


TA-AV661

SERVICE MANUAL

US Model



SPECIFICATIONS

This amplifier incorporates the Dolby Pro Logic Surround system. Manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby," the double-D symbol  and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation.

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads both channels driven, from 50 - 20,000 Hz; rated 120 watts per channel minimum RMS power, with no more than 0.9 % total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Power output 140 W + 140 W (front, at rear/center/woofer off at 1 kHz, 0.9 % T.H.D., 8 ohms)
30 W + 30 W (rear, at front/center/woofer off at 1 kHz, 8 ohms)
45 W (center, at front/rear/woofer off at 1 kHz, 6 ohms)
60 W (woofer, at front/rear/center off at 40 Hz, 4 ohms)



Inputs		
	Sensitivity	Impedance
PHONO	2.5 mV	50 kilohms
CD	400 mV	
TAPE, VIDEO 1, 2, 3, 4, TUNER	250 mV	50 kilohms
Outputs		
	TAPE REC OUT VIDEO 1, VIDEO 2: Voltage 250 mV, Impedance 1 kilohms	
	HEADPHONES: Accepts low and high impedance headphones	
Graphic equalizer	±10 dB at 63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 16 kHz	

Video section

Inputs VIDEO 1, 2, 3, 4: 1 Vp-p 75 ohms
Outputs VIDEO 1, 2, MONITOR: 1 Vp-p 75 ohms

General

Power requirements 120 V AC, 60 Hz
Power consumption 270 W
AC outlets 3 switched, total 120 W
Dimensions 430 x 160 x 355 mm (16 15/16 x 6 3/16 x 14 inches)
Mass (Approx.) 9.5 kg (20 lb 15 oz)
Supplied accessories Remote controller (remote) (1)
Size AA (R6) batteries (2)

Design and specifications are subject to change without notice.

AV CONTROL INTEGRATED AMPLIFIER
SONY®

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

[Lighting of all FLs and LEDs]

While pressing $\boxed{3}$ button, connect the power supply plug to the outlet, the FL tubes and LEDs light up.

[Key Check]

With all the FLs and LEDs lit, when the $\boxed{3}$ button and $\boxed{\text{WOOFER ON/OFF}}$ button are pressed simultaneously, "SET **" is displayed.

When the $\boxed{3}$ button and $\boxed{\text{WOOFER ON/OFF}}$ button are pressed simultaneously again, the Key Check mode is set and "KEY 0" is displayed.

Each time a button other than $\boxed{\text{POWER}}$ is pressed, the display will count up to "KEY 30".

A button already pressed will not be counted when pressed again.

When the button is pressed for the 31st time, "AMP" is displayed and the key check mode is ended.

Note: The ** of "SET **" differs according to the version of the microprocessor.

To exit the test mode, press the $\boxed{\text{POWER}}$ button.

• Abbreviation

FL : Fluorescent Indicator Tube

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

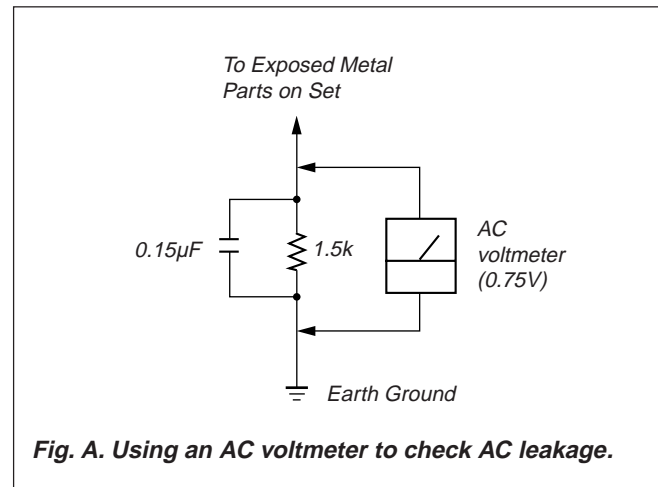
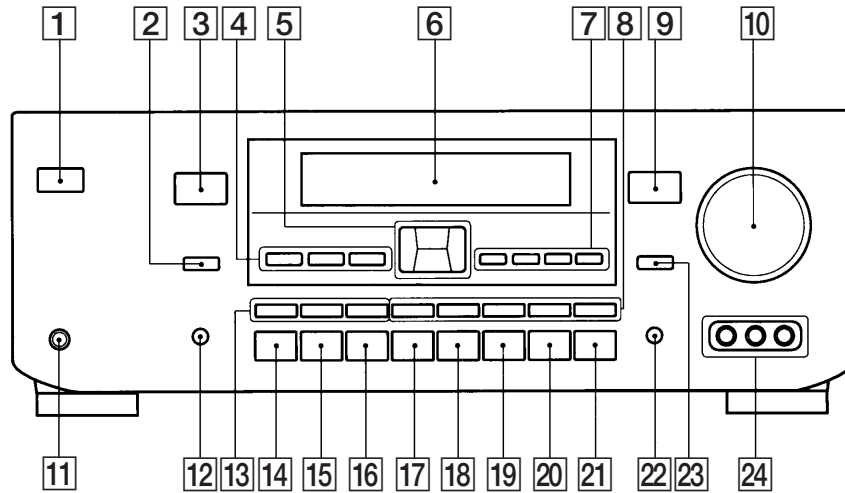


Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 2 GENERAL

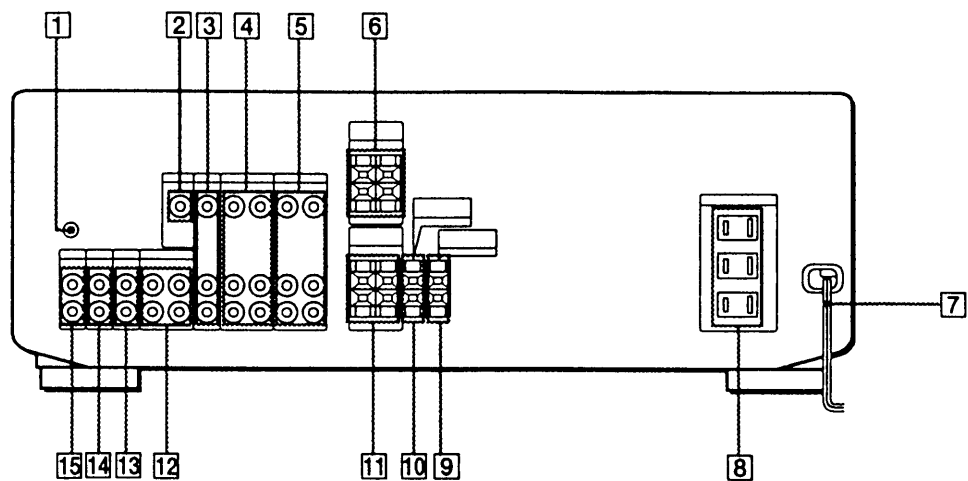
This section is extracted from instruction manual.

FRONT PANEL



- | | |
|--|---|
| <p>1 POWER button</p> <p>2 CENTER MODE button</p> <p>3 DOLBY PRO LOGIC indicator</p> <p>4 SURROUND MODE buttons
(DOLBY, HALL, SIMULATED)</p> <p>5 <V/>/Δ/▽/ button</p> <p>6 Display Window</p> <p>7 CONTROL MODE buttons
(EQ, CENTER, REAR, WOOFER)</p> <p>8 Numeric buttons (1-5)</p> <p>9 SUPER WOOFER indicator</p> <p>10 MASTER VOLUME knob</p> <p>11 HEADPHONES jack</p> <p>12 DISPLAY button</p> | <p>13 PRESET MODE buttons
(MEMORY, USER, SOUND FIELD)</p> <p>14 VIDEO 1 button</p> <p>15 VIDEO 2 button</p> <p>16 VIDEO 3 button</p> <p>17 VIDEO 4 button</p> <p>18 TAPE button</p> <p>19 CD button</p> <p>20 TUNER button</p> <p>21 PHONO button</p> <p>22 EQ FLAT button</p> <p>23 WOOFER ON/OFF button</p> <p>24 VIDEO 4 INPUT jack
(VIDEO, AUDIO L/R)</p> |
|--|---|

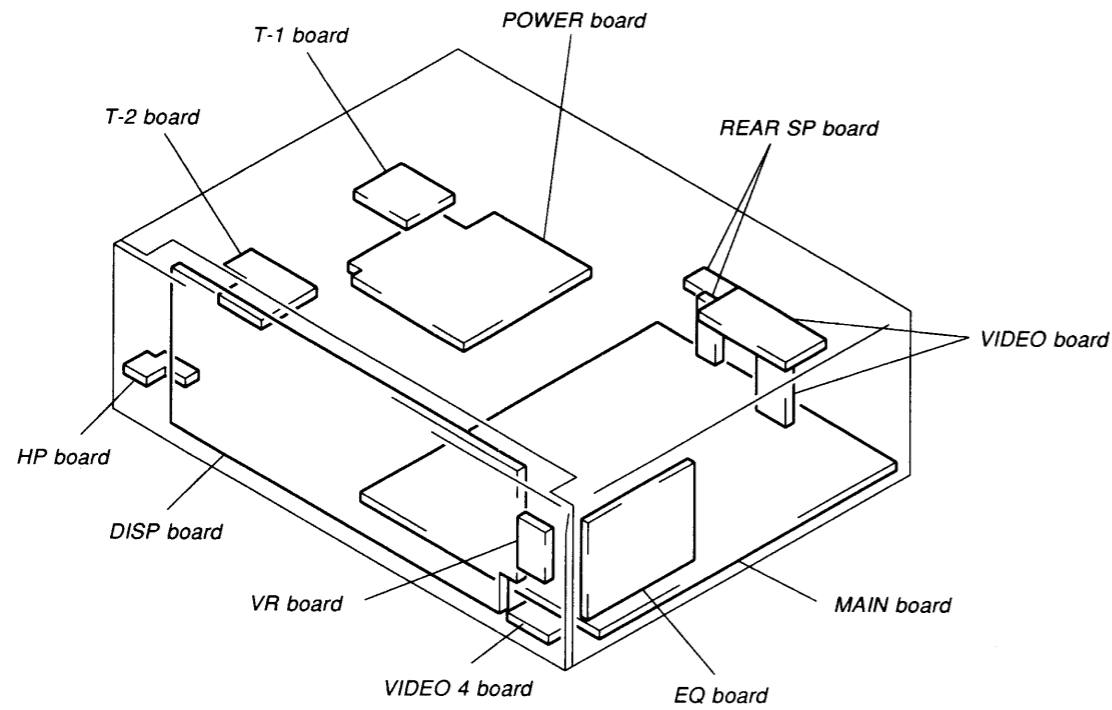
REAR PANEL



- | | | |
|--|---|---|
| <p>1 \hbar ground terminal</p> <p>2 MONITOR</p> <p>3 VIDEO 3</p> <p>4 VIDEO 2</p> <p>5 VIDEO 1</p> | <p>6 REAR SPEAKERS</p> <p>7 AC power cord</p> <p>8 SWITCHED AC OUTLET</p> <p>9 WOOFER SPEAKER</p> <p>10 CENTER SPEAKER</p> | <p>11 FRONT SPEAKERS</p> <p>12 TAPE</p> <p>13 CD</p> <p>14 TUNER</p> <p>15 PHONO</p> |
|--|---|---|

