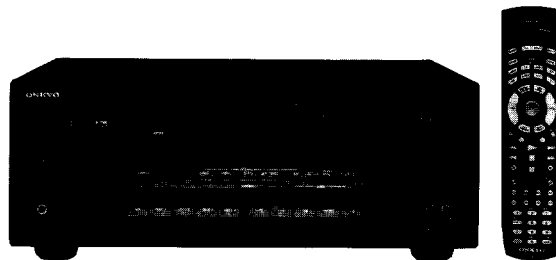


ONKYO® SERVICE MANUAL

AUDIO VIDEO CONTROL RECEIVER MODEL TX-DS676



Black and Golden models

BMD	120V AC, 60Hz
BMP, BMPT, BMPA, GMPT	230V AC, 50Hz
BMWT, BMWR, GMWT	220-230V/120V
GMWR	AC, 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

TABLE OF CONTENTS

Specifications.....	2
Service procedures.....	3
Panel views.....	4
FL tube view.....	7
Microprocessor connection diagram.....	8
Microprocessor terminal descriptions.....	9
IC block diagrams and descriptions.....	10
Printed circuit board-part list.....	21
Adjustment and confirmation.....	27
Wiring view.....	29
Block diagram.....	31
Preamplifier PC board view.....	33
Preamplifier schematic diagram.....	35
Power/Input PC board view.....	37
Power/Input schematic diagram.....	39
Main circuit PC board view.....	41
Main circuit schematic diagram.....	43
DSP PC board view.....	45
DSP schematic diagram.....	47
Power amplifier PC board view.....	49
Power amplifier schematic diagram.....	51
Display PC board view.....	53
Display circuit schematic diagram.....	55
Video circuit PC board view.....	57
Video circuit schematic diagram.....	59
Exploded view.....	61
Parts list.....	63
Packing view.....	65

ONKYO®
AUDIO COMPONENTS

SPECIFICATIONS

AMPLIFIER SECTION

Continuous Average Power output (FTC)

All channels: 105 watts per channel min. RMS at 8 ohms, 2 channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.
135 watts min. RMS at 6 ohms, 2 channels driven from 1 kHz with no more than 0.1% total harmonic distortion.

Continuous Power output (DIN)	140 watts at 6 ohms
Maximum Power output (EIAJ)	170 watts at 6 ohms
Total Harmonic Distortion:	0.08% at rated power (Front)
IM Distortion:	0.08% at rated power (Front)
Damping Factor:	60 at 8 ohms (Front)
Input Sensitivity and Impedance	
PHONO:	2.5 mV, 50 kohms
LINE (CD, TAPE, DVD, VIDEO 1, 2, 3,4):	200 mV, 50 kohms
MULTICHANNEL INPUT (FRONT L/R, SURROUND L/R, CENTER):	200 mV, 50 kohms
(SUBWOOFER):	36 mV, 50 kohms
COAXIAL 1, 2 (DIGITAL):	0.5 Vp-p, 75 ohms
Output Level and Impedance	
Rec out (TAPE, VIDEO 1):	200 mV, 2.2 kohms
Pre out:	1 V, 470 ohms
Phono Overload:	110 mV RMS at 1 kHz, 0.5% T.H.D.
Frequency Response:	20 Hz to 100 kHz, +1/-3 dB(LINE INPUT)
RIAA Deviation:	20 Hz to 20 kHz, ± 0.8 dB
Tone Control	
Bass:	± 10 dB at 100 Hz
Treble:	± 10 dB at 10 kHz
Signal-to-Noise Ratio	
Phono:	80 dB (IHF A, 5 mV input)
CD/Tape:	100 dB (IHF A)

VIDEO SECTION

Input sensitivity/Impedance (DVD, VIDEO 1, 2, 3,4)	
VIDEO (Composite):	1 Vp-p, 75 ohms
Output Level/Impedance (VIDEO 1, MONITOR)	
VIDEO (Composite):	1 Vp-p, 75 ohms

TUNER SECTION

FM

Tuning Range:	87.5 — 108.0 MHz (50 kHz steps)
Usable Sensitivity	
Mono:	11.2 dBf, 1.0 μ V (75 ohms IHF) 0.9 μ V (75 ohms DIN)
Stereo:	17.2 dBf, 2.0 μ V (75 ohms IHF) 23 μ V (75 ohms DIN)
50 dB Quieting Sensitivity	
Mono:	17.2 dBf, 2.0 μ V (75 ohms)
Stereo:	37.2 dBf, 20 μ V (75 ohms)
Capture Ratio:	2.0 dB
Image Rejection Ratio	
U.S.A. & Canadian models:	40 dB
Other area models:	85 dB
IF Rejection Ratio:	90 dB
Signal-to-Noise Ratio	
Mono:	76 dB
Stereo:	70 dB
Alternate Channel Attenuation:	55 dB
Selectivity:	50 dB (DIN)
AM Suppression Ratio:	50 dB
Total Harmonic Distortion	
Mono:	0.2%
Stereo:	0.3%
Frequency Response:	30 Hz — 15 kHz, ± 1.0 dB
Stereo Separation:	45 dB at 1 kHz 30 dB at 100 Hz — 10 kHz

AM

Tuning Range	
U.S.A. & Canadian models:	530—1,710 kHz (10 kHz steps)
European & Australian models:	522—1,611 kHz (9 kHz steps)
Worldwide models:	531—1,602 kHz (9 kHz steps), 530—1,710 kHz (10 kHz steps)
Usable Sensitivity:	30 μ V
Image Rejection Ratio:	40 dB
IF Rejection Ratio:	40 dB
Signal-to-Noise Ratio:	40 dB
Total Harmonic Distortion:	0.7%

GENERAL

Power Supply:	AC 120 V, 60 Hz AC 230 V, 50 Hz AC 220-230 V and 120 V switchable, 50/60 Hz
Power Consumption:	6.2 A 520 W
Dimensions (W \times H \times D):	435 \times 175 \times 453 mm 17-1/8" \times 6-7/8" \times 17-13/16"
Weight:	
USA & Canadian models:	16.3 kg, 35.9 lbs.
Others:	17.6 kg, 38.8 lbs.

REMOTE CONTROL


Transmitter:	Infrared
Signal range:	Approx. 5 meters, 16 ft.
Power supply:	Two "AA" batteries (1.5 V \times 2)


Specifications and features are subject to change without notice.

Power supply and voltage vary depending on the area in which the unit is purchased.

SERVICE PROCEDURES

1. Replacing the fuses

 This symbol located near the fuses indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.

 Ce symbole indique que le fusible utilise est a rapide. Pour une protection permanente, n'utiliser que fusibles de meme type. Ce dernier est la qu le present symbol est appse.

CIRCUIT NO.	PART NO.	DESCRIPTION
F904	252199	10A-UL, Primary <D/W>
F902	252278 or 252044	5A-SE-EAK or 5A-SE-TL250V,Primary <P/T/W/A>
F903	252075 or 252241	2.5A-SE-EAK or 2.5A-SE-TL250V,AC outlet <P/T>
F941,F942	252160 252241 or 252075	2.5A-UL/T237,Secondary <D> 2.5A-SE-EAK or 2.5A-SE-TL250V,Secondary <P/T/W/A>

Note: <D>:120V model only
<P>: European model only
<T>: Asian model only
<A>: Australian model only
<W>:Worldwide model only

2. To initialize the unit

This device employs a microprocessor to perform various functions and operations. If interference generated by an external power supply, radio wave, or other electrical source results in accident which causes the specified operations and functions to operate abnormally.

To perform a result, please follow the procedure below.

1. Press and hold down the VIDEO-1 button, then press the SPEAKER A button.
2. After "clear" is displayed, the preset memory and each mode stored in the memory, such as surround, are initialized and will return to the factory setting.

3. Safety-check out

(Only U.S.A. model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer. Connect the insulating-resistance tester between the plug of power supply cord and screw on the back panel.
Specifications: 3.3Mohm \pm 10% at 500V.

4. Memory Preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in order to charge the back-up system.

The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged. This period is shorter when the unit is exposed to a highly humid climate.

5. Setting the AM tuning step frequency

(Worldwide models only)

Worldwide models are equipped with a switch that controls the AM band tuning steps. Please set this switch to match the AM band tuning step frequency in your area.

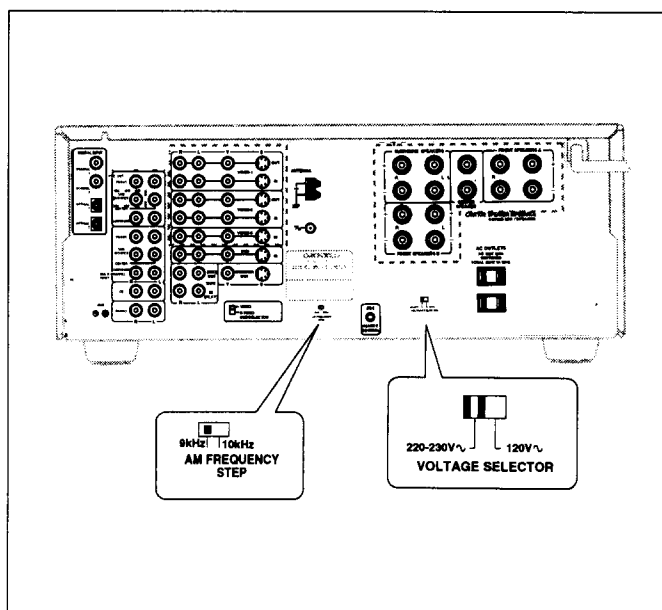
U.S.A. and Canada : 10 kHz

Other areas : 9 kHz

6. Setting the Voltage selector (Worldwide models only)

Worldwide models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit.

1. Determine the proper voltage for your area: 220-230 V or 120 V.
2. If the preset voltage is not correct for your area, insert a screwdriver into the groove in the switch. Slide the switch all the way to the right (120 V) or to the left (220-230 V), whichever is appropriate.

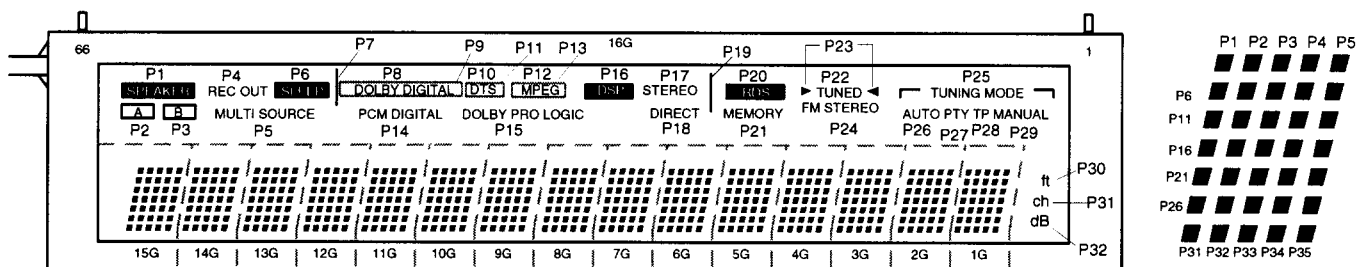


7. Changing the AM band step

With the exception of the worldwide models, a tuning step selector switch is not provided. When you change the band step, change the parts as shown below.

	To 10kHz	To 9kHz
R8085	Open	10k
R8086	10k	Open

FL TUBE VIEW



1. How to enter into Debug mode

During press and hold DSP key, press DISPLAY key.

Then "DEBUG MODE=NO" is displayed on FL tube.

During press and hold DSP key, press DISPLAY key again.

Then "DEBUG MODE=YES" is displayed on FL tube.

		0	1
15G,14G	Dialog normalization		
13G	DIR ERF	Digital In	No Digital In
12G	DIR AUTODATA	PCM	AC-3
10G,9G	DIR Address 03H	Refer to the table 2.	
8G,7G	DIR Address 04H	Refer to the table 3.	
5G,4G	Input mode	Refer to the table 4.	
3G	Mode	Refer to the table 5.	
2G	Surround mode	Refer to the table 6.	

Table 1

	0X	0X	2X
X=0	Null	7	Reserved
1	Dolby Digital	8	MPEG2 L1
2	Reserved	9	MPEG2 L2/3
3	Pause	a	Reserved
4	MPEG1 L1	b	DTS1(512)
5	MPEG1 L2,3/MPEG2 w/o	c	DTS1(1024)
6	MPEG2 w/e	d	DTS1(2048)

Table 4

D7	D6	D5	D4	D3	D2	D1	D0
ERF	0	~AUDIO	AUTO	PEM	FS1	FS0	FS96
0	0	0	0	0	0	0	0

Rst

Table 2

Audio bit	Pre-empha.	Sampling frequency
0:Audio	output	00:44.1kHz
1:Non audio	0:Off	01:Off
	1:On	10:48kHz
		11: 32kHz

0	LFE:Off
1	LFE:On
8	Dolby surround encoder:Off
9	Dolby surround encoder:ON

Table 5

D7	D6	D5	D4	D3	D2	D1	D0
CV	STC	CRC	LOCK	V	0	BIP	PAR
0	0	0	0	0	0	0	0

Rst

Channel Status Validity

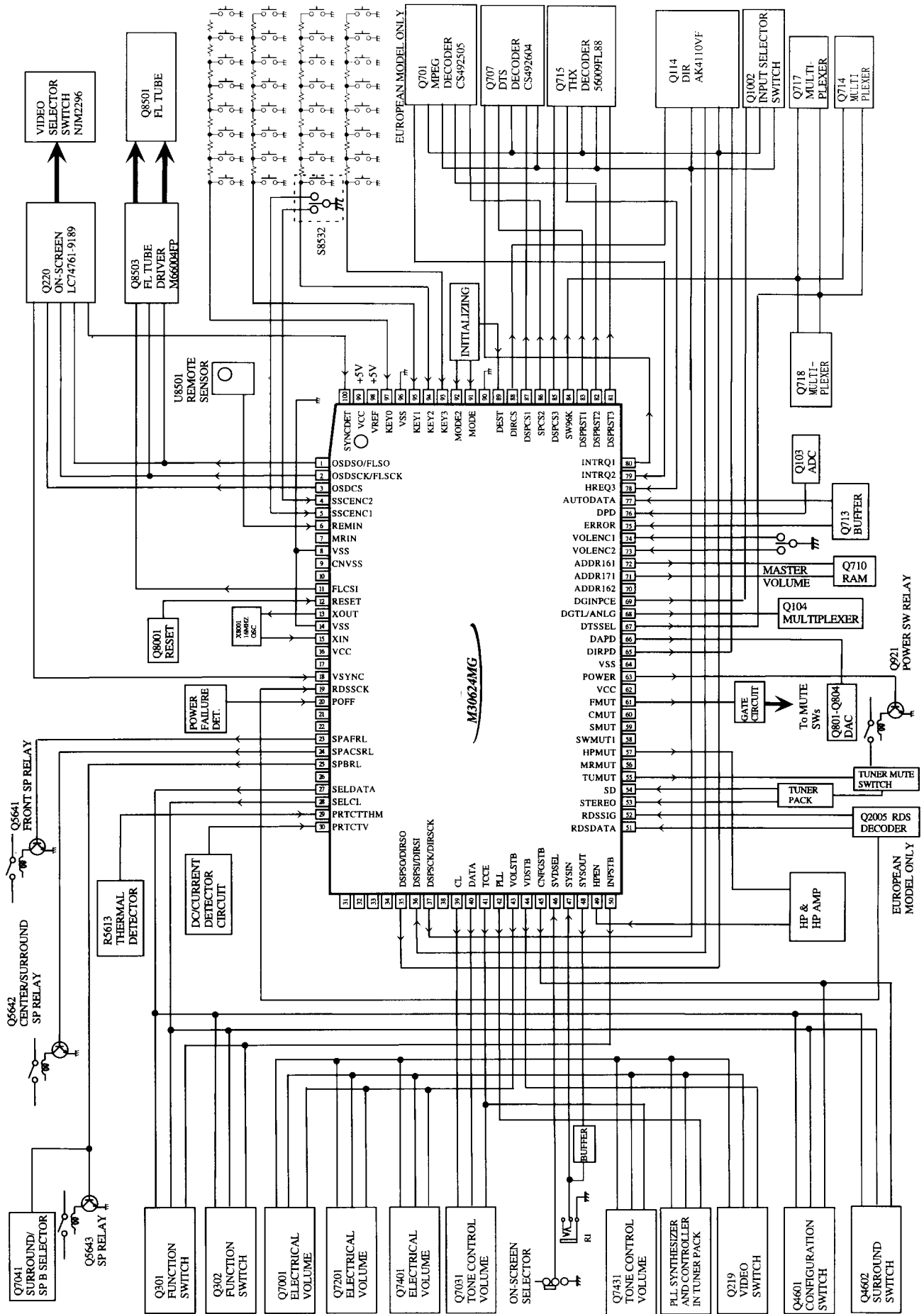
0:Valid

Table 3

DSP	When DTS		When DTS	
0	1+1	0	Mono	8
1	1/0	1	Dual Mono	9
2	2/0	2	L+R	a
3	3/0	3	(L+R)+(L-R)	b
4	2/1	4	L+Rt	c
5	3/1	5	C+L+R	d
6	3/2	6	L+R+S	e
		7	C+L+R+S	f

