930 IC931 IC932 IC933 IC934 IC935 IC936 IC937 IC938 IC939 IC940 IC941 IC942 IC943 IC944 IC945 IC946 IC947 IC948 IC949 IC950 IC951 IC952 IC953 IC954 IC955 IC956 IC957 IC958 IC959 IC960 IC961 IC962 IC963 IC964 IC965 IC966 IC967 IC968 IC969 IC970 IC971 IC972 IC973 IC974 IC975 IC976 IC977 IC978 IC979 IC980 IC981 IC982 IC983 IC984 IC985 IC986 IC987 IC988 IC989 IC990 IC991 IC992 IC993 IC994 IC995 IC996 IC997 IC998 IC999 IC1000

IC1001 IC1002 IC1003 IC1004 IC1005 IC1006 IC1007 IC1008 IC1009 IC1010 IC1011 IC1012 IC1013 IC1014 IC1015 IC1016 IC1017 IC1018 IC1019 IC1020 IC1021 IC1022 IC1023 IC1024 IC1025 IC1026 IC1027 IC1028 IC1029 IC1030 IC1031 IC1032 IC1033 IC1034 IC1035 IC1036 IC1037 IC1038 IC1039 IC1040 IC1041 IC1042 IC1043 IC1044 IC1045 IC1046 IC1047 IC1048 IC1049 IC1050 IC1051 IC1052 IC1053 IC1054 IC1055 IC1056 IC1057 IC1058 IC1059 IC1060 IC1061 IC1062 IC1063 IC1064 IC1065 IC1066 IC1067 IC1068 IC1069 IC1070 IC1071 IC1072 IC1073 IC1074 IC1075 IC1076 IC1077 IC1078 IC1079 IC1080 IC1081 IC1082 IC1083 IC1084 IC1085 IC1086 IC1087 IC1088 IC1089 IC1090 IC1091 IC1092 IC1093 IC1094 IC1095 IC1096 IC1097 IC1098 IC1099 IC1100

IC1101 IC1102 IC1103 IC1104 IC1105 IC1106 IC1107 IC1108 IC1109 IC1110 IC1111 IC1112 IC1113 IC1114 IC1115 IC1116 IC1117 IC1118 IC1119 IC1120 IC1121 IC1122 IC1123 IC1124 IC1125 IC1126 IC1127 IC1128 IC1129 IC1130 IC1131 IC1132 IC1133 IC1134 IC1135 IC1136 IC1137 IC1138 IC1139 IC1140 IC1141 IC1142 IC1143 IC1144 IC1145 IC1146 IC1147 IC1148 IC1149 IC1150 IC1151 IC1152 IC1153 IC1154 IC1155 IC1156 IC1157 IC1158 IC1159 IC1160 IC1161 IC1162 IC1163 IC1164 IC1165 IC1166 IC1167 IC1168 IC1169 IC1170 IC1171 IC1172 IC1173 IC1174 IC1175 IC1176 IC1177 IC1178 IC1179 IC1180 IC1181 IC1182 IC1183 IC1184 IC1185 IC1186 IC1187 IC1188 IC1189 IC1190 IC1191 IC1192 IC1193 IC1194 IC1195 IC1196 IC1197 IC1198 IC1199 IC1200

3.5 A-INPUT SEL (AWZ3590) AND AV-INPUT SEL (AWZ3591) ASSEMBLY

• View from component side AV- INPUT SEL ASSEMBLY (AWZ3591)



TO FRONT TERM ASSEMBLY J261

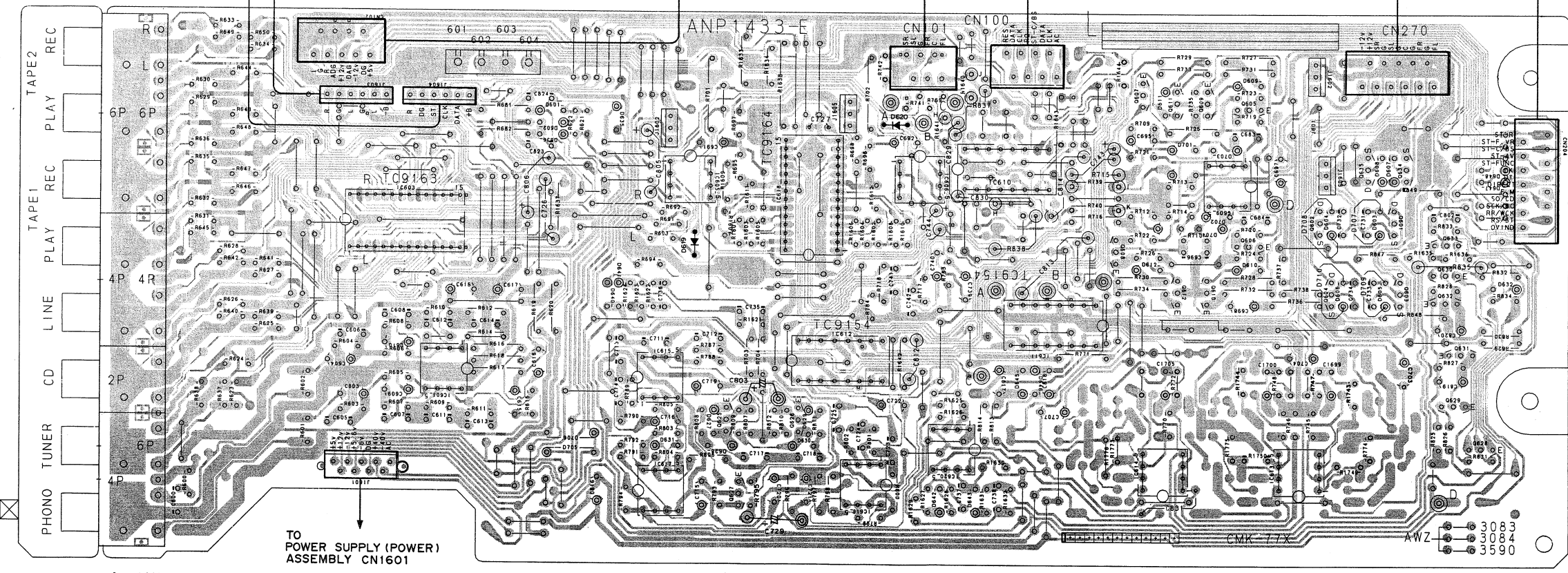
TO DSP ASSEMBLY J102

TO DSP ASSEMBLY J101

TO DSP ASSEMBLY J100

TO VR ASSEMBLY J1270

TO JI-COM ASSEMBLY J204



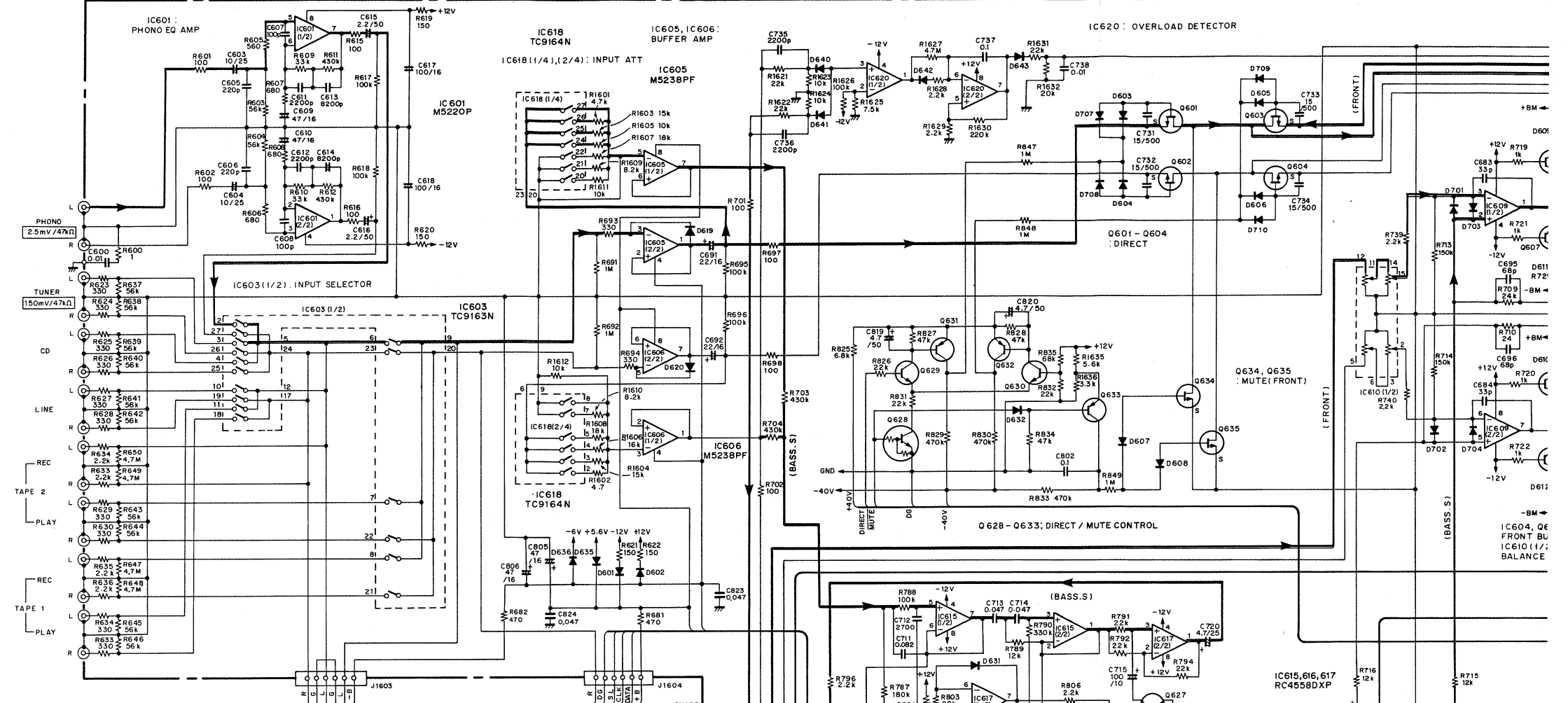
TO POWER SUPPLY (POWER) ASSEMBLY CN1601

A-INPUT SEL ASSEMBLY (AWZ3590)

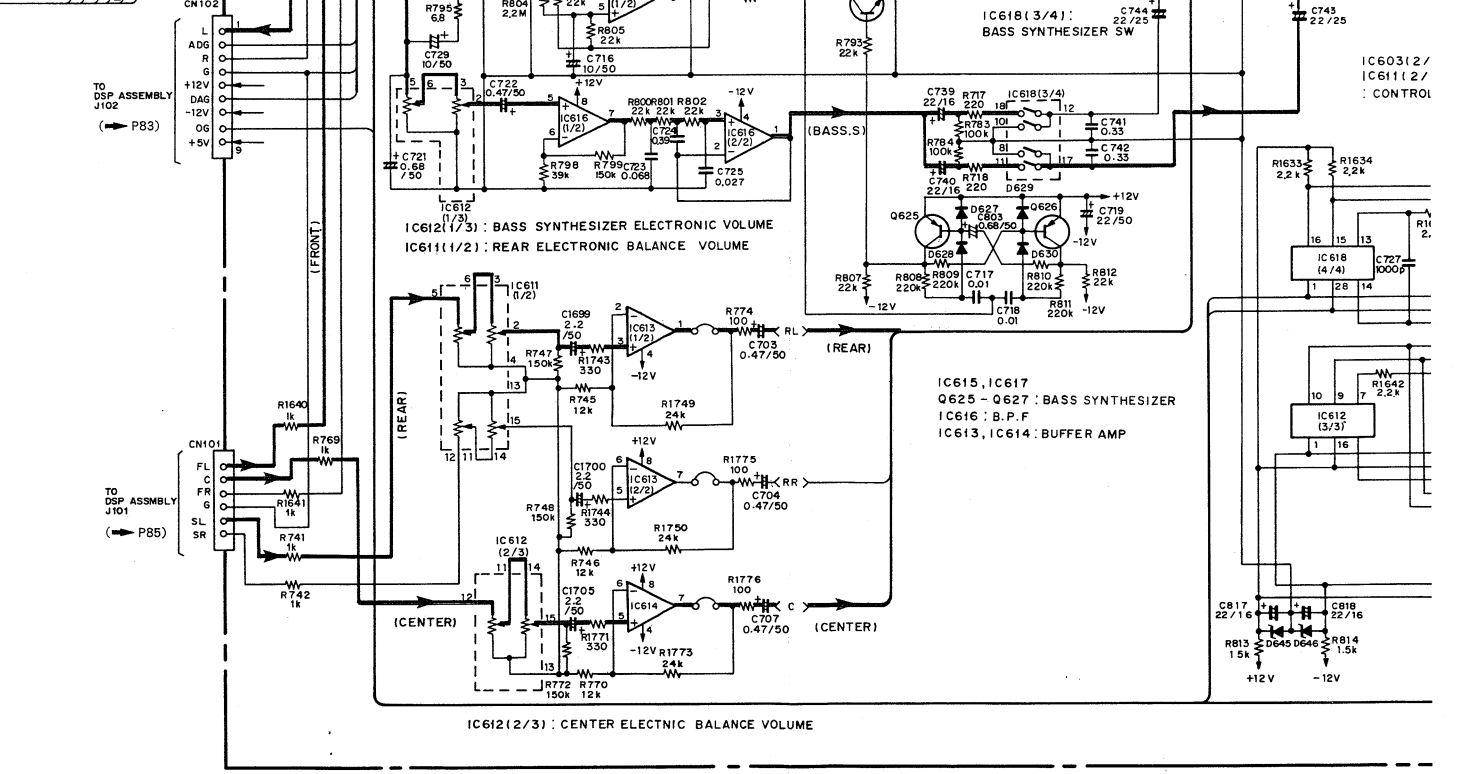
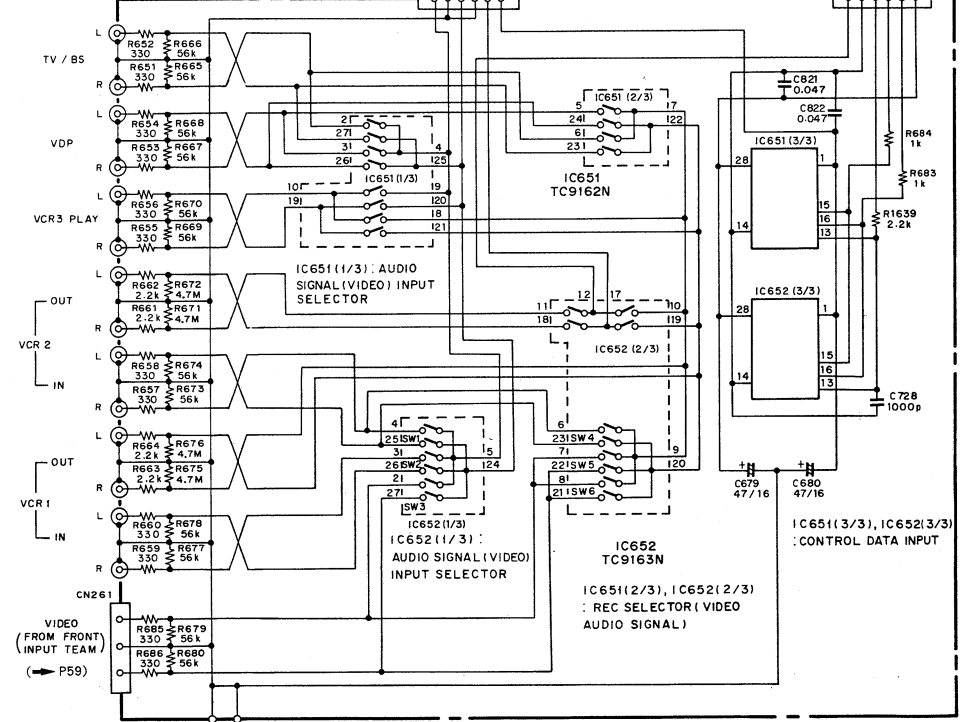
IC603	IC605	IC618	IC606	IC610	Q607 Q611 Q609 Q605	IC609	Q635 Q634		
IC601	IC615	Q625	Q626	IC612	Q608	Q606	Q602	Q601	Q633
	IC617	Q627		IC616	IC611	Q612 Q610	Q604	Q603	Q632
				IC620		IC614	IC613	Q631 Q628	Q629

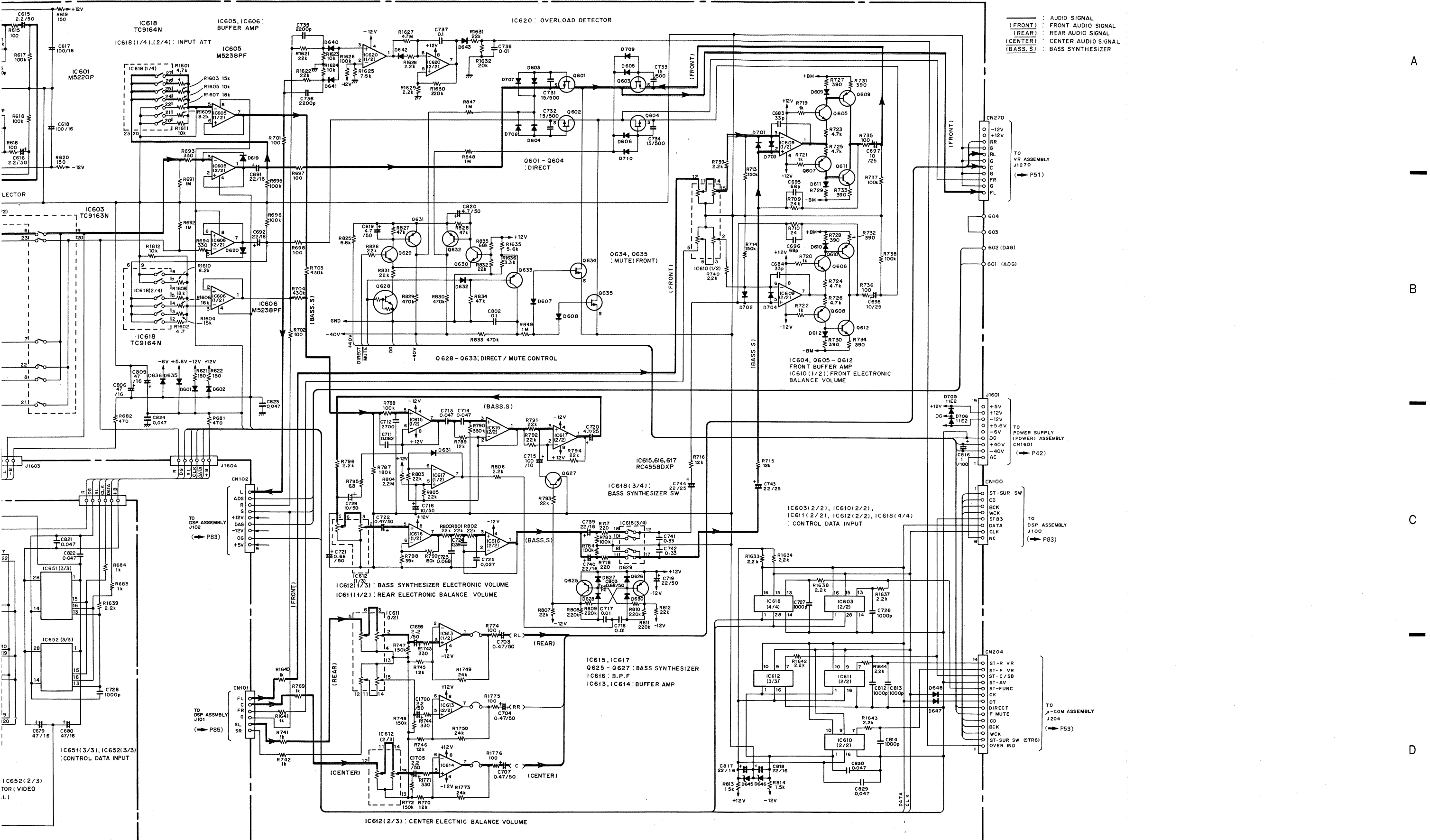
3.5 A-INPUT SEL (AWZ3590) AND AV-INPUT SEL (AWZ3591) ASSEMBLY

A-INPUT SEL ASSEMBLY(AWZ3590)



AV-INPUT SEL ASSEMBLY(AWZ3591)





— : AUDIO SIGNAL
 (FRONT) : FRONT AUDIO SIGNAL
 (REAR) : REAR AUDIO SIGNAL
 (CENTER) : CENTER AUDIO SIGNAL
 (BASS.S) : BASS SYNTHESIZER