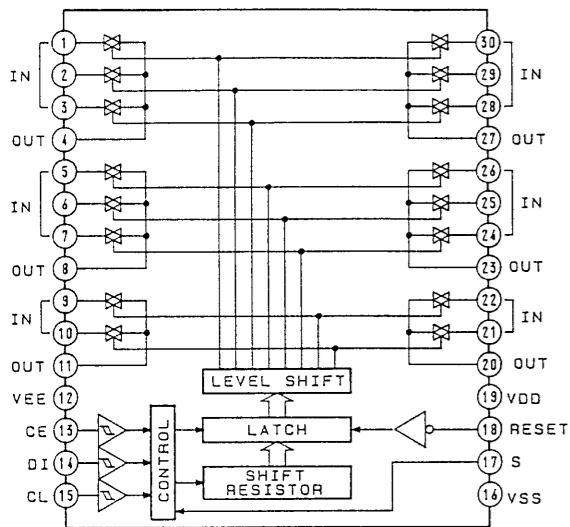
SECTION 2 DIAGRAMS

2-1. CIRCUIT BOARDS LOCATION

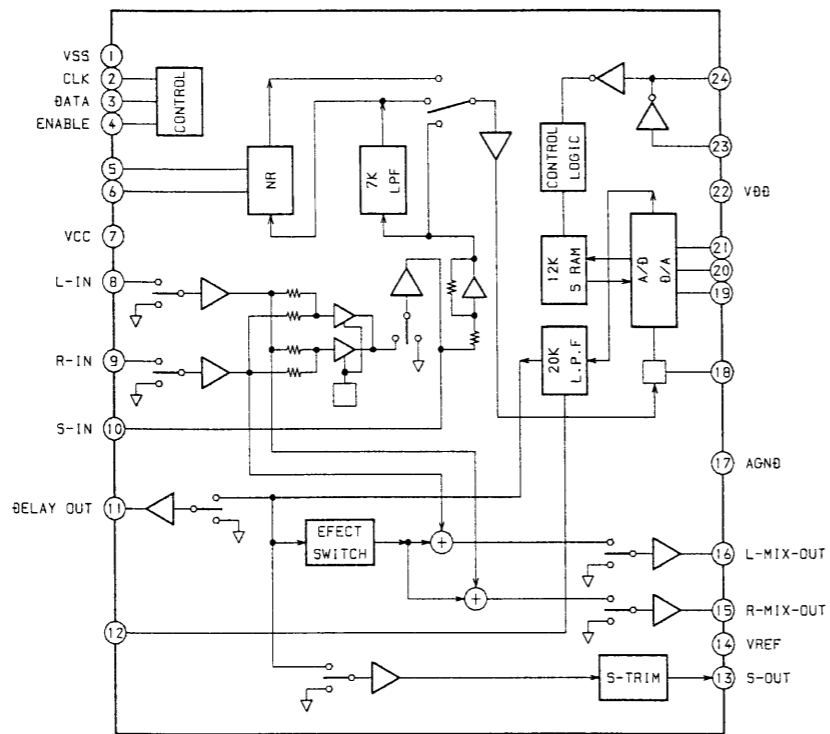


• IC BLOCK DIAGRAMS

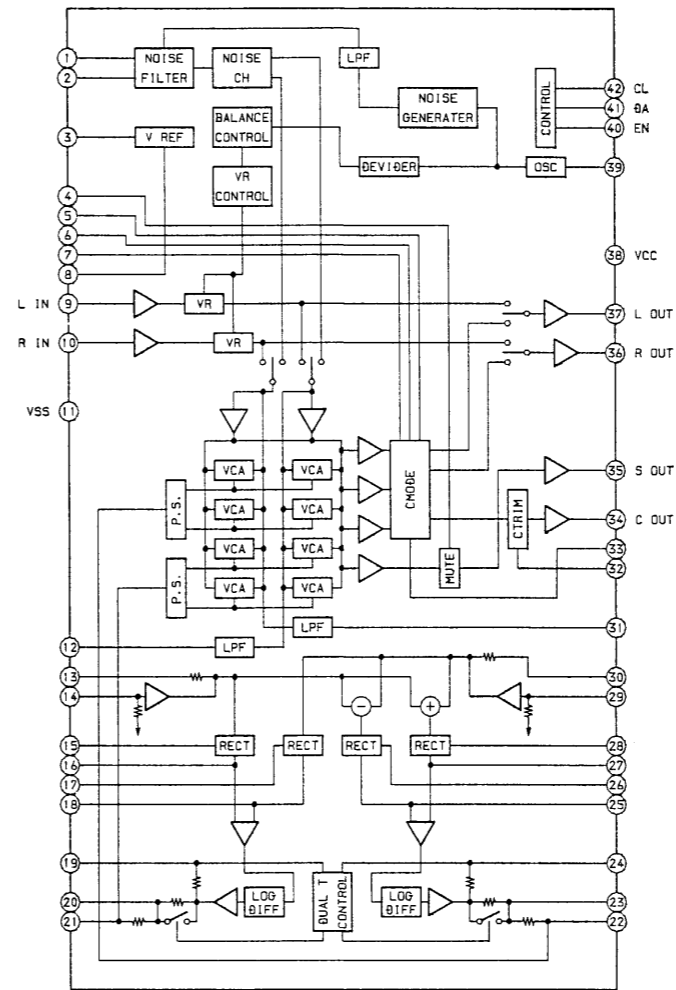
IC102 LC7822



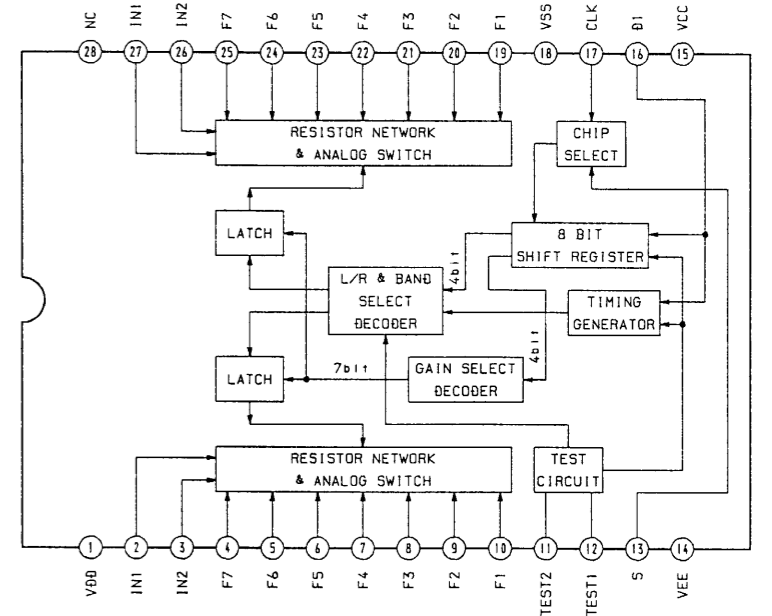
IC104 LV1011



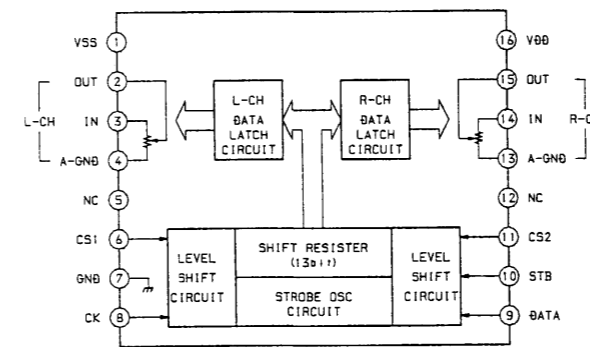
IC103 LA2785



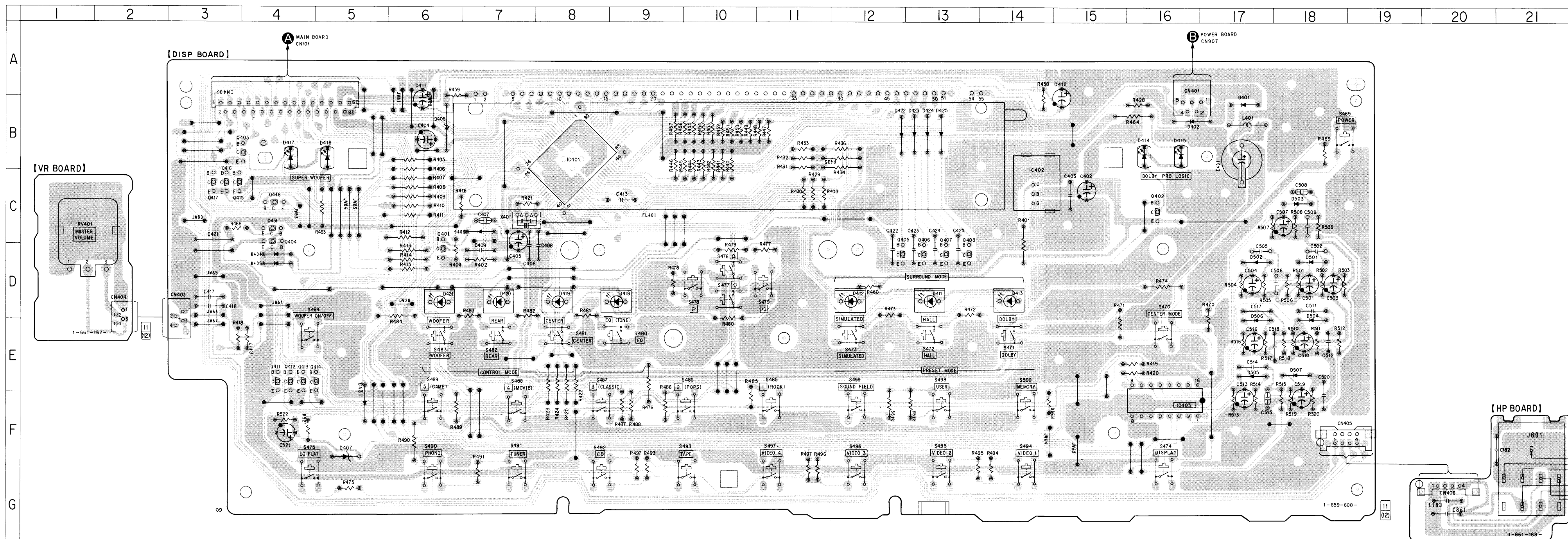
IC123 NJU7305L



IC112, 113, 114 TC9210P



2-2. PRINTED WIRING BOARD — DISPLAY SECTION —
 • See page 4 for Circuit Boards Location.

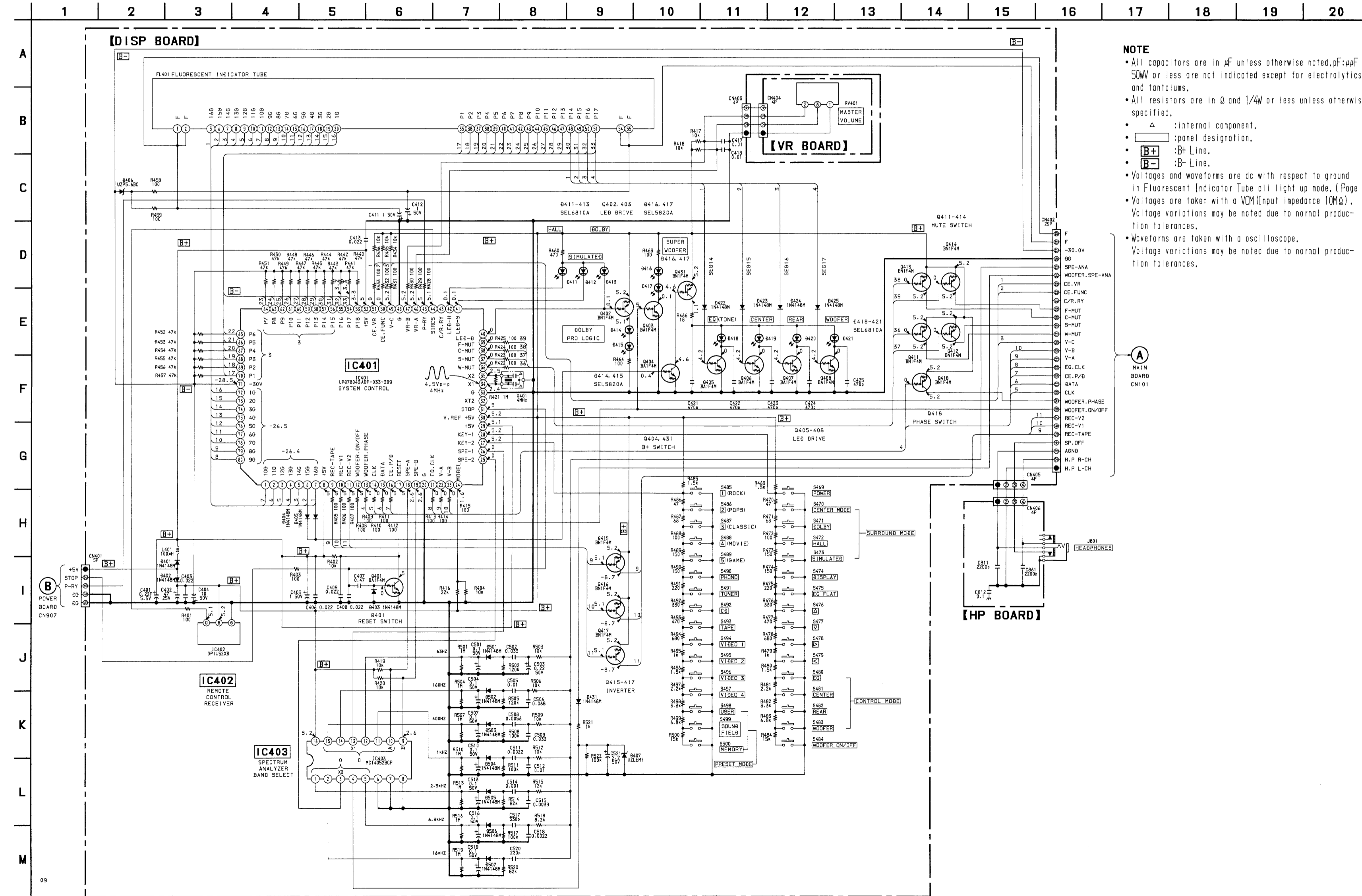


• Semiconductor Location

Ref. No.	Location
D401	B-17
D402	B-16
D403	C-7
D404	D-4
D405	D-4
D406	B-6
D407	F-5
D411	D-13
D412	D-12
D413	D-14
D414	B-14
D415	B-14
D416	B-5
D417	B-4
D418	D-9
D419	D-8
D420	D-7
D421	D-6
D422	B-12
D423	B-13
D424	B-13
D425	B-13
D431	F-5
D501	D-18
D502	D-17
D503	C-18
D504	D-18
D505	E-17
D506	D-17
D507	E-18
IC401	B-8
IC402	C-14
IC403	F-16
Q401	D-6
Q402	C-16
Q403	B-4
Q404	C-4
Q405	D-12
Q406	D-13
Q407	D-13
Q408	D-13
Q411	E-4
Q412	E-4
Q413	E-4
Q414	E-4
Q415	C-3
Q416	C-3
Q417	C-3
Q418	C-4
Q431	C-4

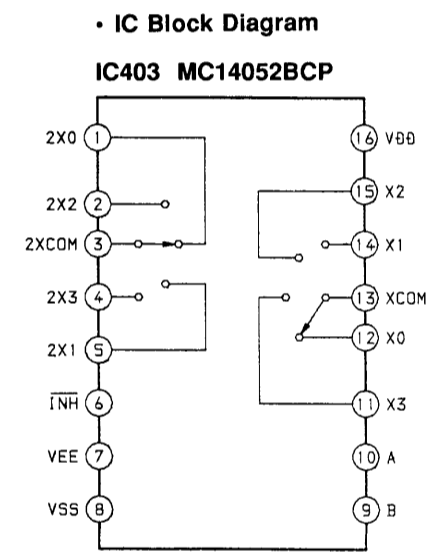
Note:
 • — : parts extracted from the component side.
 • Δ : internal component.
 • ▨ : Pattern from the side which enable seeing.

2-3. SCHEMATIC DIAGRAM — DISPLAY SECTION —



NOTE

- All capacitors are in μF unless otherwise noted, pF: pF
- 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △: internal component.
- : panel designation.
- B+: B+ Line.
- B-: B- Line.
- Voltagess and waveforms are dc with respect to ground in Fluorescent Indicator Tube all light up mode. (Page 2)
- Voltagess are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.

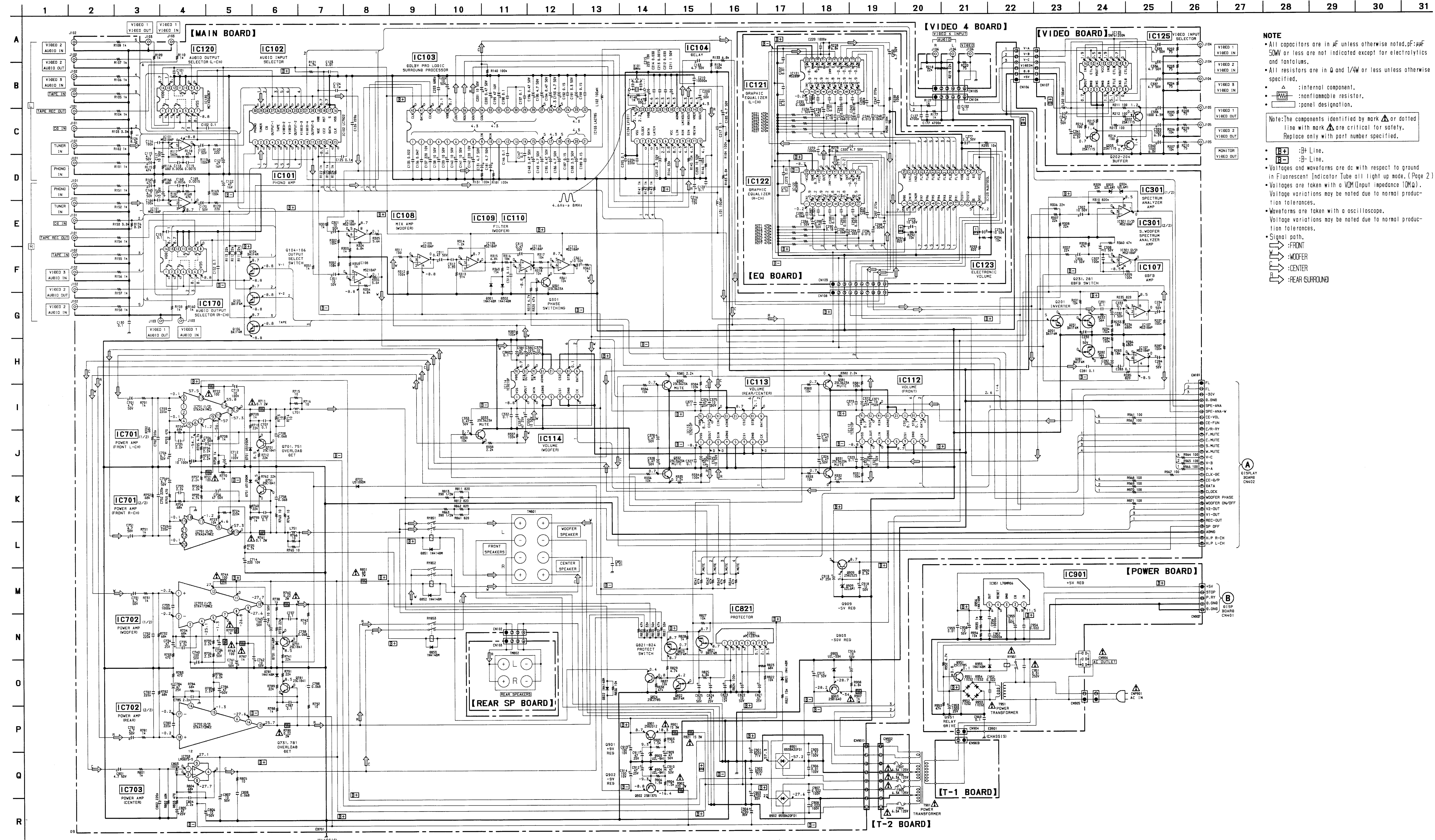


2-4. IC PIN FUNCTION
• IC401 SYSTEM CONTROL (μPD78043AGF-033-3B9)

Pin No.	Pin Name	I/O	Function
1-7	10G-16G	O	FL grid signal output.
8	+5V	—	+5V
9	REC-TAPE	O	
10	REC-V1	O	Audio output select signal output.
11	REC-V2	O	
12	WOOFER ON/OFF	O	Woofler ON/OFF signal output.
13	WOOFER PHASE	O	Woofler phase control signal output.
14	CLK	O	Serial clock output.
15	DATA	O	Serial data output.
16	CE-P/D	O	Chip enable signal output (for IC102).
17	RESET	I	Reset signal input.
18	SPE-A	O	Spectrum analyzer band select output.
19	SPE-B	O	
20	G	—	Ground
21	EQ-CLK	O	Clock signal output (for IC123).
22	V-A	O	Video output select signal output.
23	V-B	O	
24	MODEL	I	Destination detection setting input.
25	SPE-2	I	Spectrum analyzer input (2.5 kHz, 6.3 kHz, 16 kHz, WOOFER)
26	SPE-1	I	Spectrum analyzer input (63 Hz, 160 Hz, 400 Hz, 1 kHz)
27, 28	KEY-1, KEY-2	I	Key matrix input.
29	+5V	—	+5V
30	VREF +5V	—	+5V
31	STOP	I	Power ON reset input.
32	XT2	I	Not used.
33	G	—	Ground
34	X1	I	X'tal (5 MHz).
35	X2	O	
36	W-MUT	O	
37	S-MUT	O	Mute control output.
38	C-MUT	O	
39	F-MUT	O	
40	LED-D	O	
41	LED-S	O	LED drive signal output.
42	LED-H	O	
43	C/R. RY	O	Not used.
44	SIRCS	I	SIRCS signal input.
45	P-RY	O	Main power supply relay drive signal output.
46, 47	VR-A, VR-B	I	Volume encoder signal input.
48	G	—	Ground
49	V-C	O	Video output select signal output.
50	CE FUNC	O	Chip enable signal output (for IC102).
51	CE VR	O	Chip enable signal output (for IC112-114).
52	+5V	—	+5V
53-70	P1-P18	O	FL segment signal output.
71	-30V	—	-30V for FL
72-80	1G-9G	O	FL grid signal output.

