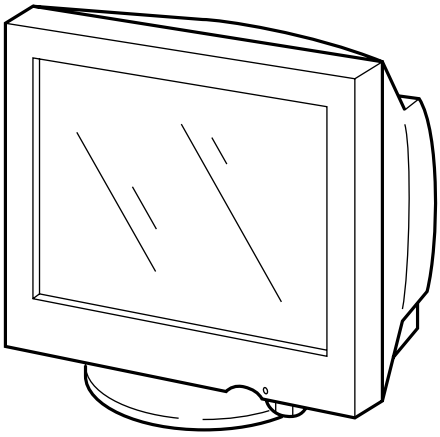
CPD-E400/E400E

SERVICE MANUAL



CPD-E400
US Model
Canadian Model
Chassis No. SCC-L30K-A

CPD-E400E
AEP Model
Chassis No. SCC-L30K-A

F99 CHASSIS

SPECIFICATIONS

CRT	0.24 mm aperture grille pitch (center) 19 inches measured diagonally 90-degree deflection FD Trinitron
Viewable image size	Approx. 365 × 274 mm (w/h) (14 3/8 × 10 7/8 inches) 18.0" viewing image
Resolution	
Maximum	Horizontal: 1800 dots Vertical: 1440 lines
Recommended	Horizontal: 1280 dots Vertical: 1024 lines
Standard image area	Approx. 352 × 264 mm (w/h) (13 7/8 × 10 1/2 inches)
Deflection frequency*	Horizontal: 30 to 96 kHz Vertical: 48 to 120 Hz
AC input voltage/current	100 to 240 V, 50 – 60 Hz, Max. 2.0 A
Power consumption	140 W
Operating temperature	10˚C to 40˚C
Dimensions	Approx. 446 × 464 × 461 mm (w/h/d) (17 5/8 × 18 3/8 × 18 1/4 inches)
Mass	Approx. 26 kg (57 lb 5 oz)
Plug and Play	DDC1/DDC2B/DDC2Bi/GTF

* Recommended horizontal and vertical timing condition
- Horizontal sync width should be more than 1.0 µsec.
- Horizontal blanking width should be more than 3.0 µsec.
- Vertical blanking width should be more than 500 µsec.

Design and specifications are subject to change without notice.

TRINITRON® COLOR COMPUTER DISPLAY

SONY®

SAFETY CHECK-OUT

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.

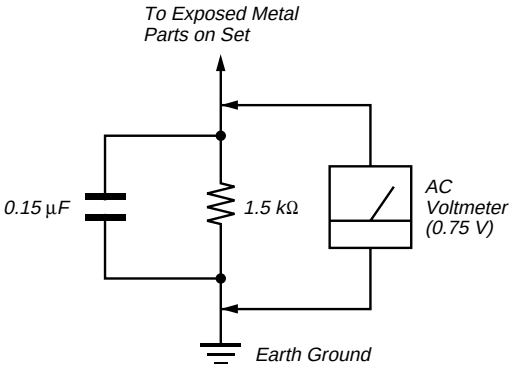


Fig. A. Using an AC voltmeter to check AC leakage.

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 ⚠ 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 ⚠ 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 FONCTIONNE-MENT EST SUSPECTÉ.

POWER SAVING FUNCTION

This monitor meets the power-saving guidelines set by VESA, ENERGY STAR, and NUTEK. If the monitor is connected to a computer or video graphics board that is DPMS (Display Power Management Signaling) compliant, the monitor will automatically reduce power consumption in three stages as shown below.

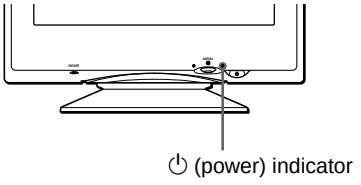
Power mode	Power consumption	⏻ (power) indicator
normal operation	≤ 140 W	green
1 standby	≤ 15 W	green and orange alternate
2 suspend (sleep)*	≤ 15 W	green and orange alternate
3 active off** (deep sleep)*	≤ 3 W	orange
power off	0 W	off

* "Sleep" and "deep sleep" are power saving modes defined by the Environmental Protection Agency.

