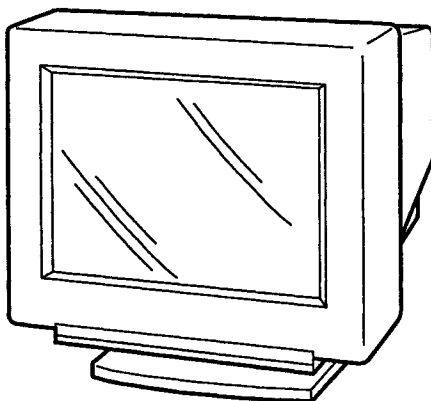


GDM-20SE2T

SERVICE MANUAL

US Model
Canadian Model
AEP Model
Chassis No. SCC-J53B-A

Multiscan **20se II**



N2H CHASSIS

SPECIFICATIONS

Picture tube	0.25 mm aperture grille pitch 20 inches measured diagonally (19" visual) 90-degree deflection
Video image area	Approx. 389 × 293 mm (w/h) (15 ³ / ₈ × 11 ⁵ / ₈ inches)
Resolution	Horizontal: Max. 1600 dots Vertical: Max. 1200 lines
Standard image area	Approx. 373 × 280 mm (w/h) (14 ³ / ₄ × 11 ¹ / ₈ inches) or Approx. 350 × 280 mm (w/h) (13 ⁷ / ₈ × 11 ¹ / ₈ inches)
Deflection frequency	Horizontal: 30 to 96 kHz Vertical: 48 to 160 Hz
AC input voltage/current	100 to 120 V, 50/60 Hz, 1.7 A 220 to 240 V, 50 – 60 Hz, 1.2 A
Power consumption	Max. 150 W
Dimensions	472 × 493.5 × 501 mm (w/h/d) (18 ⁵ / ₈ × 19 ¹ / ₂ × 19 ³ / ₄ inches)
Mass	Approx. 30 kg (66 lb 2 oz)

Design and specifications are subject to change without notice.

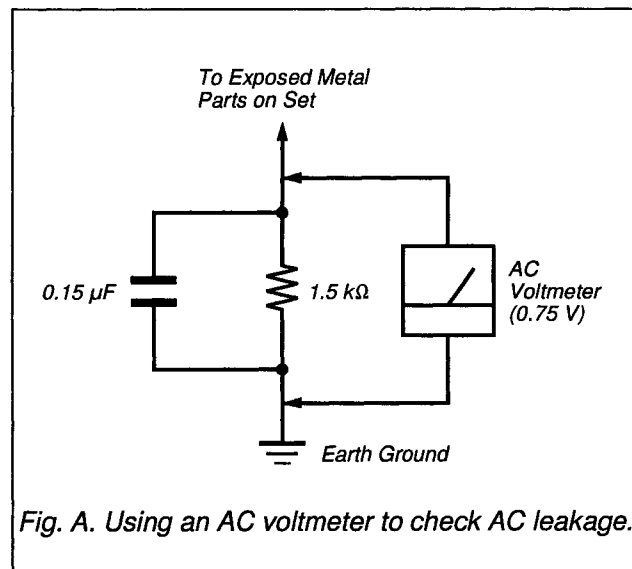
TRINITRON® COLOR GRAPHIC DISPLAY
SONY®



SAFETY CHECK-OUT (US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.



LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

WARNING!!

NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK $\triangle$ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

AVERTISSEMENT!!

NE JAMAIS METTRE SOUS TENSION QUAND LA BOBINE DE DEMAGNETISATION EST ENLEVÉE.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE $\triangle$ SONT CRITIQUES POUR LA SÉCURITÉ. NE LES REMPLACER QUE PAR UNE PIÈCE PORTANT LE NUMÉRO SPECIFIÉ. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

TIMING SPECIFICATION

PRIMARY MODE MODE AT PRODUCTION	MODE1	MODE2	MODE3	MODE4	MODE5	MODE6	MODE7	MODE8	PRIMARY MODE MODE9	MODE10
RESOLUTION	640 X 480	720 X 400	640 X 480	832 X 624	800 X 600	1024 X 768	1024 X 768	1152 X 870	1280 X 1024	1600 X 1200
CLOCK	25.175 MHZ	28.322 MHZ	36 000 MHZ	57 285 MHZ	56.250 MHZ	80 000 MHZ	94.500 MHZ	100.000 MHZ	157.500 MHZ	202.500 MHZ
— HORIZONTAL —										
H-FREQ	31 469 kHz	31 469 kHz	43 269 kHz	49 727 kHz	53 674 kHz	60 241 kHz	68 677 kHz	68.681 kHz	91.146 kHz	93 750 kHz
	μsec	μsec	μsec	μsec	μsec	μsec	μsec	μsec	μsec	μsec
H TOTAL	31 778	31 777	23 111	20 110	18 631	16.600	14.561	14 560	10 971	10 667
H BLK	6.356	6 355	5 333	5.586	4 409	3.800	3.725	3 040	2 844	2 765
H FP	0 636	0 636	0 889	0 559	0 569	0 550	0 508	0.320	0 305	0 316
H SYNC	3 813	3 813	1 333	1 117	1 138	1 200	1.016	1 280	1 016	0.948
H BP	1.907	1 907	3 111	3 910	2 702	2 050	2.201	1.440	1 524	1 501
H ACTIV	25 422	25 422	17.778	14 524	14.222	12 800	10 836	11 520	8 127	7 901
— VERTICAL —										
V FREQ(HZ)	59 940 Hz	70 087 Hz	85.008 Hz	74 553 Hz	85 061 Hz	74 927 Hz	84 997 Hz	75 062 Hz	85 024 Hz	75 000 Hz
	lines	lines	lines	lines	lines	lines	lines	lines	lines	lines
V TOTAL	525	449	509	667	631	804	808	915	1072	1250
V BLK	45	49	29	43	31	36	40	45	48	50
V FP	10	3	1	3	1	3	1	3	1	1
V SYNC	2	3	3	3	3	3	3	3	3	3
V BP	33	43	25	37	27	30	36	39	44	46
V. ACTIV	480	400	480	624	600	768	768	870	1024	1200
— SYNC —										
INT(G)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
EXT(H/V)/POLARITY	YES N / N	YES N / P	YES N / N	YES N / N	YES P / P	YES N / N	YES P / P	YES N / N	YES P / P	YES P / P
EXT(CS) /POLARITY	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
INT/NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT

96 1.22 VER.

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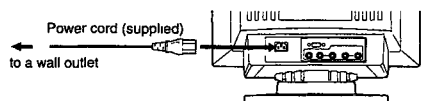
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The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

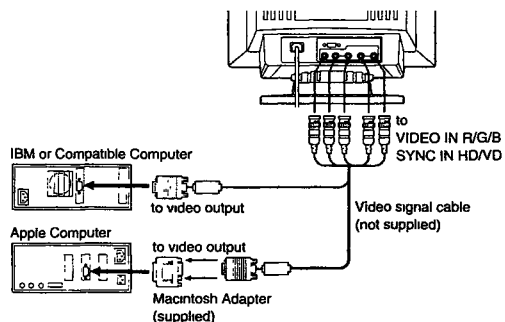
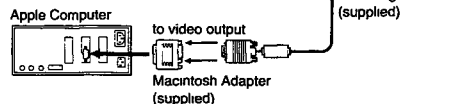
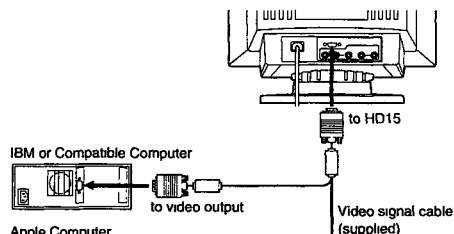
Getting Started

This monitor will sync with any IBM or compatible system equipped with VGA or greater graphics capability. Although this monitor will sync to other platforms, including Macintosh and Power Macintosh system, a cable adapter is required. Please consult your dealer for advice on which adapter is suitable for your needs.

Step 1: With the monitor switched off, attach the power cord to the monitor and the other end to the power outlet.



Step 2: With the computer switched off, attach the video signal cable to the monitor (HD15/5 BNC's) and attach the other end to the video card.



Note: Use HD15 (Female)-HD15(Male without No.9 pin) adapter (supplied) for current DOS computer which has no compliance of DDC 2AB and its No.9 pin is disconnected.

SECTION 1 GENERAL

Using your Monitor

Preset and User Modes

The Multiscan 17seII/20seII has factory preset modes for the 10 most popular industry standards for true "plug and play" capability.

When using a video mode that is not one of the 10 factory preset modes, some fine tuning may be required to optimize the display to your preferences. Simply adjust the monitor according to the preceding adjustment instructions. The adjustments will be stored automatically and recalled whenever that mode is used. A total of 15 user-defined modes can be stored in memory. If the 16th mode is entered, it will replace the first.

For less common modes, and modes that evolve in the future, the Digital Multiscan Technology of the Multiscan 17seII/20seII will perform all of the complex adjustments necessary to ensure a high quality picture for any timing in its frequency range. However, due to the wide variety of video boards on the market, it may be necessary for the user to fine tune the vertical/horizontal size and centering.

Recommended horizontal timing conditions

Horizontal sync width duty should be: >4.8% of total horizontal time.

Horizontal blanking width should be: >3.0 μ sec

Note: For Windows[®] users, check your video board manual or the utility program which comes with your graphic board and select the highest available refresh rate to maximize monitor performance.

GDM-17SE2T

No.	Resolution (dots x lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 x 480	31.5 kHz	60 Hz	VGA Graphic ¹⁾
2	720 x 400	31.5 kHz	70 Hz	VGA Text ¹⁾
3	640 x 480	43.3 kHz	85 Hz	VESA ²⁾
4	832 x 624	49.7 kHz	75 Hz	Macintosh 16" Color ³⁾
5	800 x 600	53.7 kHz	85 Hz	VESA ²⁾
6	1024 x 768	60.0 kHz	75 Hz	Macintosh 19" Color ³⁾
7	1280 x 1024	64.0 kHz	60 Hz	VESA ²⁾
8	1024 x 768	68.7 kHz	85 Hz	VESA ²⁾
9	1152 x 870	68.7 kHz	75 Hz	Macintosh 21" Color ³⁾
10	1280 x 1024	80.0 kHz	75 Hz	VESA ²⁾

GDM-20SE2T

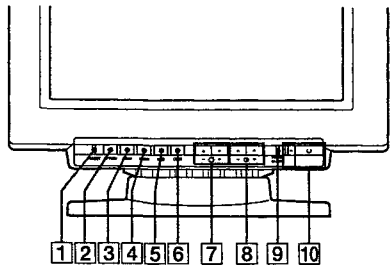
No.	Resolution (dots x lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 x 480	31.5 kHz	60 Hz	VGA Graphic ¹⁾
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7	1024 x 768	68.7 kHz	85 Hz	VESA ²⁾
8	1152 x 870	68.7 kHz	75 Hz	Macintosh 21" Color ³⁾
9	1280 x 1024	91.1 kHz	85 Hz	VESA ²⁾
10	1600 x 1200	93.8 kHz	75 Hz	VESA ²⁾

- 1) VGA is a trademark of IBM Corporation.
- 2) VESA is a trademark of Video Electronics Standard Association.
- 3) Macintosh is a trademark of Apple Computer Inc.
- 4) Windows[®] is a registered trademark of Microsoft Corporation in the United States and other countries.

Functions of Controls

See the given pages for further description.

Front

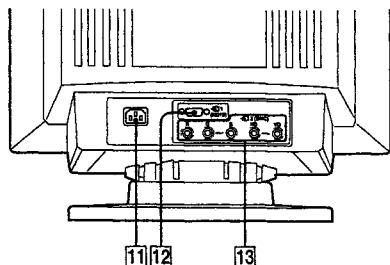


- 1 RESET button (page 11)**
Press to reset the adjustment data to the factory-preset levels.
- 2 OPTION button (page 9-11)**
Press to set the option items, such as control lock and color temperature.
- 3 CONV (convergence) button (page 9)**
Press to adjust the vertical and horizontal convergence.
- 4 GEOM (geometry) button (page 8)**
Press to adjust the rotation and pincushion.
- 5 SIZE (picture size) button (page 8)**
Press to adjust the vertical and horizontal picture size.
- 6 CENT (center) button (page 7)**
Press to adjust the vertical and horizontal picture position.
- 7 BRIGHTNESS -/+ (↓/↑) buttons (page 7-11)**
Press to adjust the brightness.

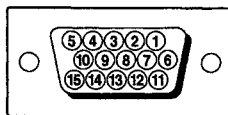
-/+ (↓/↑) buttons also adjust the each item.
- 8 CONTRAST -/+ (←/→) buttons (page 7-11)**
Press to adjust the contrast.

-/+ (←/→) buttons also adjust the each item.
- 9 POWER SAVING indicator (page 12)**
Lights up when the monitor is in the Power Saving Modes.
- 10 power switch and indicator (page 12)**
Press to turn the monitor on or off. The indicator lights up when the monitor is turned on.

Rear



- 11 AC IN connector**
Plug in an AC power cord.
- 12 Video input 1 connector (HD15)**
The cable accepts RGB video signals (0.714 Vp-p, positive) and SYNC signals.



Pin No.	Signal	Pin No.	Signal
1	Red	8	Blue Ground
2	Green	9	DDC + 5V*
	(Composite Sync on Green)	10	Ground
3	Blue	11	—
4	—	12	Bi-Directional Data (SDA)*
5	DDC Ground*	13	H. Sync
6	Red Ground	14	V. Sync
7	Green Ground	15	Data Clock(SCL)*

* Display Data Channel (DDC) Standard by VESA

- 13 Video input 2 connectors (5 BNC)**
The cable accepts RGB video signals (0.714 Vp-p, positive) and SYNC signals.

Adjustments

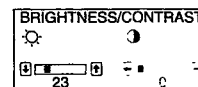
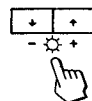
You can adjust the picture to your preference by following the procedure described below.
You can adjust all items on the OSD (On Screen Display).
The item being adjusted is indicated in white on the OSD.

Before adjusting the items, turn on the unit and connect a video cable to the computer/work station.

Adjusting the Picture Brightness

The adjustment data becomes the common setting for all input signals received.

- 1 Press the $\odot \downarrow/\uparrow$ button.**
The "BRIGHTNESS/CONTRAST" OSD (On Screen Display) appears.



- 2 Press the $\odot \downarrow/\uparrow$ buttons to adjust picture brightness.**
↓ ... for less brightness
↑ ... for more brightness

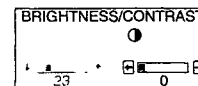
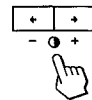
The "BRIGHTNESS/CONTRAST" OSD disappears 3 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

Adjusting the Picture Contrast

The adjustment data becomes the common setting for all input signals received.

- 1 Press the $\odot \leftarrow/\rightarrow$ button.**
The "BRIGHTNESS/CONTRAST" OSD (On Screen Display) appears.



- 2 Press the $\odot \leftarrow/\rightarrow$ button to adjust picture contrast.**
← ... for less contrast
→ ... for more contrast

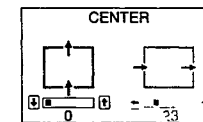
The "BRIGHTNESS/CONTRAST" OSD disappears 3 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

Adjusting the Picture Centering

The adjustment data becomes the unique setting for the input signals received.

- 1 Press the CENT button.**
The "CENTER" OSD (On Screen Display) appears.



- 2 For vertical adjustment**
Press the $\odot \downarrow/\uparrow$ buttons.



↓ ... to move down
↑ ... to move up

For horizontal adjustment
Press the $\odot \leftarrow/\rightarrow$ buttons.



← ... to move left
→ ... to move right

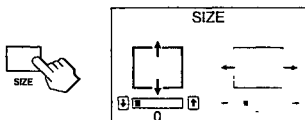
To erase the "CENTER" OSD, press the CENT button again.
The "CENTER" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

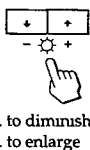
Adjusting the Picture Size

The adjustment data becomes the unique setting for the input signals received

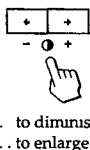
- 1 Press the SIZE button.
The "SIZE" OSD (On Screen Display) appears.



- 2 For vertical adjustment
Press the $\downarrow/\uparrow$ buttons.



For horizontal adjustment
Press the $\leftarrow/\rightarrow$ buttons



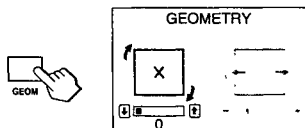
To erase the "SIZE" OSD, press the SIZE button again.
The "SIZE" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

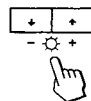
Adjusting the Picture Rotation

The adjustment data becomes the common setting for all input signals received

- 1 Press the GEOM button.
The "GEOMETRY" OSD (On Screen Display) appears.



- 2 Press the $\odot \downarrow/\uparrow$ buttons



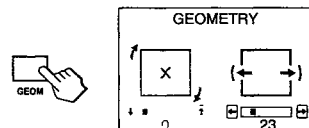
To erase the "GEOMETRY" OSD, press the GEOM button again.
The "GEOMETRY" OSD automatically disappears 10 seconds after you release the buttons

To reset, press the RESET button while the OSD is on

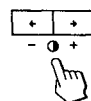
Adjusting the Pincushion

The adjustment data becomes the unique setting for the input signals received.

- 1 Press the GEOM button.
The "GEOMETRY" OSD (On Screen Display) appears.



- 2 Press the $\odot \leftarrow/\rightarrow$ buttons



← ... to diminish the picture sides



→ ... to expand the picture sides

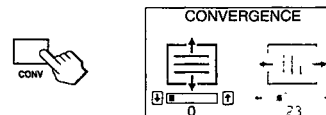
To erase the "GEOMETRY" OSD, press the GEOM button again.
The "GEOMETRY" OSD automatically disappears 10 seconds after you release the buttons

To reset, press the RESET button while the OSD is on

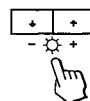
Adjusting the Convergence

The adjustment data becomes the common setting for all input signals received.

- 1 Press the CONV button.
The "CONVERGENCE" OSD (On Screen Display) appears.



- 2 For vertical adjustment
Press the $\odot \downarrow/\uparrow$ buttons.



For horizontal adjustment
Press the $\odot \leftarrow/\rightarrow$ buttons.



← ... to move Red to the left and Blue to the right
→ ... to move Red to the right and Blue to the left

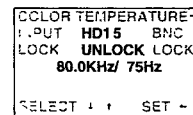
To erase the "CONVERGENCE" OSD, press the CONV button again.
The "CONVERGENCE" OSD automatically disappears 10 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

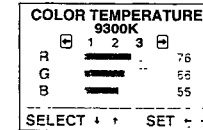
Setting the Color Temperature

The selected color temperature becomes the common setting for all input signals

- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.

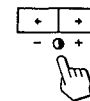


- 2 Press the $\odot \rightarrow$ button.
The "COLOR TEMPERATURE" OSD appears



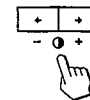
- 3 Adjust with the $\odot \leftarrow/\rightarrow$ and $\odot \downarrow/\uparrow$ buttons.
There are three color temperature modes on the OSD.
The factory settings are 1 : 5000K, 2 : 6500K, and 3 : 9300K.

To select 5000K, 6500K or 9300K
Press the $\odot \leftarrow/\rightarrow$ buttons.

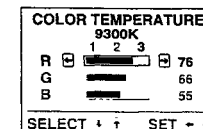
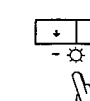


To obtain the desired color temperature

- 1 Press the $\odot \leftarrow/\rightarrow$ buttons to select the 1, 2 or 3 mode.



- 2 Press the $\odot \downarrow/\uparrow$ buttons to select R, G or B.



- 3 Press the $\odot \leftarrow/\rightarrow$ buttons to adjust the color temperature.

The "5000K," "6500K" or "9300K" disappears.
The color temperatures are memorized in the each mode-1, 2 and 3 until you reset each.

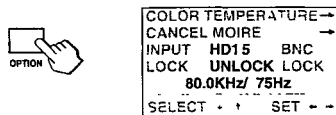
To erase the "COLOR TEMPERATURE" OSD, press the OPTION button again.
The OSD automatically disappears 30 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

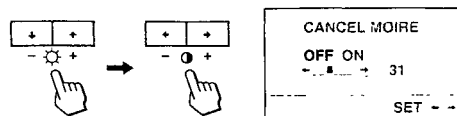
Canceling the Moire (GDM-20SE2T only)

The adjustment data becomes the unique setting for the input signals received.

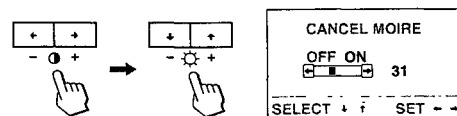
- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.



- 2 Press the $\odot$ $\downarrow/\uparrow$ buttons to select "CANCEL MOIRE" and then press the $\odot$ $\rightarrow$ button



- 3 Press the $\odot$ $\leftarrow/\rightarrow$ buttons to select "ON" and then press the $\odot$ $\downarrow$ button.



- 4 Press the $\odot$ $\leftarrow/\rightarrow$ buttons to adjust for minimum moire.



To erase the "CANCEL MOIRE" OSD, press the OPTION button again.
The OSD automatically disappears 30 seconds after you release the buttons.

To reset, press the RESET button while the OSD is on.

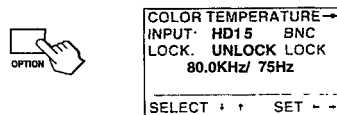
Note

When the moire is cancelled, the picture may be fuzzy.
Adjust the moire gradually from 0, and stop the adjustment as near to 0 as possible

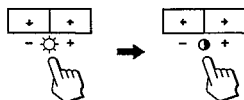
Switching the Input Connector

As the monitor has two sets of input connectors, you can switch between two input video signals. It is necessary to select the connector type (HD15/5 BNC's) correctly according to the connection.

- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.



- 2 Press the $\odot$ $\downarrow/\uparrow$ buttons to select "INPUT" and then press the $\odot$ $\leftarrow/\rightarrow$ button to select "HD15" or "BNC."



When you switch between input sources, the monitor screen is muted for a moment (Mute) then the signal through the selected input is displayed. If the selected input do not receive any video signals, the monitor automatically returns to the other input after Mute and the OPTION OSD appears

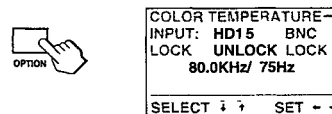
To erase the OPTION OSD, press the OPTION button again. The OSD automatically disappears 30 seconds after you release the buttons.

If two computers are connected to the monitor (one to each input), when one of the computers is turned on or restarted, or the monitor goes into power saving mode, the monitor may switch to the other input because the signal is temporarily interrupted. Select the input which you use, following the above steps.

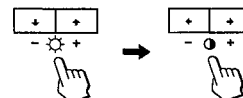
Locking the Controls

This feature allows you to lock the monitor so that all the buttons, except the $\odot$ power switch and OPTION button, on the front panel cannot be operated (Lock mode). Hence, your settings cannot be modified. With this function, you can ensure that your settings will remain the same even when the control buttons are exposed to others.
To release the Lock mode, set it to off (UNLOCK) position. Normally keep this function set to off (UNLOCK) position.

- 1 Press the OPTION button.
The OPTION OSD (On Screen Display) appears.



- 2 Press the $\odot$ $\downarrow/\uparrow$ buttons to select "LOCK" and then press the $\odot$ $\leftarrow/\rightarrow$ buttons to select "LOCK."



The $\odot$ $\downarrow/\uparrow$ buttons do not work on the OPTION OSD. The control buttons on the front panel except the OPTION button do not work. If you press any button except the $\odot$ power switch and OPTION button, the $\odot$ mark appears on the screen.



To Cancel the Control Lock

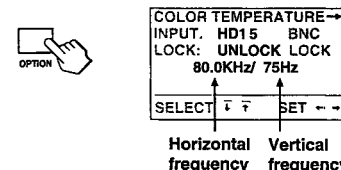
Press the OPTION button again.
Press the $\odot$ $\leftarrow/\rightarrow$ buttons to select "UNLOCK."

To erase the OPTION OSD, press the OPTION button again. The OSD automatically disappears 30 seconds after you release the buttons.

Checking the Signal Frequency

It is possible to check the current vertical and horizontal frequencies of the input signal received.

Press the OPTION button.
The OPTION OSD (On Screen Display) appears.



Resetting the Adjustment Data to Factory-preset Levels

To reset an adjustment item

If you want to reset the color temperature
Select one of the three color temperature modes, (See "Setting the Color Temperature" on the page 9), and then press the RESET button before the OSD (On Screen Display) disappears.

If you want to reset the other adjustment items
Press the button of the adjustment item you want to reset, and then press the RESET button before the OSD (On Screen Display) disappears.

To reset the brightness, contrast, size, center and pincushion adjustment data at once (for the received signal)

Press the RESET button with something like a coin for one second when no OSD is shown.



To reset all adjustment data to factory-preset levels

Press and hold the RESET button for more than 2 seconds. All adjustment data including the brightness and contrast are reset to factory-preset levels.



Power Saving Function

This monitor is capable of 3 states of reduced power consumption.

By sensing the absence of one or both sync signals coming from the host computer, it will reduce power consumption as follows.

Mode	State	Power consumption	Required resumption time	POWER SAVING indicator	⏻ (power) indicator
1	Normal operation	≤ 140 W	—	off	green on
2	Standby (1st step of power saving)	≤ 100 W	approx. 3 sec.	orange on	green on
3	Suspend (2nd step of power saving)	≤ 15 W	approx. 3 sec.	orange on	green on
4	Active-off (3rd step of power saving)	≤ 5 W	approx. 10 sec.	orange on	off
5	Power-off	0 W	—	off	off

Power Saving Operation

The H-sync is not present.

↓

The unit goes into standby state.

↓

The V-sync is not present.

↓

The unit goes into suspend state.

↓

Both the H-sync and V-sync are not present.

↓

The unit goes into active-off state.

The monitor requires a videocard or screen saver software which switches off one or both sync signals to activate the power saving function.

Caution: The Power Saving function will automatically put the monitor into the Active-off state if the power switch is turned on without any video signal input. Once the horizontal and vertical syncs are sensed, the monitor will automatically return to its Normal operation state.

Plug and Play

This monitor complies with the DDC™1, DDC2B and DDC2AB which are the Display Data Channel (DDC) standards of VESA.

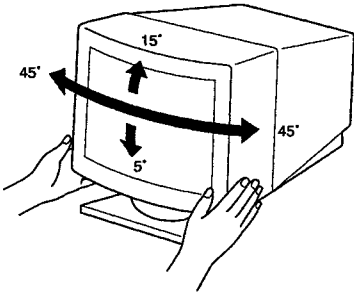
When a DDC1 host system is connected, the monitor synchronizes with the V. CLK in accordance with the VESA standards and outputs the EDID (Extended Display Identification) to the data line.
When a DDC2B or DDC2AB host system is connected, the monitor automatically switches to each communication.

DDC™ is a trademark of Video Electronics Standard Association.

Use of the Tilt-Swivel

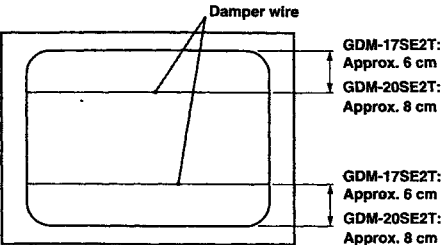
With the tilt-swivel, this unit can be adjusted to be viewed at your desired angle within 90° horizontally and 20° vertically.

To turn the unit vertically and horizontally, hold it at its bottom with both hands as illustrated below.



Damper Wire

Using a white background, very thin horizontal stripes on the screen are visible as shown below. These stripes are damper wires. These wires are attached to the aperture grille inside the Trinitron tube and are there to damp vibrations of the aperture grille in order to prevent them from influencing to the picture quality.