• Abbreviation
FL: Fluorescent Indicator Tube

2-5. SCHEMATIC DIAGRAM — MAIN SECTION —
• See page 4 for IC Block Diagrams. (IC102-104, 112-114, 123)



NOTE

- All capacitors are in μF unless otherwise noted. pF: pF
- 50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/\text{W}$ or less unless otherwise specified.
- Δ : internal component.
- \square : nonflammable resistor.
- \square : panel designation.

Note: The components identified by mark Δ or doited line with mark Δ are critical for safety. Replace only with part number specified.

- \square :B Line.
- \square :B Line.

Voltages and waveforms are dc with respect to ground in Fluorescent Indicator Tube all light up mode. (Page 2)

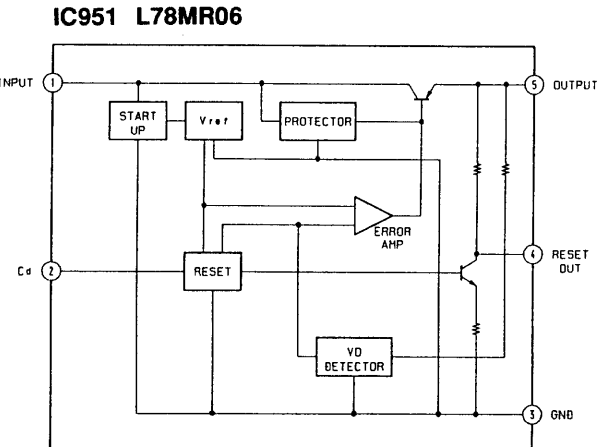
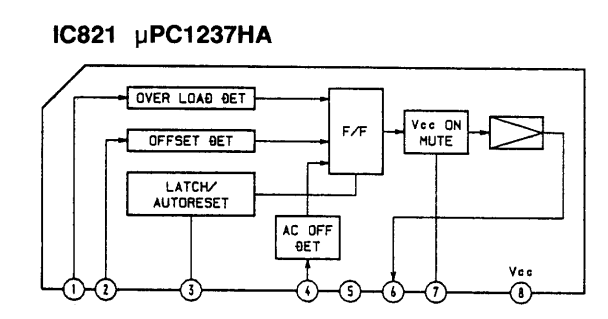
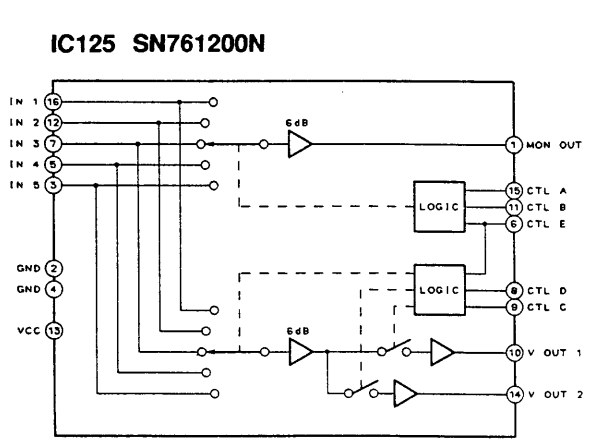
Voltages are taken with a VOM (input impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.

Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.

Signal path:

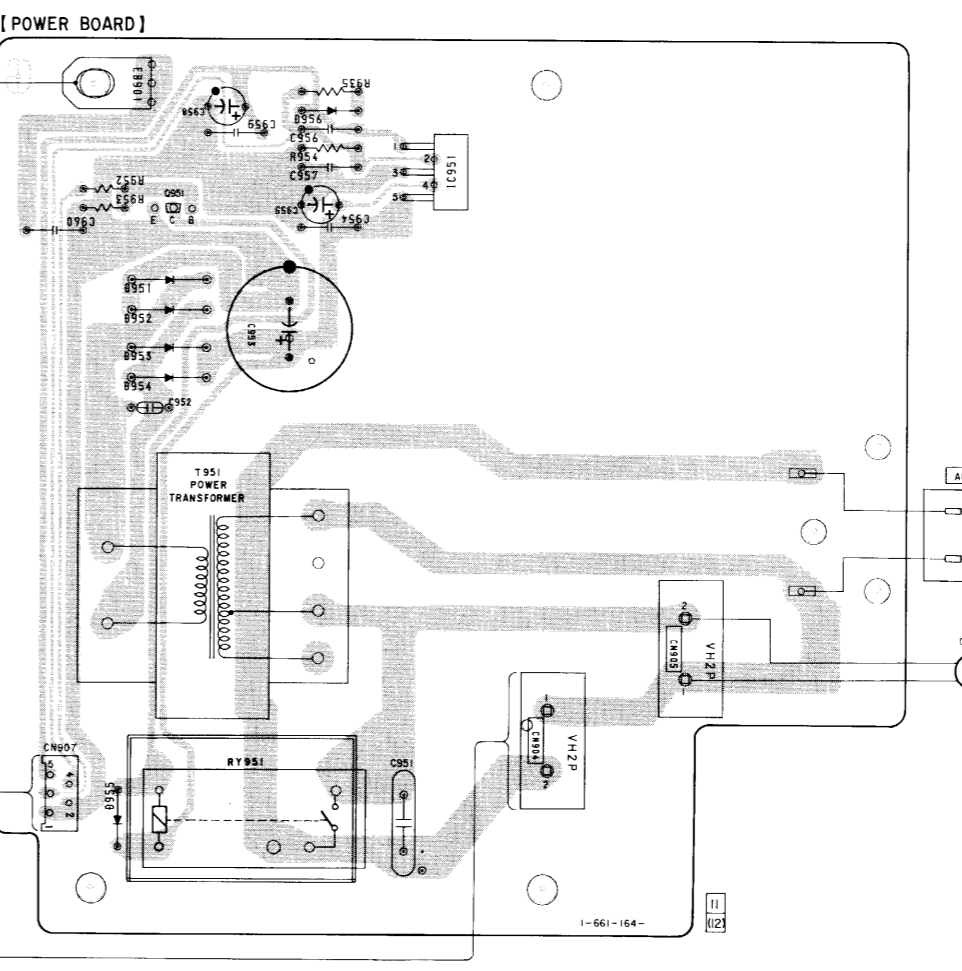
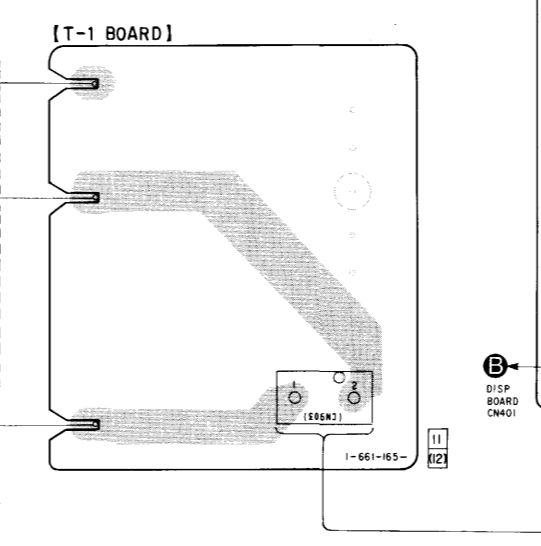
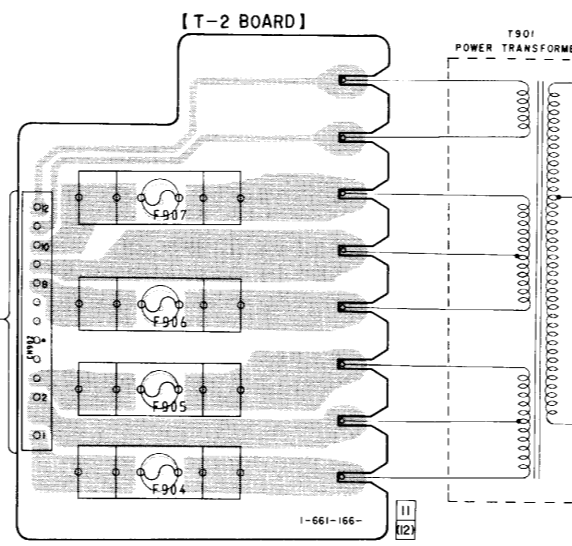
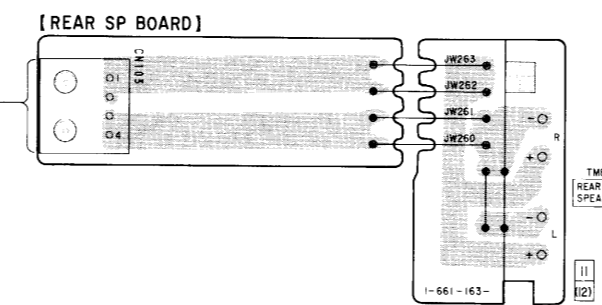
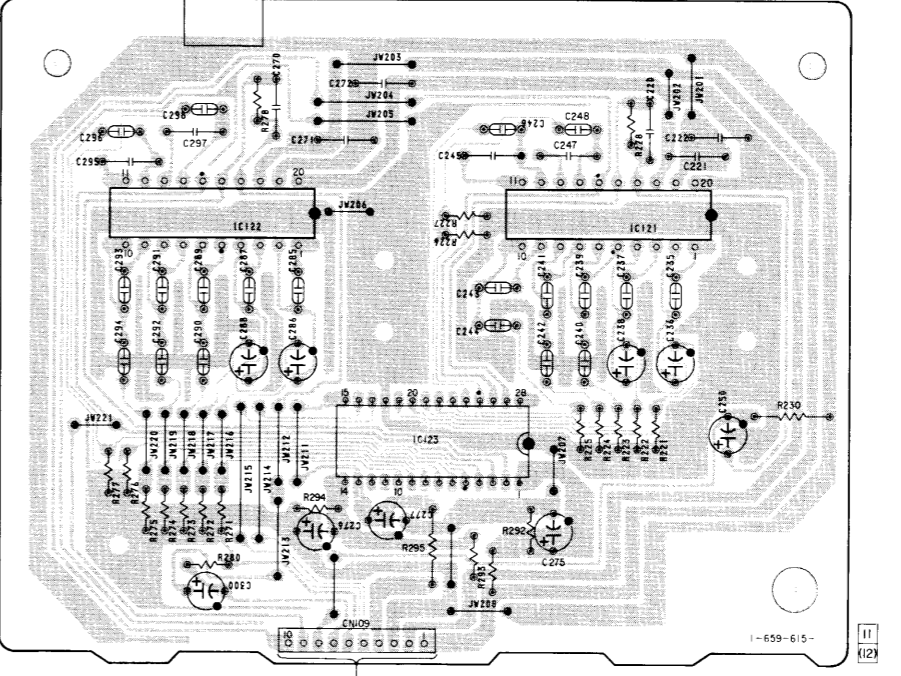
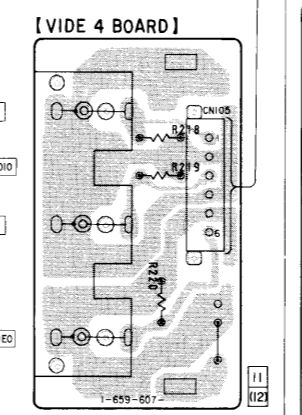
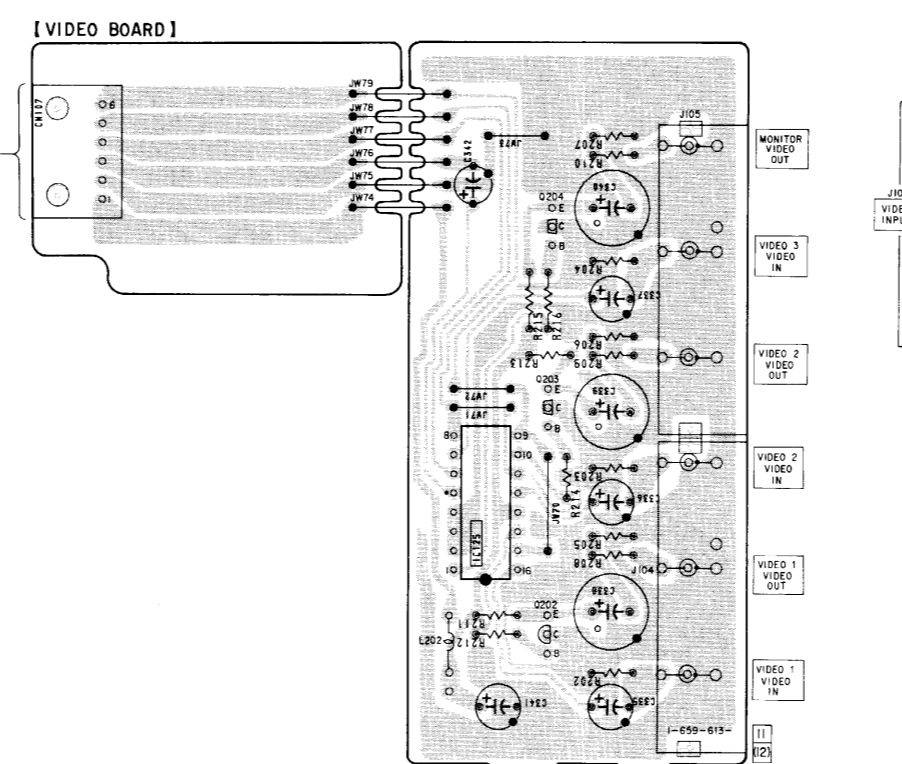
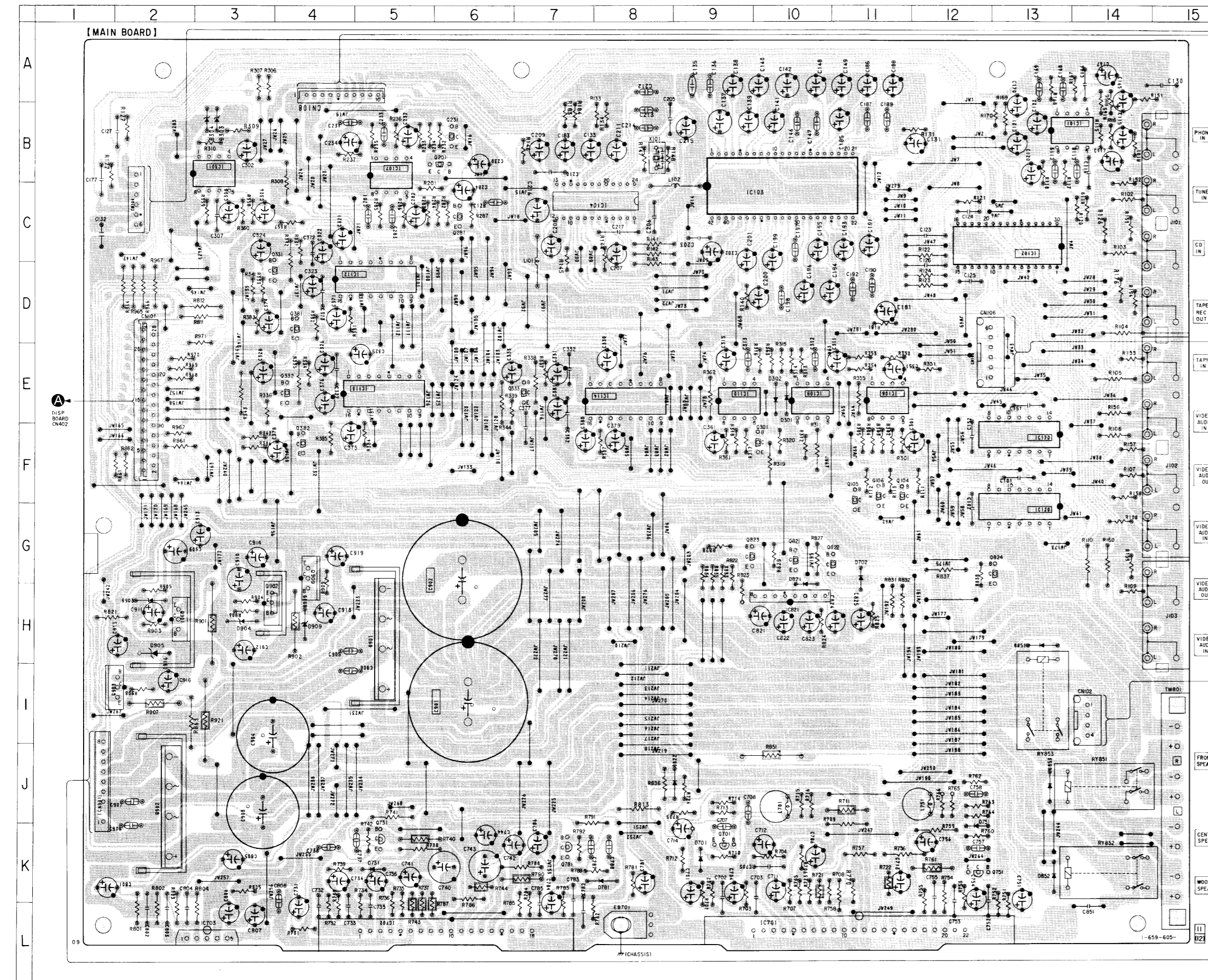
- \rightarrow FRONT
- \rightarrow REAR
- \rightarrow CENTER
- \rightarrow REAR SURROUND

