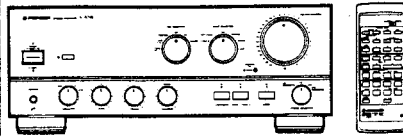


Service Manual

PIONEER
The Art of Entertainment



ORDER NO.
ARP2520

STEREO AMPLIFIER

A-701R

A-701R-G

A-701R AND A-701R-G HAVE THE FOLLOWING:

Type	Model		Power Requirement	Remarks
	A-701R	A-701R-G		
HEZ	○	○	AC 220 V - 230 V, 240 V (switchable)*	

* Change the connection of the power transformer's primary wiring.

- This manual is applicable to the following: A-701R/HEZ; A-701R-G/HEZ.
- For the following: A-701R-G/HEZ, refer to page 41.
- A-701R-G is the same as A-701R except for color.
- Ce manuel pour le service comprend les explications de réglage en français.
- Este manual de servicio trata del método ajuste escrito en español.

CONTENTS

1. EXPLODED VIEWS, PACKING AND PARTS LIST	2
2. SCHEMATIC AND PCB CONNECTIONS DIAGRAMS	7
3. PCB PARTS LIST	35
4. ADJUSTMENTS	40
4. REGLAGE	40
4. AJUSTE	40
5. FOR A-701R-G/HEZ	41
6. PANEL FACILITIES	42
7. SPECIFICATIONS	45

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FS APR. 1992 Printed in Japan

1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- 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	Parts No.	Mark No.	Description	Parts No.
1	ROTARY KNOB L	AAB1222	NSP 46	PUSH JOINT	AMR1709
2	ROTARY KNOB M(PLS)	AAB1223	NSP 47	HEAT SINK HOLDER F	AMR2286
3	ROTARY KNOB S(PLS)	AAB1224	NSP 48	HEAT SINK HOLDER R	AMR2287
4	PUSH KNOB	AAD1536	NSP 49	RIGHT FRAME	ANA1038
5	DIRECT KNOB	AAD1560	NSP 50	TRANS. FRAME	ANA1131
6	POWER KNOB	AAD2275	51	FRONT PANEL	ANB1512
NSP 7	REC OUT ASSY	AWZ4064	NSP 52	REAR PANEL	ANC1891
8	NAME PLATE (METAL)	AAM1029	NSP 53	PANEL STAY	AND1052
9	SCREW	ABA-298	☉ 54	POWER L ASSY	AWZ4282
10	SCREW (STEEL)	ABA1004	NSP 55	BOTTOM PLATE	ANF1013
11	SCREW (STEEL)	ABA1009	NSP 56	VOLUME HOLDER	ANG1395
12	SCREW (STEEL)	ABA1011	NSP 57	VOLUME ASSY HOLDER	ANG1573
13	SCREW (STEEL)	ABA1053	NSP 58	POWER ASSY HOLDER F	ANG1575
14	SCREW (STEEL)	ABA1047	NSP 59	POWER ASSY HOLDER R	ANG1576
15	SCREW (STEEL)	ABA1048	NSP 60	EARTH PLATE	ANG1578
16	SCREW (STEEL)	ABA1050	NSP 61	TRANSISTOR HOLDER	ANG1585
17	SCREW	ABA1056	NSP 62	HEAT SINK	ANH1336
18	SCREW	ABA1082	NSP 63	HEAT SINK	ANH1337
19	SCREW	ABA1088	64	LONG SHAFT ASSY	ANL1047
20	SPACER	ABF1002	65	OPE. INSTRUCTIONS (English, French, German, Italian, Dutch, Swedish, Spanish, Portuguese)	ARE1240
21	WASHER	ABF1017	66	TONE AMP ASSY	AWZ4069
NSP 22	SPACER	AEC1396	67	POWER SUPPLY ASSY	AWZ4081
23	SPRING	ABH1034	68	SPEAKER TERM ASSY	AWZ4230
24	NUT	ABN-065	69	PHONO AMP ASSY	AWZ3436
25	FLANGE NUT M9	ABN-072	70	METAL BONNET	AZN1804
Δ 26	AC POWER CORD	ADG1049	71	SCREW	FBT40P080FZK
NSP 27	CUSHION C (RUBBER)	AEB-270	72	NUT	NK90FCU
NSP 28	NYLON BINDER	AEC-093	73	SCREW	VMZ30P060FCU
☉ 29	POWER R ASSY	AWZ4283	Δ 74	ELECTR. CAPACITOR (C1)	ACH1194
30	STRAIN RELIEF	AEC-882	Δ 75	FUSE(T2.5A) (FU3)	AEK-512
NSP 31	SPACER	AEC1065	Δ 76	TRANSISTOR (Q1)	2SC3281
NSP 32	NYLON RIVET	AEC1160	Δ 77	TRANSISTOR (Q155)	2SC4137
☉ 33	CONTROL ASSY	AWZ4068	Δ 78	TRANSISTOR (Q156)	2SC4137
NSP 34	SPACER	AEE1013	Δ 79	TRANSISTOR (Q2)	2SC3281
35	SHEET	AEE1014	Δ 80	TRANSISTOR (Q3)	2SA1302
NSP 36	SPEAKER SW ASSY	AWZ4070	Δ 81	TRANSISTOR (Q4)	2SA1302
NSP 37	BINDER	AEC-826	NSP 82	SPACER	AEC1395
38	STYROL PROTECTOR	AHA1070	NSP 83	ROTARY FUNC ASSY	AWZ4065
39	PACKING CASE	AHD2269	84	SWITCH (S3)	ASU1045
40	PACKING SHEET	AHG1021	85	SWITCH (S4)	ASU1044
NSP 41	TERMINAL SCREW	AKE-031			
42	PANEL BASE	AMB1799			
43	FOOT	AMR1159			
44	INDICATING LENS	AMR1160			
45	HOLDER	AMR2417			

1

2

3

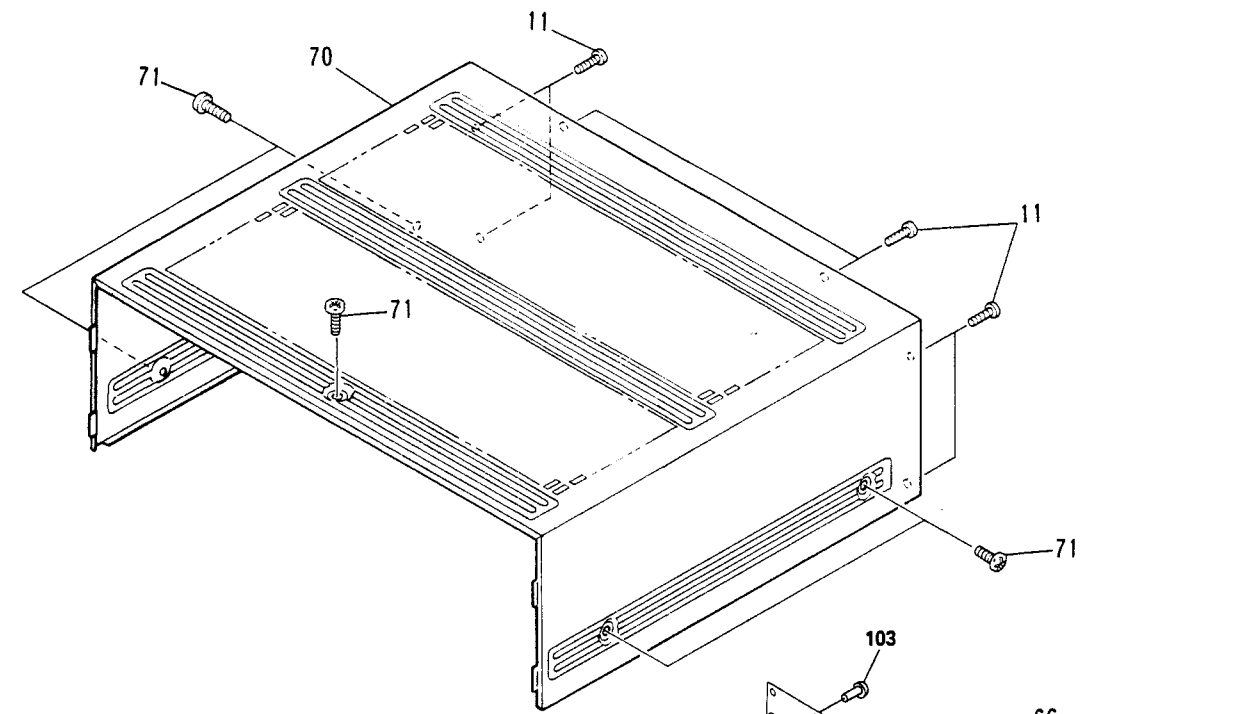
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6

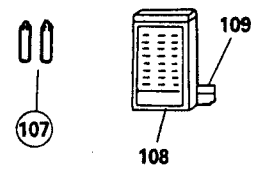
Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
△ 86	POWER TRANSFORMER (T1)	ATS1422	NSP 101	SR ASSY	AWZ4066
● 87	VR ASSY	AWZ4063	102	ACRYL(SENSOR)	AAK1760
NSP 88	HEADPHONE ASSY	AWZ3515	103	SCREW	BPZ30P080FZK
NSP 89	DIODE ASSY	AWZ4392	104	SCREW	VBZ35P080FMC
90	SCREW (STEEL)	ABA1129	△ 105	CARBON FILM RESISTOR (R1)	RD1/4PMF100J
A			△ 106	CARBON FILM RESISTOR (R2)	RD1/4PMF010J
△ 91	WASHER	ABE-053	NSP 107	BATTERY (R03,AAA)	AEX-021
△ 92	AC SOCKET 3-P	AKP-502	108	REMOTE CONTROL UNIT (CU-A001)	AXD1211
93	KNOB (PLASTIC)	AAD1016	109	BATTERY COVER	PZN1001
NSP 94	BINDER	AEP-215			
95	PIN GROMMET	AEC1015			
NSP 96	PCB SUPPORT	AEC1215			
NSP 97	PROTECTION ASSY	AWZ4277			
NSP 98	SUBTRANS ASSY	AWZ4067			
NSP 99	VOLUME HOLDER	ANG1661			
NSP 100	BRACKET B	ANG1557			

• Exterior

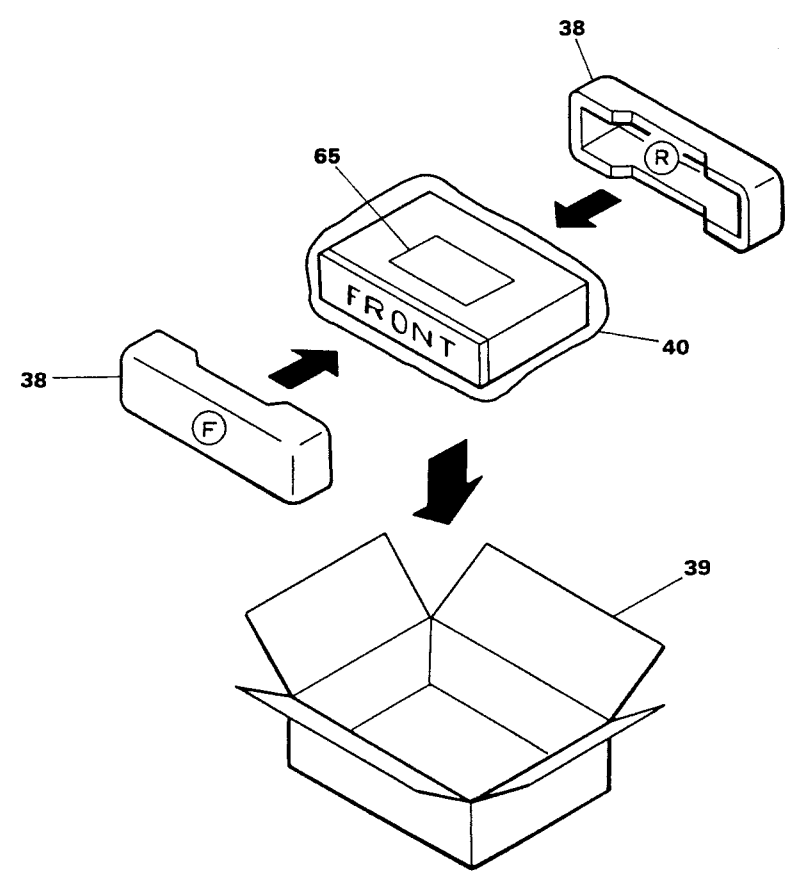


Packing

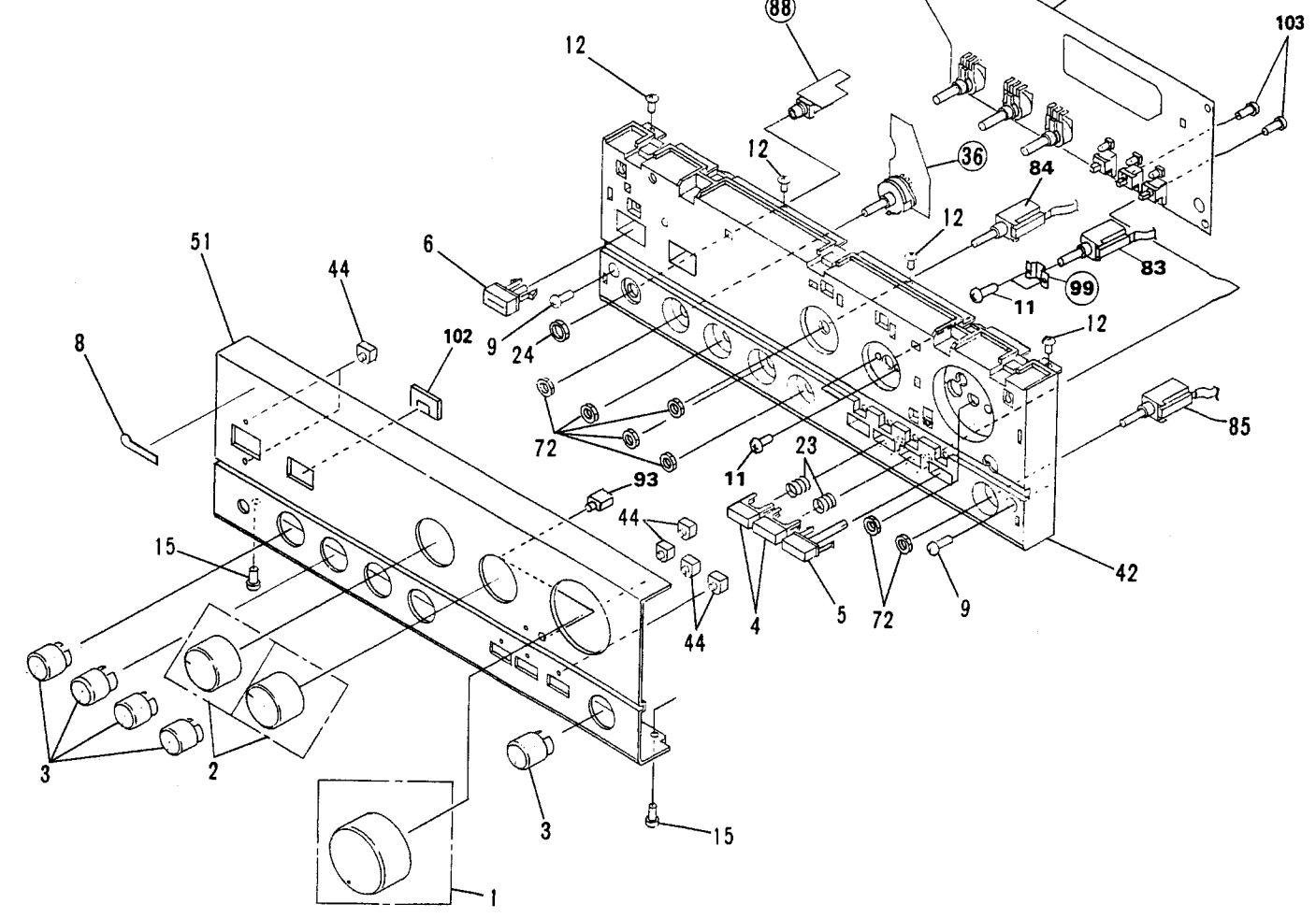
B



C



D



1

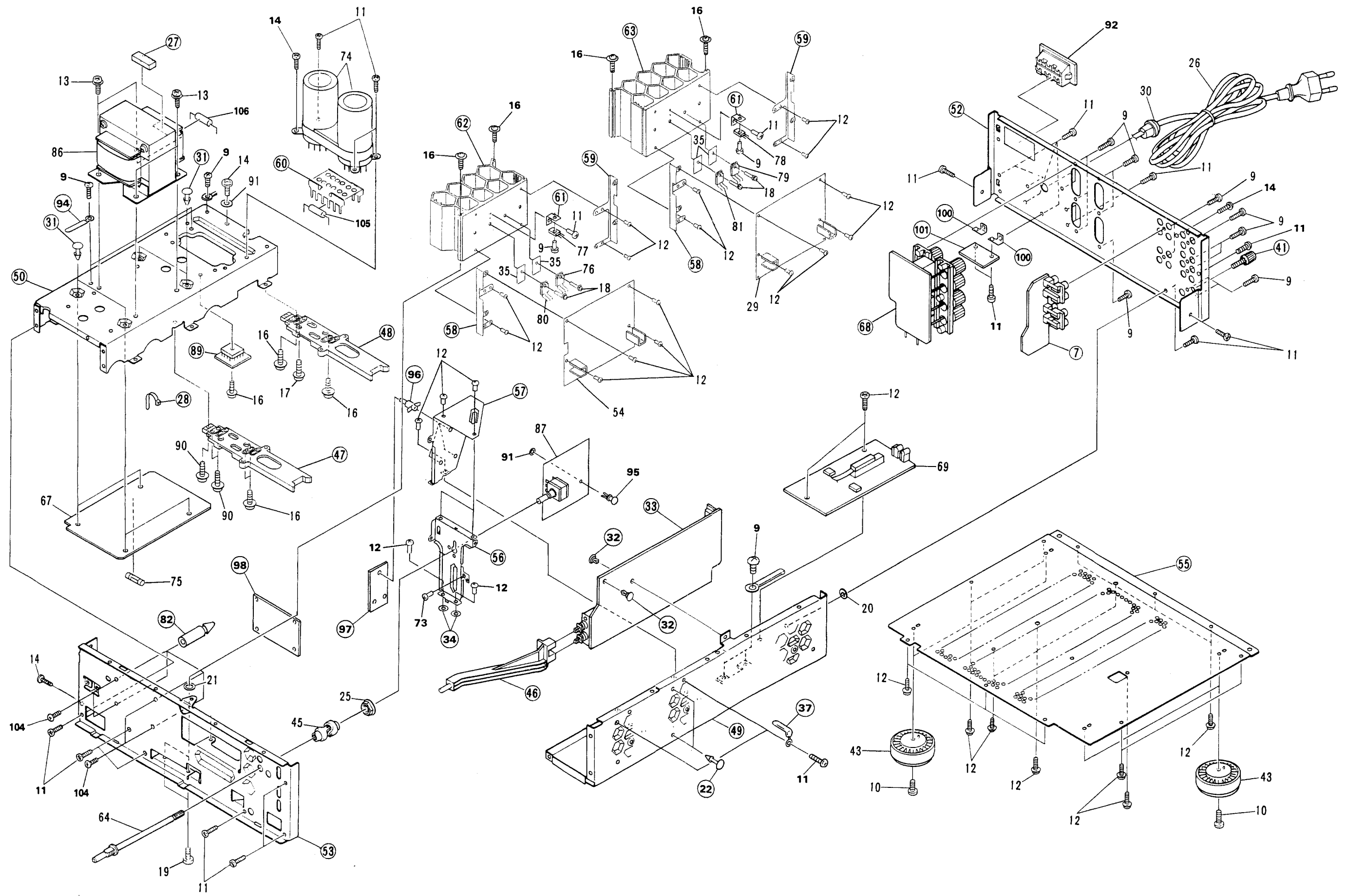
2

3

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6



A
B
C
D

2. SCHEMATIC AND PCB CONNECTIONS DIAGRAMS

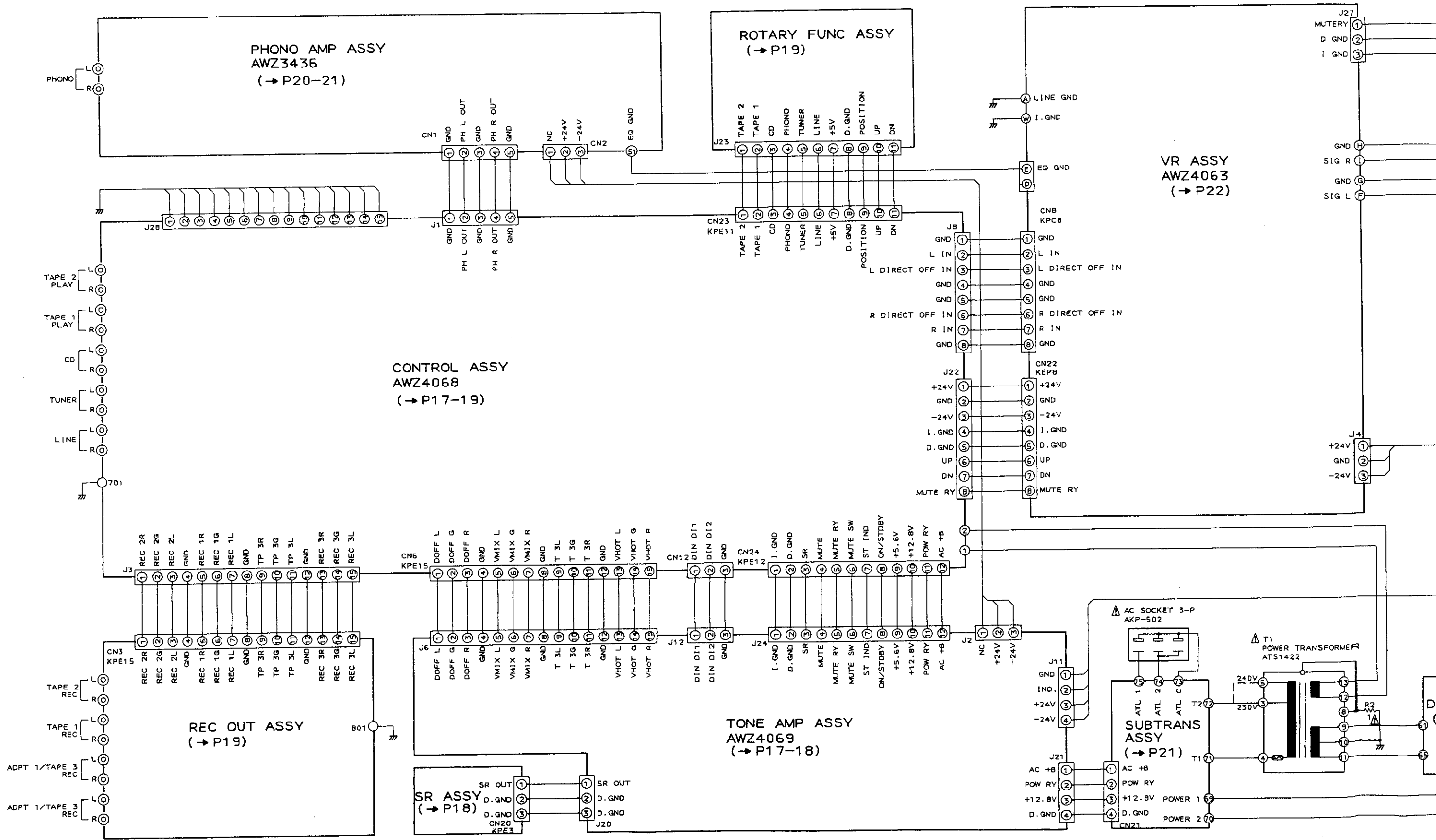
2.1 OVERALL SCHEMATIC DIAGRAM

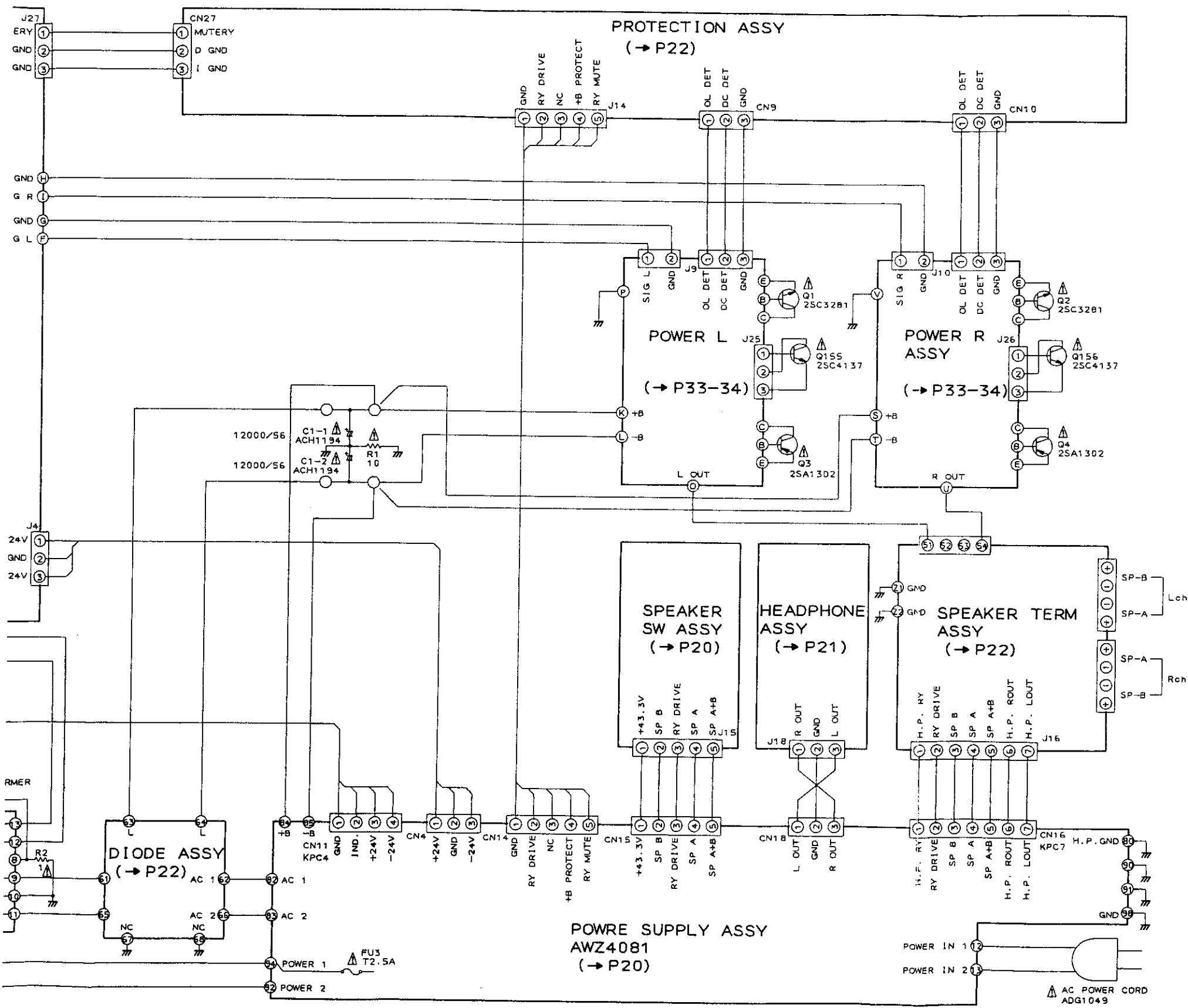
A

B

C

D





1. RESISTORS :
Indicated in Ω , 1/4 W, 1/6 W and 1/8 W, $\pm 5\%$ tolerance unless otherwise noted k ; k Ω , M ; M Ω , (F) ; $\pm 1\%$, (G) ; $\pm 2\%$, (K) ; $\pm 10\%$, (M) ; $\pm 20\%$ tolerance.
2. CAPACITORS :
Indicated in capacity (μ F)/voltage(V) unless otherwise noted p; pF. Indication without voltage is 50 V except electrolytic capacitor.
3. VOLTAGE, CURRENT :
 - \square ; DC voltage (V) at no input signal unless otherwise noted.
 - \square V ; Signal voltage at rated power.
 - \leftrightarrow mA or \leftarrow mA ; DC current at no input signal unless otherwise noted.
4. OTHERS :
 - \rightarrow ; Signal route
 - \odot ; Adjustment 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.
 - \times marked capacitors and resistors have parts numbers.
 - ∇ (Red) : Measurement point
 - This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
5. SWITCHES : (The underline indicates the switch position.)
 CONTROL ASSY
 S701: FUNCTION SEL (TAPE2 - DAT/TAPE1 - CD - PHONO - TUNER - LINE)
 S702: REC SELECTOR (TAPE 2 1 - TAPE 1 2 - SOURCE - OFF - CD - TUNER)
 S703: DIRECT (ON - OFF)