Table 6

MICROPROCESSOR CONNECTION DIAGRAM



MICROPROCESSOR TERMINAL DESCRIPTIONS

PIN NO.	SYMBOL	I/O	DESCRIPTION	PIN NO.	SYMBOL	I/O	DESCRIPTION
1	OSDSO/FLSO	0	Serial data output pin to OSD and Fluorescent tube driver ICs.	51	RSDSDATA	1	Data input pin from RDS decoder
2	OSDSCK/FLSCK	0	Serial clock output pin to OSD and Fluorescent tube driver ICs.	52	RDSSIG	1	Signal input pin from RDS decoder
3	OSDOS	0	Chip select output pin to OSD IC.	53	~STEREO	1	Detection input pin for FM STEREO broadcast
4	SSCENC2	1	Rotary encoder input pin for SSC.	54	~SD	1	Detection input pin for the broadcast
5	SSCENC1	1	Rotary encoder input pin for SSC.	55	TUMUT	0	Muting control output pin for FM section
6	~REMIN	1	Signal input pin from remote controller	56	MRMUT	0	Muting control output pin for multi room section
7	~MRIN	1	Signal input pin from remote controller for Multi room	57	HPMUT	0	Muting control output pin for headphone section
8	VSS	1	Ground pin	58	~SWMUT1	0	Muting control output pin for super woofer 1
9	VSS	1	Ground pin	59	SMUT	0	Muting control output pin for surround channel
10	FLCSI	0	Chip select output pin to OSD IC.	60	CMUT	0	Muting control output pin for center channel
12	RESET	1	Microprocessor reset input pin	61	FMUT	0	Muting control output pin for front channel
13	XOUT	0	Oscillator circuit output pin for main clock	62	VCC	0	Power supply pin
14	VSS	1	Ground pin	63	POWER	0	Power source relay control output pin
15	XIN	1	Oscillator circuit input pin for main clock	64	VSS	0	Ground pin
16	VCC	1	Power supply pin	65	~DIRPD	0	Power down signal output pin for DIR IC
17		1	Power supply pin	66	~DAPD	0	Reset output pin for D/A converter.
18	VSYNC	1	Vertical synchronizing signal input pin	67	DTSEL	0	DSP switching output pin for DTS/MPEG2 decoder.
19	~RDSSCK	1	Clock input pin from RDS decoder	68	DGTL/ANLG	0	Digital/Analog select pin. Digital at the low level.
20	POFF	1	Power failure detection input pin	69	DGINPCE	0	Chip enable output pin for digital input selector IC LC7824.
21		1	Power failure detection input pin	70	ADDR162	0	ADDR 16 output pin to DSP of MPEG2 decoder
22		1	Power failure detection input pin	71	ADDR171	0	ADDR 17 output pin to DSP of MPEG2 decoder
23	SPAFRL	0	Speaker A relay control output pin for front channel	72	ADDR161	0	ADDR 16 output pin to DTS decoder
24	SPACSR1	0	Speaker A relay control output pin for center and surround channels	73	VOLENC2	1	Rotary encoder input pin for volume
25	SPBR1	0	Speaker B relay control output pin	74	VOLENC1	1	Rotary encoder input pin for volume
26		1	Speaker B relay control output pin	75	ERROR	1	Lock error signal input pin for DIR
27	SELDATA	0	Data output pin to function switch ICs	76	DPD	1	Reset signal output pin for A/D converter
28	SELCL	0	Clock output pin to function switch ICs	77	AUTODATA	1	AUTODATA signal input pin for DSP.
29	~PRTCTHM	1	Detection input pin for Thermal protector	78	~HREG3	1	HREQ input pin from the surround DSP
30	PRTCTV	1	Detection input pin for Current and voltage protector	79	~INTRQ2	1	INTRQ input pin from DSP of MPEG2 decoder
31		1	Detection input pin for Current and voltage protector	80	~INTRQ1	0	INTRQ input pin from DTS decoder
32		1	Detection input pin for Current and voltage protector	81	~DSPRST3	0	Reset signal output pin to the surround DSP
33		1	Detection input pin for Current and voltage protector	82	~DSPRST2	0	Reset signal output pin to DSP of MPEG2 decoder
34		1	Detection input pin for Current and voltage protector	83	~DSPRST1	0	Reset signal output pin to the DTS decoder
35	DSPSO/DIRSO	0	Serial data output pin to DSP and DIR ICs.	84	~SW96K	0	Signal pass select pin when PCM 96kHz
36	DSPSI/DIRSI	1	Serial data input pin from DSP and DIR ICs.	85	DSPCS3	0	Chip select output pin to the surround DSP
37	DSPSCK/DIRSCK	0	Serial clock output pin to DSP and DIR ICs.	86	~DSPCS2	0	Chip select output pin to DSP of MPEG2 decoder
38		0	Serial clock output pin to DSP and DIR ICs.	87	~DSPCS1	0	Chip select output pin to the DTS decoder
39	CL	0	Serial clock output pin to the function switch and Electro volume ICs.	88	~DIRCS	0	Chip select output pin to DIR
40	DATA	0	Serial data output pin to the function switch and Electro volume ICs.	~89	DEST	1	Initializing input pin
41	TCCE	0	Chip enable output pin for the tone control IC TC9184P.	90	MODE	1	Mode input pin
42	PLL	0	Serial data latch output pin for PLL IC on the tuner pack	92	MODE2	1	Mode 2 input pin
43	VOLSTB	0	Strobe output pin for the Electro volume IC	93	KEY3	1	Operation key connection pin 3
44	VDSSTB	0	Strobe output pin for the function switch ICs	94	KEY2	1	Operation key connection pin 2
45	CNFGSTB	0	Strobe output pin for the function switch ICs	95	KEY1	1	Operation key connection pin 1
46	SVDSSEL	1	S/Composite video select	96	VSS	1	Power supply pin for A/D converter
47	~SYSIN	1	System code input pin	97	KEY0	1	Operation key connection pin 0
48	~SYSOUT	0	System code output pin	98	VREF	1	Reference voltage pin for A/D converter
49	HPEN	1	Detection input pin to insert the headphone jack.	99	VCC	1	Power supply pin for A/D converter
50	INPSTB	0	Strobe output pin of input select ICs.	100	~SYNCDET	1	External synchronizing judge input pin for on-screen display.

~: Negative logic

CAUTION: Replacement of the transistor of mark *, if necessary, must be made from the same beta group (HFE) as the original type.

PRINTED CIRCUIT BOARD-PARTS LIST

POWER AMPLIFIER PC BOARD (NAAF-6600-3A/3B)

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistors			NP:No spare parts	
Q5001,Q5002	2210755,	* 2SC1775A-E,	Q5641,Q5642	2212115,	2SC2458-GR,
Q5101,Q5102	2210756,	* 2SC1775A-F,		2213284 or	2SC1740S-R or
Q5201,Q5202	2211732 or	* 2SC1845-F or		2215864	NP KTC3199-GR
Q5301,Q5302	2211733	* 2SC1845-E	Q5643	2213640,	DTC123JS,
Q5003,Q5103	2210755,	2SC1775A-E,		2214660 or	RN1205 or
Q5203,Q5303	2210756,	2SC1775A-F,		2215830	NP KRC105M
Q5403	2211732 or	2SC1845-F or	Q5646	2211792 or	2SA992-F or
Q5644,Q5645	2211733	2SC1845-E		2211793	2SA992-E
Q5004,Q5104	2212115,	2SC2458-GR,	D5001,D5101	223163 or	1SS133 or
Q5204,Q5304	2213284 or	2SC1740S-R or	D5201,D5301	223205	1SS270A
Q5404	2215864	NP KTC3199-GR	D5401	223163 or	1SS133 or
Q5005-Q5007	2211353,	2SA949-O,	D5601-D5607	223205	1SS270A
Q5105-Q5107	2211354,	2SA949-Y,	D5608	224471303	MTZJ13C,Zener
Q5205-Q5207	2215843 or	NP KTA1024-O or	D5643,D5644	223163 or	1SS133 or
	2215844	NP KTA1024-Y		223205	1SS270A
Q5008,Q5108	2211633,	2SC2229-O,	D5647	224470512	MTZJ5.1B,Zener
Q5208	2211634,	2SC2229-Y,			
	2215853 or	NP KTC3206-O or	L5201,L5301	231176	S-1.3C <P/T/W>
	2215854	NP KTC3206-Y			
Q5209	2213284	2SC1740S-R	C5001,C5101	393884707	47 μ F,50V,Elect.
Q5210,Q5310	2213354 or	2SA933S-R or	C5004,C5104	354742219	220 μ F,16V,Elect.
	2215975	NP KTA1266-GR	C5005,C5105	354722219	220 μ F,6.3V,Elect.
Q5212	2211353,	2SA949-O,	C5010,C5110	354781009	10 μ F,50V,Elect.
	2211354 or	2SA949-Y or	C5017,C5018	354774709	47 μ F,63V,Elect.
	2215843	NP KTA1024-O	C5117,C5118	354774709	47 μ F,63V,Elect.
Q5213,Q5313	2203010 or	* 2SC5171 or	C5201,C5301	354784709	47 μ F,50V,Elect.
	2203434	NP KTD2061-Y	C5204,C5304	354742219	220 μ F,16V,Elect.
Q5214,Q5314	2203000 or	* 2SA1930 or	C5205,C5305	354722219	220 μ F,6.3V,Elect.
	2203424	NP KTB1369-Y	C5210,C5212	354781009	10 μ F,50V,Elect.
Q5215,Q5315	2202843,	* 2SC5242-O,	C5213,C5313	374721034	0.01 μ F \pm 5%,50V,Plastic
	2202842,	* 2SC5242-R,	C5214,C5314	374724734	0.047 μ F \pm 5%,50V,Plastic
	2201653,	* 2SC3856-O,	C5215-C5218	354774709	47 μ F,63V,Elect.
	2201655 or	* 2SC3856-P or	C5310,C5312	354781009	10 μ F,50V,Elect.
	2201654	* 2SC3856-Y	C5315-C5318	354774709	47 μ F,63V,Elect.
Q5216,Q5316	2202833,	* 2SA1962-O,	C5401	393884707	47 μ F,50V,Elect.
	2202832,	* 2SA1962-R,	C5404	354742219	220 μ F,16V,Elect.
	2201663,	* 2SA1492-O,	C5405,C5645	354722219	220 μ F,6.3V,Elect.
	2201665 or	* 2SA1492-P or	C5410	354781009	10 μ F,50V,Elect.
	2201664	* 2SA1492-Y	C5417,C5418	354774709	47 μ F,63V,Elect.
Q5217,Q5317	2214984 or	2SC2631-R or	C5601-C5603	354761019	100 μ F,35V,Elect.
	2214985	2SC2631-S	C5646	354741009	10 μ F,16V,Elect.
Q5219,Q5319	2212863 or	2SC3419-O or	C5650	354780109	1 μ F,50V,Elect.
	2212864	2SC3419-Y			
Q5305-Q5307	2211353,	2SA949-O,	R5014,R5015	443521014	100 Ω \pm 5%,1/2W,Metal oxide
Q5405-Q5407	2211354,	2SA949-Y,	R5017,R5117	443526804	68 Ω \pm 5%,1/2W,Metal oxide
	2215843 or	NP KTA1024-O or	R5018,R5019	443521014	100 Ω \pm 5%,1/2W,Metal oxide
	2215844	NP KTA1024-Y	R5114,R5115	443521014	100 Ω \pm 5%,1/2W,Metal oxide
Q5308	2211633,	2SC2229-O,	R5118,R5119	443521014	100 Ω \pm 5%,1/2W,Metal oxide
Q5408	2211634 or	2SC2229-Y or	R5214,R5215	443521014	100 Ω \pm 5%,1/2W,Metal oxide
	2215853	NP KTC3206-O	R5217,R5317	443526804	68 Ω \pm 5%,1/2W,Metal oxide
Q5309	2213284	2SC1740S-R	R5218,R5219	443521014	100 Ω \pm 5%,1/2W,Metal oxide
Q5401,Q5402	2210755,	* 2SC1775A-E,	R5222,R5322	5210290	N06HR4.7KBE,Trimming
	2210756,	* 2SC1775A-F,	R5226	443524714	470 Ω \pm 5%,1/2W,Metal oxide
	2211732 or	* 2SC1845-F or	R5229,R5329	443521514	150 Ω \pm 5%,1/2W,Metal oxide
	2211733	* 2SC1845-E	R5230,R5231	453530224	2.2 Ω \pm 5%,1/2W,Metal
Q5601	2212445	2SK365-GR	R5232,R5332	4000132 or	0.22 Ω *2,5.5W or
Q5602-Q5604	2212115,	2SC2458-GR,		4500245	0.22 Ω *2,5.5W,Metal plate
	2213284 or	2SC1740S-R or	R5240,R5340	453630824	8.2 Ω \pm 5%,1W,Metal
	2215864	NP KTC3199-GR	R5241,R5242	453530224	2.2 Ω \pm 5%,1/2W,Metal
Q5605,Q5606	221282,	DTC144ES,	R5314,R5315	443521014	100 Ω \pm 5%,1/2W,Metal oxide
	2213560 or	RN1204 or	R5318,R5319	443521014	100 Ω \pm 5%,1/2W,Metal oxide
	2215820	NP KRC104M	R5330,R5331	453530224	2.2 Ω \pm 5%,1/2W,Metal
Q5607	2202115 or	2SD2061-E or	R5341,R5342	453530224	2.2 Ω \pm 5%,1/2W,Metal
	2202116	2SD2061-F	R5414,R5415	443521014	100 Ω \pm 5%,1/2W,Metal oxide

CAUTION: Replacement of the transistor of mark *, if necessary, must be made from the same beta group (HFE) as the original type.