** When your computer is in a power saving mode, MONITOR IS IN POWER SAVE MODE appears on the screen if you press any button on the monitor. After a few seconds, the monitor enters the power saving mode again.

DIAGNOSIS

This monitor is equipped with a self-diagnosis function. If there is a problem with your monitor or computer, the screen will go blank and the ⏻ (power) indicator will either light up green or flash orange. If the ⏻ (power) indicator is lit in orange, the computer is in power saving mode. Try pressing any key on the keyboard.

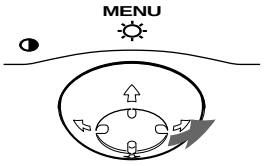


If the ⏻ (power) indicator is green

1 Disconnect the video input cable or turn off the connected computer.

2 Press the ⏻ (power) button twice to turn the monitor off and then on.

3 Move the control button ➡ for 2 seconds before the monitor enters power saving mode.



If all four color bars appear (white, red, green, blue), the monitor is working properly. Reconnect the video input cable and check the condition of your computer.

If the color bars do not appear, there is a potential monitor failure. Inform your authorized Sony dealer of the monitor's condition.

If the ⏻ (power) indicator is flashing orange

Press the ⏻ (power) button twice to turn the monitor off and then on.

If the ⏻ (power) indicator lights up green, the monitor is working properly.

If the ⏻ (power) indicator is still flashing, there is a potential monitor failure. Count the number of seconds between orange flashes of the ⏻ (power) indicator and inform your authorized Sony dealer of the monitor's condition. Be sure to note the model name and serial number of your monitor. Also note the make and model of your computer and video board.

TIMING SPECIFICATION

MODE AT PRODUCTION	MODE 1	MODE 2
RESOLUTION	738 X 414	1600 X 1200
CLOCK	28.322 MHz	202.500 MHz
HORIZONTAL		
H-FREQ	31.469 kHz	93.750 kHz
	usec	usec
H. TOTAL	31.777	10.667
H. BLK	5.720	2.765
H. FP	0.318	0.316
H. SYNC	3.813	0.948
H. BP	1.589	1.501
H. ACTIV	26.057	7.901
– VERTICAL –		
V. FREQ(HZ)	70.087 Hz	75.000 Hz
	lines	lines
V. TOTAL	449	1250
V. BLK	35	50
V. FP	5	1
V. SYNC	2	3
V. BP	28	46
V. ACTIV	414	1200
– SYNC –		
INT(G)	NO	NO
EXT(H/V)/POLARITY	YES N/P	YES P/P
EXT(CS) /POLARITY	NO	NO
INT/NON INT	NON INT	NON INT

99.10.26 VER.

TABLE OF CONTENTS

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.

SECTION 1
GENERAL

Precautions

Warning on power connections

- Use the supplied power cord. If you use a different power cord, be sure that it is compatible with your local power supply.
  For the customers in the U.S.A.
  If you do not use the appropriate cord, this monitor will not conform to mandatory FCC standards.

  Example of plug types

for 100 to 120 V AC

for 200 to 240 V AC

- Before disconnecting the power cord, wait at least 30 seconds after turning off the power to allow the static electricity on the screen's surface to discharge.
- After the power is turned on, the screen is demagnetized (degaussed) for about 5 seconds. This generates a strong magnetic field around the screen which may affect data stored on magnetic tapes and disks placed near the monitor. Be sure to keep magnetic recording equipment, tapes, and disks away from the monitor.

The equipment should be installed near an easily accessible outlet.

Installation

Do not install the monitor in the following places:

- on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies, etc.) that may block the ventilation holes
- near heat sources such as radiators or air ducts, or in a place subject to direct sunlight
- in a place subject to severe temperature changes
- in a place subject to mechanical vibration or shock
- on an unstable surface
- near equipment which generates magnetism, such as a transformer or high voltage power lines
- near or on an electrically charged metal surface

Maintenance

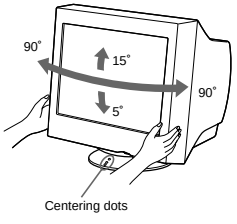
- Clean the screen with a soft cloth. If you use a glass cleaning liquid, do not use any type of cleaner containing an anti-static solution or similar additive as this may scratch the screen's coating.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a ballpoint pen or screwdriver. This type of contact may result in a scratched picture tube.
- Clean the cabinet, panel and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent, such as alcohol or benzene.

