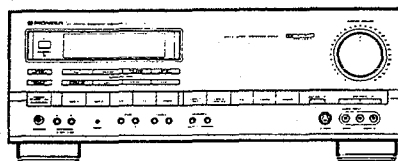


Service Manual

PIONEER
The Art of Entertainment



ORDER NO.
ARP2560

AV DIGITAL SURROUND AMPLIFIER

VSA-D801S

VSA-701S

VSA - D801S AND VSA - 701S HAVE THE FOLLOWING :

Type	Model		Power Requirement	Remarks
	VSA - D801S	VSA - 701S		
SD	○	○	AC110V, 120V - 127V, 220V, 240V (Switchable)	
HE	—	○	AC220 - 230V, 240V (Switchable)*	
HB	—	○	AC220 - 230V, 240V (Switchable)*	

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

- This manual is applicable to the following : VSA - D801S/SD and VSA - 701S/SD.
- For VSA - 701S/SD, refer to page 87.
- For the following : VSA - 701S/HE and HB, refer to the service manual ARP2561 for VSA - 701S.
- Ce manuel pour le service comprend les explications de réglage en français.
- Este manual de servicio trata del método ajuste escrito en español.

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DFG JUNE 1992 Printed in Japan

1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

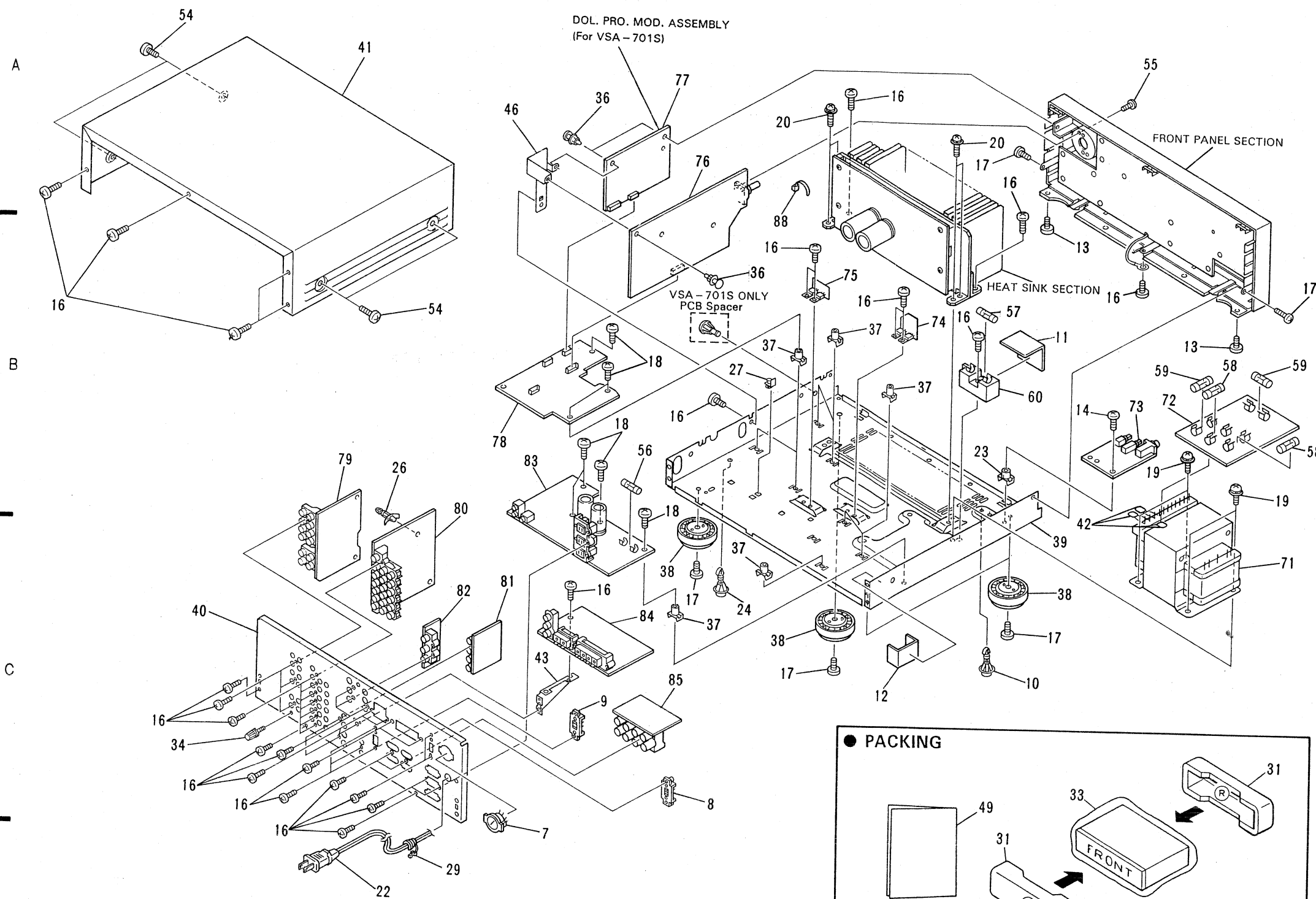
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●"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

Parts list of Exterior and Packing

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	MASTER VOL ASSY	AAB1119	NSP	48	HEAT SINK	ANH1379
	2	BALANCE BUTTON	AAD2282		49	OPE. INSTRUCTIONS (ENGLISH)	ARB1382
	3	ACRYLIC PANEL	AAK2312		50	.....
	4	SP BUTTON (PLS)	AAD2211				
	5	FL FILTER	AAK2313	●	51	FL. U-COM ASSEMBLY	AWK1552
	6	PANEL BASE	AMB2003		52	REMOTE CONSOLE UNIT (CU-VSA019)	AXD1271
Δ	7	VOLTAGE SELECTOR (S1)	AKX-507		53	SCREW	BPZ26P080FMC
Δ	8	VOLTAGE SELECTOR (S2)	AKX1004		54	SCREW	FBT40P060FZK
	9	VOLTAGE SELECTOR (S3)	AKX1004		55	SCREW	VMZ30P060FCU
NSP	10	SPACER	AEC1360				
NSP	11	BARRIER (PVC)	AEC1412	Δ	56	FUSE (4A, FU1)	AEK-125
NSP	12	BARRIER (PVC)	AEC1440	Δ	57	FUSE (4A, FU2)	AEK-125
	13	SCREW	ABA1006	Δ	58	FUSE (4A, FU3, 4)	AEK-125
	14	SCREW	ABA1024	Δ	59	FUSE (1.25A, FU5, 6)	AEK-120
	15	NAME PLATE (METAL)	AAM1029	Δ	60	FUSE HOLDER	AKR1001
	16	SCREW	ABA-298	Δ	61	TRANSISTOR (Q1)	2SC3281
	17	SCREW (STEEL)	ABA1009	Δ	62	POWER TRANSISTOR (Q10)	2SA1803
	18	SCREW	ABA1018	Δ	63	TRANSISTOR (Q2)	2SC3281
	19	SCREW (STEEL)	ABA1053	Δ	64	TRANSISTOR (Q3)	2SA1302
	20	SCREW	ABA1054	Δ	65	TRANSISTOR (Q4)	2SA1302
	21	SCREW	ABA1082	Δ	66	TRANSISTOR (Q5)	2SC3182N
Δ	22	AC POWER CORD	ADG1051	Δ	67	TRANSISTOR (Q6)	2SA1265N
NSP	23	PCB MOULD	AMR2115	Δ	68	POWER TRANSISTOR (Q7)	2SC4688
NSP	24	PCB HOLDER	AEC1097	Δ	69	POWER TRANSISTOR (Q8)	2SC4688
	25	MICA SHEET	AEC1140	Δ	70	POWER TRANSISTOR (Q9)	2SA1803
NSP	26	PCB SUPPORT	AEC1215	Δ	71	POWER TRANSFORMER (T1)	ATS1427
NSP	27	PCB HINGE	AEC1407	NSP	72	TRANS TERMINAL ASSEMBLY	AWZ4268
	28	MICA SHEET	AEE1014				
Δ	29	CORD STOPPER	AEC-882	●	73	SP SW ASSEMBLY	AWZ4289
NSP	30	ALKALINE (LR6, AA)	AEX1007	●	74	REG (5.6V) ASSEMBLY	AWZ4267
				●	75	REG (12V) ASSEMBLY	AWZ4266
	31	FRONT REAR PAD	AHA1503	●	76	VOLUME ASSEMBLY	AWZ4387
	32	PACKING CASE	AHD2287	●	77	DSP ASSEMBLY	AWZ4294
	33	PACKING SHEET	AHG1021	●	78	CONNECTION ASSEMBLY	AWZ4385
NSP	34	TERMINAL SCREW	AKE-031	●	79	AUDIO FUNCTION ASSEMBLY	AWZ4383
	35	FRONT PANEL	ANB1518	●	80	A/V FUNCTION ASSEMBLY	AWZ4384
	36	RIVET (PLASTIC)	AMR1066				
NSP	37	PCB MOULD	AMR1525		81	S TERM ASSEMBLY	AWQ1017
	38	FOOT	AMR2414	NSP	82	PRE OUT ASSEMBLY	AWZ4386
NSP	39	CHASSIS	ANA1178	●	83	POWER SUPPLY ASSEMBLY	AWZ4381
NSP	40	REAR PANEL	ANC1898	●	84	REAR SP CENTER SP ASSEMBLY	AWZ4382
	41	METAL BONNET (MTL)	ANE1373	NSP	85	FRONT SP ASSEMBLY	AWZ4261
Δ	42	MYLAR CAPACITOR (C15-C17)	CQMA104K250				
NSP	43	PCB HOLDER A	ANG-516	●	86	AMP ASSEMBLY	AWZ4286
NSP	44	SUB TRANS HOLDER	ANG1393	NSP	87	PCB HOLDER	ANG1726
NSP	45	POWER ASSEMBLY HOLDER -F	ANG1575	NSP	88	BINDER	AEC-093
NSP	46	PCB HOLDER	ANG1670				
NSP	47	POWER ASSEMBLY HOLDER -R	ANG1683				

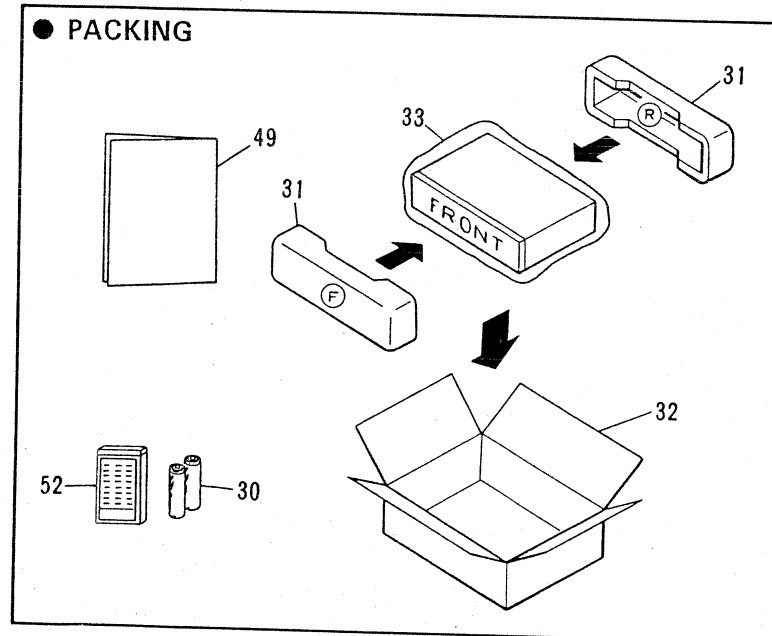
● EXTERIOR

VSA-D801S

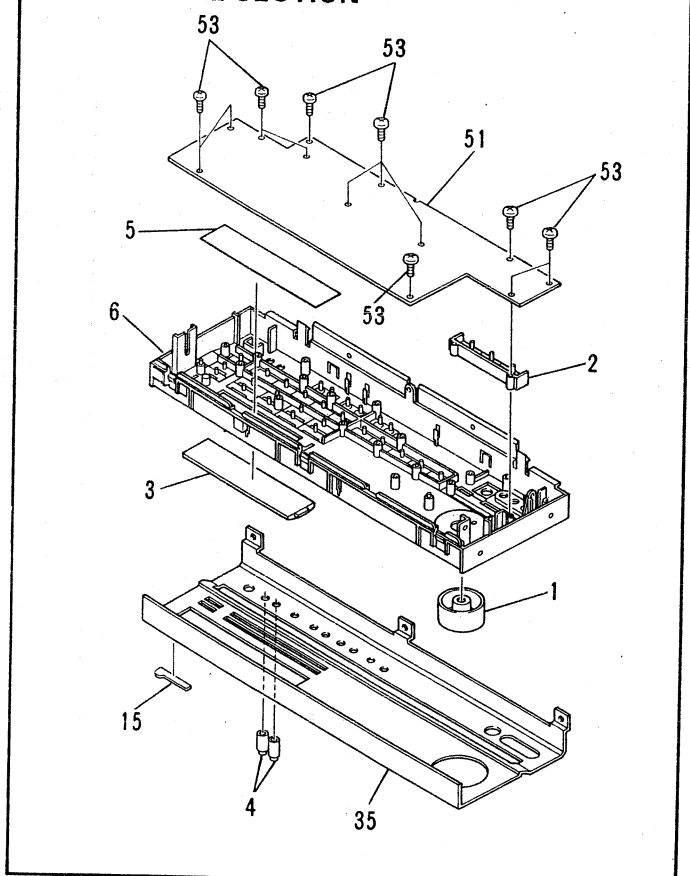


NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

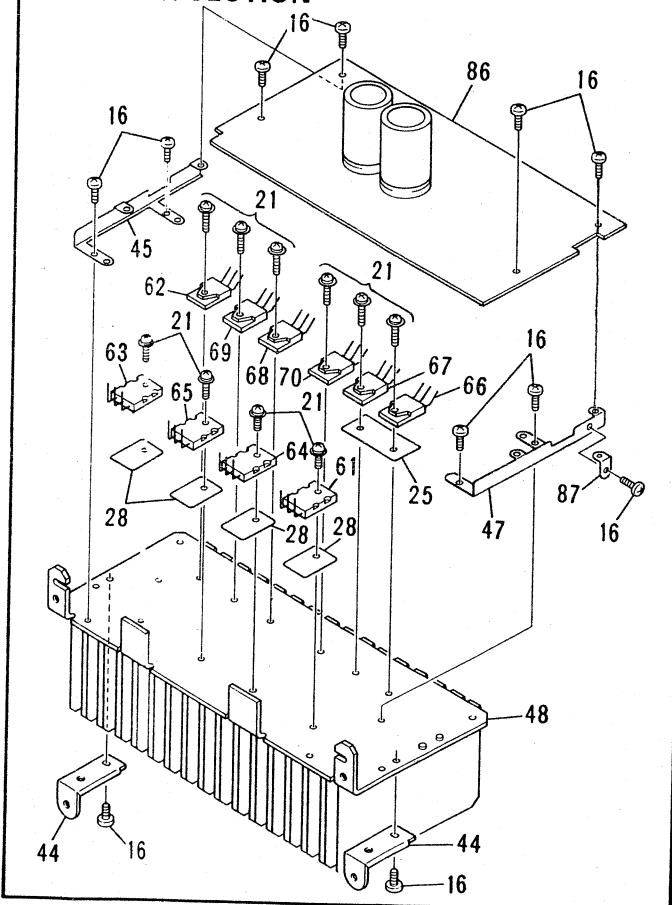
● PACKING



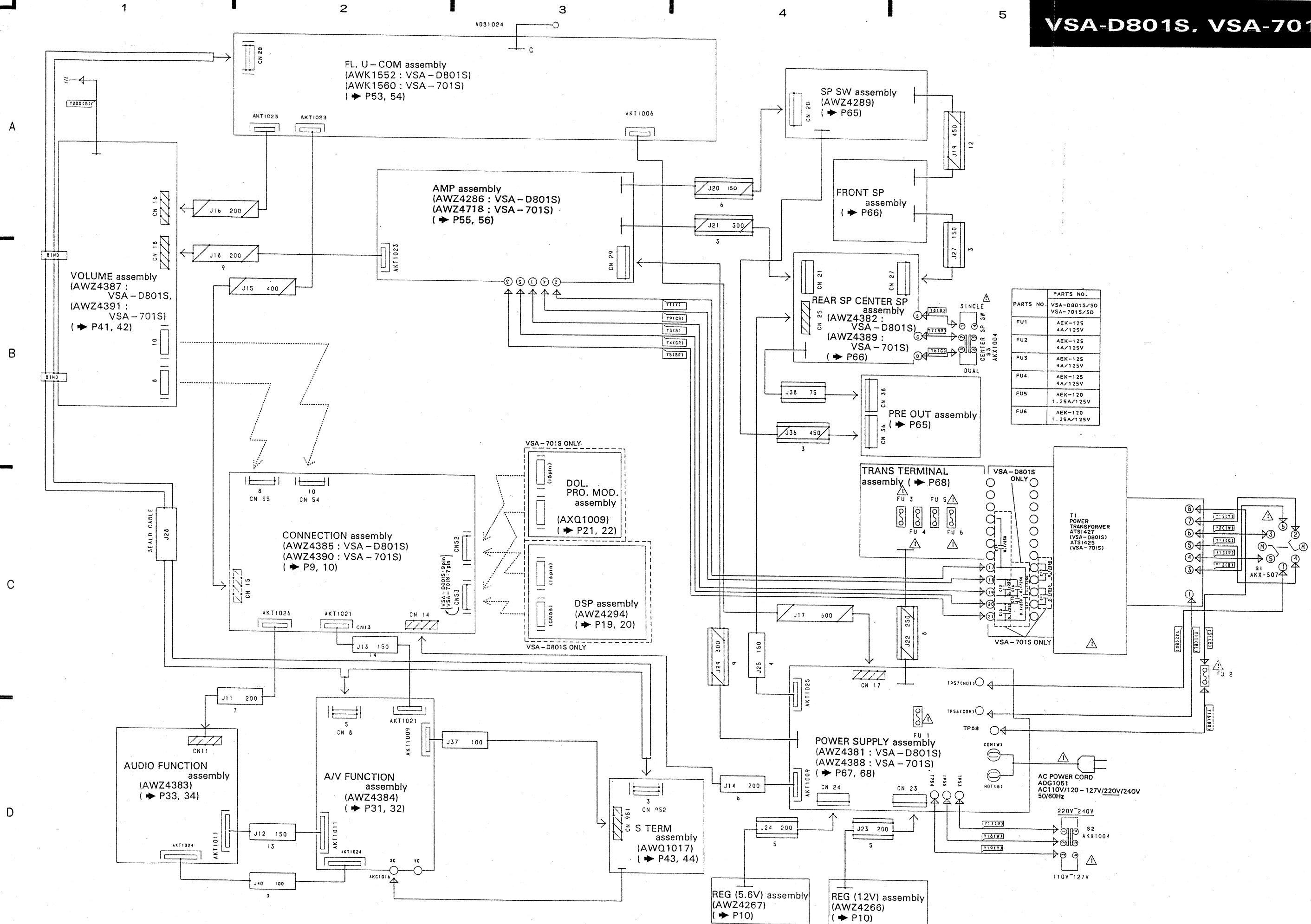
FRONT PANEL SECTION



HEAT SINK SECTION

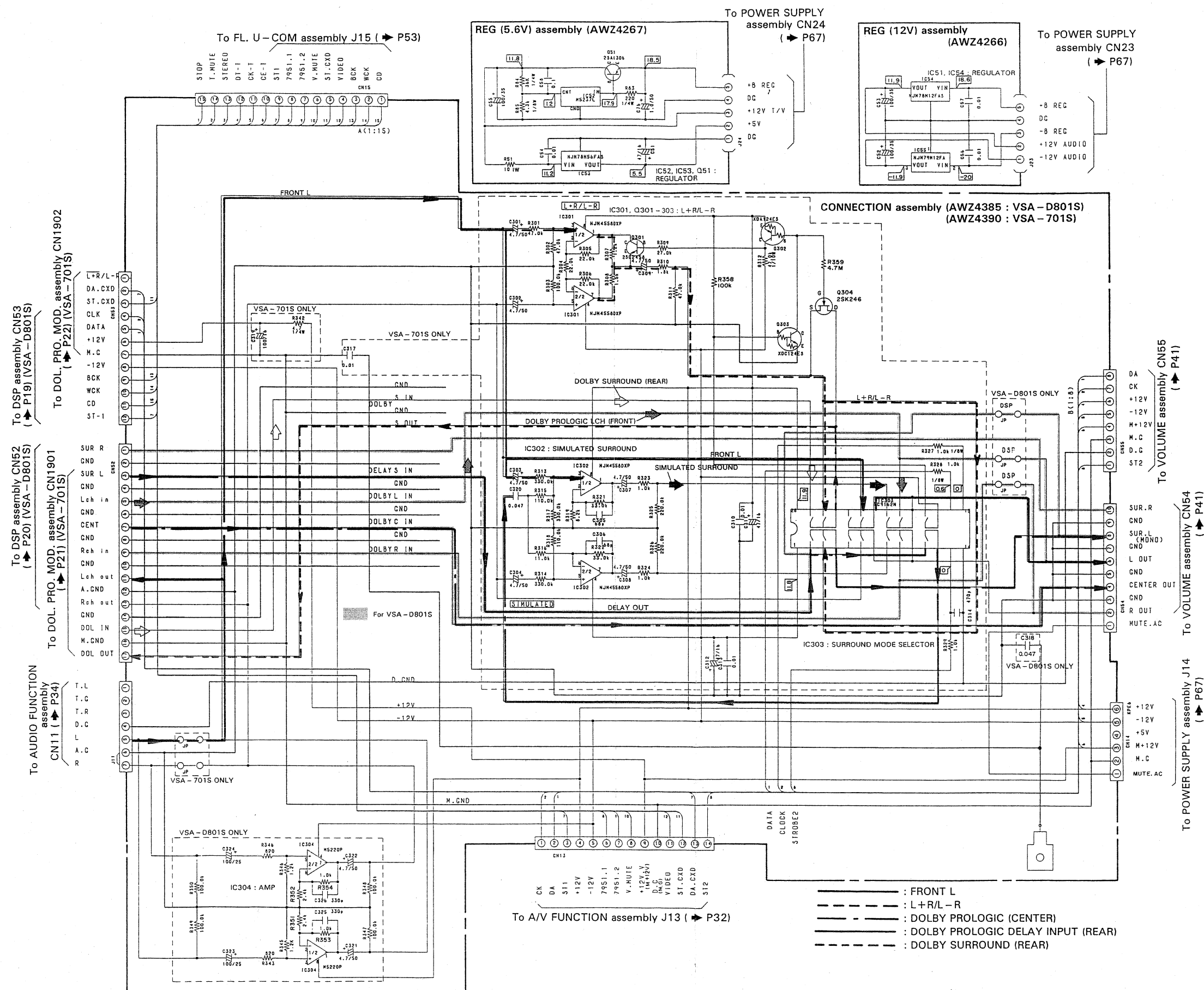


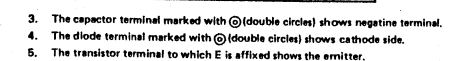
VSA-D801S, VSA-701S



PARTS NO.	PARTS NO.
FU1	AEK-125 4A/125V
FU2	AEK-125 4A/125V
FU3	AEK-125 4A/125V
FU4	AEK-125 4A/125V
FU5	AEK-120 1.25A/125V
FU6	AEK-120 1.25A/125V

3.2 CONNECTION ASSEMBLY, REG (12V) ASSEMBLY AND REG (5.6V) ASSEMBLY







To VOLUME assembly CN54 (← P40)C

a



3

4

2

B

C

D

A

B

C

d

DSP assembly (AWZ4294 : VSA - D801S ONLY)

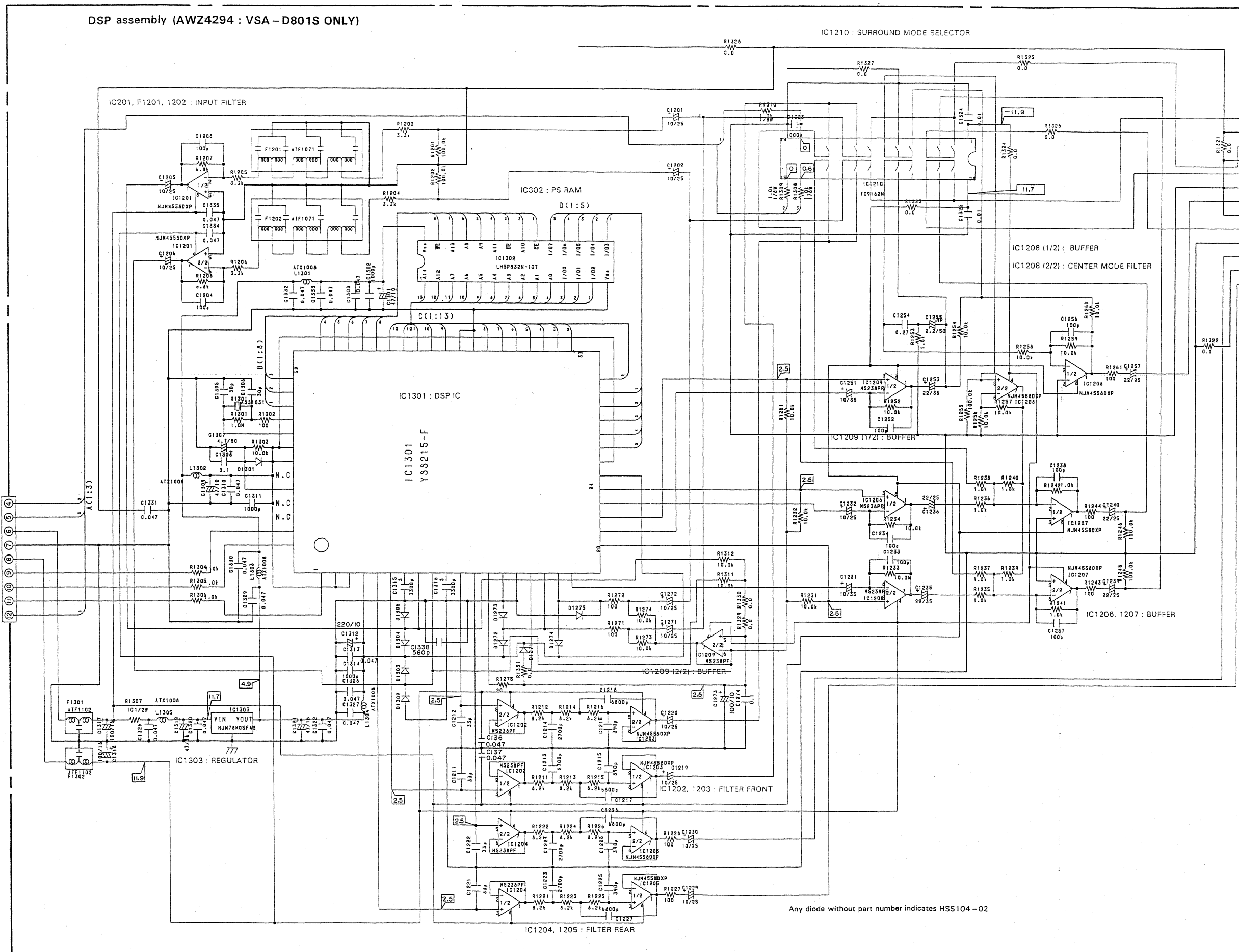
To CONNECTION assembly
CN53 Pin4 - Pin12 (▲ P9)

CK
DT
+12V
0.C
-12V
BCK
WCK
CD
ST1

Reh in
GND
Lch in
GND
Front.R
GND
Center
GND
Front.L
GND
Rear.L
GND
Rear.R

To CONNECTION assembly CN52
Pin1 - Pin13 (▲ P9)

Any diode without part number indicates HSS104-02



3.4 DOL. PRO. MOD. ASSEMBLY

A

B

C

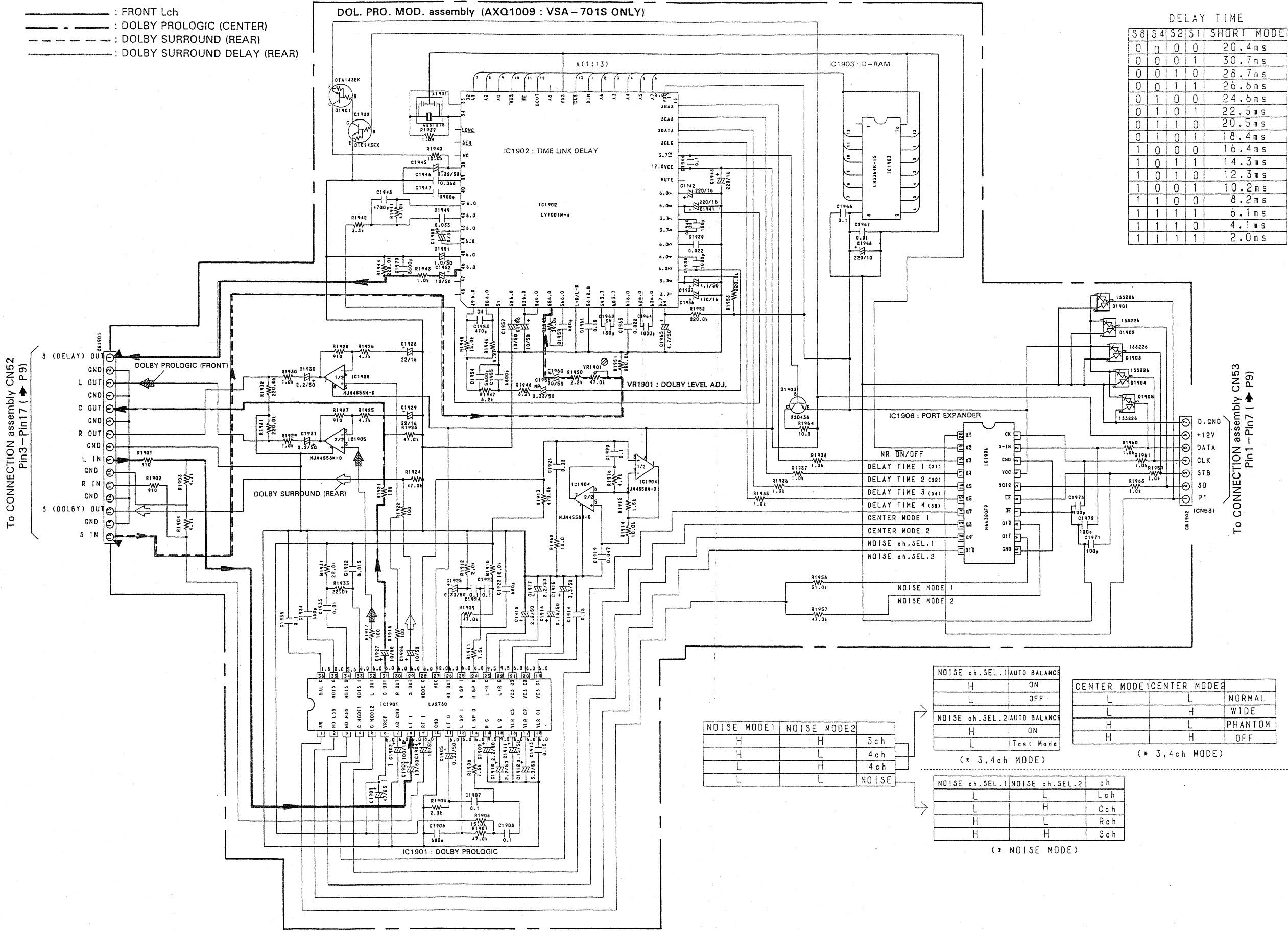
D

A

B

C

D



DELAY TIME					
S8	S4	S2	S1	SHORT MODE	
0	0	0	0	20.4ms	
0	0	0	1	30.7ms	
0	0	1	0	28.7ms	
0	0	1	1	26.6ms	
0	1	0	0	24.6ms	
0	1	0	1	22.5ms	
0	1	1	0	20.5ms	
0	1	1	1	18.4ms	
1	0	0	0	16.4ms	
1	0	1	1	14.3ms	
1	0	1	0	12.3ms	
1	0	0	1	10.2ms	
1	1	0	0	8.2ms	
1	1	1	1	6.1ms	
1	1	1	0	4.1ms	
1	1	1	1	2.0ms	

NOISE ch.SEL.1		AUTO BALANCE	
H	ON		
L	OFF		
NOISE ch.SEL.2		AUTO BALANCE	
H	ON		
L	Test Mode		
(* 3.4ch MODE)			

CENTER MODE		CENTER MODE2	
L	L		NORMAL
L	H		WIDE
H	L		PHANTOM
H	H		OFF
(* 3.4ch MODE)			

NOISE ch.SEL.1		NOISE ch.SEL.2		ch
L	L			Lch
L	H			Cch
H	L			Rch
H	H			Sch
(* NOISE MODE)				

