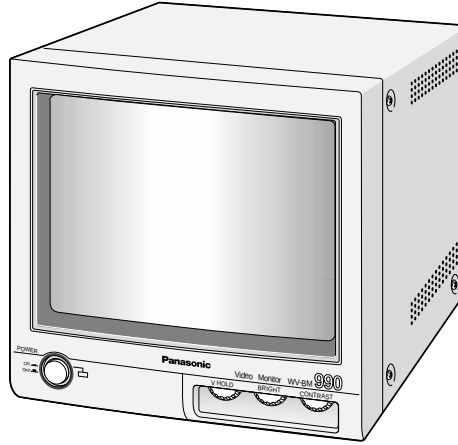


Service Manual

Video Monitor WV-BM990



SPECIFICATIONS

Power Source :	220-240 V AC, 50 Hz
Power Consumption :	Approx. 28 W
Screen Size :	245 mm (9-5/8") diagonal tube size, 90° deflection. 220 mm (8-11/16") diagonal actual visual size.
Horizontal Resolution :	800 TV lines at centre
Video Input :	1.0 V[p-p] composite/75 Ω , BNC with Auto Termination
Video Output :	Looped through video input, BNC
Horizontal Scanning Frequency :	15.625 kHz
Vertical Scanning Frequency :	50 Hz
Sweep Linearity :	Horizontal; Less than 5 % Vertical; Less than 5 %
Ambient Operating Humidity :	Less than 90 %
Ambient Operating Temperature :	-10°C - +50°C (14°F - 122°F)
Dimensions :	221 (W) x 220 (H) x 262 (D) mm [8-11/16" (W) x 8-11/16 (H) x 10-5/16"]
Weight :	5.2 kg (11.5 lbs.)

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

OPTIONAL ACCESSORY

Rack Mount Bracket WV-Q29E

Panasonic

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distribution is a violation of law.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.

It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN  CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	 This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.  This symbol alerts the user that important literature concerning the operation and maintenance of this has been included. Therefore, it should be read carefully in order to avoid any problems.
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IMPORTANT SAFETY NOTICE

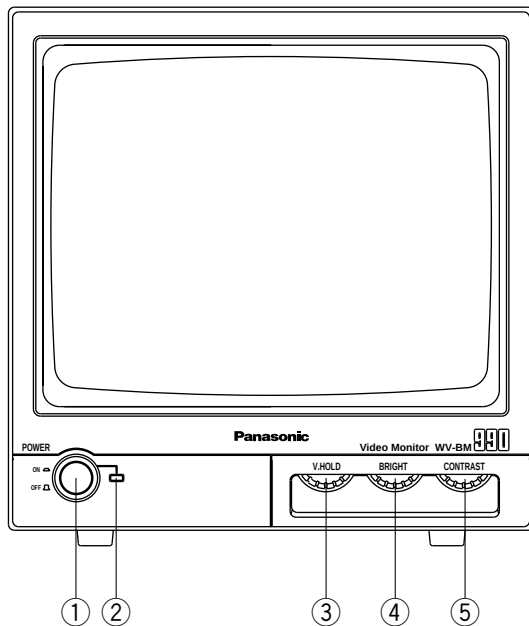
There are special components used in this equipment which are important for safety. These parts are indicated by the "⚠" mark on the schematic diagram and the replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-radiation, shock, fire, or other hazards. Do not modify the original design without permission of manufacture.

CONTENTS

Major Operating Controls and Their Functions	1
Adjustment Procedure	2
Location of Test Points and Adjusting Controls	4
Schematic Diagram	5
Conductor View	6
Exploded View	7
Replacement Parts List	8

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS

● Front View



① Power Switch (POWER, ON/OFF)

This is a push-push type switch which turns the power of this monitor on and off.

Press once (switch remains down (⬇️)) to turn on the power of the monitor.

Press again (switch comes up (⬆️)) to turn off the power of the monitor.

② Power Indicator

This indicator is on when the monitor's power is turned on.

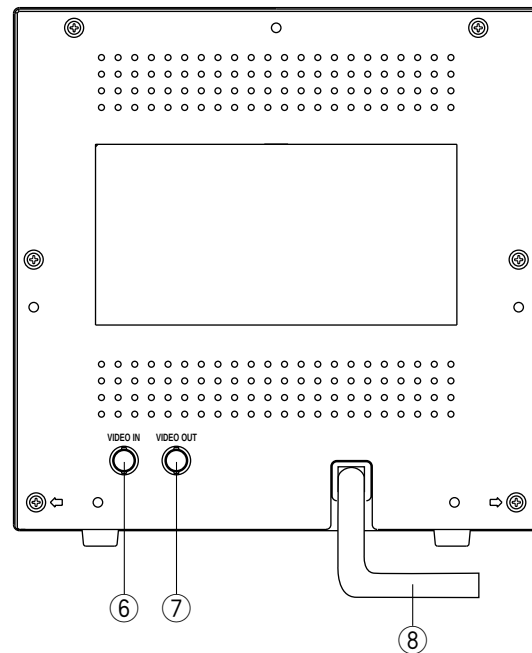
③ Vertical Hold Control (V-HOLD)

This control is used to lock the vertical position of the picture.

④ Brightness Control (BRIGHT)

Adjusts the picture brightness. Turn this counterclockwise to increase the picture brightness, and turning the control clockwise has the reverse effect.

● Rear View



⑤ Contrast Control (CONTRAST)

Adjusts the picture contrast. Turn this counterclockwise to increase the picture contrast, and turning the control clockwise has the reverse effect.

⑥ Video Input Connector (VIDEO IN)

For input of the composite video signal from the out-board device.

⑦ Video Output Connector (VIDEO OUT)

The video input signal connected to the video input connector ⑥ is looped through to this connector and terminated automatically.

⑧ AC Power Cord

Plug the power cord to an AC outlet.

ADJUSTMENT PROCEDURE

1. Test Equipments Required

- The following Test Equipments are required for adjustment of the Video Monitor WV-BM990.
- Video Signal Generator (Crosshatch Signal)
- Monoscope Pattern Signal Generator
- Oscilloscope
- Digital Voltmeter
- Degaussing Coil
- Ceramic Screwdriver
- Electric Torque Driver

2. Disassembling Procedure for the Adjustment

- Referring to Fig. 2-1, remove eight screws that secure the Upper Cover and the Rear Cover. Remove the Upper Cover and the Rear Cover.

