

15. DETAILS OF NANA0 MONITOR

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Cautions

1 Primary and Secondary Circuit

To avoid a severe electric shock, never touch the primary parts. When you make adjustments in this monitor, use the dielectric tuning tool. Don't short anything otherwise they may cause a trouble.

2 Impact

Don't give any impact to the color monitor during transportation, otherwise a trouble may result. The shipping package is durable against a drop of 400mm. However, if the package drops from a height of exceeding 400mm, it may be damaged.

3 High Voltage

Never touch the interior of the color monitor carelessly, since a very dangerous high voltage exceeding 20,000V is produced inside the monitor. Disconnect the AC plug from the socket before touching the interior.

4 High-Temperature Section

If dust or paper scraps remain in the interior of the color monitor, they may cause a trouble like electric shock or a fire. Particularly be careful with the ingress of these foreign substances due to a practical joke of customers.

5 Troubles

If an abnormal noise, smoke, or an unusual odor was detected, turn off the power switch immediately and also disconnect the plug from the plug socket. If the instrument is operated as it is, an unexpected trouble may result.

6 Magnetism

Magnetism causes the disturbance of CRT performance. Don't allow any magnet nor speaker to be close to the color monitor. Even if it approaches the instrument, it does not cause a trouble, but the picture may be colored or distorted.

7 Static Electricity

If you touch the CRT surface, you may feel a slight electric shock. This is caused by the static electricity being produced on the CRT surface and it does not affect the human body.

8 Control knobs

Don't manipulate control knobs uselessly. Entrust a skilled technician with their adjustments. If these control knobs are adjusted at random, the instrument may malfunction after a long-time use. For detailed adjustments, refer to the separate adjustment and check procedures.

9 Connecting CRT and PCB

Use only CRT and PCB cording the same serial number. Apply silicon grease around anode button when putting anode cap on. Please make sure that only other material is not attached around contact area.

10 Modification

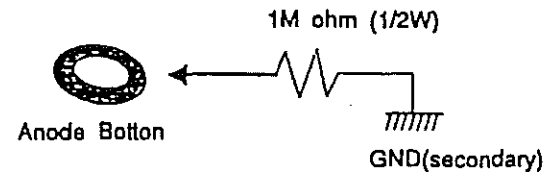
Never modify any part of the equipment without permission by authorised party. NANA O corporation will not be responsible for any damage or incident caused by an unauthorised modification.

◆ Notice

1. How to discharge the electricity on the CRT Anode button.

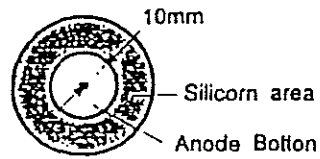
Use the following jig to discharge on the CRT Anode button. This action must be done after disconnecting the AC cord.

During discharging, do not attempt to touch the mentioned area (an arrow below).

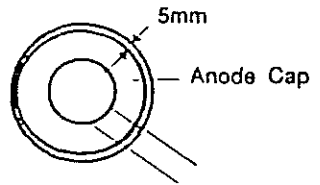


2. How to mount the Anode cap.

- (1). Clean up around the Anode button and inside of Anode cap.
- (2). Paint the Silicon grease around the Anode button uniformly.
(Recommended grease; KS-650N, Shinetsukagaku)

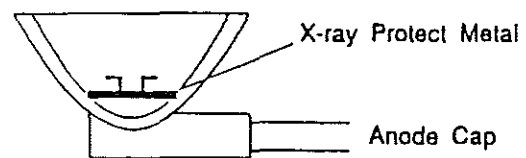


* Do not paint inside of 10mm.



* Over-painted area may be less than 5mm.

- (3). Lock the hook inside of the Anode cap onto the Anode button surely. If it has X-ray metal in the Anode cap, attach it onto the Anode button surely.



- (4). After locking the Anode button, pull the Anode to make sure the connection.

3. Please pay your attention to CRT neck and NECK PCB. Do not put both part to other material. It will be caused the damage.

4. Be careful to insert the NECK PCB to CRT.

5. Do not clamp CN102 lead and High Voltage lead from FBT with other lead wires.

I. Specifications

1. Features

- This color monitor is equipped with 29" flat screen CRT and scans the dual frequencies of 15kHz and 24kHz.
- Remote Control PCB provides the easy access to adjust the screen image.
- The composite PCB is superior to endure the shock or damage comparison with the paper phenol PCB.
- The switching power supply provides the stable image quality in fair condition of power source.

2. Electrical Specifications

All measurements are subject to prior warm up at least 30 minutes and to be carried out in the standard normal inspection environment. The value herein described stands on following signals.

Input signal: Mode 1 15.625kHz, Sega System 32 Timing
 Mode 2 24.39kHz, Sega System 24 Timing

Setting: The screen faces to East and volumes and switches are set to the factory pre-set condition unless otherwise specified.

Measurement: Linearity, Distortion, Convergence
 • Mode 2 signal is used for MS9-29SU.

2-1 Deflection

2-1-1 Scanning Frequency

(Horizontal synchronising signal)

Frequency: 15.75kHz \pm 300Hz (MODE 1), 24.6kHz \pm 300Hz (MODE 2)

Blanking Pulse width: less than 8.5 μ S

(Vertical synchronising signal)

Frequency: 55 ~ 65Hz

Blanking Pulse width: less than 1.3mS

2-1-2 Linearity

Horizontal \pm 12% max.

Vertical \pm 10% max.

2-1-3 Distortion

Trapezoidal distortion	less than 3%
Barrel/pincushion distortion	less than 3%
Tilt	less than 2°

2-1-4 Display Size, Display Position

Those settings are adjusted by the timings in Clause 9.

2-1-5 Display Size Control

Display shall be overscanned by tuning by the adjust volume on the Control PCB with the signals in Clause 9.

2-2 Image

2-2-1 Center resolution 640 dots x 405 lines

2-2-2 Bandwidth
Video Bandwidth More than 16MHz (at -3dB)

2-3 ITC Adjustment

2-3-1 Color Purity

No trouble shall be appeared after degaussing by a handy-bar demagnetizer.

2-3-2 Misconvergence

- Within a circle having a diameter corresponding to 60% of vertical length of CRT. less than 1.5mm
- Within a circle having a diameter equivalent to vertical length of CRT (excluding the above circle) less than 2.5mm
- Within CRT screen (excluding the above circles) less than 3.0mm

2-3-3 White Balance

x: 0.274 ± 0.020

y: 0.280 ± 0.020

Color temperature target is about 10600°K. Brightness and Contrast volume set at factory pre-setting. Measured by white windows pattern at center.

2-3-4 Jittering

No jittering shall be noticeable from 50cm distance.

2-3-5 Brightness

42 ± 7ft-L

3Vp-p input voltage, white windows (180x180mm) on center

2-4 Power Input

Input voltage 120V AC ± 10%, 60Hz

Power consumption 105 ± 20W

Inrush Current Less than 40A peak at cold start (Input voltage 120VAC)

Less than 70A peak at hot start (Input voltage 120VAC)

2-5 Input signal specification

2-5-1 Sync signal: Horizontal Negative polarity or Positive polarity, TTL level
Vertical Negative polarity, TTL level

2-5-2 Video signal: Analog, Positive

2-5-3 Scanning: Non-interlaced

2-6 CRT

2-6-1 Display Tube 29" 110° deflection color CRT
CRT type : M68JUA068X
Iron Mask

2-6-2 Trio Pitch 0.72mm (center)

2-6-3 Transmission Rate 39%

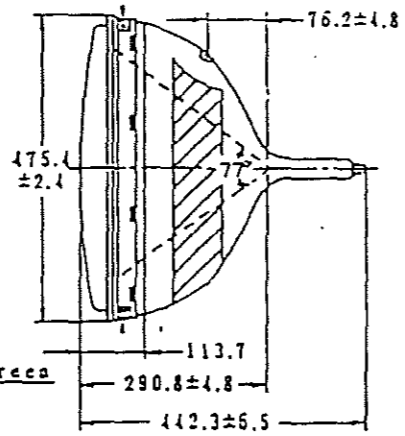
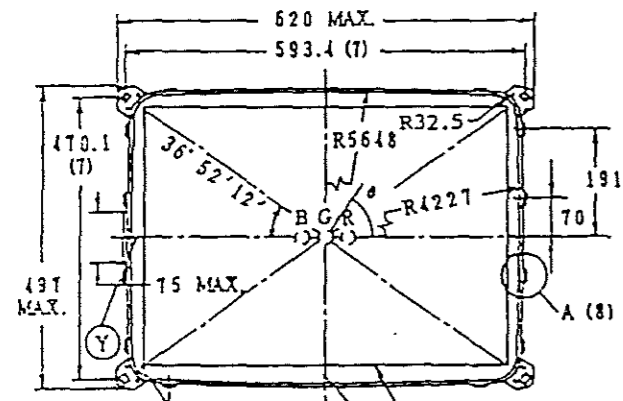
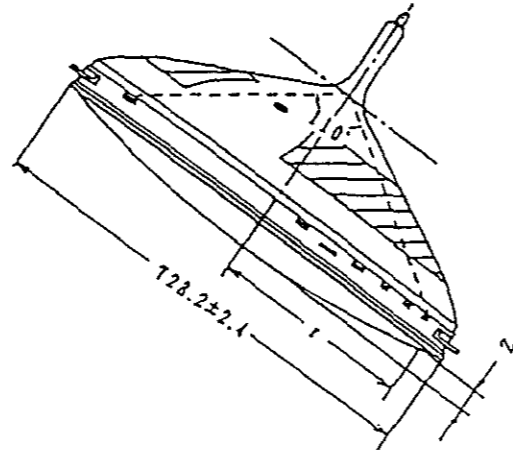
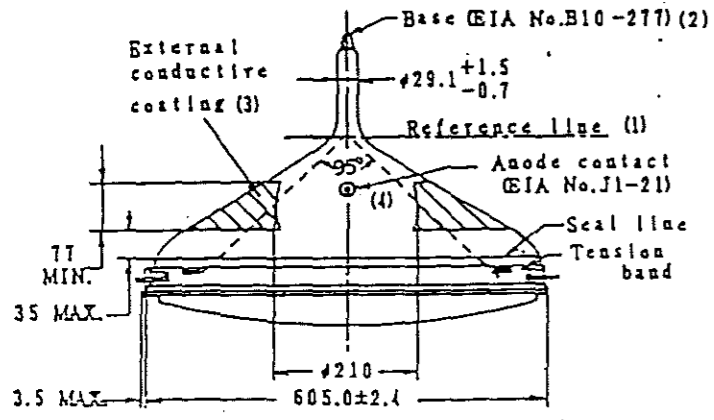
2-6-4 CRT Dimension

TUBE SPECIFICATION

American Matsushita Electronics Corporation

Dimensions in mm

M 6 8 J U A 0 6 8 X



Minimum useful screen
 Diagonal 676.0
 Horizontal 540.8
 Vertical 405.6

$$Z = \frac{\sqrt{K(\theta)^2 + r^2} - r(\theta)}{B(\theta)}$$

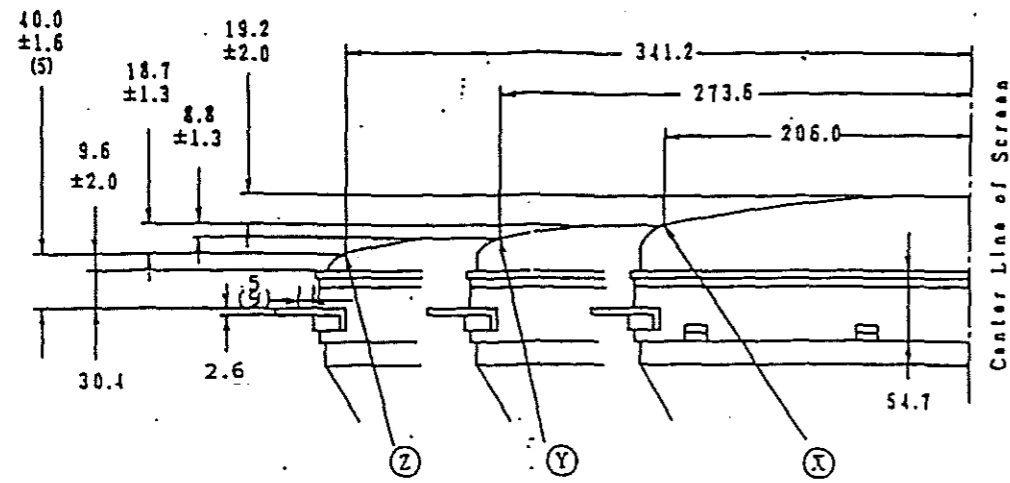
$$B(\theta) = \sum_{l=0}^5 B_l \cdot \cos(2l \cdot \theta)$$

$$K(\theta) = \frac{1}{\sum_{l=0}^5 K_l \cdot \cos(2l \cdot \theta)}$$

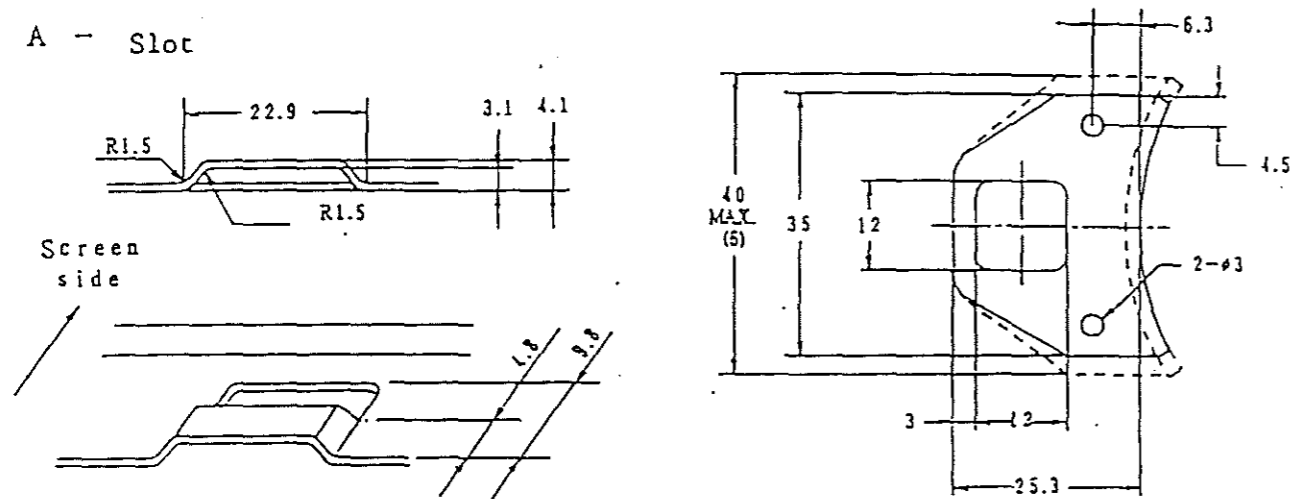
θ : Angle from long axis

K_0	1.3720958×10^{-3}	B_0	1.7508762
K_1	3.2976780×10^{-4}	B_1	0.4992099
K_2	$-1.2286042 \times 10^{-3}$	B_2	-1.5658756
K_3	$-2.4794464 \times 10^{-4}$	B_3	-0.3842095
K_4	2.7589475×10^{-7}	B_4	-6.27861×10^{-7}
K_5	$-1.3568352 \times 10^{-8}$	B_5	-3.38107×10^{-7}

Dimensions in mm

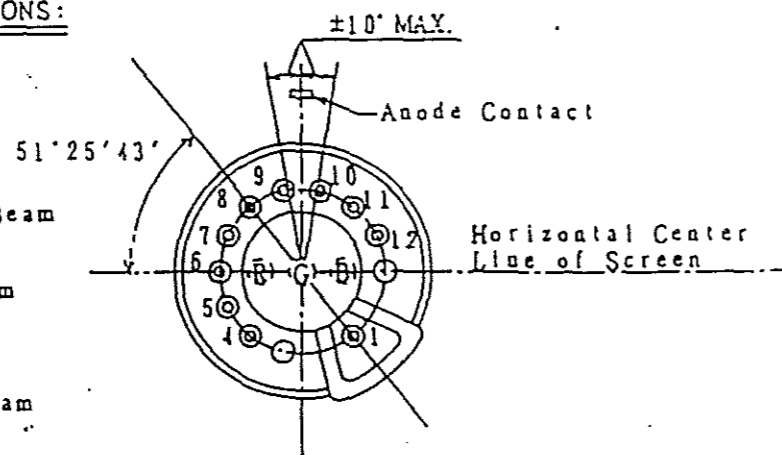


- A - Slot



SPECIFICATION OF PIN CONNECTIONS:

- Pin No.1 : Grid No.3,5
- Pin No.4 : I.C.
- Pin No.5 : Grid No.1
- Pin No.6 : Cathode of Green Beam
- Pin No.7 : Grid No.2,4
- Pin No.8 : Cathode of Red Beam
- Pin No.9 : Heater
- Pin No.10: Heater
- Pin No.11: Cathode of Blue Beam
- Pin No.12: I.C.