• IC Block Diagrams



2-6. PRINTED WIRING BOARD — MAIN SECTION —

• See page 4 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D301	E-10	IC122	B-26
D302	E-10	IC123	D-27
D303	B-3	IC125	D-19
D304	B-3	IC170	F-13
D701	K-9	IC301	B-3
D702	G-11	IC701	L-10
D731	K-5	IC702	L-5
D751	J-12	IC703	L-3
D781	K-8	IC821	H-10
D821	G-10	IC951	G-27
D822	J-8		
D851	H-13	Q104	F-11
D852	K-13	Q105	F-11
D853	J-13	Q106	F-11
D901	H-5	Q201	B-6
D902	J-2	Q202	E-19
D903	H-2	Q203	C-19
D904	H-3	Q204	B-19
D905	H-2	Q231	B-6
D909	H-4	Q281	C-6
D951	G-25	Q301	F-10
D952	H-25	Q331	D-3
D953	H-25	Q332	E-4
D954	H-25	Q333	E-7
D955	K-25	Q381	D-4
D956	F-26	Q382	F-4
		Q701	K-9
IC101	B-13	Q731	K-5
IC102	C-13	Q751	K-12
IC103	C-10	Q781	K-7
IC104	C-8	Q821	G-10
IC107	B-5	Q822	G-10
IC108	E-11	Q823	G-9
IC109	E-10	Q824	G-12
IC110	E-9	Q901	H-2
IC112	D-5	Q902	H-3
IC113	E-5	Q903	I-1
IC114	E-8	Q909	G-4
IC120	G-13	Q951	G-25
IC121	B-28		

Note:

- : parts extracted from the component side.
- △ : internal component.
- ▨ : Pattern from the side which enable seeing.

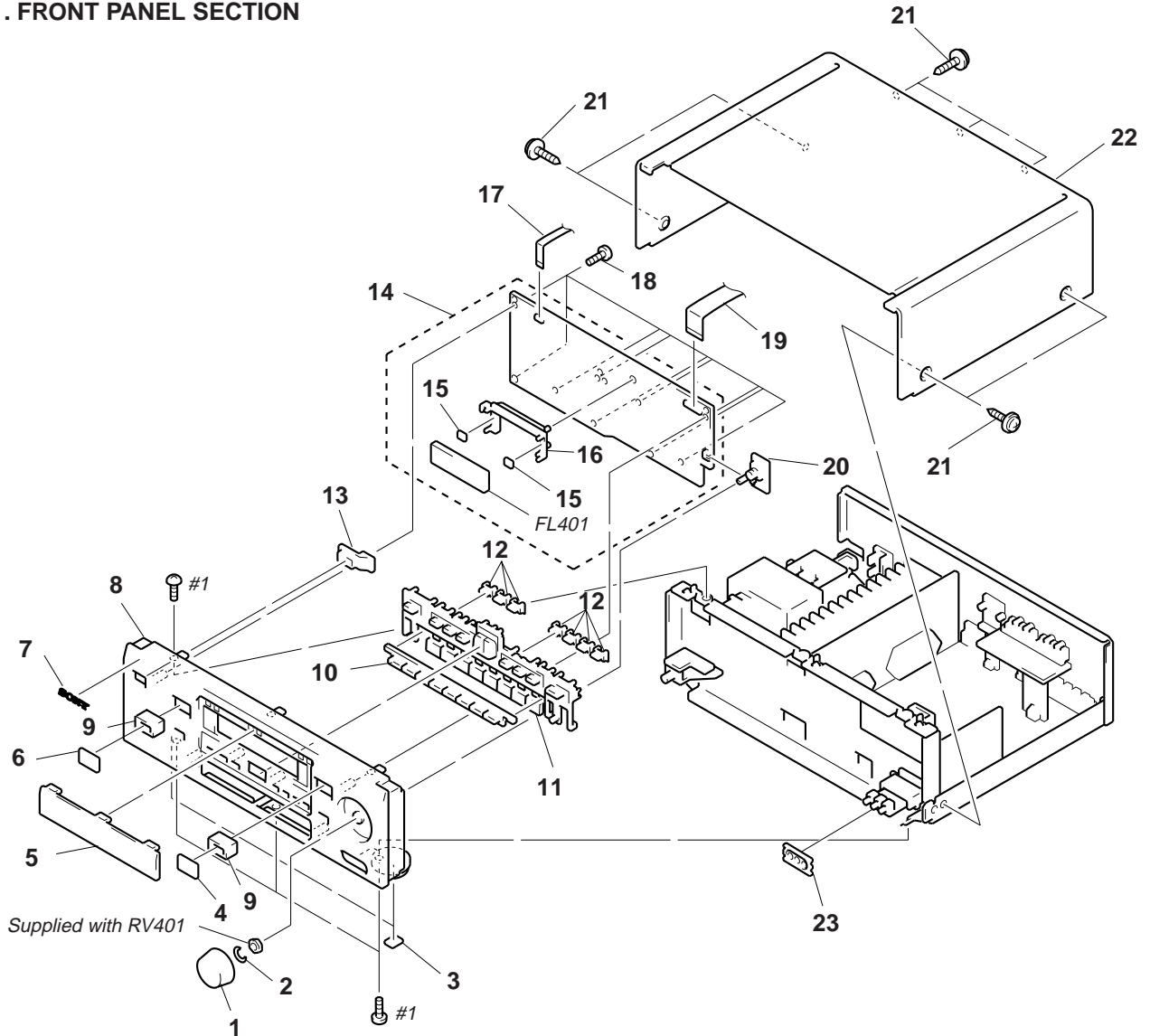
SECTION 3 EXPLODED VIEWS

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

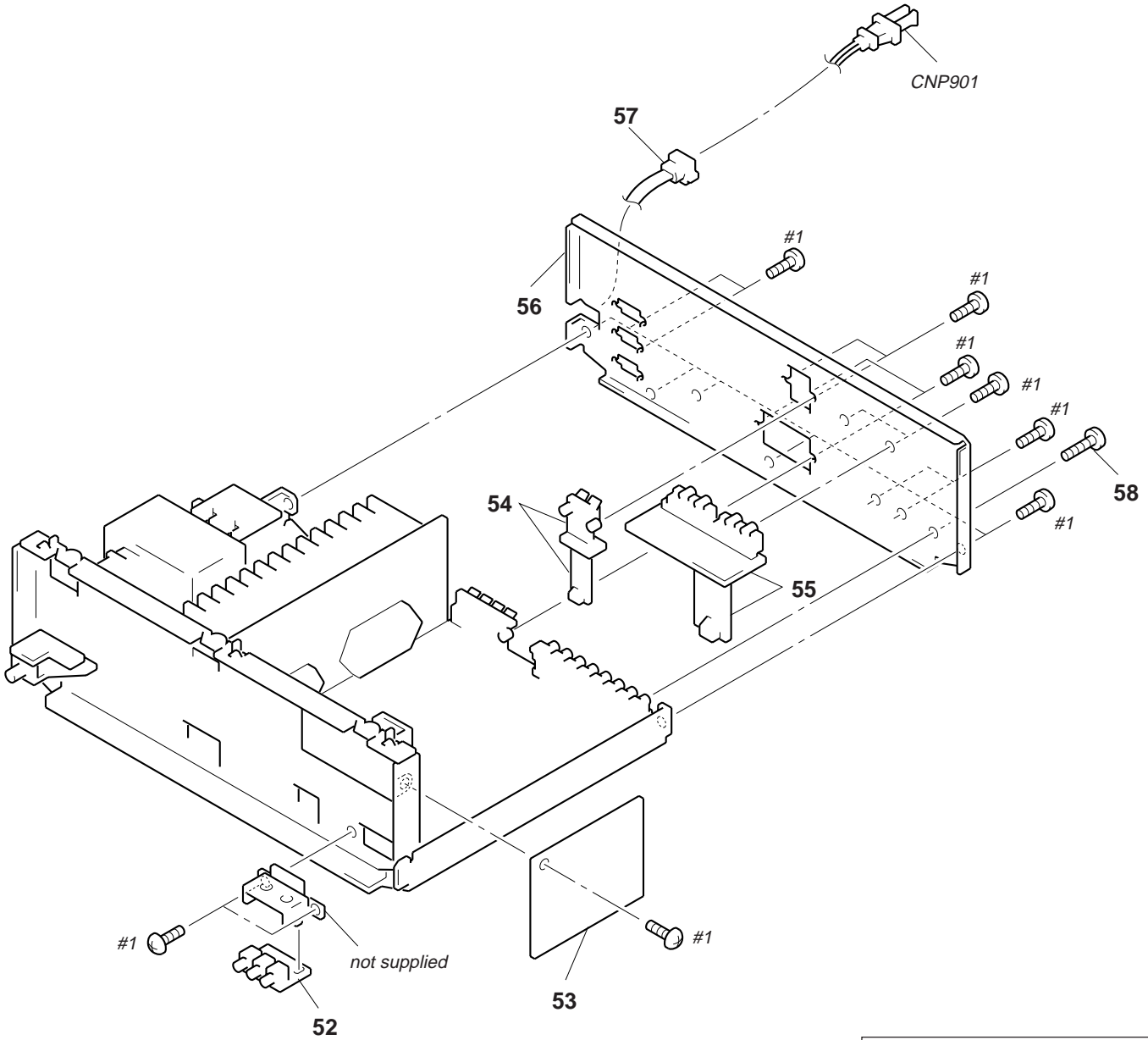
The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

3-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-980-107-01	KNOB (VOL)		13	4-979-936-01	BUTTON (P-T)	
2	3-350-426-01	SPRING, RING		* 14	A-4389-305-A	DISP BOARD, COMPLETE	
3	4-977-358-11	CUSHION (8X12.5)		* 15	4-921-941-01	CUSHION (FL)	
4	4-979-937-11	FILTER		* 16	4-971-014-11	HOLDER, FL TUBE	
5	4-979-942-21	WINDOW		17	1-769-867-11	WIRE (FLAT TYPE) (5 CORE)	
6	4-979-937-01	FILTER		18	4-951-620-01	SCREW (2.6X8), +BVTP	
7	4-963-404-21	EMBLEM (5-A), SONY		19	1-773-286-11	WIRE (FLAT TYPE) (29 CORE)	
8	4-979-934-11	PANEL, FRONT		* 20	1-661-167-11	VR BOARD	
* 9	4-982-462-01	HOUSE, LED		21	3-704-366-01	SCREW (CASE) (M3X8)	
10	4-980-108-01	BUTTON (PRE)		* 22	4-982-682-01	CASE (414532)	
11	4-979-930-01	BUTTON (F-8)		23	4-979-932-01	ESCUTCHEON (V)	
12	4-979-931-01	INDICATOR		FL401	1-517-513-11	INDICATOR TUBE, FLUORESCENT	

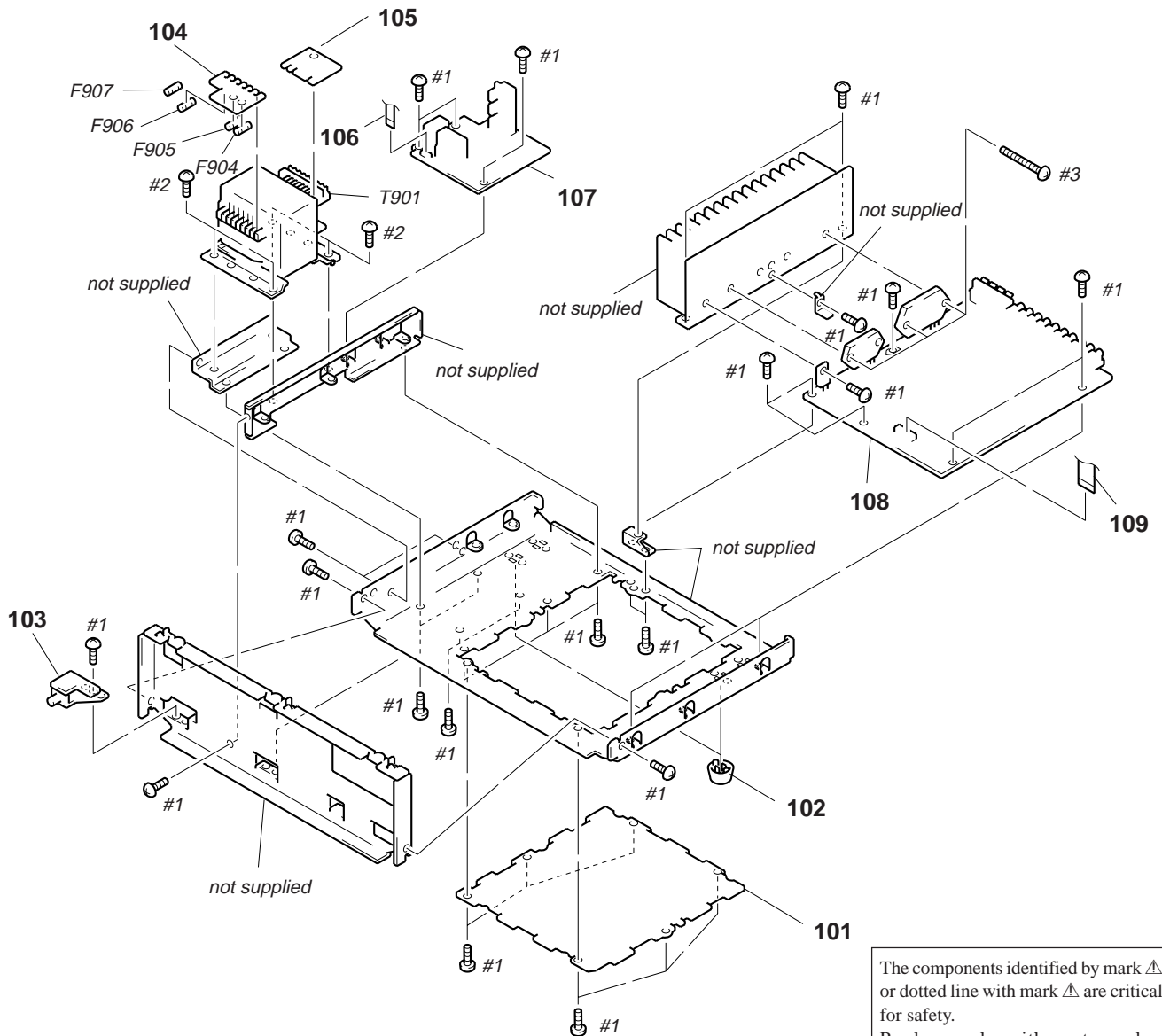
3-2. BACK PANEL SECTION



The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 52	1-659-607-11	VIDEO 4 BOARD		* 57	3-703-244-00	BUSHING (2104), CORD	
* 53	A-4389-312-A	EQ BOARD, COMPLETE		58	3-704-515-01	SCREW (BV/RING)	
* 54	1-661-163-11	REAR SP BOARD		Δ CNP901	1-690-609-21	CORD, POWER	
* 55	1-659-613-11	VIDEO BOARD					
* 56	4-979-954-52	PANEL, BACK					