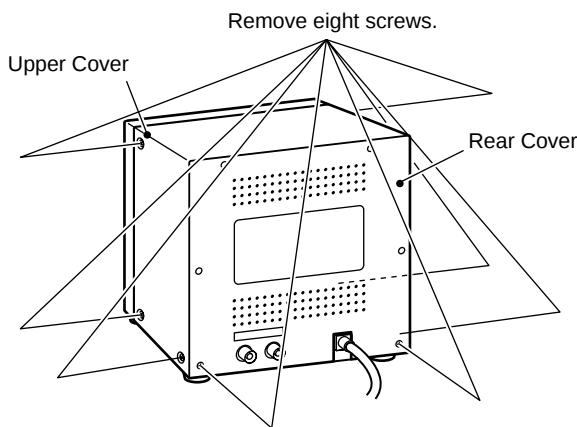


Fig. 2-1

3. Connection and Setting up for Adjustment

3.1. Connection

- Fig. 3-1 shows the connecting diagram for adjustment procedure of the WV-BM990.

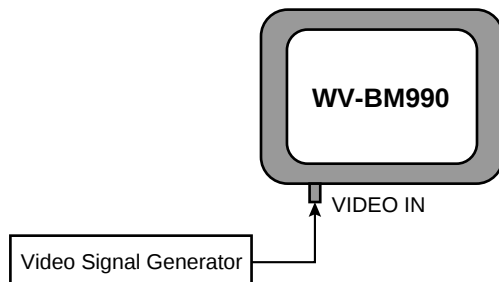


Fig 3-1

- Connect the coaxial cable between Video Input Connector of the WV-BM990 and Video Output Connector of Video Signal Generator.

3.2. Setting Up

- Set the every adjusting VRs to their mechanical center positions.
- This adjustment should be done after 20 minutes warm up of the WV-BM990.

4. Adjustment Procedure

- Refer to the Location of the Test Points and Adjusting Controls on the page 4.

(1). Freerun Adjustment

Test Point:	Pin H+ of CN501 (H+)	Main Board
Adjust:	VR501 (H-HOLD)	Main Board
	VR515 (H.PRESET)	Main Board

- Disconnect all the input signals from the WV-BM990.
- Connect the Frequency Counter to Pin H+ of CN501.
- Fix VR501 (H-HOLD) at its center position.
- Adjust VR515 so that the frequency becomes 15.400 kHz $\pm$ 50 Hz.

(2). Cut Off Voltage Adjustment

Adjust:	VR401 (V-HOLD)	Main Board
	Deflection Coil (DY)	
	VR301 (CONTRAST)	Main Board
	VR302 (BRIGHT)	Main Board
	VR602 (SUB-BRIGHT)	CRT Board

Observe: Video Monitor Screen

- Supply the Monoscope Pattern signal to the Video Input Connector.
- Adjust VR401 to hold picture vertically.
- Adjust the Deflection Coil so that the edges of the Monoscope Pattern are visible in the monitor screen.
- Turn VR301 fully counterclockwise.
- Turn VR302 to its mechanical center position.
- Adjust VR602 so that the Raster just appear.

(3). Picture Tilt Adjustment

Adjust: Deflection Coil (DY)

Observe: Video Monitor Screen

- Supply the Monoscope Pattern signal to the Video Input Connector.
- Loosen the Deflection Coil Holding Screw as shown in Fig. 4-1.

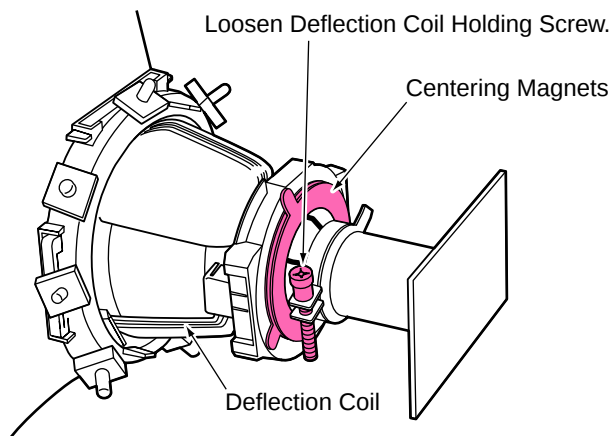


Fig. 4-1

- Turn the Deflection Coil until the raster becomes straight on the monitor screen.
 - Tighten the Deflection Coil Holding Screw carefully.
- Note:** When fixing the Deflection Coil Holding Screw, push the Deflection Coil to connect to CRT tightly.

(4). Centering and Horizontal Size Adjustment

Adjust: VR301 (CONTRAST) Main Board
 VR302 (BRIGHT) Main Board
 Centering Magnets
 L501 (H.SIZE) Main Board

Observe: Video Monitor Screen

- Supply the Monoscope Pattern signal to the Video Input Connector.
- Fix VR301 and VR302 at their center positions.
- Adjust the Centering Magnets as shown in Fig. 4-1 until the Monoscope Pattern signal comes to the center on the monitor screen.
- Adjust L501 so that the full Horizontal Width becomes plus 6% overscanning.
- Repeat adjusting the Centering Magnets and L501 until satisfactory.

(5). Vertical Height and Vertical Linearity Adjustment

Adjust: VR408 (V.SIZE) Main Board
 VR412 (V.LINE) Main Board
 Centering Magnets

Observe: Video Monitor Screen

- Supply the Monoscope Pattern signal to the Video Input Connector.
- Fix VR301 and VR302 at their mechanical center positions.
- Adjust VR408 so that the full Vertical Height becomes plus 6% overscanning.
- Adjust VR412 so that the circle portion of the Monoscope Pattern signal becomes nearly a true circle.

- Adjust the Centering Magnets so that the full Horizontal Width and full Vertical Height become the same overscanning rate.
- Repeat adjusting VR408, VR412 and the Centering Magnets until satisfactory.