BOTTOM VIEW OF BASE

3 Mechanical Specifications

3-1 Outline

Refer to the attached sheet.

3-2 Weight

Net: 37kg
Gross: 43kg

3-3 Adjustment Functions

* Refer to Page 19.

3-3-1 User Control

Brightness (BRIGHT)
Contrast (CONTRAST)
Vertical position (V.POSI)
Vertical size (V.SIZE)
Horizontal size (H.SIZE)
Horizontal position (H.POSI)
Red signal gain (R-GAIN)
Green signal gain (G-GAIN)
Blue signal gain (B-GAIN)

3-3-2 Maintenance Control

Side pin spc (SPC15)
Trapezoid (TRAP)
Vertical linearity (V.LIN)
H.SIZE Limiter (H.S.LIM)
Red signal bias(R-CUTOFF)
Green signal bias (G-CUTOFF)
Blue signal bias(B-CUTOFF)
Horizontal position (H.POSI)

Focus (FOCUS)
Screen (SCREEN)

* Caution: Do not adjust above volumes except the authorized service personnel.

3-4 Power Cord and Signal Input Connector

A: UP connector

- #1pin Red from B connector #6
- #2pin Green from B connector #5
- #3pin Blue from B connector #4
- #4pin Grey from B connector #2
- #5pin White from B connector #3
- #6pin Black from D connector #1
- #7pin Black from D connector #3
- #9pin Red from C connector #3
- #10pin Red from C connector #5
- #8, #11~15pin open

B: EHR-6 connector

- #1pin Open
- #2pin Grey
- #3pin White
- #4pin Blue
- #5pin Green
- #6pin Red

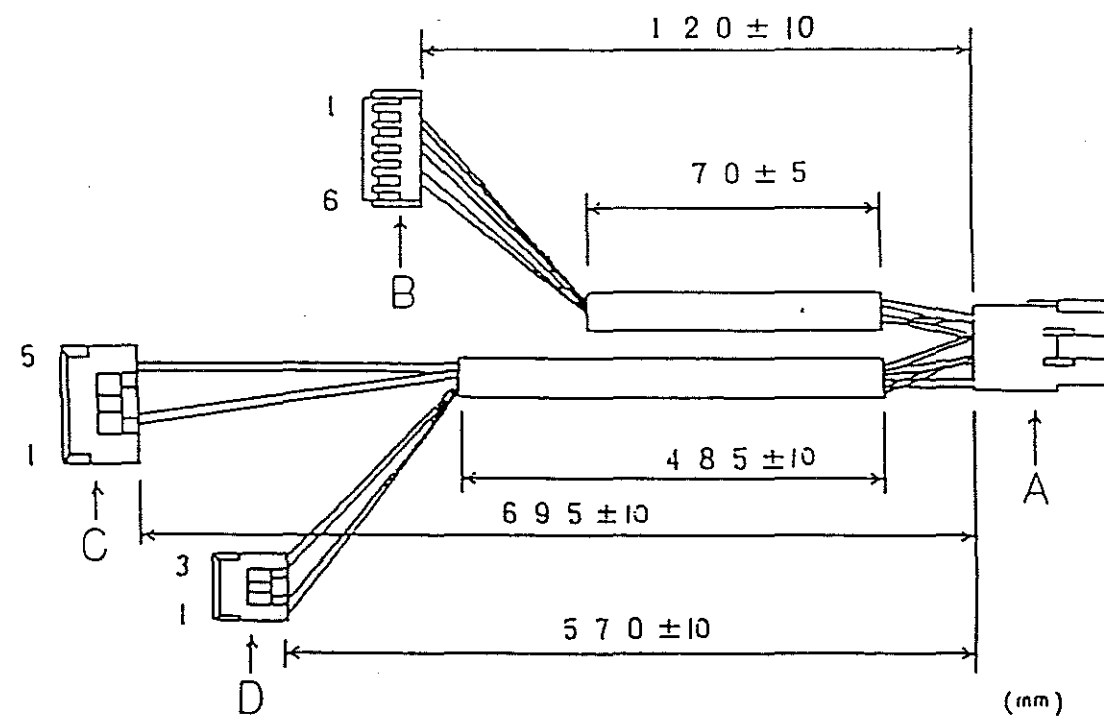
C: VHR-5N connector

- #1~2,4pin Open
- #3pin Red
- #5pin Red

D: VHR-3N connector

- #1pin Black
- #2pin Open
- #3pin Black

* Tight up the ferrite core (Matsushita, KR06TA191010W) on the harness of EHR-6P connector side.



4 Reliability and Safety

4-1 Safety Standards UL1950

4-2 X-Ray DHHS

4-3 AC line noise resistance

No asynchronized condition shall be detected when applying 500V_{p-p} pulse by using a noise simulator.

4-4 High Voltage Label Anode lead, Focus lead, Screen lead, DY lead

4-5 MTBF 20,000 hours without CRT (MIL-HDBK-217F)

5 Environmental Conditions

5-1 Operating conditions

Temperature 0°C ~ 40°C

Relative humidity Less than 70%, non condensing

5-2 Storage conditions

Temperature -10°C ~ 60°C

Relative humidity Less than 80%, non condensing

5-3 Drop Test 40cm (drop on five faces without top face)

5-4 Vibration Test

No abnormal symptom shall appear when applying vibrations having the maximum acceleration of 1G for 30 minutes.

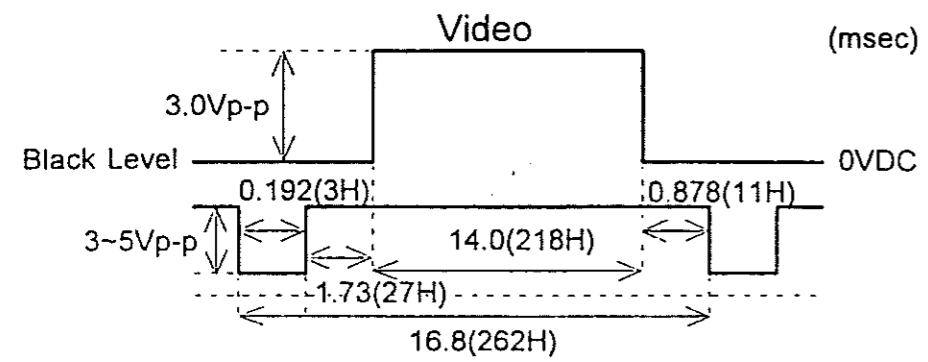
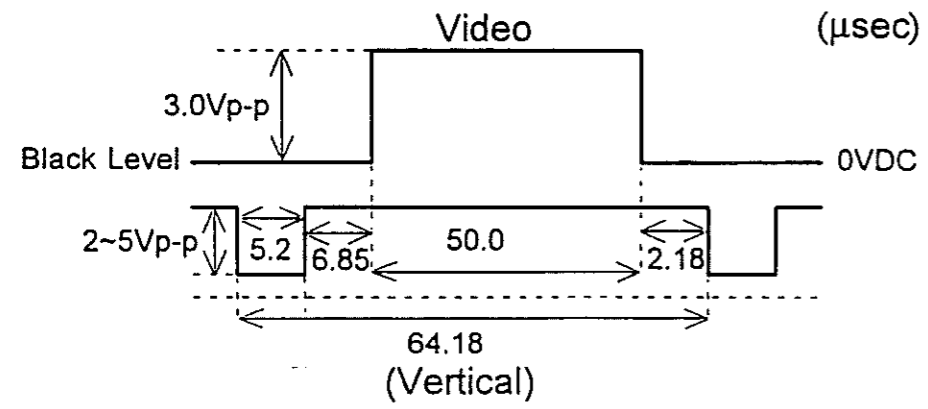
6 Pin Assignment

Pin No.		
1	Vertical sync	Negative polarity, 3V ~ 5Vp-p
2	Horizontal sync	Negative Composite, 2V ~ 5Vp-p or Negative polarity, 3V ~ 5Vp-p
3	Ground	Ground
4	Blue video	Positive polarity, Black level, more than 0VDC or Positive polarity, White level, Black level + 3Vp-p
5	Green video	Same as specified
6	Red video	Same as specified

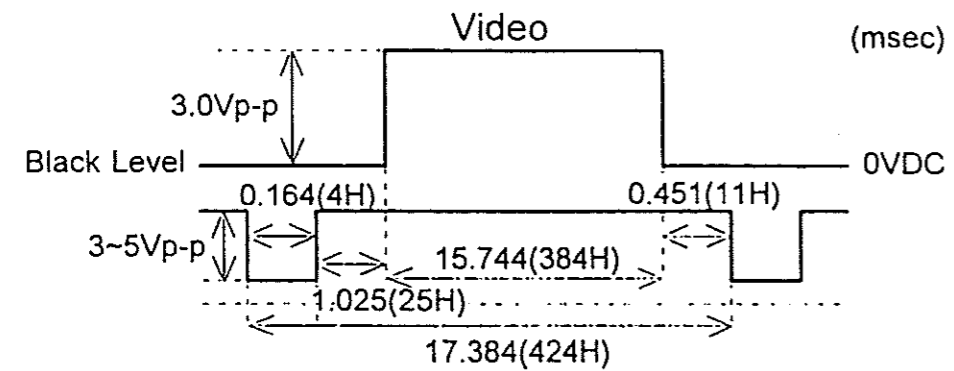
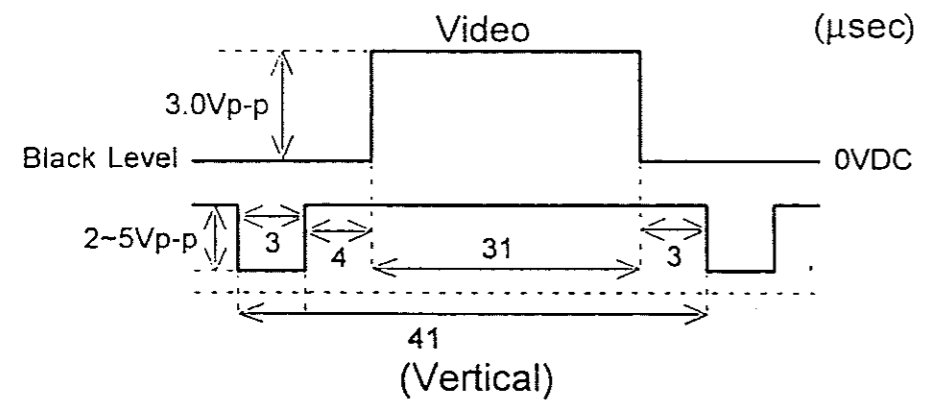
* Please open 1pin when input a composite sync into 2pin.

8 Timing Chart

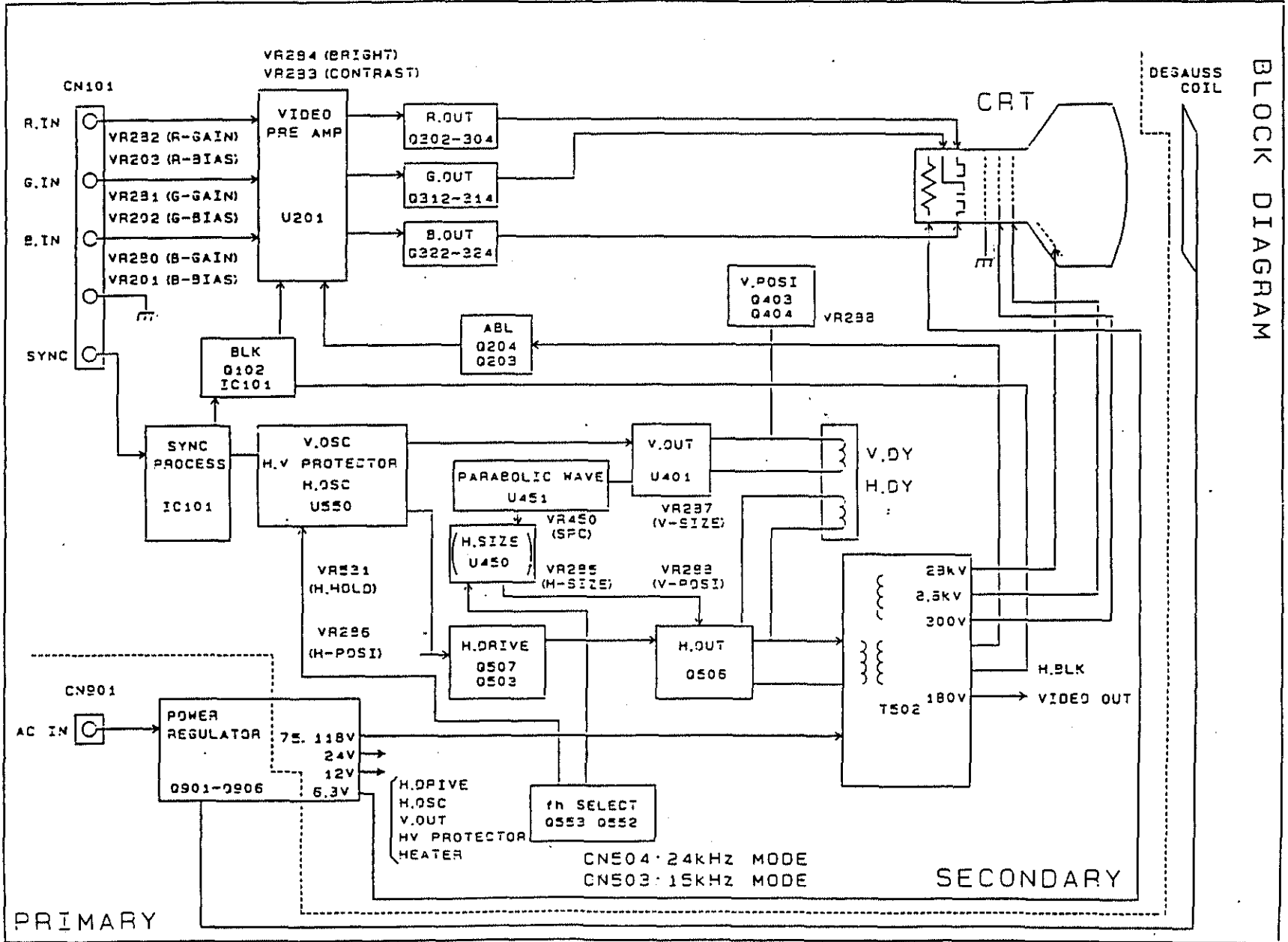
15.58kHz (Horizontal)



