15. DETAILS OF NANAO MONITOR

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INTENTIONALLY
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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 made sure that only other material is not attached around contact area.

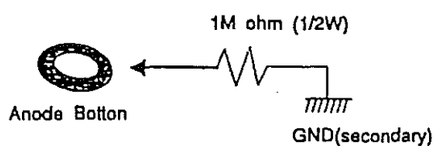
10 Modification

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

♦ Notice

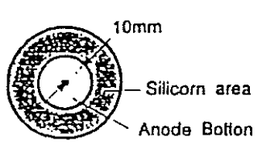
1. How to discharge the electricity on the CRT Anode button.

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).

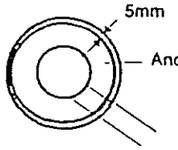


2. How to mount the Anode cap.

(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)

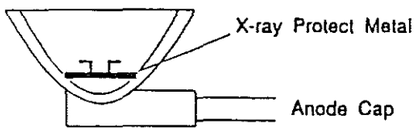


* Do not paint inside of 10mm.



* 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 ± 300Hz (MODE 1), 24.6kHz ± 300Hz (MODE 2)

Blanking Pulse width: less than 8.5μS

(Vertical synchronising signal)

Frequency: 55 ~ 65Hz

Blanking Pulse width: less than 1.3mS

2-1-2 Linearity

Horizontal ±12% max.

Vertical ±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%

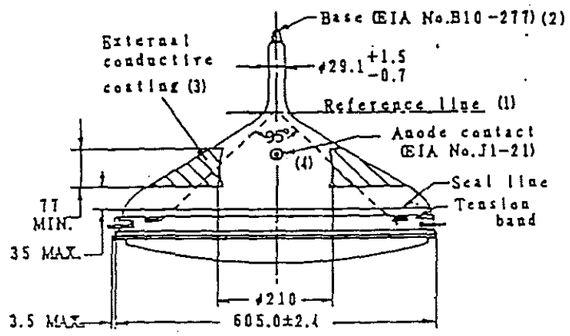
2-6-4 CRT Dimension

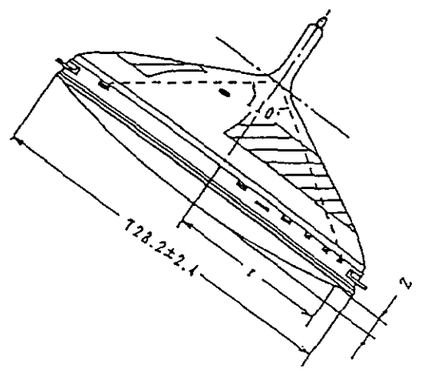
TUBE SPECIFICATION

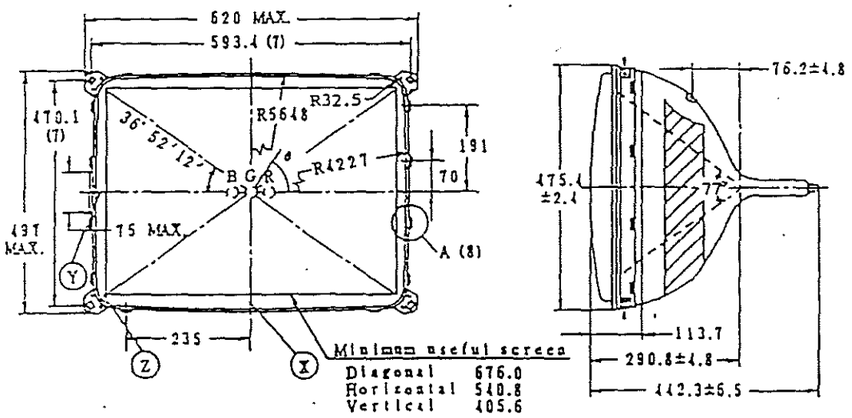
American Matsushita Electronics Corporation

Dimensions in mm

M68JUA068X







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

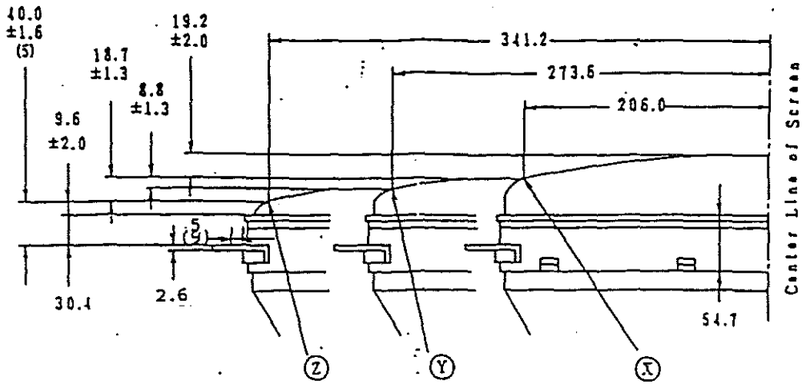
$$B(\phi) = \sum_{i=0}^{5} Bi \cdot \cos(2i \cdot \phi)$$

$$K(\phi) = \frac{1}{\sum_{i=0}^{5} Ki \cdot \cos(2i \cdot \phi)}$$

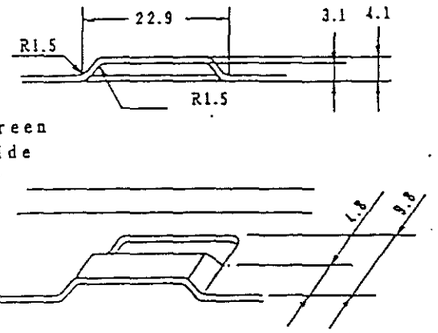
ϕ;Angle from long axis

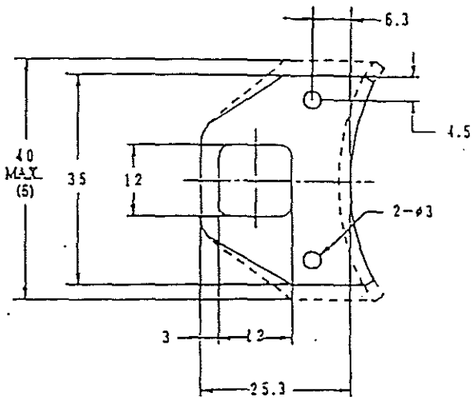
K_0	1.3720958×10^{-3}	B_0	1.7508762
K_1	3.2976780×10^{-4}	B_1	0.4992099
K_2	-1.2286042×10^{-3}	B_2	-1.5658756
K_3	-2.4794464×10^{-4}	B_3	-0.3842095
K_4	2.7589475×10^{-7}	B_4	-6.27861×10^{-7}
K_5	-1.3568352×10^{-6}	B_5	-3.38107×10^{-7}

Dimensions in mm



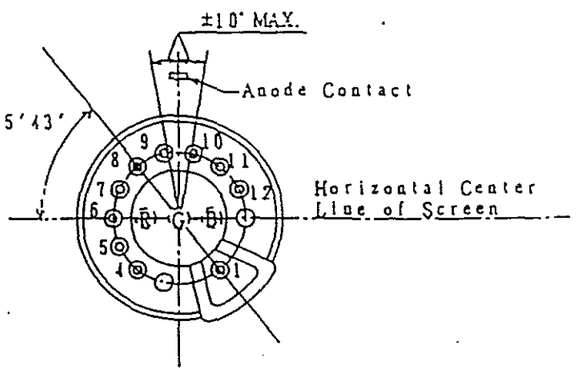
– A – Slot





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

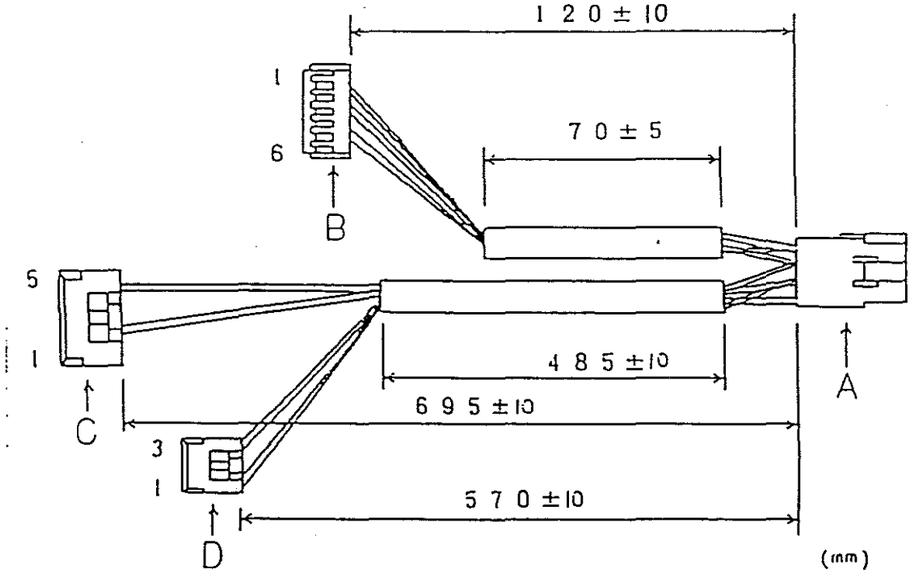
A: UP connector
#1pin Red from B connector #6
#2pin Green from B connector #5
#3pin Blue from B connector #4
#4pin Grey from B connector #2
#5pin White from B connector #3
#6pin Black from D connector #1
#7pin Black from D connector #3
#9pin Red from C connector #3
#10pin Red from C connector #5
#8, #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 500Vp-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.

