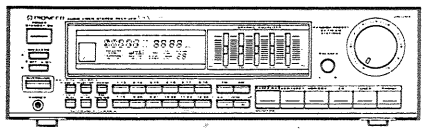
Service Manual



ORDER NO.
ARP1530

AUDIO/VIDEO STEREO RECEIVER

VSX-3300

MODELS VSX-3300 AND VSX-3300S HAVE FIVE VERSIONS:

Type	Applicable model		Power requirement	Export destination
	VSX-3300	VSX-3300S		
KUC	○	○	AC120V only	U.S.A and Canada
SD/G	○	–	AC110V,120 – 127V,220V,240V (switchable)	U.S.Military
HE	–	○	AC220V,240V (switchable) *	European continent
HEZ	–	○	AC220V,240V (switchable) *	West Germany
HB	–	○	AC220V,240V (switchable) *	United kingdom

* Change the primary wiring of power transformer.

- **This manual is applicable to the VSX-3300/KUC and SD/G types.**
- **For the VSX-3300/SD/G type, refer to page 26.**
- **For the other types, refer to additional service manual.**
- **Ce manuel pour le service comprend les explications en français de réglage.**
- **Este manual de servicio trata del método ajuste escrito en español.**

CONTENTS

1. SAFETY INFORMATION

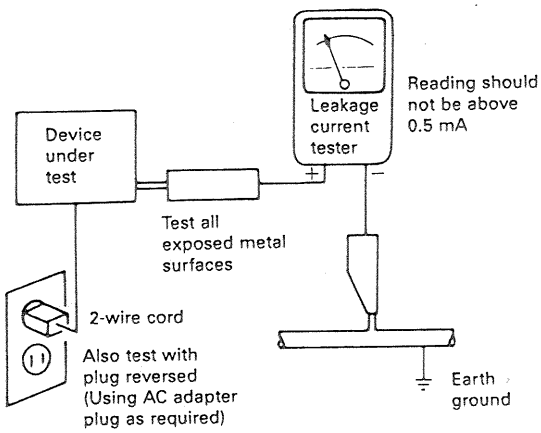
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120 V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

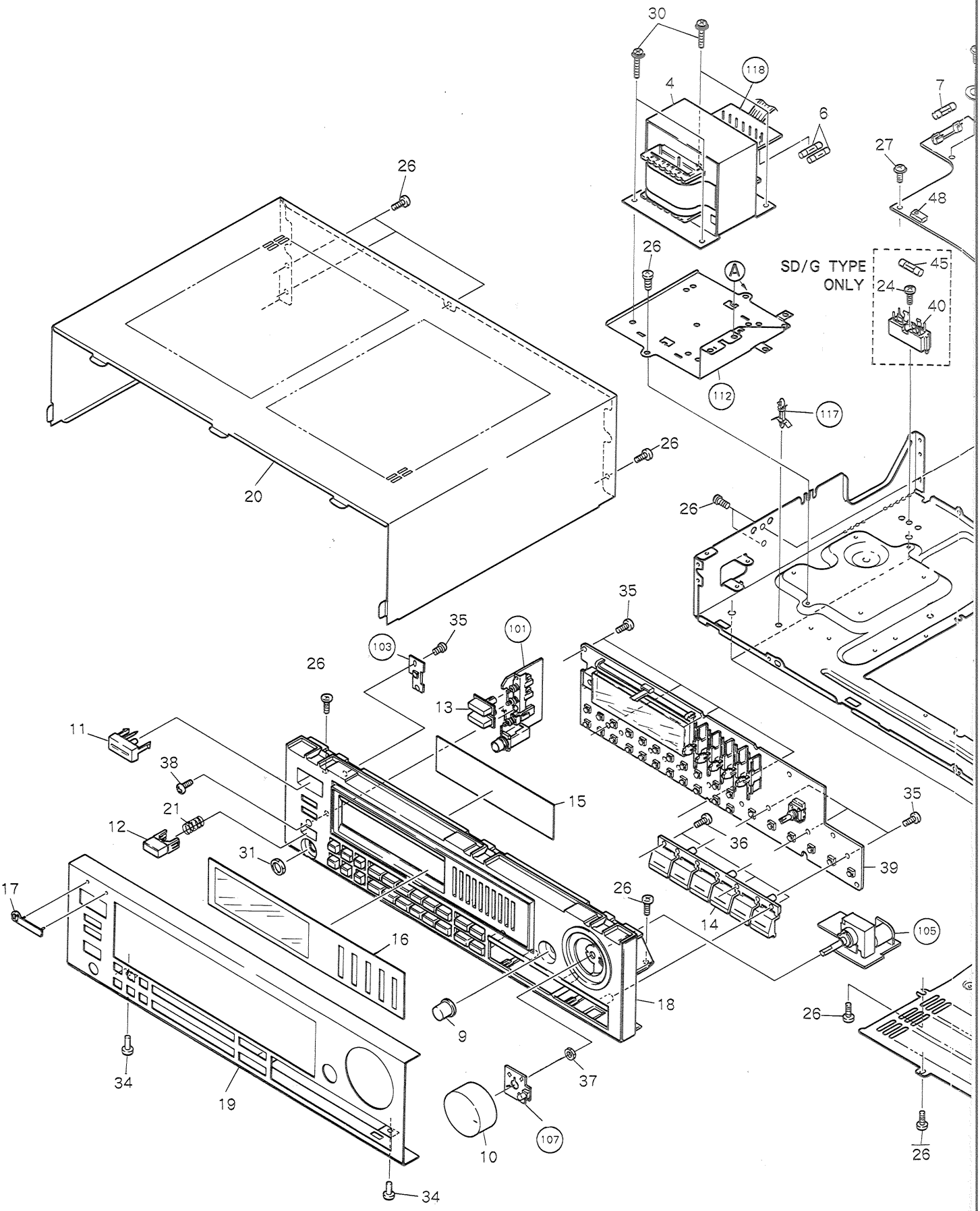
Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

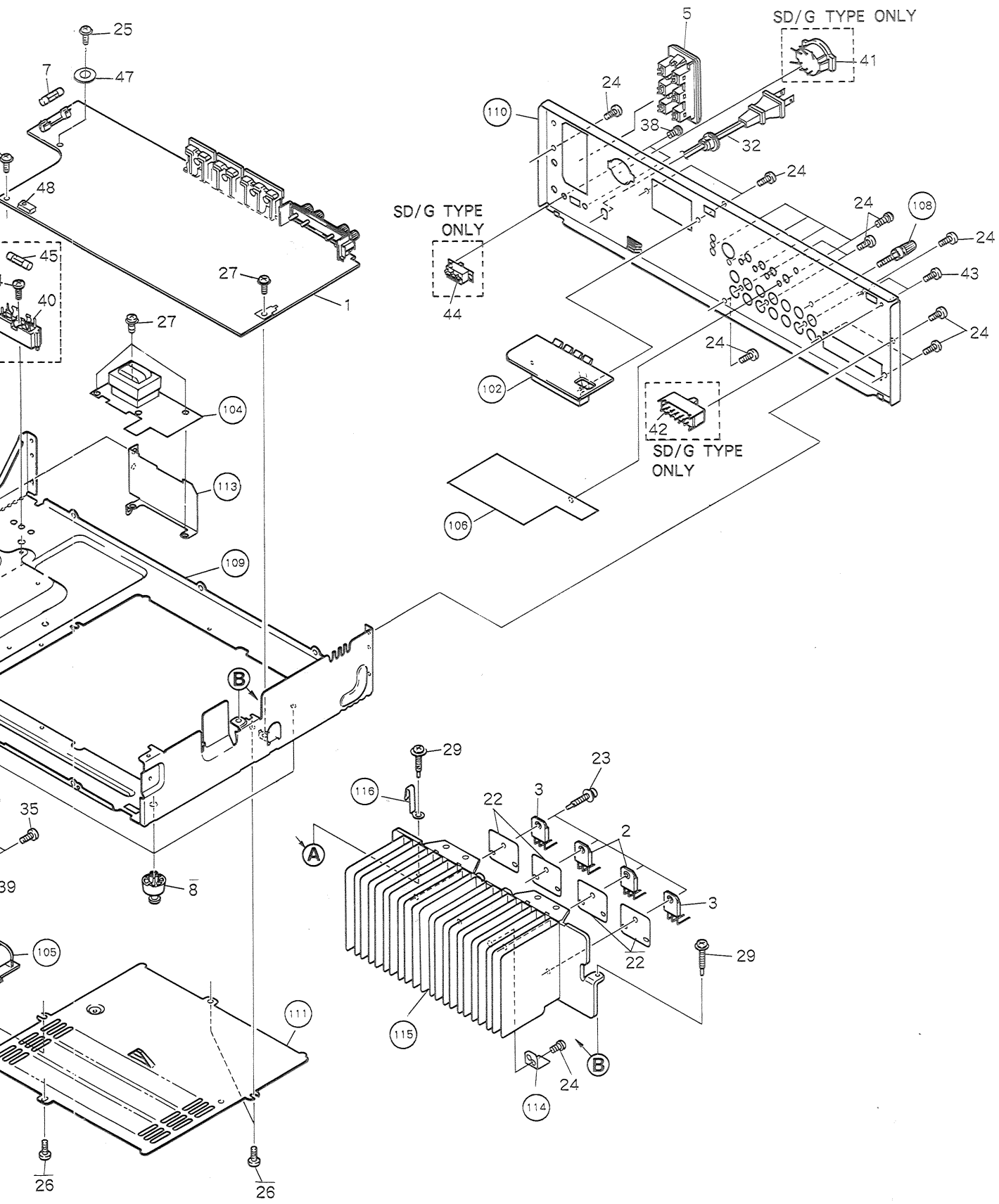
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST




SD/G TYPE ONLY
SD/G TYPE ONLY
SD/G TYPE ONLY
25
47
7
48
45
40
27
1
27
104
113
109
B
35
39
8
105
111
26
26
5
41
24
110
38
32
24
24
108
24
43
24
24
SD/G TYPE ONLY
44
102
42
106
29
116
23
22
3
2
3
22
29
A
115
B
24
114

NOTES :

- Parts without part number cannot be supplied.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

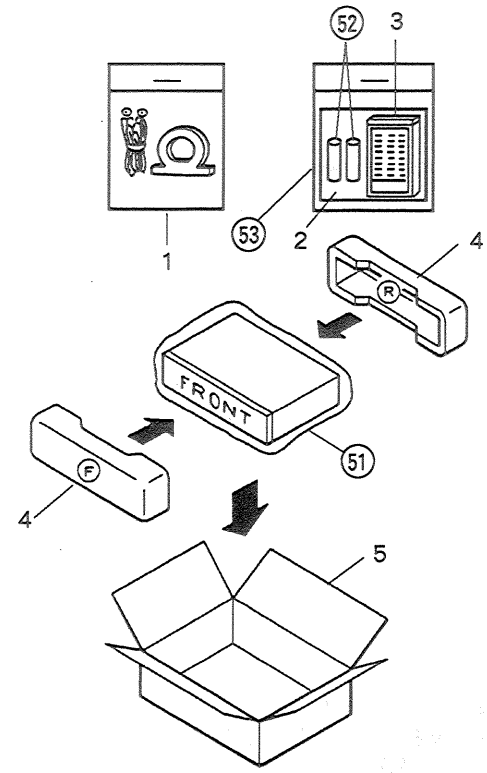
Parts List

Mark	No.	Part No.	Description
	1	AWZ1677	COMPLEX assembly
⚠★★	2	2SA1302	Q3,Q4
⚠★★	3	2SC3281	Q1,Q2
⚠	4	ATS1135	Power transformer (T1)
⚠	5	AKP-515 (AKP-504)	AC outlet (3P)
⚠★★	6	AEK-121	Fuse (1.6A/125V,FU3,FU4)
⚠★★	7	AEK-304	Fuse (8A/125V,FU1)
	8	AEC-784	Leg assembly
	9	AAB1010	Rotary knob (BALANCE)
	10	AAB1056	Rotary knob (BOLUME)
	11	AAD1152	Knob (POWER)
	12	AAD1162	Knob (SURROUND)
	13	AAD1295	Knob (SPEAKERS)
	14	AAD1296	Knob array (TAPE2,/DAT, VCR/TAPE1, VDP/CDV, CD, TUNER, PHONO)
	15	AAK1437	FL filter
	16	AAK1438	Sheet panel
	17	AAM-030	Name plate
	18	AMB1336	Panel base
	19	ANB1169	Front panel
	20	AZN1466	Bonnet
	21	ABH1034	Coil spring B
	22	AEE1014	Mica sheet
	23	ABA-297	Screw
	24	ABA-298	Screw (3 × 8)
	25	ABA1004	Screw
	26	ABA1009	Screw (3 × 6)
	27	ABA1011	Screw (3 × 6)
	28	ABA1047	Screw
	29	ABA1052	Screw (3 × 12)
	30	ABA1054	Screw (3 × 10)
	31	ABN-065	Nut
⚠	32	ADG1031 (ADG1001)	AC power cord
	33	ADX1191	Lead wire
	34	BBT30P080FZK	Screw
	35	BBZ26P080FMC	Screw
	36	BPZ30P080FZK	Screw
	37	NK70FUC	Nut
	38	VMZ30P060FCU	Screw
	39	AWZ1678	CONTROL assembly
	40	AKR-038	Fuse holder
	41	AKX-507	Voltage selector 1 (S2)
	42	ASH-004	Slide switch (CHANNEL STEP) (S3)
	43	VMZ26P040FZK	Screw
	44	AKX1004	Voltage selector 2 (S4)
	45	AEK-125	Fuse (4A,FU2)
	46		• • • • •
	47	AEB-236	Rubber washer
	48	AEB1063	Spacer ring
	101		SP SWITCH assembly
	102		SP TERMINAL assembly
	103		POWER SW assembly
	104		RELAY assembly
	105		VR assembly
	106		VIDEO assembly
	107		LED assembly
	108		Terminal (GND)
	109		Chassis
	110		Rear panel
	111		Bottom plate
	112		Transformer frame
	113		Transformer holder
	114		Plate
	115		Heat sink
	116		Binder
	117		PCB support
	118		TRANS assembly