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors			Capacitors	
R5417	443526804	68 Ω \pm 5%, 1/2W, Metal oxide	C5423	354781009	10 μ F, 50V, Elect.
R5418, R5419	443521014	100 Ω \pm 5%, 1/2W, Metal oxide	C5623, C5624	3504353	15000 μ F, 63V, Elect.
R5643, R5644	453530224	2.2 Ω \pm 5%, 1/2W, Metal		Resistors	
	Relays		R5022, R5122	5210261	N06HR5KBC, Trimming
RL5643, RL5644	25065517, 25065563 or 25065586	NRL-2P5A-DC24-098, NRL-2P5A-DC24-129 or NRL-2P5A-DC24-142	R5029, R5129	443521514	150 Ω \pm 5%, 1/2W, Metal oxide
	Plugs		R5030, R5031	453530224	2.2 Ω \pm 5%, 1/2W, Metal
JL5623B	25055628	NPLG-7P590	R5032, R5132	4000132 or 4500245	0.22 Ω *2, 5.5W or 0.22 Ω *2, 5.5W, Metal plate
P5201, P5301	25055038	NPLG-2P29	R5040	453630824	8.2 Ω \pm 5%, 1W, Metal
P5638	25055099	NPLG-2P83	R5130, R5131	453530224	2.2 Ω \pm 5%, 1/2W, Metal
P5641, P5642	25055038	NPLG-2P29	R5140, R5440	453630824	8.2 Ω \pm 5%, 1W, Metal
	Sockets		R5422	5210261	N06HR5KBC, Trimming
JL5622B	25050271	NSCT-7P99	R5429	443521514	150 Ω \pm 5%, 1/2W, Metal oxide
JL5624B	25050267	NSCT-3P95	R5430, R5431	453530224	2.2 Ω \pm 5%, 1/2W, Metal
JL5625A	25051088	NSCT-4P875		Relays	
P3011A	200B3381830UL	NSAS-18P0729	RL5641	25065563, 25065517 or 25065586	NRL-2P5A-DC24-129, NRL-2P5A-DC24-098 or NRL-2P5A-DC24-142
P5002B, P5402B	25051426	NSCT-4P1213	RL5642	25065574	NRL-1P5A-DC24-134
P5102B	25051427	NSCT-5P1214		Plugs	
P5633B	25051428	NSCT-6P1215	P5001, P5101	25055038	NPLG-2P29
P5634A	2009990550UL	NSAS-8P0727	P5002A, P5402A	25055783	NPLG-4P739
	Clamp		P5102A	25055784	NPLG-5P740
P5611	260224	CP-1S	P5401	25055038	NPLG-2P29
			P5633A	25055785	NPLG-6P741
				Sockets	
			JL5621A	25051110	NSCT-6P897
			JL5622A	25051111	NSCT-7P898
			JL5624A	25051107	NSCT-3P894
			P5631A	2009990549UL	NSAS-12P0726
			P5635A	2009990551UL	NSAS-4P0728
				THERMAL DETECTOR PC BOARD (NAETC-6602-3A/3B)	
				CIRCUIT NO. PART NO. DESCRIPTION	
			R5613	4000150	PTH9M04BC222TS2F333, Thermistor
			R5614	4000153	PTH9M04BF222TS2F333, Thermistor
			JL5625B	25051088	NSCT-4P875, Socket
				SECONDARY CIRCUIT PC BOARD (NAETC-6606-3A/3B)	
				CIRCUIT NO. PART NO. DESCRIPTION	
			C941, C942	374731044	0.1 μ F \pm 5%, 100V, Plastic capacitor
			R941, R942	453530104	1 Ω \pm 5%, 1/2W, Metal resistor
			JL5621B	25051110	NSCT-6P897, Socket
			JL942B	25050286	NSCT-9P114, Socket
			P5612	260224	CP-1S, Clamp
				DSP CIRCUIT PC BOARD (NADG-6608-3A/3B)	
				CIRCUIT NO. PART NO. DESCRIPTION	
				ICs	
			Q1002	22241416	LC7824
			Q101, Q102	22241383R2	NJM4565M-D
			Q103	22241361R2	AK5383VS
			Q104	22274157ER2TO	TC74VHC157FT
			Q114	22241338R2	AK4110VF
			Q115	222740046R2TO	TC74HCU04F
			Q701	22241358R9	CS492505-CL
			Q705	22274125ER2TO	TC74VHC125FT
			Q707	22241340R9	CS492604-CL
			Q708, Q709	22274574ER2TO	TC74VHC574FT
			Q710	22241415R2	LC372100PF10-K34-TLM
			Q711	22274157ER2TO	TC74VHC157FT
			Q713	22274244ER2TO	TC74VHC244FT
			Q714, Q717, Q718	22274153ER2TO	TC74VHC153FT
			Q801-Q803	22241360R2	AK4393VF
			Q813-Q815	22241409R2	BA15532F
				FRONT/CENTER POWER AMPLIFIER PC BOARD (NAAF-6601-3A/3B)	
				CIRCUIT NO. PART NO. DESCRIPTION	
				Transistors	
Q5009	2213284	2SC1740S-R			
Q5010, Q5110	2213354 or	2SA933S-R or			
Q5410	2215975	NP KTA1266-GR			
Q5013, Q5113	2203010 or	* 2SC5171 or			
Q5413	2203434	NP KTD2061-Y			
Q5014, Q5114	2203000 or	* 2SA1930 or			
Q5414	2203424	NP KTB1369-Y			
Q5015, Q5115	2202843, *	2SC5242-O,			
Q5415	2202842, *	2SC5242-R,			
	2201653, *	2SC3856-O,			
	2201655 or *	2SC3856-P or			
	2201654 *	2SC3856-Y			
Q5016, Q5116	2202833, *	2SA1962-O,			
Q5416	2202832, *	2SA1962-R,			
	2201663, *	2SA1492-O,			
	2201665 or *	2SA1492-P or			
	2201664 *	2SA1492-Y			
Q5017, Q5117	2214984 or	2SC2631-R or			
Q5417	2214985	2SC2631-S			
Q5019, Q5119	2212863 or *	2SC3419-O or			
Q5419	2212864 *	2SC3419-Y			
Q5109, Q5409	2213284	2SC1740S-R			
	Diodes				
D5621	22380273	RS804M			
D5641, D5642	223163 or	1SS133 or			
D5645, D5646	223205	1SS270A			
	Coils				
L5001, L5101	231176	S-1.3C <P/T/W>			
L5401	231176	S-1.3C <P/T/W>			
	Capacitors				
C5012, C5112	354781009	10 μ F, 50V, Elect.			
C5013, C5113	374721034	0.01 μ F \pm 5%, 50V, Plastic			
C5014, C5114	374724734	0.047 μ F \pm 5%, 50V, Plastic			
C5023, C5123	354781009	10 μ F, 50V, Elect.			
C5412	354781009	10 μ F, 50V, Elect.			
C5413	374721034	0.01 μ F \pm 5%, 50V, Plastic			
C5414	374724734	0.047 μ F \pm 5%, 50V, Plastic			

NOTE: THE COMPONENTS IDENTIFIED BY MARK
 Δ ARE CRITICAL FOR RISK OF FIRE AND
 ELECTRIC SHOCK. REPLACE ONLY WITH
 PART NUMBER SPECIFIED.

CIRCUIT NO.	PART NO.	DESCRIPTION
U1003,U1004	24120037	TORX178A
	Photo couplers	
	Crystal	
X101	3010320	AT-49 12.288MHz
	Diodes	
D1002,D1003	224490330R2	UDZ3.3B
D101-D112	223234R2 or	1SS352 or
D701,D702	223233R1	1SS355
	Coils	
L1001-L1003	231237M022R2	NCH-1471
L101	231237M022R2	NCH-1471
L103	230921R2	BLM21B222SPT
L108-L110	231237M022R2	NCH-1471
L701,L702	231237M022R2	NCH-1471 <P/T/W/A>
L703-L705	231237M022R2	NCH-1471
L801,L802	231237M022R2	NCH-1471
R117,R118	230948R2	BLM21A102F
R122,R125	230921R2	BLM21B222SPT
R127,R131	230921R2	BLM21B222SPT
R797,R798	230948R2	BLM21A102F
	Capacitors	
C1005	356724709R2	47 μ F,6.3V,Elect.
C101,C102	356724709R2	47 μ F,6.3V,Elect.
C107-C110	356741009R2	10 μ F,16V,Elect.
C118	356724709R1	47 μ F,6.3V,Elect.
C120,C148	356724709R2	47 μ F,6.3V,Elect.
C158	356724709R2	47 μ F,6.3V,Elect.
C719	356721019R2	100 μ F,6.3V,Elect.
C734,C735	356724709R1	47 μ F,6.3V,Elect. <P/T/W/A>
C737,C738	356724709R2	47 μ F,6.3V,Elect.
C742	356724709R2	47 μ F,6.3V,Elect.
C801-C803	356724709R2	47 μ F,6.3V,Elect.
C814,C816	356724709R2	47 μ F,6.3V,Elect.
C818,C820	356724709R2	47 μ F,6.3V,Elect.
C821,C823	356724709R2	47 μ F,6.3V,Elect.
C825,C827	356724709R2	47 μ F,6.3V,Elect.
C831,C832	356741009R2	10 μ F,16V,Elect.
C841-C844	356741009R2	10 μ F,16V,Elect.
	Terminals	
P1001,P1002	25045473	NPJ-1PDBL291
	Sockets	
P701	25051442	NSCT-20P1229
P702,P801	25051438	NSCT-16P1225
P803	25051430	NSCT-8P1217

PRIMARY CIRCUIT PC BOARD (NAPS-6610-3A/3B/3C/3D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistor	
Q921	2213640 or 2215830	DTC123JS or NP KRC105M
	Diodes	
D921-D924	22380035, 22380032 or 22380260	GP104003E, 1SR139-100 or RL1N4003
D925	223163 or 223205	1SS133 or 1SS270A
	Power transformer	
T902	2300670A Δ 2300671A Δ 2300672A Δ	NPT-1111D <D> NPT-1111P <P/T/A> NPT-1111DG <W>
	Capacitors	
C901	3500196S	RE275V-103M
C922	354742219	220 μ F,16V,Elect.
	Resistors	
R901	431533355 Δ	RC1/2GFKUL-3.3M,Solid <D>
R921	453530824	8.2 Ω ±5%,1/2W,Metal

CIRCUIT NO.	PART NO.	DESCRIPTION
	Relay	
RL901	25065584, Δ 25065248, Δ 25065516 or Δ 25065588 Δ 25065561, Δ 25065508, Δ 25065515 or Δ 25065526 Δ	NRL-1P10A-DC12-140, NRL-1P15A-DC12-29, NRL-1P10A-DC12-097 or NRL-1P10A-DC12-143 <D/W> NRL-1P5A-DC12-127, NRL-1P10A-DC12-093, NRL-1P5A-DC12-096 or NRL-1P5A-DC12-102 <P/T/A>
	Switch	
S901	25065437 Δ	NSS-22157P <W>
	Fuse holders	
F911,F912	25052133 Δ	NSCT-1P2031 <D/W>
F915,F916	25052133 Δ	NSCT-1P2031 <P/W/T/A>
F917,F918	25052133 Δ	NSCT-1P2031 <P/T>
	Label	
F902a	29361938	Fuse <P/T/W/A>
	Plug	
P901a	25055675 Δ	NPLG-2P631
	Sockets	
JL9051b	25050267	NSCT-3P95
P902	25051126 Δ 25051125 Δ	NSCT-4P913 <D> NSCT-4P912 <P/T/W>
	Fuses	
F902	252244 or Δ 252078 Δ	5A-SE-TL250V or 5A-SE-EAK,Fuse <P/T/W/A/R>
F903	252241 or Δ 252075 Δ	2.5A-SE-TL250V or 2.5A-SE-EAK,Fuse <P/T>
F904	252199 Δ	10A-UL,Fuse <D/W/R>

INPUT TERMINAL PC BOARD (NAAF-6611-3A/3B/3C/3D)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q301	22240829	TC9274N-008
Q302	22240799	TC9163AN
Q311	22240191	NJM4565D-D
	Capacitors	
C341,C343	354744709	47 μ F,16V,Elect.
C344,C346	354744709	47 μ F,16V,Elect.
C349,C351	353744709	47 μ F,16V,Elect.
C353,C354	393884707	47 μ F,50V,Elect.
C357,C358	393884707	47 μ F,50V,Elect.
	Sockets	
P301b	25051438	NSCT-16P1225
P302b	25051429	NSCT-7P1216
	Plug	
P303b	25055234	NPLG-3P218
	Terminals	
P304,P305	25045571 or 25045300	NPJ-6PDRW386 or NPJ-6PDBL159
P307	25045575 or 25045303	NPJ-4PDRW389 or NPJ-4PDBL162

FRONT VIDEO TERMINAL PC BOARD (NAETC-6612-3A/3B/3C/3D)

CIRCUIT NO.	PART NO.	DESCRIPTION
P212	25051961	NSCT-4P1748,Socket
P213	25045405	NPJ-3PDBL230,Terminal
P204a	2009990434UL	NSAS-10P0578,Socket
P303a	2009990513UL	NSAS-6P0675,Socket

NOTE: THE COMPONENTS IDENTIFIED BY MARK
 △ ARE CRITICAL FOR RISK OF FIRE AND
 ELECTRIC SHOCK. REPLACE ONLY WITH
 PART NUMBER SPECIFIED.