(6). Focus Adjustment

Adjust: VR601 (FOCUS) CRT Board

Observe: Video Monitor Screen

- Supply the Monoscope Pattern signal to the Video Input Connector.
- Adjust the VR601 for the best focus in the monitor screen.

(7). Raster Distortion Adjustment

Adjust: Deflection Magnets

Observe: Video Monitor Screen

- Supply the Crosshatch signal to the Video Input Connector.
- Adjust 8 magnets as shown in Fig. 4-2 so that the raster distortion becomes minimum.

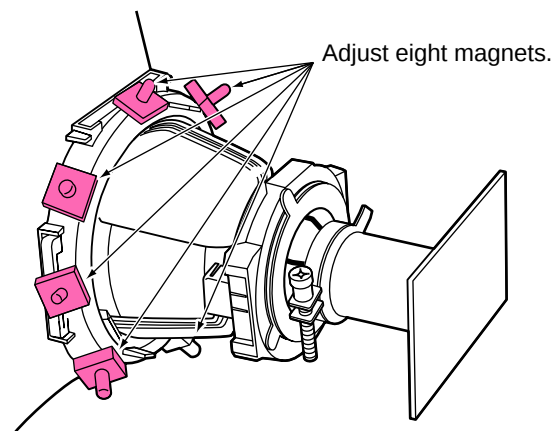


Fig. 4-2

- The raster distortion against 8 magnets are as shown in Fig. 4-3.

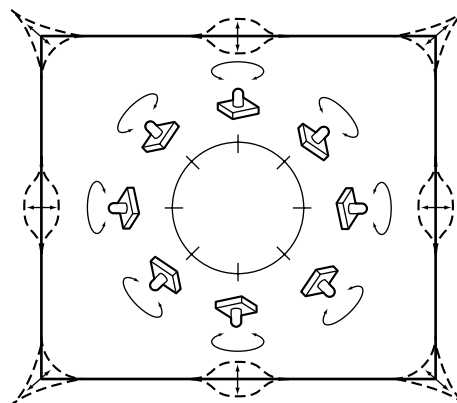
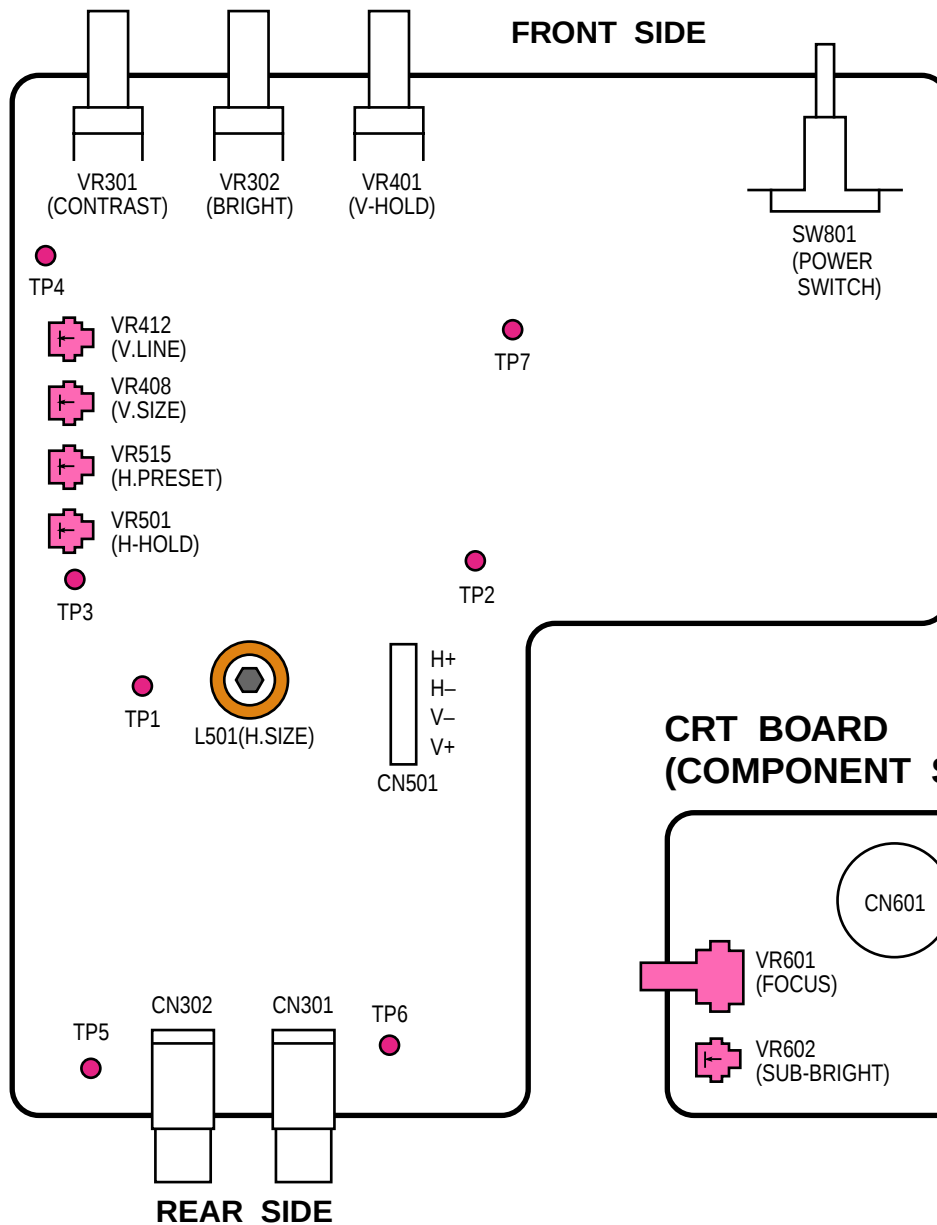