A

B



D

1

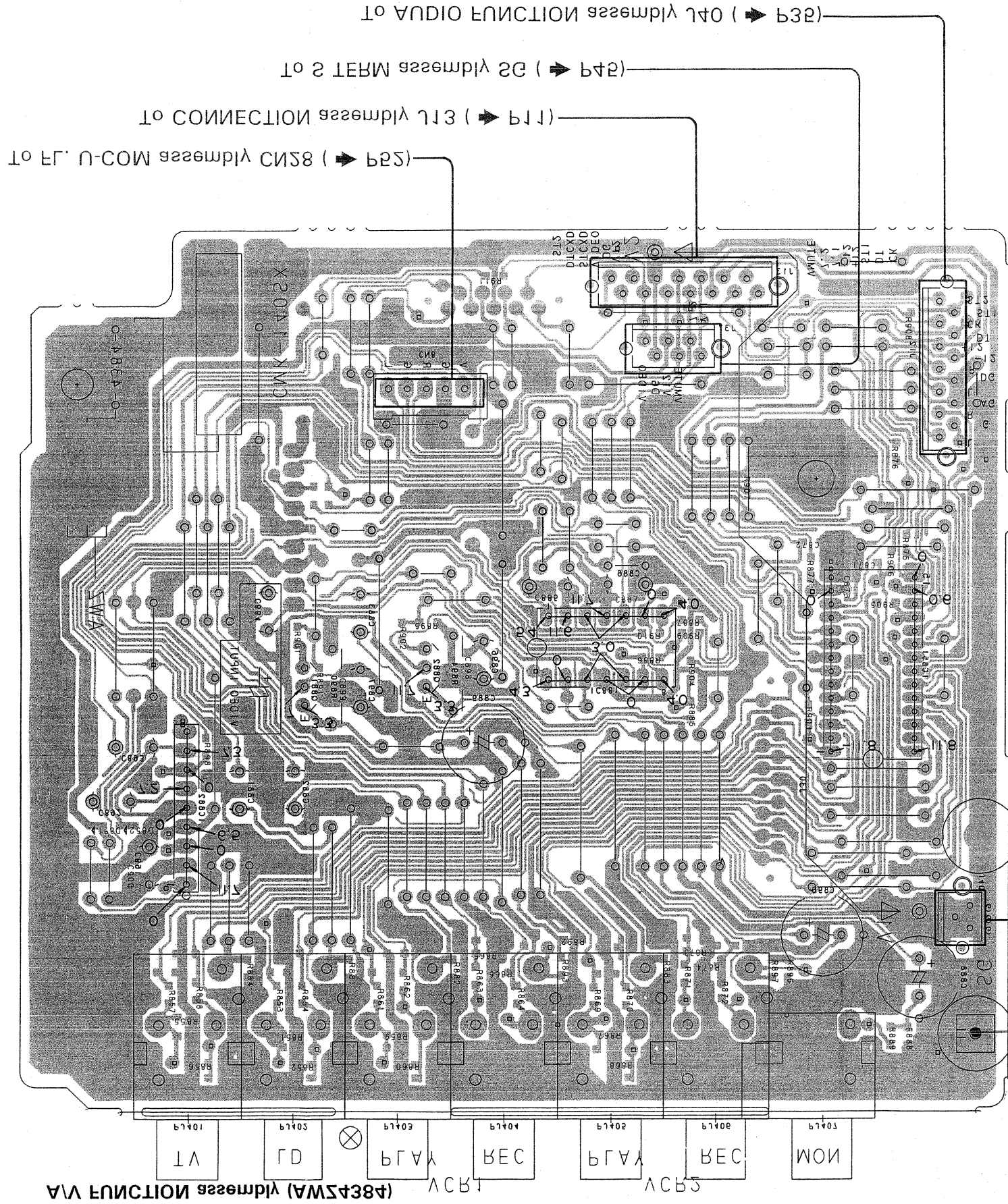
8

1

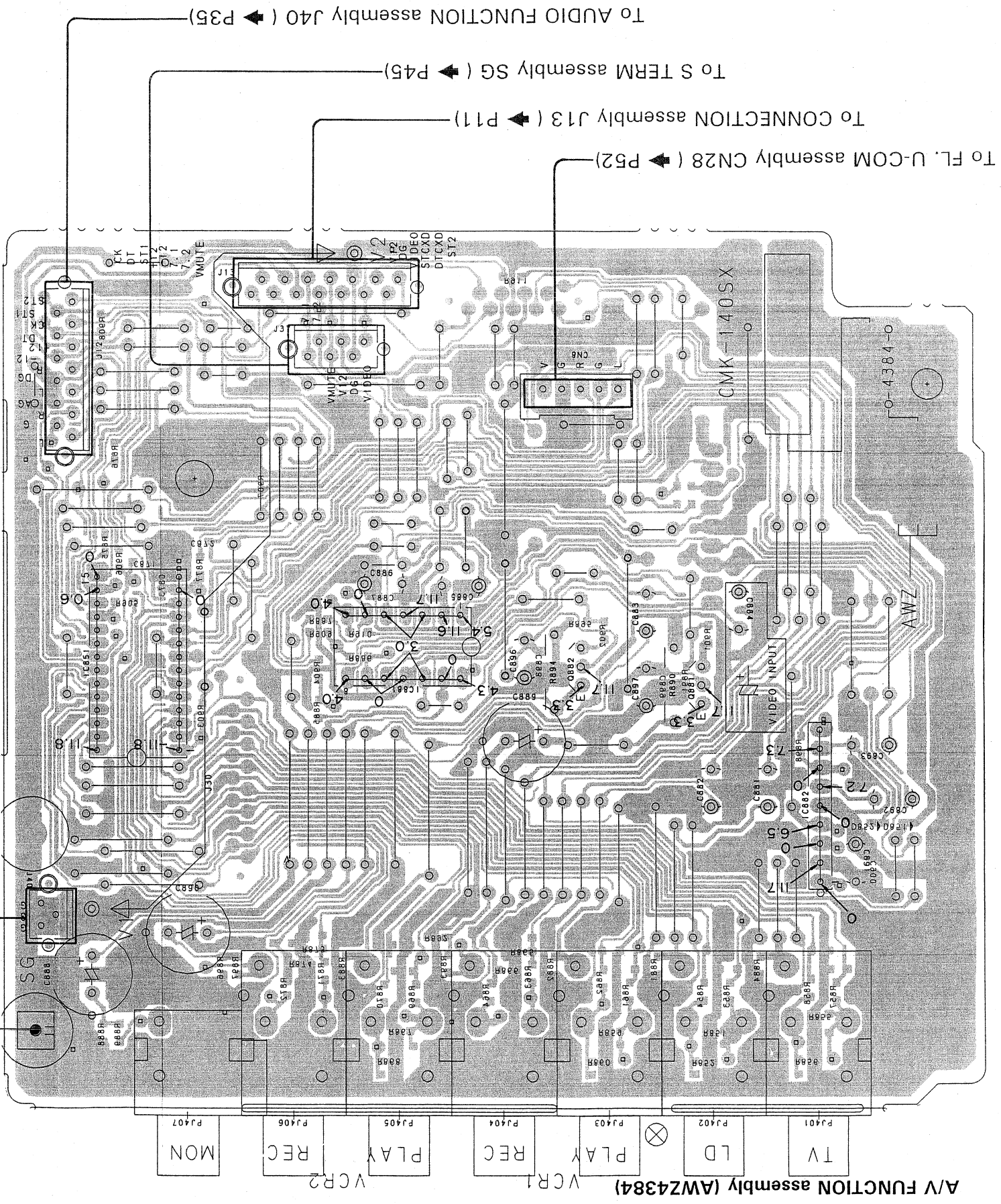
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	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 \odot (double circles) shows negative terminal.
4. The diode terminal marked with \odot (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



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



NOTE

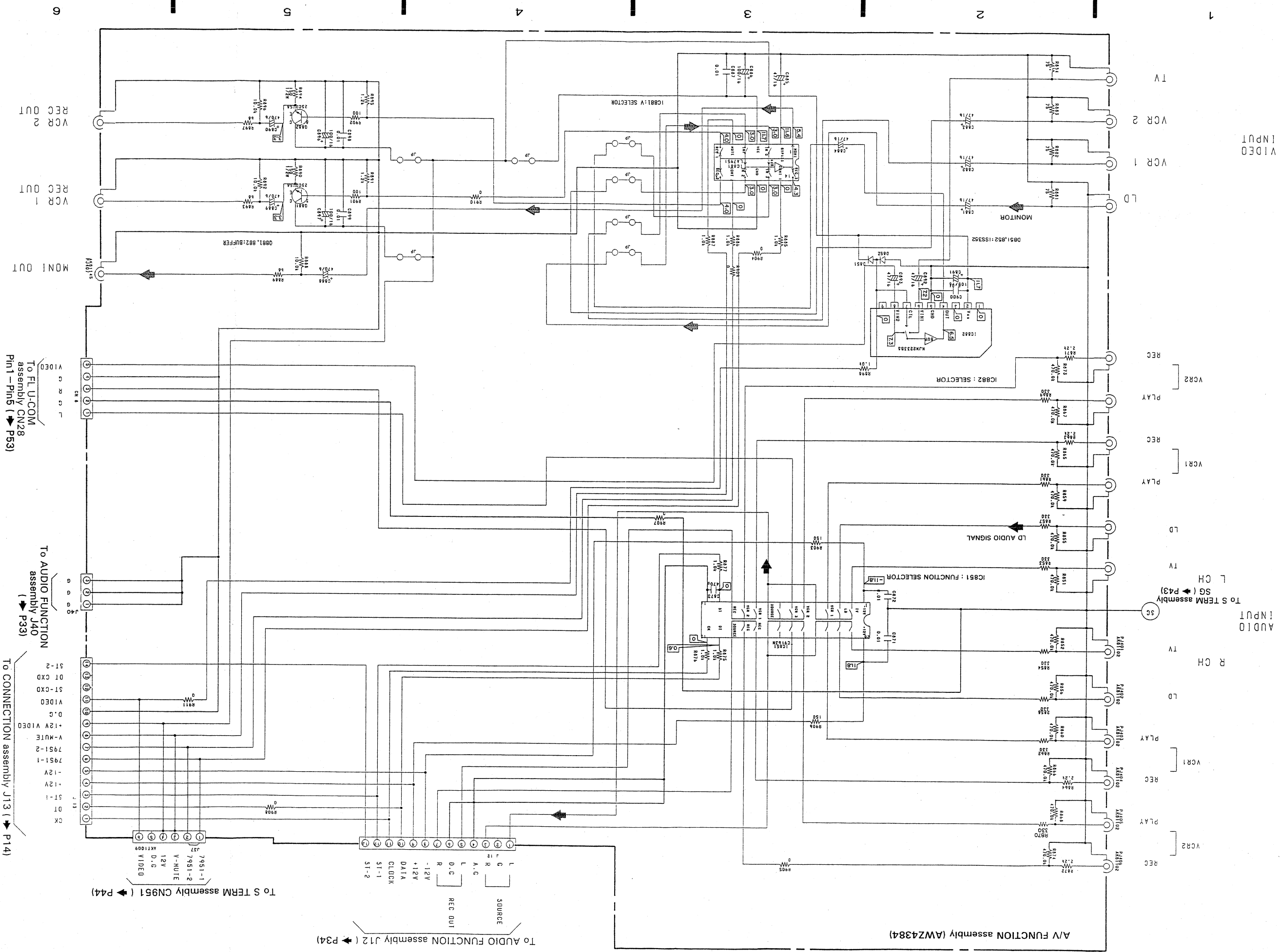
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

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

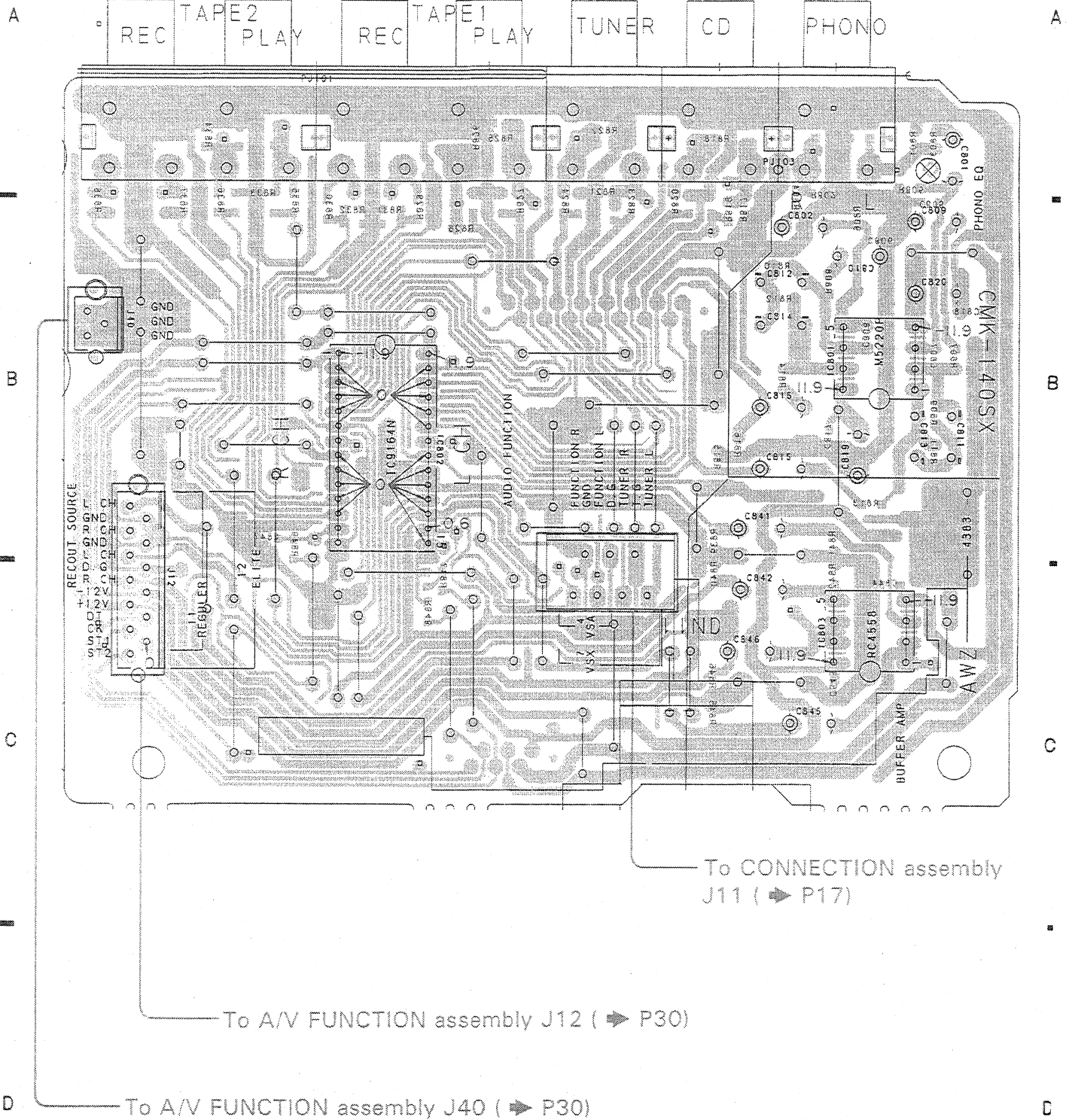
Part Name	IC	Switch	Relay	Coil	Filter	Variable resistor or Semi-fixed resistor
P.C.B. pattern diagram indication						
Others						

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

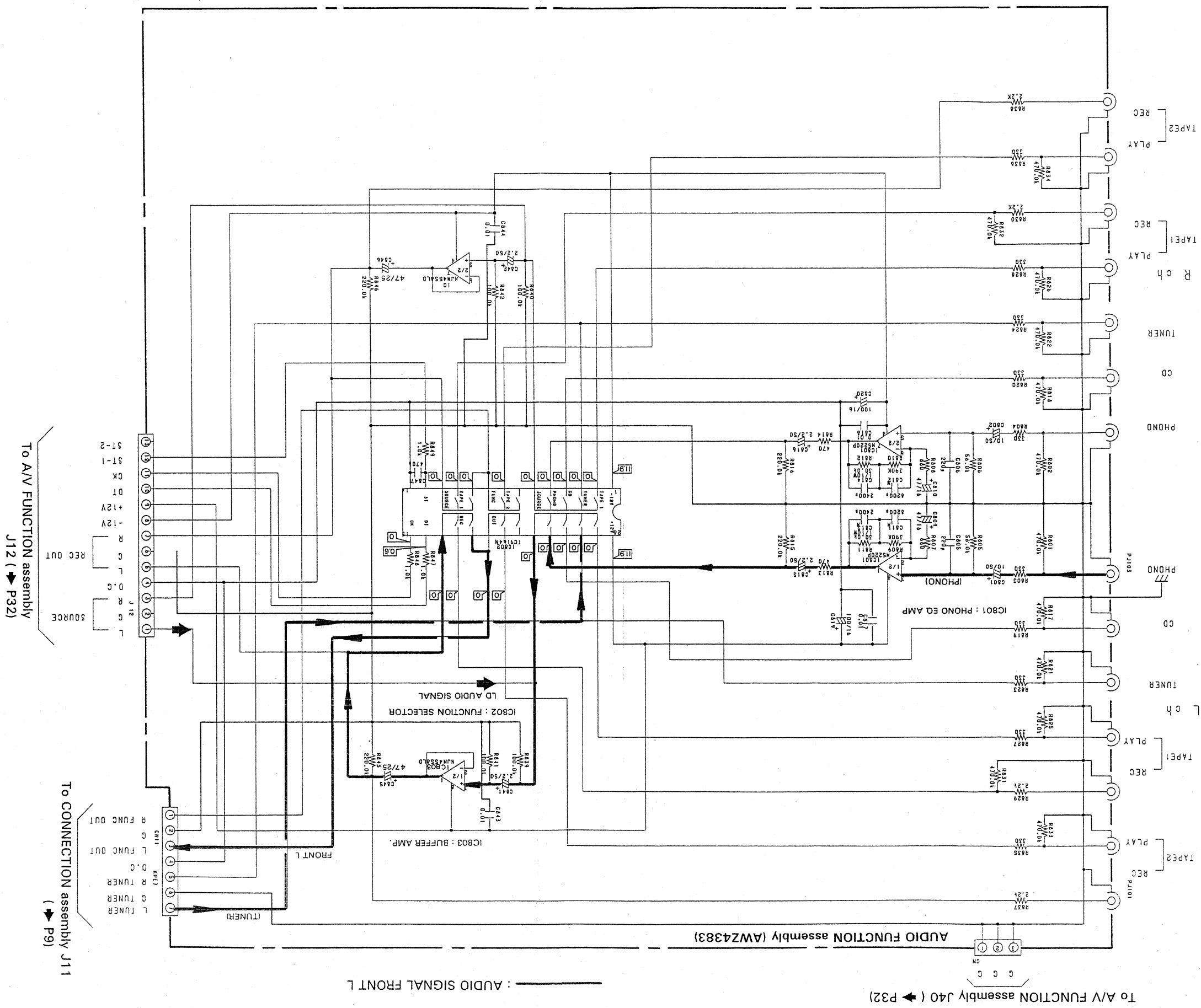
This P. C. B connection diagram is viewed from the parts mounted side.



AUDIO FUNCTION assembly (AWZ4383)



VSA-D801S, VSA-701S



A



0

3

A

A

B

C

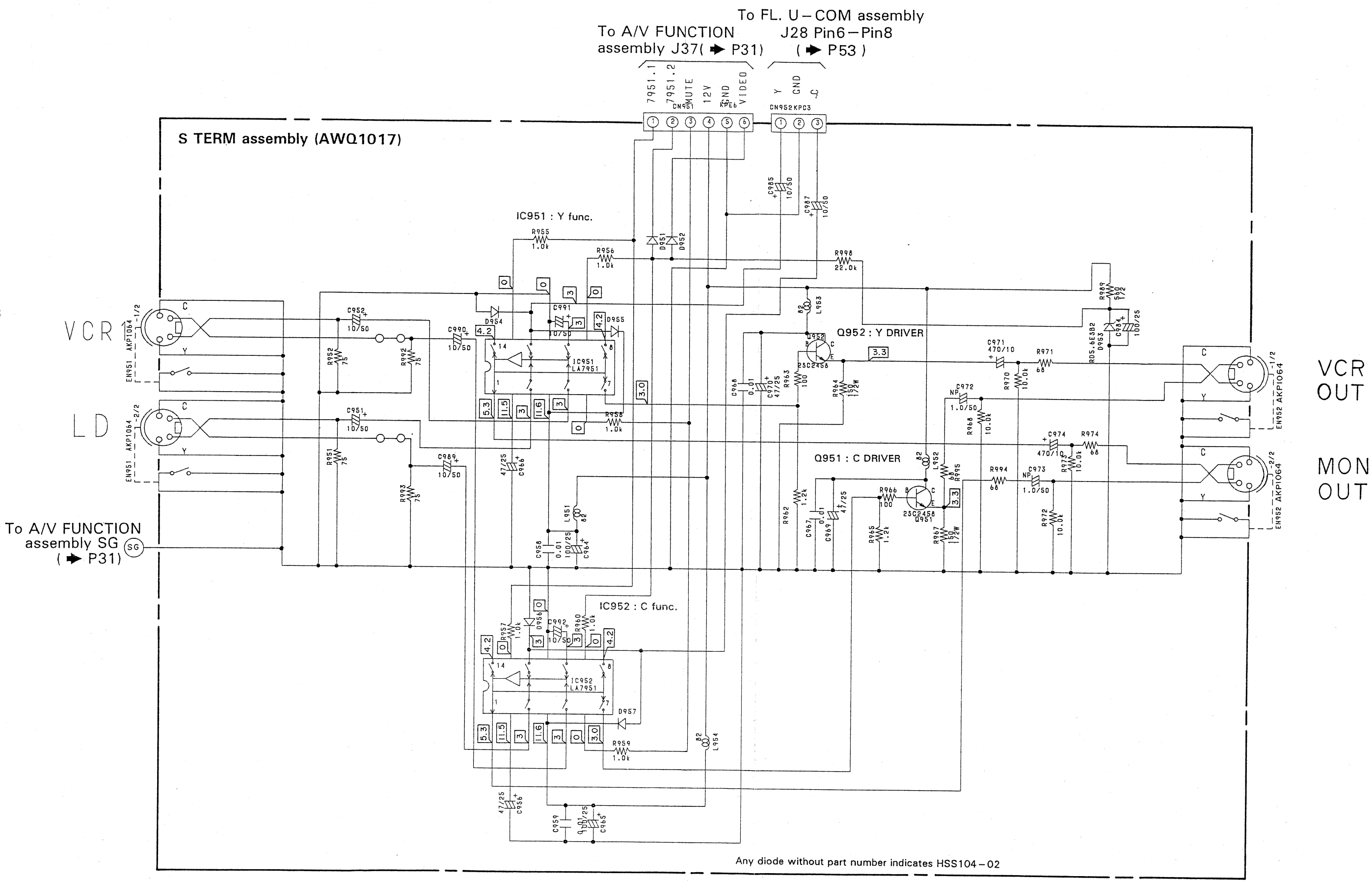
D

A

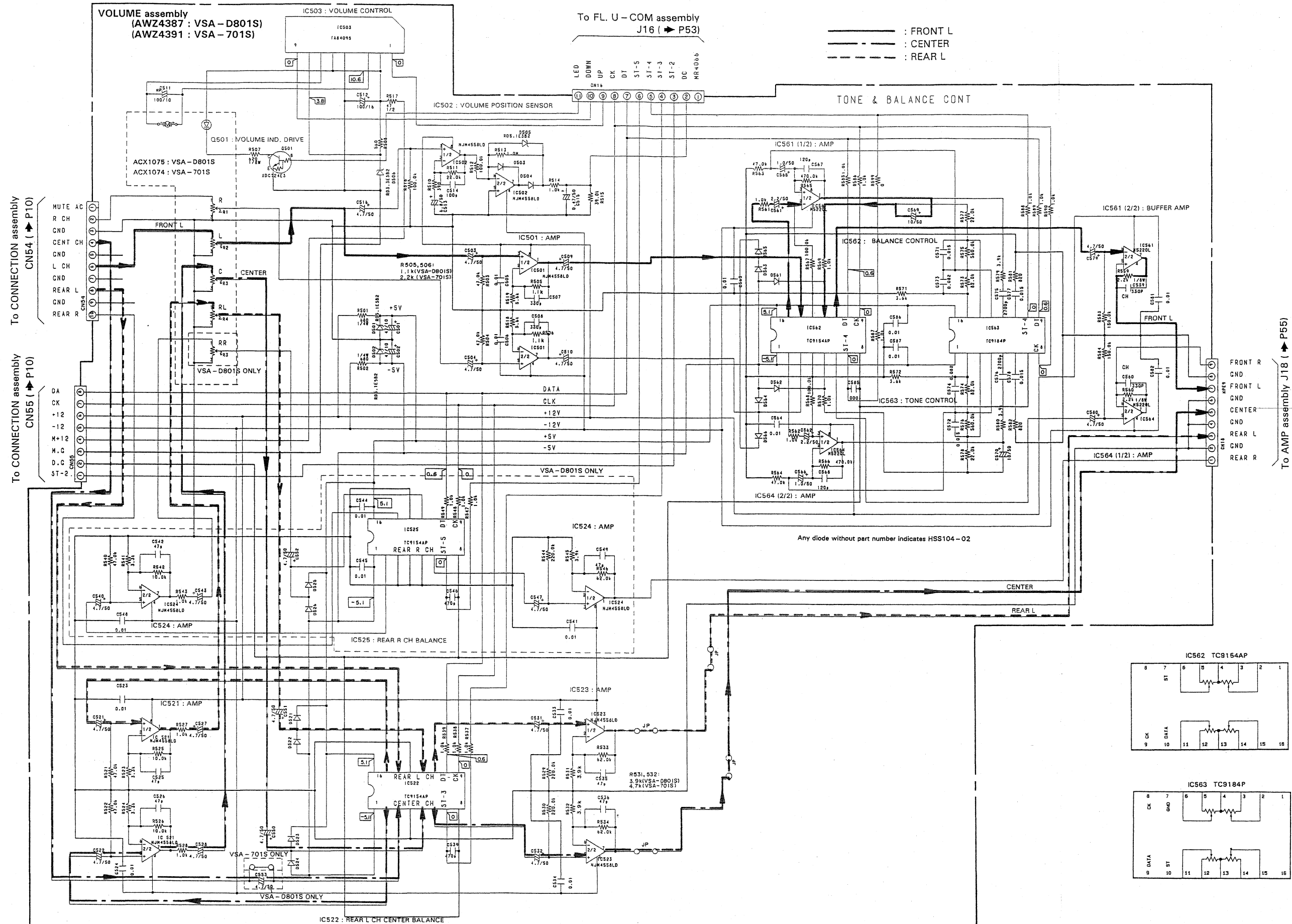
B

C

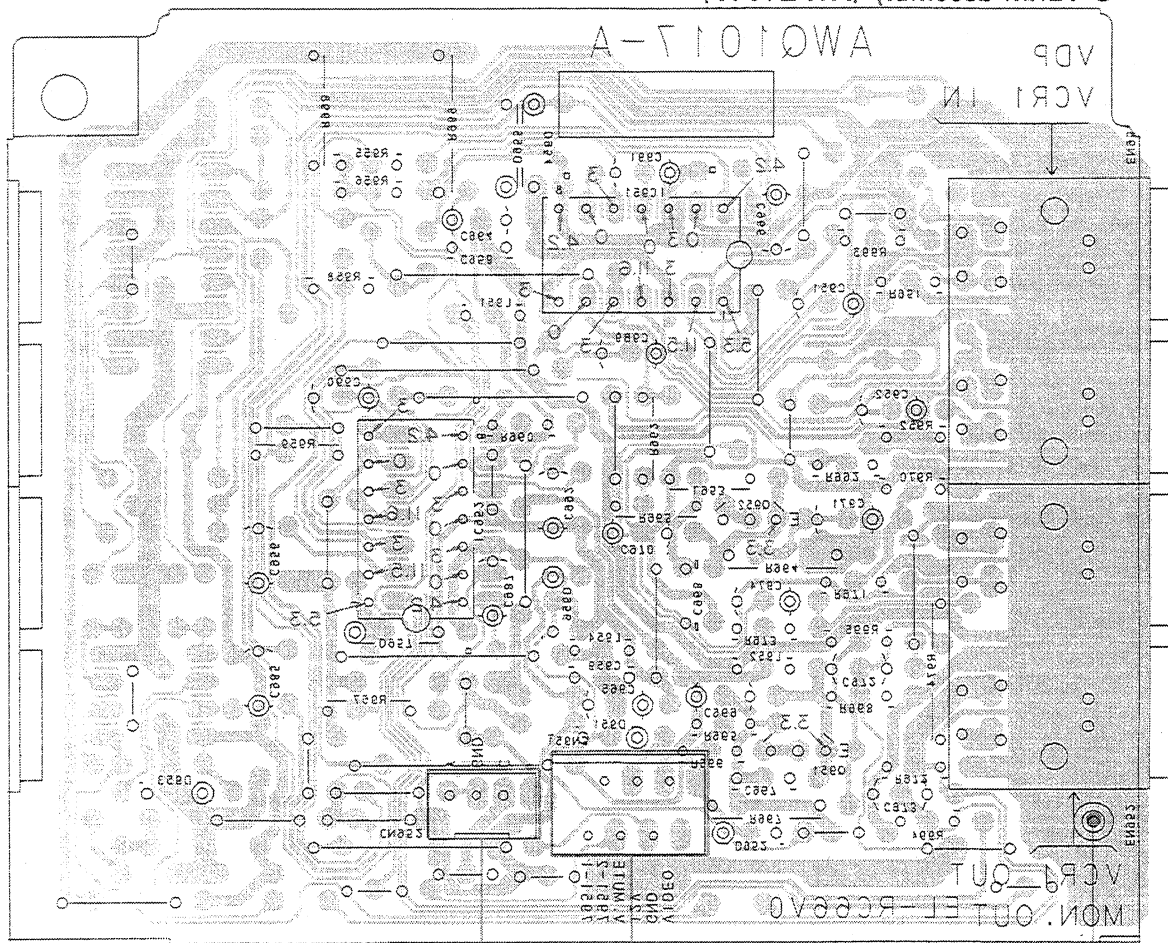
D



Any diode without part number indicates HSS104-02



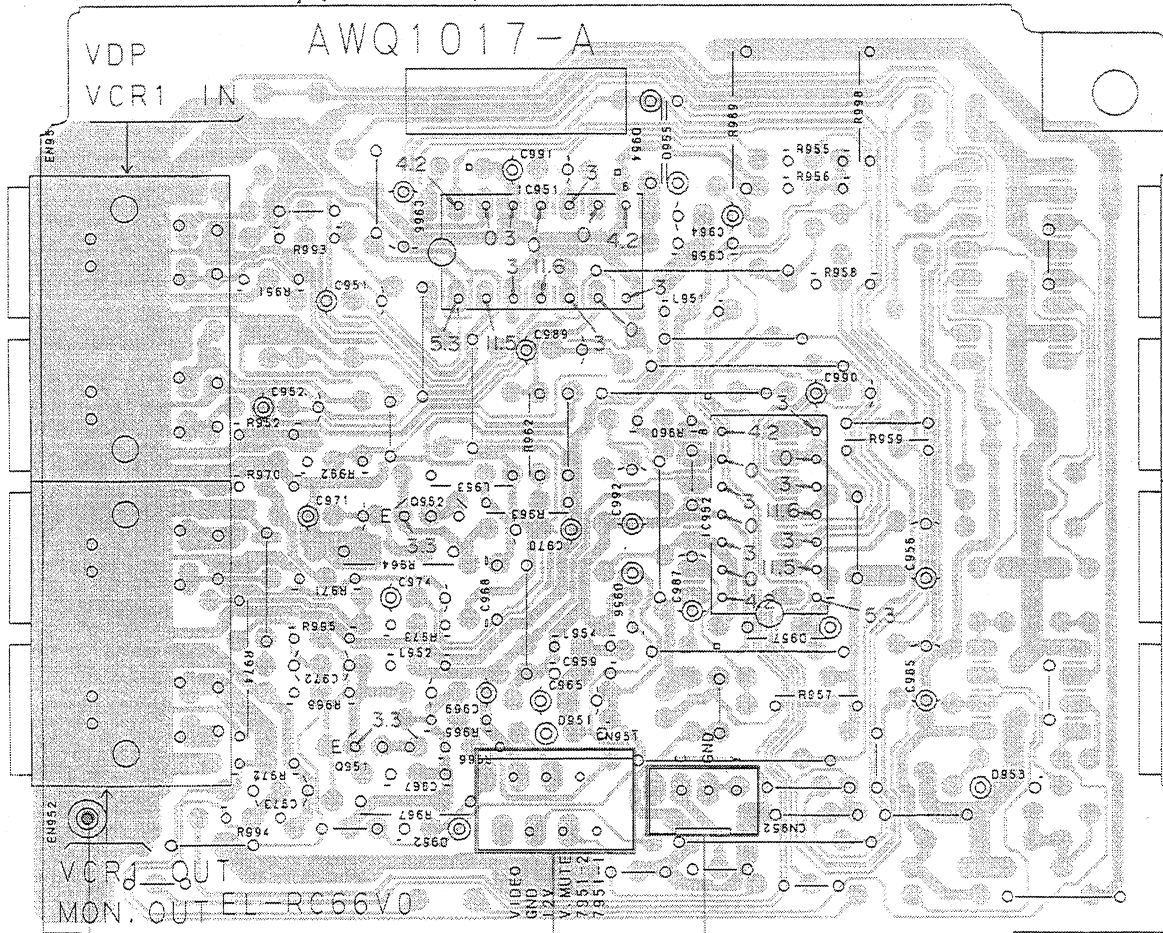
2 TERM assembly (AWQ1017)



To AV FUNCTION assembly 737 (P29) → P25
 To FL. U-COM assembly 828 (P25) → P25
 To AV FUNCTION assembly 26 (P30) → P30

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

S TERM assembly (AWQ1017)



- To FL. U-COM assembly CN28 (➡ P52)

-To A/V FUNCTION assembly J37 (➡ P29)

-To A/V FUNCTION assembly SG (➡ P30)

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

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. diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarized)
		Capacitor (Non-polarized)

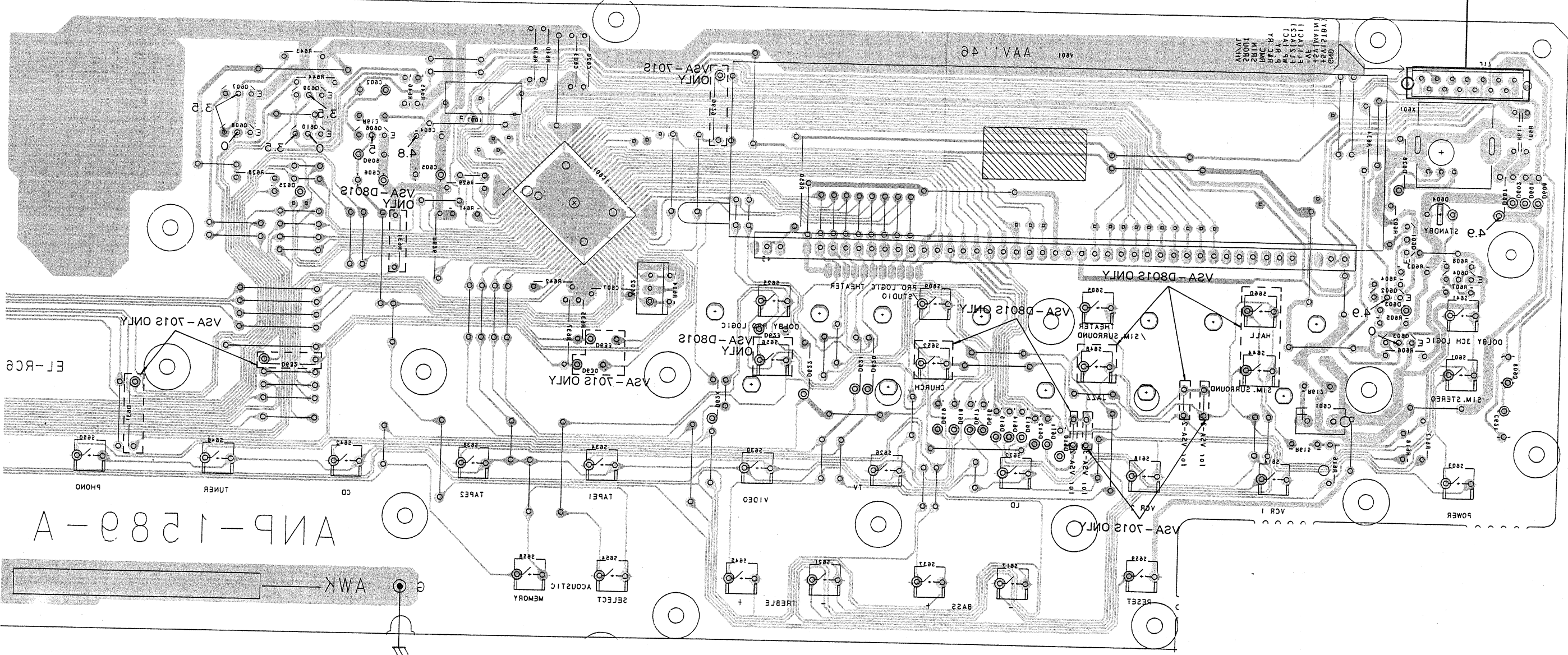
Others

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



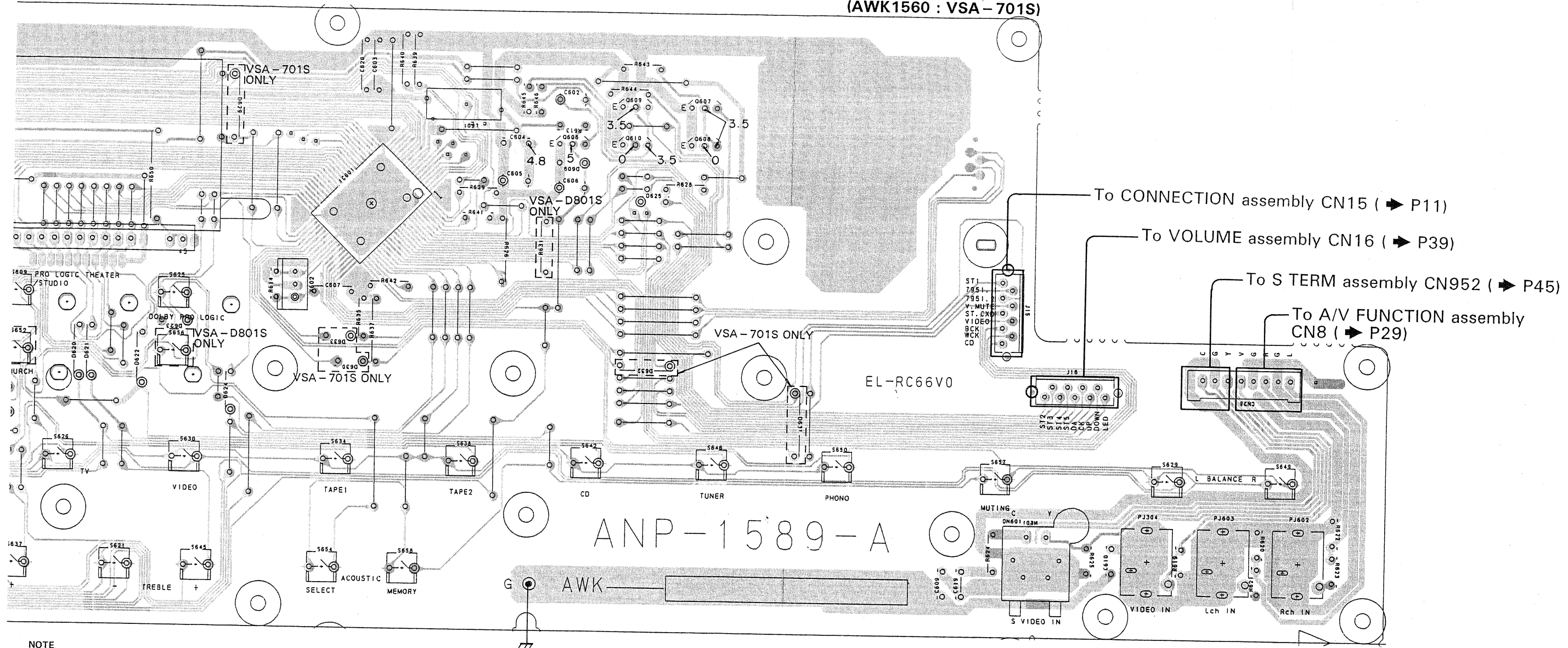
e



FL. U-COM assembly (AWK1555)