**SURROUND/FRONT B SPEAKER TERMINAL PC BOARD
 (NAETC-6614-3A/3B/3C/3D)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C5219,C5221	374721034	0.01 μ F \pm 5%,50V,Plastic <P/T/W/A>
C5261,C5262	374724734	0.047 μ F \pm 5%,50V,Plastic
C5319,C5321	374721034	0.01 μ F \pm 5%,50V,Plastic <P/T/W/A>
C5361,C5362	374724734	0.047 μ F \pm 5%,50V,Plastic
	Resistors	
R5261,R5262	453630824	8.2 Ω \pm 5%,1W,Metal
R5361,R5362	453630824	8.2 Ω \pm 5%,1W,Metal
	Terminal	
P5636	25060292	NTM-8PDMN223
	Plugs	
P5634b	25055167	NPLG-4P151
P5635b	25055165	NPLG-2P149

CIRCUIT NO.	PART NO.	DESCRIPTION
R8542	49163103415	RM1/10IU-10K*15,Array
	Resistor	
S8501-S8531	25035652	NPS-111-S604,Push
S8532	25065507	EC11B15244,Rotary
	Switches	
	Sockets	
JL8501A	25051109	NSCT-5P896
JL8502A	25051107	NSCT-3P894
P8501	25052071,	NSCT-25P1858,
	25050965,	NSCT-25P752,
	25051329,	NSCT-25P1118,
	25051869 or	NSCT-25P1656 or
	25052258	NSCT-25P2155
	Holder	
Q8501A	27191074	(FL)

**FRONT/CENTER SPEAKER TERMINAL PC BOARD
 (NAETC-6615-3A/3B/3C/3D)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C5019,C5119	374721034	0.01 μ F \pm 5%,50V,Plastic <P/T/W/A>
C5061,C5161	374724734	0.047 μ F \pm 5%,50V,Plastic
C5419	374721034	0.01 μ F \pm 5%,50V,Plastic <P/T/W/A>
C5461	374724734	0.047 μ F \pm 5%,50V,Plastic
	Resistors	
R5061,R5161	453630824	8.2 Ω \pm 5%,1W,Metal
R5461	453630824	8.2 Ω \pm 5%,1W,Metal
	Terminal	
P5632	25060291	NTM-6PDMN222
	Plug	
P5631b	25055169	NPLG-6P153

S-VIDEO TERMINAL PC BOARD (NAVD-6622-3A/3B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q215-Q218	22241347	NJM2296D
Q219	22240800	TC9164AN
	Transistors	
Q201-Q208	2213631 or	RN1241-A or
Q211-Q214	2213632	RN1241-B
	Capacitors	
C232,C233	354744719	470 μ F,16V,Elect.
	Plug	
P202B	25055236	NPLG-5P220
	Sockets	
JL201A	25051093	NSCT-9P880
JL202A	25051094	NSCT-10P881
P201B	25051428	NSCT-6P1215
P205,P206	25051568	NSCT-12P1355
P207	25051750	NSCT-4P1537

POWER SWITCH PC BOARD (NAETC-6619-3A/3B/3C/3D)

CIRCUIT NO.	PART NO.	DESCRIPTION
C906	3500196S	△ RE275V-103M,Capacitor IS
S906	25035550	△ NPS-111-L512P,Switch

ON-SCREEN PC BOARD (NAVD-6623-3A/3B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q220	22241037	LC74761-9189
Q223,Q224	22241347	NJM2296D
	Transistors	
Q221	2212115,	2SC2458-GR,
	2213284 or	2SC1740S-R or
	2215864	NP KTC3199-GR
Q222	2212125,	2SA1048-GR
	2213354 or	2SA933S-R
	2215975	NP KTA1266-GR
Q225-Q230	2213631 or	RN1241-A or
	2213632	RN1241-B
	Diodes	
D213-D215	223163 or	1SS133 or
	223205	1SS270A
	Crystals	
X201	3010167	XTL-14.32M
X202	3010238	XTL-17.73M <P/T/W>
	Coils	
L201	233454J056	NCH-1452 056J
L202	233454K220	NCH-1452 220K
	Capacitors	
C208,C219	354721019	100 μ F,6.3V,Elect.
C210,C221	375524744	0.47 μ F \pm 5%,50V,Plastic
C211	354784799	0.47 μ F,50V,Elect.
C214	374722234	0.022 μ F \pm 5%,50V,Plastic
C215,C225	354780109	1 μ F,50V,Elect.
C216	374726824	6800pF \pm 5%,50V,Plastic
C217	374721224	1200pF \pm 5%,50V,Plastic

DISPLAY CIRCUIT PC BOARD (NADIS-6621-3A/3B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q8501	212199	16-BT-66GK
	IC	
Q8503	22240685R9	M66004FP
	Remote sensor	
U8501	241330	PIC-26043TE2
	Transistors	
Q8502,Q8505	2212115,	2SC2458-GR,
	2213284 or	2SC1740S-R or
	2215864	NP KTC3199-GR
Q8504	2213510,	DTA114ES,
	2214350 or	RN2202 or
	2215770	NP KRA102M
Q8507	221282,	DTC144ES,
	2213560 or	RN1204 or
	2215820	NP KRC104M
	Diodes	
D8501,D8505	223163 or	1SS133 or
	223205	1SS270A
D8502	225290	SEL4110R,LED
D8504	224470823	MTZJ8.2C,Zener
	Capacitors	
C8515	354721019	100 μ F,6.3V,Elect.
C8506	354741009	10 μ F,16V,Elect.
C8518	354780109	1 μ F,50V,Elect.
C8510	354781009	10 μ F,50V,Elect.
C8514	375524744	0.47 μ F \pm 5%,50V,Plastic

NOTE: THE COMPONENTS IDENTIFIED BY MARK
 △ ARE CRITICAL FOR RISK OF FIRE AND
 ELECTRIC SHOCK. REPLACE ONLY WITH
 PART NUMBER SPECIFIED.

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors			Oscillators	
C218	354783399	0.33 μ F, 50V, Elect.	X2001	3010203	AF6146CG, Crystal <P>
C223, C226	354721019	100 μ F, 6.3V, Elect.	X8001	3010322	CST16.00MXW0C1, Ceramic
C224	354724719	470 μ F, 6.3V, Elect.		Capacitors	
C227	354744709	47 μ F, 16V, Elect.	C2001	354784799	0.47 μ F, 50V, Elect.
C230, C231	354744719	470 μ F, 16V, Elect.	C2002	354780339	3.3 μ F, 50V, Elect.
	Terminals		C2006, C2008	354721019	100 μ F, 6.3V, Elect. <P>
P209	25045339	NPJ-4PDYE190	C2007	374725614	560pF \pm 5%, 50V, Plastic <P>
P210	25045299	NPJ-3PDYE158	C2012, C2013	374721824	1800pF \pm 5%, 50V, Plastic <W>
	Switch		C6071, C6171	354741009	10 μ F, 16V, Elect.
S201	25065581	NSS-22203	C6072, C6172	354721019	100 μ F, 6.3V, Elect.
	Sockets		C6073-C6075	354741009	10 μ F, 16V, Elect.
JL201B	25051093	NSCT-9P880	C6173, C6175	354741009	10 μ F, 16V, Elect.
JL202B	25051094	NSCT-10P881	C8001, C8002	354721019	100 μ F, 6.3V, Elect.
P203B	25051431	NSCT-9P1218	C8003	354780109	1 μ F, 50V, Elect.
	HEADPHONE TERMINAL PC BOARD (NAETC-6624-3A/3B)		C8007	3000078	DX-5R5L104, Super
	CIRCUIT NO. PART NO. DESCRIPTION		C8008	375524744	0.47 μ F \pm 5%, 50V, Plastic
JL8501B	25051109	NSCT-5P896, Socket	C8011	354780339	3.3 μ F, 50V, Elect.
P8502	25045514	YKB26-5005, Headphone	C8013	354741009	10 μ F, 16V, Elect.
	MAIN VOLUME PC BOARD (NAETC-6625-3A/3B)		C9053	354744729	4700 μ F, 16V, Elect.
	CIRCUIT NO. PART NO. DESCRIPTION		C9054	354741029	1000 μ F, 16V, Elect.
JL8502B	25051107	NSCT-3P894, Socket	C9056	354724719	470 μ F, 6.3V, Elect.
S8533	25065575	EC16B2425, Rotary encoder	C9058, C9060	354741009	10 μ F, 16V, Elect.
	MAIN CIRCUIT PC BOARD (NAAR-6627-3A/3B/3C/3D)		C9062, C9064	354741009	10 μ F, 16V, Elect.
	CIRCUIT NO. PART NO. DESCRIPTION		C9063	354780229	2.2 μ F, 50V, Elect.
	ICs		C9065	354762229	2200 μ F, 35V, Elect.
Q2005	22241297R2	BU1923F <P>	C9066	354761029	1000 μ F, 35V, Elect.
Q6075	22240191	NJM4565D-D	C9068, C9070	354741009	10 μ F, 16V, Elect.
Q8003	22241420	M30624MG-238FP	C9069	354780229	2.2 μ F, 50V, Elect.
Q9051	22278033DNEC	MPC2933HF	C9071	354781019	100 μ F, 50V, Elect.
Q9052-Q9054	222780055	78M05HF	C9072	354771019	100 μ F, 63V, Elect.
Q9055	222790055	79M05FA	C9076	354742229	2200 μ F, 16V, Elect.
Q9056, Q9057	222780125	78M12HF	C9078, C9080	354741009	10 μ F, 16V, Elect.
Q9059	222780565JRC	NJM78M56FA		Resistors	
Q9060	222780055	78M05HF	R6078, R6178	453530224	2.2 Ω \pm 5%, 1/2W, Metal
	Transistors		R9051, R9052	452638294	0.82 Ω \pm 5%, 1W, Metal
Q2001, Q2002	2215410R2	RN1441	R9053	452630154	1.5 Ω \pm 5%, 1W, Metal
Q2003	2214530R2	RN2402	R9054	452630154	1.5 Ω \pm 5%, 1W, Metal
Q2004	2213143R2	2SC2712-O <P>	R9055	452630334	3.3 Ω \pm 5%, 1W, Metal
Q6071, Q6072	2215410R2	RN1441	R9056	452530334	3.3 Ω \pm 5%, 1/2W, Metal
Q6073	2214530R2	RN2402	R9057	452530104	1 Ω \pm 5%, 1/2W, Metal
Q6074, Q8001	2214490R2	RN1404	R9058, R9059	452630474	4.7 Ω \pm 5%, 1W, Metal
Q6171, Q6172	2215410R2	RN1441	R9060, R9066	452530474	4.7 Ω \pm 5%, 1/2W, Metal
Q8002, Q8102	2214530R2	RN2402	R9061, R9062	452530824	8.2 Ω \pm 5%, 1/2W, Metal
Q8101, Q8103	2214490R2	RN1404	R9065	453530224	2.2 Ω \pm 5%, 1/2W, Metal
Q9058	2211455	2SA1015-GR	R9067, R9068	442621014	100 Ω \pm 5%, 1W, Metal oxide
	Diodes		R9069	442521204	12 Ω \pm 5%, 1/2W, Metal oxide
D8001	22380260,	RL1N4003,		Fuse labels	
D9052-D9057	22380032 or	1SR139-100 or	F941A, F942A	29361747	T2.5AL250V <P/T/W/A>
D9059-D9061	22380035	GP104003E		Fuse holders	
D8002	223234R2 or	1SS352 or	F943-F946	25052133	△ NSCT-1P2031
D804-D806	223233R1	1SS355		Sockets	
D8003, D8007	224490560R2	UDZ5.6B, Zener	JL5623A	25051091	NSCT-7P878
D8101, D8102	223234R2 or	1SS352 or	JL9051A	25051107	NSCT-3P894
	223233R1	1SS355	JL942A	25051113	NSCT-9P900
D9051	22380022F	RBV402		Plugs	
D9058	224493300R2	UDZ33B, Zener	P201A	25055785	NPLG-6P741
	Coils		P203A	25055788	NPLG-9P744
L2001	231237K220R2	NCH-1477 <P>	P3012A, P3013A	25055799	NPLG-20P755
L8001	231237K220R2	NCH-1477	P301A, P702A	25055795	NPLG-16P751
R8034, R8036	230948R2	BLM21A102F	P302A	25055786	NPLG-7P742
			P701A	25055799	NPLG-20P755

NOTE: THE COMPONENTS IDENTIFIED BY MARK
 Δ ARE CRITICAL FOR RISK OF FIRE AND
 ELECTRIC SHOCK. REPLACE ONLY WITH
 PART NUMBER SPECIFIED.

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	Plugs			Capacitors	
P8002A	25052024, 25050955, 25051281, 25051822 or 25052211	NSCT-15P1811, NSCT-15P742, NSCT-15P1070, NSCT-15P1609 or NSCT-15P2108	C3097,C3098 C3251,C3351 C4005,C4105 C4006,C4106 C4602,C4604 C6604	354721019 374722224 374721244 374724734 354741009 354781009	100 μ F,6.3V,Elect. 2200pF±5%,50V,Plastic <P/T/W/A> 0.12 μ F±5%,50V,Plastic 0.047 μ F±5%,50V,Plastic 10 μ F,16V,Elect. 10 μ F,50V,Elect.
P8003A	25055789	NPLG-10P745	C7001,C7002	354784709	47 μ F,50V,Elect.
P801A	25055795	NPLG-16P751	C7003,C7004	354744709	47 μ F,16V,Elect.
P803A	25055787	NPLG-8P743	C7011,C7111	354741009	10 μ F,16V,Elect.
	Terminals		C7013,C7113	354780229	2.2 μ F,50V,Elect.
P8203	25045504	NPJ-1PDBL319,RI	C7015,C7024	354784709	47 μ F,50V,Elect.
P8501A	25052034, 25050965, 25051291, 25051832 or 25052221	NSCT-25P1821, NSCT-25P752, NSCT-25P1080, NSCT-25P1619 or NSCT-25P2118	C7033,C7034 C7035,C7036 C7039,C7040 C7041,C7042 C7045,C7046 C7051,C7151	374721534 374724724 374721234 374728234 354744709 374725614	0.015 μ F±5%,50V,Plastic 4700pF±5%,50V,Plastic 0.012 μ F±5%,50V,Plastic 0.082 μ F±5%,50V,Plastic 47 μ F,16V,Elect. 560pF±5%,50V,Plastic <P/T/W/A>
	Fuses		C7115,C7124	354784709	47 μ F,50V,Elect.
F941,F942	252160	Δ 2.5A-UL/T-237,Fuse <D>	C7201,C7203	354744709	47 μ F,16V,Elect.
	252241 or	Δ 2.5A-SE-TL250Vor	C7202,C7205	354784709	47 μ F,50V,Elect.
	252075	Δ 2.5A-SE-EAK, Fuse <P/T/W/A>	C7204,C7206	354741009	10 μ F,16V,Elect.
	Screws		C7211,C7311	354741009	10 μ F,16V,Elect.
Q9051B,Q9052B	82143010	3P+10FN(BC),Pan head	C7213,C7313	354784709	47 μ F,50V,Elect.
Q9054B,Q9055B	82143010	3P+10FN(BC),Pan head	C7401,C7402	354744709	47 μ F,16V,Elect.
	Switch		C7403,C7404	354784709	47 μ F,50V,Elect.
S2001	25065414	NSS-22155 <W>	C7411,C7511	354741009	10 μ F,16V,Elect.
	Heatsinks		C7413,C7513	354780229	2.2 μ F,50V,Elect.
Q9054A,Q9055A	27160391	RAD-67	C7415,C7515	354784709	47 μ F,50V,Elect.
Q9051A,Q9052A	27160209		C7422,C7522	354784709	47 μ F,50V,Elect.
PREAMPLIFIER PC BOARD (NAAF-6628-3A/3B/3C/3D)					
CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs		C7431	374721534	0.015 μ F±5%,50V,Plastic
Q3051,Q3061	22241383R2	NJM4565M-D	C7432	374724724	4700pF±5%,50V,Plastic
Q3071,Q3091	22241383R2	NJM4565M-D	C7434,C7534	374721234	0.012 μ F±5%,50V,Plastic
Q4001,Q4101	22241383R2	NJM4565M-D	C7435	374728234	0.082 μ F±5%,50V,Plastic
Q4201,Q4301	22241383R2	NJM4565M-D	C7451,C7551	374722224	2200pF±5%,50V,Plastic <P/T/W/A>
Q4601	22240786	TC9274N-006	C7524	374722734	0.027 μ F±5%,50V,Plastic
Q4602	22241221R2	TC9164AF	C7534	374721234	0.012 μ F±5%,50V,Plastic
Q7001,Q7201	22241220R2	TC9459F	C7535	374728234	0.082 μ F±5%,50V,Plastic
Q7011,Q7021	22241383R2	NJM4565M-D		Terminals	
Q7031,Q7431	22241253	TC9184AP	P3051	25045572	NPJ-6PDBRW387
Q7041	22240025	LC4966	P3052	25045300	NPJ-6PDBL159
Q7211	22241383R2	NJM4565M-D	P7051	25045586	NPJ-4PDBRW397
Q7401	22241220R2	TC9459F		Plug	
Q7411,Q7421	22241383R2	NJM4565M-D	P3011B	25055139	NPLG-9P123
	Transistors		P3012B,P3013B	25051442	NSCT-20P1229
Q6001-Q6003	2215410R2	RN1441		Sockets	
Q6101-Q6103	2215410R2	RN1441			
Q6201-Q6203	2215410R2	RN1441			
Q6301-Q6303	2215410R2	RN1441			
Q6401-Q6403	2215410R2	RN1441			
Q6501,Q6502	2215410R2	RN1441			
Q6601	2214470R2	RN1402			
Q6602	2214550R2	RN2404			
Q6605	2214470R2	RN1402			
	Diodes				
D7201,D7202	224490910R2	UDZ9.1B,Zener			
	Capacitors				
C3053,C3054	354784709	47 μ F,50V,Elect.			
C3063,C3064	354784709	47 μ F,50V,Elect.			
C3067,C3077	374726224	6200pF±5%,50V,Plastic			
C3068,C3078	374721824	1800pF±5%,50V,Plastic			
C3069,C3070	354741009	10 μ F,16V,Elect.			
C3073,C3074	354784709	47 μ F,50V,Elect.			
C3079,C3080	354741009	10 μ F,16V,Elect.			
C3093,C3094	354741009	10 μ F,16V,Elect.			