3. PACKING

Parts List

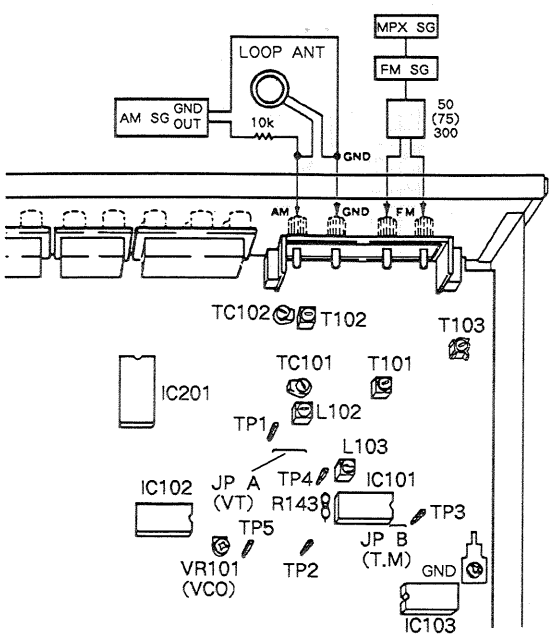
Mark	No.	Part No.	Description
	1	AEA1002	Antenna set
	2	ARB1097	Operating instructions (English)
	3	AXD1051	Remote control unit
	4	AHA1015	Front rear pad
	5	AHD1348	Packing case
	51		Packing sheet
	52		Battery
	53		Accessory bag

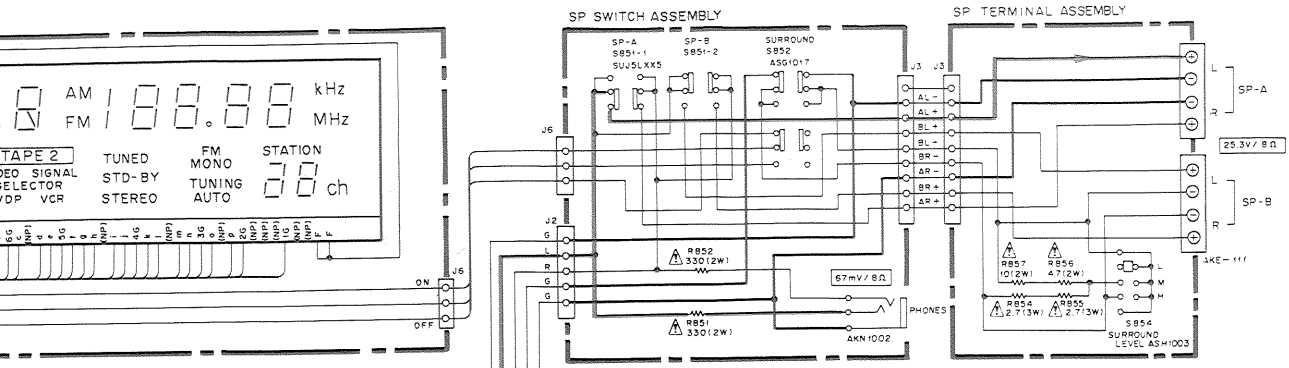


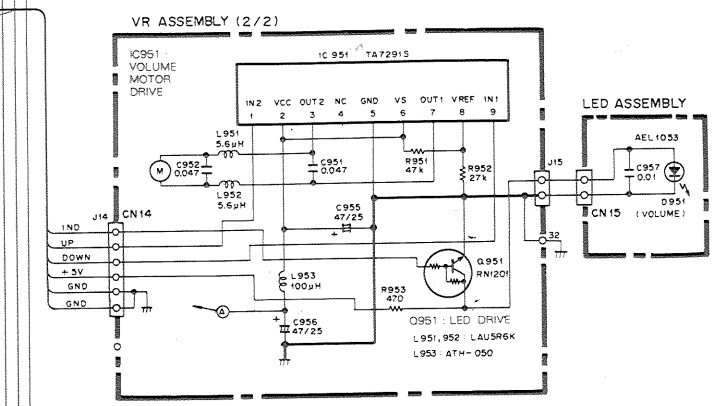
4. ADJUSTMENTS

● This adjustment procedure is for only the adjustment (FM tuner adjustment Step 2) which is differennt from that for the SX-2300/KUC type. For all other adjustments, refer to the SX-2300/KUC type service manual (ARP1477).

Step	FM SG (1kHz, ± 75kHz deviation)		VSX-3300 Frequency display	Adjustment point	Adjustment procedure
	Frequency	Level			
2	98.0MHz	30 to 40 dB	98.0MHz	T101 T103	Adjust DC voltage between IC101 13 pin and ground at maximum.







COMPLEX ASSEMBLY

F102,103	: ATF-126
F104	: ATF-208
L101,105,106,108-110	: LAU2R2M
L102	: ATB-114
L103	: ATE-079
L104	: LTA472J
L107	: ATC1003
L111	: ATC1001
L112	: ATC1002
L501,502	: ATH1004
T101	: ATE-063
T102	: ATB-095
T103	: ATC-194
TC101,102	: ACM-015
C506,607	: ACH1044
C611	: ACG1003
C617	: ACH1011
RY501	: ASR-112
R533,534	: ACN-139
R611	: ACN-209
VR101	: VRT86VS472
X101	: ASS1005

CONTROL ASSEMBLY

S701-727,729	: ASG-711
VR401	: ACS1016
VR403-407	: ACU1023
V701	: AAV1051
X701	: ASS1004

RELAY ASSEMBLY

RY502	: ASR1012
T551	: ATT1011
C1	: ACG1003

VR ASSEMBLY

L951,952	: LAU5R6K
L953	: ATH-050
VR951	: ACX1010

1. RESISTORS :
Indicated in Ω, 1/4W, 1/6W and 1/8W, ±5% tolerance unless otherwise noted k ; kΩ, M ; MΩ, (F) ; ±1%, (G) ; ±2%, (K) ; ±10%, (M) ; ±20% tolerance.

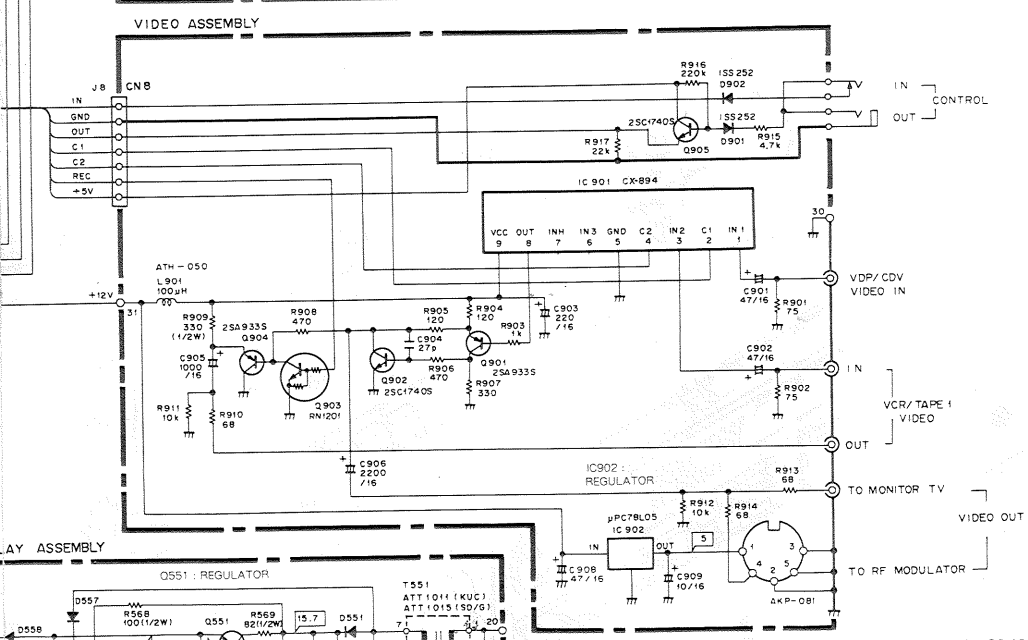
2. CAPACITORS :
Indicated in capacity (μF) /voltage (V) unless otherwise noted p ; pF. Indication without voltage is 50V except electrolytic capacitor.

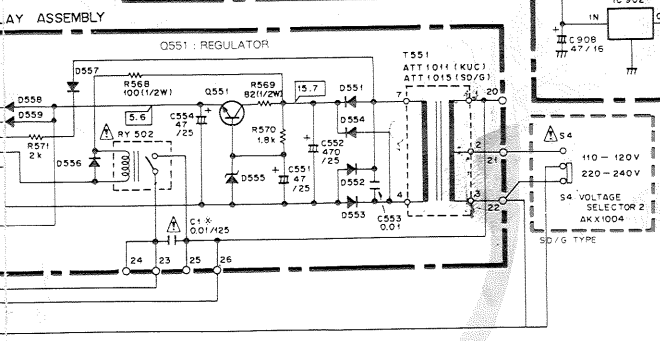
3. VOLTAGE, CURRENT :
▭ ; DC voltage (V) at no input signal.
Value in ( ) is DC voltage at rated power.
⇦mA ; DC current at no input signal.

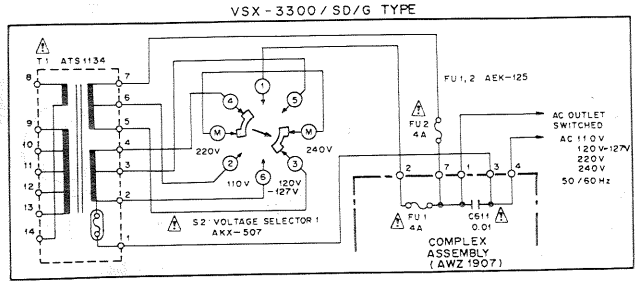
4. OTHERS :
➡ ; Signal route.
⊘ ; Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

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

5. SWITCHES : (The underlined indicates the switch position)
CONTROL Assembly
S701 : TUNING DOWN
S702 : TUNING UP
S703 : FM
S704 : AM
S705 : 6/18
S706 : 5/17
S707 : 4/16
S708 : 3/15
S709 : 2/14
S710 : 1/13
S711 : 12/24
S712 : 11/23
S713 : 10/22
S714 : 9/21
S715 : 8/20
S716 : 7/19
S717 : SIMULATED STEREO
S718 : MEMORY
S719 : MEMORY SCAN
S720 : FM MODE
S721 : FM TUNING
S722 : TAPE 2/DAT
S723 : VCR/TAPE 1
S724 : VDP/CDV
S725 : CD
S726 : TUNER
S727 : PHONO
S729 : VIDEO SIGNAL SELECTOR
POWER SW Assembly
S728 : POWER
SP TERMINAL Assembly
S854 : SURROUND LEVEL L – M – H

