

Adjustment Specifications (MS-2934-S/SW)

1. Adjustment Signal

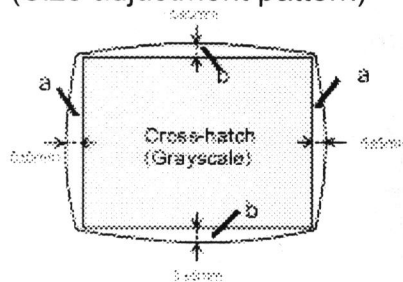
- NAOMI(31k) supplied by SEGA or corresponded signal

2. Adjustment Specification

2.1 Display Size (Cross-hatch pattern) The screen shall face the east.

- The edge of the horizontal image shall be $5\text{mm} \pm 5\text{mm}$ from the edge of screen ("a" in the below figure)
- The edge of the vertical image shall be $5\text{mm} \pm 5\text{mm}$ from the edge of screen ("b" in the below figure)

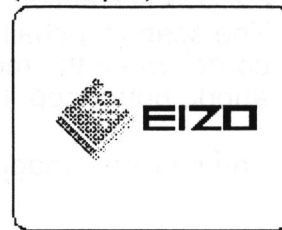
(Size adjustment pattern)



2.2 Scan Direction

The scanning shall start from left top corner when the monitor is set to face its anode button top.

(Example)

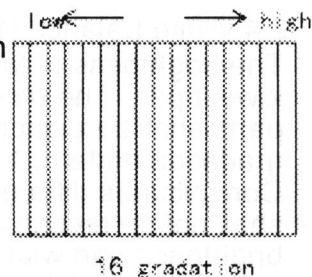


2.3 Display Position

To be centered.

2.4 White Balance (16 gradation pattern)

Conspicuous different white balance shall not be recognizable in low and high brightness part with 16 grayscale pattern. Low brightness level (1st gradation part) :



Adjustment Specifications (MS-2934-SF/SFW)

1. Adjustment Signal

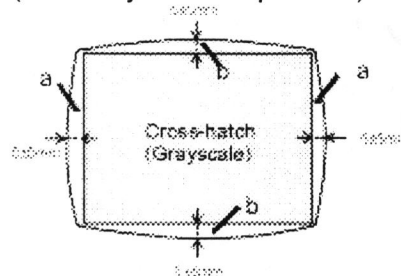
- NAOMI(31k) supplied by SEGA or corresponded signal

2. Adjustment Specification

2.1 Display Size (Cross-hatch pattern) The sanode button shall face the west.

- The edge of the horizontal image shall be 5mm5mm from the edge of screen ("a" in the below figure)
- The edge of the vertical image shall be 5mm5mm from the edge of screen ("b" in the below figure)

(Size adjustment pattern)



2.2 Scan Direction

The scanning shall start from right top corner when the monitor is set to face its anode button top. (Mirror)

The mirrored image will appear

(Example)

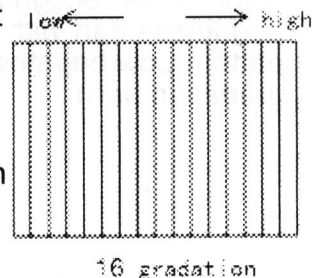


2.3 Display Position

To be centered.

2.4 White Balance (16 gradation pattern)

The brightness of the low part : $12/255$ at lowest part. The other parts: the lowest parts shall be disappeared at the 16 gradation pattern, $17n/255$ and $n=0\sim15$. Conspicuous different white balance shall not be recognizable in low and high brightness part with 16 grayscale pattern. Low brightness level (1st gradation part) :



Adjustment Specifications (MS-2934-SN/SNW)

1. Adjustment Signal

- NAOMI(31k) supplied by SEGA or corresponded signal

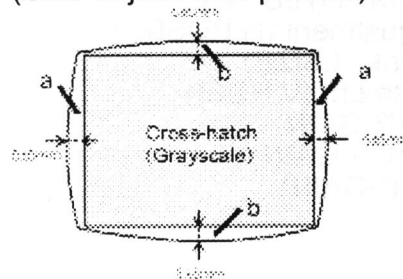
2. Adjustment Specification

2.1 Display Size (Cross-hatch pattern) The Anode button shall face west.

2.1 Display Size (Cross-hatch pattern) The screen shall face the east.

- The edge of the horizontal image shall be 5mm from the edge of screen ("a" in the below figure)
- The edge of the vertical image shall be 5mm from the edge of screen ("b" in the below figure)

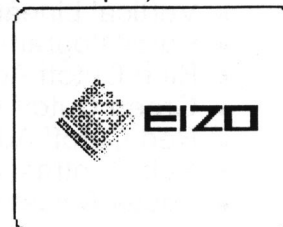
(Size adjustment pattern)



2.2 Scan Direction

The scanning shall start from left top corner when the monitor is set to face its anode button top.

(Example)

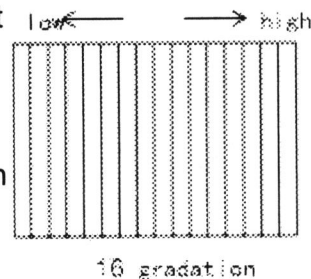


2.3 Display Position

To be centered.

2.4 White Balance (16 gradation pattern)

The brightness of the low part : 12/255 at lowest part. The other parts: the lowest parts shall be disappeared at the 16 gradation pattern, $17n/255$ and $n=0\sim15$. Conspicuous different white balance shall not be recognizable in low and high brightness part with 16 grayscale pattern. Low brightness level (1st gradation part) :



MECHANICAL SPECIFICATIONS

Adjustment Functions

AC CORD

Configuration

Packing specifications

Connector Specifications

Conductive Aluminum Foil Tape Specifications

Adjustment Functions

PCB-VR *PCB-VR can be down out approx.900mm from the monitor

- Brightness Adjustment (BRIGHT)
- Contrast Adjustment (CONTRAST)
- Horizontal Size Adjustment (H.SIZE)
- Horizontal Position Adjustment (H.POSI)
- Vertical Size Adjustment (V.SIZE)
- Vertical Position Adjustment (V.POSI)
- Red Gain Adjustment (R-GAIN)
- Green Gain Adjustment (G-GAIN)
- Blue Gain Adjustment (B-GAIN)

PCB-MAIN

- Trapezoidal Distortion Adjustment (TRAP)
- Pin-Cushion Distortion Adjustment (SPC)
- Vertical Linearity (V.LIN)
- Parallelogram Distortion Adjustment (PARA)
- Blue Cutoff Adjustment (B. CUT OFF)
- Green Cutoff Adjustment (G.CUT OFF)
- Red Cutoff Adjustment (R.CUT OFF)
- Sub Contrast Adjustment (SUB CONT)
- Focus Adjustment (FOCUS)

MECHANICAL SPECIFICATIONS

Adjustment Functions

AC CORD

Configuration

Packing specifications

Connector Specifications

Conductive Aluminum Foil Tape

Specifications

AC CORD

Exclusive AC CORD for SEGA.