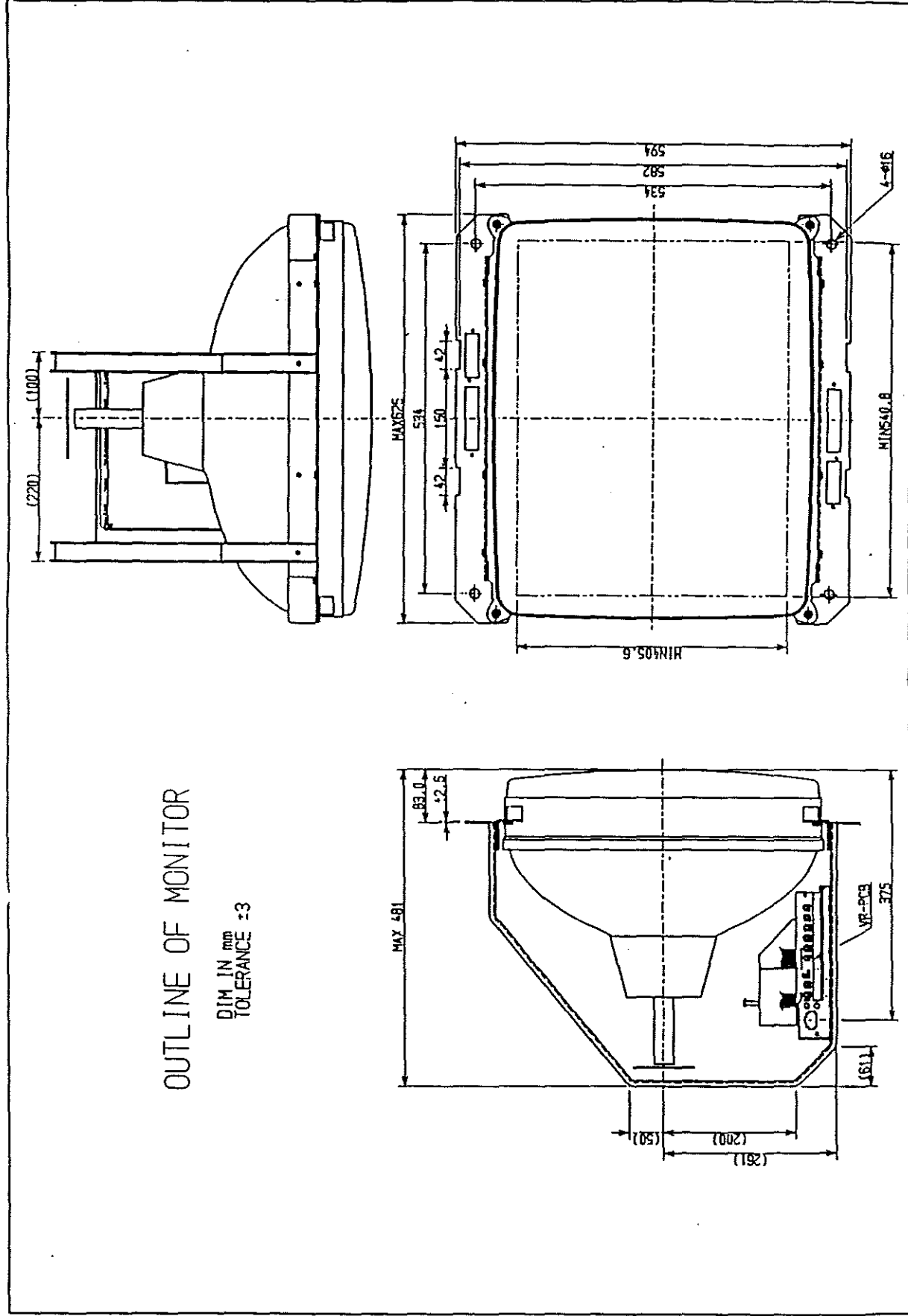
24.39kHz (Horizontal)



9. Block Diagram

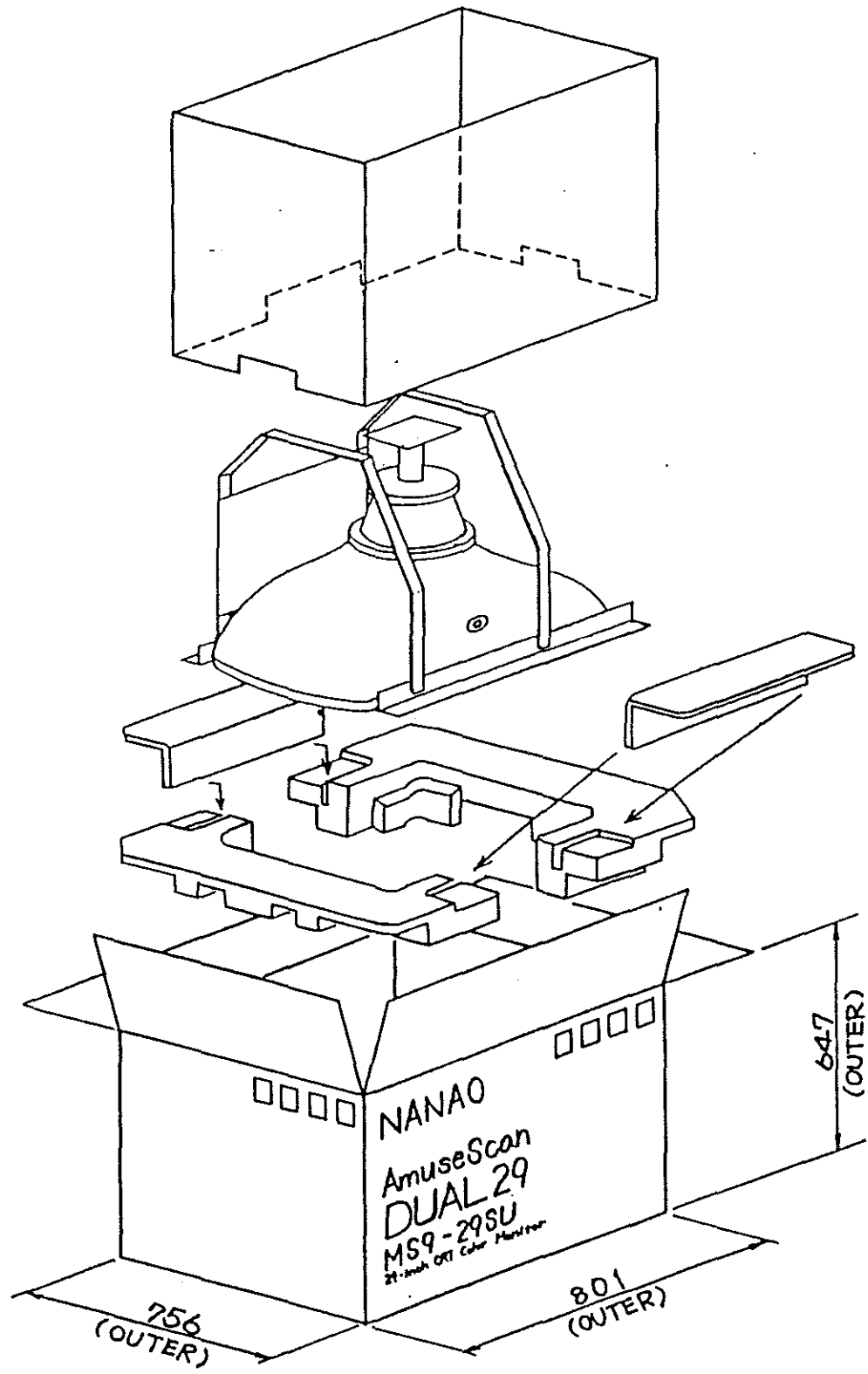


10. Outline

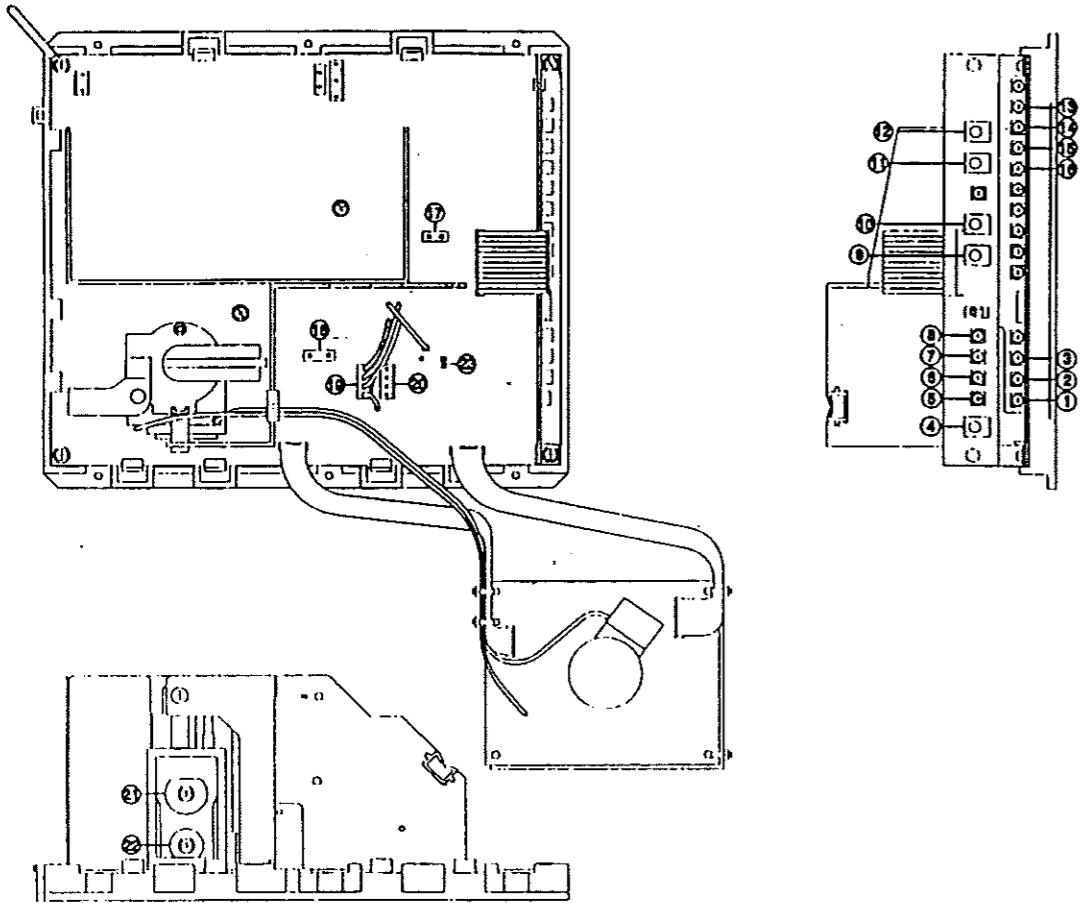


11. Packing Drawing

(mm)







II. Adjustment for User Control



1. R-Cutoff (VR201)
RED BIAS adjustment.
RED color gets stronger when turning this VR to clockwise.
2. G-Cutoff (VR202)
GREEN BIAS adjustment.
GREEN color gets stronger when turning this VR to clockwise.
3. B-Cutoff (VR203)
BLUE BIAS adjustment.
BLUE color gets stronger when turning this VR to clockwise.
4. CONTRAST (VR283)

5. R-GAIN (VR280)
RED INPUT GAIN adjustment
RED color gets deeper when turning this VR to clockwise.
6. G-GAIN (VR281)
GREEN INPUT GAIN adjustment
GREEN color gets deeper when turning this VR to clockwise.
7. B-GAIN (VR282)
BLUE INPUT GAIN adjustment
BLUE color gets deeper when turning this VR to clockwise.
8. BRIGHT (VR284)
9. H. SIZE (VR285)
Horizontal size adjustment.
Note: Use the hex core driver to turn this coil.
10. H. POSI (VR286)
Horizontal phase adjustment.
11. V. SIZE (VR287)
Vertical size adjustment.
12. V. POSITION (VR288)
Vertical position adjustment.
13. V. LIN (VR401)
Vertical linearity adjustment.
14. TRAP (VR453)
Trapezoidal distortion adjustment.
15. SPC15 (VR450)
Side Pin Cushion adjustment.
16. H.S.LIM (VR452)
Horizontal side limitation adjustment. Sealed with the Silicon rubber.

17.18. Deflection Yoke Polarity Connectors

	CN401 normal	CN401 reverse
CN501 normal connection	 Normal screen	 Mirrored screen
CN501 reverse connection	 Reversed screen	 180° rotated screen

19. H. Freq. Switching Connector (CN503)
Used for 15kHz signal.

20. H. Freq. Switching Connector (CN504)
Used for 24kHz signal.

21. Focus

22. Screen
Adjust to just back raster disappearing.

23. Horizontal Size Changeable Connector (Wide: CN506, Narrow: CN507)
This connector changes the range of horizontal size control. If the screen is too wide even adjusting H. SIZE, change this connector to NARROW position.

III. Detail Adjustment

† Necessary Equipment & Tools: Hand demagnetizer, Digital multimeter, Frequency counter, Plastic driver.

1. Preset

A). Setting before detail adjustment.

CRT direction	TV style, face to East	Volume position	RGB Gain: 1 o'clock RGB Cut-off: clockwise max. Others: center
DY polarity	Normal (CN501, 401)	Screen VR	Just disappeared the raster
fH connector	High (CN504)	Focus VR	Best focused
H. Size Tap	Inserted to CN507		

B). CRT and other metal parts are degaussed. Burning time should be more than 30 minutes.

2. Adjustment

- * Standard signal: System 24. If required, use the game logic board.
- *. Input voltage: 120VAC, 60Hz

A). +B Adjustment without any signal

Set the fH connector to CN503. Make sure the +B voltage between GND(chassis) and TP2 for reading 76 +/- 0.2VDC.

Set the fH connector to CN504. Make sure the +B voltage between GND(chassis) and TP2 for reading 119 +/- 0.2VDC.

B). ITC Adjustment RED raster and cross-hatch signal

B-1. Earth magnetizm setting

Set to shipping distination. CRT is faced to East.

B-2. Purity Adjustment

B-2-1. Receive white closs-hatch and adsut it roughly.

B-2-2. Receive RED raster signal.

B-2-3. Pull the DY toward your body and adjust 2P magnet for getting the RED bar on the center of the screen. (Fig. B-2-3)

B-2-4. Push the DY away from your body and fix it at best RED color position with checking the tilt distortion.

B-2-5. Check the white uniformity with white raster signal.

B-2-6. Check the purity condition with RGB to South, North and West direction after degaussing by the hand demagnetizer. If noticeable error on the corner or edge, attach the magnet piece onto CRT funnel to compensate it.

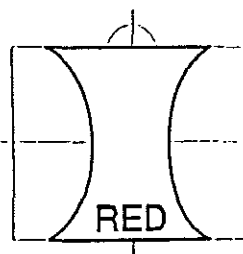


Fig. B-2-3

B-3. Static Convergence Adjustment.

- B-3-1. Receive cross-hatch signal and adjust focus to correct position.
- B-3-2. Receive magenta cross-hatch and adjust 4P magnet in order to receive the best magenta colour at the centre of the screen.
- B-3-3. Receive white cross-hatch and adjust 6P magnet in order to receive the best white colour at the centre of the screen.
- B-3-4. If necessary, repeat B-3-2 and B-3-3.

B-4. Dynamic Convergence Adjustment

- B-4-1. Receive magenta cross-hatch.
- B-4-2. Swing the DY up and down until the best convergence is obtained at the top and bottom of the screen. Next, fix the DY using wedges. (Fig.B-4-2)

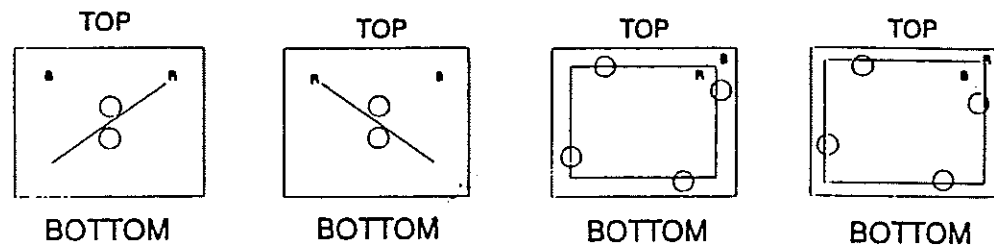


Fig. B-4-2

- B-4-3. Swing the DY on both sides until the best convergence is obtained on the edges. Then fix the DY again.
- B-4-4. The wedges should be placed as per Fig. B-4-4.
- B-4-5. If the edges are still not satisfactory then place the ferrite between the CRT and the DY.

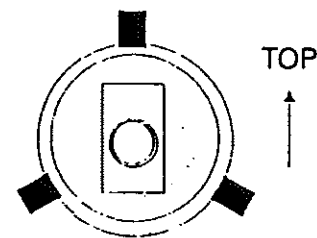


Fig. B-4-4

B-5. Fixing of the DY

- CP magnet, DY screw: Locked By the paint.
- Wedges: Fixed with the silicon rubber.

C). X-ray protector check with standard signal
 Input 12.5VDC between GND(chassis) and J466. Endure the protection activates. (Fig. C: recommended circuit)

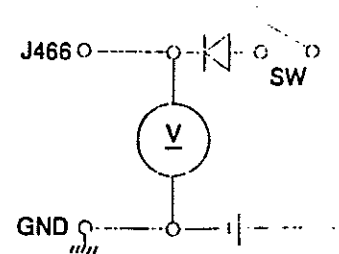


Fig. C

D). V.Lin (VR401) adjust with standard signal
Adjust this VR for getting the same height at top and bottom of the screen. (Fig. D)

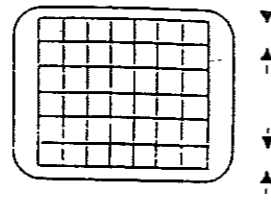


Fig. D

E). Distortion Adjustment with standard signal

E-1. Side Pincushion Adjustment

Adjust VR450 for getting the straight line at left and right edges.

E-2. Trapezoid Adjustment

Adjust VR453 for getting the best rectangle image.

E-3. Parallelogramic Adjustment

Adjust VR552 for getting the best rectangle image.