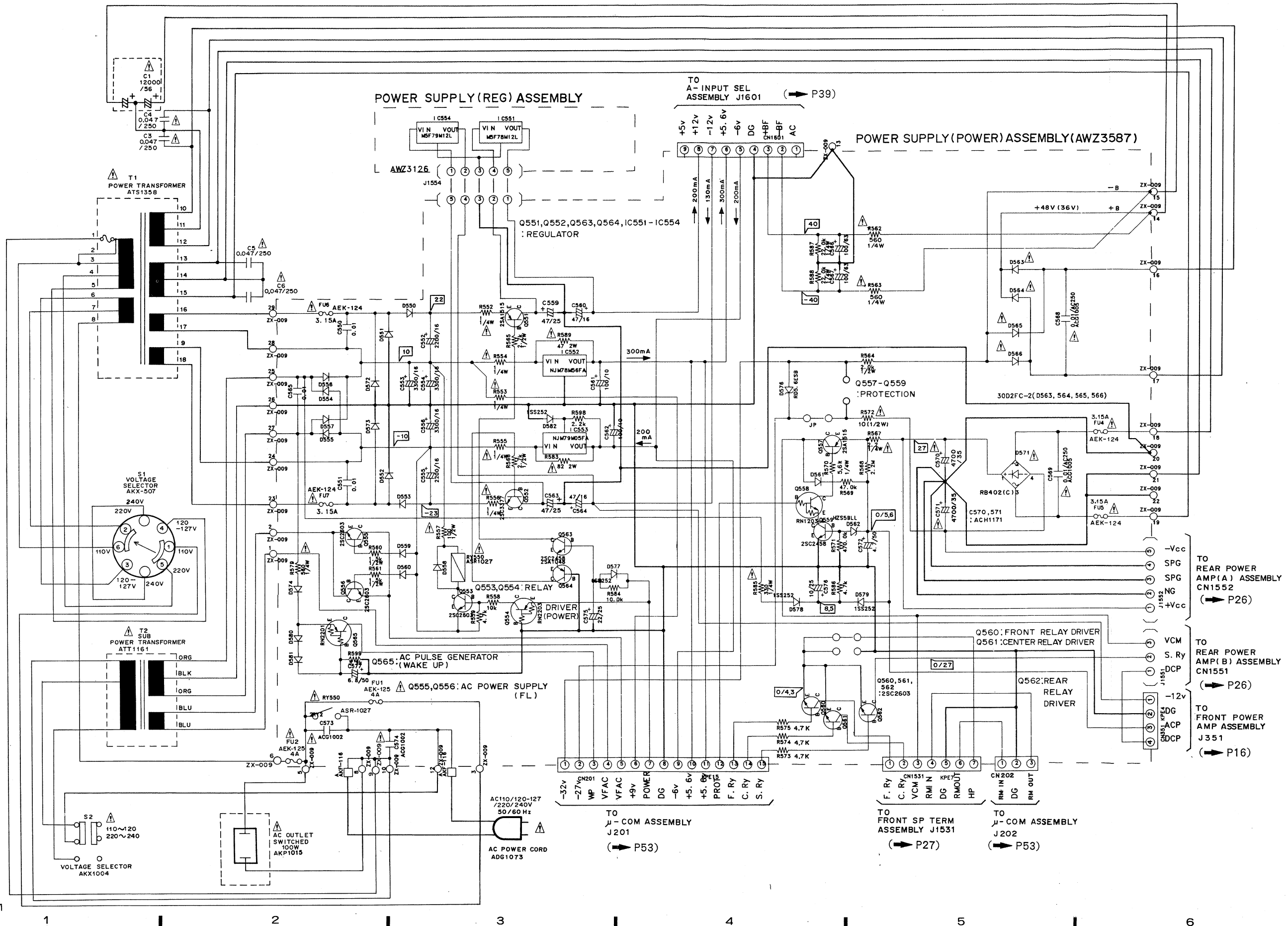
A

B

C

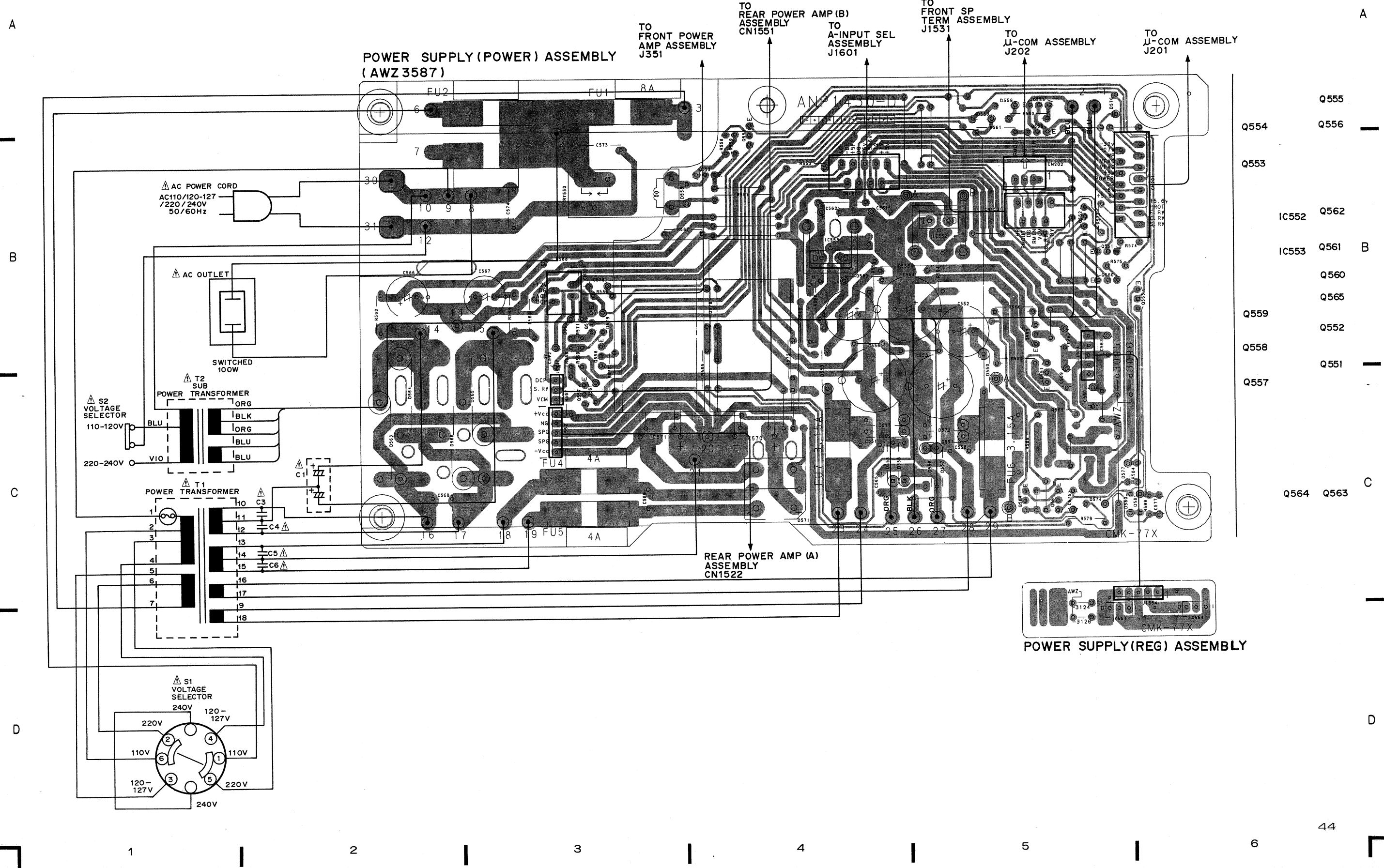
D

3.6 POWER SUPPLY (REG) AND POWER SUPPLY (POWER) (AWZ3587) ASSEMBLY

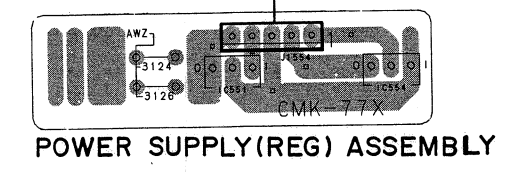


3.6 POWER SUPPLY (REG) AND POWER SUPPLY (POWER) (AWZ3587) ASSEMBLY

• View from component side



- Q554 Q555
- Q553 Q556
- IC552 Q562
- IC553 Q561
- Q559 Q560
- Q558 Q565
- Q557 Q552
- Q564 Q551
- Q563 Q563



3.6 POWER SUPPLY (REG) AND POWER SUPPLY (POWER) (AW23587) ASSEMBLY

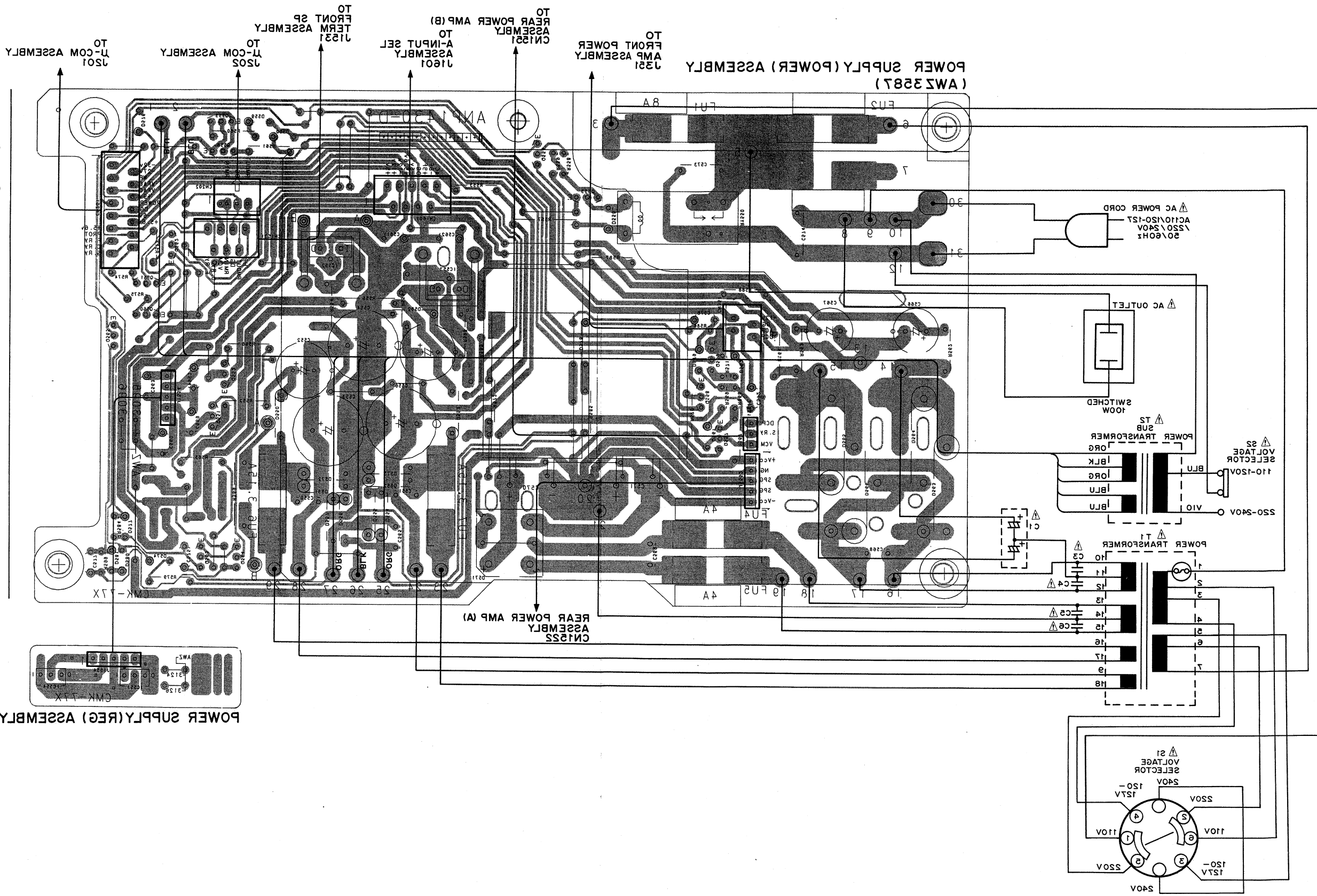
• View from soldering side

A

B

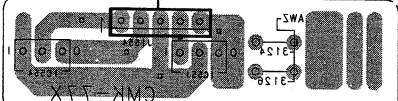
C

D



0222
0226
0223
0225
0223
0223
0223
0223
0225
0225
0221
0225
0224 0223

POWER SUPPLY (REG) ASSEMBLY

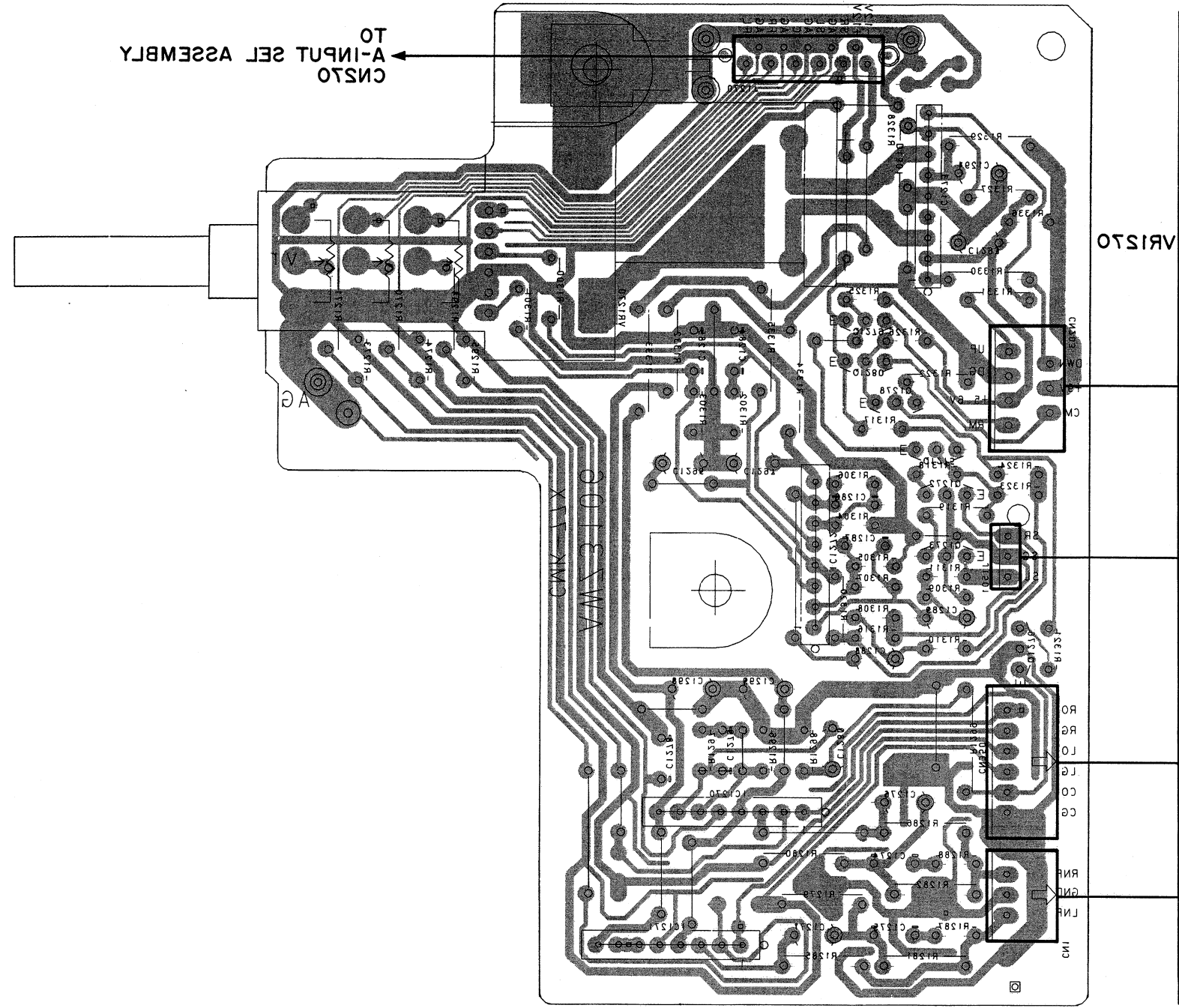


45 e

3.7 VR ASSEMBLY (AWZ310E)

• View from soldering side

VR ASSEMBLY (AWZ310E)



TO A-INPUT SEL ASSEMBLY
CN1520

IC1523

Q1529

Q1580

Q1528

Q1525

Q1525

IC1523

Q1526

IC1520

IC1521

TO T1-COM ASSEMBLY
J203

TO REAR POWER AMP(A)
ASSEMBLY
CN1501

TO FRONT POWER AMP
ASSEMBLY
J350

TO FRONT SP TERM
ASSEMBLY
CN1

A

B

C

D

A

B

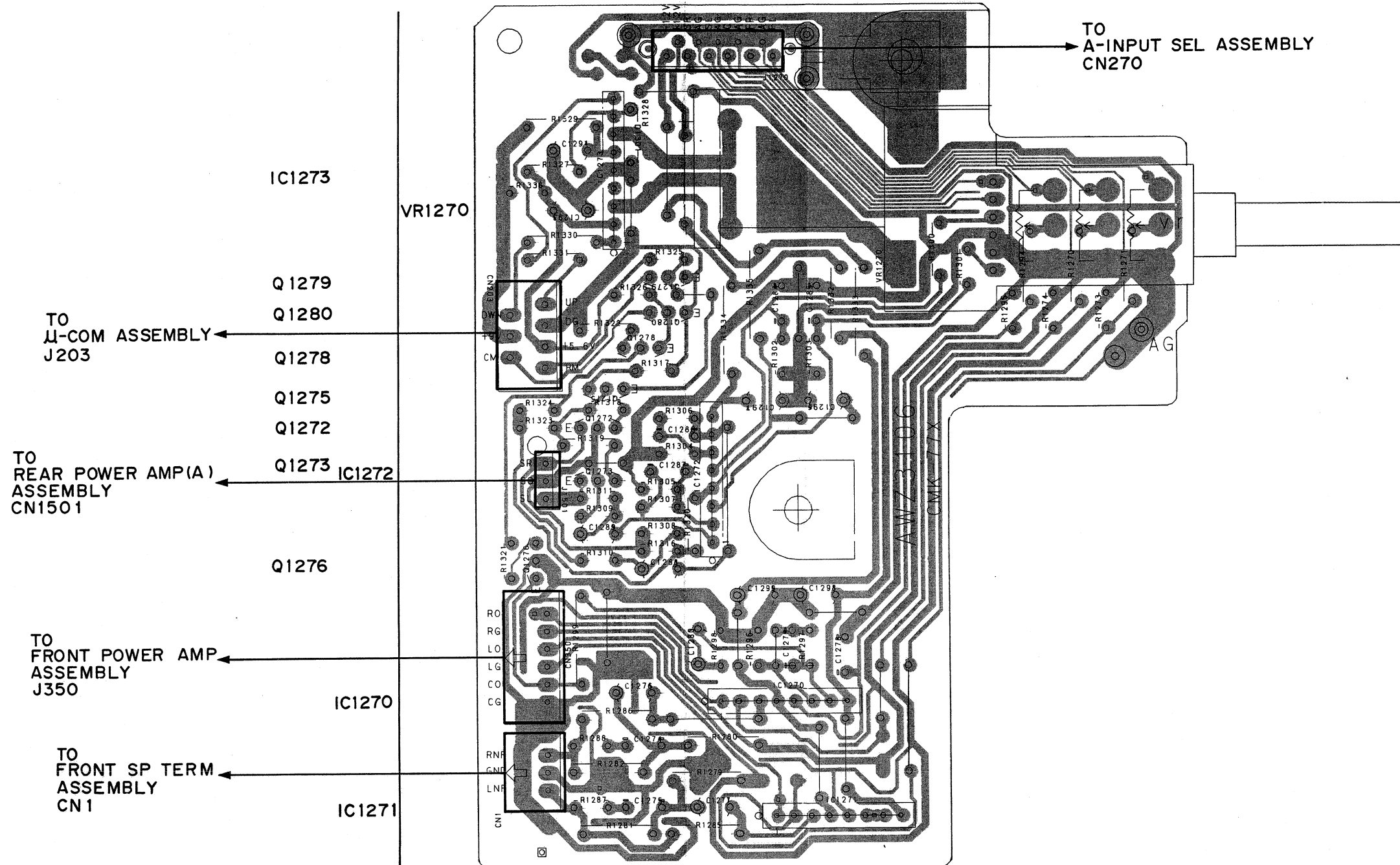
C

D

3.7 VR ASSEMBLY (AWZ3106)

• View from component side

VR ASSEMBLY (AWZ 3106)



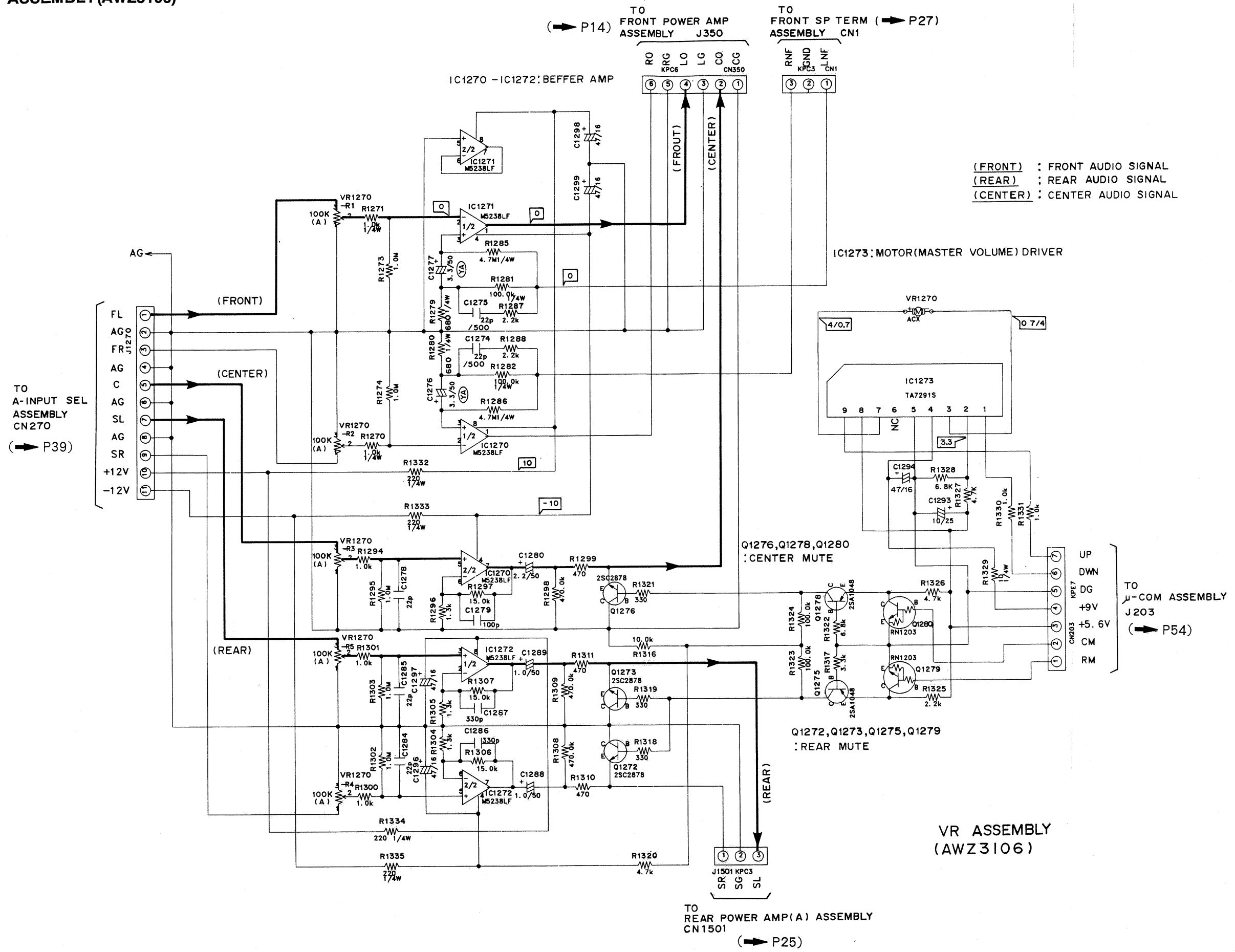
A

B

C

D

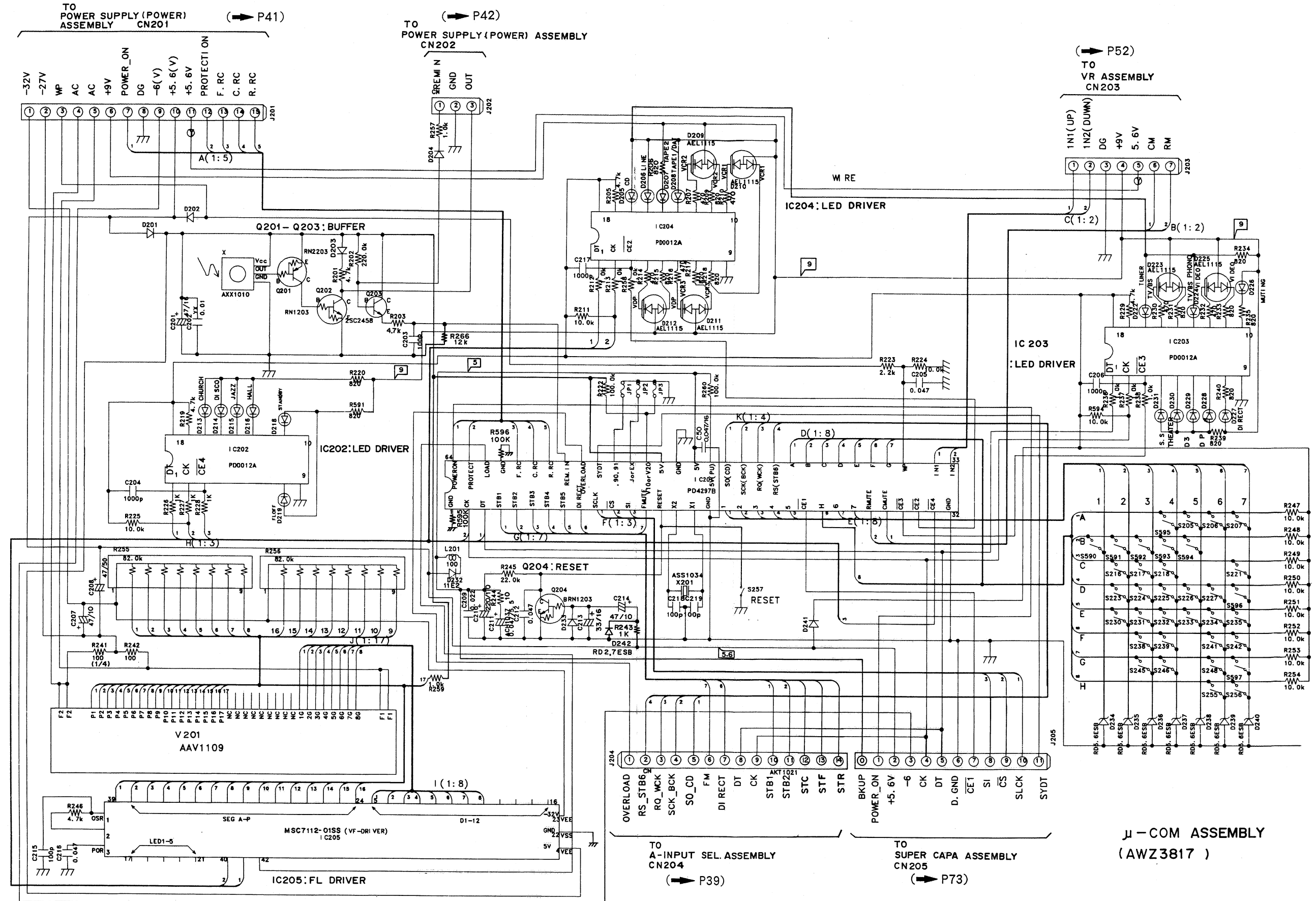
3.7 VR ASSEMBLY(AWZ3106)



(FRONT) : FRONT AUDIO SIGNAL
 (REAR) : REAR AUDIO SIGNAL
 (CENTER) : CENTER AUDIO SIGNAL

VR ASSEMBLY
 (AWZ3106)

3.8 μ -COM ASSEMBLY (AWZ3817)



μ -COM ASSEMBLY (AWZ3817)

3.8 μ -COM ASSEMBLY (AWZ3817)