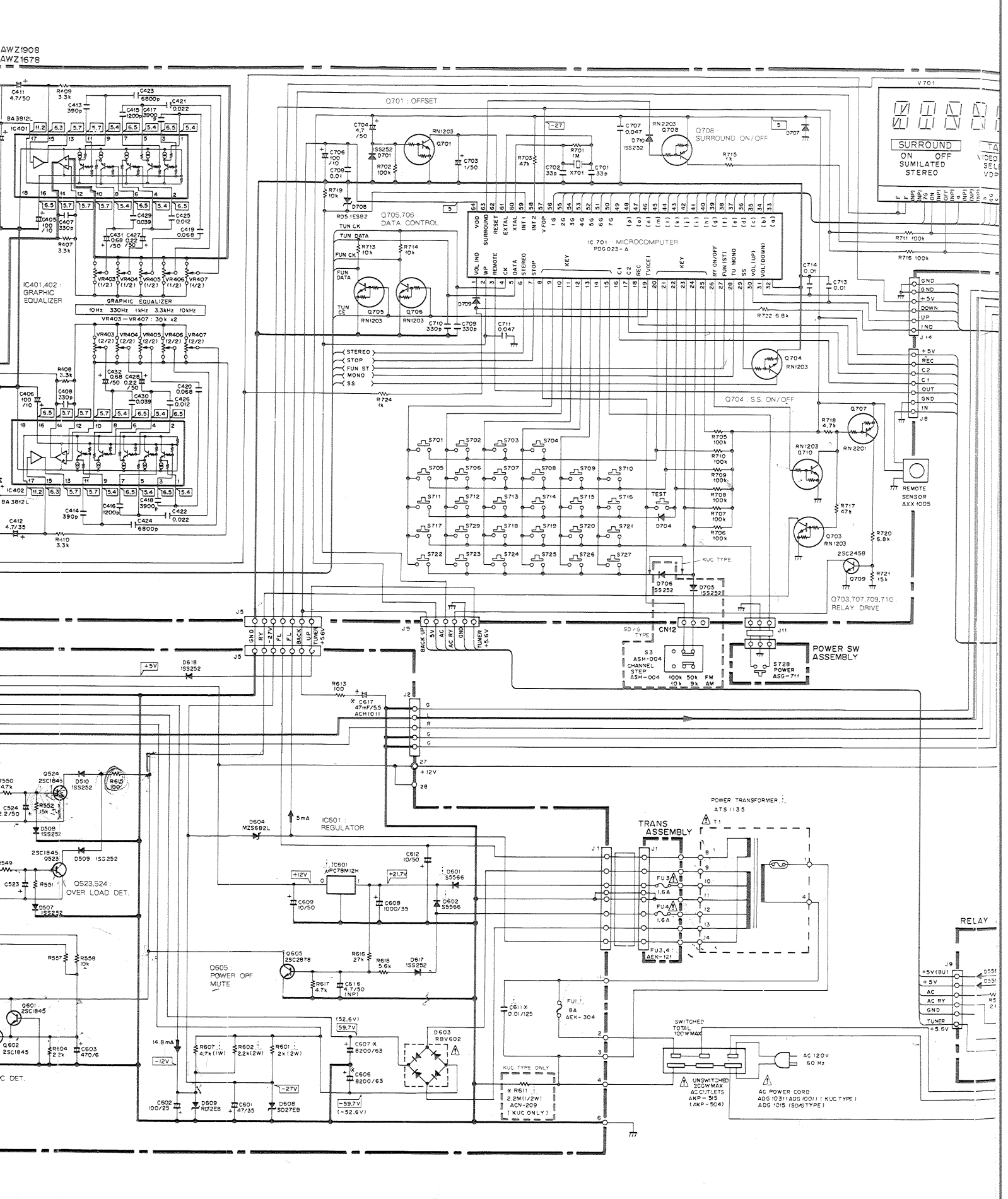






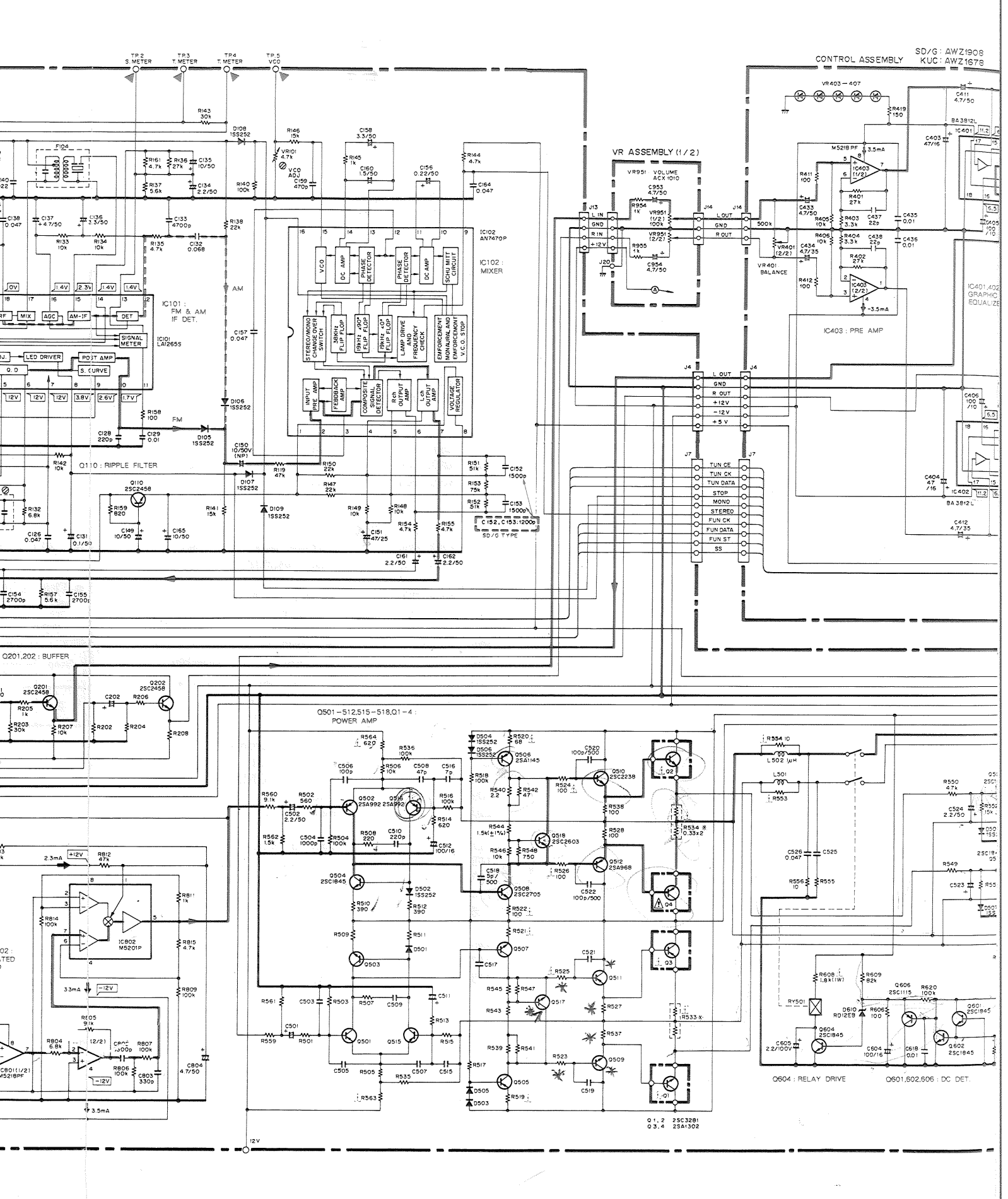
INCORRECTLY WIRED

AWZ1908
AWZ1678

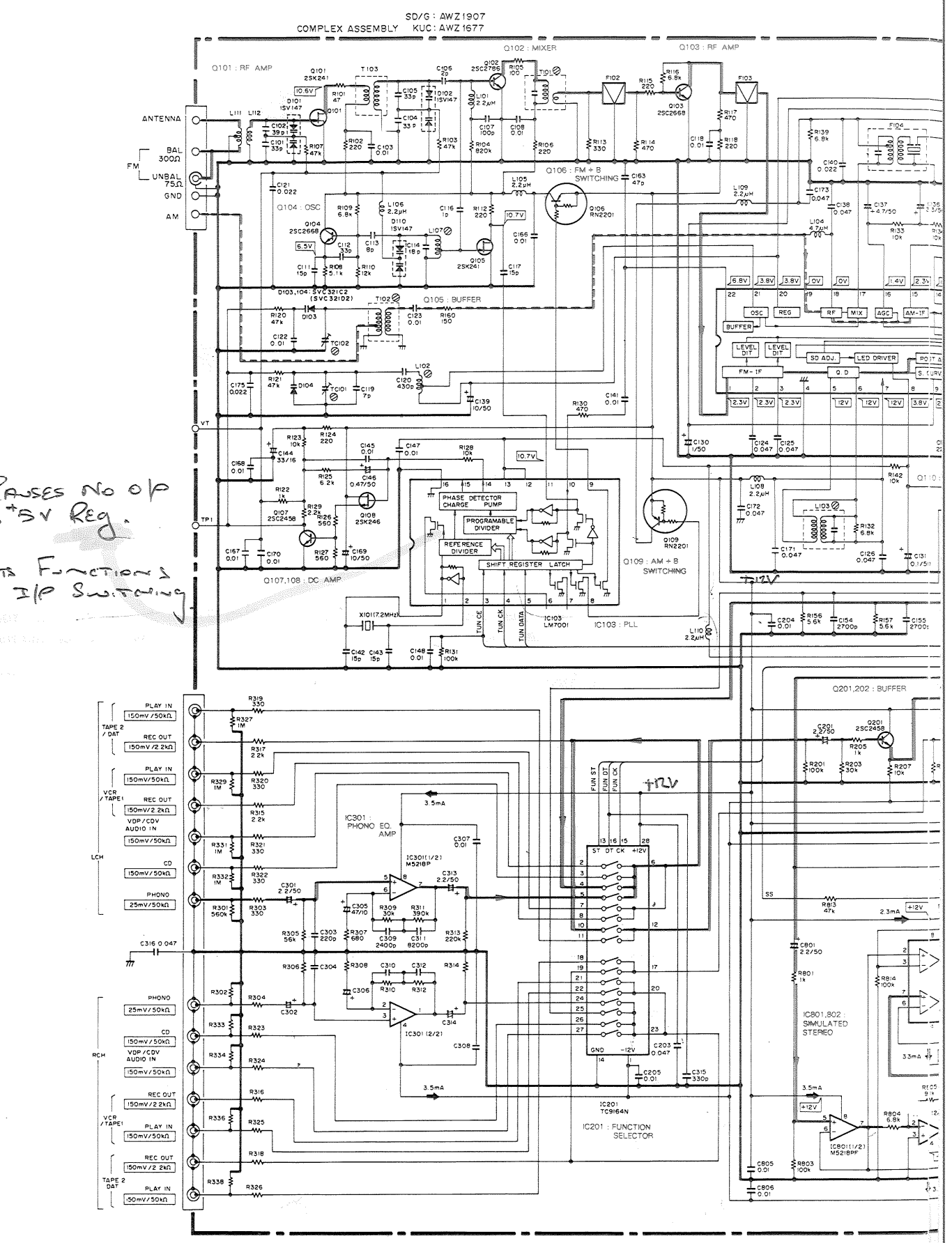


SD/G : AWZ1908
KUC : AWZ1678

CONTROL ASSEMBLY



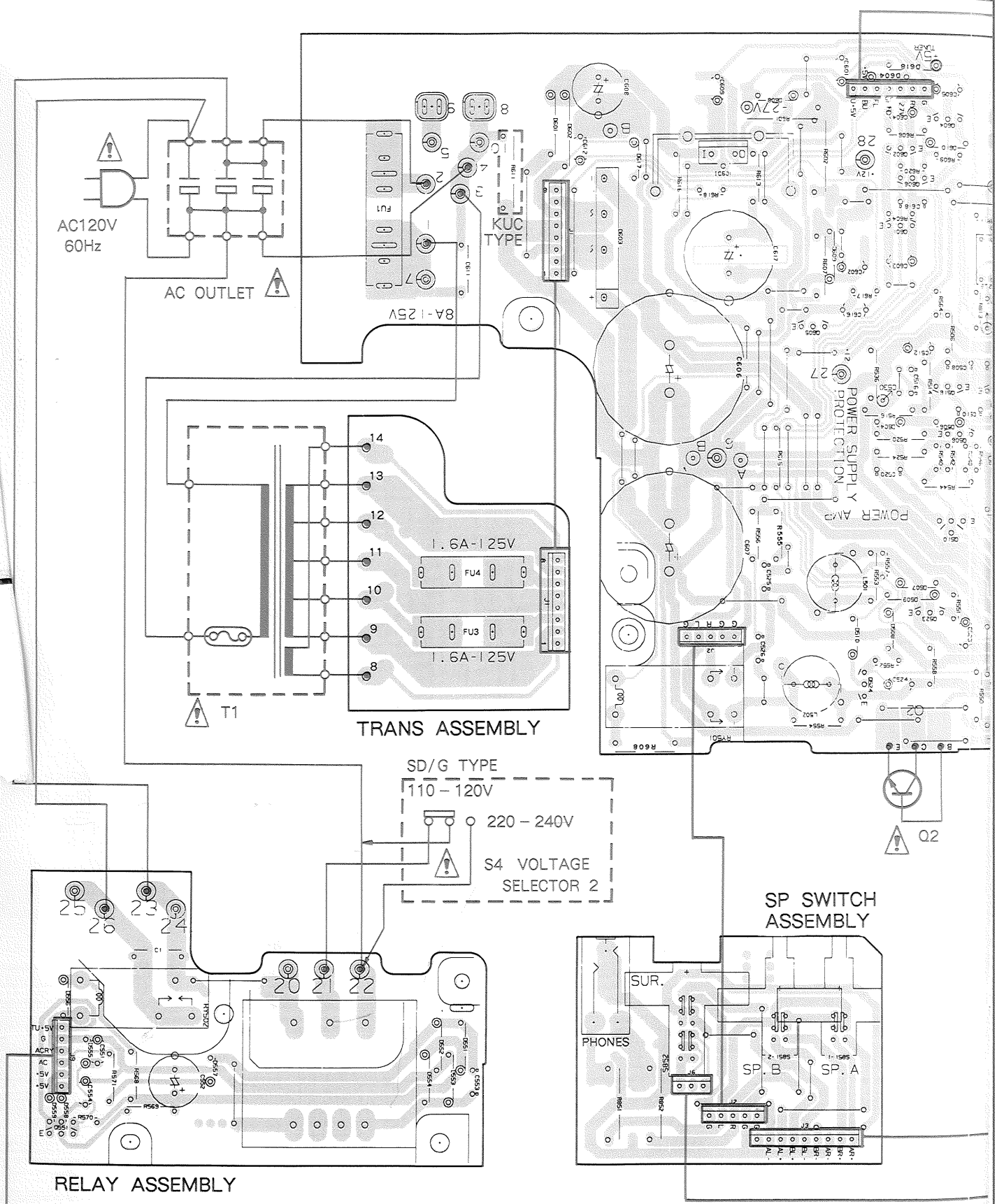
5. SCHEMATIC DIAGRAM

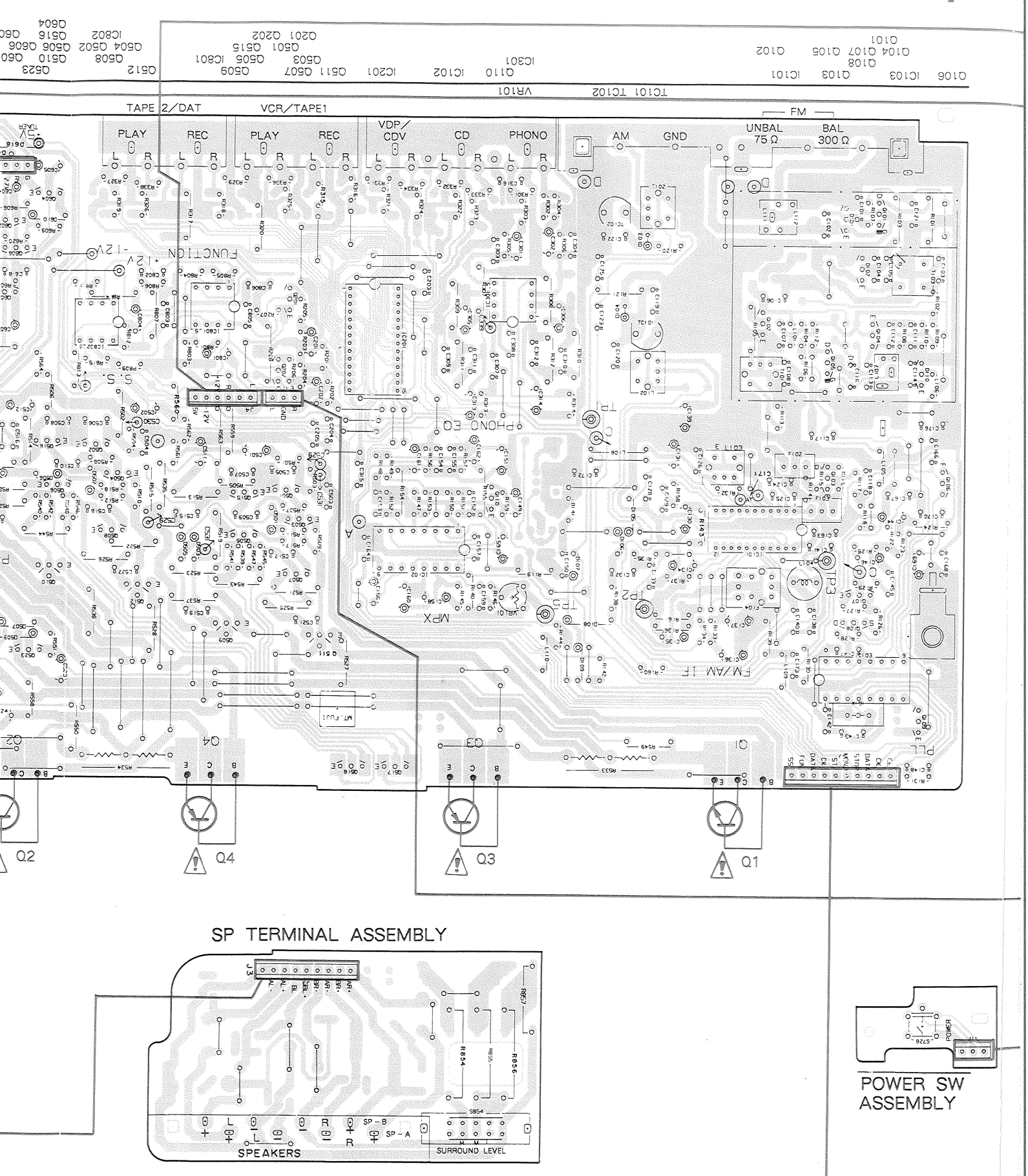


6. P.C. BOARDS CONNECTION DIAGRAM

COMPLEX ASSEMBLY

SD/G : AWZ1907
KUC : AWZ1677





SP TERMINAL ASSEMBLY

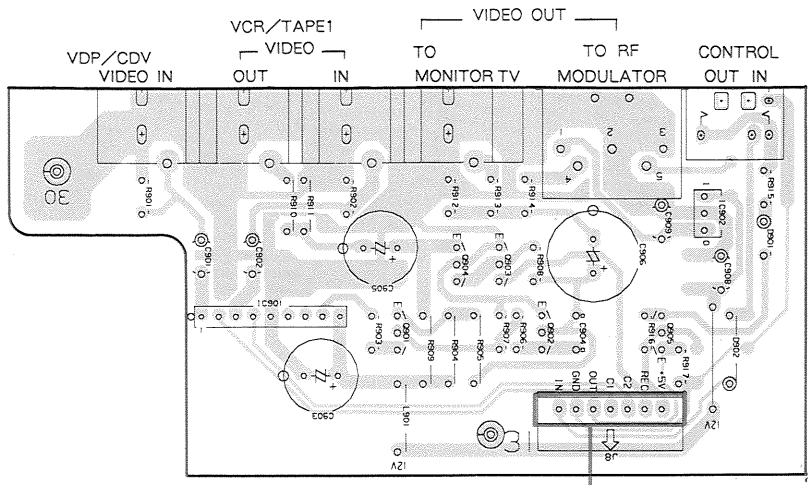
POWER SW ASSEMBLY

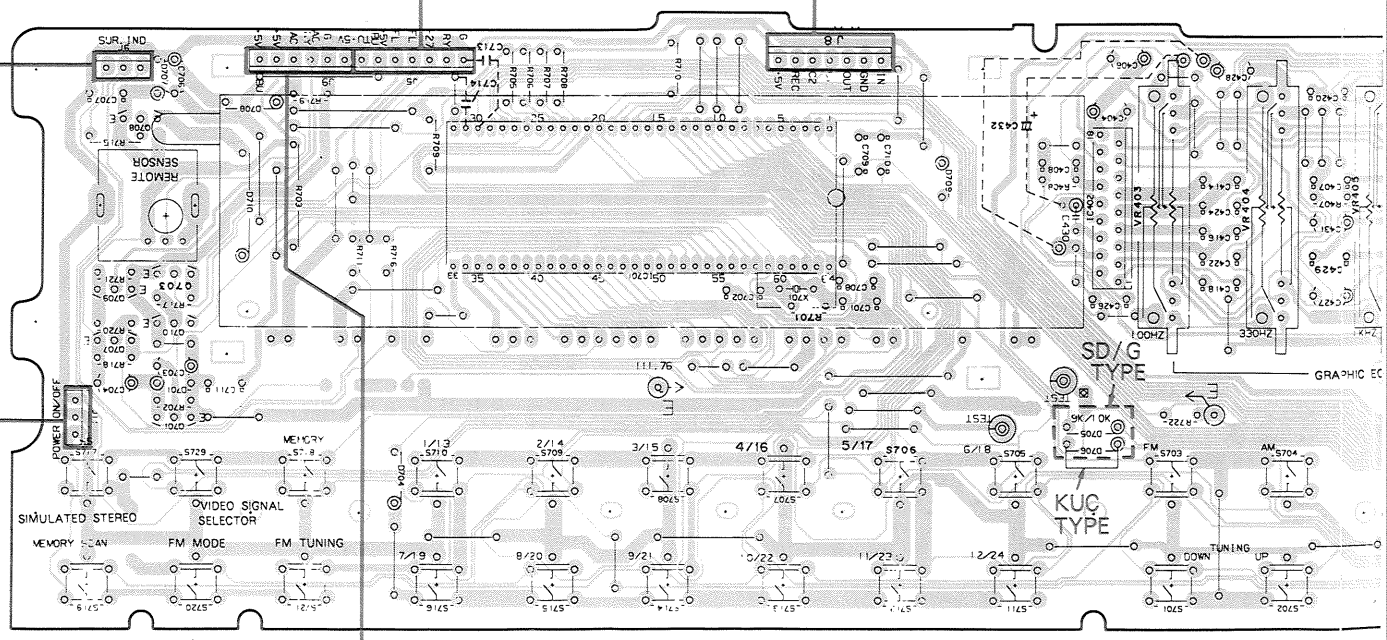
NOTE

1. This P.C.B connection diagram
2. The parts which have been m
   with the corresponding wiring

P.C.B. pattern diagram indication