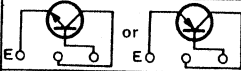
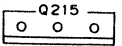
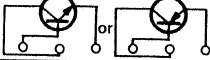
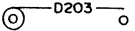
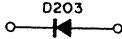
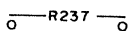





3. The capacitor terminal marked with \ominus (double circles) shows negative terminal.
4. The diode terminal marked with \ominus (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

FL. U-COM assembly (AWK1552 : VSA-D801S)
(AWK1560 : VSA-701S)



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 (Polarized)
		Capacitor (Non-polarized)

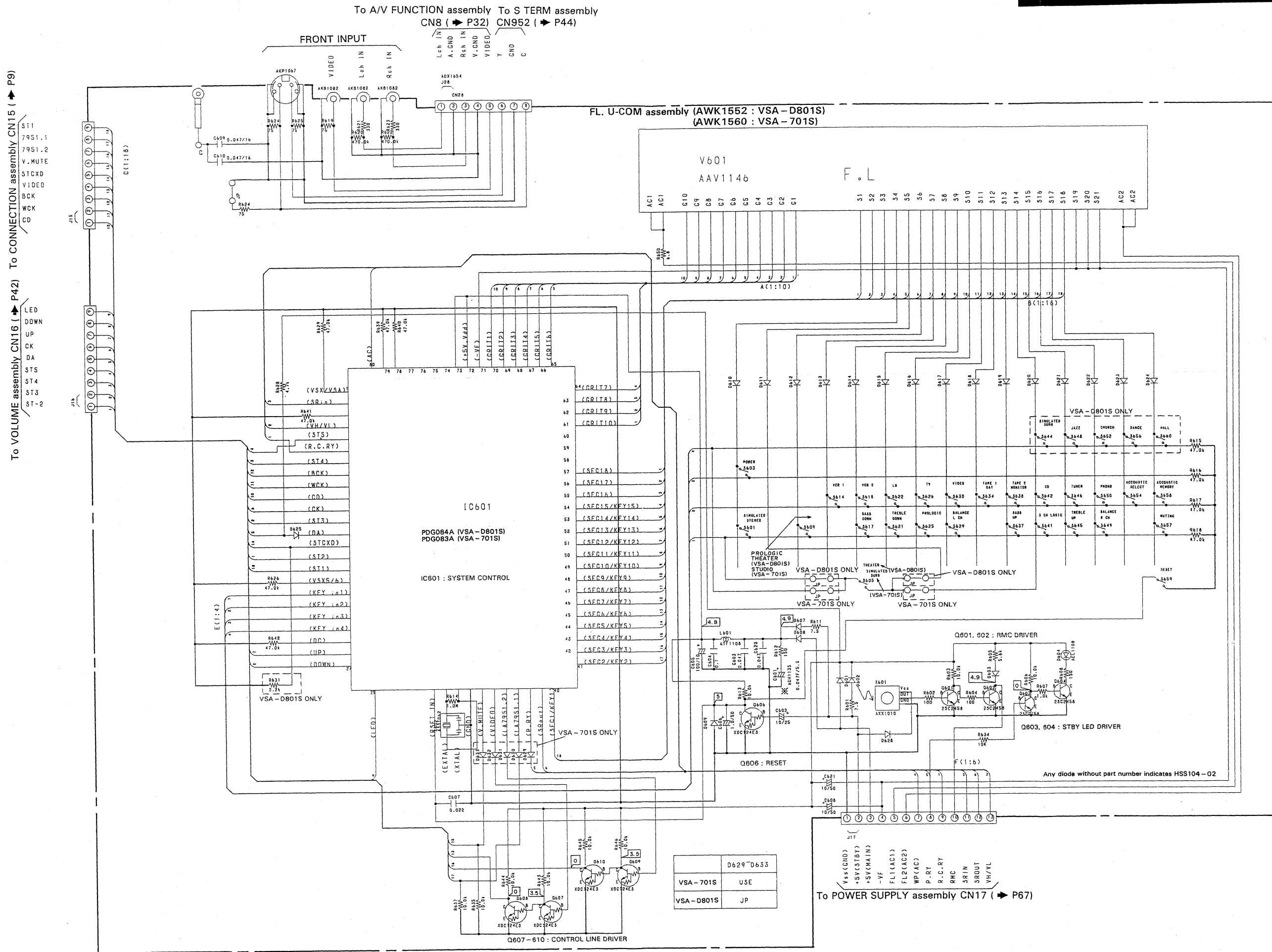
Others

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

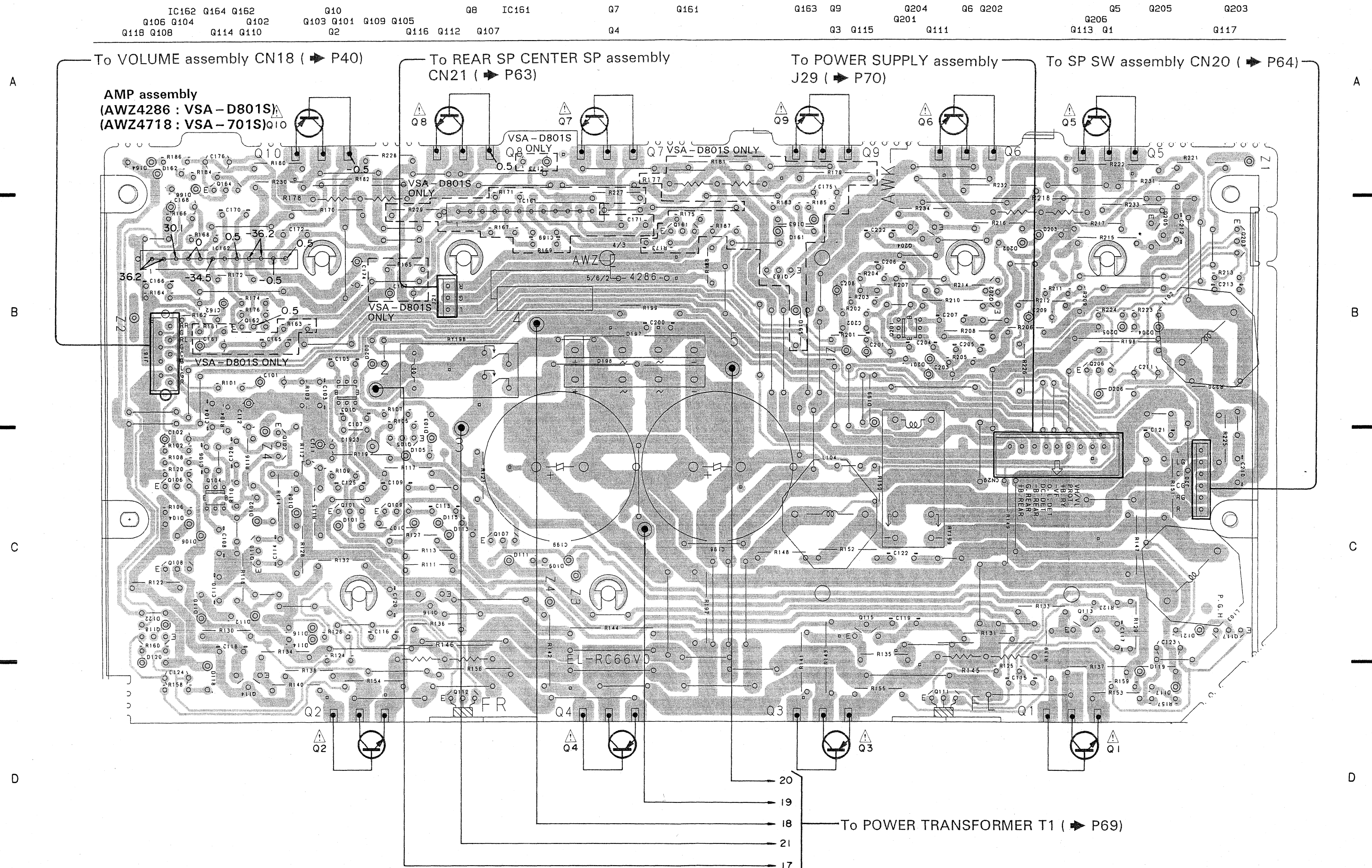
3. The capacitor terminal marked with \ominus (double circles) shows negative terminal.
4. The diode terminal marked with \ominus (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

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

VSA-D801S, VSA-701S



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



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

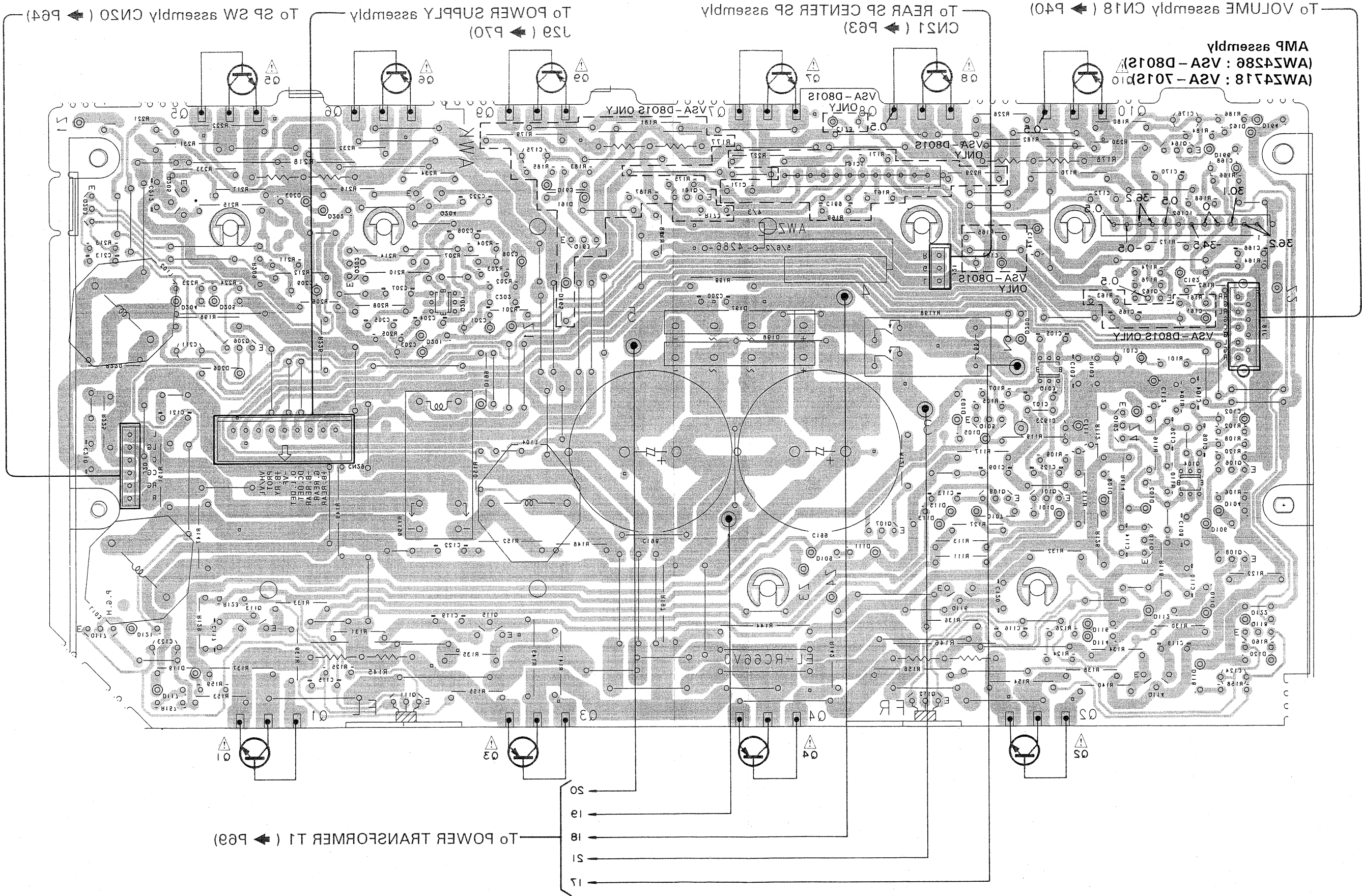
A

B

C

D

59



A

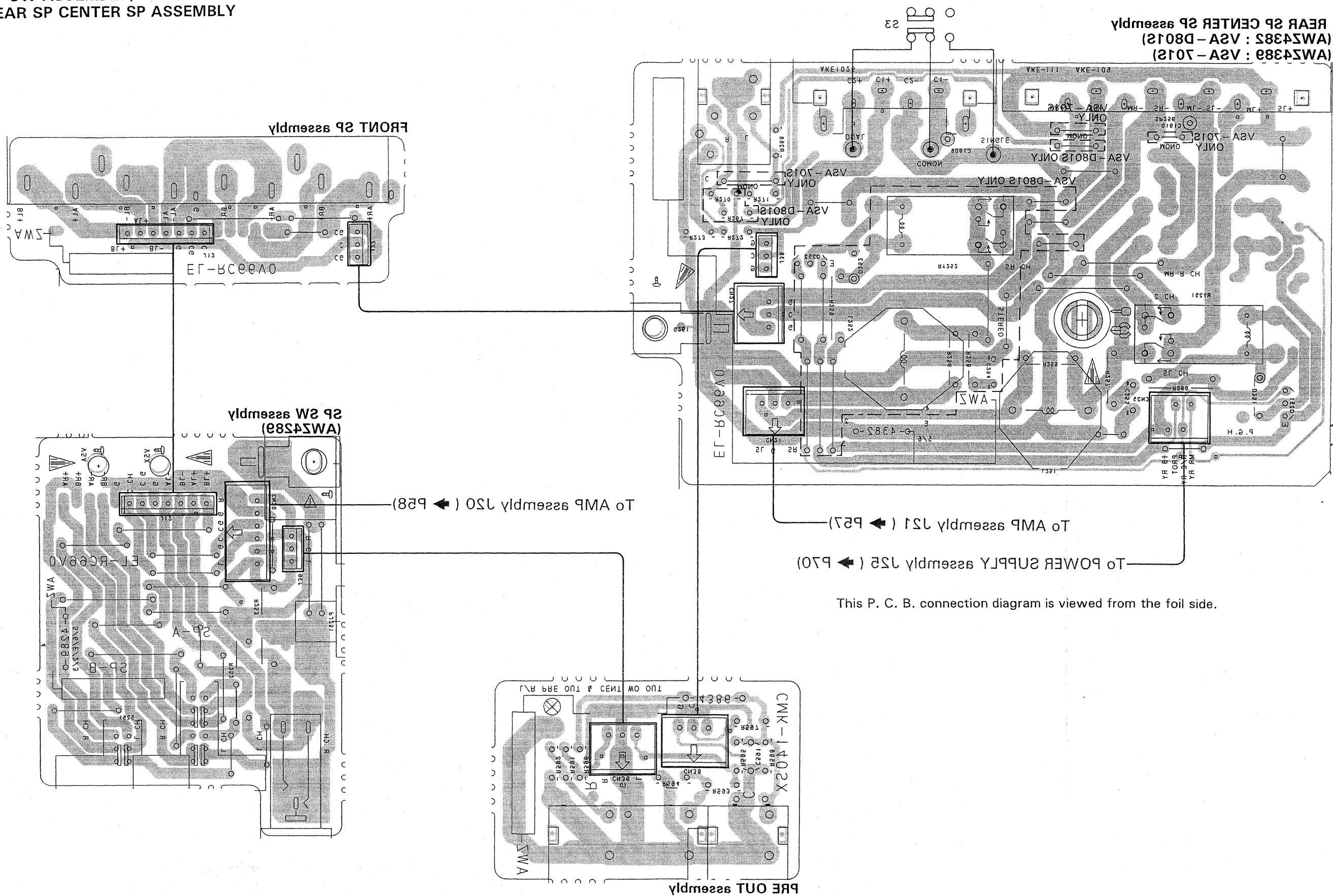
B

C

D

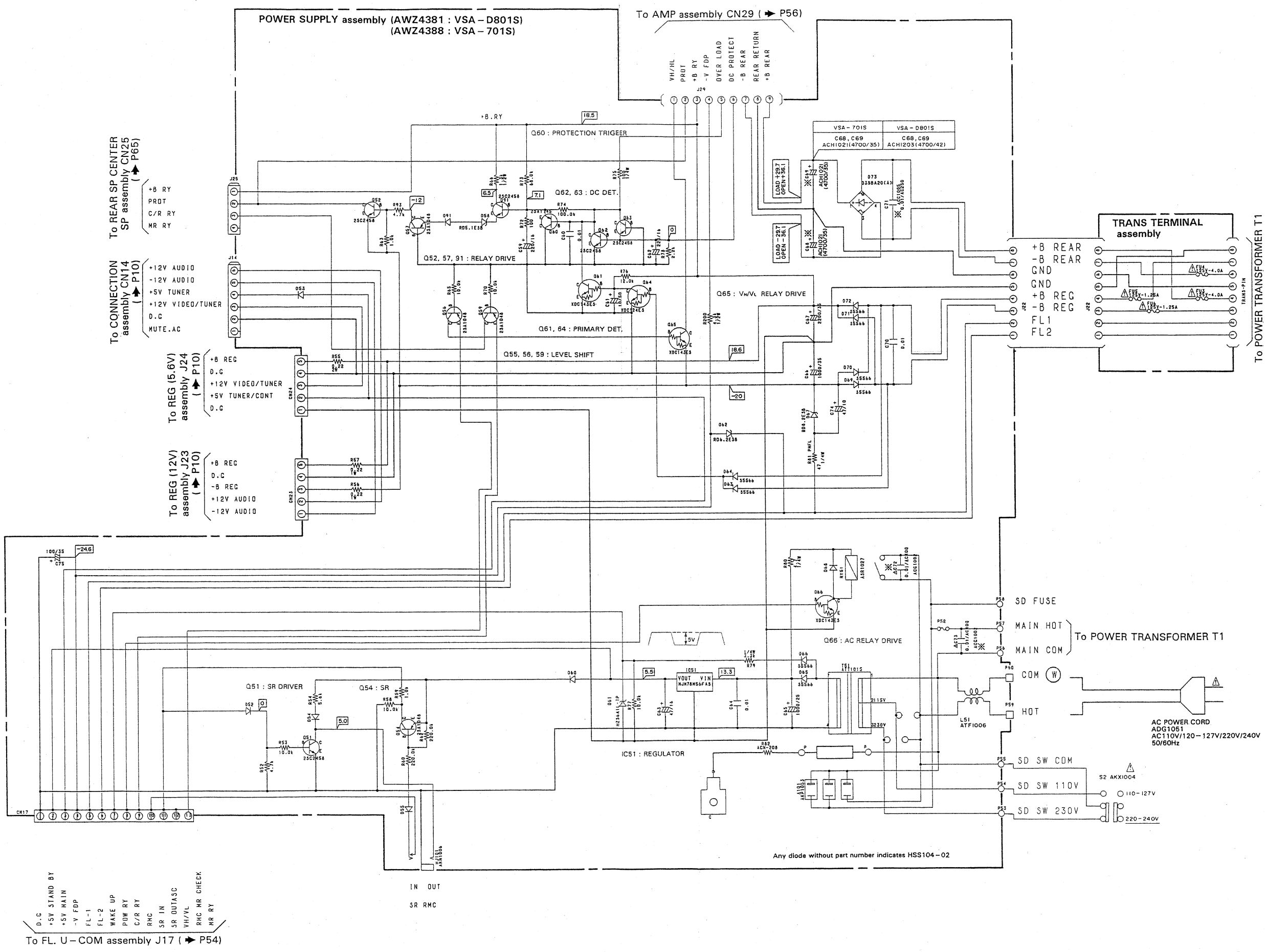
59

3.11 SP SW ASSEMBLY, FRONT SP ASSEMBLY, PRE OUT ASSEMBLY AND REAR SP CENTER SP ASSEMBLY



3.12 POWER SUPPLY ASSEMBLY AND TRANS TERMINAL ASSEMBLY

A
B
C
D



A
B
C
D

POWER SUPPLY assembly (AWZ4381 : VSA - D801S)
(AWZ4388 : VSA - 701S)

AC POWER CORD
AC 110V/120 - 127V/220V/240V
50/60Hz

Q66

Q54 IC51 Q51
Q65 Q52

Q57 Q63
Q62 Q60

Q64 Q61
Q91 Q59 Q56 Q55

ANP1588-A

CAUTION FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.

VSA - D801S ONLY 220-240V 110-127V

POWER TRANSFORMER

LINE VOLTAGE SELECTOR

To REAR SP CENTER SP assembly
CN25 (➔ P63)

To AMP assembly (➔ P69)

To AMP assembly
CN29 (➔ P58)

To REG (12V) assembly
J23 (➔ P11)

To REG (5.6V) assembly
J24 (➔ P11)

To CONNECTION assembly
CN14 (➔ P11)

To FL. U - COM assembly
J17 (➔ P50)

TRANS TERMINAL assembly

FIRE - REPLACE FUSE AS MARKED.

NOTE

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

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
EO 0504	EO	Transistor
EO 0215	EO	Relistor type transistor
EO 0203	EO	Diode
EO R237	EO	Resistor
EO C513	EO	Capacitor (Polarized)
EO C518	EO	Capacitor (Non-polarized)

Others

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

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

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

4. 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%).

560 Ω \rightarrow 56 \times 10¹ \rightarrow 561 RD1/8PM \square \square J

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

0.5 Ω \rightarrow 0R5 RN2H \square \square K

1 Ω \rightarrow 010 RSIP \square \square 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 RN1/4PC \square \square \square F

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES				CAPACITORS			
NSP		FRONT SP ASSEMBLY	AWZ4261	C601		ACH1135	
NSP		TRANS TERMINAL ASSEMBLY	AWZ4268	C606		CEAS010M50	
●		AMP ASSEMBLY	AWZ4286	C602		CEAS100M50	
●		SP SW ASSEMBLY	AWZ4289	C605		CEAS101M10	
●		POWER SUPPLY ASSEMBLY	AWZ4381	C608, 621		CEJA100M50	
●		REAR SP CENTER SP ASSEMBLY	AWZ4382	C604		CKDYX104M25	
●		REG (12V) ASSEMBLY	AWZ4266	C607		CKPUYF223Z25	
●		REG (5.6V) ASSEMBLY	AWZ4267	C603, 609, 610, 620		CKPUYF473Z16	
●		AUDIO FUNCTION ASSEMBLY	AWZ4383	RESISTORS			
●		A/V FUNCTION ASSEMBLY	AWZ4384	All Resistors			RD1/8PM \square \square \square J
●		CONNECTION ASSEMBLY	AWZ4385	OTHERS			
NSP		PRE OUT ASSEMBLY	AWZ4386	REMOTE RECEIVER UNIT			AXX1010
●		VOLUME ASSEMBLY	AWZ4387	X602 (8.00MHZ)		ASS1015	
●		FL. U-COM ASSEMBLY	AWK1552	PIN JACK 1P		AKB1082	
●		DSP ASSEMBLY	AWZ4294	SOCKET (DIN)		AKP1067	
		S TERM ASSEMBLY	AWQ1017	V601 FL TUBE		AAV1146	
				FL SPACER		AEB1120	
FL. U-COM ASSEMBLY				S TERM ASSEMBLY			
SEMICONDUCTORS				SEMICONDUCTORS			
	IC601	CONTROL MCU	PDG084A	IC951, 952	VIDEO SWITCH	LA7951	
	Q606-610		XDC124ES	Q951, 952		2SC2458	
	Q601-604		2SC2458	D951, 952, 954-957		HSS104-02	
	D604	LED (RED)	ABL1108	D953	ZENER DIODE	RD5.6ESB	
	D601-603, 607-625, 628		HSS104-02	COILS			
SWITCHES				L951-954	AXIAL INDUCTOR	LAU820K	
	S601, 603, 605, 609, 614, S617, 618, 621, 622, 625, S626, 629, 630, 634, 637, S638, 641, 642, 644-646, S648-650, 652, 654, S656-660		ASG1034	CAPACITORS			
COIL				C972, 973		CEANP010M50	
	F601		ATF1108	C951, 952, 985, 987, 989-992		CEAS100M50	
				C964, 965		CEAS101M25	

Mark	No.	Description	Parts No.
	C956, 966, 969, 970		CEAS470M25
	C971, 974		CEAS471M10
	C968		CKDYF103Z50
	C958, 959, 967		CKPUYF103Z25

RESISTORS

R989	RD1/2PMF561J
R964, 967	RD1/2PM151J
Other Resistors	RD1/8PM□□□J

OTHERS

SOCKET (DIN)	AKP1064
CN951 CONNECTOR (6P)	KPE6

FRONT SP ASSEMBLY
OTHERS

SPEAKER TERMINAL 8-P	AKE1011
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REG (12V) ASSEMBLY
SEMICONDUCTORS

IC54 REGULATOR IC	NJM78M12FAS
IC55 REGULATOR IC	NJM79M12FA

CAPACITORS

C52, 53	CEAS101M35
C56, 57	CKCYF103Z50

REG (5.6V) ASSEMBLY
SEMICONDUCTORS

IC52	M5237L
IC53 REGULATOR IC	NJM78M56FAS
Q51	2SA1306

CAPACITORS

C76	CEAS010M50
C55	CEAS101M35
C51	CEAS470M16
C54	CKCYF103Z50
C58	CKCYX104M25

RESISTORS

R83	RD1/4PMF221J
R84	RD1/4PM363J
R51	RS1LMF100J
Other Resistors	RD1/8PM□□□J

TRANS TERMINAL ASSEMBLY

TRANS TERMINAL assembly has no service parts.

Mark	No.	Description	Parts No.
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AMP ASSEMBLY
SEMICONDUCTORS

IC161, 162	PREDRIVER-IC	UPC1270H
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Q107, 108	2SA1145
Q103, 104, 201	2SA1240
DUAL TRANSISTOR	
Q115, 116, 204	2SA1306
Q105, 106	2SA970
Q101, 102	2SC1845

Q117, 118, 206	2SC2240
Q161-164	2SC2458
Q111, 112, 203	2SC2603
Q109, 110, 202	2SC2705
Q113, 114, 205	2SC3298

D197, 198	D5SB20F
D101-108, 111-114, 117-122, 161	HSS104-02
166, 199, 200, 204-206	
D109, 110, 115, 116, 201	RD10ESB
ZENER DIODE	
D202, 203 ZENER DIODE	RD4.3ESB

RELAIRES

RY199	ASR-112
RY198	ASR1035

COILS

L102-104	COIL	ATH1004
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CAPACITORS

C200 (0.01/AC250V)	ACG1005
C198 (8200/DC71V)	ACH1224
C199 (8200/DC71V)	ACH1225
C113, 114	CCCSL050C500
C105-108	CCCSL101J50

C212, 222	CCCSL101K500
C117-120	CCCSL151K500
C109, 110	CCCSL220K500
C204, 205	CCCSL470J50
C207	CCCSL560K500

C169, 170	CCCSL680J50
C123, 124	CEANP010M100
C175, 176, 211	CEANP2R2M50
C173, 174	CEAS100M100
C161, 201, 203	CEAS2R2M50

C101, 102	CEAS4R7M50
C111, 112, 208	CEAS470M16
C209	CEAS470M25
C167, 168	CEHAQ101M10
C162	CEHAQ2R2M50

C121, 122, 210	CFTXA473J50
C115, 116, 206, 213	CKCYB102K50
C103, 104	CKCYB122K50
C125, 126, 165, 166, 202	CKCYB222K50
C171, 172	CKCYX333M25

Mark	No.	Description	Parts No.
RESISTORS			
	R177, 178 (0.22/2W)		ACN-131
	R145, 146, 218 (0.33/5W)		ACN1087
	R147, 148, 220, 225		RD1/4PMF100J
	R129-136, 214-217		RD1/4PMF101J
	R153-156, 179-182, 221, 222		RD1/4PMF222J
	R139-142, 233, 234		RD1/4PMF4R7J
	R210		RD1/4PMF470J
	R121, 122		RD1/4PMF680J
	R208		RD1/4PM123J
	R115, 116		RD1/4PM152J
	R207		RD1/4PM431J
	R117, 118		RD1/4PM473J
	R111-114		RFA1/4PS391J
	R137, 138, 143, 144, 227-232		RFA1/4PS4R7J
	R127, 128		RFA1/4PS470J
	R151, 152		RS1LMF100J
	R198, 199		RS1PMF681J
	R197		RS2LMF103J
	Other Resistors		RD1/8PM□□□J

OTHERS

CN29 CONNECTOR (9P)	KPC9
SCREW (STEEL)	ABA1009

SP SW ASSEMBLY**SWITCH**

S251 PUSH SWITCH	SUJ6LYXS
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RESISTORS

R252, 253	RS2LMF331J
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OTHERS

JACK (PHONES)	AKN1002
CN20 JUMPER CONNECTOR	KPC6

DSP ASSEMBLY**SEMICONDUCTORS**

IC1302	LH5P832N-10T
IC1202, 1204, 1206, 1209	M5238PF
IC1201, 1203, 1205, 1207, 1208	NJM4558DXP
IC1303 REGULATOR IC	NJM78M05FAS
IC1210 E-SW IC	TC9162N

IC1301 YSS215	
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D1271-1275, 1301-1305	HSS104-02
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COILS

F1201, 1202	ATF1071
F1301, 1302	ATF1102

L1301-1305	ATX1008
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Mark	No.	Description	Parts No.
CAPACITORS			
	C1203, 1204, 1233, 1234, 1237, 1238, 1252, 1256		CCSQCH101J50
	C1305, 1306		CCSQCH300J50
	C1211, 1212, 1221, 1222		CCSQCH330J50
	C1215, 1216, 1225, 1226		CCSQCH391J50
	C1255		CEANP2R2M50
	C1201, 1202, 1205, 1206, 1219, 1220, 1229, 1230, 1232, 1271, 1272		CEAS100M50
	C1273		CEAS101M10
	C1317, 1318		CEAS101M16
	C1318		CEAS101M16
	C1236, 1239, 1240, 1257		CEAS220M25
	C1312		CEAS221M10
	C1307		CEAS4R7M50
	C1301, 1309		CEAS470M10
	C1319, 1321		CEAS470M16
	C1231, 1251		CEJA100M35
	C1235, 1253		CEJA220M25
	C1254		CFTXA274J50
	C1338		CKDYB561K50
	C1302, 1311, 1314, 1323		CKSQYB102K50
	C1213, 1214, 1223, 1224		CKSQYB272K50
	C1217, 1218, 1227, 1228		CKSQYB682K50
	C1324, 1325		CKSQYF103Z50
	C1274, 1308		CKSQYF104Z50
	C1303, 1310, 1313, 1320, 1322, 1326-1330, 1332-1337		CKSQYF473Z50
	C1315, 1316		CQSA332J50

RESISTORS

R1307	RD1/2PMF100J
R1321-1331	RS1/10S000J
R1227, 1228, 1243, 1244, 1261, 1271, 1272, 1302	RS1/10S101J
R1235-1242, 1204-1306	RS1/10S102J
R1231-1234, 1251, 1252, 1254, 1256-1260, 1273, 1274, 1303, 1311, 1312	RS1/10S103J
R1201, 1202, 1245, 1246, 1255	RS1/10S104J
R1301	RS1/10S105J
R1253	RS1/10S152J
R1275	RS1/10S200J
R1203	RS1/10S332J

R1204-1206	RS1/10S332J
R1207, 1208	RS1/10S682J
R1211-1216, 1221-1226	RS1/10S822J

Other Resistors	RD1/8PM□□□J
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OTHERS

X1301 (11.2MHZ)	ASS1031
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Mark	No.	Description	Parts No.
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POWER SUPPLY ASSEMBLY
SEMICONDUCTORS

IC51	REGULATOR IC	NJM78M56FAS
Q64		XDC124ES
Q61, 65, 66		XDC143ES
Q54, 56, 57, 59		2SA1048
Q60		2SA1145
Q51, 52, 62, 63, 91		2SC2458
D73		D3SBA20 (A)
D52-55, 60, 68, 91		HSS104-02
D61 ZENER DIODE		HZS6A1L
D58 ZENER DIODE		RD5.1ESB
D62 ZENER DIODE		RD6.2ESB
D67 ZENER DIODE		RD8.2ESB
D63-66, 69-72		S5566

RELAY

RY51	ASR1027
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COIL & TRANSFORMER

L51	LINE FILTER	ATF1006
T51	POWER TRANSFORMER	ATT1015

CAPACITORS

△ C72, 73 (0.01/AC400V)	ACG1002
C71 (0.01/AC250V)	ACG1005
C68, 69 (4700/DC42V)	ACH1203
C61	CEAS100M50
C75	CEAS101M35
C65	CEAS102M25
C66	CEAS102M35
C59, 62	CEAS221M16
C67	CEAS222M35
C74	CEAS470M10
C63	CEAS470M16
C60, 64, 70	CKCYB103K50

RESISTORS

R66	RD1/2PM132J
R200	RD1/2PM432J
R81	RD1/4PMFL470J
R75	RD1/4PMF101J
R80	RD1/4PMF4R7J
R79	RD1/4PM332J
R56, 57	RS1LMFR22J
R55	RS2LMFR22J