Specifications

GDM-17SE2T	
Picture tube	0.25 mm aperture grille pitch 17 inches measured diagonally (16" visual) 90-degree deflection
Video image area	Approx. 328 × 242 mm (w/h) (13 × 9 5/8 inches)
Resolution	Horizontal: Max. 1280 dots Vertical: Max. 1024 lines
Standard image area	Approx. 300 × 225 mm (w/h) (11 7/8 × 8 7/8 inches) or Approx. 293 × 234 mm (w/h) (11 5/8 × 9 1/4 inches)
Deflection frequency	Horizontal: 30 to 85 kHz Vertical: 48 to 150 Hz
AC input voltage/current	100 to 120 V, 50/60 Hz, 1.7 A 220 to 240 V, 50 – 60 Hz, 1.2 A
Power consumption	Max. 140 W
Dimensions	403.6 × 426.3 × 450 mm (w/h/d) (16 × 16 7/8 × 17 3/4 inches)
Mass	Approx. 20 kg (44 lb)

GDM-20SE2T	
Picture tube	0.25 mm aperture grille pitch 20 inches measured diagonally (19" visual) 90-degree deflection
Video image area	Approx. 389 × 293 mm (w/h) (15 3/8 × 11 5/8 inches)
Resolution	Horizontal: Max. 1600 dots Vertical: Max. 1200 lines
Standard image area	Approx. 373 × 280 mm (w/h) (14 3/4 × 11 1/8 inches) or Approx. 350 × 280 mm (w/h) (13 7/8 × 11 1/8 inches)
Deflection frequency	Horizontal: 30 to 96 kHz Vertical: 48 to 160 Hz
AC input voltage/current	100 to 120 V, 50/60 Hz, 1.7 A 220 to 240 V, 50 – 60 Hz, 1.2 A
Power consumption	Max. 150 W
Dimensions	472 × 493.5 × 501 mm (w/h/d) (18 5/8 × 19 1/2 × 19 3/4 inches)
Mass	Approx. 30 kg (66 lb 2 oz)

Design and specifications are subject to change without notice.

Troubleshooting

This section may help you isolate a problem and as a result, eliminate the need to contact technical support, allowing continued productivity.

No picture

- ➔ If neither the ⏻ (power) indicator nor the POWER SAVING indicator is not lit.
 - Check that the power cord is properly connected.
 - Check that the power switch is in the "on" position.
- ➔ If the POWER SAVING indicator is lit.
 - Check that your computer power switch is in the "on" position.
 - The monitor will recover when you press any key on the keyboard of the computer.
 - Check that the video cable is properly connected and all plugs are firmly seated in their socket.
 - Check that the 5 BNC's are connected in the right order (from power cord side: Red-Green-Blue-HD-VD).
 - Ensure that no pins are bent or pushed in the HD15 connector of the cable.
 - Check that the video card is seated completely in a proper bus slot.
 - Check that the video frequency range is within that specified for the monitor.
 - If using a Macintosh system, check that the Macintosh adapter and the video signal cable are properly connected.
- ➔ If the ⏻ (power) and/or the POWER SAVING indicators are both flashing.
 - Turn the monitor off and on. If the indicator is off, the monitor is in the normal condition. If the indicator is still flashing, there is a potential monitor failure.
- ➔ If you do the above procedures and the monitor does not recover.
 - Unplug the video cable (HD15/5 BNC's) then press and hold the ⏻ + button for 2 seconds to display the color bars. Then, turn the monitor off and on by pressing the ⏻ power switch.
 - If the monitor does not recover, the monitor is out of order.

Picture is scrambled

- ➔ Check your graphics board manual for the proper monitor setting on your Multiscan 17seII/20seII.
- ➔ Check this manual and confirm that the graphic mode and the frequency at which you are trying to operate is supported. Even within the proper range some video boards may have a sync pulse that is too narrow for the monitor to sync correctly.

Troubleshooting

Color is not uniform

- ➔ Trip the  power switch once to activate the Auto-degauss cycle. This function is to demagnetize the metal frame of the CRT to obtain neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

You cannot adjust the monitor with the buttons on the front panel

- ➔ If the control lock is set to on, set it to off using the OPTION OSD. (page 11)
You will be able to adjust the monitor.

White does not look white

- ➔ Adjust color temperature using the OPTION OSD. (page 9)
- ➔ Check that the 5 BNC's are connected in the right order (from power cord side: Red-Green-Blue-HD-VD).

Screen image is not centered or sized properly

- ➔ Adjust centering, size or geometry using the OSD. (page 7, 8)
- ➔ Some video modes do not fill the screen to the edge of the monitor. There is no single answer to solve the problem. There is a tendency to have this problem on higher refresh timings.

Edges of the image are curved

- ➔ Adjust pincushion using the OSD. (page 8)

White lines show red or blue shades at edges

- ➔ Adjust the convergence using the OSD. (page 9)

Picture is fuzzy

- ➔ Adjust the contrast and brightness using the OSD (page 7).
- ➔ Trip the  power switch once to activate the Auto-degauss cycle. This function demagnetizes the metal frame of the CRT to obtain neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.
- ➔ If red or blue shades are found at the edge of images, adjust convergence using the OSD. (page 9)
- ➔ (GDM-20SE2T only)
If the moire is cancelled on the OPTION OSD, the picture may be fuzzy.
— Select "OFF" on the OPTION OSD. (page 10)

Picture bounces or has wavy oscillations

- ➔ Isolate and eliminate any potential sources of electric or magnetic fields. Common causes for this symptom are electric fans, fluorescent lighting, laser printers, and so on.
- ➔ If you have another monitor close to this monitor, increase the distance between them to reduce the interference.
- ➔ Try plugging the monitor into a different AC outlet, preferably on a different circuit.
- ➔ Try the monitor on a completely different computer in a different room.

Picture appears to be ghosting

- ➔ Eliminate the use of video cable extension cable and/or video switch boxes if this symptom occurs. Excessive cable length or weak connection can produce this symptom.

Two fine horizontal lines (wires) are visible

- ➔ These wires stabilize the vertically striped Aperture Grille. This Aperture Grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.

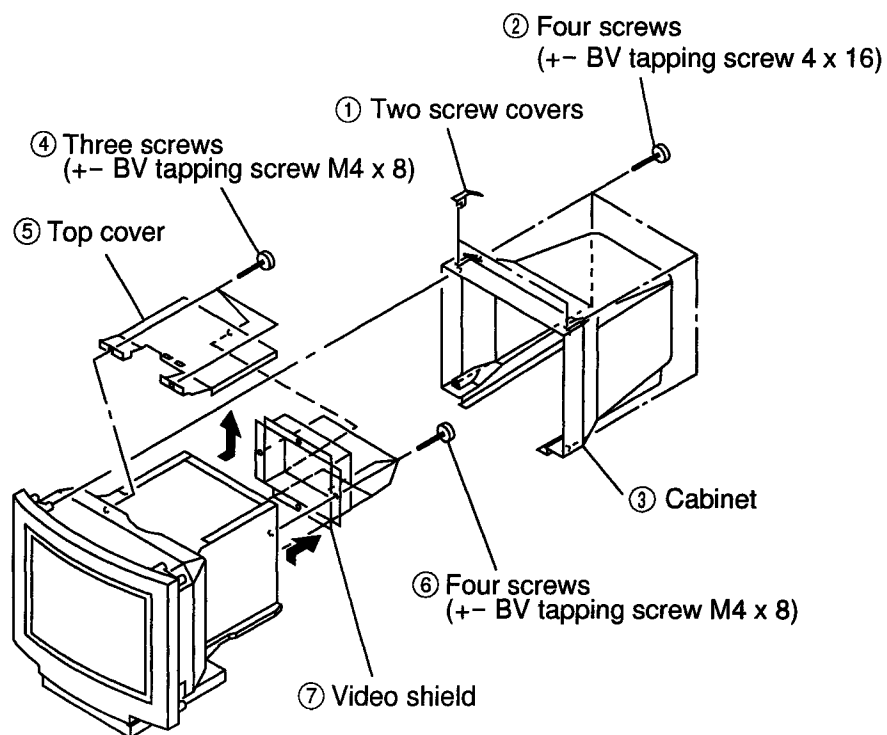
Wavy or elliptical (moire) pattern is visible

- ➔ Due to the relationship between resolution, monitor dot pitch and the pitch of some image patterns, certain screen backgrounds, especially gray, sometimes show moire. This can only be eliminated by changing your desktop pattern.
- ➔ (GDM-20SE2T only)
Cancel the moire using the OPTION OSD. (page 10)
May be modified according to the model.

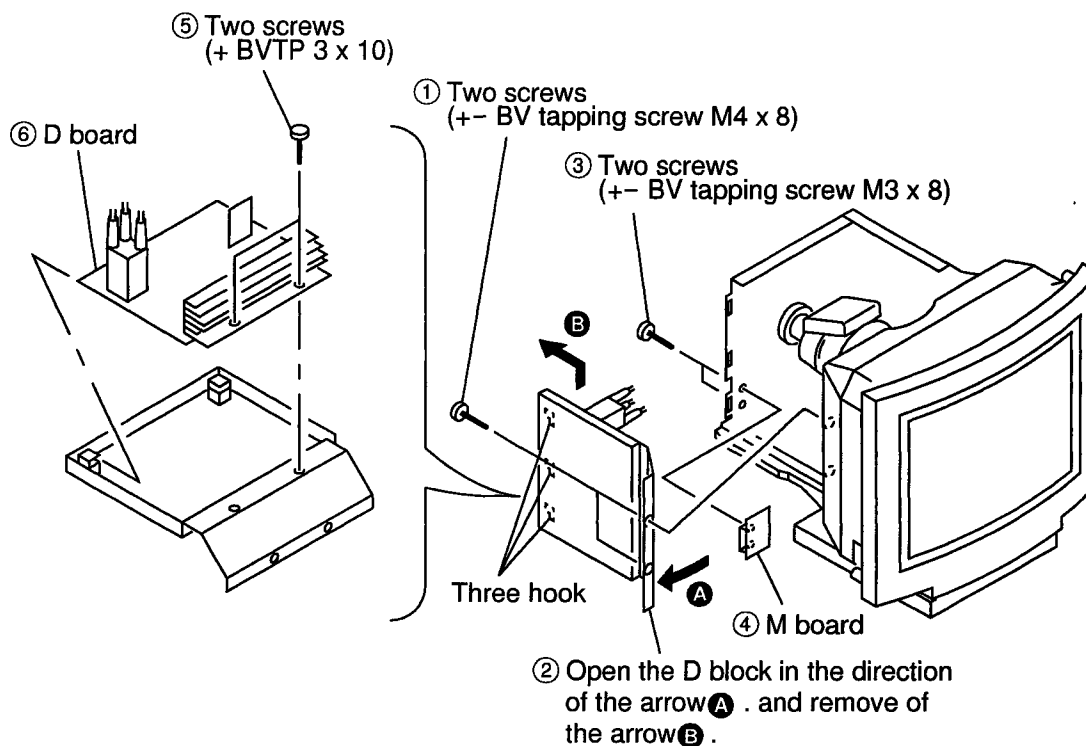
- If the problem persists, call your authorized Sony dealer from a location near your monitor.
- Note the model name and the serial number of your monitor. Also note the make and name of your computer and video board.

SECTION 2 DISASSEMBLY

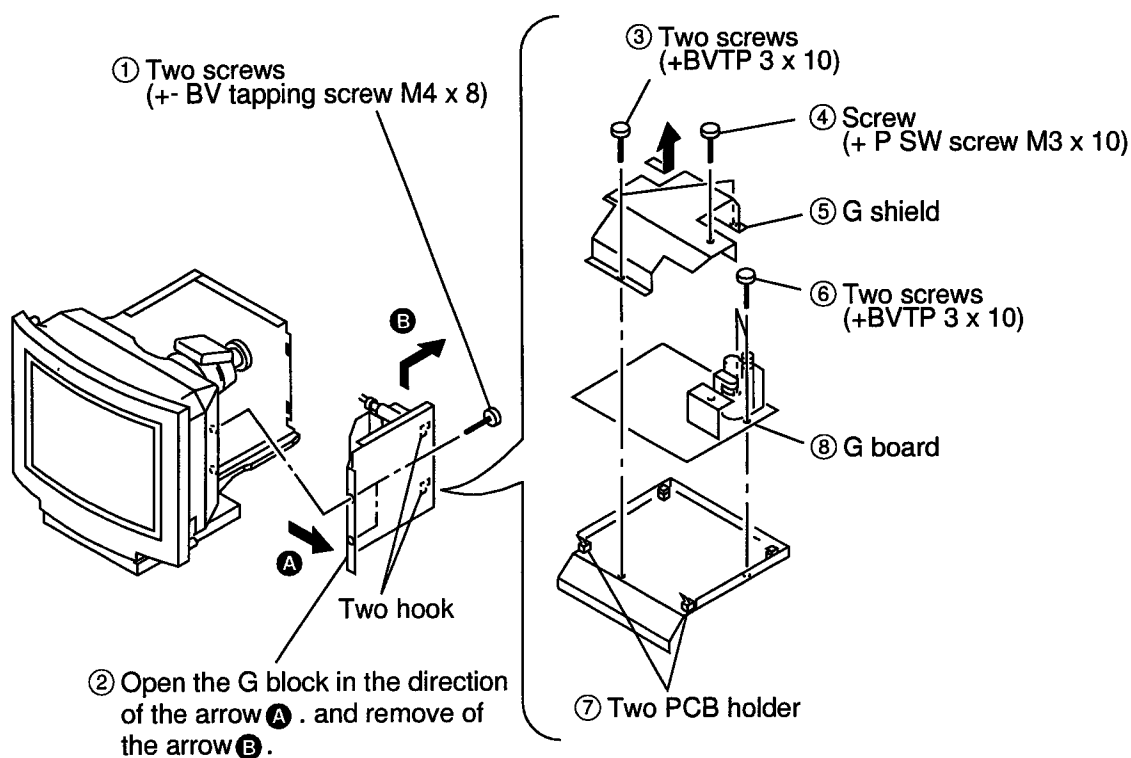
2-1. CABINET REMOVAL



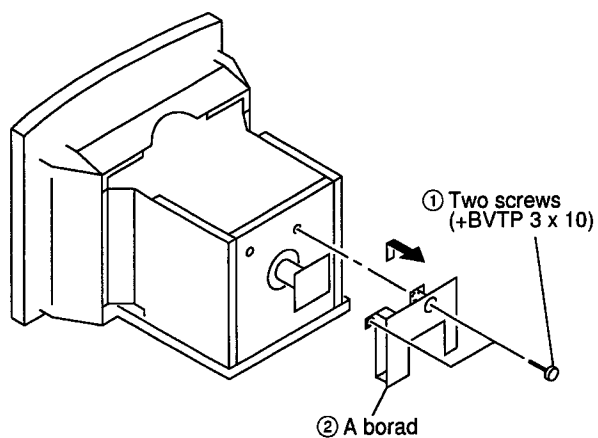
2-2. D AND M BOARDS REMOVAL



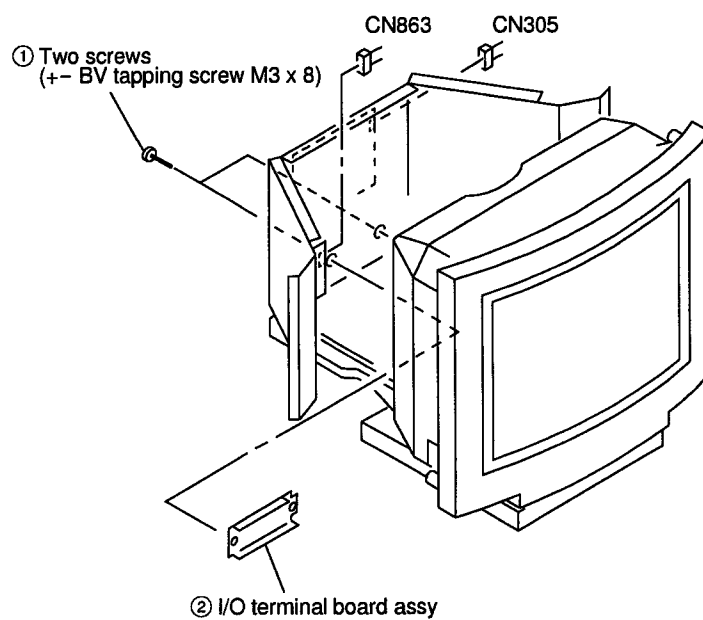
2-3. G BOARD REMOVAL



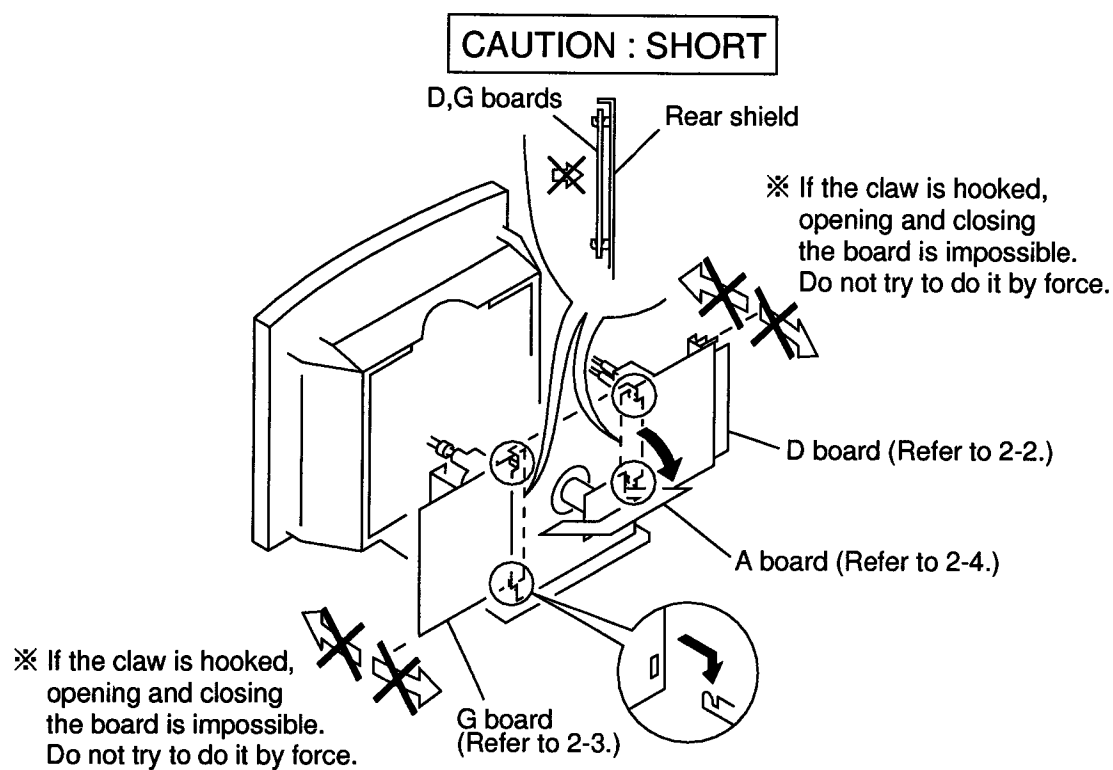
2-4. A BOARD REMOVAL



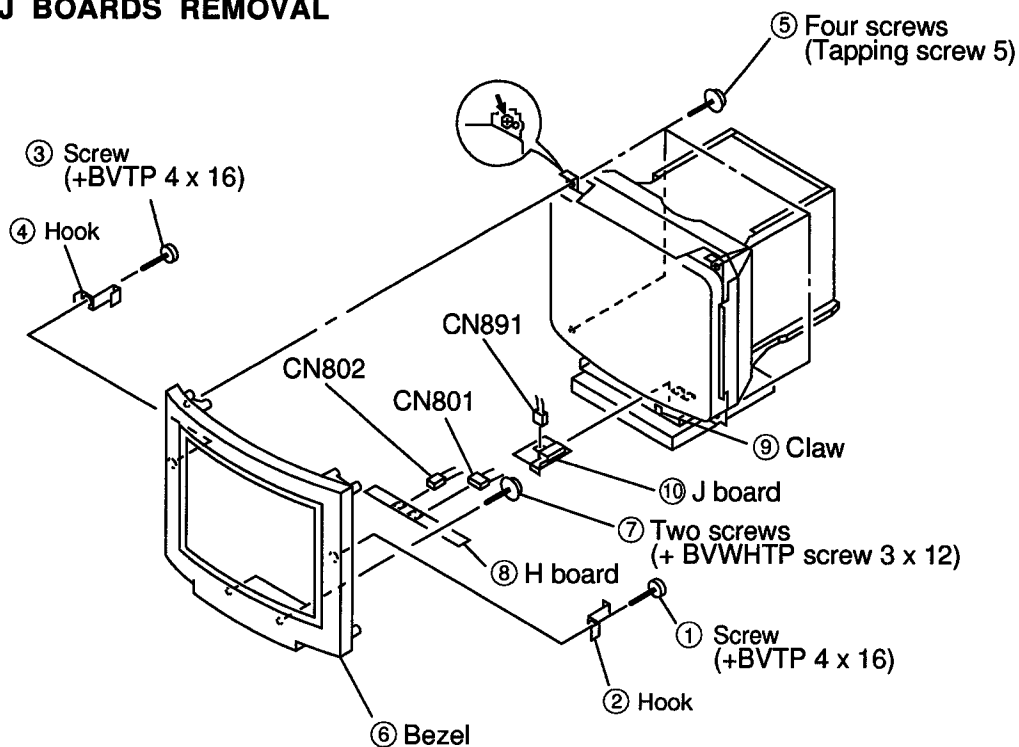
2-5. I/O TERMINAL BOARD ASSY REMOVAL



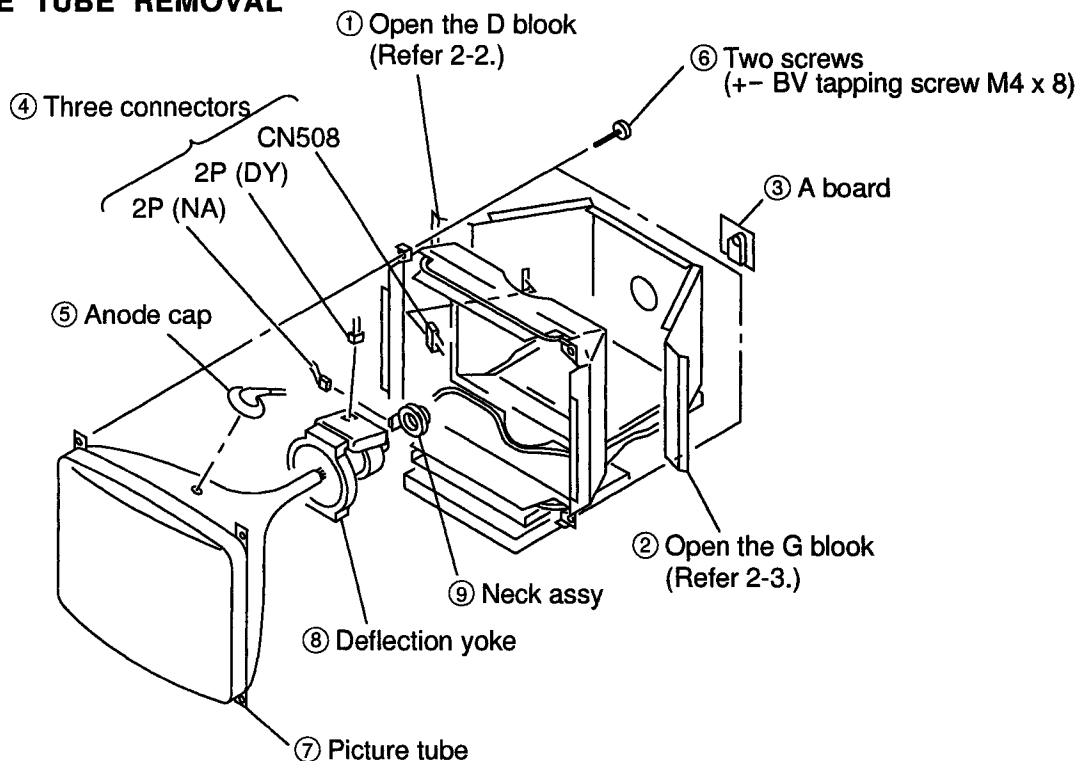
2-6. SERVICE POSITION



2-7. H, J BOARDS REMOVAL

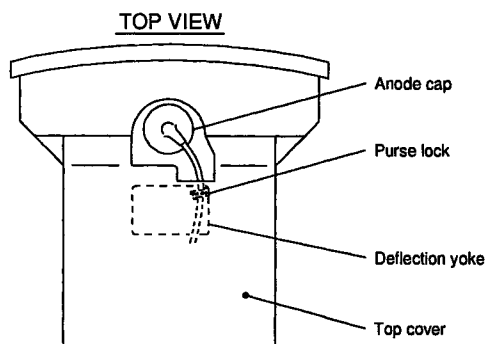


2-8. PICTURE TUBE REMOVAL



• INSTALLED POSITION OF THE ANODE-CAP

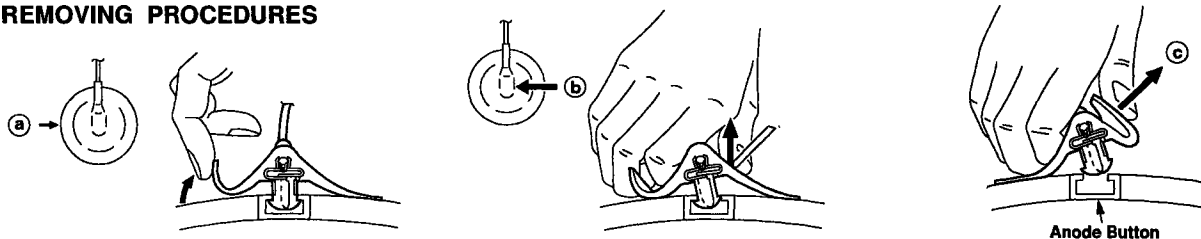
Install the anode cap as shown a figure.



• REMOVAL OF ANODE-CAP

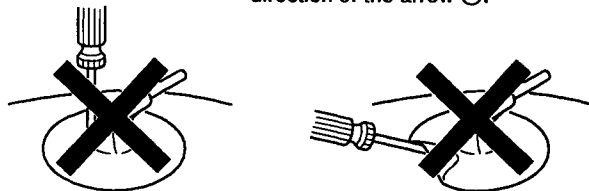
NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

• REMOVING PROCEDURES



• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material
- ② Don't press the rubber hardly not to hurt inside of anode-caps! A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.



SECTION 3

SAFETY RELATED ADJUSTMENT

When replacing or repairing the shown below table, the following operational checks must be performed as a safety precaution against X-rays emissions from the unit.

	Part Replaced (■)	
HV Regulator Circuit Check	G board	IC901 • Mounted G board
HV Hold-Down Circuit Check	G board	D935 • Mounted G board
Beam Current Protector Circuit Check-1	G board	IC901, D933, D934, R907, R908, R909, R910 • Mounted G board
Beam Current Protector Circuit Check-2	G board	R973, R974 • Mounted G board
Voltage of 3rd winding of FBT	G board	T902 (FBT) • Mounted G board

Check Condition

Input voltage : 100~120 VAC

Input signal : White dots or Cross Hatch

Controls : BRT and CONT → Minimum

B+ voltage : 175~185 VDC

a) HV Regulator Check

- 1) Confirm that the voltage of the pin ⑩ of IC901 on G board is within the voltage range shown below.
Standard: 9.00±0.10 VDC

b) HV Hold-Down Circuit Check

- 1) Using an external DC power supply, apply the voltage shown below between cathode of D916 on G board and ground, and confirm that the HV Hold-Down circuit works. (TV Raster disappears)
Check Condition: Less than 31.30 VDC

c) Beam Current Protector Circuit Check-1

- 1) Record the initial regulation value of ABL-SHUTDOWN and using a PC computer, input the "255" for maximum value of resistor.
- 2) Connect to the Constant Current Jig (A) between pin ⑪ of T902 (FBT) on G board and ground, and confirm that the Beam Current Protector Circuit works. (TV Raster disappears)
Check Condition: Less than 1.34 mA

d) Beam Current Protector Circuit Check-2

Input the initial regulation value of ABL-SHUTDOWN that was recorded c)-1).