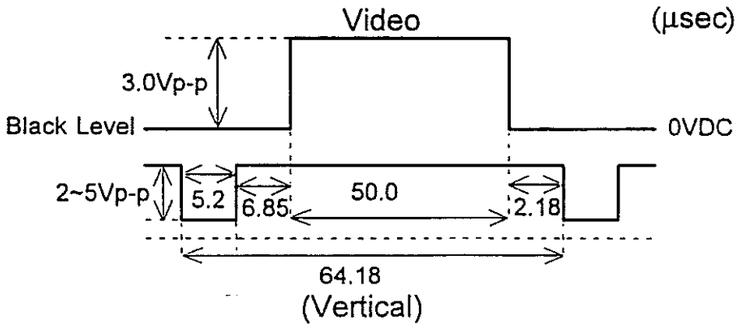
6 Pin Assignment

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

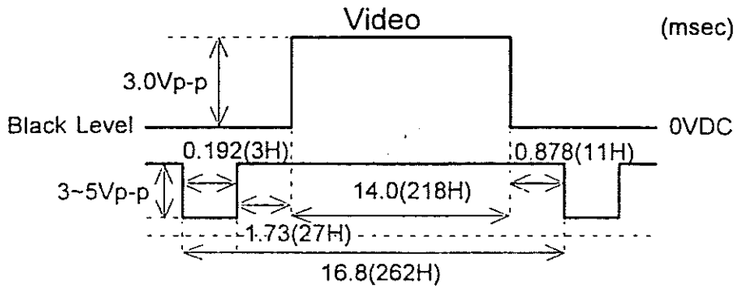
* Please open 1pin when input a composite sync into 2pin.

8 Timing Chart

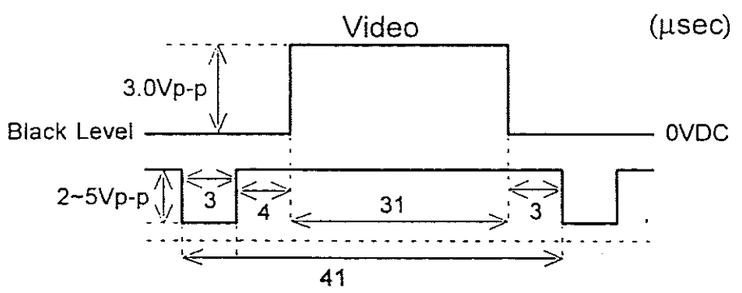
15.58kHz (Horizontal)



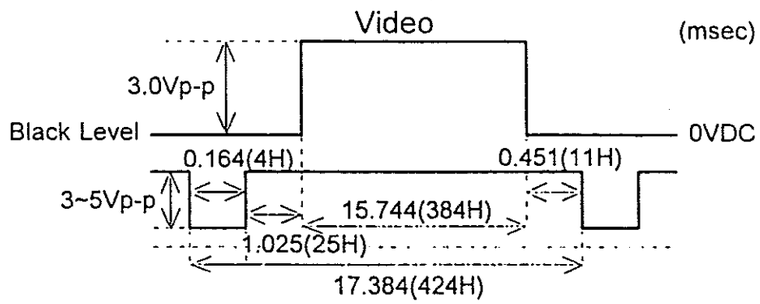
(Vertical)



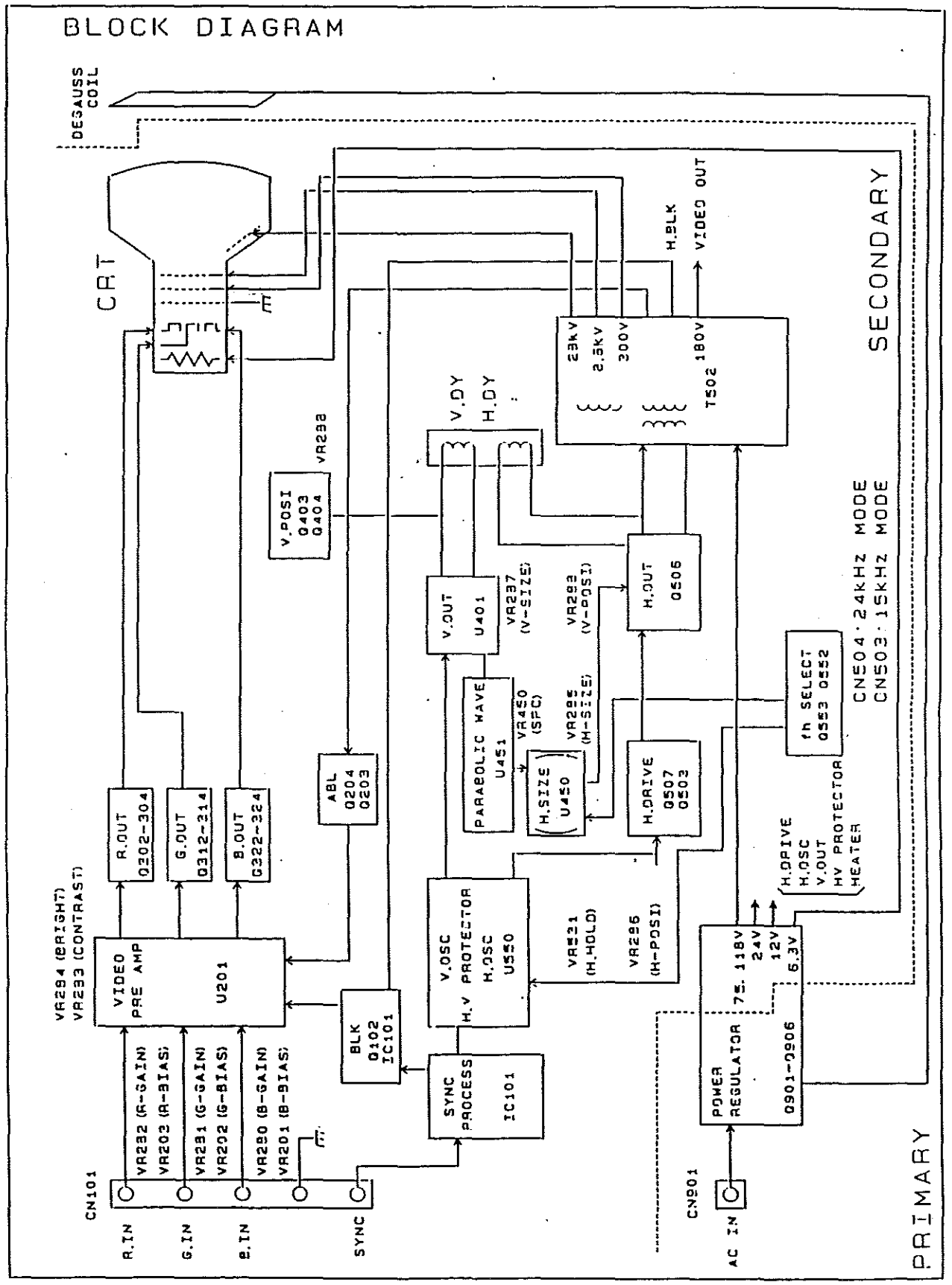
24.39kHz (Horizontal)



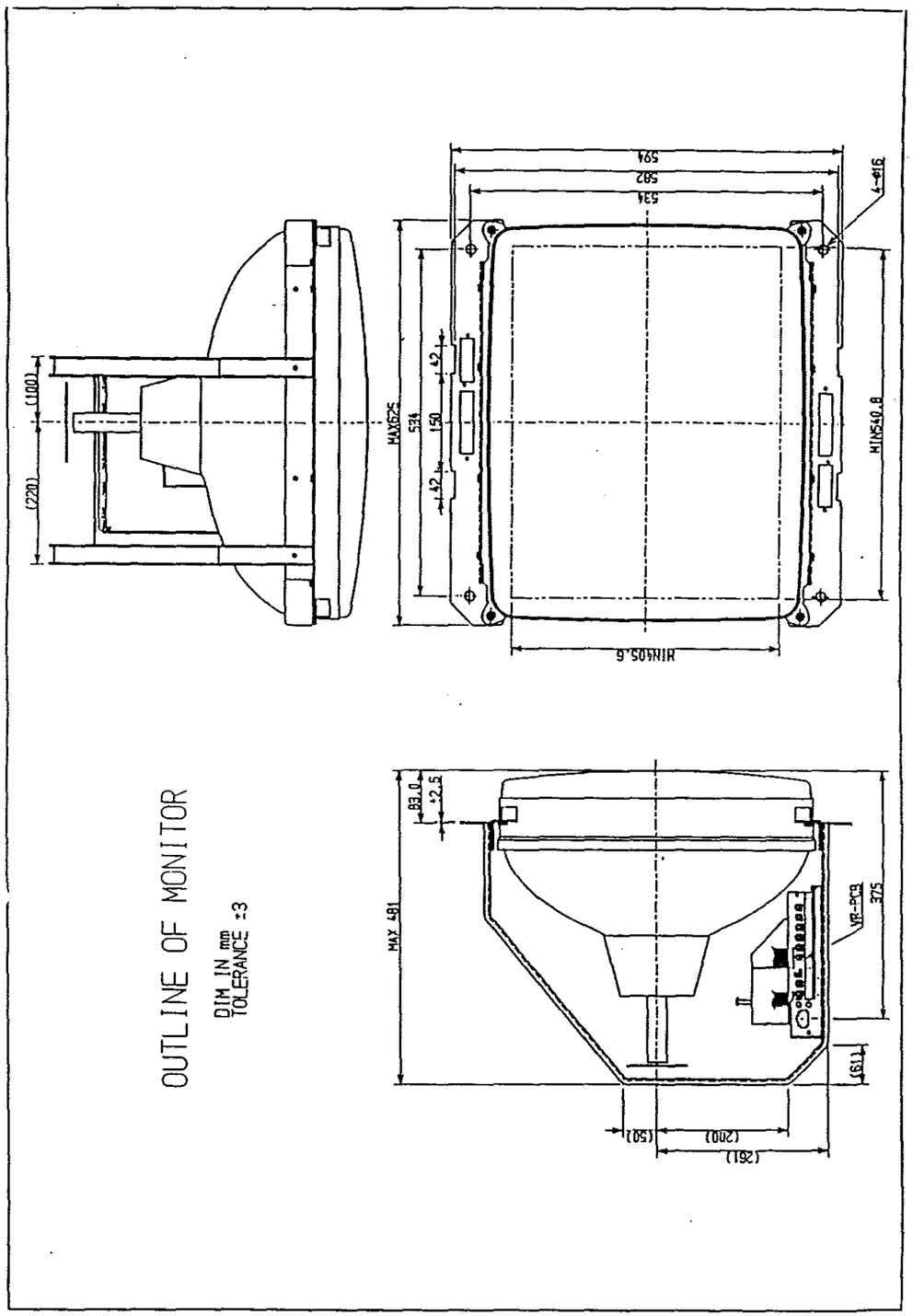
(Vertical)