3-3. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 101	4-979-946-01	PLATE (432), BOTTOM	
	102	X-3371-405-1	FOOT (SMALL) ASSY
* 103	1-661-168-11	HP BOARD	
* 104	1-661-166-11	T-2 BOARD	
* 105	1-661-165-11	T-1 BOARD	
	106	1-769-867-11	WIRE (FLAT TYPE) (5 CORE)
* 107	1-661-164-11	POWER BOARD	

Ref. No.	Part No.	Description	Remark
* 108	A-4389-302-A	MAIN BOARD, COMPLETE	
	109	1-773-286-11	WIRE (FLAT TYPE) (29 CORE)
Δ F904	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
Δ F905	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
Δ F906	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
Δ F907	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
Δ T901	1-429-458-11	TRANSFORMER, POWER	

SECTION 4 ELECTRICAL PARTS LIST

Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-4389-305-A	DISP BOARD, COMPLETE *****		C517	1-162-288-31	CERAMIC 330PF 10%	50V
*	4-921-941-01	CUSHION (FL)		C518	1-162-302-11	CERAMIC 0.0022uF 30%	16V
*	4-971-014-11	HOLDER, FL TUBE		C519	1-126-956-91	ELECT 0.1uF 20%	50V
		< CAPACITOR >		C520	1-162-286-31	CERAMIC 220PF 10%	50V
				C521	1-124-925-11	ELECT 2.2uF 20%	100V
						< CONNECTOR >	
C401	1-125-486-11	DOUBLE LAYERS 0.22F 5.5V		* CN401	1-568-848-11	SOCKET, CONNECTOR 5P	
C402	1-104-664-11	ELECT 47uF 20% 25V		* CN402	1-568-871-11	SOCKET, CONNECTOR 29P	
C403	1-161-494-00	CERAMIC 0.022uF 25V		CN405	1-770-397-11	HOUSING, CONNECTOR(PC BOARD)4P	
C404	1-126-964-11	ELECT 10uF 20% 50V				< DIODE >	
C405	1-124-903-11	ELECT 1uF 20% 50V		D401	8-719-987-63	DIODE 1N4148M	
C406	1-161-494-00	CERAMIC 0.022uF 25V		D402	8-719-987-63	DIODE 1N4148M	
C407	1-136-173-00	FILM 0.47uF 5% 50V		D403	8-719-987-63	DIODE 1N4148M	
C408	1-161-494-00	CERAMIC 0.022uF 25V		D404	8-719-987-63	DIODE 1N4148M	
C409	1-161-494-00	CERAMIC 0.022uF 25V		D405	8-719-987-63	DIODE 1N4148M	
C411	1-124-903-11	ELECT 1uF 20% 50V		D406	8-719-014-73	DIODE UZP-5.6BC-TP	
C412	1-124-903-11	ELECT 1uF 20% 50V		D407	8-719-933-36	DIODE HZS6B1L	
C413	1-161-494-00	CERAMIC 0.022uF 25V		D411	8-719-301-49	DIODE SEL2810A (HALL)	
C417	1-162-306-11	CERAMIC 0.01uF 30% 16V		D412	8-719-301-49	DIODE SEL2810A (SIMULATED)	
C418	1-162-306-11	CERAMIC 0.01uF 30% 16V		D413	8-719-301-49	DIODE SEL2810A (DOLBY)	
C421	1-162-290-31	CERAMIC 470PF 10% 50V		D414	8-719-032-98	DIODE SEL5820A (DOLBY PROLOGIC)	
C422	1-162-290-31	CERAMIC 470PF 10% 50V		D415	8-719-032-98	DIODE SEL5820A (DOLBY PROLOGIC)	
C423	1-162-290-31	CERAMIC 470PF 10% 50V		D416	8-719-032-98	DIODE SEL5820A (SUPER WOOFER)	
C424	1-162-290-31	CERAMIC 470PF 10% 50V		D417	8-719-032-98	DIODE SEL5820A (SUPER WOOFER)	
C425	1-162-290-31	CERAMIC 470PF 10% 50V		D418	8-719-301-49	DIODE SEL2810A (EQ)	
C501	1-126-956-91	ELECT 0.1uF 20% 50V		D419	8-719-301-49	DIODE SEL2810A (CENTER)	
C502	1-130-489-00	MYLAR 0.033uF 5% 50V		D420	8-719-301-49	DIODE SEL2810A (REAR)	
C503	1-124-464-11	ELECT 0.22uF 20% 50V		D421	8-719-301-49	DIODE SEL2810A (WOOFER)	
C504	1-126-956-91	ELECT 0.1uF 20% 50V		D422	8-719-987-63	DIODE 1N4148M	
C505	1-130-483-00	MYLAR 0.01uF 5% 50V		D423	8-719-987-63	DIODE 1N4148M	
C506	1-130-493-00	MYLAR 0.068uF 5% 50V		D424	8-719-987-63	DIODE 1N4148M	
C507	1-126-956-91	ELECT 0.1uF 20% 50V		D425	8-719-987-63	DIODE 1N4148M	
C508	1-130-480-00	MYLAR 0.0056uF 5% 50V		D431	8-719-987-63	DIODE 1N4148M	
C509	1-130-489-00	MYLAR 0.033uF 5% 50V		D501	8-719-987-63	DIODE 1N4148M	
C510	1-126-956-91	ELECT 0.1uF 20% 50V		D502	8-719-987-63	DIODE 1N4148M	
C511	1-162-302-11	CERAMIC 0.0022uF 30% 16V		D503	8-719-987-63	DIODE 1N4148M	
C512	1-130-483-00	MYLAR 0.01uF 5% 50V		D504	8-719-987-63	DIODE 1N4148M	
C513	1-126-956-91	ELECT 0.1uF 20% 50V		D505	8-719-987-63	DIODE 1N4148M	
C514	1-162-294-31	CERAMIC 0.001uF 10% 50V		D506	8-719-987-63	DIODE 1N4148M	
C515	1-130-478-00	MYLAR 0.0039uF 5% 50V		D507	8-719-987-63	DIODE 1N4148M	
C516	1-126-956-91	ELECT 0.1uF 20% 50V					

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< FLUORESCENT INDICATOR >		R421	1-247-903-00	CARBON	1M 5% 1/4W
FL401	1-517-513-11	INDICATOR TUBE, FLUORESCENT		R422	1-247-807-31	CARBON	100 5% 1/4W
		< IC >		R423	1-247-807-31	CARBON	100 5% 1/4W
IC401	8-759-366-87	IC uPD78043AGF-033-3B9		R424	1-247-807-31	CARBON	100 5% 1/4W
IC402	8-749-920-83	IC GP1U52XB		R425	1-247-807-31	CARBON	100 5% 1/4W
IC403	8-759-000-48	IC MC14052BCP		R428	1-247-807-31	CARBON	100 5% 1/4W
		< COIL >		R429	1-247-807-31	CARBON	100 5% 1/4W
L401	1-410-521-11	INDUCTOR 100uH		R430	1-247-807-31	CARBON	100 5% 1/4W
		< TRANSISTOR >		R431	1-247-807-31	CARBON	100 5% 1/4W
Q401	8-729-900-36	TRANSISTOR DTC124ES		R432	1-247-807-31	CARBON	100 5% 1/4W
Q402	8-729-900-63	TRANSISTOR DTA124ES		R433	1-247-807-31	CARBON	100 5% 1/4W
Q403	8-729-900-36	TRANSISTOR DTC124ES		R434	1-249-429-11	CARBON	10K 5% 1/4W
Q404	8-729-900-36	TRANSISTOR DTC124ES		R435	1-249-429-11	CARBON	10K 5% 1/4W
Q405	8-729-900-36	TRANSISTOR DTC124ES		R436	1-249-429-11	CARBON	10K 5% 1/4W
Q406	8-729-900-36	TRANSISTOR DTC124ES		R440	1-249-437-11	CARBON	47K 5% 1/4W
Q407	8-729-900-36	TRANSISTOR DTC124ES		R441	1-249-437-11	CARBON	47K 5% 1/4W
Q408	8-729-900-36	TRANSISTOR DTC124ES		R442	1-249-437-11	CARBON	47K 5% 1/4W
Q411	8-729-900-63	TRANSISTOR DTA124ES		R443	1-249-437-11	CARBON	47K 5% 1/4W
Q412	8-729-900-63	TRANSISTOR DTA124ES		R444	1-249-437-11	CARBON	47K 5% 1/4W
Q413	8-729-900-63	TRANSISTOR DTA124ES		R445	1-249-437-11	CARBON	47K 5% 1/4W
Q414	8-729-900-63	TRANSISTOR DTA124ES		R446	1-249-437-11	CARBON	47K 5% 1/4W
Q415	8-729-900-63	TRANSISTOR DTA124ES		R447	1-249-437-11	CARBON	47K 5% 1/4W
Q416	8-729-900-63	TRANSISTOR DTA124ES		R448	1-249-437-11	CARBON	47K 5% 1/4W
Q417	8-729-900-63	TRANSISTOR DTA124ES		R449	1-249-437-11	CARBON	47K 5% 1/4W
Q418	8-729-900-63	TRANSISTOR DTA124ES		R450	1-249-437-11	CARBON	47K 5% 1/4W
Q431	8-729-900-63	TRANSISTOR DTA124ES		R451	1-249-437-11	CARBON	47K 5% 1/4W
		< RESISTOR >		R452	1-249-437-11	CARBON	47K 5% 1/4W
R401	1-247-807-31	CARBON	100 5% 1/4W	R453	1-249-437-11	CARBON	47K 5% 1/4W
R402	1-249-429-11	CARBON	10K 5% 1/4W	R454	1-249-437-11	CARBON	47K 5% 1/4W
R403	1-247-807-31	CARBON	100 5% 1/4W	R455	1-249-437-11	CARBON	47K 5% 1/4W
R404	1-249-429-11	CARBON	10K 5% 1/4W	R456	1-249-437-11	CARBON	47K 5% 1/4W
R405	1-247-807-31	CARBON	100 5% 1/4W	R457	1-249-437-11	CARBON	47K 5% 1/4W
R406	1-247-807-31	CARBON	100 5% 1/4W	R458	1-247-807-31	CARBON	100 5% 1/4W
R407	1-247-807-31	CARBON	100 5% 1/4W	R459	1-247-807-31	CARBON	100 5% 1/4W
R408	1-247-807-31	CARBON	100 5% 1/4W	R460	1-249-413-11	CARBON	470 5% 1/4W F
R409	1-247-807-31	CARBON	100 5% 1/4W	R463	1-247-807-31	CARBON	100 5% 1/4W
R410	1-247-807-31	CARBON	100 5% 1/4W	R464	1-247-807-31	CARBON	100 5% 1/4W
R411	1-247-807-31	CARBON	100 5% 1/4W	R466	1-249-396-11	CARBON	18 5% 1/4W F
R412	1-247-807-31	CARBON	100 5% 1/4W	R469	1-249-419-11	CARBON	1.5K 5% 1/4W F
R413	1-247-807-31	CARBON	100 5% 1/4W	R470	1-249-401-11	CARBON	47 5% 1/4W F
R414	1-247-807-31	CARBON	100 5% 1/4W	R471	1-249-403-11	CARBON	68 5% 1/4W F
R415	1-247-807-31	CARBON	100 5% 1/4W	R472	1-247-807-31	CARBON	100 5% 1/4W
R416	1-249-433-11	CARBON	22K 5% 1/4W	R473	1-249-407-11	CARBON	150 5% 1/4W F
R417	1-249-429-11	CARBON	10K 5% 1/4W	R474	1-249-407-11	CARBON	150 5% 1/4W F
R418	1-249-429-11	CARBON	10K 5% 1/4W	R475	1-249-409-11	CARBON	220 5% 1/4W F
R419	1-249-429-11	CARBON	10K 5% 1/4W	R476	1-249-411-11	CARBON	330 5% 1/4W
R420	1-249-429-11	CARBON	10K 5% 1/4W	R477	1-249-413-11	CARBON	470 5% 1/4W F
				R478	1-249-415-11	CARBON	680 5% 1/4W F
				R479	1-249-417-11	CARBON	1K 5% 1/4W F
				R480	1-249-419-11	CARBON	1.5K 5% 1/4W F
				R481	1-249-421-11	CARBON	2.2K 5% 1/4W F
				R482	1-249-423-11	CARBON	3.3K 5% 1/4W F

DISP

EQ

Ref. No.	Part No.	Description	Remark
R483	1-249-427-11	CARBON 6.8K 5%	1/4W F
R484	1-249-431-11	CARBON 15K 5%	1/4W
R485	1-249-419-11	CARBON 1.5K 5%	1/4W F
R486	1-249-401-11	CARBON 47 5%	1/4W F
R487	1-249-403-11	CARBON 68 5%	1/4W F
R488	1-247-807-31	CARBON 100 5%	1/4W
R489	1-249-407-11	CARBON 150 5%	1/4W F
R490	1-249-407-11	CARBON 150 5%	1/4W F
R491	1-249-409-11	CARBON 220 5%	1/4W F
R492	1-249-411-11	CARBON 330 5%	1/4W
R493	1-249-413-11	CARBON 470 5%	1/4W F
R494	1-249-415-11	CARBON 680 5%	1/4W F
R495	1-249-417-11	CARBON 1K 5%	1/4W F
R496	1-249-419-11	CARBON 1.5K 5%	1/4W F
R497	1-249-421-11	CARBON 2.2K 5%	1/4W F
R498	1-249-423-11	CARBON 3.3K 5%	1/4W F
R499	1-249-427-11	CARBON 6.8K 5%	1/4W F
R500	1-249-431-11	CARBON 15K 5%	1/4W
R501	1-247-903-00	CARBON 1M 5%	1/4W
R502	1-247-881-00	CARBON 120K 5%	1/4W
R503	1-249-429-11	CARBON 10K 5%	1/4W
R504	1-247-903-00	CARBON 1M 5%	1/4W
R505	1-247-881-00	CARBON 120K 5%	1/4W
R506	1-249-429-11	CARBON 10K 5%	1/4W
R507	1-247-903-00	CARBON 1M 5%	1/4W
R508	1-249-441-11	CARBON 100K 5%	1/4W
R509	1-249-429-11	CARBON 10K 5%	1/4W
R510	1-247-903-00	CARBON 1M 5%	1/4W
R511	1-249-441-11	CARBON 100K 5%	1/4W
R512	1-249-429-11	CARBON 10K 5%	1/4W
R513	1-247-903-00	CARBON 1M 5%	1/4W
R514	1-249-440-11	CARBON 82K 5%	1/4W
R515	1-249-430-11	CARBON 12K 5%	1/4W
R516	1-247-903-00	CARBON 1M 5%	1/4W
R517	1-249-441-11	CARBON 100K 5%	1/4W
R518	1-249-428-11	CARBON 8.2K 5%	1/4W F
R519	1-247-903-00	CARBON 1M 5%	1/4W
R520	1-249-440-11	CARBON 82K 5%	1/4W
R521	1-249-417-11	CARBON 1K 5%	1/4W F
R522	1-249-441-11	CARBON 100K 5%	1/4W
< SWITCH >			
S469	1-554-303-21	SWITCH, TACTILE (POWER)	
S470	1-554-303-21	SWITCH, TACTILE (CENTER MODE)	
S471	1-554-303-21	SWITCH, TACTILE (DOLBY)	
S472	1-554-303-21	SWITCH, TACTILE (HALL)	
S473	1-554-303-21	SWITCH, TACTILE (SIMULATED)	
S474	1-554-303-21	SWITCH, TACTILE (DISPLAY)	
S475	1-554-303-21	SWITCH, TACTILE (EQ FLAT)	
S476	1-554-303-21	SWITCH, TACTILE (Δ)	
S477	1-554-303-21	SWITCH, TACTILE (▽)	
S478	1-554-303-21	SWITCH, TACTILE (▷)	