F). H & V Size (H:VR285, V:VR287) Adjustment with standard signal

Adjust horizontal and vertical size to the designated size precisely.

G). H & V Position (H:VR286, V:VR288) Adjustment with standard signal

Adjust the image to center precisely.

H). White Balance Adjustment with grey scale standard signal

* Gain VR VR280, VR281, VR282

* Cut-off VR VR201, VR202, VR203

Tune the image for getting the pure white by adjusting above volumes. Check both brighten and darken part.

I). Brightness (VR284) Adjustment with standard signal

I-1. Raster Brightness

Set the Brightness VR maximum. Adjust the raster brightness by tuning the Screen VR about 0.8ft-L. After this, set the Brightness VR just disappearing the raster screen.

I-2. Window Brightness Adjustment with standard signal

Set the Brightness VR maximum and the Contrast VR at center click. Adjust the Sub-Contrast VR (VR204) for getting the brightness at 42 +/- 2ft-L.

I-3. White Field Brightness Adjustment with standard signal

Set the Brightness and Contrast VR maximum. Adjust the ABL VR (VR205) for getting the brightness at 21 +/- 1ft-L.

J). Focus Adjustment with standard signal

Adjust this VR on FBT for getting the best focus point at designated area. (Fig. J)

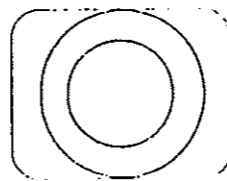


Fig. J

IV. Trouble Shooting

1. No screen

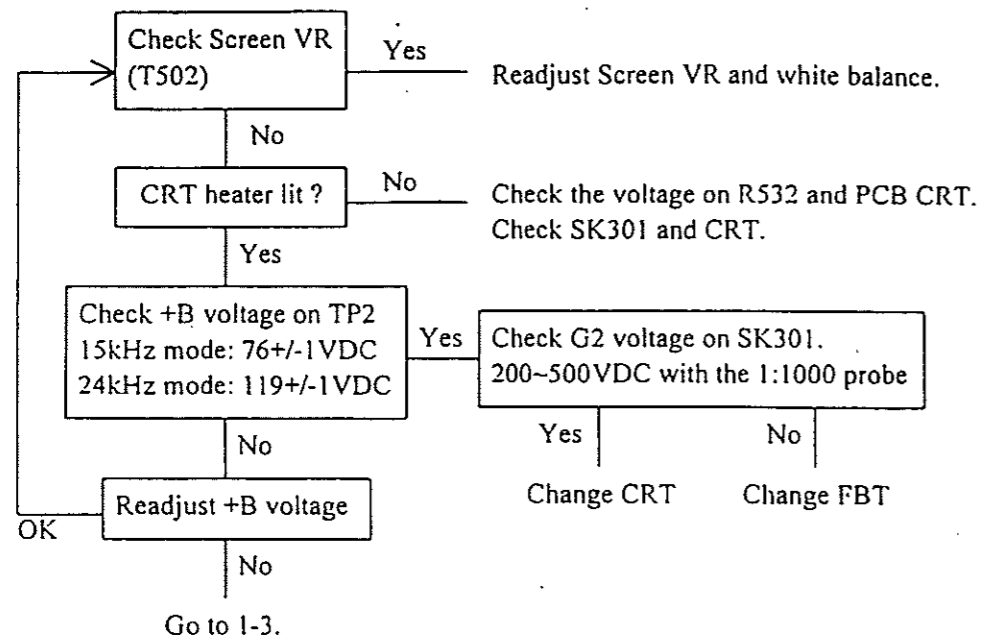
1-1. Fuse blown

Trouble in the Primary circuit.

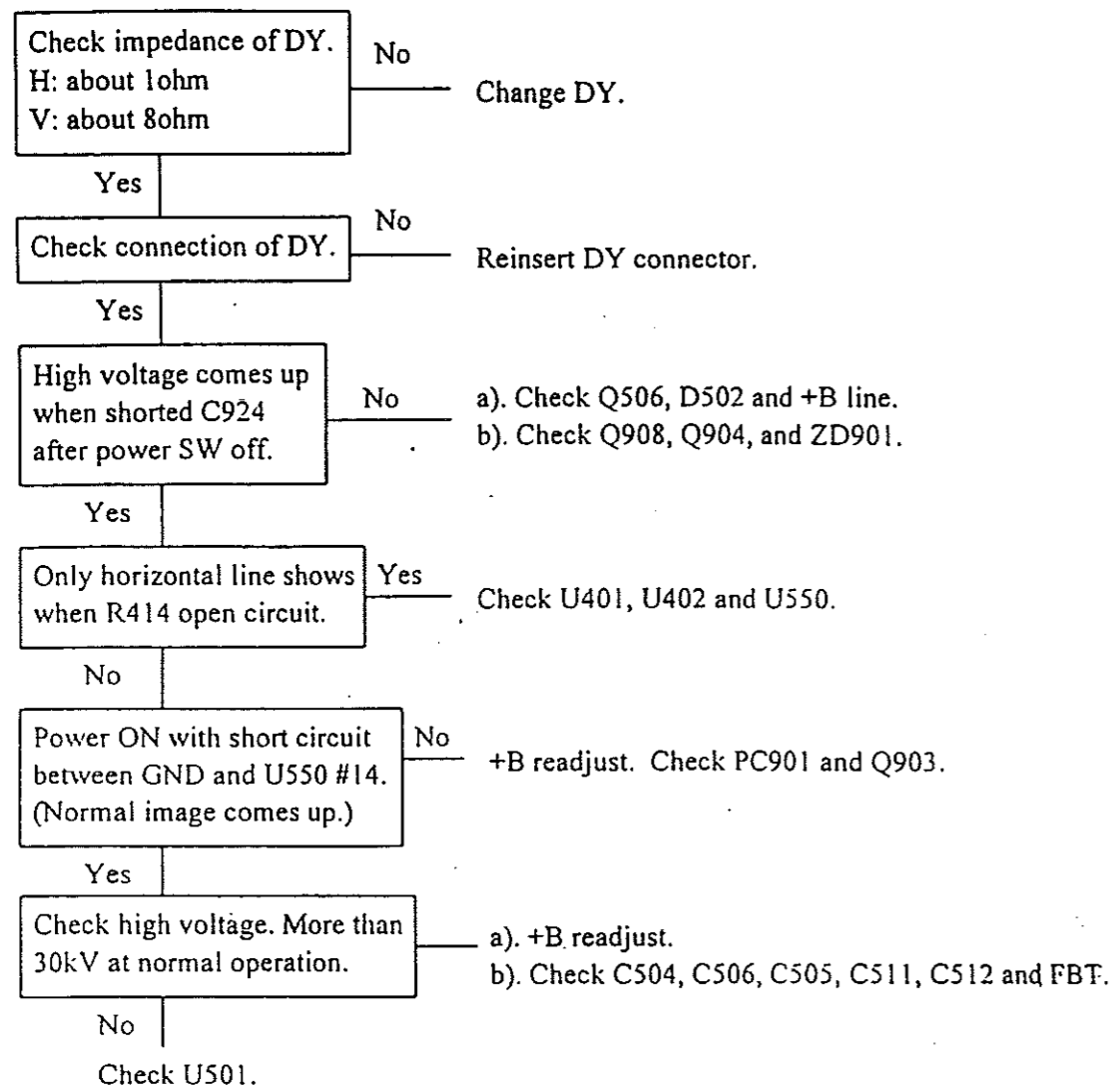
Check Q901, T901, BD901, D901, C911, PTH901.

Recheck the input voltage when turning the power switch ON. (Voltage should be 108~132VAC.)

1-2. High voltage comes up but no raster image

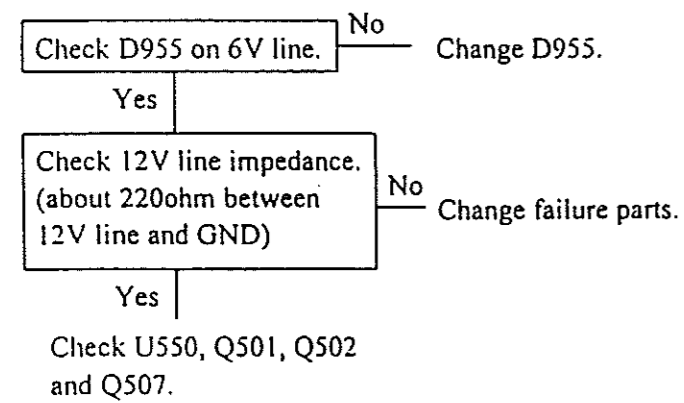


1-3. High voltage comes shortly.

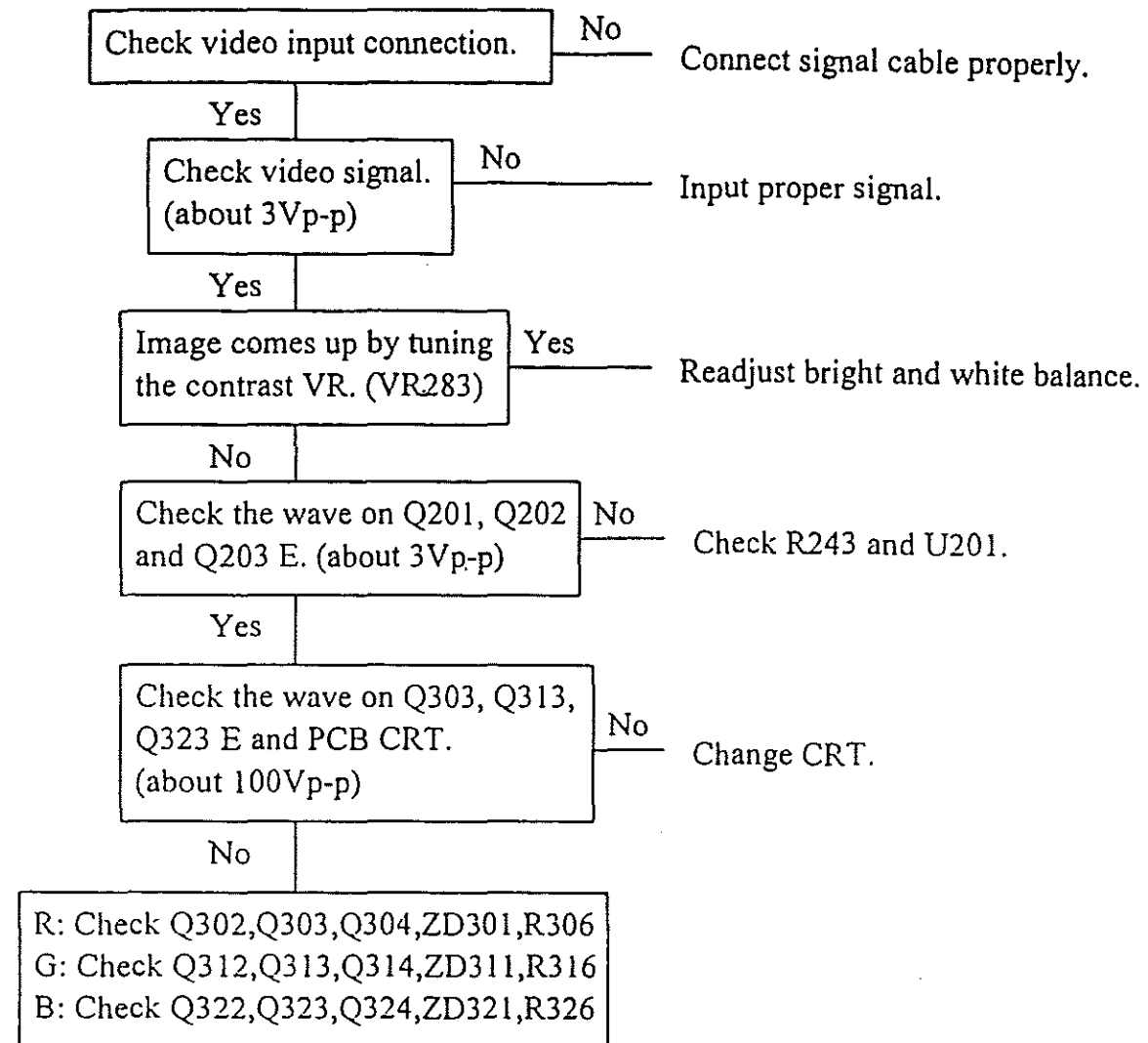


1-4. No high voltage but noise sounds.

* Discharge C924 before turning the power SW ON again.

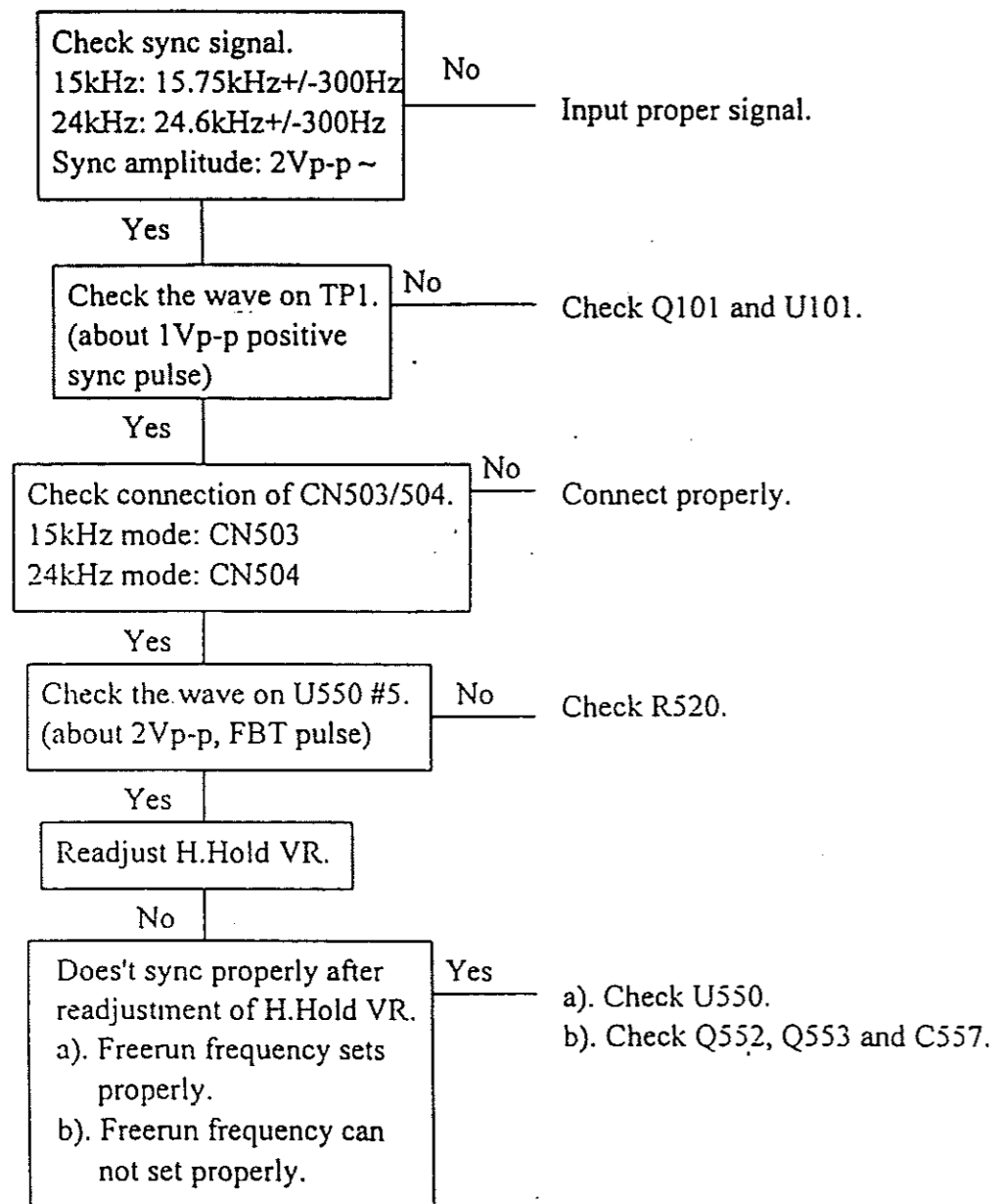


2. Raster lit but no images (or particular color doesn't show)

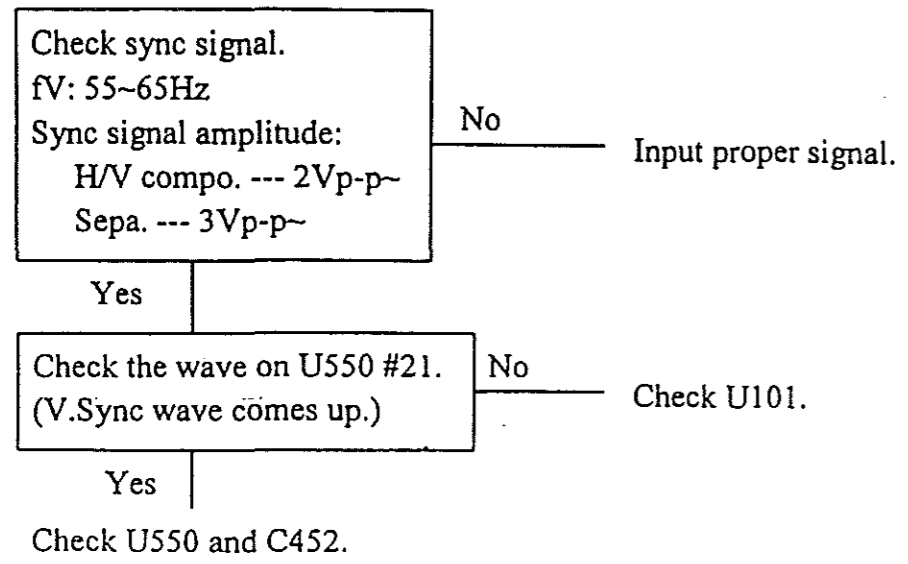


3. Doesn't sync properly.

3-1. Horizontal sync



3-2. Vertical sync



V. Important service Safety Information

The B+ controls in this monitor are sealed not to remove unnecessarily because of protecting the user from X-ray radiation. The B+ Adj. controls should not normally have to be adjusted. But if the part related X-ray circuit are replaced due to the damage, check the B+ voltage to assure that there are within specification after adjustment. Then, seal these controls according to the manufacture's requirement.