Other Resistors

RD1/8PM□□□J

OTHERS

JACK (CONTROL)	AKN1006
AC OUTLET (3P)	AKP1053
CN17 CONNECTOR (13P)	KPE13

Mark	No.	Description	Parts No.
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REAR SP CENTER SPASSEMBLY
SEMICONDUCTORS

Q251, 252	XDC143ES
D251, 252	HSS104-02

RELAIIES

RY251, 252	ASR1035
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COILS

L251, 252 COIL	ATH1004
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CAPACITORS

C253, 254	CFTXA473J50
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RESISTORS

R255-258	RD1/4PMF100J
R259, 260	RS1LMF681J

Other Resistors

RD1/8PM□□□J

OTHERS

PIN JACK 3P	AKB1120
SPEAKER TERMINAL 4-P (REAR SP)	AKE-109
SPEAKER TERMINAL 4-P (CENTER SP)	AKE1026
CN25 CONNECTOR (4P)	KPE4

AUDIO FUNCTION ASSEMBLY
SEMICONDUCTORS

IC801 OP-AMP-IC	M5220P
IC803 OP-AMP IC	NJM4558DXP
IC802 E-SW IC	TC9164N

CAPACITORS

C805, 806	CCSQCH221J50
C847	CCSQCH471J50
C807, 808	CCSQSL101J50
C801, 802	CEAS100M50
C819, 820	CEAS101M16
C815, 816, 841, 842	CEAS2R2M50
C845, 846	CEAS470M25
C809, 810	CEAS470M16
C817, 818, 843, 844	CKSQYF103Z50
C813, 814	CQMA242J50
C811, 812	CQMA822J50

RESISTORS

R847-849	RS1/10S102J
R839-842	RS1/10S104J
R829, 830, 837, 838	RS1/10S222J
R815, 816, 845, 846	RS1/10S224J
R811, 812	RS1/10S303J

R803, 804, 819, 820, 823, 824, 827, 828, 835, 836	RS1/10S331J
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Mark	No.	Description	Parts No.
	R809, 810		RS1/10S394J
	R813, 814		RS1/10S471J
	R801, 802, 817, 818, 821, 822, 825, 826, 831-834		RS1/10S474J
	R805, 806		RS1/10S563J
	R807, 808		RS1/10S681J

OTHERS

CN	PIN JACK 6P (TAPE1/TUNER)	AKB1140
CN	PIN JACK 4P (TAPE2)	AKB1181
CN	PIN JACK 4P (CD/PHONO)	AKB1201
CN11	CONNECTOR (7P)	KPE7

A/V FUNCTION ASSEMBLY
SEMICONDUCTORS

IC881	VIDEO SWITCH	LA7951
IC882	E-SW IC	NJM2233BS
IC851	E-SW IC	TC9163N

Q881, 882	2SC2458
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D851, 852	1SS352
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CAPACITORS

C873	CCSQCH471J50
C886, 891, 896, 897, 881-885, 892, 893	CEAS101M16
C888-890	CEAS471M6
C871, 872, 887, 898-900	CKSQYB103K50

RESISTORS

R890, 894	RD1/2PM151J
R904, 905, 907-911	RS1/10S000J
R901, 902	RS1/10S101J
R875-877, 885-887, 898	RS1/10S102J
R888, 892, 896	RS1/10S103J

R891, 895	RS1/10S122J
R903, 906	RS1/10S151J
R863, 864, 871, 872	RS1/10S222J
R853, 854, 857, 858, 861, 862, 869, 870	RS1/10S331J
R851, 852, 855, 856, 859, 860, 865-868, 873, 874	RS1/10S474J

R889, 893, 897	RS1/10S680J
R881-884	RS1/10S750J

OTHERS

PIN JACK 3P	AKB1102
PIN JACK 1P	AKB1145

CONNECTION ASSEMBLY
SEMICONDUCTORS

IC304	OP-AMP-IC	M5220P
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Mark	No.	Description	Parts No.
CAPACITORS			
	C325, 326		CCSQCH331J50
	C323, 324		CEAS101M25
	C321, 322		CEAS4R7M50
	C315		CEAS470M16
	C318		CKSQYF473Z50

RESISTORS

R351, 352	RS1/10S242J
R347-350	RS1/10S104J
R345, 346	RS1/10S122J
R353, 354	RS1/10S102J
R343, 344	RS1/10S821J

OTHERS

CN14	CONNECTOR (6P)	KPE6
CN15	CONNECTOR (9P)	KPE9

PRE OUT ASSEMBLY
CAPACITORS

C591	CFTXA824J50
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RESISTORS

All Resistors	RD1/8PM□□□J
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OTHERS

CN	PIN JACK 1P	AKB1139
CN	PIN JACK 2P	AKB1171

VOLUME ASSEMBLY
SEMICONDUCTORS

IC561, 564	OP-AMP IC	M5220L
IC501, 521, 523		NJM4558DXP
IC524	OP-AMP IC	NJM4558LD
IC503	MECHANISM DRIVER IC	TA8409S
IC522, 525, 562	E-VR IC	TC9154AP

IC563	E-TONE CONTROL IC	TC9184P
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Q501	XDC124ES
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D521-526	HSS104-02
D561-566	HSS104-02
D506 ZENER DIODE	RD3.3ESB2
D501 502 ZENER DIODE	RD5.1ESB2

CAPACITORS

C567, 568	CCSQCH121J50
C507, 508, 559, 560	CCSQCH331J50
C525, 526, 535, 536, 542, 549	CCSQCH470J50
C511	CEANP101M10
C565, 566	CEAS010M50

C569, 570	CEAS100M50
C512	CEAS101M16

Mark	No.	Description	Parts No.
	C561, 562		CEAS2R2M50
	C503, 504, 509, 510, 521, 522, 527,		CEAS4R7M50
	528, 531, 532, 540, 543, 547, 550—552,		
	579, 580		
	C501, 502		CEAS470M10
	C585		CKSQYB102K50
	C505, 506, 523, 524, 533, 534, 541,		CKSQYB103K50
	544, 545, 548		
	C539, 546		CKSQYB471K50
	C563, 564, 581, 582, 586, 587		CKSQYF103Z50
	C571, 572, 577, 578		CQMA153J50
	C575, 576		CQMA272J50
	C573, 574		CQMA823J50
RESISTORS			
	VR501 (100k A5×2)		ACX1075
	R517		RD1/2PM470J
	R501, 502		RD1/4PM681J
	R599		RS1/10S000J
	R527, 528, 537—539, 543, 547—549,		RS1/10S102J
	561, 562, 569, 570, 585—590		
	R525, 526, 542		RS1/10S103J
	R567, 568		RS1/10S104J
	R505, 506		RS1/10S112J
	R583, 584		RS1/10S154J
	R559, 560		RS1/10S222J
	R577, 578		RS1/10S223J
	R529, 530, 544		RS1/10S224J
	R523, 524, 541		RS1/10S332J
	R571, 572		RS1/10S362J
	R531, 532, 545, 579, 580		RS1/10S392J
	R503, 504, 521, 522, 540, 563, 564		RS1/10S473J
	R565, 566		RS1/10S474J
	R508		RS1/10S561J
	R518, 519		RS1/10S562J
	R575, 576		RS1/10S564J
	R533, 534, 546		RS1/10S623J
	R581, 582		RS1/10S821J
	R573, 574		RS1/10S823J
	Other Resistors		RD1/8PM□□□J
OTHERS			
	CN16 CONNECTOR (9P)		KPE9
	CN18 CONNECTOR (9P)		KPE9

5. ADJUSTMENTS

DOLBY LEVEL ADJUSTMENT (FOR VSA - 701S ONLY)

Set the switches as follows :

- SURROUND MODE : STUDIO
- DELAY TIME : 20m Sec.
- INPUT SELECTOR : CD

1. Input a signal of 1kHz at 300mV to the Lch side of the CD terminal.
2. Adjust the input level so that Pin ⑮ of the CN1901 connector becomes 300mVrms (=0dB).
3. Adjust VR1901 so that the output level of Pin ① (DELAY OUT) of the CN1901 connector becomes $-0.5\text{dB} \pm 1\text{dB}$.

5. REGLAGES

REGLAGE DU NIVEAU DOLBY (POUR VSA - 701S SEULEMENT)

Régler les commandes de la manière suivante :

- MODE AMBIOPHONIQUE : STUDIO
- TEMPS DE RETARD : 20m Sec.
- SELECTEUR D'ENTREE : CD

1. Appliquer un signal de 1kHz à 300mV au côté Lch de la borne CD.
2. Régler le niveau d'entrée de manière qu'il soit égal à 300mVeff à la broche ⑮ du connecteur CN1901 (=0dB).
3. Régler VR1901 de manière que le niveau de sortie à la broche ① (SORTIE RETARD) du connecteur CN1901 soit égal à $-0.5\text{dB} \pm 1\text{dB}$.

5. AJUSTES


AJUSTE DE NIVEL DOLBY (SOLO PARA VSA - 701S)

Ajuste los interruptores de la manera siguiente :

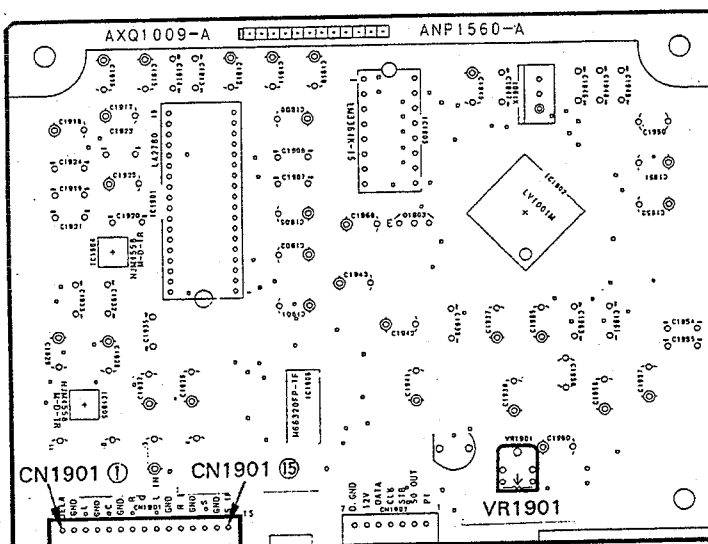
- MODE DE SONIDO ENVOLVENTE : ESTUDIO
- TIEMPO DE RETARDO : 20 mseg.
- SELECTOR DE ENTRADA : CD

1. Ingrese una señal de 1 kHz en 300mV al lado del canal L (izquierdo) del terminal CD.
2. Ajuste el nivel de entrada de modo que el contacto ⑮ del conector CN1901 se convierta en 300mV de valor eficaz (=0dB).
3. Ajuste la VR1901 de modo que el nivel de salida del contacto ① (SALIDA DE RETARDO) del conector CN1901 se convierta en $-0.5\text{dB} \pm 1\text{dB}$.

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DOL. PRO. MOD. assembly
Ensemble DOL. PRO. MOD.
Conjunto DOL. PRO. MOD.



6. IC INFORMATION

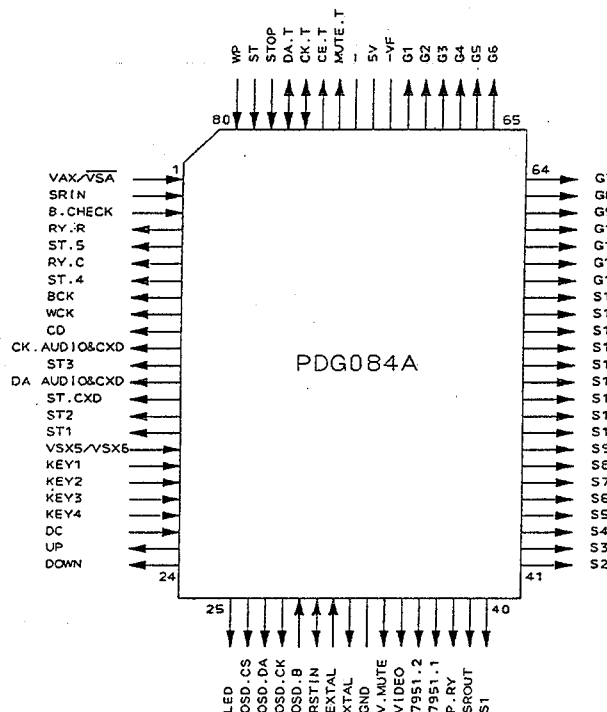
- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDG084A (IC601)

● System Control Micro-computer

● Pin Assignment

(Top View)



● Pin Function

No.	Terminal Name	I/O	Description
1	VSX/VSA	I	Port for switching between VSX and VSA.
2	SR IN	I	Remote control signal input from the SR IN terminal or the light receiving unit.
3	B-Check	I	Remote control signal input from the MR IN terminal. The system detects remote control operation SUB ROOM when the signal is input.
4	RY-Rear	O	Rear relay ON/OFF
5	ST. 5	O	Strobe to operate the rear electronic VR.
6	RY-Center	O	Center relay ON/OFF
7	ST. 4	O	Strobe to operate the front balance and tone.
8	BCK	O	DSD IC bit clock

No.	Terminal Name	I/O	Description
9	WCK	O	DSP IC word clock
10	CD	O	DSP IC data
11	CK. AUDIO & CXD	O	Clock for the audio system and the port expander.
12	ST. 3	O	Strobe to operate the surround and center electronic VRs.
13	DA. AUDIO & CXD	O	Data for the audio system and the port expander.
14	ST. CXD	O	Strobe for the port expander.
15	ST. 2	O	Strobe for subfunction, multiroom VR and analog ground SW.
16	ST. 1	O	Strobe for main function and DSP surround SW.
17	VSX5/VSX6	I	Port for switching between VSX-5 and VSX-6.
18	KEY IN 1	I	KEY MATRIX return input
19	KEY IN 2	I	
20	KEY IN 3	I	
21	KEY IN 4	I	
22	DC	I	Detection of the VR position (VR MAX : 5V, VR MIN : 0V) of AUDIO SOURCE CONTROL and conversion of A/D.
23	UP	O	VR : UP when using remote control.
24	DOWN	O	VR : DOWN when using remote control.
25	LED	O	VR knob LED ON/OFF during remote control operation.
26	OSD. CS	O	NC
27	OSD. DA	O	
28	OSD. CK	O	
29	OSD. BLUE	I	Reset
30	RST IN	I/O	
31	EXTAL	I	
32	XTAL	O	

No.	Terminal Name	I/O	Description
33	GND	—	GND
34	V. MUTE	O	To the MUTE terminal of LA7951 used for MUTE and FUNCTION of the video signal.
35	VIDEO	O	Switches between VIDEO and TV when front video input is added.
36	LA7951. 2	O	2-bit control terminal of LA7951 (video function).
37	LA7951. 1	O	
38	P. RY	O	Power relay and turning the standby LED to ON/OFF.
39	SR OUT	O	Sends SR signal of multiple devices during AUDIO SOURCE CONTROL.
40	SEG1/KEY1	O	Display segment and KEY MATRIX output.
41	SEG2/KEY2	O	
42	SEG3/KEY3	O	
43	SEG4/KEY4	O	
44	SEG5/KEY5	O	
45	SEG6/KEY6	O	
46	SEG7/KEY7	O	
47	SEG8/KEY8	O	
48	SEG9/KEY9	O	
49	SEG10/KEY10	O	
50	SEG11/KEY11	O	
51	SEG12/KEY12	O	
52	SEG13/KEY13	O	
53	SEG14/KEY14	O	
54	SEG15/KEY15	O	
55	SEG 16	O	Display segment
56	SEG 17	O	
57	SEG 18	O	

No.	Terminal Name	I/O	Description
58	GRID 13	O	NC
59	GRID 12	O	
60	GRID 11	O	
61	GRID 10	O	Display grid
62	GRID 9	O	
63	GRID 8	O	
64	GRID 7	O	
65	GRID 6	O	
66	GRID 5	O	
67	GRID 4	O	
68	GRID 3	O	
69	GRID 2	O	
70	GRID 1	O	
71	—VF	—	FL negative voltage —VFDP
72	+5V(VDD)	—	Positive power supply
73	—	—	NC
74	MUTE. T	O	
75	CE. T	O	
76	CK. T	I/O	
77	DA. T	I/O	
78	STOP (TUNED)	I	Control signal sent from IC when performing tuning. The TUNED FL indicator lights up when the system detects the signal.
79	STEREO	I	Signal sent from IC when the system is in the STEREO mode. The STEREO indicator lights up when the system detects the signal.
80	AC Wake Up	I	AC short break detection report

7. REMOTE CONTROL UNIT [CU – VSA019 (AXD1271)]
[CU – VSA020 (AXD1272)]

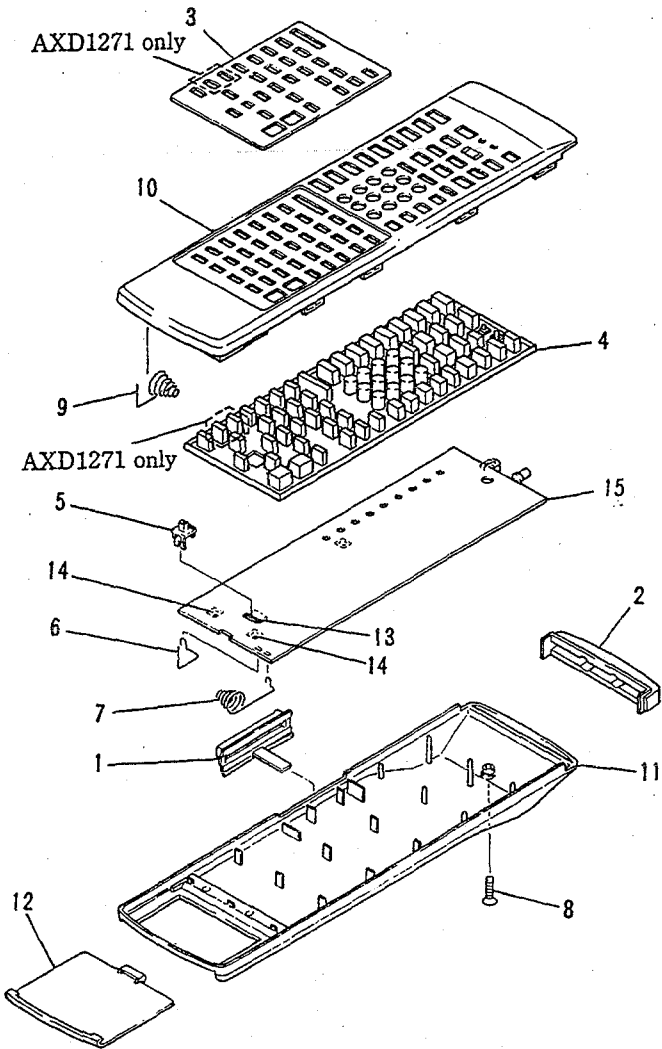
7.1 EXPLODED VIEW AND PARTS LIST

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 of Exterior

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	PLATE (AXD1271)	AZA1370
	3	PLATE (AXD1272)	AZA1371
	4	RUBBER SHEET (AXD1271)	AZA1365
	4	RUBBER SHEET (AXD1272)	AZA1366
	5	KNOB	AZA1349
	6	TERMINAL (+)	AZB1327
	7	TERMINAL (–)	AZB1328
	8	SCREW	AZB1329
	9	TERMINAL (C)	AZB1330
	10	CASE (A)	AZN2089
	11	CASE (B)	AZN2090
	12	BATTERY COVER	AZN2091
	13	SLIDE SW	AZS1117
	14	TACT SW	AZS1118
NSP	15	P. C. BOARD	AZW1130



7.2 ELECTRICAL 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%).

560 Ω \rightarrow $56 \times 10^1 \rightarrow$ 561 RD1/8PM $\begin{smallmatrix} \text{5} & \text{6} & \text{1} \end{smallmatrix}$ J

47k Ω \rightarrow $47 \times 10^3 \rightarrow$ 473 RD1/4PS $\begin{smallmatrix} \text{4} & \text{7} & \text{3} \end{smallmatrix}$ J

0.5 Ω \rightarrow 0R5 RN2H $\begin{smallmatrix} \text{0} & \text{5} \end{smallmatrix}$ K

1 Ω \rightarrow 010 RS1P $\begin{smallmatrix} \text{0} & \text{1} & \text{0} \end{smallmatrix}$ K

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

5.62k Ω \rightarrow $562 \times 10^1 \rightarrow$ 5621 RN1/4PC $\begin{smallmatrix} \text{5} & \text{6} & \text{2} & \text{1} \end{smallmatrix}$ F

Parts list of AXD1271 and AXD1272

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

SEMICONDUCTORS

IC1	μ -COM	ACM001-029
IC2	IC	AZC1564
IC3	LOGIC IC	MC74HC138F
Q1, 2	CHIP TRANSISTOR	2SC3052E
Q3, 4	TRANSISTOR	2SD1622
D1	DIODE	DWA010-TE
D10-17	LED	AZC1573
D2-6	DIODE	DWA010-TE
D7	LED	SLR-938C
D8	DIODE	SPS-503C-3
D9	LED	AZC1573

CAPACITORS

C1, 2	CERAMIC CAPACITOR	CCDSL330J50
C3	CERAMIC CAPACITOR	CCDSL221J50
C4	CERAMIC CAPACITOR	CKDYX104M25
C5	ELECT. CAPACITOR	CEAS470M10
C6	CERAMIC CAPACITOR	CKDYB103K50
C7	ELECT. CAPACITOR	CEAS221M10
C8	ELECT. CAPACITOR	CEAS4R7M50





RESISTORS

R7, 8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
	Other resistors	RD1/8PM $\begin{smallmatrix} \square & \square & \square \end{smallmatrix}$ J

OTHERS

X1	RESONATOR	AZC1570
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7.3 P. C. BOARD PATTERN (FOR AXD1271 AND AXD1272)

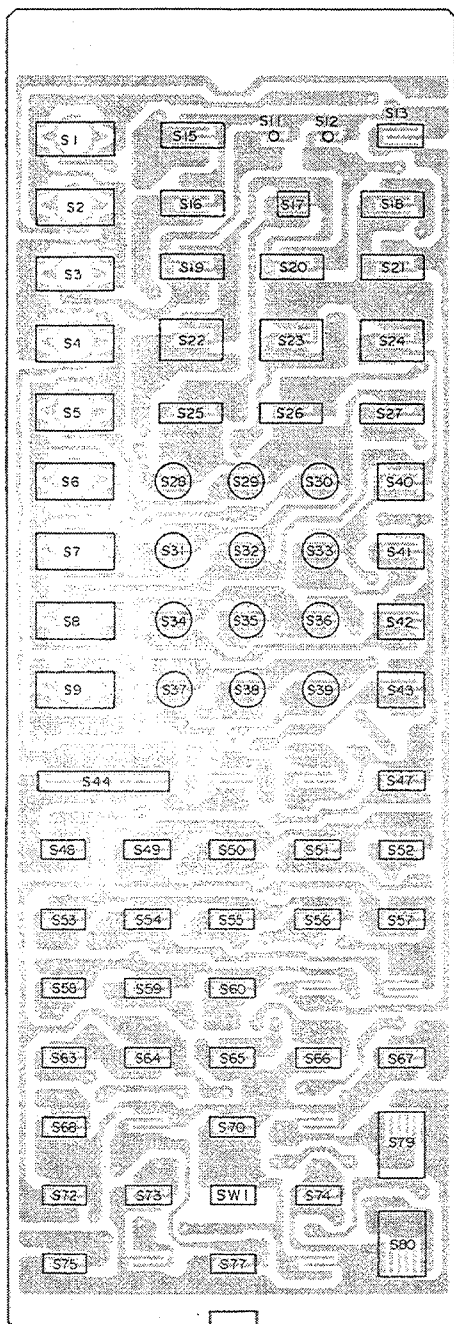
-  : Indicates a chip resistor.
-  : Indicates a chip capacitor.
-  : Indicates a chip transistor.
-  : Indicates a chip diode.

A

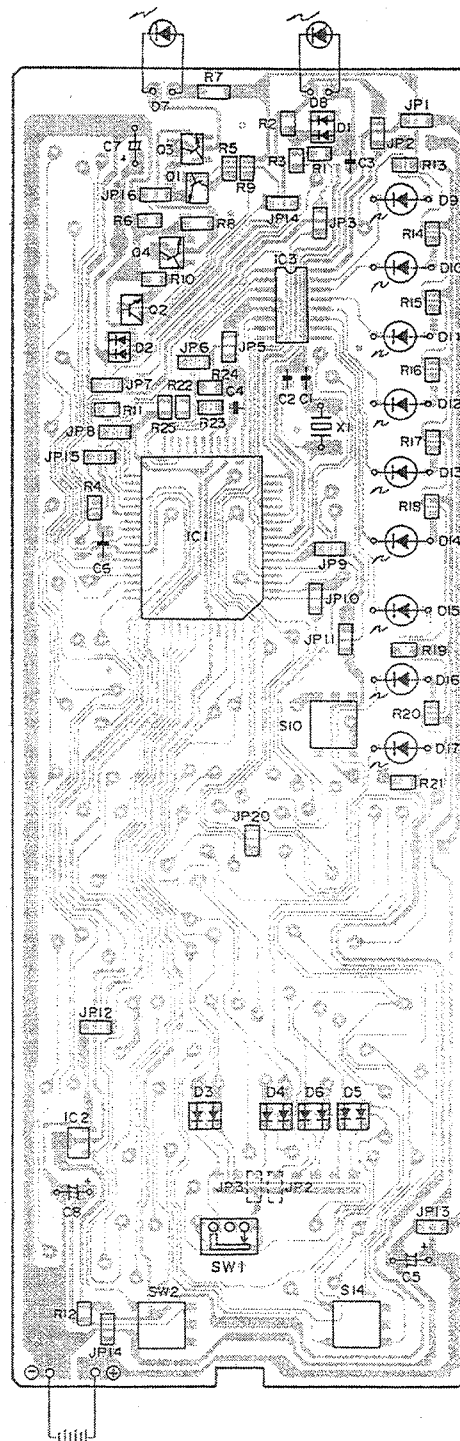
B

C

D



S68, S72: AXD1271 ONLY



7.4 SCHEMATIC DIAGRAM (FOR AXD1271 AND AXD1272)

VSA-D801S, VSA-701S

NOTE:

JP2: The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

JP3: This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning. This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

NOTE:

- : Indicates a chip resistor.
- : Indicates a chip capacitor.
- : Indicates a chip transistor.
- : Indicates a chip diode.

Note:

1. When ordering service parts, be sure to refer to "PARTS LIST OF EXPLODED VIEWS" or "PCB PARTS LIST".
2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
3. RESISTORS:
Unit: k Ω , M Ω , or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ unless otherwise noted.

(Type 2)

4. CAPACITORS:

Unit: pF or μ F unless otherwise noted.
Ratings: capacitor (μ F)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.

5. COILS:

Unit: mH or μ H unless otherwise noted.

6. VOLTAGE AND CURRENT:

□ : DC voltage (V) at no input signal unless otherwise noted.
□ : mA or μ A : DC current at no input signal unless otherwise noted.

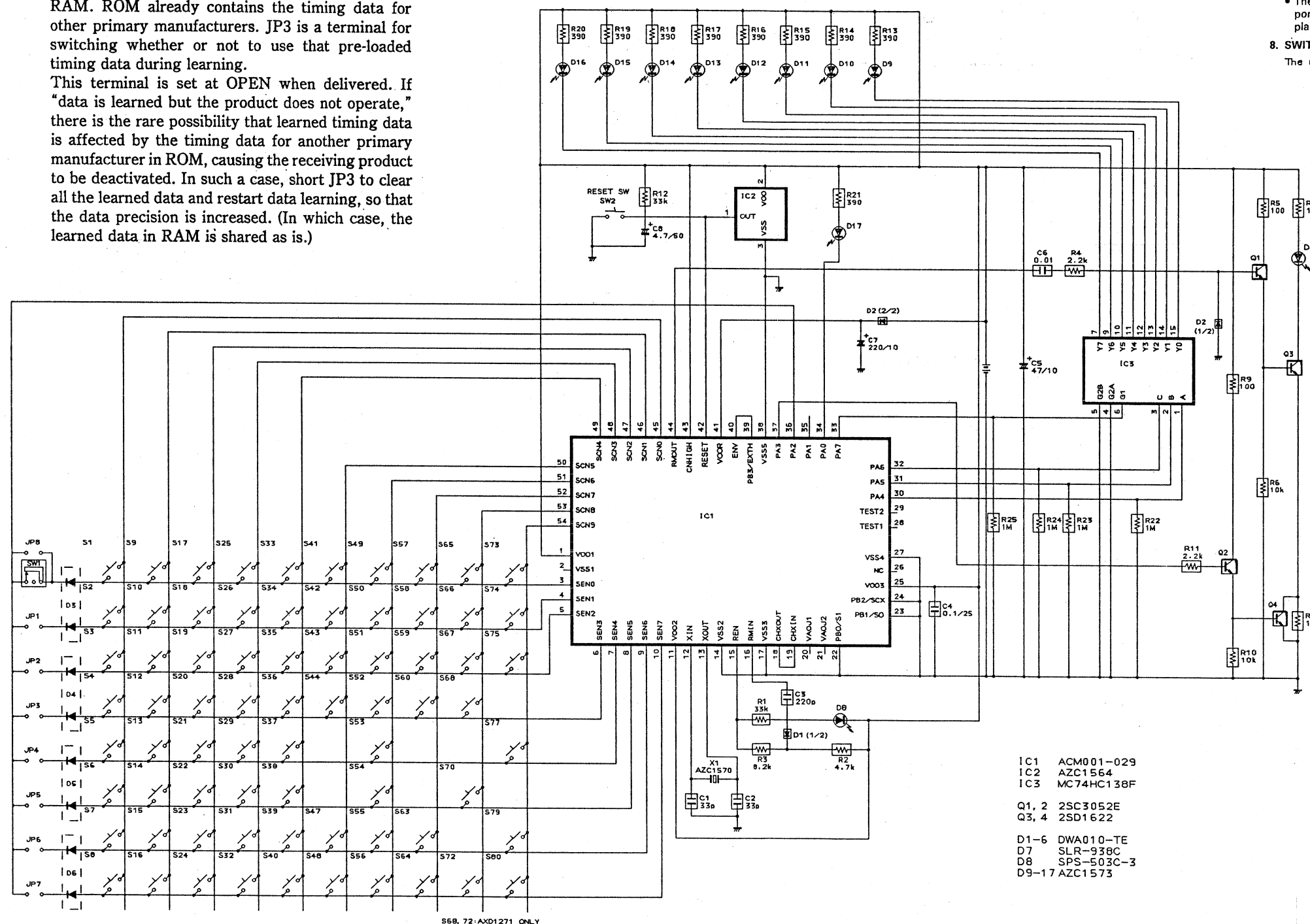
7. OTHERS:

- \odot : Adjusting point.
- The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SWITCHES (Underline indicates switch position):

The underline indicates the switch position

- SW1: CENT. BAL. / REAR REAR BAL.
- SW2: RESET
- S1: VCR1
- S2: VCR2
- S3: LD
- S4: TV
- S5: CD
- S6: TUNER
- S7: DECK I
- S8: DECK II
- S9: DAT
- S10: MODE CHECK
- S11: LEARN
- S12: EDIT
- S13: MULTI COMMAND
- S14: M. CLEAR
- S15: POWER
- S16: M
- S17: REC
- S18: Δ
- S19: Δ
- S20: Δ (SEARCH)
- S21: Δ
- S22: Δ
- S23: Δ
- S24: Δ
- S25: TV/VCR (+10)
- S26: SELECT (DISP)
- S27: TV FUNC (BAND)
- S28: 1
- S29: 2
- S30: 3
- S31: 4
- S32: 5
- S33: 6
- S34: 7
- S35: 8
- S36: 9
- S37: 10/0
- S38: 11/PGM
- S39: 12/CLEAR
- S40: CUSTOM (TV VOL+)
- S41: SCAN (TV VOL-)
- S42: FREQ CH (A)
- S43: FREQ CH (V)
- S44: AMP POWER
- S47: SLEEP
- S48: VCR1
- S49: VCR2
- S50: LD
- S51: TV
- S52: VIDEO
- S53: TAPE1/DAT
- S54: TAPE2/MONITOR
- S55: CD
- S56: TUNER
- S57: PHONO
- S58: SIMULATED STEREO
- S59: ACOUSTIC
- S60: VIDEO SIGNAL SELECT
- S63: SURR MODE
- S64: 3CH LOGIC
- S65: CENTER MODE
- S66: TEST TONE
- S67: MUTING
- S68: EFFECT + (AXD1271 ONLY)
- S70: CENTER +
- S72: EFFECT - (AXD1271 ONLY)
- S73: REAR L
- S74: REAR R
- S75: DELAY TIME
- S77: CENTER -
- S79: MASTER VOLUME +
- S80: MASTER VOLUME -



8. FOR VSA – 701S/SD TYPE

- 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 “ \odot ” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

8.1 CONTRAST OF MISCELLANEOUS PARTS

VSA – 701S/SD and VSA – D801S/SD have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSA – D801S/SD	VSA – D701S/SD	
\odot	DSP assembly	AWZ4294	.....
\odot	AMP assembly	AWZ4286	AWZ4718	
\odot	POWER SUPPLY assembly	AWZ4381	AWZ4388	
\odot	REAR SP CENTER SP assembly	AWZ4382	AWZ4389	
\odot	CONNECTION assembly	AWZ4385	AWZ4390	
\odot	VOLUME assembly	AWZ4387	AWZ4391	
\odot	FL. U-COM assembly	AWK1552	AWK1560	
	DOL. PRO. MOD assembly	.....	AXQ1009	
Δ	Q7 Transistor	2SC4688	.....
Δ	Q9 Transistor	2SA1803	.....
Δ	T1 Power transformer	ATS1427	ATS1425	
Δ	C15–C17 Mylar film capacitor	CQMA104K250	.....
Δ	C10–C14 Mylar film capacitor	.....	CQMA104K250	
	Panel base	AMB2003	AMB2004	
	Front panel	ANB1518	ANB1519	
NSP	PCB Spacer	.....	AEC1072	
NSP	Barrier (PVC)	AEC1412	.....
	Bonnet	ANE1373	ANE1374	
NSP	Heat sink	ANH1379	ANH1398	
	Packing case	AHD2287	AHD2288	
	Operating instructions (English)	ARB1382	ARB1381	
	Remote control unit (CU–VSA019)	AXD1271	.....
	Remote control unit (CU–VSA020)	.....	AXD1272	

POWER SUPPLY ASSEMBLY

POWER SUPPLY assembly (AWZ4388) and POWER SUPPLY assembly (AWZ4381) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4381	AWZ4388	
	C68, C69 (4700/DC42V)	ACH1203	.....
	C68, C69 (4700/DC35V)	.....	ACH1021	

AMP ASSEMBLY

AMP assembly (AWZ4254) and AMP assembly (AWZ4286) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4286	AWZ4718	
	IC161	UPC1270H	.....
	Q161, Q163	2SC2458	.....
	D161, D163, D165	HSS104–02	.....
	C161	CEAS2R2M50	.....
	C165	CKCYB222K50	.....
	C167	CEHAQ101M10	.....
	C169	CCCSL680J50	.....
	C171	CKCYX333M25	.....
	C173	CEAS100M100	.....
	C175	CEANP2R2M50	.....
	R161, R173	RD1/8PM102J	.....
	R163, R169	RD1/8PM563J	.....
	R165	RD1/8PM123J	.....
	R167	RD1/8PM272J	.....
	R171	RD1/8PM684J	.....
	R175	RD1/8PM122J	.....
	R177 (0.22/2W)	ACN – 131	.....
	R179, R181	RD1/4PMF222J	.....
	R183, R185	RD1/8PM153J	.....
	R187	RD1/8PM183J	.....
	R227, R229	RFA1/4PS4R7J	.....