Transportation

When you transport this monitor for repair or shipment, use the original carton and packing materials.

Use of the tilt-swivel

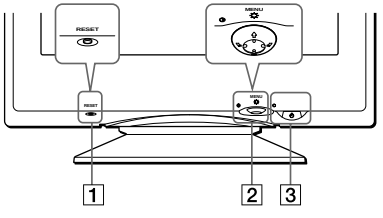
This monitor can be adjusted within the angles shown below. To find the center of the monitor's turning radius, align the center of the monitor's screen with the centering dots on the stand.
Hold the monitor at the bottom with both hands when you turn it horizontally or vertically. Be careful not to pinch your fingers at the back of the monitor when you tilt the monitor up vertically.



Identifying parts and controls

See the pages in parentheses for further details.

Front

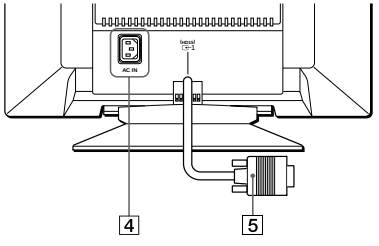


1 RESET button (page 14)
This button resets the adjustments to the factory settings.

2 Control button (page 9)
The control button is used to display the menu and make adjustments to the monitor, including brightness and contrast adjustments.

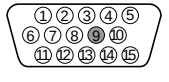
3 ⏻ (power) switch and indicator (pages 7, 15, 18)
This button turns the monitor on and off. The power indicator lights up in green when the monitor is turned on, and either flashes in green and orange, or lights up in orange when the monitor is in power saving mode.

Rear



4 AC IN connector (page 7)
This connector provides AC power to the monitor.

5 Video input 1 connector (HD15) (↪1) (page 6)
This connector inputs RGB video signals (0.700 Vp-p, positive) and sync signals.



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

* DDC (Display Data Channel) is a standard of VESA.

US

1-1

Setup

Before using your monitor, check that the following accessories are included in your carton:

- Power cord
- Current G3 adapter (for beige system) (1)
- Setup Disk (1)
- Warranty card
- Notes on cleaning the screen's surface
- This instruction manual

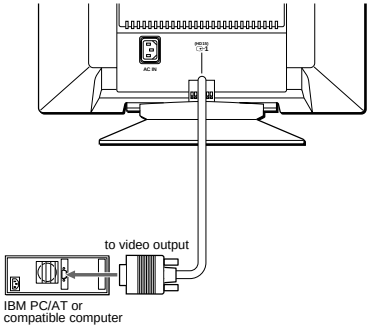
Step 1: Connect your monitor to your computer

Turn off the monitor and computer before connecting.

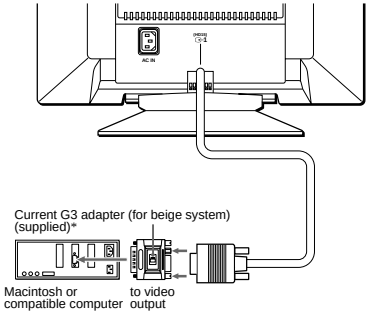
Note

Do not touch the pins of the video signal cable connector as this might bend the pins.

■ Connecting to an IBM PC/AT or compatible computer



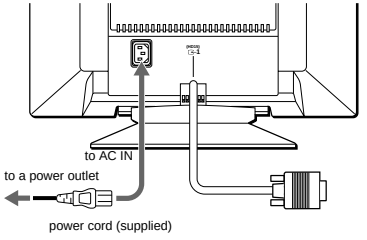
■ Connecting to a Macintosh or compatible computer



* Connect the supplied Macintosh adapter to the computer before connecting the cable.
This adapter is compatible with Macintosh LC, Performa, Quadra, Power Macintosh, and Power Macintosh G3 series computers that have two rows of pins. If you are connecting to the other version of Power Macintosh G3 series with three rows of pins or models other than those stated above, you will need a different adapter (not supplied).