H.V. failure may increase X-ray radiation. Therefore, monitors should not be operated with H.V. level exceeding the specified rating. The max. operating H.V. specified on the chassis is 28.5 +/-1.5kV at max. brightness with an input voltage of 120VAC. Higher voltage may also increase possibility of failure in H.V. supply to CRT.

It is important to maintain specified values of all components in the horizontal deflection, high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltage. No change should be made to the original design of the monitor.

Components shown on the schematic diagram identified ★ mark should be replaced only with exact factory recommended parts. The use of unauthorized substitute parts may cause X-ray radiation.

To determine the presence of high voltage, use an accurate and high impedance H.V. meter connected between second anode lead and the CRT dag grounding.

When servicing the High Voltage System, AC line cord should be disconnecting a 10kΩ resistor in series with an insulated wire (such as a test probe). Attach such tool between picture tube dag and second anode lead after servicing the anode cap onto picture tube and eliminate static charge.

REF. NO.	PART NO.	DESCRIPTION		QTY.
<u>COILS</u>				
L301	00L13120KT	(CHOKE)	LF-5.0S-120K	1
L302	00L134R7KT	(CHOKE)	LF-5.0S-4R7M	1
L311	00L13120KT	(CHOKE)	LF-5.0S-120K	1
L312	00L134R7KT	(CHOKE)	LF-5.0S-4R7K	1
L321	00L13100KT	(CHOKE)	LF-5.0S-100K	1
L322	00L134R7KT	(CHOKE)	LF-5.0S-4R7K	1
L313	00L13100KT	(CHOKE)	LF-5.0S-100K	1
L323	00L13100KT	(CHOKE)	LF-5.0S-100K	1
L324	00L13120KT	(CHOKE)	LF-5.0S-120K	1
<u>SPARK-GAP</u>				
SG301	08R38116A1		1KV	1
SG311	08R38116A1		1KV	1
SG321	08R38116A1		1KV	1
SG333	08F38315A1		DSP-201M-500B	1
<u>OTHER PARTS</u>				
CN301	00F44547B1	CONNECTOR	2.36 PIN (GT-PIN)	1
CN302	00J40642A7	CONNECTOR	B8B-PH-K-S	1
CN303	00F40953A4	CONNECTOR	B5B-XH-A	1
SK301	08F43120A1	C. R. T. -SOCKET	CYT3210-2101	1
	08N49197A1	RADIATOR-OTH-126-T		3
<u>JUMPER</u>				
J301	08F09122A1	JUMPER	P=5	1
J303	08F09122A4	JUMPER	P=15	1
J304	08F09122A2	JUMPER	P=10	1
J305	08F09122A5	JUMPER	P=20	1
J307	08F09122A1	JUMPER	P=5	1

REF.NO.	PART NO.	DESCRIPTION	QTY.
	08R31225A1	C. R. T. M68JUA068X	1
	05F18637A1	DEFLE-YOKE KY4UL319X	1
	08N50441A1	C. P-MAGNET ETC33X8KA	1
	08N46012A1	WEDGE	3
	05U01695E1	ASSY-COATING EARTH	1
	00N08110A1	ACETATE TAPE No.156 NITTO巾19mm l=100mm	2
	08J08089A2	ACETATE TAPE AT-570F 巾15mm l=30mm	3
	0FN803010D	TAP-TITE-P-TP 3×10	9
	0FJ924016N	TAP-TITE-P-BIND 4×16	1
	08N54089A1	CLAMPER T18R	20
	00F55550A1	PLASTIC-RIVET No.615	2
	00R54072A1	ANODE CLAMPER	1
	05F16640A1	ASSY-D. G-COIL	1
	05C02613A1	BRACKET 29S	2
	05B00977A1	BASE 29S	1
	05B00975A1	STAY 29S	2
	05D07075A1	PCB-HOLDER 29S	1
	05D06224A1	CRT SCREW	4
	0FF706012D	SCREW-SEMS-P-HEX M6×4 (W/SW付)	4
	0FJ924008D	TAP-TITE-P-BIND 4×8	4
	05D07110A1	N. P-MS9-29SU	1
	05D07111A1	LABEL-II. V-29SU	1
	05D07112A1	LABEL-CN-29SU	1
	05D01095A1	FUSE-LABEL	1
	05D04910A1	II. V-WARKING-LABEL	1
	05D06444A1	DIHS-LABEL	1
	05D06450A1	LABEL-IIV	1
	05D06454A1	UL-LABEL	1
	05D06455A1	CRT-LABEL	1

REF. NO.	PART NO.	DESCRIPTION			QTY.
C321	OKH80331JM	CERAMIC	DD107 50V SL	331J	1
C322	OKH81222KB	CERAMIC	DD106 50V B	222K	1
C331	02L81102KB	CERAMIC	DE0907 2KV B	102K	1
C332	OPR41100MW	ELECTRO.	KME 250V	10uF	1

TRANSISTORS

Q301	OCH21740S2	SILICON	2SC1740S		1
Q302	OCF24001ZL	SILICON	2SC4001L		1
Q303	OCH24218Z2	SILICON	2SC4218		1
Q304	0AH21624Z2	SILICON	2SA1624		1
Q311	OCH21740S2	SILICON	2SC1740S		1
Q312	OCF24001ZL	SILICON	2SC4001L		1
Q313	OCH24218Z2	SILICON	2SC4218		1
Q314	0AH21624Z2	SILICON	2SA1624		1
Q321	OCH21740S2	SILICON	2SC1740S		1
Q322	OCF24001ZL	SILICON	2SC4001L		1
Q323	OCH24218Z2	SILICON	2SC4218		1
Q324	0AH21624Z2	SILICON	2SA1624		1

DIODES

D301	00J25891A1		1SS133		1
D302	00N25030T1		1SS244		1
D303	00N25030T1		1SS244		1
D311	00J25891A1		1SS133		1
D312	00N25030T1		1SS244		1
D313	00N25030T1		1SS244		1
D321	00J25891A1		1SS133		1
D322	00N25030T1		1SS244		1
D323	00N25030T1		1SS244		1
ZD301	00N25735D2		HZS15NB2		1
ZD311	00N25735D2		HZS15NB2		1
ZD321	00N25735D2		HZS15NB2		1
ZD322	08F09122A1	JUMPER	P=5		1
ZD323	08F09122A1	JUMPER	P=5		1
ZD324	08F09122A1	JUMPER	P=5		1

PCB-CRT (5U02224A2)

REF. NO.	PART NO.	DESCRIPTION			QTY.
PCB	05B00950B1	PCB-CRT			1/2
<u>FIXED RESISTORS</u>					
R300	OBK10471JT	CARBON	1 / 4	470-J	1
R301	OBK10121JT	CARBON	1 / 4	120-J	1
R302	OBK10180JT	CARBON	1 / 4	18-J	1
R303	OCL04224JT	CARBON	RD50SS	220K-J	1
R304	OBK10183JT	CARBON	1 / 4	18K-J	1
R305	OHM37562JS	METAL	BSR 5W	5.6K-J	1
R306	OBL08101JL	FUSING	RF25L10	100-J	1
R307	OCH14271JM	SOLID	RC 1/2	270-J	1
R308	OBK10102JT	CARBON	1 / 4	1K-J	1
R310	OBK10471JT	CARBON	1 / 4	470-J	1
R311	OBK10121JT	CARBON	1 / 4	120-J	1
R312	OBK10270JT	CARBON	1 / 4	27-J	1
R313	OCL04224JT	CARBON	RD50SS	220K-J	1
R314	OBK10183JT	CARBON	1 / 4	18K-J	1
R315	OHM37562JS	METAL	BSR 5W	5.6K-J	1
R316	OBL08101JL	FUSING	RF25L10	100-J	1
R317	OCH14271JM	SOLID	RC 1/2	270-J	1
R320	OBK10471JT	CARBON	1 / 4	470-J	1
R321	OBK10121JT	CARBON	1 / 4	120-J	1
R322	OBK10270JT	CARBON	1 / 4	27-J	1
R323	OCL04224JT	CARBON	RD50SS	220K-J	1
R324	OBK10183JT	CARBON	1 / 4	18K-J	1
R325	OHM37562JS	METAL	BSR 5W	5.6K-J	1
R326	OBL08101JL	FUSING	RF25L10	100-J	1
R327	OCH14271JM	SOLID	RC 1/2	270-J	1
R331	OCH14105JM	SOLID	RC 1/2	1M-J	1

CAPACITORS

C301	OKH80331JM	CERAMIC	DD107 50V SL	331J	1
C302	OKH81222KB	CERAMIC	DD106 50V B	222K	1
C311	OKH80271JM	CERAMIC	DD107 50V SL	271J	1
C312	OKH81222KB	CERAMIC	DD106 50V B	222K	1

REF. NO.	PART NO.	DESCRIPTION	QTY
EY7	08N51059A1	EYELET 1.6×3.0	1
EY8	08N51059A1	EYELET 1.6×3.0	1
EY9	08N51059A1	EYELET 1.6×3.0	1
EY10	08N51059A1	EYELET 1.6×3.0	1
EY11	08N51059A1	EYELET 1.6×3.0	1
EY12	08N51059A1	EYELET 1.6×3.0	1
EY14	08N51059A1	EYELET 1.6×3.0	1
EY15	08N51059A1	EYELET 1.6×3.0	1
EY16	08N51059A1	EYELET 1.6×3.0	1
EY17	08N51059A1	EYELET 1.6×3.0	1
EY18	08N51059A1	EYELET 1.6×3.0	1
EY19	08N51059A1	EYELET 1.6×3.0	1
EY20	08N51059A1	EYELET 1.6×3.0	1
EY21	08N51059A1	EYELET 1.6×3.0	1
EY22	08N51059A1	EYELET 1.6×3.0	1
EY23	08N51059A1	EYELET 1.6×3.0	1

REF.NO.	PART NO.	DESCRIPTION			QTY
J470	08F09122A8	JUMPER	P=7.5		1
J471	08F09122A8	JUMPER	P=7.5		1
J472	08F09122A2	JUMPER	P=10		1
J473	08F09122A2	JUMPER	P=10		1
J474	08F09122A6	JUMPER	P=25		1
J475	08F09122A4	JUMPER	P=15		1
J476	08F09122A8	JUMPER	P=7.5		1
J477	08F09122A2	JUMPER	P=10		1
J478	08F09122A2	JUMPER	P=10		1
J479	08F09122A1	JUMPER	P=5		1
J480	08F09122A1	JUMPER	P=5		1
J481	08F09122A1	JUMPER	P=5		1
J482	08F09122A2	JUMPER	P=10		1
J502	0ZL49000ZA	JUMPER	RK73Z2A	TD	1
J503	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J507	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J508	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J509	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J510	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J511	0ZL49103JA	CARBON	RK73K2A	TD 10K-J	1
J512	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J513	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J515	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J519	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J520	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J522	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J524	0ZL49103JA	CARBON	RK73K2A	TD 10K-J	1
J525	0ZL49000ZA	JUMPER	RK73Z2A	TD	1
J526	0AL49000ZA	JUMPER	RK73Z2B	TD	1

EYELET

EY1	08N51059A2	EYELET	2.0×3.0		1
EY2	08N51059A2	EYELET	2.0×3.0		1
EY3	08N51059A2	EYELET	2.0×3.0		1
EY4	08N51059A2	EYELET	2.0×3.0		1
EY5	08N51059A2	EYELET	2.0×3.0		1
EY6	08N51059A2	EYELET	2.0×3.0		1

REF. NO.	PART NO.	DESCRIPTION		QTY
J430	08F09122A3	JUMPER	P=12.5	1
J431	08F09122A2	JUMPER	P=10	1
J432	08F09122A2	JUMPER	P=10	1
J433	0CLO4682JT	CARBON	1 / 2 6.8K-J	1
J434	08F09122A2	JUMPER	P=10	1
J435	08F09122A2	JUMPER	P=10	1
J436	08F09122A8	JUMPER	P=7.5	1
J437	08F09122A2	JUMPER	P=10	1
J438	08F09122A8	JUMPER	P=7.5	1
J439	08F09122A8	JUMPER	P=7.5	1
J440	08F09122A3	JUMPER	P=12.5	1
J441	08F09122A4	JUMPER	P=15	1
J442	08F09122A4	JUMPER	P=15	1
J443	08F09122A4	JUMPER	P=15	1
J444	08F09122A4	JUMPER	P=15	1
J445	08F09122A4	JUMPER	P=15	1
J446	08F09122A4	JUMPER	P=15	1
J447	08F09122A4	JUMPER	P=15	1
J448	08F09122A4	JUMPER	P=15	1
J449	08F09122A5	JUMPER	P=20	1
J450	08F09122A6	JUMPER	P=25	1
J451	0BK10222JH	CARBON	1 / 4 2.2K-J	1
J452	08F09122A4	JUMPER	P=15	1
J453	08F09122A5	JUMPER	P=20	1
J454	08F09122A5	JUMPER	P=20	1
J455	08F09122A6	JUMPER	P=25	1
J457	08F09122A2	JUMPER	P=10	1
J458	08F09122A5	JUMPER	P=20	1
J459	08F09122A5	JUMPER	P=20	1
J460	08F09122A3	JUMPER	P=12.5	1
J461	08F09122A2	JUMPER	P=10	1
J463	08F09122A1	JUMPER	P=5	1
J464	08F09122A5	JUMPER	P=20	1
J465	08F09122A8	JUMPER	P=7.5	1
J466	08F09122A2	JUMPER	P=10	1
J467	08F09122A2	JUMPER	P=10	1
J468	08F09122A8	JUMPER	P=7.5	1
J469	08F09122A8	JUMPER	P=7.5	1

REF. NO.	PART NO.	DESCRIPTION			QTY
<u>JUMPER</u>					
J281	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J282	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J283	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J284	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J289	0ZL49000ZA	JUMPER	RK73Z2A	TD	1
J290	0ZL49333JA	CARBON	RK73K2A	TD 33K-J	1
J292	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J293	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J294	0AL49000ZA	JUMPER	RK73Z2B	TD	1
J401	08F09122A2	JUMPER	P=10		1
J402	08F09122A2	JUMPER	P=10		1
J403	08F09122A2	JUMPER	P=10		1
J405	08F09122A2	JUMPER	P=10		1
J407	08F09122A3	JUMPER	P=12.5		1
J408	08F09122A3	JUMPER	P=12.5		1
J409	08F09122A2	JUMPER	P=10		1
J410	08F09122A2	JUMPER	P=10		1
J411	08F09122A2	JUMPER	P=10		1
J412	08F09122A2	JUMPER	P=10		1
J413	08F09122A2	JUMPER	P=10		1
J414	08F09122A2	JUMPER	P=10		1
J415	08F09122A3	JUMPER	P=12.5		1
J416	08F09122A6	JUMPER	P=25		1
J417	08F09122A3	JUMPER	P=12.5		1
J418	08F09122A3	JUMPER	P=12.5		1
J419	0CLO4102JT	CARBON	1 / 2	1K-J	1
J420	08F09122A3	JUMPER	P=12.5		1
J421	08F09122A3	JUMPER	P=12.5		1
J422	08F09122A5	JUMPER	P=20		1
J423	08F09122A2	JUMPER	P=10		1
J424	08F09122A2	JUMPER	P=10		1
J425	08F09122A5	JUMPER	P=20		1
J426	08F09122A6	JUMPER	P=25		1
J427	08F09122A1	JUMPER	P=5		1
J428	08F09122A2	JUMPER	P=10		1
J429	08F09122A3	JUMPER	P=12.5		1