9. Block Diagram

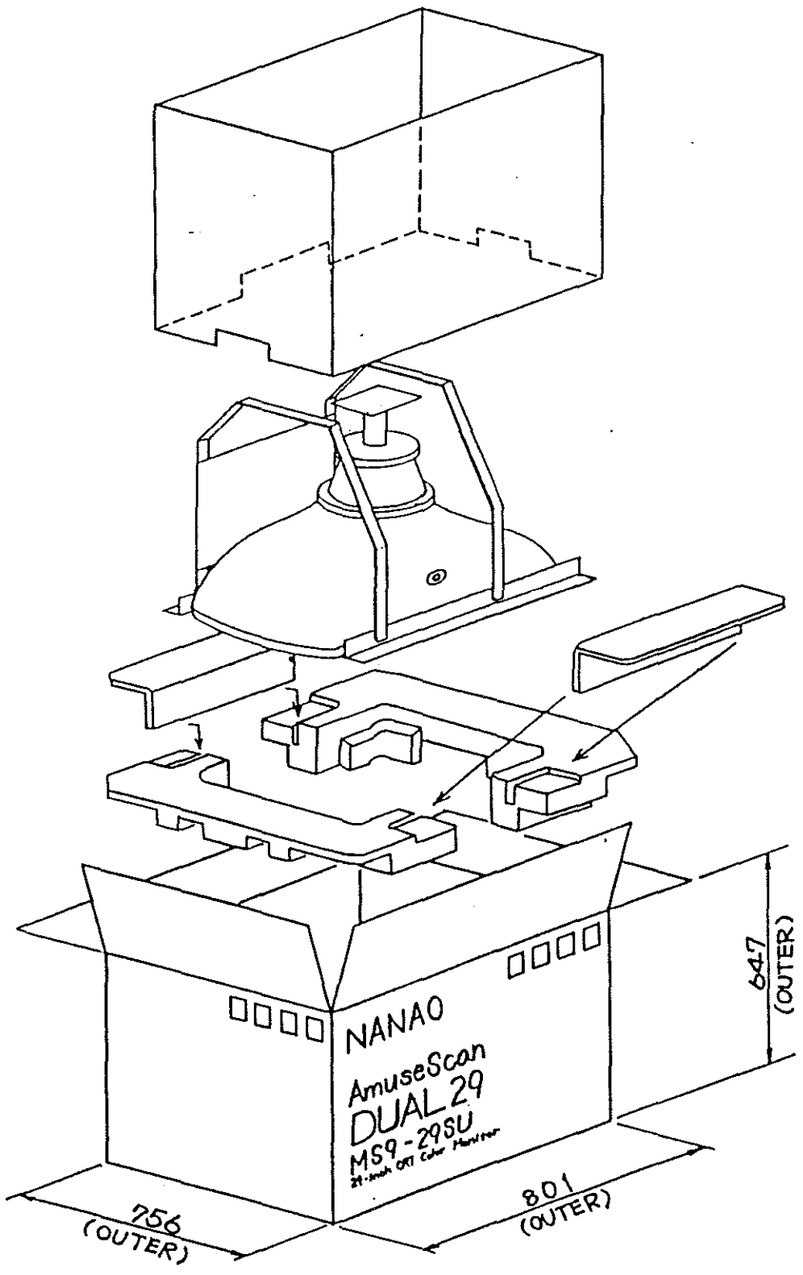


10. Outline

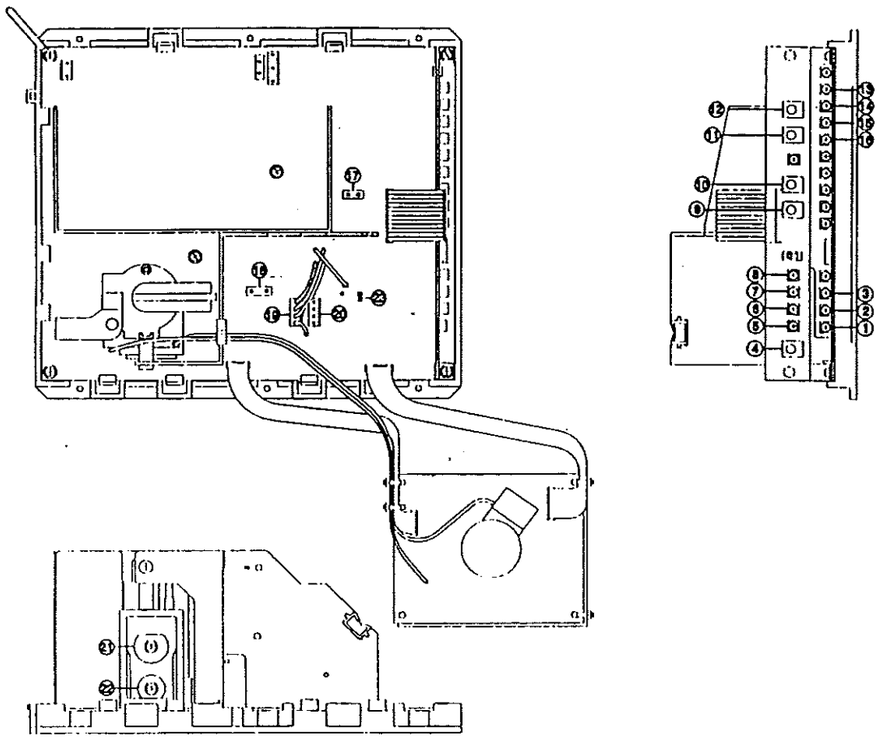

OUTLINE OF MONITOR
DIM IN mm
TOLERANCE ±3
MAX625
534
150
42
42
(100)
(220)
MIN540.8
MIN405.6
4-ø16
594
582
534
MAX 481
83.0
12.5
375
VR-PCB
(50)
(200)
(282)

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 closs-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 adjsut 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 funel to compensate it.

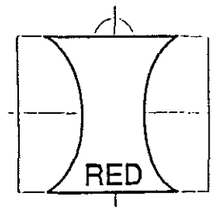


Fig. B-2-3

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)

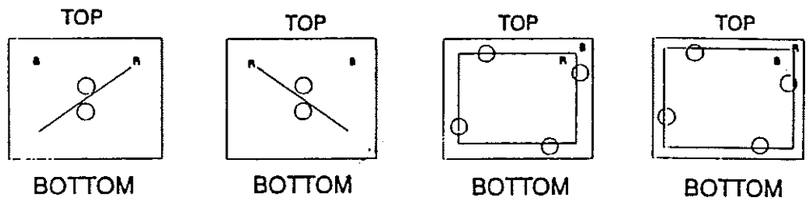


Fig. B-4-2

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.

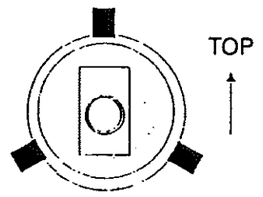


Fig. B-4-4

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)

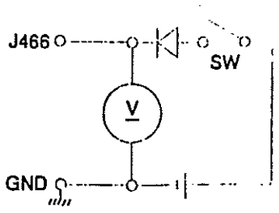


Fig. C

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)

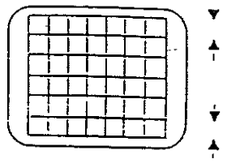


Fig. D

E). Distortion Adjustment with standard signal
E-1. Side Pincushion Adjustment
Adjust VR450 for getting the strait 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) Adjustmentwith 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)