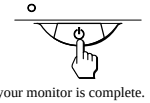
Step 2: Connect the power cord

With the monitor and computer switched off, first connect the power cord to the monitor, then connect it to a power outlet.



Step 3: Turn on the monitor and computer

First turn on the monitor, then turn on the computer.



The installation of your monitor is complete.
If necessary, use the monitor's controls to adjust the picture.

If no picture appears on your screen

- Check that the monitor is correctly connected to the computer.
- If NO INPUT SIGNAL appears on the screen, confirm that the video signal cable is properly connected and all plugs are firmly seated in their sockets.
- If MONITOR IS IN POWER SAVE MODE appeared on the screen, try pressing any key on the computer keyboard.
- If you are replacing an old monitor with this model and OUT OF SCAN RANGE appears on the screen, reconnect the old monitor. Then adjust the computer's graphic board so that the horizontal frequency is between 30 – 96 kHz, and the vertical frequency is between 48 – 120 Hz.

For more information about the on-screen messages, see "Trouble symptoms and remedies" on page 16.

US

Setup on various OS (Operating System)

This monitor complies with the "DDC" Plug & Play standard and automatically detects all the monitor's information with the Windows Plug & Play function. No specific driver needs to be installed to the computer.
If you connect the monitor to your PC, and then boot your PC for the first time, the setup Wizard may be displayed on the screen. Click on "Next" several times according to the instructions from the Wizard until the Plug & Play Monitor is automatically selected so that you can use this monitor.
If your PC/graphics board has difficulty communicating with this monitor, load the supplied Setup Disk. Refer to the "Read Me" file on the Disk about the procedure to install. You can also download the information by accessing the web site of the graphics board's manufacturer.

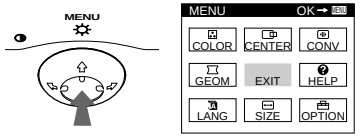
For customers using Windows NT4.0

Monitor setup in Windows NT4.0 does not use the display driver. Refer to the Windows NT4.0 instruction manual for further details on adjusting the resolution, refresh rate, and number of colors.

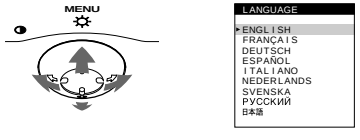
Selecting the on-screen menu language (LANG)

English, French, German, Spanish, Italian, Dutch, Swedish, Russian and Japanese versions of the on-screen menus are available. The default setting is English.

1 Press the center of the control button.
See page 9 for more information on using the control button.



2 Move the control button to highlight LANG and press the center of the control button again.



3 Move the control button ↓/↑ to select a language.
- ENGLISH
- FRANÇAIS: French
- DEUTSCH: German
- ESPAÑOL: Spanish
- ITALIANO: Italian
- NEDERLANDS: Dutch
- SVENSKA: Swedish
- РУССКИЙ: Russian
- 日本語: Japanese

To close the menu
Press the center of the control button once to return to the main MENU, and twice to return to normal viewing. If no buttons are pressed, the menu closes automatically after about 30 seconds.

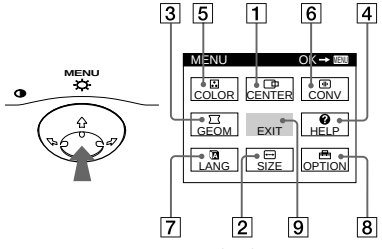
To reset to English
Press the RESET button while the LANGUAGE menu is displayed on the screen.

Customizing Your Monitor

You can make numerous adjustments to your monitor using the on-screen menu.

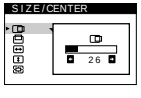
Navigating the menu

Press the center of the control button to display the main MENU on your screen. See page 9 for more information on using the control button.

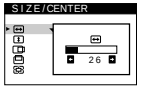


Use the control button to select one of the following menus.

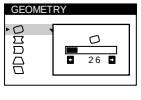
1 CENTER (page 10)
Selects the CENTER menu to adjust the picture's centering, size or zoom.