MECHANICAL SPECIFICATIONS

Adjustment Functions

AC CORD

Configuration

Packing specifications

Connector Specifications

**Conductive Aluminum Foil Tape
Specifications**

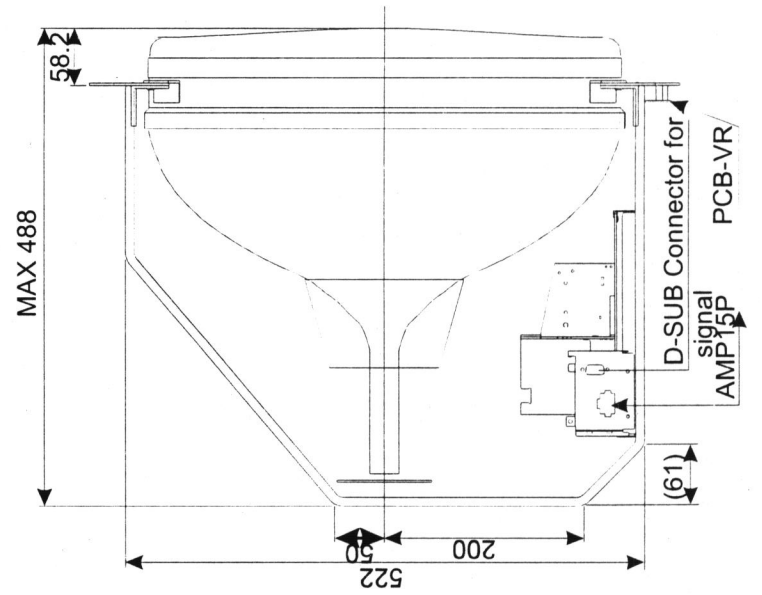
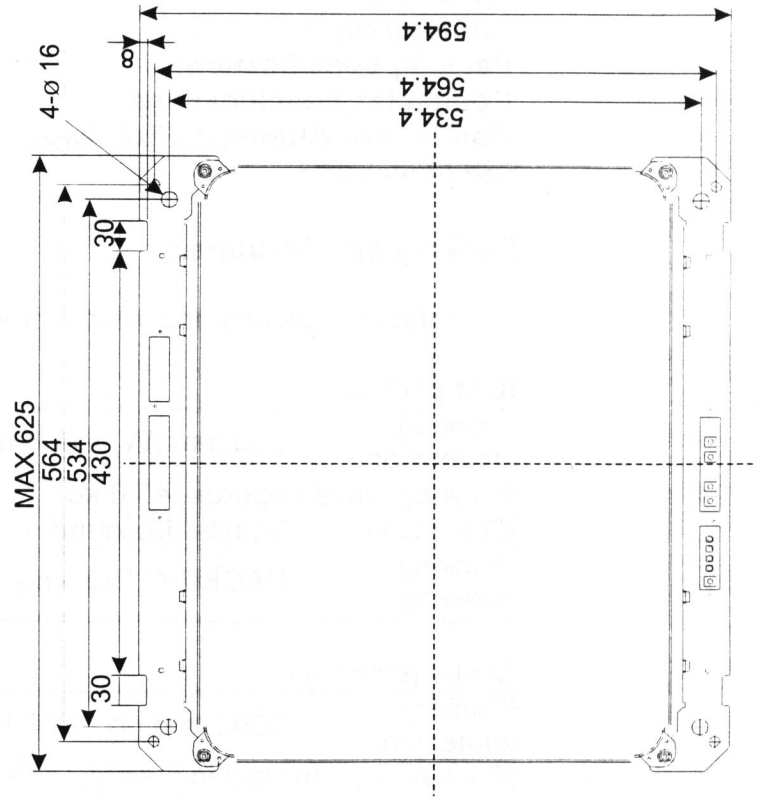
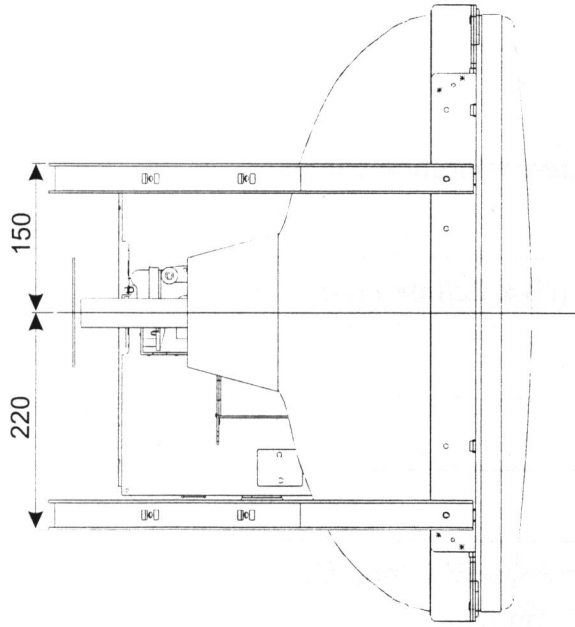
Configuration

All of the dimensions, weights and angles below are reference values.

Dimensions (net)	625 mm (W) x 594 mm (H) x 488 mm (D) Weight (net)
Weight (net)	approx. 40.0 kg
Outline drawing	To View PDF file

MS-2934

: mm



MECHANICAL SPECIFICATIONS

Adjustment Functions

AC CORD

Configuration

Packing specifications

Connector Specifications

Conductive Aluminum Foil Tape

Specifications

Packing specifications

All of the dimensions and weight below are reference values.

(unit package)

Packing dimensions	756 mm (W) x 606 mm (H) x 728 mm (D)
Packing weight	approx. 45.0 kg
Stack limit	3 units (Maximum)
Packing drawing	PACKING Drawing

(pallet package)

Packing dimensions	1090 mm (W) x 670 mm (H) x 850 mm (D)
Packing weight	Packing weight approx. 108.0 kg
Stack limit	2 units (Maximum)
Packing drawing	PACKING Drawingf

Note)
1. After packing, seal the top with item 60 as the shape of "1"

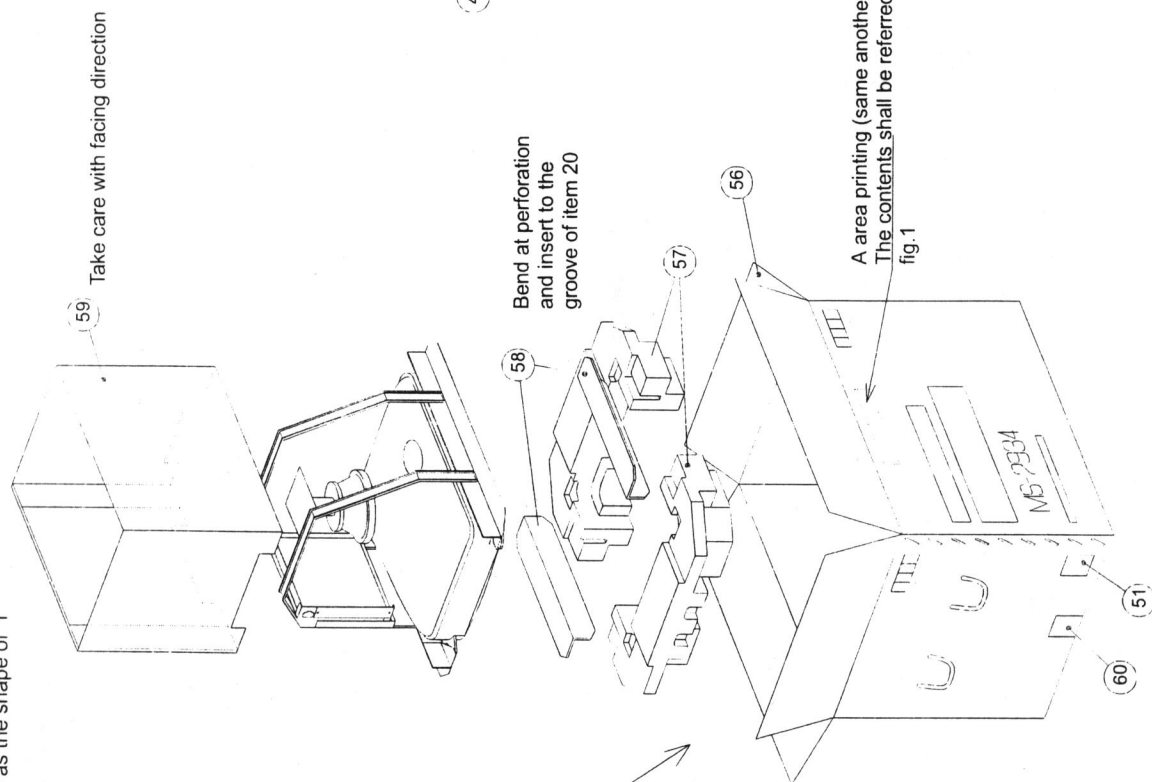
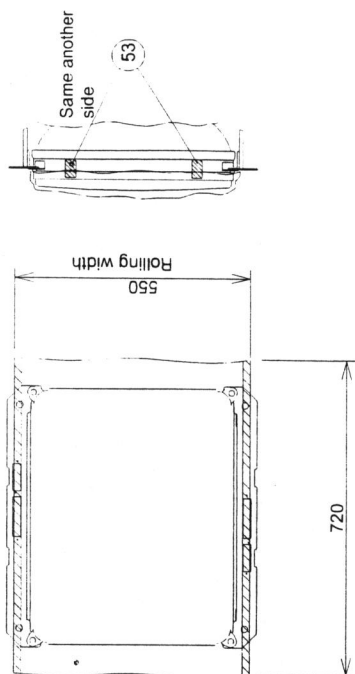