- 1) Shorted between pin ⑪ of IC901 and ground.
- 2) Connect to the Constant Current Jig (A) between pin ⑪ of T902 (FBT) on G board and ground, and confirm that the Beam Current Protector Circuit works. (TV Raster disappears)
Check Condition: Less than 1.63 mA

e) Voltage of 3rd winding of FBT

- 1) Confirm that the voltage of the cathode of D916 on G board is within the voltage range shown below.
Standard: Less than 23.30 VDC

SECTION 4

ADJUSTMENTS

● Landing Rough Adjustment

1. Enter the full white signal. (or the full black dots signal).
2. Adjust the contrast to the maximum.
3. Make the screen monogreen.
4. Adjust the brightness is easy to see with the G2 resistor.
5. Reverse the DY, and adjust coarsely the purity magnet so that a green raster positions in the center of screen.
6. Moving the DY forward, adjust so that an entire screen becomes monogreen.
7. Adjust the tilt of DY, and fix lightly with a clamp.

● Landing Fine Adjustment

1. Put the set inside the Helmholtz coil.
2. Input the single green signal and set the CONT control to MAX.

Note: Set to $\Sigma 1k=300 \mu A$ with the signal green signal, and after aging for about 30 minutes, adjust so that it is exactly this value.

3. Demagnetize the metal part of the chassis with the hand degausser and coil degausser, and the CRT surface with the hand degausser.

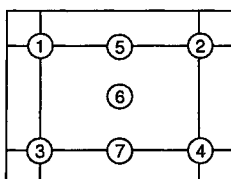
Input AC 230V to AC IN, turn on and off the power to perform auto degaussing. (Perform auto degaussing by setting "MONCONREG2"=152. Return to the original value after use.)

Demagnetize the CRT surface with the hand degausser again.

Note:

- (1) Adjust in a non-magnetic field. $BV=45uT$.
- (2) If adjusting in a magnetic fields, add the shift from the non-magnetic field in your estimation.
4. Attach the wobbling coil to the designated part of the CRT neck.
5. Attach the sensor of the landing adjustment unit on the CRT surface.
6. Adjust the DY position and purity, and the DY tilt, and landing of the center and 4 corners with the landing checker.

<Specification>



Adjust the green of corners 1 to 4, and center 6 to $\pm 5 \mu m$, and red and blue to within $\pm 7 \mu m$ of green, and the difference between red and blue to within $\pm 10 \mu m$.

Adjust the green of 5 and 7 to within $\pm 10 \mu m$, and red and blue to within $\pm 7 \mu m$ of green, and the difference between red and blue to within $\pm 10 \mu m$.

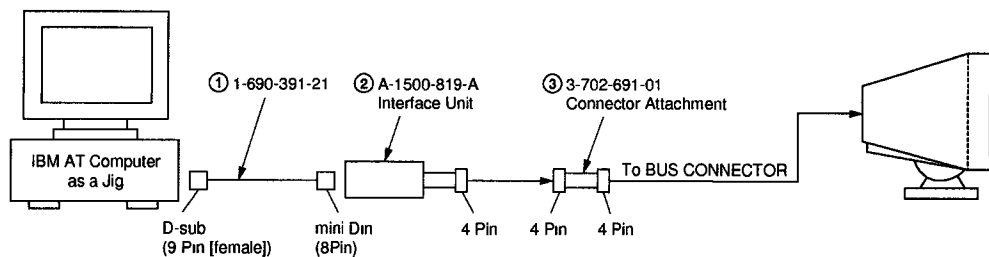
(Set each corner to 1st frame of the crosshatch.)

7. For the up/down and left/right swing, swing the DY and insert a wedge so that the up and down pins are equal at the top and bottom and the horizontal trapezoid is equal at the left and right. Insert the wedge firmly so that the DY does not shake.
8. Check the landing of each corner, and if they do not satisfy the specification, paste a Disk-Mg onto the funnel and adjust.

Note:

- (1) Do not paste more than 2 magnets to one corner.
- (2) Paste within 80 to 100 mm from the DY on the diagonal line of the magnet.
- (3) If using the magnet, be sure to demagnetize with the hand degausser and check.
9. Remove the sensor and wobbling coil.
10. Switch the signal to R.G.B., and check that each color is pure.
11. Check that the DY is not tilting, and fix the purity Mg with a white pen.

Connect the communication cable of the computer to the connector located on the D board on the monitor. Run the service software and then follow the instruction.



*The parts above (①~③) are necessary for DAS adjustment.

● Convergence Rough Adjustment

- (1) Receive an image of the white crosshatch signals (white lines on black).
- (2) Place the protrusions of the 6-fold poles magnet attached to the CRT neck upon each other.
- (3) Make rough adjustment of the H direction convergence by using H. STAT VR (left side of the video block).
- (4) Make a rough adjustment of the V direction convergence by using "V. STAT".

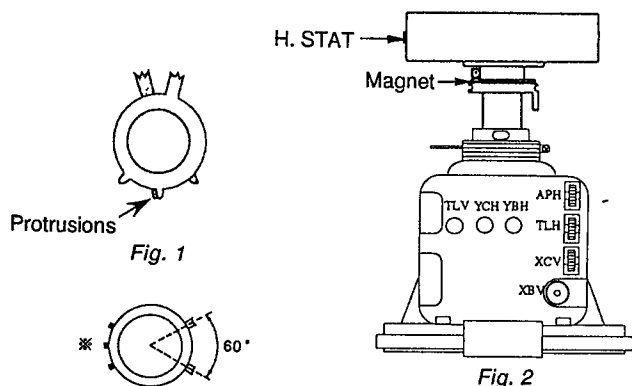
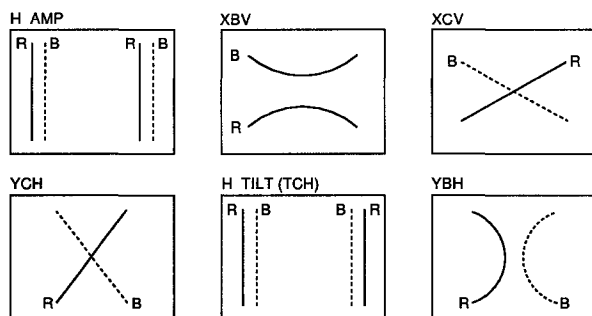


Fig. 1

Fig. 3

※ Set so that the protruding parts of the 2 magnet rings agree with each other.



● Convergence Specification

MODE	9	1, 2, 3, 4, 5, 6, 7, 8, 10
	A	0.24 mm
B	0.28 mm	0.32 mm

● White Balance Adjustment Specification

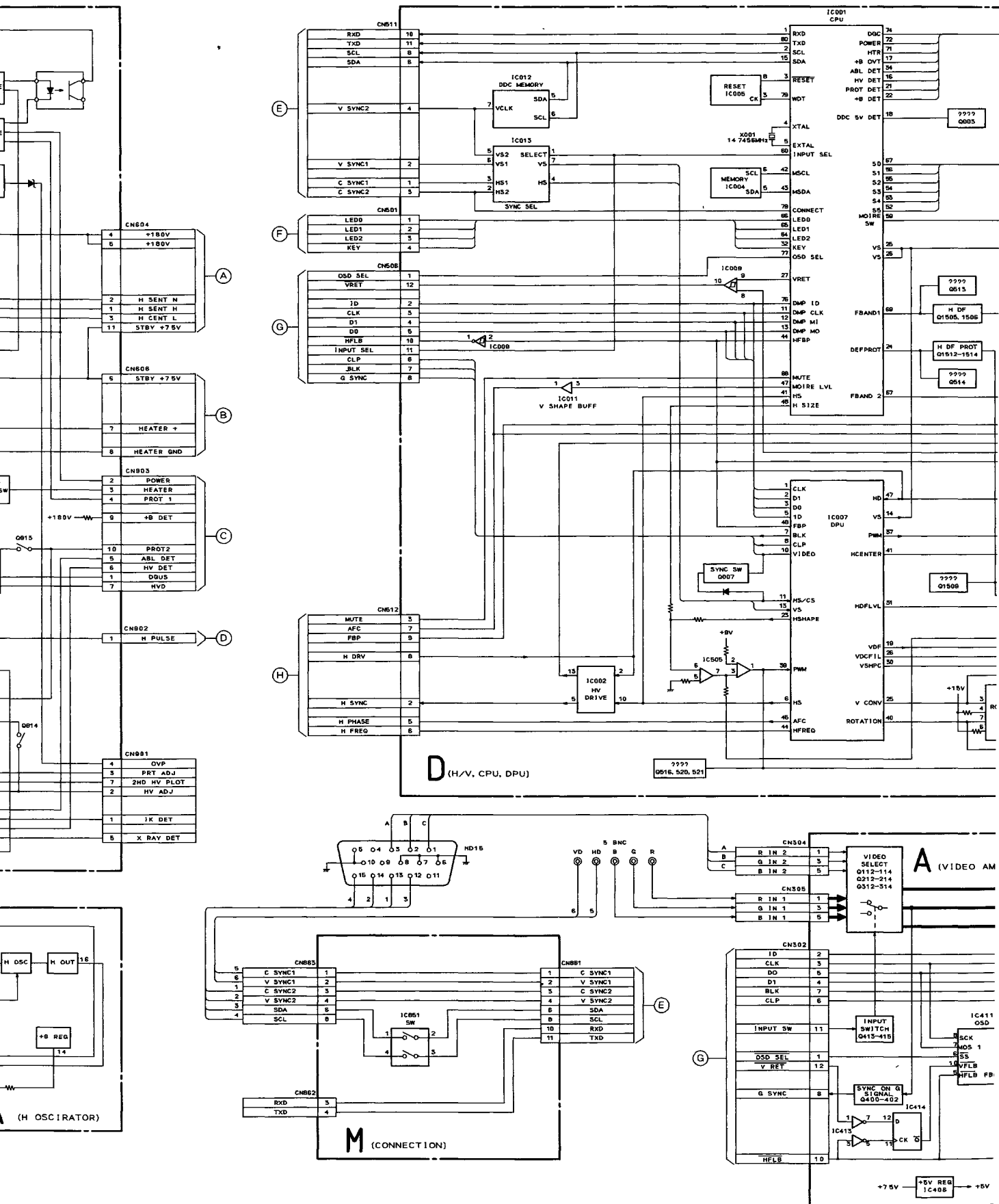
- (1) 9300K
 $x = 0.283 \pm 0.010$
 $y = 0.298 \pm 0.008$
 (All White)
- (2) 6500K
 $x = 0.313 \pm 0.010$
 $y = 0.329 \pm 0.008$
 (All White)
- (3) 5000K
 $x = 0.346 \pm 0.008$
 $y = 0.359 \pm 0.008$
 (All White)

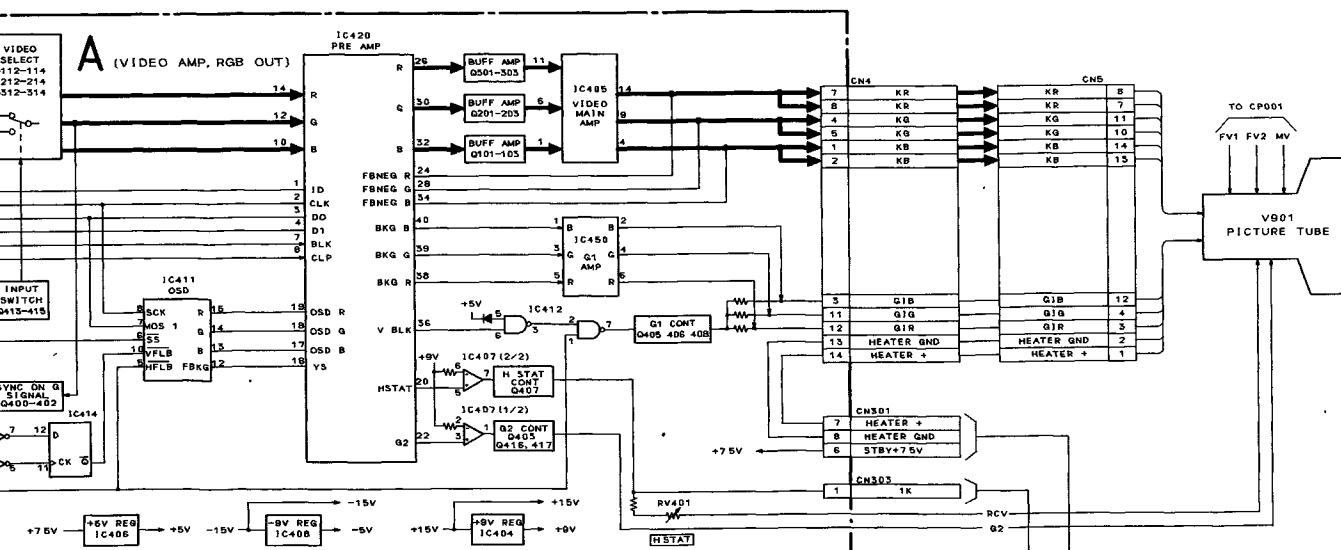
● Vertical and Horizontal Position and Size Specification

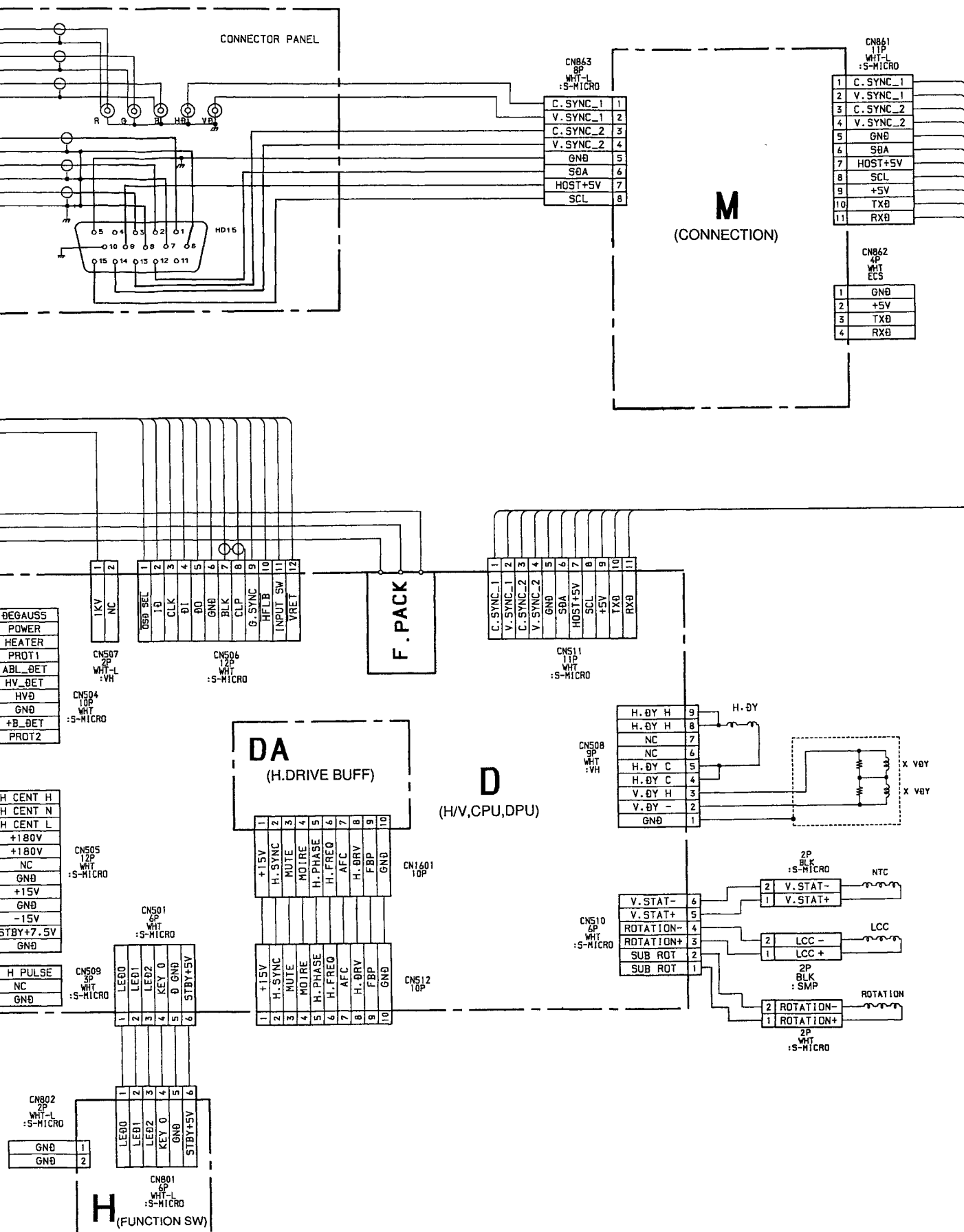
MODE	All mode
	A
B	280 mm

5-1. BLOCK DIAGRAM

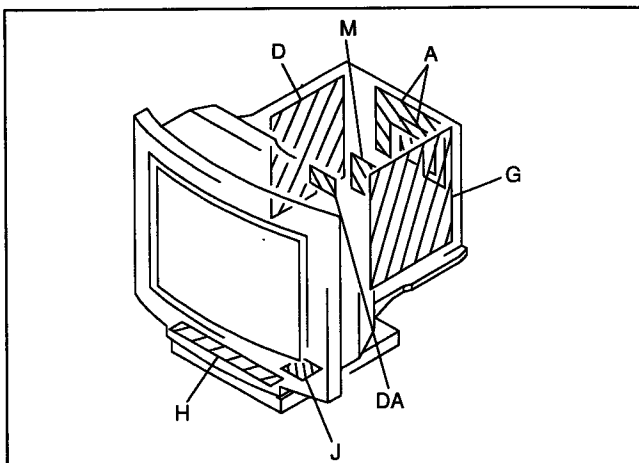








5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μF 50 V or less are not indicated except for electrolytic.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M Ω digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- * : Can not be measured.
- Circled numbers are waveform references.
- : B + bus.
- : B - bus.
- When replacing components identified by , make the necessary adjustments indicated. (See page 14)
- When replacing the part in below table, be sure to perform the related adjustment.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

	Part replaced ()	
HV Regulator Circuit Check	G board	IC901 • Mounted G board
HV Hold-Down Circuit Check	G board	D935 • Mounted G board
Beam Current Protector Circuit Check-1	G board	IC901, D933, D934, R907, R908, R909, R910 • Mounted G board
Beam Current Protector Circuit Check-2	G board	R973, R974 • Mounted G board
Voltage of 3rd winding of FBT	G board	T902 (FBT) • Mounted G board

● D BOARD SEMICONDUCTOR LOCATION

IC	(Conductor Side)	(Component Side)
IC001	A-2	C-1
IC002	A-2	C-1
IC003	A-2	C-1
IC004	A-2	C-1
IC005	A-2	C-1
IC006	A-2	C-1
IC007	A-2	C-1
IC008	A-2	C-1
IC009	A-2	C-1
IC010	A-2	C-1
IC011	A-2	C-1
IC012	A-2	C-1
IC013	A-2	C-1
IC014	A-2	C-1
IC015	A-2	C-1
IC016	A-2	C-1
IC017	A-2	C-1
IC018	A-2	C-1
IC019	A-2	C-1
IC020	A-2	C-1
IC021	A-2	C-1
IC022	A-2	C-1
IC023	A-2	C-1
IC024	A-2	C-1
IC025	A-2	C-1
IC026	A-2	C-1
IC027	A-2	C-1
IC028	A-2	C-1
IC029	A-2	C-1
IC030	A-2	C-1
IC031	A-2	C-1
IC032	A-2	C-1
IC033	A-2	C-1
IC034	A-2	C-1
IC035	A-2	C-1
IC036	A-2	C-1
IC037	A-2	C-1
IC038	A-2	C-1
IC039	A-2	C-1
IC040	A-2	C-1
IC041	A-2	C-1
IC042	A-2	C-1
IC043	A-2	C-1
IC044	A-2	C-1
IC045	A-2	C-1
IC046	A-2	C-1
IC047	A-2	C-1
IC048	A-2	C-1
IC049	A-2	C-1
IC050	A-2	C-1
IC051	A-2	C-1
IC052	A-2	C-1
IC053	A-2	C-1
IC054	A-2	C-1
IC055	A-2	C-1
IC056	A-2	C-1
IC057	A-2	C-1
IC058	A-2	C-1
IC059	A-2	C-1
IC060	A-2	C-1
IC061	A-2	C-1
IC062	A-2	C-1
IC063	A-2	C-1
IC064	A-2	C-1
IC065	A-2	C-1
IC066	A-2	C-1
IC067	A-2	C-1
IC068	A-2	C-1
IC069	A-2	C-1
IC070	A-2	C-1
IC071	A-2	C-1
IC072	A-2	C-1
IC073	A-2	C-1
IC074	A-2	C-1
IC075	A-2	C-1
IC076	A-2	C-1
IC077	A-2	C-1
IC078	A-2	C-1
IC079	A-2	C-1
IC080	A-2	C-1
IC081	A-2	C-1
IC082	A-2	C-1
IC083	A-2	C-1
IC084	A-2	C-1
IC085	A-2	C-1
IC086	A-2	C-1
IC087	A-2	C-1
IC088	A-2	C-1
IC089	A-2	C-1
IC090	A-2	C-1
IC091	A-2	C-1
IC092	A-2	C-1
IC093	A-2	C-1
IC094	A-2	C-1
IC095	A-2	C-1
IC096	A-2	C-1
IC097	A-2	C-1
IC098	A-2	C-1
IC099	A-2	C-1
IC100	A-2	C-1

TRANSISTOR

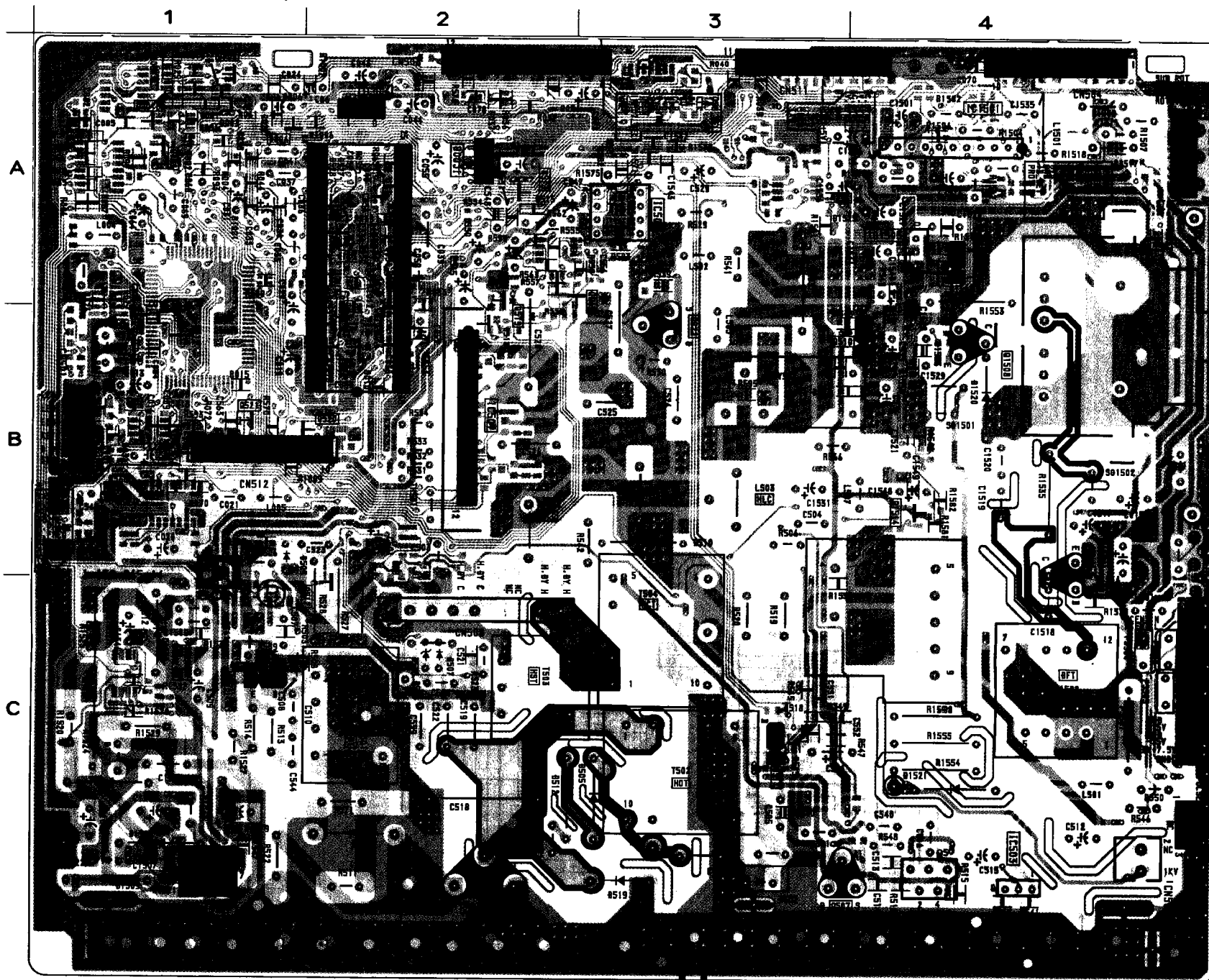
Q	(Conductor Side)	(Component Side)
Q001	A-1	B-1
Q002	A-1	B-1
Q003	A-1	B-1
Q004	A-1	B-1
Q005	A-1	B-1
Q006	A-1	B-1
Q007	A-1	B-1
Q008	A-1	B-1
Q009	A-1	B-1
Q010	A-1	B-1
Q011	A-1	B-1
Q012	A-1	B-1
Q013	A-1	B-1
Q014	A-1	B-1
Q015	A-1	B-1
Q016	A-1	B-1
Q017	A-1	B-1
Q018	A-1	B-1
Q019	A-1	B-1
Q020	A-1	B-1
Q021	A-1	B-1
Q022	A-1	B-1
Q023	A-1	B-1
Q024	A-1	B-1
Q025	A-1	B-1
Q026	A-1	B-1
Q027	A-1	B-1
Q028	A-1	B-1
Q029	A-1	B-1
Q030	A-1	B-1
Q031	A-1	B-1
Q032	A-1	B-1
Q033	A-1	B-1
Q034	A-1	B-1
Q035	A-1	B-1
Q036	A-1	B-1
Q037	A-1	B-1
Q038	A-1	B-1
Q039	A-1	B-1
Q040	A-1	B-1
Q041	A-1	B-1
Q042	A-1	B-1
Q043	A-1	B-1
Q044	A-1	B-1
Q045	A-1	B-1
Q046	A-1	B-1
Q047	A-1	B-1
Q048	A-1	B-1
Q049	A-1	B-1
Q050	A-1	B-1
Q051	A-1	B-1
Q052	A-1	B-1
Q053	A-1	B-1
Q054	A-1	B-1
Q055	A-1	B-1
Q056	A-1	B-1
Q057	A-1	B-1
Q058	A-1	B-1
Q059	A-1	B-1
Q060	A-1	B-1
Q061	A-1	B-1
Q062	A-1	B-1
Q063	A-1	B-1
Q064	A-1	B-1
Q065	A-1	B-1
Q066	A-1	B-1
Q067	A-1	B-1
Q068	A-1	B-1
Q069	A-1	B-1
Q070	A-1	B-1
Q071	A-1	B-1
Q072	A-1	B-1
Q073	A-1	B-1
Q074	A-1	B-1
Q075	A-1	B-1
Q076	A-1	B-1
Q077	A-1	B-1
Q078	A-1	B-1
Q079	A-1	B-1
Q080	A-1	B-1
Q081	A-1	B-1
Q082	A-1	B-1
Q083	A-1	B-1
Q084	A-1	B-1
Q085	A-1	B-1
Q086	A-1	B-1
Q087	A-1	B-1
Q088	A-1	B-1
Q089	A-1	B-1
Q090	A-1	B-1
Q091	A-1	B-1
Q092	A-1	B-1
Q093	A-1	B-1
Q094	A-1	B-1
Q095	A-1	B-1
Q096	A-1	B-1
Q097	A-1	B-1
Q098	A-1	B-1
Q099	A-1	B-1
Q100	A-1	B-1