REF.NO.	PART NO.	DESCRIPTION	QTY
CN902	00F40916A2	POST B3P5-VH	1
CN903	00F40019A1	POST YP115S-2P	1
	05Y02175A1	ASS'Y CN102	1
	05Y02176A1	ASS'Y CN502	1
	05Y02744A1	ASS'Y CN HF	1
	05Y02176A1	ASS'Y CN570	1
	05Y02745A1	ASS'Y CN HS	1
	05U02234A1	ASS'Y H OUT	1
	05U01897A5	ASS'Y P.V.D	1
	05C02448A1	RADIATOR FBT	(1)
	05D06939A1	RADIATOR	(1)
	00J40193A2	EDGE-SADDLE	(2)
	0FJ923010D	TAP-TITE-P-BAIND 3x10	4
	0FJ924010D	TAP-TITE-P-BAIND 4x10	1
	00N51517A2	SPRING BAND	(3)
	0FJ923010D	TAP-TITE-P-BAIND 3x10	(3)
	08N52611A1	TFC CAP	(1)
	08R52115A1	ISOLATION SHEET 30x16 (U401)	(1)
TP1	00J44862A2	RT-01T-1.0B	1
TP2	00J44862A2	RT-01T-1.0B	1
	05D07141A1	LABEL CONT	1

REF.NO.	PART NO.	DESCRIPTION	QTY
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COILS

L503	05F16622A1	(CHOKE)	1
L504	05F16623A1	(LINEAR)	1
(L504)	08N46396A1	SILICON SHEET	1
L901	05F16611A1	(LINE FILTER)	1
L951	05F16318A1	(CHOKE)	1
L952	00K11101K0	(CHOKE) TSL1110-101K	1
L953	00L20101K0	(CHOKE) ELF1010SKI-101K	1

OTHER PARTS

U101	00N27192A5	TC74HC86AF	1
U201	00N26549A1	M51387P	1
U401	08F26454A2	LA7837	(1)
U402	00N26469A4	M5218	1
U450	08F26578A1	AN5551	1
U451	00N26469A4	M5218	1
U501	00R26138A1	UPC358HA	1
U550	08N26517A1	LA7853	1
U951	08N26343A7	UPC78M12A	1
U961	08R26113T1	AN1431M	1
PC901	08R28114A1	TLP621-LF2	1
CF901	08N51217T1	FUSE-CLIP PFC5000-0202	2
F901	08R32159A2	FUSE 23706.3 6.3A 125V	1
CN101	00J40192A5	CONNECTOR S6BEN	1
CN508	00F44547B1	GT-PN	1
CN280	00J40193A2	CONNECTOR S12B-EN	1
CN401	00F40752A2	POST W-P3002	1
CN402	00J40643A2	CONNECTOR S12B-PN-K-S	1
CN501	08F40149A2	POST B2P-LV-TN	1
CN503	00F40831A3	CONNECTOR B4P-VII	1
CN504	00F40831A3	CONNECTOR B4P-VII	1
CN506	00J44862A2	CONNECTOR PIN RT-01T-1.00	1
CN507	00J44862A2	CONNECTOR PIN RT-01T-1.00	1
CN901	00F40916A1	POST B2P-VII	1

REF. NO.	PART NO.	DESCRIPTION	QTY
D951	08N25521F1	31DF6	1
D952	08R25111F1	31DF4	1
D953	08J25878A1	RL2Z	1
D954	08J25878A1	RL2Z	1
D955	08R25013F1	ERB83-004	1
D956	08J25878A1	RL2Z	1
D957	00N25092T2	ERA15-02	1
BD901	00N25196A4	RBV-406	1
ZD101	08H25199C2	(ZENER) RD5.1MB2	1
ZD102	08H25199C2	(ZENER) RD5.1MB2	1
ZD103	08H25199C2	(ZENER) RD5.1MB2	1
ZD449	00H25777C2	(ZENER) RD12MB2	1
ZD450	08H25201C2	(ZENER) RD6.2MB2	1
ZD451	00H25777C2	(ZENER) RD12MB2	1
ZD452	08H25199C2	(ZENER) RD5.1MB2	1
ZD501	08H25207C2	(ZENER) RD15MB2	1
ZD502	08H25199C2	(ZENER) RD5.1MB2	1
ZD901	08N25416T3	(ZENER) 1ZB20	1
ZD902	08H25213C4	(ZENER) RD27MB	1
ZD903	08H25209C2	(ZENER) RD18MB2	1
ZD904	08H25207C2	(ZENER) RD15MB2	1
ZD952	08N25416T3	(ZENER) 1ZB20	1

TRANS FORMERS

T501	05F13617A1	(DRIVE-TRANS)	1
T502	05F13618A1	(FLYBACK)	1
T901	05F13619A1	(POWER-TRANS)	1

POSISTOR

PTH901	08J29031A1	PTH451C263DG8ROMI40	1
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THERMISTOR

NTH901	00N38508A1	115-050-41205	1
NTH951	08J38247T2	NT732ATD LOOK-K	1

REF. NO.	PART NO.	DESCRIPTION	QTY
<u>DIODES</u>			
D101	08H25035C1	DAN217	1
D102	00H25737C1	DAN202K	1
D103	00H25737C1	DAN202K	1
D105	00H25737C1	DAN202K	1
D201	08H25035C1	DAN217	1
D202	08H25035C1	DAN217	1
D203	08H25035C1	DAN217	1
D204	08H25035C1	DAN217	1
D205	08H25035C1	DAN217	1
D206	08H25035C1	DAN217	1
D207	08H25035C1	DAN217	1
D208	08H25035C1	DAN217	1
D209	08H25035C1	DAN217	1
D211	00H25737C1	DAN202K	1
D212	00H25737C1	DAN202K	1
D213	08H25035C1	DAN217	1
D214	08H25035C1	DAN217	1
D215	08H25035C1	DAN217	1
D401	08N25358T1	IDL42A	1
D402	08N25358T1	IDL42A	1
D403	08N25358T1	IDL42A	1
D404	00H25737C1	DAN202K	1
D405	00H25737C1	DAN202K	1
D407	00H25737C1	DAN202K	1
D450	00H25737C1	DAN202K	1
D451	00H25737C1	DAN202K	1
OR D502	08J25030A1	ESC021M-15	(1)
D502	08R25112A1	FMP-3FU	OR
D505	00J25234A3	ERB44-04	1
D507	08N25358T1	IDL42A	1
D509	08H25035C1	DAN217	1
D901	08N25520T1	IJU41	1
D902	00H25737C1	DAN202K	1
D903	00H25737C1	DAN202K	1
D904	00H25737C1	DAN202K	1
D905	00H25737C1	DAN202K	1

REF. NO.	PART NO.	DESCRIPTION		QTY
<u>TRANSISTORS</u>				
Q101	OCK42412KZ	SILICON	2SC2412K	1
Q102	OCK42412KZ	SILICON	2SC2412K	1
Q201	OAK41037KZ	SILICON	2SA1037K	1
Q202	OAK41037KZ	SILICON	2SA1037K	1
Q203	OAK41037KZ	SILICON	2SA1037K	1
Q204	OCK42412KZ	SILICON	2SC2412K	1
Q205	OAK41037KZ	SILICON	2SA1037K	1
Q401	OCK42412KZ	SILICON	2SC2412K	1
Q402	OCK42412KZ	SILICON	2SC2412K	1
Q403	ODF22400AZ	SILICON	2SD2400A	1
Q404	0BF21569AZ	SILICON	2SB1569A	1
Q451	OAK41037KZ	SILICON	2SA1037K	1
Q452	00H29358T1	SILICON	DTC144EK	1
Q501	OCK42412KZ	SILICON	2SC2412K	1
Q502	OAK41037KZ	SILICON	2SA1037K	1
Q503	0AH21020ZZ	SILICON	2SA1020	1
Q506	OCF24692ZZ	SILICON	2SC4692	(1)
Q507	08F24546ZZ	FET	2SK941	1
Q508	ODF21944ZZ	SILICON	2SD1944	(1)
Q550	OAK41037KZ	SILICON	2SA1037K	1
Q551	OCK42412KZ	SILICON	2SC2412K	1
Q552	OAK41037KZ	SILICON	2SA1037	1
Q553	00H29365T1	SILICON	DTC143EK	1
Q554	OCK42412KZ	SILICON	2SC2412K	1
Q555	00H29358T1	SILICON	DTC144EK	1
Q901	08N24597A1	FET	2SK1531	(1)
Q902	OCK42412KZ	SILICON	2SC2412K	1
Q903	OCK42412KZ	SILICON	2SC2412K	1
Q904	OCK42412KZ	SILICON	2SC2412K	1
Q905	OAK41037KZ	SILICON	2SA1037K	1
Q906	OCK42412KZ	SILICON	2SC2412K	1
Q953	OCK42412KZ	SILICON	2SC2412K	1
Q954	OAK41255ZZ	SILICON	2SA1255	1

REF. NO.	PART NO.	DESCRIPTION				QTY
C555	OKK90103KB	CERAMIC	GRM40	B	103K	1
C556	OKM871R0MW	ELECTRO.	KME	50V	1 μ F-M	1
C557	OKK91472JM	PLASTIC	DSR	50V	472J	1
C558	OGK90104ZF	CERAMIC	GRM40	F	104Z	1
C559	OGK90104ZF	CERAMIC	GRM40	F	104Z	1
C560	OGK90104ZF	CERAMIC	GRM40	F	104Z	1
C561	0EQ35470MT	ELECTRO.	YZ	16V	47 μ F-M	1
C562	0EQ35101MT	ELECTRO.	YZ	10V	100 μ F-M	1
C564	OKQ16474J1	PLASTIC	ECQ-Y	1H	474J	1
C565	OGK90104KB	CERAMIC	GRM40	B	104K	1
C566	OGK90104KB	CERAMIC	GRM40	B	104K	1
C567	0EK90105ZF	CERAMIC	GRM40	F	105Z	1
C901	ORP15104MS	PLASTIC	LPX	250V	104M	1
C911	0QM12102M2	ELECTRO.	SMH	200V	1000 μ F-M	1
C912	0UP56104JF	PLASTIC	ECQ-E	1H	104J	1
C914	0ZP45471KR	CERAMIC	DE0705	1KV	471K	1
C915	0ZP45471KR	CERAMIC	DE0705	1KV	471K	1
C921	OKK90222KB	CERAMIC	GRM40	B	222K	1
C923	OKK90682KB	CERAMIC	GRM40	B	682K	1
C924	OGK90104KB	CERAMIC	GRM40	B	104K	1
C925	OGK90104KB	CERAMIC	GRM40	B	104K	1
C927	OGK90104KB	CERAMIC	GRM40	B	104K	1
C951	0NP47181M2	ELECTRO.	SXE	100V	181M	1
C952	0NP47221M2	ELECTRO.	SXE	100V	221M	1
C953	0PP59470MP	ELECTRO.	KMG	160V	47 μ F-M	1
C954	01P47681M1	ELECTRO.	SXE	35V	680 μ F-M	1
C955	0GQ07181HT	ELECTRO.	UPL	1F	180 μ F-M	1
C956	0CQ07681MT	ELECTRO.	UPL	1A	680 μ F-M	1
C957	01Q35100MT	ELECTRO.	YZ	35V	10 μ F-M	1
C958	0EQ35470MT	ELECTRO.	YZ	16V	47 μ F-M	1
C961	OGK90104KB	CERAMIC	GRM40	B	104K	1
C962	ORP56334KF	PLASTIC	ECQ-E	1H	334K	1
C963	0ZP45221KR	CERAMIC	DE0705	1KV	221K	1
C991	00Q57102ME	CERAMIC	DE1310		102M	1
C992	00Q57102ME	CERAMIC	DE1310		102M	1
C994	00Q57102ME	CERAMIC	DE1310		102M	1

REF. NO.	PART NO.	DESCRIPTION				QTY
C410	OKK86221JC	CERAMIC	GRM40	CH	221J	1
C411	OKP762R2MT	ELECTRO.	KME-8P50V		2.2 μ F-M	1
C413	OGK90104KB	CERAMIC	GRM40	B	104K	1
C414	OGK90104ZF	CERAMIC	GRM40	F	104Z	1
C416	OKQ16105J1	PLASTIC	ECQ-Y	1H	105J	
C450	OGK90104ZF	CERAMIC	GRM40	F	104Z	1
C451	OKQ35220MT	ELECTRO.	VZ	50V	22 μ F-M	1
C452	OEQ10104GT	PLASTIC	ECH-U	1C	104G	1
C453	OKP13103JT	PLASTIC	ECQ-B	1H	103J	1
C454	OKK90472KB	CERAMIC	GRM40	B	472K	1
C455	OKQ35100MT	ELECTRO.	VZ	50V	10 μ F-M	1
C456	OKQ35100MT	ELECTRO.	VZ	50V	10 μ F-M	1
C457	OKQ35100MT	ELECTRO.	VZ	50V	10 μ F-M	1
C458	OKQ35220MT	ELECTRO.	VZ	50V	22 μ F-M	1
C459	OKQ35220MT	ELECTRO.	VZ	50V	22 μ F-M	1
C501	0WH81222KB	CERAMIC	DD09	500V B	222K	1
C502	OKP13473JT	PLASTIC	ECQ-B	1H	473J	1
C503	0IQ35101MT	ELECTRO.	VZ	35V	100 μ F-M	1
C504	07H73103JF	PLASTIC	DKR	1.8KV	103J	1
C505	07H73912JF	PLASTIC	DKR	1.8KV	912J	1
C506	0UG77393JF	PLASTIC	DTW	400V	393J	1
C507	0UQ05684JF	PLASTIC	DHSA	400V	684J	1
C509	0NP56155JF	PLASTIC	ECQ-E	1H	155J	1
C510	0NP56155JF	PLASTIC	ECQ-E	1H	155J	1
C511	0XG77183JF	PLASTIC	DTW	630V	183J	1
C512	0XG77153JF	PLASTIC	DTW	630V	153J	1
C513	0RP59100MT	ELECTRO.	KMG	250V	10 μ F-M	1
C514	0RP80104KF	PLASTIC	DFZ	250V	104K	1
C515	0PP41101MW	ELECTRO.	KME	160V	100 μ F-M	1
C516	OGK90104ZF	CERAMIC	GRM40	F	104Z	1
C519	0UP16684JS	PLASTIC	PM	400V	684J	1
C522	0KH81102KD	CERAMIC	DD104	50V	102K	1
C531	0QK66474JF	PLASTIC	DHS	200V	474J	1
C550	OKK86101JC	CERAMIC	GRM40	CH	101J	1
C551	OKK86102JC	CERAMIC	GRM40	CH	102J	1
C552	OKK86391JC	CERAMIC	GRM40	CH	391J	1
C553	OKP13682JT	PLASTIC	ECQ-B	1H	682J	1
C554	OKQ35100MT	ELECTRO.	VZ	50V	1 μ F-M	1