NOTE: <D>: 120V model only
 <P>: 230V model only
 <T>: Asian model only
 <W>: Worldwide model only
 <A>: Australian model only

ADJUSTMENT AND CONFIRMATION

1. Idling current adjustment

Before Idling adjustment, turn the trimming resistors R5022, R5122, R5222, R5322 and R5422 to counter clockwise. Connect the DC voltmeter to sockets P5001, P5101, P5201, P5301 and P5401.

After turn POWER to ON, adjust the trimming resistors R5022, R5122, R5222, R5322 and R5422 so that the reading of voltmeter becomes 1.0 mV.

After adjustment, attach the top cover.

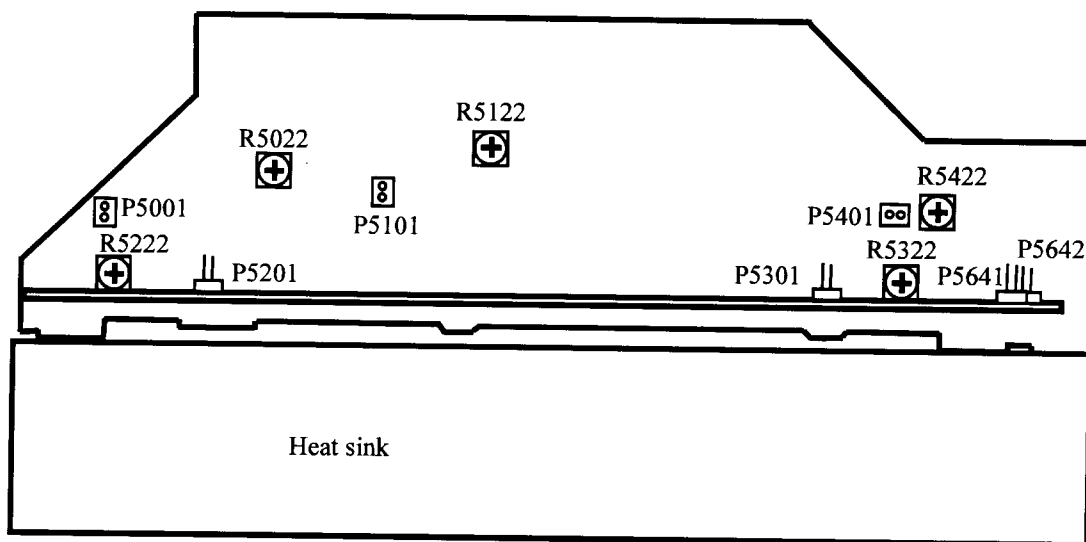
Confirm the voltage of above points after five minutes.

When less than 6 mV, readjust the above resistors so that the voltage becomes 6.0 mV.

When 6 mV to 7.5 mV, you are not necessary to adjust.

When more than 7.5 mV, readjust the above resistors so that the voltage becomes 7.5 mV.

Note: No load and No signal



Confirmation of protection circuit

1. Confirmation of speaker relay

Confirm that the speaker relay turns ON approximate 5 seconds after the power switch is turned ON.

Confirm that the speaker relay turns OFF immediately after the power switch is turned OFF.

2. Confirmation of DC detection circuit

Press and hold down CD button, then press SPEAKERS-A and SPEAKERS-B buttons at the same time.

During "TEST-1-00" on the FL tube light on and off, press PRESET/MODE ADJ button.

Apply DC 1.5~3V to MULTI CHANNEL INPUT terminals with no load.

Confirm that the speaker relay turns OFF.

Apply DC -1.5~-3V to MULTI CHANNEL INPUT terminals with no load.

Confirm that the speaker relay turns OFF.

3. Confirmation of Current detection circuit

Press and hold down CD button, then press SPEAKERS-A and SPEAKERS-B buttons at the same time.

During "TEST-1-00" on the FL tube light on and off, press PRESET/MODE ADJ button.

Connect Differentiator below and apply the 200Hz square signal to the terminal of MULTI CHANNEL INPUT.

Adjust the attenuator or Volume so that the output level becomes 35V p-p.

Confirm that the speaker relay does not turn OFF when a 3.0 ohm load is connected.

Confirm that the speaker relay turns OFF when a 1.5 ohm load is connected.

Confirmation of Fan

Set the unit to "TEST-1-00" and apply the signal 1kHz, -30dB (32 mV) to Multi channel inputs except Sub Woofer with no load. Confirm that the fan turns after few seconds.

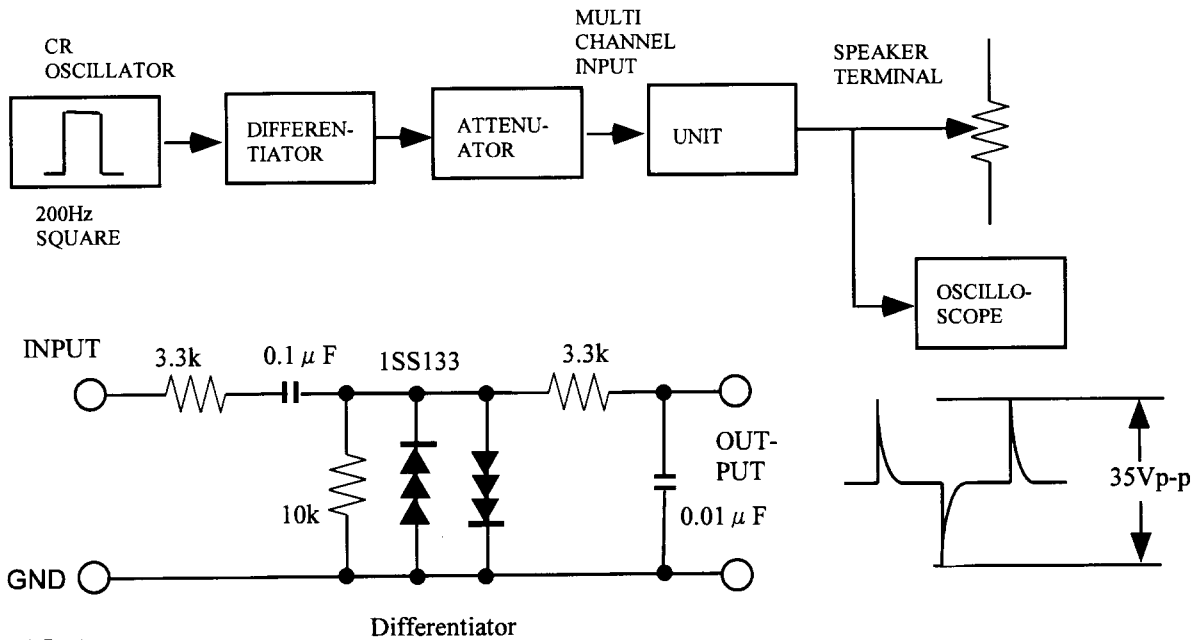
Connect the 22 ohm resistor between terminal P5642 with no input.

Confirm that the fan turns after few seconds.

Confirmation of thermal detection circuit

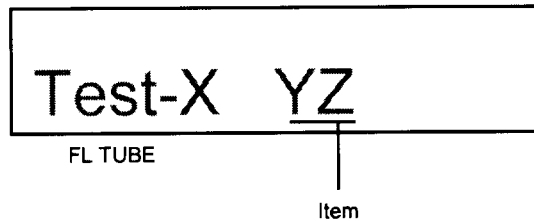
Set the unit to "TEST-1-00" and connect the 22 ohm resistor between terminal P5641.

Confirm that "Thermal Protect" on the fluorescent tube light on.



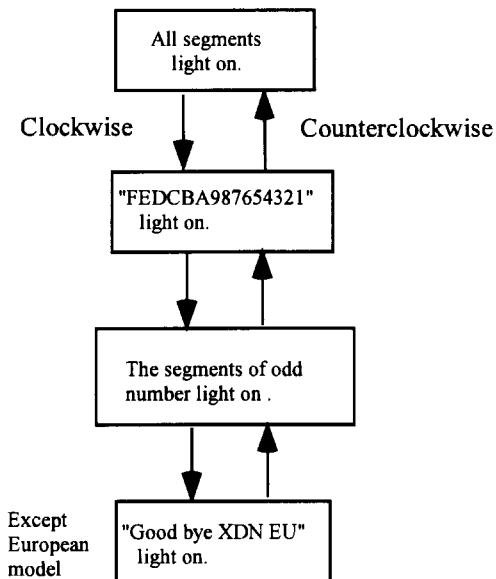
Test Mode

1. Turn POWER button on.
2. Press and hold down CD button, then press SPEAKERS-A and SPEAKERS-B buttons at the same time.
3. During "TEST-1-00" on the FL tube is displayed, press CD button to set the unit to the test mode of FL tube.



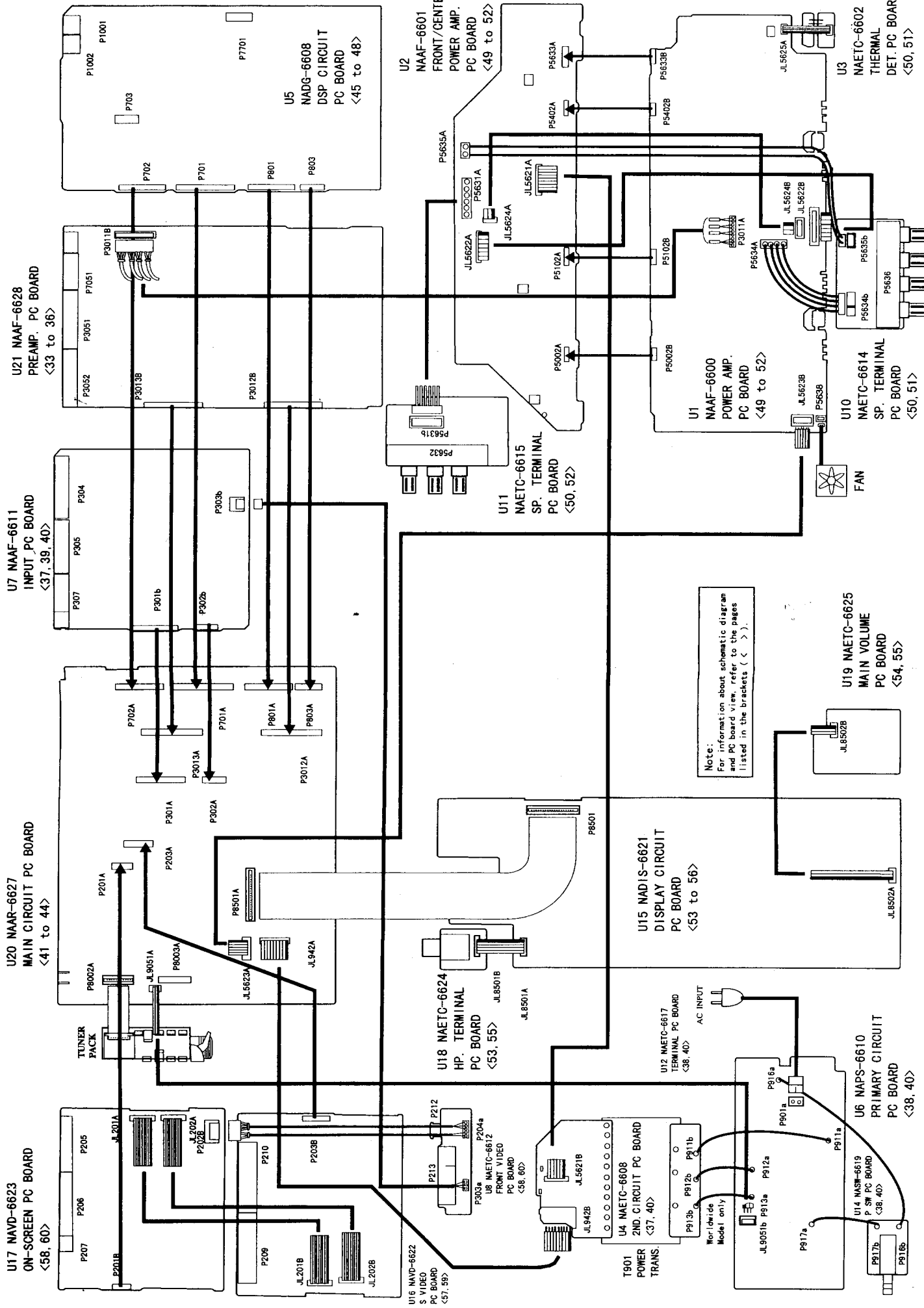
Test mode of FL tube

Turn PRESET/MODE ADJ button to change the test mode of FL tube.