DIODE

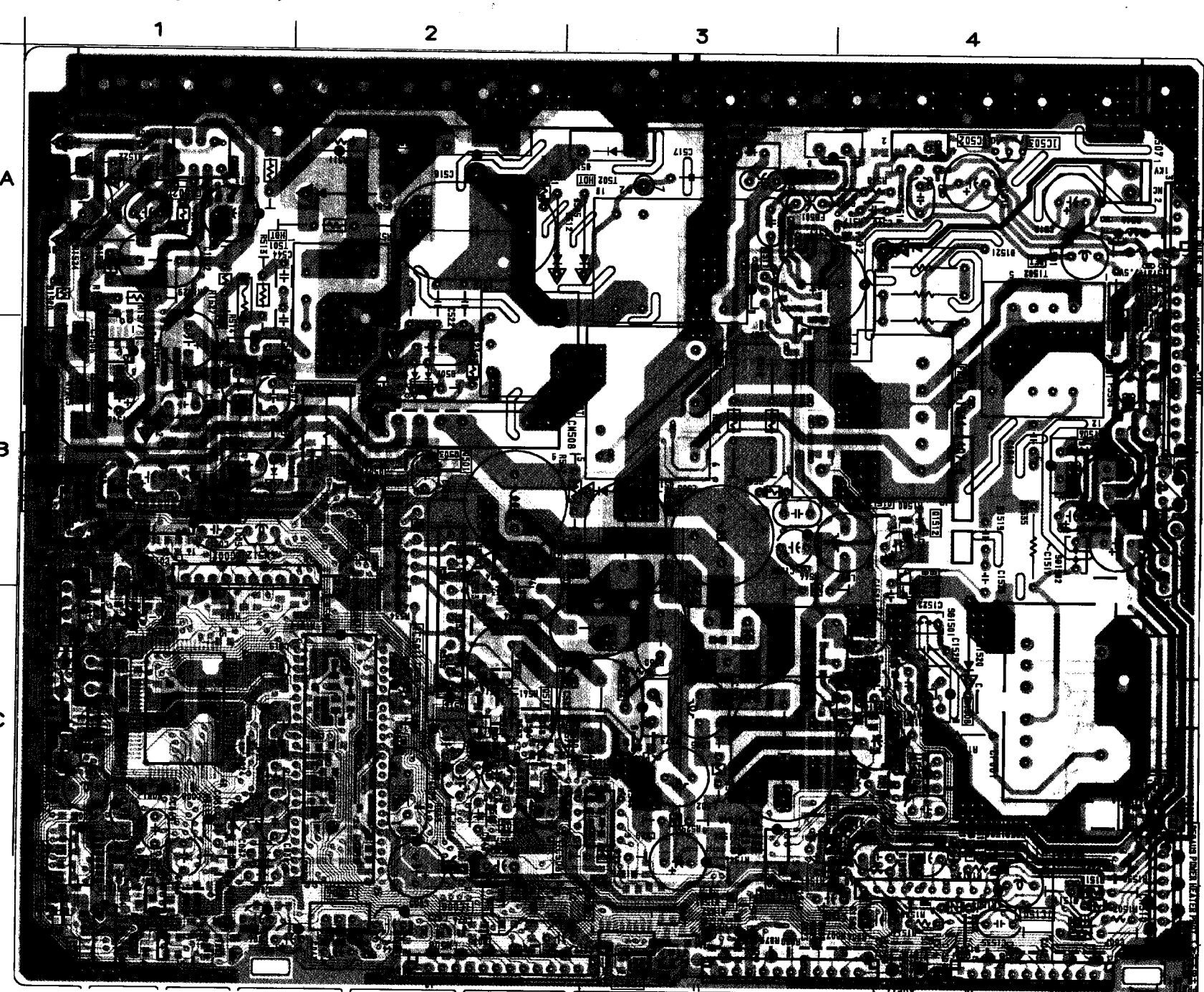
D	(Conductor Side)	(Component Side)
D001	A-1	B-1
D002	A-1	B-1
D003	A-1	B-1
D004	A-1	B-1
D005	A-1	B-1
D006	A-1	B-1
D007	A-1	B-1
D008	A-1	B-1
D009	A-1	B-1
D010	A-1	B-1
D011	A-1	B-1
D012	A-1	B-1
D013	A-1	B-1
D014	A-1	B-1
D015	A-1	B-1
D016	A-1	B-1
D017	A-1	B-1
D018	A-1	B-1
D019	A-1	B-1
D020	A-1	B-1
D021	A-1	B-1
D022	A-1	B-1
D023	A-1	B-1
D024	A-1	B-1
D025	A-1	B-1
D026	A-1	B-1
D027	A-1	B-1
D028	A-1	B-1
D029	A-1	B-1
D030	A-1	B-1
D031	A-1	B-1
D032	A-1	B-1
D033	A-1	B-1
D034	A-1	B-1
D035	A-1	B-1
D036	A-1	B-1
D037	A-1	B-1
D038	A-1	B-1
D039	A-1	B-1
D040	A-1	B-1
D041	A-1	B-1
D042	A-1	B-1
D043	A-1	B-1
D044	A-1	B-1
D045	A-1	B-1
D046	A-1	B-1
D047	A-1	B-1
D048	A-1	B-1
D049	A-1	B-1
D050	A-1	B-1
D051	A-1	B-1
D052	A-1	B-1
D053	A-1	B-1
D054	A-1	B-1
D055	A-1	B-1
D056	A-1	B-1
D057	A-1	B-1
D058	A-1	B-1
D059	A-1	B-1
D060	A-1	B-1
D061	A-1	B-1
D062	A-1	B-1
D063	A-1	B-1
D064	A-1	B-1
D065	A-1	B-1
D066	A-1	B-1
D067	A-1	B-1
D068	A-1	B-1
D069	A-1	B-1
D070	A-1	B-1
D071	A-1	B-1
D072	A-1	B-1
D073	A-1	B-1
D074	A-1	B-1
D075	A-1	B-1
D076	A-1	B-1
D077	A-1	B-1
D078	A-1	B-1
D079	A-1	B-1
D080	A-1	B-1
D081	A-1	B-1
D082	A-1	B-1
D083	A-1	B-1
D084	A-1	B-1
D085	A-1	B-1
D086	A-1	B-1
D087	A-1	B-1
D088	A-1	B-1
D089	A-1	B-1
D090	A-1	B-1
D091	A-1	B-1
D092	A-1	B-1
D093	A-1	B-1
D094	A-1	B-1
D095	A-1	B-1
D096	A-1	B-1
D097	A-1	B-1
D098	A-1	B-1
D099	A-1	B-1
D100	A-1	B-1

CRYSTAL

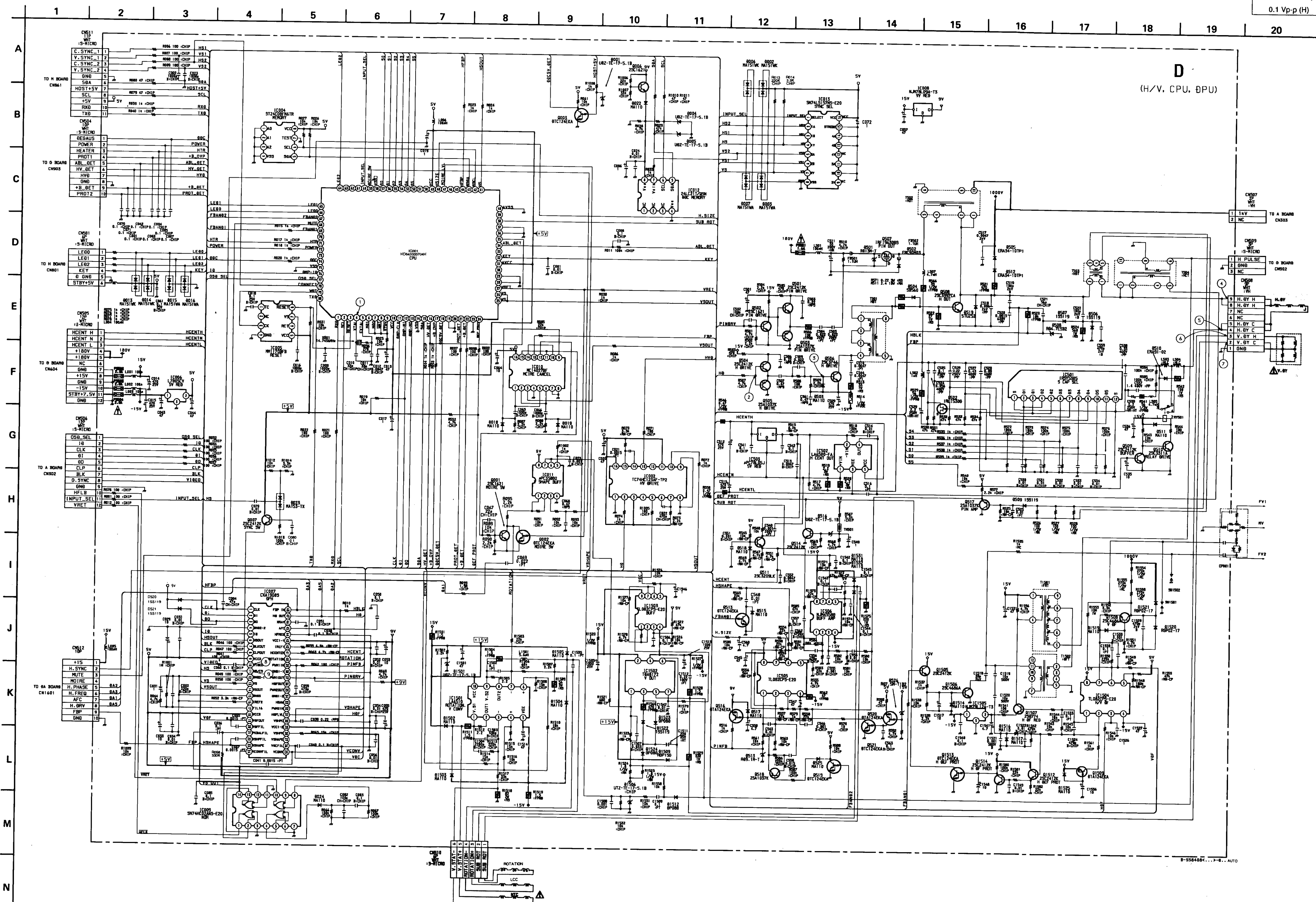
X	(Conductor Side)	(Component Side)
X001	B-1	C-1



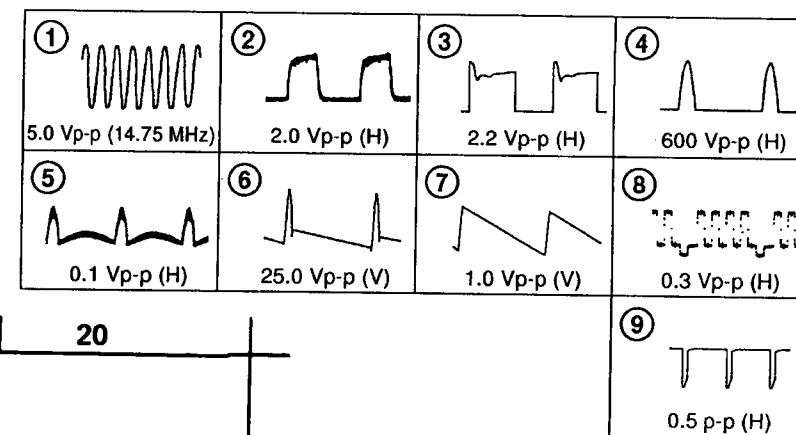
— D BOARD (Component Side) —



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

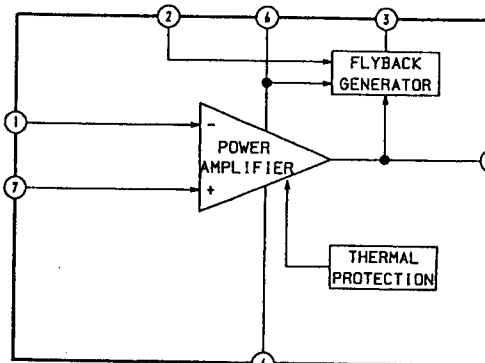


● D BOARD WAVEFORMS



● D BOARD

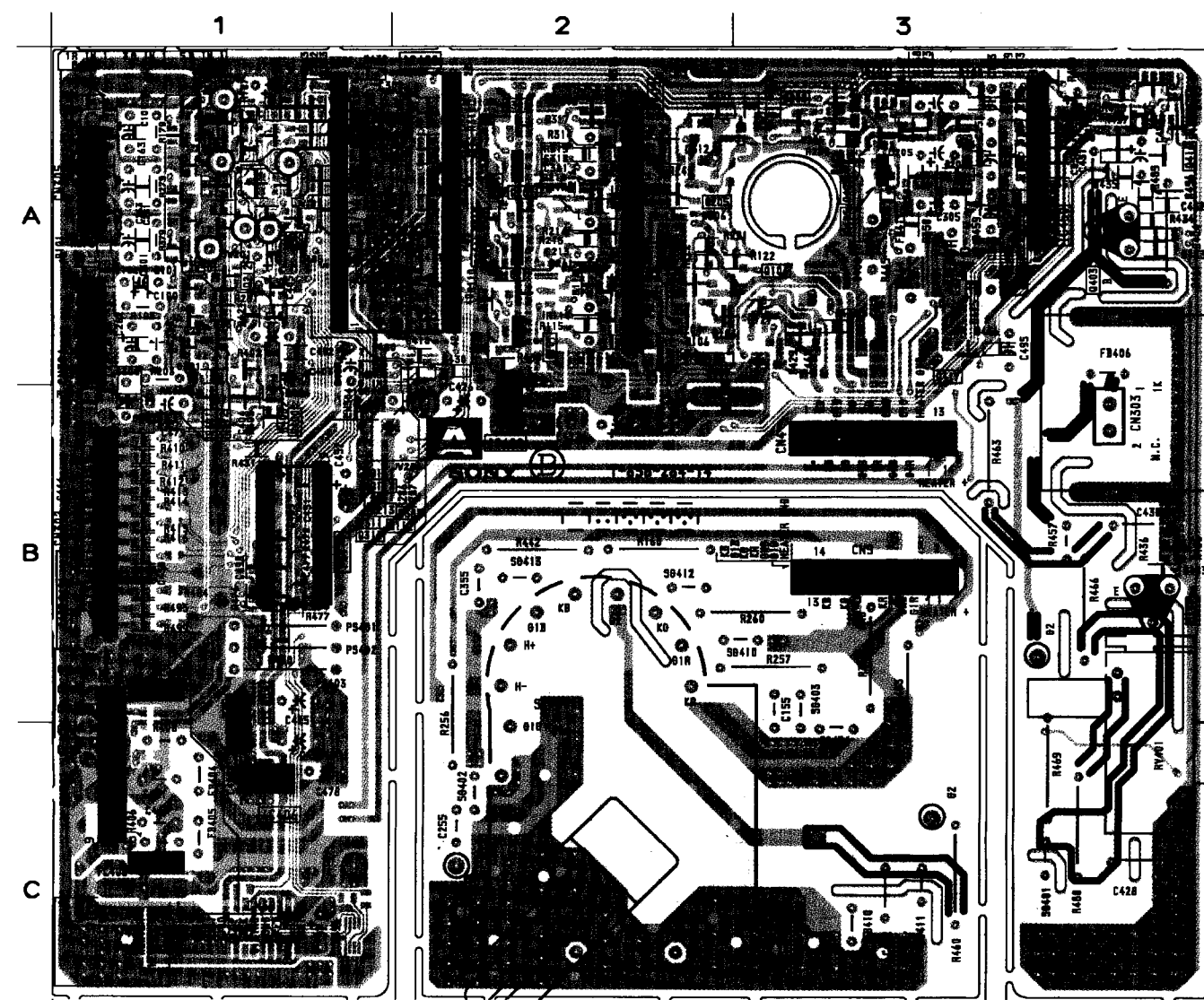
IC1502 TDA8172



● D BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	
IC001	2	3.9	31	2.6					
	3	5.0	37	4.8					
	4	4.8	39	4.8					
	5	5.0	40	3.0	IC1504	*1	-1	2	
	6	5.0	42	2.7					
	7	5.0	44	2.7					
	8	5.0	45	2.4					
	9	5.0	45	2.5					
	10	5.0	46	0.7					
	11	5.0	47	2.6	OO01	B	0	0	
	12	5.0	48	0					
	13	5.0	49	0					
	15	4.2				OO02	B	0	
	16	4.2							
	17	3.6							
	18	5.0				OO03	B	0	
	21	0							
	22	4.6				OO06	B	0	
	24	5.0							
	25	0.2							
	26	0.2							
	27	0							
	30	0							
	IC009	1	5.1	1	2.6				
		33	0	6	2.6	OO07	B	0	
		34	2.8	10	2.6	OO01	B	11	
		35	4.3	11	2.5				
		38	2.3	12	0	OO02	B	11	
		41	0.7	13	-1.5				
		42	5.1	14	2.6	OO03	B	11	
		43	5.0	15	2.5				
		44	0						
46		0							
48		2.6							
50		5.0							
53		0.2							
54		5.0							
55		0							
IC010		1	1	0					
	2	1	0						
	3	0							
	4	1.9							
	6	1.9							
	7	0.3							
	IC012	5	0						
		6	3.0						
		7	0.3						
		IC013	1	5.0	0				
			2	0					
			3	1.8					
			4	3.1					
			5	0					
			6	0					
			7	0					
8			4.8						
9			4.8						
10			4.9						
11			4.9						
12			4.8						
13			4.8						
14	4.8								
15	4.8								
IC015	2		5.0						
	3	0							
	4	0							
	5	13.2							
	6	13.2							
	7	0							
	8	0							
	9	12.4							
	10	11							
	IC017	1	4.8						
		2	1.2						
		3	4.1						
		4	3.3						
		5	0.7						
		6	0.7						
		7	0.7						
8		0.7							
9		0.7							
10		0.7							
11		0.7							
12		0.8							
13		0.8							
14		0							
15		0							
IC002		2	2.6						
	4	4.2							
	5	0.3							
	6	0							
	7	4.9							
	10	0.7							
	11	0.7							
	12	0.8							
	13	0.8							
	14	0							
	15	0							
	IC005	1	0						
		2	5.0						
		3	0						
		7	1.6						
		8	0						
IC006		1	0						
		2	5.0						
		3	5.0						
		4	5.0						
		5	5.0						
		6	5.0						
		7	5.0						
		8	5.0						
		9	5.0						
		10	5.0						
		11	5.0						
	12	5.0							
	13	5.0							
	14	5.0							
	15	5.0							
	IC007	1	5.0						
2		5.0							
3		5.0							
4		5.0							
5		5.0							
6		5.0							
7		5.0							
8		5.0							
9		5.0							
10		5.0							
11		5.0							
12		5.0							
13		5.0							
14		5.0							
15		5.0							
IC008		1	5.1						
	2	5.1							
	3	0							
	7	1.6							
	8	0							
	IC009	1	0						
		2	5.0						
		3	0						
		7	1.6						
		8	0						
		IC010	1	0					
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC011	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC012				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC013			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC014		1	0				
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC015	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC016				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC017			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC018		1	0				
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC019	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC020				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC021			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC022		1	0				
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC023	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC024				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC025			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC026		1	0				
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC027	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC028				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC029			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC030		1	0				
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC031	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC032				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC033			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC034		1	0				
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC035	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC036				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC037			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC038		1	0				
			2	5.0					
			3	0					
			7	1.6					
			8	0					
			IC039	1	0				
2				5.0					
3				0					
7				1.6					
8				0					
IC040				1	0				
	2			5.0					
	3			0					
	7			1.6					
	8			0					
	IC041			1	0				
		2		5.0					
		3		0					
		7		1.6					
		8		0					
		IC042		1	0				
			2	5.0					
			3	0					
			7	1.6					

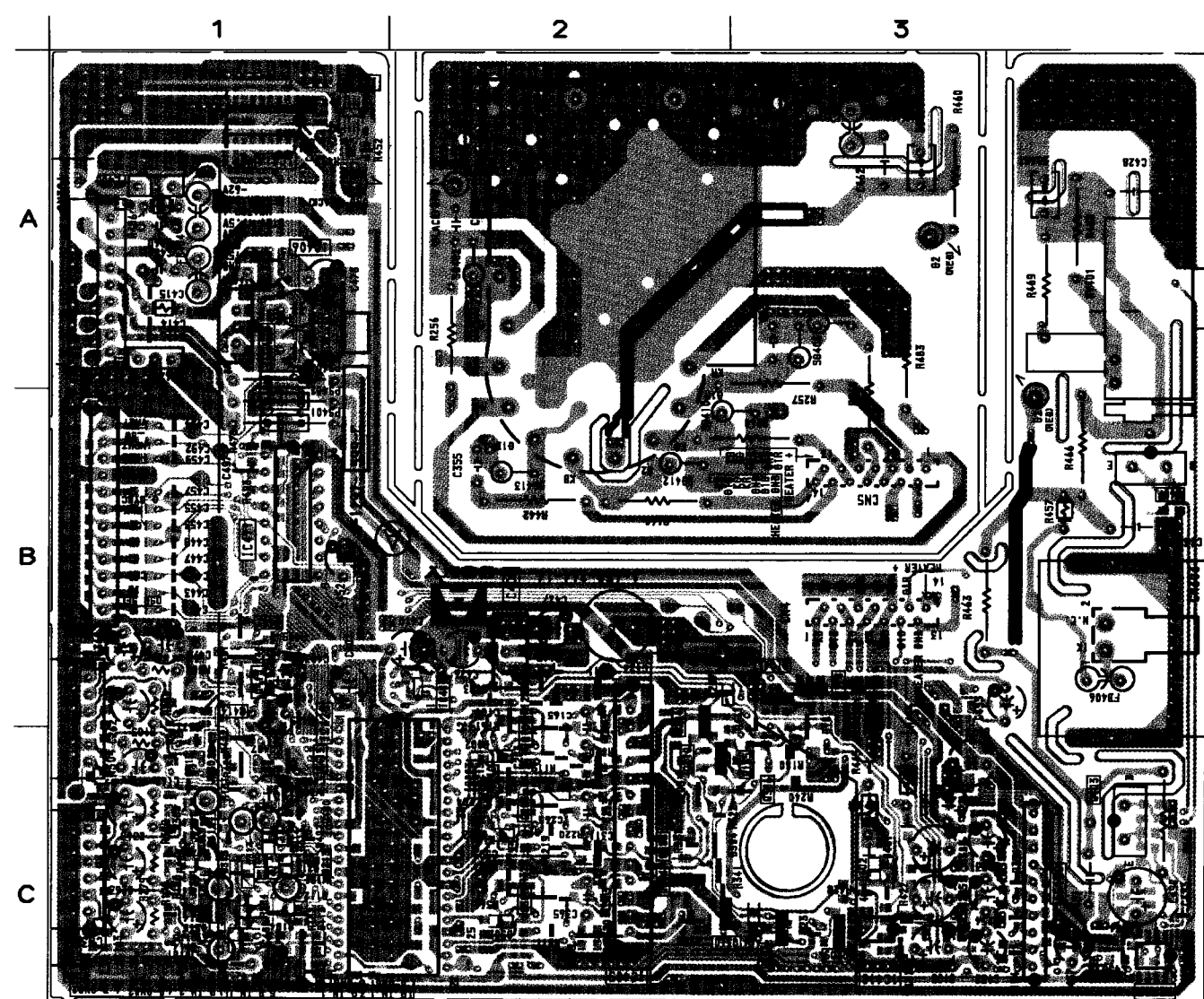
(2) Schematic Diagram of A Board
— A BOARD (Conductor Side) —



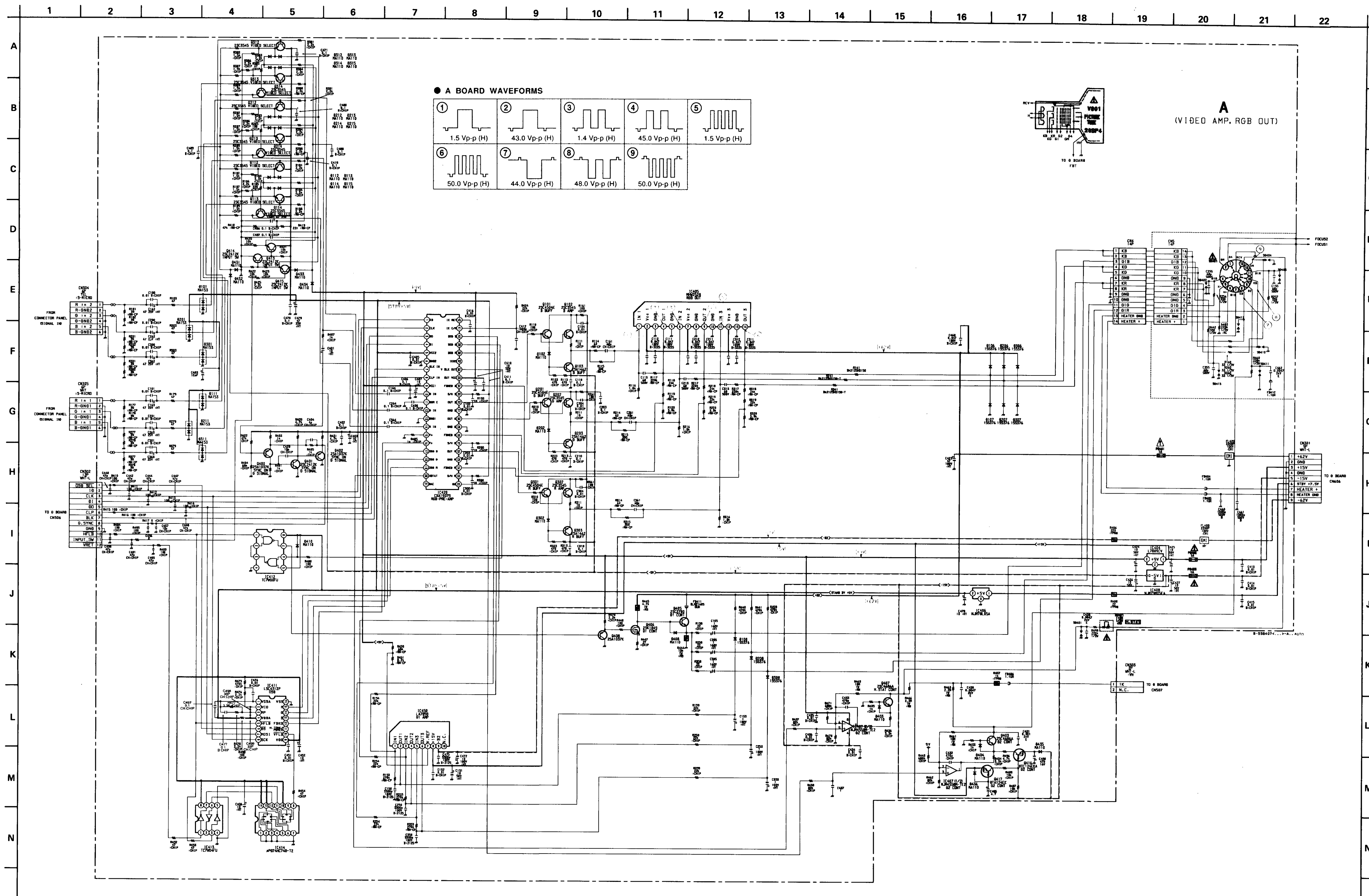
● A BOARD SEMICONDUCTOR LOCATION

IC			TRANSISTOR			DIODE			VARIABLE RESISTOR		
(Conductor)	(Component)		(Conductor)	(Component)		(Conductor)	(Component)		(Conductor)	(Component)	
IC404	B-1	A-1	Q101	A-2		D101	A-1	C-1	RV401	C-3	A-3
IC405	A-2	C-2	Q102	A-2		D102	A-2	C-2			
IC406	C-1	A-1	Q103		B-2	D106	A-2	C-2			
IC407	C-3		Q112	A-1		D107	A-2				
IC408	B-2	C-2	Q113	A-1		D108	A-3				
IC411	B-1	A-1	Q114	A-1		D111	A-1				
IC412	C-2		Q201	A-2		D112	C-1				
IC413	A-1		Q202	A-2	C-2	D113	C-1				
IC414	A-1		Q203			D114	C-1				
IC420	A-2	C-1	Q212	A-1		D115	C-1				
IC450	A-3	C-3	Q213	A-1		D201	A-1	C-2			
			Q214	A-1		D202					
			Q301	A-2		D206	A-2				
			Q302	A-2		D207	B-2				
			Q303		C-2	D208	A-3				