REAR SP CENTER SP ASSEMBLY

REAR SP CENTER SP assembly (AWZ4389) and REAR SP CENTER SP assembly (AWZ4382) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4382	AWZ4389	
	Q252	XDC143ES	.....
	D252	HSS104–02	.....
	RY252	ASR1035	.....
	L252	ATH1004	.....
	C254	CFTXA473J50	.....
	R256, R258	RD1/4PMF100J	.....
	R259	RS1LMF681J	.....
	R267	RD1/8PM333J	.....
	R270	RD1/8PM222J	.....

CONNECTION ASSEMBLY

CONNECTION assembly (AWZ4390) and CONNECTION assembly (AWZ4385) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4385	AWZ4390	
	IC301, IC302	.....	NJM4558DXP	
	IC303	.....	TC9162N	
	IC304	M5220P	.....
	Q301	.....	2SC2458	
	Q302	.....	XDA124ES	
	Q303	.....	XDC124ES	
	Q304	.....	2SK246	
	C301—C304, C307—C309	.....	CEAS4R7M50	
	C305, C306	.....	CCSQCH680J50	
	C310, C313	.....	CKSQYB103K50	
	C311, C312	.....	CEAS470M16	
	C314	.....	CCSQCH471J50	
	C317	.....	CKSQYF103Z50	
	C318	CKSQYF473Z50	.....
	C319	.....	CEAS101M16	
	C320	.....	CFTXA473J50	
	C321, C322	CEAS4R7M50	.....
	C323, C324	CEAS101M25	.....
	C325, C326	CCSQCH331J50	.....
	R301, R302, R311, R312	.....	RS1/10S473J	
	R303	.....	RS1/10S104J	
	R304—R306	.....	RS1/10S223J	
	R307	.....	RS1/10S122J	
	R308	.....	RS1/10S152J	
	R309	.....	RS1/10S273J	
	R310	.....	RS1/10S182J	
	R313, R314, 317	.....	RS1/10S334J	
	R315, R318	.....	RS1/10S114J	
	R316	.....	RS1/10S113J	
	R319	.....	RS1/10S822J	
	R321, R322	.....	RS1/10S333J	
	R323, R324, R329	.....	RS1/10S102J	
	R325, R326	.....	RS1/10S224J	
	R327, R328	.....	RS1/8PM102J	
	R342	.....	RS1/8PM4R7J	
	R343, R344	RS1/10S821J	.....
	R345, R346	RS1/10S122J	.....
	R347—R350	RS1/10S104J	.....
	R351, R352	RS1/10S242J	.....
	R353, R354	RS1/10S102J	.....
	R358	.....	RS1/8PM104J	
	R359	.....	RS1/8PM475J	

VOLUME ASSEMBLY

VOLUME assembly (AWZ4391) and VOLUME assembly (AWZ4387) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4387	AWZ4391	
	IC524	NJM4558LD	.....
	IC525	TC9154AP	.....
	D525, D526	HSS104-02	.....
	C553	.....	CEAS4R7M50	
	C540, C543, C547, C552	CEAS4R7M50	.....
	C541, C544, C545, C548	CKSQYB103K50	.....
	C542, C549	CCSQCH470J50	.....
	C546	CKSQYB471K50	.....
	VR501	ACX1075	ACX1074	
	R505, R506	RS1/10S112J	RS1/10S222J	
	R518, R519	RS1/10S562J	.....
	R531, R532	RS1/10S392J	RS1/10S472J	
	R540	RS1/10S473J	.....
	R541	RS1/10S332J	.....
	R542	RS1/10S103J	.....
	R543, R547-R549	RS1/10S102J	.....
	R544	RS1/10S224J	.....
	R545	RS1/10S392J	.....
	R546	RS1/10S623J	.....

FL U-COM ASSEMBLY

FL U-COM assembly (AWK1560) and FL U-COM assembly (AWK1552) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWK1552	AWK1560	
	IC601	PDG084A	PDG083A	
	D629-D633	.....	HSS104-02	
	S644, S648, S652, S656, S660	ASG1034	.....
	R631	RD1/8PM222J	.....

8.2 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%).

560 Ω \rightarrow 56 $\times 10^1 \rightarrow$ 561 RD1/8PM Δ Δ J

47k Ω \rightarrow 47 $\times 10^3 \rightarrow$ 473 RD1/4PS Δ Δ J

0.5 Ω \rightarrow 0R5 RN2H Δ Δ K

1 Ω \rightarrow 010 RSIP Δ Δ K

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

5.62k Ω \rightarrow 562 $\times 10^1 \rightarrow$ 5621 RN1/4PC Δ Δ Δ F

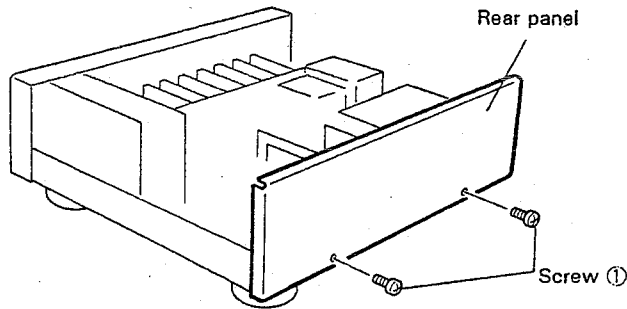
Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
DOL. PRO. MOD. ASSEMBLY					
SEMICONDUCTORS					
IC1901	DOLBY PROLOGIC IC	LA2780	C1928, 1929	ELECT. CAPACITOR	CEAS220M16
IC1902	DOLBY SURREUND IC	LV1001M-A	C1930, 1931	ELECT. CAPACITOR	CEAS2R2M50
IC1903	DRAM IC	LM3364K-15	C1932	AUDIO FILM CAPACITOR	CFTXA153J50
IC1904, 1905	OP-AMP IC	NJM4558M-D	C1933	AUDIO FILM CAPACITOR	CFTXA103J50
IC1906	PORT-EXPANDER IC	M66320FP	C1934	CHIP CAPACITOR	CCSQCH681J50
Q1901	TRANSISTOR	DTA143EK	C1935	AUDIO FILM CAPACITOR	CFTXA104J50
Q1902	DIGITAL TRANSISTOR	DTC143EK	C1936	ELECT. CAPACITOR	CEAS471M16
Q1903	TRANSISTOR	2SD438	C1937	ELECT. CAPACITOR	CEAS4R7M50
D1901-1905	DIODE	1SS226	C1938	CHIP CAPACITOR	CCSCH102J50
			C1939	AUDIO FILM CAPACITOR	CFTXA223J50
CAPACITORS					
C1901	ELECT. CAPACITOR	CEAS470M25	C1940	CHIP CAPACITOR	CCSQCH151J50
C1902	ELECT. CAPACITOR	CEAS101M10	C1941-1943	ELECT. CAPACITOR	CEAS221M16
C1903, 1904	ELECT. CAPACITOR	CEAS100M50	C1944	CERAMIC CAPACITOR	CKSQYF104Z50
C1905	ELECT. CAPACITOR	CEYAR33M50	C1945	ELECT. CAPACITOR	CEASR22M50
C1906	CHIP CAPACITOR	CCSQCH681J50	C1946	AUDIO FILM CAPACITOR	CFTXA683J50
C1907, 1908	AUDIO FILM CAPACITOR	CFTXA104J50	C1947	MYLAR FILM CAPACITOR	CQMA392J50
C1909, 1910	ELECT. CAPACITOR	CEYA2R2M50	C1948	MYLAR FILM CAPACITOR	CQMA472J50
C1911	ELECT. CAPACITOR	CEASR15M50	C1949	AUDIO FILM CAPACITOR	CFTXA333J50
C1912	ELECT. CAPACITOR	CEYA3R3M50	C1950	ELECT. CAPACITOR	CEANP100M35
C1913, 1914	AUDIO FILM CAPACITOR	CFTXA154J50	C1951	ELECT. CAPACITOR	CEAS010M50
C1915	ELECT. CAPACITOR	CEYA3R3M50	C1952	ELECT. CAPACITOR	CEAS100M50
C1916	ELECT. CAPACITOR	CEASR15M50	C1953	CHIP CERAMIC C.	CCSQCH471J50
C1917, 1918	ELECT. CAPACITOR	CEANL2R2M50	C1954	MYLAR FILM CAPACITOR	CQMA562J50
C1919	AUDIO FILM CAPACITOR	CFTXA473J50	C1955	MYLAR FILM CAPACITOR	CQMA682J50
C1920	AUDIO FILM CAPACITOR	CFTXA104J50	C1956	ELECT. CAPACITOR	CEANPR33M50
C1921	AUDIO FILM CAPADITOR	CFTXA334J50	C1957, 1958	ELECT. CAPACITOR	CEAS100M50
C1922	CHIP CAPACITOR	CCSQCH681J50	C1959	CHIP CAPACITOR	CCSQCH681J50
C1923, 1924	AUDIO FILM CAPACITOR	CFTXA104J50	C1960	ELECT. CAPACITOR	CEAS100M50
C1925	ELECT. CAPACITOR	CEYAR33M50	C1961	AUDIO FILM CAPACITOR	CFTXA154J50
C1926, 1927	ELECT. CAPACITOR	CEAS100M50			

Mark No.	Description	Parts No.
C1962	CHIP CAPACITOR	CCSQCH151J50
C1963	AUDIO FILM CAPACITOR	CFTXA223J50
C1964	CHIP CAPACITOR	CCSCH102J50
C1965	ELECT. CAPACITOR	CEAS4R7M50
C1966	CERAMIC CAPACITOR	CKSQYF104Z50
C1967	CERAMIC CAPACITOR	CKSQYB103K50
C1968	ELECT. CAPACITOR	CEAS221M10
C1970	CERAMIC CAPACITOR	CKSQYB562K50
C1971-1973	CHIP CAPACITOR	CCSQCH101J50
RESISTORS		
VR1901	VR (4.7k)	ACP1045
	Other resistors	RS1/10S□□□J
OTHERS		
X1901	CRYSTAL RESONATOR (8.00MHz)	ASS1015

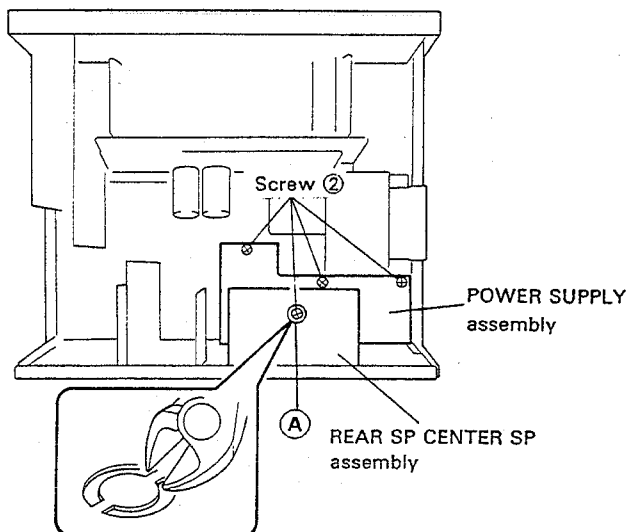
9. DISASSEMBLY

9.1 POWER SUPPLY ASSEMBLY

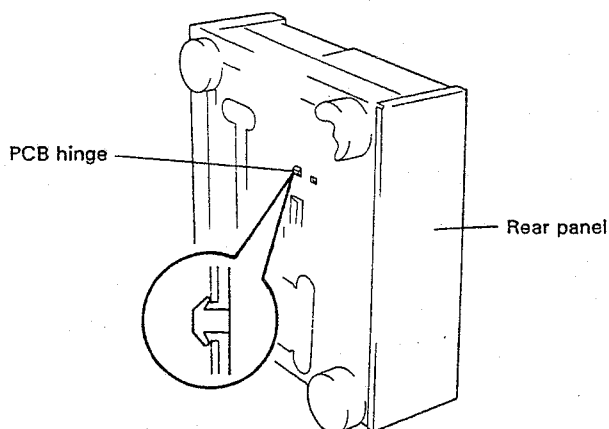
1. Remove the bonnet case (7 screws).
2. Remove the screws on the rear panel. (two screws ①)



3. Use nippers to cut at (A) in the REAR SP CENTER SP assembly.
4. Remove the screws on the POWER SUPPLY assembly. (four screws ②)



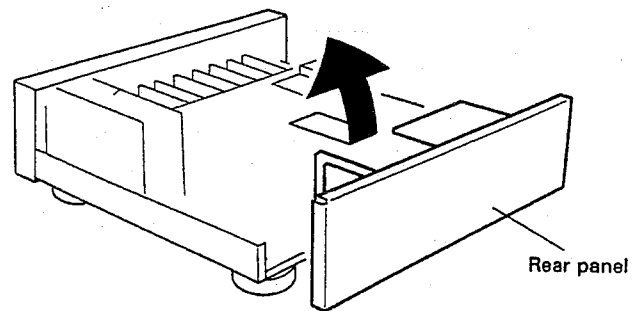
5. Stand the unit upright, and use fine-nosed pliers to press in the PCB hinge on the rear panel.



Note :

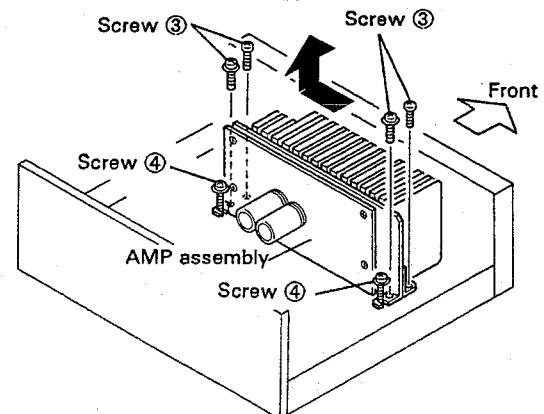
Avoid shorting the unit by using an insulation sheet or similar between transformer TP and other assemblies when positioning the unit securely.

6. Return the unit to its original position. Pull the rear panel toward the operator and securely place it so that the side with the POWER SUPPLY assembly buttons are visible.

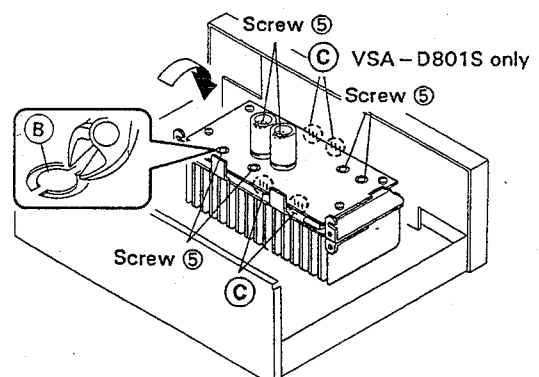


9.2 AMP ASSEMBLY

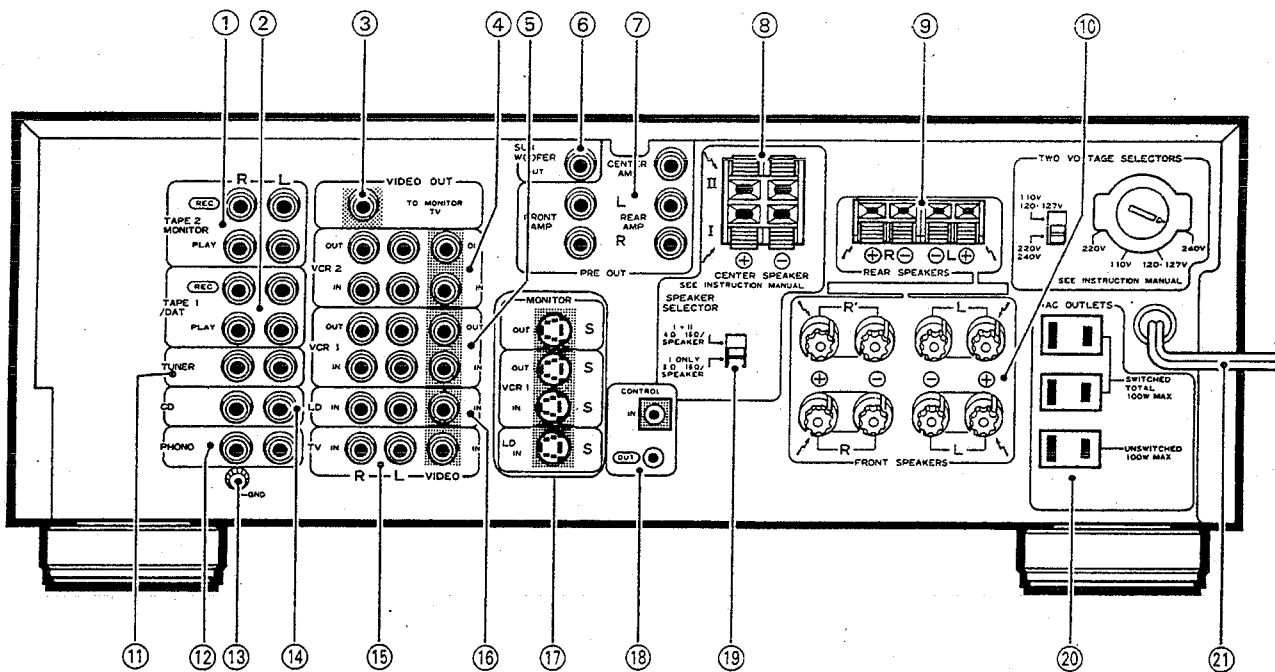
1. Remove the four heat sink locking screws ③ and loosen the two regular screws ④.
2. Cut the binder with nippers.



3. Cut the AMP assembly at (B) with nippers and then remove the six screws ⑤.
4. Remove the transistor solder at (C) (four locations).



10. PANEL FACILITIES



① TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

② TAPE 1/DAT jacks

Use these to connect the cassette deck or DAT (digital audio tape) deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

③ VIDEO OUT (TV MONITOR) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2 or LD player connected to this unit.

④ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑤ VCR 1 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑥ SUB WOOFER OUT jack

If you want to boost the low frequencies, or you want to use the unit in a 3D system, connect to a sub woofer power amplifier.

⑦ PRE OUT jacks

[FRONT AMP]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[CENTER AMP]

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

[REAR AMP]

When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

⑧ CENTER SPEAKER terminals

Connect the center speaker to these terminals. (See ⑬)

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other. Use center speakers of impedance $8\ \Omega$ — $16\ \Omega$.

⑨ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other. Use rear speakers of impedance $8\ \Omega$ — $16\ \Omega$.

⑩ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.

B: Connect to the second set of speakers.

Speaker lead wire preparation and connection.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other. Use speakers of impedance $8\ \Omega$ — $16\ \Omega$.

⑪ TUNER input jacks

Connect to the output jacks of the tuner.

⑫ PHONO input jacks

Connect to the output cables from a turntable.

⑬ GND terminal

Connect the turntable ground lead to this terminal.

⑭ CD input jacks

Connect to the output jacks of a compact disc player.

⑮ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑯ LD jacks

[VIDEO IN]

When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

⑰ S (connector) video jacks

When used in conjunction with a VCR, Video disc player (LaserDisc player) or TV monitor equipped with S video jacks, connect to these jacks.

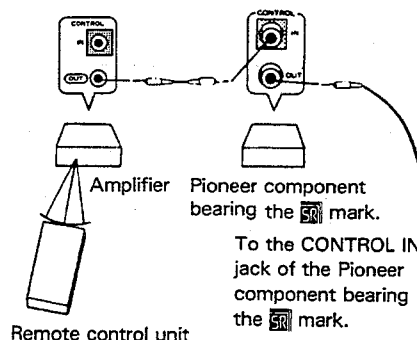
⑱ CONTROL IN/OUT jacks

IN: Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.

OUT: Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:

The amplifier's remote sensor does not function when a plug is inserted in IN jack. To operate, point the remote control unit at the remote sensor on the component to which the amplifier's IN jack is connected.



⑲ CENTER SPEAKER SELECTOR Switch

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

When only one speaker is connected:

Be sure to set the switch to "I ONLY" (down 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 + II" (up 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**.

⑳ AC OUTLETS

[SWITCHED TOTAL 100 W MAX]

Power supplied through these outlets is turned on and off by the amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

[UNSWITCHED 100 W MAX]

Power flows continually to this outlet, regardless of whether the amplifier is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

NOTE:

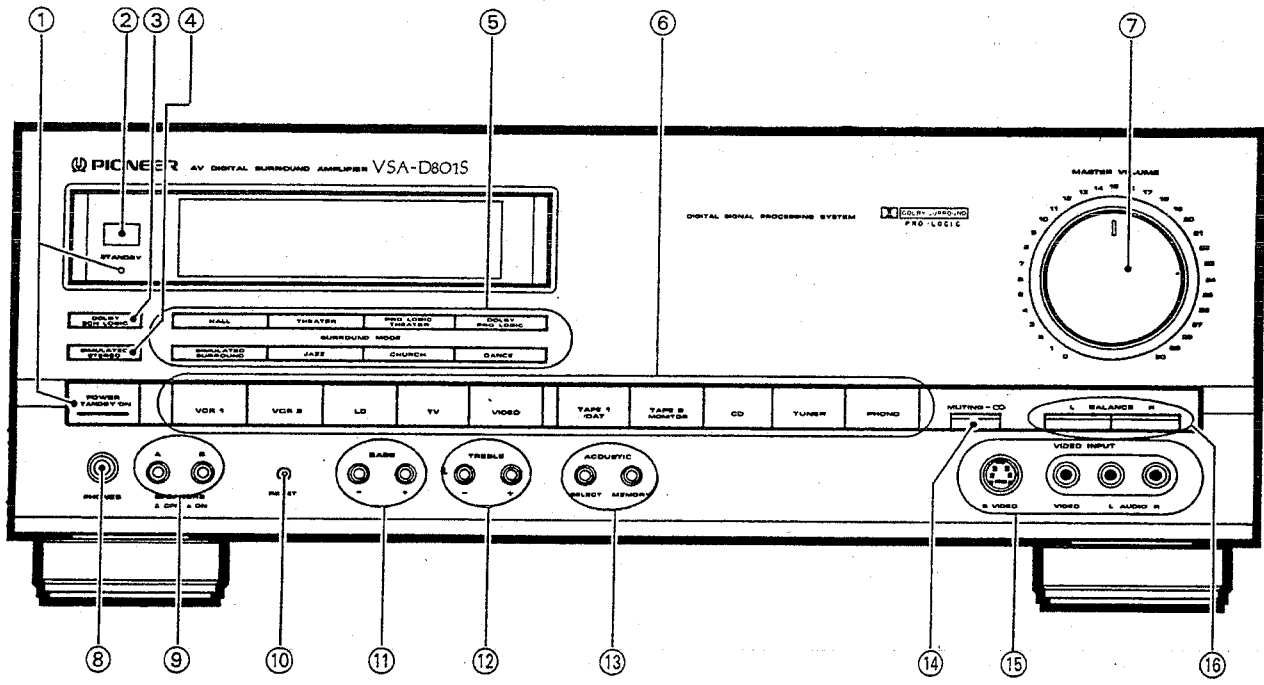
- This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.
- Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk. This can cause the amplifier to malfunction.

CAUTION:

DO NOT CONNECT MONITOR OR TV SET.

㉑ Power cord

VSA-D801S



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 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 STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]
When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:
When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

- ② Remote sensor
- ③ DOLBY 3CH LOGIC button
- ④ SIMULATED STEREO button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the **DOLBY SURROUND** mark.

Press to produce a simulated stereo effect when listening to monaural sources (for example, normal AM or TV broadcasts).
"SIMULATED STEREO" appears on the display section.
NOTE:

- This effect is not produced through the rear speakers.
- Use with the SURROUND MODE in the OFF.

⑤ SURROUND MODE selector buttons

See page 5 "SURROUND EFFECT".

⑥ INPUT SELECTOR buttons

- VCR 1:** Press when performing playback on a first VCR unit.
- VCR 2:** Press when performing playback on a second VCR unit.
- LD:** Press when performing playback on an LD player.
- TV:** Press when using a TV tuner connected to the TV jacks.
- VIDEO:** Press when performing playback on a VCR connected to VIDEO INPUT jacks on the front panel.
- TAPE 1/DAT:** Press when performing playback on a DAT or cassette deck.
- TAPE 2 MONITOR:** Press when performing playback on a second cassette deck or second DAT and when monitoring recording.
- CD:** Press when playing compact discs on a CD player.
- TUNER:** Press when listening to radio broadcasts.
- PHONO:** Press when playing records on turntable.

⑦ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center and rear speakers.

⑧ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

⑨ SPEAKERS buttons (A, B) **OFF** **ON**

ON/OFF switches for the A and B speaker systems.

NOTE:

No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑩ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.

If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

⑪ BASS control buttons

Use to adjust the low-frequency level. Press the + button to increase the low-frequency level, and the - button to decrease it.

The TONE indicator appears on the display section.

When both buttons (-, +) of the BASS control are pressed simultaneously, the bass response will be set to the flat (normal) condition.

⑫ TREBLE control buttons

Use to adjust the high-frequency level. Press the + button to increase the high-frequency level, and the - button to decrease it.

The TONE indicator appears on the display section.

When both buttons (-, +) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

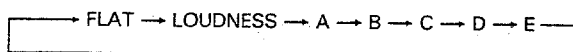
⑬ ACOUSTIC buttons

MEMORY:

Pressing this button will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT:

- This button is used to preset the five acoustic memories (A—E).
- This button is also used to recall previously set sound quality settings. Each time you press the button, the sound quality setting advances in the order shown below.



FLAT: For flat (normal) frequency response.

LOUDNESS: Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.

A—E: Memorized acoustic memory settings.

⑭ MUTING button

Press to temporarily cut off the sound volume. The display section MUTING indicator will flash. When pressed again, the sound will return to its previous level.

⑮ VIDEO INPUT jacks

Video components such as a VCR or TV camera, etc. can be connected here.

⑯ BALANCE buttons

Use them to adjust the sound volume balance between left and right speakers.

L: Press to decrease the sound on the right side.

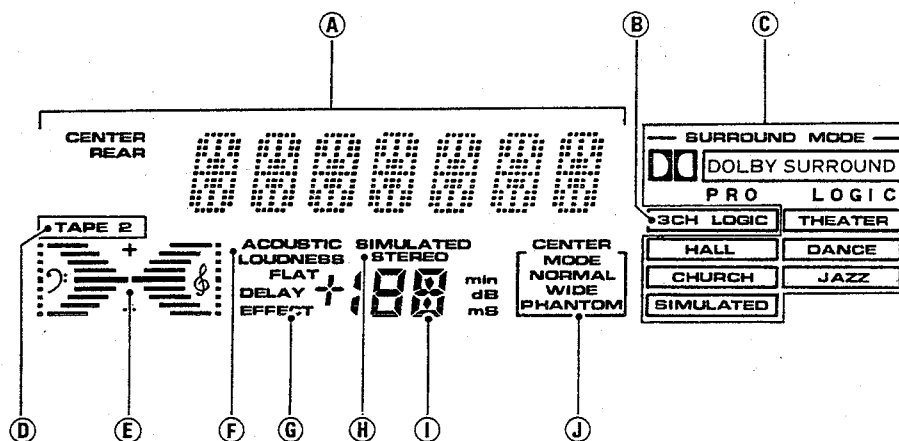
R: Press to decrease the sound on the left side.

Press L and R together to bring the volume balance back to center.

NOTE:

The left-right sound volume balance cannot be adjusted on the rear speakers.

DISPLAY SECTION



Ⓐ CHARACTER/BALANCE display

- This displays the name of the component selected with the INPUT SELECTOR, etc.
- It also displays the rear level, center level and balance settings during adjustment.

Ⓑ DOLBY 3CH LOGIC indicator

Ⓒ SURROUND MODE indicators

Ⓓ TAPE 2 indicator

Lights up when the INPUT SELECTOR is set to TAPE 2 MONITOR ON.

Ⓔ TONE level indicator

Shows the settings of the BASS and TREBLE buttons.

Ⓕ ACOUSTIC display

Shows the setting of the ACOUSTIC MEMORY.

Ⓖ DELAY/EFFECT indicator

Ⓗ SIMULATED STEREO indicator

Ⓘ ACOUSTIC/DELAY TIME/EFFECT LEVEL/SLEEP TIME display

- Indicates delay time (ms) when using DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).
- Displays Acoustic memory letters A to E.
- Displays surround effect level from 10 to 100.

Ⓙ CENTER MODE indicators

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO LOGIC SURROUND. With DOLBY 3CH LOGIC, NORMAL or WIDE center mode will be indicated.

11. SPECIFICATIONS

Amplifier Section

STEREO (FRONT)

Continuous average power output of 110 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.05 % total harmonic distortion (front).**

Continuous power output (Front and center driven)

Front..... 65 W + 65 W (1 kHz, T.H.D. 0.8 %, 8 Ω)
Center..... 65 W (1 kHz, T.H.D. 0.8 %, 8 Ω)
Rear..... 20 W + 20 W (1 kHz, T.H.D. 0.8 %, 8 Ω)

Dynamic Power (4 Ω /2 Ω)..... 220 W/240 W

Total Harmonic Distortion (Front)

20 Hz — 20 kHz, 110 W, 8 Ω 0.05%

Input (Sensitivity/Impedance)

PHONO MM..... 2.5 mV/47 k Ω

CD, TAPE 1/DAT, TAPE 2, TUNER, LD,

VCR 1, VCR 2, TV, VIDEO..... 150 mV/47 k Ω

Phono Overload Level (T.H.D. 0.1 %, 1 kHz)**

PHONO MM..... 130 mV

Frequency Response

PHONO MM..... 20 Hz to 20,000 Hz ± 0.3 dB

CD, TAPE 1/DAT, TAPE 2, TUNER, LD,

VCR 1, VCR 2, TV, VIDEO..... 5 Hz to 100,000 Hz $\pm \frac{1}{2}$ dB

Output (Level/Impedance)

TAPE 1/DAT REC, TAPE 2 REC..... 150 mV/2.2 k Ω

VCR 1 OUT, VCR 2 OUT..... 150 mV/2.2 k Ω

PRE OUT..... 1 V/2.2 k Ω

Tone Control

BASS..... ± 8 dB (100 Hz)

TREBLE..... ± 8 dB (10 kHz)

Muting..... $-\infty$

Loudness Contour..... 6 dB (100 Hz)
3 dB (10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)

PHONO MM..... 76 dB

CD, TAPE 1/DAT, TAPE 2, TUNER, LD,

VCR 1, VCR 2, TV, VIDEO..... 97 dB

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

** Measured by Audio Spectrum Analyzer.

VIDEO Section

Input (Sensitivity/Impedance)

VCR 1, VCR 2, LD, TV, VIDEO..... 1 Vp-p/75 Ω

Output (Level/Impedance)

VCR 1, VCR 2, MONITOR..... 1 Vp-p/75 Ω

Frequency Response

VCR 1, VCR 2, LD, TV, VIDEO \rightarrow MONITOR... 5 Hz — 10 MHz $\pm \frac{1}{2}$ dB

Signal to Noise Ratio..... 60 dB

S-VIDEO Section

Input (Sensitivity/Impedance)

LD, VIDEO, VCR 1..... 1 Vp-p/75 Ω (Luminance Signal)
0.286 Vp-p/75 Ω (Color Signal)

Output (Level/Impedance)

VCR 1, MONITOR..... 1 Vp-p/75 Ω (Luminance Signal)
0.286 Vp-p/75 Ω (Color Signal)

Frequency Response

LD, VCR 1 \rightarrow MONITOR..... 5 Hz — 7 MHz $\pm \frac{1}{2}$ dB

Signal to Noise Ratio..... 60 dB

Surround Section

Rear Frequency Response..... 30 Hz — 7,000 Hz $\pm \frac{1}{2}$ dB

Delay Time (DOLBY PRO LOGIC SURROUND)

Variable range..... 16 ms — 30 ms

Step..... 2 ms

Miscellaneous

Power requirements..... AC 110 V/120 — 127 V/220 V/240 V
(Switchable), 50/60 Hz

Power consumption..... 660 W

AC Outlets

SWITCHED x 2..... TOTAL 100 W MAX

UNSWITCHED x 1..... 100 W MAX

Dimensions..... 420 (W) x 162 (H) x 417 (D) mm

16-9/16 (W) x 6-3/8 (H) x 16-7/16 (D) in

Weight (without package)..... 10.3 kg (22 lb 11 oz)

Furnished Parts

Remote control unit..... 1

Dry cell batteries

(size "AA" (IEC LR6/AM-3) Alkaline)..... 2

Operating Instructions..... 1

NOTE:

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

Service Manual

 **PIONEER®**
The Art of Entertainment

ORDER NO.
ARP2561

AV DIGITAL SURROUND AMPLIFIER

VSA-701S

HB, HE

- Refer to the service manual ARP2560 for VSA – D801S.
- This manual is applicable to VSA – 701S/HB and HE.

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1. 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.

VSA-701S/HB, HE and VSA-D801S/SD have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		VSA-D801S/SD	VSA-701S/HB	VSA-701S/HE	
●	AMP assembly	AWZ4286	AWZ4538	AWZ4538	
●	POWER SUPPLY assembly	AWZ4381	AWZ4539	AWZ4539	
●	REAR SP CENTER SP assembly	AWZ4382	AWZ4540	AWZ4540	
●	CONNECTION assembly	AWZ4385	AWZ4390	AWZ4390	
●	VOLUME assembly	AWZ4387	AWZ4545	AWZ4545	
●	FL. U-COM assembly	AWK1552	AWK1560	AWK1560	
●	DSP assembly	AWZ4294	.....	.....
	DOL. PRO. MOD. assembly	.....	AXQ1009	AXQ1009	
Δ	Q7 Power transistor	2SC4688	.....	.....
Δ	Q9 Power transistor	2SA1803	.....	.....
Δ	S1 Voltage selector (AC110V/120-127V/220V/240V)	AKX-507	.....	.....
Δ	S2 Voltage selector (AC110V-127V/220V-240V)	AKX1004	.....	.....
Δ	T1 Power transformer (AC110V, 120-127V, 220V, 240V)	ATS1427	.....	.....
Δ	T1 Power transformer (AC220V-230V, 240V)	.....	ATS1435	ATS1435	
Δ	C10-C12 Mylar film capacitor	.....	CQMA104K250	CQMA104K250	See pages 22, 23
Δ	C15-C17 Mylar film capacitor	CQMA104K250	.....	.....
Δ	FU1 Fuse (4A/125V)	AEK-125	.....	.....
Δ	FU1 Fuse (T2.5A/250V)	.....	AEK-512	AEK-512	
Δ	FU2 Fuse (4A/125V)	AEK-125	.....	.....
Δ	FU3, FU4 Fuse (4A/125V)	AEK-125	.....	.....
Δ	FU3, FU4 Fuse (T2.5A/250V)	.....	AEK-512	AEK-512	
Δ	FU5, FU6 Fuse (1.25A/125V)	AEK-120	.....	.....
Δ	FU5, FU6 Fuse (T1.25A/250V)	.....	AEK-509	AEK-509	
Δ	AC Power cord	ADG1051	ADG1087	ADG1049	
Δ	Fuse holder	AKR1001	.....	.....
NSP	FL filter	AAK2313	AAK2364	AAK2364	
	Barrier (PVC)	AEC1412	.....	.....
	Panel base	AMB2003	AMB2004	AMB2004	
	Front panel	ANB1518	ANB1519	ANB1519	

Mark	Symbol & Description	Part No.			Remarks
		VSA – D801S/SD	VSA – 701S/HB	VSA – 701S/HE	
NSP	Rear panel	ANC1898	ANC1928	ANC1928	
NSP	Heat sink	ANH1379	ANH1399	ANH1399	
	Packing case	AHD2396	AHD2394	AHD2394	
	Operating instructions (English)	ARB1382	ARB1399	.....
	Operating instructions (Dutch, Swedish, Spanish, Portuguese)	.....	.....	ARC1373	
	Operating instructions (English, French, German, Italian)	.....	.....	ARE1248	
	Remote control unit (CU – VSA019)	AXD1271	.....	.....
	Remote control unit (CU – VSA022)	.....	AXD1283	AXD1283	

2. PCB PARTS LIST (FOR VSA – 701S/HB AND HE)

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%).