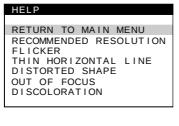
2 SIZE (page 10)
Selects the SIZE menu to adjust the picture's size, centering or zoom.



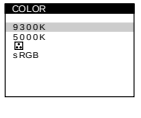
3 GEOM (page 11)
Selects the GEOM menu to adjust the picture's rotation and shape.



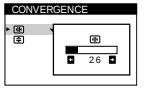
4 HELP (page 13)
Selects the HELP menu to display helpful hints and information about this monitor.



5 COLOR (page 11)
Selects the COLOR menu to adjust the picture's color temperature. You can use this to match the monitor's colors to a printed picture's colors.

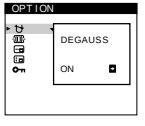


6 CONV (page 12)
Selects the CONV menu to adjust the picture's horizontal and vertical convergence.



7 LANG (page 8)
Selects the LANG menu to choose the on-screen menu's language.

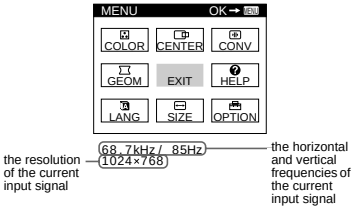
8 OPTION (page 12)
Selects the OPTION menu to adjust the monitor's options. The options include:
- degaussing the screen
- adjusting the moire cancellation level
- changing the on-screen menu position
- locking the controls



9 EXIT
Select EXIT to close the menu.

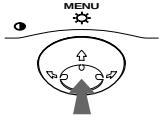
■ Displaying the current input signal

The horizontal and vertical frequencies of the current input signal are displayed in the main MENU. If the signal matches one of this monitor's factory preset modes, the resolution is also displayed.

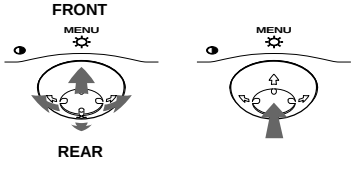


■ Using the control button

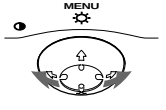
1 Display the main MENU.
Press the center of the control button to display the main MENU on your screen.



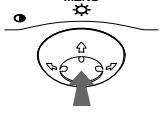
2 Select the menu you want to adjust.
Highlight the desired menu by moving the control button towards the rear to go up (↑), towards the front to go down (↓), and left (←) or right (→) to move sideways.



3 Adjust the menu.
Move the control button left (←) or right (→) to make the adjustment.

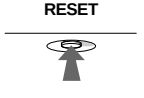


4 Close the menu.
Press the center of the control button once to return to the main MENU, and twice to return to normal viewing. If no buttons are pressed, the menu closes automatically after about 30 seconds.



■ Resetting the adjustments

Press the RESET button. See page 14 for more information on resetting the adjustments.

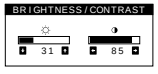


US

Adjusting the brightness and contrast

Brightness and contrast adjustments are made using a separate BRIGHTNESS/CONTRAST menu.
These settings are stored in memory for all input signals.

1 Move the control button in any direction.
The BRIGHTNESS/CONTRAST menu appears on the screen.



2 Move the control button ↓/↑ to adjust the brightness (☼), and ←/→ to adjust the contrast (◑).
The menu automatically disappears after about 3 seconds.

If you set sRGB to "ON" on the color setting, the brightness (☼) and contrast (◑) are automatically set to "31" and "85" respectively.
For more information about sRGB, see "Adjusting the color of the picture (COLOR)" on page 11.

Adjusting the centering of the picture (CENTER)

This setting is stored in memory for the current input signal.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight CENTER and press the center of the control button again.
The SIZE/CENTER menu appears on the screen.

3 First move the control button ↓/↑ to select for horizontal adjustment, or for vertical adjustment. Then move the control button ←/→ to adjust the centering.

Adjusting the size of the picture (SIZE)

This setting is stored in memory for the current input signal.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight SIZE and press the center of the control button again.
The SIZE/CENTER menu appears on the screen.