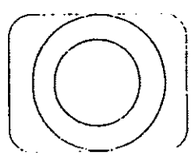


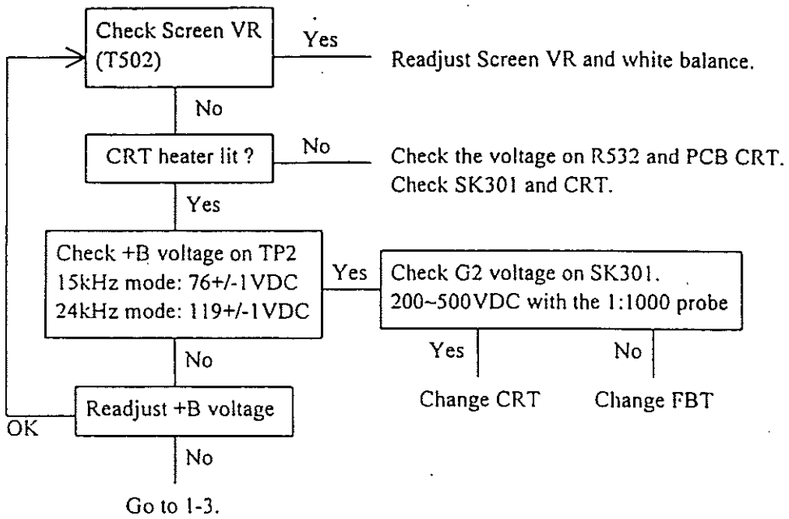
Fig. J

IV. Trouble Shooting

1. No screen

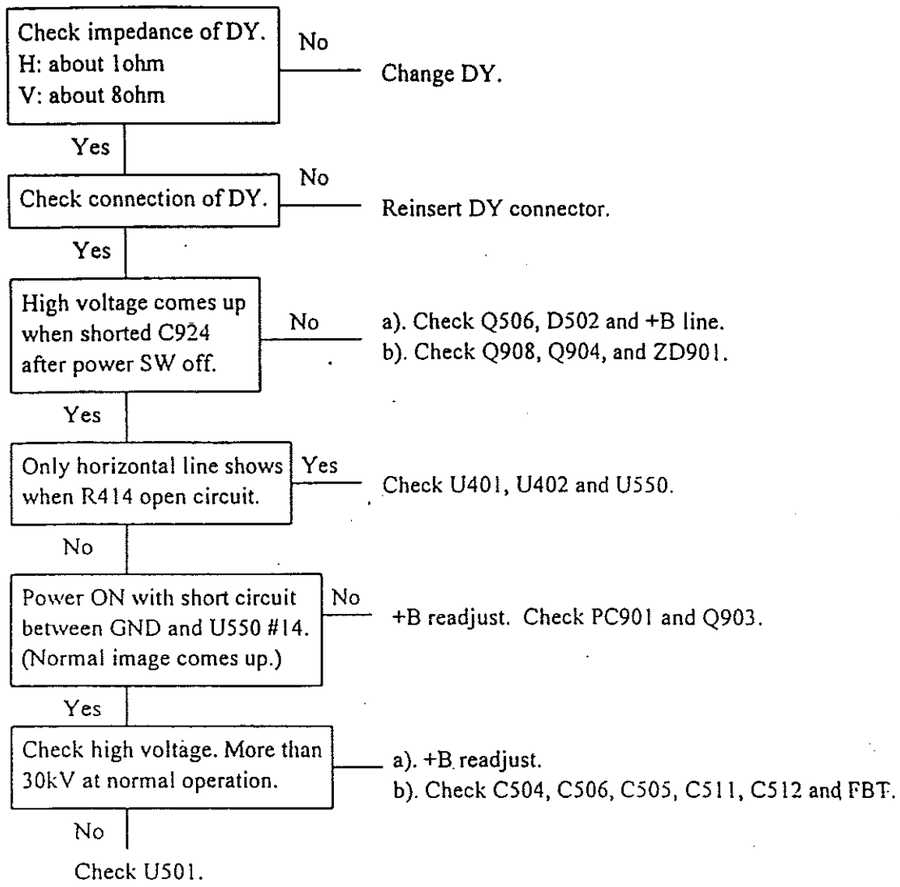
1-1. Fuse blown
Trouble in the Primary circuit.
Check Q901, T901, BD901, D901, C911, PTH901.
Recheck the input voltage when turning the power switch ON. (Voltage should be 108~132VAC.)

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



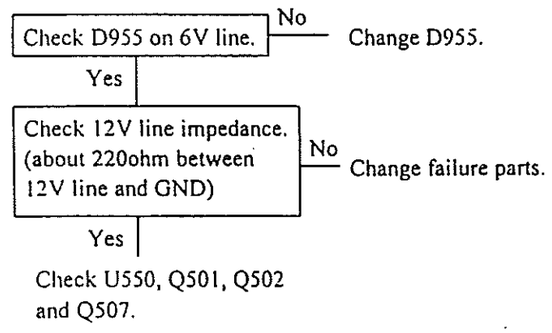
Go to 1-3.

1-3. High voltage comes shortly.

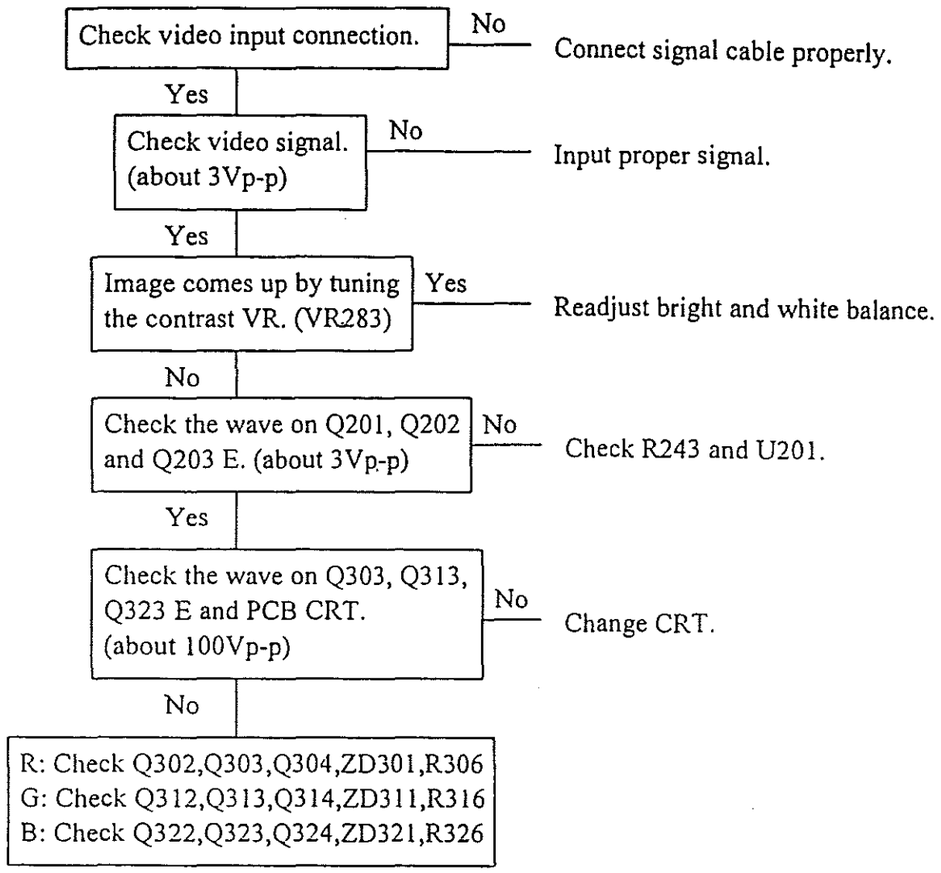


1-4. No high voltage but noise sounds.

* Discharge C924 before turning the power SW ON again.