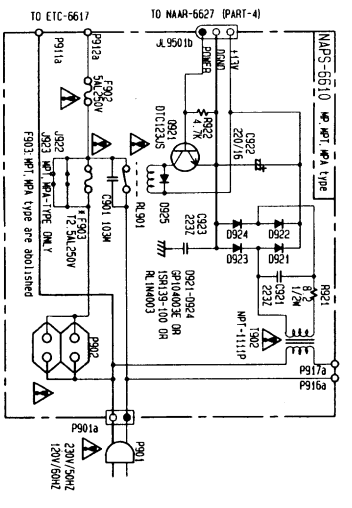
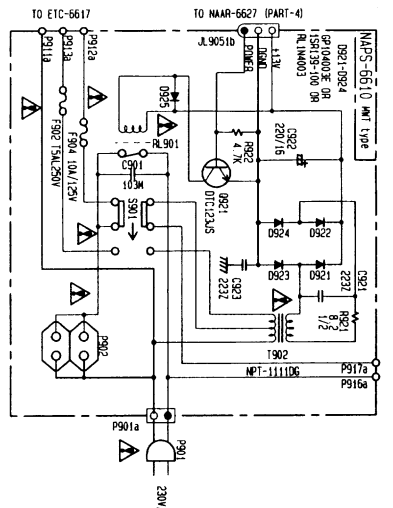
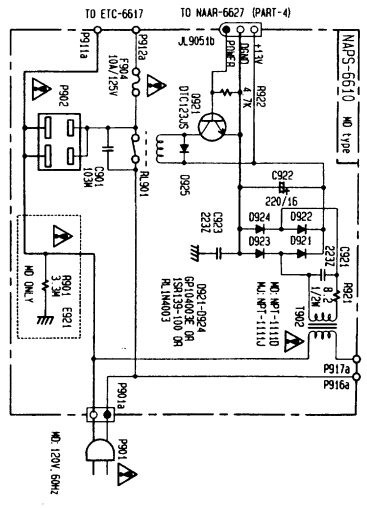
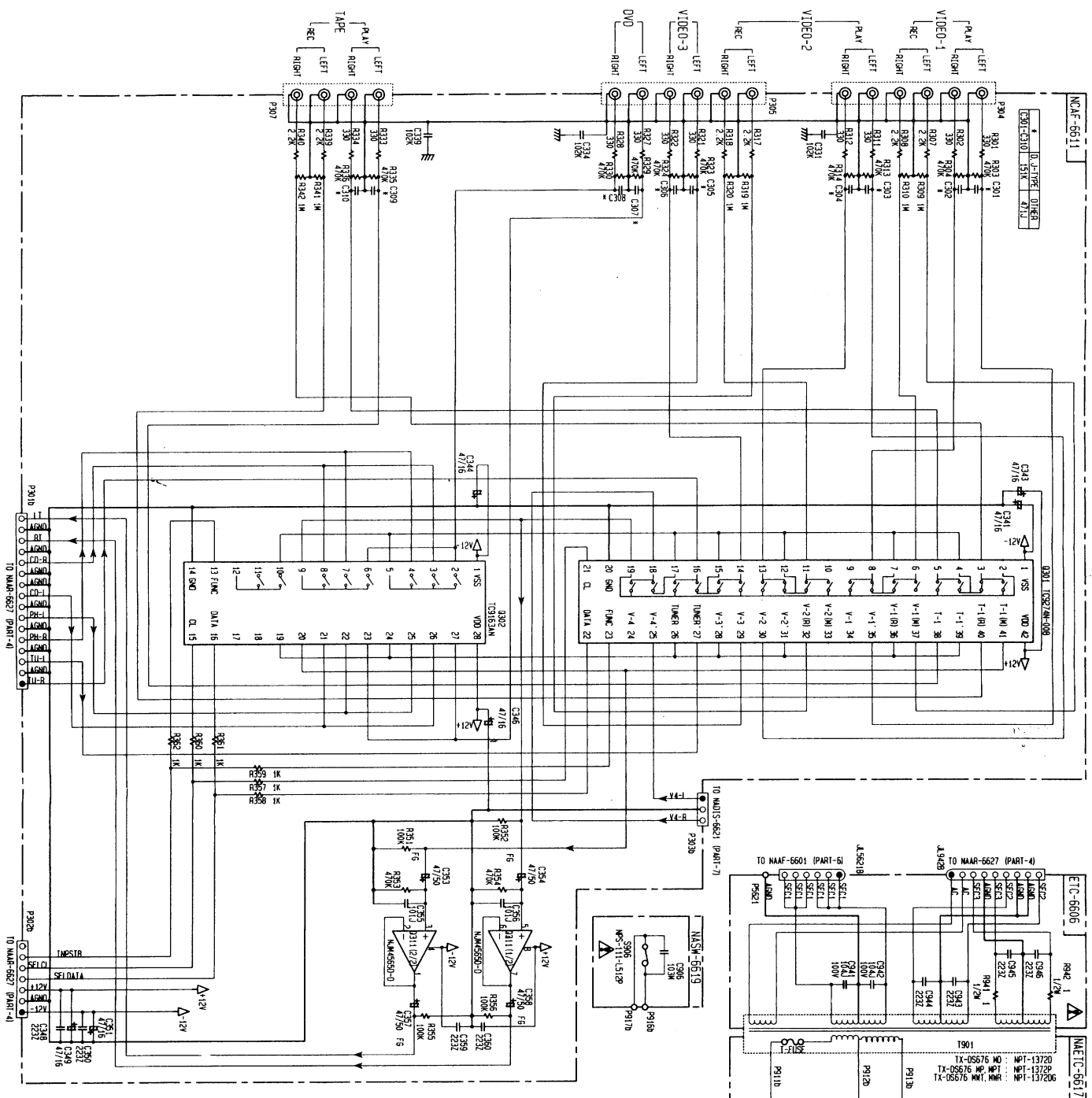
Press PRESET/MODE ADJ button to finish the test mode of FL tube.

- XDN EU
1 2 3 4
1. THX: 1.THX 0:None
 2. Digital output:1.Yes 0:No
 3. N: 1.NTSC/PAL: Auto PAL 0: NTSC
 4. EU:Europe US: USA SA:Saudi JP:Japan



SCHEMATIC DIAGRAM 3

A B C D E F G



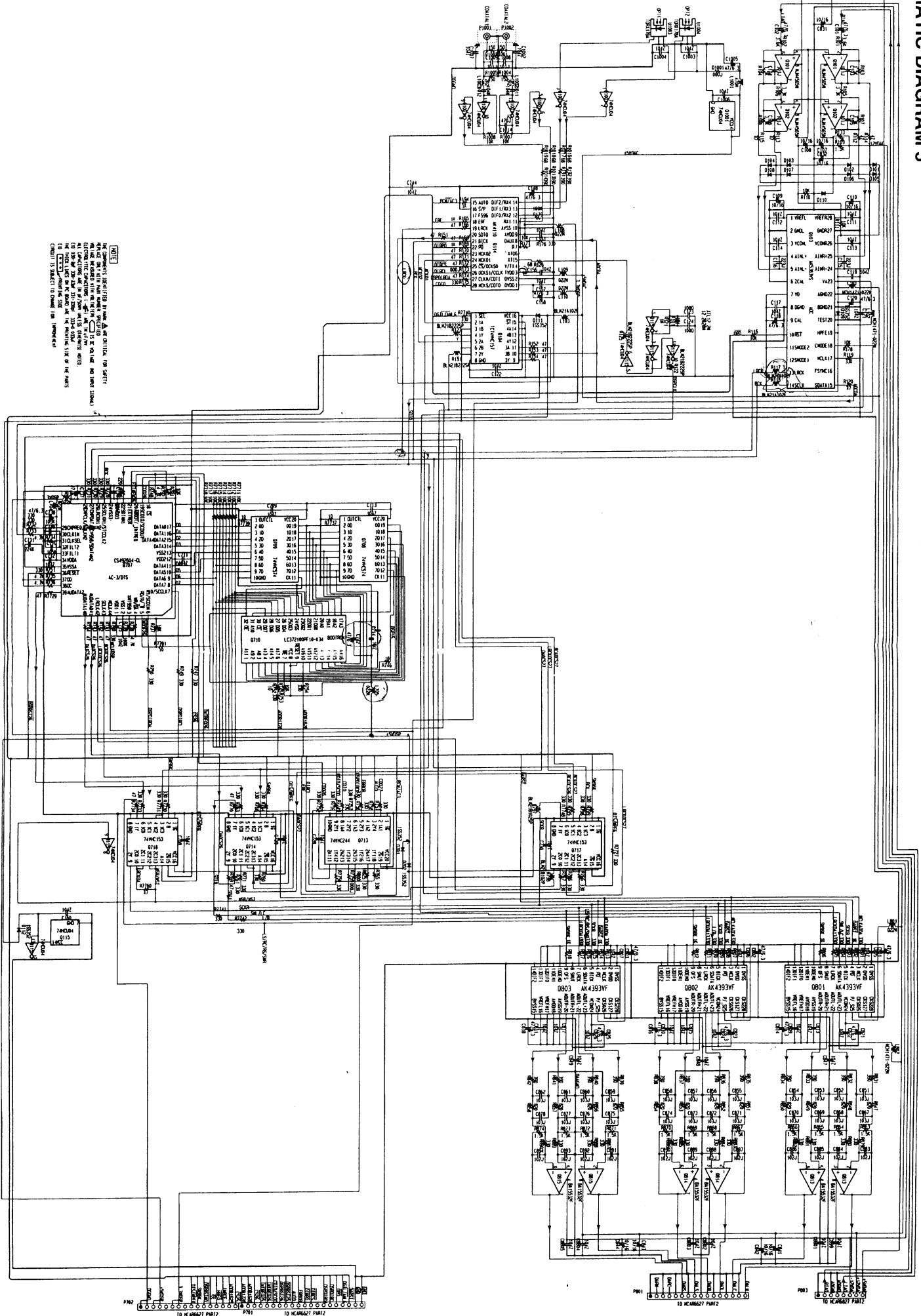
ATTENTION
 WARNING: THE FOLLOWING INFORMATION IS FOR THE USE OF PERSONNEL QUALIFIED IN THE REPAIR AND MAINTENANCE OF THIS EQUIPMENT. READ AND UNDERSTAND THE CAUTION SYMBOLS AND THE INFORMATION CONTAINED HEREIN BEFORE ATTEMPTING TO REPAIR OR MAINTAIN THIS EQUIPMENT.

CAUTION
 WARNING: THE FOLLOWING INFORMATION IS FOR THE USE OF PERSONNEL QUALIFIED IN THE REPAIR AND MAINTENANCE OF THIS EQUIPMENT. READ AND UNDERSTAND THE CAUTION SYMBOLS AND THE INFORMATION CONTAINED HEREIN BEFORE ATTEMPTING TO REPAIR OR MAINTAIN THIS EQUIPMENT.

WARNING
 TO AVOID THE RISK OF ELECTRICAL SHOCK, DISCONNECT THE POWER SUPPLY FROM THE EQUIPMENT BEFORE ATTEMPTING TO REPAIR OR MAINTAIN IT. THE POWER SUPPLY SHOULD BE DISCONNECTED FROM THE EQUIPMENT BEFORE ATTEMPTING TO REPAIR OR MAINTAIN IT. THE POWER SUPPLY SHOULD BE DISCONNECTED FROM THE EQUIPMENT BEFORE ATTEMPTING TO REPAIR OR MAINTAIN IT.

EMATIC DIAGRAM 5

A B C D E F G



NOTE:

1. COMPONENTS IDENTIFIED BY A WAVE AND/OR SYMBOL ARE SAFETY RELATED COMPONENTS. FAILURE OF THESE COMPONENTS MAY CAUSE THE EQUIPMENT TO OPERATE IN AN UNDESIRABLE MANNER OR TO STOP OPERATING. THESE COMPONENTS SHOULD BE REPLACED WITH IDENTICAL PARTS.

2. THE WAVE AND/OR SYMBOL IS USED TO IDENTIFY THE SAFETY RELATED COMPONENTS. THESE COMPONENTS SHOULD BE REPLACED WITH IDENTICAL PARTS.

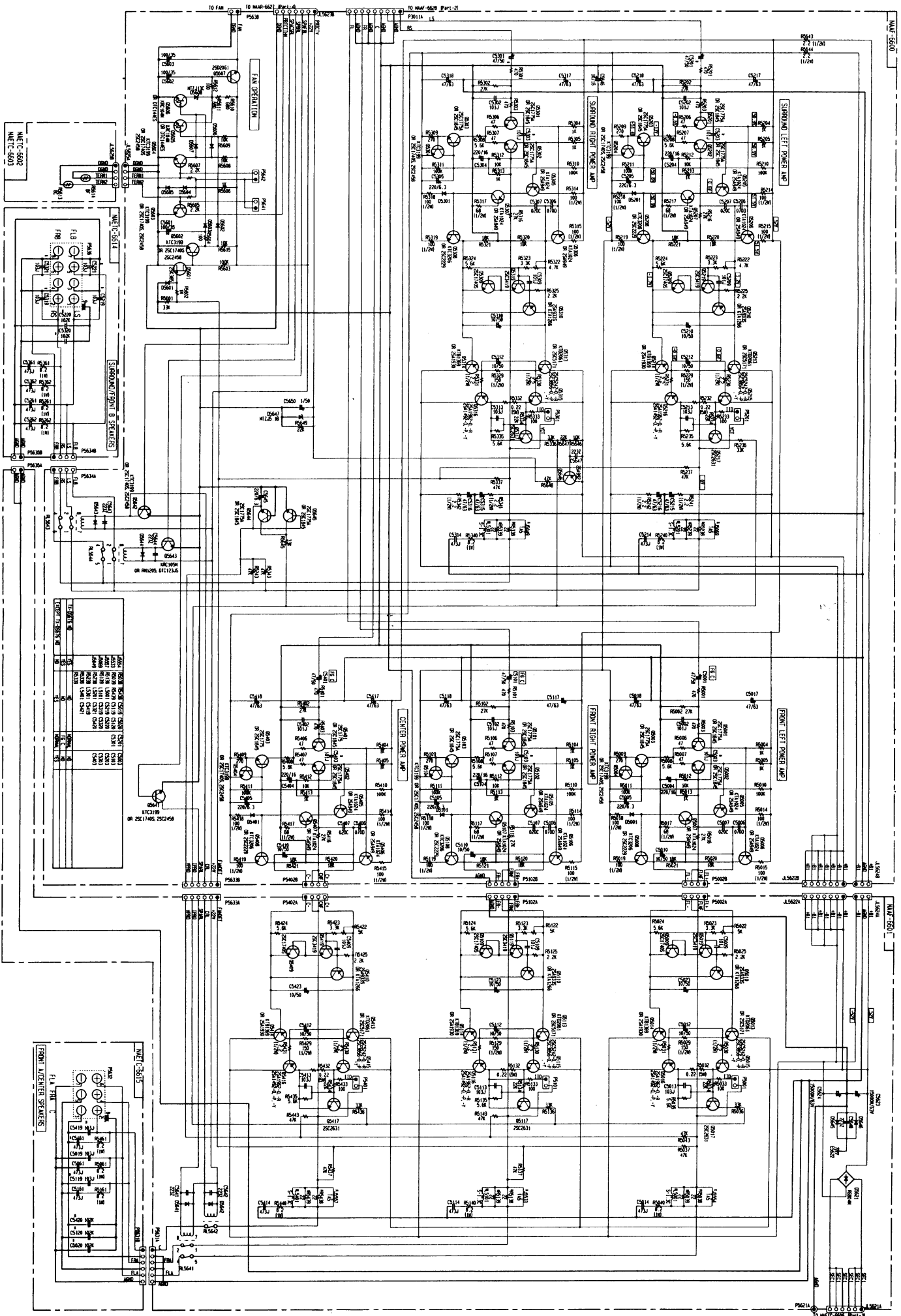
3. THE WAVE AND/OR SYMBOL IS USED TO IDENTIFY THE SAFETY RELATED COMPONENTS. THESE COMPONENTS SHOULD BE REPLACED WITH IDENTICAL PARTS.

4. THE WAVE AND/OR SYMBOL IS USED TO IDENTIFY THE SAFETY RELATED COMPONENTS. THESE COMPONENTS SHOULD BE REPLACED WITH IDENTICAL PARTS.

5. THE WAVE AND/OR SYMBOL IS USED TO IDENTIFY THE SAFETY RELATED COMPONENTS. THESE COMPONENTS SHOULD BE REPLACED WITH IDENTICAL PARTS.