• View from component side

A

A

B

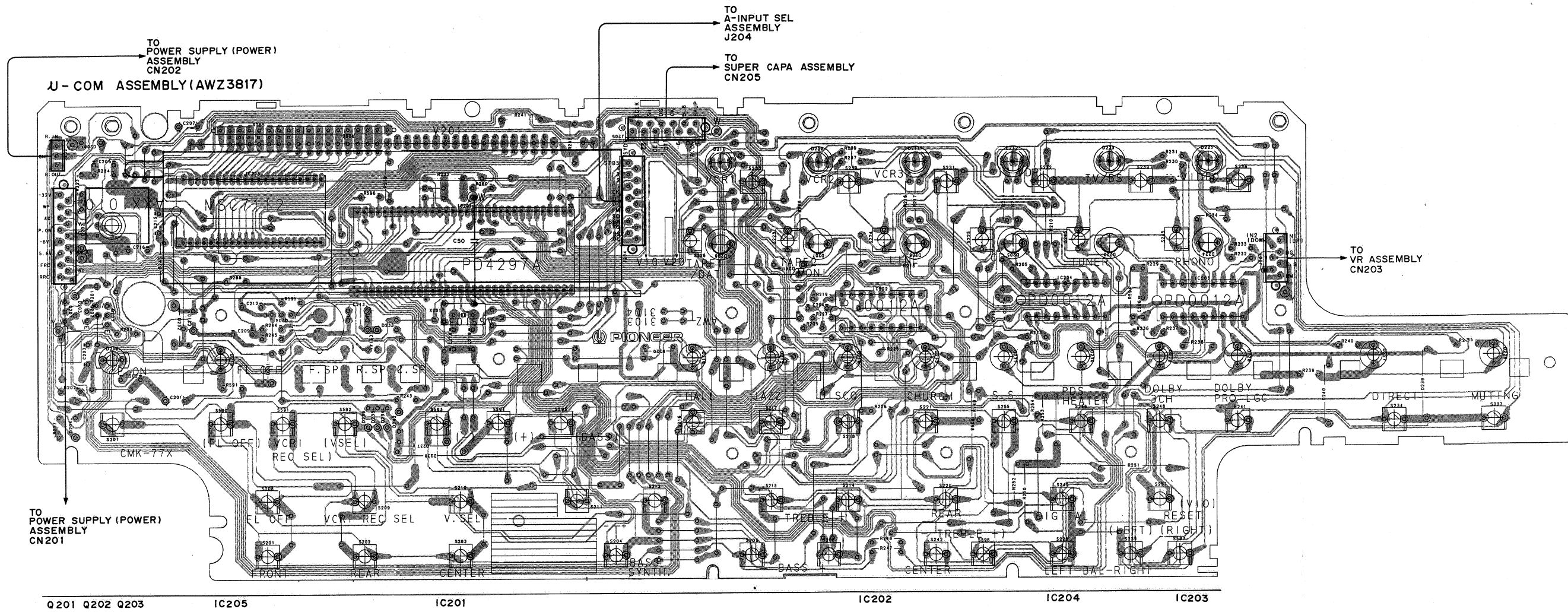
B

C

C

D

D

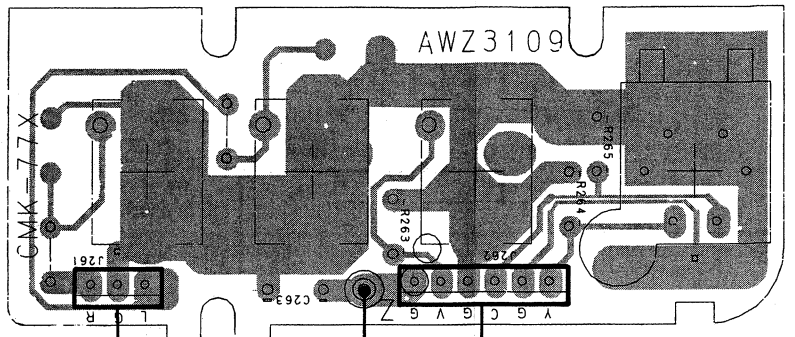


Q201 Q202 Q203 IC205 IC201 IC202 IC204 IC203

3.9 FRONT TERM ASSEMBLY

• View from component side

FRONT TERM ASSEMBLY

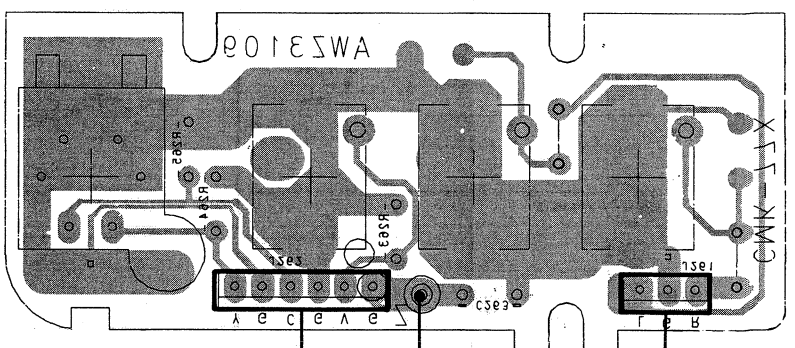


TO AV-INPUT SEL ASSEMBLY CN261

TO SUPER CAPA ASSEMBLY CN262

• View from soldering side

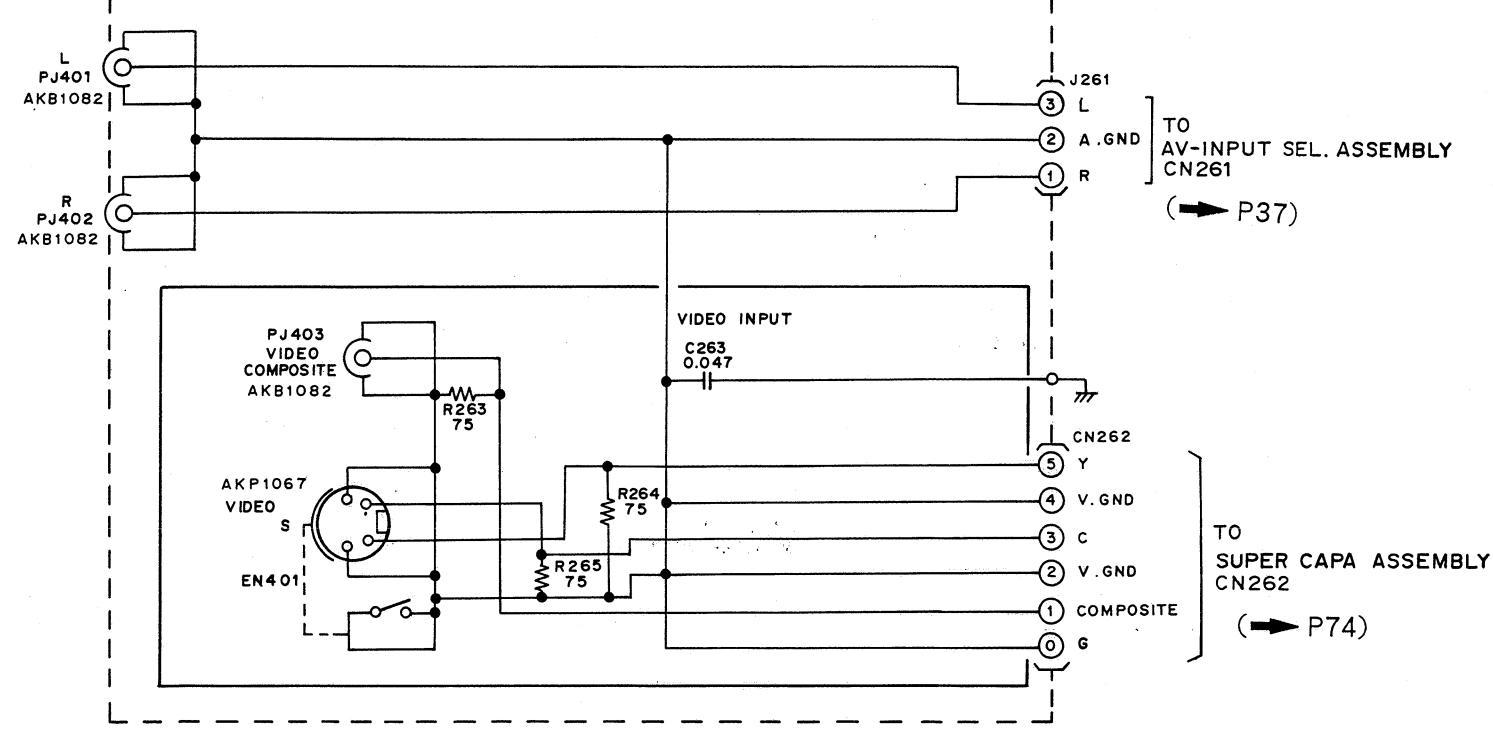
FRONT TERM ASSEMBLY



TO SUPER CAPA ASSEMBLY CN262

TO AV-INPUT SEL ASSEMBLY CN261

FRONT TERM ASSEMBLY

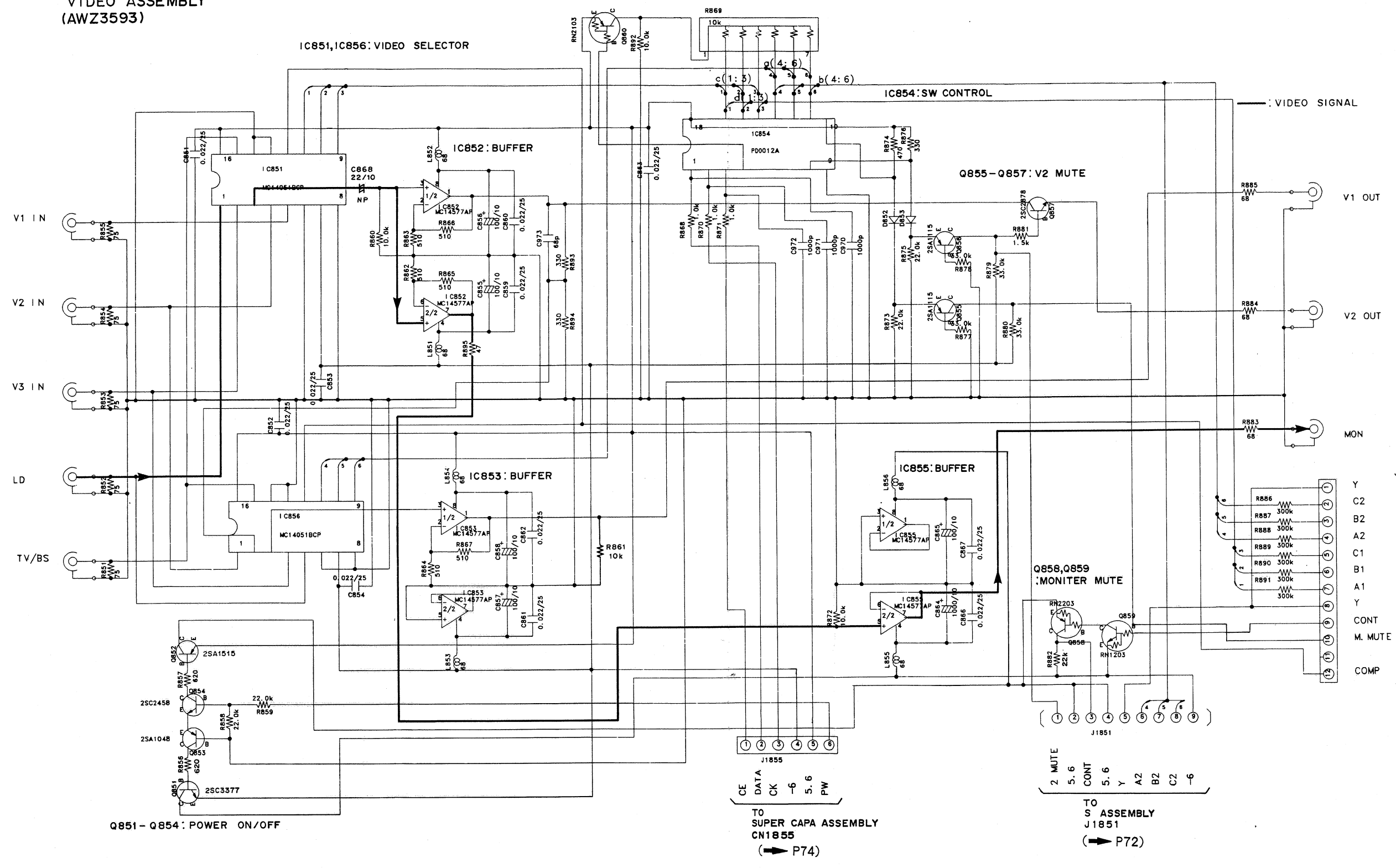


TO AV-INPUT SEL. ASSEMBLY CN261 (→ P37)

TO SUPER CAPA ASSEMBLY CN262 (→ P74)

3.10 VIDEO ASSEMBLY (AWZ3593)

VIDEO ASSEMBLY (AWZ3593)



A

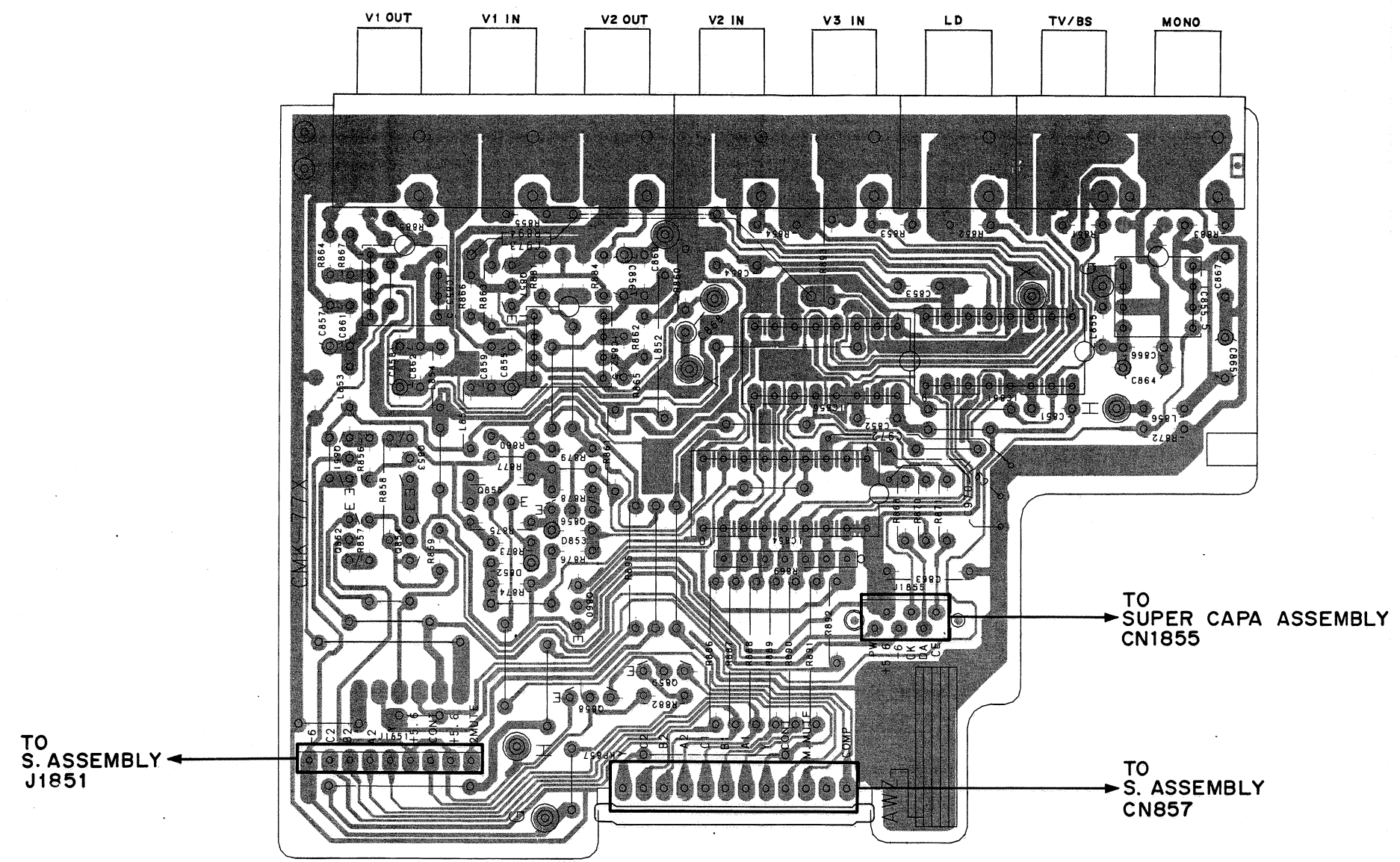
B

C

D

3.10 VIDEO ASSEMBLY (AWZ3593)
 • View from component side

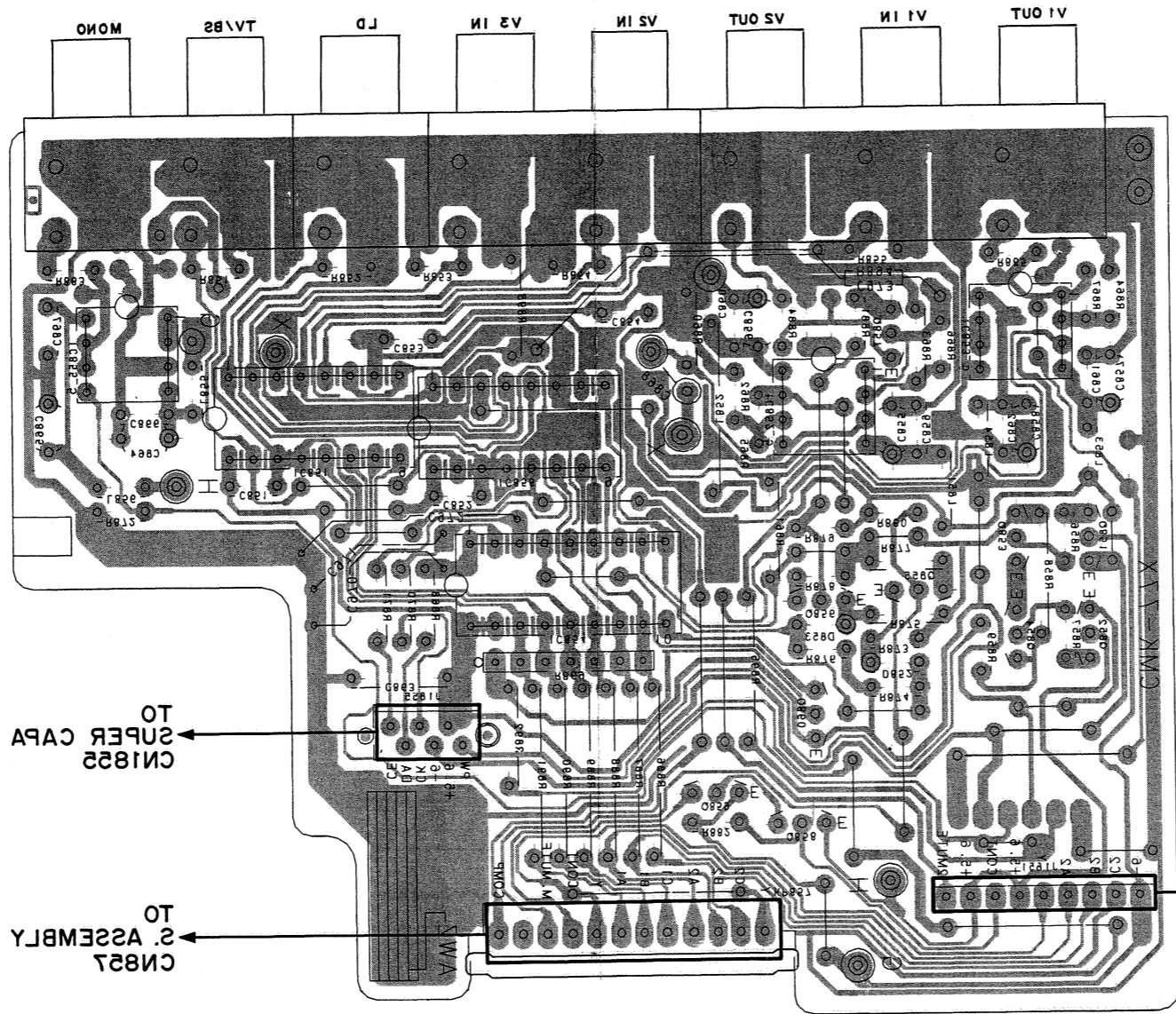
VIDEO ASSEMBLY (AWZ3593)



IC853	Q857	IC852	IC858	IC851	IC855
Q851	Q853	Q855	Q856		
Q852	Q854	Q860	IC854		
		Q858	Q859		

• View from soldering side

VIDEO ASSEMBLY (AW32523)