Ref. No.	Part No.	Description	Remark
S479	1-554-303-21	SWITCH, TACTILE (<)	
S480	1-554-303-21	SWITCH, TACTILE (EQ)	
S481	1-554-303-21	SWITCH, TACTILE (CENTER)	
S482	1-554-303-21	SWITCH, TACTILE (REAR)	
S483	1-554-303-21	SWITCH, TACTILE (WOOFER)	
S484	1-554-303-21	SWITCH, TACTILE (WOOFER ON/OFF)	
S485	1-554-303-21	SWITCH, TACTILE (1 (ROCK))	
S486	1-554-303-21	SWITCH, TACTILE (2 (POPS))	
S487	1-554-303-21	SWITCH, TACTILE (3 (CLASSIC))	
S488	1-554-303-21	SWITCH, TACTILE (4 (MOVIE))	
S489	1-554-303-21	SWITCH, TACTILE (5 (GAME))	
S490	1-554-303-21	SWITCH, TACTILE (PHONO)	
S491	1-554-303-21	SWITCH, TACTILE (TUNER)	
S492	1-554-303-21	SWITCH, TACTILE (CD)	
S493	1-554-303-21	SWITCH, TACTILE (TAPE)	
S494	1-554-303-21	SWITCH, TACTILE (VIDEO 1)	
S495	1-554-303-21	SWITCH, TACTILE (VIDEO 2)	
S496	1-554-303-21	SWITCH, TACTILE (VIDEO 3)	
S497	1-554-303-21	SWITCH, TACTILE (VIDEO 4)	
S498	1-554-303-21	SWITCH, TACTILE (USER)	
S499	1-554-303-21	SWITCH, TACTILE (SOUND FIELD)	
S500	1-554-303-21	SWITCH, TACTILE (MEMORY)	
< VIBRATOR >			
X401	1-577-101-11	VIBRATOR, CERAMIC (4MHz)	

*	A-4389-312-A	EQ BOARD, COMPLETE	

< CAPACITOR >			
C220	1-162-294-31	CERAMIC 0.001uF 10%	50V
C221	1-162-306-11	CERAMIC 0.01uF 30%	16V
C222	1-162-306-11	CERAMIC 0.01uF 30%	16V
C235	1-130-493-00	MYLAR 0.068uF 5%	50V
C236	1-124-903-11	ELECT 1uF 20%	50V
C237	1-130-488-00	MYLAR 0.027uF 5%	50V
C238	1-124-902-00	ELECT 0.47uF 20%	50V
C239	1-130-483-00	MYLAR 0.01uF 5%	50V
C240	1-130-498-00	MYLAR 0.18uF 5%	50V
C241	1-130-478-00	MYLAR 0.0039uF 5%	50V
C242	1-130-493-00	MYLAR 0.068uF 5%	50V
C243	1-130-474-00	MYLAR 0.0018uF 5%	50V
C244	1-130-489-00	MYLAR 0.033uF 5%	50V
C245	1-162-292-31	CERAMIC 680PF 10%	50V
C246	1-130-484-00	MYLAR 0.012uF 5%	50V
C247	1-162-287-31	CERAMIC 270PF 10%	50V
C248	1-130-479-00	MYLAR 0.0047uF 5%	50V
C250	1-126-963-11	ELECT 4.7uF 20%	50V
C270	1-162-294-31	CERAMIC 0.001uF 10%	50V
C271	1-162-306-11	CERAMIC 0.01uF 30%	16V

Ref. No.	Part No.	Description	Remark		
C272	1-162-306-11	CERAMIC	0.01uF	30%	16V
C275	1-124-907-11	ELECT	10uF	20%	50V
C276	1-124-907-11	ELECT	10uF	20%	50V
C277	1-126-961-11	ELECT	2.2uF	20%	50V
C285	1-130-493-00	MYLAR	0.068uF	5%	50V
C286	1-124-903-11	ELECT	1uF	20%	50V
C287	1-130-488-00	MYLAR	0.027uF	5%	50V
C288	1-124-902-00	ELECT	0.47uF	20%	50V
C289	1-130-483-00	MYLAR	0.01uF	5%	50V
C290	1-130-498-00	MYLAR	0.18uF	5%	50V
C291	1-130-478-00	MYLAR	0.0039uF	5%	50V
C292	1-130-493-00	MYLAR	0.068uF	5%	50V
C293	1-130-474-00	MYLAR	0.0018uF	5%	50V
C294	1-130-489-00	MYLAR	0.033uF	5%	50V
C295	1-162-292-31	CERAMIC	680PF	10%	50V
C296	1-130-484-00	MYLAR	0.012uF	5%	50V
C297	1-162-287-31	CERAMIC	270PF	10%	50V
C298	1-130-479-00	MYLAR	0.0047uF	5%	50V
C300	1-126-963-11	ELECT	4.7uF	20%	50V
< CONNECTOR >					
* CN109	1-766-719-11	CONNECTOR, BOARD TO BOARD 10P			
< IC >					
IC121	8-759-633-78	IC M5289P			
IC122	8-759-633-78	IC M5289P			
IC123	8-759-081-01	IC NJU7305L			
< RESISTOR >					
R221	1-247-895-00	CARBON	470K	5%	1/4W
R222	1-247-895-00	CARBON	470K	5%	1/4W
R223	1-247-895-00	CARBON	470K	5%	1/4W
R224	1-247-895-00	CARBON	470K	5%	1/4W
R225	1-247-895-00	CARBON	470K	5%	1/4W
R226	1-247-895-00	CARBON	470K	5%	1/4W
R227	1-247-895-00	CARBON	470K	5%	1/4W
R228	1-249-427-11	CARBON	6.8K	5%	1/4W F
R230	1-249-441-11	CARBON	100K	5%	1/4W
R271	1-247-895-00	CARBON	470K	5%	1/4W
R272	1-247-895-00	CARBON	470K	5%	1/4W
R273	1-247-895-00	CARBON	470K	5%	1/4W
R274	1-247-895-00	CARBON	470K	5%	1/4W
R275	1-247-895-00	CARBON	470K	5%	1/4W
R276	1-247-895-00	CARBON	470K	5%	1/4W
R277	1-247-895-00	CARBON	470K	5%	1/4W
R278	1-249-427-11	CARBON	6.8K	5%	1/4W F
R280	1-249-441-11	CARBON	100K	5%	1/4W
R291	1-249-416-11	CARBON	820	5%	1/4W F
R292	1-249-429-11	CARBON	10K	5%	1/4W
R293	1-249-416-11	CARBON	820	5%	1/4W F
R294	1-249-429-11	CARBON	10K	5%	1/4W
R295	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description	Remark		
*	1-661-168-11	HP BOARD			

< CAPACITOR >					
C811	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C812	1-164-159-11	CERAMIC	0.1uF		50V
C861	1-162-302-11	CERAMIC	0.0022uF	30%	16V
< CONNECTOR >					
CN406	1-770-388-11	PIN, CONNECTOR (PC BOARD) 4P			
< JACK >					
J801	1-569-113-11	JACK, LARGE TYPE (HEADPHONES)			

*	A-4389-302-A	MAIN BOARD, COMPLETE			

7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S				
< CAPACITOR >					
C101	1-164-159-11	CERAMIC	0.1uF		50V
C102	1-164-159-11	CERAMIC	0.1uF		50V
C115	1-126-163-11	ELECT	4.7uF	20%	50V
C116	1-162-282-31	CERAMIC	100PF	10%	50V
C117	1-124-261-00	ELECT	10uF	20%	50V
C118	1-130-480-00	MYLAR	0.0056uF	5%	50V
C119	1-130-473-00	MYLAR	0.0015uF	5%	50V
C120	1-126-301-11	ELECT	1uF	20%	50V
C121	1-124-589-11	ELECT	47uF	20%	16V
C122	1-124-589-11	ELECT	47uF	20%	16V
C123	1-162-306-11	CERAMIC	0.01uF	30%	16V
C124	1-164-159-11	CERAMIC	0.1uF		50V
C125	1-164-159-11	CERAMIC	0.1uF		50V
C126	1-162-286-31	CERAMIC	220PF	10%	50V
C127	1-162-600-11	CERAMIC	4700PF	10%	16V
C128	1-136-165-00	FILM	0.1uF	5%	50V
C130	1-164-159-11	CERAMIC	0.1uF		50V
C131	1-126-963-11	ELECT	4.7uF	20%	50V
C133	1-126-963-11	ELECT	4.7uF	20%	50V
C135	1-101-005-00	CERAMIC	22000PF		50V
C136	1-130-491-00	MYLAR	0.047uF	5%	50V
C137	1-126-923-11	ELECT	220uF	20%	10V
C138	1-126-964-11	ELECT	10uF	20%	50V
C139	1-126-964-11	ELECT	10uF	20%	50V
C140	1-126-964-11	ELECT	10uF	20%	50V
C141	1-126-964-11	ELECT	10uF	20%	50V
C142	1-126-923-11	ELECT	220uF	20%	10V
C146	1-136-165-00	FILM	0.1uF	5%	50V
C147	1-136-165-00	FILM	0.1uF	5%	50V
C148	1-124-902-00	ELECT	0.47uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C149	1-126-963-11	ELECT	4.7uF	20%	50V	C284	1-126-964-11	ELECT	10uF	20%	50V
C151	1-164-159-11	CERAMIC	0.1uF		50V	C301	1-126-964-11	ELECT	10uF	20%	50V
C152	1-164-159-11	CERAMIC	0.1uF		50V	C302	1-126-964-11	ELECT	10uF	20%	50V
C165	1-126-163-11	ELECT	4.7uF	20%	50V						
C166	1-162-282-31	CERAMIC	100PF	10%	50V	C306	1-126-964-11	ELECT	10uF	20%	50V
						C307	1-162-282-31	CERAMIC	100PF	10%	50V
C167	1-124-261-00	ELECT	10uF	20%	50V	C308	1-126-964-11	ELECT	10uF	20%	50V
C168	1-130-480-00	MYLAR	0.0056uF	5%	50V	C311	1-124-902-00	ELECT	0.47uF	20%	50V
C169	1-130-473-00	MYLAR	0.0015uF	5%	50V	C312	1-136-172-00	FILM	0.39uF	5%	50V
C170	1-126-301-11	ELECT	1uF	20%	50V						
C177	1-162-600-11	CERAMIC	4700PF	10%	16V	C313	1-136-166-00	FILM	0.12uF	5%	50V
						C315	1-124-902-00	ELECT	0.47uF	20%	50V
C181	1-126-963-11	ELECT	4.7uF	20%	50V	C321	1-126-964-11	ELECT	10uF	20%	50V
C183	1-126-963-11	ELECT	4.7uF	20%	50V	C322	1-104-664-11	ELECT	47uF	20%	25V
C185	1-124-902-00	ELECT	0.47uF	20%	50V	C323	1-164-159-11	CERAMIC	0.1uF		50V
C186	1-126-963-11	ELECT	4.7uF	20%	50V						
C187	1-136-167-00	FILM	0.15uF	5%	50V	C324	1-124-902-00	ELECT	0.47uF	20%	50V
						C325	1-126-964-11	ELECT	10uF	20%	50V
C188	1-126-962-11	ELECT	3.3uF	20%	50V	C326	1-104-664-11	ELECT	47uF	20%	25V
C189	1-136-167-00	FILM	0.15uF	5%	50V	C327	1-164-159-11	CERAMIC	0.1uF		50V
C190	1-136-167-00	FILM	0.15uF	5%	50V	C328	1-124-902-00	ELECT	0.47uF	20%	50V
C191	1-126-962-11	ELECT	3.3uF	20%	50V						
C192	1-136-167-00	FILM	0.15uF	5%	50V	C330	1-126-964-11	ELECT	10uF	20%	50V
						C331	1-104-664-11	ELECT	47uF	20%	25V
C193	1-126-963-11	ELECT	4.7uF	20%	50V	C332	1-164-159-11	CERAMIC	0.1uF		50V
C194	1-124-902-00	ELECT	0.47uF	20%	50V	C333	1-124-902-00	ELECT	0.47uF	20%	50V
C195	1-126-963-11	ELECT	4.7uF	20%	50V	C351	1-126-964-11	ELECT	10uF	20%	50V
C196	1-124-902-00	ELECT	0.47uF	20%	50V						
C197	1-136-165-00	FILM	0.1uF	5%	50V	C361	1-126-964-11	ELECT	10uF	20%	50V
						C371	1-126-964-11	ELECT	10uF	20%	50V
C198	1-136-165-00	FILM	0.1uF	5%	50V	C372	1-104-664-11	ELECT	47uF	20%	25V
C199	1-126-967-11	ELECT	47uF	20%	16V	C373	1-164-159-11	CERAMIC	0.1uF		50V
C200	1-124-902-00	ELECT	0.47uF	20%	50V	C374	1-124-902-00	ELECT	0.47uF	20%	50V
C201	1-126-964-11	ELECT	10uF	20%	50V						
C202	1-126-964-11	ELECT	10uF	20%	50V	C375	1-126-964-11	ELECT	10uF	20%	50V
						C376	1-104-664-11	ELECT	47uF	20%	25V
C203	1-162-292-31	CERAMIC	680PF	10%	50V	C377	1-164-159-11	CERAMIC	0.1uF		50V
C205	1-164-159-11	CERAMIC	0.1uF		50V	C378	1-124-902-00	ELECT	0.47uF	20%	50V
C206	1-162-286-31	CERAMIC	220PF	10%	50V	C379	1-126-964-11	ELECT	10uF	20%	50V
C207	1-124-925-11	ELECT	2.2uF	20%	100V						
C208	1-126-964-11	ELECT	10uF	20%	50V	C380	1-126-964-11	ELECT	10uF	20%	50V
						C381	1-104-664-11	ELECT	47uF	20%	25V
C209	1-126-964-11	ELECT	10uF	20%	50V	C382	1-164-159-11	CERAMIC	0.1uF		50V
C210	1-162-306-11	CERAMIC	0.01uF	30%	16V	C701	1-126-963-11	ELECT	4.7uF	20%	50V
C211	1-124-903-11	ELECT	1uF	20%	50V	C702	1-162-286-31	CERAMIC	220PF	10%	50V
C212	1-130-489-00	MYLAR	0.033uF	5%	50V						
C213	1-130-473-00	MYLAR	0.0015uF	5%	50V	C703	1-162-286-31	CERAMIC	220PF	10%	50V
						C704	1-126-963-11	ELECT	4.7uF	20%	50V
C214	1-130-489-00	MYLAR	0.033uF	5%	50V	C705	1-162-191-31	CERAMIC	2.2PF	10%	50V
C215	1-126-923-11	ELECT	220uF	20%	10V	C706	1-126-967-11	ELECT	47uF	20%	50V
C216	1-126-923-11	ELECT	220uF	20%	10V	C707	1-136-165-00	FILM	0.1uF	5%	50V
C217	1-164-159-11	CERAMIC	0.1uF		50V						
C230	1-124-903-11	ELECT	1uF	20%	50V	C708	1-130-493-00	MYLAR	0.068uF	5%	50V
						C711	1-124-667-11	ELECT	10uF	20%	100V
C231	1-136-165-00	FILM	0.1uF	5%	50V	C712	1-124-667-11	ELECT	10uF	20%	100V
C232	1-124-903-11	ELECT	1uF	20%	50V	C713	1-124-667-11	ELECT	10uF	20%	100V
C233	1-136-165-00	FILM	0.1uF	5%	50V	C714	1-126-923-11	ELECT	220uF	20%	10V
C234	1-126-964-11	ELECT	10uF	20%	50V						
C281	1-136-165-00	FILM	0.1uF	5%	50V	C731	1-126-963-11	ELECT	4.7uF	20%	50V
						C732	1-162-286-31	CERAMIC	220PF	10%	50V
C282	1-124-903-11	ELECT	1uF	20%	50V	C733	1-162-294-31	CERAMIC	0.001uF	10%	50V
C283	1-136-165-00	FILM	0.1uF	5%	50V	C734	1-104-664-11	ELECT	47uF	20%	25V