REF. NO.	PART NO.	DESCRIPTION			QTY
C106	0ZL49103JA	CARBON	1 / 10	10K-J	1
C107	0KQ35220MT	ELECTRO.	YZ 50V	22 μ F-M	1
C108	0KK86102JC	CERAMIC	GRM40 CH	102J	1
C109	0EK90105ZF	CERAMIC	GRM40 F	105Z	1
C201	0EQ35470MT	ELECTRO.	YZ 16V	47 μ F-M	1
C202	0EQ35470MT	ELECTRO.	YZ 16V	47 μ F-M	1
C203	0EQ35470MT	ELECTRO.	YZ 16V	47 μ F-M	1
C204	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C205	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C206	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C207	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C208	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C209	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C210	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C211	0KQ352R2MT	ELECTRO.	YZ 50V	2.2 μ F-M	1
C212	0KQ352R2MT	ELECTRO.	YZ 50V	2.2 μ F-M	1
C213	0KQ352R2MT	ELECTRO.	YZ 50V	2.2 μ F-M	1
C214	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C215	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C216	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C217	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C218	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C219	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C220	0EQ35471MT	ELECTRO.	YZ 16V	470 μ F-M	1
C221	0EQ35101MT	ELECTRO.	YZ 16V	100 μ F-M	1
C222	0EQ35220MT	ELECTRO.	YZ 50V	22 μ F-M	1
C280	0EPI2100MT	ELECTRO.	KRE 16V	10 μ F-M	1
C281	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C400	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C401	0GK90104ZF	CERAMIC	GRM40 F	104Z	1
C402	0EQ35471MT	ELECTRO.	YZ 16V	470 μ F-M	1
C403	0KPI3103JT	PLASTIC	ECQ-B IH	103J	1
C404	0KQ16105J1	PLASTIC	ECQ-Y IH	105J	1
C405	0KQ16105J1	PLASTIC	ECQ-Y IHI	105J	1
C406	01Q35102MT	ELECTRO.	YZ 35V	1000 μ F-M	1
C407	01Q35101MT	ELECTRO.	YZ 35V	100 μ F-M	1
C408	01Q35101MT	ELECTRO.	YZ 35V	100 μ F-M	1
C409	01Q35101MT	ELECTRO.	YZ 35V	100 μ F-M	1

REF.NO. PART NO. DESCRIPTION QTY

VARIABLE RESISTORS

VR201	00H13332WB	SEMIFIXED	RH063LC	3.3K-B	1
VR202	00H13332WB	SEMIFIXED	RH063LC	3.3K-B	1
VR203	00H13332WB	SEMIFIXED	RH063LC	3.3K-B	1
VR204	00H13472WB	SEMIFIXED	RH063LC	4.7K-B	1
VR205	00H13103WB	SEMIFIXED	RH063LC	10K-B	1
VR280	00H03332TB	SEMIFIXED	RH063MC	3.3K-B	1

VARIABLE RESISTORS

VR281	00H03332TB	SEMIFIXED	RH063MC	3.3K-B	1
VR282	00H03332TB	SEMIFIXED	RH063MC	3.3K-B	1
VR283	02G20502QB	VARIABLE	RK09K1130	5K-B	1
VR284	00H03332TB	SEMIFIXED	RH063MC	3.3K-B	1
VR285	02G20103PB	VARIABLE	RK09K1130	10K-B	1
VR286	02G20103PB	VARIABLE	RK09K1130	10K-B	1
VR287	02G20103PB	VARIABLE	RK09K1130	10K-B	1
VR288	02G20103PB	VARIABLE	RK09K1130	10K-B	1
VR401	00H13222WB	SEMIFIXED	RH063LC	2.2K-B	1
VR402	00H13104WB	SEMIFIXED	RH063LC	100K-B	1
VR450	00H13332WB	SEMIFIXED	RH063LC	3.3K-B	1
VR451	00H13103WB	SEMIFIXED	RH063LC	10K-B	1
VR452	00H13332WB	SEMIFIXED	RH063LC	3.3K-B	1
VR453	00H13102WB	SEMIFIXED	RH063LC	1K-B	1
VR550	00H13472WB	SEMIFIXED	RH063LC	4.7K-B	1
VR551	00H13223WB	SEMIFIXED	RH063LC	22K-B	1
VR552	00H13103WB	SEMIFIXED	RH063LC	10K-B	1
VR951	00H13102WB	SEMIFIXED	RH063LC	1K-B	1
VR952	00H13102WB	SEMIFIXED	RH063LC	1K-B	1

CAPACITORS

C101	0KQ351R0MT	ELECTRO.	YZ	50V	1 μ F-M	1
C102	0KQ351R0MT	ELECTRO.	YZ	50V	1 μ F-M	1
C103	0KK86102JC	CERAMIC	GRM40	CH	102J	1
C104	0GK90104ZF	CERAMIC	GRM40	F	104Z	1
C105	0GK90104ZF	CERAMIC	GRM40	F	104Z	1

REF. NO.	PART NO.	DESCRIPTION			QTY
R903	OCH14224JM	SOLID	1 / 2	220K-J	1
OR R903	OCH14224KM	SOLID	1 / 2	220K-K	1
R905	OHM37223JN	CEMENT	BSR 5N	22K-K	1
R906	OFM36101KN	CEMENT	BGR 3N	100-K	1
R911	OZL49105JA	CARBON	1 / 10	1.0M-J	1
R912	OZL49105JA	CARBON	1 / 10	1.0M-J	1
R913	OZL49330JA	CARBON	1 / 10	33-J	1
R914	OEL32R10JM	METAL	BPR 28	0.1-J	1
R915	OCL04101JT	CARBON	1 / 2	100-J	1
R917	OZL49272JA	CARBON	1 / 10	2.7K-J	1
R918	OZL49822JA	CARBON	1 / 10	8.2K-J	1
R921	OZL49472JA	CARBON	1 / 10	4.7K-J	1
R922	OZL49473JA	CARBON	1 / 10	47K-J	1
R923	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R924	OZL49123JA	CARBON	1 / 10	12K-J	1
R925	OZL49563JA	CARBON	1 / 10	56K-J	1
R926	OZL49273JA	CARBON	1 / 10	27K-J	1
R927	OEL09104JL	METAL	RSS 2W	100K-J	1
R928	OZL49333JA	CARBON	1 / 10	33K-J	1
R929	OZL49331JA	CARBON	1 / 10	330-J	1
R953	OCL04333JT	CARBON	1 / 2	33K-J	1
R958	OZL49472JA	CARBON	1 / 10	4.7K-J	1
R959	OZL49472JA	CARBON	1 / 10	4.7K-J	1
R961	OZL49823JA	CARBON	1 / 10	82K-J	1
R962	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R963	OZL49392JA	CARBON	1 / 10	3.9K-J	1
R964	OZL49272JA	CARBON	1 / 10	2.7K-J	1
R965	OZL49102JA	CARBON	1 / 10	1.0K-J	1
R966	OZL49122JA	CARBON	1 / 10	1.2K-J	1
R967	07M361R5KH	CEMENT	BGR 7Z	1.5-K	1
R968	OZL49683JA	CARBON	1 / 4	68K-J	1
R969	OZL49683JA	CARBON	1 / 4	68K-J	1
R970	OZL49474JA	CARBON	1 / 10	470K-J	1
R971	OZL49113JA	CARBON	1 / 10	11K-J	1
R972	OZL49393JA	CARBON	1 / 10	39K-J	1

REF. NO.	PART NO.	DESCRIPTION			QTY
R532	ODL081R5JL	FUSING	1 / 4	1.5-J	1
R533	OBL49182JA	CARBON	1 / 4	1.8K-J	1
R534	OBL49182JA	CARBON	1 / 4	1.8K-J	1
R535	OBL49182JA	CARBON	1 / 4	1.8K-J	1
R536	OZL49182JA	CARBON	1 / 4	1.8K-J	1
R537	OZL49182JA	CARBON	1 / 4	1.8K-J	1
R538	OZL49182JA	CARBON	1 / 4	1.8K-J	1
R539	OZL49182JA	CARBON	1 / 4	1.8K-J	1
R549	OZL49473JA	CARBON	1 / 10	47K-J	1
R550	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R551	OZL49123JA	CARBON	1 / 10	12K-J	1
R552	OZL49223JA	CARBON	1 / 10	22K-J	1
R553	OZL49303JA	CARBON	1 / 10	30K-J	1
R554	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R555	OZL49103JA	CARBON	1 / 10	10K-J	1
R556	OZL49183JA	CARBON	1 / 10	18K-J	1
R557	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R558	OZL49332JA	CARBON	1 / 10	3.3K-J	1
R559	OZL49473JA	CARBON	1 / 10	47K-J	1
R560	OZL49682JA	CARBON	1 / 10	6.8K-J	1
R561	OZL49102JA	CARBON	1 / 10	1K-J	1
R562	OZL49153JA	CARBON	1 / 10	15K-J	1
R563	OZL49223JA	CARBON	1 / 10	22K-J	1
R564	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R565	OZL49103JA	CARBON	1 / 10	10K-J	1
R566	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R567	OZL49103JA	CARBON	1 / 10	10K-J	1
R568	OZL49103JA	CARBON	1 / 10	10K-J	1
R571	OBL08101JL	FUSING	1 / 4	100-J	1
R572	OZL49333JA	CARBON	1 / 10	33K-J	1
R573	OZL49223JA	CARBON	1 / 10	22K-J	1
R581	OZL49223JA	CARBON	1 / 10	22K-J	1
R583	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R584	OZL49000ZA	JUMPER	1 / 10	0	1
R585	OCL04124JT	CARBON	1 / 2	120K-J	1
R901	OCHI4474JM	SOLID	1 / 2	470K-J	1
OR R901	OCHI4474KM	SOLID	1 / 2	470K-K	1
R902	ONL171R0KZ	CEMENT	MZS 15N	1.0-K	1

REF. NO.	PART NO.	DESCRIPTION			QTY.
R460	OZL49223JA	CARBON	1 / 10	22K-J	1
R461	OZL49223JA	CARBON	1 / 10	22K-J	1
R462	OZL49223JA	CARBON	1 / 10	22K-J	1
R463	OZL49223JA	CARBON	1 / 10	6.8K-J	1
R464	OZL49103JA	CARBON	1 / 10	10K-J	1
R465	OZL49153JA	CARBON	1 / 10	15K-J	1
R466	OZL49682JA	CARBON	1 / 10	6.8K-J	1
R468	OZL49224JA	CARBON	1 / 10	220K-J	1
R469	OZL49102JA	CARBON	1 / 10	1K-J	1
R470	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R471	OZL49102JA	CARBON	1 / 10	1K-J	1
R472	OZL49103JA	CARBON	1 / 10	10K-J	1
R473	OZL49473JA	CARBON	1 / 10	47K-J	1
R474	OBL49102JA	CARBON	1 / 4	1K-J	1
R475	OZL49223JA	CARBON	1 / 10	22K-J	1
R476	OZL49273JA	CARBON	1 / 10	27K-J	1
R502	OZL49471JA	CARBON	1 / 10	470-J	1
R503	OZL49471JA	CARBON	1 / 10	470-J	1
R504	OZL49153JA	CARBON	1 / 10	15K-J	1
R505	OBL49222JA	CARBON	1 / 4	2.2K-J	1
R506	OZL49103JA	CARBON	1 / 10	10K-J	1
R507	ODL09101JM	METAL	RSS 1W	100-J	1
R508	OFL09101JL	METAL	RSS 3W	100-J	1
R510	OFL09471JL	METAL	RSS 3W	470-J	1
R511	OBL49330JA	CARBON	1 / 4	33-J	1
R513	OEL09471JL	METAL	RSS 2W	470-J	1
R514	OBL49182JA	CARBON	1 / 4	1.8K-J	1
R515	OZL49223JA	CARBON	1 / 10	22K-J	1
R516	OBL08R10JL	FUSING	1 / 4	0.1-J	1
R519	OCL084R7JL	FUSING	1 / 2	4.7-J	1
R520	OBL083R3JL	FUSING	1 / 4	3.3-J	1
R521	OZL49681JA	CARBON	1 / 10	680-J	1
R522	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R523	OZL49101JA	CARBON	1 / 10	100-J	1
R524	OZL482211F	CARBON	1 / 10	2.21K-F	1
R525	OZL483011F	CARBON	1 / 10	3.01K-F	1
R526	OZL49123JA	CARBON	1 / 10	.12K-J	1
R529	OZL49103JA	CARBON	1 / 10	10K-J	1

REF. NO.	PART NO.	DESCRIPTION			QTY.
R290	OZL49000ZA	JUMPER	1 / 10	0	1
R291	OZL49822JA	CARBON	1 / 10	8.2K-J	1
R292	OZL49000ZA	JUMPER	1 / 10	0	1
R293	OZL49000ZA	JUMPER	1 / 10	0	1
R294	OZL49000ZA	JUMPER	1 / 10	0	1
R295	OZL49153JA	CARBON	1 / 10	15K-J	1
R296	OZL49332JA	CARBON	1 / 10	3.3K-J	1
R297	OZL49000ZA	JUMPER	1 / 10	0	1
R298	OZL49272JA	CARBON	1 / 10	2.7K-J	1
R299	OZL49103JA	CARBON	1 / 10	10K-J	1
R401	OZL49102JA	CARBON	1 / 10	1K-J	1
R402	OZL49563JA	CARBON	1 / 10	56K-J	1
R403	OZL49333JA	CARBON	1 / 10	33K-J	1
R404	OZL49124JA	CARBON	1 / 10	120K-J	1
R405	OZL49470JA	CARBON	1 / 10	47-J	1
R406	OZL49223JA	CARBON	1 / 10	22K-J	1
R407	OZL49563JA	CARBON	1 / 10	56K-J	1
R409	OZL49563JA	CARBON	1 / 10	56K-J	1
R410	OZL49183JA	CARBON	1 / 10	18K-J	1
R412	OZL49332JA	CARBON	1 / 10	3.3K-J	1
R413	OZL49105JA	CARBON	1 / 10	1M-J	1
R414	OZL49103JA	CARBON	1 / 10	10K-J	1
R415	OZL49473JA	CARBON	1 / 10	47K-J	1
R416	OZL49223JA	CARBON	1 / 10	22K-J	1
R417	OZL49153JA	CARBON	1 / 10	15K-J	1
R418	OZL49153JA	CARBON	1 / 10	1.5K-J	1
R419	OZL49683JA	CARBON	1 / 10	68K-J	1
R420	OCL41102JT	CARBON	1 / 2	1K-J	1
R425	OBL08101JL	FUSING	1 / 4	100-J	1
R426	OFLO9121JL	METAL	RSS 3W	120-J	1
R427	OEL091R0JL	METAL	RSSX 2W	1.0-J	1
R451	OZL49102JA	CARBON	1 / 10	1K-J	1
R453	OZL482943F	CARBON	1 / 10	294K-F	1
R454	OZL49563JA	CARBON	1 / 10	56K-J	1
R455	OZL49223JA	CARBON	1 / 10	22K-J	1
R456	OZL49153JA	CARBON	1 / 10	15K-J	1
R457	OBL08221JL	FUSING	1 / 4	220K-J	1
R458	OZL49333JA	CARBON	1 / 10	33K-J	1

REF. NO.	PART NO.	DESCRIPTION			QTY.
R221	OZL49102JA	CARBON	1 / 10	1K-J	1
R222	OZL49470JA	CARBON	1 / 10	47-J	1
R223	OZL49470JA	CARBON	1 / 10	47-J	1
R224	OZL49470JA	CARBON	1 / 10	47-J	1
R225	OZL49470JA	CARBON	1 / 10	47-J	1
R226	OZL49470JA	CARBON	1 / 10	47-J	1
R227	OZL49470JA	CARBON	1 / 10	47-J	1
R228	OBL49471JA	CARBON	1 / 4	470-J	1
R229	OBL49471JA	CARBON	1 / 4	470-J	1
R230	OBL49471JA	CARBON	1 / 4	470-J	1
R231	OZL49221JA	CARBON	1 / 10	220-J	1
R232	OZL49333JA	CARBON	1 / 10	33K-J	1
R233	OZL49221JA	CARBON	1 / 10	220-J	1
R235	OZL49102JA	CARBON	1 / 10	1K-J	1
R236	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R237	08J38247T2	THERMISTOR	1 / 10	100K-J	1
R238	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R239	OZL49682JA	CARBON	1 / 10	6.8K-J	1
R240	OZL483321F	CARBON	1 / 10	3.32K-J	1
R241	OZL49823JA	CARBON	1 / 10	82K-J	1
R242	OZL49471JA	CARBON	1 / 10	470-J	1
R243	OBL08221JL	FUSING	1 / 4	220-J	1
R244	OZL49221JA	CARBON	1 / 10	220-J	1
R245	OZL49332JA	CARBON	1 / 10	3.3K-J	1
R246	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R247	OZL49102JA	CARBON	1 / 10	1K-J	1
R248	OZL49154JA	CARBON	1 / 10	150K-J	1
R249	OZL481102F	CARBON	1 / 10	11.0K-F	1
R278	0BK10223JT	CARBON	1 / 4	22K-J	1
R281	OZL49682JA	CARBON	1 / 10	6.8K-J	1
R282	OZL49272JA	CARBON	1 / 10	2.7K-J	1
R283	OZL49682JA	CARBON	1 / 10	6.8K-J	1
R284	OZL49272JA	CARBON	1 / 10	2.7K-J	1
R285	OZL49682JA	CARBON	1 / 10	6.8K-J	1
R286	OZL49272JA	CARBON	1 / 10	2.7K-J	1
R287	OZL49000ZA	JUMPER	1 / 10	0	1
R288	OZL49222JA	CARBON	1 / 10	2.2K-J	1
R289	OZL49000ZA	JUMPER	1 / 10	0	1