Q504 (E B C)
Q215 (E B C)
D203
R237
C513
C518

VIDEO ASSEMBLY





Q708
Q709 Q703
Q707 Q710
Q701

IC701

IC402

SD/G : AWZ1908
CONTROL ASSEMBLY KUC : AWZ1678

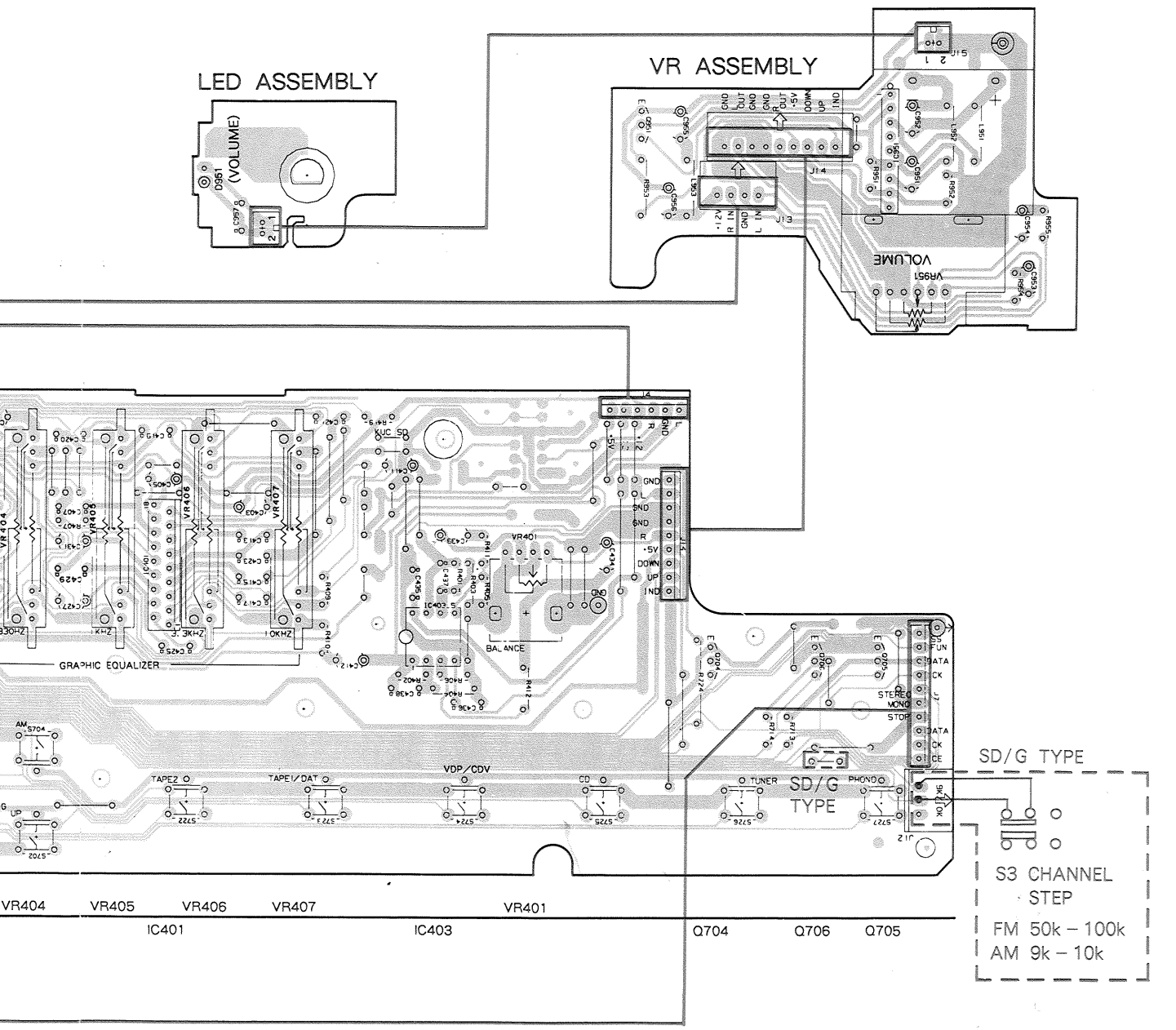
C.B connection diagram is viewed from the parts mounted side.
rts which have been mounted on the board can be replaced with those shown
e corresponding wiring symbols listed in the following Table.

ern diagram indication	Corresponding part symbol	Part Name
Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

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

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



COMPLEX ASSEMBLY

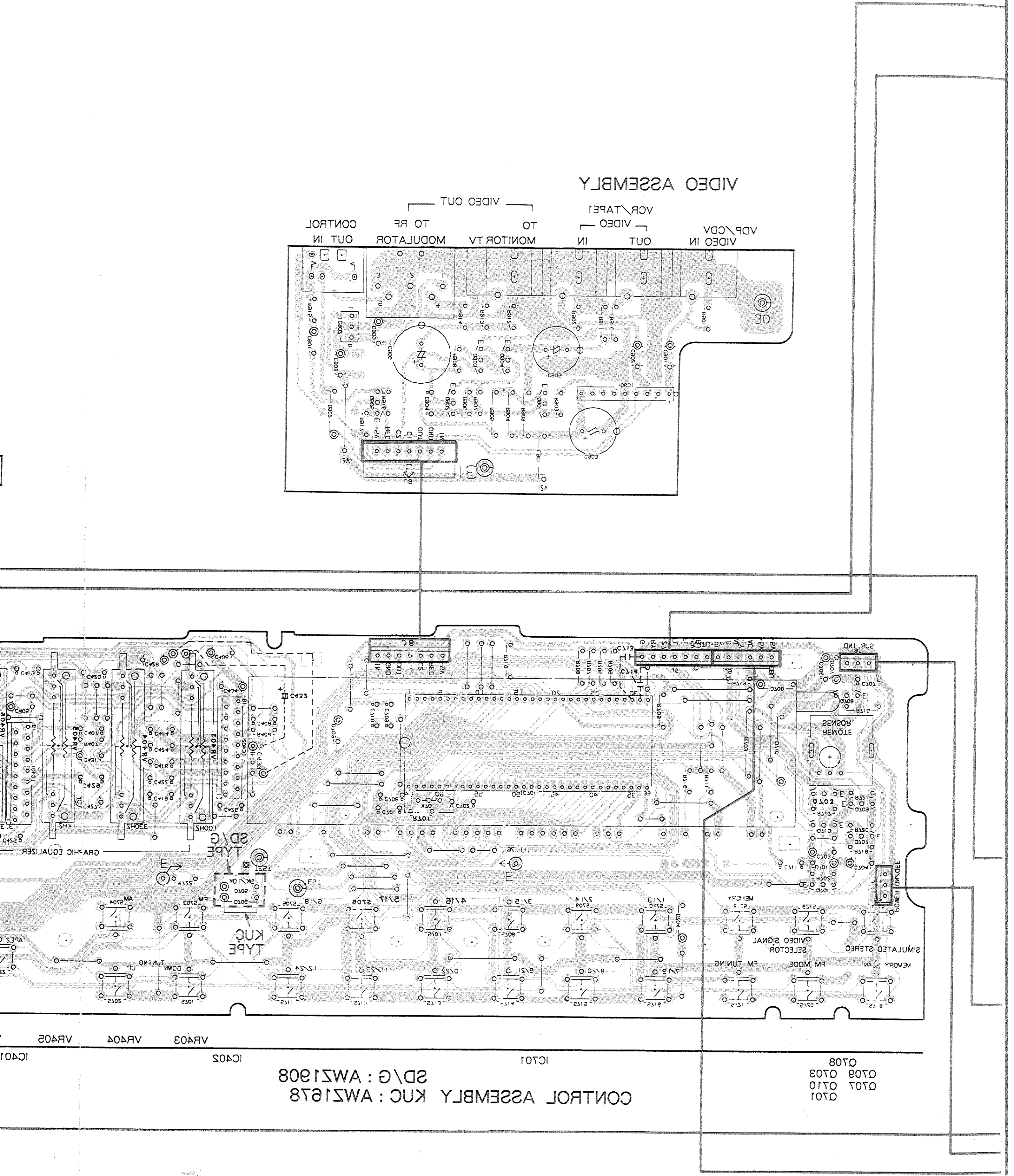