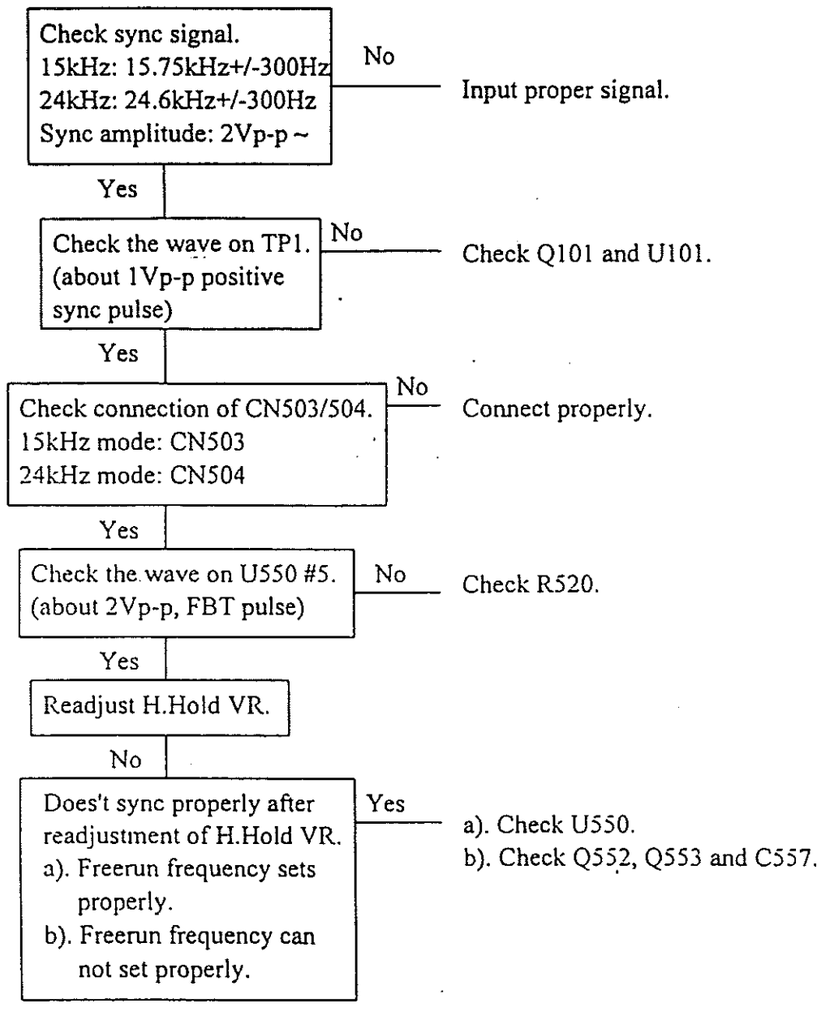


2. Raster lit but no images (or particular color doesn't show)

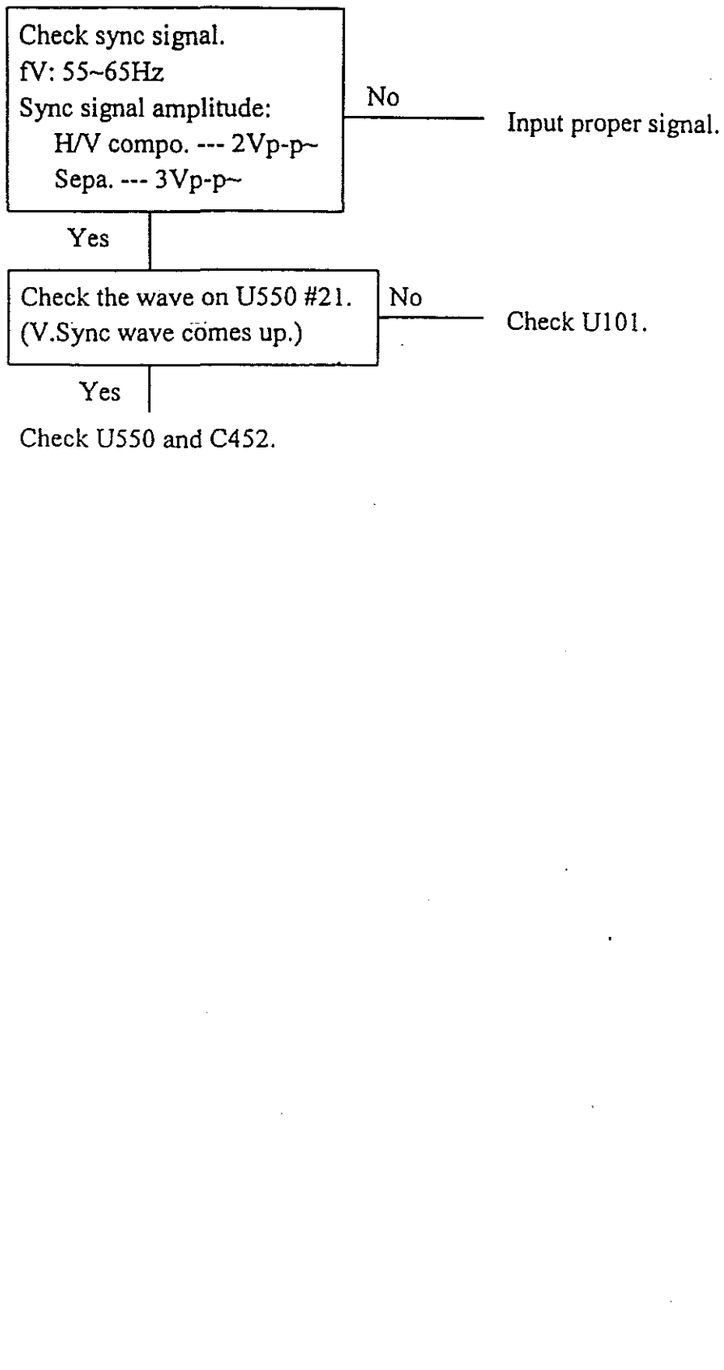


3. Doesn't sync properly.

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.	D E S C R I P T I O N		QTY.
COILS				
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
SPARK-GAP				
SG301	08R38116A1		1KV	1
SG311	08R38116A1		1KV	1
SG321	08R38116A1		1KV	1
SG333	08F38315A1		DSP-201M-500B	1
OTHER PARTS				
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	CVT3210-2101	1
	08N49197A1	RADIATOR-OTH-126-T		3
JUMPER				
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19㎜ l=100㎜		2
	08J08089A2	ACETATE TAPE AT-570F 巾15㎜ l=30㎜		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-H.V-29SU		1
	05D07112A1	LABEL-CN-29SU		1
	05D01095A1	FUSE-LABEL		1
	05D04910A1	H.V-WARKING-LABEL		1
	05D06444A1	DHHS-LABEL		1
	05D06450A1	LABEL-HV		1
	05D06454A1	UL-LABEL		1
	05D06455A1	CRT-LABEL		1

REF.NO.	PART NO.	DESCRIPTION			QTY.
C321	0KH80331JM	CERAMIC	DD107 50V SL	331J	1
C322	0KH81222KB	CERAMIC	DD106 50V B	222K	1
C331	02L81102KB	CERAMIC	DE0907 2KV B	102K	1
C332	0PR41100MW	ELECTRO.	KME 250V	10uF	1

TRANSISTORS

Q301	0CH21740SZ	SILICON	2SC1740S	1
Q302	0CF24001ZL	SILICON	2SC4001L	1
Q303	0CH24218ZZ	SILICON	2SC4218	1
Q304	0AH21624ZZ	SILICON	2SA1624	1
Q311	0CH21740SZ	SILICON	2SC1740S	1
Q312	0CF24001ZL	SILICON	2SC4001L	1
Q313	0CH24218ZZ	SILICON	2SC4218	1
Q314	0AH21624ZZ	SILICON	2SA1624	1
Q321	0CH21740SZ	SILICON	2SC1740S	1
Q322	0CF24001ZL	SILICON	2SC4001L	1
Q323	0CH24218ZZ	SILICON	2SC4218	1
Q324	0AH21624ZZ	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	00N25735B2		HZS15NB2	1
ZD311	00N25735B2		HZS15NB2	1
ZD321	00N25735B2		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
FIXED RESISTORS					
R300	0BK10471JT	CARBON	1 / 4	470-J	1
R301	0BK10121JT	CARBON	1 / 4	120-J	1
R302	0BK10180JT	CARBON	1 / 4	18-J	1
R303	0CL04224JT	CARBON	RD50SS	220K-J	1
R304	0BK10183JT	CARBON	1 / 4	18K-J	1
R305	0HM37562JS	METAL	BSR 5W	5.6K-J	1
R306	0BL08101JL	FUSING	RF25L10	100-J	1
R307	0CH14271JM	SOLID	RC 1/2	270-J	1
R308	0BK10102JT	CARBON	1 / 4	1K-J	1
R310	0BK10471JT	CARBON	1 / 4	470-J	1
R311	0BK10121JT	CARBON	1 / 4	120-J	1
R312	0BK10270JT	CARBON	1 / 4	27-J	1
R313	0CL04224JT	CARBON	RD50SS	220K-J	1
R314	0BK10183JT	CARBON	1 / 4	18K-J	1
R315	0HM37562JS	METAL	BSR 5W	5.6K-J	1
R316	0BL08101JL	FUSING	RF25L10	100-J	1
R317	0CH14271JM	SOLID	RC 1/2	270-J	1
R320	0BK10471JT	CARBON	1 / 4	470-J	1
R321	0BK10121JT	CARBON	1 / 4	120-J	1
R322	0BK10270JT	CARBON	1 / 4	27-J	1
R323	0CL04224JT	CARBON	RD50SS	220K-J	1
R324	0BK10183JT	CARBON	1 / 4	18K-J	1
R325	0HM37562JS	METAL	BSR 5W	5.6K-J	1
R326	0BL08101JL	FUSING	RF25L10	100-J	1
R327	0CH14271JM	SOLID	RC 1/2	270-J	1
R331	0CH14105JM	SOLID	RC 1/2	1M-J	1
CAPACITORS					
C301	0KH80331JM	CERAMIC	DD107 50V SL	331J	1
C302	0KH81222KB	CERAMIC	DD106 50V B	222K	1
C311	0KH80271JM	CERAMIC	DD107 50V SL	271J	1
C312	0KH81222KB	CERAMIC	DD106 50V B	222K	1

REF.NO.	PART NO.	D E S C R I P T I O N		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.	D E S C R I P T I O N			QTY
J430	08F09122A3	JUMPER	P=12.5		1
J431	08F09122A2	JUMPER	P=10		1
J432	08F09122A2	JUMPER	P=10		1
J433	0CL04682JT	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.	D E S C R I P T I O N			QTY
JUMPER					
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	0CL04102JT	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.	D E S C R I P T I O N	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 3×10	4
	0FJ924010D	TAP-TITE-P-BAIND 4×10	1
	00N51517A2	SPRING BAND	(3)
	0FJ923010D	TAP-TITE-P-BAIND 3×10	(3)
	08N52611A1	TFC CAP	(1)
	08R52115A1	ISOLATION SHEET 30×16 (U401)	(1)
TP1	00J44862A2	RT-01T-1.0B	1
TP2	00J44862A2	RT-01T-1.0B	1
	05D07141A1	LABEL CONT	1

REF.NO.	PART NO.	D E S C R I P T I O N		QTY
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)	ELF1010SK1-101K	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	S6B-EH	1
CN508	00F44547B1	GT-PN		1
CN280	00J40193A2	CONNECTOR	S12B-EH	1
CN401	00F40752A2	POST	W-P3002	1
CN402	00J40643A2	CONNECTOR	S12B-PH-K-S	1
CN501	08F40149A2	POST	B2P-LV-TN	1
CN503	00F40831A3	CONNECTOR	B4P-VH	1
CN504	00F40831A3	CONNECTOR	B4P-VH	1
CN506	00J44862A2	CONNECTOR PIN	RT-01T-1.0B	1
CN507	00J44862A2	CONNECTOR PIN	RT-01T-1.0B	1
CN901	00F40916A1	POST	B2P-VH	1

REF.NO.	PART NO.	D E S C R I P T I O N		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	PTH451C263DG8ROM140		1

THERMISTOR

NTH901	00N38508A1	115-050-41205		1
NTH951	08J38247T2	NT732ATD	100K-K	1

REF.NO.	PART NO.	DESCRIPTION	QTY
DIODES			
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	1DL42A	1
D402	08N25358T1	1DL42A	1
D403	08N25358T1	1DL42A	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	1DL42A	1
D509	08H25035C1	DAN217	1
D901	08N25520T1	1JU41	1
D902	00H25737C1	DAN202K	1
D903	00H25737C1	DAN202K	1
D904	00H25737C1	DAN202K	1
D905	00H25737C1	DAN202K	1

REF.NO.	PART NO.	D E S C R I P T I O N		QTY
TRANSISTORS				
Q101	0CK42412KZ	SILICON	2SC2412K	1
Q102	0CK42412KZ	SILICON	2SC2412K	1
Q201	0AK41037KZ	SILICON	2SA1037K	1
Q202	0AK41037KZ	SILICON	2SA1037K	1
Q203	0AK41037KZ	SILICON	2SA1037K	1
Q204	0CK42412KZ	SILICON	2SC2412K	1
Q205	0AK41037KZ	SILICON	2SA1037K	1
Q401	0CK42412KZ	SILICON	2SC2412K	1
Q402	0CK42412KZ	SILICON	2SC2412K	1
Q403	0DF22400AZ	SILICON	2SD2400A	1
Q404	0BF21569AZ	SILICON	2SB1569A	1
Q451	0AK41037KZ	SILICON	2SA1037K	1
Q452	00H29358T1	SILICON	DTC144EK	1
Q501	0CK42412KZ	SILICON	2SC2412K	1
Q502	0AK41037KZ	SILICON	2SA1037K	1
Q503	0AH2102022	SILICON	2SA1020	1
Q506	0CF2469222	SILICON	2SC4692	(1)
Q507	08F24546ZZ	FET	2SK941	1
Q508	0DF21944ZZ	SILICON	2SD1944	(1)
Q550	0AK41037KZ	SILICON	2SA1037K	1
Q551	0CK42412KZ	SILICON	2SC2412K	1
Q552	0AK41037KZ	SILICON	2SA1037	1
Q553	00H29365T1	SILICON	DTC143EK	1
Q554	0CK42412KZ	SILICON	2SC2412K	1
Q555	00H29358T1	SILICON	DTC144EK	1
Q901	08N24597A1	FET	2SK1531	(1)
Q902	0CK42412KZ	SILICON	2SC2412K	1
Q903	0CK42412KZ	SILICON	2SC2412K	1
Q904	0CK42412KZ	SILICON	2SC2412K	1
Q905	0AK41037KZ	SILICON	2SA1037K	1
Q906	0CK42412KZ	SILICON	2SC2412K	1
Q953	0CK42412KZ	SILICON	2SC2412K	1
Q954	0AK41255ZZ	SILICON	2SA1255	1