TO SUPER CAPA ASSEMBLY
CN1825

TO 2. ASSEMBLY
CN821

TO 2. ASSEMBLY
J1821

- 0828 0829
- 0820 0824
- 0822 0823
- 0825 0826
- IC823 0827 IC825
- IC824
- IC828
- IC821
- IC822

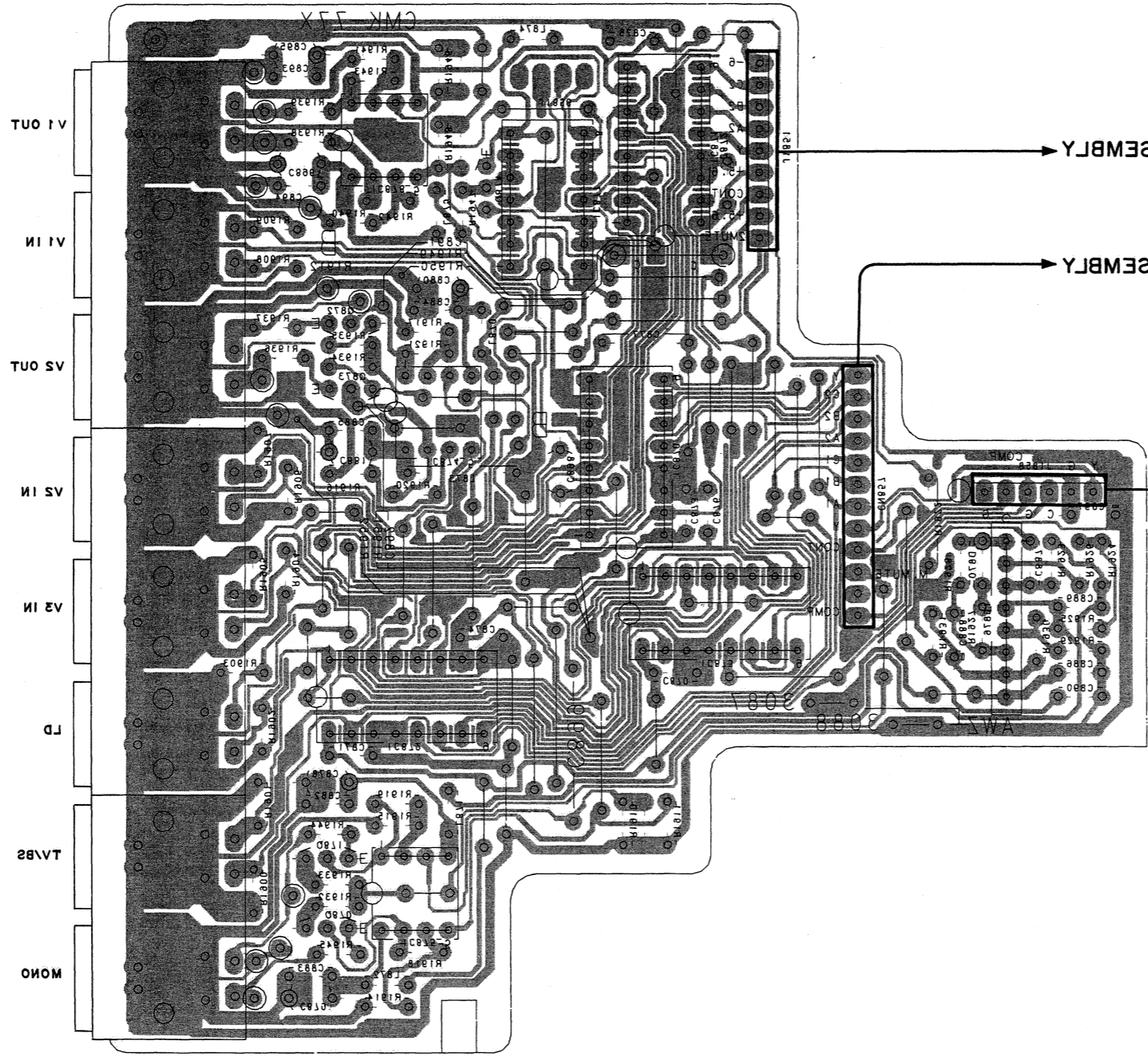
A

B

C

D

2. ASSEMBLY (AW3087)



IC875 Q870
 IC874 Q873
 IC875 Q871
 IC876
 IC873
 IC871 Q874
 IC878 Q875

TO
 VIDEO ASSEMBLY
 IC1851

TO
 VIDEO ASSEMBLY
 IC852

TO
 SUPER CAPA ASSEMBLY
 IC1858

A

B

C

D

A

B

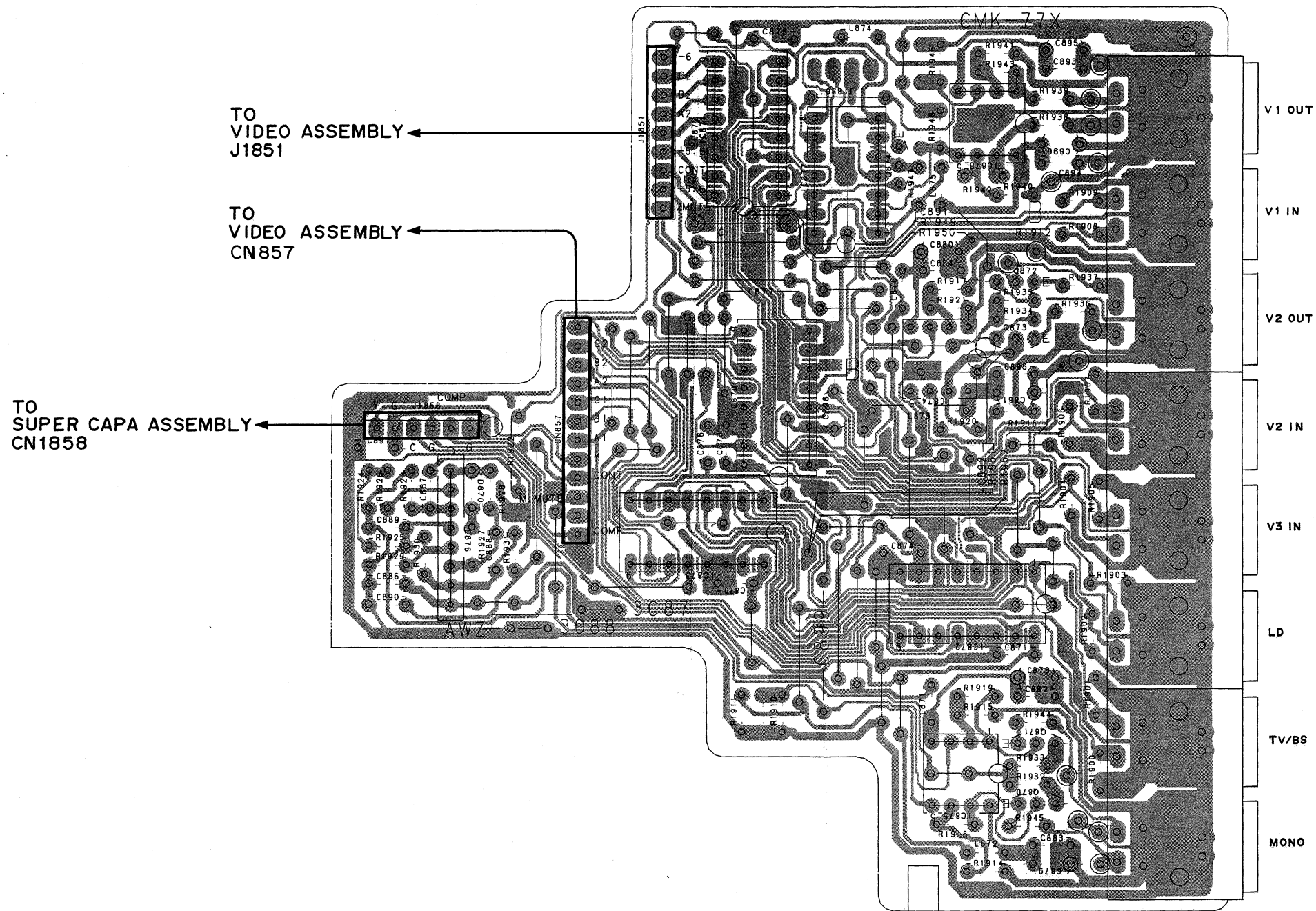
C

D

3.11 S. ASSEMBLY (AWZ3087)

• View from component side

S. ASSEMBLY (AWZ3087)



IC871 IC877 Q874 IC878
 Q872
 IC870 IC874 Q873
 IC876 IC873 IC872 Q871
 IC875 Q870

A

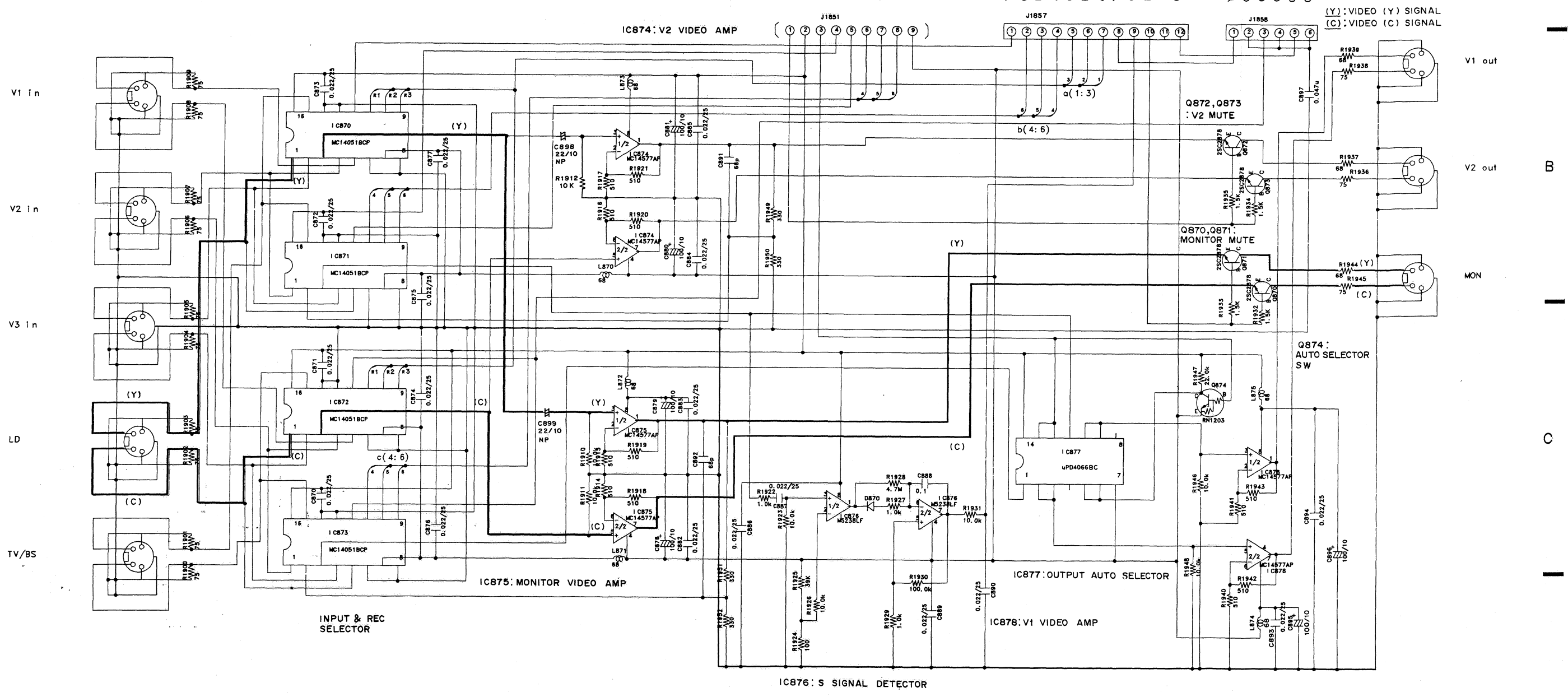
B

C

D

A

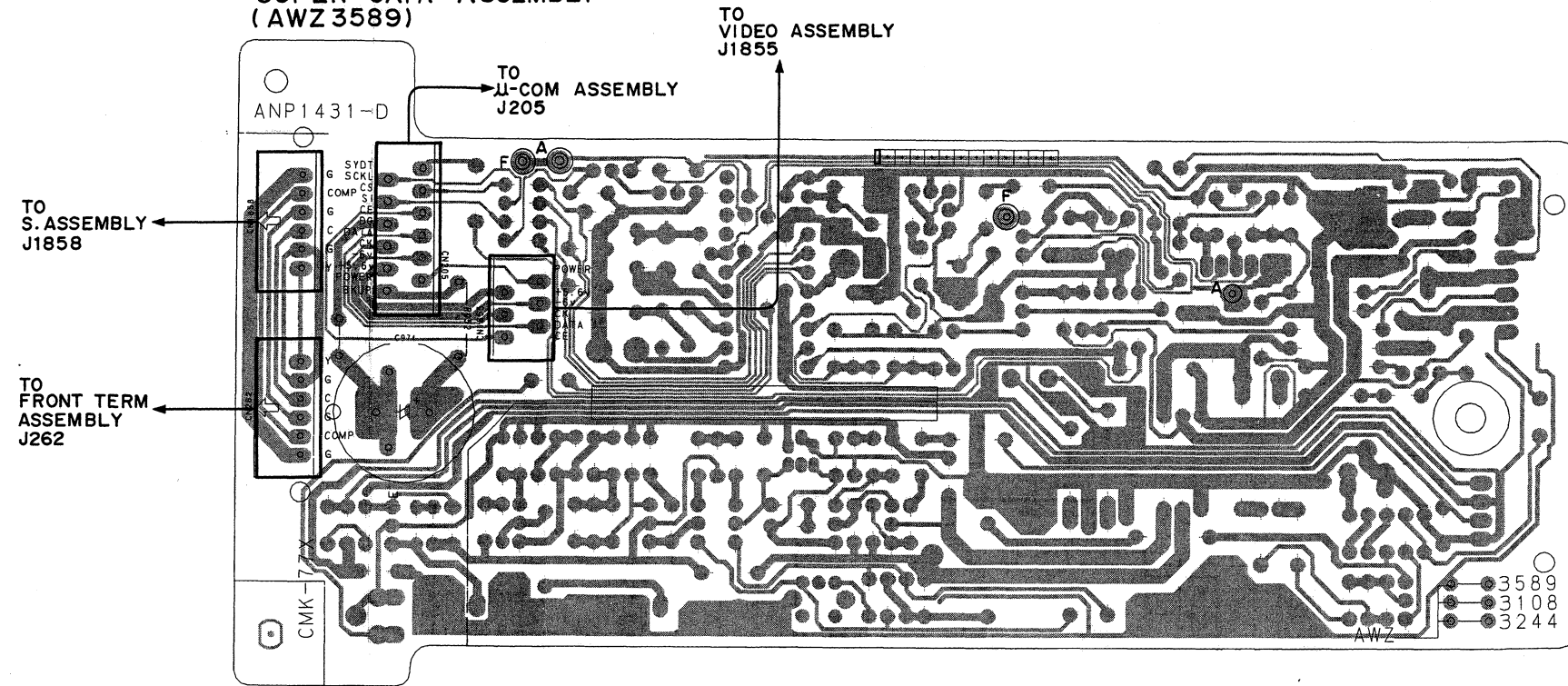
S ASSEMBLY (AWZ3087)



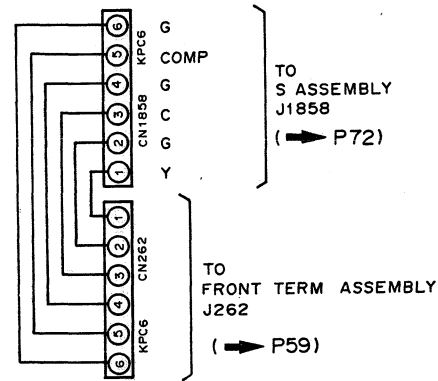
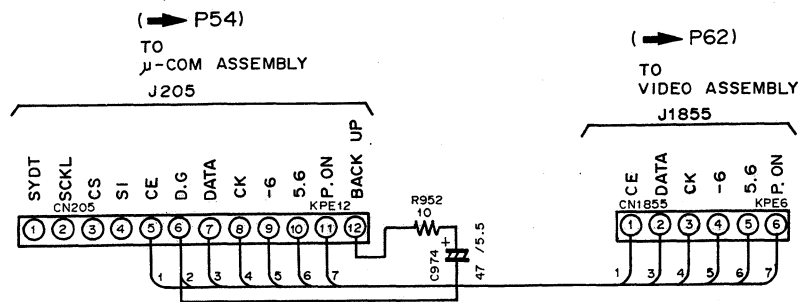
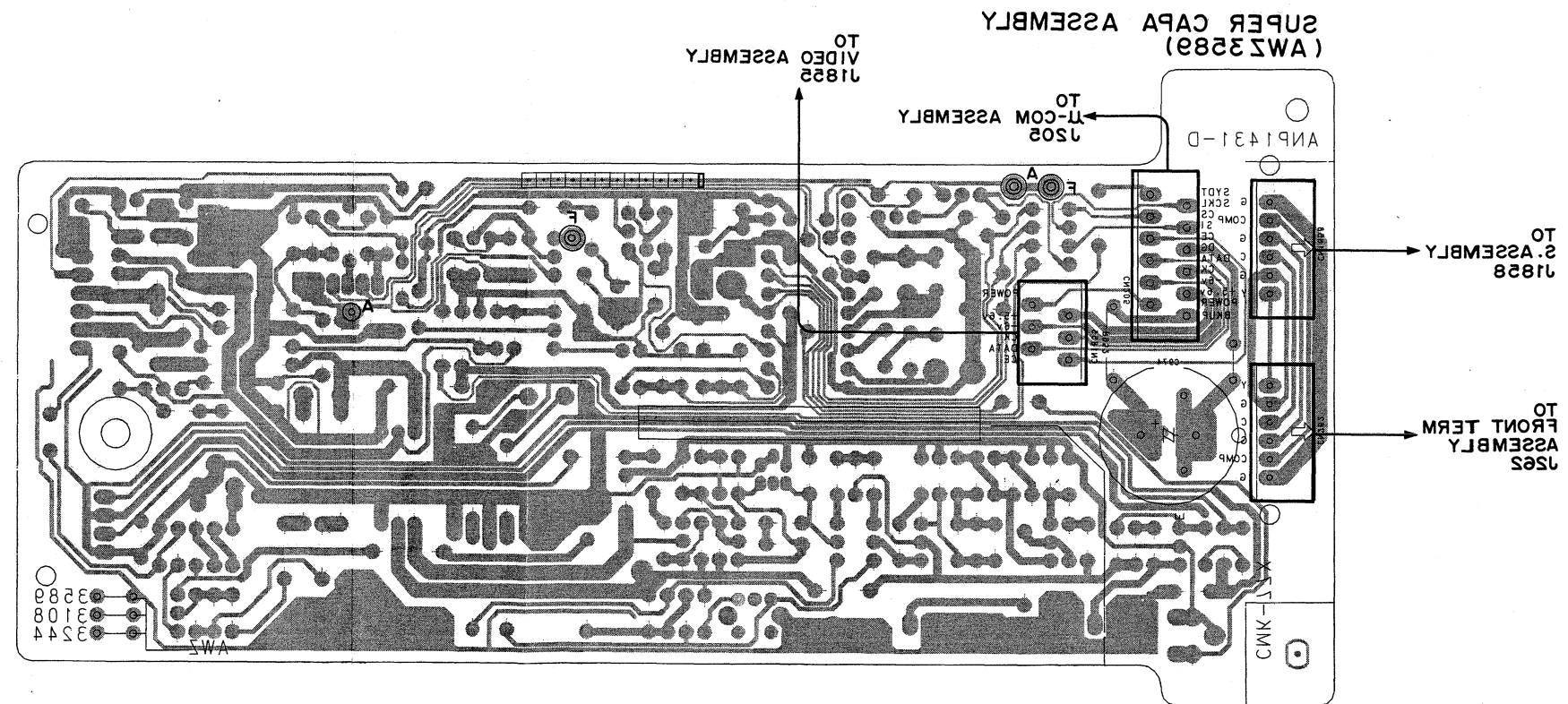
D

3.12 SUPER CAPA ASSEMBLY (AWZ3589)

• View from component side
 SUPER CAPA ASSEMBLY
 (AWZ 3589)



• View from soldering side



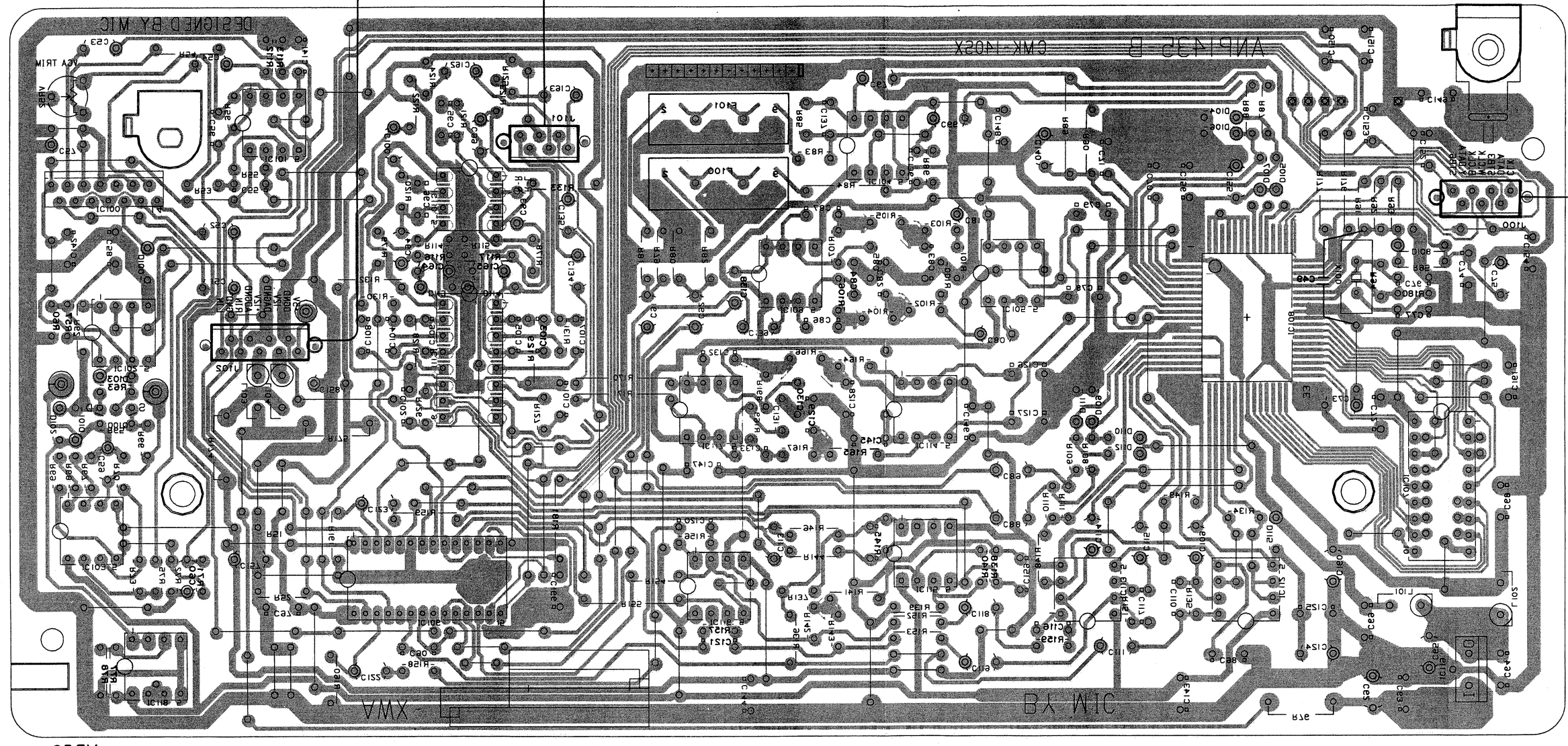
A

A

TO
A-INPUT SEL. ASSEMBLY
CN101

DSP ASSEMBLY (AW2311S)

TO
A-INPUT SEL.
ASSEMBLY
CN100



B

B

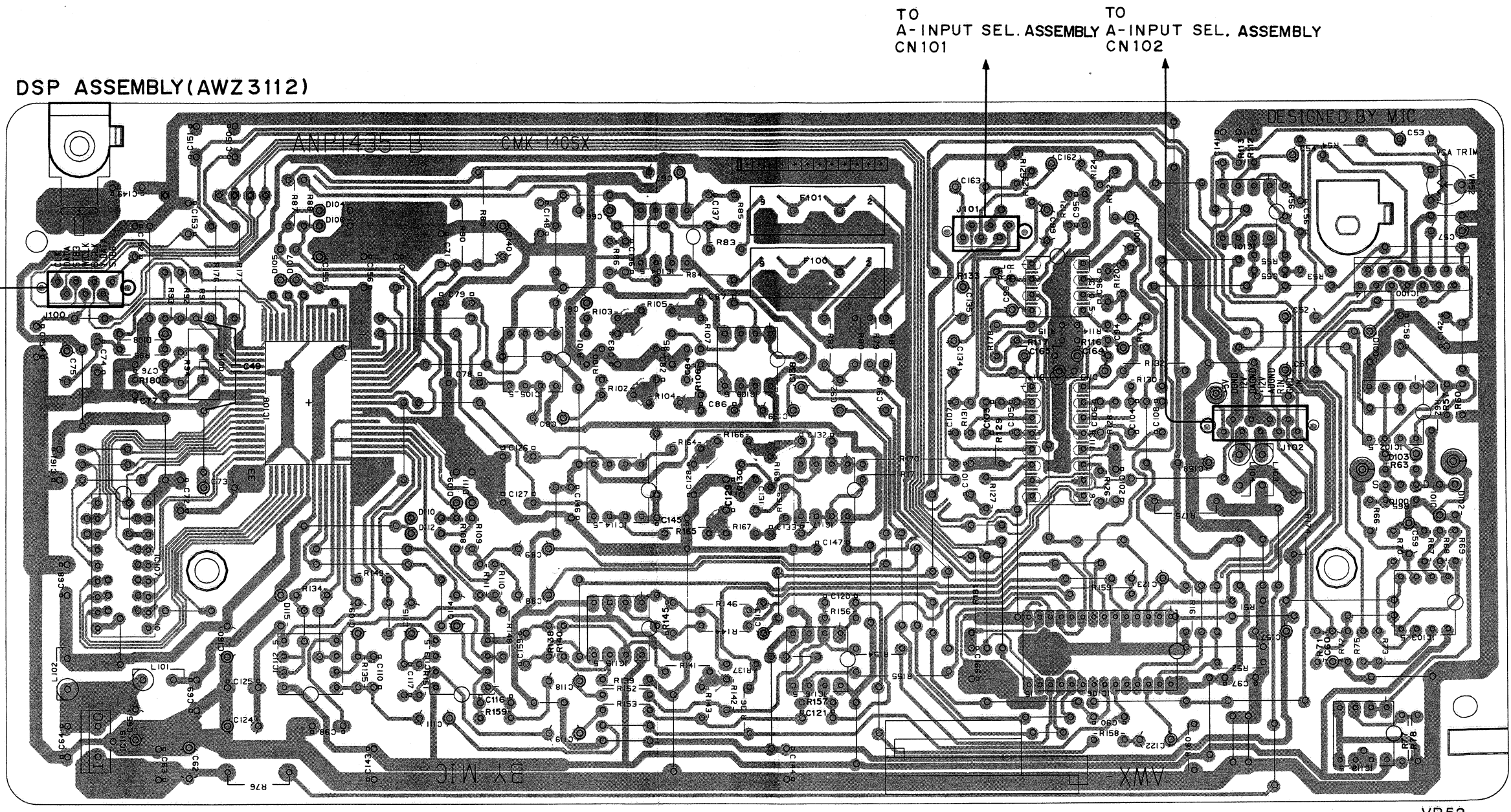
C

C

D

D

3.13 DSP ASSEMBLY (AWZ3112)
• View from component side



								VR52
	IC108	IC105	IC104	IC109	IC110	IC101	IC100	
IC107	IC112	IC113	IC114	IC117	IC111	IC106	IC102	
			IC115	IC116			Q100	
							IC103	
							IC118	