Fig. 1 Packing case printing

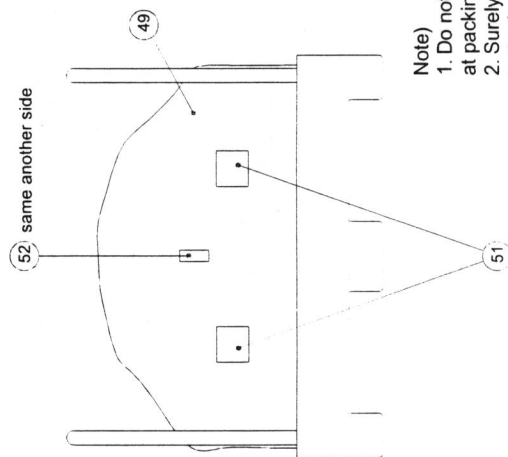
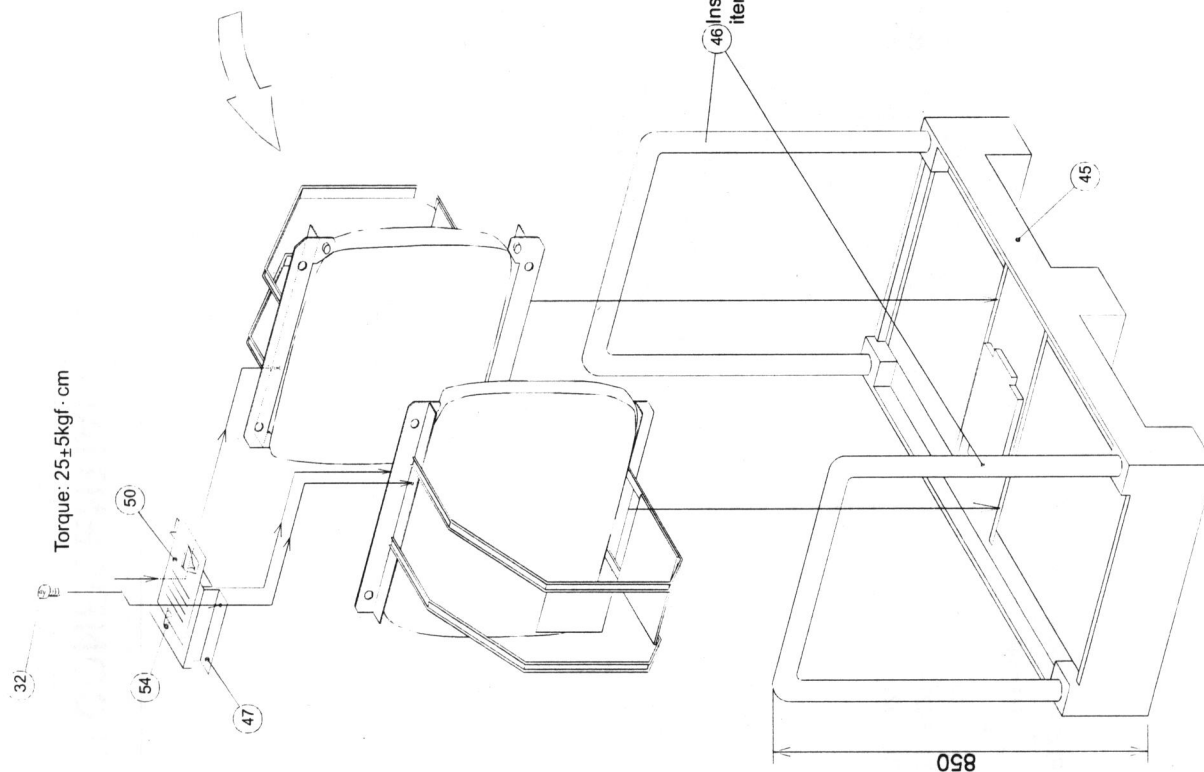
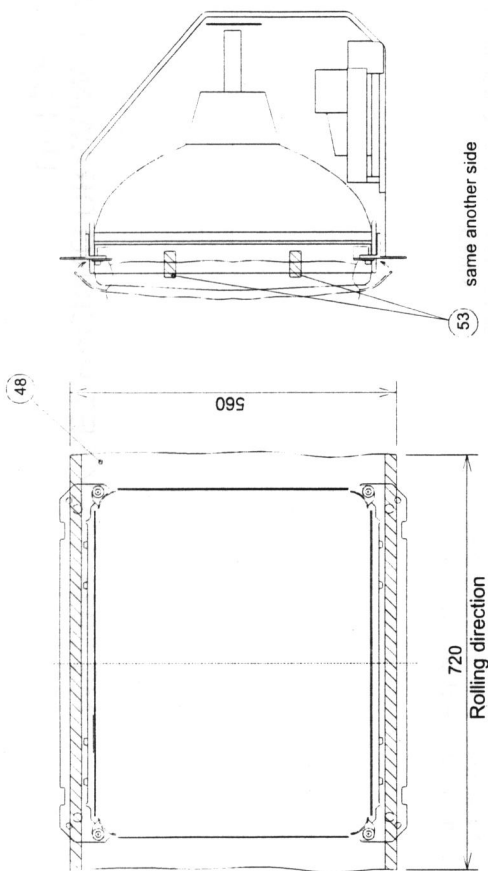
GROUP	printing
-S	A
-SF	200-5927
-SN	200-5927-01
	200-5927-02



On putting, Do not catch the foreign material between CRT surface. Cover the whole CRT surface

CONFIDENTIAL

MS-2934 ASSY SET PACKING DRAWING (2/2)
Unit package



- Note)
1. Do not bump the CRT surface at packing .
 2. Surely cover with item 48 to the bottom and the surplus shall be insert under the STAY (BASE).

CONFIDENTIAL

MS-2934 ASSY SET PACKING DRAWING (1/2)

Palette package

MECHANICAL SPECIFICATIONS

Adjustment Functions

AC CORD

Configuration

Packing specifications

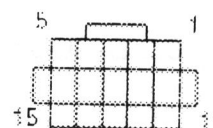
Connector Specifications

Conductive Aluminum Foil Tape Specifications

Connector Specifications

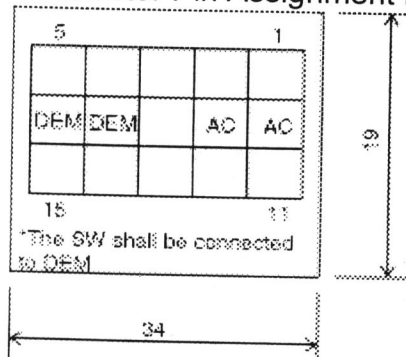
Connector Location

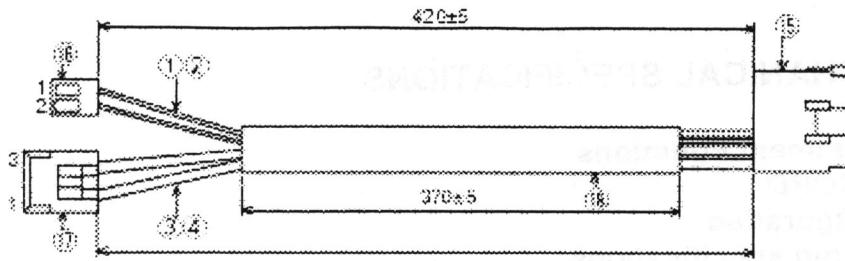
AMP UP Connector (176300-1)



Pin #	Input signal	specification
1	N.C (No Connection)	-
2	N.C	-
3	N.C	-
4	N.C	-
5	N.C	-
6	AC Power Supply	100~120Vac±10%,50/60Hz
7	AC Power Supply	100~120Vac±10%,50/60Hz
8	N.C	-
9	DEM	SW shall be connected between 9pin and 10 pin.
10	DEM	SW shall be connected between 9pin and 10 pin.
11	N.C	-
12	N.C	-
13	N.C	-
14	N.C	-
15	N.C	-

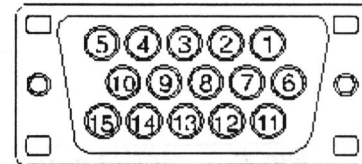
Connector Pin Assignment Label





15. UP Connector	16 PHR-2 [to CN902]
6 17-1 Black	1 15-9 Red
7 17-3 White	2 15-10 Orange
9 16-1 Red	17VHR-3 [to CN902]
10 16-2 Orange	1 15-6 Black
	3 15-7 White
1~5,8,11~15 are opened	2 is opened