560 Ω \rightarrow 56 \times 10¹ \rightarrow 561 RD1/8PM Δ Δ Δ J
 47k Ω \rightarrow 47 \times 10³ \rightarrow 473 RD1/4PS Δ Δ Δ J
 0.5 Ω \rightarrow 0R5 RN2H Δ Δ Δ K
 1 Ω \rightarrow 010 RS1P Δ Δ Δ 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 RN1/4PC Δ Δ Δ Δ F

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES				FL. U – COM ASSEMBLY			
●		FL. U – COM ASSEMBLY	AWK1560	SEMICONDUCTORS			
NSP		FRONT SP ASSEMBLY	AWZ4261		IC601		PDG083A
NSP		TRANS TERMINAL ASSEMBLY	AWZ4268		Q601 – Q604		2SC2458
●		SP SW ASSEMBLY	AWZ4289		Q606 – Q610		XDC124ES
●		AMP ASSEMBLY	AWZ4538				
●		POWER SUPPLY ASSEMBLY	AWZ4539		D604		AEL1108
●		REAR SP CENTER SP ASSEMBLY	AWZ4540		D601 – D603, D607 – D625,		HSS104 – 02
●		REG. (12V) ASSEMBLY	AWZ4266		D628 – D633		
●		REG. (5.6V) ASSEMBLY	AWZ4267				
●		AUDIO FUNCTION ASSEMBLY	AWZ4383	SWITCHES			
●		A/V FUNCTION ASSEMBLY	AWZ4384		S601, S603, S605, S609, S614, S617,		ASG1034
NSP		PRE OUT ASSEMBLY	AWZ4386		S618, S621, S622, S625, S626, S629,		
●		CONNECTION ASSEMBLY	AWZ4390		S630, S634, S637, S638, S641, S642,		
●		VOLUME ASSEMBLY	AWZ4545		S645, S646, S649, S650, S654,		
		S TERM ASSEMBLY	AWQ1017		S657 – S659		
		DOL. PRO. MOD. ASSEMBLY	AXQ1009				

Mark	No.	Description	Parts No.
COIL			
	F601		ATF1108
CAPACITORS			
	C601		ACH1135
	C606		CEAS010M50
	C602		CEAS100M50
	C605		CEAS101M10
	C608, C621		CEJA100M50
	C604		CKDYX104M25
	C607		CKPUYF223Z25
	C603, C609, C610, C620		CKPUYF473Z16

RESISTORS

All Resistors RD1/8PM□□□J

OTHERS

REMOTE RECEIVER UNIT
X602 (8.00MHZ)
PIN JACK 1P
SOCKET (DIN)
V601 FL TUBE
FL SPACER

AXX1010
ASS1015
AKB1082
AKP1067
AAV1146
AEB1120

CONNECTION ASSEMBLY

SEMICONDUCTORS

IC301, IC302
IC303

Q301
Q304
Q302
Q303

NJM4558DXP
TC9162N

2SC2458
2SK246
XDA124ES
XDC124ES

CAPACITORS

C314
C305, C306
C319
C311, C312, C315
C301-C304, C307-C309

C320
C310, C313
C317

CCSQCH471J50
CCSQCH680J50
CEAS101M16
CEAS470M16
CEAS4R7M50

CFTXA473J50
CKSQYB103K50
CKSQYF103Z50

RESISTORS

R323, R324, R329
R303
R316
R315, R318
R307

R308
R310
R304-R306
R325, R326
R309

RS1/10S102J
RS1/10S104J
RS1/10S113J
RS1/10S114J
RS1/10S122J

RS1/10S152J
RS1/10S182J
RS1/10S223J
RS1/10S224J
RS1/10S273J

Mark	No.	Description	Parts No.
	R321, R322 R313, R314, R317 R301, R302, R311, R312 R319		RS1/10S333J RS1/10S334J RS1/10S473J RS1/10S822J
	Other Resistors		RD1/8PM□□□J
OTHERS			
	CN14 6P JUMPER CONNECTOR		KPE6
	CN15 9P JUMPER CONNECTOR		KPE9

AMP ASSEMBLY

SEMICONDUCTORS

IC162

Q107, Q108
Q103, Q104, Q201
Q115, Q116, Q204
Q105, Q106
Q101, Q102

Q117, Q118, Q206
Q162, Q164
Q111, Q112, Q203
Q109, Q110, Q202
Q113, Q114, Q205

D197, D198
D101-D108, D111-D114,
D117-D122, D162, D164, D166,
D199, D200, D204-D206
D109, D110, D115, D116, D201
D202, D203

UPC1270H

2SA1145
2SA1240
2SA1306
2SA970
2SC1845

2SC2240
2SC2458
2SC2603
2SC2705
2SC3298

D5SB20F
HSS104-02

RD10ESB
RD4.3ESB

RELAY

RY199
RY198

ASR-112
ASR1035

COILS

L102-L104

ATH1004

CAPACITORS

C200 (0.01/AC150V)
C198 (8200/DC71V)
C199 (8200/DC71V)
C113, C114
C105-C108

C212, C222
C207, C2914
C117-C120
C204, C205
C109, C110, C2915, C2916

C170
C123, C124
C176, C211
C174
C201, C203

ACG1005
ACH1224
ACH1225
CCCSL050C500
CCCSL101J50

CCCSL101K500
CCCSL121K500
CCCSL151K500
CCCSL470J50
CCCSL470K500

CCCSL680J50
CEANP010M100
CEANP2R2M50
CEAS100M100
CEAS2R2M50

Mark	No.	Description	Parts No.
	C111, C112, C208 C209 C101, C102 C168 C162		CEAS470M16 CEAS470M25 CEAS4R7M50 CEHAQ101M10 CEHAQ2R2M50
	C121, C122, C210, C2917-C2919 C115, C116, C206, C213 C103, C104 C125, C126, C166, C202 C172		CFTXA104J50 CKCYB102K50 CKCYB122K50 CKCYB222K50 CKCYX333M25

RESISTORS

R178 (0.22, 2W) R145, R146, R218 (0.33, 5W) R208 R115, R116 R207	ACN-131 ACN1087 RD1/4PM123J RD1/4PM152J RD1/4PM431J
R117, R118 R147, R148, R220, R225 R153-R156, R180, R182, R221, R222 R139-R142, R233, R234 R121, R122	RD1/4PM473J RD1/4PMF100J RD1/4PMF222J RD1/4PMF4R7J RD1/4PMF680J
R129-R136, R214-R217 R210 R111-R114 R127, R128 R137, R138, R143, R144, R228, R230-R232	RD1/4PMFL101J RD1/4PMFL470J RFA1/4PS391J RFA1/4PS470J RFA1/4PS4R7J
R151, R152 R198, R199 R197	RS1LMF100J RS1PMF681J RS2LMF103J

Other Resistors

RD1/8PM□□□□J

OTHERS

CN29 9P JUMPER CONNECTOR KPC9

POWER SUPPLY ASSEMBLY

IC51	NJM78M56FAS
Q54, Q56, Q57, Q59 Q60 Q51, Q52, Q62, Q63, Q91 Q64 Q61, Q65, Q66	2SA1048 2SA1145 2SC2458 XDC124ES XDC143ES
D73 D52-D55, D60, D68, D91 D61 D58 D62	D3SBA20 (A) HSS104-02 HZS6A1L RD5.1ESB RD6.2ESB
D67 D63-D66, D69-D72	RD8.2ESB S5566

Mark	No.	Description	Parts No.
RELAY			
	RY51		ASR1027
COIL & TRANSFORMER			
	L51 T51		ATF1006 ATT1015

CAPACITORS

△ C72, C73 (0.01/AC400V) C71 (0.01/AC150V) C68, C69 (4700/DC35V) C61 C75	ACG1002 ACG1005 ACH1021 CEAS100M50 CEAS101M35
C65 C66 C59, C62 C67 C74	CEAS102M25 CEAS102M35 CEAS221M16 CEAS222M35 CEAS470M10
C63 C60, C64, C70	CEAS470M16 CKCYB103K50

RESISTORS

R66 R200 R79 R75 R80	RD1/2PM132J RD1/2PM432J RD1/4PM332J RD1/4PMF101J RD1/4PMF4R7J
R81 R56, R57 R55	RD1/4PMFL470J RS1LMFR22J RS2LMFR22J

Other Resistors

RD1/8PM□□□□J

OTHERS

2P MINI JACK AKN1006
CN17 13P JUMPER CONNECTOR KPE13

REAR SP CENTER SP ASSEMBLY

SEMICONDUCTORS

Q251	XDC143ES
D251	HSS104-02

RELAY

RY251	ASR-111
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COIL

L251	ATH1004
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CAPACITORS

C253, C2911	CFTXA104J50
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Mark	No.	Description	Parts No.
RESISTORS			
	R255, R257 R260		RD1/4PMF100J RS1LMF681J
	Other Resistors		RD1/8PM□□□□J

OTHERS

3P PIN JACK	AKB1120
4P SPEAKER TERMINAL	AKE-109
4P SPEAKER TERMINAL	AKE1026
CN25 4P JUMPER CONNECTOR	KPE4

VOLUME ASSEMBLY

SEMICONDUCTORS

IC561, IC564	M5220L
IC501, IC521, IC523	NJM4558DXP
IC503	TA8409S
IC522, IC562	TC9154AP
IC563	TC9184P

Q501	XDC124ES
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D521-D524, D561-D566	HSS104-02
D506	RD3.3ESB2
D501, D502	RD5.1ESB2

CAPACITORS

C567, C568	CCSQCH121J50
C507, C508, C559, C560	CCSQCH331J50
C525, C526, C535, C536	CCSQCH470J50
C511	CEANP101M10
C565, C566	CEAS010M50

C569, C570	CEAS100M50
C512	CEAS101M16
C561, C562	CEAS2R2M50
C501, C502	CEAS470M10
C503, C504, C509, C510, C521, C522, C527, C528, C531, C532, C550, C551, C553, C579, C580	CEAS4R7M50

C585	CKSQYB102K50
C505, C506, C523, C524, C533, C534	CKSQYB103K50
C539	CKSQYB471K50
C563, C564, C581, C582, C586, C587	CKSQYF103Z50
C571, C572, C577, C578	CQMA153J50

C575, C576	CQMA272J50
C573, C574	CQMA823J50

RESISTORS

VR501 (100k×4)	ACX1074
R517	RD1/2PM470J
R501, R502	RD1/4PM681J
R599	RS1/10S000J
R527, R528, R537-R539, R561, R562, R569, R570, R585-R590, R2943, R2944	RS1/10S102J
R525, R526	RS1/10S103J

Mark	No.	Description	Parts No.
	R567, R568 R583, R584 R505, R506, R559, R560, R2946, R2948 R577, R578 R529, R530		RS1/10S104J RS1/10S154J RS1/10S222J RS1/10S223J RS1/10S224J

R523, R524 R571, R572 R579, R580 R531, R532 R503, R504, R521, R522, R563, R564		RS1/10S332J RS1/10S362J RS1/10S392J RS1/10S472J RS1/10S473J
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R565, R566 R508 R575, R576 R533, R534 R581, R582 R573, R574		RS1/10S474J RS1/10S561J RS1/10S564J RS1/10S623J RS1/10S821J RS1/10S823J
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Other Resistors	RD1/8PM□□□□J
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OTHERS

CN16, CN18 9P JUMPER CONNECTOR	KPE9
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DOL. PRO. MOD. ASSEMBLY

IC1901 IC1903 IC1902 IC1906 IC1904 IC1905	LA2780 LM3364K-15 LV1001M-A M66320FP NJM4558M-D NJM4558M-D
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Q1903 Q1901 Q1902	2SD438 DTA143EK DTC143EK
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D1901-D1905	1SS226
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CAPACITORS

C1938, C1964 C1971-C1973 C1940, C1962 C1953 C1906, C1922, C1934, C1959	CCSCH102J50 CCSQCH101J50 CCSQCH151J50 CCSQCH471J50 CCSQCH681J50
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C1909, C1910, C1917, C1918 C1950 C1956 C1951 C1903, C1904, C1926, C1927, C1952, C1957, C1958, C1960	CEANL2R2M50 CEANP100M35 CEANPR33M50 CEAS010M50 CEAS100M50
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C1902 C1928, C1929 C1968, C1941, C1942, C1943 C1930, C1931 C1901	CEAS101M10 CEAS220M16 CEAS221M10 CEAS2R2M50 CEAS470M25
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Mark	No.	Description	Parts No.
	C1936		CEAS471M16
	C1937, C1965		CEAS4R7M50
	C1911, C1916		CEASR15M50
	C1945		CEASR22M50
	C1912, C1915		CEYA3R3M50
	C1905, C1925		CEYAR33M50
	C1933		CFTXA103J50
	C1907, C1908, C1920, C1923, C1924, C1935		CFTXA104J50
	C1932		CFTXA153J50
	C1913, C1914, C1961		CFTXA154J50
	C1939, C1963		CFTXA223J50
	C1949		CFTXA333J50
	C1921		CFTXA334J50
	C1919		CFTXA473J50
	C1946		CFTXA683J50
	C1967		CKSQYB103K50
	C1970		CKSQYB562K50
	C1944, C1966		CKSQYF104Z50
	C1947		CQMA392J50
	C1948		CQMA472J50
	C1954		CQMA562J50
	C1955		CQMA682J50

RESISTORS

VR1901 (47k)	ACP1045
R1962, R1964	RS1/10S100J
R1917, R1918, R1921, R1922	RS1/10S101J
R1929, R1930, R1935-R1938, R1943, R1959-R1961, R1963	RS1/10S102J
R1914, R1940	RS1/10S103J
R1939	RS1/10S105J
R1915	RS1/10S152J
R1906, R1910, R1945	RS1/10S153J
R1905, R1912	RS1/10S202J
R1950	RS1/10S222J
R1933, R1934	RS1/10S223J
R1931, R1932, R1944, R1951-R1953	RS1/10S224J
R1942	RS1/10S332J
R1949	RS1/10S393J
R1903, R1094, R1916, R1925, R1926	RS1/10S472J
R1907, R1909, R1923, R1924, R1941, R1957	RS1/10S473J
R1913	RS1/10S474J
R1958	RS1/10S513J
R1908, R1911	RS1/10S752J
R1946-R1948	RS1/10S822J
R1901, R1902, R1927, R1928	RS1/10S911J

OTHERS

X1901 (8.00MHZ)	ASS1015
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- The other assemblies of VSA - 701S/HB and HE are the same as those of VSA - D801S/SD.

3. SCHEMATIC DIAGRAMS AND PCB PATTERNS

Note:

(Type 1)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. RESISTORS:

Unit: k: k Ω , M: M Ω , or Ω unless otherwise noted.

Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.

Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ unless otherwise noted.

4. CAPACITORS:

Unit: p: pF or μ F unless otherwise noted.


Ratings: capacitor (μ F)/ voltage (V) unless otherwise noted.

Rated voltage: 50V except for electrolytic capacitors.


5. COILS:

Unit: m: mH or μ H unless otherwise noted.

6. VOLTAGE AND CURRENT:
 : Signal voltage at rated output.

 : DC voltage (V) at no input signal unless otherwise noted.

Value in () is DC voltage at rated power.

 mA or \leftarrow mA : DC current at no input signal unless otherwise noted.

7. OTHERS:

• \rightarrow : Signal route.

• \otimes : Adjusting point.

• ∇ (Red) : Measurement point.

• The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SWITCHES (Underline indicates switch position):

S3 CENTER SP SW SINGLE – DUAL
FL. U – COM assembly

S601 SIMULATED STEREO
S603 POWER STANDBY/ON
S605 SIMULATED SURR.
S609 STUDIO
S614 VCR 1
S617 BASS DOWN (–)
S618 VCR 2
S621 TREBLE DOWN (–)
S622 LD
S625 DOLBY PRO LOGIC
S626 TV
S629 BALLANCE LCH
S630 VIDEO
S634 TAPE 1/DAT
S637 BASS UP (+)
S638 TAPE 2/MONITOR
S641 DOLBY 3CH LOGIC
S642 CD
S645 TREBLE UP (+)
S646 TUNER
S649 BALLANCE RCH
S650 PHONO
S654 ACOUSTIC SELECT
S657 MUTING
S658 ACOUSTIC MEMORY
S659 RESET

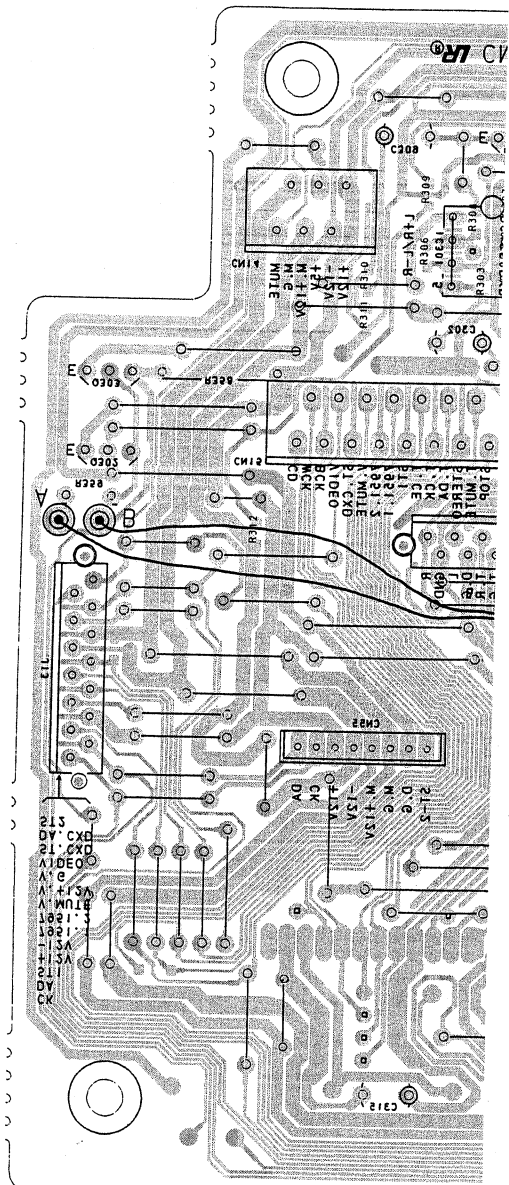
SP SW assembly

S251 SP – A ON/OFF
 SP – B ON/OFF

∇



4



gram is viewed from the foil side.

TABLE 1. *Continued*

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.

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



others

er.



IC522

IC523

9

5

▷

 \angle

8

6

9



8

6

▼

B

C

d.

B connection diagram is viewed from the parts mounted side.

- Line Voltage Selection**
1. Disconnect the AC Power cord.
 2. Remove the top cover.
 3. Change the connection with the power transformer (T1) primary taps.
 4. Stick the line voltage label on the rear panel.

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

AC POWER CORD
AC220-230/240V
50/60Hz

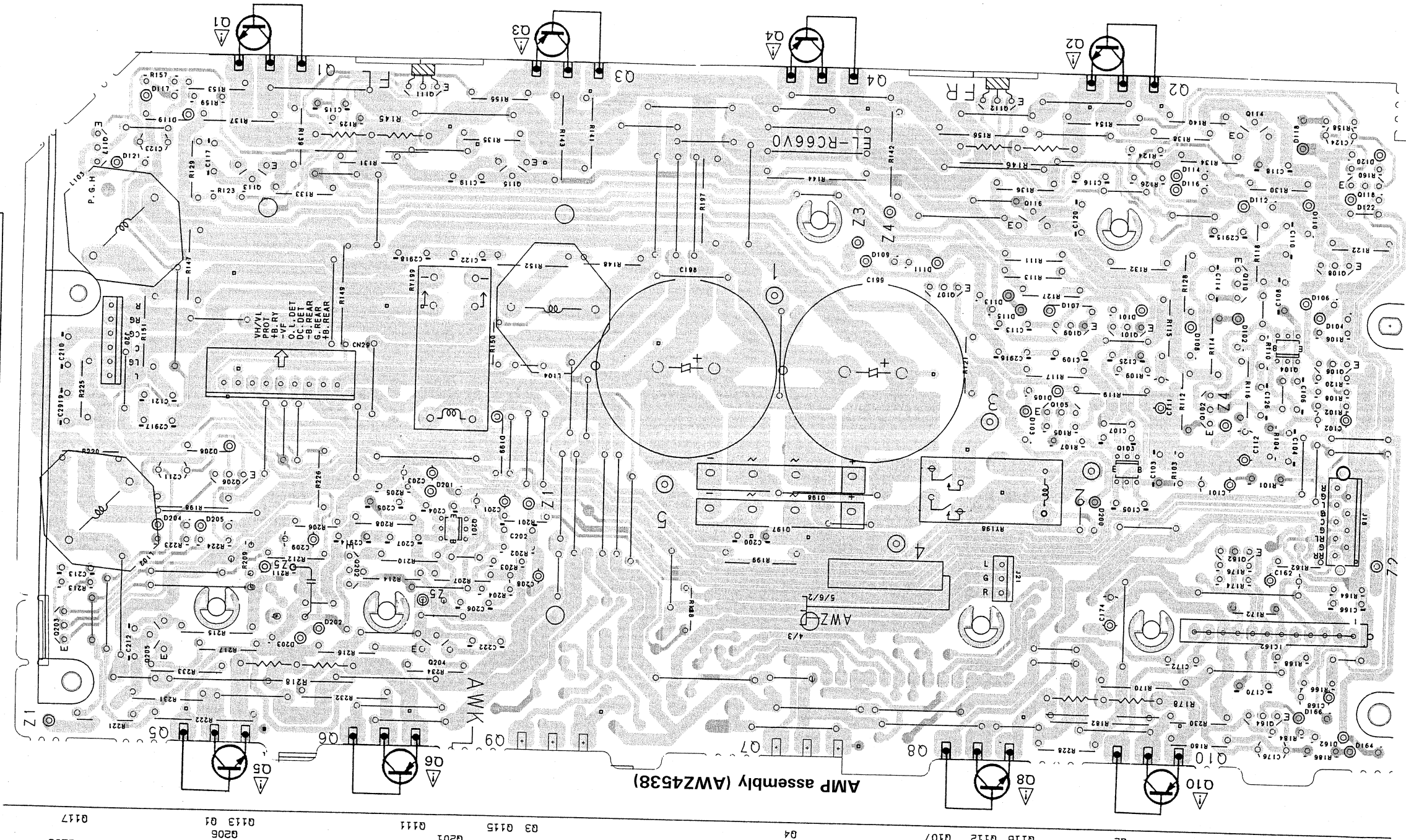
ANP15

POWER SUPPLY assembly (AWZ4539)

ATTENTION UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.

CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE FUSES WITH SAME TYPE AND RATINGS ONLY.



AMP assembly (AWZ4538)

POWER TRANSFORMER

125V8A

FU1

T1

220-230V (HE)
240V (HB)

17

18

19

20

21

12

13

14

15

16

11

10

9

6

5

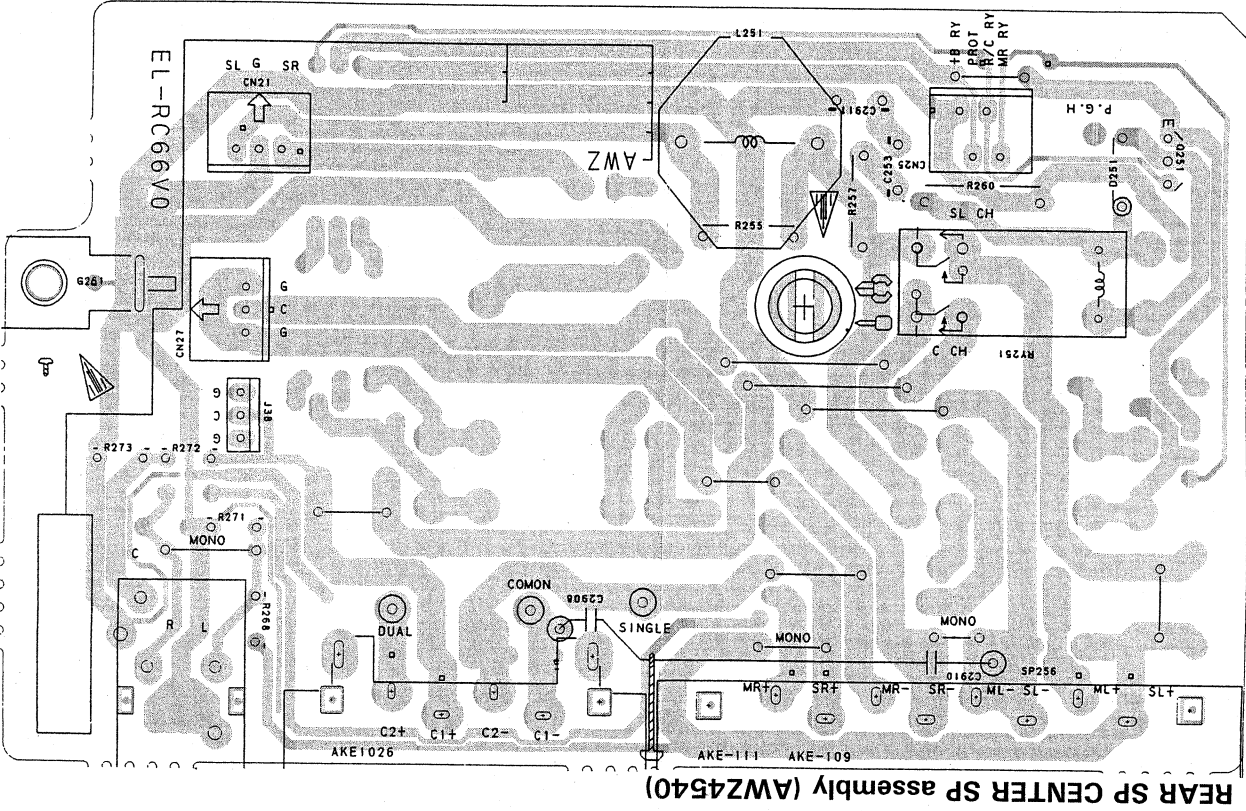
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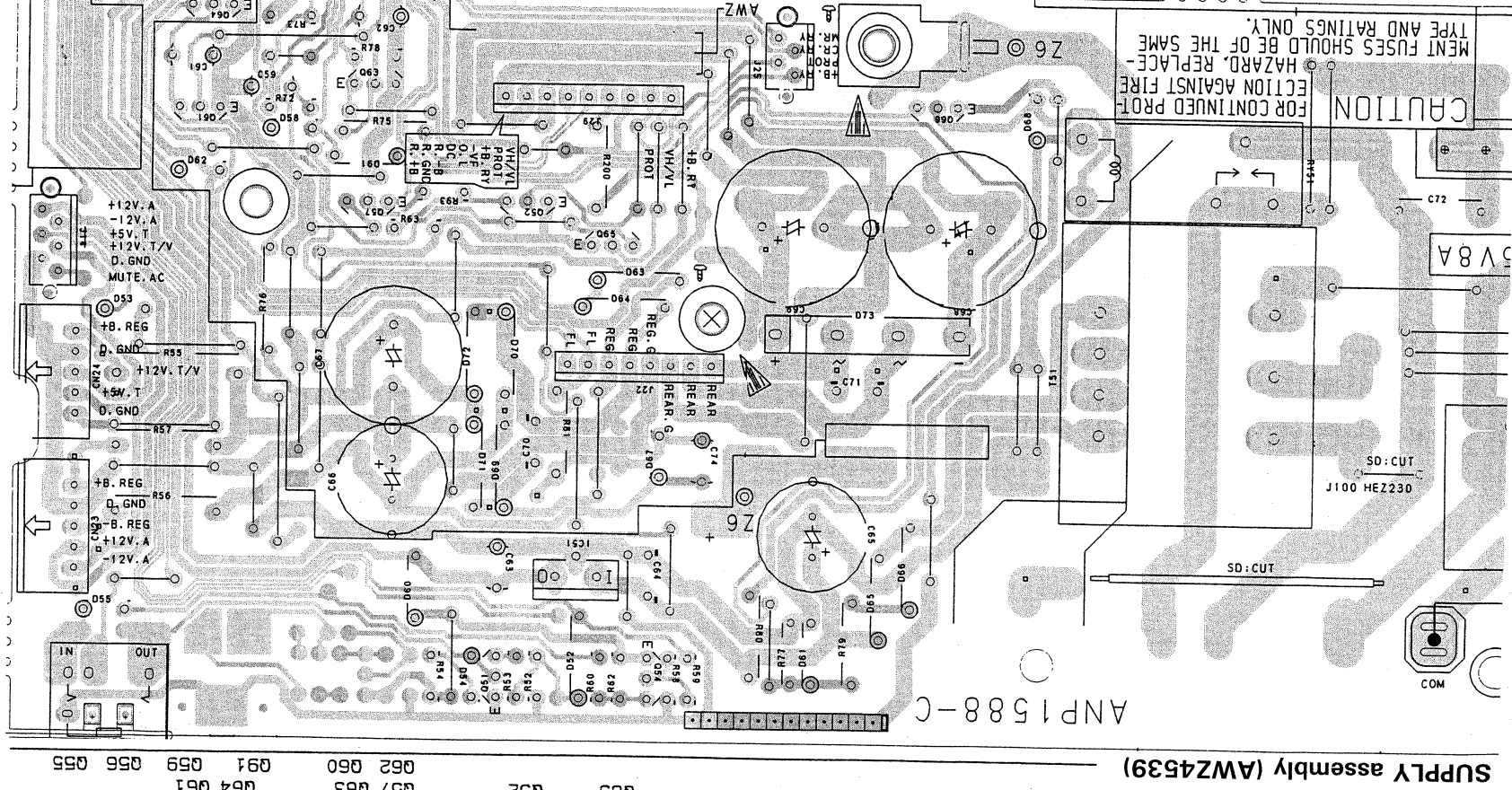
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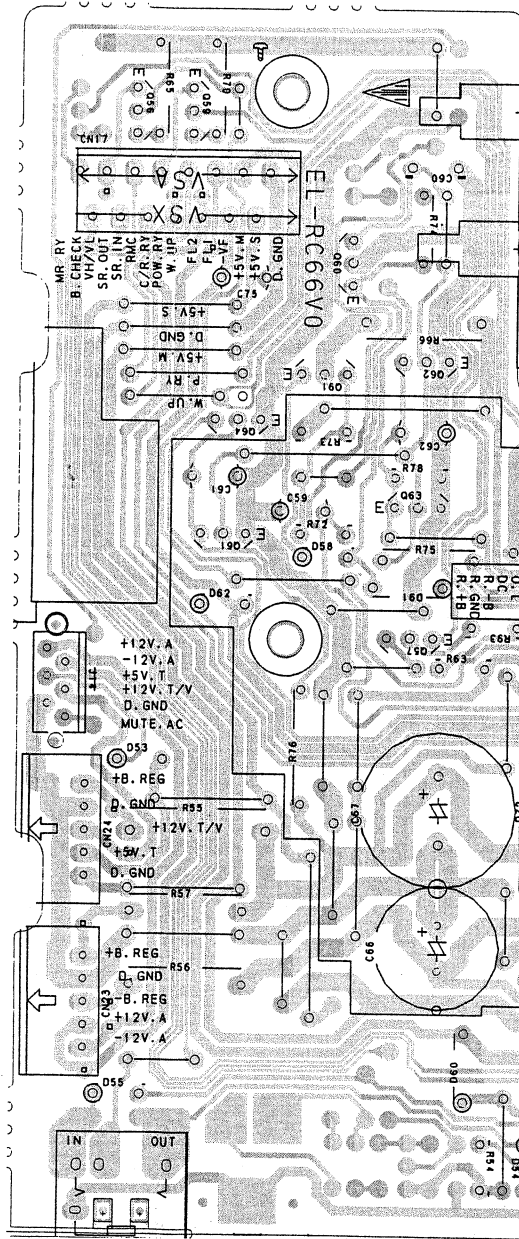
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REAR SP CENTER SP assembly (AWZ4540)

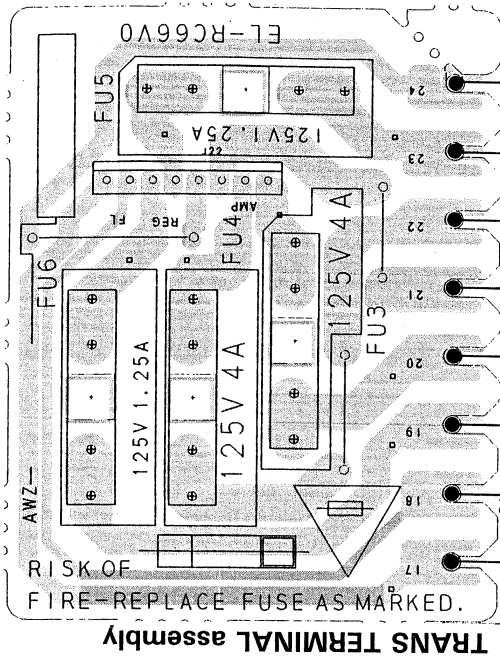


SUPPLY assembly (AWZ4539)



ANP1588-C

054 IC51 051
055
052
057 063
064 061
062 060
091 059
056 055



To AMP assembly

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE MENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.

5V8A

SD.CUT
06234 0011

COM

TRANSFORMER

TRANS TERMINAL assembly

RISK OF FIRE-REPLACE FUSE AS MARKED.