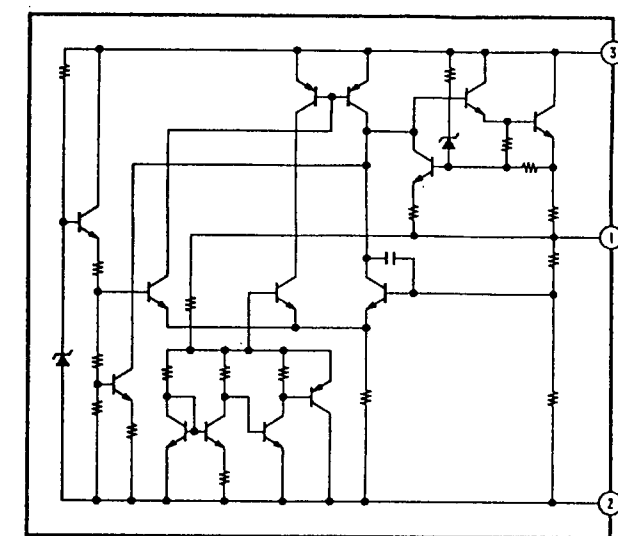
— A BOARD (Component Side) —



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



● A BOARD
IC406 NJM78L05A



● A BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC405	1	1.6	5	1.0	
	6	1.6	6	-40.4	
	9	34.2	7	1.0	
	11	1.6	Q101	B	2.8
	14	32.8		C	8.0
				E	2.2
IC407	1	-1.4			
	2	3.4	Q102	B	2.8
	3	3.4		C	8.0
	5	3.1		E	2.1
	6	3.1	Q103	B	1.4
	7	-1.6		E	2.1
IC411	2	1.4			
	3	1.4	Q201	B	2.9
	5	4.8		C	7.9
	6	5.0		E	2.2
	7	5.0			
	8	5.0	Q202	B	2.9
	10	5.1		C	7.9
	12	0.3		E	2.2
	13	0	Q203	B	1.5
	14	0		E	2.2
	15	0			
IC412	1	4.8	Q301	B	3.0
	2	4.3		C	7.9
	3	4.3		E	2.4
	6	0.7	Q302	B	3.0
	7	0.9		C	2.3
				E	7.9
IC420	1	5.0			
	2	5.0	Q303	B	1.6
	3	5.0		C	2.3
	4	5.0		E	2.3
	7	1.2	Q400	B	3.1
	8	0.7		C	0.7
	10	3.4		E	3.7
	11	5.0	Q401	B	0.7
	12	3.3		C	2.3
	14	3.4	Q402	B	2.3
	15	0		E	2.9
	16	0.3			
	17	0	Q403	B	0
	18	0		C	37.0
	19	0		E	0.6
	20	3.1			
	22	3.4	Q405	B	53.2
	23	6.6		E	53.1
	24	2.6			
	26	3.0	Q406	D	53.2
	27	6.5		G	1.5
	28	2.7		S	0.2
	30	2.9			
	32	2.8	Q407	B	0
	33	6.5		C	289.0
	34	2.7		E	-0.6
	36	0.7	Q408	B	0.9
	37	0.2		E	1.5
	38	4.4			
	39	4.4	Q416	B	-14.9
	40	4.3		C	-0.6
	41	0			
	42	1.8	SK401	KR	34.0
				KG	35.0
IC450	1	1.0		KB	35.0
	2	-38.8		G2	320.0
	3	1.1		H+	7.0
	4	-40.1			

(3) Schematic Diagram of G Board

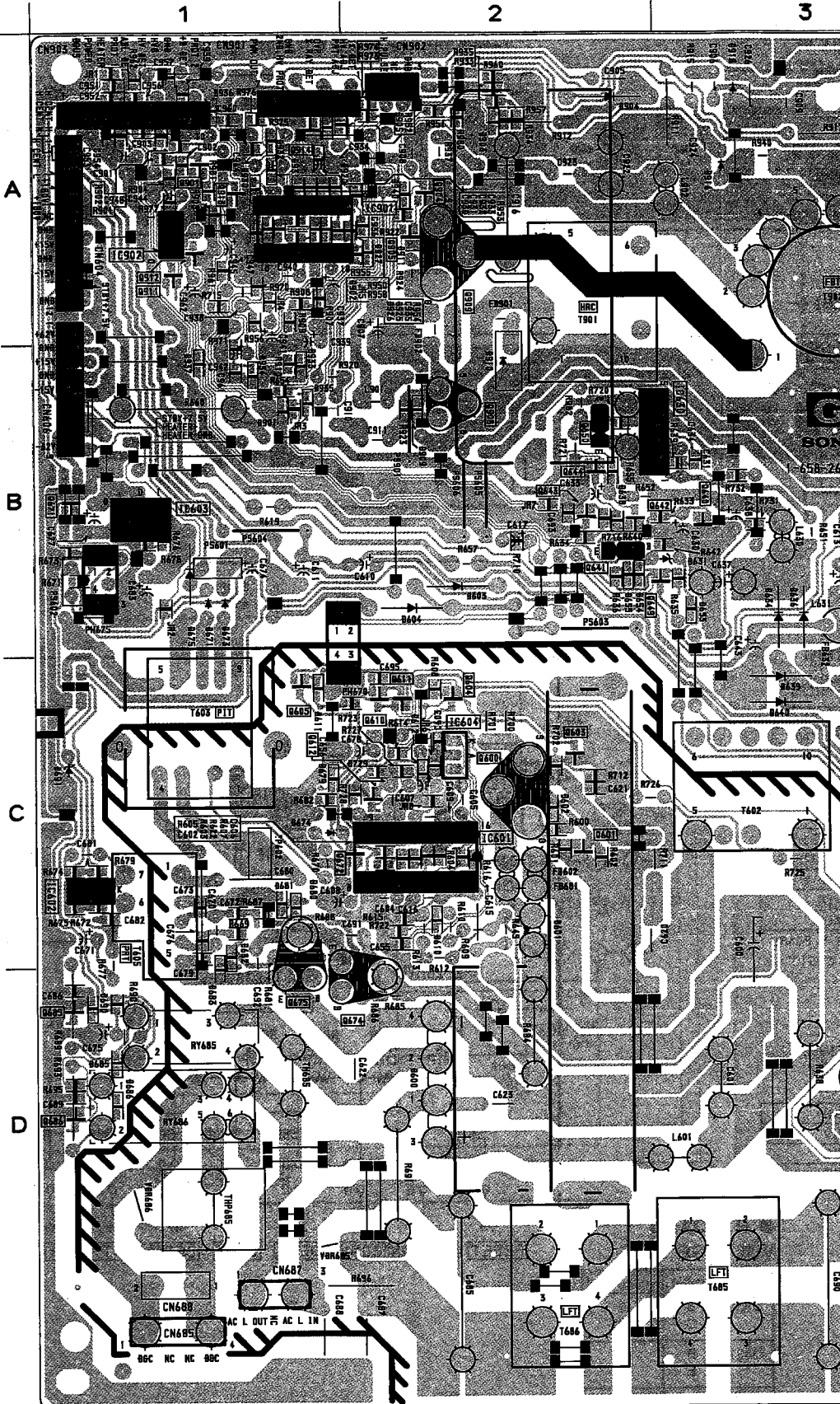
— G BOARD —

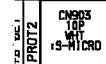


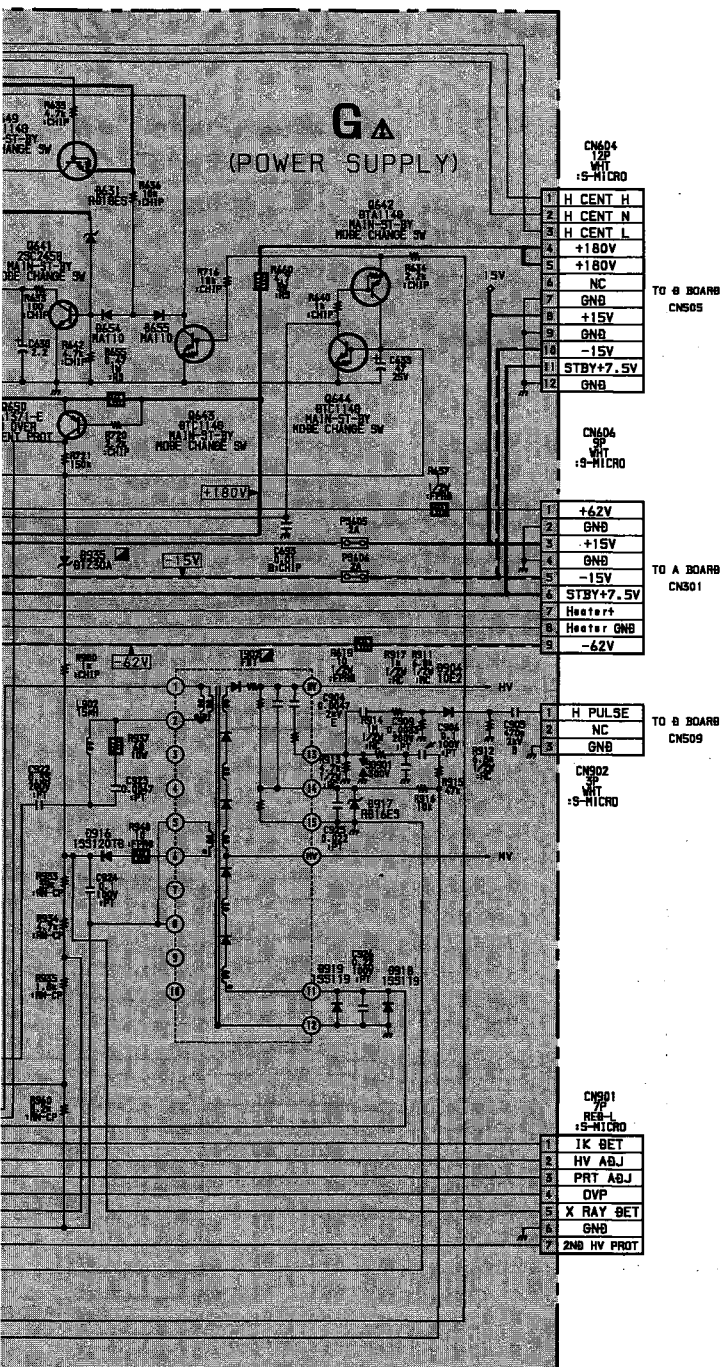
[POWER SUPPLY]

● G BOARD
SEMICONDUCTOR LOCATION

IC		
IC601	C-2	D611 C-1
IC602	C-1	D612 C-2
IC603	B-1	D631 B-3
IC604	C-2	D634 B-3
IC630	B-3	D635 D-3
IC901	A-2	D636 B-3
IC902	A-1	D637 D-3
TRANSISTOR		D638 B-2
Q600	C-2	D639 C-3
Q601	C-2	D640 C-3
Q602	D-3	D642 B-3
Q603	C-2	D648 D-3
Q604	C-2	D650 D-3
Q605	C-1	D651 B-3
Q606	D-3	D653 B-3
Q610	C-2	D654 B-2
Q611	C-2	D655 B-2
Q612	C-2	D671 B-1
Q640	B-3	D673 B-1
Q641	B-2	D674 C-1
Q642	B-2	D675 B-1
Q643	B-2	D679 C-1
Q644	B-2	D680 C-1
Q645	D-3	D681 C-1
Q647	D-3	D682 C-1
Q649	B-2	D683 C-1
Q650	B-2	D684 D-3
Q671	B-1	D685 D-1
Q672	C-1	D686 D-1
Q674	D-2	D690 D-1
Q675	C-1	D691 D-1
Q685	D-1	D901 B-1
Q686	D-1	D902 A-2
Q901	A-1	D903 A-2
Q904	A-2	D904 A-2
Q905	A-2	D905 A-2
Q908	B-2	D909 B-2
Q909	A-2	D910 B-2
Q911	A-1	D911 A-2
Q912	A-1	D916 A-3
Q913	A-1	D917 A-3
Q914	A-1	D918 A-3
DIODE		D919 B-3
D600	D-2	D920 A-1
D601	C-2	D925 A-2
D602	C-2	D926 A-2
D603	B-2	D927 A-2
D604	B-2	D930 A-1
D605	B-3	D931 A-1
D610	C-2	D932 A-1
		D933 B-1
		D934 B-1
		D935 B-1
		D936 A-1
		D937 B-1
		D940 A-2







● G BOARD VOLTAGE LIST

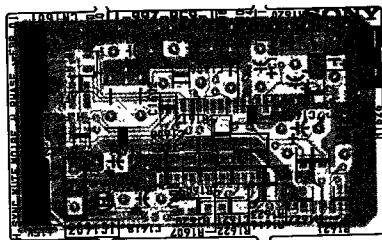
Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC601	1	2.6		C	0	Q649	E	0
	2	2.6		E	3.1		B	15.4
	3	2.6					C	16.1
	4	0.5	Q602	B	1.3		E	16.2
	5	1.6		C	-1.4			
	6	3.4		E	2.0			
	7	0	Q603	B	0	Q650	B	181.1
	8	12.0		C	4.9		C	0
	9	3.2		E	0	Q671	B	5.0
	10	3.2			E		5.0	
	11	12.0	Q604	B	4.9	Q672	B	11.3
	12	10.7		C	0.5		C	12.1
	13	4.9		E	4.9		E	12.1
	14	4.9	Q605	B	1.3	Q674	B	179.0
	15	4.9		C	0.6		C	350.0
	16	0		E	0.5		E	182.3
IC602	1	2.5	Q606	B	-1.4	Q675	B	-1.8
	3	14.2		C	-1.4		C	182.3
IC603	2	3.2		Q610	E		0	Q685
	3	6.2	B		1.9	B	0.9	
	4	5.0	C		0	C	0.3	
	5	7.1	E	1.8				
IC604	1	2.6	Q611	B	0	Q686	B	0
	2	0		C	1.9		C	14.9
	3	2.6		E	0			
IC630	1	180.7	Q612	B	6.1	Q901	B	0.2
	3	2.5		C	2.6		C	10.4
	4	11.0		E	5.0	Q904	B	9.0
	5				C		14.2	
IC901	2	9.7	Q640	B	14.0	Q905	B	9.0
	4	0.3		E	14.1		E	8.8
	5	1.1	Q641	B	0.3		Q908	B
	6	4.6		C	14.0	E		8.8
	7	5.3	Q642	B	3.7	Q909	G	43.6
	8	9.1		C	0		S	179.2
	9	9.0		E	3.7	Q911	D	44.0
	10	7.7	Q643	B	0.8		G	8.8
	11	6.0		C	0	Q912	B	0
	12	7.5	Q644	B	0		C	16.1
	13	5.1		C	3.7	E	16.1	
	14	6.0	Q645	B	182.6	Q913	B	0.2
	15	6.0		C	350.0		C	10.5
	16	9.0		E	183.9			
	17	0.2	Q647	B	-1.4			
			C	183.9				
	Q600	D G S	89.3 3.1 0					
Q601	B	3.3						

DA

[H. DRIVE BUFF]

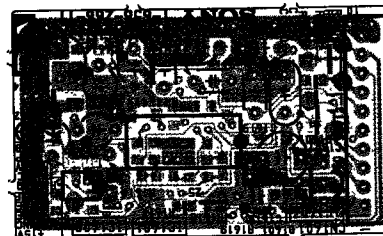
(4) Schematic Diagrams of DA, H, J and M Boards

— DA BOARD (Conductor Side) —

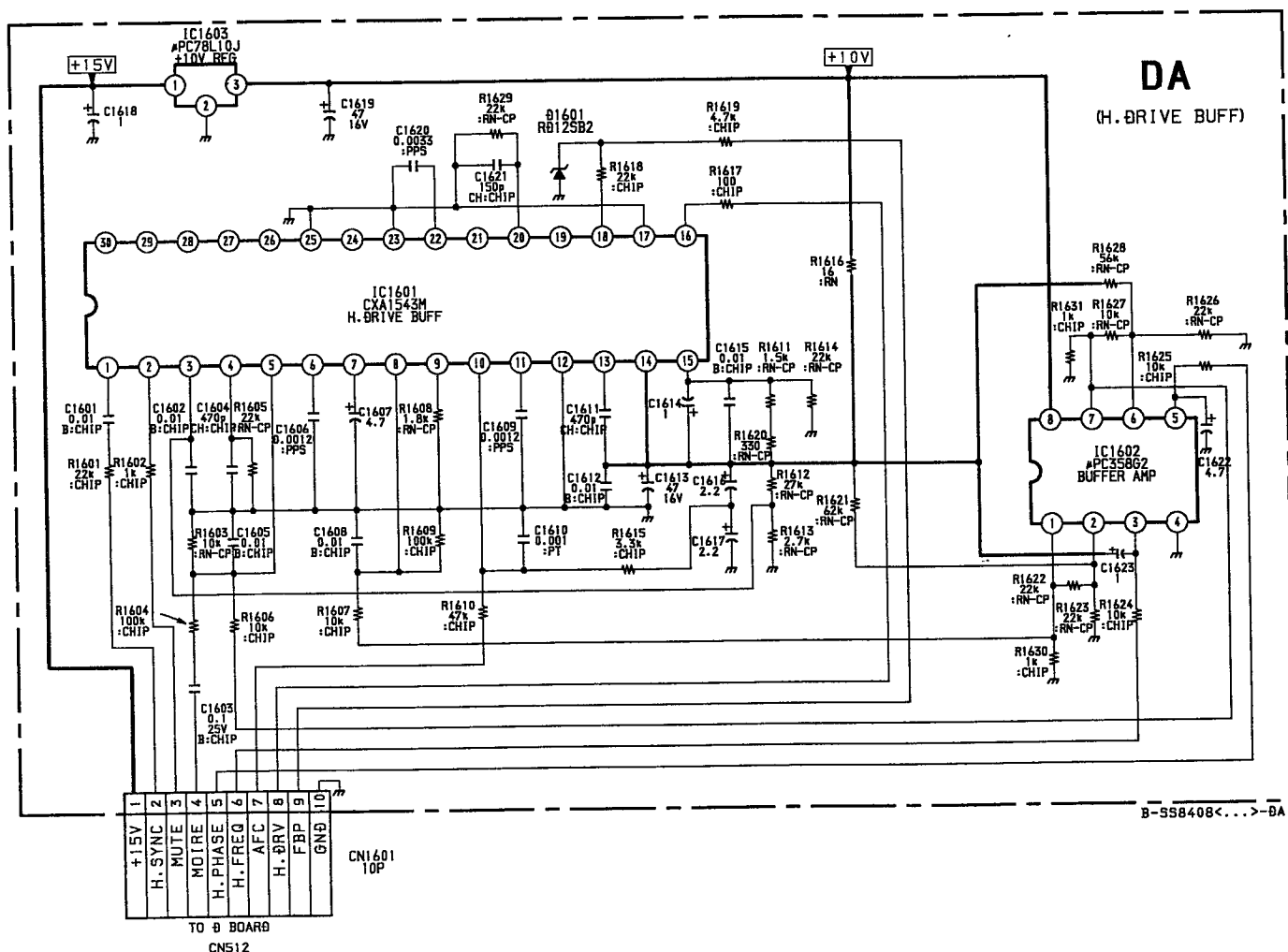


- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

— DA BOARD (Component Side) —



- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



Schematic diagram

← G board

Schematic diagrams

DA H J M boards →

J

[AC SW]

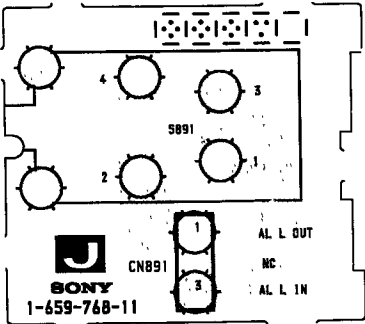
M

[CONNECTION]

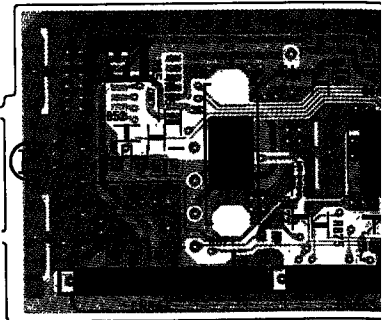
● DA BOARD
VOLTAGE LIST

Ref.	Pin No.	Voltage [V]
IC1601	1	4.8
	2	0
	3	0.9
	4	7.6
	5	1.3
	6	0
	7	4.5
	8	0.2
	9	1.2
	10	6.8
	11	*
	13	8.5
	15	8.6
	16	2.6
	18	0.8
	20	7.3
	22	5.1
IC1602	1	0.2
	2	1.4
	3	1.4
	5	2.5
	6	2.5
	7	2.5
	7	2.5

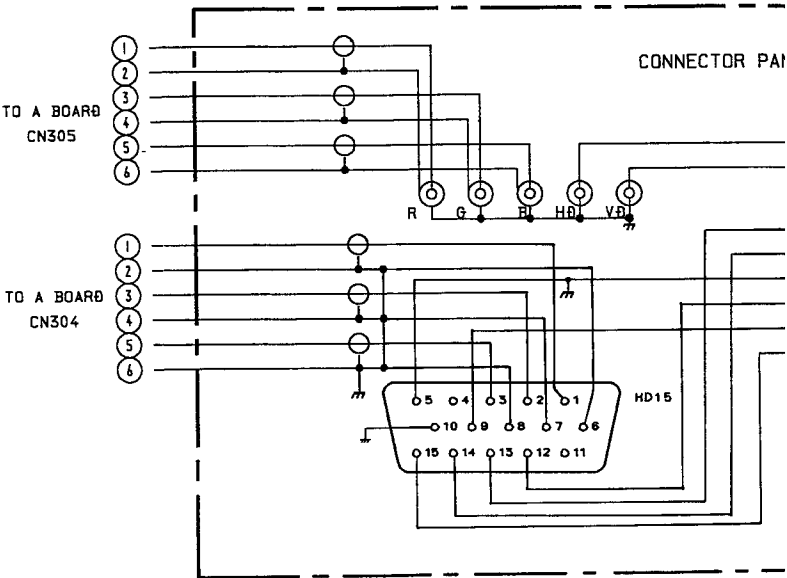
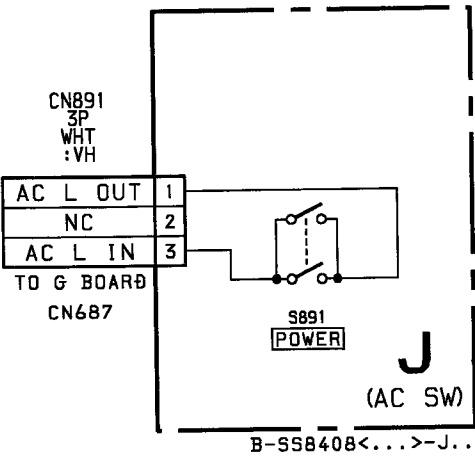
— J BOARD —



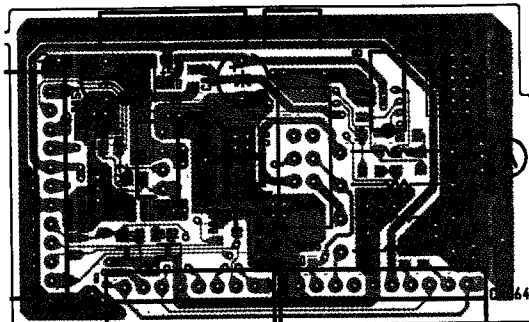
— M BOARD (Conductor Side) -



- : Pattern from the side which
- : Pattern of the rear side.



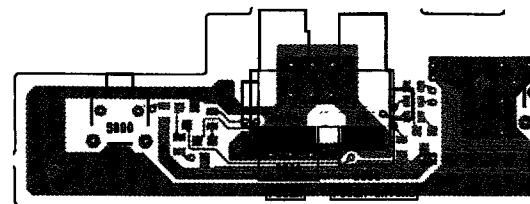
— M BOARD (Component Side) —



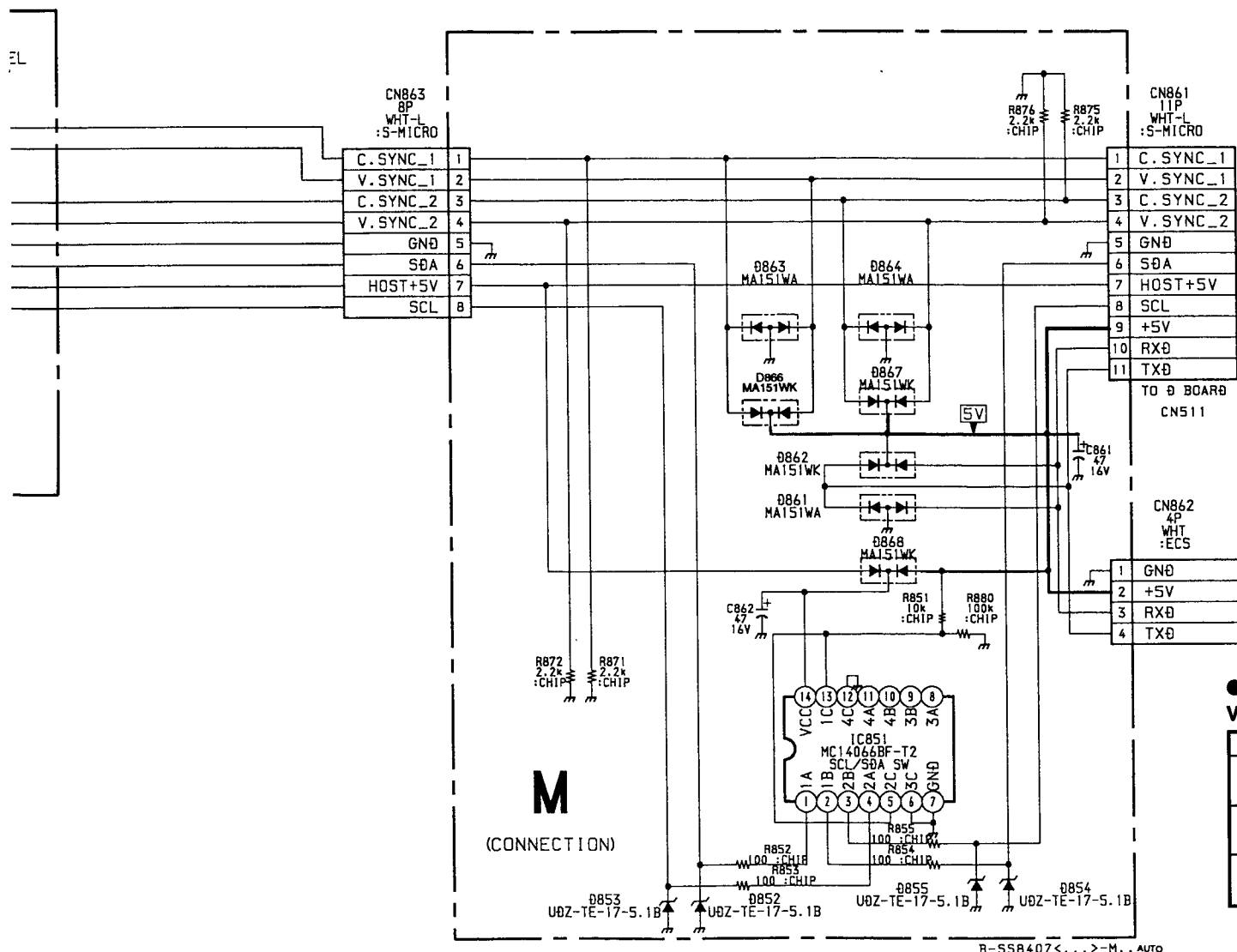
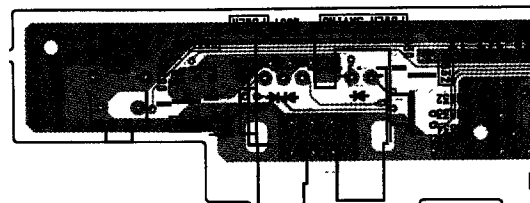
enables seeing.