4.6.3 D-SUB15 pin (mini) connector



pin#	Input Singal	Specification
1	Red	Positive 0.7Vp-p/75Ohm
2	Green	
3	Blue	
4	N.C	
5	Earth	Earth
6	Red Earth	
7	Green Earth	
8	Blue Earth	
9	N.C	-
10	Earth	Earth
11	N.C	-
12	N.C	-
13	H.Sync or Composite Sync	Positive/Negative, Separate Sync, 3~5Vp-p Negative, Composite Sync, 1~5Vp-p
14	V.Sync	Positive/Negative, Separate Sync, 3~5Vp-p
15	N.C	-

MECHANICAL SPECIFICATIONS

Adjustment Functions

AC CORD

Configuration

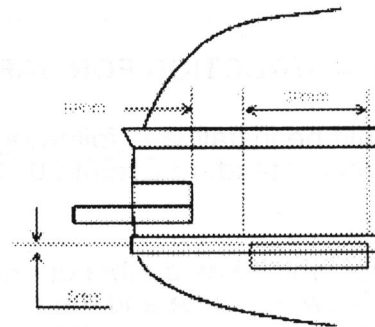
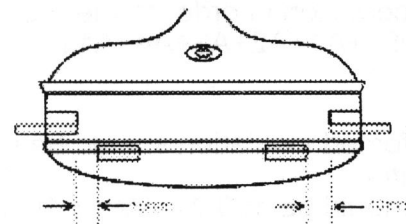
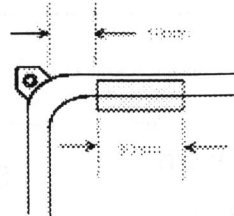
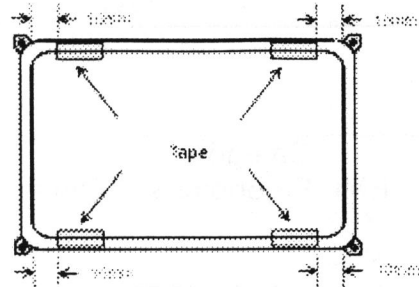
Packing specifications

Connector Specifications

Conductive Aluminum Foil Tape Specifications

Conductive Aluminum Foil Tape Specifications

Name	TERAOKA 830
Dimension (reference values)	
Taping	<p>The aluminum foil tapes are put on to keep the surface of the panel and the integral implosion protection metal band conductive as follows (Since no problem is found in the mechanical and electrical performance.);</p>



CERTIFICATIONS & STANDARDS

Certifications

Standard	Origin	Category				Mark
		Safety	EMI	Ergonomics	Others	
S-JQA	Based on Electrical Appliance & Material Control low (The 3rd clause, Table No.8 "applied apparatus")	Yes	-	-	-	Name Plate
TUV	EN60950: 1992+A1+A2+A3+A4+A11	Yes	-	-	-	Name Plate
CB	IEC60950: 1991+A1+A2+A3+A4	Yes	-	-	-	-
UL	UL 1950 2 nd	Yes	-	-	-	Name Plate
C-UL	CSA C22.2 No. 950 2 nd	Yes	-	-	-	Name Plate
DHHS (DNHW)	-	-	-	-	Yes (X-ray)	Name Plate
PTB*	-	-	-	-	Yes (X-ray)	-

Standards

Standards	Origin	Category				Mark
		Safety	EMI	Ergonomics	Others	
VCCI	VCCI Class A	-	-Yes	-	-	-
FCC	FCC Class A	-	-Yes	-	-	-

INSTALLATION INSTRUCTION FOR SAFETY REQUIREMENT

The monitor should be installed in following condition in order to meet the requirement of safety standard EN60950: 1992+A1+A2+A3+A4+A11

1. Power Supply

- The transformer which has double or reinforced insulation should be used between primary power source and the monitor.
- The rating of input power supply voltage should be 100-120Vac \pm 10%.

2. Ambient temperature

The ambient temperature around the monitor should be less than 40C°.

RELIABILITY & SAFETY

RELIABILITY

MTBF	20,000 hours at standard power input excluding CRT.*Values calculated according to the simplified "Parts Count Reliability Prediction" method as specified in MIL- HDBK-217F.
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SAFETY

line noise resistance	No synchronized condition shall be detected when applying 500Vp-p pulse by using a noise simulator.
Undesired radiation	Based on Electrical Appliance & Material Control low Based on VCCI Class A (Excluded the Video Component)
High voltage label	To be pasted on the followings. <ul style="list-style-type: none">• Top of the anode cap• The anode lead• The focus and screen lead• The DY lead

OPERATING ENVIRONMENT SPECIFICATIONS

Ambient Temperature		Operation: 0°C~40°C Storage: -10°C~60°C (The inner temperature of the amusement machine should be designed below 40°C)
Ambient Humidity		Operation: 30%~70% R.H. Non condensing Storage: 20%~80% R.H. Non condensing
Altitude		Operation: up to 3,000 m Shipping or Storage: up to 12,000 m
Vibration	(Ass'y chassis unit)	To be free from any damage to the circuits nor the appearance on 1 hour 1 G (face up : 0.5G) vibration test to be carried out under 5~100~5 Hz varying frequencies in every 10 minutes. To be validated along all three axes.
	(Unit package)	To be free from any damage on 30 minutes 1 G vibration test to be carried out under 5~100~5 Hz varying frequencies in every 10 minutes. To be validated along all three axes.
	(Pallet package)	To be free from any damage on 40 minutes (or 1 hour in up-down vibration only) 0.5 G vibration test to be carried out under 5~100~5 Hz varying frequencies in every 10 minutes. To be validated along all three axes.
Drop Test	(Unit package)	To be free from any damage on free drop from 40 cm height once.
	(Pallet package)	To be free from any damage on free drop from 15 cm height and on drop with support (10 cm) from 15 cm height once.

PACKAGING SPECIFICATIONS

Unit package

- **PACKING Drawing (ASSY SET PACKING DRAWING)**
- **Parts List (ASSY SET)**

Pallette package

- **PACKING Drawing (ASSY SET PACKING DRAWING)**
- **Parts List (ASSY SET)**

(The Number in the drawing is corresponded to the number in the parts list)

Section 2 – ADJUSTMENT

ADJUSTMENT CONTROL	2-1
TOOLS	2-5
SIGNAL (ANALOG)	2-6
ADJUSTMENT LOCATION	2-7
BEFORE ADJUSTMENT	2-9
ADJUSTMENT	2-10

Adjustment Control

To see Adjustment location (VR Position)(The number in the drawing is corresponded to the below numbers)

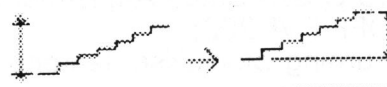
1. Contrast Adjustment (CONTRAST: VR283)
Adjust the contrast of the image.

2. Red Gain Adjustment (R-GAIN: VR280)
Turning clock wise darkens Red

Change of the GAIN VR

GAIN left turn

GAIN right turn

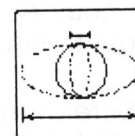


3. Green Gain Adjustment (G-GAIN: VR281)
Turning clock wise darkens Green

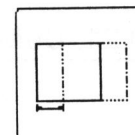
4. Blue Gain Adjustment (B-GAIN: VR282)
Turning clock wise darkens Blue

5. Brightness Adjustment (BRIGHT: VR284)
Adjust the brightness of the image

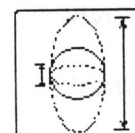
6. H. Size Adjustment (H.SIZE: VR285)
Adjust the horizontal size of image



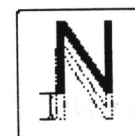
7. H. Position Adjustment (H.POSI: VR286)
Adjust the horizontal position of image



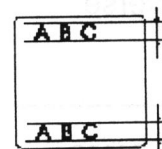
8. V. Size adjustment (V.SIZE: VR287)
Adjust the Vertical size of image



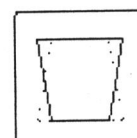
9. V. Position Adjustment (V.POSI: VR280)
Adjust the vertical position of image



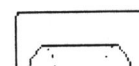
10. V. Linearity Adjustment (V.LIN: VR401)
Adjust the vertical linearity



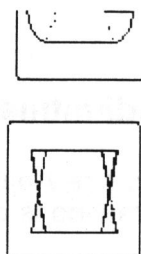
11. Trapezoidal Distortion Adjustment (TRAP: VR452)
Adjust the trapezoidal distortion



12. Side Pin Cushion distortion (S.P.C: VR450)
Adjust Side-pin-cushion distortion

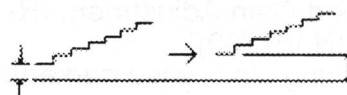


13.Parallelogram distortion (PARA:VR552)
Adjusts Parallelogram distortion



14.Blue Cutoff Adjustment(B-CUT
OFF:VR203)
Turning Clockwise darkens Blue

Change of the CUT OFF VR
CUTOFF left turn CUTOFF right turn







15.Green Cutoff Adjustment(G-CUT
OFF:FVR202)
Turning Clockwise darkens Green.