 TONE AMP ASSY
 S301: ADPT1/TAPE3 (ON - OFF)
 S302: LOUDNESS (ON - OFF)
 S303: POWER (STANDBY / ON)
 S304: MUTING (ON - OFF)

 SPEAKER SW ASSY
 S401: SPEAKERS (OFF - A - B - A+B)

 PHONO AMP ASSY
 S501: PHONO SELECTOR (MC SUBSONIC - MC - MM - MM SUBSONIC)

 ROTARY FUNC ASSY
 S981: INPUT SELECTOR (TAPE2 - DAT/TAPE1 - CD - PHONO - TUNER - LINE)

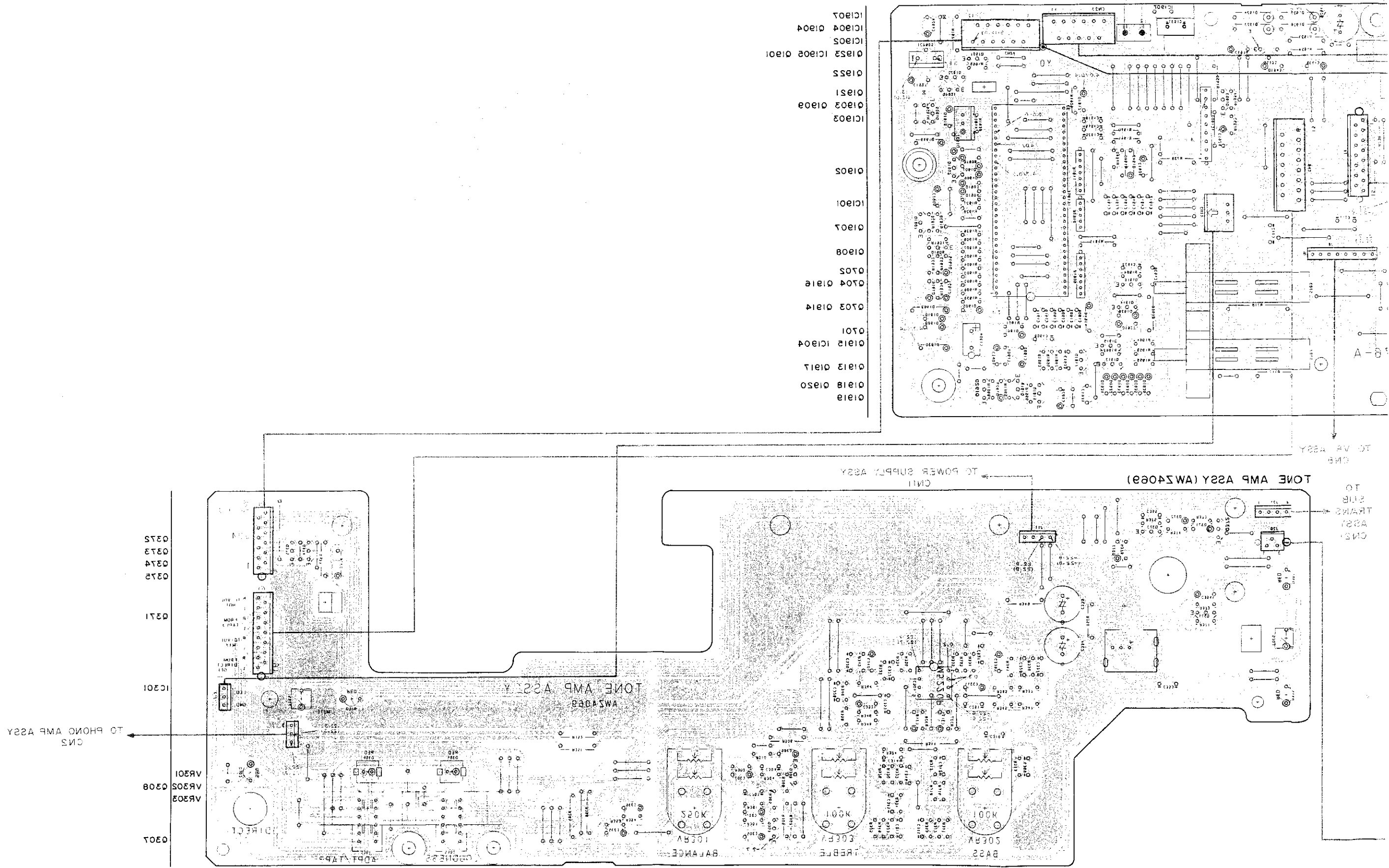
A

B

C

D

This P.C.B. connection diagram is viewed from the foil side



A

B

C

D

8

8

7

8

2

4

8

8

7

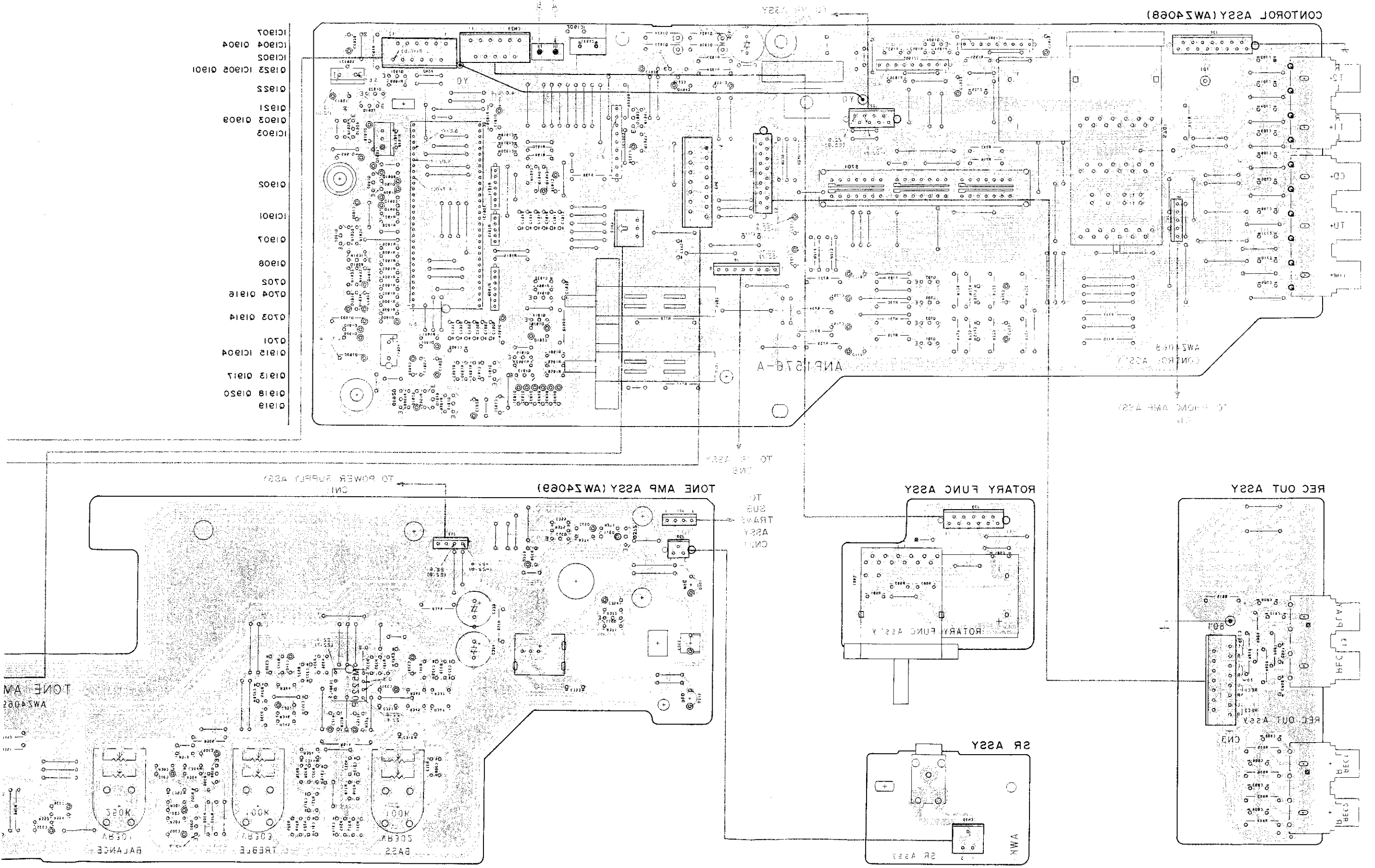
8

2

4

2.3 CONTROL, TONE AMP, REC OUT, ROTARY FUNC AND SR ASSEMBLIES

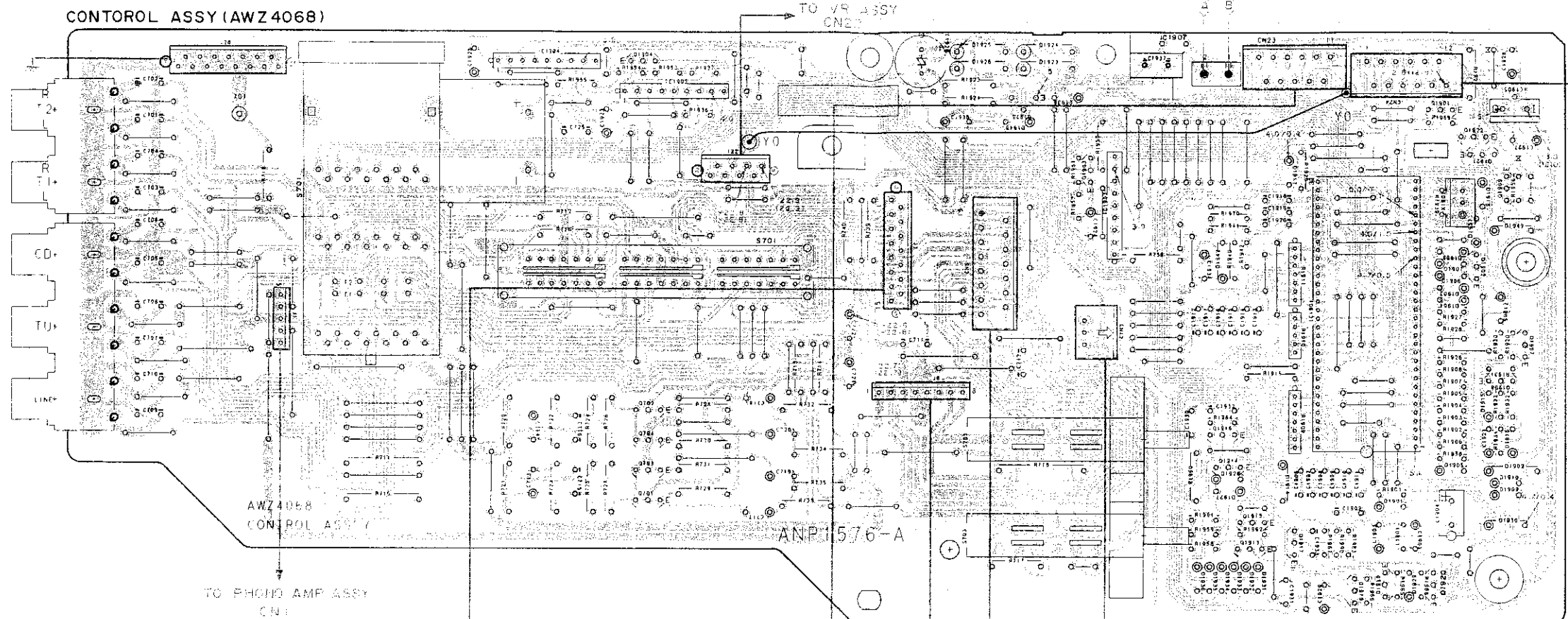
This P.C.B. connection diagram is viewed from the foil side.



A
B
C
D

2.2 CONTROL, TONE AMP, REC OUT, ROTARY FUNC AND SR ASSEMBLIES

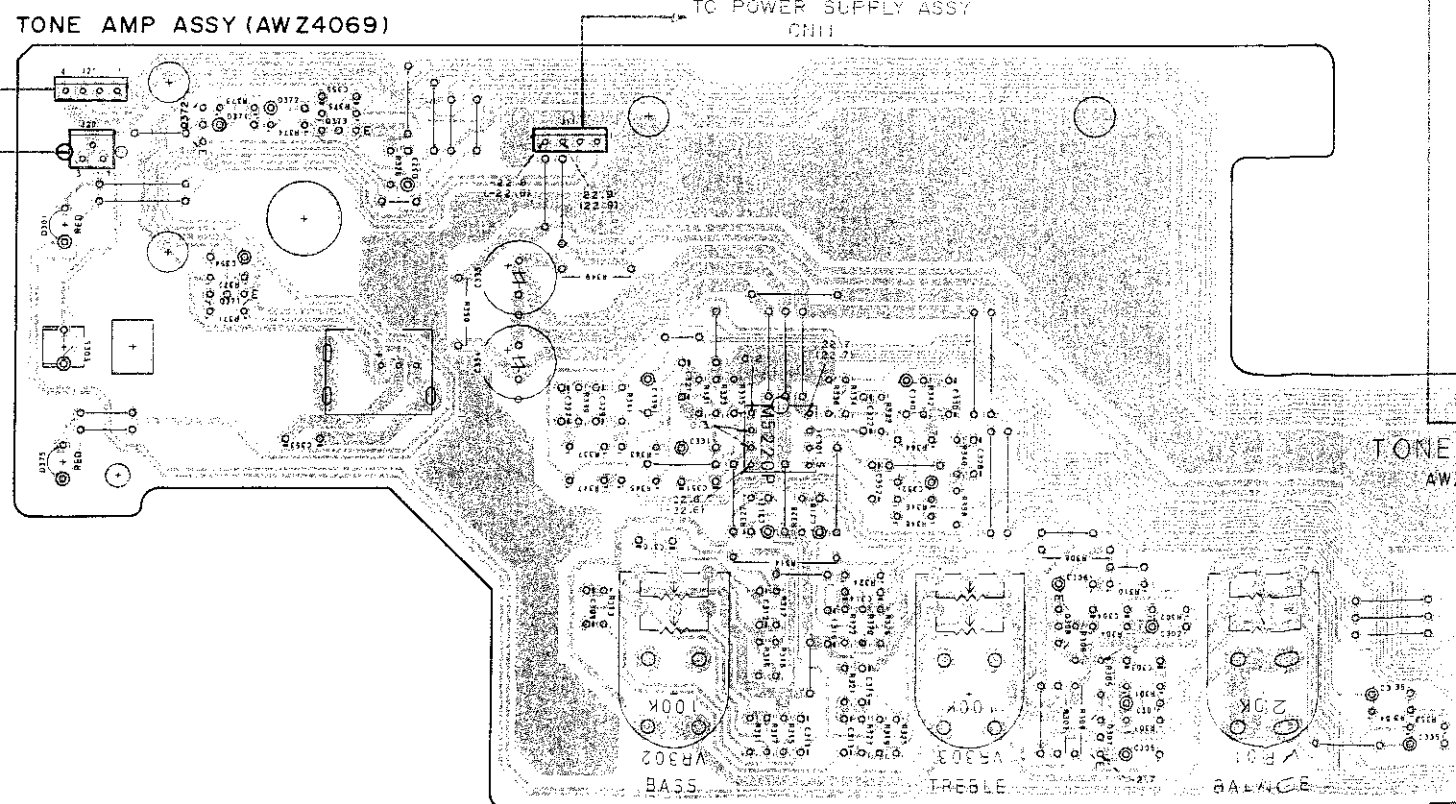
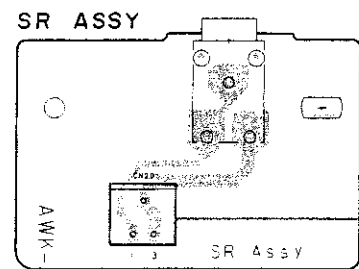
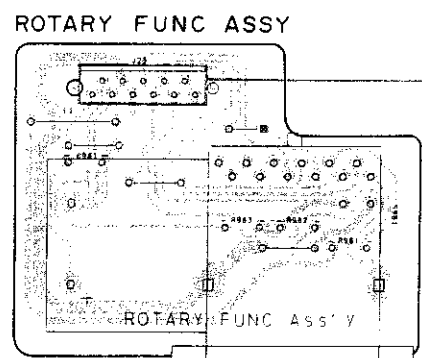
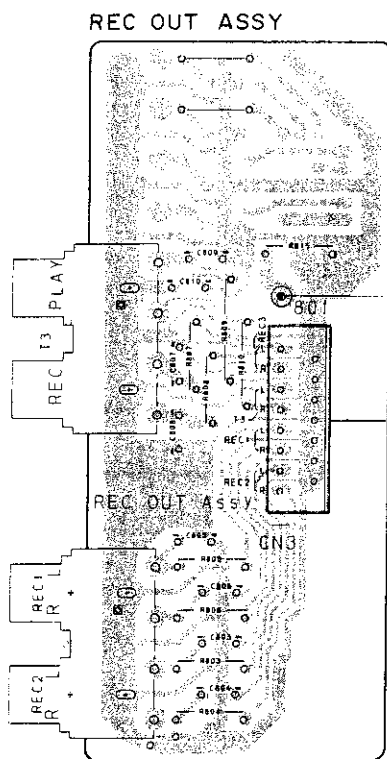
A



B

C

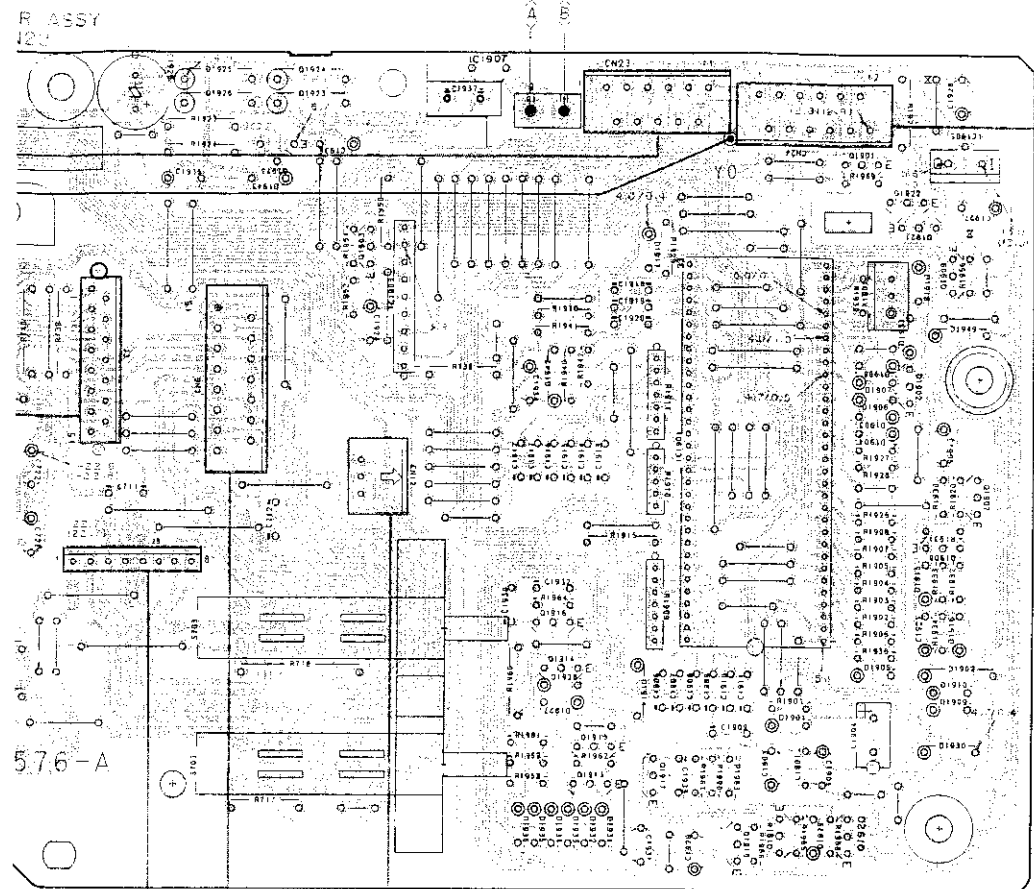
D



IC1907
IC1904 Q1904
IC1902
Q1923 IC1905 Q1901
Q1922
Q1921
Q1903 Q1909
IC1903
Q1902
IC1901
Q1907
Q1908
Q702
Q704 Q1916
Q703 Q1914
Q701
Q1915 IC1904
Q1913 Q1917
Q1918 Q1920
Q1919

NOTE
 1. TH
 2. TH
 W

P.C.B



- IC1907
- IC1904 Q1904
- IC1902
- Q1923 IC1905 Q1901
- Q1922
- Q1921
- Q1903 Q1909
- IC1903
- Q1902
- IC1901
- Q1907
- Q1908
- Q702
- Q704 Q1916
- Q703 Q1914
- Q701
- Q1915 IC1904
- Q1913 Q1917
- Q1918 Q1920
- Q1919