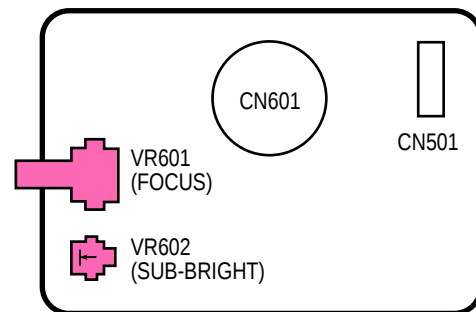
Fig. 4-3

LOCATION OF TEST POINTS AND ADJUSTING CONTROLS

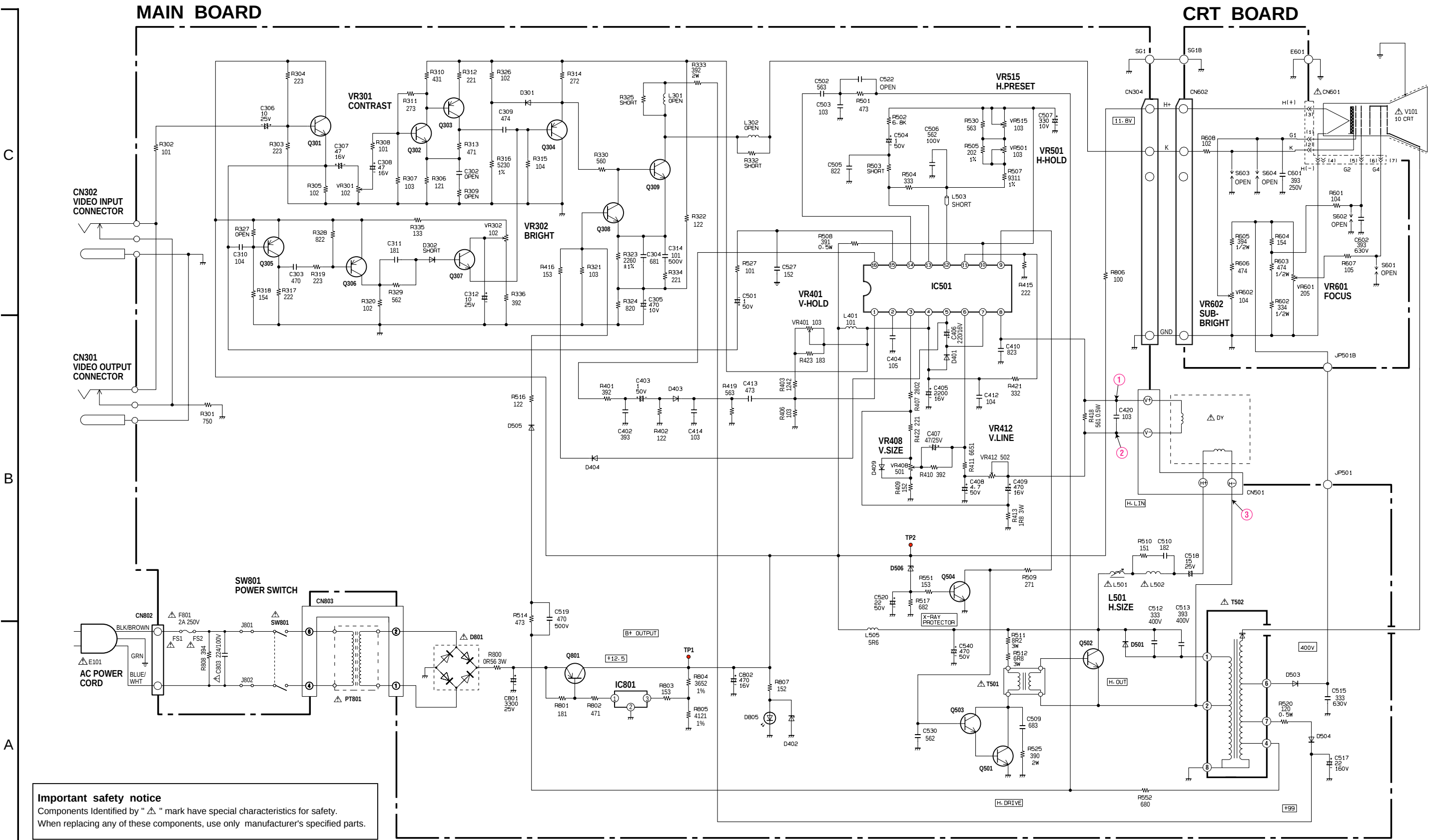
MAIN BOARD (COMPONENT SIDE)



CRT BOARD (COMPONENT SIDE)