16.Red Cutoff Adjustment(R-CUT
OFF:VR201)
Turning Clockwise darkens Red.

17.Sub Contrast Adjustment(SUB
CONT: VR204)
Only if sufficient contrast is obtained
with VR283, the screen contrast is
adjusted with SUB.CONTRAST.
18.Focus Adjustment (FOCUS)
Adjust to get the best focus.

19.Screen Adjustment (SCREEN)
Adjust to just back raster disappearing.

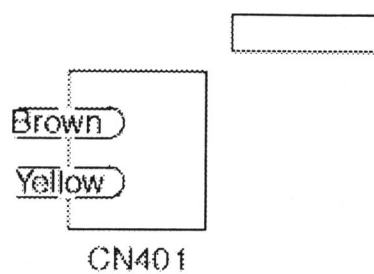
20.21. Deflection Yoke Polarity Connectors

	20 CN401 normal	20 CN401 reverse
21 CN501 Normal	 Normal screen	 Reversed Screen
21 CN501 reverse	 Mirrored Screen	 180o rotated screen

20.CN401

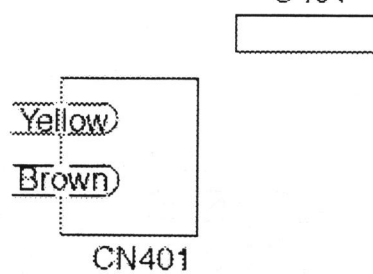
Normal Connection

U401



Reverse Connection

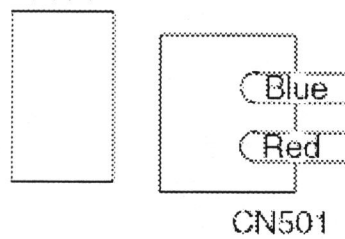
U401



21. CN501

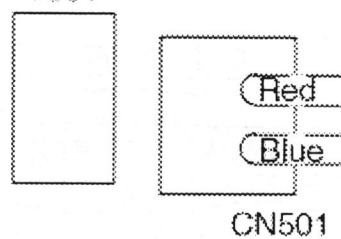
Normal Connection

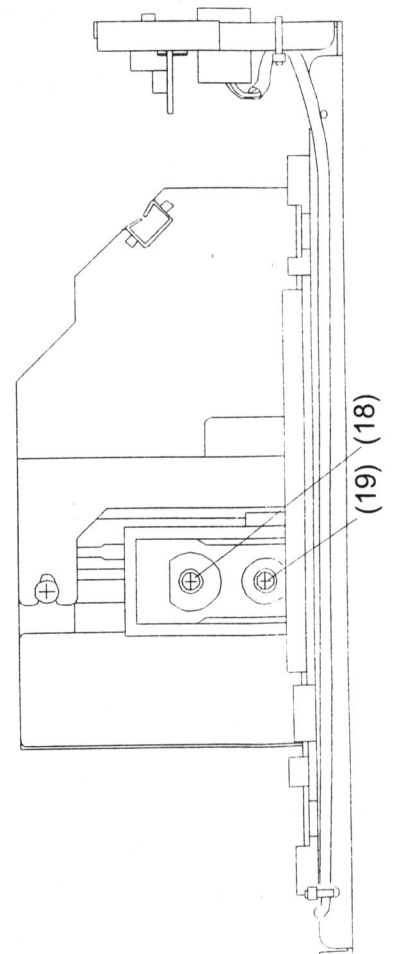
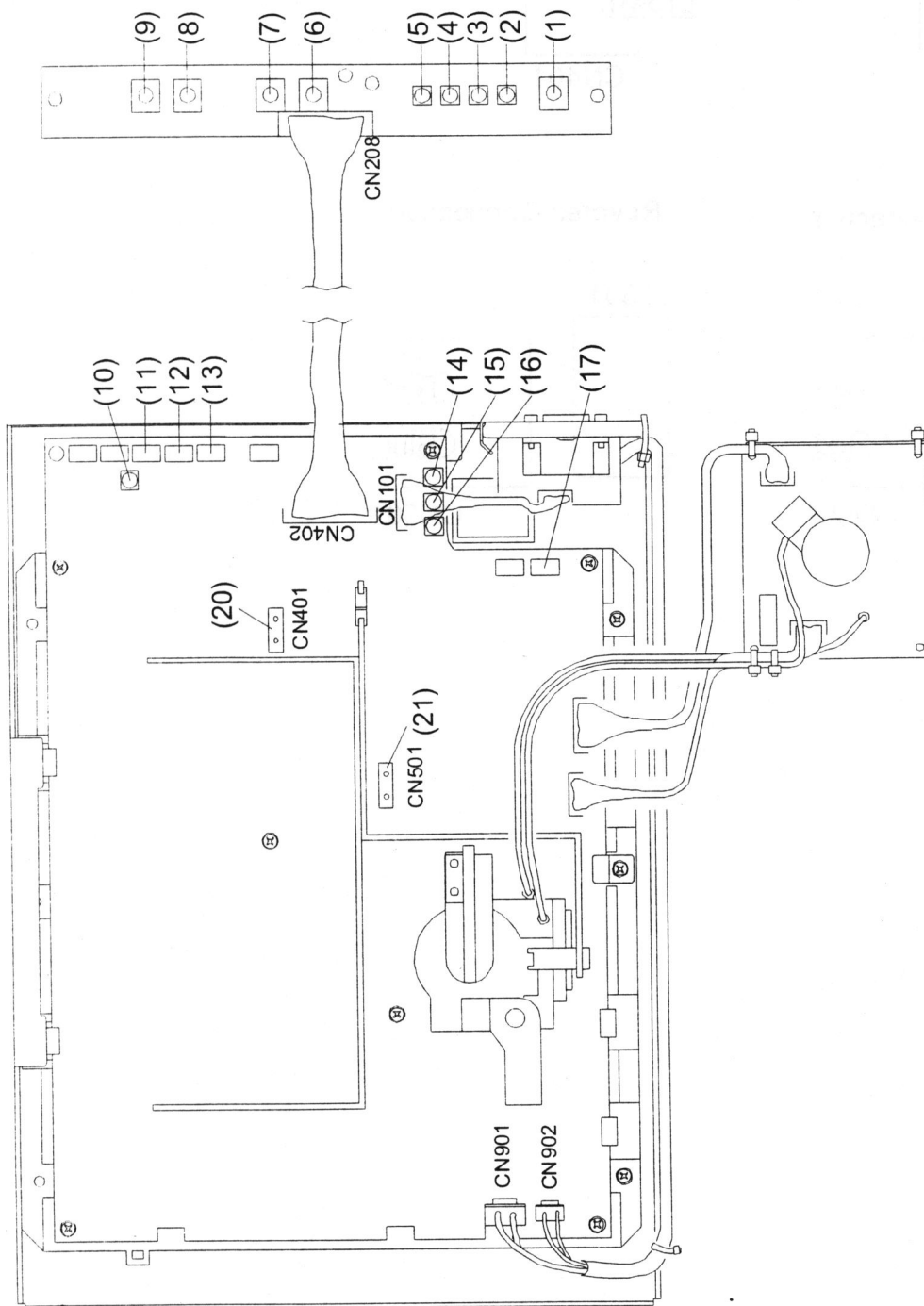
T501



Reverse Connection

T501





General Adjustment

Tools

Before starting general adjustment, the following tools are recommended to do tuning.