MS 9 - 2 9 S U P A R T S - L I S T

PCB-MAIN (5T01087A2)

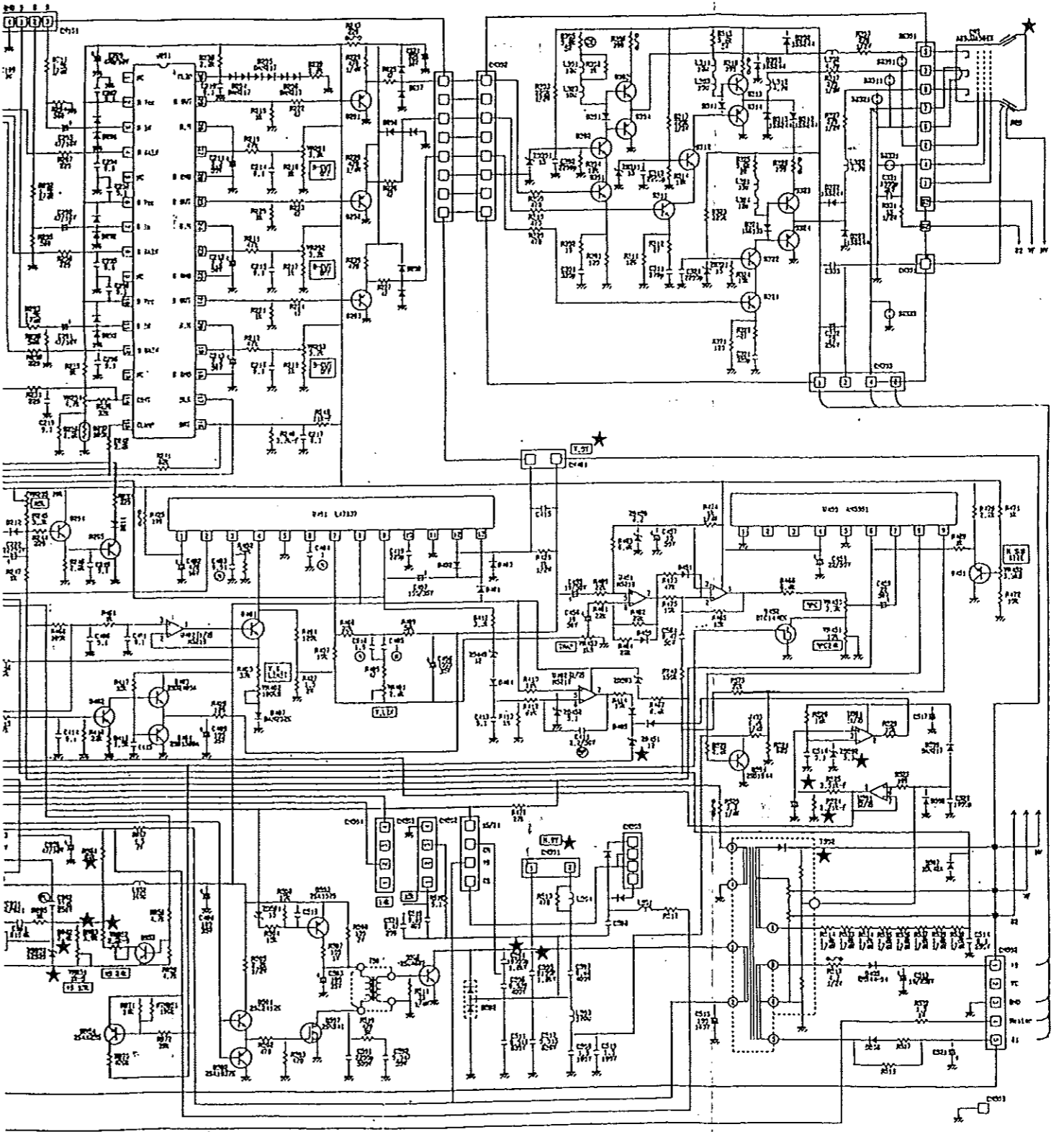
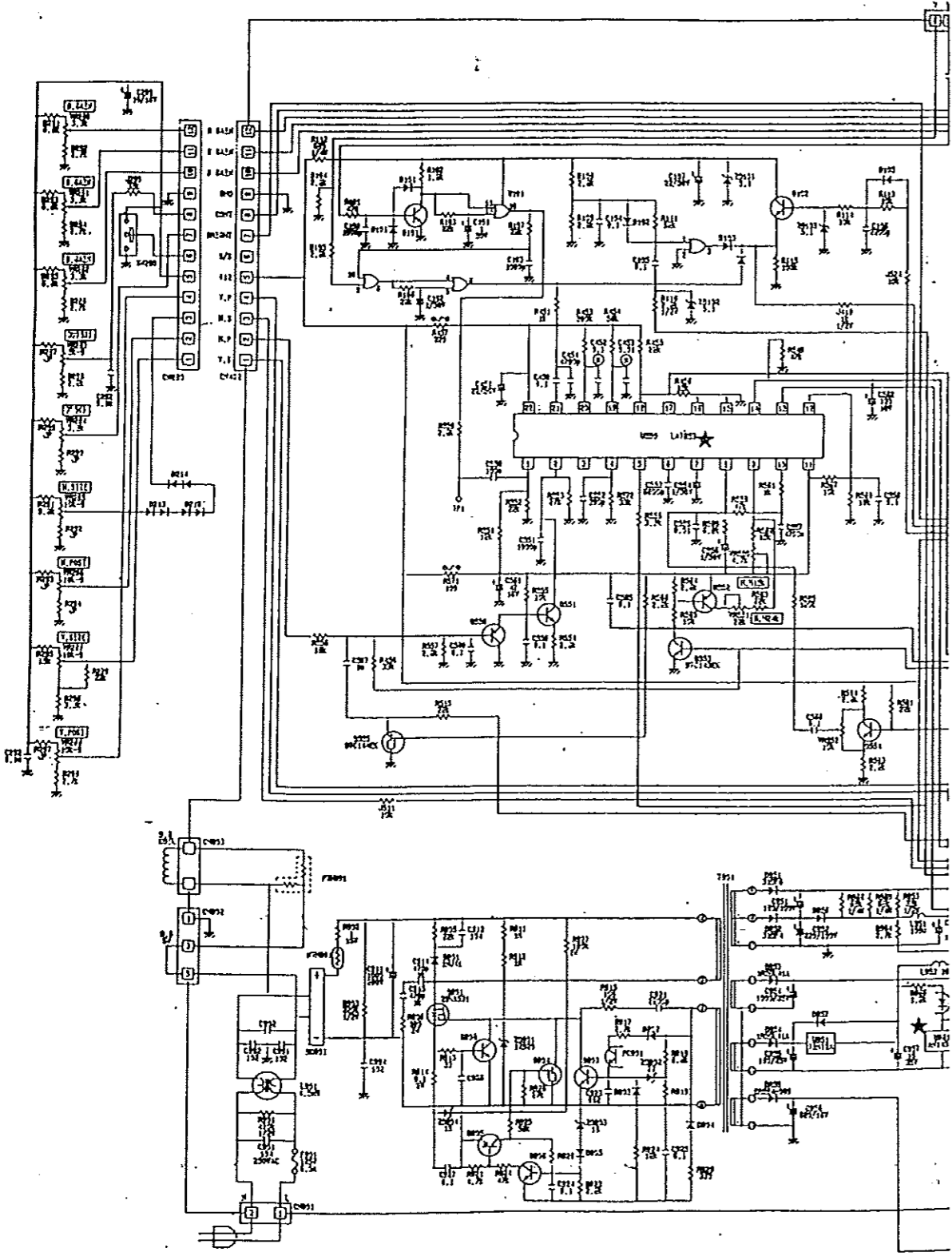
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PCB	05A00585D1	PCB-MAIN			1
<u>FIXED RESISTORS</u>					
R101	0ZL49471JA	CARBON	1 / 10	470-J	1
R102	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R103	0ZL49223JA	CARBON	1 / 10	22K-J	1
R104	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R105	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R106	0ZL49223JA	CARBON	1 / 10	22K-J	1
R107	0ZL49223JA	CARBON	1 / 10	22K-J	1
R108	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R109	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R110	0CLO4102JT	CARBON	1 / 2	1K-J	1
R111	0ZL49823JA	CARBON	1 / 10	82K-J	1
R112	0BL49681JA	CARBON	1 / 4	680-J	1
R113	0ZL49103JA	CARBON	1 / 10	10K-J	1
R114	0ZL49103JA	CARBON	1 / 10	10K-J	1
R115	0ZL49104JA	CARBON	1 / 10	100K-J	1
R201	0BL49152JA	CARBON	1 / 4	1.5K-J	1
R202	0BL49152JA	CARBON	1 / 4	1.5K-J	1
R203	0BL49152JA	CARBON	1 / 4	1.5K-J	1
R204	0ZL49561JA	CARBON	1 / 10	560-J	1
R205	0ZL49561JA	CARBON	1 / 10	560-J	1
R206	0ZL49561JA	CARBON	1 / 10	560-J	1
R207	0ZL49221JA	CARBON	1 / 10	220-J	1
R208	0ZL49221JA	CARBON	1 / 10	220-J	1
R209	0ZL49221JA	CARBON	1 / 10	220-J	1
R210	0ZL49473JA	CARBON	1 / 10	47K-J	1
R211	0ZL49473JA	CARBON	1 / 10	47K-J	1
R212	0ZL49473JA	CARBON	1 / 10	47K-J	1
R216	0ZL49102JA	CARBON	1 / 10	1K-J	1
R217	0ZL49102JA	CARBON	1 / 10	1K-J	1
R218	0ZL49102JA	CARBON	1 / 10	1K-J	1
R219	0ZL49102JA	CARBON	1 / 10	1K-J	1
R220	0ZL49102JA	CARBON	1 / 10	1K-J	1


• X-Ray related parts list

Symbol	Description	
T502	FBT	MSU1FHH09
R525	R-METAL	3.01k Ω -F
R524	R-METAL	2.21k Ω -F
ZD502	Zener Diode	RD5.1MB2
VR951	R-SEMX	1k Ω -B
VR952	R-SEMX	2.2k Ω -B
DY	--	05F13637A1
C504	C-PL	10000pF-J, 1.6kV
C505	C-PL	9100pF-J, 1.6kV
R961	R-CA	82k Ω
R962	R-CA	2.4k Ω
R963	R-CA	3.9k Ω
U961	IC	AN1431M
CRT		M68JUA068X
U550	IC	LA7853
ZD451	Zener Diode	RD12MB2

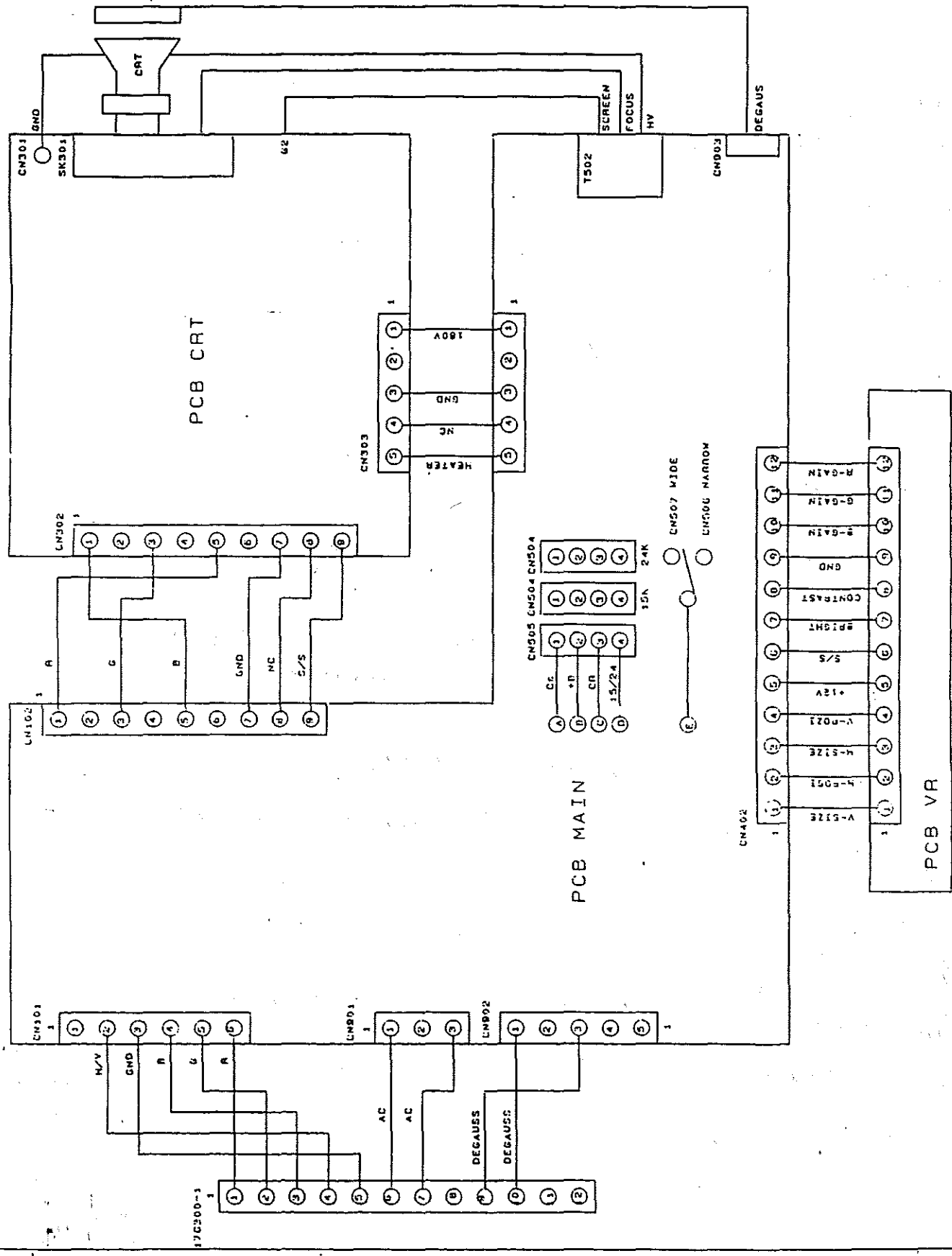
VI. Circuit Diagram

- * Parts list Page 32 ~ 54
- * Connection diagram Page 55
- * Circuit diagram Page 56



株式会社 ナナオ				TITLE
DATE	DRAWN	CHECKED	DESIGNED	APPROVED
SCALE	.65/1			
				MS9-29SU SCHEMATIC DIAGRAM
				DRAW NO.
				E-B0279 (5T01087) 





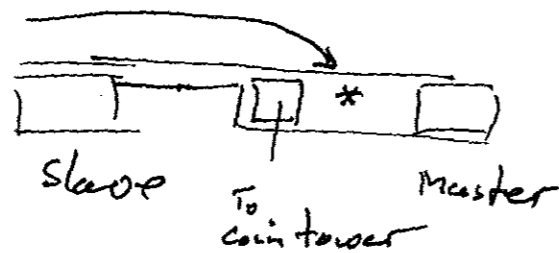
Post test Master side for Earth bond on

Base	-----	less than 100mS
Monitor stand	-----	" "
Billboard upper	-----	" "
Billboard lower	-----	" "

Repeat on Slave side with same results

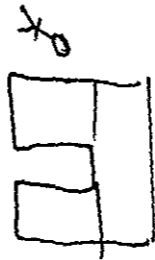
continuity between Master slave OK

Starpoint loose



* Cleaner was cleaning Master side Screen
 * Blown backwards by force of shock (3")
 * Right arm

- * Removed Rear of Master cabinet.
- * Inspection showed all Earths connected & secure

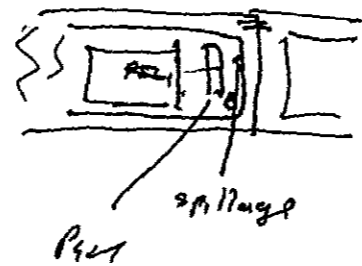


- * Inspection of cables under Master seat revealed

Pink (100V feed) to rear fan was loose (not connected)

Insulation boot was intact. Earth to fan & Rear metalwork < 1.12

- * Logic tray shows signs of liquid spillage at front



- * Area under footrest ok. no loose wires.
- All Earth points secure.