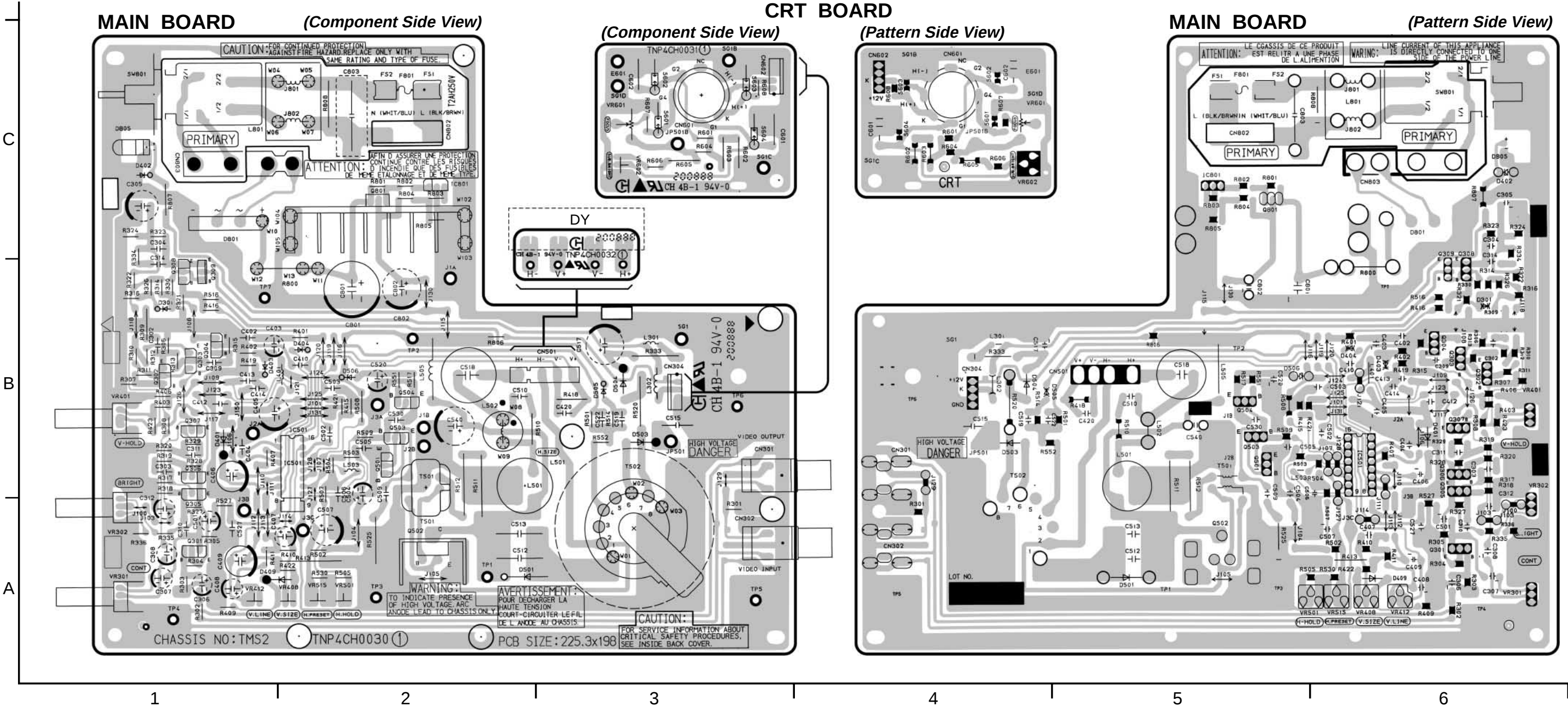


SCHEMATIC DIAGRAM



Important safety notice
Components identified by " ⚠ " mark have special characteristics for safety.
When replacing any of these components, use only manufacturer's specified parts.

CONDUCTOR VIEW



< INDEX >
MAIN BOARD

IC501	C4	D301	C3
IC801	A3	D401	B4
		D402	A4
Q301	C2	D403	B3
Q302	C2	D404	B3
Q303	C2	D409	B4
Q304	C3	D501	A5
Q305	C2	D503	A6
Q306	C2	D504	A6
Q307	C2	D505	B3
Q308	C3	D506	B4
Q309	C3	D801	A2
Q501	A5	D805	A4
Q502	A5		
Q503	A4		
Q504	B4		
Q801	A3		

< VOLTAGE >
MAIN BOARD

IC501	IC801
Pin1	4.0 14.0
2	6.7 0
3	3.8 1.3
4	11.8
5	5.5
6	2.0
7	11.3
8	5.7
9	0.6
10	6.9
11	4.8
12	3.5
13	4.1
14	2.3
15	4.1
16	1.6

< WAVEFORM >
MAIN BOARD

1. 5 ms/DIV, 5 V/DIV

2. 5 ms/DIV, 1 V/DIV

3. 20 μs/DIV, 20 V/DIV

Note: The value indicated in the schematic diagram should be read as follows:

Multiplier (0 - 5)
2nd. Significant Digit (0 - 9)
1st. Significant Digit (1 - 9)

<Example>
For Resistor:
330 → 33 × 10⁰ = 33 Ω
561 → 56 × 10¹ = 560 Ω
123 → 12 × 10³ = 12k Ω
0R00 = 0 Ω

For Capacitor:
(Except Electrolytic Capacitor and Tantalum Capacitor):
820 → 82 × 10⁰ = 82 pF
102 → 10 × 10² = 1000 pF = 0.001 μF
104 → 10 × 10⁴ = 100000 pF = 0.1 μF