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

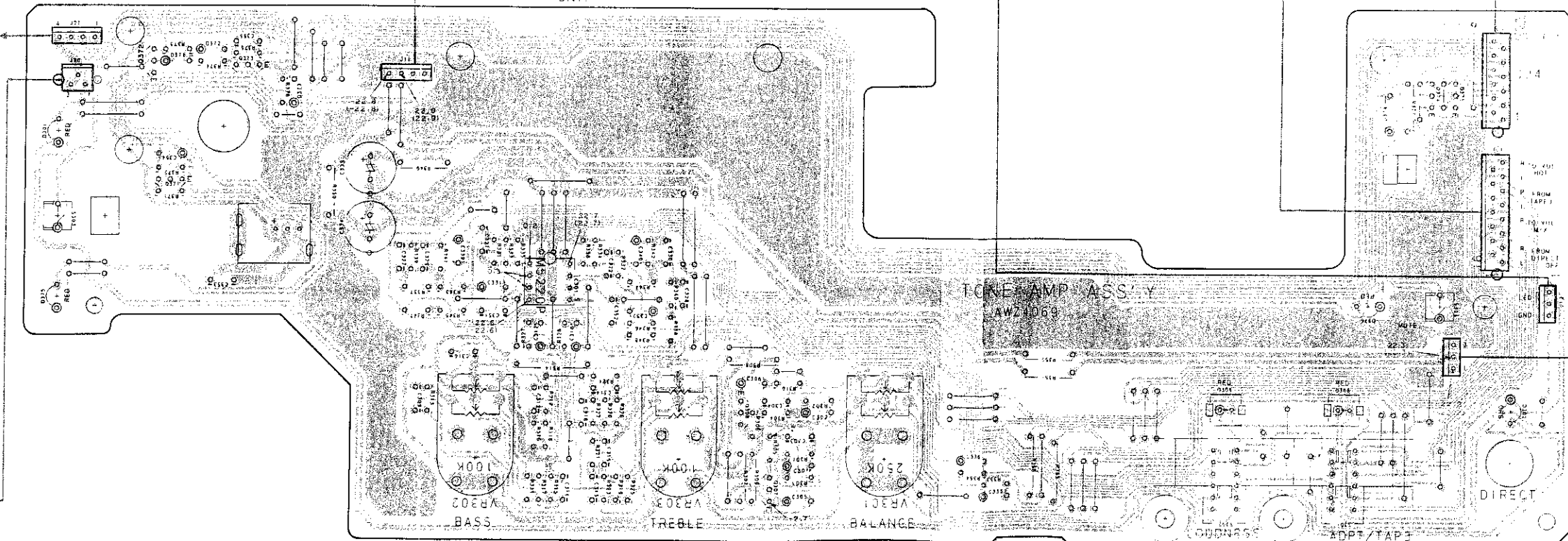
3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊕ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

TO VR ASSY
CN3

TO SUB
TRANS
ASSY
CN2

TONE AMP ASSY (AWZ4069)

TO POWER SUPPLY ASSY
CN11



- Q372
- Q373
- Q374
- Q375

Q371

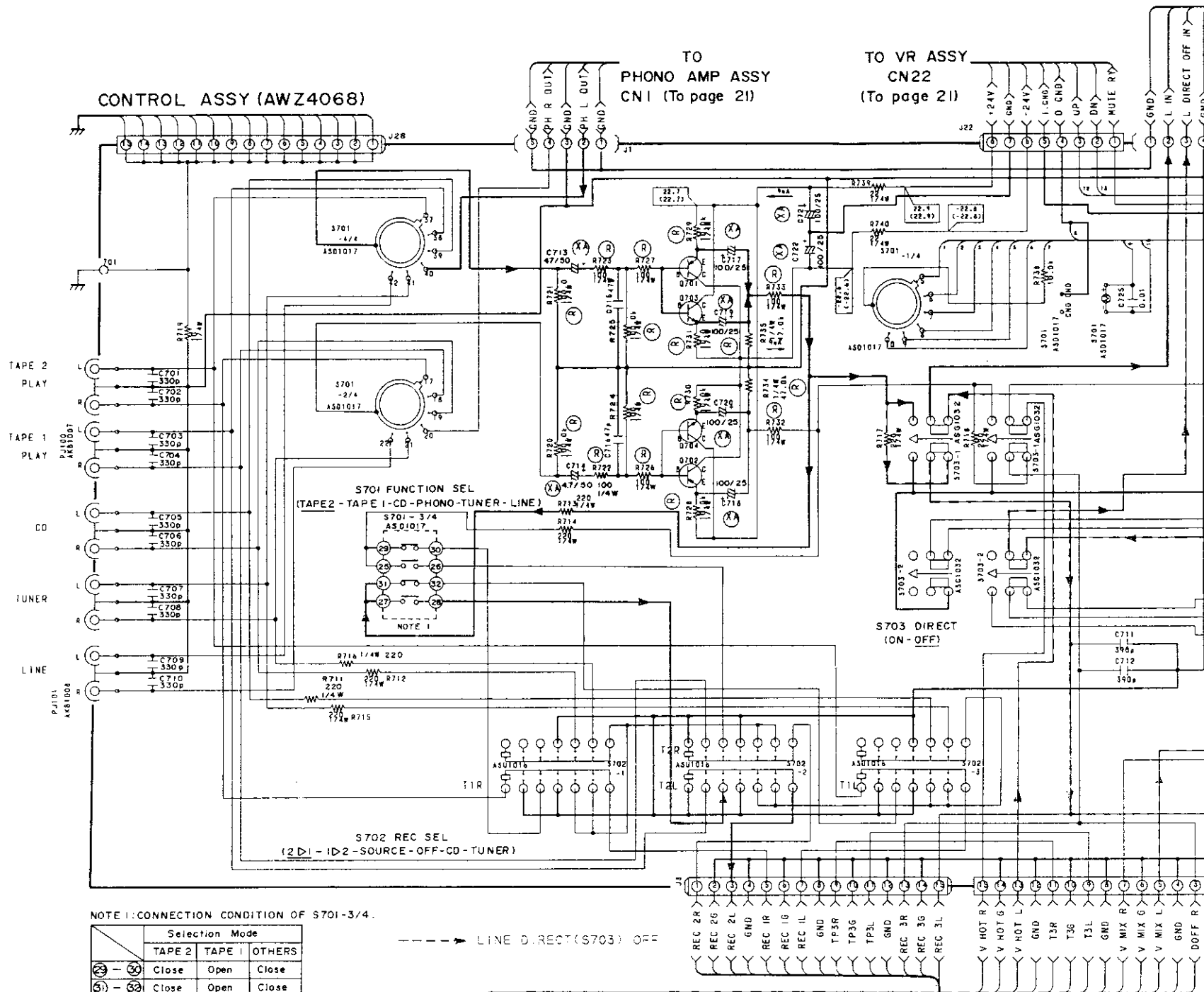
IC301

TO PHONO AMP ASSY
CN2

- VR301
- VR302
- VR303

Q308

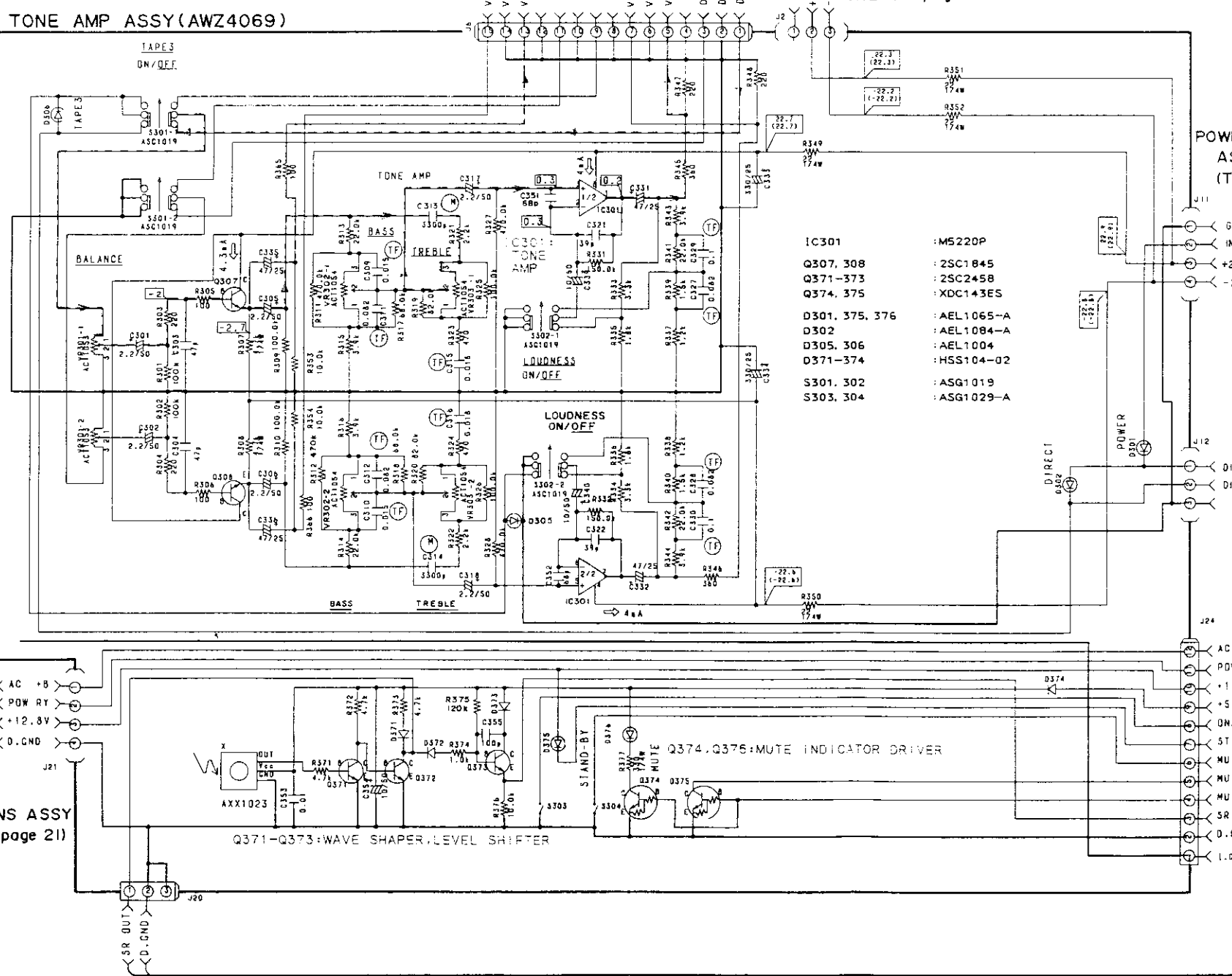
Q307



NOTE 1: CONNECTION CONDITION OF S701-3/4.

Selection Mode	Selection Mode		
	TAPE 2	TAPE 1	OTHERS
① - ②	Close	Open	Close
③ - ④	Close	Open	Close
⑤ - ⑥	Open	Close	Close
⑦ - ⑧	Open	Close	Close

----- LINE DIRECT (S703) OFF



A

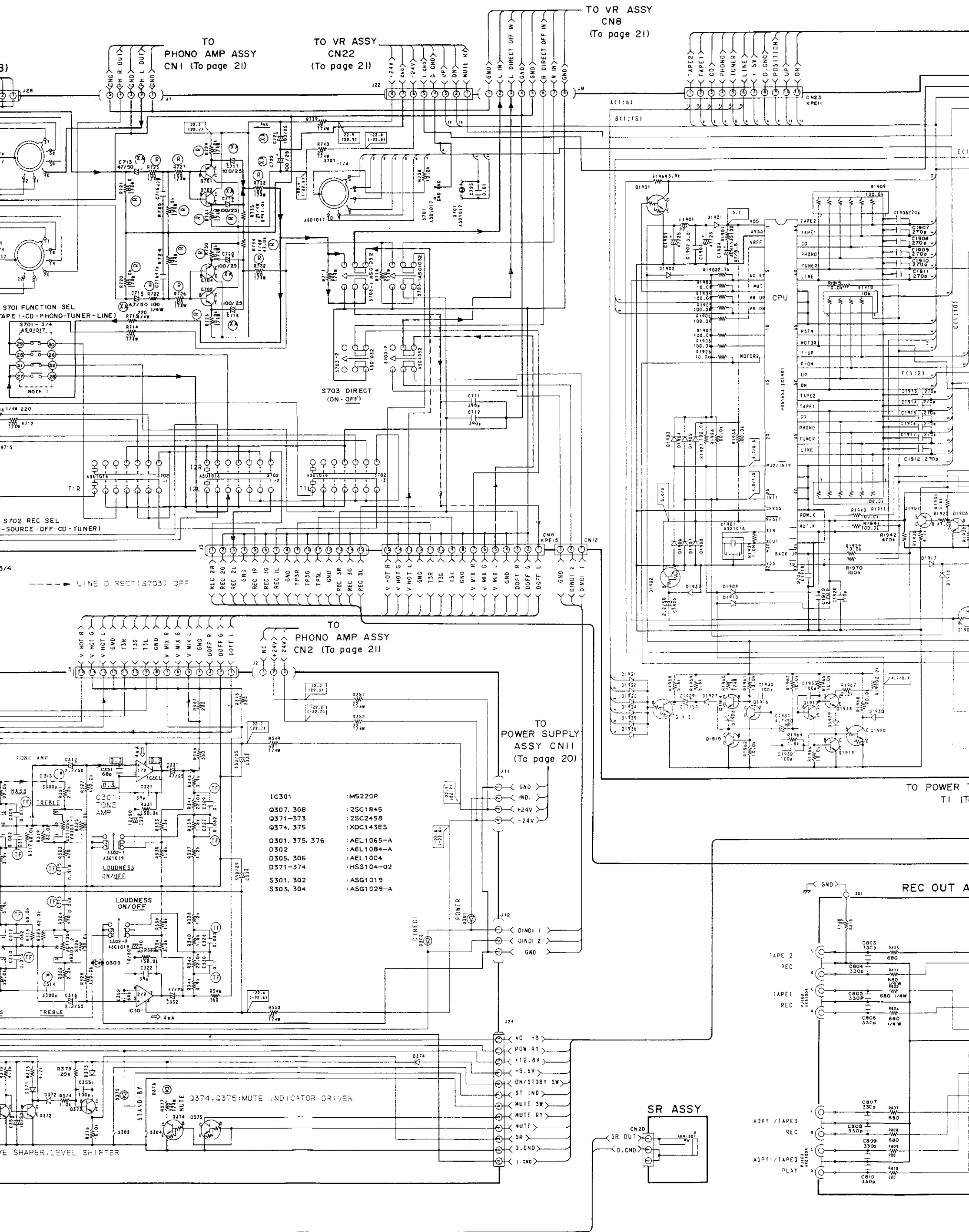
B

C

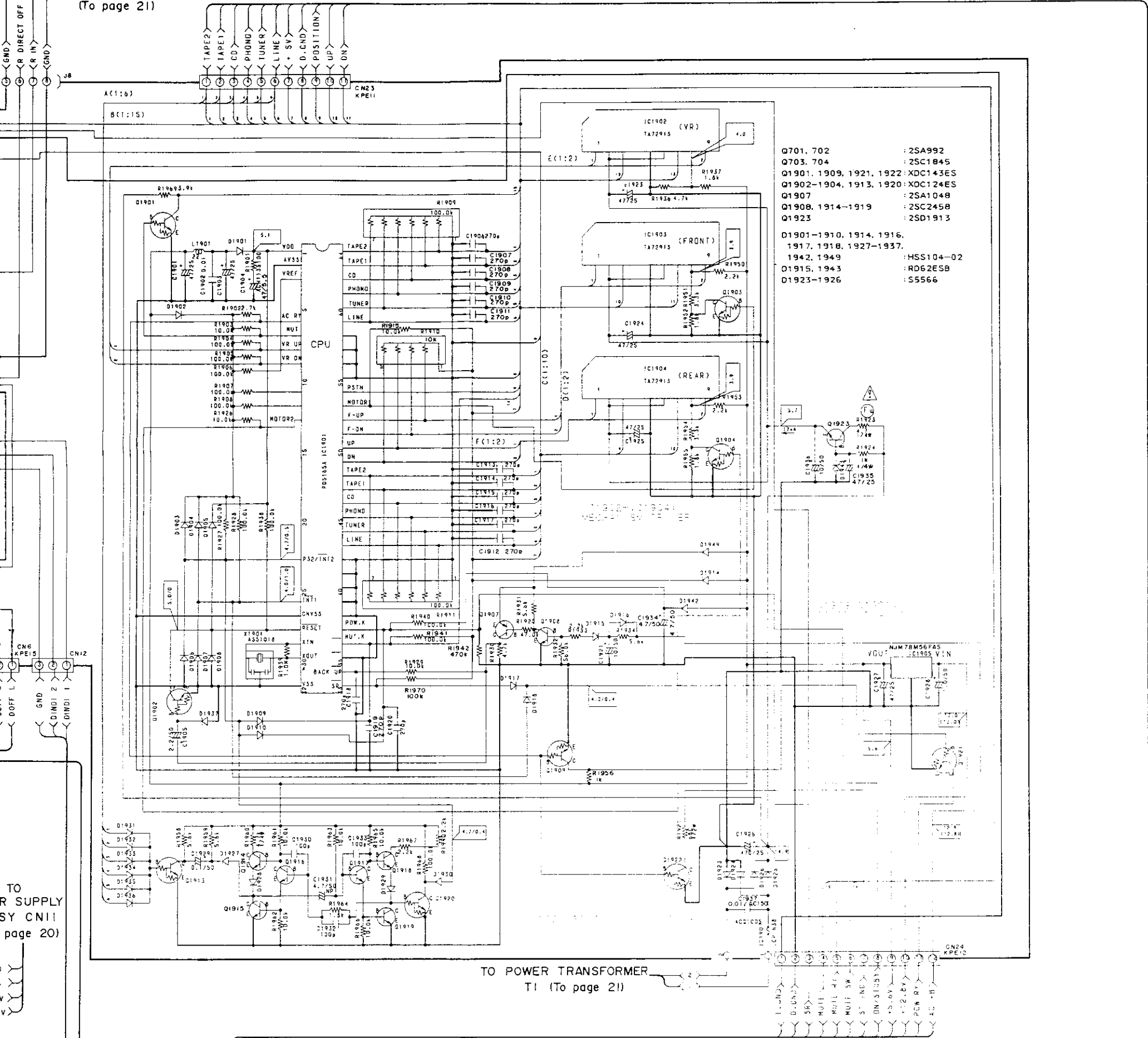
D

E

F



TO VR ASSY
CN8
(To page 21)

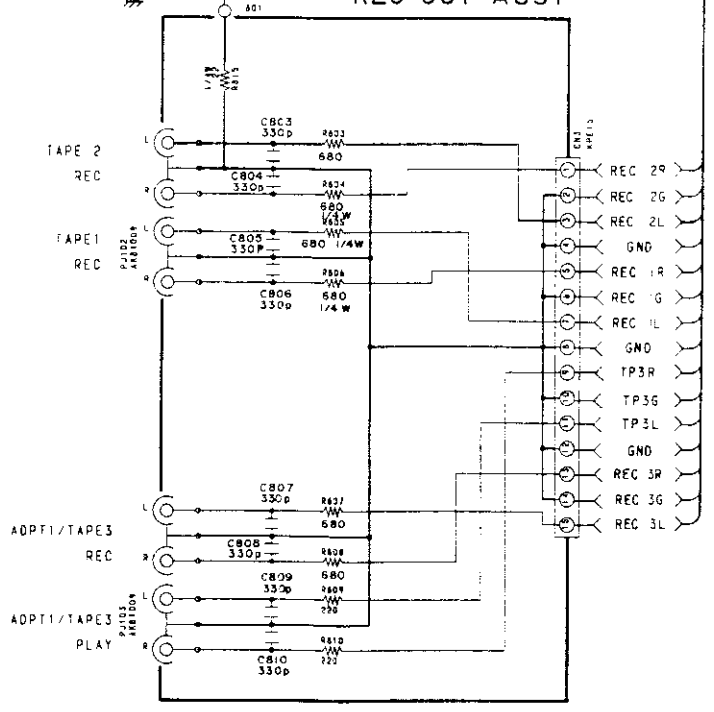


- Q701, 702 : 2SA992
- Q703, 704 : 2SC1845
- Q1901, 1909, 1921, 1922 : XDC143ES
- Q1902-1904, 1913, 1920 : XDC124ES
- Q1907 : 2SA1048
- Q1908, 1914-1919 : 2SC2458
- Q1923 : 2SD1913
- D1901-1910, 1914, 1916, 1917, 1918, 1927-1937, 1942, 1949 : HSS104-02
- D1915, 1943 : RD62ESB
- D1923-1926 : S5566

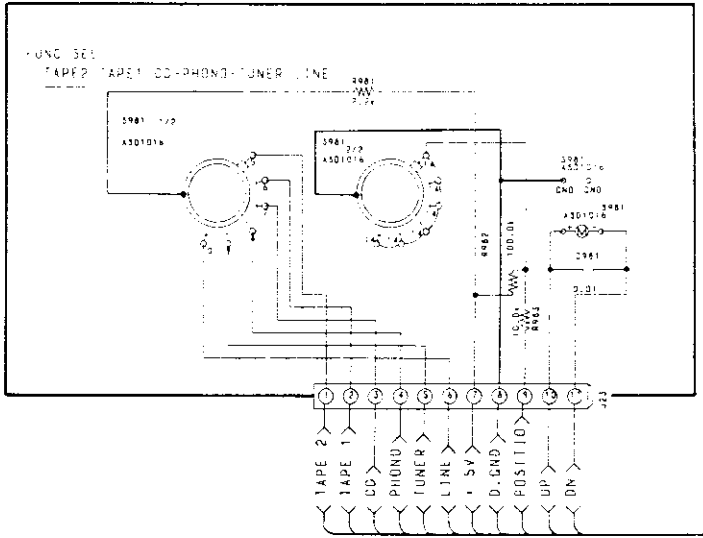
TO SUPPLY
SY CN11
page 20)

TO POWER TRANSFORMER
T1 (To page 21)

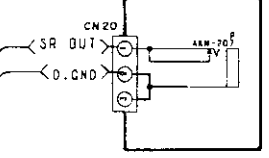
REC OUT ASSY



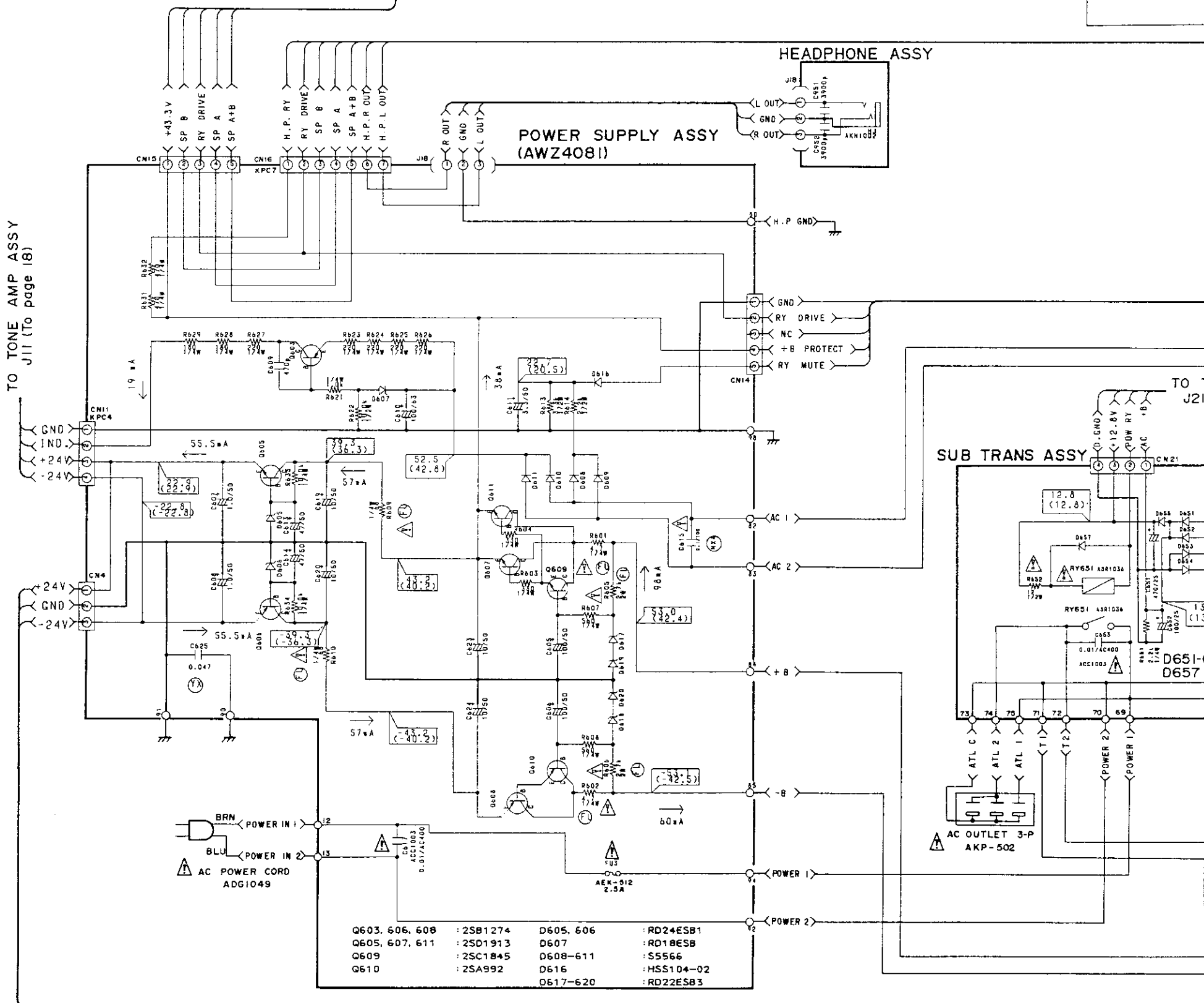
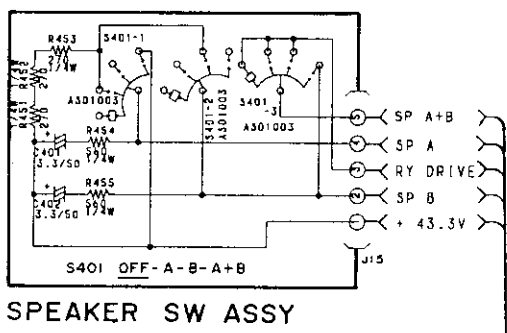
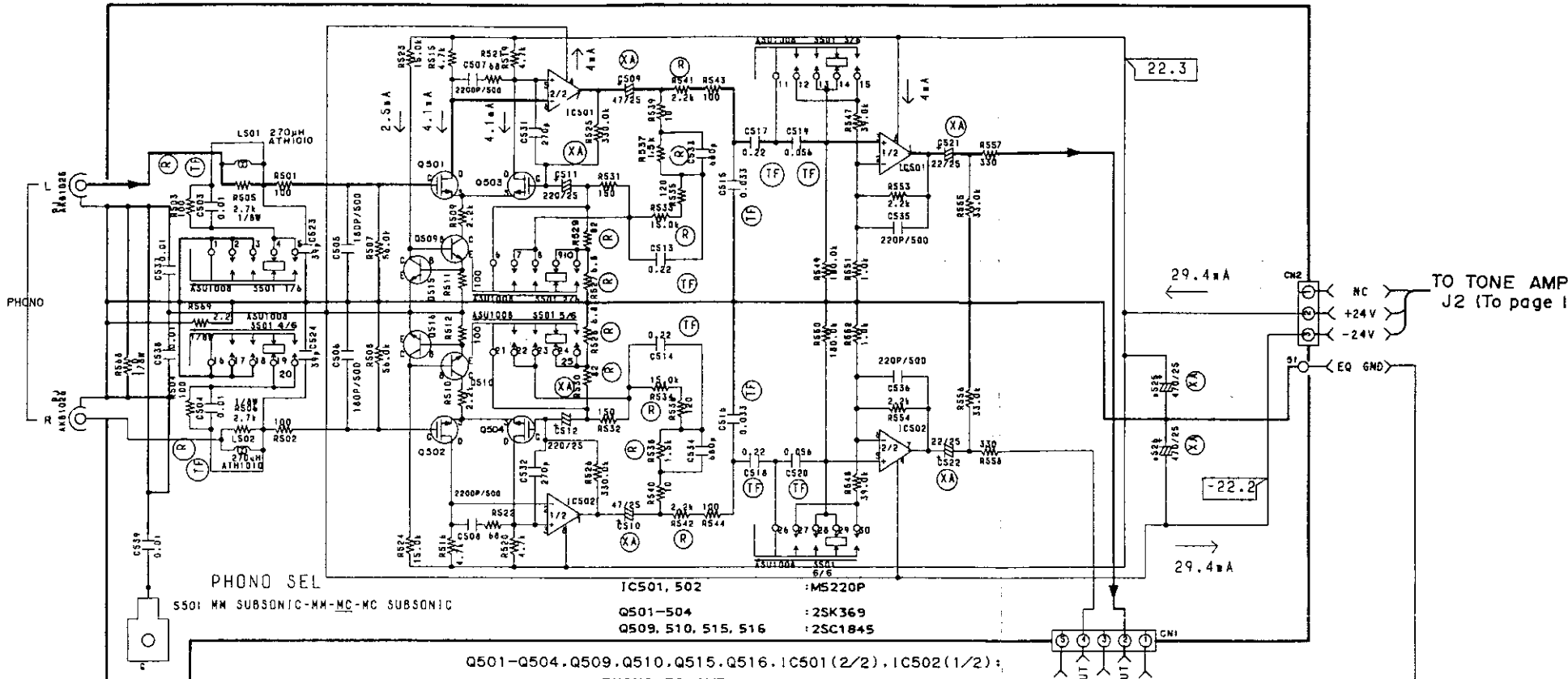
ROTARY FUNC ASSY