KUC : AWZ1577

SD/G : AWZ1907

FM
BAL
300 Ω
UNBAL
75 Ω
GND
AM
PHONO
CD
VDP
CDV
REC
PLAY
REC
PLAY
TAPE 2/DAT
VCR/TAPE1
FUNCTION
Q1
Q3
Q4

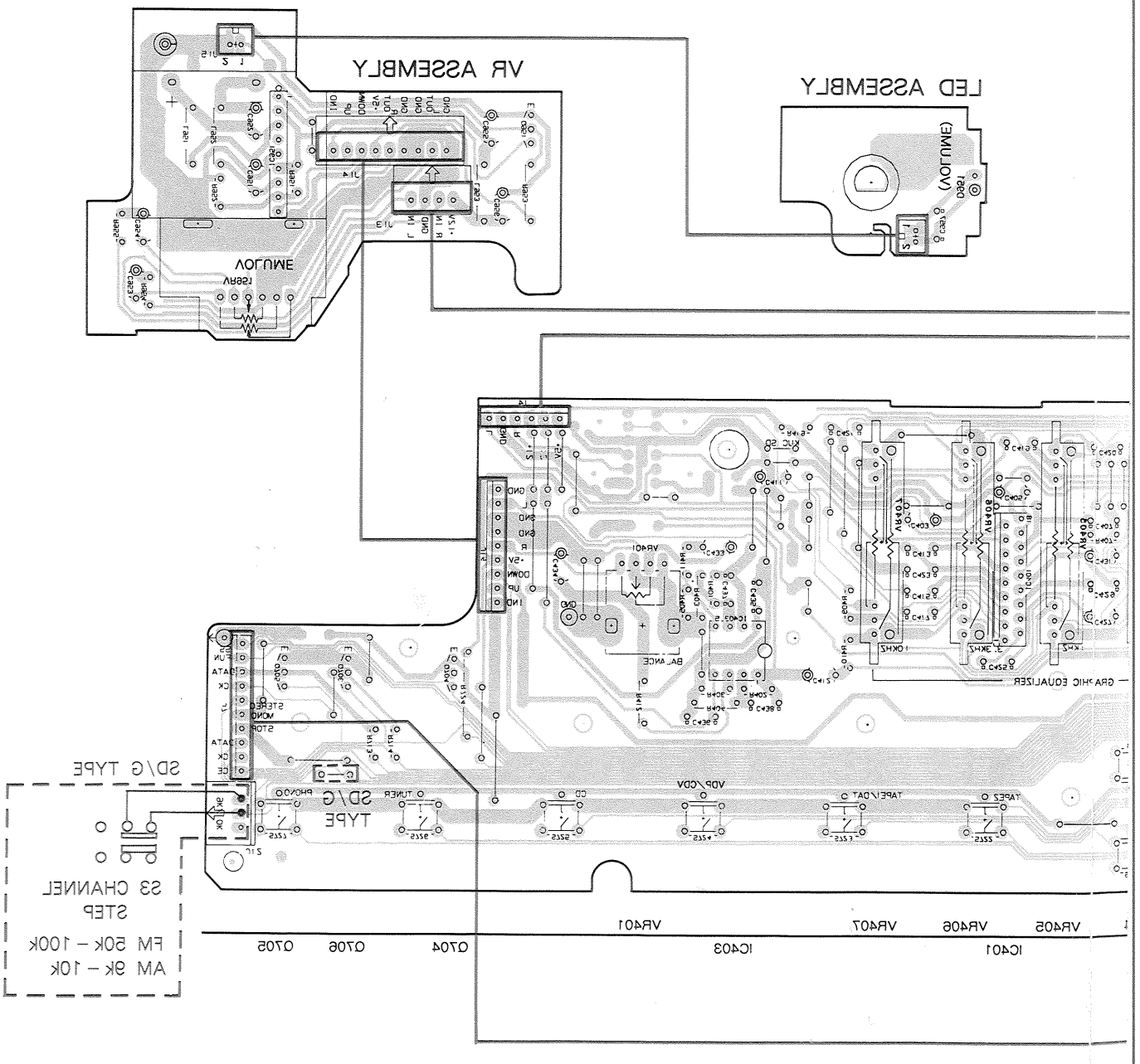
POWER SW
ASSEMBLY

SP TERMINAL ASSEMBLY
SPEAKERS
SURROUND LEVEL



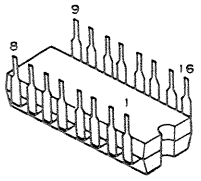
VIDEO ASSEMBLY
VIDEO OUT
TO RF MODULATOR
TO MONITOR TV
VCR/TAPE1
VIDEO
IN
OUT
VDP/CDV VIDEO IN
CONTROL
OUT IN
GRAPHIC EQUALIZER
SD/G TYPE
KUC TYPE
REMOTE SENSOR
VIDEO SIGNAL SELECTOR
SIMULATED STEREO
MEMORY
MEMORY SCAN
FM MODE
FM TUNING
TUNING
UP
DOWN
POWER ON/OFF
SUR.IND
VR403
VR404
VR405
IC401
IC402
IC701
Q708
Q709 Q703
Q707 Q710
Q701
SD/G : AWZ1908
CONTROL ASSEMBLY KUC : AWZ1678