TO
A-INPUT SEL.
ASSEMBLY
CN100

TO
A-INPUT SEL. ASSEMBLY
CN101

TO
A-INPUT SEL. ASSEMBLY
CN102

A

B

C

D

3.13 DSP ASSEMBLY (AWZ3112)

A

B

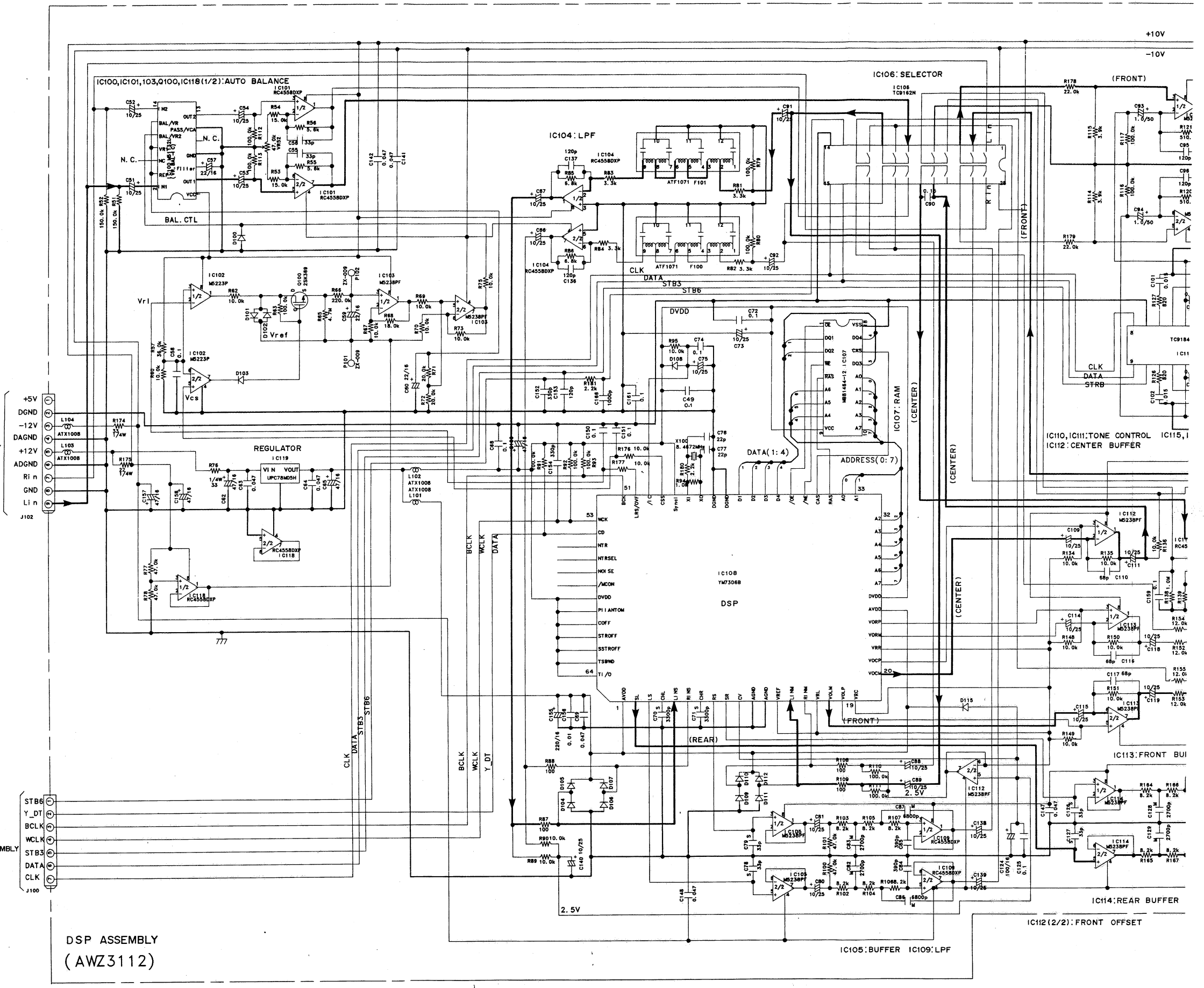
C

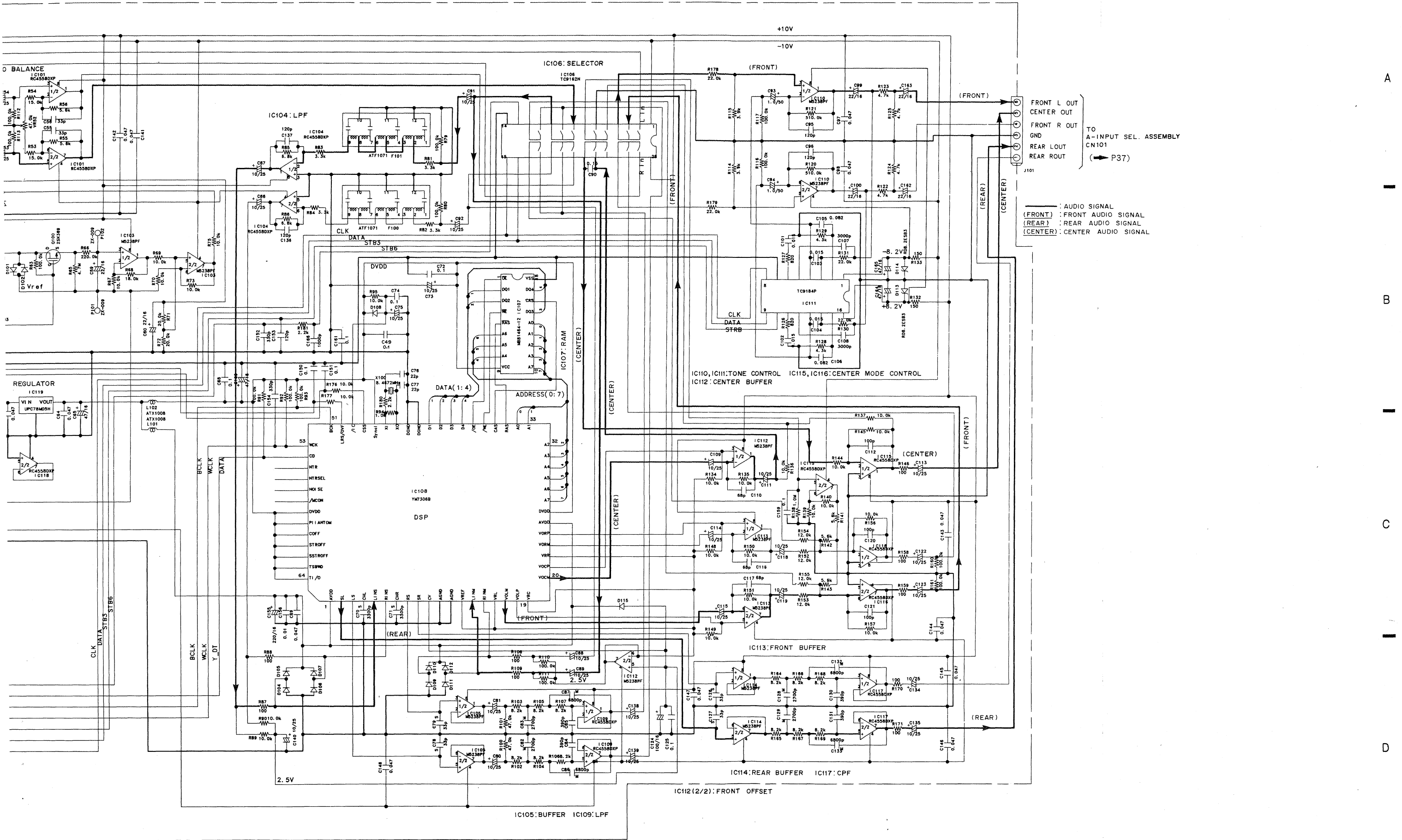
D

TO A-INPUT SEL ASSEMBLY CN102 (P37)

TO A-INPUT SEL ASSEMBLY CN100 (P39)

DSP ASSEMBLY (AWZ3112)





J101

FRONT L OUT
 CENTER OUT
 FRONT R OUT
 REAR L OUT
 REAR R OUT

TO
 A-INPUT SEL. ASSEMBLY
 CN101
 (P37)

— : AUDIO SIGNAL
 (FRONT) : FRONT AUDIO SIGNAL
 (REAR) : REAR AUDIO SIGNAL
 (CENTER) : CENTER AUDIO SIGNAL

A
 B
 C
 D

4. P.C.B's 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 Δ 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%)
 - 560 Ω → 56 × 10¹ → 561 RD1/4PS 561J
 - 47k Ω → 47 × 10³ → 473 RD1/4PS 473J
 - 0.5 Ω → 0R5 RN2H 0R5K
 - 1 Ω → 010 RSIP 010K
 - Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
 - 5.62k Ω → 562 × 10¹ → 5621 RN1/4SR 5621F

Mark No.	Description	Part No.	Mark No.	Description	Part No.
⊙ FRONT POWER AMP ASSEMBLY (AWZ3098)					
SEMICONDUCTORS					
Q350-353	TRANSISTOR	2SC1845	C384	ELECTR. CAPACITOR	CEAS102M6
Q354-357	TRANSISTOR	2SA1145	C385, 386	ELECTR. CAPACITOR	CEHAQ4R7M2C
Q358, 359	TRANSISTOR	2SC2705	C391	CERAMIC CAPACITOR	CKCYF103Z50
Q360, 361	TRANSISTOR	2SC3298	C392, 393	MYLOR FILM CAPACITOR	CQMA104K50
Q362, 363	TRANSISTOR	2SA1306	C394, 395	MYLOR FILM CAPACITOR	CQMA333K50
RESISTORS					
Q364, 365	TRANSISTOR	2SC2240	R350, 351	CARBONFILM RESISTOR	RDR1/4PM□□□J
Q366, 367	TRANSISTOR	2SC1845	R352, 353	CARBONFILM RESISTOR	RD1/4PM□□□J
Q368	TRANSISTOR	2SA1145	R354-359	CARBONFILM RESISTOR	RD1/8PM□□□J
Q369	TRANSISTOR	2SC2705	R360-367	CARBONFILM RESISTOR	RD1/4PMF□□□J
Q370	TRANSISTOR	2SA1145	R368-371	FUSLIBLE RESISTOR	RFA1/4PS□□□J
Q371	TRANSISTOR	2SA1306	R374, 375	CARBONFILM RESISTOR	RD1/4PM□□□J
Q372	TRANSISTOR	2SC3298	R384-399	FUSLIBLE RESISTOR	RFA1/4PS□□□J
Q373	TRANSISTOR	2SC2240	R404, 405	RESISTOR (0.27, 5W)	ACN1018
Q374, 375	TRANSISTOR	2SC2458	R406, 407	CARBONFILM RESISTOR	RD1/4PMF□□□J
D350-355	DIODE	1SS252	R408, 409	FUSLIBLE RESISTOR	RFA1/4PS□□□J
D360-377	DIODE	1SS252	R410, 411	CARBONFILM RESISTOR	RD1/8PM□□□J
COILS/TRANSFORMERS					
L352	COIL	ATH1011	R412, 413	CARBONFILM RESISTOR	RD1/2PMF□□□J
CAPACITORS					
C350, 351	CERAMIC CAPACITOR	CKCYB331K50	R414, 415	CARBONFILM RESISTOR	RD1/8PM□□□J
C352, 353	CERAMIC CAPACITOR	CCCSL100D50	R420, 421	CARBONFILM RESISTOR	RD1/8PM□□□J
C354, 355	CERAMIC CAPACITOR	CCCSL101J50	R422, 423	CARBONFILM RESISTOR	RD1/4PMF□□□J
C356, 357	ELECTR. CAPACITOR	CEAS330M50	R424-429	CARBONFILM RESISTOR	RD1/8PM□□□J
C362, 363	CERAMIC CAPACITOR	CCCSL820K500	R430, 431	CARBONFILM RESISTOR	RD1/4PMF□□□J
C364-367	CERAMIC CAPACITOR	CCCSL101K500	R432, 433	FUSLIBLE RESISTOR	RFA1/4PS□□□J
C368, 369	ELECTR. CAPACITOR	CEANP010M50	R439-446	FUSLIBLE RESISTOR	RFA1/4PS□□□J
C370, 371	CERAMIC CAPACITOR	CKCYB471K50	R449	RESISTOR (0.27, 5W)	ACN1018
C372	ELECTR. CAPACITOR	CEAS101M10	R450	CARBONFILM RESISTOR	RD1/4PMF□□□J
C373	CERAMIC CAPACITOR	CCCSL180K500	R451	FUSLIBLE RESISTOR	RFA1/4PS□□□J
C374	CERAMIC CAPACITOR	CCCSL220J50	R452	CARBONFILM RESISTOR	RD1/8PM□□□J
C376	CERAMIC CAPACITOR	CCCSL101J50	R453	CARBONFILM RESISTOR	RD1/2PMF□□□J
C380, 381	CERAMIC CAPACITOR	CCCSL101K500	R454, 455	CARBONFILM RESISTOR	RD1/8PM□□□J
C382	ELECTR. CAPACITOR	CEAS4R7M50	R456	CARBONFILM RESISTOR	RD1/2PMFL□□□J
C383	ELECTR. CAPACITOR	CEANP010M50	R457-462	CARBONFILM RESISTOR	RD1/8PM□□□J

Mark No.	Description	Part No.
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REAR POWER AMP (A) ASSEMBLY

Mark No.	Description	Part No.
CAPACITORS		
C1502	CERAMIC CAPACITOR	CKMYB102K50
C1504	ELECTR. CAPACITOR	CEAS2R2M50
C1506	ELECTR. CAPACITOR	CEAS100M25
C1508	CERAMIC CAPACITOR	CCMSL101J50
C1510	CERAMIC CAPACITOR	CCMSL220J50
C1512	ELECTR. CAPACITOR	CEAS330M25
C1513, 1514	ELECTR. CAPACITOR	CEAS010M50
C1518	AUDIO FILM CAPACITOR	CFTXA823J50
C1520	AUDIO FILM CAPACITOR	CFTXA823J50
C1522	CERAMIC CAPACITOR	CCMSL100D50
C1524	CERAMIC CAPACITOR	CCMSL470J50
RESISTORS		
R1502	CARBONFILM RESISTOR	RD1/8PM□□□J
R1506	CARBONFILM RESISTOR	RD1/8PM□□□J
R1508	CARBONFILM RESISTOR	RD1/8PM□□□J
R1510	CARBONFILM RESISTOR	RD1/8PM□□□J
R1512	CARBONFILM RESISTOR	RD1/8PM□□□J
Δ R1514	CARBONFILM RESISTOR	RD1/4PMF□□□J
R1518	CARBONFILM RESISTOR	RD1/8PM□□□J

REAR POWER AMP (B) ASSEMBLY

Mark No.	Description	Part No.
CAPACITORS		
C1501	CERAMIC CAPACITOR	CKMYB102K50
C1503	ELECTR. CAPACITOR	CEAS2R2M50
C1505	ELECTR. CAPACITOR	CEAS100M25
C1507	CERAMIC CAPACITOR	CCMSL101J50
C1509	CERAMIC CAPACITOR	CCMSL220J50
C1511	ELECTR. CAPACITOR	CEAS330M25
C1515, 1516	ELECTR. CAPACITOR	CEAS010M50
C1517	AUDIO FILM CAPACITOR	CFTXA823J50
C1519	AUDIO FILM CAPACITOR	CFTXA823J50
C1521	CERAMIC CAPACITOR	CCMSL100D50
C1523	CERAMIC CAPACITOR	CCMSL470J50
RESISTORS		
R1501	CARBONFILM RESISTOR	RD1/8PM□□□J
R1505	CARBONFILM RESISTOR	RD1/8PM□□□J
R1507	CARBONFILM RESISTOR	RD1/8PM□□□J
R1509	CARBONFILM RESISTOR	RD1/8PM□□□J
R1511	CARBONFILM RESISTOR	RD1/8PM□□□J
Δ R1513	CARBONFILM RESISTOR	RD1/4PMF□□□J
R1515-1517	CARBONFILM RESISTOR	RD1/8PM□□□J

TEMPERATURE COMPENSATION ASSEMBLY

Mark No.	Description	Part No.
SEMICONDUCTORS		
Q376, 377	TRANSISTOR	2SC2603

TEMPERATURE COMPENSATION ASSEMBLY

Mark No.	Description	Part No.
SEMICONDUCTORS		
Q378	TRANSISTOR	2SC2603

Mark No.	Description	Part No.
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⊙ μ-COM ASSEMBLY (AWZ3817)

Mark No.	Description	Part No.
SEMICONDUCTORS		
IC201	IC201 制御 IC	PD4297B
IC202-204	OUTPUT EXPANDER IC	PD0012A
IC205	FL DRIVER IC	MSC7112-01SS
Q201	TRANSISTOR	RN2203
Q202	TRANSISTOR	RN1203
Q203	TRANSISTOR	2SC2458
Q204	TRANSISTOR	RN1203
D201-204	DIODE	1SS252
D205-208	LED (RED)	AEL1099
D209-212	LED (RED, AMBER)	AEL1115
D213-216	LED (RED)	AEL1099
D218, 219	LED (RED)	AEL1099
D222	LED (RED)	AEL1099
D223	LED (RED, AMBER)	AEL1115
D224	LED (RED)	AEL1099
D225	LED (RED, AMBER)	AEL1115
D226-231	LED (RED)	AEL1099
D232	DIODE	11E2
D233	DIODE	1SS252
D234-240	ZENER DIODE	RD5. 6ESB
D241	DIODE	1SS252
D242	ZENER DIODE	RD2. 7ESB
SWITCHES		
S205-207	SWITCH	ASG1029
S216-218	SWITCH	ASG1029
S221	SWITCH	ASG1029
S223-227	SWITCH	ASG1029
S230-235	SWITCH	ASG1029
S238, 239	SWITCH	ASG1029
S241, 242	SWITCH	ASG1029
S245, 246	SWITCH	ASG1029
S248	SWITCH	ASG1029
S255, 256	SWITCH	ASG1029
S590-597	SWITCH	ASG1029
CAPACITORS		
C201	ELECTR. CAPACITOR	CEAS470M16
C202	CERAMIC CAPACITOR	CKDYX103M25
C203	CERAMIC CAPACITOR	CCMSL101J50
C204	CERAMIC CAPACITOR	CKMYB102K50
C205	CERAMIC CAPACITOR	CKDYF473Z50
C206	CERAMIC CAPACITOR	CKMYB102K50
C207	ELECTR. CAPACITOR	CEAS470M10
C208	ELECTR. CAPACITOR	CEAS470M50
C209	CERAMIC CAPACITOR	CKDYF223Z50
C210	ELECTR. CAPACITOR	CEAS221M10
C211	CBA (47000/5.5V)	ACH1037
C212	CERAMIC CAPACITOR	CKCYF473Z50
C213	ELECTR. CAPACITOR	CEAS330M16
C214	ELECTR. CAPACITOR	CEAS470M10
C215	CERAMIC CAPACITOR	CCDSL101J50
C216	CERAMIC CAPACITOR	CKDYF473Z50

Mark No.

C50	
C217	CERAMIC CAPACITOR
C218, 219	CERAMIC CAPACITOR
RESISTORS	
R201-203	CAI
R205-207	CAI
R209-220	CAI
R222-240	CAI
R241	CARBONFILM RESISTOR
R242-254	CAI
R255, 256	RESISTOR
R257-260	CAI
R266	CARBONFILM RESISTOR
R591	CARBONFILM RESISTOR
R594-596	CAI
OTHERS	
REMOTE RECEIVER	RECEIVER
V201	FL TUBE
X201	CERAMIC CAPACITOR
⊙ VR ASSEMBLY	
SEMICONDUCTORS	
IC1270-1272	IC
IC1273	MECHANICAL
Q1272, 1273	TRANSISTOR
Q1275	TRANSISTOR
Q1276	TRANSISTOR
Q1278	TRANSISTOR
Q1279, 1280	TRANSISTOR
CAPACITORS	
C1274, 1275	MICROFILM CAPACITOR
C1276, 1277	ELECTR. CAPACITOR
C1278	CERAMIC CAPACITOR
C1279	CERAMIC CAPACITOR
C1280	ELECTR. CAPACITOR
C1284, 1285	CERAMIC CAPACITOR
C1286, 1287	CERAMIC CAPACITOR
C1288, 1289	ELECTR. CAPACITOR
C1293	ELECTR. CAPACITOR
C1294	ELECTR. CAPACITOR
C1296-1299	ELECTR. CAPACITOR
RESISTORS	
R1270, 1271	CERAMIC CAPACITOR
R1273, 1274	CERAMIC CAPACITOR
R1279-1282	CERAMIC CAPACITOR
R1285, 1286	CERAMIC CAPACITOR
R1287, 1288	CERAMIC CAPACITOR
R1294-1311	CERAMIC CAPACITOR
R1316-1328	CERAMIC CAPACITOR
R1329	FUSLIBLE RESISTOR
R1330, 1331	CERAMIC CAPACITOR
R1332-1335	CERAMIC CAPACITOR
VR1270	VR(10)

Mark No. Description Part No.

REAR POWER AMP (A) ASSEMBLY

CAPACITORS

C1502 CERAMIC CAPACITOR CKMYB102K50
C1504 ELECTR. CAPACITOR CEAS2R2M50
C1506 ELECTR. CAPACITOR CEAS100M25
C1508 CERAMIC CAPACITOR CCMSL101J50
C1510 CERAMIC CAPACITOR CCMSL220J50

C1512 ELECTR. CAPACITOR CEAS330M25
C1513, 1514 ELECTR. CAPACITOR CEAS010M50
C1518 AUDIO FILM CAPACITOR CFTXA823J50
C1520 AUDIO FILM CAPACITOR CFTXA823J50
C1522 CERAMIC CAPACITOR CCMSL100D50

C1524 CERAMIC CAPACITOR CCMSL470J50

RESISTORS

R1502 CARBONFILM RESISTOR RD1/8PM□□□J
R1506 CARBONFILM RESISTOR RD1/8PM□□□J
R1508 CARBONFILM RESISTOR RD1/8PM□□□J
R1510 CARBONFILM RESISTOR RD1/8PM□□□J
R1512 CARBONFILM RESISTOR RD1/8PM□□□J

R1514 CARBONFILM RESISTOR RD1/4PMF□□□J
R1518 CARBONFILM RESISTOR RD1/8PM□□□J

REAR POWER AMP (B) ASSEMBLY

CAPACITORS

C1501 CERAMIC CAPACITOR CKMYB102K50
C1503 ELECTR. CAPACITOR CEAS2R2M50
C1505 ELECTR. CAPACITOR CEAS100M25
C1507 CERAMIC CAPACITOR CCMSL101J50
C1509 CERAMIC CAPACITOR CCMSL220J50

C1511 ELECTR. CAPACITOR CEAS330M25
C1515, 1516 ELECTR. CAPACITOR CEAS010M50
C1517 AUDIO FILM CAPACITOR CFTXA823J50
C1519 AUDIO FILM CAPACITOR CFTXA823J50
C1521 CERAMIC CAPACITOR CCMSL100D50

C1523 CERAMIC CAPACITOR CCMSL470J50

RESISTORS

R1501 CARBONFILM RESISTOR RD1/8PM□□□J
R1505 CARBONFILM RESISTOR RD1/8PM□□□J
R1507 CARBONFILM RESISTOR RD1/8PM□□□J
R1509 CARBONFILM RESISTOR RD1/8PM□□□J
R1511 CARBONFILM RESISTOR RD1/8PM□□□J

R1513 CARBONFILM RESISTOR RD1/4PMF□□□J
R1515-1517 CARBONFILM RESISTOR RD1/8PM□□□J

TEMPERATURE COMPENSATION ASSEMBLY

SEMICONDUCTORS

Q376, 377 TRANSISTOR 2SC2603

TEMPERATURE COMPENSATION ASSEMBLY

SEMICONDUCTORS

Q378 TRANSISTOR 2SC2603

Mark No. Description Part No.