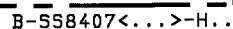
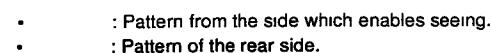
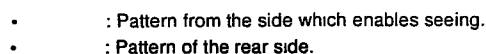
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

— H BOARD (Conductor Side) —



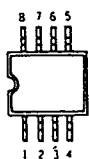
— H BOARD (Component Side) —





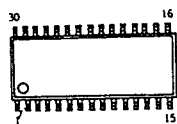
5-5. SEMICONDUCTORS

BA10358F-E2
NJM4558M
ST24C08FM6TR
TL082CPS
TL082M
 μ PC358G2
 μ PC4558G2
24LC21T/SN



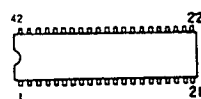
(TOP VIEW)

CXA1543M
CXA1543M-T6



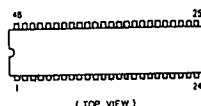
TOP VIEW

CXA1907S



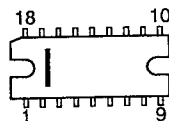
(Top view)

CXA1908S



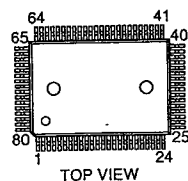
(TOP VIEW)

DM-57



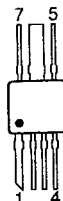
TOP VIEW

HD6433337WA04H



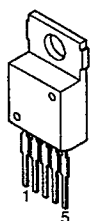
TOP VIEW

IRSY5305

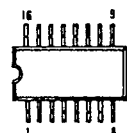


MARKING SIDE VIEW

LA6500-FA
LA7890

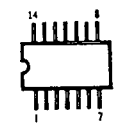


MC14027BF
SN74LS157NS
TC74HC123AF



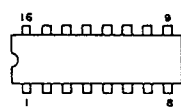
(TOP VIEW)

MC74HC4066F
SN74HC02ANS
SN74HC74ANS



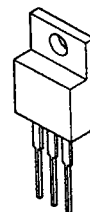
(TOP VIEW)

LSC4312P
TL494CN

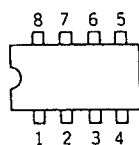


(TOP VIEW)

L7805CV
L7809CV
NJM78M09FA
TA7805S

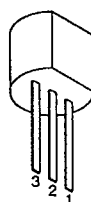


MM1170BFB
M5218AP
NJM4558D

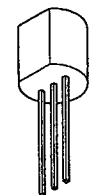


(Top view)

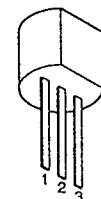
NJM8L05A
NJM8L09A
TA78L09S
 μ PC78L10J



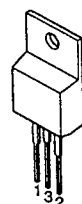
NJM78L12A
 μ PC78L05J



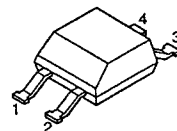
NJM79L12A



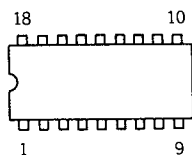
NJM79M05FA



PC123F2
PC123FY2

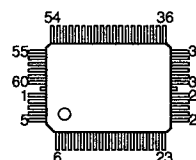


SBA9755S

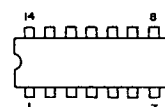


(Top view)

IS-3050F

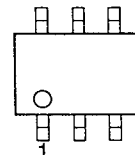


SN74HC4066NS
TC74HC4066AF



(TOP VIEW)

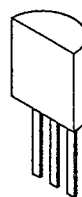
TC7W04FU



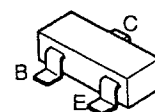
TDA8172



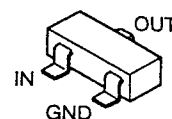
μ PC1093J



DTA114GKAT146
DTA124EKA
DTA124EKA-T146
DTC114GKAT146
DTC124EKA
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2SA1036K-Q
2SA1037K-T-146-QR
2SA1162-G
2SA1338-5-TB
2SA1462
2SA1462-Y33
2SC1621
2SC1623-L5L6
2SC2411K-CQ
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2SC3545
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DTB143EK



FS16SM-10-A8



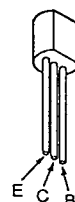
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IRLI530G



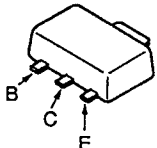
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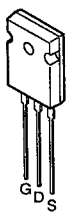
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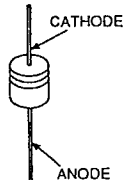
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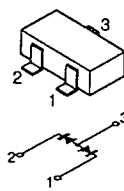
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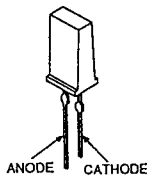
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RD16ESB2
RD16ESB3
RD18ESB2
1SS119
1SS119-25
1SS120
1SS120TD



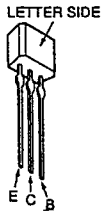
MA151WA
1S2836



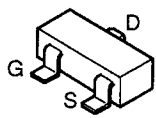
SEL1922D-C
SEL1922D-C, D



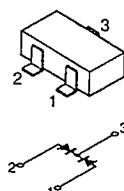
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2SC3311A



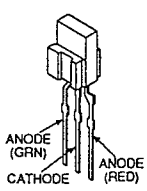
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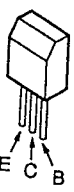
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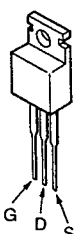
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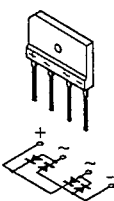
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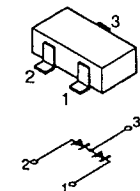
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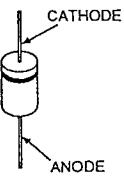
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D4SB60L



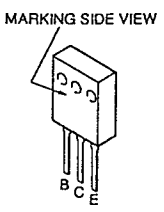
MA153
1SS226



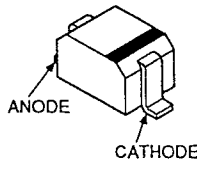
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D2S4MTA1



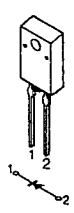
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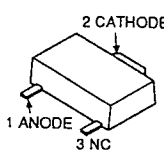
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DTZ-TT11-30A
DTZ-TT11-8.2C
DTZ5.1B
MA110
RD12SB2
UDZ-TE-17-13B
UDZ-TE-17-16B
UDZ-TE-17-24B
UDZ-TE-17-3.3B
UDZ-TE-17-4.7B
UDZ-TE-17-5.1B
UDZ-TE-17-6.2B



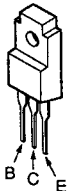
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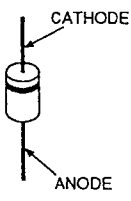
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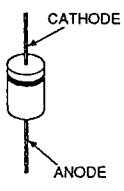
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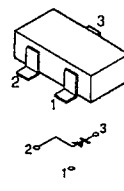
D1NL20
ERA91-02
S2LA20F



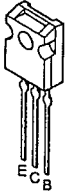
EGP20G
ERA34-10
GP08D
GP08DPKG23
RGP02-17EL-6433
RGP02-17PKG23
RGP02-20EL-6394
RGP15G
10E2



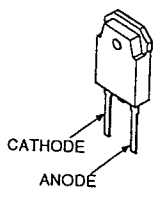
RD13M-B2
RD7.5M-B2
RD9.1M-B2



2SC4833MNP



5TUZ52



SECTION 6

EXPLODED VIEWS

NOTE:

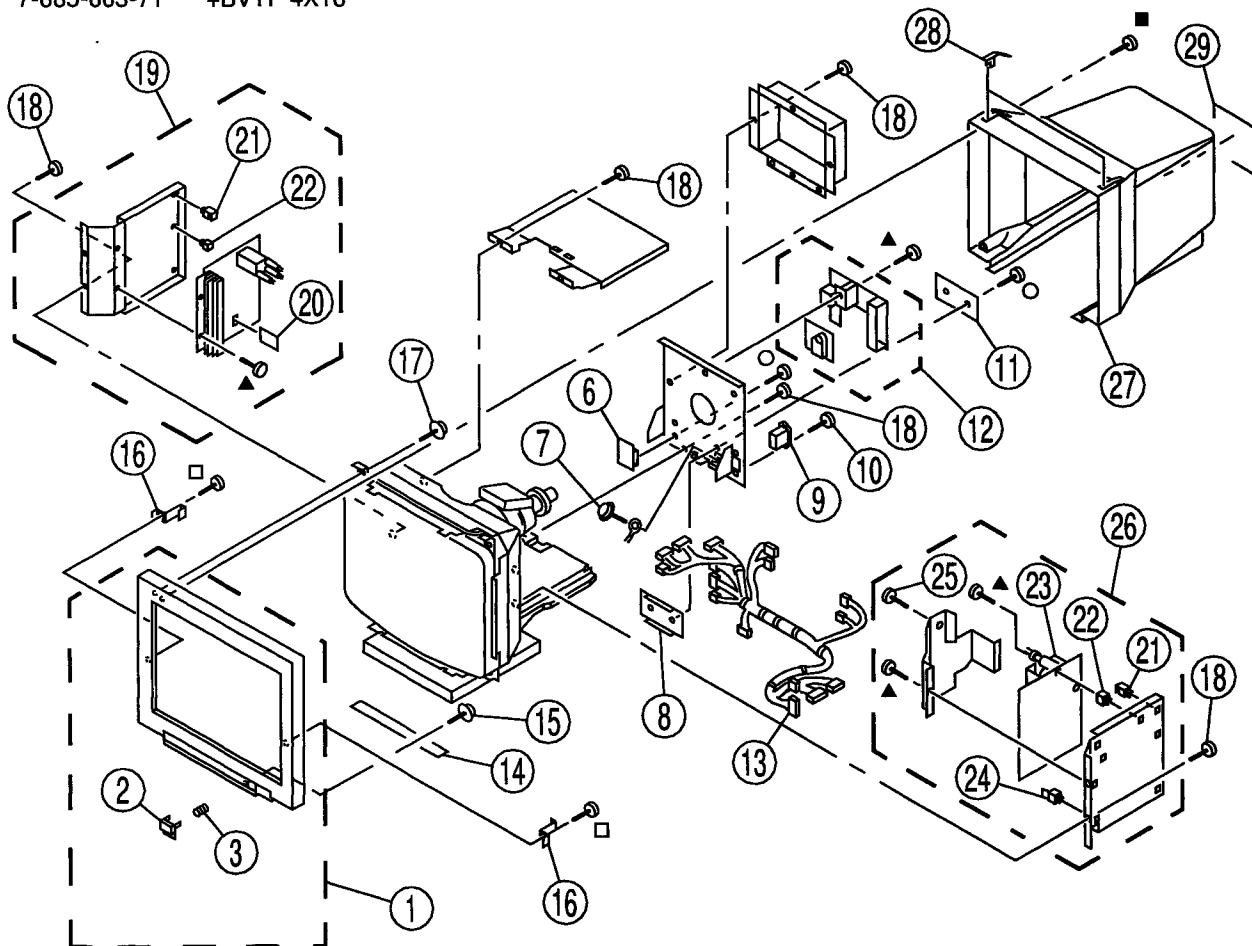
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. CHASSIS

- 7-685-663-79 +BV TAPPING SCREW (4X16)
- ▲ 7-685-647-79 +BVTP 3X10
- 7-682-548-04 +BV TAPPING SCREW (M3X8)
- 7-685-663-71 +BVTP 4X16



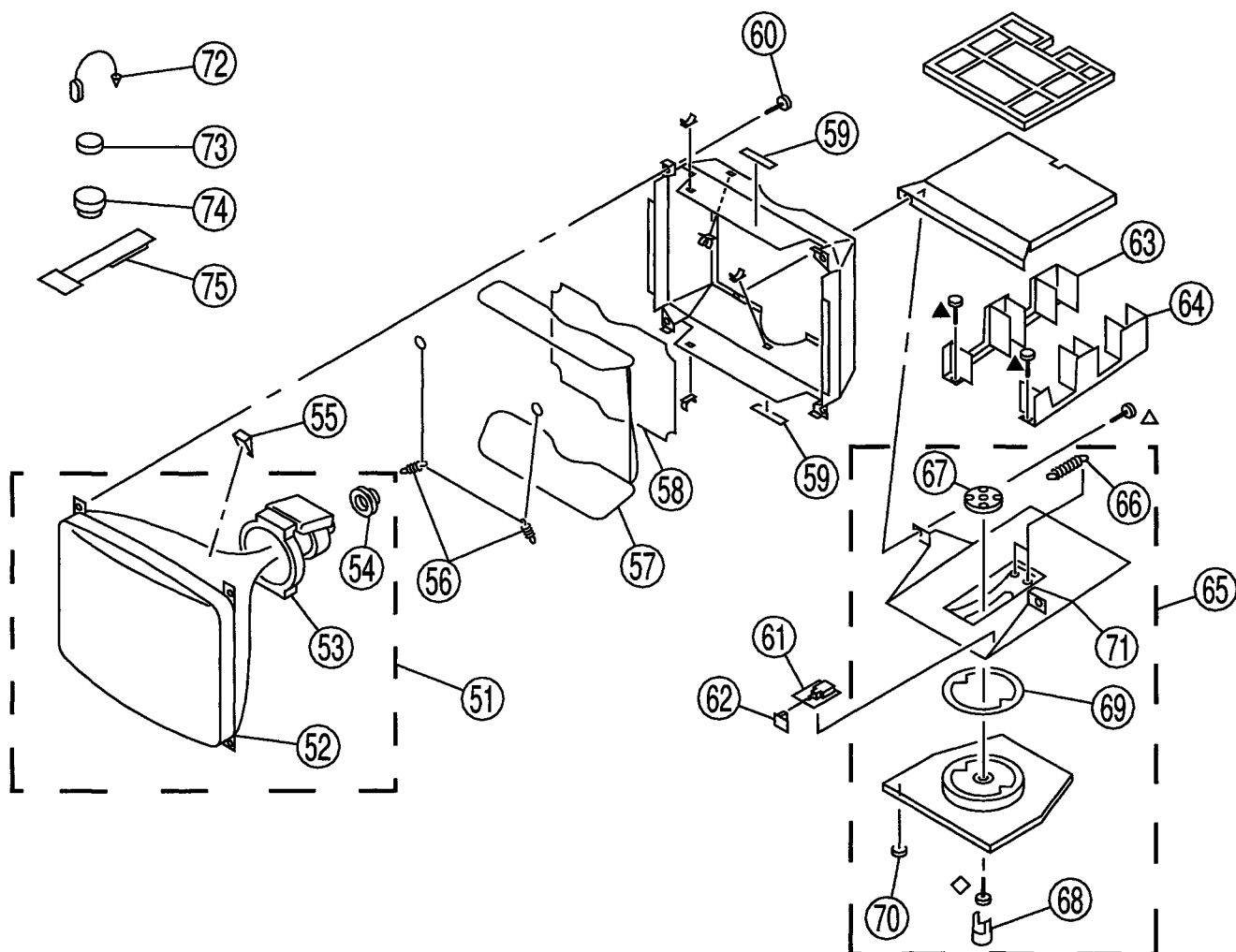
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4033-526-1	BEZEL ASSY	2, 3	18	4-381-962-11	SCREW (M4X8), TAPPING, (+) (BV)	
2	4-053-291-01	BUTTON, POWER		19	* 8-933-196-00	D BLOCK ASSY	20~22
3	3-653-339-01	SPRING, CCMPRESSION		20	* 8-933-127-00	DA BOARD, COMPLETE	
6	* 8-933-161-00	M BOARD, COMPLETE		21	* 3-701-903-11	HOLDER, PC BOARD	
7	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)		22	* 4-382-848-01	HOLDER, PCB	
8	1-694-108-11	TERMINAL BOARD ASSY. I/O		23	Δ X-4033-383-1	TRANSFORMER ASSY, FLYBACK (NX-4200/J1D4)	
9	Δ 1-251-382-12	INLET, AC 3P (WITH NOISE FILTE)		24	* 3-703-141-00	HOLDER, PCB	
10	4-052-345-01	SCREW, (3X8) (+K), TAPPING		25	4-382-854-11	SCREW (M3X10), P SW (+)	
11	4-053-310-01	SHEET, CONNECTOR		26	* Δ 8-933-159-00	G BLOCK ASSY (G BOARD)	21~25
12	* 8-933-158-00	A BOARD, COMPLETE		27	4-051-441-01	CABINET	
13	1-900-215-90	CONNECTOR ASSY		28	4-051-442-01	COVER, SCREW	
14	* 8-933-160-00	H BOARD, COMPLETE		29	* 4-051-128-31	LABEL, INFORMATION	
15	4-029-432-01	SCREW (3X12), (+) B VWHTP					
16	* 4-051-566-01	HOOK					
17	4-365-808-01	SCREW (5), TAPPING					

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-2. PICTURE TUBE

- ◇ 7-685-664-79 +BVTP 4X20
- △ 7-682-563-04 +BV TAPPING SCREW (M4X12)
- ▲ 7-685-647-79 +BVTP 3X10



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	△ 8-736-369-94	ITC ASSY (20SH8-R3)	52~54	65	X-4033-198-1	STAND ASSY	66~71
52	△ 8-736-389-05	PICTURE TUBE (20SH8)		66	4-046-901-01	SPRING, TENSION	
53	△ 8-451-476-12	DEFLECTION YOKE Y20SHK-M		67	4-050-692-01	STOPPER (A)	
54	△ 8-453-003-41	NECK ASSY (NA3012-M4)		68	4-041-621-01	STOPPER (B)	
55	4-040-897-01	SPACER, DY		69	* 4-041-625-01	RING, TILT SWIVEL	
56	4-369-318-00	SPRING, TENSION		70	4-047-474-01	FOOT, RUBBER	
57	△ 1-411-885-11	COIL, DEMAGNETIC		71	4-051-443-01	COVER, BOTTOM	
58	1-411-472-11	COIL, LANDING CORRECTION		72	4-308-870-00	CLIP, LEAD WIRE	
59	* 9-911-844-99	CUSHION		73	1-452-032-00	MAGNET, DISC ; 10mm ϕ	
60	4-381-962-11	SCREW (M4X8), TAPPING, (+) (BV)		74	1-452-094-00	MAGNET, ROTATABLE DISK ; 15mm ϕ	
61	* 8-933-162-00	J BOARD, COMPLETE		75	X-4030-584-1	PERMALLOY ASSY, CORRECTION	
62	* 4-394-972-21	CAP, POWER					
63	* 4-051-945-01	BOTTOM ATTACHMENT (L)					
64	* 4-051-944-01	BOTTOM ATTACHMENT (R)					



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C435	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D112	8-719-404-46	DIODE MA110	
C436	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D113	8-719-404-46	DIODE MA110	
C437	1-107-902-11	ELECT 1MF	20% 50V	D114	8-719-404-46	DIODE MA110	
C440	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D115	8-719-404-46	DIODE MA110	
C442	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D201	8-719-800-76	DIODE 1SS226	
C444	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D202	8-719-404-46	DIODE MA110	
C447	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D206	8-719-052-12	DIODE 1SS376TE-17	
C448	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D207	8-719-052-12	DIODE 1SS376TE-17	
C451	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D208	8-719-052-12	DIODE 1SS376TE-17	
C452	1-107-929-11	ELECT 10MF	20% 50V	D211	8-719-800-76	DIODE 1SS226	
C457	1-163-227-11	CERAMIC CHIP 10pF	0.5pF 50V	D212	8-719-404-46	DIODE MA110	
C458	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D213	8-719-404-46	DIODE MA110	
C460	1-162-318-11	CERAMIC 0.001MF	10% 500V	D214	8-719-404-46	DIODE MA110	
C461	1-162-318-11	CERAMIC 0.001MF	10% 500V	D215	8-719-404-46	DIODE MA110	
C462	1-162-114-00	CERAMIC 0.0047MF	2KV	D301	8-719-800-76	DIODE 1SS226	
C468	1-163-831-00	CERAMIC CHIP 0.047MF	10% 100V	D302	8-719-404-46	DIODE MA110	
C470	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D306	8-719-052-12	DIODE 1SS376TE-17	
C471	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D307	8-719-052-12	DIODE 1SS376TE-17	
C472	1-107-929-11	ELECT 10MF	20% 100V	D308	8-719-052-12	DIODE 1SS376TE-17	
C475	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 100V	D311	8-719-800-76	DIODE 1SS226	
C476	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D312	8-719-404-46	DIODE MA110	
C477	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D313	8-719-404-46	DIODE MA110	
C478	1-107-929-11	ELECT 10MF	20% 50V	D314	8-719-404-46	DIODE MA110	
C479	1-104-664-11	ELECT 47MF	20% 25V	D315	8-719-404-46	DIODE MA110	
C480	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D403	8-719-404-46	DIODE MA110	
C483	1-107-929-11	ELECT 10MF	20% 50V	D404	8-719-404-46	DIODE MA110	
C485	1-104-664-11	ELECT 47MF	20% 25V	D408	8-719-404-46	DIODE MA110	
C486	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D410	8-719-404-46	DIODE MA110	
C487	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D431	8-719-404-46	DIODE MA110	
C488	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D432	8-719-404-46	DIODE MA110	
C489	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D433	8-719-404-46	DIODE MA110	
C490	1-128-528-11	ELECT 470MF	20% 16V	D434	8-719-404-46	DIODE MA110	
C491	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D435	8-719-404-46	DIODE MA110	
C493	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	D436	8-719-404-46	DIODE MA110	
C495	1-126-963-11	ELECT 4.7MF	20% 50V				
C496	1-107-929-11	ELECT 10MF	20% 50V				
C497	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C498	1-163-239-11	CERAMIC CHIP 33pF	5% 50V				
C499	1-163-239-11	CERAMIC CHIP 33pF	5% 50V				
<u>CONNECTOR</u>				<u>FERRITE BEAD</u>			
CN301	1-564-524-11	PLUG, CONNECTOR 9P		FB404	1-410-397-21	FERRITE BEAD INDUCTOR	1.1UH
CN302*	1-564-527-11	PLUG, CONNECTOR 12P		FB405	1-410-397-21	FERRITE BEAD INDUCTOR	1.1UH
CN303*	1-766-179-11	PIN, CONNECTOR (PC BOARD) 2P		FB406	1-410-397-21	FERRITE BEAD INDUCTOR	1.1UH
CN304*	1-564-521-11	PLUG, CONNECTOR 6P		FB410	1-410-397-21	FERRITE BEAD INDUCTOR	1.1UH
CN305*	1-564-521-11	PLUG, CONNECTOR 6P		FB411	1-412-390-21	INDUCTOR CHIP	0UH
<u>DIODE</u>				<u>FILTER</u>			
D101	8-719-800-76	DICDE 1SS226		FL408	1-236-164-11	ENCAPSULATED COMPONENT	
D102	8-719-404-46	DIODE MA110		FL420	1-236-164-11	ENCAPSULATED COMPONENT	
D106	8-719-052-12	DIODE 1SS376TE-17					
D107	8-719-052-12	DIODE 1SS376TE-17					
D108	8-719-052-12	DIODE 1SS376TE-17					
D111	8-719-800-76	DIODE 1SS226					
				<u>IC</u>			
				IC404	8-759-701-59	IC NJM78M09FA	
				IC405	8-749-010-98	IC MHW2528	
				IC406	8-759-708-05	IC NJM78L05A	
				IC407	8-759-100-96	IC UPC4558G2	
				IC408	8-759-701-65	IC NJM79M05FA	
				IC411	8-759-359-03	IC LSC4312P	
				IC412	8-759-082-55	IC TC7W00FU	