For Coil:
010 → 1 × 10⁰ = 1 μH
8R2 → 8.2 × 10² = 8.2 μH
101 → 10 × 10⁴ = 100 μH

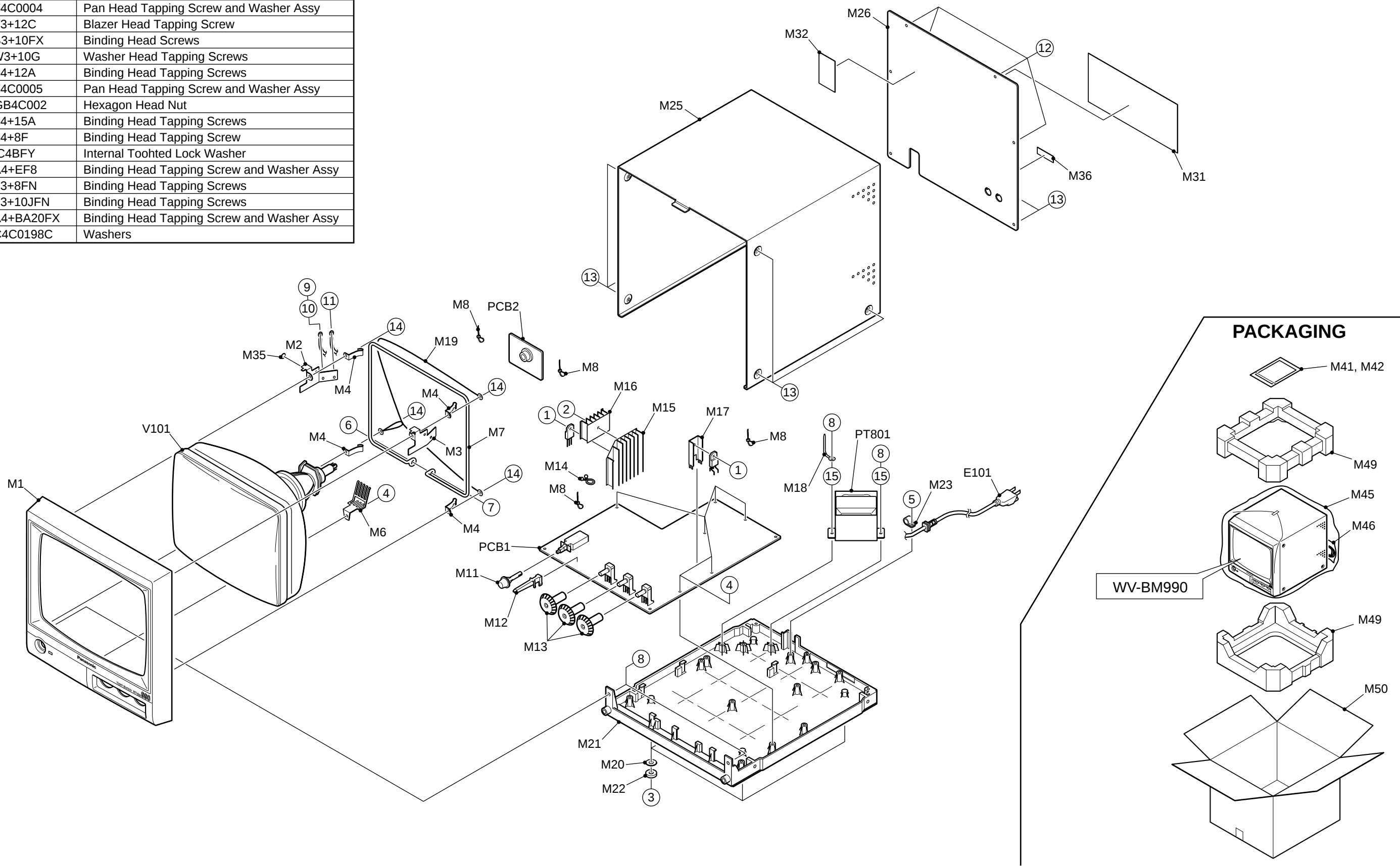
< INDEX >
MAIN BOARD

IC501	B2	D301	B1
IC801	C2	D401	B1
		D402	C1
Q301	A1	D403	B1
Q302	B1	D404	B2
Q303	B1	D409	A1
Q304	B1	D501	A2
Q305	A1	D503	B3
Q306	B1	D504	B3
Q307	B1	D505	B3
Q308	B1	D506	B2
Q309	B1	D801	C1
Q501	B2	D805	C1
Q502	B2		
Q503	B2		
Q504	B2		
Q801	C2		

EXPLODED VIEW

○ Numbers show screws, washers, nuts and etc.

No.	Screws	Description
①	THT4C0004	Pan Head Tapping Screw and Washer Assy
②	XTV3+12C	Blazer Head Tapping Screw
③	XSB3+10FX	Binding Head Screws
④	XTW3+10G	Washer Head Tapping Screws
⑤	XTB4+12A	Binding Head Tapping Screws
⑥	THT4C0005	Pan Head Tapping Screw and Washer Assy
⑦	XNGB4C002	Hexagon Head Nut
⑧	XTB4+15A	Binding Head Tapping Screws
⑨	XTB4+8F	Binding Head Tapping Screw
⑩	XWC4BFY	Internal Toohted Lock Washer
⑪	XYA4+EF8	Binding Head Tapping Screw and Washer Assy
⑫	XTB3+8FN	Binding Head Tapping Screws
⑬	XTB3+10JFN	Binding Head Tapping Screws
⑭	XYA4+BA20FX	Binding Head Tapping Screw and Washer Assy
⑮	TUC4C0198C	Washers



REPLACEMENT PARTS LIST

Important Notice

- Components identified by " ⚠ " mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
- RTL : Retention Time Limited (No longer available after discontinuing product).

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
MISCELLANEOUS			MAIN BOARD		
V101 ⚠	TXAVB1BM990P	CRT Assy	PCB1 (RTL)	NP4CH0030231	Printed Circuit Board Assy
PT801 ⚠	TLP4C60262S	Power Transformer	IC501	UPC1379C	IC
E101 ⚠	TSX4C7119H	AC Power Cord for WV-BM990/B	IC801	M5237L	IC
M1	TSX4C7118H	AC Power Cord for WV-BM990/G	Q301,302	2SD636-QRS	Transistor
	TKE4C5601C	Front Cover	Q303-306	2SB641QRS	Transistor
M2	TUX4C0149C	Earth Metal (R)	Q307,308	2SD636-QRS	Transistor
M3	TUX4C0150C	Earth Metal (L)	Q309	2SC2258	Transistor
M4	TUX4C0151C	CRT Hook	Q501	2SC1384QR	Transistor
M6	TES4C0038C	Earth Plate	Q502	2SD1274B	Transistor
M7	TES4C0039C	CRT Fix Spring	Q503	2SC3311AQRTA	Transistor
M8	TMM81416	Wire Clamper (X4)	Q504	2SC1740STPS	Transistor
M11	TBX4C0089-1C	SW Knob	Q801	2SB1299	Transistor
M12	TKK4C0096-1C	LED Lens	D301	MA165TA5VT	Diode
M13	TBX4C0088-1C	VR Knob (X3)	D401	1N4003TB26	Diode
M14	TMM4C0093	Wire Clamper (X2)	D402	MA4120H	Diode
M18	TUX4C0071	Wire Fixing Metal	D403	MA165TA5VT	Diode
M19	TXA3A1BM990	CRT Knit Wire	D404	MA165TA5VT	Diode
M20	TUC4C0196C	Bottom Washer	D409	1N4148T77	Diode
M21	TKY4C0901C	Bottom Cover	D501	FR154-T	Diode
M22	YVW5350WB01	Rubber Foot	D503	ES01FV0-H	Diode
M23	TMM4C0148	Cable Clamp	D504	ES01FV0-H	Diode
M25	TKA4C0003C	Upper Cover	D505	MA165TA5VT	Diode
M26	TKC4C0003C	Rear Cover	D506	MA4150M	Diode
M31 ⚠	TBM4C0699	Main Label for WV-BM990/B	D801 ⚠	D3SB60	Diode
	TBM4C0698	Main Label for WV-BM990/G	D805	LPG3333	LED
M32 ⚠	TQF4C0278	Caution Label	R301	ERDS2TJ750	Carbon 75 ohms 1/4W
M35 ⚠	TQF4C0629	Earth Label	R302	ERDS2TJ101	Carbon 100 ohms 1/4W
M36	TQF4C0627	Video Label	R303	ERDS2TJ223	Carbon 22K ohms 1/4W
			R304	ERDS2TJ223	Carbon 22K ohms 1/4W
			R305	ERDS2TJ102	Carbon 1K ohms 1/4W
			R306	ERDS2TJ121	Carbon 120 ohms 1/4W
			R307	ERDS2TJ103	Carbon 10K ohms 1/4W
			R308	ERDS2TJ101	Carbon 100 ohms 1/4W
			R310	ERDS2TJ431	Carbon 430 ohms 1/4W
			R311	ERDS2TJ273	Carbon 27K ohms 1/4W
			R312	ERDS2TJ221	Carbon 220 ohms 1/4W
			R313	ERDS2TJ471	Carbon 470 ohms 1/4W
			R314	ERDS2TJ272	Carbon 2.7K ohms 1/4W
			R315	ERDS2TJ104	Carbon 100K ohms 1/4W
			R316	ROS2TKF5230K	Metal 523 ohms 1/4W
			R317	ERDS2TJ222	Carbon 2.2K ohms 1/4W
			R318	ERDS2TJ154	Carbon 150K ohms 1/4W
			R319	ERDS2TJ223	Carbon 22K ohms 1/4W
			R320	ERDS2TJ102	Carbon 1K ohms 1/4W
			R321	ERDS2TJ103	Carbon 10K ohms 1/4W