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

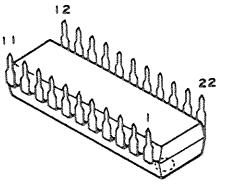


External Appearance of Transistors and ICs

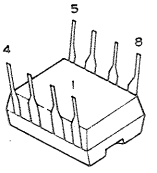
AN7470P
LM7001



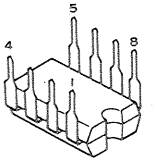
LA1265S



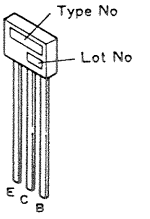
M5201P



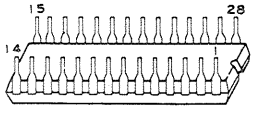
M5218P
M5218PF



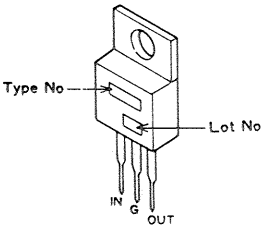
RN2201
RN1203
RN2203
RN1201



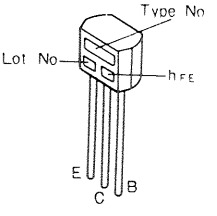
TC9164N



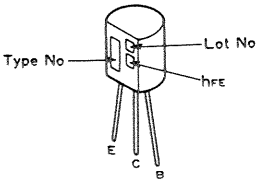
μPC78M12H



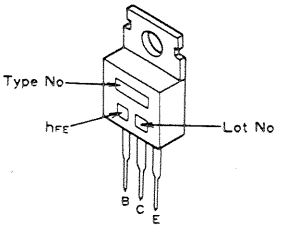
2SA1115
2SC2603



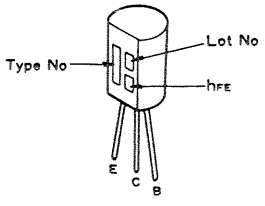
2SA1145
2SC2705
2SC2878



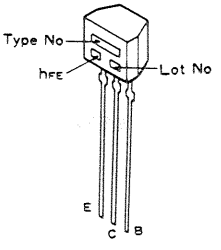
2SA968
2SC2238



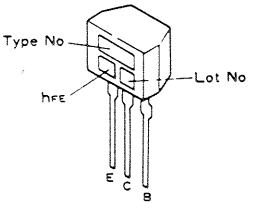
2SA992
2SC1845



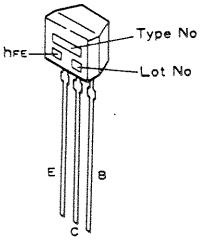
2SC2458



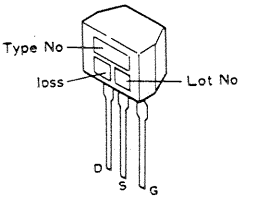
2SC2668
2SA933S
2SC1740S



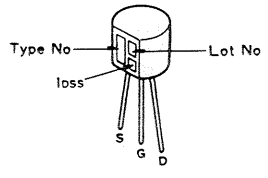
2SC2786



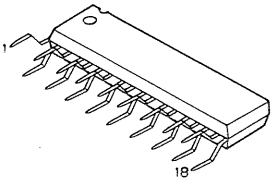
2SK241



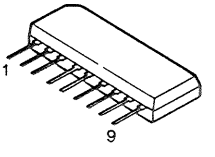
2SK246



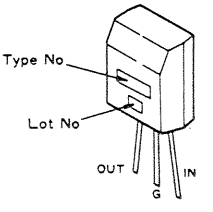
BA3812L



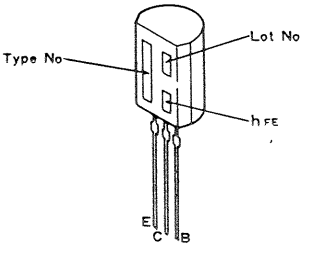
TA7291S
CX-894



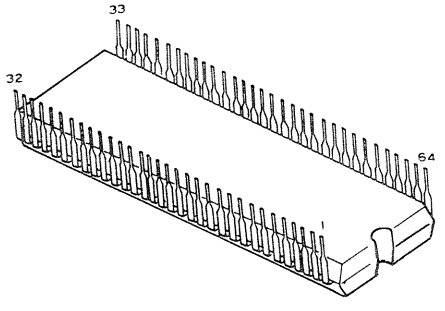
μPC78L05



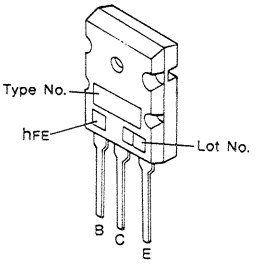
2SC3377



PDG023-A



2SA1302
2SC3281



7. ELECTRICAL PARTS LIST

NOTES :

- Parts without part number cannot be supplied.
- Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

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

560 Ω → 56 × 10^1 → 561 ····· RD1/4PS 5 6 1 J
47k Ω → 47 × 10^3 → 473 ····· RD1/4PS 4 7 3 J
0.5 Ω → 0R5 ····· RN2H 0 R 5 K
1 Ω → 010 ····· RS1P 0 1 0 K

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

5.62k Ω → 562 × 10^1 → 5621 ····· RN1/4SR 5 6 2 1 F

Miscellaneous Parts

P.C. BOARD ASSEMBLIES

Mark	Symbol & Description	Part No.
	LED assembly	
	VIDEO assembly	
	COMPLEX assembly	AWZ1677
	POWER SW assembly	
	CONTROL assembly	AWZ1678
	RELAY assembly	
	SP TERMINAL assembly	
	VR assembly	
	SP SWITCH assembly	
	TRANS assembly	

OTHERS

Mark	Symbol & Description	Part No.
⚠★★	Q3,Q4	2SA1302
⚠★★	Q1,Q2	2SC3281
⚠ ★	T1 Power transformer	ATS1135
⚠★★	FU3,FU4 Fuse (1.6A/125V)	AEK-121
⚠★★	FU1 Fuse (8A/125V)	AEK-304
⚠	3P AC outlet	AKP-515 (AKP-504)
⚠	AC power cord	ADG1031 (ADG1001)

LED Assembly

SEMICONDUCTOR

Mark	Symbol & Description	Part No.
★	D951	AEL1053

CAPACITOR

Mark	Symbol & Description	Part No.
	C957	CKDYF103Z50

VIDEO Assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC901	CX-894
★★	IC902	μPC78L05
★★	Q903	RN1201
★★	Q901,Q904	2SA933S
★★	Q902,Q905	2SC1740S
★	D901,D902	1SS252

COIL

Mark	Symbol & Description	Part No.
	L901 Inductor	ATH-050

CAPACITORS

Mark	Symbol & Description	Part No.
	C904	CCCSL270J50
	C909	CEAS100M25
	C905	CEAS102M16
	C903	CEAS221M16
	C906	CEAS222M16
	C901,C902,C908	CEAS470M16

RESISTORS

Mark	Symbol & Description	Part No.
	R909	RD1/2PM331J
	R904,R905	RD1/4PM121J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	1P Pin jack	AKB1010
	3P Pin jack	AKB1050
	2P Mini jack	AKN1006
	5P DIN socket	AKP-081

COMPLEX Assembly (AWZ1677)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC102	AN7470P
★★	IC101	LA1265S
★★	IC103	LM7001
★★	IC802	M5201P
★★	IC301	M5218P
★★	IC801	M5218PF
★★	IC201	TC9164N
⚠★★	IC601	μPC78M12H
★★	Q606	2SA1115
★★	Q505,Q506	2SA1145
★★	Q106Q109	RN2201
★★	Q511,Q512	2SA968
★★	Q501,Q502,Q515,Q516	2SA992
★★	Q503,Q504,Q523,Q524,Q601,Q602, Q604	2SC1845
★★	Q509,Q510	2SC2238
★★	Q107,Q110,Q201,Q202	2SC2458
★★	Q517,Q518	2SC2603
★★	Q103,Q104	2SC2668
★★	Q507,Q508	2SC2705
★★	Q102	2SC2786
★★	Q605	2SC2878
★★	Q101,Q105	2SK241
★★	Q108	2SK246
★	D604	HZS6B2L
⚠ ★	D603	RBV602
★	D609,D610	RD12EB
★	D608	RD27EB
★	D103,D104	SVC321C2 (SVC321D2)
⚠ ★	D601,D602	S5566
★	D105 – D109,D501 – D510,D617, D618	1SS252
★	D101,D102,D110	1SV147

RELAY

Mark	Symbol & Description	Part No.
★★	RY501 Relay	ASR-112

COILS, FILTERS AND TRANSFORMERS

Mark	Symbol & Description	Part No.
	L102 AM OSC coil	ATB-114
	L111 FM coil	ATC1001
	L112 FM coil	ATC1002
	L107 FM coil	ATC1003
	L103 FM detector coil	ATE-079
	L501,L502 AF choke coil	ATH1004
	L101,L105,L106,L108 – L110 Axial inductor	LAU2R2M
	L104 Inductor	LTA472J
	F102,F103 FM ceramic filter	ATF-126
	F104 AM ceramic filter	ATF-208
	T102 AM antenna transformer	ATB-095
	T103 FM RF transformer	ATC-194
	T101 FM matching transformer	ATE-063

CAPACITORS

Mark	Symbol & Description	Part No.
	TC101,TC102 Ceramic trimmer	ACM-015
⚠	C611 (0.01/125V)	ACG1003
	C617 (47mF/5.5V)	ACH1011
	C606,C607 (8200/63V)	ACH1044
	C517,C518	CCCSL050C500
	C519 – C522	CCCSL101K500
	C128,C303,C304,C509,C510	CCCSL221J50
	C119,C515,C516	CCDCH070D50
	C113	CCDCH080D50
	C111,C117,C142,C143	CCDCH150J50
	C112	CCDCH330J50
	C102	CCDRH390J50
	C101,C104,C105	CCDRH330J50
	C116	CCDSL010C50
	C106	CCDSL020C50
	C107,C505,C506	CCDSL101J50
	C163,C507,C508	CCDSL470J50
	C114	CCDTH180J50
	C150	CEANP100M50
	C616	CEANP4R7M50
	C156	CEJAR22M50
	C146	CEASR47M50
	C131	CEAS0R1M50
	C130	CEJA010M50
	C160	CEAS1R5M50
	C135,C139,C149,C165,C169,C609, C612	CEAS100M50
	C511,C512,C604	CEAS101M16
	C602	CEAS101M25
	C608	CEAS102M35
	C605	CEAS2R2M100
	C134,C161,C162,C201,C202,C301, C302,C313,C314,C501,C502,C523, C524,C801	CEAS2R2M50
	C136,C158	CEAS3R3M50
	C144	CEAS330M16
	C137,C804	CEAS4R7M50
	C151,C305,C306	CEAS470M25
	C601	CEAS470M35
	C603	CEAS471M6
	C133	CKCYB472K50
	C503,C504	CKDYB102K50
	C154,C155	CKDYB272K50
	C315,C803	CKDYB331K50

Mark	Symbol & Description	Part No.
	C103,C108,C118,C122,C123,C129, C141,C145,C147,C148, C166 – C168,C170,C204,C205, C307,C308,C618,C805,C806	CKDYF103Z50
	C121,C140,C175	CKDYF223Z50
	C124,C125,C138,C157,C164,C173, C203,C316	CKDYF473Z50
	C126,C171,C172	CKDYX473M25
	C152,C153	CQMA152K50
	C309,C310	CQMA242J50
	C802	CQMA332K50
	C525,C526	CQMA473K50
	C132	CQMA683J50
	C311,C312	CQMA822J50
	C120	CQSA431J50
	C159	CQSA471J50

RESISTORS

Mark	Symbol & Description	Part No.
★	VR101 Semi-fixed (4.7kΩ)	VRTB6VS472
⚠	R533,R534 (0.33 × 2)	ACN-139
⚠	R611 (2.2M/1/2W)	ACN-209
⚠	R519,R520	RD1/4PMF680J
	R527,R528,R537,R538,R549, R550,R553 – R556	RD1/4PMF□□□J
	R307 – R312,R513 – R516,R535, R536,R571,R613	RD1/4PM□□□J
	R511,R512,R615	RFA1/4PS□□□J
⚠	R521 – R526	RFA1/4PS101J
	R543,R544	RN1/4PQ1501F
⚠	R607	RS1LMF472J
⚠	R608	RS1PMF182J
⚠	R601,R602	RS2LMF□□□J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
★	X101 Crystal resonator	ASS1005
	4P Terminal (ANTENNA)	AKA1009
	4P Pin jack	AKB1007
	6P Pin jack	AKB1024

POWER SW Assembly

SWITCH

Mark	Symbol & Description	Part No.
★★	S728 Tact switch (POWER)	ASG-711

CONTROL Assembly (AWZ1678)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC401,IC402	BA3812L
★★	IC403	M5218PF
★★	IC701	PDG023-A
★★	Q701,Q703 – Q706,Q710	RN1203
★★	Q707	RN2201
★★	Q708	RN2203
★★	Q709	2SC2458
★	D708	RD5.1ESB2
★	D701,D704,D707,D709,D710	1SS252

SWITCHES

Mark	Symbol & Description	Part No.
★★	S701 – S727,S729 Tact switch TUNING (UP,DOWN), FM, AM, 1/13 – 12/24, VIDEO SIGNAL SELECTOR, MEMORY, MEMORY SCAN, FM MODE, FM TUNING, TAPE 2/DAT, VCR/TAPE 1, VDP/CDV, CD, TUNER, PHONO, SIMULATED STEREO	ASG – 711

CAPACITORS

Mark	Symbol & Description	Part No.
	C437,C438	CCCSL220J50
	C701,C702	CCDCH330J50
	C704	CEJA4R7M50
	C431	CEASR68M50
	C703	CEJA010M50
	C405,C406,C706	CEJA101M10
	C411,C433	CEAS4R7M50
	C403	CEAS470M25
	C427,C428	CEJAR22M50
	C432	CEASR68M50
	C412,C434	CEJA4R7M35
	C415,C416	CKDYB122K50
	C407,C408,C709,C710	CKDYB331K50
	C413,C414	CKDYB391K50
	C435,C436,C708,C713,C714	CKDYF103Z50
	C707	CKDYF473Z50
	C711	CKDYX473M25
	C425,C426	CQMA123K50
	C421,C422	CQMA223K50
	C417,C418	CQMA392K50
	C429,C430	CQMA393K50
	C423,C424	CQMA682K50
	C419,C420	CQMA683K50
	C404	CEJA470M16