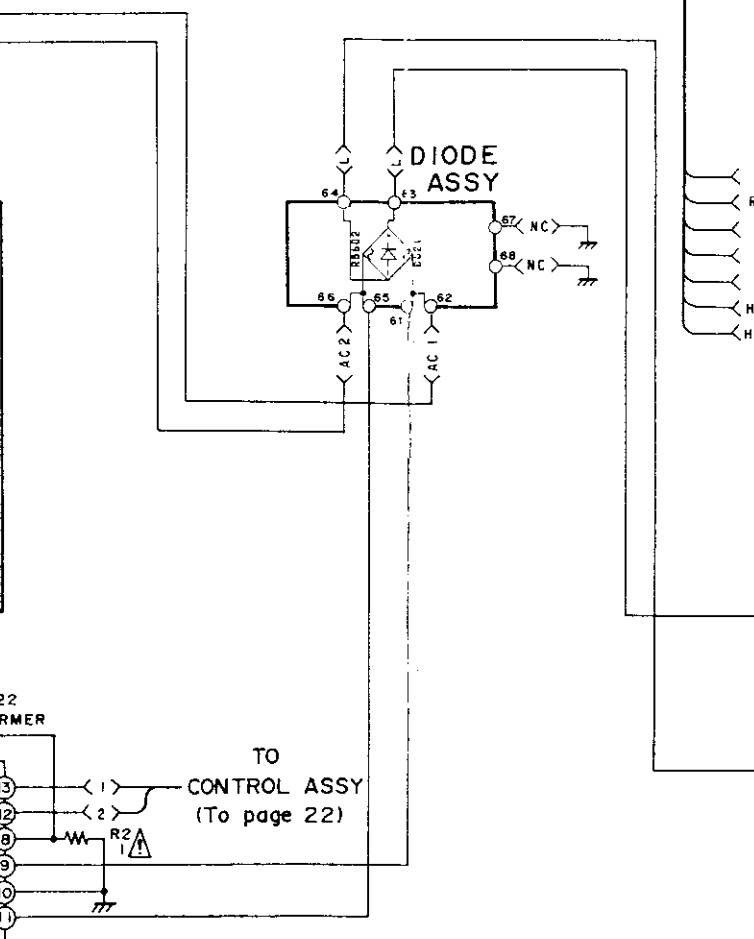
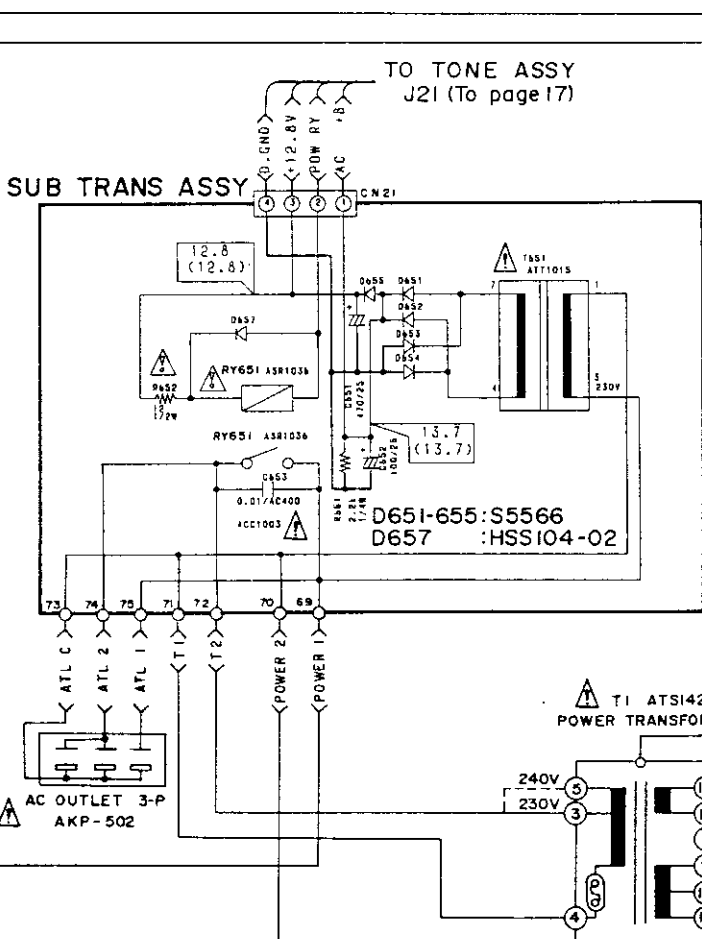
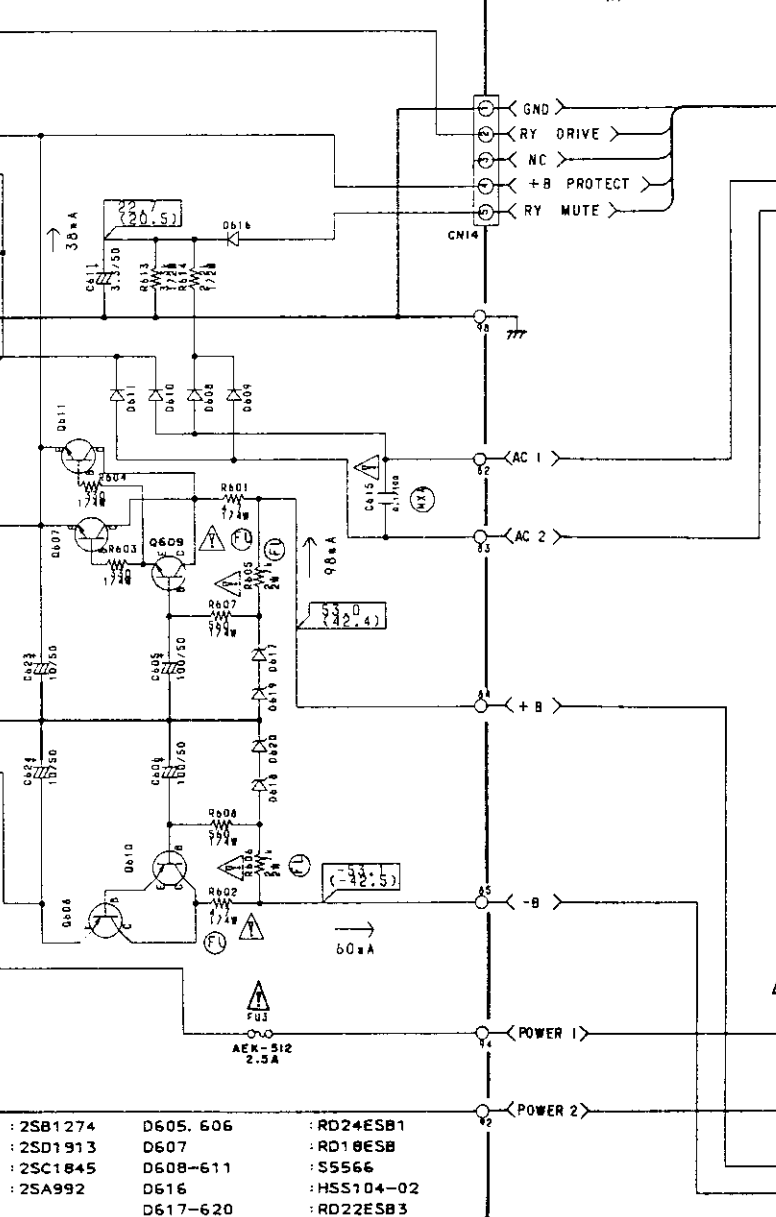
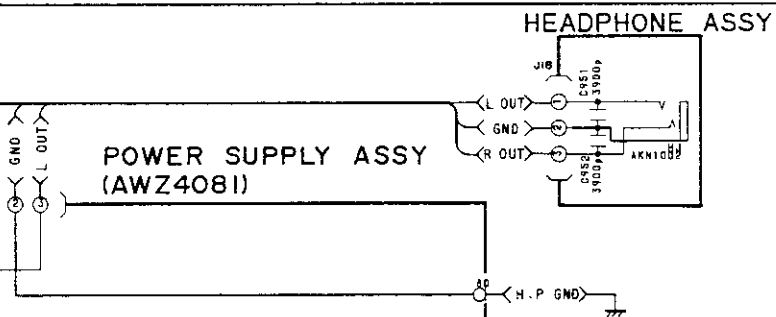
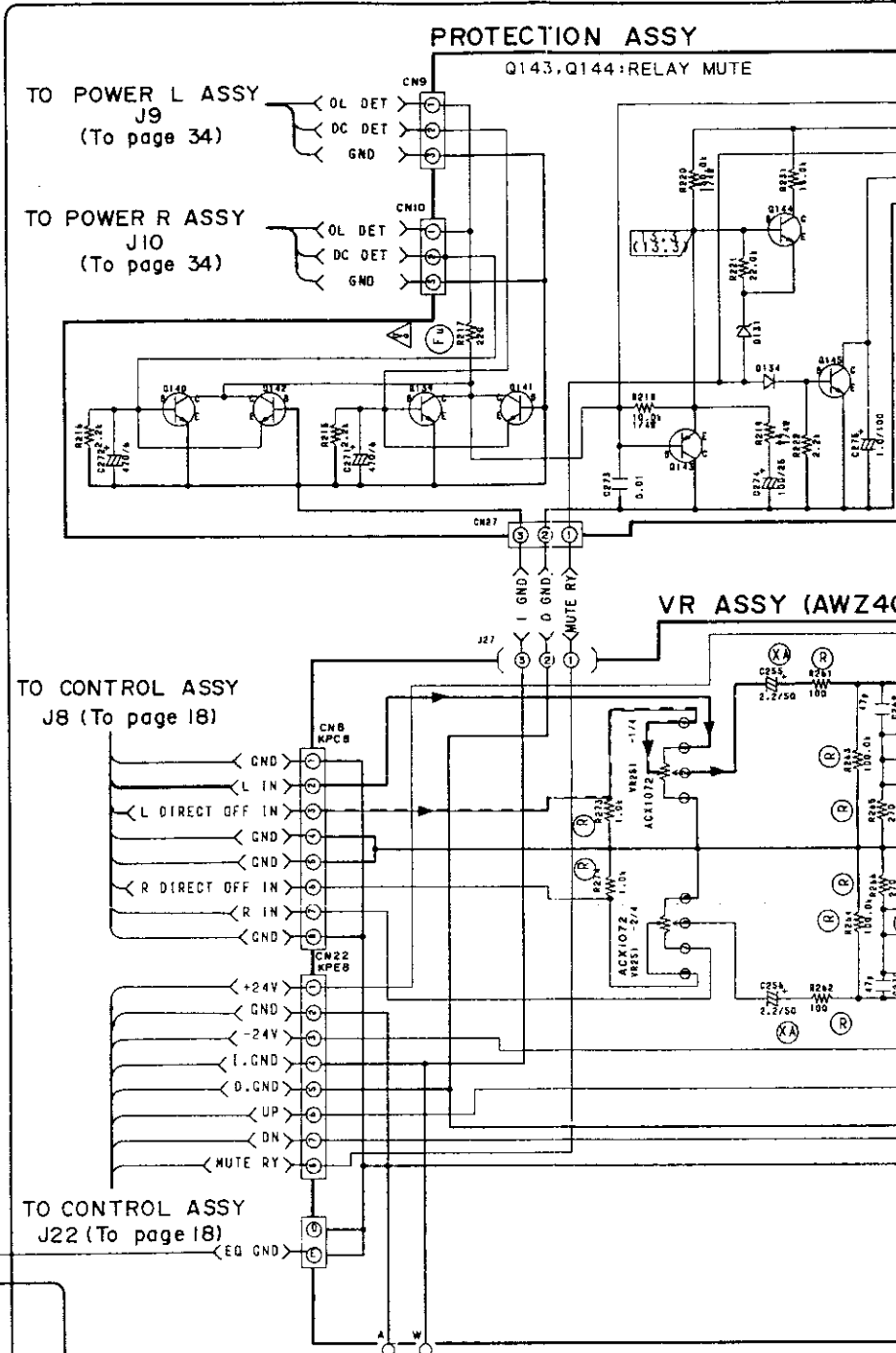
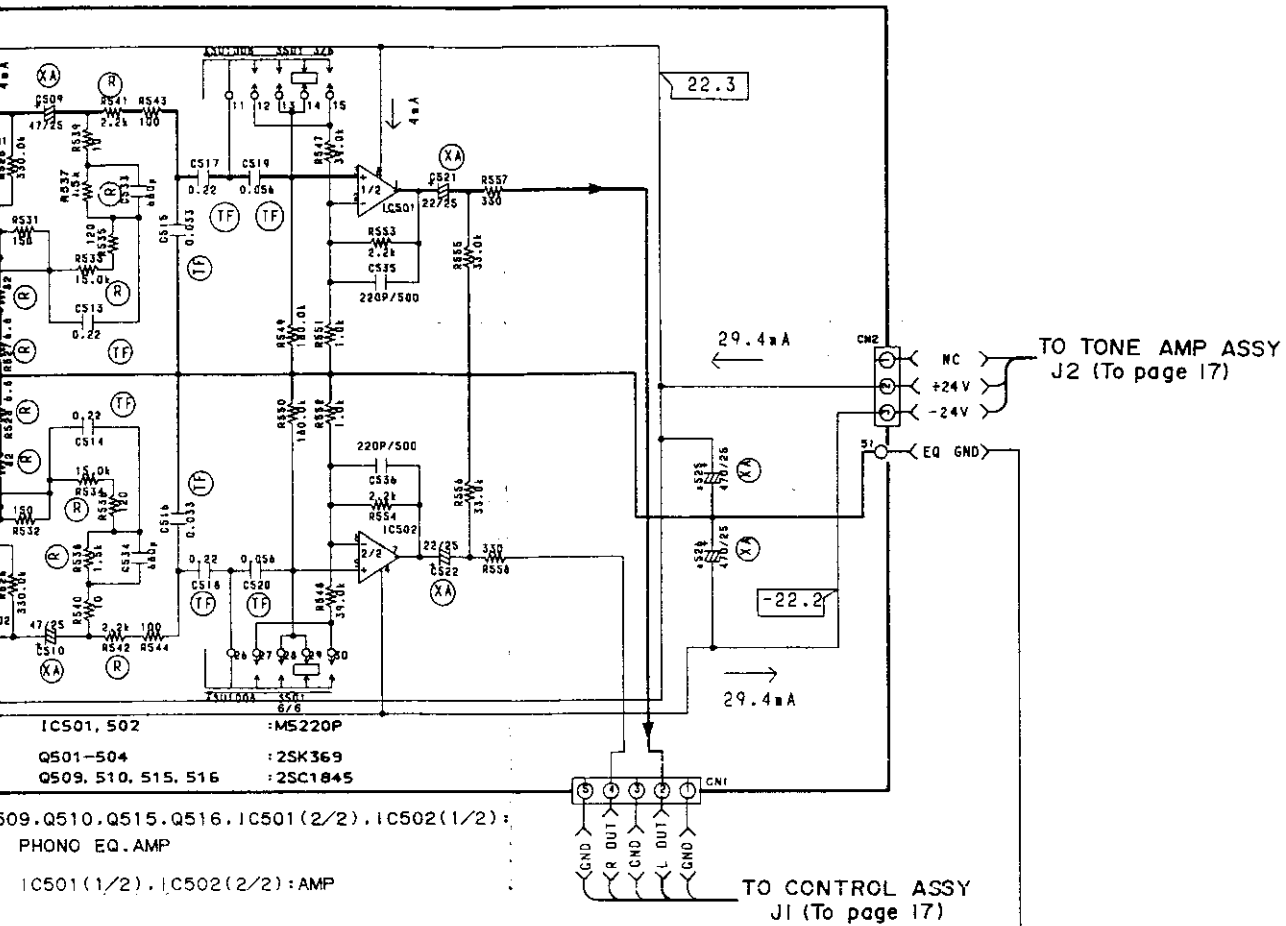


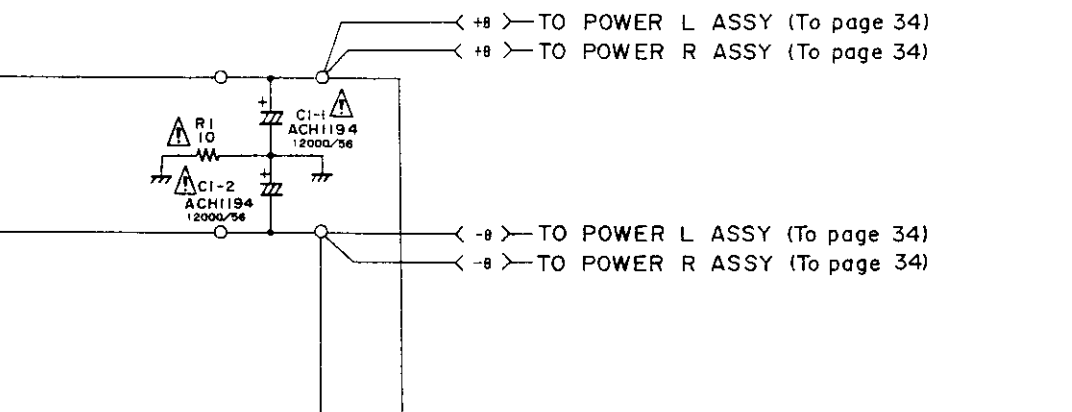
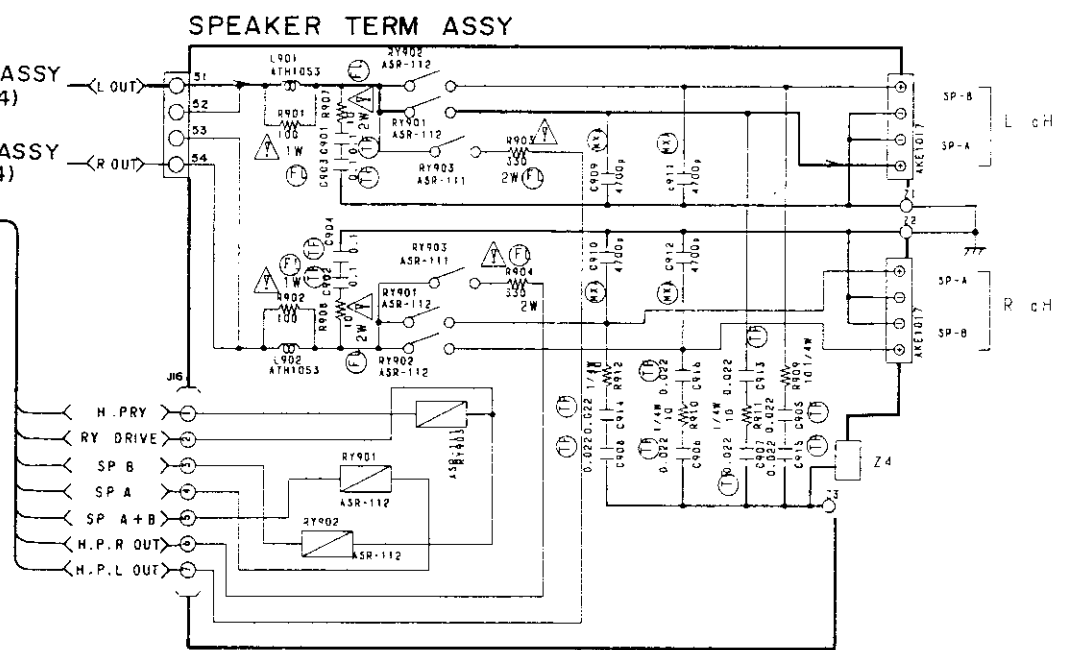
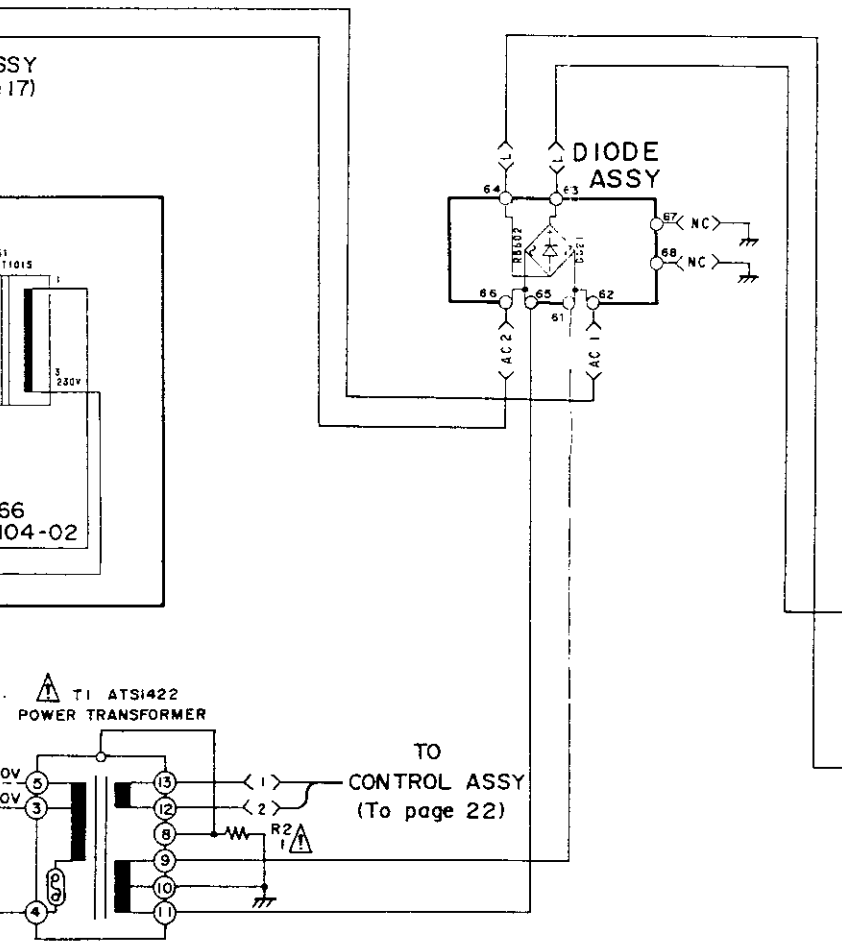
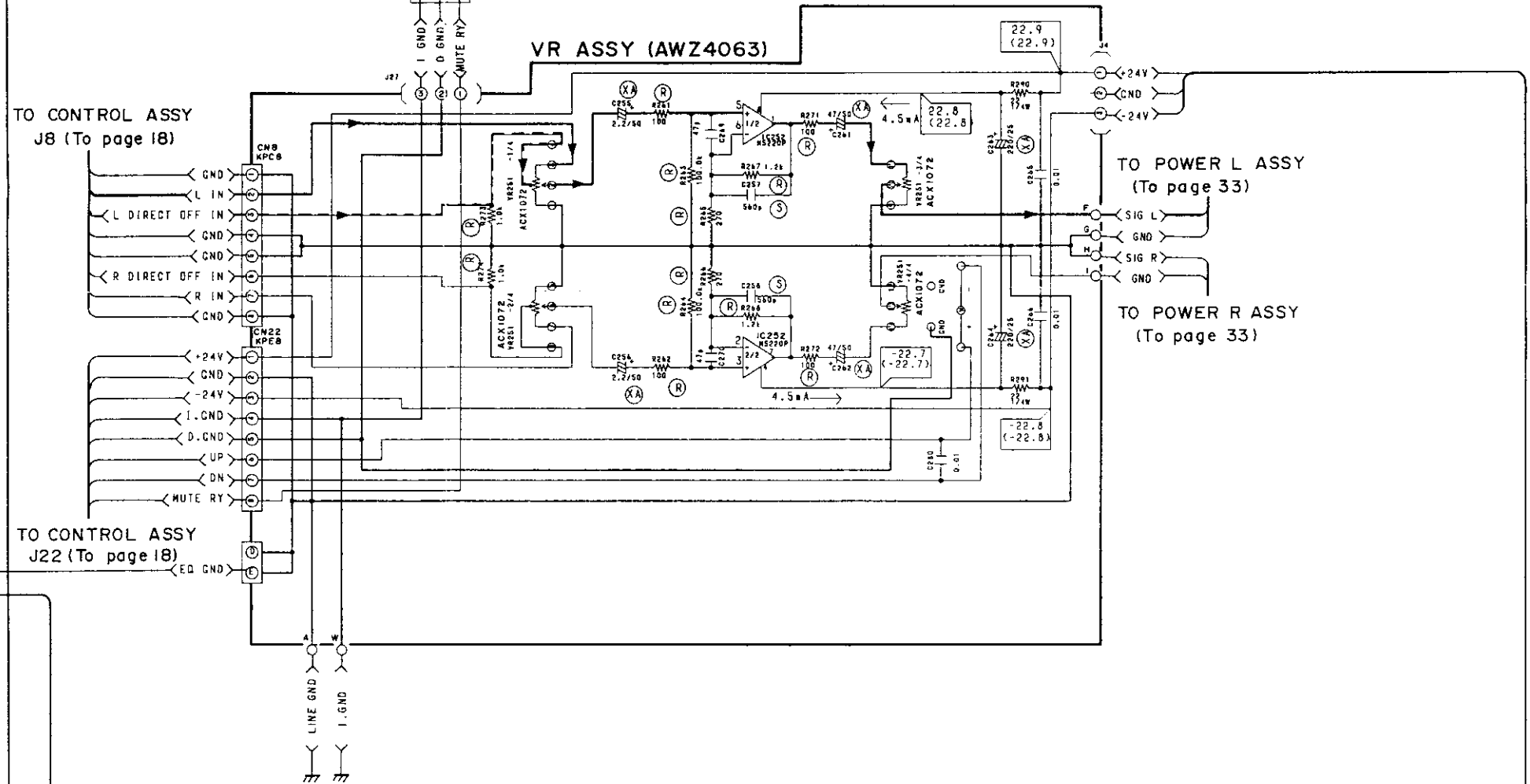
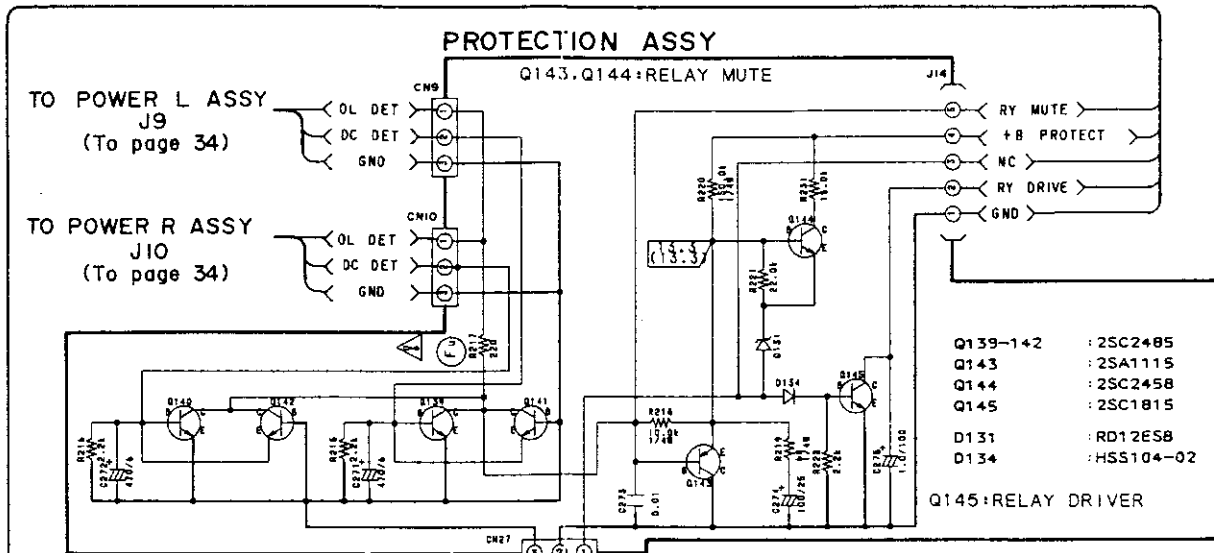
SR ASSY