Ref. No.	Part No.	Description			Remark
C735	1-162-191-31	CERAMIC	2.2PF	10%	50V
C736	1-126-967-11	ELECT	47uF	20%	50V
C737	1-136-165-00	FILM	0.1uF	5%	50V
C738	1-130-493-00	MYLAR	0.068uF	5%	50V
C740	1-126-968-11	ELECT	100uF	20%	50V
C741	1-126-964-11	ELECT	10uF	20%	50V
C742	1-126-964-11	ELECT	10uF	20%	50V
C743	1-126-968-11	ELECT	100uF	20%	50V
C744	1-126-964-11	ELECT	10uF	20%	50V
C751	1-126-963-11	ELECT	4.7uF	20%	50V
C752	1-162-286-31	CERAMIC	220PF	10%	50V
C753	1-162-286-31	CERAMIC	220PF	10%	50V
C754	1-126-963-11	ELECT	4.7uF	20%	50V
C755	1-162-191-31	CERAMIC	2.2PF	10%	50V
C756	1-126-967-11	ELECT	47uF	20%	50V
C757	1-136-165-00	FILM	0.1uF	5%	50V
C758	1-130-493-00	MYLAR	0.068uF	5%	50V
C781	1-126-963-11	ELECT	4.7uF	20%	50V
C782	1-162-286-31	CERAMIC	220PF	10%	50V
C783	1-162-286-31	CERAMIC	220PF	10%	50V
C784	1-104-664-11	ELECT	47uF	20%	25V
C785	1-162-191-31	CERAMIC	2.2PF	10%	50V
C786	1-126-967-11	ELECT	47uF	20%	50V
C787	1-136-165-00	FILM	0.1uF	5%	50V
C788	1-130-493-00	MYLAR	0.068uF	5%	50V
C801	1-126-963-11	ELECT	4.7uF	20%	50V
C802	1-162-286-31	CERAMIC	220PF	10%	50V
C803	1-162-294-31	CERAMIC	0.001uF	10%	50V
C804	1-162-191-31	CERAMIC	2.2PF	10%	50V
C805	1-104-664-11	ELECT	47uF	20%	25V
C806	1-126-964-11	ELECT	10uF	20%	50V
C807	1-126-964-11	ELECT	10uF	20%	50V
C808	1-130-493-00	MYLAR	0.068uF	5%	50V
C821	1-104-664-11	ELECT	47uF	20%	25V
C822	1-126-964-11	ELECT	10uF	20%	50V
C823	1-126-933-11	ELECT	100uF	20%	10V
C824	1-104-664-11	ELECT	47uF	20%	25V
C825	1-126-964-11	ELECT	10uF	20%	50V
C851	1-162-306-11	CERAMIC	0.01uF	30%	16V
C901	1-110-592-11	ELECT	8200uF	99%	71V
C902	1-110-592-11	ELECT	8200uF	99%	71V
C903	1-126-955-11	ELECT	4700uF	20%	35V
C904	1-126-955-11	ELECT	4700uF	20%	35V
C905	1-106-367-00	MYLAR	0.01uF	5%	200V
C906	1-106-367-00	MYLAR	0.01uF	5%	200V
C907	1-106-375-12	MYLAR	0.022uF	5%	200V
C908	1-106-375-12	MYLAR	0.022uF	5%	200V
C909	1-126-967-11	ELECT	47uF	20%	50V
C910	1-126-967-11	ELECT	47uF	20%	50V
C911	1-104-664-11	ELECT	47uF	20%	25V
C912	1-104-664-11	ELECT	47uF	20%	25V

Ref. No.	Part No.	Description			Remark
C913	1-126-933-11	ELECT	100uF	20%	10V
C914	1-126-933-11	ELECT	100uF	20%	10V
C915	1-126-964-11	ELECT	10uF	20%	50V
C916	1-126-964-11	ELECT	10uF	20%	50V
C918	1-126-964-11	ELECT	10uF	20%	50V
C919	1-104-664-11	ELECT	47uF	20%	25V
< CONNECTOR >					
* CN101	1-568-844-11	SOCKET, CONNECTOR 29P			
CN102	1-770-721-11	CONNECTOR, BOARD TO BOARD 4P			
CN104	1-770-832-11	CONNECTOR, BOARD TO BOARD 6P			
CN106	1-770-722-11	CONNECTOR, BOARD TO BOARD 6P			
* CN108	1-766-715-11	CONNECTOR, BOARD TO BOARD 10P			
CN403	1-750-194-11	CONNECTOR, BOARD TO BOARD 4P			
< DIODE >					
D301	8-719-987-63	DIODE 1N4148M			
D302	8-719-987-63	DIODE 1N4148M			
D303	8-719-933-36	DIODE HZS6B1L			
D304	8-719-933-36	DIODE HZS6B1L			
D701	8-719-815-85	DIODE 1S1585			
D702	8-719-815-85	DIODE 1S1585			
D731	8-719-987-63	DIODE 1N4148M			
D751	8-719-815-85	DIODE 1S1585			
D781	8-719-987-63	DIODE 1N4148M			
D821	8-719-987-63	DIODE 1N4148M			
D822	8-719-987-63	DIODE 1N4148M			
D851	8-719-987-63	DIODE 1N4148M			
D852	8-719-987-63	DIODE 1N4148M			
D853	8-719-987-63	DIODE 1N4148M			
D901	8-719-510-68	DIODE D5SBA20F01			
D902	8-719-510-68	DIODE D5SBA20F01			
D903	8-719-001-21	DIODE UZL-9H1			
D904	8-719-001-21	DIODE UZL-9H1			
D905	8-719-002-67	DIODE UZL-33H			
D909	8-719-933-36	DIODE HZS6B1L			
< GROUND TERMINAL >					
* EB701	1-537-738-21	TERMINAL, EARTH			
< IC >					
IC101	8-759-634-51	IC M5218AP			
IC102	8-759-805-14	IC LC7822			
IC103	8-759-248-74	IC LA2785			
IC104	8-759-341-23	IC LV1011			
IC107	8-759-634-51	IC M5218AP			
IC108	8-759-634-51	IC M5218AP			
IC109	8-759-634-51	IC M5218AP			
IC110	8-759-634-51	IC M5218AP			
IC112	8-759-281-42	IC TC9210P			
IC113	8-759-281-42	IC TC9210P			

MAIN

Ref. No.	Part No.	Description	Remark
IC114	8-759-281-42	IC TC9210P	
IC120	8-759-000-49	IC MC14066BCP	
IC170	8-759-000-49	IC MC14066BCP	
IC301	8-759-634-51	IC M5218AP	
IC701	8-749-010-34	IC STK4241MK2	
IC702	8-749-920-10	IC STK4172MK2	
IC703	8-759-085-89	IC LM3875-S	
IC821	8-759-111-68	IC uPC1237HA	
< JACK >			
J101	1-766-558-41	JACK, PIN 8P (TAPE REC OUT, CD/TUNER/PHONO IN)	
J102	1-766-558-31	JACK, PIN 8P (VIDEO2 AUDIO IN/OUT, VIDEO 3 AUDIO IN, TAPE IN)	
J103	1-573-028-31	JACK, PIN 4P (VIDEO 1 VIDEO IN/OUT, VIDEO1 AUDIO IN/OUT)	
< COIL >			
L101	1-410-521-11	INDUCTOR 100uH	
L102	1-410-521-11	INDUCTOR 100uH	
L701	1-420-872-00	COIL, AIR-CORE	
L751	1-420-872-00	COIL, AIR-CORE	
< TRANSISTOR >			
Q104	8-729-900-36	TRANSISTOR DTC124ES	
Q105	8-729-900-36	TRANSISTOR DTC124ES	
Q106	8-729-900-36	TRANSISTOR DTC124ES	
Q201	8-729-900-36	TRANSISTOR DTC124ES	
Q231	8-729-900-36	TRANSISTOR DTC124ES	
Q281	8-729-900-36	TRANSISTOR DTC124ES	
Q301	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q331	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q332	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q333	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q381	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q382	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q701	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q731	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q751	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q781	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q821	8-729-900-63	TRANSISTOR DTA124ES	
Q822	8-729-900-36	TRANSISTOR DTC124ES	
Q823	8-729-900-63	TRANSISTOR DTA124ES	
Q824	8-729-119-79	TRANSISTOR 2SC2785-FEK	
Q901	8-729-209-15	TRANSISTOR 2SD2012	
Q902	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q903	8-729-030-19	TRANSISTOR 2SB1640	
Q909	8-729-030-18	TRANSISTOR 2SD2525	
< RESISTOR >			
R101	1-249-417-11	CARBON 1K 5% 1/4W F	
R102	1-249-417-11	CARBON 1K 5% 1/4W F	
R103	1-249-423-11	CARBON 3.3K 5% 1/4W F	

Ref. No.	Part No.	Description	Remark
R104	1-249-417-11	CARBON 1K 5% 1/4W F	
R105	1-249-417-11	CARBON 1K 5% 1/4W F	
R106	1-249-417-11	CARBON 1K 5% 1/4W F	
R107	1-249-417-11	CARBON 1K 5% 1/4W F	
R108	1-249-417-11	CARBON 1K 5% 1/4W F	
R109	1-249-417-11	CARBON 1K 5% 1/4W F	
R110	1-249-417-11	CARBON 1K 5% 1/4W F	
R111	1-249-433-11	CARBON 22K 5% 1/4W	
R112	1-249-433-11	CARBON 22K 5% 1/4W	
R113	1-249-433-11	CARBON 22K 5% 1/4W	
R115	1-249-437-11	CARBON 47K 5% 1/4W	
R116	1-249-415-11	CARBON 680 5% 1/4W F	
R117	1-247-897-11	CARBON 560K 5% 1/4W	
R118	1-249-437-11	CARBON 47K 5% 1/4W	
R119	1-249-441-11	CARBON 100K 5% 1/4W	
R120	1-249-409-11	CARBON 220 5% 1/4W F	
R121	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R122	1-249-417-11	CARBON 1K 5% 1/4W F	
R123	1-249-417-11	CARBON 1K 5% 1/4W F	
R124	1-249-417-11	CARBON 1K 5% 1/4W F	
R126	1-249-428-11	CARBON 8.2K 5% 1/4W F	
R127	1-249-417-11	CARBON 1K 5% 1/4W F	
R131	1-249-441-11	CARBON 100K 5% 1/4W	
R133	1-249-427-11	CARBON 6.8K 5% 1/4W F	
R134	1-249-441-11	CARBON 100K 5% 1/4W	
R140	1-249-441-11	CARBON 100K 5% 1/4W	
R141	1-249-417-11	CARBON 1K 5% 1/4W F	
R142	1-249-417-11	CARBON 1K 5% 1/4W F	
R143	1-249-417-11	CARBON 1K 5% 1/4W F	
R144	1-249-435-11	CARBON 33K 5% 1/4W	
R145	1-249-431-11	CARBON 15K 5% 1/4W	
R146	1-249-441-11	CARBON 100K 5% 1/4W	
R147	1-249-411-11	CARBON 330 5% 1/4W	
R148	1-247-903-00	CARBON 1M 5% 1/4W	
R151	1-249-417-11	CARBON 1K 5% 1/4W F	
R152	1-249-417-11	CARBON 1K 5% 1/4W F	
R153	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R154	1-249-417-11	CARBON 1K 5% 1/4W F	
R155	1-249-417-11	CARBON 1K 5% 1/4W F	
R156	1-249-417-11	CARBON 1K 5% 1/4W F	
R157	1-249-417-11	CARBON 1K 5% 1/4W F	
R158	1-249-417-11	CARBON 1K 5% 1/4W F	
R159	1-249-417-11	CARBON 1K 5% 1/4W F	
R160	1-249-417-11	CARBON 1K 5% 1/4W F	
R165	1-249-437-11	CARBON 47K 5% 1/4W	
R166	1-249-415-11	CARBON 680 5% 1/4W F	
R167	1-247-897-11	CARBON 560K 5% 1/4W	
R168	1-249-437-11	CARBON 47K 5% 1/4W	
R169	1-249-441-11	CARBON 100K 5% 1/4W	
R170	1-249-409-11	CARBON 220 5% 1/4W F	
R176	1-249-428-11	CARBON 8.2K 5% 1/4W F	
R177	1-249-417-11	CARBON 1K 5% 1/4W F	

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
R181	1-249-441-11	CARBON	100K	5%	1/4W	R354	1-249-427-11	CARBON	6.8K 5% 1/4W F
R183	1-249-427-11	CARBON	6.8K	5%	1/4W F	R355	1-249-426-11	CARBON	5.6K 5% 1/4W
R184	1-249-441-11	CARBON	100K	5%	1/4W	R357	1-249-433-11	CARBON	22K 5% 1/4W
R201	1-249-429-11	CARBON	10K	5%	1/4W				
R232	1-249-438-11	CARBON	56K	5%	1/4W	R358	1-249-437-11	CARBON	47K 5% 1/4W
						R359	1-249-441-11	CARBON	100K 5% 1/4W
R233	1-249-432-11	CARBON	18K	5%	1/4W	R360	1-249-437-11	CARBON	47K 5% 1/4W
R234	1-247-883-00	CARBON	150K	5%	1/4W	R361	1-249-429-11	CARBON	10K 5% 1/4W
R235	1-249-416-11	CARBON	820	5%	1/4W F	R362	1-249-417-11	CARBON	1K 5% 1/4W F
R236	1-247-899-11	CARBON	680K	5%	1/4W				
R237	1-249-441-11	CARBON	100K	5%	1/4W	R363	1-249-429-11	CARBON	10K 5% 1/4W
						R381	1-249-441-11	CARBON	100K 5% 1/4W
R282	1-249-438-11	CARBON	56K	5%	1/4W	R382	1-249-421-11	CARBON	2.2K 5% 1/4W F
R283	1-249-432-11	CARBON	18K	5%	1/4W	R383	1-249-429-11	CARBON	10K 5% 1/4W
R284	1-247-883-00	CARBON	150K	5%	1/4W	R384	1-249-441-11	CARBON	100K 5% 1/4W
R285	1-249-416-11	CARBON	820	5%	1/4W F				
R286	1-247-899-11	CARBON	680K	5%	1/4W	R385	1-249-421-11	CARBON	2.2K 5% 1/4W F
						R386	1-249-429-11	CARBON	10K 5% 1/4W
R287	1-249-441-11	CARBON	100K	5%	1/4W	R387	1-249-441-11	CARBON	100K 5% 1/4W
R301	1-249-417-11	CARBON	1K	5%	1/4W F	R701	1-249-417-11	CARBON	1K 5% 1/4W F
R302	1-249-441-11	CARBON	100K	5%	1/4W	R702	1-249-439-11	CARBON	68K 5% 1/4W F
R303	1-249-417-11	CARBON	1K	5%	1/4W F				
R304	1-249-427-11	CARBON	6.8K	5%	1/4W F	R703	1-249-413-11	CARBON	470 5% 1/4W F
						R704	1-249-439-11	CARBON	68K 5% 1/4W
R305	1-249-426-11	CARBON	5.6K	5%	1/4W	R705	1-249-425-11	CARBON	4.7K 5% 1/4W F
R306	1-249-433-11	CARBON	22K	5%	1/4W	R706	1-249-421-11	CARBON	2.2K 5% 1/4W F
R307	1-249-433-11	CARBON	22K	5%	1/4W	R707	1-249-421-11	CARBON	2.2K 5% 1/4W F
R308	1-249-433-11	CARBON	22K	5%	1/4W				
R309	1-249-433-11	CARBON	22K	5%	1/4W	R708	1-249-417-11	CARBON	1K 5% 1/4W F
						R709	1-249-417-11	CARBON	1K 5% 1/4W F
R310	1-247-901-11	CARBON	820K	5%	1/4W	R710	1-249-433-11	CARBON	22K 5% 1/4W
R311	1-247-807-31	CARBON	100	5%	1/4W	△R711	1-208-601-11	WIREWOUND	0.1 10% 2W F
R312	1-249-441-11	CARBON	100K	5%	1/4W	R712	1-249-433-11	CARBON	22K 5% 1/4W
R313	1-247-878-00	CARBON	91K	5%	1/4W				
R314	1-249-418-11	CARBON	1.2K	5%	1/4W F	R713	1-249-393-11	CARBON	10 5% 1/4W F
						R714	1-249-393-11	CARBON	10 5% 1/4W F
R315	1-249-427-11	CARBON	6.8K	5%	1/4W F	R715	1-249-393-11	CARBON	10 5% 1/4W F
R316	1-249-432-11	CARBON	18K	5%	1/4W	R716	1-249-393-11	CARBON	10 5% 1/4W F
R317	1-249-429-11	CARBON	10K	5%	1/4W	△R721	1-249-405-11	CARBON	100 5% 1/4W F
R318	1-249-429-11	CARBON	10K	5%	1/4W				
R319	1-249-425-11	CARBON	4.7K	5%	1/4W F	△R722	1-249-405-11	CARBON	100 5% 1/4W F
						R723	1-249-429-11	CARBON	10K 5% 1/4W
R320	1-249-437-11	CARBON	47K	5%	1/4W	R724	1-247-887-00	CARBON	220K 5% 1/4W
R331	1-249-441-11	CARBON	100K	5%	1/4W	R725	1-249-425-11	CARBON	4.7K 5% 1/4W F
R332	1-249-421-11	CARBON	2.2K	5%	1/4W F	R731	1-249-417-11	CARBON	1K 5% 1/4W F
R333	1-249-429-11	CARBON	10K	5%	1/4W				
R334	1-249-441-11	CARBON	100K	5%	1/4W	R732	1-249-439-11	CARBON	68K 5% 1/4W
						R733	1-249-413-11	CARBON	470 5% 1/4W F
R335	1-249-421-11	CARBON	2.2K	5%	1/4W F	R734	1-249-439-11	CARBON	68K 5% 1/4W
R336	1-249-429-11	CARBON	10K	5%	1/4W	R735	1-249-421-11	CARBON	2.2K 5% 1/4W F
R337	1-249-441-11	CARBON	100K	5%	1/4W	R736	1-249-421-11	CARBON	2.2K 5% 1/4W F
R338	1-249-421-11	CARBON	2.2K	5%	1/4W F				
R339	1-249-429-11	CARBON	10K	5%	1/4W	△R737	1-249-417-11	CARBON	1K 5% 1/4W F
						R738	1-249-417-11	CARBON	1K 5% 1/4W F
R341	1-249-437-11	CARBON	47K	5%	1/4W	R739	1-249-433-11	CARBON	22K 5% 1/4W
R342	1-249-437-11	CARBON	47K	5%	1/4W	△R740	1-208-602-11	WIREWOUND	0.22 10% 2W F
R343	1-249-437-11	CARBON	47K	5%	1/4W	R741	1-249-433-11	CARBON	22K 5% 1/4W
R344	1-249-437-11	CARBON	47K	5%	1/4W				
R351	1-249-417-11	CARBON	1K	5%	1/4W F	R742	1-249-393-11	CARBON	10 5% 1/4W F
						△R743	1-249-405-11	CARBON	100 5% 1/4W F
R352	1-249-441-11	CARBON	100K	5%	1/4W	△R744	1-249-405-11	CARBON	100 5% 1/4W F
R353	1-249-417-11	CARBON	1K	5%	1/4W F	R751	1-249-417-11	CARBON	1K 5% 1/4W F