EL-RC66V0

125V 1.25A

FU5

125V 1.25A

FU6

125V 4A

FU3

125V 4A

FU4

125V 4A

FU1

125V 4A

FU2

125V 4A

FU3

125V 4A

FU4

125V 4A

FU5

125V 4A

FU6

125V 4A

FU7

125V 4A

FU8

125V 4A

FU9

125V 4A

FU10

125V 4A

FU11

125V 4A

FU12

125V 4A

FU13

125V 4A

FU14

125V 4A

FU15

125V 4A

FU16

125V 4A

FU17

125V 4A

FU18

125V 4A

FU19

125V 4A

FU20

125V 4A

FU21

125V 4A

FU22

125V 4A

FU23

125V 4A

FU24

125V 4A

FU25

125V 4A

FU26

125V 4A

FU27

125V 4A

FU28

125V 4A

FU29

125V 4A

FU30

125V 4A

FU31

125V 4A

FU32

125V 4A

FU33

125V 4A

FU34

125V 4A

FU35

125V 4A

FU36

125V 4A

FU37

125V 4A

FU38

125V 4A

FU39

125V 4A

FU40

125V 4A

FU41

125V 4A

FU42

125V 4A

FU43

125V 4A

FU44

125V 4A

FU45

125V 4A

FU46

125V 4A

FU47

125V 4A

FU48

125V 4A

FU49

125V 4A

FU50

125V 4A

FU51

125V 4A

FU52

125V 4A

FU53

125V 4A

FU54

125V 4A

FU55

125V 4A

FU56

125V 4A

FU57

125V 4A

FU58

125V 4A

FU59

125V 4A

FU60

125V 4A

FU61

125V 4A

FU62

125V 4A

FU63

125V 4A

FU64

125V 4A

FU65

125V 4A

FU66

125V 4A

FU67

125V 4A

FU68

125V 4A

FU69

125V 4A

FU70

125V 4A

FU71

125V 4A

FU72

125V 4A

FU73

125V 4A

FU74

125V 4A

FU75

125V 4A

FU76

125V 4A

FU77

125V 4A

FU78

125V 4A

FU79

125V 4A

FU80

125V 4A

FU81

125V 4A

FU82

125V 4A

FU83

125V 4A

FU84

125V 4A

FU85

125V 4A

FU86

125V 4A

FU87

125V 4A

FU88

125V 4A

FU89

125V 4A

FU90

125V 4A

FU91

125V 4A

FU92

125V 4A

FU93

125V 4A

FU94

125V 4A

FU95

125V 4A

FU96

125V 4A

FU97

125V 4A

FU98

125V 4A

FU99

125V 4A

FU100

125V 4A

FU101

125V 4A

FU102

125V 4A

FU103

125V 4A

FU104

125V 4A

FU105

125V 4A

FU106

125V 4A

FU107

125V 4A

FU108

125V 4A

FU109

125V 4A

FU110

125V 4A

FU111

125V 4A

FU112

125V 4A

FU113

125V 4A

FU114

125V 4A

FU115

125V 4A

FU116

125V 4A

FU117

125V 4A

FU118

125V 4A

FU119

125V 4A

FU120

125V 4A

FU121

125V 4A

FU122

125V 4A

FU123

125V 4A

FU124

125V 4A

FU125

125V 4A

FU126

125V 4A

FU127

125V 4A

FU128

125V 4A

FU129

125V 4A

FU130

125V 4A

FU131

125V 4A

FU132

125V 4A

FU133

125V 4A

To FL. U - COM assembly J15 (P35)
KPE9

STOP
T.MUTE
STEREO
DT-T
CK-T
CE-T
ST1
7951.1
7951.2
V.MUTE
ST.CXD
VIDEO
BCK
WCK
CD

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

CONNECTION assembly (AWZ4390)

To DOL. PRO. MOD. assembly
CN1902 (P34)

1 L+R/L-
2 DA.CXD
3 ST.CXD
4 CLK
5 DATA
6 M.G
7 +12V
8 -12V
9 BCK
10 WCK
11 CD
12 ST-1

To DOL. PRO. MOD. assembly
CN1901 (P33)

1 SUR R
2 CND
3 SUR L
4 CND
5 Lch in
6 CND
7 CENT
8 CND
9 Rch in
10 CND
11 Lch out
12 A.CND
13 Rch out
14 CND
15 DOL IN
16 M.CND
17 DOL OUT

To AUDIO FUNCTION
assembly CN11

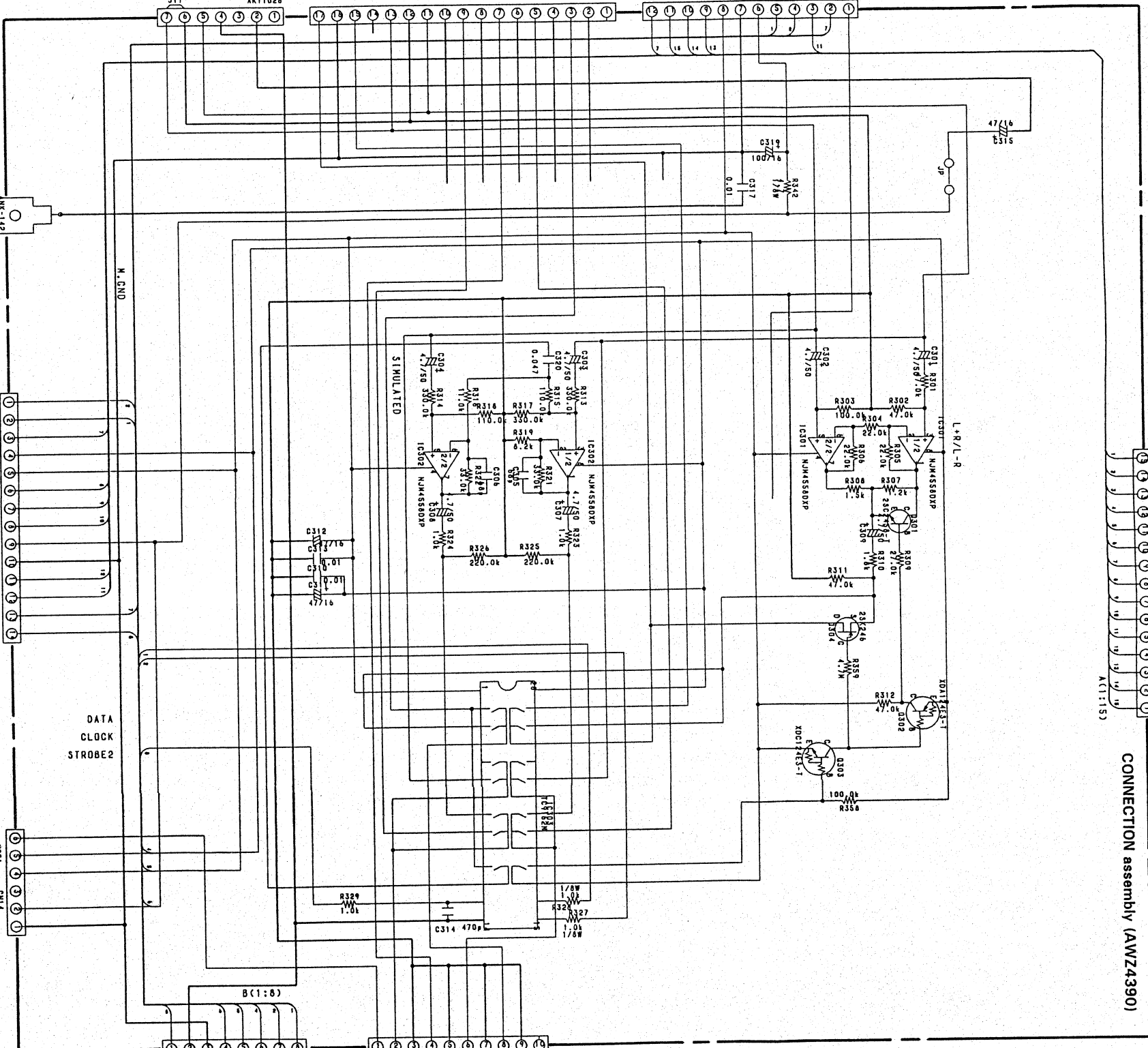
1 T.L
2 T.C
3 T.R
4 D.C
5 L
6 R
7 A.C

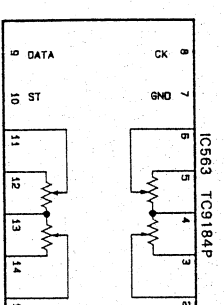
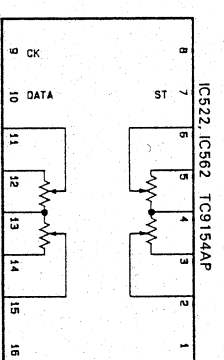
To A/V FUNCTION assembly J13

1 CK
2 DA
3 ST1
4 +12V
5 -12V
6 7951.1
7 7951.2
8 V.MUTE
9 +12V.V
10 D.C
11 VIDEO
12 ST.CXD
13 DA.CXD
14 ST2

To POWER SUPPLY
assembly J14 (P19)

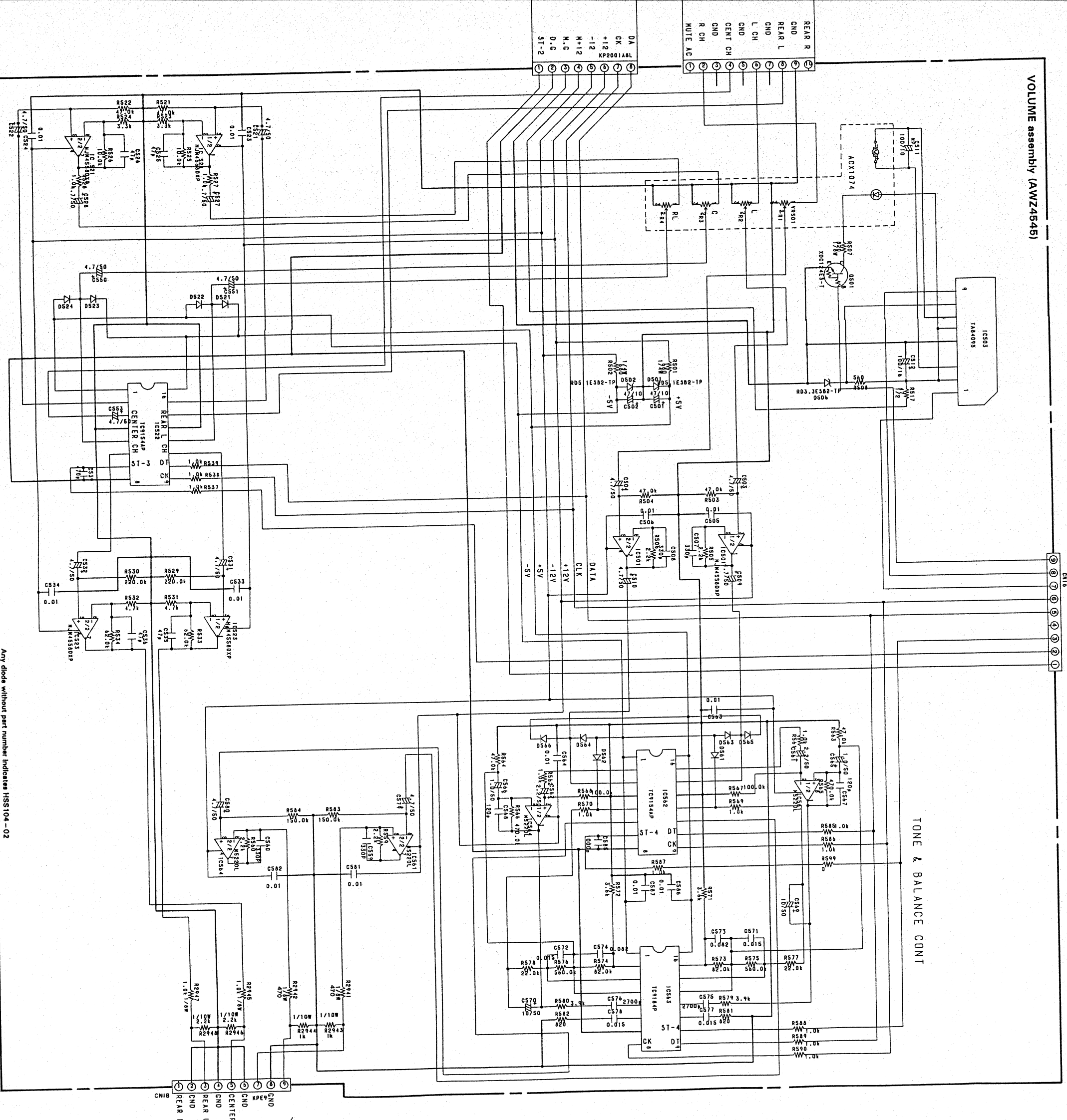
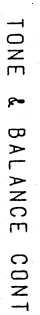
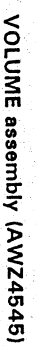
1 MUTE.AC
2 +12V
3 -12V
4 +5V
5 M+12V
6 M.C



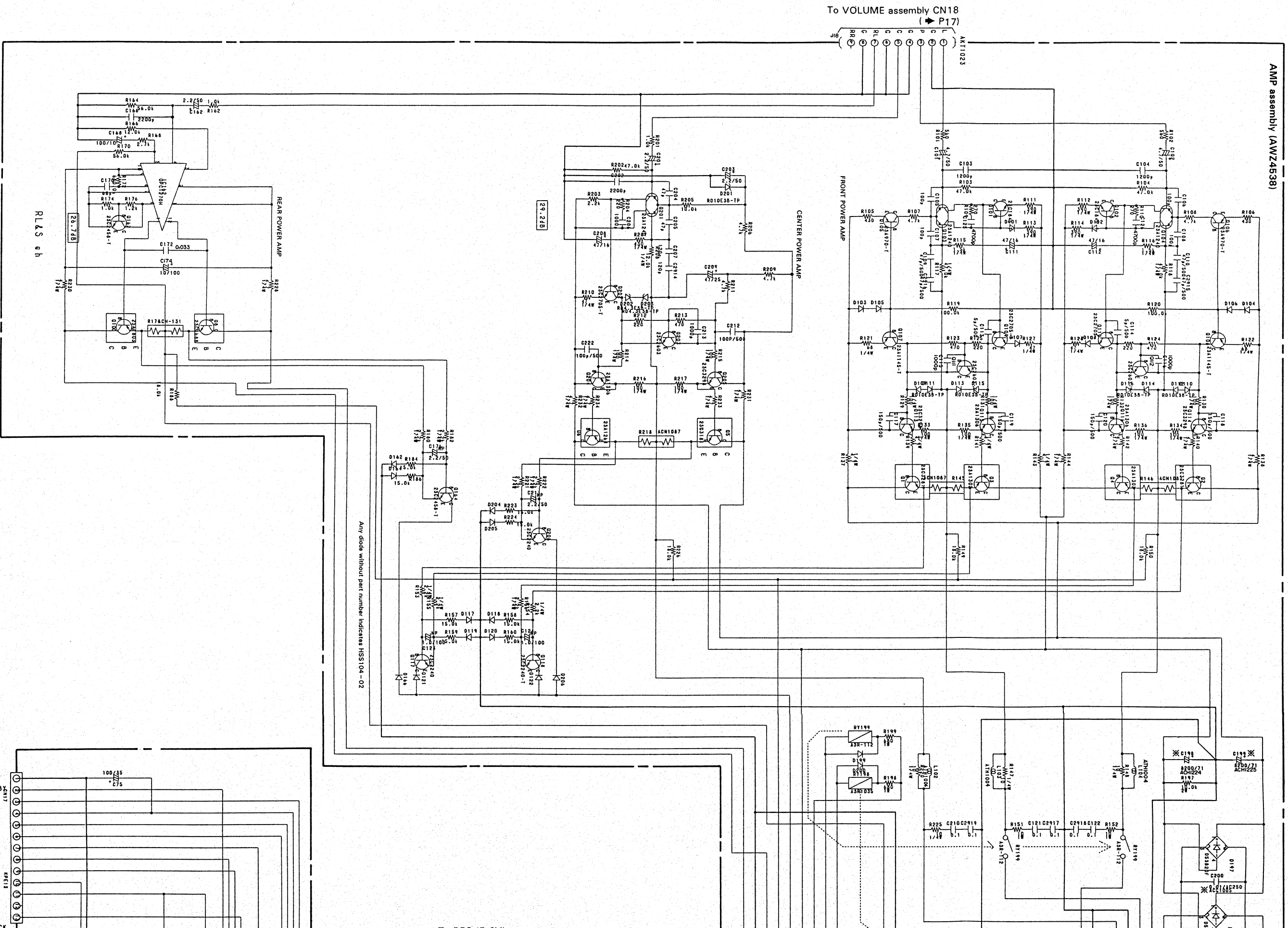


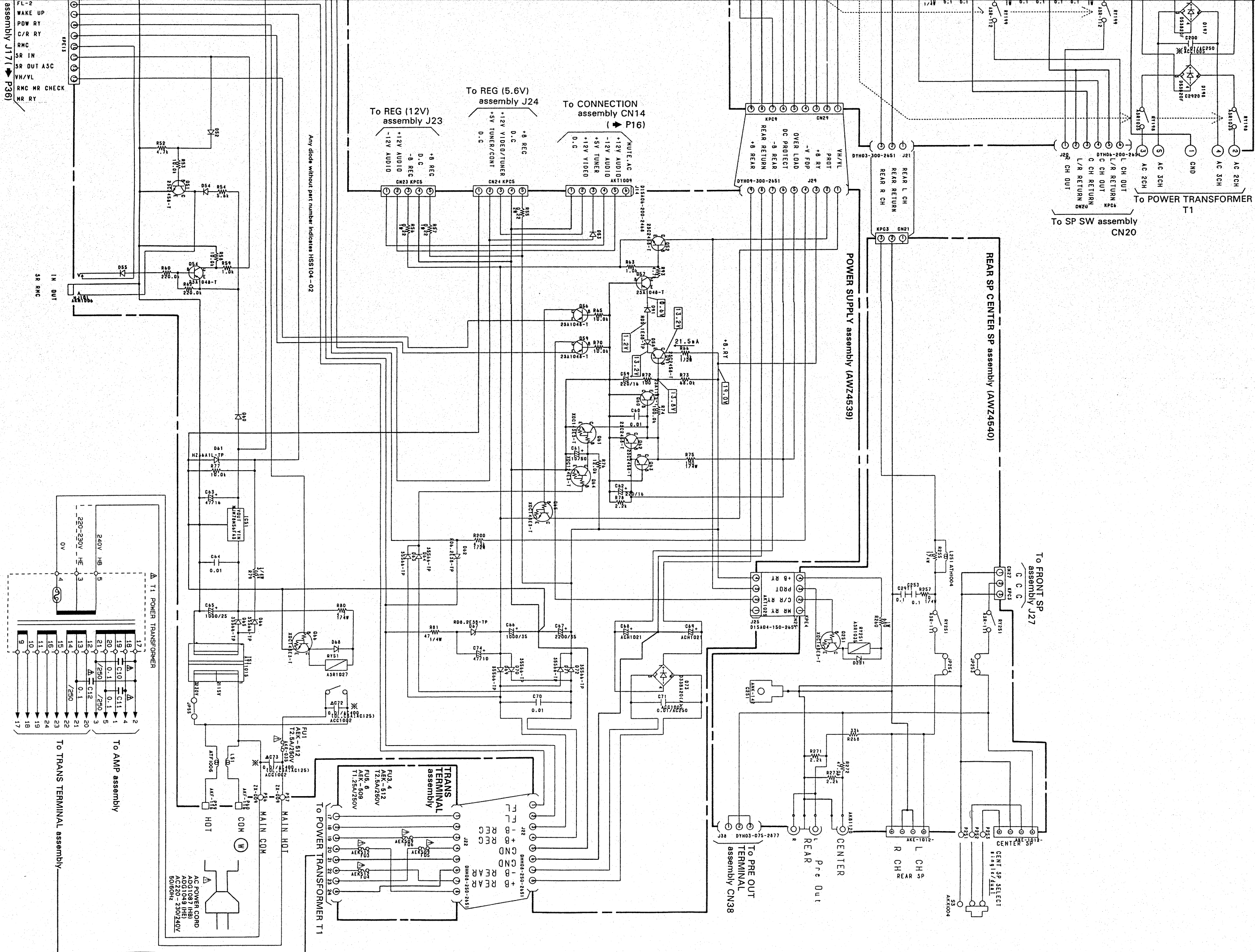
To FL. U - COM assembly J16 (➡ P35)
KPE9

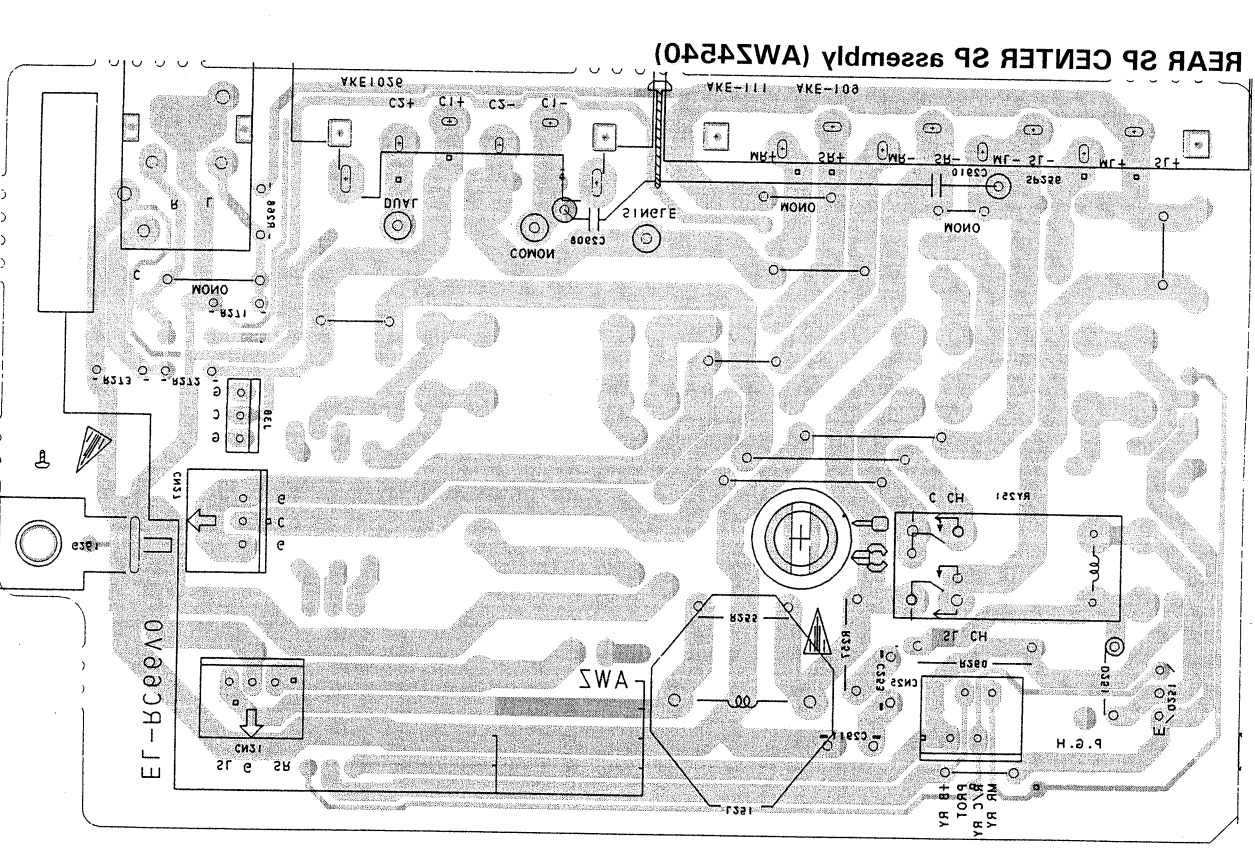
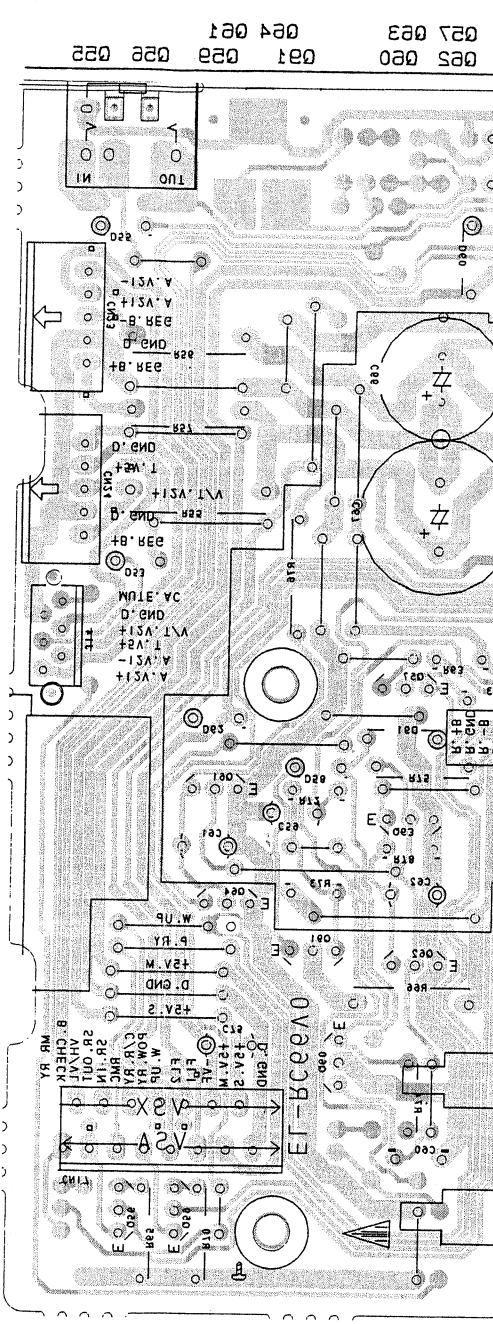
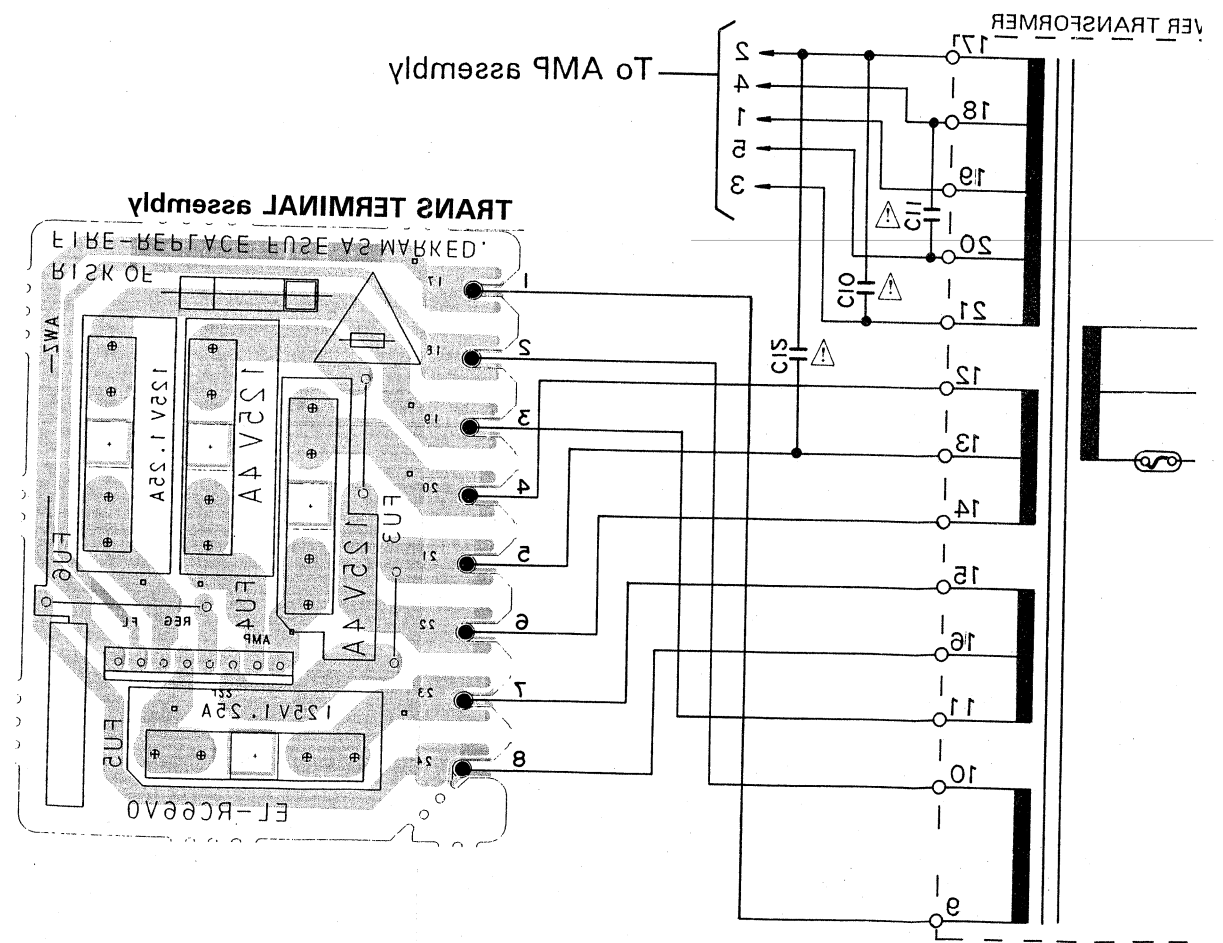
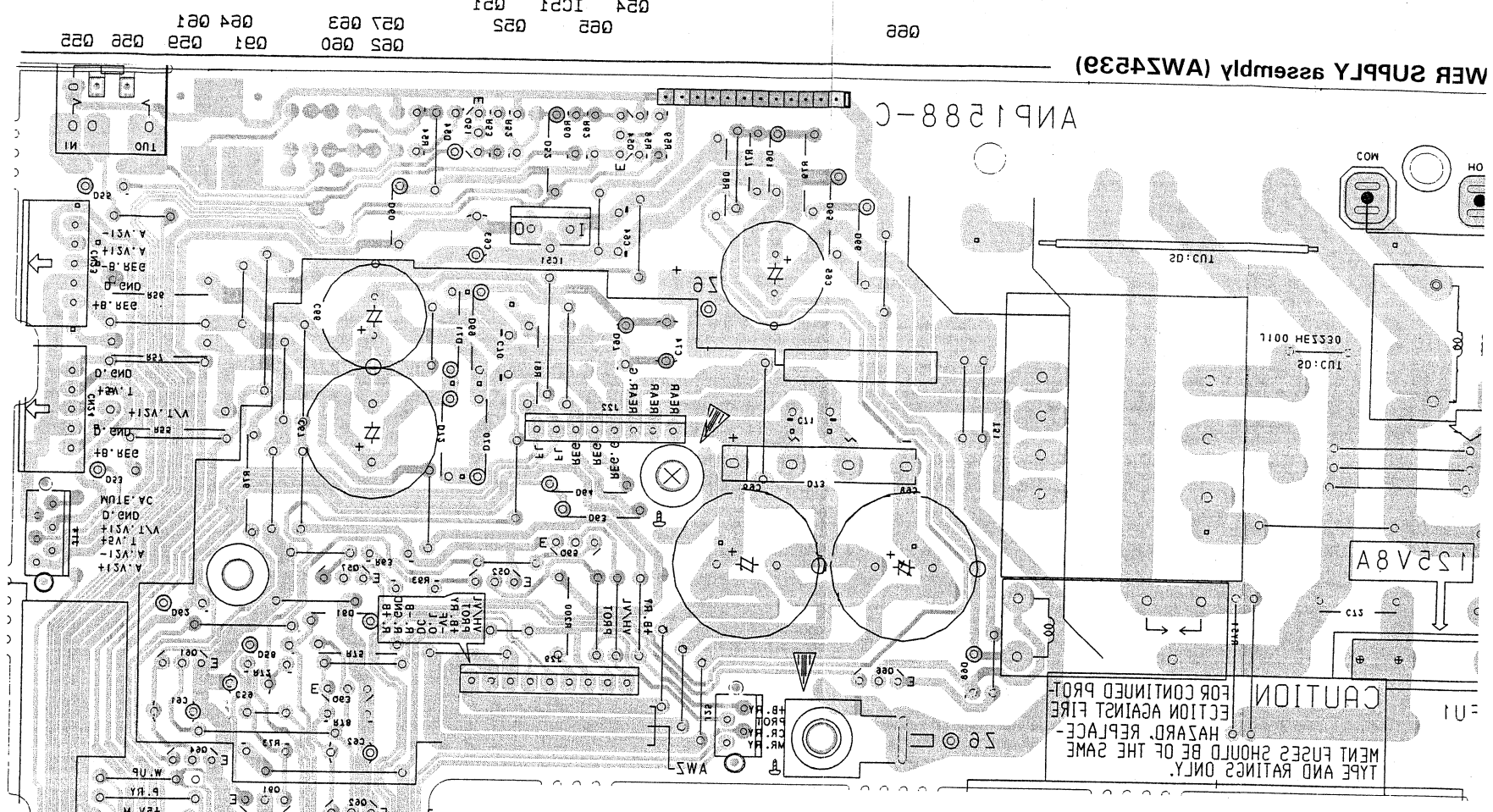
LED
DOWN
UP
CK
DT
ST-5
ST-4
ST-3
ST-2



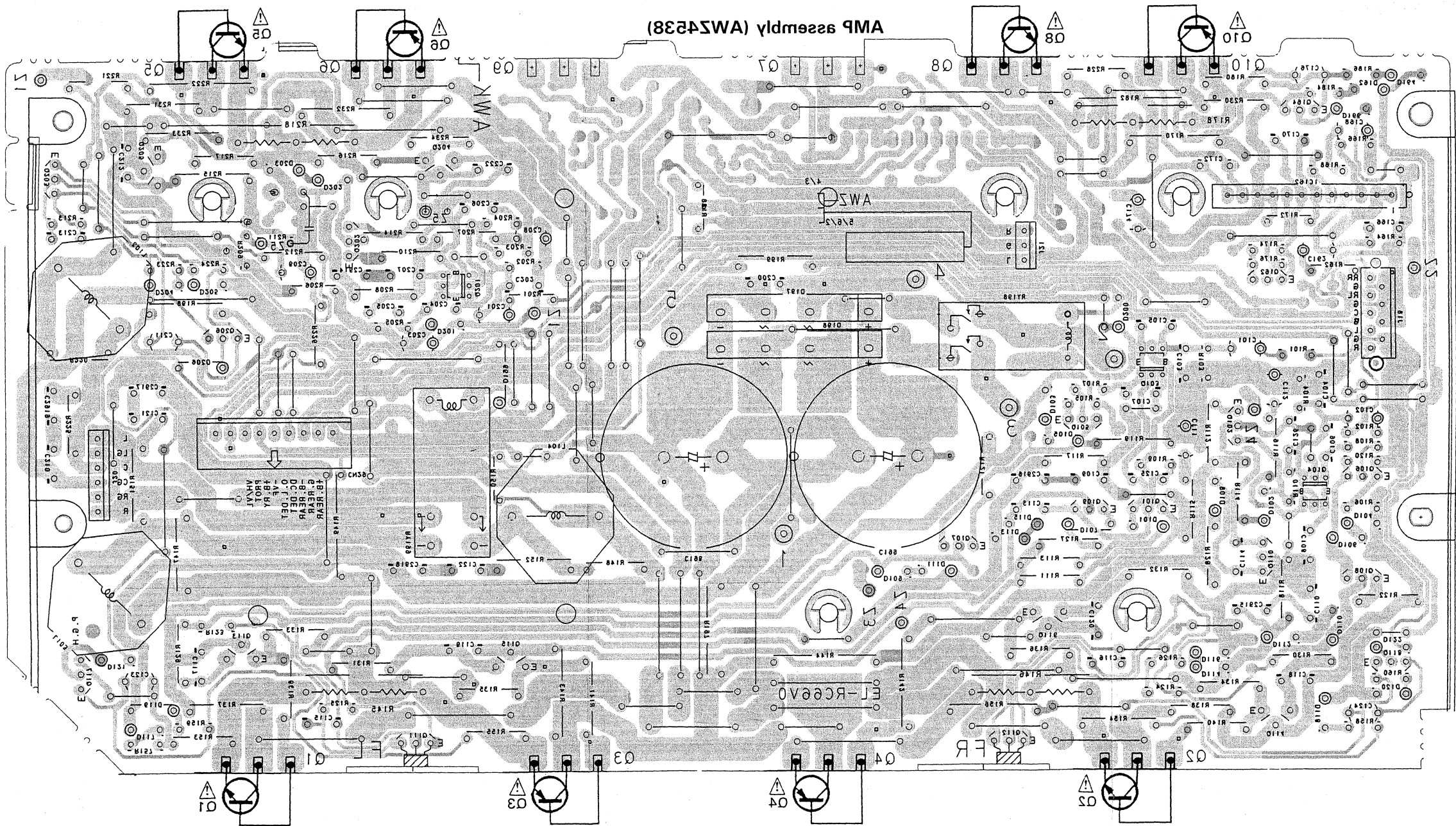
Any diode without part number indicates HSS104--02

3.2 AMP ASSEMBLY, REAR SP CENTER SP ASSEMBLY, POWER SUPPLY ASSEMBLY AND
TRANS TERMINAL ASSEMBLY





This PCB connection diagram is viewed from the foil side.