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
R322	ERDS2TJ122	Carbon	1.2K ohms 1/4W	R808	ERC12AGK394D	Solid	390K ohms 1/2W
R323	R0S2TKF2260K	Metal	226 ohms 1/4W	VR301	VUE2AF20B13C	Variable Resistor	1K ohms
R324	ERDS2TJ820	Carbon	82 ohms 1/4W	VR302	VUE2AF20B13C	Variable Resistor	1K ohms
R326	ERDS2TJ102	Carbon	1K ohms 1/4W	VR401	VUE2AF20B14C	Variable Resistor	10K ohms
R328	ERDS2TJ822	Carbon	8.2K ohms 1/4W	VR408	TAV1028B501	Variable Resistor	500 ohms
R329	ERDS2TJ562	Carbon	5.6K ohms 1/4W	VR412	TAV1028B502	Variable Resistor	5K ohms
R330	ERDS2TJ560	Carbon	56 ohms 1/4W	VR501	TAV1028B103	Variable Resistor	10K ohms
R333	ERG2SJ392	Metal	3.9K ohms 2W	VR515	TAV1028B103	Variable Resistor	10K ohms
R334	ERDS2TJ221	Carbon	220 ohms 1/4W	C303	CCR1H470JG1D	Ceramic	47 pF 50V
R335	ERDS2TJ133	Carbon	13K ohms 1/4W	C304	CKR2H681KB1D	Ceramic	680 pF 500V
R336	ERDS2TJ392	Carbon	3.9K ohms 1/4W	C305	CEA1APF471BE	Electrolytic	470 µF 10V
R401	ERDS2TJ392	Carbon	3.9K ohms 1/4W	C306	CEA1EPF100BE	Electrolytic	10 µF 25V
R402	ERDS2TJ122	Carbon	1.2K ohms 1/4W	C307	CEA1CPF470BE	Electrolytic	47 µF 16V
R403	R0S2TKF1242K	Metal	12.4K ohms 1/4W	C308	CEA1CPF470BE	Electrolytic	47 µF 16V
R406	ERDS2TJ103	Carbon	10K ohms 1/4W	C309	CQM1H474JZBM	Plastic	0.47 µF 50V
R407	R0S2TKF2802K	Metal	28K ohms 1/4W	C310	ECQB1H104JF	Plastic	0.1 µF 50V
R409	ERDS2TJ152	Carbon	1.5K ohms 1/4W	C311	CCR1H181JG1D	Ceramic	180 pF 50V
R410	ERDS2TJ392	Carbon	3.9K ohms 1/4W	C312	CEA1EPF100BE	Electrolytic	10 µF 25V
R411	R0S2TKF6651K	Carbon	6.65K ohms 1/4W	C314	CCR2H101JG1D	Ceramic	100 pF 500V
R413	ERX3SJ1R8	Metal	1.8 ohms 3W	C402	CQM1H393KZ3M	Plastic	0.039 µF 50V
R415	ERDS2TJ222	Carbon	2.2K ohms 1/4W	C403	CEA1HPF010BE	Electrolytic	1 µF 50V
R416	ERDS2TJ153	Carbon	15K ohms 1/4W	C404	ECQV1H105JZ	Plastic	1 µF 50V
R418	ERDS1TJ561	Carbon	560 ohms 1/2W	C405	CEA1CPF222EE	Electrolytic	2200 µF 16V
R419	ERDS2TJ563	Carbon	56K ohms 1/4W	C406	CEA1CPF221BE	Electrolytic	220 µF 16V
R421	ERDS2TJ332	Carbon	3.3K ohms 1/4W	C407	CEA1EPF470BE	Electrolytic	47 µF 25V
R422	ERDS2TJ221	Carbon	220 ohms 1/4W	C408	CEA1HPF4R7BE	Electrolytic	4.7 µF 50V
R423	ERDS2TJ183	Carbon	18K ohms 1/4W	C409	CEA1CPF471BE	Electrolytic	470 µF 16V
R501	ERDS2TJ473	Carbon	47K ohms 1/4W	C410	CQM1H823JZ3M	Plastic	0.082 µF 50V
R502	ERDS2TJ682	Carbon	6.8K ohms 1/4W	C412	ECQB1H104JF	Plastic	0.1 µF 50V
R503	T3A206D	Jumper Wire		C413	CQM1H473JZ3M	Plastic	0.047 µF 50V
R504	ERDS2TJ333	Carbon	33K ohms 1/4W	C414	CQM1H103JZ3M	Plastic	0.01 µF 50V
R505	R0S2TKF2001K	Metal	2K ohms 1/4W	C420	CQM1H103JZ3M	Plastic	0.01 µF 50V
R507	R0S2TKF9311K	Metal	9.31K ohms 1/4W	C501	CEA1HPF010BE	Electrolytic	1 µF 50V
R508	ERDS1TJ391	Carbon	390 ohms 1/2W	C502	CQM1H563JZ3M	Plastic	0.056 µF 50V
R509	ERDS2TJ271	Carbon	270 ohms 1/4W	C503	CQM1H103JZ3M	Plastic	0.01 µF 50V
R510	ERD25FJ151	Carbon	150 ohms 1/4W	C504	CEA1HPF010BE	Electrolytic	1 µF 50V
R511	ERX3SJ8R2	Metal	8.2 ohms 3W	C505	CQM1H822KZ3M	Plastic	8200 pF 50V
R512	ERX3SJ6R8	Metal	6.8 ohms 3W	C506	ECQP1562JZ3M	Plastic	5600 pF 100V
R514	ERDS2TJ473	Carbon	47K ohms 1/4W	C507	CEA1APF331BE	Electrolytic	330 µF 10V
R516	ERDS2TJ122	Carbon	1.2K ohms 1/4W	C509	CQM1H683JZ3M	Plastic	0.068 µF 50V
R517	ERDS2TJ682	Carbon	6.8K ohms 1/4W	C510	CKR2H182KB1D	Ceramic	1800 pF 500V
R520	ERQ12HJ120P	Fuse Resistor	12 ohms 1/2W	C512	ECQF4333JZBM	Plastic	0.033 µF 400V
R525	ERG2SJ390	Metal	39 ohms 2W	C513	ECQF4393JZBM	Plastic	0.039 µF 400V
R527	ERDS2TJ101	Carbon	100 ohms 1/4W	C515	ECQE6333KFMB	Plastic	0.033 µF 630V
R530	ERDS2TJ563	Carbon	56K ohms 1/4W	C517	CEA2CPF220BE	Electrolytic	22 µF 160V
R551	ERDS2TJ153	Carbon	15K ohms 1/4W	C518	CEA1EBP150EE	Electrolytic	15 µF 25V
R552	ERDS2TJ680	Carbon	68 ohms 1/4W	C519	CCR2H470JG1D	Ceramic	47 pF 500V
R800	ERX3SJ56	Metal	0.56 ohms 3W	C520	CEA1HPF220BE	Electrolytic	22 µF 50V
R801	ERDS2TJ181	Carbon	180 ohms 1/4W	C527	CQM1H152JZ3M	Plastic	1500 pF 50V
R802	ERDS2TJ471	Carbon	470 ohms 1/4W	C530	CKR1H562KB1D	Ceramic	5600 pF 50V
R803	ERDS2TJ153	Carbon	15K ohms 1/4W	C540	CEA1HPF471EE	Electrolytic	470 µF 50V
R804	R0S2TKF3652K	Metal	36.5K ohms 1/4W	C801	CEA1EPF332EE	Electrolytic	3300 µF 25V
R805	R0S2TKF4121K	Metal	4.12K ohms 1/4W	C802	CEA1CPF471BE	Electrolytic	470 µF 16V
R806	ERDS2TJ100	Carbon	10 ohms 1/4W	C803	△ CQU2A224MNFT	Plastic	0.22 µF 100V
R807	ERDS2TJ152	Carbon	1.5K ohms 1/4W				