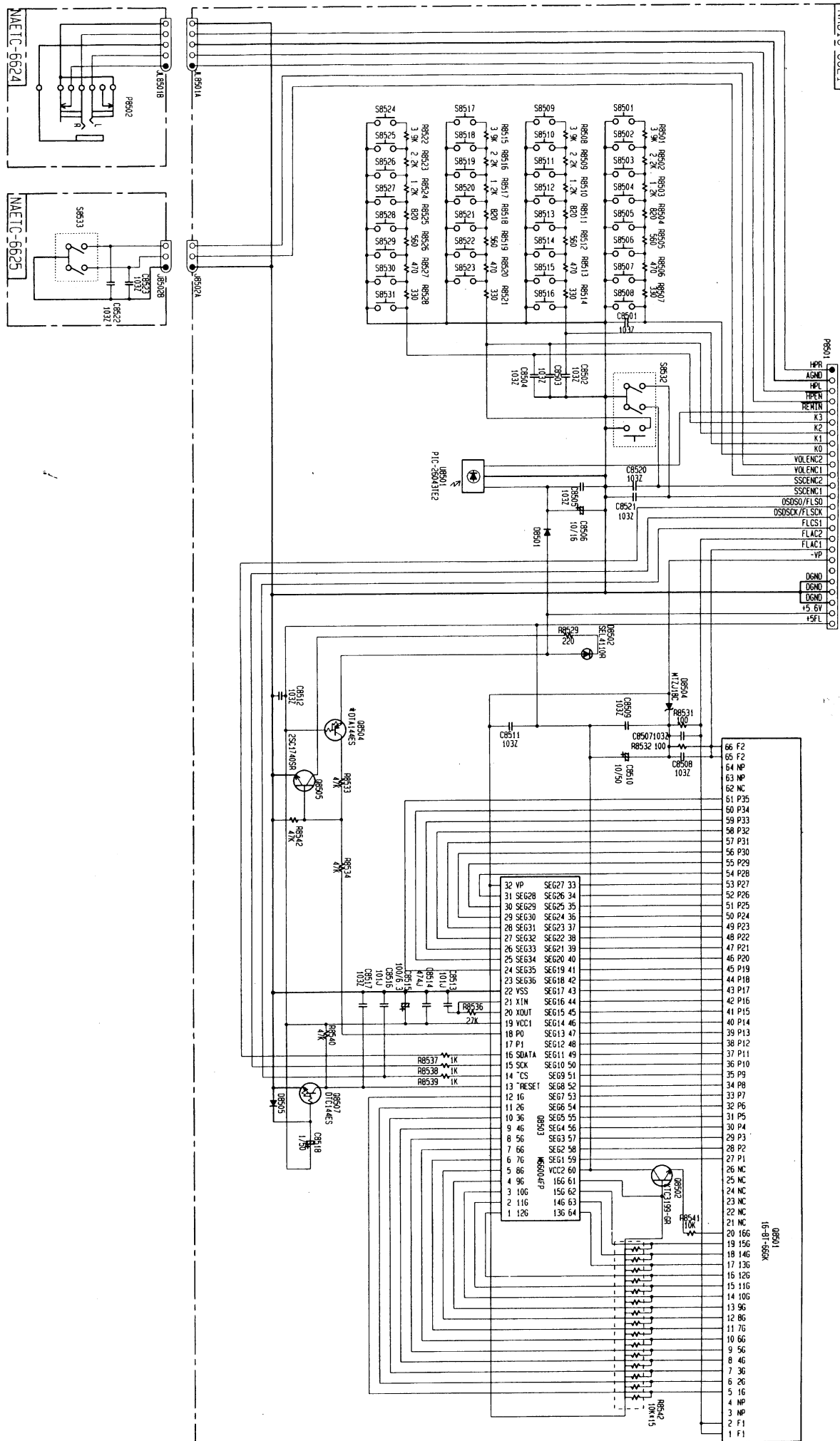
CHEMATIC DIAGRAM 6

A B C D E F G



CHEMATIC DIAGRAM 7

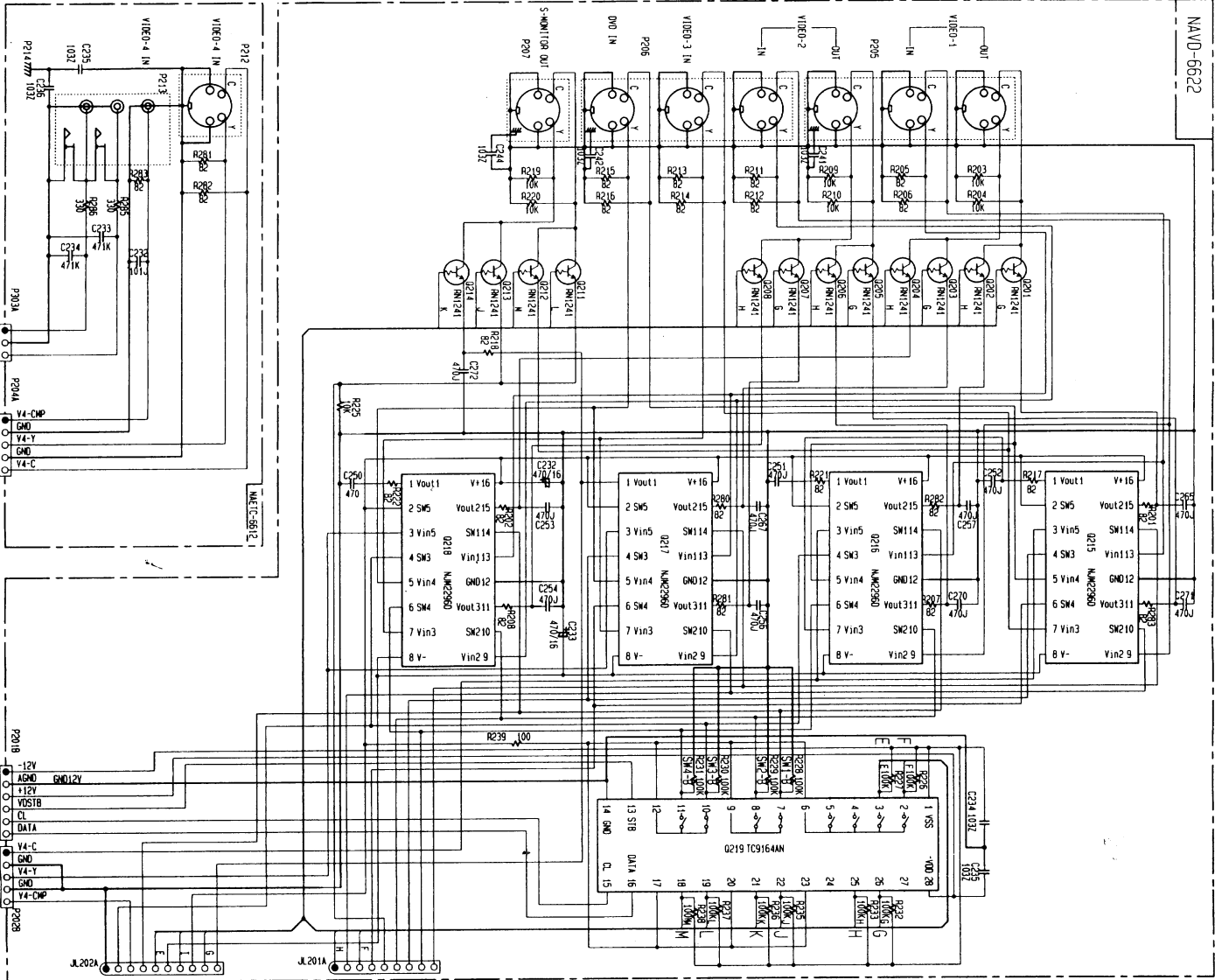
NA01S-6621



A
B
C
D
E
F
G

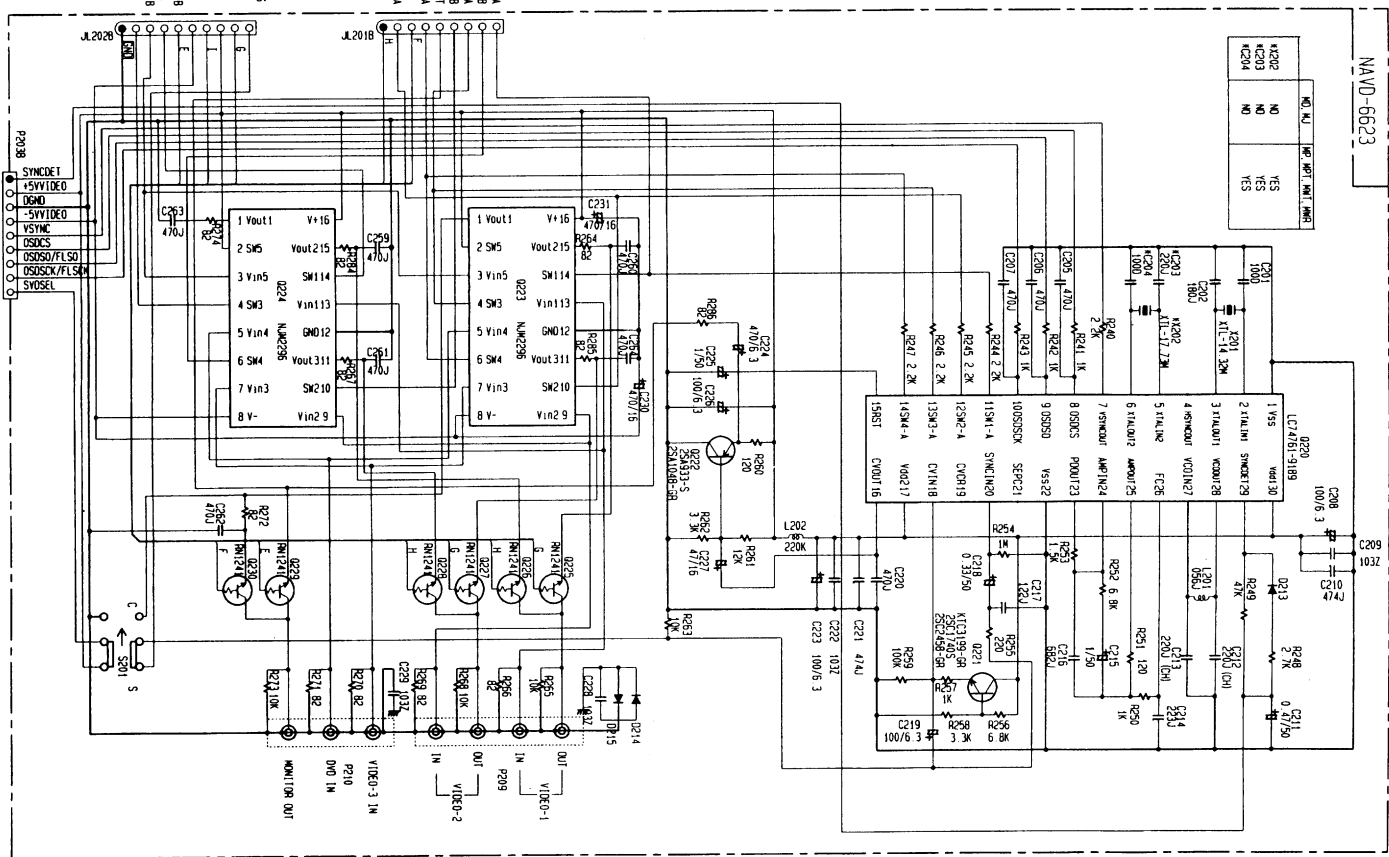
NAVD-6622

Schematic Diagram 8

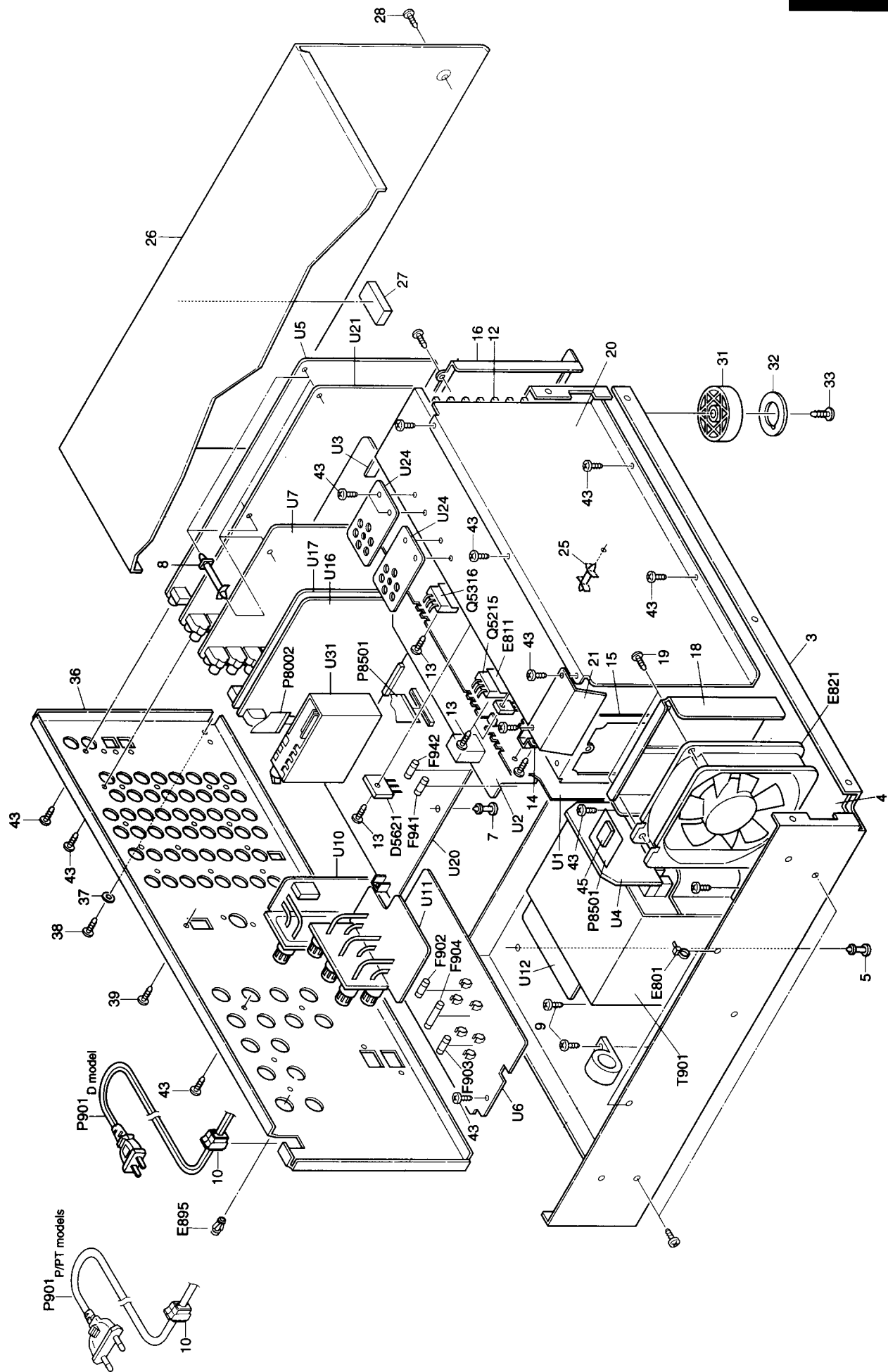


NAVD-6623

NO. IN	NO. OUT	IMP. PART. NAME
NO	NO	YES
NO	NO	YES
NO	NO	YES



EXPLODED VIEW



PARTS LIST

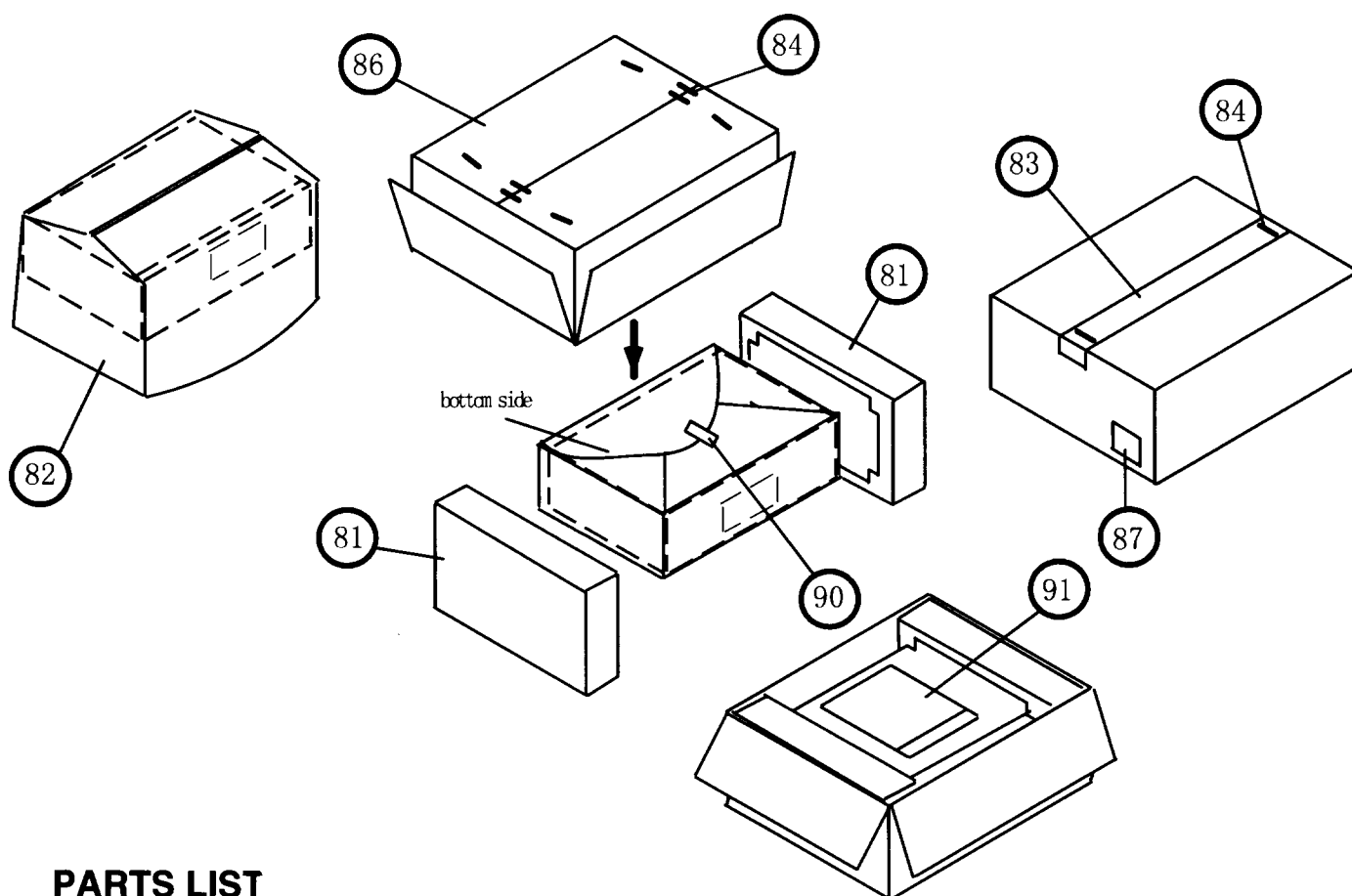
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
1	27111116	Front bracket 	37	87643010	W3*10F(BC),Flat washer
2	27111117	Front bracket <G>	38	838930088	3TTB+8B(UN),Self-tapping screw
3	82143010	3P+10FN(BC),Pan head screw	39	838430068	3TTB+6B(BC),Self-tapping screw
4	27100373A	Chassis	40	27212119	Front panel
5	27130824B	Bracket PT	41	27212120	Front panel <G>
6	27190813	KGPS-10RF,Holder	42	28198778	Facet
7	27190965	Holder	42	28135244Y	Badge
8	27190428A	KGLS-10RF,Holder	43	28135245	Badge <G>
9	27190470	KGLS-18S,Holder	43	838130088	3TTB+8B,Self-tapping screw
10	830440089	4TTC+8C(BC),Self-tapping screw	44	27215329	Decorative frame <D/T/W/A/R>
11	27300750	#2271,Bushing,cord	44	27215330	Decorative frame <P>
12	27301396	HL-28-0,Clamp	45	27215331	Decorative frame <G>
13	27160446B	Heat sink	45	28141336Y	Cushion
14	801433	3SMS8W.SW+14B(BC),Special screw	D5621	22380273	RS804M, Diode
15	27141681	Retainer PWB	E801	260208	Wire tie
16	27141740	Retainer L	E811	223024Y	AC238,Isolated sheet
18	27141741	Retainer R	E821	24502308	D09T-24PG07(EX),Fan
19	838150108	Retainer, fan	E895	880048	P-3055B-8L,Plastic rivet <P/T>
20	27141743	5TTB+10B,Self-tapping screw	F902	252244 or	5A-SE-TL250V or
21	27150439	Retainer F	F903	252078	5A-SE-EAK,Fuse <P/T/W/A/R>
22	28191851A	Shield plate	F904	252241 or	2.5A-SE-TL250V or
23	28133385	Clear plate	F941,F942	252075	2.5A-SE-EAK,Fuse <P/T>
24	28325497A	Back plate 		252199	10A-UL,Fuse <D/W/R>
25	28325499A	Back plate <G>		252160	2.5A-UL/T-237,Fuse <D>
26	27190902	Knob,Power 		252241 or	2.5A-SE-TL250V or
27	28184757	Knob,Power <G>		252075	2.5A-SE-EAK, Fuse <P/T/W>
28	28141272Y	KGPS-16S,Holder	P8002	2047151512	NCFC7-151512,Flexible flat cable
31	838930088	Top cover 	P8501	2047255012	NCFC7-255012,Flexible flat cable
32	28141332	Top cover <G>	P901	253281VOL or	AS-UC-2#18 or
33	28325683	10x60x20,Cushion		253289HIT	AS-UC-2#18,Power supply cord <D>
34	28325684	3TTB+8B(BC), Self-tapping screw 		253245MAR	AS-CEE,Power supply cord <P/T>
35	28325651	3TTB+8B(UN), Self-tapping screw <G>		253246KAW	AS-CEE-2,Power supply cord <W>
36	27122617	Leg		253268HIT	AS-CAA,Power supply cord <A>
	27175319A	Cushion		253274KAW	AS-CCEE,Power supply cord <R>
	28141332	3TTW+8B(BC),Self-tapping screw	Q5015,Q5115	2202843,	* 2SC5242-O,
	831430088	Knob SS 	Q5215,Q5315	2202842,	* 2SC5242-R,
	28325683	Knob SS <G>	Q5415	2201653,	* 2SC3856-O,
	28325684	Knob, Volume 		2201655 or	* 2SC3856-P or
	28325651	Knob, Volume <G>		2201654	* 2SC3856-Y,Transistor
	28325653	Rear panel <D>	Q5016,Q5116	2202833,	* 2SA1962-O,
	27122617	Rear panel <P>	Q5216,Q5316	2202832,	* 2SA1962-R,
	27122618	Rear panel <T>	Q5416	2201663,	* 2SA1492-O,
	27122619	Rear panel <W>		2201665 or	* 2SA1492-P or
	27122620	Rear panel <R>		2201664	* 2SA1492-Y,Transistor
	27122621	Rear panel <A>			

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
Q5019,Q5119	2212863 or	2SC3419-O or	U13	1A841518-3A	NASW-6618-3A,Holder for PC board <D>
Q5419	2212864	2SC3419-Y,Transistor		1A841518-3B	NASW-6618-3B,Holder for PC board <P/T>
T901	2301414	△ NPT-1372D,Power transformer <D>		1A841518-3C	NASW-6618-3C,Holder for PC board <W/R>
	2301415	△ NPT-1372P,Power transformer <P/T/A>		1A841518-3D	NASW-6618-3D,Holder for PC board <A>
	2301416	△ NPT-1372DG,Power transformer <W/R>	U14	1A841519-3A	NASW-6619-3A,Power switch PC board ass'y <D>
U1	1A841500-3A	NAAF-6600-3A,Power amplifier PC board ass'y <D>		1A841519-3B	NASW-6619-3B,Power switch PC board ass'y <P/T>
	1A841500-3B	NAAF-6600-3B,Power amplifier PC board ass'y <P/T/W/A/R>		1A841519-3C	NASW-6619-3C,Power switch PC board ass'y <W/R>
U2	1A841501-3A	NAAF-6601-3A,Front/center power amplifier PC board ass'y <D>		1A841519-3D	NASW-6619-3D,Power switch PC board ass'y <A>
	1A841501-3B	NAAF-6601-3B,Front/center power amplifier PC board ass'y <P/T/W/A/R>	U15	1A841521-3A	NADIS-6621-3A,Display circuit PC board ass'y <D>
U3	1A841502-3A	NAETC-6602-3A,Thermal detector PC board ass'y <D>		1A841521-3B	NADIS-6621-3B,Display circuit PC board ass'y <P/T/W/A/R>
	1A841502-3B	NAETC-6602-3B,Thermal detector PC board ass'y <P/T/W/A/R>	U16	1A841522-3A	NAVD-6622-3A,S- video terminal PC board ass'y <D>
U4	1A841506-3A	NAETC-6606-3A,Secondary circuit PC board ass'y <D>		1A841522-3B	NAVD-6622-3B,S- video terminal PC board ass'y <P/T/W/A/R>