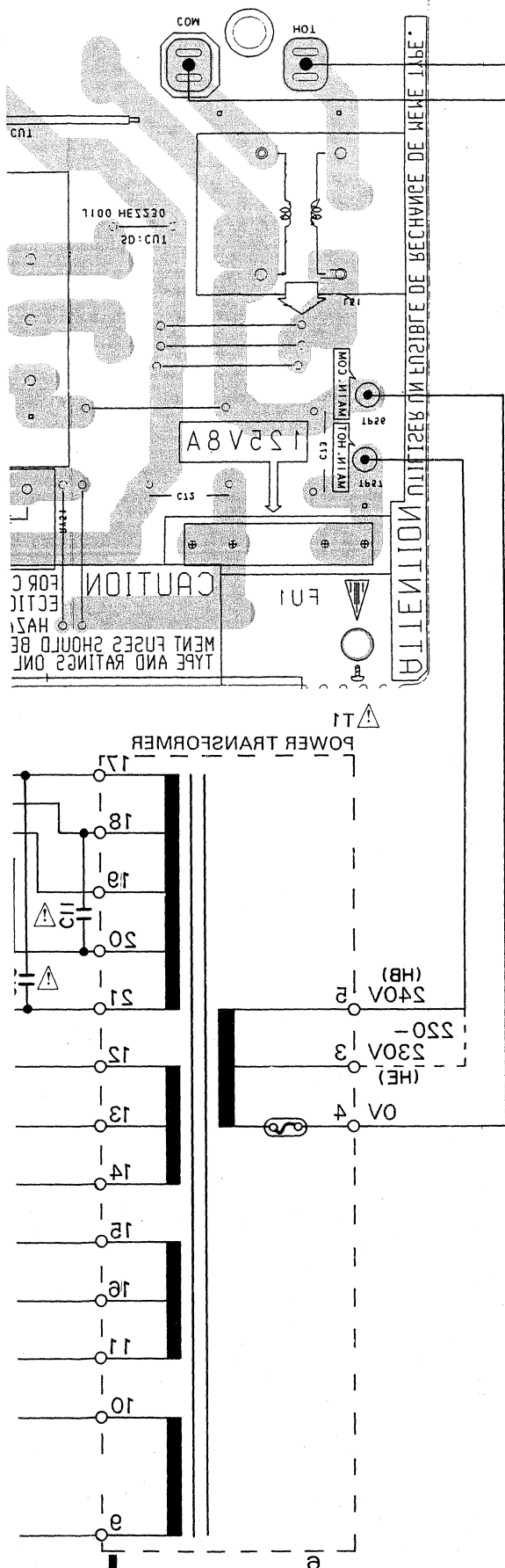


- Line Voltage Selection
- Line voltage can be changed with the following steps.
1. Disconnect the AC Power cord.
 2. Remove the top cover.
 3. Change the connection with the power transformer (T1) primary taps.
 4. Stick the line voltage label on the rear panel.

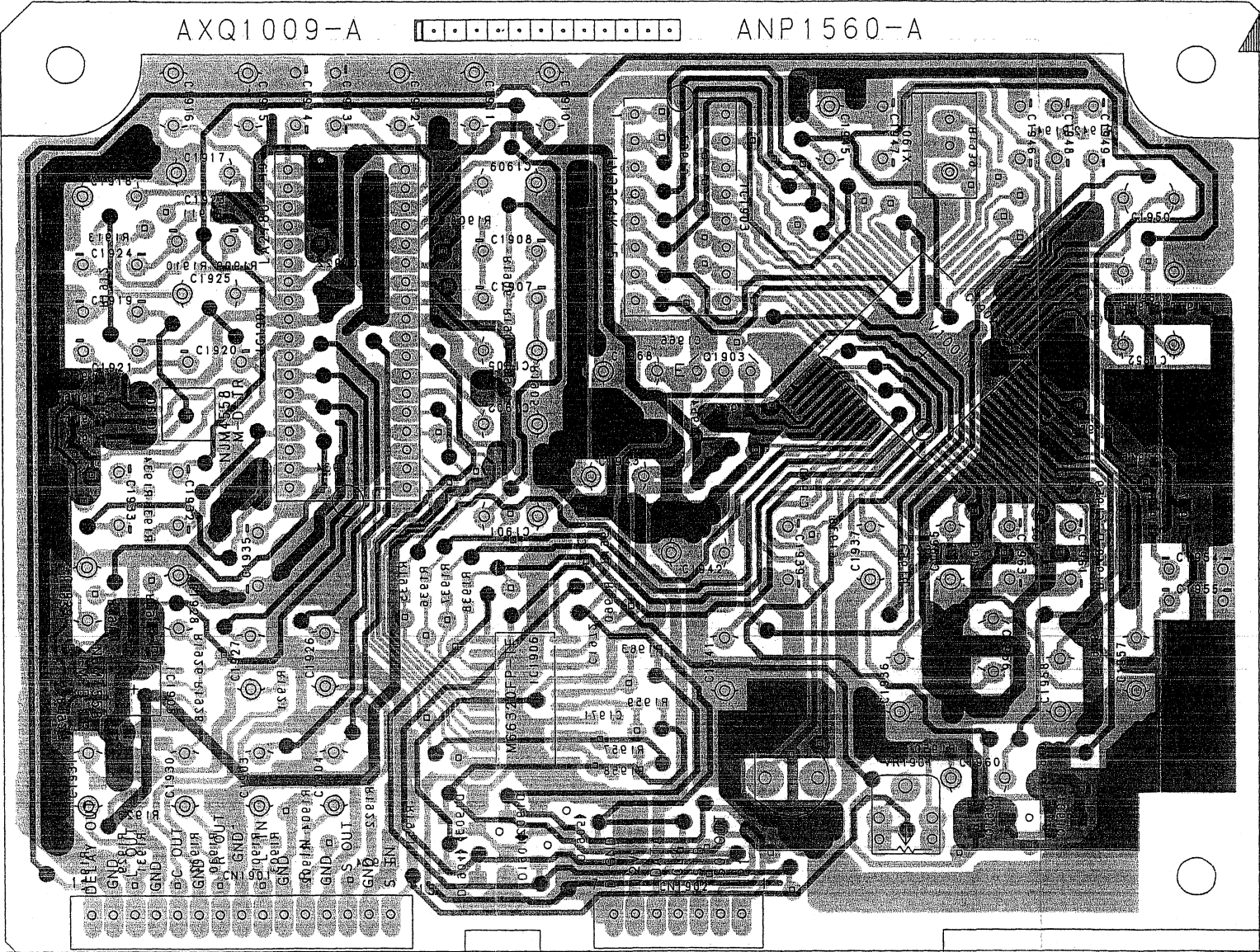
Part No.	Description
AAX-193	220V label
AAX-192	240V label

AC POWER CORD
AC220-230/240V
50/60Hz

POWER SUPPLY assembly (A)



DOL. PRO. MOD. assembly (AXQ1009)



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 (Polarized)
		Capacitor (Non-polarized)

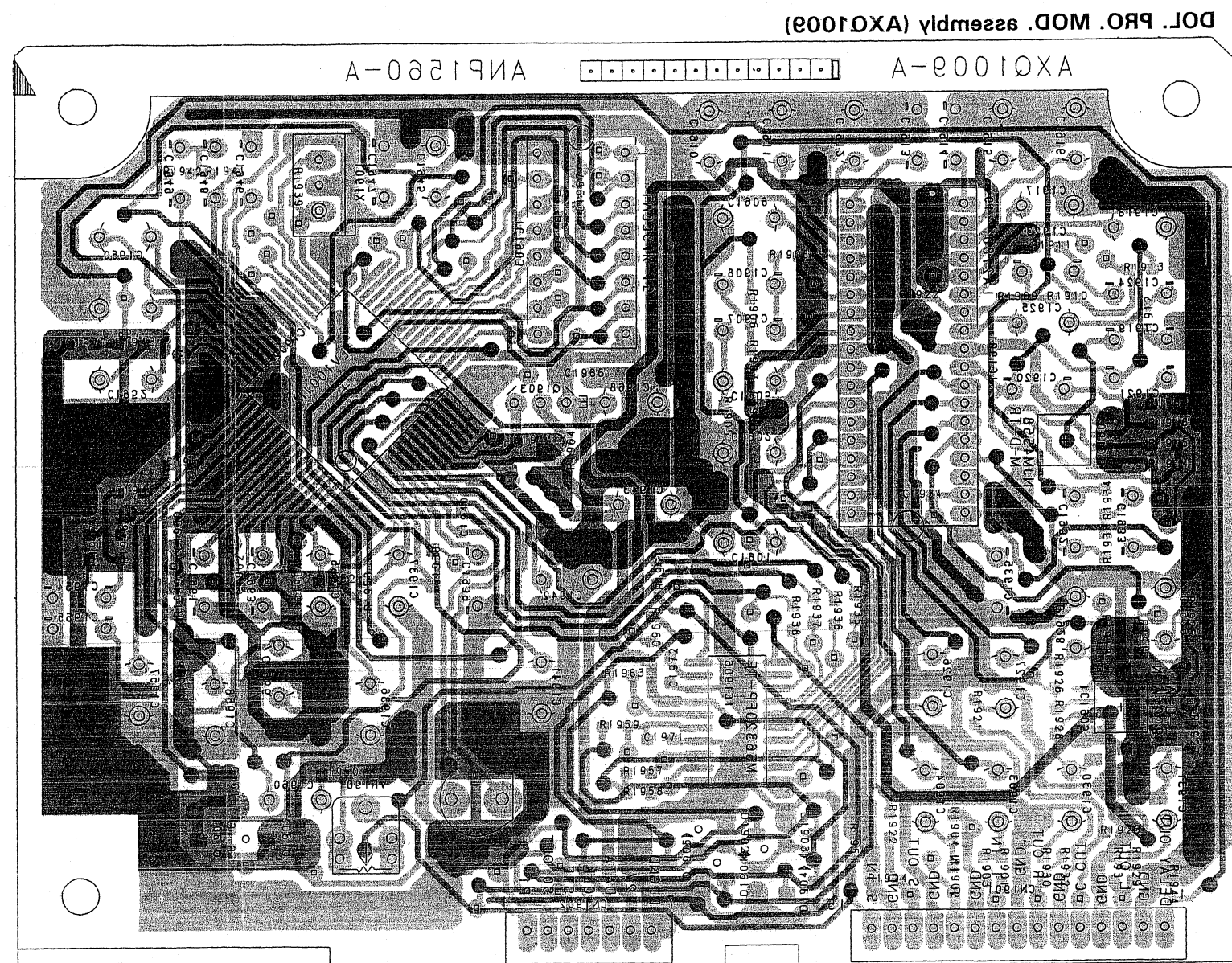
Others

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

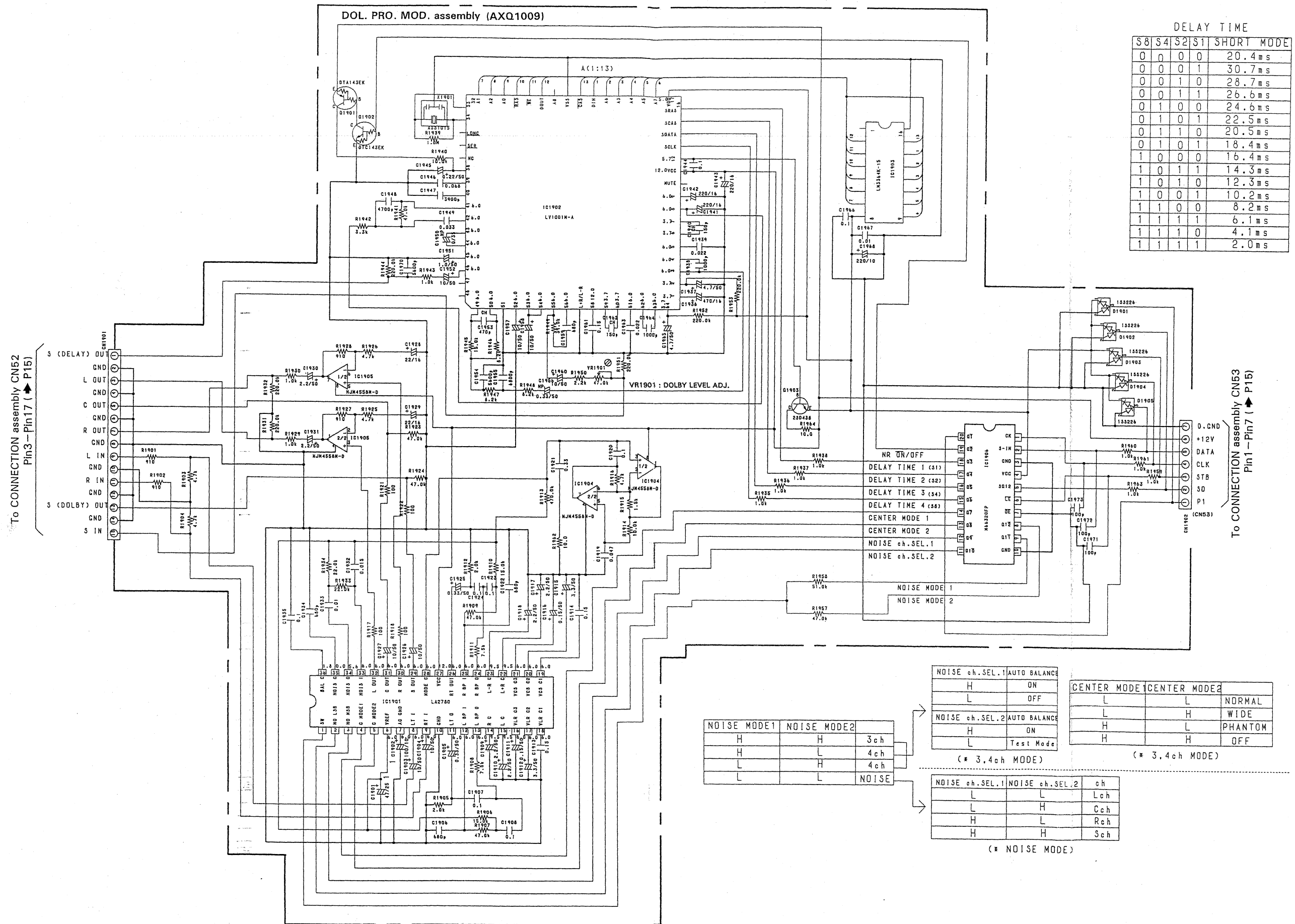
- 3. The capacitor terminal marked with ⊙ (double circles) shows negative terminal.
- 4. The diode terminal marked with ⊙ (double circles) shows cathode side.
- 5. The transistor terminal to which E is affixed shows the emitter.

This PCB connection diagram is viewd from the parts mounted side.

3.3 DOL. PRO. MOD. ASSEMBLY

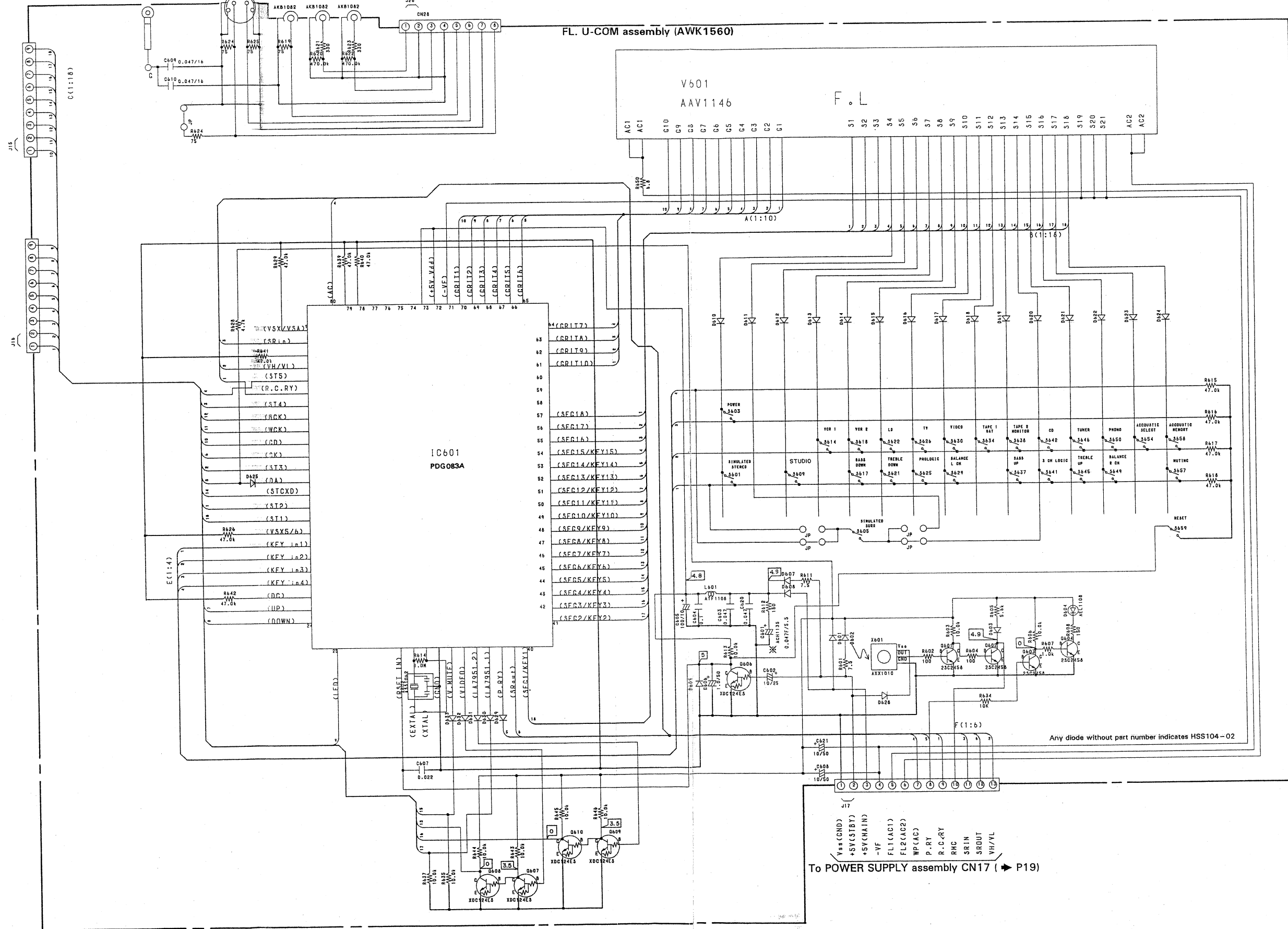


This PCB connection diagram is viwed from the foil side.



3.4 FL U - COM ASSEMBLY

To VOLUME assembly CN16 (P17) To CONNECTION assembly CN15 (P15)

LED
DOWN
UP
CK
DA
ST5
ST4
ST3
ST-2

A

B

C

D

1

2

3

4

5

6

1

2

3

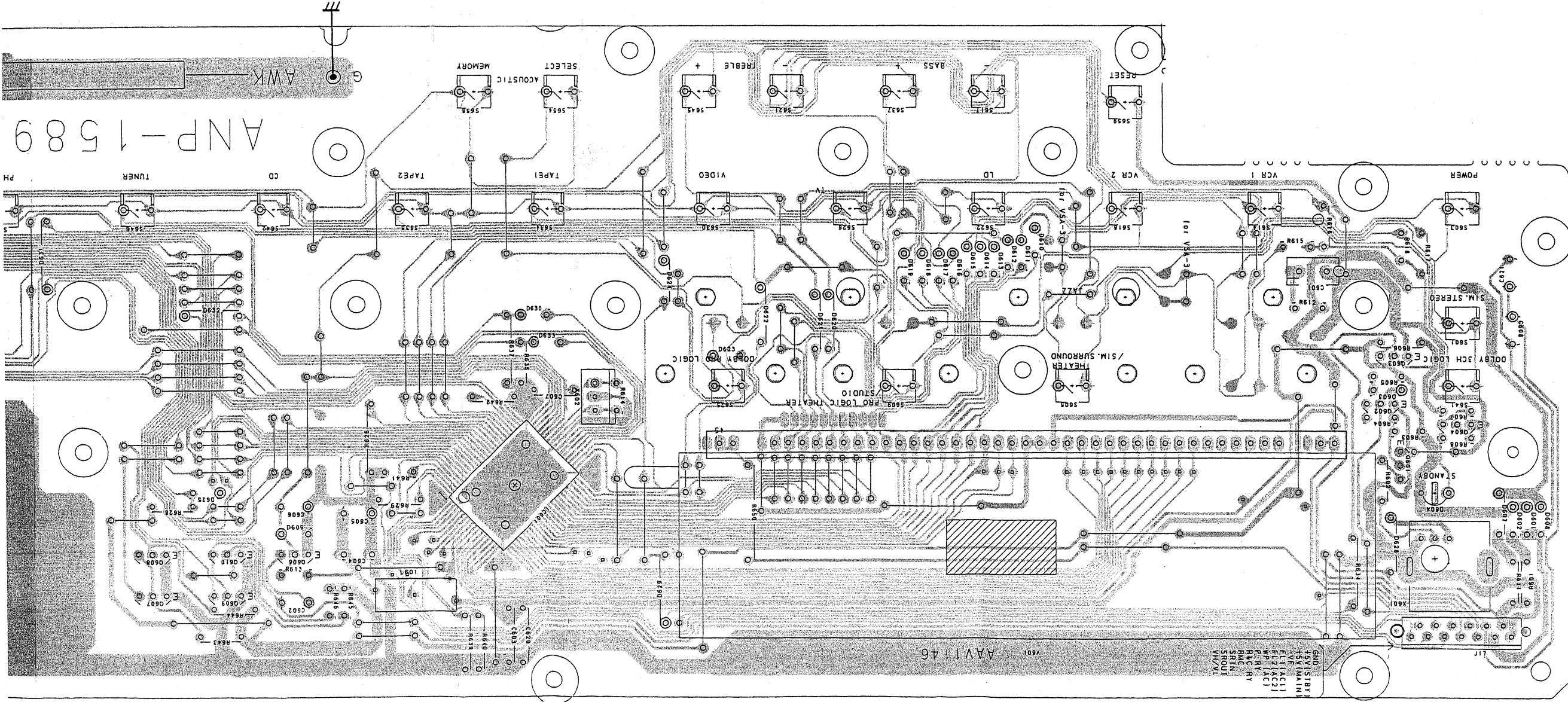
4

5

6

GROUNDING
PATTERN
ELECTRICALLY
ISOLATED
P.C. BOARD
RMC
SRIN
SHOUT
10/11

AAV11146



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.

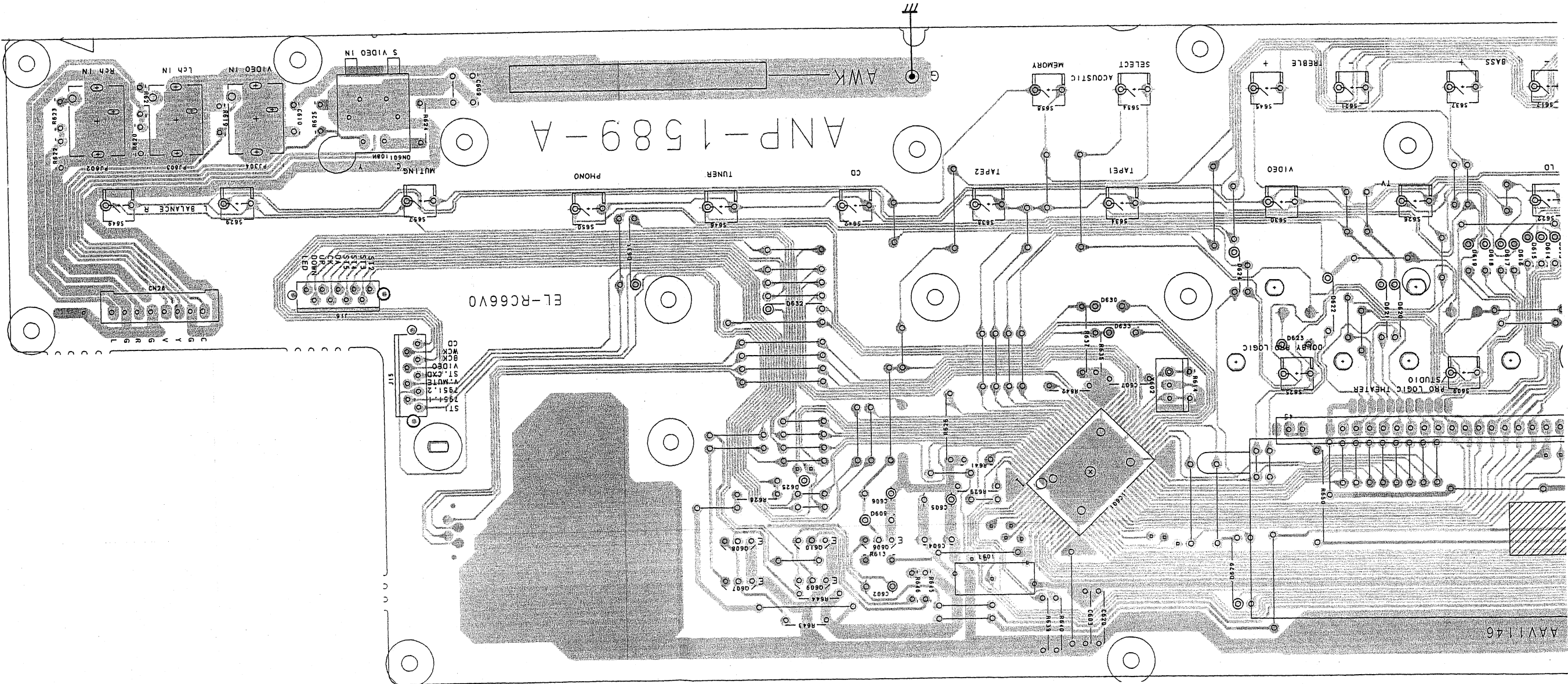
Others

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

Part Name	Corresponding part symbol	Part Name	Corresponding part symbol
Transistor		Transistor type	
Diode		Resistor	
Capacitor (Polarized)		Capacitor (Non-polarized)	

FL. U - COM assembly (AWK1560)



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.

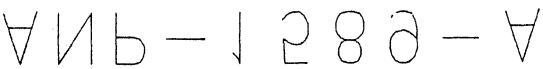
Others

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

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.

Part Name	Part Name	P.C.B. pattern diagram indication
Transistor	Transistor	Transistor
Radiator type	Radiator type	Radiator type
Diode	Diode	Diode
Resistor	Resistor	Resistor
Capacitor (Polarized)	Capacitor (Polarized)	Capacitor (Polarized)
Capacitor (Non-polarized)	Capacitor (Non-polarized)	Capacitor (Non-polarized)

This PCB connection diagram is viewed from the parts mounted side.



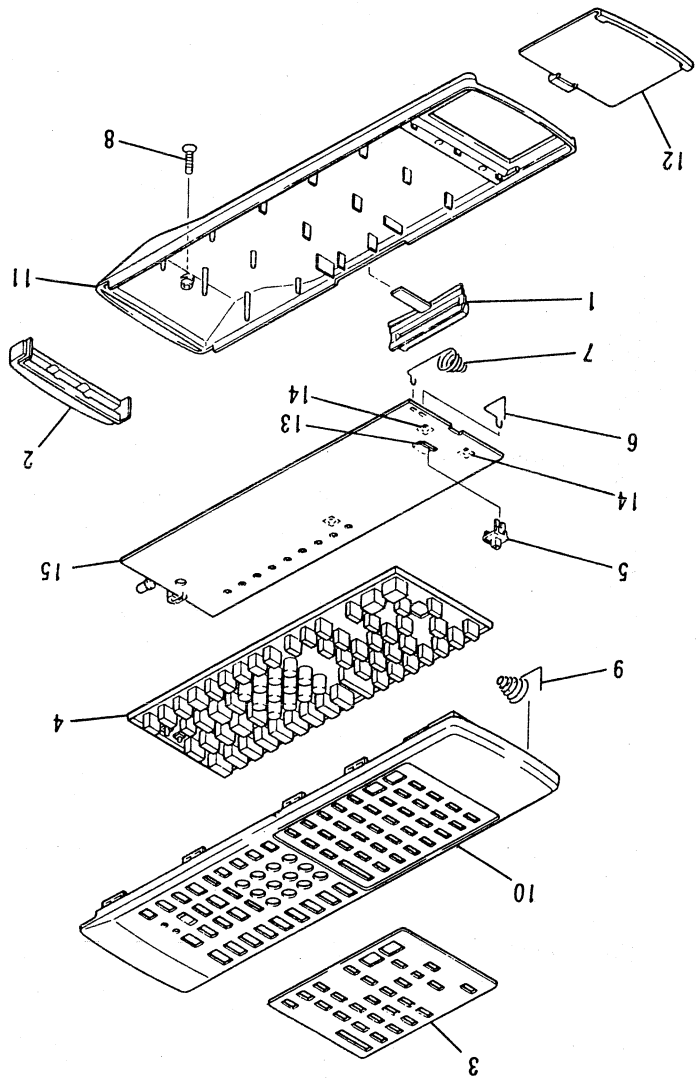
C

4. REMOTE CONTROL UNIT [CU - VSA022 (AXD1283)]

4.1 EXPLODED VIEW 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 of Exterior		
Mark No.	Description	Parts No.
1	MODE CHECK KEY	AZA1335
2	FILTER	AZA1336
3	PLATE	AZA1410
4	RUBBER SHEET	AZA1366
5	KNOB	AZA1349
6	TERMINAL (+)	AZB1327
7	TERMINAL (-)	AZB1328
8	SCREW	AZB1329
9	TERMINAL (C)	AZB1330
10	CASE (A)	AZN2089
11	CASE (B)	AZN2090
12	BATTERY COVER	AZN2091
13	SLIDE SW	AZS1117
14	TACT SW	AZS1118
15	P. C. BOARD	AZW1130



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4.2 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%).
560 Ω \rightarrow 56 $\times 10^1 \rightarrow$ 561
47k Ω \rightarrow 47 $\times 10^3 \rightarrow$ 473
RDI/8PM Δ Δ Δ J
RDI/4PS Δ Δ Δ J
RN2H Δ Δ Δ K
0.5 Ω \rightarrow 0R5
12 \rightarrow 010
RS1P Δ Δ Δ K
Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62k Ω \rightarrow 562 $\times 10^1 \rightarrow$ 5621
RN1/4PC Δ Δ Δ Δ F

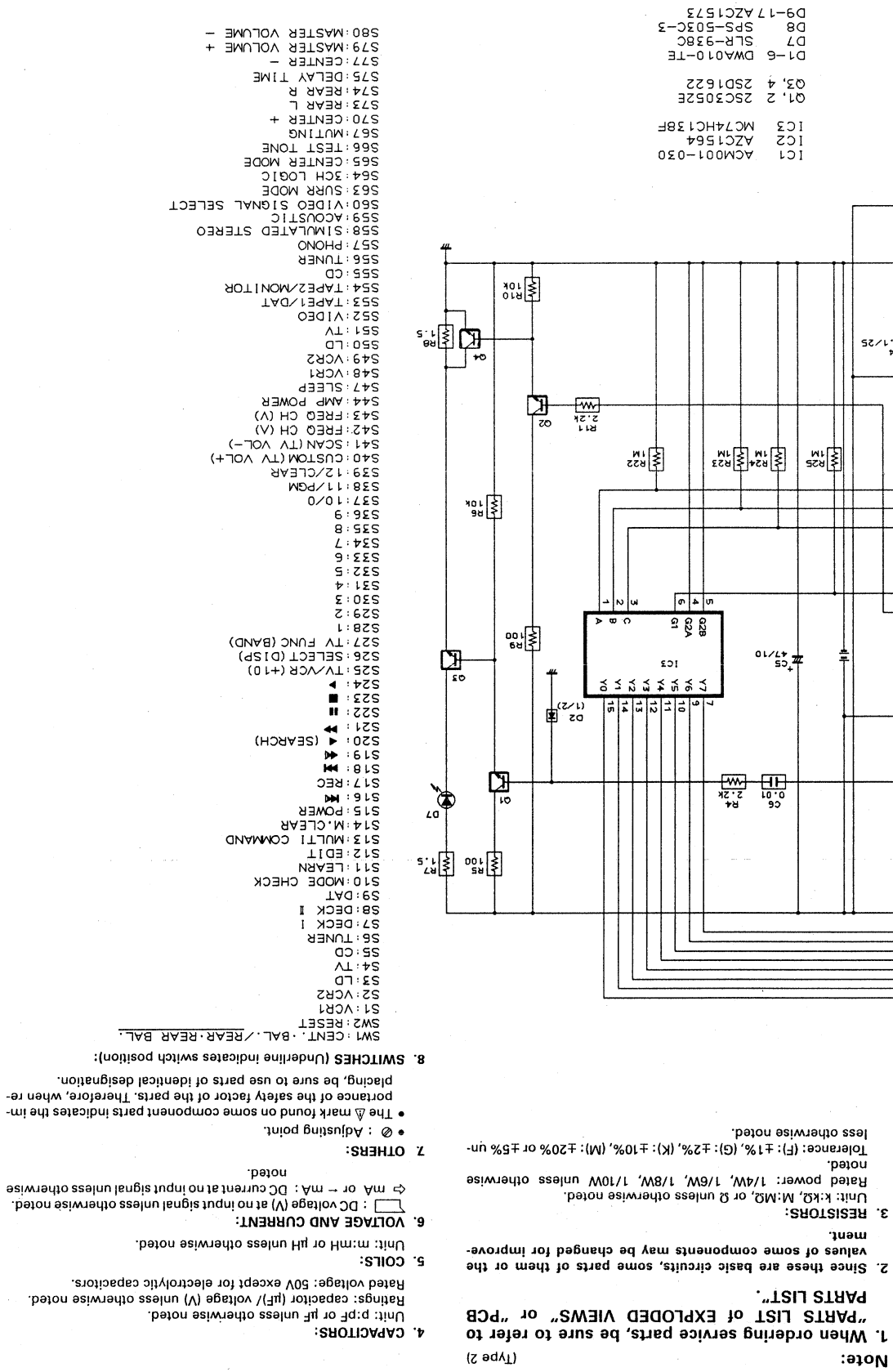
Mark No.	Description	Parts No.
SEMICONDUCTORS		
IC1	μ -COM	ACM001-030
IC2	IC	AZC1564
IC3	LOGIC IC	MC74HC138F
Q1, 2	CHIP TRANSISTOR	2SC3052E
Q3, 4	TRANSISTOR	2SD1622
D1-6	DIODE	DWA010-TE
D7	LED	SLR-938C
D8	DIODE	SPS-503C-3
CAPACITORS		
C1, 2	CERAMIC CAPACITOR	CCDSL330J50
C3	CERAMIC CAPACITOR	CCDSL221J50
C4	CERAMIC CAPACITOR	CKDYX104M25
C5	ELECT. CAPACITOR	CEAS470M10
C6	CERAMIC CAPACITOR	CKDYB103K50
C7	ELECT. CAPACITOR	CEAS221M10
C8	ELECT. CAPACITOR	CEAS4R7M50
RESISTORS		
R7, 8	CARBON FILM RESISTOR	RDI/4PMFL1R5J
	Other resistors	RDI/8PM Δ Δ Δ J
OTHERS		
X1	RESONATOR	AZC1570

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4.3 SCHEMATIC DIAGRAM

JP2: The terminal for switching f_c (carrier frequency of the fixed code). This terminal is set at OPEN ($f_c = 40\text{kHz}$) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that f_c will be 36.7kHz . (In which case, the learned code and preset code do not change.)

(not change.) This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JF3 is a terminal for switching whether or not to use that pre-loaded timing data during learning. This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JF3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

[illegible][illegible]

D