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
L401	TLT101K186T	Coil 100 μ H	CRT BOARD		
L501 $\triangle$	TLH4C60752Y	Width Coil	PCB2 (RTL)	NP4CH0030232	Printed Circuit Board Assy
L502 $\triangle$	TLH4C60659Y	H. Linearity Coil	R601	ERDS2TJ104	Carbon 100K ohms 1/4W
L503	TSK4C6006	Bead Core	R602	ERDS1TJ334	Carbon 330K ohms 1/2W
L505	TLT056K109	Peaking Coil	R603	ERDS1TJ474	Carbon 470K ohms 1/2W
F801 $\triangle$	XBA2C20TB15L	Current Fuse 2A 250V	R604	ERDS2TJ154	Carbon 150K ohms 1/4W
FS1,2 $\triangle$	SN5057	Fuse Holder	R605	ERDS1TJ394	Carbon 390K ohms 1/2W
CN301,302	HXC033001210	BNC Connector	R606	ERDS2TJ474	Carbon 470K ohms 1/4W
CN304	XAJT4P2BM990	4-pin Connector	R607	ERDS2TJ105	Carbon 1M ohms 1/4W
CN501	TJS7551-04J	4-pin Connector	R608	ERDS2TJ102	Carbon 1K ohms 1/4W
CN802	JS3961-05N3J	5-pin Connector	VR601	EVMJ6U10KB26	Variable Resistor 2M ohms
CN803	JS0861-06N2S	6-pin Connector	VR602	TAV1028B104	Variable Resistor 100K ohms
JP501	XAJT1P2BM990	1P Terminal Wire	C601	ECQE2393KZBM	Plastic 0.039 μ F 250V
J1A-3A	TXAJT1P11568	1P Terminal Wire	C602	ECQE6393KZBM	Plastic 0.039 μ F 630V
J3B	TXAJT1P11568	1P Terminal Wire	CN601 $\triangle$	TJS25640V	CRT Socket
J801	T3A206D10A	Jumper Wire	E601	XAJT1P1BM990	1P Terminal Wire
J802	T3A206D10A	Jumper Wire	ACCESSORY PARTS / PACKAGING PARTS		
E1 $\triangle$	TMM4C0150	Insulator Fuse Cap for F801	M41 $\triangle$	V8QA5383AN	Operating Instruxactions
E501	XAJT4P1BM990	4-pin Connector Assy for CN501	M42	TQE8548-1	FUN Bag
SG1	XAJT1P3BM990	1P Terminal Wire	M45	XZB48X57C05A	Polyethylene Bag
SG1D	TELBSR-1.5	GT Pin	M46	TQE8593	Polyethylene Bag
SW801 $\triangle$	SDDFA3017U	Power Switch	M49	TXAPD1BM990	Packing Cushion
T501 $\triangle$	TLH80410	H. Drive Transformer	M50	V35A5319A1-B	Packaging for WV-BM990/B
T502 $\triangle$	TLF4C60840H	Flyback Transformer		V35A5319A1-G	Packaging for WV-BM990/G
TP1,2	TELBSR-1.5	GT pin			
TP4	TELBSR-1.5	GT pin			
TP6	TELBSR-1.5	GT pin			
M15	TUC4C0043-10	Heat Sink for Q801			
M16	TUC4C0153-4C	Heat Sink			
M17	TUC4C0108C	Heat Sink for Q502			