3 First move the control button ↓/↑ to select for horizontal adjustment, or for vertical adjustment. Then move the control button ←/→ to adjust the size.

Enlarging or reducing the picture (ZOOM)

This setting is stored in memory for the current input signal.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight SIZE or CENTER and press the center of the control button again.
The SIZE/CENTER menu appears on the screen.

3 Move the control button ↓/↑ to select (zoom), and move ←/→ to enlarge or reduce the picture.

Notes
- Adjustment stops when either the horizontal or vertical size reaches its maximum or minimum value.
- The horizontal adjustment value is not displayed in the menu.

Adjusting the shape of the picture (GEOM)

The GEOM settings allow you to adjust the rotation and shape of the picture.
The (rotation) setting is stored in memory for all input signals. All other settings are stored in memory for the current input signal.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight GEOM and press the center of the control button again.
The GEOMETRY menu appears on the screen.

3 First move the control button ↓/↑ to select the desired adjustment item. Then move the control button ←/→ to make the adjustment.

Select	To
	rotate the picture
	expand or contract the picture sides
	shift the picture sides to the left or right
	adjust the picture width at the top of the screen
	shift the picture to the left or right at the top of the screen

Adjusting the color of the picture (COLOR)

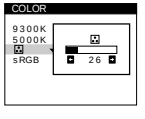
The COLOR settings allow you to adjust the picture's color temperature by changing the color level of the white color field. Colors appear reddish if the temperature is low, and bluish if the temperature is high. This adjustment is useful for matching the monitor's colors to a printed picture's colors.
This setting is stored in memory for all input signals.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight COLOR and press the center of the control button again.
The COLOR menu appears on the screen.

3 Move the control button ↓/↑ to select a color temperature.
The preset color temperatures are 5000K and 9300K. Since the default setting is 9300K, the whites will change from a bluish hue to a reddish hue as the temperature is lowered to 5000K.

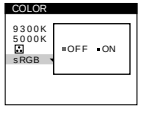
4 If necessary, fine tune the color temperature.
You can select your own color temperature between 9300K and 5000K.
First move the control button ↓/↑ to select . Then move the control button ←/→ to adjust the color temperature.



sRGB Mode

The sRGB color setting is an industry standard color space protocol designed to correlate the displayed and printed colors of sRGB compliant computer products. To adjust the colors to the sRGB profile, simply set the sRGB "ON" in the COLOR menu. However, in order to display the sRGB colors correctly (γ=2.2, 6500K), you must set your computer to the sRGB profile.
When you set sRGB to "ON", the brightness (☼) and contrast (◑) are automatically set to "31" and "85" respectively. If you change the brightness (☼) and contrast (◑), sRGB setting is changed to "OFF."
For information on how to change the brightness (☼) and contrast (◑), see page 10.

Note
Your computer and other connected products (such as a printer), must be sRGB compliant.



US

1-4

Adjusting the convergence (CONV)

The CONV settings allow you to adjust the quality of the picture by controlling the convergence. The convergence refers to the alignment of the red, green, and blue color signals.
If you see red or blue shadows around letters or lines, adjust the convergence.
These settings are stored in memory for all input signals.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight CONV and press the center of the control button again.
The CONVERGENCE menu appears on the screen.

3 First move the control button ↓/↑ to select for horizontal adjustment, or for vertical adjustment. Then move the control button ←/→ to adjust the convergence.

Additional settings (OPTION)

You can manually degauss (demagnetize) the monitor, adjust the moire cancellation level, change the menu position, and lock the controls.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight OPTION and press the center of the control button again.
The OPTION menu appears on the screen.

3 Move the control button ↓/↑ to select the desired adjustment item.
Adjust the selected item according to the following instructions.

Degaussing the screen

The monitor is automatically demagnetized (degaussed) when the power is turned on.
To manually degauss the monitor, first move the control button ↓/↑ to select (DEGAUSS). Then move the control button →.
The screen is degaussed for about 5 seconds. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

Adjusting the moire*

If elliptical or wavy patterns appear on the screen, adjust the moire cancellation level.
To adjust the amount of moire cancellation, first move the control button ↓/↑ to select (MOIRE ADJUST). Then move the control button ←/→ until the moire effect is at a minimum.