COM ASSEMBLY (AWZ3817)

SEMICONDUCTORS

IC201 出力増倍器 PD4297B
IC202-204 OUTPUT EXPANDER IC PD0012A
IC205 FL DRIVER IC MSC7112-01SS
Q201 TRANSISTOR RN2203
Q202 TRANSISTOR RN1203

Q203 TRANSISTOR 2SC2458
Q204 TRANSISTOR RN1203
D201-204 DIODE 1SS252
D205-208 LED (RED) AEL1099
D209-212 LED (RED, AMBER) AEL1115

D213-216 LED (RED) AEL1099
D218, 219 LED (RED) AEL1099
D222 LED (RED) AEL1099
D223 LED (RED, AMBER) AEL1115
D224 LED (RED) AEL1099

D225 LED (RED, AMBER) AEL1115
D226-231 LED (RED) AEL1099
D232 DIODE 11E2
D233 DIODE 1SS252
D234-240 ZENER DIODE RD5.6ESB

D241 DIODE 1SS252
D242 ZENER DIODE RD2.7ESB

SWITCHES

S205-207 SWITCH ASG1029
S216-218 SWITCH ASG1029
S221 SWITCH ASG1029
S223-227 SWITCH ASG1029
S230-235 SWITCH ASG1029

S238, 239 SWITCH ASG1029
S241, 242 SWITCH ASG1029
S245, 246 SWITCH ASG1029
S248 SWITCH ASG1029
S255, 256 SWITCH ASG1029

S590-597 SWITCH ASG1029

CAPACITORS

C201 ELECTR. CAPACITOR CEAS470M16
C202 CERAMIC CAPACITOR CKDYX103M25
C203 CERAMIC CAPACITOR CCMSL101J50
C204 CERAMIC CAPACITOR CKMYB102K50
C205 CERAMIC CAPACITOR CKDYF473Z50

C206 CERAMIC CAPACITOR CKMYB102K50
C207 ELECTR. CAPACITOR CEAS470M10
C208 ELECTR. CAPACITOR CEAS470M50
C209 CERAMIC CAPACITOR CKDYF223Z50
C210 ELECTR. CAPACITOR CEAS221M10

C211 CEA (47000/5.5V) ACH1037
C212 CERAMIC CAPACITOR CKCYF473Z50
C213 ELECTR. CAPACITOR CEAS330M16
C214 ELECTR. CAPACITOR CEAS470M10
C215 CERAMIC CAPACITOR CCDSL101J50

C216 CERAMIC CAPACITOR CKDYF473Z50

Mark No. Description Part No.

C50 CKPUYF473Z16
C217 CERAMIC CAPACITOR CKMYB102K50
C218, 219 CERAMIC CAPACITOR CCDCH101J50

RESISTORS

R201-203 CARBONFILM RESISTOR RD1/8PM□□□J
R205-207 CARBONFILM RESISTOR RD1/8PM□□□J
R209-220 CARBONFILM RESISTOR RD1/8PM□□□J
R222-240 CARBONFILM RESISTOR RD1/8PM□□□J
R241 CARBONFILM RESISTOR RD1/4PMF□□□J

R242-254 CARBONFILM RESISTOR RD1/8PM□□□J
R255, 256 RESISTOR ARRAY (82K) RA8S□□□J
R257-260 CARBONFILM RESISTOR RD1/8PM□□□J
R266 CARBONFILM RESISTOR RD1/8PM□□□J
R591 CARBONFILM RESISTOR RD1/8PM□□□J

R594-596 CARBONFILM RESISTOR RD1/8PM□□□J

OTHERS

REMOTE RECEIVER UNIT AXX1010
V201 FL TUBE AAV1109
X201 CERAMIC RESONATOR ASS1034

VR ASSEMBLY (AWZ3106)

SEMICONDUCTORS

IC1270-1272 OP AMP M5238LF
IC1273 MECHANISM DRIVER IC TA7291S
Q1272, 1273 TRANSISTOR 2SC2878
Q1275 TRANSISTOR 2SA1048
Q1276 TRANSISTOR 2SC2878

Q1278 TRANSISTOR 2SA1048
Q1279, 1280 TRANSISTOR RN1203

CAPACITORS

C1274, 1275 MICA CAPACITOR CMA220J500
C1276, 1277 ELECTR. CAPACITOR CEYA3R3M50
C1278 CERAMIC CAPACITOR CCCSL220J50
C1279 CERAMIC CAPACITOR CCDSL101J50
C1280 ELECTR. CAPACITOR CEAS2R2M50

C1284, 1285 CERAMIC CAPACITOR CCCSL220J50
C1286, 1287 CERAMIC CAPACITOR CKCYB331K50
C1288, 1289 ELECTR. CAPACITOR CEAS010M50
C1293 ELECTR. CAPACITOR CEAS100M25
C1294 ELECTR. CAPACITOR CEAS470M16

C1296-1299 ELECTR. CAPACITOR CEAS470M16

RESISTORS

R1270, 1271 CARBONFILM RESISTOR RDR1/4PM□□□J
R1273, 1274 CARBONFILM RESISTOR RD1/8PM□□□J
R1279-1282 CARBONFILM RESISTOR RDR1/4PM□□□J
R1285, 1286 CARBONFILM RESISTOR RD1/4PM□□□J
R1287, 1288 CARBONFILM RESISTOR RD1/8PM□□□J

R1294-1311 CARBONFILM RESISTOR RD1/8PM□□□J
R1316-1328 CARBONFILM RESISTOR RD1/8PM□□□J
R1329 FUSIBLE RESISTOR RFA1/4PS□□□J
R1330, 1331 CARBONFILM RESISTOR RD1/8PM□□□J
R1332-1335 CARBONFILM RESISTOR RD1/4PMF□□□J

VR1270 VR (100K) ACX1041

Mark No. Description Part No.

OTHERS

CN203 CONNECTOR (7P) KPE7
CN350 JUMPER CONNECTOR KPC6

FRONT TERM ASSEMBLY

CAPACITORS

C263 CERAMIC CAPACITOR CKCYF473Z50

RESISTORS

R263-265 CARBONFILM RESISTOR RD1/8PM□□□J

OTHERS

PIN JACK (1P) AKB1082
SOCKET (4P. DIN) AKP1067

POWER SUPPLY (REG) ASSEMBLY

SEMICONDUCTORS

IC551 REGULATOR IC M5F78M12L
IC554 REGULATOR IC M5F79M12L

POWER SUPPLY (POWER) ASSEMBLY (AWZ3587)

SEMICONDUCTORS

IC552 REGULATOR IC NJM78M56FAS
IC553 REGULATOR IC NJM79M05FA
Q551 TRANSISTOR 2SA1515
Q552 TRANSISTOR 2SC3377
Q553 TRANSISTOR 2SC2603

Q554 TRANSISTOR RN2203
Q555, 556 TRANSISTOR 2SC2603
Q557 TRANSISTOR 2SA1515
Q558 TRANSISTOR RN1203
Q559 TRANSISTOR 2SC2458

Q560-562 TRANSISTOR 2SC2603
Q563 TRANSISTOR 2SC2458
Q564 TRANSISTOR 2SA1048
Q565 TRANSISTOR RN2201
D550-557 DIODE 11E2

D558-561 DIODE 1SS252
D562 ZENER DIODE HZS5BLL
D563-566 DIODE 30D2FC-2
D571 DIODE RB402
D572, 573 DIODE 11E2

D574 DIODE 1SS252
D576 ZENER DIODE RD5.6ESB
D577-582 DIODE 1SS252

RELAYS

RY550 RELAY ASR1027

CAPACITORS

C550, 551 CERAMIC CAPACITOR CKDYF103Z50
C552 ELECTR. CAPACITOR CEAS222M16
C553, 554 ELECTR. CAPACITOR CEAS332M16
C555 ELECTR. CAPACITOR CEHAQ222M16
C556 ELECTR. CAPACITOR CEAS332M16

C559 ELECTR. CAPACITOR CEAS470M25

Mark	No.	Description	Part No.
	C560	ELECTR. CAPACITOR	CEAS470M16
	C561, 562	ELECTR. CAPACITOR	CEHAQ101M10
	C563	ELECTR. CAPACITOR	CEHAQ470M25
	C564	ELECTR. CAPACITOR	CEAS470M16
	C565	CERAMIC CAPACITOR	CKDYF103Z50
	C566, 567	ELECTR. CAPACITOR	CEAS101M63
△	C568, 569	CKA (0.01/AC250V)	ACG1005
△	C570, 571	CEA (4700/35V)	ACH1171
	C572	ELECTR. CAPACITOR	CEAS4R7M50
△	C573, 574	CKA (0.01/AC400V)	ACG1002
	C575	ELECTR. CAPACITOR	CEAS220M25
	C576	ELECTR. CAPACITOR	CEAS100M25
	C577	ELECTR. CAPACITOR	CEAS6R8M50

RESISTORS

△	R552-554	CARBONFILM RESISTOR	RD1/4PMF□□□J
△	R555	CARBONFILM RESISTOR	RD1/4PMFL□□□J
△	R556	CARBONFILM RESISTOR	RD1/4PMF□□□J
△	R557	CARBONFILM RESISTOR	RD1/2PMF□□□J
	R558, 559	CARBONFILM RESISTOR	RD1/8PM□□□J
	R560, 561	CARBONFILM RESISTOR	RD1/2PM□□□J
△	R562, 563	FUSLIBLE RESISTOR	RFA1/4PS□□□J
	R564-566	CARBONFILM RESISTOR	RD1/2PMF□□□J
△	R567	CARBONFILM RESISTOR	RD1/4PMF□□□J
	R568, 569	CARBONFILM RESISTOR	RD1/8PM□□□J
	R570	CARBONFILM RESISTOR	RD1/4PM□□□J
	R571	CARBONFILM RESISTOR	RD1/8PM□□□J
△	R572	CARBONFILM RESISTOR	RD1/2PMF□□□J
	R573-575	CARBONFILM RESISTOR	RD1/8PM□□□J
△	R579	CARBONFILM RESISTOR	RD1/4PMF□□□J
△	R583	METAL OXIDE RESISTOR	RS2LMF□□□J
	R584	CARBONFILM RESISTOR	RD1/8PM□□□J
△	R585	CARBONFILM RESISTOR	RD1/4PMF□□□J
	R586	CARBONFILM RESISTOR	RD1/8PM□□□J
	R587, 588	CARBONFILM RESISTOR	RD1/4PMF□□□J
△	R589	METAL OXIDE RESISTOR	RS2LMF□□□J
	R598, 599	CARBONFILM RESISTOR	RD1/8PM□□□J

OTHERS

SCREW	ABA-298
CN201 CONNECTOR (15P)	KPE15
CN351 CONNECTOR (4P)	KPE4
CN1531 CONNECTOR (7P)	KPE7
CN1601 CONNECTOR (9P)	KPE9

⊙ FRONT SP TERM ASSEMBLY (AWZ3092)

SEMICONDUCTORS

D531, 532	DIODE	1SS252
D534	DIODE	1SS252

RELAYS

RY531	RELAY	ASR-112
RY533	RELAY	ASR1005

COILS/TRANSFORMERS

L531, 532	COIL	ATH1011
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Mark	No.	Description	Part No.
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CAPACITORS

C531-534	AUDIO FILM CAPACITOR	CFTXA154J50
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RESISTORS

R531, 532	METAL OXIDE RESISTOR	RS1LMF□□□J
R533, 534	CARBONFILM RESISTOR	RD1/2PMFL□□□J
R535	FUSLIBLE RESISTOR	RFA1/4PS□□□J
R539	METAL OXIDE RESISTOR	RS2LMF□□□J
R541	METAL OXIDE RESISTOR	RS2LMF□□□J
R542, 543	CARBONFILM RESISTOR	RD1/4PMFL□□□J

OTHERS

SPEAKER TERMINAL (8-P)	AKE1011
JACK (2-P)	AKN1006

HEADPHONE ASSEMBLY

OTHERS

JACK	AKN1022
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⊙ A-INPUT SEL ASSEMBLY (AWZ3590)

SEMICONDUCTORS

IC601	OP-AMP-IC	M5220P
IC603	E-SW IC	TC9163N
IC605, 606	OP AMP	M5238PF
IC609	OP AMP	M5238PF
IC610-612	E-VR IC	TC9154AP
IC613-617		RC4558DXP
IC618	E-SW IC	TC9164N
IC620		RC4558DXP
Q601-604	N-FET	2SK373
Q605, 606	TRANSISTOR	2SC2240
Q607-610	TRANSISTOR	2SA970
Q611, 612	TRANSISTOR	2SC2240
Q625	TRANSISTOR	RN2203
Q626	TRANSISTOR	2SA1048
Q627	TRANSISTOR	2SC2878
Q628	TRANSISTOR	RN1203
Q629, 630	TRANSISTOR	2SC2458
Q631, 632	TRANSISTOR	2SA1038
Q633	TRANSISTOR	2SA1048
Q634, 635	N-FET	2SK373
D601-612, 619, 620	DIODE	1SS252
D627-632	DIODE	1SS252
D635, 636	DIODE	1SS252
D640-643	DIODE	1SS252
D645, 646	ZENER DIODE	RD5.6ESB2
D647, 648	DIODE	1SS252
D701-704	DIODE	1SS252
D705, 706	DIODE	11E2
D707-710	DIODE	1SS252

CAPACITORS

C600	CERAMIC CAPACITOR	CKDYB103K50
C603, 604	ELECTR. CAPACITOR	CEAS100M25
C605, 606	CERAMIC CAPACITOR	CCCSL221J50
C607	CERAMIC CAPACITOR	CCDSL101J50
C608	CERAMIC CAPACITOR	CCCSL101J50

Mark No.	Description	Part No.
C609, 610	ELECTR. CAPACITOR	CEAS470M16
C611, 612	MYLOR FILM CAPACITOR	CQMA222J50
C613, 614	MYLOR FILM CAPACITOR	CQMA822J50
C615, 616	ELECTR. CAPACITOR	CEAS2R2M50
C617, 618	ELECTR. CAPACITOR	CEAS101M16
C683, 684	CERAMIC CAPACITOR	CCCSL330J50
C691, 692	ELECTR. CAPACITOR	CEYA220M16
C695, 696	CERAMIC CAPACITOR	CCCSL680K500
C697, 698	ELECTR. CAPACITOR	CEAS100M25
C703, 704	ELECTR. CAPACITOR	CEASR47M50
C707	ELECTR. CAPACITOR	CEASR47M50
C711	AUDIO FILM CAPACITOR	CFTXA823J50
C712	MYLOR FILM CAPACITOR	CQMA272J50
C713, 714	AUDIO FILM CAPACITOR	CFTXA473J50
C715	ELECTR. CAPACITOR	CEAS101M10
C716	ELECTR. CAPACITOR	CEAS100M25
C717, 718	CERAMIC CAPACITOR	CKCYF103Z50
C719	ELECTR. CAPACITOR	CEAS220M50
C720	ELECTR. CAPACITOR	CEAS4R7M50
C721	ELECTR. CAPACITOR	CEASR68M50
C722	ELECTR. CAPACITOR	CEASR47M50
C723	AUDIO FILM CAPACITOR	CFTXA683J50
C724	AUDIO FILM CAPACITOR	CFTXA394J50
C725	AUDIO FILM CAPACITOR	CFTXA273J50
C726, 727	CERAMIC CAPACITOR	CKDYB102K50
C729	CERAMIC CAPACITOR	CEAS100M50
C731, 732	MICA CAPACITOR	CMA150J500
C733, 734	CERAMIC CAPACITOR	CCCSL150K500
C735, 736	CERAMIC CAPACITOR	CKCYB222K50
C737	AUDIO FILM CAPACITOR	CFTXA104J50
C738	CERAMIC CAPACITOR	CKCYF103Z50
C739, 740	ELECTR. CAPACITOR	CEAS220M16
C741, 742	AUDIO FILM CAPACITOR	CFTXA334J50
C743, 744	ELECTR. CAPACITOR	CEAS220M25
C802	MYLOR FILM CAPACITOR	CQMA104K50
C803	ELECTR. CAPACITOR	CEASR68M50
C805, 806	ELECTR. CAPACITOR	CEAS470M16
C812-814	CERAMIC CAPACITOR	CKDYB102K50
C816	ELECTR. CAPACITOR	CEAS010M100
C817, 818	ELECTR. CAPACITOR	CEAS220M16
C819, 820	ELECTR. CAPACITOR	CEAS4R7M50
C823, 824	CERAMIC CAPACITOR	CKCYX473M25
C829, 830	CERAMIC CAPACITOR	CKDYX473M25
C831	MYLOR FILM CAPACITOR	CQMA473J50
C1699, 1700	ELECTR. CAPACITOR	CEAS2R2M50
C1705	ELECTR. CAPACITOR	CEAS2R2M50

RESISTORS

R600-612	CARBONFILM RESISTOR	RD1/8PM□□□J
R615-618	CARBONFILM RESISTOR	RD1/8PM□□□J
R619, 620	CARBONFILM RESISTOR	RD1/4PMF□□□J
R621-650	CARBONFILM RESISTOR	RD1/8PM□□□J
R681, 682	CARBONFILM RESISTOR	RD1/2PM□□□J
R691-698	CARBONFILM RESISTOR	RD1/8PM□□□J
R701-704	CARBONFILM RESISTOR	RD1/8PM□□□J
R709, 710	CARBONFILM RESISTOR	RD1/8PM□□□J
R713-742	CARBONFILM RESISTOR	RD1/8PM□□□J
R745-748	CARBONFILM RESISTOR	RD1/8PM□□□J

Mark No.	Description	Part No.
R769-772	CARBONFILM RESISTOR	RD1/8PM□□□J
R774	CARBONFILM RESISTOR	RD1/8PM□□□J
R783, 784	CARBONFILM RESISTOR	RD1/8PM□□□J
R787-794	CARBONFILM RESISTOR	RD1/8PM□□□J
R795-814	CARBONFILM RESISTOR	RD1/8PM□□□J
R825-835	CARBONFILM RESISTOR	RD1/8PM□□□J
R847-849	CARBONFILM RESISTOR	RD1/8PM□□□J
R1601-1612	CARBONFILM RESISTOR	RD1/8PM□□□J
R1621-1638	CARBONFILM RESISTOR	RD1/8PM□□□J
R1640-1644	CARBONFILM RESISTOR	RD1/8PM□□□J
R1743, 1744	CARBONFILM RESISTOR	RD1/8PM□□□J
R1749, 1750	CARBONFILM RESISTOR	RD1/8PM□□□J
R1773	CARBONFILM RESISTOR	RD1/8PM□□□J
R1775, 1776	CARBONFILM RESISTOR	RD1/8PM□□□J

OTHERS

PIN JACK (4P)	AKB1101
PIN JACK (6P)	AKB1129
PIN JACK (6P)	AKB1138
CN100 CONNECTOR (7P)	KPE7
CN101 CONNECTOR (6P)	KPE6
CN102 CONNECTOR (9P)	KPE9
CN204 CONNECTOR (14P)	KPE14
CN270 CONNECTOR (11P)	KPE11

⊙ AV-INPUT SEL ASSEMBLY (AWZ3591)

SEMICONDUCTORS

IC651 E-SW IC	TC9162N
IC652 E-SW IC	TC9163N

CAPACITORS

C679, 680	ELECTR. CAPACITOR	CEAS470M16
C728	CERAMIC CAPACITOR	CKDYB102K50
C821, 822	CERAMIC CAPACITOR	CKCYX473M25

RESISTORS

R651-680	CARBONFILM RESISTOR	RD1/8PM□□□J
R683-686	CARBONFILM RESISTOR	RD1/8PM□□□J
R1639	CARBONFILM RESISTOR	RD1/8PM□□□J

OTHERS

PIN JACK (6P)	AKB1140
PIN JACK (8P)	AKB1144

⊙ REAR SP TERM ASSEMBLY (AWZ3592)

SEMICONDUCTORS

D535	DIODE	ISS252
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SWITCHES

S533	VOLTAGE SELECTOR	AKX1033
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RELAYS

RY532	RELAY	ASR-112
RY534	RELAY	ASR1005

COILS/TRANSFORMERS

L533, 534	COIL	ATH1011
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CAPACITORS

C535, 536	AUDIO FILM CAPACITOR	CFTXA823J50
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Mark	No.	Description	Part No.
	C542	ELECTR. CAPACITOR	CEANP4R7M50
	C543	ELECTR. CAPACITOR	CEANP010M50

RESISTORS

R1503, 1504	CARBONFILM RESISTOR	RD1/4PMFL□□□J
R1505-1519	CARBONFILM RESISTOR	RD1/8PM□□□J

OTHERS

CN1	PIN JACK (3P)	AKB1165
CN2	PIN JACK (3P)	AKB1166
CN3	SPEAKER TERMINAL (4-P)	PAKE1029
CN1533	CONNECTOR (8P)	KPE8

⊙ **S. ASSEMBLY (AWZ3087)**

SEMICONDUCTORS

IC870-873		MC14051BCP
IC874, 875		MC14577AP
IC876	OP AMP	M5238LF
IC877	LOGIC IC	UPD4066BC
IC878		MC14577AP

Q870-873	TRANSISTOR	2SC2878
Q874	TRANSISTOR	RN1203
D870	DIODE	1SS252

COILS/TRANSFORMERS

L870-875	AXIAL INDUCTOR	LAU680K
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CAPACITORS

C870-877		CKPUYF223Z25
C878-881	ELECTR. CAPACITOR	CEAS101M10
C882-887		CKPUYF223Z25
C888	CERAMIC CAPACITOR	CKDYX104M25
C889, 890		CKPUYF223Z25

C891, 892	CERAMIC CAPACITOR	CCDSL680J50
C893, 894		CKPUYF223Z25
C895, 896	ELECTR. CAPACITOR	CEAS101M10
C897	CERAMIC CAPACITOR	CKDYX473M25
C898, 899	ELECTR. CAPACITOR	CEANP220M10

RESISTORS

R1900-1912	CARBONFILM RESISTOR	RD1/8PM□□□J
R1914-1952	CARBONFILM RESISTOR	RD1/8PM□□□J

OTHERS

SOCKET		AKP1064
SOCKET		AKP1065

⊙ **SUPER CAPA ASSEMBLY (AWZ3589)**

CAPACITORS

C974	ELECTR. CAPACITOR (47 μF/5.5)	ACH1011
------	-------------------------------	---------

RESISTORS

R952	CARBONFILM RESISTOR	RD1/8PM□□□J
------	---------------------	-------------

OTHERS

CN205	CONNECTOR (12P)	KPE12
CN262	JUMPER CONNECTOR	KPC6
CN1855	CONNECTOR (6P)	KPE6
CN1858	JUMPER CONNECTOR	KPC6

⊙ **VIDEO ASSEMBLY (AWZ3593)**

SEMICONDUCTORS

IC851		MC14051BCP
IC852, 853		MC14577AP
IC854	OUTPUT EXPANDER IC	PD0012A
IC855		MC14577AP
IC856		MC14051BCP

Q851	TRANSISTOR	2SC3377
Q852	TRANSISTOR	2SA1515
Q853	TRANSISTOR	2SA1048
Q854	TRANSISTOR	2SC2458
Q855, 856	TRANSISTOR	2SA1115

Q857	TRANSISTOR	2SC2878
Q858	TRANSISTOR	RN2203
Q859	TRANSISTOR	RN1203
Q860	TRANSISTOR	RN2201
D852, 853	DIODE	1SS252

COILS/TRANSFORMERS

L851-856	AXIAL INDUCTOR	LAU680K
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CAPACITORS

C851-854		CKPUYF223Z25
C855-858	ELECTR. CAPACITOR	CEAS101M10
C859-863		CKPUYF223Z25
C864, 865	ELECTR. CAPACITOR	CEAS101M10
C866, 867		CKPUYF223Z25

C868	ELECTR. CAPACITOR	CEANP220M10
C970-972	CERAMIC CAPACITOR	CKDYF102Z50
C973	CERAMIC CAPACITOR	CCDSL680J50

RESISTORS

R851-868	CARBONFILM RESISTOR	RD1/8PM□□□J
R869	RESISTOR ARRAY (10K)	RA6S□□□J
R870-895	CARBONFILM RESISTOR	RD1/8PM□□□J

OTHERS

PIN JACK (2P)		AKB1118
PIN JACK (3P)		AKB1143

⊙ **DSP ASSEMBLY (AWZ3112)**

SEMICONDUCTORS

IC100	DUAL ATT/BAL IC	M51132L
IC101		RC4558DXP
IC102	OP-AMP IC	M5223P
IC103	OP AMP	M5238PF
IC104		RC4558DXP

IC105	OP AMP	M5238PF
IC106	E-SW IC	TC9162N
IC107	MEMORY IC	MB81464-12
IC108	DSP IC	YM7306B
IC109		RC4558DXP

IC110	OP AMP	M5238PF
IC111	E-TONE CONTROL IC	TC9184P
IC112-115	OP AMP	M5238PF
IC116-118		RC4558DXP
IC119	REGULATOR IC	UPC78M05H