The components identified by shading and mark are critical for safety. Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R286	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R418	1-208-822-11	METAL CHIP	47K 0.50%1/10W
R287	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R419	1-208-814-11	METAL CHIP	22K 0.50%1/10W
R288	1-216-659-11	METAL CHIP	2.2K 0.50%1/10W	R420	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R289	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R421	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R290	1-216-121-91	METAL GLAZE	1M 5% 1/10W	R422	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R301	1-216-617-11	METAL CHIP	39 0.50%1/10W	R423	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R302	1-216-617-11	METAL CHIP	39 0.50%1/10W	R424	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R303	1-249-401-11	CARBON	47 5% 1/4W	R425	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R310	1-216-025-91	METAL GLAZE	100 5% 1/10W	R431	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R311	1-216-001-00	METAL GLAZE	10 5% 1/10W	R433	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R313	1-216-041-00	METAL GLAZE	470 5% 1/10W	R434	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R314	1-216-622-11	METAL CHIP	62 0.50%1/10W	R435	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R315	1-216-638-11	METAL CHIP	330 0.50%1/10W	R436	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R316	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R437	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R317	1-218-760-11	METAL CHIP	220K 0.50%1/10W	R438	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R318	1-216-684-91	METAL CHIP	24K 0.50%1/10W	R440	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R319	1-208-814-11	METAL CHIP	22K 0.50%1/10W	R441	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R320	1-216-665-11	METAL CHIP	3.9K 0.50%1/10W	R442	1-260-093-11	CARBON	330 5% 1/2W
R323	1-216-041-00	METAL GLAZE	470 5% 1/10W	R443	1-216-117-00	METAL GLAZE	680K 5% 1/10W
R341	1-414-633-21	INDUCTOR, FERRITE BEAD		R444	1-215-875-11	METAL OXIDE	10K 5% 1W F
R353	1-216-107-00	METAL GLAZE	270K 5% 1/10W	R445	1-215-873-00	METAL OXIDE	4.7K 5% 1W F
R354	1-208-814-11	METAL CHIP	22K 0.50%1/10W	R447	1-216-011-00	METAL GLAZE	27 5% 1/10W
R358	1-216-009-00	METAL GLAZE	22 5% 1/10W	R448	1-216-025-91	METAL GLAZE	100 5% 1/10W
R359	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R450	1-216-695-11	METAL CHIP	68K 0.50%1/10W
R360	1-260-081-11	CARBON	33 5% 1/2W	R451	1-216-673-11	METAL CHIP	8.2K 0.50%1/10W
R361	1-216-025-91	METAL GLAZE	100 5% 1/10W	R452	1-216-017-91	METAL CHIP	47 5% 1/10W
R377	1-216-617-11	METAL CHIP	39 0.50%1/10W	R453	1-216-017-91	METAL CHIP	47 5% 1/10W
R378	1-216-617-11	METAL CHIP	39 0.50%1/10W	R454	1-216-017-91	METAL CHIP	47 5% 1/10W
R379	1-249-401-11	CARBON	47 5% 1/4W	R457	1-249-417-11	CARBON	1K 5% 1/4W F
R381	1-216-659-11	METAL CHIP	2.2K 0.50%1/10W	R459	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R382	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R460	1-260-127-11	CARBON	220K 5% 1/2W
R383	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R461	1-219-720-11	METAL	10M 5% 1W
R384	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R462	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R385	1-216-017-91	METAL GLAZE	47 5% 1/10W	R463	1-211-885-21	METAL	2.2M 5% 1W
R386	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R466	1-211-885-21	METAL	2.2M 5% 1W
R387	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R469	1-219-720-11	METAL	10M 5% 1W
R388	1-216-659-11	METAL CHIP	2.2K 0.50%1/10W	R470	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R389	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R471	1-216-117-00	METAL GLAZE	680K 5% 1/10W
R390	1-216-121-91	METAL GLAZE	1M 5% 1/10W	R473	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R401	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R475	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R402	1-216-089-91	METAL GLAZE	47K 5% 1/10W	R476	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R403	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R477	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R404	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R478	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R405	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R480	1-216-025-91	METAL GLAZE	100 5% 1/10W
R406	1-249-409-11	CARBON	220 5% 1/4W F	R483	1-202-842-11	SOLID	220K 20% 1/2W
R407	1-216-049-91	METAL GLAZE	1K 5% 1/10W	R484	1-216-025-91	METAL GLAZE	100 5% 1/10W
R408	1-249-397-11	CARBON	22 5% 1/4W F	R485	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R409	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R488	1-260-127-11	CARBON	220K 5% 1/2W
R410	1-216-025-91	METAL GLAZE	100 5% 1/10W	R489	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R411	1-216-025-91	METAL GLAZE	100 5% 1/10W	R495	1-216-025-91	METAL GLAZE	100 5% 1/10W
R412	1-216-025-91	METAL GLAZE	100 5% 1/10W	R496	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R413	1-216-025-91	METAL GLAZE	100 5% 1/10W	R497	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R414	1-216-025-91	METAL GLAZE	100 5% 1/10W	R498	1-216-025-91	METAL GLAZE	100 5% 1/10W
R415	1-216-025-91	METAL GLAZE	100 5% 1/10W	R499	1-216-025-91	METAL GLAZE	100 5% 1/10W
R416	1-216-025-91	METAL GLAZE	100 5% 1/10W				
R417	1-216-295-91	CONDUCTOR, CHIP	-2012				



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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<u>VARIABLE RESISTOR</u>				<u>RESISTOR</u>			
	RV401	1-223-410-21 RES, ADJ, METAL FILM 110M (H. STAT)		R851	1-216-073-00	METAL GLAZE 10K	5% 1/10W
<u>SPARK GAP</u>				R852	1-216-025-91	MTEAL GLAZE 100	5% 1/10W
SG401	1-519-422-11	GAP, SPARK		R853	1-216-025-91	METAL GLAZE 100	5% 1/10W
SG402	1-519-504-11	GAP, DISCHARGE		R854	1-216-025-91	METAL GLAZE 100	5% 1/10W
SG403	1-519-504-11	GAP, DISCHARGE		R855	1-216-025-91	METAL GLAZE 100	5% 1/10W
SG404	1-519-504-11	GAP, DISCHARGE		R871	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
SG410	1-519-504-11	GAP, DISCHARGE		R874	1-247-756-11	CARBON 2.2K	5% 1/2W
SG411	1-519-422-11	GAP, SPARK		R875	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
SG412	1-519-504-11	GAP, DISCHARGE		R876	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
SG413	1-519-504-11	GAP, DISCHARGE		R880	1-216-097-91	METAL GLAZE 100K	5% 1/10W
<u>SOCKET</u>				*****			
SK401	1-251-116-12	SOCKET, PICTURE TUBE		Δ *8-933-159-00 G BLOCK ASSY (G BOARD)			
*****				*****			
*8-933-161-00 M BOARD, COMPLETE				*****			
*****				<u>CAPACITOR</u>			
<u>CAPACITOR</u>				C600	Δ 1-113-598-11	ELECT 220MF	20% 400V
C861	1-124-589-11	ELECT 47MF	20% 16V	C601	Δ 1-113-597-11	FILM 1MF	10% 400V
C862	1-124-589-11	ELECT 47MF	20% 16V	C602	Δ 1-164-004-91	CERAMIC CHIP 0.1MF	10% 25V
<u>CONNECTOR</u>				C603	Δ 1-163-275-91	CERAMIC CHIP 0.001MF	5% 50V
CN861	*1-564-526-11	PLUG, CONNECTOR 11P		C604	Δ 1-137-368-91	FILM 0.0047MF	5% 50V
CN862	*1-560-062-00	PIN, CONNECTOR 4P		C605	Δ 1-137-190-81	FILM 0.22MF	5% 50V
CN863	1-564-523-11	PLUG, CONNECTOR 8P		C606	Δ 1-163-017-91	CERAMIC CHIP 0.0047MF	10% 50V
<u>DIODE</u>				C607	Δ 1-107-907-91	ELECT 22MF	20% 50V
D852	8-719-976-99	DIODE DTZ5.1B		C608	Δ 1-107-909-91	ELECT 47MF	20% 50V
D853	8-719-976-99	DIODE DTZ5.1B		C609	Δ 1-137-190-81	FILM 0.22MF	5% 50V
D854	8-719-976-99	DIODE DTZ5.1B		C610	Δ 1-126-927-91	ELECT 2200MF	20% 10V
D855	8-719-976-99	DIODE DTZ5.1B		C611	Δ 1-126-927-91	ELECT 2200MF	20% 10V
D861	8-719-104-34	DIODE 1S2836		C612	Δ 1-107-928-91	ELECT 4.7MF	20% 100V
D862	8-719-801-78	DIODE 1SS184		C613	Δ 1-107-928-91	ELECT 4.7MF	20% 100V
D863	8-719-104-34	DIODE 1S2836		C615	Δ 1-136-203-61	FILM 0.01MF	10% 630V
D864	8-719-104-34	DIODE 1S2836		C616	Δ 1-137-307-91	FILM 0.01MF	5% 50V
D866	8-719-801-78	DIODE 1SS184		C617	Δ 1-126-963-91	ELECT 4.7MF	20% 50V
D867	8-719-801-78	DIODE 1SS184		C620	Δ 1-104-332-91	CERAMIC 470pF	10% 2KV
D868	8-719-801-78	DIODE 1SS184		C621	Δ 1-163-267-91	CERAMIC CHIP 470pF	5% 50V
<u>IC</u>				C622	Δ 1-113-926-91	ELECT 0.0047MF	250V
IC851	8-759-013-86	IC MC74HC4066F		C623	Δ 1-113-926-91	ELECT 0.0047MF	250V
*****				C630	Δ 1-107-903-91	ELECT 2.2MF	20% 50V
				C631	Δ 1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
				C633	Δ 1-107-888-91	ELECT 47MF	20% 25V
				C634	Δ 1-164-646-91	CERAMIC 2200pF	10% 500V
				C635	Δ 1-137-192-81	FILM 0.33MF	5% 50V
				C636	Δ 1-165-127-91	CERAMIC 470pF	10% 500V
				C637	Δ 1-107-955-91	ELECT 100MF	20% 200V
				C638	Δ 1-107-950-91	ELECT 3.3MF	20% 200V
				C639	Δ 1-137-188-81	FILM 0.15MF	5% 50V
				C640	Δ 1-136-333-91	FILM 0.027MF	5% 630V
				C642	Δ 1-107-933-91	ELECT 100MF	20% 100V
				C643	Δ 1-107-928-91	ELECT 4.7MF	20% 100V
				C644	Δ 1-164-645-91	CERAMIC 1000pF	10% 500V

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q603	Δ 8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR		R636	Δ 1-202-933-61	FUSIBLE 0.1	10% 1/2W F
Q604	Δ 8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR		R639	Δ 1-216-113-91	METAL GLAZE 470K	5% 1/10W
Q605	Δ 8-729-033-24	TRANSISTOR DTC114GKAT146		R640	Δ 1-216-049-91	METAL GLAZE 1K	5% 1/10W
Q606	Δ 8-729-920-75	TRANSISTOR 2SC2412K-T-146-QR		R641	Δ 1-216-073-91	METAL GLAZE 10K	5% 1/10W
Q610	Δ 8-729-033-26	TRANSISTOR DTA114GKAT146		R642	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W
Q611	Δ 8-729-033-24	TRANSISTOR DTC114GKAT146		R643	Δ 1-216-642-71	METAL OXIDE 100K	5% 1W F
Q612	Δ 8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR		R644	Δ 1-216-642-71	METAL OXIDE 100K	5% 1W F
Q640	Δ 8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR		R645	Δ 1-249-417-91	CARBON 1K	5% 1/4W F
Q641	Δ 8-729-230-44	TRANSISTOR 2SC2458TP-YGR		R650	Δ 1-247-775-91	CARBON 4.7	5% 1/4W
Q642	Δ 8-729-033-26	TRANSISTOR DTA114GKAT146		R651	Δ 1-249-413-91	CARBON 470	5% 1/4W F
Q643	Δ 8-729-033-24	TRANSISTOR DTC114GKAT146		R652	Δ 1-215-481-91	METAL 330K	1% 1/4W
Q644	Δ 8-729-033-24	TRANSISTOR DTC114GKAT146		R653	Δ 1-247-791-91	CARBON 22	5% 1/4W
Q645	Δ 8-729-033-51	TRANSISTOR 2SC4833MNP-2		R654	Δ 1-216-689-91	METAL CHIP 39K	0.50% 1/10W
Q647	Δ 8-729-033-51	TRANSISTOR 2SC4833MNP-2		R655	Δ 1-216-345-71	METAL OXIDE 0.47	5% 1W F
Q649	Δ 8-729-033-26	TRANSISTOR DTA114GKAT146		R656	Δ 1-260-127-81	CARBON 220K	5% 1/2W
Q650	Δ 8-729-036-01	TRANSISTOR 2SA1371DE-AE		R657	Δ 1-260-292-71	CARBON 1	5% 1/2W
Q671	Δ 8-729-033-26	TRANSISTOR DTA114GKAT146		R658	Δ 1-260-127-81	CARBON 220K	5% 1/2W
Q672	Δ 8-729-033-26	TRANSISTOR DTA114GKAT146		R659	Δ 1-247-775-91	CARBON 4.7	5% 1/4W
Q674	Δ 8-729-032-36	TRANSISTOR 2SC4052MNP-R		R660	Δ 1-216-397-91	METAL OXIDE 4.7	5% 3W F
Q675	Δ 8-729-032-36	TRANSISTOR 2SC4052MNP-R		R664	Δ 1-247-791-91	CARBON 22	5% 1/4W
Q685	Δ 8-729-033-24	TRANSISTOR DTC114GKAT146		R669	Δ 1-216-304-91	METAL GLAZE 3.3	5% 1/10W
Q686	Δ 8-729-033-24	TRANSISTOR DTC114GKAT146		R670	Δ 1-249-393-91	CARBON 10	5% 1/4W F
Q901	Δ 8-729-143-24	TRANSISTOR 2SC1621-T1B2B3		R671	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W
Q904	Δ 8-729-901-91	TRANSISTOR 2SC2411K-T-146-CQ		R672	Δ 1-216-053-91	METAL GLAZE 1.5K	5% 1/10W
Q905	Δ 8-729-902-02	TRANSISTOR 2SA1036K-T-146-Q		R673	Δ 1-216-057-91	METAL GLAZE 2.2K	5% 1/10W
Q908	Δ 8-729-035-54	TRANSISTOR 2SJ449		R674	Δ 1-216-073-91	METAL GLAZE 10K	5% 1/10W
Q909	Δ 8-729-033-91	TRANSISTOR 2SK1120LBSONY2		R675	Δ 1-216-669-91	METAL CHIP 5.6K	0.50% 1/10W
Q911	Δ 8-729-904-55	TRANSISTOR DTB143EK-T-146		R676	Δ 1-216-633-91	METAL CHIP 180	0.50% 1/10W
Q912	Δ 8-729-027-52	TRANSISTOR DTC124EKA-T146		R677	Δ 1-259-033-91	CARBON 1	5% 1/4W
Q913	Δ 8-729-027-52	TRANSISTOR DTC124EKA-T146		R678	Δ 1-216-649-91	METAL CHIP 820	0.50% 1/10W
Q914	Δ 8-729-027-52	TRANSISTOR DTC124EKA-T146		R679	Δ 1-216-651-91	METAL CHIP 1K	0.50% 1/10W
RESISTOR				R681	Δ 1-247-895-91	CARBON 470K	5% 1/4W
R600	Δ 1-216-001-91	METAL GLAZE 10	5% 1/10W	R682	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W
R601	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W	R684	Δ 1-217-418-61	FUSIBLE 0.47	10% 1/2W F
R602	Δ 1-216-049-91	METAL GLAZE 1K	5% 1/10W	R685	Δ 1-247-895-91	CARBON 470K	5% 1/4W
R603	Δ 1-216-657-91	METAL CHIP 1.8K	0.50% 1/10W	R686	Δ 1-247-895-91	CARBON 470K	5% 1/4W
R604	Δ 1-216-089-91	METAL GLAZE 47K	5% 1/10W	R687	Δ 1-216-304-91	METAL GLAZE 3.3	5% 1/10W
R605	Δ 1-216-025-91	METAL GLAZE 100	5% 1/10W	R688	Δ 1-247-895-91	CARBON 470K	5% 1/4W
R607	Δ 1-216-105-91	METAL GLAZE 220K	5% 1/10W	R689	Δ 1-260-085-81	CARBON 68	5% 1/2W
R608	Δ 1-216-041-91	METAL GLAZE 470	5% 1/10W	R690	Δ 1-216-081-91	METAL GLAZE 22K	5% 1/10W
R609	Δ 1-215-485-91	METAL 470K	1% 1/4W	R691	Δ 1-205-998-11	WIREWOUND 1	5% 10W
R610	Δ 1-215-485-91	METAL 470K	1% 1/4W	R693	Δ 1-260-085-81	CARBON 68	5% 1/2W
R612	Δ 1-215-485-91	METAL 470K	1% 1/4W	R695	Δ 1-216-073-91	METAL GLAZE 10K	5% 1/10W
R613	Δ 1-215-485-91	METAL 470K	1% 1/4W	R696	Δ 1-202-914-91	SOLID 390K	20% 1/2W
R614	Δ 1-216-049-91	METAL GLAZE 1K	5% 1/10W	R697	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W
R615	Δ 1-216-671-91	METAL CHIP 6.8K	0.50% 1/10W	R700	Δ 1-218-191-71	METAL OXIDE 0.1	5% 1W F
R616	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W	R701	Δ 1-218-191-71	METAL OXIDE 0.1	5% 1W F
R619	Δ 1-260-304-71	CARBON 10	5% 1/2W	R702	Δ 1-216-033-91	METAL GLAZE 220	5% 1/10W
R621	Δ 1-216-089-91	METAL GLAZE 47K	5% 1/10W	R709	Δ 1-216-097-91	METAL GLAZE 100K	5% 1/10W
R622	Δ 1-216-081-91	METAL GLAZE 22K	5% 1/10W	R710	Δ 1-216-057-91	METAL GLAZE 2.2K	5% 1/10W
R633	Δ 1-216-025-91	METAL GLAZE 100	5% 1/10W	R711	Δ 1-216-377-71	METAL OXIDE 4.7	5% 2W F
R634	Δ 1-216-057-91	METAL GLAZE 2.2K	5% 1/10W	R712	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W
R635	Δ 1-216-065-91	METAL GLAZE 4.7K	5% 1/10W	R713	Δ 1-216-081-91	METAL GLAZE 22K	5% 1/10W
R636	Δ 1-216-073-91	METAL GLAZE 10K	5% 1/10W	R714	Δ 1-216-113-91	METAL GLAZE 470K	5% 1/10W
				R715	Δ 1-216-673-91	METAL CHIP 8.2K	0.50% 1/10W
				R716	Δ 1-216-073-91	METAL GLAZE 10K	5% 1/10W



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R720	Δ 1-216-057-91	METAL GLAZE	2.2K 5% 1/10W	R980	Δ 1-216-049-91	METAL GLAZE	1K 5% 1/10W
R721	Δ 1-215-473-91	METAL	150K 1% 1/4W	R981	Δ 1-216-025-91	METAL GLAZE	100 5% 1/10W
R722	Δ 1-216-689-91	METAL CHIP	39K 0.50% 1/10W	R982	Δ 1-247-883-91	CARBON	150K 5% 1/4W
R723	Δ 1-216-081-91	METAL GLAZE	22K 5% 1/10W	<u>RELAY</u>			
R725	Δ 1-215-485-91	METAL	470K 1% 1/4W	RY685	Δ 1-515-849-11	RELAY	
R726	Δ 1-215-485-91	METAL	470K 1% 1/4W	RY686	Δ 1-755-128-11	RELAY	
R727	Δ 1-216-699-91	METAL CHIP	100K 0.50% 1/10W	<u>SPARK GAP</u>			
R728	Δ 1-216-017-91	METAL GLAZE	47 5% 1/10W	SG901	Δ 1-519-421-32	GAP, DISCHARGE	
R729	Δ 1-216-089-91	METAL GLAZE	47K 5% 1/10W	<u>TRANSFORMER</u>			
R731	Δ 1-216-031-91	METAL GLAZE	180 5% 1/10W	T601	Δ 1-429-325-21	TRANSFORMER, CONVERTER (PIT)	
R732	Δ 1-216-031-91	METAL GLAZE	180 5% 1/10W	T602	Δ 1-411-593-11	COIL, CHOKE 85UF	
R735	Δ 1-211-800-71	FUSIBLE	2.2 5% 1/2W F	T603	Δ 1-429-212-11	TRANSFORMER, CONVERTER (PIT)	
R901	Δ 1-216-057-91	METAL GLAZE	2.2K 5% 1/10W	T604	Δ 1-429-254-11	TRANSFORMER, CONVERTER (PRT)	
R902	Δ 1-216-065-91	METAL GLAZE	4.7K 5% 1/10W	T605	Δ 1-429-254-11	TRANSFORMER, CONVERTER (PRT)	
R903	Δ 1-216-073-91	METAL GLAZE	10K 5% 1/10W	T685*	Δ 1-429-180-11	TRANSFORMER, LINE FILTER	
R904	Δ 1-216-057-91	METAL GLAZE	2.2K 5% 1/10W	T901	Δ 1-411-592-21	COIL, CHOKE 500UH	
R907	Δ 1-216-643-91	METAL CHIP	470 0.50% 1/10W	T902	Δ X-4033-383-1	TRANSFORMER ASSY, FLYBACK	(NX-4200/J1D4)
R908	Δ 1-216-643-91	METAL CHIP	470 0.50% 1/10W	<u>THERMISTOR</u>			
R909	Δ 1-216-643-91	METAL CHIP	470 0.50% 1/10W	TH685	Δ 1-809-260-11	THERMISTOR, POWER	
R910	Δ 1-216-643-91	METAL CHIP	470 0.50% 1/10W	THP685	Δ 1-809-827-11	THERMISTOR, POSITIVE	
R911	Δ 1-202-900-91	SOLID	6.8K 20% 1/2W	<u>TEST PIN</u>			
R912	Δ 1-202-900-51	SOLID	6.8K 20% 1/2W	TP601	Δ 1-695-915-21	TAB (CONTACT)	
R913	Δ 1-202-873-91	SOLID	4.7K 20% 1/2W	TP602	Δ 1-695-915-21	TAB (CONTACT)	
R914	Δ 1-202-885-91	SOLID	1M 20% 1/2W	<u>VARISTOR</u>			
R915	Δ 1-247-871-91	CARBON	47K 5% 1/4W	VDR685	Δ 1-807-180-31	VARISTOR ZNR-14DK471U	
R916	Δ 1-247-855-91	CARBON	10K 5% 1/4W	VDR686	Δ 1-810-622-11	VARISTOR	
R917	Δ 1-202-868-91	SOLID	1K 20% 1/2W	VDR735	Δ 1-810-053-21	VARISTOR	
R920	Δ 1-249-401-91	CARBON	47 5% 1/4W F	*****			
R922	Δ 1-216-041-91	METAL GLAZE	470 5% 1/10W	* 8-933-127-00 DA BOARD, COMPLETE			
R923	Δ 1-216-061-91	METAL GLAZE	3.3K 5% 1/10W	*****			
R924	Δ 1-249-397-91	CARBON	22 5% 1/4W F	<u>CAPACITOR</u>			
R933	Δ 1-216-689-91	METAL CHIP	39K 0.50% 1/10W	C1601	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R934	Δ 1-216-667-91	METAL CHIP	4.7K 0.50% 1/10W	C1602	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R935	Δ 1-216-657-91	METAL CHIP	1.8K 0.50% 1/10W	C1603	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R937	Δ 1-219-727-11	METAL	68 5% 10W	C1604	1-163-197-00	CERAMIC CHIP 470pF	5% 50V
R940	Δ 1-249-393-91	CARBON	10 5% 1/4W F	C1605	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R950	Δ 1-216-065-91	METAL GLAZE	4.7K 5% 1/10W	C1606	1-113-700-11	FILM	0.0012MF 5% 50V
R951	Δ 1-216-025-91	METAL GLAZE	100 5% 1/10W	C1607	1-126-163-11	ELECT	4.7MF 20% 50V
R952	Δ 1-216-097-91	METAL GLAZE	100K 5% 1/10W				
R953	Δ 1-216-073-91	METAL GLAZE	10K 5% 1/10W				
R954	Δ 1-216-117-91	METAL GLAZE	680K 5% 1/10W				
R955	Δ 1-216-097-91	METAL GLAZE	100K 5% 1/10W				
R956	Δ 1-216-105-91	METAL GLAZE	220K 5% 1/10W				
R957	Δ 1-216-097-91	METAL GLAZE	100K 5% 1/10W				
R958	Δ 1-216-097-91	METAL GLAZE	100K 5% 1/10W				
R960	Δ 1-216-673-91	METAL CHIP	8.2K 0.50% 1/10W				
R961	Δ 1-216-089-91	METAL GLAZE	47K 5% 1/10W				
R962	Δ 1-216-089-91	METAL GLAZE	47K 5% 1/10W				
R970	Δ 1-216-041-91	METAL GLAZE	470 5% 1/10W				
R971	Δ 1-216-041-91	METAL GLAZE	470 5% 1/10W				
R973	Δ 1-216-671-91	METAL CHIP	6.8K 0.50% 1/10W				
R974	Δ 1-216-671-91	METAL CHIP	6.8K 0.50% 1/10W				
R975	Δ 1-216-049-91	METAL GLAZE	1K 5% 1/10W				
R976	Δ 1-216-667-91	METAL CHIP	4.7K 0.50% 1/10W				
R977	Δ 1-216-001-91	METAL GLAZE	10 5% 1/10W				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C035	1-137-365-11	FILM	0.0015MF 5% 50V	C518	1-107-433-11	FILM	0.006MF 3% 2KV
C036	1-137-399-11	FILM	0.1MF 5% 50V	C519	1-162-558-11	CERAMIC	100pF 10% 2KV
C037	1-137-365-11	FILM	0.0015MF 5% 50V	C520	1-136-553-11	FILM	0.0015MF 5% 630V
C038	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C521	1-163-245-11	CERAMIC CHIP	56pF 5% 50V
C039	1-113-519-11	FILM	0.22MF 5% 50V				
C040	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C522	1-162-558-11	CERAMIC	100pF 10% 2KV
C041	1-137-365-11	FILM	0.0015MF 5% 50V	C523	1-137-370-11	FILM	0.01MF 5% 50V
C042	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C524	1-113-694-11	FILM	0.056MF 5% 400V
C043	1-126-967-11	ELECT	47MF 20% 50V	C525	1-107-846-11	FILM	0.1MF 5% 250V
C044	1-126-967-11	ELECT	47MF 20% 50V	C526	1-115-353-11	FILM	0.22MF 5% 250V
C050	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C527	1-109-960-11	FILM	0.43MF 5% 400V
C051	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C528	1-110-969-11	FILM	0.89MF 5% 400V
C052	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	C529	1-107-683-11	ELECT	2.2MF 0 250V
C053	1-126-964-11	ELECT	10MF 20% 50V	C530	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C054	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	C531	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C055	1-126-941-11	ELECT	470MF 20% 25V	C532	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C056	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	C533	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C057	1-126-967-11	ELECT	47MF 20% 50V	C534	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C059	1-163-005-11	CERAMIC CHIP	470pF 10% 50V	C535	1-107-929-11	ELECT	10MF 20% 50V
C060	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C536	1-107-909-11	ELECT	47MF 20% 50V
C061	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C537	1-113-696-11	FILM	1.4MF 5% 400V
C064	1-126-964-11	ELECT	10MF 20% 50V	C538	1-136-757-11	FILM	0.0033MF 5% 400V
C065	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	C539	1-107-683-11	ELECT	2.2MF 0 250V
C066	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	C540	1-106-343-00	MYLAR	0.001MF 10% 200V
C067	1-163-235-11	CERAMIC CHIP	22pF 5% 50V	C541	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C068	1-136-173-00	FILM	0.47MF 5% 50V	C542	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C069	1-137-372-11	FILM	0.022MF 5% 50V	C543	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C070	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C544	1-137-368-11	FILM	0.0047MF 5% 50V
C071	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C545	1-126-967-11	ELECT	47MF 20% 50V
C072	1-124-903-11	ELECT	1MF 20% 50V	C546	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
C073	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	C547	1-126-967-11	ELECT	47MF 20% 50V
C079	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	C548	1-137-370-11	FILM	0.01MF 5% 50V
C080	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C549	1-124-903-11	ELECT	1MF 20% 50V
C081	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	C550	1-126-963-11	ELECT	4.7MF 20% 50V
C082	1-163-251-11	CERAMIC CHIP	100pF 5% 50V	C551	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
C083	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C552	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V
C084	1-163-243-11	CERAMIC CHIP	47pF 5% 50V	C554	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C085	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	C555	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
C086	1-126-964-11	ELECT	10MF 20% 50V	C556	1-163-005-11	CERAMIC CHIP	470pF 10% 50V
C501	1-126-967-11	ELECT	47MF 20% 50V	C557	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C502	1-163-251-11	CERAMIC CHIP	100pF 5% 50V	C558	1-163-023-00	CERAMIC CHIP	0.015MF 10% 50V
C503	1-136-169-00	FILM	0.22MF 5% 50V	C559	1-162-134-11	CERAMIC	470pF 10% 2KV
C504	1-106-375-12	MYLAR	0.022MF 200V	C560	1-126-963-11	ELECT	4.7MF 20% 50V
C505	1-106-375-12	MYLAR	0.022MF 200V	C561	1-136-173-00	FILM	0.47MF 5% 50V
C506	1-136-169-00	FILM	0.22MF 5% 50V	C562	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V
C507	1-136-173-00	FILM	0.47MF 5% 50V	C563	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C508	1-163-037-11	CERAMIC CHIP	0.022MF 10% 50V	C1501	1-126-967-11	ELECT	47MF 20% 50V
C509	1-126-941-11	ELECT	470MF 20% 25V	C1502	1-137-399-11	FILM	0.1MF 5% 50V
C510	1-137-368-11	FILM	0.0047MF 5% 50V	C1503	1-163-003-11	CERAMIC CHIP	330pF 10% 50V
C511	1-110-641-51	ELECT	33MF 20% 200V	C1504	1-164-161-11	CERAMIC CHIP	0.0022MF 10% 50V
C512	1-128-528-11	ELECT	470MF 20% 25V	C1505	1-126-942-61	ELECT	1000MF 20% 25V
C513	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V	C1506	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C514	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	C1507	1-163-989-11	CERAMIC CHIP	0.033MF 10% 25V
C515	1-128-528-11	ELECT	470MF 20% 25V	C1508	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V
C516	1-137-399-11	FILM	0.1MF 5% 50V	C1509	1-137-399-11	FILM	0.1MF 5% 50V
C517	1-162-114-00	CERAMIC	0.0047MF 2KV	C1511	1-107-894-11	ELECT	220MF 20% 35V
				C1512	1-106-228-00	MYLAR	0.22MF 10% 100V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1513	1-126-942-61	ELECT	1000MF 20% 25V	D015	8-719-104-34	DIODE 1S2836	
C1514	1-126-967-11	ELECT	47MF 20% 50V	D016	8-719-104-34	DIODE 1S2836	
C1517	1-126-964-11	ELECT	10MF 20% 50V	D018	8-719-404-46	DIODE MA110	
C1518	1-104-718-91	CERAMIC	33pF 5% 2KV	D019	8-719-404-46	DIODE MA110	
C1519	1-101-804-00	CERAMIC	10pF 5% 500V	D022	8-719-404-46	DIODE MA110	
C1520	1-101-804-00	CERAMIC	10pF 5% 500V	D023	8-719-800-76	DIODE 1SS226	
C1521	1-162-318-11	CERAMIC	0.001MF 10% 500V	D024	8-719-404-46	DIODE MA110	
C1522	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	D501	8-719-106-80	ZENER DIODE RD13M-B2	
C1523	1-137-399-11	FILM	0.1MF 5% 50V	D502	8-719-048-73	DIODE ERC90M-03	
C1524	1-163-005-11	CERAMIC CHIP	470pF 10% 50V	D503	8-719-404-46	DIODE MA110	
C1526	1-124-903-11	ELECT	1MF 20% 50V	D504	8-719-984-73	DIODE SB560	
C1527	1-126-967-11	ELECT	47MF 20% 50V	D505	8-719-018-82	DIODE RGP02-20EL-6394	
C1528	1-137-399-11	FILM	0.1MF 5% 50V	D506	8-719-911-19	DIODE 1SS119-25	
C1529	1-162-134-11	CERAMIC	470pF 10% 2KV	D507	8-719-911-19	DIODE 1SS119-25	
C1531	1-107-909-11	ELECT	47MF 20% 50V	D508	8-719-109-81	ZENER DIODE RD4.7ESB2	
C1533	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	D509	8-719-911-19	DIODE 1SS119-25	
C1535	1-137-399-11	FILM	0.1MF 5% 50V	D510	8-719-951-30	DIODE ERA91-02	
C1536	1-126-964-11	ELECT	10MF 20% 50V	D511	8-719-404-46	DIODE MA110	
C1540	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D512	8-719-018-82	DIODE RGP02-20EL-6394	
C1541	1-126-963-11	ELECT	4.7MF 20% 50V	D513	8-719-106-44	ZENER DIODE RD9.1M-B2	
C1542	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D515	8-719-404-46	DIODE MA110	
C1543	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D516	8-719-976-99	DIODE DTZ5.1B	
C1544	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D517	8-719-404-46	DIODE MA110	
C1545	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D518	8-719-404-46	DIODE MA110	
C1546	1-124-903-11	ELECT	1MF 20% 50V	D519	8-719-049-12	DIODE 5TUZ52	
C1547	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	D525	8-719-404-46	DIODE MA110	
C1548	1-126-964-11	ELECT	10MF 20% 50V	D526	8-719-106-23	ZENER DIODE RD7.5M-B2	
C1549	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	D527	8-719-911-19	DIODE 1SS119-25	
<u>CONNECTOR</u>				D528	8-719-911-19	DIODE 1SS119-25	
CN501*	1-564-509-11	PLUG, CONNECTOR 6P		D1501	8-719-976-99	DIODE DTZ5.1B	
CN504*	1-564-513-11	PLUG, CONNECTOR 10P		D1502	8-719-404-46	DIODE MA110	
CN505*	1-564-515-11	PLUG, CONNECTOR 12P		D1503	8-719-404-46	DIODE MA110	
CN506*	1-564-515-11	PLUG, CONNECTOR 12P		D1504	8-719-404-46	DIODE MA110	
CN507	1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P		D1505	8-719-404-46	DIODE MA110	
CN508*	1-774-513-11	PIN, CONNECTOR (PC BOARD) 9P		D1506	8-719-976-99	DIODE DTZ5.1B	
CN509*	1-564-506-11	PLUG, CONNECTOR 3P		D1509	8-719-979-85	DIODE EGP20G	
CN510*	1-564-509-11	PLUG, CONNECTOR 6P		D1512	8-719-908-03	DIODE GP08D	
CN511*	1-564-514-11	PLUG, CONNECTOR 11P		D1514	8-719-404-46	DIODE MA110	
CN512*	1-774-511-11	CONNECTOR, BOARD TO BOARD 10P		D1516	8-719-404-46	DIODE MA110	
<u>COMPOSITION CIRCUIT BLOCK</u>				D1517	8-719-404-46	DIODE MA110	
CP001	1-223-985-11	RESISTOR ASSY, (WF-721)		D1519	8-719-404-46	DIODE MA110	
<u>DIODE</u>				D1520	8-719-028-72	DIODE RGP02-17EL-6433	
D001	8-719-976-99	DIODE DTZ5.1B		D1521	8-719-028-72	DIODE RGP02-17EL-6433	
D002	8-719-801-78	DIODE 1SS184		D1522	8-719-911-19	DIODE 1SS119-25	
D003	8-719-104-34	DIODE 1S2836		D1523	8-719-908-03	DIODE GP08D	
D004	8-719-976-99	DIODE DTZ5.1B		D1524	8-719-908-03	DIODE GP08D	
D005	8-719-976-99	DIODE DTZ5.1B		D1525	8-719-404-46	DIODE MA110	
D006	8-719-801-78	DIODE 1SS184		D1531	8-719-404-46	DIODE MA110	
D007	8-719-104-34	DIODE 1S2836		D1532	8-719-404-46	DIODE MA110	
D013	8-719-801-78	DIODE 1SS184		<u>FERRITE BEAD</u>			
D014	8-719-801-78	DIODE 1SS184		FB501	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
				FB502	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	