PHONO AMP ASSY (AWZ3436)







A

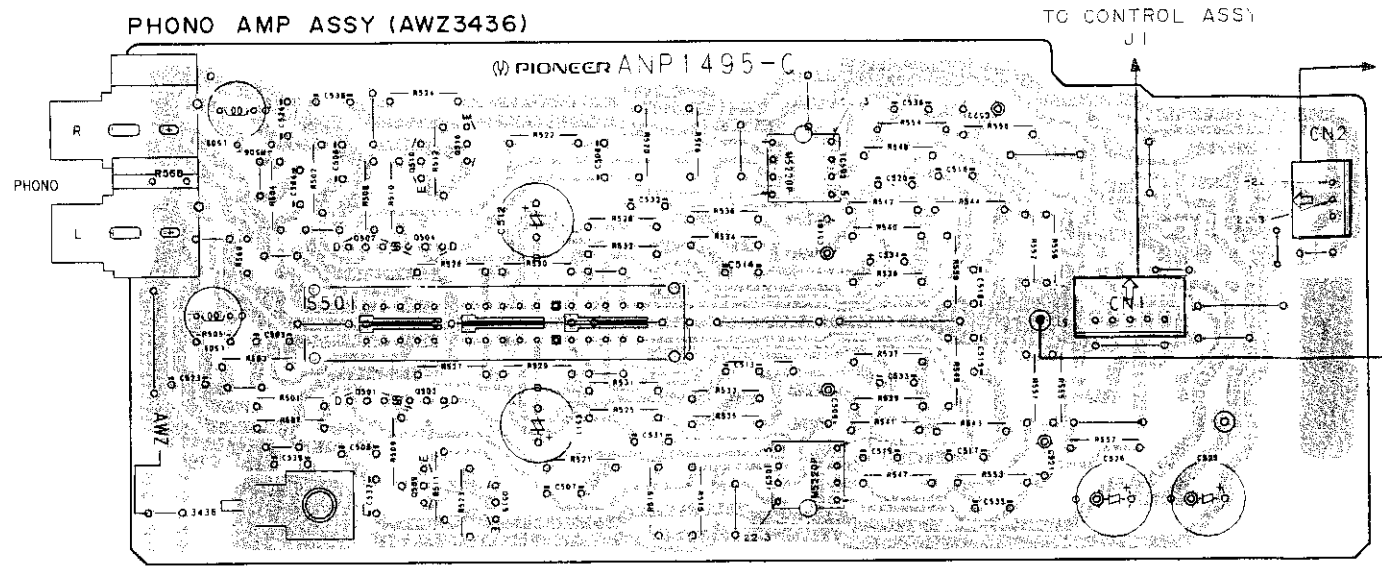
B

C

D

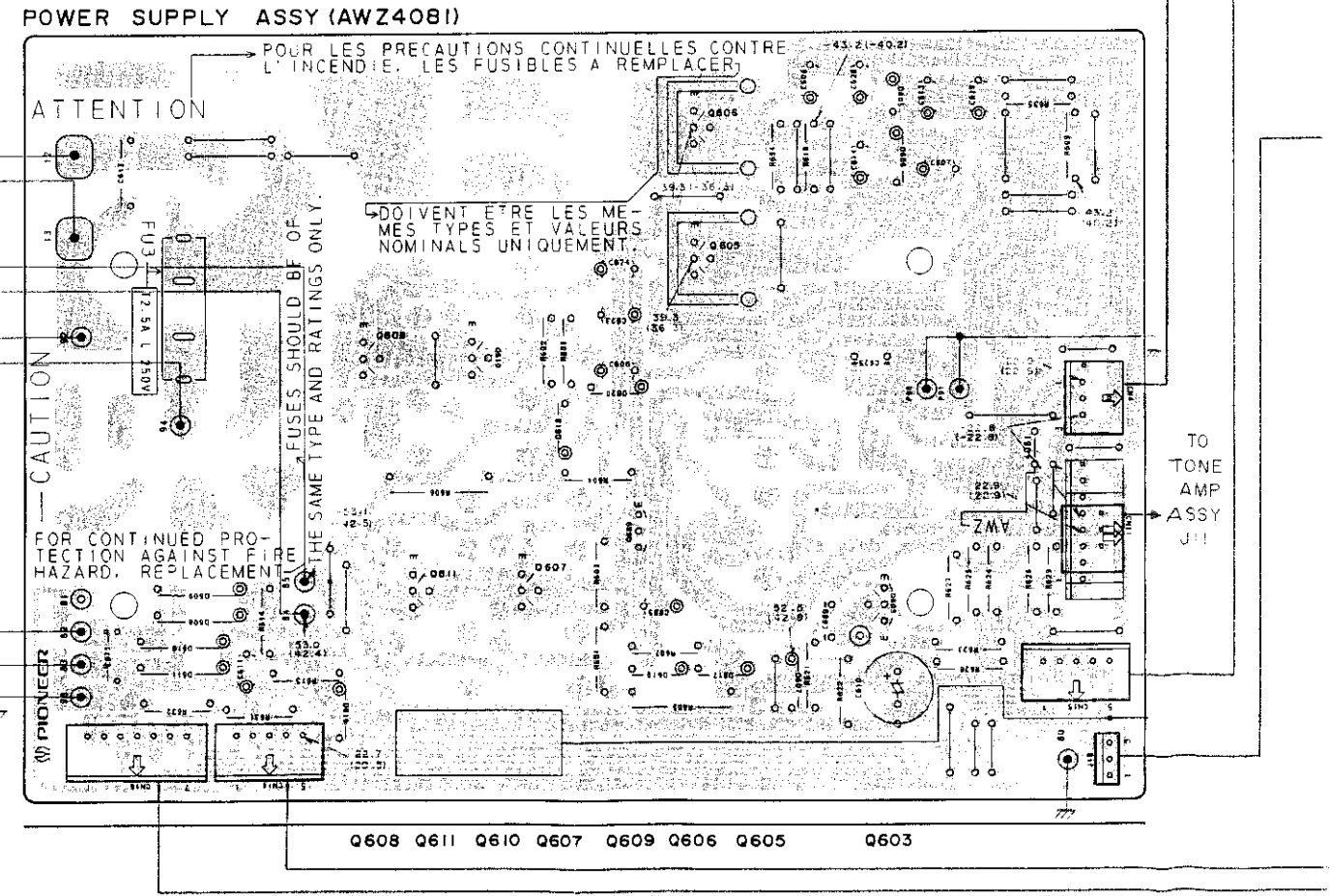
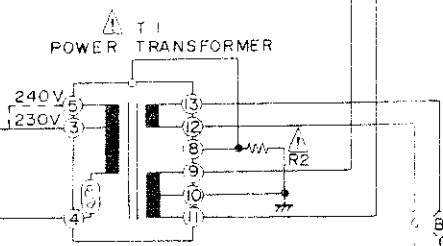
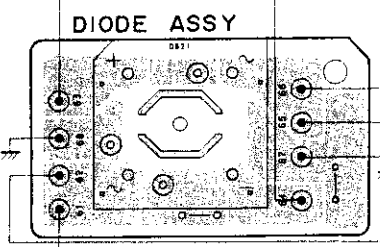
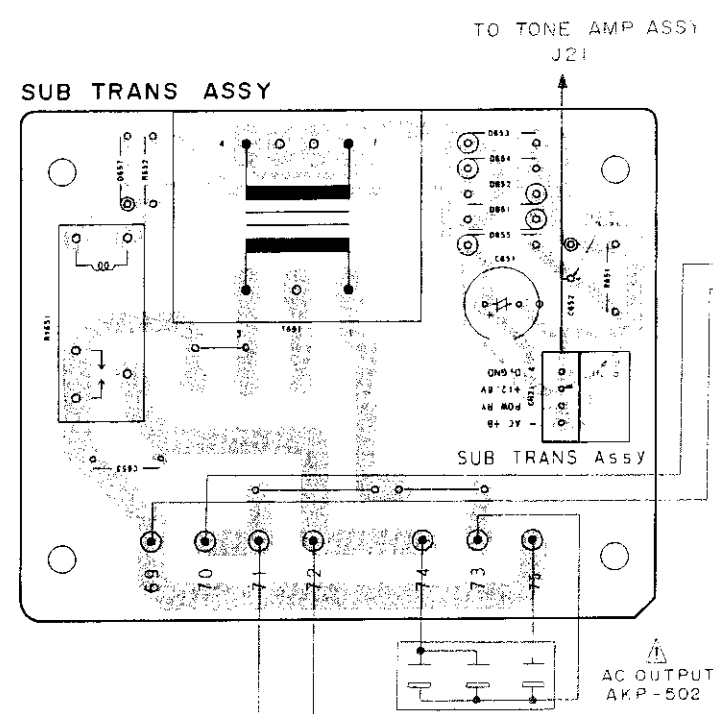
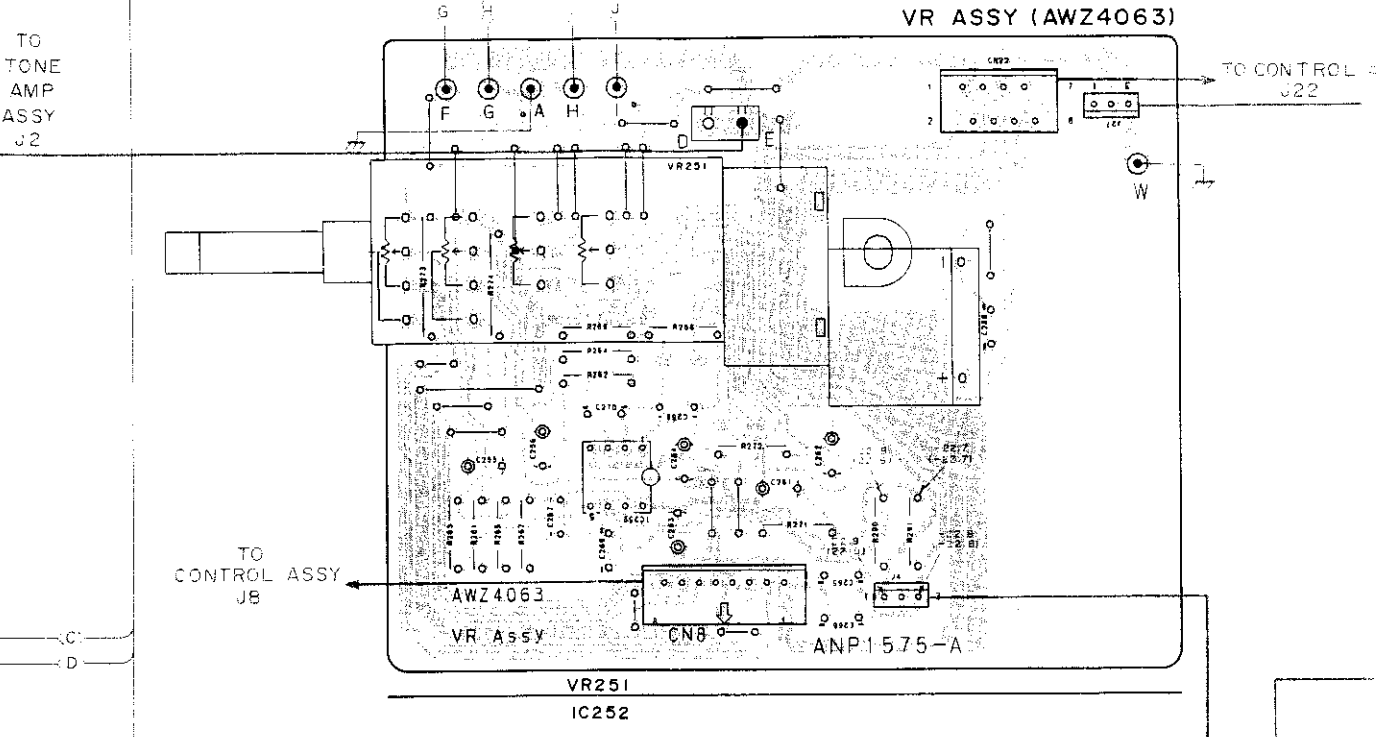
E

F



Q502 Q510 Q516
 Q501 Q504 Q515
 Q503
 Q509

IC501
 IC502

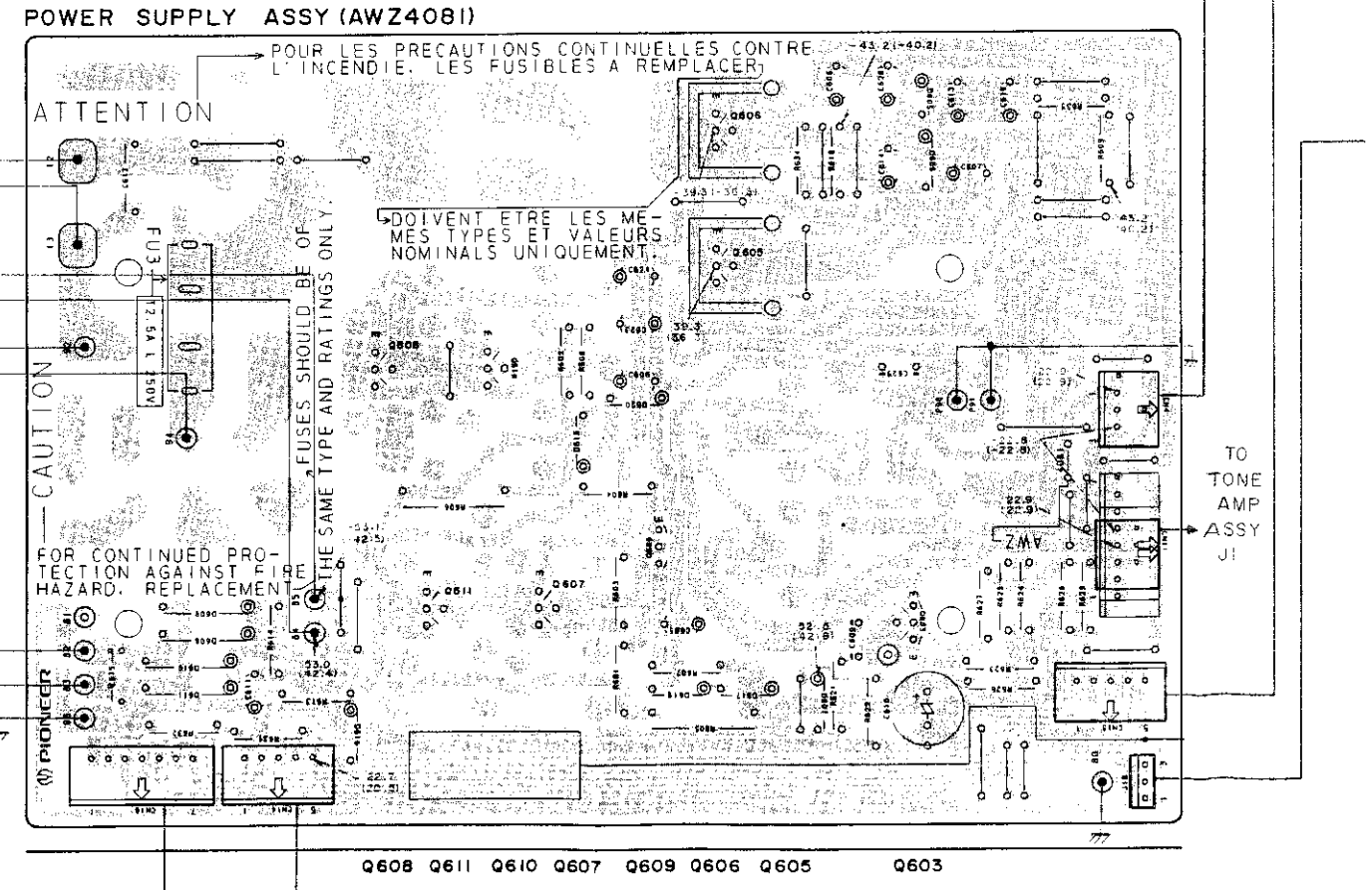
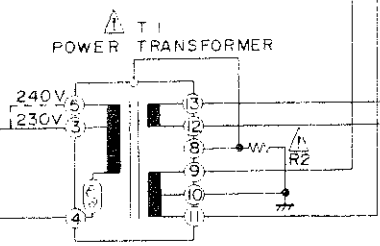
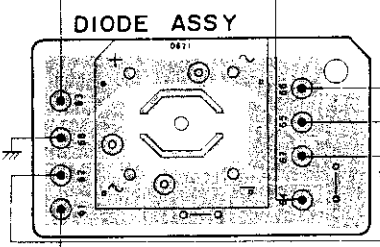
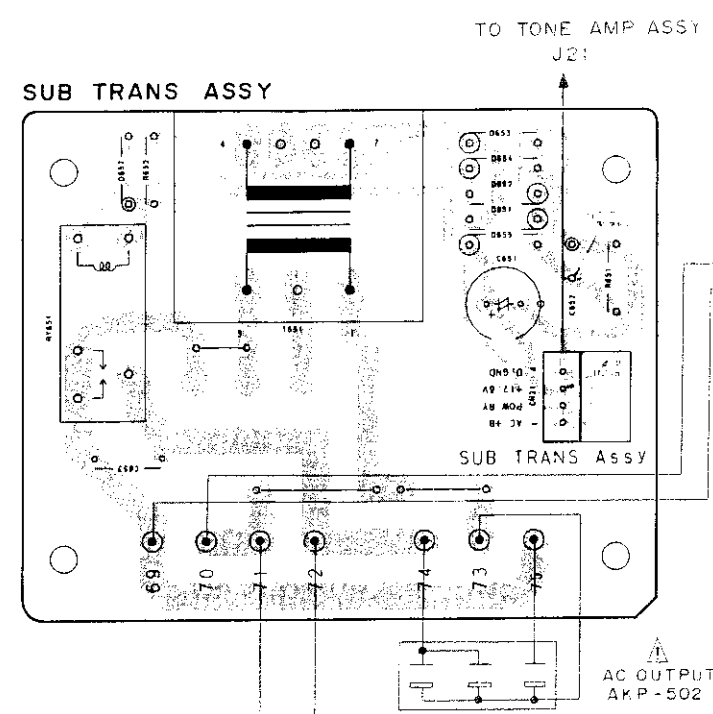
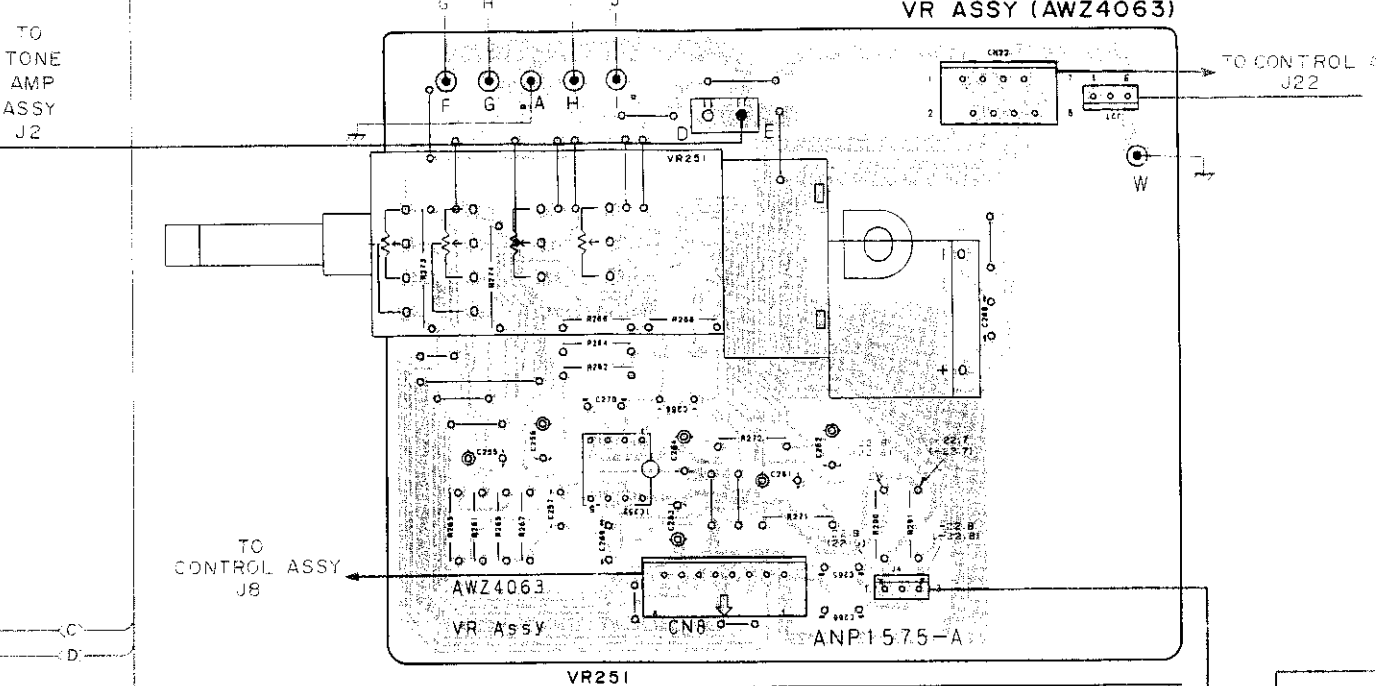
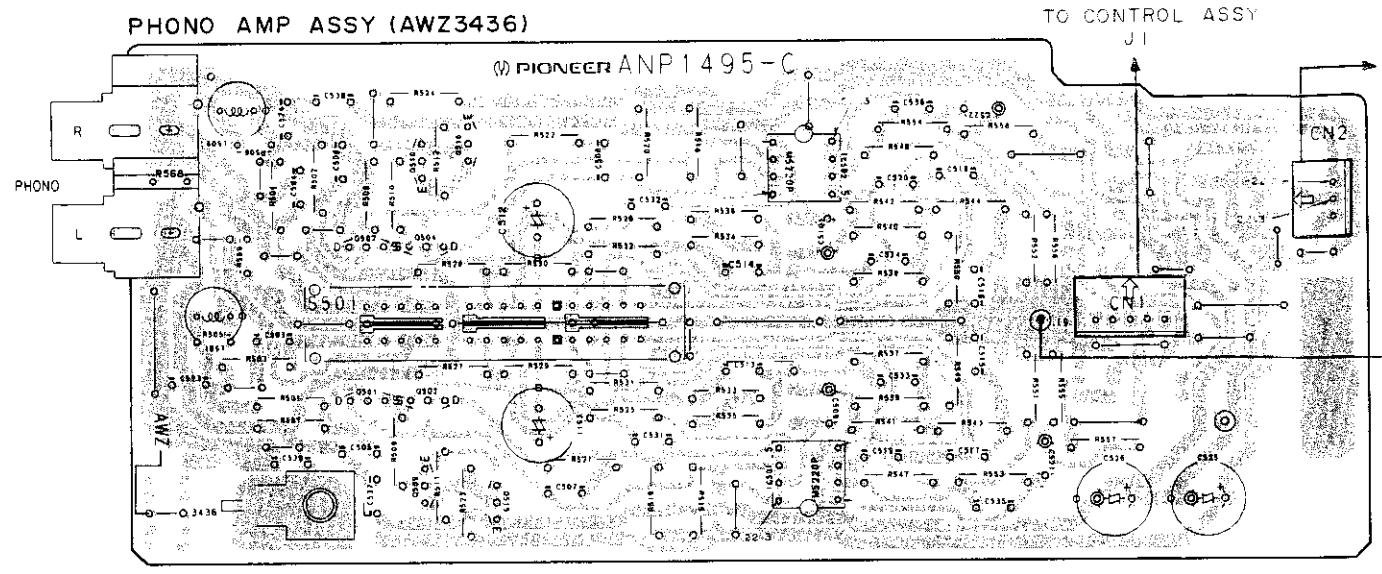