	1A841506-3B	NAETC-6606-3B,Secondary circuit PC board ass'y <P/T/W/A/R>	U17	1A841523-3A	NAVD-6623-3A,On-screen PC board ass'y <D>
U5	1A841508-3A	NADG-6608-3A,DSP circuit PC board ass'y <D/T/W/A/R>		1A841523-3B	NAVD-6623-3B,On-screen PC board ass'y <P/T/W/A/R>
	1A841508-3B	NADG-6608-3B,DSP circuit PC board ass'y <P>	U18	1A841524-3A	NAETC-6624-3A,Headphone terminal PC board ass'y <D>
U6	1A841510-3A	NAPS-6610-3A,Primary circuit PC board ass'y <D>		1A841524-3B	NAETC-6624-3B,Headphone terminal PC board ass'y <P/T/W/A/R>
	1A841510-3B	NAPS-6610-3B,Primary circuit PC board ass'y <P/T>	U19	1A841525-3A	NAETC-6625-3A,Mian volume PC board ass'y <D>
	1A841510-3C	NAPS-6610-3C,Primary circuit PC board ass'y <W/R>		1A841525-3B	NAETC-6625-3B,Mian volume PC board ass'y <P/T/W/A/R>
U7	1A841510-3D	NAPS-6610-3D,Primary circuit PC board ass'y <A>		1A841527-3A	NAAR-6627-3A,Main circuit PC board ass'y <D>
	1A841511-3A	NAAF-6611-3A,Input terminal PC board ass'y <D>	U20	1A841527-3B	NAAR-6627-3B,Main circuit PC board ass'y <P>
	1A841511-3B	NAAF-6611-3B,Input terminal PC board ass'y <P/T>		1A841527-3C	NAAR-6627-3C,Main circuit PC board ass'y <T/A>
	1A841511-3C	NAAF-6611-3C,Input terminal PC board ass'y <W/R>		1A841527-3D	NAAR-6627-3D,Main circuit PC board ass'y <W/R>
U8	1A841511-3D	NAAF-6611-3D,Input terminal PC board ass'y <A>	U21	1A841528-3A	NAAF-6628-3A,Pre., amplifier PC board ass'y <D>
	1A841512-3A	NAETC-6612-3A,Front video terminal PC board ass'y <D>		1A841528-3B	NAAF-6628-3B,Pre., amplifier PC board ass'y <P>
	1A841512-3B	NAETC-6612-3B,Front video terminal PC board ass'y <P/T>		1A841528-3C	NAAF-6628-3C,Pre., amplifier PC board ass'y <T/A>
	1A841512-3C	NAETC-6612-3C,Front video terminal PC board ass'y <W/R>	U24	1A841528-3D	NAAF-6628-3D,Pre., amplifier PC board ass'y <W/R>
	1A841512-3D	NAETC-6612-3D,Front video terminal PC board ass'y <A>	U25	25136607	NCETC-6607,Holder PC board <D>
U9	1A841513-3A	NAETC-6613-3A,Holder for PC board <D>		25136723	NCETC-6723,Holder PC board <D>
	1A841513-3B	NAETC-6613-3B,Holder for PC board <P/T>	U31	240134	TFCEIU114A,Tuner pack <D>
	1A841513-3C	NAETC-6613-3C,Holder for PC board <W/R>		240135	TFCEIE512A,Tuner pack <P/T/W/A/R>
	1A841513-3D	NAETC-6613-3D,Holder for PC board <A>			
U10	1A841514-3A	NAETC-6614-3A,Surround/front B speaker terminal PC board ass'y <D>			
	1A841514-3B	NAETC-6614-3B,Surround/front B speaker terminal PC board ass'y <P/T>			
	1A841514-3C	NAETC-6614-3C,Surround/front B speaker terminal PC board ass'y <W/R>			
	1A841514-3D	NAETC-6614-3D,Surround/front B speaker terminal PC board ass'y <A>			
U11	1A841515-3A	NAETC-6615-3A,Front/center speaker terminal PC board ass'y <D>			
	1A841515-3B	NAETC-6615-3B,Front/center speaker terminal PC board ass'y <P/T>			
	1A841515-3C	NAETC-6615-3C,Front/center speaker terminal PC board ass'y <W/R>			
	1A841515-3D	NAETC-6615-3D,Front/center speaker terminal PC board ass'y <A>			
U12	1A841517-3A	NAETC-6617-3A,Power transformer terminal PC board ass'y <D>			
	1A841517-3B	NAETC-6617-3B,Power transformer terminal PC board ass'y <P/T>			
	1A841517-3C	NAETC-6617-3C,Power transformer terminal PC board ass'y <W/R>			
	1A841517-3D	NAETC-6617-3D,Power transformer terminal PC board ass'y <A>			

NOTE: : Black model only <T>: Asian model only
 <G>: Golden model only <W>: Worldwide model only
 <D>: 120V model only <A>: Australian model only
 <P>: 230V model only <R>: Chinese model only

NOTE: THE COMPONENTS IDENTIFIED BY MARK
 △ ARE CRITICAL FOR RISK OF FIRE AND
 ELECTRIC SHOCK. REPLACE ONLY WITH
 PART NUMBER SPECIFIED.

PACKING VIEW



PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
81	29091881A	Pad
82	29100153Y	1020x720,Polybag
83	29110098	PP tape
84	282301	Staple
86	29053463	Carton box <D>
	29053464	Carton box <P>
	29053465	Carton box <T/W/A/R>
	29053466	Carton box <G>
87	29362476	Label EAN <P/T/W/A/R>
	29362477	Label EAN <G>
	29362478	Label UPC <D>
90	261504	Paper tape
91	29100097-1A	350*250,Polybag
	29365083	Warranty card <D>
	29095866	Instruction sheet <D>
	29342721A	Instruction manual E
	29342722	Instruction manual U3 GSWD <P>
	29342723	Instruction manual U3 FSI <P>
	29342726	Instruction manual T <T/W>
	29342725	Instruction manual <D>
	24140392A	RC-392M,remote controller
	3010054	Battery
	25055018	CV-K-1,Conversion plug <WT>
	25056005 or	CV-K-1 or
	292115	FM antenna <P/T/W>
	292142	FM antenna <D>
	25065462	YAE21-0237,FM antenna adapter <T/W>
	232140	NMA-3057,AM loop antenna

NOTE: : Black model only
 <G>: Golden model only
 <D>: 120V model only
 <P>: European model only
 <T>: Asian model only
 <W>: Worldwide model only
 <WT>: Taiwanese model only