REF.NO.	PART NO.	DESCRIPTION	QTY
C555	0KK90103KB	CERAMIC GRM40 B 103K	1
C556	0KM871R0MW	ELECTRO. KME 50V 1μF-M	1
C557	0KK91472JM	PLASTIC DSR 50V 472J	1
C558	0GK90104ZF	CERAMIC GRM40 F 104Z	1
C559	0GK90104ZF	CERAMIC GRM40 F 104Z	1
C560	0GK90104ZF	CERAMIC GRM40 F 104Z	1
C561	0EQ35470MT	ELECTRO. VZ 16V 47μF-M	1
C562	0EQ35101MT	ELECTRO. VZ 10V 100μF-M	1
C564	0KQ16474JI	PLASTIC ECQ-V 1H 474J	1
C565	0GK90104KB	CERAMIC GRM40 B 104K	1
C566	0GK90104KB	CERAMIC GRM40 B 104K	1
C567	0EK901052F	CERAMIC GRM40 F 105Z	1
C901	0RP15104MS	PLASTIC LFX 250V 104M	1
C911	0QM12102M2	ELECTRO. SMH 200V 1000μF-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	0KK90222KB	CERAMIC GRM40 B 222K	1
C923	0KK90682KB	CERAMIC GRM40 B 682K	1
C924	0GK90104KB	CERAMIC GRM40 B 104K	1
C925	0GK90104KB	CERAMIC GRM40 B 104K	1
C927	0GK90104KB	CERAMIC GRM40 B 104K	1
C951	0NP47181M2	ELECTRO. SXE 100V 181M	1
C952	0NP47221M2	ELECTRO. SXE 100V 221M	1
C953	0PP59470MP	ELECTRO. KMG 160V 47μF-M	1
C954	0IP47681M1	ELECTRO. SXE 35V 680μF-M	1
C955	0GQ07181MT	ELECTRO. UPL 1F 180μF-M	1
C956	0CQ07681MT	ELECTRO. UPL 1A 680μF-M	1
C957	0IQ35100MT	ELECTRO. VZ 35V 10μF-M	1
C958	0EQ35470MT	ELECTRO. VZ 16V 47μF-M	1
C961	0GK90104KB	CERAMIC GRM40 B 104K	1
C962	0RP56334KF	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.	D E S C R I P T I O N	QTY
C410	0KK86221JC	CERAMIC GRM40 CH 221J	1
C411	0KP762R2MT	ELECTRO. KME-BP50V 2.2μF-M	1
C413	0GK90104KB	CERAMIC GRM40 B 104K	1
C414	0GK901042F	CERAMIC GRM40 F 104Z	1
C416	0KQ16105JI	PLASTIC ECQ-V 1H 105J	
C450	0GK901042F	CERAMIC GRM40 F 104Z	1
C451	0KQ35220MT	ELECTRO. VZ 50V 22μF-M	1
C452	0EQ10104GT	PLASTIC ECH-U 1C 104G	1
C453	0KP13103JT	PLASTIC ECQ-B 1H 103J	1
C454	0KK90472KB	CERAMIC GRM40 B 472K	1
C455	0KQ35100MT	ELECTRO. VZ 50V 10μF-M	1
C456	0KQ35100MT	ELECTRO. VZ 50V 10μF-M	1
C457	0KQ35100MT	ELECTRO. VZ 50V 10μF-M	1
C458	0KQ35220MT	ELECTRO. VZ 50V 22μF-M	1
C459	0KQ35220MT	ELECTRO. VZ 50V 22μF-M	1
C501	0WH81222KB	CERAMIC DD09 500V B 222K	1
C502	0KP13473JT	PLASTIC ECQ-B 1H 473J	1
C503	0IQ35101MT	ELECTRO. VZ 35V 100μF-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 10μF-M	1
C514	0RP80104KF	PLASTIC DFZ 250V 104K	1
C515	0PP41101MW	ELECTRO. KME 160V 100μF-M	1
C516	0GK901042F	CERAMIC GRM40 F 104Z	1
C519	0UP16684JS	PLASTIC PM 400V 684J	1
C522	0KH81102KB	CERAMIC DD104 50V 102K	1
C531	0QKG6474JF	PLASTIC DHS 200V 474J	1
C550	0KK86101JC	CERAMIC GRM40 CH 101J	1
C551	0KK86102JC	CERAMIC GRM40 CH 102J	1
C552	0KK86391JC	CERAMIC GRM40 CH 391J	1
C553	0KP13682JT	PLASTIC ECQ-B 1H 682J	1
C554	0KQ351R0MT	ELECTRO. VZ 50V 1μF-M	1

REF.NO.	PART NO.	D E S C R I P T I O N				QTY
C106	0ZL49103JA	CARBON	1 / 10		10K-J	1
C107	0KQ35220MT	ELECTRO.	VZ	50V	22μF-M	1
C108	0KK86102JC	CERAMIC	GRM40	CH	102J	1
C109	0EK901052F	CERAMIC	GRM40	F	105Z	1
C201	0EQ35470MT	ELECTRO.	VZ	16V	47μF-M	1
C202	0EQ35470MT	ELECTRO.	VZ	16V	47μF-M	1
C203	0EQ35470MT	ELECTRO.	VZ	16V	47μF-M	1
C204	0GK901042F	CERAMIC	GRM40	F	104Z	1
C205	0GK901042F	CERAMIC	GRM40	F	104Z	1
C206	0GK901042F	CERAMIC	GRM40	F	104Z	1
C207	0GK901042F	CERAMIC	GRM40	F	104Z	1
C208	0GK901042F	CERAMIC	GRM40	F	104Z	1
C209	0GK901042F	CERAMIC	GRM40	F	104Z	1
C210	0GK901042F	CERAMIC	GRM40	F	104Z	1
C211	0KQ352R2MT	ELECTRO.	VZ	50V	2.2μF-M	1
C212	0KQ352R2MT	ELECTRO.	VZ	50V	2.2μF-M	1
C213	0KQ352R2MT	ELECTRO.	VZ	50V	2.2μF-M	1
C214	0GK901042F	CERAMIC	GRM40	F	104Z	1
C215	0GK901042F	CERAMIC	GRM40	F	104Z	1
C216	0GK901042F	CERAMIC	GRM40	F	104Z	1
C217	0GK901042F	CERAMIC	GRM40	F	104Z	1
C218	0GK901042F	CERAMIC	GRM40	F	104Z	1
C219	0GK901042F	CERAMIC	GRM40	F	104Z	1
C220	0EQ35471MT	ELECTRO.	VZ	16V	470μF-M	1
C221	0EQ35101MT	ELECTRO.	VZ	16V	100μF-M	1
C222	0EQ35220MT	ELECTRO.	VZ	50V	22μF-M	1
C280	0EP12100MT	ELECTRO.	KRE	16V	10μF-M	1
C281	0GK901042F	CERAMIC	GRM40	F	104Z	1
C400	0GK901042F	CERAMIC	GRM40	F	104Z	1
C401	0GK901042F	CERAMIC	GRM40	F	104Z	1
C402	0EQ35471MT	ELECTRO.	VZ	16V	470μF-M	1
C403	0KP13103JT	PLASTIC	ECQ-B	1H	103J	1
C404	0KQ16105J1	PLASTIC	ECQ-V	1H	105J	1
C405	0KQ16105J1	PLASTIC	ECQ-V	1H	105J	1
C406	01Q35102MT	ELECTRO.	VZ	35V	1000μF-M	1
C407	01Q35101MT	ELECTRO.	VZ	35V	100μF-M	1
C408	01Q35101MT	ELECTRO.	VZ	35V	100μF-M	1
C409	01Q35101MT	ELECTRO.	VZ	35V	100μF-M	1

REF.NO.	PART NO.	D E S C R I P T I O N			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.	VZ	50V 1μF-M	1
C102	0KQ351R0MT	ELECTRO.	VZ	50V 1μF-M	1
C103	0KK861023C	CERAMIC	GRM40	CH 102J	1
C104	0GK901043F	CERAMIC	GRM40	F 104Z	1
C105	0GK901043F	CERAMIC	GRM40	F 104Z	1

REF.NO.	PART NO.	DESCRIPTION			QTY
R903	0CH14224JM	SOLID	1 / 2	220K-J	1
OR R903	0CH14224KM	SOLID	1 / 2	220K-K	1
R905	0HM37223JN	CEMENT	BSR 5N	22K-K	1
R906	0FM36101KN	CEMENT	BGR 3N	100-K	1
R911	0ZL49105JA	CARBON	1 / 10	1.0M-J	1
R912	0ZL49105JA	CARBON	1 / 10	1.0M-J	1
R913	0ZL49330JA	CARBON	1 / 10	33-J	1
R914	0EL32R10JM	METAL	BPR 28	0.1-J	1
R915	0CL04101JT	CARBON	1 / 2	100-J	1
R917	0ZL49272JA	CARBON	1 / 10	2.7K-J	1
R918	0ZL49822JA	CARBON	1 / 10	8.2K-J	1
R921	0ZL49472JA	CARBON	1 / 10	4.7K-J	1
R922	0ZL49473JA	CARBON	1 / 10	47K-J	1
R923	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R924	0ZL49123JA	CARBON	1 / 10	12K-J	1
R925	0ZL49563JA	CARBON	1 / 10	56K-J	1
R926	0ZL49273JA	CARBON	1 / 10	27K-J	1
R927	0EL09104JL	METAL	RSS 2W	100K-J	1
R928	0ZL49333JA	CARBON	1 / 10	33K-J	1
R929	0ZL49331JA	CARBON	1 / 10	330-J	1
R953	0CL04333JT	CARBON	1 / 2	33K-J	1
R958	0ZL49472JA	CARBON	1 / 10	4.7K-J	1
R959	0ZL49472JA	CARBON	1 / 10	4.7K-J	1
R961	0ZL49823JA	CARBON	1 / 10	82K-J	1
R962	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R963	0ZL49392JA	CARBON	1 / 10	3.9K-J	1
R964	0ZL49272JA	CARBON	1 / 10	2.7K-J	1
R965	0ZL49102JA	CARBON	1 / 10	1.0K-J	1
R966	0ZL49122JA	CARBON	1 / 10	1.2K-J	1
R967	07M361R5KH	CEMENT	BGR 7Z	1.5-K	1
R968	0ZL49683JA	CARBON	1 / 4	68K-J	1
R969	0ZL49683JA	CARBON	1 / 4	68K-J	1
R970	0ZL49474JA	CARBON	1 / 10	470K-J	1
R971	0ZL49113JA	CARBON	1 / 10	11K-J	1
R972	0ZL49393JA	CARBON	1 / 10	39K-J	1