Les composants identifiés par un trame
et une marque Δ sont critiques pour la
sécurité. Ne les remplacer que par une
pièce portant le numéro spécifié.

The components identified by shading
and mark Δ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<u>IC</u>				Q503	8-729-216-22	TRANSISTOR 2SA1162-G	
IC001	8-759-392-96	IC HD6433337WA04H		Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC002	8-759-239-55	IC TC74HC123AF		Q505	8-729-216-22	TRANSISTOR 2SA1162-G	
IC004	8-759-353-44	IC ST24C08FM6TR		Q506	8-729-820-73	TRANSISTOR 2SC3746	
IC005	8-759-162-80	IC MM1170BFB		Q507	8-729-015-28	TRANSISTOR IRFI9630GS	
IC006	8-759-231-53	IC TA7805S		Q508	8-729-821-07	TRANSISTOR 2SC3997CA	
IC007	8-752-076-34	IC CXA1908S		Q509	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC008	8-759-168-20	IC TA78L09S		Q510	8-729-119-78	TRANSISTOR 2SC2785-HFE	
IC009	8-759-925-72	IC SN74HC02ANS		Q511	8-729-140-96	TRANSISTOR 2SD774-34	
IC010	8-759-008-94	IC MC14027BF		Q513	8-729-027-52	TRANSISTOR DTC124EKA-T146	
IC011	8-759-100-94	IC UPC358G2		Q514	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC012	8-759-370-08	IC 24LC21T/SN		Q516	8-729-027-31	TRANSISTOR DTA124EKA-T146	
IC013	8-759-930-50	IC SN74LS157NS		Q517	8-729-216-22	TRANSISTOR 2SA1162-G	
IC501	8-749-011-63	IC IRSY5305		Q518	8-729-216-22	TRANSISTOR 2SA1162-G	
IC502	8-759-803-42	IC LA6500-FA		Q519	8-729-027-52	TRANSISTOR DTC124EKA-T146	
IC503	8-759-708-05	IC NJM78L05A		Q520	8-729-027-31	TRANSISTOR DTA124EKA-T146	
IC505	8-759-981-48	IC TL082M		Q521	8-729-027-52	TRANSISTOR DTC124EKA-T146	
IC506	8-759-634-51	IC M5218AP		Q522	8-729-027-96	TRANSISTOR IRLI530G	
IC1501	8-759-822-38	IC LA6510		Q1505	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1502	8-759-980-58	IC TDA8172		Q1506	8-729-020-07	TRANSISTOR 2SC4686A(LBSONY)	
IC1503	8-759-981-48	IC TL082M		Q1507	8-729-140-96	TRANSISTOR 2SD774-34	
IC1504	8-759-981-48	IC TL082M		Q1508	8-729-020-07	TRANSISTOR 2SC4686A(LBSONY)	
IC1505	8-759-700-69	IC NJM79L12A		Q1509	8-729-027-31	TRANSISTOR DTA124EKA-T146	
<u>COIL</u>				Q1512	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L001	1-412-537-31	INDUCTOR 100UH		Q1513	8-729-027-52	TRANSISTOR DTC124EKA-T146	
L002	1-412-537-31	INDUCTOR 100UH		Q1514	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L003	1-412-537-31	INDUCTOR 100UH		<u>RESISTOR</u>			
L004	1-412-537-31	INDUCTOR 100UH		R001	1-216-025-91	METAL GLAZE 100	5% 1/10W
L005	1-410-482-31	INDUCTOR 100UH		R002	1-216-025-91	METAL GLAZE 100	5% 1/10W
L006	1-410-482-31	INDUCTOR 100UH		R003	1-216-049-91	METAL GLAZE 1K	5% 1/10W
L501	1-412-537-31	INDUCTOR 100UH		R004	1-216-049-91	METAL GLAZE 1K	5% 1/10W
L502	1-406-671-11	COIL, CHOKE 1.0mH		R006	1-216-025-91	METAL GLAZE 100	5% 1/10W
L503	1-411-585-11	COIL, HORIZONTAL LINEARITY		R007	1-216-025-91	METAL GLAZE 100	5% 1/10W
L504	1-411-584-11	COIL, HORIZONTAL LINEARITY		R008	1-216-025-91	METAL GLAZE 100	5% 1/10W
L505	1-406-675-11	COIL, CHOKE 4.7mH		R009	1-216-025-91	METAL GLAZE 100	5% 1/10W
L507	1-406-675-11	COIL, CHOKE 4.7mH		R010	1-216-049-91	METAL GLAZE 1K	5% 1/10W
L1501	1-412-522-31	INDUCTOR 5.6UH		R011	1-216-097-91	METAL GLAZE 100K	5% 1/10W
<u>IC LINK</u>				R012	1-216-025-91	METAL GLAZE 100	5% 1/10W
PS501	Δ 1-533-592-31	LINK, IC 1.6A		R013	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
PS502	Δ 1-532-984-91	LINK, IC 2A/90V		R014	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
PS503	Δ 1-532-984-91	LINK, IC 2A/90V		R015	1-216-049-91	METAL GLAZE 1K	5% 1/10W
PS504	Δ 1-532-984-91	LINK, IC 2A/90V		R017	1-216-049-91	METAL GLAZE 1K	5% 1/10W
<u>TRANSISTOR</u>				R018	1-216-049-91	METAL GLAZE 1K	5% 1/10W
Q001	8-729-162-13	TRANSISTOR 2SC1621		R019	1-216-073-00	METAL GLAZE 10K	5% 1/10W
Q002	8-729-027-52	TRANSISTOR DTC124EKA-T146		R020	1-216-049-91	METAL GLAZE 1K	5% 1/10W
Q003	8-729-027-52	TRANSISTOR DTC124EKA-T146		R021	1-216-025-91	METAL GLAZE 100	5% 1/10W
Q006	8-729-162-13	TRANSISTOR 2SC1621		R022	1-216-025-91	METAL GLAZE 100	5% 1/10W
Q007	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R023	1-216-049-91	METAL GLAZE 1K	5% 1/10W
Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R024	1-216-049-91	METAL GLAZE 1K	5% 1/10W
Q502	8-729-162-13	TRANSISTOR 2SC1621		R025	1-216-073-00	METAL GLAZE 10K	5% 1/10W
				R026	1-216-073-00	METAL GLAZE 10K	5% 1/10W
				R027	1-216-073-00	METAL GLAZE 10K	5% 1/10W
				R028	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
				R029	1-216-089-91	METAL GLAZE 47K	5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R030	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R506	1-249-405-11	CARBON 100	5% 1/4W F
R031	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R507	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R032	1-216-025-91	METAL GLAZE 100	5% 1/10W				
R033	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R508	1-216-025-91	METAL GLAZE 100	5% 1/10W
R034	1-216-025-91	METAL GLAZE 100	5% 1/10W	R509	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R035	1-216-025-91	METAL GLAZE 100	5% 1/10W	R510	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R036	1-216-025-91	METAL GLAZE 100	5% 1/10W	R511	1-219-731-11	METAL 2.4	1% 10W
R037	1-216-025-91	METAL GLAZE 100	5% 1/10W	R513	1-215-860-11	METAL OXIDE 33	5% 1W F
R039	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R514	1-211-796-11	FUSIBLE 1	5% 1/2W F
R040	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R515	1-216-673-11	METAL CHIP 8.2K	0.50%1/10W
R041	1-216-025-91	METAL GLAZE 100	5% 1/10W	R516	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R044	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R517	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R046	1-216-025-91	METAL GLAZE 100	5% 1/10W	R518	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R047	1-216-025-91	METAL GLAZE 100	5% 1/10W	R519	1-216-393-00	METAL OXIDE 2.2	5% 3W F
R049	1-216-025-91	METAL GLAZE 100	5% 1/10W	R520	1-216-393-00	METAL OXIDE 2.2	5% 3W F
R050	1-216-025-91	METAL GLAZE 100	5% 1/10W	R521	1-249-413-11	CARBON 470	5% 1/4W F
R052	1-216-663-11	METAL CHIP 3.3K	0.50%1/10W	R522	1-216-423-11	METAL OXIDE 27	5% 1W F
R058	1-218-764-11	METAL CHIP 330K	0.50%1/10W	R523	1-249-429-11	CARBON 10K	5% 1/4W F
R059	1-216-671-11	METAL CHIP 6.8K	0.50%1/10W	R524	1-216-431-11	METAL OXIDE 560	5% 1W F
R061	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R525	1-208-812-11	METAL CHIP 18K	0.50%1/10W
R062	1-216-025-91	METAL GLAZE 100	5% 1/10W	R526	1-214-840-00	METAL 100	1% 1/2W
R063	1-216-667-11	METAL CHIP 4.7K	0.50%1/10W	R527	1-214-840-00	METAL 100	1% 1/2W
R065	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R528	1-214-840-00	METAL 100	1% 1/2W
R066	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R529	1-260-313-51	CARBON 56	5% 1/2W
R067	1-216-097-91	METAL GLAZE 100K	50% 1/10W	R530	1-249-437-11	CARBON 47K	5% 1/4W
R069	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R531	1-249-437-11	CARBON 47K	5% 1/4W
R070	1-216-663-11	METAL CHIP 3.3K	0.50%1/10W	R532	1-249-437-11	CARBON 47K	5% 1/4W
R071	1-216-025-91	METAL GLAZE 100	5% 1/10W	R533	1-249-437-11	CARBON 47K	5% 1/4W
R072	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R534	1-249-437-11	CARBON 47K	5% 1/4W
R073	1-216-659-11	METAL CHIP 2.2K	0.50%1/10W	R535	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R074	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R536	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R075	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R537	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R076	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R538	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R077	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R539	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R078	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R540	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R079	1-216-017-91	METAL GLAZE 47	5% 1/10W	R541	1-260-313-51	CARBON 56	5% 1/2W
R080	1-216-017-91	METAL GLAZE 47	5% 1/10W	R542	1-215-863-11	METAL OXIDE 100	5% 1W F
R085	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R543	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R086	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R544	1-216-025-91	METAL GLAZE 100	5% 1/10W
R087	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R545	1-208-806-11	METAL CHIP 10K	0.50%1/10W
R088	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R546	1-260-288-11	CARBON 0.47	5% 1/2W
R089	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R547	1-216-667-11	METAL CHIP 4.7K	0.50%1/10W
R090	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R548	1-249-429-11	CARBON 10K	5% 1/4W
R091	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R549	1-216-667-11	METAL CHIP 4.7K	0.50%1/10W
R092	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R550	1-260-288-11	CARBON 0.47	5% 1/2W
R093	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R551	1-216-667-11	METAL CHIP 4.7K	0.50%1/10W
R095	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R552	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R096	1-216-035-00	METAL GLAZE 270	5% 1/10W	R553	1-208-814-11	METAL CHIP 22K	0.50%1/10W
R097	1-216-025-91	METAL GLAZE 100	5% 1/10W	R554	1-208-814-11	METAL CHIP 22K	0.50%1/10W
R098	1-216-025-91	METAL GLAZE 100	5% 1/10W	R555	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R099	1-216-125-00	METAL GLAZE 1.5M	5% 1/10W	R556	1-208-824-11	METAL CHIP 56K	0.50%1/10W
R501	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R557	1-208-822-11	METAL CHIP 47K	0.50%1/10W
R502	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R558	1-216-685-11	METAL CHIP 27K	0.50%1/10W
R503	1-216-041-00	METAL GLAZE 470	5% 1/10W	R561	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R504	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R562	1-249-401-11	CARBON 47	5% 1/4W F
R505	1-216-041-00	METAL GLAZE 470	5% 1/10W	R563	1-208-806-11	METAL CHIP 10K	0.50%1/10W
				R565	1-208-814-11	METAL CHIP 22K	0.50%1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R566	1-260-311-11	CARBON 39	5% 1/2W	R1515	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R567	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	R1516	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R568	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1517	1-216-085-00	METAL GLAZE 33K	5% 1/10W
R569	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1518	1-216-450-00	METAL OXIDE 82	5% 2W F
R570	1-216-001-00	METAL GLAZE 10	5% 1/10W	R1519	1-249-383-11	CARBON 1.5	5% 1/4W F
R571	1-216-381-11	METAL OXIDE 0.22	5% 3W F	R1520	1-260-292-11	CARBON 1	5% 1/2W
R572	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1521	1-216-647-11	METAL CHIP 680	0.50%1/10W
R573	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1522	1-208-822-11	METAL CHIP 47K	0.50%1/10W
R574	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1523	1-216-651-11	METAL CHIP 1K	0.50%1/10W
R575	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1524	1-214-798-21	METAL 1.8	1% 1/2W
R576	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1525	1-214-798-21	METAL 1.8	1% 1/2W
R577	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R1526	1-208-806-11	METAL CHIP 10K	0.50%1/10W
R578	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1527	1-260-292-11	CARBON 1	5% 1/2W
R579	1-216-651-11	METAL CHIP 1K	0.50%1/10W	R1528	1-249-383-11	CARBON 1.5	5% 1/4W F
R580	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1529	1-215-866-11	METAL OXIDE 330	5% 1W F
R581	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1531	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R582	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1532	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R583	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R1535	1-202-818-00	SOLID 1K	20% 1/2W
R584	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1537	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R585	1-216-089-91	METAL GLAZE 47K	5% 1/10W	R1538	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R586	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R1539	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R587	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1541	1-216-025-91	METAL GLAZE 100	5% 1/10W
R588	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1542	1-216-113-00	METAL GLAZE 470K	5% 1/10W
R589	1-208-806-11	METAL CHIP 10K	0.50%1/10W	R1543	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R590	1-208-814-11	METAL CHIP 22K	0.50%1/10W	R1544	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R591	1-208-814-11	METAL CHIP 22K	0.50%1/10W	R1545	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R592	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1546	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R593	1-216-017-91	METAL GLAZE 47	5% 1/10W	R1548	1-218-758-11	METAL CHIP 180K	0.50%1/10W
R594	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1549	1-216-687-11	METAL CHIP 33K	0.50%1/10W
R595	1-216-097-91	METAL GLAZE 100K	5% 1/10W	R1550	1-216-105-91	METAL GLAZE 220K	5% 1/10W
R1001	1-216-121-91	METAL GLAZE 1M	5% 1/10W	R1551	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R1002	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1552	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
R1005	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1553	1-219-720-11	METAL 10M	5% 1W
R1006	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R1554	1-202-843-11	SOLID 270K	20% 1/2W
R1007	1-216-085-00	METAL GLAZE 33K	5% 1/10W	R1555	1-202-843-11	SOLID 270K	20% 1/2W
R1008	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1556	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R1009	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1558	1-249-429-11	CARBON 10K	5% 1/4W
R1010	1-216-017-91	METAL GLAZE 47	5% 1/10W	R1559	1-208-822-11	METAL CHIP 47K	0.50%1/10W
R1011	1-216-017-91	METAL GLAZE 47	5% 1/10W	R1560	1-249-413-11	CARBON 470	5% 1/4W F
R1012	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1561	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1013	1-216-105-91	METAL GLAZE 220K	5% 1/10W	R1571	1-208-822-11	METAL CHIP 47K	0.50%1/10W
R1014	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	R1572	1-208-822-11	METAL CHIP 47K	0.50%1/10W
R1501	1-249-383-11	CARBON 1.5	5% 1/4W F	R1573	1-216-689-11	METAL CHIP 39K	0.50%1/10W
R1502	1-249-421-11	CARBON 2.2K	5% 1/4W	R1574	1-208-806-11	METAL CHIP 10K	0.50%1/10W
R1503	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R1575	1-215-863-11	METAL OXIDE 100	5% 1W F
R1504	1-249-383-11	CARBON 1.5	5% 1/4W F	R1576	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R1505	1-249-385-11	CARBON 2.2	5% 1/4W	R1577	1-208-806-11	METAL CHIP 10K	0.50%1/10W
R1506	1-216-093-00	METAL GLAZE 68K	5% 1/10W	R1578	1-216-667-11	METAL CHIP 4.7K	0.50%1/10W
R1507	1-249-421-11	CARBON 2.2K	5% 1/4W	R1579	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1508	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R1580	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R1509	1-216-473-11	METAL OXIDE 56	5% 3W F	R1581	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R1510	1-216-079-00	METAL GLAZE 18K	5% 1/10W	R1582	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R1511	1-249-383-11	CARBON 1.5	5% 1/4W F	R1598	1-202-843-11	SOLID 270K	20% 1/2W
R1512	1-249-385-11	CARBON 2.2	5% 1/4W				
R1513	1-216-105-91	METAL GLAZE 220K	5% 1/10W				
R1514	1-216-077-00	METAL GLAZE 15K	5% 1/10W				



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<u>RELAY</u>				D831	8-719-045-19	DIODE SPB-26MVWF	
RY501	1-755-137-11	RELAY		<u>TRANSISTOR</u>			
<u>SPARK GAP</u>				Q830	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
SG1501	1-519-422-11	GAP, SPARK		Q831	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
SG1502	1-519-422-11	GAP, SPARK		Q832	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<u>TRANSFORMER</u>				<u>RESISTOR</u>			
T501	1-429-303-11	TRANSFORMER, FERRITE (HDT)		R800	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
T502	1-411-594-11	COIL, CHOKE 5mH		R801	1-216-035-00	METAL GLAZE 270	5% 1/10W
T503	1-426-998-11	TRANSFORMER, FERRITE (HST)		R802	1-216-037-00	METAL GLAZE 330	5% 1/10W
T504	1-429-301-11	TRANSFORMER, FERRITE (HCT)		R803	1-216-039-00	METAL GLAZE 390	5% 1/10W
T1501	1-423-405-12	TRANSFORMER, FERRITE (FRT)		R804	1-216-043-91	METAL GLAZE 560	5% 1/10W
T1502	1-423-854-11	TRANSFORMER, FERRITE (DFT)		R805	1-216-045-00	METAL GLAZE 680	5% 1/10W
<u>THERMISTOR</u>				R806	1-216-049-91	METAL GLAZE 1K	5% 1/10W
TH501	1-807-796-11	THERMISTOR		R807	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W
<u>CRYSTAL</u>				R808	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
X001	1-579-562-11	VIBRATOR, CRYSTAL		R809	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
*****				R810	1-216-075-00	METAL GLAZE 12K	5% 1/10W
* 8-933-160-00 H BOARD, COMPLETE				R830	1-216-037-00	METAL GLAZE 330	5% 1/10W
*****				R831	1-216-041-00	METAL GLAZE 470	5% 1/10W
* 4-049-089-01 HOLDER, LED				R832	1-216-037-00	METAL GLAZE 330	5% 1/10W
<u>CAPACITOR</u>				R833	1-216-049-91	METAL GLAZE 1K	5% 1/10W
C801	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	R834	1-216-049-91	METAL GLAZE 1K	5% 1/10W
C802	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R835	1-216-073-00	METAL GLAZE 10K	5% 1/10W
C803	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	<u>SWITCH</u>			
C804	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	S801	1-571-532-21	SWITCH, TACTIL (CONT +)	
C805	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	S802	1-571-532-21	SWITCH, TACTIL (CONT -)	
C806	1-124-589-11	ELECT 47MF	20% 16V	S803	1-571-532-21	SWITCH, TACTIL (BRT +)	
<u>CONNECTOR</u>				S804	1-571-532-21	SWITCH, TACTIL (BRT -)	
CN801*	1-564-521-11	PLUG, CONNECTOR 6P		S805	1-571-532-21	SWITCH, TACTIL (CENT)	
CN802	1-564-517-11	PLUG, CONNECTOR 2P		S806	1-571-532-21	SWITCH, TACTIL (SIZE)	
<u>DIODE</u>				S807	1-571-532-21	SWITCH, TACTIL (GEOM)	
D801	8-719-801-78	DIODE 1SS184		S808	1-571-532-21	SWITCH, TACTIL (CONV)	
D802	8-719-801-78	DIODE 1SS184		S809	1-571-532-21	SWITCH, TACTIL (OPTION)	
D803	8-719-104-34	DIODE 1S2836		S810	1-571-532-21	SWITCH, TACTIL (RESET)	
D804	8-719-104-34	DIODE 1S2836		*****			
D830	8-719-311-90	DIODE SEL1922D-C, D		* 8-933-162-00 J BOARD, COMPLETE			

				<u>CONNECTOR</u>			
				CN891	1-691-960-11	CONNECTOR (PC BOARD) 3P	
				<u>SWITCH</u>			
				S891	1-571-433-21	SWITCH, PUSH (AC POWER)	

Les composants identifiés par un tramé et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS *****					
		1-251-382-12 INLET, AC 3P(WITH NOISE FILTE)					
		1-411-472-11 COIL, LANDING CORRECTION					
		1-411-885-11 COIL, DEMAGNETIC					
	*	1-694-108-11 TERMINAL BOARD ASSY, I/O					
		1-765-718-11 CORD SET, POWER (U/C Model) 10A/125V					
		1-765-717-11 CORD SET, POWER (AEP Model) 10A/250V					
		1-774-648-11 ADAPTOR, CONVERSION (for VGA) (AEP Model)					
		1-776-210-11 CABLE ASSY (15P DSUB X2 CONNECTOR)					
		1-900-215-90 CONNECTOR ASSY					
		8-451-476-12 DEFLECTION YOKE Y20SHK-M					
		8-453-003-41 NECK ASSY (NA3012-M4)					
V901		8-736-389-05 PICTURE TUBE (20SH8)					
		8-736-369-94 ITC ASSY (20SH8-R3)					