The components identified by mark △ or dotted line with mark △ are critical for safety.
 Replace only with part number specified.

MAIN

POWER

Ref. No.	Part No.	Description	Remark
R752	1-249-439-11	CARBON	68K 5% 1/4W
R753	1-249-413-11	CARBON	470 5% 1/4W F
R754	1-249-439-11	CARBON	68K 5% 1/4W
R755	1-249-425-11	CARBON	4.7K 5% 1/4W F
R756	1-249-421-11	CARBON	2.2K 5% 1/4W F
R757	1-249-421-11	CARBON	2.2K 5% 1/4W F
R758	1-249-417-11	CARBON	1K 5% 1/4W F
R759	1-249-417-11	CARBON	1K 5% 1/4W F
R760	1-249-433-11	CARBON	22K 5% 1/4W
△R761	1-208-601-11	WIREWOUND	0.1 10% 2W F
R762	1-249-433-11	CARBON	22K 5% 1/4W
R763	1-249-393-11	CARBON	10 5% 1/4W F
R764	1-249-393-11	CARBON	10 5% 1/4W F
R765	1-249-393-11	CARBON	10 5% 1/4W F
R766	1-249-393-11	CARBON	10 5% 1/4W F
R770	1-249-417-11	CARBON	1K 5% 1/4W F
R781	1-249-417-11	CARBON	1K 5% 1/4W F
R782	1-249-439-11	CARBON	68K 5% 1/4W
R783	1-249-413-11	CARBON	470 5% 1/4W F
R784	1-249-439-11	CARBON	68K 5% 1/4W
R785	1-249-421-11	CARBON	2.2K 5% 1/4W F
R786	1-249-421-11	CARBON	2.2K 5% 1/4W F
△R787	1-249-417-11	CARBON	1K 5% 1/4W F
R788	1-249-417-11	CARBON	1K 5% 1/4W F
R789	1-249-433-11	CARBON	22K 5% 1/4W
△R790	1-208-602-11	WIREWOUND	0.22 10% 2W F
R791	1-249-433-11	CARBON	22K 5% 1/4W
R792	1-249-393-11	CARBON	10 5% 1/4W F
R801	1-249-417-11	CARBON	1K 5% 1/4W F
R802	1-249-439-11	CARBON	68K 5% 1/4W
R803	1-249-413-11	CARBON	470 5% 1/4W F
R804	1-249-439-11	CARBON	68K 5% 1/4W
R805	1-249-393-11	CARBON	10 5% 1/4W F
R811	1-249-416-11	CARBON	820 5% 1/4W F
R812	1-249-416-11	CARBON	820 5% 1/4W F
R813	1-260-094-11	CARBON	390 5% 1/2W
R821	1-249-431-11	CARBON	15K 5% 1/4W
R822	1-249-429-11	CARBON	10K 5% 1/4W
R823	1-249-439-11	CARBON	68K 5% 1/4W
R824	1-249-441-11	CARBON	100K 5% 1/4W
R825	1-249-427-11	CARBON	6.8K 5% 1/4W F
R827	1-249-429-11	CARBON	10K 5% 1/4W
R828	1-249-417-11	CARBON	1K 5% 1/4W F
R829	1-249-425-11	CARBON	4.7K 5% 1/4W F
R831	1-249-435-11	CARBON	33K 5% 1/4W
R832	1-249-437-11	CARBON	47K 5% 1/4W
R833	1-249-438-11	CARBON	56K 5% 1/4W
R834	1-249-435-11	CARBON	33K 5% 1/4W
R835	1-249-437-11	CARBON	47K 5% 1/4W
R836	1-249-429-11	CARBON	10K 5% 1/4W
R837	1-249-429-11	CARBON	10K 5% 1/4W

Ref. No.	Part No.	Description	Remark
R838	1-249-437-11	CARBON	47K 5% 1/4W
△R851	1-215-885-00	METAL OXIDE	68 5% 2W F
R861	1-249-416-11	CARBON	820 5% 1/4W F
R862	1-249-416-11	CARBON	820 5% 1/4W F
R863	1-260-094-11	CARBON	390 5% 1/2W
△R901	1-215-906-11	METAL OXIDE	15 5% 3W F
△R902	1-215-888-00	METAL OXIDE	220 5% 2W F
R903	1-249-419-11	CARBON	1.5K 5% 1/4W F
R904	1-249-419-11	CARBON	1.5K 5% 1/4W F
R905	1-249-419-11	CARBON	1.5K 5% 1/4W F
R906	1-249-419-11	CARBON	1.5K 5% 1/4W F
△R907	1-215-869-11	METAL OXIDE	1K 5% 1W F
R908	1-249-427-11	CARBON	6.8K 5% 1/4W F
R909	1-249-423-11	CARBON	3.3K 5% 1/4W F
△R921	1-215-906-11	METAL OXIDE	15 5% 3W F
R961	1-247-807-31	CARBON	100 5% 1/4W
R962	1-247-807-31	CARBON	100 5% 1/4W
R964	1-247-807-31	CARBON	100 5% 1/4W
R965	1-247-807-31	CARBON	100 5% 1/4W
R966	1-247-807-31	CARBON	100 5% 1/4W
R967	1-247-807-31	CARBON	100 5% 1/4W
R968	1-247-807-31	CARBON	100 5% 1/4W
R969	1-247-807-31	CARBON	100 5% 1/4W
R970	1-247-807-31	CARBON	100 5% 1/4W
R971	1-247-807-31	CARBON	100 5% 1/4W
		< RELAY >	
RY851	1-755-141-11	RELAY	
RY852	1-515-920-11	RELAY (24V)	
RY853	1-515-920-11	RELAY (24V)	
		< TERMINAL >	
TM801	1-694-055-11	TERMINAL BOARD (SP) (FRONT/CENTER/WOOFER SPEAKERS)	
		< VIBRATOR >	
X101	1-579-125-11	VIBRATOR, CERAMIC (8MHz)	

*	1-661-164-11	POWER BOARD	*****
		< CAPACITOR >	
△C951	1-113-925-11	ELECT	0.01uF 20% 250V
C952	1-130-487-00	MYLAR	0.022uF 5% 50V
C953	1-124-557-11	ELECT	1000uF 20% 25V
C954	1-161-494-00	CERAMIC	0.022uF 25V
C955	1-124-463-00	ELECT	0.1uF 20% 50V
C956	1-162-306-11	CERAMIC	0.01uF 30% 16V
C957	1-162-306-11	CERAMIC	0.01uF 30% 16V
C958	1-124-907-11	ELECT	10uF 20% 50V
C959	1-162-306-11	CERAMIC	0.01uF 30% 16V

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Ref. No.	Part No.	Description	Remark
C960	1-164-159-11	CERAMIC 0.1uF	50V
		< CONNECTOR >	
CN904	1-564-321-00	PIN, CONNECTOR 2P	
CN905	1-564-321-00	PIN, CONNECTOR 2P	
△ CN906	1-540-061-11	OUTLET, AC (POLAR)	
* CN907	1-568-824-11	SOCKET, CONNECTOR 5P	
		< DIODE >	
D951	8-719-024-99	DIODE 11ES2-NTA2B	
D952	8-719-024-99	DIODE 11ES2-NTA2B	
D953	8-719-024-99	DIODE 11ES2-NTA2B	
D954	8-719-024-99	DIODE 11ES2-NTA2B	
D955	8-719-987-63	DIODE 1N4148M	
D956	8-719-987-63	DIODE 1N4148M	
		< GROUND TERMINAL >	
EB901	1-537-770-21	TERMINAL BOARD, GROUND	
		< IC >	
IC951	8-759-820-13	IC L78MR06	
		< TRANSISTOR >	
Q951	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< RESISTOR >	
R935	1-249-417-11	CARBON 1K 5% 1/4W F	
R952	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R953	1-249-437-11	CARBON 47K 5% 1/4W	
R954	1-249-429-11	CARBON 10K 5% 1/4W	
		< RELAY >	
△ RY951	1-515-999-11	RELAY, POWER	
		< TRANSFORMER >	
△ T951	1-450-361-11	TRANSFORMER, POWER	

*	1-661-163-11	REAR SP BOARD	

		< CONNECTOR >	
CN103	1-770-725-11	CONNECTOR, BOARD TO BOARD 4P	
		< TERMINAL >	
TM802	1-537-240-11	TERMINAL BOARD (CHECKER PIN)	(REAR SPEAKERS)

Ref. No.	Part No.	Description	Remark
*	1-661-165-11	T-1 BOARD	

*	1-661-166-11	T-2 BOARD	

	1-533-217-31	HOLDER, FUSE	
		< CONNECTOR >	
CN902	1-691-774-11	PLUG (MICRO CONNECTOR) 12P	
		< FUSE >	
△ F904	1-533-310-11	FUSE, GLASS TUBE 6.3A 125V	
△ F905	1-533-310-11	FUSE, GLASS TUBE 6.3A 125V	
△ F906	1-533-310-11	FUSE, GLASS TUBE 6.3A 125V	
△ F907	1-533-310-11	FUSE, GLASS TUBE 6.3A 125V	

*	1-659-613-11	VIDEO BOARD	

		< CAPACITOR >	
C335	1-126-963-11	ELECT 4.7uF 20% 50V	
C336	1-126-963-11	ELECT 4.7uF 20% 50V	
C337	1-126-963-11	ELECT 4.7uF 20% 50V	
C338	1-124-471-00	ELECT 1000uF 20% 6.3V	
C339	1-124-471-00	ELECT 1000uF 20% 6.3V	
C340	1-124-471-00	ELECT 1000uF 20% 6.3V	
C341	1-104-656-11	ELECT 2200uF 20% 6.3V	
C342	1-126-963-11	ELECT 4.7uF 20% 50V	
		< CONNECTOR >	
CN107	1-770-726-11	CONNECTOR, BOARD TO BOARD 6P	
		< IC >	
IC125	8-759-061-95	IC SN761200N	
		< JACK >	
J104	1-774-821-11	JACK, PIN 3P (VIDEO 1/2/3 VIDEO IN)	
J105	1-774-821-11	JACK, PIN 3P (VIDEO 1/2 VIDEO OUT, MONITOR VIDEO OUT)	
		< COIL >	
L202	1-408-080-00	INDUCTOR 100uH	
		< TRANSISTOR >	
Q202	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q203	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q204	8-729-119-76	TRANSISTOR 2SA1175-HFE	

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TA-AV661

VIDEO **VIDEO 4** **VR**

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	
R202	1-247-804-11	CARBON 75	5% 1/4W
R203	1-247-804-11	CARBON 75	5% 1/4W
R204	1-247-804-11	CARBON 75	5% 1/4W
R205	1-249-429-11	CARBON 10K	5% 1/4W
R206	1-249-429-11	CARBON 10K	5% 1/4W
R207	1-249-429-11	CARBON 10K	5% 1/4W
R208	1-247-804-11	CARBON 75	5% 1/4W
R209	1-247-804-11	CARBON 75	5% 1/4W
R210	1-247-804-11	CARBON 75	5% 1/4W
R211	1-247-807-31	CARBON 100	5% 1/4W
R212	1-247-807-31	CARBON 100	5% 1/4W
R213	1-247-807-31	CARBON 100	5% 1/4W
R214	1-247-807-31	CARBON 100	5% 1/4W
R215	1-247-807-31	CARBON 100	5% 1/4W
R216	1-247-807-31	CARBON 100	5% 1/4W

*	1-659-607-11	VIDEO 4 BOARD *****	
		< CAPACITOR >	
C132	1-164-159-11	CERAMIC 0.1uF	50V
		< CONNECTOR >	
CN105	1-770-831-11	CONNECTOR, BOARD TO BOARD 6P	
		< JACK >	
J106	1-770-340-11	JACK BLOCK, PIN (L TYPE) 3P (VIDEO 4 AUDIO/VIDEO IN)	
		< RESISTOR >	
R218	1-249-433-11	CARBON 22K	5% 1/4W
R219	1-249-433-11	CARBON 22K	5% 1/4W
R220	1-247-804-11	CARBON 75	5% 1/4W

Ref. No.	Part No.	Description	Remark
*	1-661-167-11	VR BOARD *****	
		< CONNECTOR >	
CN404	1-750-185-11	CONNECTOR, BOARD TO BOARD 4P	
		< VARIABLE RESISTOR >	
RV401	1-467-869-11	ENCODER, ROTARY (MASTER VOLUME)	

		MISCELLANEOUS *****	
17	1-769-867-11	WIRE (FLAT TYPE) (5 CORE)	
19	1-773-286-11	WIRE (FLAT TYPE) (29 CORE)	
106	1-769-867-11	WIRE (FLAT TYPE) (5 CORE)	
109	1-773-286-11	WIRE (FLAT TYPE) (29 CORE)	
△ CNP901	1-690-609-21	CORD, POWER	
△ F904	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
△ F905	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
△ F906	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
△ F907	1-533-310-11	FUSE, GLASS TUBE (6.3A 125V)	
FL401	1-517-513-11	INDICATOR TUBE, FLUORESCENT	
△ T901	1-429-458-11	TRANSFORMER, POWER	

		ACCESSORIES & PACKING MATERIALS *****	
	1-473-624-11	COMMANDER, STANDARD (RM-U661)	
	3-856-090-11	MANUAL, INSTRUCTION (ENGLISH)	
*	4-980-414-01	CUSHION	
*	4-980-737-01	COVER, BATTERY (FOR RM-U661)	
*	4-981-469-01	INDIVIDUAL CARTON	

		HARDWARE LIST *****	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT(B)	
#2	7-682-560-04	SCREW +BVTT 4X6 (S)	
#3	7-685-650-91	SCREW +BVTP 3X16 TYPE2 TT(B)	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.