Mark No.	Description	Part No.	Mark No.	Description	Part No.
Q100	N-FET	2SK369	C49		CKDYX104M16
D100-112	DIODE	1SS252	C132, 133	MYLOR FILM CAPACITOR	CQMA682K50
D113, 114	ZENER DIODE	RD8. 2ESB3	C134, 135	ELECTR. CAPACITOR	CEAS100M25
D115	DIODE	1SS252	C136, 137	CERAMIC CAPACITOR	CCDSL121J50
COILS/TRANSFORMERS			C138-140	ELECTR. CAPACITOR	CEAS100M25
L101-104	FERRITE BEAD	ATX1008	C141-148	CERAMIC CAPACITOR	CKDYX473M16
F100, 101	FILTER	ATF1071	C150, 151	CERAMIC CAPACITOR	CKDYX104M16
CAPACITORS			C152	CERAMIC CAPACITOR	CKDYB331K50
C51-54	ELECTR. CAPACITOR	CEAS100M25	C153	CERAMIC CAPACITOR	CCDSL121J50
C55, 56	CERAMIC CAPACITOR	CCDSL330J50	C154	CERAMIC CAPACITOR	CKDYB331K50
C57	ELECTR. CAPACITOR	CEAS220M16	C155	ELECTR. CAPACITOR	CEAS221M16
C58	CERAMIC CAPACITOR	CKDYX104M16	C156	CERAMIC CAPACITOR	CKDYB103K50
C59, 60	ELECTR. CAPACITOR	CEAS220M16	C157, 158	ELECTR. CAPACITOR	CEAS470M16
C62	ELECTR. CAPACITOR	CEAS470M16	C159	CERAMIC CAPACITOR	CKDYX104M16
C63, 64	CERAMIC CAPACITOR	CKDYX473M25	C160	ELECTR. CAPACITOR	CEAS470M16
C65	ELECTR. CAPACITOR	CEAS470M16	C161	CERAMIC CAPACITOR	CKDYX104M16
C66, 67	ELECTR. CAPACITOR	CEAS100M25	C162, 163	ELECTR. CAPACITOR	CEAS220M16
C68	CERAMIC CAPACITOR	CKDYX104M16	C164, 165	ELECTR. CAPACITOR	CEAS470M16
C69	CERAMIC CAPACITOR	CKDYX473M25	C166	CERAMIC CAPACITOR	CKDYB102K50
C70, 71	PL. STYRENE CAPACITOR	CQSA332J160	RESISTORS		
C72	CERAMIC CAPACITOR	CKDYX104M16	R51-57	CARBONFILM RESISTOR	RD1/8PM□□□J
C73	ELECTR. CAPACITOR	CEAS100M25	R60	CARBONFILM RESISTOR	RD1/8PM□□□J
C74	CERAMIC CAPACITOR	CKDYX104M16	R62, 63	CARBONFILM RESISTOR	RD1/8PM□□□J
C75	ELECTR. CAPACITOR	CEAS100M25	R65-73	CARBONFILM RESISTOR	RD1/8PM□□□J
C76, 77	CERAMIC CAPACITOR	CCDCH220J50	R75	CARBONFILM RESISTOR	RD1/8PM□□□J
C78, 79	PL. STYRENE CAPACITOR	CQSA330K50	R76	CARBONFILM RESISTOR	RD1/4PMFL□□□J
C80, 81	ELECTR. CAPACITOR	CEAS100M25	R77-95	CARBONFILM RESISTOR	RD1/8PM□□□J
C82, 83	MYLOR FILM CAPACITOR	CQMA272K50	R100-117	CARBONFILM RESISTOR	RD1/8PM□□□J
C84, 85	CERAMIC CAPACITOR(0.01μ)	ACG1026	R120-131	CARBONFILM RESISTOR	RD1/8PM□□□J
C86, 87	MYLOR FILM CAPACITOR	CQMA682K50	R132, 133	CARBONFILM RESISTOR	RD1/4PMFL□□□J
C88, 89	ELECTR. CAPACITOR	CEAS100M25	R134, 135	METALFILM RESISTOR	RN1/4PC□□□□F
C90	MYLOR FILM CAPACITOR	CQMA154K50	R136-146	CARBONFILM RESISTOR	RD1/8PM□□□J
C91, 92	ELECTR. CAPACITOR	CEAS100M25	R148-151	METALFILM RESISTOR	RN1/4PC□□□□F
C93, 94	ELECTR. CAPACITOR	CEAS010M50	R152-161	CARBONFILM RESISTOR	RD1/8PM□□□J
C95, 96	CERAMIC CAPACITOR	CCDSL121J50	R164-171	CARBONFILM RESISTOR	RD1/8PM□□□J
C97, 98	CERAMIC CAPACITOR	CKDYX473M16	R174, 175	CARBONFILM RESISTOR	RD1/4PMFL□□□J
C99, 100	ELECTR. CAPACITOR	CEAS220M16	R176-181	CARBONFILM RESISTOR	RD1/8PM□□□J
C101-104	AUDIO FILM CAPACITOR	CFTXA153J50	VR52	VR	VRTS6VS473
C105, 106	AUDIO FILM CAPACITOR	CFTXA823J50	OTHERS		
C107, 108	MYLOR FILM CAPACITOR	CQMA302J50	X100	CRYSTAL RESONATOR	ASS1050
C109	ELECTR. CAPACITOR	CEAS100M25			
C110	CERAMIC CAPACITOR	CCDSL680J50			
C111	ELECTR. CAPACITOR	CEAS100M25			
C112	CERAMIC CAPACITOR	CCDSL101J50			
C113-115	ELECTR. CAPACITOR	CEAS100M25			
C116, 117	CERAMIC CAPACITOR	CCDSL680J50			
C118, 119	ELECTR. CAPACITOR	CEAS100M25			
C120, 121	CERAMIC CAPACITOR	CCDSL101J50			
C122, 123	ELECTR. CAPACITOR	CEAS100M25			
C124	ELECTR. CAPACITOR	CEAS101M16			
C125	CERAMIC CAPACITOR	CKDYX104M16			
C126, 127	PL. STYRENE CAPACITOR	CQSA330K50			
C128, 129	MYLOR FILM CAPACITOR	CQMA272K50			
C130, 131	CERAMIC CAPACITOR(0.01μ)	ACG1026			

5. ADJUSTMENTS

ADJUSTMENT OF DSP SECTION

Preparation

1. Set the surround mode to DOLBY PROLOGIC.
2. Set the center mode to WIDE.
3. Set the TONE to FLAT.

Adjustments

1. Input 1 kHz signal with in-phase and the same level (approx. 100 mV to 1V) to both Lch and Rch of the VCR1 on the rear panel, respectively.
2. Short-circuit the terminals of P101 and P102 in the DSP assembly.
3. Rotate the VR52 (VCA TRIM) in the DSP assembly and adjust so that the outputs of the F-L and F-R of CN103 go below -40 dB against the output of CEN, and that both channels become the same levels as much as possible.
4. Remove the P101 and P102 terminals short-circuited in the DSP assembly.
5. Input 1 kHz signal with in-phase and which is of 1 dB level difference in between Lch and Rch, into the Lch and the Rch of the VCR1 on the rear panel respectively, and confirm that the outputs of the F-L and F-R go below -40 dB against the outputs of CN103 CEN.

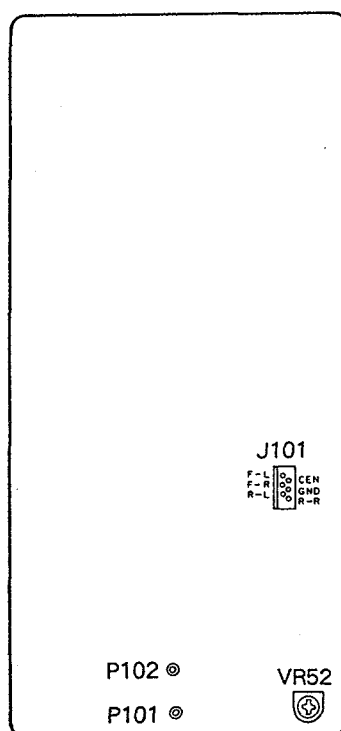



Fig. 1 DSP Section Adjustment Points

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6. IC INFORMATION (PD5151A: FOR REMOTE CONTROL UNIT)

● Terminal Function

Pin No.	Symbol	I/O	Function	Active
1	P6.2	O	N.C.	—
2	P6.1	O	N.C.	—
3	P6.0	O	Key scan output	L
4	P4.7	O	Key scan output	L
5	P4.6	O	Key scan output	L
6	P4.5	O	Key scan output	L
7	P4.4	O	key scan output	L
8	P4.3	O	Key scan output	L
9	P4.2	O	Key scan output	L
10	P4.1	O	Key scan output	L
11	P4.0	O	Key scan output	L
12	P3.7	O	Key scan output	L
13	P3.6	O	Key scan output	L
14	P3.5	I	External RAM (present/absent) discrimination input	L/H
15	P3.4	I	Remote control envelope signal input	L
16	CNTR	I	Remote control signal input	H
17	$\overline{\text{INT2}}$	I	Key on wake up signal input	\downarrow
18	SYNC	O	N.C.	—
19	R/ $\overline{\text{W}}$	O	R/ $\overline{\text{W}}$ signal output	H/L
20	$\overline{\text{INT1}}$	I	Remote control envelope signal input	\downarrow
21	NC	—	N.C.	—
22	NC	—	N.C.	—
23	NC	—	N.C.	—
24	CNV _{ss}	I	GND (started up by signal chip mode)	—
25	$\overline{\text{RES}}$	I	Reset signal input	L
26	Xin	I	Clock signal input	—
27	Xout	O	Clock signal output	—
28	ϕ	O	Timing clock signal output	H/L
29	V _{ss}	—	GND	0V
30	P5.7	I	Key scan input	L
31	P5.6	I	Key scan input	L
32	P5.5	I	Key scan input	L
33	P5.4	I	Key scan input	L
34	P5.3	I	Key scan input	L
35	P5.2	I	Key scan Input	L
36	P5.1	I	Key scan input	L
37	P5.0	I	Key scan input	L
38	NC	—	N.C.	—
39	A15	O	Address signal output	H/L
40	A14	O	Address signal output	H/L

Pin No.	Symbol	I/O	Function	Active
41	A13	O	Address signal output	H/L
42	A12	O	Address signal output	H/L
43	A11	O	Address signal output	H/L
44	A10	O	Address signal output	H/L
45	A9	O	Address signal output	H/L
46	A8	O	Address signal output	H/L
47	A7	O	Address signal output	H/L
48	A6	O	Address signal output	H/L
49	A5	O	Address signal output	H/L
50	A4	O	Address signal output	H/L
51	A3	O	Address signal output	H/L
52	A2	O	Address signal output	H/L
53	A1	O	Address signal output	H/L
54	A0	O	Address signal output	H/L
55	NC	-	N.C.	-
56	D7	I/O	Data signal I/O	H/L
57	D6	I/O	Data signal I/O	H/L
58	D5	I/O	Data signal I/O	H/L
59	D4	I/O	Data signal I/O	H/L
60	D3	I/O	Data signal I/O	H/L
61	D2	I/O	Data signal I/O	H/L
62	D1	I/O	Data signal I/O	H/L
63	D0	I/O	Data signal I/O	H/L
64	NC	-	N.C.	-
65	Vss	-	GND	0V
66	NC	-	N.C.	-
67	Vdd	-	Power supply	+5V
68	P6.7	O	Learning mode display (LED) output	L
69	P6.6	O	Transmission display (LED) output	L
70	P6.5	O	Infrared receiving amplifier (ON/OFF) output	L/H
71	P6.4	O	Remote control signal output	H
72	P6.3	O	Remote control output boost (ON/OFF) output	H/L

7. PROGRAMABLE REMOTE CONTROL UNIT (CU-VSA013: AXD1217)

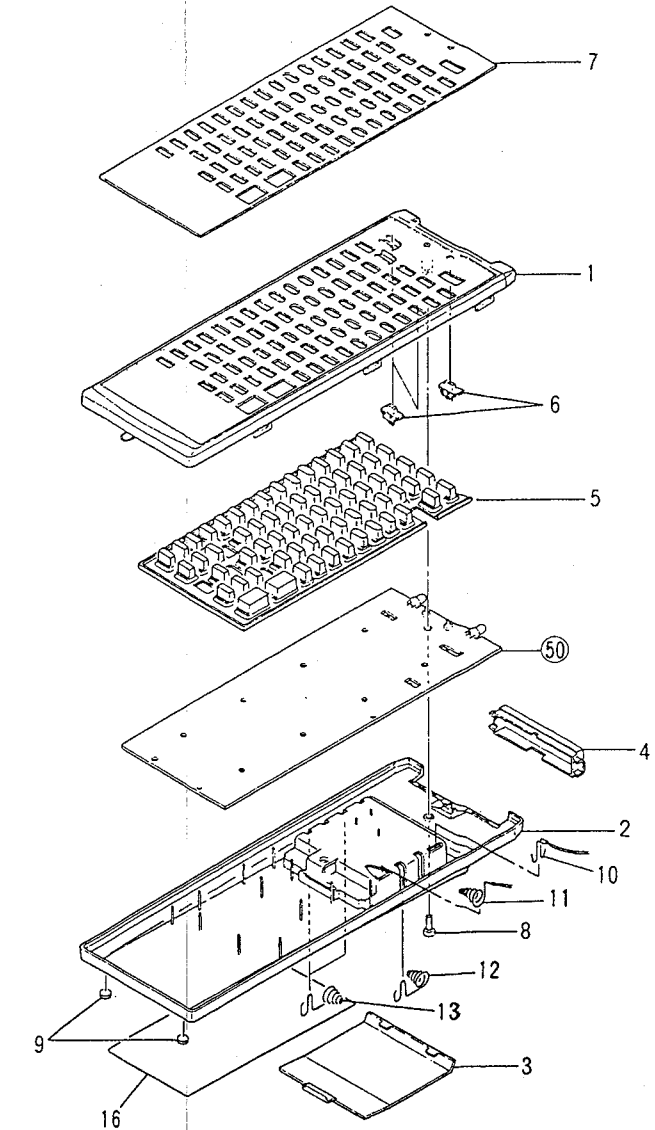
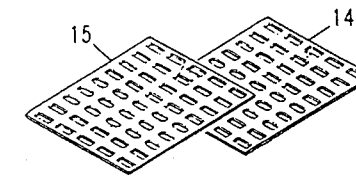
7.1 EXPLODED VIEW AND PARTS LIST

NOTES:

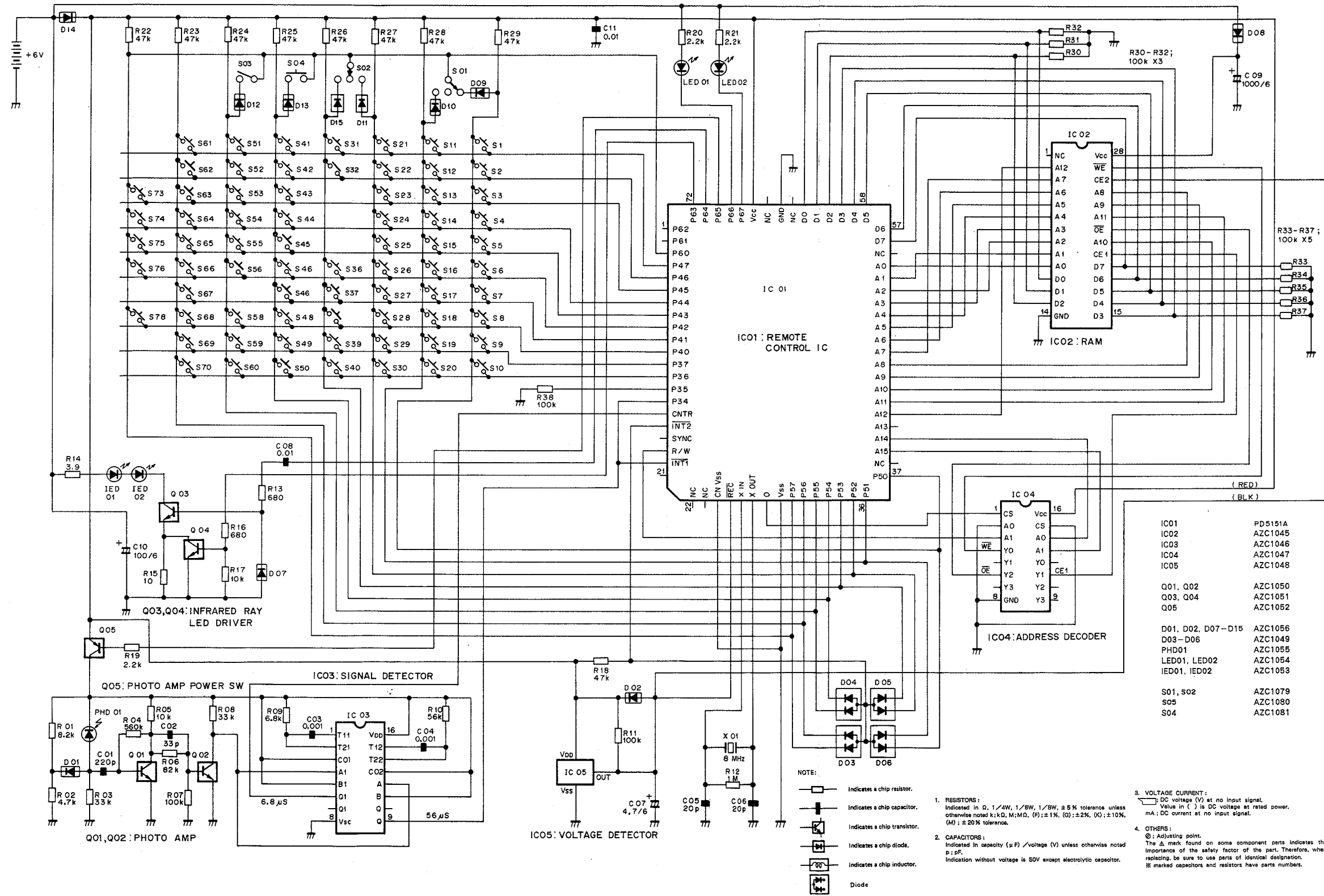
- Parts without part number cannot be supplied.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be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

Parts List

Mark	No.	Description	Part No.
	1	Case (A)	AZH1033
	2	Case (B)	AZH1034
	3	Case (C)	AZH1035
	4	Filter	AZN1400
	5	Rubber switch	AZA1318
	6	Knob	AZS1042
	7	Name plate	AZA1319
	8	Screw	AZB1124
	9	Leg	AZN1401
	10	Electrode spring	AZB1274
	11	Electrode spring	AZB1275
	12	Electrode spring	AZB1276
	13	Electrode spring	AZB1277
	14	Sheet (TV)	AAK1847
	15	Sheet (LD)	AAK2111
	16	Label	AZA1273
	50	PCB board



7.2 SCHEMATIC DIAGRAM



5. SWITCHES (Underline indicates switch position)
- S01 : AUDIO/VIDEO/AUX
 - S02 : SR RECALL/USE/LEARN
 - S03 : DECK I/DECK II
 - S04 : RESET
- TAPE/VCR
- S1 : VCR POWER
 - S2 : TAPE/VCR
 - S3 : TAPE/VCR
 - S4 : REC MUTE/VCR CH-
 - S5 : TAPE SELECT/VCR CH+
 - S6 :
 - S7 : ANT
 - S8 :
 - S9 :
 - S10 :
- CD/LD
- S11 : CHP FR-TM
 - S12 :
 - S13 : CD/LD POWER
 - S14 : DISC SEL/DISPLAY
 - S15 : SEARCH
 - S16 :
 - S17 :
 - S18 :
 - S19 :
- TUNER/CD/TV/LD
- S20 : 1/13
 - S21 : 2/14
 - S22 : 3/15
 - S23 : 4/16
 - S24 : 5/17
 - S25 : 6/18
 - S26 : 7/19
 - S27 : 8/20
 - S28 : 9/21
 - S29 : 0, 10/22
 - S30 : 11/MEMORY/23
 - S31 : 12/CLEAR/24
- TUNER/CD/PHONO/TV/LD
- S32 : 1, 12/13, 24/DUAL
 - S35 : PGM
 - S37 : FREQUENCY -/TV CHANNEL -
 - S38 : FREQUENCY +/TV CHANNEL +
 - S39 : TV POWER
 - S40 : CD +10/TV FUNC
 - S41 : PHONO TV VOL -
 - S42 : PHONO TV VOL +
 - S43 : TV DISP
- AMP
- S44 : VCR 1
 - S45 : VCR 2
 - S46 : VCR 3
 - S47 : LD
 - S48 : TV/BS
 - S49 : VIDEO
 - S50 : TAPE 1/DAT
 - S51 : TAPE 2
 - S52 : DIRECT / V. SEL.
 - S53 : LINE
 - S54 : CD
 - S55 : TUNER
 - S56 : PHONO
 - S58 : INPUT/EFFECT LEF -
 - S59 : AMP POWER
 - S60 : MUTING
 - S61 : FRONT R
 - S62 : FRONT L
 - S63 : MASTER VOLUME -
 - S64 : MASTER VOLUME +
 - S65 : REAR LEVEL -
 - S66 : REAR LEVEL +
 - S67 : TEST TONE
 - S68 : CENTER MODE
 - S69 : REAR R
 - S70 : REAR L
 - S73 : CENTER LEVEL -
 - S74 : CENTER LEVEL +
 - S75 : SURROUND MODE
 - S76 : INPUT/EFFECT LEV +
 - S78 : DELAY TIME

IC01	PD5151A
IC02	AZC1045
IC03	AZC1046
IC04	AZC1047
IC05	AZC1048
Q01, Q02	AZC1050
Q03, Q04	AZC1051
Q05	AZC1052
D01, D02, D07-D15	AZC1056
D03-D06	AZC1049
PHD01	AZC1055
LED01, LED02	AZC1054
IED01, IED02	AZC1053
S01, S02	AZC1079
S05	AZC1080
S04	AZC1081

NOTE:

- Indicates a chip resistor.
- Indicates a chip capacitor.
- Indicates a chip transistor.
- Indicates a chip diode.
- Indicates a chip inductor.
- Diode

1. RESISTORS:
Indicated in Ω, 1/4W, 1/8W, 1/16W, ±5% tolerance unless otherwise noted; k: kΩ, M: MΩ, (F): ±1%, (Q): ±2%, (K): ±10%, (M): ±20% tolerance.







2. CAPACITORS:
Indicated in capacity (μF) / voltage (V) unless otherwise noted; p: pF. Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE CURRENT:
 DC voltage (V) at no input signal. Value in () is DC voltage at rated power. mA: DC current at no input signal.

4. OTHERS:
Q: Adjusting point. The Δ 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. * marked capacitors and resistors have parts numbers.