RESISTORS

Mark	Symbol & Description	Part No.
★	VR401 Variable resistor (500k) (BALANCE)	ACS1016
★	VR403 – VR407 Variable resistor (30k) (GRAPHIC EQUALIZER)	ACU1023
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
★	V701 Fluorescent indicator tube	AAV1051
★	X701 Ceramic resonator	ASS1004
	Remote control sensor unit	AXX1005

RELAY Assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	Q551	2SC3377
★	D555	RD6.2ESB3
★	D551 – D554	S5566
★	D556 – D559	1SS252

RELAY

Mark	Symbol & Description	Part No.
★★	RY502 Relay	ASR1012

TRANSFORMER

Mark	Symbol & Description	Part No.
★	T551 Power transformer	ATT1011

CAPACITORS

Mark	Symbol & Description	Part No.
	C1 (0.01/125V)	ACG1003
	C551,C554	CEAS470M25
	C552	CEAS471M25
	C553	CKDYF103Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R568,R569	RD1/2PMF□□□J
	R570	RD1/8PM182J

SP TERMINAL Assembly

SWITCH

Mark	Symbol & Description	Part No.
★★	S854 Slide switch (SURROUND LEVEL)	ASH1003

RESISTORS

Mark	Symbol & Description	Part No.
⚠	R856,R857	RS2LMF□□□J
⚠	R854,R855	RS3LMF2R7J

OTHERS

Mark	Symbol & Description	Part No.
	8P Terminal (SPEAKER)	AKE-111

VR Assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC951	TA7291S
★★	Q951	RN1201

COILS

Mark	Symbol & Description	Part No.
	L953 Inductor (100μH)	ATH-050
	L951,L952 Axial inductor	LAU5R6K

CAPACITORS

Mark	Symbol & Description	Part No.
	C953,C954	CEAS4R7M50
	C955,C956	CEAS470M25
	C951,C952	CKDYX473M25

RESISTORS

Mark	Symbol & Description	Part No.
★	VR951 Variable resistor with motor (100kΩ) (VOLUME)	ACX1010
	R953	RD1/4PM471J
	Other resistors	RD1/8PM□□□J

SP SWITCH Assembly

SWITCHES

Mark	Symbol & Description	Part No.
★★	S852 Push switch (SURROUND)	ASG1017
★★	S851 Push switch (SPEAKERS)	SUJ5LXXS

RESISTORS

Mark	Symbol & Description	Part No.
⚠	R851,R852	RS2PMF331J

OTHERS

Mark	Symbol & Description	Part No.
	Phone jack (PHONES)	AKN1002

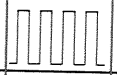
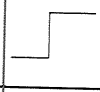
TRANS Assembly

There is not supplied parts in this assembly.

8. IC INFORMATION

PDG023 (MICROCOMPUTER)

<table>
<tr><th>Pin No.</th><th>Pin name</th><th>I/O</th><th>Condition</th><th>Terminal status</th><th>Remark</th></tr>
<tr><td>1</td><td>VOL. IND</td><td>O</td><td>POWER ON</td><td>L</td><td>VOLUME indicator to go on.</td></tr>
<tr><td>2</td><td>WAKE UP</td><td>I</td><td>POWER ON</td><td>H</td><td>When the terminal voltage remains low for more than 60 ns, this terminal enters the backup mode.
When the terminal voltage becomes high, this terminal returns to its original mode.</td></tr>
<tr><td>3</td><td>REMOTE IN</td><td>I</td><td></td><td>L</td><td>Remote control signal input.</td></tr>
<tr><td>4</td><td>CLOCK</td><td>O</td><td></td><td>  </td><td>This terminal outputs "CLOCK" for control signals directed to IC201 (TC9164N) and IC103 (LM7001).</td></tr>
<tr><td>5</td><td>DATA</td><td>O</td><td></td><td>  </td><td>This terminal outputs "DATA" for control signals directed to IC201 (TC9164N) and IC103 (LM7001).</td></tr>
<tr><td>6</td><td>TUNER STEREO</td><td>I</td><td>INPUT PORT</td><td>L</td><td>When the output of IC102 (AN7470P) pin 9 in the tuner unit is low, this terminal causes the FL display stereo indicator to go on.</td></tr>
<tr><td>7</td><td>TUNER STOP</td><td>I</td><td>INPUT PORT</td><td>L</td><td>When the output of IC101 (LA1265S) pin 8 in the tuner unit is low, this terminal causes the FL display tuner indicator to go on.</td></tr>
<tr><td>8
|
15</td><td>KEY MATRIX OUTPUT</td><td>O</td><td></td><td>  </td><td>Detects the tact switch position.</td></tr>
<tr><td>16</td><td>C1</td><td rowspan="3">O</td><td rowspan="3">When the VIDEO signal is selecting</td><td rowspan="3">——</td><td rowspan="3"><table><tr><th>Signal \ Pin No.</th><th>16</th><th>17</th><th>18</th></tr><tr><td>VDP</td><td>H</td><td>L</td><td>L</td></tr><tr><td>VCR</td><td>L</td><td>H</td><td>H</td></tr><tr><td>Other</td><td>L</td><td>L</td><td>H</td></tr></table></td></tr>
<tr><td>17</td><td>C2</td></tr>
<tr><td>18</td><td>REC</td></tr>
<tr><td>19</td><td>ENABLE</td><td>O</td><td>While a control signal (DATA) is transmitted to IC103 (LM7001)</td><td>H</td><td>Low while DATA is not transmitted.</td></tr>
<tr><td>20
|
25</td><td>KEY MATRIX INPUT</td><td>I</td><td></td><td>  </td><td>Detects the tact switch position.</td></tr>
<tr><td>26</td><td>POWER RELAY</td><td>O</td><td>POWER ON</td><td>H</td><td>Set the AC relay (RY502) to on.</td></tr>
<tr><td>27</td><td>FUNCTION IC STROBE</td><td>O</td><td>Immediately after transmitting DATA to IC201 (TC9164N)</td><td>  </td><td>Instantaneously becomes high after transmitting a control signal to FUNCTION IC201 (TC9164N)</td></tr>
<tr><td>28</td><td>TUNER AUTO MONO</td><td>O</td><td>When the system is in the FM "MONO" mode</td><td>H</td><td>Set the FM MODE switch to MONO.</td></tr>
<tr><td>29</td><td>SIMULATED STEREO</td><td>O</td><td>When the SIMULATED STEREO is operating</td><td>H</td><td>When the ON/OFF switch of the SIMULATED STEREO is turned on.</td></tr>
<tr><td>30</td><td>VOL. UP</td><td rowspan="2">O
—</td><td rowspan="2">When the VOLUME control is operating</td><td rowspan="2">——</td><td rowspan="2"><table><tr><th>Mode \ Pin No.</th><th>30</th><th>31</th></tr><tr><td>VOL. UP</td><td>H</td><td>L</td></tr><tr><td>VOL. DOWN</td><td>L</td><td>H</td></tr></table></td></tr>
<tr><td>31</td><td>VOL. DOWN</td></tr>
<tr><td>32</td><td>Vss</td><td></td><td>GND</td><td>0V</td><td></td></tr>
<tr><td>33
|
48</td><td>SEGMENT</td><td>O</td><td></td><td>  </td><td>This is a SEGMENT control terminal for the FL display.</td></tr>
<tr><td>49
|
56</td><td>GRID</td><td>O</td><td></td><td>  </td><td>This is a GRID control terminal for the FL display.</td></tr>
<tr><td>57</td><td>VFDP</td><td>I</td><td></td><td>– 29V</td><td>This is power supply terminal for a resistor (incorporated in IC701) to pull down control terminals 33 to 56 for SEGMENT and GRID.</td></tr>
</table>

Pin No.	Pin name	I/O	Condition	Terminal status	Remark
58	INT2	O	(NOT USED)		Does not function in the program.
59	INT1	O			
60	Xtal	O	When connected to a crystal vibrator (4.19MHz)		
61	Extal	I			
62	RESET		When the 5V power source is turned on		When data is written in the microcomputer memory, this terminal causes the system to start from the start before the power supply was interrupted. When data in the microcomputer memory is erased, this terminal causes the system to start from the initial state.
63	SUR. IND.	O	POWER ON	L	When the terminal voltage is high (at the power is syanby), "ON" and "OFF" of SURROUND indicator to go off.
64	VDD	–	5V power source	5V	

9. FOR VSX−3300/SD/G TYPE

NOTES :
- Parts without part number cannot be supplied.
- Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5 %, and K = 10 %).
- 560 Ω → 56 × 10^1 → 561 ····· RD1/4PS 5 6 1 J
- 47k Ω → 47 × 10^3 → 473 ····· RD1/4PS 4 7 3 J
- 0.5 Ω → 0R5 ····· RN2H 0 R 5 K
- 1 Ω → 010 ····· RS1P 0 1 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
- 5.62k Ω → 562 × 10^1 → 5621 ····· RN1/4SR 5 6 2 1 F

Contrast of Miscellaneous Parts

The VSX−3300/SD/G type is the same as the VSX−3300/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		VSX−3300/KUC type	VSX−3300/SD/G type	
	COMPLEX assembly	AWZ1677	AWZ1907	
	CONTROL assembly	AWZ1678	AWZ1908	
	RELAY assembly	Non supply	Non supply	
⚠	AC power cord	ADG1031	ADG1015	
⚠★★	FU1 Fuse (8A/125V)	AEK-304	• • • • •	
⚠★★	FU1,FU2 Fuse (4A)	• • • • •	AEK-125	
	Packing spacer	• • • • •	AHB1021	For packing
	Packing case	AHD1348	AHD1396	For packing
	Fuse holder	• • • • •	AKR-038	
⚠★★	S2 Voltage selector 1	• • • • •	AKX-507	
⚠★★	S4 Voltage selector 2	• • • • •	AKX1004	
	Operating instructions (Spanish)	• • • • •	ARC1078	
⚠★★	S3 Slide switch (CHANNEL STEP)	• • • • •	ASH-004	
⚠ ★	T1 Power transformer (AC120V)	ATS1135	• • • • •	
⚠ ★	T1 Power transformer (AC110/120 − 127/220/240V)	• • • • •	ATS1134	
	Screw	• • • • •	VMZ26P040FZK	

COMPLEX Assembly (AWZ1907)

The COMPLEX assembly (AWZ1907) is the same as the COMPLEX assembly (AWZ1677) with the exception of following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ1677	AWZ1907	
	C152,C153	CQMA152K50	CQMA122K50	
	R611	ACN-209	• • • • •	

CONTROL Assembly (AWZ1908)

The CONTROL assembly (AWZ1908) is the same as the CONTROL assembly (AWZ1678) with the exception of following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ1678	AWZ1908	
★	D705,D706	・・・・・	1SS252	

RELAY Assembly (Non Supply)

The RELAY assembly (SD/G type) is the same as the RELAY assembly (KUC type) with the exception of following sections.