- Degaussing Bar
- Digital voltage meter.
- Frequency counter
- Signal Generator
- Brightness meter

Signal (analog Signal)

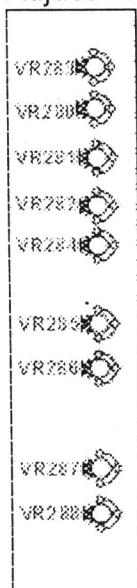
No	Source	Mode	fH fV	Dot Clock(iMHz)	Sync	BP	Display	Total	Sync V form (V)
1	Naomi (JAMMA31)	31k	31.69kHz 59.80Hz	27.00	3.04μs 3H	3.22μs 33H	23.70μs 480H	31.55μs 530H	Comp Nega 0
2	Size Limit 31k	31k	31.50kHz 60.00Hz	24.57	3.5μs 3H	2.73μs 43H	23.75μs 457H	31.75μs 525H	Comp Nega 0

Adjustment Location

Each adjustment VR shall be preset at the following location before turning ON.

VR	Name	PCB	Preset
VR951	{B-ADJ	MAIN	Center
VR283	Contrast	VR	Center
VR285	H.SIZE	VR	Center
VR286	H.POSI	VR	Center
VR287	V.SIZE	VR	Center
VR288	V.POSI	VR	Center
VR284	Bright	VR	Center
VR280	R.GAIN	VR	Center
VR281	G.GAIN	VR	Center
VR282	B.GAIN	VR	Center
VR201	R.CUT OFF	MAIN	counterclockwise max.
VR202	G.CUT OFF	MAIN	counterclockwise max.
VR203	B.CUT OFF	MAIN	counterclockwise max.
VR550	H.HOLD	MAIN	Center
VR204	SUB CONT	MAIN	Center
VR205	ABL	MAIN	Center
VR450	S.P.C	MAIN	Center
VR452	TRAPEZOIDAL	MAIN	Center
VR451	H.SIZE LIMIT	MAIN	Center
VR402	V.SIZE LIMIT	MAIN	Center
VR401	V.LIN	MAIN	Center
VR552	PARA	MAIN	Center
VR571	R.SHIFT	MAIN	clockwise max.
T501 (FBT)	SCREEN	MAIN	counterclockwise max.
T501 (FBT)	FOCUS	MAIN	Center

Adjustment Location for PCB-VR (seen from parts side)



Adjustment

Adjust with facing the CRT surface to east. The face top one shall face its anode west.

<Whole Adjustment>

1	+B Adjustment
2	Preset
3	Degauss Circuit Confirmation
4	Horizontal Sync Adjustment
5	Focus Adjustment
6	Color Purity Adjustment
7	Convergence Adjustment
8	Raster H. Adjustment
9	H/V Size Limit Adjustment
10	V.Linearity Adjustment
11	Distortion Adjustment
12	Size and Position Adjustment
13	Color Adjustment
14	X-ray Protection Confirmation
15	Default Setting

1 +B Adjustment

	VR	How to adjust	measure Point	Signal
1	VR951	Set the Digital voltage meter at the TP901.	TP901	Non
2		Adjust 110 ± 0.2 VDC using the VR951.		

2 Preset

Turn the SCREEN VR slowly.

	VR	How to adjust	Signal
1	T501	Receive the signal. Adjust the SCREEN VR on the FBT so that back-raster slightly appears.	No.1 Cross-hatch
2		Adjust the FOCUS VR on the FBT to get the best focused image.	

3 Degauss Circuit Confirmation

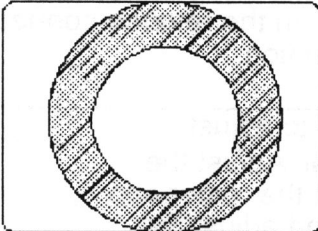
	VR	How to adjust	Signal
1	CN902	Receive the signal. Confirm that degaussing can be effective after magnetizing.	No.1 Red-field

4 H Sync Adjustment

	VR	How to adjust	measure	Signal
--	----	---------------	---------	--------

VR	How to adjust	Point	Signal
1 VR550	Set the probe of the frequency counter at the DY Red lead. Adjust the VR701 on the PCB-MAIN to get the free-run frequency 31.5 ± 0.2 kHz.	DY red lead	Non

5 Focus Adjustment

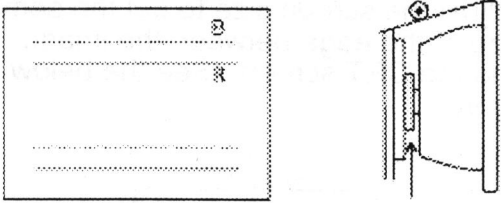
VR	How to adjust	Signal
1 T501	Receive the signal. Adjust with the FOCUS VR on the FBT to get the best focus in the below part. (See the below figure.) 	No.1

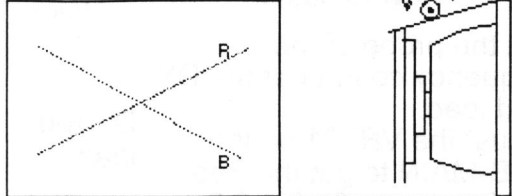
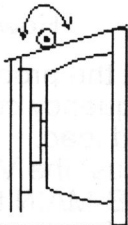
6 Color Purity Adjustment

VR	How to adjust	Signal
1 DY magnet	Receive the signal. Adjust by moving the DY back and forth to get the best purity. Keep the horizontal balance by opening the 2P magnet symmetrically.	No.1 RED-field
2	Adjust the purity in the corners of the screen with the magnets.	
3	Confirm if the satisfactory purity is obtained in all four directions after degaussing.	

7 Convergence Adjustment

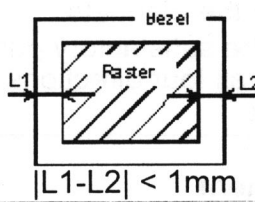
The CRT surface shall face east and confirm in all direction. The anode of the Facetop Style should face the west when adjusting, and the all directions when confirming.

VR	How to adjust	Signal
1 DY magnet	Receive the signal. Adjust Yv with the magnet. (See the below figure.)  Adjust Yv with the differential coil. (See the below figure.)	

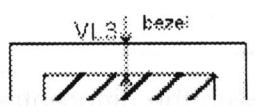
2			No.1 RED-field
3	If the misconvergence still appears in the corners of the screen, put the ferrite magnet into the space between the CRT and the DY.		
4	After Adjustment, lock the ferrite sheet with silicone and lock the DY and CP magnet with paint.		

8 Raster H. Adjustment

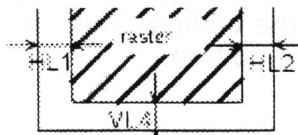
VR571 is preset clockwise max.. In the reverse connection, adjust with the VRs in the opposite direction.

VR	How to adjust	Signal
1 VR451	Receive the signal. Adjust the brightness so that the raster can appear slightly, and adjust the horizontal size to get the under-scanned image.	
2 VR571	Adjust the screen to set the horizontal raster position at the center of the bezel. When shifting the raster position to the left, insert the CN572 close to the CN571 (1pin). When shifting to the right, insert the CN572 close to the CN571 (3pin). (See the below figure.) <div data-bbox="662 1288 917 1489">  </div>	No.1 black-field
3	Twist the two harnesses of the CN572 together and set them out of the PCB so that they should not touch the FBT.	

9 H/V Size Limit Adjustment

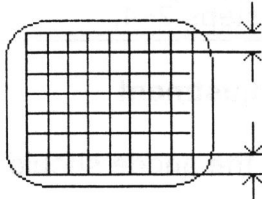
VR	How to adjust	Signal
1 VR285 VR287	Receive the signal. Set the horizontal and vertical size at maximum. Adjust the screen size to get the same size of the edge between the image and the CRT screen. (See the below figure.)	
2 VR402		No.2 Cross-hatch

2 VR451



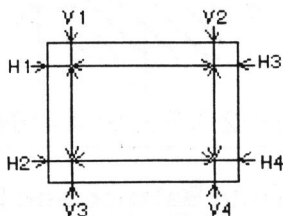
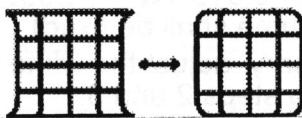
HL1, HL2, VL3, VL4 = $0 \pm 3\text{mm}$ (or within $0 \sim -8\text{ mm}$ if the adjustment is very difficult)

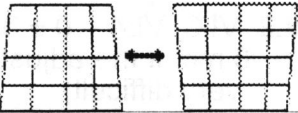
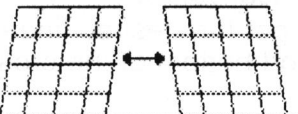
10 V.Linearity Adjustment

VR	How to adjust	Signal
1 VR288	Receive the signal and set the image at the vertical center. Adjust to get the desired linearity at the top and bottom of the crosshatch pattern.	
2 VR401		No.1 Cross-hatch

11 Distortion Adjustment

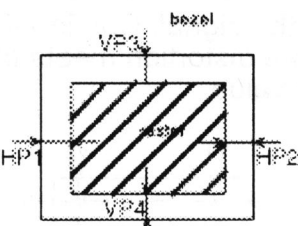
When adjusting the trapezoidal or/and parallelogram distortion, the CRT screen should face the east. As for the Facetop style, the anode should face the west.