7.3 P.C. BOARD DIAGRAMS

NOTE:

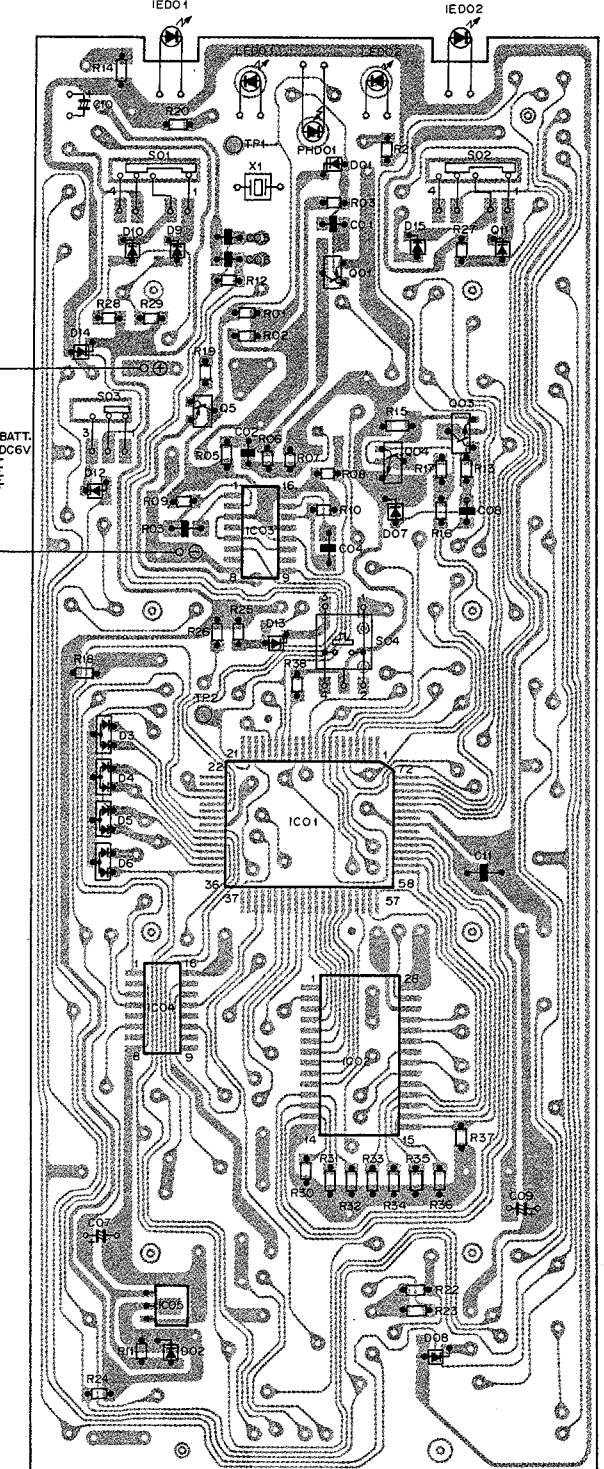
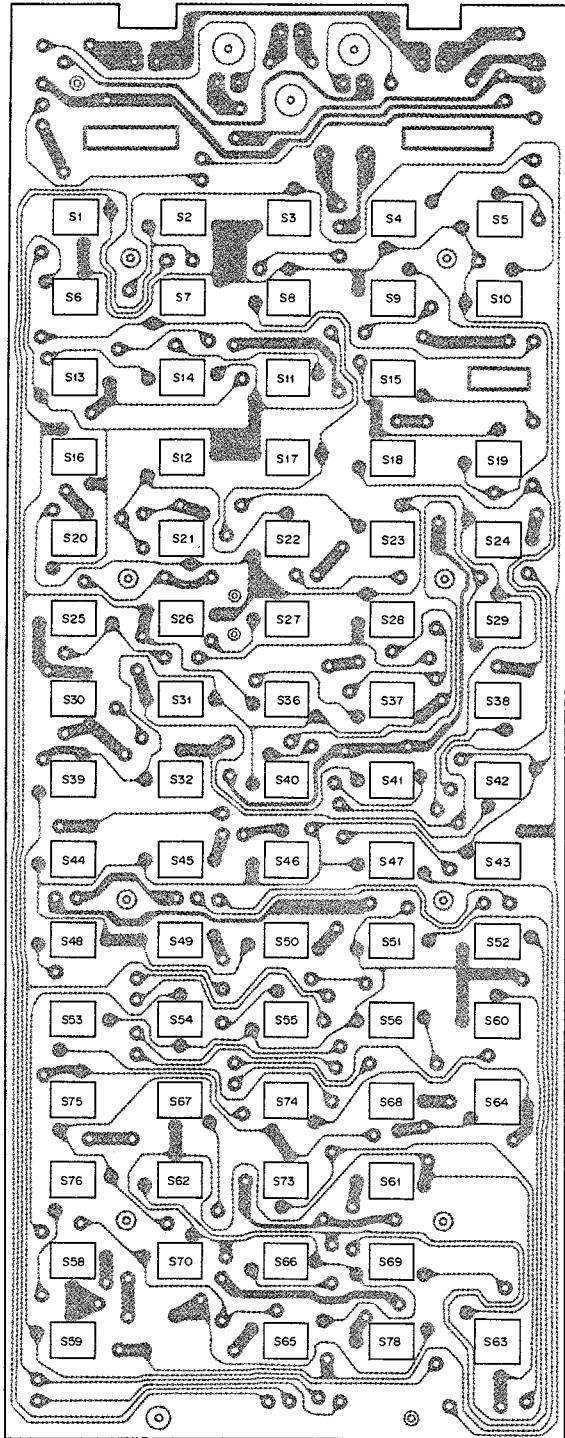
-  Indicates a chip resistor.
-  Indicates a chip capacitor.
-  Indicates a chip inductor.
-  Indicates a chip diode.
-  Indicates a chip inductor.
-  Diode

A

B

C

D



A

B

C

D

7.4 P.C.B's 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 Δ 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%)

560 Ω \rightarrow 56 \times 10¹ \rightarrow 561 RD1/4PS

5	6	1
---	---	---

 J

47k Ω \rightarrow 47 \times 10³ \rightarrow 473 RD1/4PS

4	7	3
---	---	---

 J

0.5 Ω \rightarrow 0R5 RN2H

0	R	5
---	---	---

 K

1 Ω \rightarrow 010 RS1P

0	1	0
---	---	---

 K

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

5.62k Ω \rightarrow 562 \times 10¹ \rightarrow 5621 RN1/4SR

5	6	2	1
---	---	---	---

 F

Mark No.	Description	Part No.	Mark No.	Description	Part No.
SEMICONDUCTORS			RESISTORS		
IC1		PD5151A	R1		AZC1064
IC2		AZC1045	R2		AZC1065
IC3		AZC1046	R3, R8		AZC1066
IC4		AZC1047	R5, R17		AZC1068
IC5		AZC1048	R6		AZC1069
Q1, Q2		AZC1050	R9		AZC1070
Q3, Q4		AZC1051	R10		AZC1071
Q5		AZC1052	R12		AZC1072
D3-D6		AZC1049	R7, R11, R30-R38		AZC1073
D1, D2, D7-D15		AZC1233	R19-R21		AZC1074
IED1, IED2		AZC1053	R13, R16		AZC1075
LED1, LED2		AZC1054	R15		AZC1076
PHD1		AZC1055	R18, R22-R29		AZC1077
			R14		AZC1078
			R4		AZC1256
SWITCHES			OTHERS		
S1, S2 SLIDE SWITCH		AZC1079	X1 RESONATOR		AZC1057
S5 SLIDE SWITCH		AZC1080			
S4 SLIDE SWITCH		AZC1081			
CAPACITORS					
C1		AZC1058			
C2		AZC1059			
C5, C6		AZC1060			
C8		AZC1061			
C3, C4		AZC1062			
C11		AZC1063			
C10		AZC1251			
C7		AZC1252			
C9		AZC1255			

8. SPECIFICATIONS

Audio Section

STEREO (FRONT)

Continuous average power output of 75 watts* per channel, min., at 8 ohms, from 20Hz to 20,000Hz with no more than 0.008%* * total harmonic distortion (front).

Continuous power output

SURROUND	
FRONT (1 kHz, 0.3%, 8Ω)	70W + 70W
CENTER (1 kHz, 0.3%, 8Ω)	70W
REAR (1 kHz, 5%, 8Ω)	23W + 23W

Music power (1kHz, 10%, 8Ω)

STEREO	
FRONT	140W + 140W

Dynamic power output

4Ω/8Ω	140W/100W
-------	-----------

SN ratio (Old HF=A201, short circuit, A network)

PHONO MM	72dB
TUNER, CD, LINE, TAPE1/DAT, TAPE2, VIDEO, TV/BS, LD, VCR1, VCR2, VCR3	96dB

Input terminal (sensitivity/impedance)

PHONO MM	2.5mV/50kΩ
TUNER, CD, LINE, TAPE1/DAT, TAPE2, VIDEO, TV/BS, LD, VCR1, VCR2, VCR3	150mV/30kΩ

Frequency characteristics

PHONO MM, 20Hz ~ 20kHz	±0.3dB
TUNER, CD, LINE, TAPE1/DAT, TAPE2, VIDEO, TV/BS, LD, VCR1, VCR2, VCR3, 5Hz ~ 100kHz	±3dB

Output terminal (output level/impedance)

TAPE1/DAT, TAPE2, REC	150mV/2.2kΩ
VCR, VCR3, PRE OUT	150mV/2.2kΩ
FRONT PRE OUT	1V/2.2kΩ
SUPER WOOFER OUT	1V/2.2kΩ

Tone Control (Front, Center, Rear)

BASS	±8dB(100Hz)
TREBLE	±8dB(10kHz)

Muting ∞

Video Section

Input terminal (sensitivity/impedance)

VCR1, VCR2, VCR3, LD, TV/BS, VIDEO	1Vp-p/75Ω
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Output terminal (sensitivity/impedance)

VCR1, VCR2, TO MONITOR TV	1Vp-p/75Ω
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S terminal (sensitivity/impedance)

Input terminal	
VCR1, VCR2, VCR3, LD, TV/BS, VIDEO	1Vp-p/75Ω(luminance signal)
	0.286Vp-p/75Ω(color signal)

Output terminal

VCR1, VCR2, TO MONITOR TV	1Vp-p/75Ω(luminance signal)
	0.286Vp-p/75Ω(color signal)

Frequency characteristics

VCR1, VCR2, VCR3, LD, VIDEO, TO MONITOR TV, 10Hz ~ 10MHz	±3dB
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Surround Section

Surround PRE OUT

(output level/impedance)	1V/2.2kΩ
--------------------------	----------

Frequency characteristics

LD → REAR SPEAKER OUT(DOLBY SURROUND position), 30Hz ~ 7kHz	±3dB
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Delay time (time of Dolby Pro Logic Surround only)

Variable range	16ms ~ 30ms
Step	2ms Step

Power Supply Component, Others

Power requirements AC110/120-127/220/240V (switchable), 50/60Hz

Power consumption 654W

AC outlet

SWITCHED (x1) 100W MAX

External dimensions 420(W)x427(D)x162(H)mm

Weight 13.8kg

* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output claims for Amplifier.

** Measured by Audio Spectrum Analyzer.

Accessories

Operating Instructions	1
Remote Control Unit	1
Template	2
Size AAA alkaline dry cell batteries LRO3(AM-4)	4

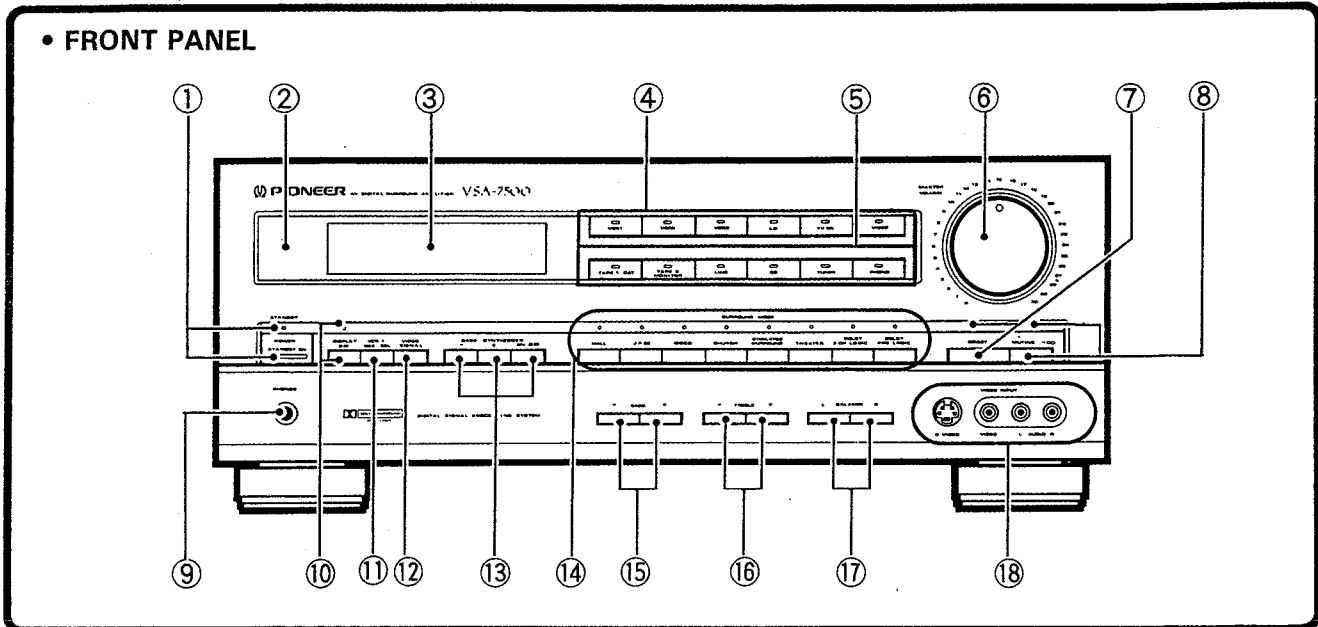
NOTE:

Specifications and the design subject to possible modifications without notice due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays and other chemicals on near this unit, since these will corrode the surfaces.

9. PANEL FACILITIES



① POWER STANDBY/ON switch / STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

- The indicator lights when the unit is in the standby mode.
- The accessory remote control unit can also be used to operate STANDBY/ON function of this switch.
- When not using the unit for a long period, disconnect the power cord.
- In standby condition, the last sources to be selected on the audio system (excluding PHONO) and the video system (excluding items connected to S terminal) are maintained. For this reason, absentee sound recording or absentee video recording can be executed with the power supply in standby condition.

② Remote control sensor

③ Display

④ Video input selector

Selects the video unit for playback. The indicator lights up red.

VCR1: Press for playback of the VCR connected to the VCR1 terminal.

VCR2: Press for playback of the VCR connected to the VCR2 terminal.

VCR3: Press for playback of the VCR connected to the VCR3 terminal.

LD: Press for disc playback with CD, CDV, LD player connected to LD terminal.

TV/BS: Press for watching broadcasts with TV tuner or BS tuner.

VIDEO: Press for playback of unit (i.e., TV camera) connected to VIDEO INPUT terminal on front panel.

⑤ Audio Input Selector

Selects the audio unit for playback. The indicator lights up red.

TAPE1/DAT: Press for playback of tape with DAT or cassette deck connected to TAPE1/DAT terminal.

TAPE2 MONITOR: Press for playback of tape with DAT or cassette deck connected to TAPE2 terminal. Press once again to turn to OFF.

LINE: Press for using an audio unit connected to the LINE terminal.

CD: Press for CD playback with a CD player connected to the CD terminal.

TUNER: Press for listening to AM or FM broadcast with tuner connected to TUNER terminal.

PHONO: Press for playback of records on turntable connected to PHONO terminal.

⑥ MASTER VOLUME

In adjusting the sound volume with this knob, the front, rear and center change simultaneously. Moreover, output from PRE OUT terminal, the CENTER AMPLIFIER OUT terminal and the SUPER WOOFER OUT terminal, all on the rear panel, changes simultaneously.

⑦ DIRECT Button/Indicator

Press this button ON (indicator lights up) to hear the source sound without passing through a sound quality adjustment circuit or balance adjustment circuit. In order to enjoy better sound quality at the front, do not use Surround, Tone Control (Bass, Treble), Balance or Bass Synthesizer.

When the DIRECT button is ON, if you press an operation button which does not function, the DIRECT indicator blinks to give notice.

⑧ MUTING Button/Indicator

Press this button to extinguish the sound volume temporarily. At this time the muting indicator blinks. When pressed again, the original sound volume is restored.

⑨ Headphones terminal (PHONES)

Connect the headphones plug to this terminal.

If a speaker is connected to II terminal, but the speaker selector switch is at the "I AND II" position, there will be no sound.

⑪ AC OUTLETS

SWITCHED TOTAL 100W MAX

For a second unit is connected in linkage with the setting (ON-STANDBY (OFF)) of the power supply switch (STANDBY/ON) for this unit, the power supply to that unit can be set to ON-OFF (the power supply switch of second unit is set at ON).

Set so that the total power consumption does not exceed 100W.

Power Consumption of Power Supply Outlet

- Never connect an electrical unit (i.e., toaster, drier) whose power consumption exceeds the value of W shown on the panel. Otherwise, there is the danger of breakdowns and fire.
- Do not connect television sets. Even if the power consumption of a TV set is less than the allowance value, when the power is connected, there can be huge surges of current which exceed the allowance value.

⑫ AUDIO INPUT Terminals

• **LINE**

Can be connected to output terminal of audio unit.

• **CD**

Can be connected to output terminal of compact disc player.

• **TUNER**

Can be connected to output terminal of FM/AM tuner.

• **PHONO/GND**

Record player output cord can be connected to this terminal.

An Earth wire is connected to the GND terminal.

Use a moving magnet (MM) type cartridge with the turntable.

⑬ LD Terminals

This terminal is connected to the output (video, audio) terminal of CD, CDV, LD player.

- In the case of a CD, CDV, LD player with S video output terminal, the S terminal can also be connected.

⑭ TV/BS Terminals

Connected to output (video, audio) terminal of BS tuner or TV tuner.

- In the case of a tuner with S video output, the S terminal can also be connected.

⑮ TO MONITOR TV Terminals

Connected to the video input terminal of monitor TV.

Only signals input from S terminal are output by the S terminal of the monitor TV. Consequently, nothing can be output unless the S input terminal of LD, VCR1, 2, 3, TV/BS, or VIDEO INPUT (front panel) has been connected.

⑯ CENTER AMP PREOUT Terminal

This terminal is used when a separate power amplifier is employed to amplify power at the front center.

⑰ SUPER WOOFER OUT Terminal

This terminal is used to connect a center woofer power amplifier when you want to strengthen the bass region of the center channel or you want to use a 3D system.

The frequency characteristic of this channel is cut by a characteristic of 6dB/oct at about 100Hz or above.

⑱ CENTER SPEAKERS Terminals

Connects center speakers for Dolby Pro Logic Surround and Dolby 3CH Logic. Since two systems can be connected, a center speaker can be placed at each side of a TV and used as dual center (see page 18).

When the speaker selector is at "I ONLY," use a speaker with impedance of 8 to 16 ohms. When the speaker selector is at "I AND II," use speakers with impedance ranging from 4 to 16 ohms each.

⑲ POWER Cord

NOTE:

- In this unit, S terminal (Y-C separation) and pin jack video terminal are independent from each other, so signals input from pin jack are output from pin jack and signals input from S terminal are output from S terminal.



..... Composite system terminal

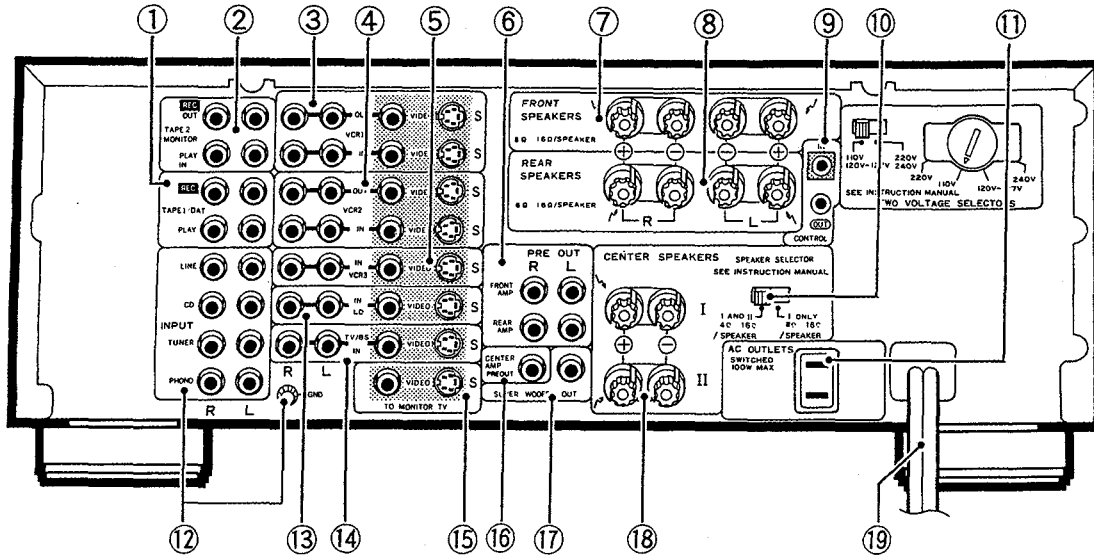


..... S terminal

• Concerning 3D System

3D is an abbreviation of "three dimensional" in the three dimensional stereo system. This system is a stereo 2-channel with an additional channel that magnifies and reproduces excessively low sounds. The format makes use of the fact that the human ear loses almost all sense of direction with frequencies of long wavelength at 100 Hz or below; the low sound components of right and left are synthesized as one channel, and the speaker for playback of ultra-low sounds is driven by a special-purpose amplifier. This scheme is also called the center woofer format. Its distinguishing characteristic is that it handles super woofer, which tends to become large-scale, with one channel.

REAR PANEL



① TAPE1/DAT Terminals

REC:

Can be connected to the record input terminals of the first cassette deck or the digital audio tape deck.

PLAY:

Can be connected to the playback output terminals of the first cassette deck or the digital audio tape deck.

NOTE:

For connection of the digital audio tape deck, connect to analog input/output terminals.

② TAPE2 MONITOR Terminals

REC:

Can be connected to the record input terminals of the second cassette deck.

PLAY:

Can be connected to the playback output terminals of the second cassette deck.

③ VCR1 Terminals

IN:

Can be connected to the playback output (video, audio) terminals of the first VCR.

OUT:

Can be connected to the video record (video, audio) input terminals of the first VCR.

- For a VCR having a S video input/output terminal, the S terminal can also be connected.
- If audio output of the VCR is monaural, use a stereo--monaural cord sold on the market.

④ VCR2 Terminals

Used to connect with the second VCR.

Connection is made in the same way as with the first VCR (except for S terminal connection).

⑤ VCR3 Input Terminals

Can be connected to playback terminals of the third VCR.

⑥ PRE OUT Terminals

This terminal is used when a separate power amplifier is employed for power amplification.

FRONT AMP: for front L, R

REAR AMP: for rear L, R

If a separate amplifier has been connected to the PRE OUT terminal, do not connect a speaker to the speaker terminal of this unit.

⑦ FRONT SPEAKERS Terminals

The right and left speakers at the front are connected through these terminals.

Use speakers with an impedance of 8 to 16 ohms.

⑧ REAR SPEAKERS Terminals

The right and left speakers at the rear are connected through these terminals.

⑨ CONTROL IN/OUT Terminals

These terminals are for input or output of control signals for centralized remote control of various units by the remote control component provided with this unit.

⑩ CENTER SPEAKER SELECTOR Switch

This switch changes the speaker impedance for when only one center speaker is connected, or two speakers are connected.

When one speaker only is connected:

Be sure to set the switch to "I ONLY" (right side), and always connect a speaker with impedance of 8 to 16 ohms to the I terminal.

When two speakers are connected:

Be sure to set the switch to "I AND II" (left side), and always use speakers with an impedance of 4 to 16 ohms.

NOTE:

Switch the SPEAKER SELECTOR when the unit power supply is at **STANDBY**. Do not switch the selector when the power supply is at **ON**.

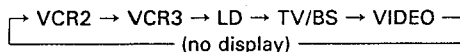
⑩ DISPLAY OFF Button/Indicator

When this button is pressed, the display extinguishes and the DISPLAY OFF indicator lights up. This stops operation of circuits not in use and prevents adverse effects on sound quality. Press the button again and the display lights up again. If another operation button is pressed while the display is extinguished, the display lights up for several seconds.

⑪ VCR1 REC SEL (SELECTOR) Button

Selects unit for video recording to VCR1 other than unit selected with video input selector.

Each time this button is pressed, the unit video recording to VCR1 is switched over in the following sequence.



For example, TV/BS video recording at VCR1 can be executed while watching LD.

(The video input selector is set to LD and the VCR1 recording selector is set to TV/BS.)

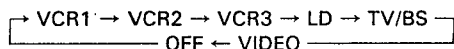
NOTE:

Do not select VCR1 with the video input selector.

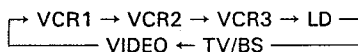
⑫ VIDEO SIGNAL Button

Enables you to change the video alone to another source without changing the audio portion. For example, you can listen to the sound from an LD while watching the video from VCR1. When this button is pressed, the screen changes in the sequence given below, and each input selector indicator lights up as orange.

<When source is selected with audio input selector>

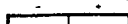


<When source is selected with video input selector>



The orange indicators show the video source and the red indicators show the audio source.

⑬ BASS SYNTHESIZER Buttons

Use this button when you want to magnify heavy bass sounds and playback powerful music pieces. It produces a dynamic effect for scenes of battles or explosions in movies. Press the bass synthesizer button to ON and the level can be adjusted in increments of 10 from 0 to 100 with the  button.

⑭ SURROUND MODE Buttons/Indicators

Selects the surround mode matching the playback source for surround playback.

The indicator of the selected mode lights up.

It goes OFF when pressed once again.

⑮ BASS Buttons

Adjusts sound quality in the low range. Press the + side to magnify low sounds and the - side to diminish these sounds. If the + and - are pressed simultaneously, the front alone become flat.

⑯ TREBLE Buttons

Adjusts sound quality in the high range. Press the + side to magnify high sounds and the - side to diminish these sounds. If + and - are pressed simultaneously, the front alone becomes flat.

⑰ BALANCE Button

Adjusts the balance of sound at right and left.

L Press when sound at the left is lower than at the right.

R Press when sound at the right is lower than at the left.

If L and R are pressed simultaneously, no adjustment takes place.

When the surround button of the remote control is used, the front and rear can be adjusted separately.

⑱ VIDEO INPUT Terminal

This terminal connects TV camera or other video unit. If the monitor TV has an S terminal and it is connected to the S output terminal of this unit, the S input terminal can also be used.

NOTE:

- For playback of audio or video units other than those connected to TAPE2 terminal, set the TAPE2 MONITOR button to OFF (TAPE2 indicator extinguishes).

When the TAPE2 MONITOR button is at ON, there is no sound. If another function button is pressed while the TAPE2 MONITOR button is ON, the TAPE2 MONITOR indicator and the TAPE2 indicator on the display blink to give notice that the other functions cannot be executed.

If the power supply switch (POWER) is pressed while the power supply is in standby condition, the listening status before the power supply was put in standby mode is restored. (Last memory function)

The last memory function remains effective for several days even if the power cord is removed or there is a power failure.

- If buttons which do not function at time of DIRECT condition are pressed while DIRECT is at ON, the indicator blink to give notice.
- If the surround mode button is pressed while DIRECT is at ON, DIRECT goes OFF.
- The effect of the bass synthesizer may be excessive, depending on the source of playback, so be careful not to raise the level too high.