Mark	Symbol & Description	Part No.		Remarks
		KUC type	SD/G type	
★	T551 Power transformer	ATT1011	ATT1015	

10. SPECIFICATIONS

Amplifier Section

Continuous Average Power Output is 80 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.05% total harmonic distortion.**

Continuous Power Output (both channel driven)
1 kHz, T.H.D. 0.05%, 8 Ω ..... 95 W + 95 W
Dynamic power (2/4/8 Ω) ..... 190/165/120 W
Total harmonic distortion (measured by Audio Spectrum Analyzer)
1 kHz, 80 W, 8 Ω 0.01%
Input (Sensitivity/Impedance)
PHONO MM ..... 2.5 mV/47 kΩ
CD, VDP/CDV, VCR/TAPE 1, TAPE 2/DAT ..... 150 mV/22 kΩ
Phono Overload Level (T.H.D. 0.01%, 1,000 Hz)
PHONO MM ..... 130 mV
Output (Level/Impedance)
TAPE REC ..... 150 mV/2.2 kΩ
Frequency Response
PHONO MM ..... 20 Hz to 20,000 Hz ±0.5 dB
CD, VDP/CDV, VCR/TAPE 1, TAPE 2/DAT
..... 10 Hz to 70,000 Hz $^{+0.5}_{-3}$ dB
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO MM ..... 73 dB
CD, VDP/CDV, VCR/TAPE 1, TAPE 2/DAT ..... 96 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]
PHONO MM ..... 75 dB
CD, VDP/CDV, VCR/TAPE 1, TAPE 2/DAT ..... 79 dB
Graphic Equalizer frequency band
..... 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

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

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity
..... MONO: 15.3 dBf (1.6 μV/75 Ω)
STEREO: 37.1 dBf (19.5 μV/75 Ω)
Signal-to-Noise Ratio
MONO ..... 80 dB (at 85 dBf)
STEREO ..... 76 dB (at 85 dBf)
Distortion
STEREO ..... 0.3% (1 kHz)
Alternate Channel Selectivity ..... 55 dB (400 kHz)
Stereo Separation ..... 35 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz, ±1 dB
Output (FM 100% MOD)
REC OUT ..... 650 mV
Antenna Input ..... 300 Ω balanced
75 Ω unbalanced

AM Tuner Section

Frequency range
When 10 kHz step ..... 530 kHz to 1,700 kHz
When 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity
IHF, Loop antenna ..... 300 μV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Output (AM 30% MOD)
REC OUT ..... 150 mV
Antenna ..... AM Loop Antenna

Video Section

Input (Sensitivity/Impedance)
VCR/TAPE 1, VDP/CDV ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR/TAPE 1, MONITOR ..... 1 Vp-p/75 Ω
Frequency Response ..... 10 Hz — 6 MHz $^{+1}_{-2}$ dB
Isolation at 3.58 MHz ..... 60 dB
Signal-to-Noise Ratio ..... 50 dB

Miscellaneous

Power Requirements
U.S., Canadian model ..... AC 120 Volts, 60 Hz
Other models ..... AC 110/120 — 127/220/240 V (switchable), 50/60 Hz
Power Consumption
U.S. and Canadian models ..... 475 W, 615 VA
Other models ..... 595 W
Dimensions ..... 420 (W) × 120 (H) × 337 (D) mm
16-9/16 (W) × 4-3/4 (H) × 13-1/4 (D) in
Weight (without package)
U.S. and Canadian models ..... 8.2 kg (18 lb 2 oz)
Other models ..... 8.3 kg (18 lb 5 oz)

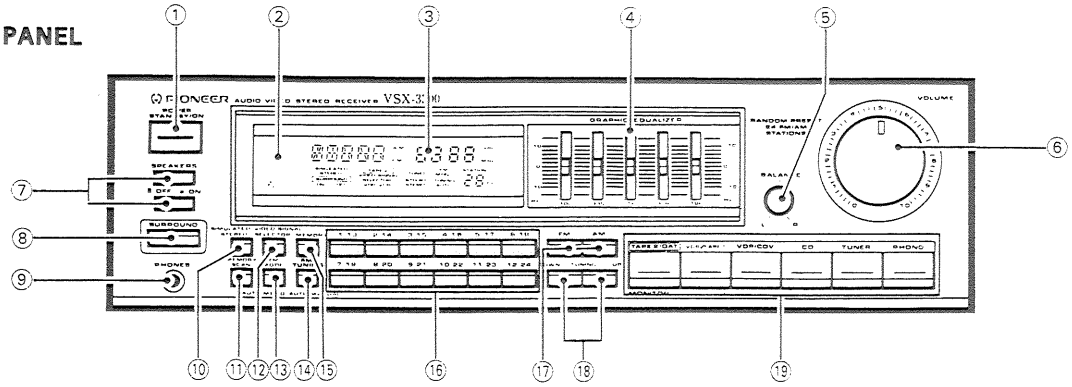
Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1
Operating Instructions 1
Remote control unit 1
Dry cell battery 2

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

11. PANEL FACILITIES

● FRONT PANEL



① POWER switch

When this switch is pressed, power is supplied to the unit. Press the switch again to turn STANDBY.

② REMOTE SENSOR window

③ MULTI OPERATION DISPLAY panel

④ GRAPHIC EQUALIZER controls

The tone can be adjusted. The equalizer is divided into five frequency ranges (100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz) to tailor music to the individual taste of the listener.

⑤ BALANCE control

Use to adjust the sound balance between the left and right speakers. When turned to the L side, the sound of the right speaker decreases. When turned to the R side, the sound of the left speaker decreases.

⑥ VOLUME control

⑦ SPEAKERS switches (■ OFF, ▬ ON)

These are used to select the speaker through which you wish to listen.

A: When the speakers connected to A terminals are in use.

B: When the speakers connected to B terminals are in use.

- Turn both A and B speakers to OFF position when only the headphones are in use.

⑧ SURROUND selector switch

By pressing the A and B SPEAKERS switches, then pressing this switch ON, you can obtain surround reproduction. If you press this switch OFF again, normal reproduction from both speakers A and B will be obtained.

⑨ PHONES jack

Connect the plug on your headphones to this jack. To listen to a program through the headphones, set both SPEAKERS A and B switches to the OFF position.

⑩ SIMULATED STEREO switch

This turns monaural signals into simulated stereo sound. Use this when you wish to experience the sense of stereo presence with AM broadcasts, VCR or other monaural signal sources.

NOTE:

This function can also be used with stereo sources, but it will result in a different sound from the normal stereo sound.

⑪ MEMORY SCAN

Press this switch to scan the stations in the memory.

⑫ VIDEO SIGNAL SELECTOR switch

When recording simulcast programs, the recorded image can be selected from among VDP/CDV, VCR and video OFF.

⑬ FM MODE (AUTO/MONO) selector switch

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the "FM MONO" indicator is lit.

Auto stereo mode:

Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:

This switch has no effect on reception of AM broadcasts.

⑭ FM TUNING AUTO/MANUAL switch

Use this switch to select either the AUTO mode or the MANUAL mode. When the "AUTO" indicator is lit, the receiver is in the AUTO mode.

⑮ MEMORY switch

This is used to memorize stations. The FM MONO mode and FM AUTO STEREO mode will also be memorized.

⑯ STATION CALL switches

These switches are used to preset and recall desired broadcasting stations, together with the FM MONO mode and FM AUTO STEREO mode.

⑰ FM/AM selector switches

These switches are used to select either FM or AM reception.

FM: Press for FM reception.

AM: Press for AM reception.

⑱ TUNING switches (DOWN, UP)

These switches are used to raise or lower the tuning frequency in the FM or AM band.

UP: The FM or AM band is scanned in the direction of increasing frequency.

DOWN: The FM or AM band is scanned in the direction of decreasing frequency.

⑲ Audio/Video function switches

TAPE 2/DAT (MONITOR):
Press to play a tape or monitor recording on the tape deck connected to the TAPE 2/DAT terminals.

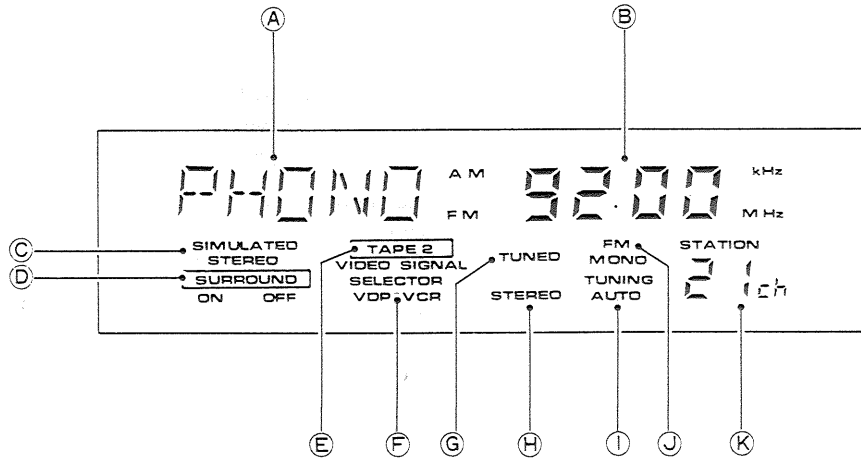
VCR/TAPE 1: Press to play the component connected to the VCR/ TAPE 1 terminals.

VDP/CDV: Press to playing the component connected to the VDP/CDV terminals.

CD: Press when playing compact discs on a CD player.

TUNER: Press when listening to a radio broadcast.

PHONO: Press when playing records on a turntable.



MULTI-OPERATION DISPLAY panel

Ⓐ Indicates the function selected by the audio/video function switches.

Ⓑ Indicates frequency

Ⓒ SIMULATED STEREO indicator

Ⓓ SURROUND ON/OFF indicator

Ⓔ TAPE 2 indicator

Ⓕ VIDEO SIGNAL SELECTOR indicator

Ⓖ TUNED indicator

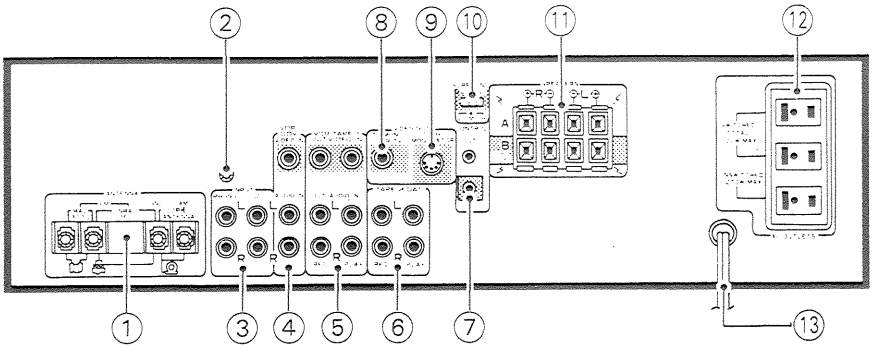
Ⓗ STEREO indicator

Ⓘ AUTO TUNING indicator

Ⓙ FM MONO indicator

Ⓚ STATION number indicator

● REAR PANEL



① FM/AM ANTENNA terminals

Use these antenna terminals for reception of FM and AM broadcasts.

② GND terminal

Connect to the ground lead of a turntable.

③ INPUT jacks

PHONO .... Connect to the output cables from a turntable.
CD ..... Connect to the output jacks of a compact disc player.

④ VDP/CDV jacks

[VIDEO IN]

When watching the video image from a LD player (VDP) or a CDV player used for playback, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L, R)]

When playing back the audio channel from a LD player (VDP) or a CDV for playback, connect its AUDIO OUTPUT jacks here.

⑤ VCR/TAPE 1 jacks

[VIDEO OUT]

When recording program materials from the video component connected to the VDP/CDV jacks, connect to the VIDEO INPUT jack of the VCR used for recording.

[VIDEO IN]

When watching the video image from a VCR used for recording, connect its VIDEO OUTPUT jack here.

[AUDIO OUT/REC (L, R)]

When recording program materials from the video component connected to the VDP/CDV jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR/TAPE 1 used for recording. When connecting a tape deck, connect with the REC (input) terminals of the tape deck.

[AUDIO IN/PLAY (L, R)]

When watching the audio channel from a VCR used for recording, connect its AUDIO OUTPUT jacks here. When connecting a tape deck, connect with the PLAY (output) terminals of the tape deck.

⑥ TAPE 2/DAT jacks

Connect these jacks to the tape deck or DAT (digital audio tape)

Connecting for Recording

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

Connecting for Playback

Connect the TAPE PLAY jack on the tape deck or DAT and the PLAY/IN side of the TAPE jack on the receiver with a pin-plug connecting cord.

⑦ REMOTE CONTROL IN/OUT jacks

IN: Connect this terminal to other Pioneer components when using those components to control this unit.

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

⑧ VIDEO OUT TO MONITOR TV jack

Use to connect a TV set for watching program materials from the VCR or VDP connected to this unit.
Connect to a monitor TV or to a TV set with video input terminal.

⑨ VIDEO OUT TO RF MODULATOR jack

Use to connect a TV set for watching program materials from the VCR or VDP connected to this unit.
Use to connect a normal TV set. When performing connections, the RF MODULATOR JA-RF5 (sold separately) is required. By connecting an RF modulator, video signals can be converted to VHF signals (U.S. channel 3 or 4), thus allowing this unit to be used to view the selected source on a normal television set.

NOTE:

- *A "normal TV set" as noted above is one for which RF connections alone are possible.*
- *Sound is not output from the TO RF MODULATOR jack. Use the speakers connected to this unit to listen to the sound.*

⑩ SURROUND LEVEL selector switch

By selecting one of the three positions (L: Low, M: Mid, H: High), the sound volume from the surround speakers can be changed.

⑪ SPEAKERS terminals

A: Connect to a first set of speakers (or the front speakers in a surround system).
B: Connect to a second set of speakers (or the surround speakers in a surround system).

⑫ AC OUTLETS

[SWITCHED TOTAL 100 W MAX]

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

[UNSWITCHED 200 W MAX]

Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 200 W.
The equipment should be disconnected by removing the main plug from the wall socket when not in regular use, e.g. when on vacation.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLETS in order to avoid overheating or fire risk.
This can cause the receiver to malfunction.

⑬ Power Supply cord