VR	How to adjust	Signal
1	Receive the signal. Confirm if the spec of the distortion meets the following value.  $\begin{aligned} H1-H2 &< 7.0\text{ mm} \\ H3-H4 &< 7.0\text{ mm} \\ V1-V2 &< 5.0\text{ mm} \\ V3-V4 &< 5.0\text{ mm} \end{aligned}$	
	Adjust the side pincushion distortion so that the vertical lines are straight from top to bottom.	
2 VR450	Side pin 	No.1 Cross-hatch
	Adjust the trapezoidal and	

		parallelotrammic distortion so that the length of the vertical lines are same from top to bottom.
3	VR452	<p>Trapezoidal distortion</p>  <p>Adjust the trapezoidal and parallelotrammic distortion so that the length of the vertical lines are same from top to bottom.</p>
4	VR552	<p>Parallelogram distortion</p> 
5		If necessary, adjust the distortion, repeating steps 2~4.

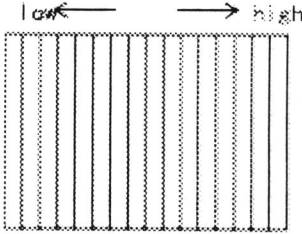
12 Size and Position Adjustment

As for the Facetop style, the anode should face the west and confirm with all direction

VR	How to adjust	Signal
1	Receive the signal.	
2	<p>Adjust the size and position to get the same size of the edge between the image and the CRT screen. (See the below figure.)</p>  <p>HP1, HP2, VP3, VP4=10±4mm</p>	No.1 Cross-hatch

13 Color Adjustment(White Balance and Brightness Adjustment)

VR	How to adjust	Signal
1 SCREEN VR	Set the brightness at maximum with the BRIGHT VR clockwise max. to get the brightness 0.8 ± 0.2 ft-L	
2 VR201 VR202 VR203	Adjust R, G & B Cut Off to get a favorable white image. If a color analyzer is available, target color coordinates are as below. $x = 0.285 \pm 0.010$, $A_y = 0.285 \pm 0.010$ (1 or 3 volume shall be fixed)	No.1 black-field
3	If necessary, adjust the white balance repeating steps 2 and 3.	

		Receive the grayscale signal. Adjust the brightness so that the raster, the first and the second gradation disappear.	
4	VR284	 <p>low ← → high</p> <p>16 gradation</p>	No.1 16 gradation pattern
		1st gradation part: 0/255, 2nd gradation part: 12/255 Other parts: 17 x (n-1)/255 n=1~16	
5	VR204	Receive the window signal. Adjust the window brightness (60.0 ± 2 ft-L).	
6	VR280 VR281 VR282	Adjust R, G & B Gain to get favorable white image. If a color analyzer is available, target color coordinates are as below. $x = 0.285 \pm 0.010$, $A_y = 0.285 \pm 0.010$	No.1 33% Window
7		If necessary, adjust the white balance repeating steps 5 and 6.	
8	VR205	Receive the white-field signal. Adjust the white-field brightness (32 ± 1 ft-L).	No.1 white-field

14 X-ray Protection Confirmation (Safety important works)

VR	How to adjust	measure Point	Signal
1	Input 13.2 ± 0.1 VDC to J89 with the DC power and make sure that the protector operation activates.	J89	No.1 Cross-hatch

15 Default Setting

	MS-2934-SF*	MS-2934-S*	MS-2934-SN*
CN501 (H.DY)	REVERSE	NORMAL	NORMAL
CN401 (V.DY)	NORMAL	NORMAL	NORMAL
Style	FaceTop	TV style	Face Top

No Screen

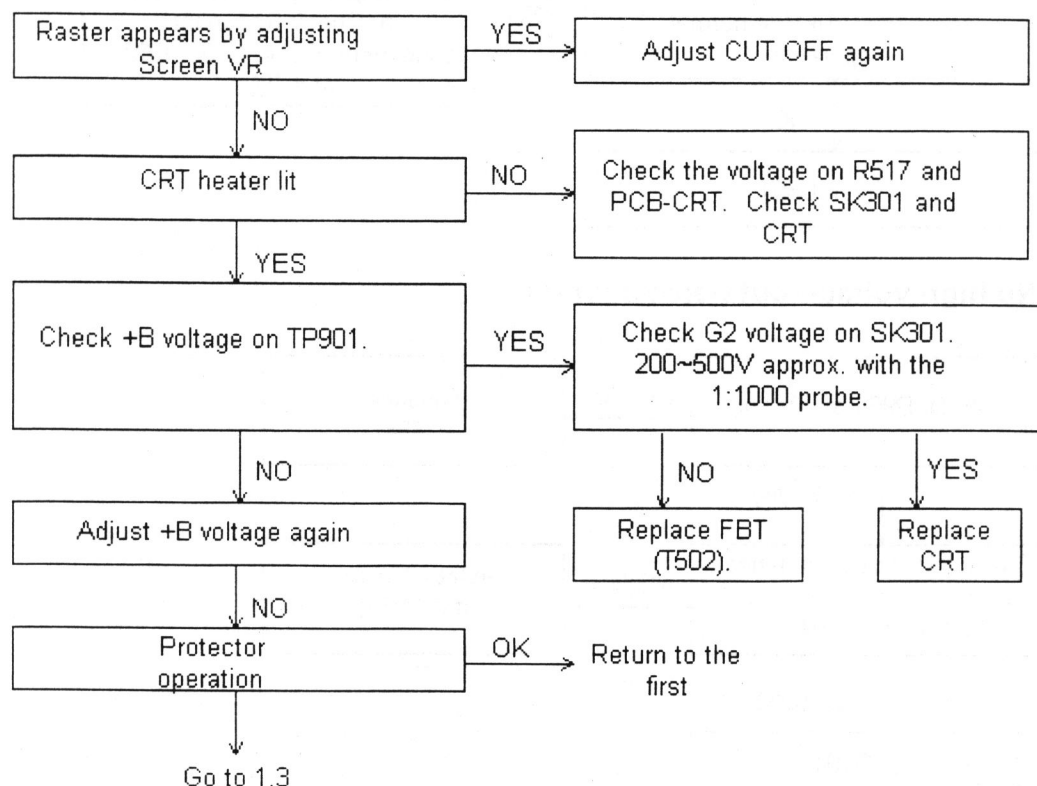
1.Fuse (F901) blown

Trouble in the Primary circuit

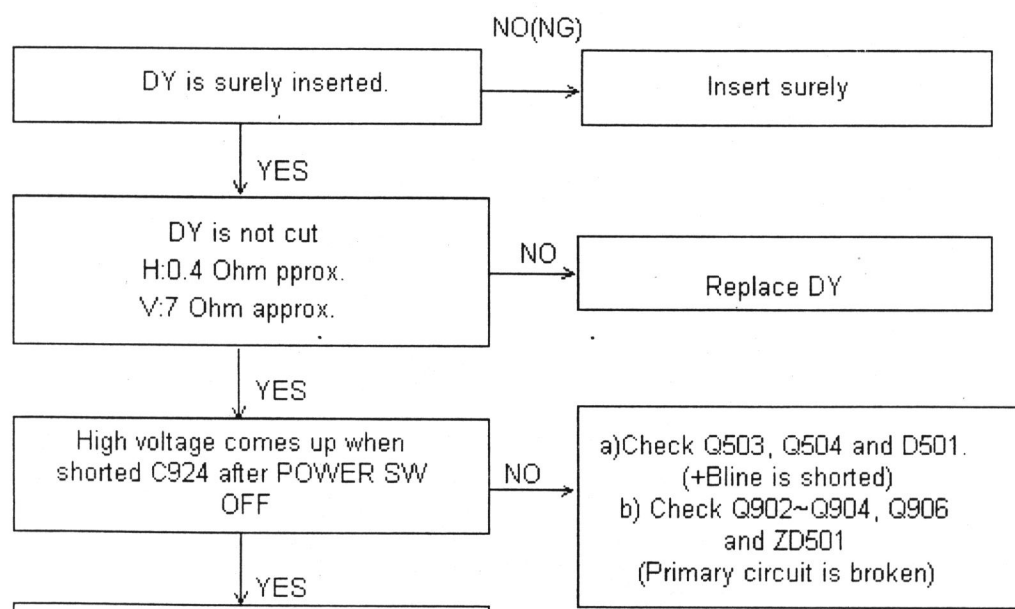
Check Q901, T901, BD901, D901, C905 and PTH901.