Line Voltage Selection
 Line voltage can be changed with the following steps.

1. Disconnect the AC power cord.
2. Remove the top cover.
3. Change the connection of the power transformer lead wire.

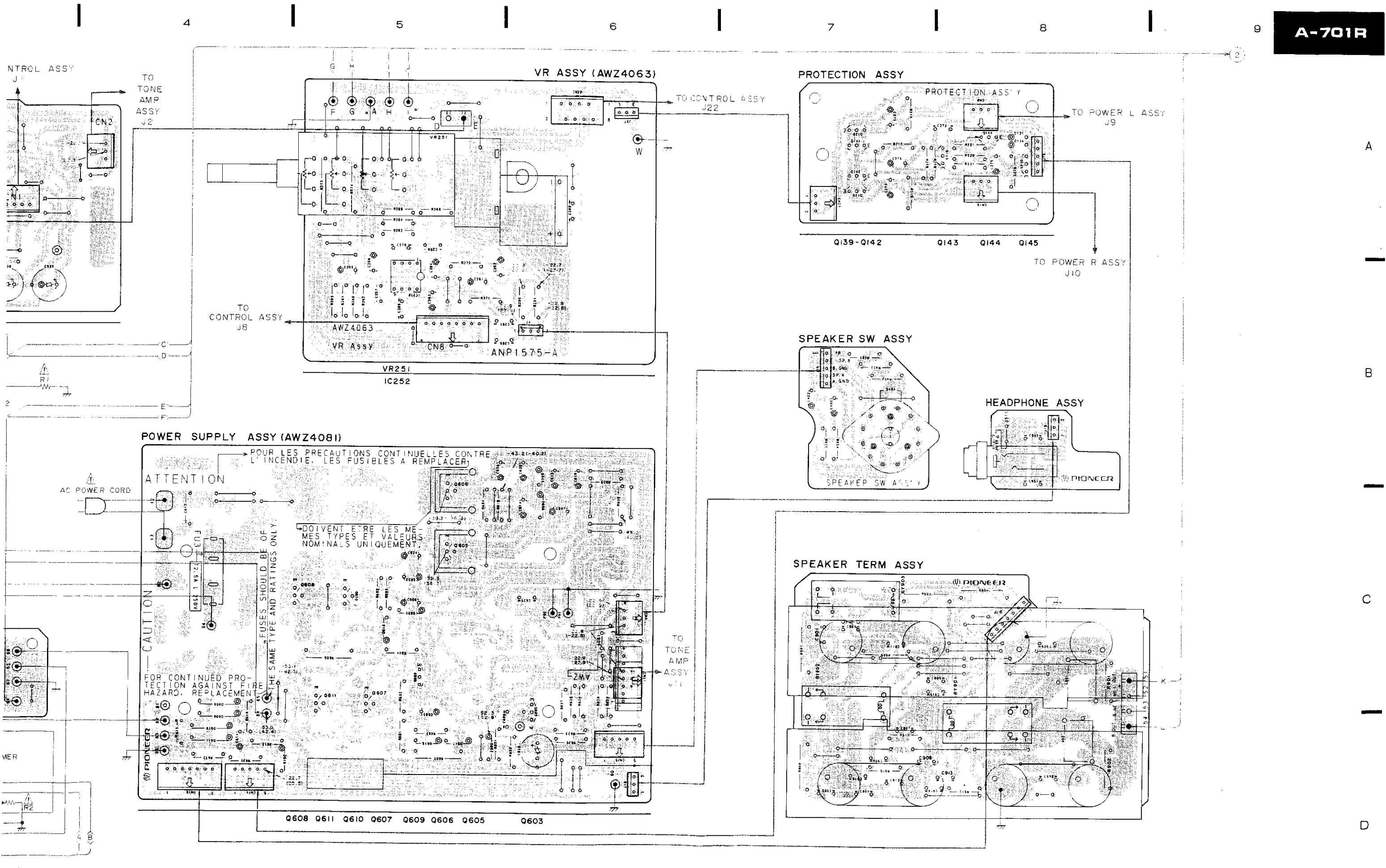
4. Stick the line voltage label on the rear panel.

Part No.	Description	
AAX-193	220 V label	----- 220 V-230 V
AAX-192	240 V label	————— 240 V



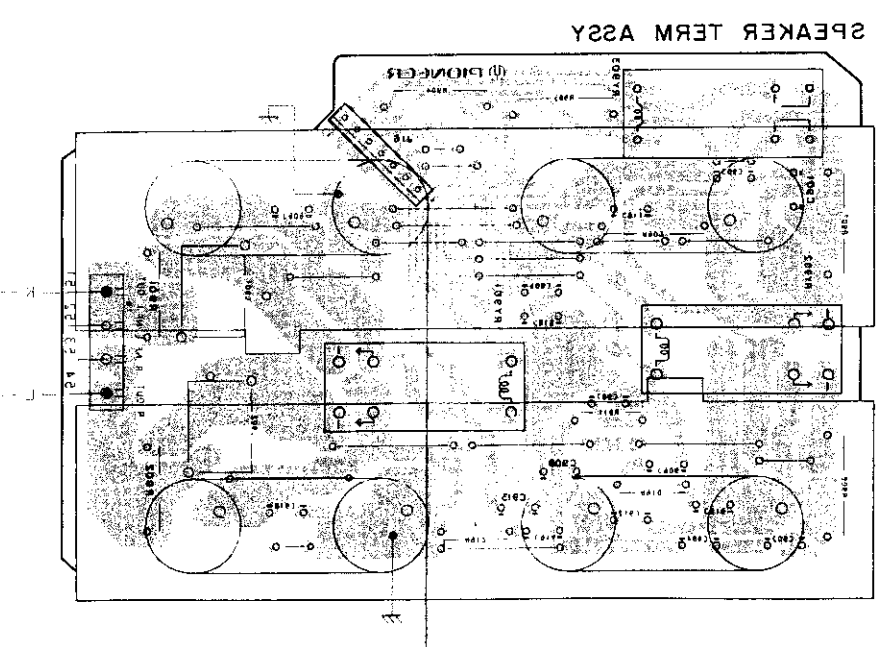
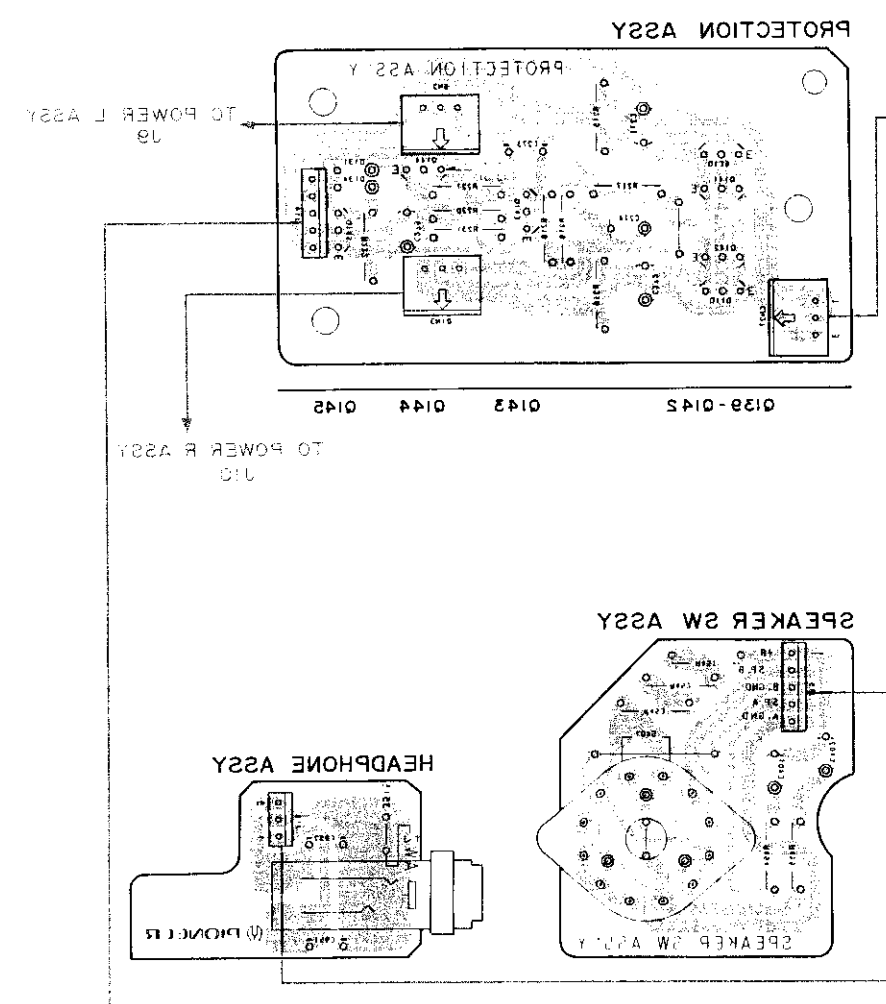
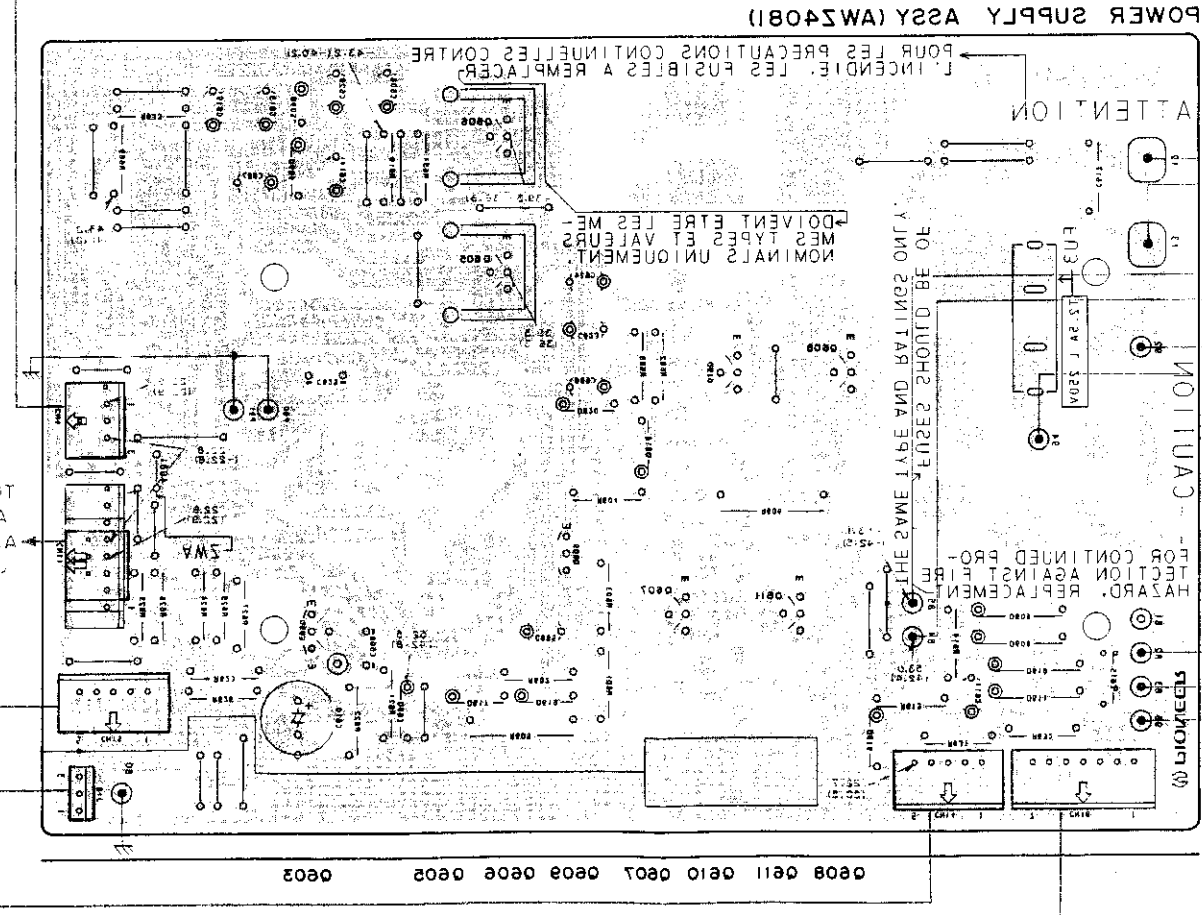
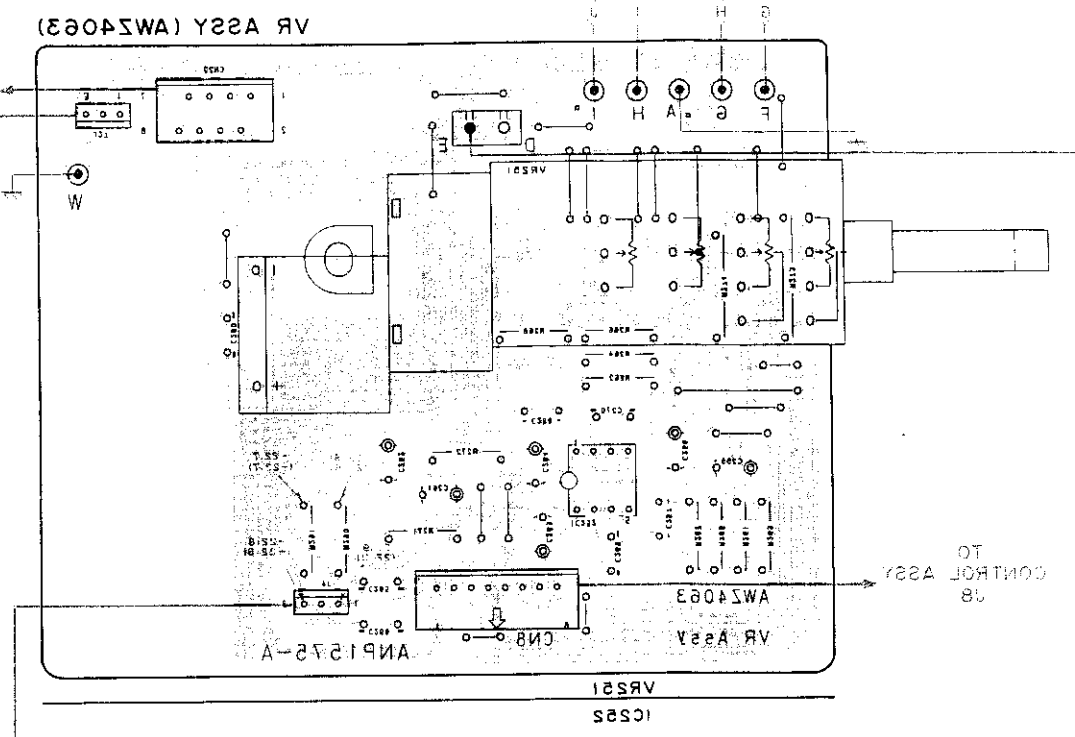
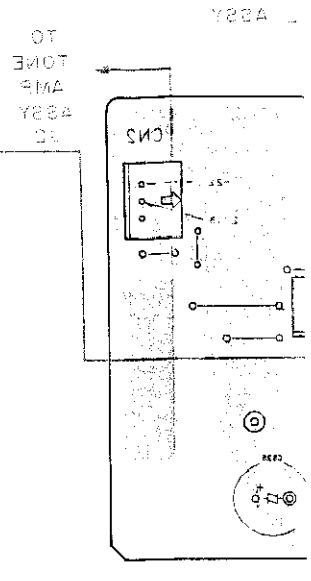
- Line Voltage Selection**
Line voltage can be changed with the following steps.
1. Disconnect the AC power cord.
 2. Remove the top cover.
 3. Change the connection of the power transformer lead wire.

4. Stick the line voltage label on the rear panel.
- | Part No. | Description |
|----------|-------------|
| AAX-193 | 220 V label |
| AAX-192 | 240 V label |
- 220 V-230 V
————— 240 V



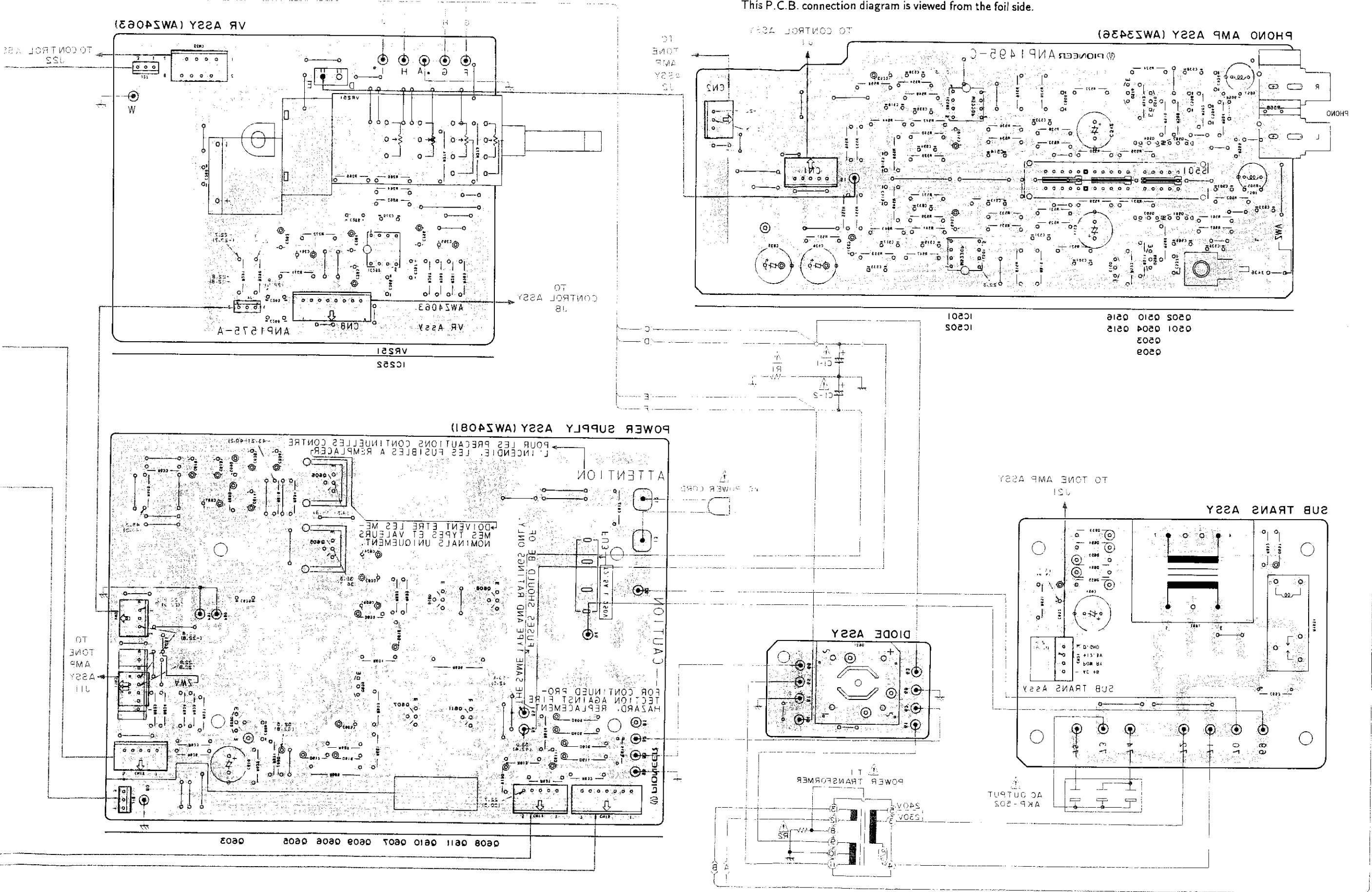
Panel.

220 V - 230 V
240 V



A
B
C
D

This P.C.B. connection diagram is viewed from the foil side.



A

B

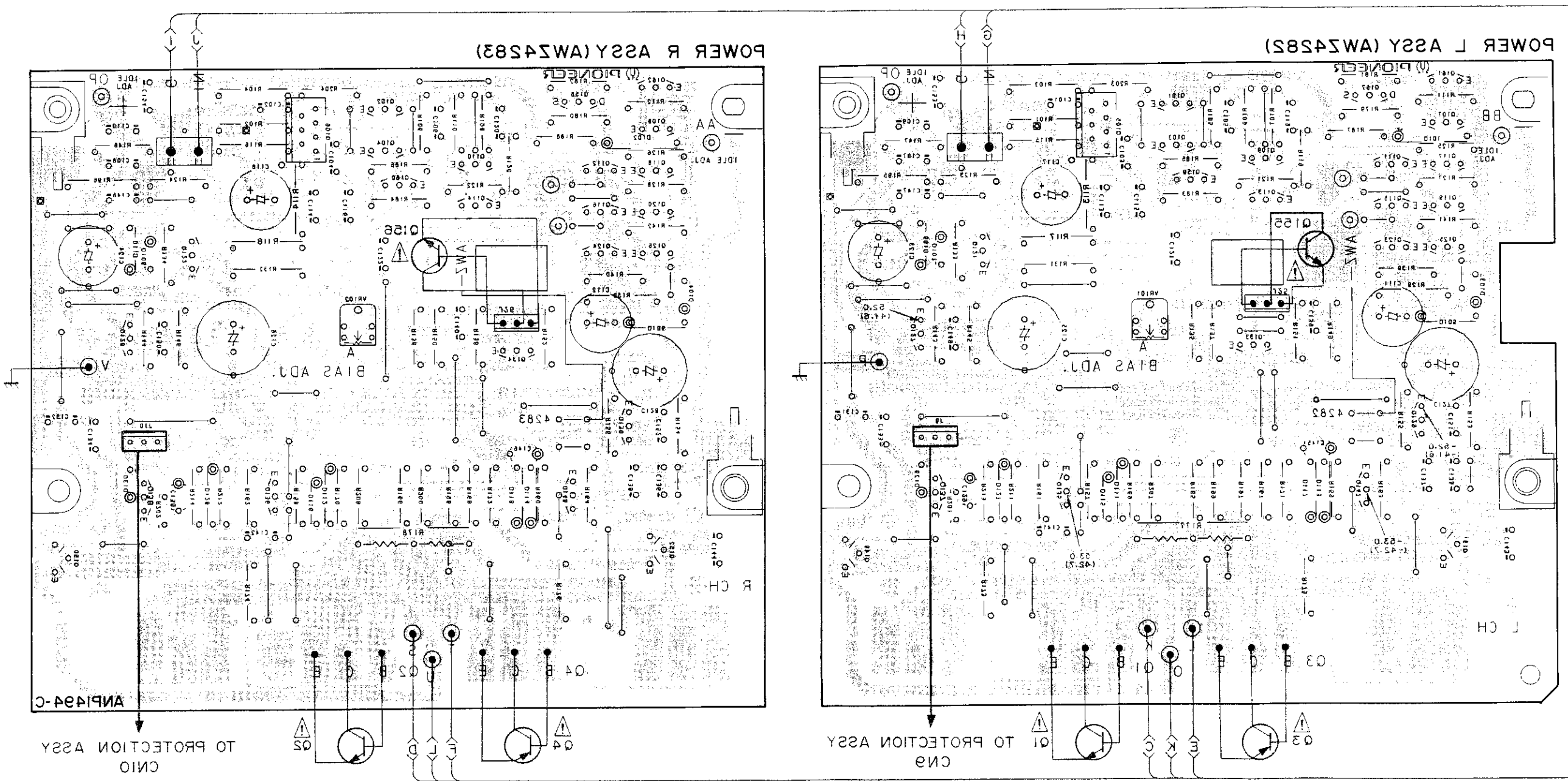
C

D

1
2
3
4
5

1
2
3
4
5

This P.C.B. connection diagram is viewed from the foil side.