REF.NO.	PART NO.	D E S C R I P T I O N			QTY
R532	0DL081R5JL	FUSING	1 / 4	1.5-J	1
R533	0BL49182JA	CARBON	1 / 4	1.8K-J	1
R534	0BL49182JA	CARBON	1 / 4	1.8K-J	1
R535	0BL49182JA	CARBON	1 / 4	1.8K-J	1
R536	0ZL49182JA	CARBON	1 / 4	1.8K-J	1
R537	0ZL49182JA	CARBON	1 / 4	1.8K-J	1
R538	0ZL49182JA	CARBON	1 / 4	1.8K-J	1
R539	0ZL49182JA	CARBON	1 / 4	1.8K-J	1
R549	0ZL49473JA	CARBON	1 / 10	47K-J	1
R550	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R551	0ZL49123JA	CARBON	1 / 10	12K-J	1
R552	0ZL49223JA	CARBON	1 / 10	22K-J	1
R553	0ZL49303JA	CARBON	1 / 10	30K-J	1
R554	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R555	0ZL49103JA	CARBON	1 / 10	10K-J	1
R556	0ZL49183JA	CARBON	1 / 10	18K-J	1
R557	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R558	0ZL49332JA	CARBON	1 / 10	3.3K-J	1
R559	0ZL49473JA	CARBON	1 / 10	47K-J	1
R560	0ZL49682JA	CARBON	1 / 10	6.8K-J	1
R561	0ZL49102JA	CARBON	1 / 10	1K-J	1
R562	0ZL49153JA	CARBON	1 / 10	15K-J	1
R563	0ZL49223JA	CARBON	1 / 10	22K-J	1
R564	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R565	0ZL49103JA	CARBON	1 / 10	10K-J	1
R566	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R567	0ZL49103JA	CARBON	1 / 10	10K-J	1
R568	0ZL49103JA	CARBON	1 / 10	10K-J	1
R571	0BL08101JL	FUSING	1 / 4	100-J	1
R572	0ZL49333JA	CARBON	1 / 10	33K-J	1
R573	0ZL49223JA	CARBON	1 / 10	22K-J	1
R581	0ZL49223JA	CARBON	1 / 10	22K-J	1
R583	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R584	0ZL49000ZA	JUMPER	1 / 10	0	1
R585	0CL04124JT	CARBON	1 / 2	120K-J	1
R901	0CH14474JM	SOLID	1 / 2	470K-J	1
OR R901	0CH14474KM	SOLID	1 / 2	470K-K	1
R902	0NL171R0KZ	CEMENT	MZS 15N	1.0-K	1

REF.NO.	PART NO.	DESCRIPTION			QTY.
R460	0ZL49223JA	CARBON	1 / 10	22K-J	1
R461	0ZL49223JA	CARBON	1 / 10	22K-J	1
R462	0ZL49223JA	CARBON	1 / 10	22K-J	1
R463	0ZL49223JA	CARBON	1 / 10	6.8K-J	1
R464	0ZL49103JA	CARBON	1 / 10	10K-J	1
R465	0ZL49153JA	CARBON	1 / 10	15K-J	1
R466	0ZL49682JA	CARBON	1 / 10	6.8K-J	1
R468	0ZL49224JA	CARBON	1 / 10	220K-J	1
R469	0ZL49102JA	CARBON	1 / 10	1K-J	1
R470	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R471	0ZL49102JA	CARBON	1 / 10	1K-J	1
R472	0ZL49103JA	CARBON	1 / 10	10K-J	1
R473	0ZL49473JA	CARBON	1 / 10	47K-J	1
R474	0BL49102JA	CARBON	1 / 4	1K-J	1
R475	0ZL49223JA	CARBON	1 / 10	22K-J	1
R476	0ZL49273JA	CARBON	1 / 10	27K-J	1
R502	0ZL49471JA	CARBON	1 / 10	470-J	1
R503	0ZL49471JA	CARBON	1 / 10	470-J	1
R504	0ZL49153JA	CARBON	1 / 10	15K-J	1
R505	0BL49222JA	CARBON	1 / 4	2.2K-J	1
R506	0ZL49103JA	CARBON	1 / 10	10K-J	1
R507	0DL09101JM	METAL	RSS 1W	100-J	1
R508	0FL09101JL	METAL	RSS 3W	100-J	1
R510	0FL09471JL	METAL	RSS 3W	470-J	1
R511	0BL49330JA	CARBON	1 / 4	33-J	1
R513	0EL09471JL	METAL	RSS 2W	470-J	1
R514	0BL49182JA	CARBON	1 / 4	1.8K-J	1
R515	0ZL49223JA	CARBON	1 / 10	22K-J	1
R516	0BL08R10JL	FUSING	1 / 4	0.1-J	1
R519	0CL084R7JL	FUSING	1 / 2	4.7-J	1
R520	0BL083R3JL	FUSING	1 / 4	3.3-J	1
R521	0ZL49681JA	CARBON	1 / 10	680-J	1
R522	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R523	0ZL49101JA	CARBON	1 / 10	100-J	1
R524	0ZL4822111F	CARBON	1 / 10	2.21K-F	1
R525	0ZL4830111F	CARBON	1 / 10	3.01K-F	1
R526	0ZL49123JA	CARBON	1 / 10	.12K-J	1
R529	0ZL49103JA	CARBON	1 / 10	10K-J	1

REF.NO.	PART NO.	D E S C R I P T I O N			QTY.
R290	0ZL49000ZA	JUMPER	1 / 10	0	1
R291	0ZL49822JA	CARBON	1 / 10	8.2K-J	1
R292	0ZL49000ZA	JUMPER	1 / 10	0	1
R293	0ZL49000ZA	JUMPER	1 / 10	0	1
R294	0ZL49000ZA	JUMPER	1 / 10	0	1
R295	0ZL49153JA	CARBON	1 / 10	15K-J	1
R296	0ZL49332JA	CARBON	1 / 10	3.3K-J	1
R297	0ZL49000ZA	JUMPER	1 / 10	0	1
R298	0ZL49272JA	CARBON	1 / 10	2.7K-J	1
R299	0ZL49103JA	CARBON	1 / 10	10K-J	1
R401	0ZL49102JA	CARBON	1 / 10	1K-J	1
R402	0ZL49563JA	CARBON	1 / 10	56K-J	1
R403	0ZL49333JA	CARBON	1 / 10	33K-J	1
R404	0ZL49124JA	CARBON	1 / 10	120K-J	1
R405	0ZL49470JA	CARBON	1 / 10	47-J	1
R406	0ZL49223JA	CARBON	1 / 10	22K-J	1
R407	0ZL49563JA	CARBON	1 / 10	56K-J	1
R409	0ZL49563JA	CARBON	1 / 10	56K-J	1
R410	0ZL49183JA	CARBON	1 / 10	18K-J	1
R412	0ZL49332JA	CARBON	1 / 10	3.3K-J	1
R413	0ZL49105JA	CARBON	1 / 10	1M-J	1
R414	0ZL49103JA	CARBON	1 / 10	10K-J	1
R415	0ZL49473JA	CARBON	1 / 10	47K-J	1
R416	0ZL49223JA	CARBON	1 / 10	22K-J	1
R417	0ZL49153JA	CARBON	1 / 10	15K-J	1
R418	0ZL49153JA	CARBON	1 / 10	1.5K-J	1
R419	0ZL49683JA	CARBON	1 / 10	68K-J	1
R420	0CL41102JT	CARBON	1 / 2	1K-J	1
R425	0BL08101JL	FUSING	1 / 4	100-J	1
R426	0FL09121JL	METAL	RSS 3W	120-J	1
R427	0EL091R0JL	METAL	RSSX 2W	1.0-J	1
R451	0ZL49102JA	CARBON	1 / 10	1K-J	1
R453	0ZL482943F	CARBON	1 / 10	294K-F	1
R454	0ZL49563JA	CARBON	1 / 10	56K-J	1
R455	0ZL49223JA	CARBON	1 / 10	22K-J	1
R456	0ZL49153JA	CARBON	1 / 10	15K-J	1
R457	0BL08221JL	FUSING	1 / 4	220K-J	1
R458	0ZL49333JA	CARBON	1 / 10	33K-J	1

REF.NO.	PART NO.	D E S C R I P T I O N			QTY.
R221	0ZL49102JA	CARBON	1 / 10	1K-J	1
R222	0ZL49470JA	CARBON	1 / 10	47-J	1
R223	0ZL49470JA	CARBON	1 / 10	47-J	1
R224	0ZL49470JA	CARBON	1 / 10	47-J	1
R225	0ZL49470JA	CARBON	1 / 10	47-J	1
R226	0ZL49470JA	CARBON	1 / 10	47-J	1
R227	0ZL49470JA	CARBON	1 / 10	47-J	1
R228	0BL49471JA	CARBON	1 / 4	470-J	1
R229	0BL49471JA	CARBON	1 / 4	470-J	1
R230	0BL49471JA	CARBON	1 / 4	470-J	1
R231	0ZL49221JA	CARBON	1 / 10	220-J	1
R232	0ZL49333JA	CARBON	1 / 10	33K-J	1
R233	0ZL49221JA	CARBON	1 / 10	220-J	1
R235	0ZL49102JA	CARBON	1 / 10	1K-J	1
R236	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R237	08J38247T2	THERMISTOR	1 / 10	100K-J	1
R238	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R239	0ZL49682JA	CARBON	1 / 10	6.8K-J	1
R240	0ZL483321F	CARBON	1 / 10	3.32K-J	1
R241	0ZL49823JA	CARBON	1 / 10	82K-J	1
R242	0ZL49471JA	CARBON	1 / 10	470-J	1
R243	0BL08221JL	FUSING	1 / 4	220-J	1
R244	0ZL49221JA	CARBON	1 / 10	220-J	1
R245	0ZL49332JA	CARBON	1 / 10	3.3K-J	1
R246	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R247	0ZL49102JA	CARBON	1 / 10	1K-J	1
R248	0ZL49154JA	CARBON	1 / 10	150K-J	1
R249	0ZL481102F	CARBON	1 / 10	11.0K-F	1
R278	0BK10223JT	CARBON	1 / 4	22K-J	1
R281	0ZL49682JA	CARBON	1 / 10	6.8K-J	1
R282	0ZL49272JA	CARBON	1 / 10	2.7K-J	1
R283	0ZL49682JA	CARBON	1 / 10	6.8K-J	1
R284	0ZL49272JA	CARBON	1 / 10	2.7K-J	1
R285	0ZL49682JA	CARBON	1 / 10	6.8K-J	1
R286	0ZL49272JA	CARBON	1 / 10	2.7K-J	1
R287	0ZL49000ZA	JUMPER	1 / 10	0	1
R288	0ZL49222JA	CARBON	1 / 10	2.2K-J	1
R289	0ZL49000ZA	JUMPER	1 / 10	0	1