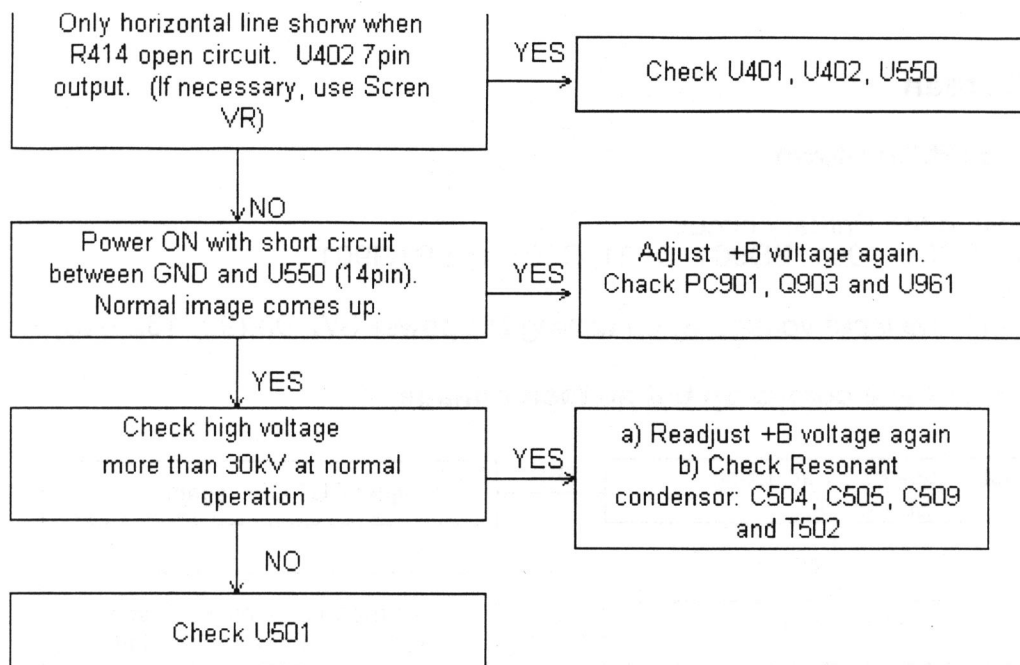
Recheck the input voltage when turning the power SW On.(90 ~132VAC)

2.High voltage comes up but no raster image

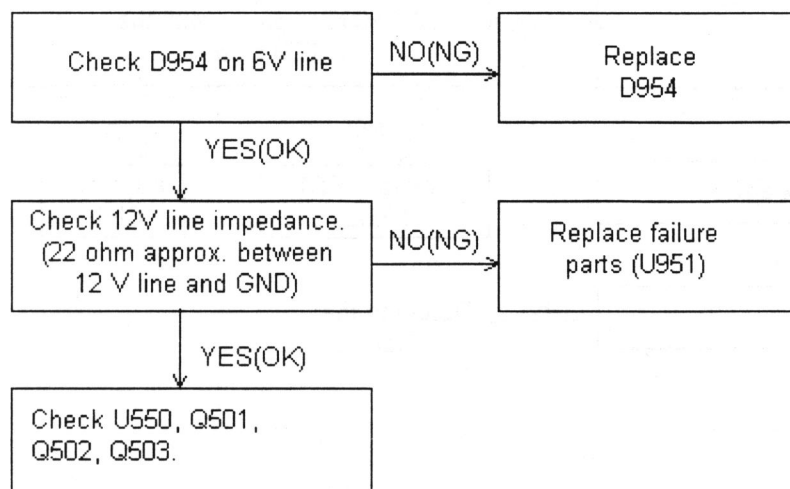


3.High voltage comes shortly

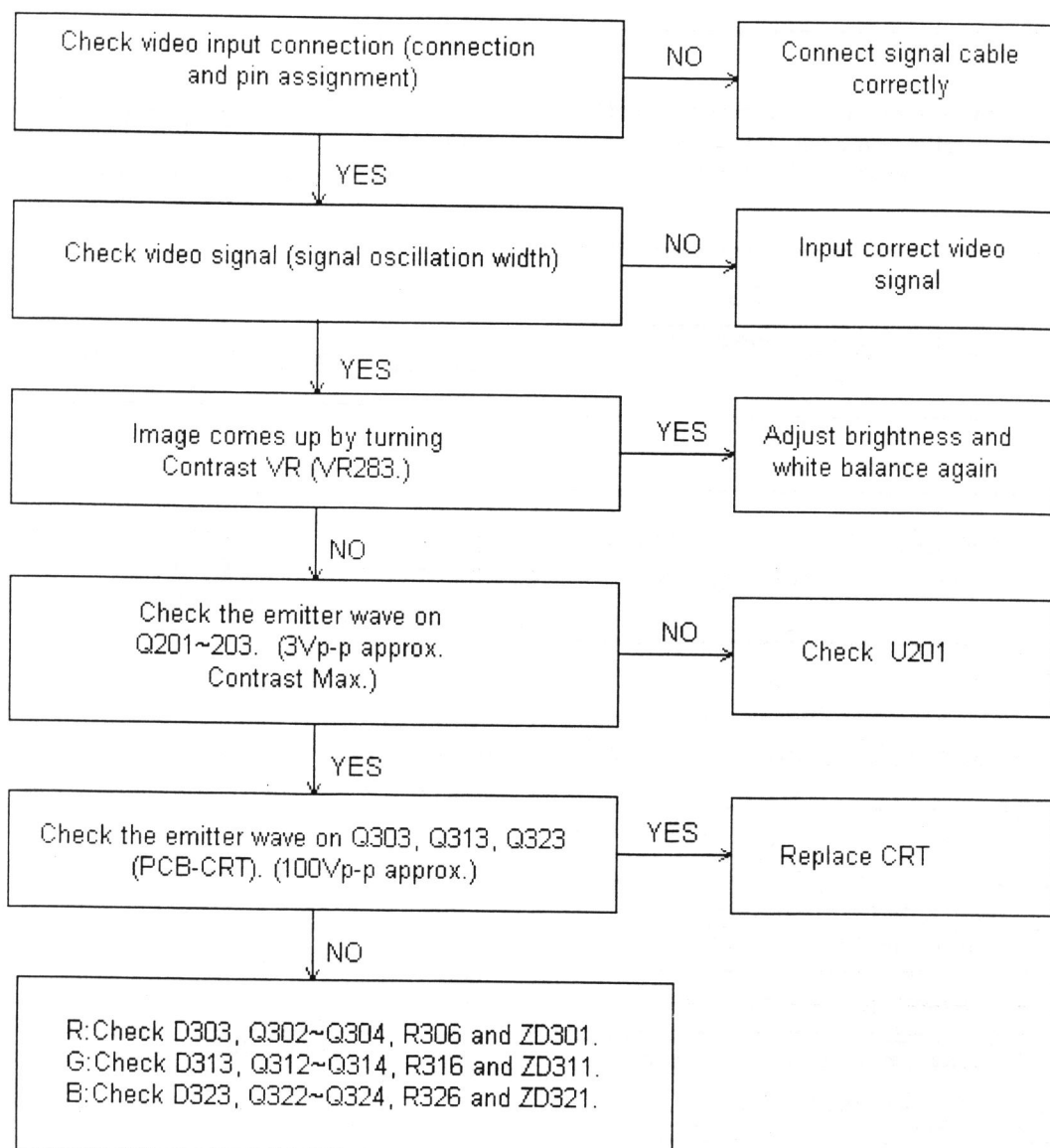




4.No high voltage but noise sounds



Raster appears but no image (or particular color is not displayed).



Notes

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