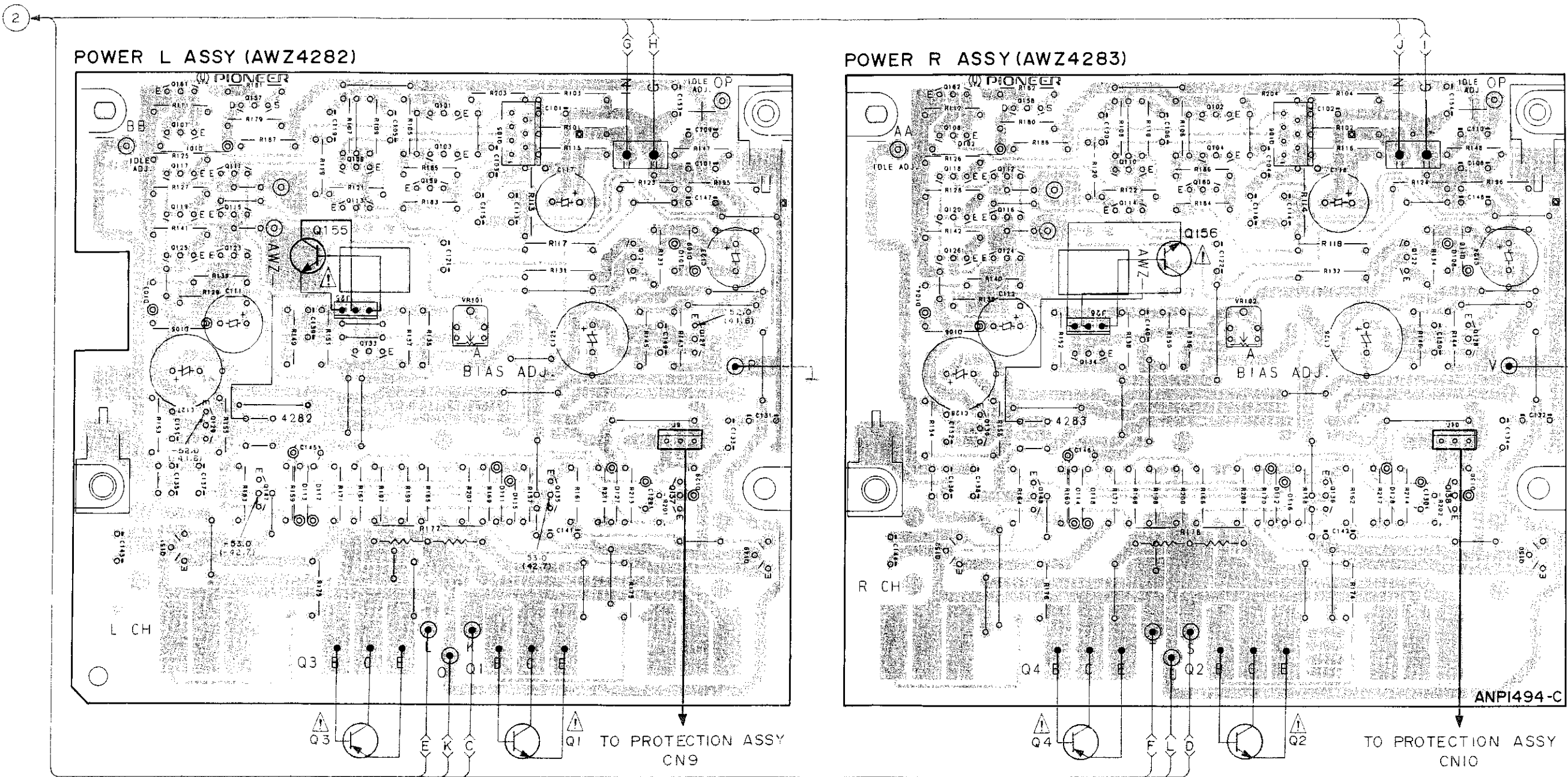


Q152	Q118	Q117	Q116	Q115	Q114	Q113	Q112	Q111	Q110	Q109	Q108	Q107	Q106	Q105	Q104	Q103	Q102	Q101	Q100	Q099	Q098	Q097	Q096	Q095	Q094	Q093	Q092	Q091	Q090	Q089	Q088	Q087	Q086	Q085	Q084	Q083	Q082	Q081	Q080	Q079	Q078	Q077	Q076	Q075	Q074	Q073	Q072	Q071	Q070	Q069	Q068	Q067	Q066	Q065	Q064	Q063	Q062	Q061	Q060	Q059	Q058	Q057	Q056	Q055	Q054	Q053	Q052	Q051	Q050	Q049	Q048	Q047	Q046	Q045	Q044	Q043	Q042	Q041	Q040	Q039	Q038	Q037	Q036	Q035	Q034	Q033	Q032	Q031	Q030	Q029	Q028	Q027	Q026	Q025	Q024	Q023	Q022	Q021	Q020	Q019	Q018	Q017	Q016	Q015	Q014	Q013	Q012	Q011	Q010	Q009	Q008	Q007	Q006	Q005	Q004	Q003	Q002	Q001
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2.4 POWER L AND POWER R ASSEMBLIES

A

A



B

B

C

C

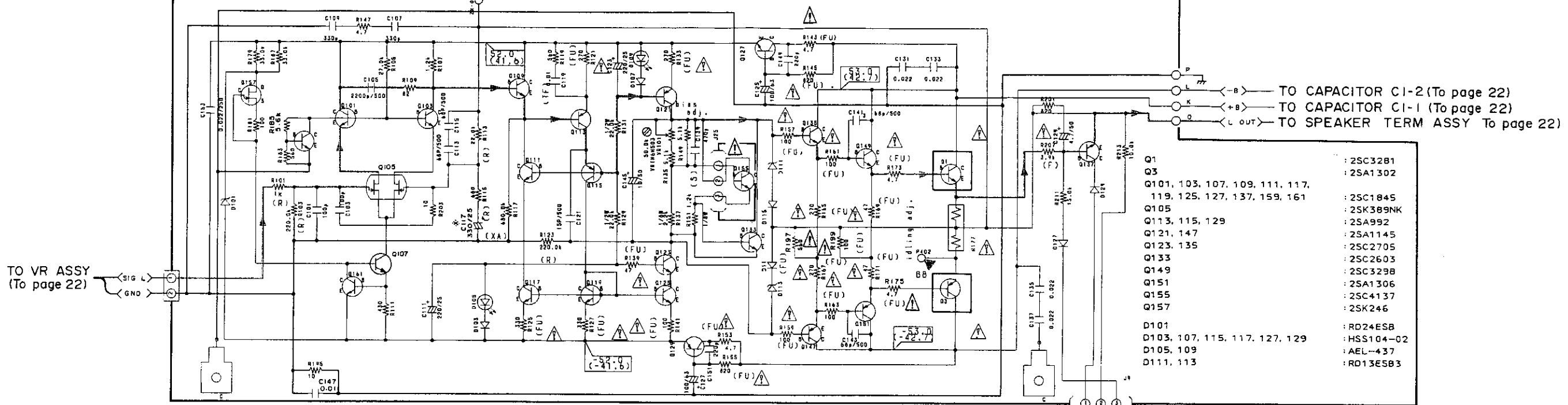
D

D

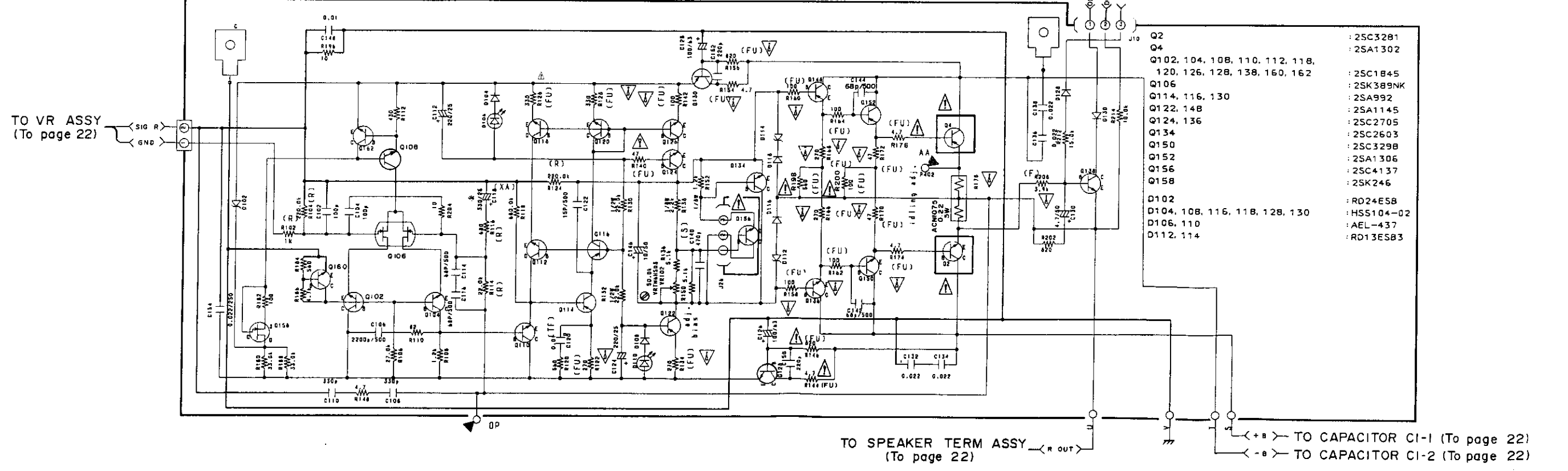
- VR101
- | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|
| Q161 | Q111 | Q157 | Q109 | Q101 | Q105 | Q135 | Q121 | Q127 | Q149 |
| Q107 | Q115 | Q147 | Q113 | Q103 | | | | Q137 | |
| Q117 | Q123 | | Q133 | Q159 | | | | | |
| Q119 | Q129 | | | | | | | | |
| Q125 | | | | | | | | | |

- VR102
- | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|
| Q162 | Q112 | Q158 | Q134 | Q110 | Q102 | Q106 | Q136 | Q122 | Q128 | Q150 |
| Q108 | Q116 | Q148 | | Q114 | Q104 | | | | Q138 | |
| Q118 | Q124 | | | | Q160 | | | | | |
| Q120 | Q130 | | | | | | | | | |
| Q126 | | | | | | | | | | |

POWER L ASSY (AWZ4282)



POWER R ASSY (AWZ4283)



3. PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- 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.
- 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 × 10¹ → 561 RD1/8PM $\begin{matrix} 5 & 6 & 1 \\ \hline \end{matrix}$ J

47kΩ → 47 × 10³ → 473 RD1/4PS $\begin{matrix} 4 & 7 & 3 \\ \hline \end{matrix}$ J

0.5Ω → 0R5 RN2H $\begin{matrix} 0 & R & 5 \\ \hline \end{matrix}$ K

1Ω → 010 RS1P $\begin{matrix} 0 & 1 & 0 \\ \hline \end{matrix}$ K

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

5.62kΩ → 562 × 10¹ → 5621 RN1/4PC $\begin{matrix} 5 & 6 & 2 & 1 \\ \hline \end{matrix}$ F

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
LIST OF ASSEMBLIES					
●	CONTROL ASSY	AWZ4068	D1923-1926	DIODE	S5566
●	TONE AMP ASSY	AWZ4069	D1927-1937	DIODE	HSS104-02
NSP	SPEAKER SW ASSY	AWZ4070	D1942	DIODE	HSS104-02
●	PHONO AMP ASSY	AWZ3436	D1943	ZENER DIODE	RD6.2ESB
NSP	HEADPHONE ASSY	AWZ3515	D1949	DIODE	HSS104-02
●	POWER SUPPLY ASSY	AWZ4081	SWITCHES		
NSP	SPEAKER TERM ASSY	AWZ4230	S701	SWITCH	ASD1017
NSP	DIODE ASSY	AWZ4392	S702	SWITCH	ASU1016
●	VR ASSY	AWZ4063	S703	PUSH SWITCH	ASG1032
NSP	REC OUT ASSY	AWZ4064	COIL		
NSP	ROTARY FUNC ASSY	AWZ4065	L1901	AXIAL INDUCTOR	LAU220K
NSP	SR ASSY	AWZ4066	CAPACITORS		
NSP	SUBTRANS ASSY	AWZ4067	C701-704	CERAMIC CAPACITOR	CKCYB331K50
NSP	PROTECTION ASSY	AWZ4277	C705,706	CERAMIC CAPACITOR	CKCYB331K500
●	POWER L ASSY	AWZ4282	C707-710	CERAMIC CAPACITOR	CKCYB331K50
●	POWER R ASSY	AWZ4283	C711,712	CERAMIC CAPACITOR	CKCYB391K50
			C713,714	ELECTROLYTIC CAPACIT	CEXA4R7M50
			C715,716	CERAMIC CAPACITOR	CCCSL470J50
			C717-722	ELECTROLYTIC CAPACIT	CEXA101M25
			C725	CERAMIC CAPACITOR	CKCYF103Z50
			C1901	ELECT. CAPACITOR	CEAS470M25
			C1902	CERAMIC CAPACITOR	CKCYF103Z50
			C1903	ELECT. CAPACITOR	CEAS470M25
			C1904	CAPACITOR(4.7/5.5)	ACH1135
			C1905	ELECT. CAPACITOR	CEAS2R2M50
			C1906-1920	CERAMIC CAPACITOR	CKMYB271K50
			C1921	ELECT. CAPACITOR	CEAS100M50
			C1923-1925	ELECT. CAPACITOR	CEAS470M25
			C1926	ELECT. CAPACITOR	CEAS471M25
			C1927	ELECT. CAPACITOR	CEAS470M25
			C1928	ELECT. CAPACITOR	CEAS010M50
			C1929	ELECT. CAPACITOR	CEAS0R1M50
			C1930	CERAMIC CAPACITOR	CCMSL101J50
			C1931	ELECT. CAPACITOR	CEANP4R7M50
			C1932,1933	CERAMIC CAPACITOR	CCMSL101J50
			C1934	ELECT. CAPACITOR	CEJA4R7M50
			C1935	ELECT. CAPACITOR	CEAS470M25
			C1936	ELECT. CAPACITOR	CEAS100M50
			C1937	CKA (0.01/AC150V)	ACG1005

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
RESISTORS					
R711-718	CARBON FILM RESISTOR	RD1/4PM221J	C351,352	CERAMIC CAPACITOR	CCCSL680J50
R719	CARBON FILM RESISTOR	RD1/4PM100J	C353	CERAMIC CAPACITOR	CKCYF103Z50
R720,721	CARBON FILM RESISTOR	RDR1/4PM104J	C354	ELECT. CAPACITOR	CEAS100M50
R722,723	CARBON FILM RESISTOR	RDR1/4PM101J	C355	CERAMIC CAPACITOR	CCCSL101J50
R724,725	CARBON FILM RESISTOR	RDR1/4PM104J	RESISTORS		
R726,727	CARBON FILM RESISTOR	RDR1/4PM101J	VR301	VARIABLE RESISTOR	ACT1053
R728-731	CARBON FILM RESISTOR	RDR1/4PM103J	VR302,303	VARIABLE RESISTOR	ACT1054
R732,733	CARBON FILM RESISTOR	RDR1/4PM101J	R307,308	CARBON FILM RESISTOR	RD1/4PM472J
R734,735	CARBON FILM RESISTOR	RDR1/4PM473J	R349-352	CARBON FILM RESISTOR	RD1/4PM220J
R739,740	CARBON FILM RESISTOR	RD1/4PM220J	R377	CARBON FILM RESISTOR	RD1/4PM331J
R1909	RESISTOR ARRAY(100K)	RA6T104J	Other resistors RD1/8PM□□□J		
R1910	RESISTOR ARRAY (10K)	RA4T104J	OTHER		
R1911	RESISTOR ARRAY(100K)	RA6T104J	REMOTE RECEIVER UNIT AXX1023		
R1921	CARBONFILM RESISTOR	RD1/2PM681J	SPEAKER SW ASSY		
△ R1923	FUSIBLE RESISTOR	RFA1/4PS4R7J	SWITCH		
R1924	CARBON FILM RESISTOR	RD1/4PM102J	S401	SWITCH	ASD1003
R1960	CARBON FILM RESISTOR	RD1/4PM472J	CAPACITORS		
	Other resistors	RD1/8PM□□□J	C401,402	ELECT. CAPACITOR	CEAS3R3M50
OTHERS					
X1901	CERAMIC RESO. (4.19MHz)	ASS1018	RESISTORS		
CN6	CONNECTOR(15P)	KPE15	R451-453	CARBON FILM RESISTOR	RD1/4PM271J
CN23	CONNECTOR(11P)	KPE11	R454,455	CARBON FILM RESISTOR	RD1/4PM561J
CN24	CONNECTOR(12P)	KPE12	PHONO AMP ASSY		
	PIN JACK(4P)	AKB1007	SEMICONDUCTORS		
	PIN JACK(6P)	AKB1008	IC501,502	OP-AMP-IC	M5220P
			Q501-504	N-FET	2SK369
			Q509,510	TRANSISTOR	2SC1845
			Q515,516	TRANSISTOR	2SC1845
			SWITCH		
			S501	SWITCH	ASU1008
			COILS		
			L501,502	COIL(270μH)	ATH1010
			CAPACITORS		
			C503,504	AUDIO FILM CAPACITOR	CFTXA103J50
			C505,506	CERAMIC CAPACITOR	CCCSL181K500
			C507,508	CERAMIC CAPACITOR	CKCYB222K500
			C509,510	ELECTROLYTIC CAPACIT	CEXA470M25
			C511,512	ELECTROLYTIC CAPACIT	CEXA221M25
			C513,514	AUDIO FILM CAPACITOR	CFTXA224J50
			C515,516	AUDIO FILM CAPACITOR	CFTXA333J50
			C517,518	AUDIO FILM CAPACITOR	CFTXA224J50
			C519,520	AUDIO FILM CAPACITOR	CFTXA563J50
			C521,522	ELECTROLYTIC CAPACIT	CEXA220M25
			C523,524	CERAMIC CAPACITOR	CCCSL390J50
			C525,526	ELECTROLYTIC CAPACIT	CEXA471M25
			C531,532	CERAMIC CAPACITOR	CCCSL271J50
			C533,534	CERAMIC CAPACITOR	CKCYB681K50
			C535,536	CERAMIC CAPACITOR	CCCSL221K500
			C537	CERAMIC CAPACITOR	CKDYF103Z50
			C538	CERAMIC CAPACITOR	CKCYF103Z50
			C539	CERAMIC CAPACITOR	CKDYF103Z50

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.	
RESISTORS			OTHERS			
R505,506	CARBONFILM RESISTOR	RD1/8PM272J	CN11	CONNECTOR(4P)	KPC4	
R527,528	CARBON FILM RESISTOR	RDR1/4PM6R8F	CN16	CONNECTOR(7P)	KPC7	
R529,530	CARBON FILM RESISTOR	RDR1/4PM820F		SCREW	ABA-298	
R533,534	CARBON FILM RESISTOR	RDR1/4PM153F				
R537,538	CARBON FILM RESISTOR	RDR1/4PM152F				
R541,542	CARBON FILM RESISTOR	RDR1/4PM222F	SPEAKER TERM ASSY			
R568	CARBONFILM RESISTOR	RD1/8PM010J	RELAYS			
R569	CARBONFILM RESISTOR	RD1/8PM2R2J	RY901,902	RELAY	ASR-112	
	Other resistors	RD1/4PM□□□J	RY903	RELAY	ASR-111	
OTHERS			COILS			
	PIN JACK(1P)	AKB1025	L901,902	COIL	ATH1053	
	PIN JACK(1P)	AKB1026	CAPACITORS			
HEADPHONE ASSY			C901-904	AUDIO FILM CAPACITOR	CFTXA104J50	
CAPACITORS			C905-908	AUDIO FILM CAPACITOR	CFTXA223J50	
C951,952	CERAMIC CAPACITOR	CKCYB392K50	C909-912	POLYESTER CAPACITOR	CQMXA472J100	
OTHER			C913-916	AUDIO FILM CAPACITOR	CFTXA223J50	
	JACK	AKN1002	RESISTORS			
POWER SUPPLY ASSY			△	R901,902	METAL OXIDE RESISTOR	RS1LMF101J
SEMICONDUCTORS			△	R903,904	METAL OXIDE RESISTOR	RS2LMF331J
Q603	TRANSISTOR	2SB1274	△	R907,908	METAL OXIDE RESISTOR	RS2LMF100J
Q605	TRANSISTOR	2SD1913		R909-912	CARBON FILM RESISTOR	RD1/4PM100J
Q606	TRANSISTOR	2SB1274	OTHER			
Q607	TRANSISTOR	2SD1913		SPEAKER TERMINAL(4P)	AKE1017	
Q608	TRANSISTOR	2SB1274	DIODE ASSY			
Q609	TRANSISTOR	2SC1845	SEMICONDUCTOR			
Q610	TRANSISTOR	2SA992	D621	DIODE	RB602(E)	
Q611	TRANSISTOR	2SD1913	REC OUT ASSY			
D605,606	ZENER DIODE	RD24ESB1	CAPACITORS			
D607	ZENER DIODE	RD18ESB	C803-810	CERAMIC CAPACITOR	CKCYB331K50	
D608-611	DIODE	S5566	RESISTORS			
D616	DIODE	HSS104-02	R803-806	CARBON FILM RESISTOR	RD1/4PM681J	
D617-620	ZENER DIODE	RD22ESB3	R807,808	CARBONFILM RESISTOR	RD1/8PM681J	
CAPACITORS			R809,810	CARBONFILM RESISTOR	RD1/8PM221J	
C605,606	ELECT. CAPACITOR	CEAS101M50	R815	CARBON FILM RESISTOR	RD1/4PM220J	
C607,608	ELECT. CAPACITOR	CEAS010M50	OTHERS			
C609	CERAMIC CAPACITOR	CKCYB471K50	CN3	CONNECTOR(15P)	KPE15	
C610	ELECT. CAPACITOR	CEAS101M63		PIN JACK(4P)	AKB1019	
C611	ELECT. CAPACITOR	CEAS3R3M50	ROTARY FUNC ASSY			
△	C613,614	ELECT. CAPACITOR	CEAS470M50	SWITCH		
△	C615	POLYESTER CAPACITOR	CQMXA104J100	S981	SWITCH	ASD1016
	C617	CKA (0.01/AC400V)	ACG1003	CAPACITOR		
	C619,620	ELECT. CAPACITOR	CEAS100M50	C981	CERAMIC CAPACITOR	CKCYH103Z50
	C623,624	ELECT. CAPACITOR	CEAS100M50	RESISTORS		
	C625	CERAMIC CAPACITOR	CKCYX473M25		All resistors	RD1/8PM□□□J
RESISTORS						
△	R601,602	FUSIBLE RESISTOR	RFA1/4PS4R7J			
△	R605,606	METAL OXIDE RESISTOR	RS2LMF272J			
△	R609,610	FUSIBLE RESISTOR	RFA1/4PS680J			
	R613	CARBON FILM RESISTOR	RD1/2PM332J			
	R614	CARBON FILM RESISTOR	RD1/2PM222J			
	R622	CARBONFILM RESISTOR	RD1/2PM103J			
	Other resistors	RD1/4PM□□□J				