MS 9 — 29SU PARTS — LIST

PCB-MAIN (5T01087A2)

REF.NO.	PART NO.	DESCRIPTION			QTY.
PCB	05A00585D1	PCB-MAIN			1
FIXED RESISTORS					
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	0CL04102JT	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

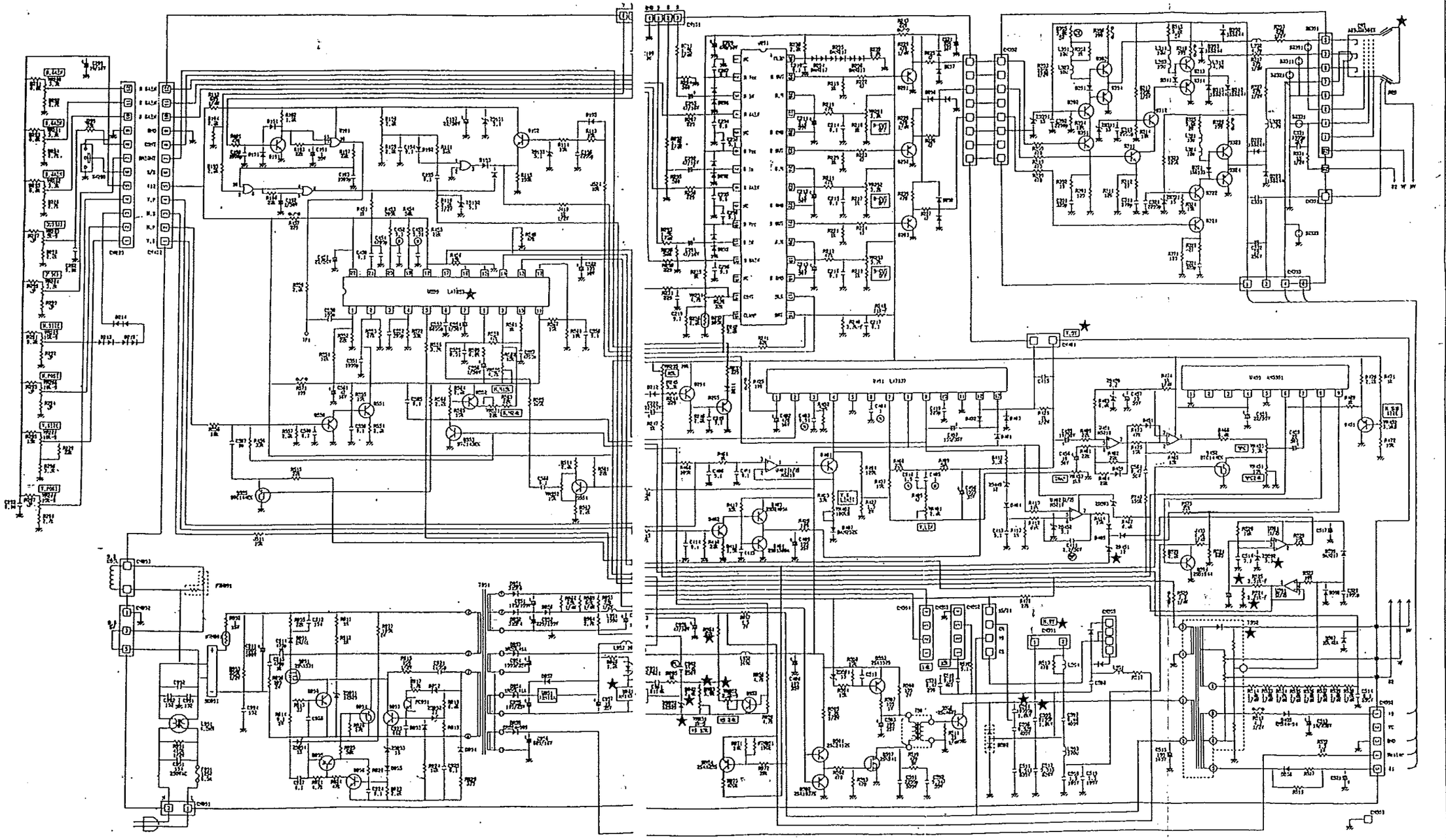
Symbol	Description	
T502	FBT	MSU1FHH09
R525	R-METAL	3.01kΩ-F
R524	R-METAL	2.21kΩ-F
ZD502	Zener Diode	RD5.1MB2
VR951	R-SEMX	1kΩ-B
VR952	R-SEMX	2.2kΩ-B
DY		05F13637A1
C504	C-PL	10000pF-J, 1.6kV
C505	C-PL	9100pF-J, 1.6kV
R961	R-CA	82kΩ
R962	R-CA	2.4kΩ
R963	R-CA	3.9kΩ
U961	IC	AN1431M
CRT		M68JUA068X
U550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

VI. Circuit Diagram

* Parts list Page 32 ~ 54

* Connection diagram Page 55

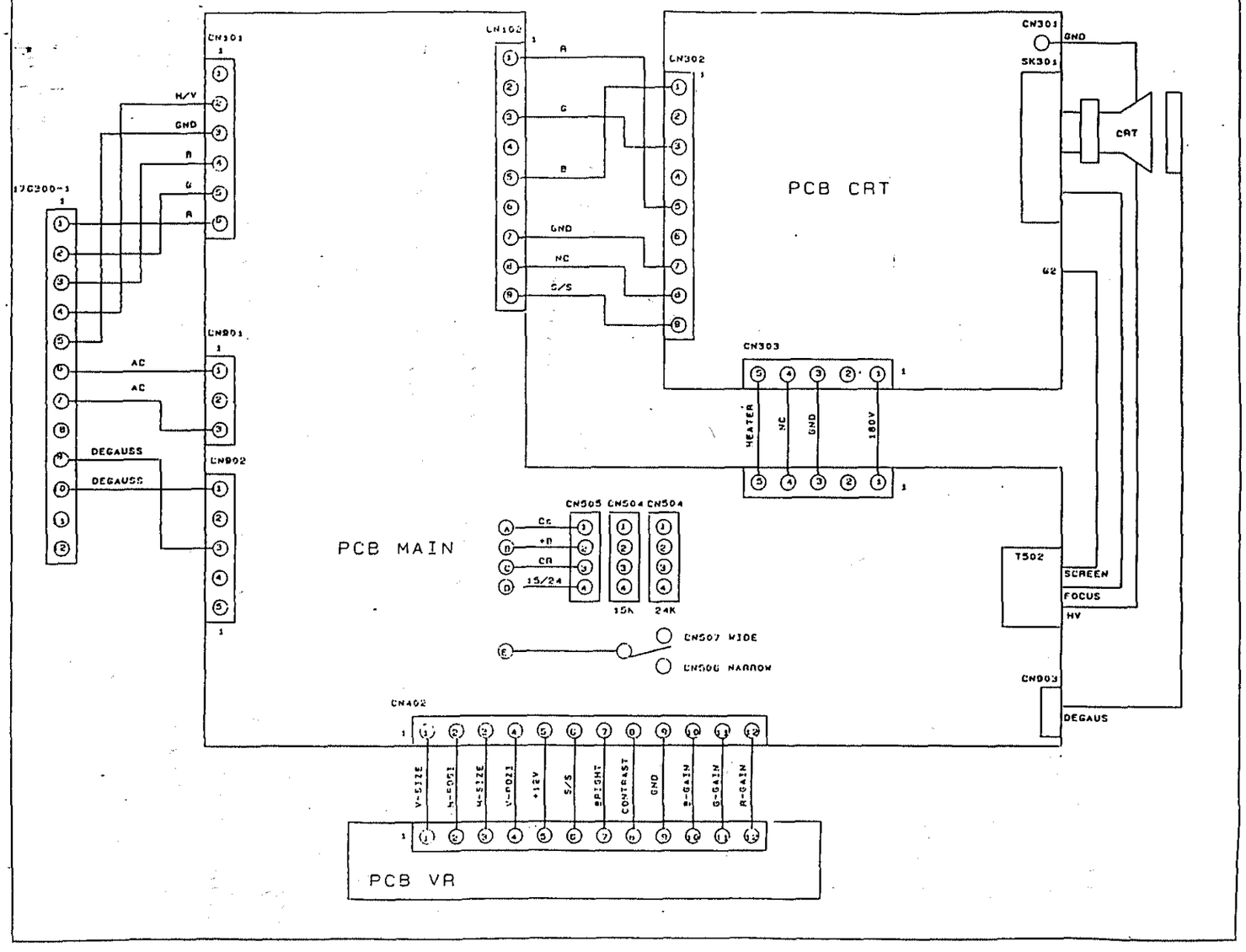
* Circuit diagram Page 56



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

3RD ANGLE-PROJECTION

SCHEM 10 Jun 1994


CN101
H/V
GND
R
G
B
17G200-1
CN901
AC
AC
DEGAUSS
DEGAUSS
CN902
CN102
R
G
B
GND
NC
S/S
CN302
PCB CRT
CN301
GND
SK301
CRT
G2
CN303
HEATER
NC
GND
180V
PCB MAIN
CN505
CN504
CN504
Cc
+B
CR
15/24
15K
24K
T502
SCREEN
FOCUS
HV
CN507 WIDE
CN508 NARROW
CN903
DEGAUS
CN402
V-SIZE
H-POSI
H-SIZE
V-POSI
+12V
S/S
BRIGHT
CONTRAST
GND
B-GAIN
G-GAIN
R-GAIN
PCB VR