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
SR ASSY			RESISTORS		
OTHERS			VR251	VARIABLE RESISTOR	ACX1072
CN20	CONNECTOR(3P) JACK	KPE3 AKN-207	R261,262	CARBON FILM RESISTOR	RDR1/4PM101J
SUBTRANS ASSY			R263,264	CARBON FILM RESISTOR	RDR1/4PM104J
SEMICONDUCTORS			R265,266	CARBON FILM RESISTOR	RDR1/4PM271J
D651-655	DIODE	S5566	R267,268	CARBON FILM RESISTOR	RDR1/4PM122J
D657	DIODE	HSS104-02	OTHERS		
RELAY			R271,272	CARBON FILM RESISTOR	RDR1/4PM101J
△ RY651	RELAY	ASR1036	R273,274	CARBON FILM RESISTOR	RDR1/4PM102J
TRANSFORMER			R290,291	CARBON FILM RESISTOR	RD1/4PM220J
△ T651	POWER TRANSFORMER	ATT1015	OTHERS		
CAPACITORS			CN8	JUMPER CONNECTOR	KPC8
C651	ELECT. CAPACITOR	CEAS471M25	CN22	CONNECTOR(8P)	KPE8
C652	ELECT. CAPACITOR	CEAS101M25	POWER L ASSY		
△ C653	CKA (0.01/AC400V)	ACG1003	SEMICONDUCTORS		
RESISTORS			Q101,103	TRANSISTOR	2SC1845
△ R651	CARBON FILM RESISTOR	RD1/4PM222J	Q105	N-DUAL-FET	2SK389NK
△ R652	CARBON FILM RESISTOR	RD1/2PM120J	Q107,109	TRANSISTOR	2SC1845
PROTECTION ASSY			Q111	TRANSISTOR	2SC1845
SEMICONDUCTORS			Q113,115	TRANSISTOR	2SA992
Q139-142	TRANSISTOR	2SC2458	Q117,119	TRANSISTOR	2SC1845
Q143	TRANSISTOR	2SA1115	Q121	TRANSISTOR	2SA1145
Q144	TRANSISTOR	2SC2458	Q123	TRANSISTOR	2SC2705
Q145	TRANSISTOR	2SC1815	Q125,127	TRANSISTOR	2SC1845
D131	ZENER DIODE	RD12ESB	Q129	TRANSISTOR	2SA992
D134	DIODE	HSS104-02	Q133	TRANSISTOR	2SC2603
CAPACITORS			Q135	TRANSISTOR	2SC2705
C271,272	ELECT. CAPACITOR	CEAS471M6	Q137	TRANSISTOR	2SC1845
C273	CERAMIC CAPACITOR	CKCYF103Z50	Q147	TRANSISTOR	2SA1145
C274	ELECT. CAPACITOR	CEAS101M25	Q149	TRANSISTOR	2SC3298
C275	ELECT. CAPACITOR	CEAS010M100	Q151	TRANSISTOR	2SA1306
RESISTORS			Q157	N-FET	2SK246
△ R217	FUSIBLE RESISTOR	RFA1/4PS221J	Q159,161	TRANSISTOR	2SC1845
R218	CARBON FILM RESISTOR	RD1/4PM103J	D101	ZENER DIODE	RD24ESB
R219	CARBON FILM RESISTOR	RD1/4PM680J	D103	DIODE	HSS104-02
R220	CARBON FILM RESISTOR	RD1/4PM154J	D105	LED(RED)	AEL-437
Other resistors		RD1/8PM□□□J	D107	DIODE	HSS104-02
VR ASSY			D109	LED(RED)	AEL-437
SEMICONDUCTOR			D111,113	ZENER DIODE	RD13ESB3
IC252	OP-AMP-IC	M5220P	D115,117	DIODE	HSS104-02
CAPACITORS			D127,129	DIODE	HSS104-02
C255,256	ELECTROLYTIC CAPACIT	CEXA2R2M50	CAPACITORS		
C257,258	PL.STYRENE CAPACITOR	CQSA561J50	C101,103	CERAMIC CAPACITOR	CCCSL101J50
C261,262	ELECTROLYTIC CAPACIT	CEXA470M50	C105	CERAMIC CAPACITOR	CKCYB222K500
C263,264	ELECTROLYTIC CAPACIT	CEXA221M25	C107,109	CERAMIC CAPACITOR	CKCYB331K50
C265,266	CERAMIC CAPACITOR	CKCYF103Z50	C111	ELECT. CAPACITOR	CEAS221M25
C269,270	CERAMIC CAPACITOR	CCCSL470J50	C113,115	CERAMIC CAPACITOR	CCCSL680K500
C280	CERAMIC CAPACITOR	CKCYF103Z50	C117	ELECTROLYTIC CAPACIT	ACH1058
			C119	AUDIO FILM CAPACITOR	CFTXA103J50
			C121	CERAMIC CAPACITOR	CCCSL150K500
			C123	ELECT. CAPACITOR	CEAS221M25
			C125,127	ELECT. CAPACITOR	CEAS101M63
			C129	ELECT. CAPACITOR	CEAS4R7M50
			C131,133	CERAMIC CAPACITOR	CKDYF223Z50
			C135,137	CERAMIC CAPACITOR	CKDYF223Z50
			C139	CERAMIC CAPACITOR	CKCYB471K50
			C141,143	CERAMIC CAPACITOR	CCCSL680K500

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
C145	ELECT. CAPACITOR	CEAS100M50	D108	DIODE	HSS104-02
C147	AUDIO FILM CAPACITOR	CFTXA103J50	D110	LED(RED)	AEL-437
C149,151	CERAMIC CAPACITOR	CCCSL221J50	D112,114	ZENER DIODE	RD13ESB3
C153	MYLAR FILM CAPACITOR	CQMA223K250	D116,118	DIODE	HSS104-02
RESISTORS			D128,130	DIODE	HSS104-02
VR101	VR	VRTM6H503	CAPACITORS		
R101	CARBON FILM RESISTOR	RDR1/4PM102J	C102,104	CERAMIC CAPACITOR	CCCSL101J50
R103	CARBON FILM RESISTOR	RDR1/4PM224J	C106	CERAMIC CAPACITOR	CKCYB222K500
R113	CARBON FILM RESISTOR	RDR1/4PM223J	C108,110	CERAMIC CAPACITOR	CKCYB331K50
R115	CARBON FILM RESISTOR	RDR1/4PM681J	C112	ELECT. CAPACITOR	CEAS221M25
△ R121	FUSIBLE RESISTOR	RFA1/4PS271J	C114,116	CERAMIC CAPACITOR	CCCSL680K500
R123	CARBON FILM RESISTOR	RDR1/4PM224J	C118	ELECT. CAPACITOR (220/50)	ACH1058
△ R125,127	FUSIBLE RESISTOR	RFA1/4PS331J	C120	AUDIO FILM CAPACITOR	CFTXA103J50
R129,131	CARBONFILM RESISTOR	RD1/2PM223J	C122	CERAMIC CAPACITOR	CCCSL150K500
△ R133	FUSIBLE RESISTOR	RFA1/4PS271J	C124	ELECT. CAPACITOR	CEAS221M25
R137	CARBONFILM RESISTOR	RD1/8PM222J	C126,128	ELECT. CAPACITOR	CEAS101M63
△ R139	FUSIBLE RESISTOR	RFA1/4PS470J	C130	ELECT. CAPACITOR	CEAS4R7M50
△ R141	FUSIBLE RESISTOR	RFA1/4PS101J	C132,134	CERAMIC CAPACITOR	CKDYF223Z50
△ R143	FUSIBLE RESISTOR	RFA1/4PS4R7J	C136,138	CERAMIC CAPACITOR	CKDYF223Z50
△ R145	FUSIBLE RESISTOR	RFA1/4PS821J	C140	CERAMIC CAPACITOR	CKCYB471K50
R151	CARBONFILM RESISTOR	RD1/8PM122J	C142,144	CERAMIC CAPACITOR	CCCSL680K500
△ R153	FUSIBLE RESISTOR	RFA1/4PS4R7J	C146	ELECT. CAPACITOR	CEAS100M50
△ R155	FUSIBLE RESISTOR	RFA1/4PS821J	C148	AUDIO FILM CAPACITOR	CFTXA103J50
△ R157,159	FUSIBLE RESISTOR	RFA1/4PS101J	C150,152	CERAMIC CAPACITOR	CCCSL221J50
△ R161,163	FUSIBLE RESISTOR	RFA1/4PS101J	C154	MYLAR FILM CAPACITOR	CQMA223K250
△ R165,167	FUSIBLE RESISTOR	RFA1/4PS271J	RESISTORS		
△ R169,171	FUSIBLE RESISTOR	RFA1/4PS470J	VR102	VR	VRTM6H503
△ R173,175	FUSIBLE RESISTOR	RFA1/4PS4R7J	R102	CARBON FILM RESISTOR	RDR1/4PM102J
△ R177	RESISTOR (0.22, 5W)	ACN1075	R104	CARBON FILM RESISTOR	RDR1/4PM224J
△ R197	FUSIBLE RESISTOR	RFA1/4PS561J	R114	CARBON FILM RESISTOR	RDR1/4PM223J
△ R199	FUSIBLE RESISTOR	RFA1/4PS101J	R116	CARBON FILM RESISTOR	RDR1/4PM681J
R201	CARBONFILM RESISTOR	RD1/8PM821J	△ R122	FUSIBLE RESISTOR	RFA1/4PS271J
△ R207	CARBON FILM RESISTOR	RD1/4PMF392J	R124	CARBON FILM RESISTOR	RDR1/4PM224J
	Other resistors	RD1/4PM□□□J	△ R126,128	FUSIBLE RESISTOR	RFA1/4PS331J
POWER R ASSY			R130,132	CARBONFILM RESISTOR	RD1/2PM223J
SEMICONDUCTORS			△ R134	FUSIBLE RESISTOR	RFA1/4PS271J
Q102,104	TRANSISTOR	2SC1845	R138	CARBONFILM RESISTOR	RD1/8PM222J
Q106	N-DUAL-FET	2SK389NK	△ R140	FUSIBLE RESISTOR	RFA1/4PS470J
Q108,110	TRANSISTOR	2SC1845	△ R142	FUSIBLE RESISTOR	RFA1/4PS101J
Q112	TRANSISTOR	2SC1845	△ R144	FUSIBLE RESISTOR	RFA1/4PS4R7J
Q114,116	TRANSISTOR	2SA992	△ R146	FUSIBLE RESISTOR	RFA1/4PS821J
Q118,120	TRANSISTOR	2SC1845	R152	CARBONFILM RESISTOR	RD1/8PM122J
Q122	TRANSISTOR	2SA1145	△ R154	FUSIBLE RESISTOR	RFA1/4PS4R7J
Q124	TRANSISTOR	2SC2705	△ R156	FUSIBLE RESISTOR	RFA1/4PS821J
Q126,128	TRANSISTOR	2SC1845	△ R158,160	FUSIBLE RESISTOR	RFA1/4PS101J
Q130	TRANSISTOR	2SA992	△ R162,164	FUSIBLE RESISTOR	RFA1/4PS101J
Q134	TRANSISTOR	2SC2603	△ R166,168	FUSIBLE RESISTOR	RFA1/4PS271J
Q136	TRANSISTOR	2SC2705	△ R170,172	FUSIBLE RESISTOR	RFA1/4PS470J
Q138	TRANSISTOR	2SC1845	△ R174,176	FUSIBLE RESISTOR	RFA1/4PS4R7J
Q148	TRANSISTOR	2SA1145	△ R178	RESISTOR (0.22, 5W)	ACN1075
Q150	TRANSISTOR	2SC3298	△ R198	FUSIBLE RESISTOR	RFA1/4PS561J
Q152	TRANSISTOR	2SA1306	△ R200	FUSIBLE RESISTOR	RFA1/4PS101J
Q158	N-FET	2SK246	R202	CARBONFILM RESISTOR	RD1/8PM821J
Q160,162	TRANSISTOR	2SC1845	△ R208	CARBON FILM RESISTOR	RD1/4PMF392J
D102	ZENER DIODE	RD24ESB		Other resistors	RD1/4PM□□□J
D104	DIODE	HSS104-02			
D106	LED(RED)	AEL-437			

4. ADJUSTMENTS

■ IDLE CURRENT ADJUSTMENT

1. Set the VOLUME CONTROL to minimum.
2. Set the POWER switch to ON.
3. Adjust VR101 (VR102) so that the voltage between OP and BB (AA) becomes $11 \pm 1\text{mV}$.

NOTE:

After turning on the power, wait at least 5 minutes before adjustment.

4. REGLAGE

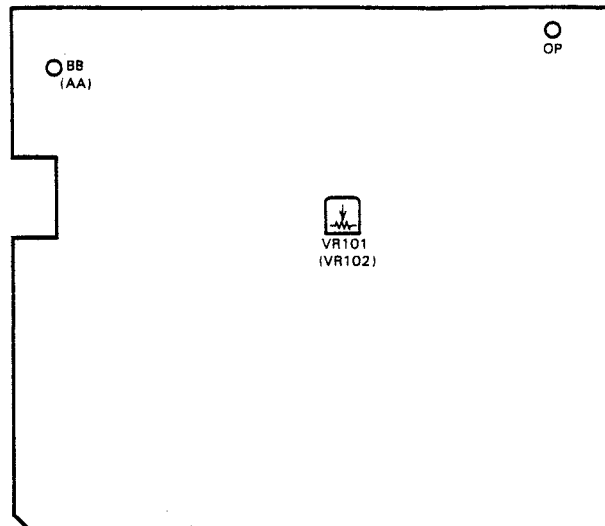
■ REGLAGE DU COURANT DEWATTE

1. Après la mise sous tension, le moteur dure 5 minutes et n'introduire charge.
2. Régler VR101 (VR102) de façon à ce que la tension entre OP et BB(AA) soit de $11 \pm 1\text{mV}$.

4. AJUSTE

■ AJUSTE DE LA CORRIENTE DEWATIADA

1. El motor funciona por 5 minutos después de encender la unidad, sin introduzca.
2. Ajuste VR101(VR102) de forma que la tensión entre OP y BB(AA) sea $11 \pm 1\text{mV}$.



POWER L (R) assembly

Fig. 1 Adjustment point

Fig. 1 Emplacement de réglage

Fig. 1 Puntos de ajuste

5. FOR A – 701R – G/HEZ

CONTRAST OF MISCELLANEOUS PARTS

NOTES:

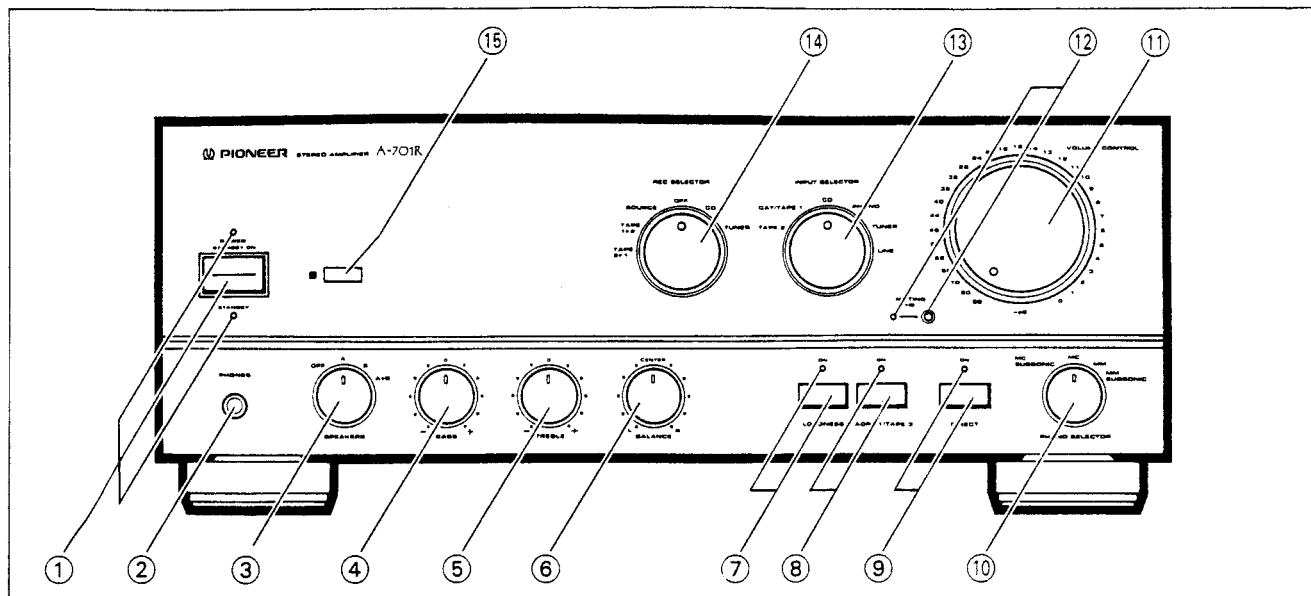
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

A – 701R – G/HEZ and A – 701R/HEZ have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		A – 701R/HEZ	A – 701R – G/HEZ	
	Rotary knob L	AAB1222	AAB1287	for packing
	Rotary knob M (PLS)	AAB1223	AAB1288	
	Rotary knob S (PLS)	AAB1224	AAB1289	
	Push knob	AAD1536	AAD2287	
	Direct knob	AAD1560	AAD2288	
	Power knob	AAD2275	AAD2276	
	Name plate (METAL)	AAM1029	
	Packing case	AHD2269	AHD2270	
	Panel base	AMB1799	AMB2005	
	Front panel	ANB1512	ANB1521	
	Remote control unit	AXD1211	AXD1287	
	Screw	FBT40P080FZK	FBT40P080FCR	
NSP	Badge Brown 3156N	PAN1262	
	Battery cover	PZN1001	AZA1376	

6. PANEL FACILITIES

[FRONT PANEL]



① POWER STANDBY/ON switch/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.

When the STANDBY indicator lights, the unit is in STANDBY.

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 SPEAKERS terminals.

OFF:

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

A:

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

B:

For reproduction of sound with the speaker system 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 button is in the ON position.
- At volume levels lower than "32," the set tone control effect is obtained.
- At volume levels higher than "32," the effect becomes increasingly weaker.

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 button is in the ON position.
- At volume levels lower than "32," the set tone control effect is obtained.
- At volume levels higher than "32," the effect becomes increasingly weaker.

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 button is in the ON position.

⑦ LOUDNESS button/indicator

Use when listening at low volume levels.

ON: (Red illumination)

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

OFF:

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

NOTE:

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

⑧ ADPT 1/TAPE 3 button/indicator

Use this button to listen to tape playback, or to monitor a tape recording.

ON: (Red illumination)

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

OFF:

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

NOTE:

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

⑨ DIRECT button/indicator

Use this button when you wish to bypass the various frequency adjusting circuits and adaptor jacks (ADPT 1/TAPE 3, ADPT 2, BASS, TREBLE, BALANCE, LOUDNESS).

ON: (Orange illumination)

When this button is in this position, the indicator lights and the signals input from the input jacks 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 button is in this position the indicator goes out and the signal passes through the various frequency adjusting circuits.

NOTE:

The settings for ⑦ through ⑨ when the power was last turned off are memorized and recalled when power is turned on, regardless of whether the AC cord was plugged in or not.

⑩ 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.

⑪ VOLUME CONTROL

Use to adjust volume level.

NOTE:

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

⑫ MUTING button/indicator

Use to temporarily cut sound volume.

ON: (Red illumination)

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

OFF:

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

NOTE:

If the AC cord was unplugged, this will be off when power is turned on, even if it was on before power was turned off.

⑬ 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 jacks.

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 cassette deck or digital audio tape deck connected to the DAT/TAPE 1 jacks.

TAPE 2:

For playback with a cassette deck connected to the TAPE 2 jacks.

⑭ REC SELECTOR switch

Switch to select recording signal. When set at other positions than SOURCE or OFF, 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 jacks of DAT/TAPE 1 and TAPE 2 will be output. Select it when not recording; output to cassette 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 cassette deck of DAT/TAPE 1 jacks, over to the cassette deck of TAPE 2 jacks.

2 ► 1:

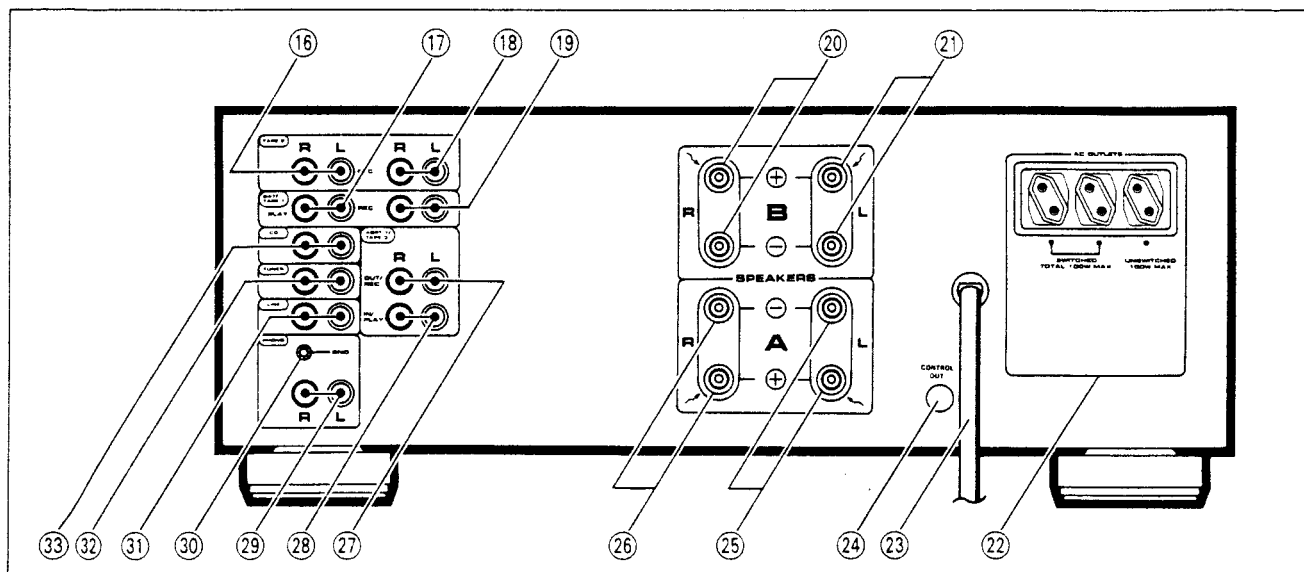
To record (copy) from the cassette deck of TAPE 2 jacks, over to the cassette deck of DAT/TAPE 1 jacks.

NOTE:

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

⑮ Remote sensor window

[REAR PANEL]



16 TAPE 2 PLAY jacks

17 DAT/TAPE 1 PLAY jacks

18 TAPE 2 REC jacks

19 DAT/TAPE 1 REC jacks

20 SPEAKERS B terminals (right channel)

21 SPEAKERS B terminals (left channel)

22 AC OUTLETS

• If the socket outlets on the associated equipment are not suitable for the plug supplied with the product, the plug must be removed and an appropriate one be fitted. The cut-off plug must be disposed of as an electrical shock hazard could occur if connected to a socket outlet.

23 Power cord

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

24 CONTROL OUT jack

25 SPEAKERS A terminals (left channel)

26 SPEAKERS A terminals (right channel)

27 ADPT 1/TAPE 3 OUT/REC jacks

28 ADPT 1/TAPE 3 IN/PLAY jacks

29 PHONO jacks

30 Turntable ground terminal (GND)

31 LINE jacks

32 TUNER jacks

33 CD jacks

7. SPECIFICATIONS

Continuous power output (both channels driven at 20 Hz to 20 kHz)**		
T.H.D. 0.007 %, 8 Ω	70 W + 70 W*	
T.H.D. 0.009 %, 4 Ω	95 W + 95 W*	
DIN Continuous power output (both channels driven at 1 kHz)		
T.H.D. 1.0 %, 8 Ω	80 W + 80 W	
T.H.D. 1.0 %, 4 Ω	120 W + 120 W	
Power bandwidth		
0.05 %, 8 Ω	5 Hz — 80 kHz*	
Damping factor		
(1 kHz/20 Hz to 20 kHz), 8 Ω	160/100	
Dynamic power output (on EIA dynamic test signal)		
4 Ω /2 Ω	150 W/200 W	
Total harmonic distortion**		
20 Hz to 20 kHz, 70 W, 8 Ω	0.007 %*	
20 Hz to 20 kHz, 95 W, 4 Ω	0.009 %*	
Inter-modulation distortion (at rated output)		0.007 %*
• Above specifications are for when power supply is 230 V.		
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. 0.1 % (MM/MC)	200 mV/15 mV	
Output level/impedance		
TAPE REC, ADAPTOR OUTPUT	150 mV/1 k Ω	
Frequency response		
PHONO (MM)	20 Hz to 20 kHz \pm 0.2 dB	
PHONO (MC)	20 Hz to 20 kHz \pm 0.3 dB	
CD, TUNER, LINE, TAPE	1 Hz to 150 kHz \pm $\frac{1}{2}$ dB*	
Tone control (volume control set at -40 dB position)		
BASS	\pm 8 dB (100 Hz)	
TREBLE	\pm 8 dB (10 kHz)	
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)	94 dB/76 dB*	
CD, TUNER, LINE, TAPE	110 dB*	
Signal-to-Noise ratio (DIN, continuous power/50 mW)		
PHONO (MM)	74 dB/72 dB*	
CD, TUNER, LINE, TAPE	92 dB/81 dB*	

Power Supply/Miscellaneous

Power Requirements	a.c. 220 — 230 Volts, 50/60 Hz
Power Consumption	650 W
AC outlets	
Switched (x 2)	100 W
Unswitched (x 1)	100 W
Dimensions	420 (W) x 435 (D) x 162 (H) mm
Weight (without package)	13.3 kg

Accessories

Operating instructions	1
Remote control unit	1
Batteries	2

NOTE:

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

* When the DIRECT button is set to ON.

** Measured by Audio Spectrum Analyzer.