* Moire is a type of natural interference which produces soft, wavy lines on your screen. It may appear due to interference between the pattern of the picture on the screen and the phosphor pitch pattern of the monitor.

Example of moire

Changing the menu's position

Change the menu's position if it is blocking an image on the screen.
To change the menu's on-screen position, first move the control button ↓/↑ to select (OSD H POSITION) for horizontal adjustment, or (OSD V POSITION) for vertical adjustment. Then move the control button ←/→ to shift the on-screen menu.

Locking the controls

To protect adjustment data by locking the controls, first move the control button ↓/↑ to select (CONTROL LOCK). Then move the control button →, to select ON.
Only the ⏻ (power) switch, EXIT, and (CONTROL LOCK) of the OPTION menu will operate. If any other items are selected, the mark appears on the screen.

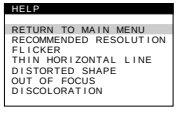
To cancel the control lock
Repeat the procedure above and set (CONTROL LOCK) to OFF.

Helpful hints and information (HELP)

The HELP menu contains helpful hints and information about this monitor. If your monitor is displaying symptoms that match those listed in the HELP menu, follow the on-screen instructions to resolve the problem. If the symptoms do not match those listed in the HELP menu or if the problem persists, see "Trouble symptoms and remedies" on page 16.

1 Press the center of the control button.
The main MENU appears on the screen.

2 Move the control button to highlight HELP and press the center of the control button again.
The following HELP menu appears on the screen.

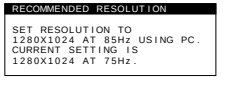


3 Move the control button ↓/↑ to select a HELP menu item and press the center of the control button again.
Instructions or information to resolve the problem appears on the screen. An explanation of each menu item is given below.

US

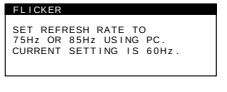
RECOMMENDED RESOLUTION

If the picture does not fill the screen to the edges or if the picture appears too large for the screen, adjust the resolution to the figures shown in the menu using your computer. If the input signal matches one of this monitor's factory preset modes, the resolution and refresh rate of the current input signal are displayed.



FLICKER

If the picture is flickering, adjust the refresh rate to figures shown in the menu. If the input signal matches one of this monitor's factory preset modes, the refresh rate of the current input signal is displayed.



(continued)

THIN HORIZONTAL LINE

The lines that appear on your screen are damper wires. See page 15 for more information about the damper wires.

DISTORTED SHAPE

If the shape of the picture on the screen seems distorted, try adjusting the picture's geometry. Move the control button ➡ to jump directly to the GEOMETRY menu.

OUT OF FOCUS

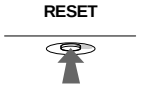
The picture may seem to be out of focus when the red and blue color signals are not aligned properly, causing red or blue shadows to appear around letters and lines. Try adjusting the picture's convergence to make the shadows disappear. Move the control button ➡ to jump directly to the CONVERGENCE menu. When the CONVERGNECE menu is displayed, the contrast, brightness and moire adjustment settings are automatically reset for all input signals.

DISCOLORATION

If the picture's color appears abnormal in certain areas of the screen, first check for any loose signal cables. After you have checked the cables, try degaussing (demagnetizing) the screen manually. Move the control button ➡ to jump directly to the OPTION menu, then select (DEGAUSS).

Resetting the adjustments

This monitor has the following three reset methods. Use the RESET button to reset the adjustments.



Resetting a single adjustment item

Use the control button to select the adjustment item you want to reset, and press the RESET button.

Resetting all of the adjustment data for the current input signal

Press the RESET button when no menu is displayed on the screen. Note that the following items are not reset by this method:

- on-screen menu language (page 8)
- on-screen menu position (page 12)
- control lock (page 13)

Resetting all of the adjustment data for all input signals

Press and hold the RESET button for more than two seconds.

Note

The RESET button does not function when (CONTROL LOCK) is set to ON.

Technical Features

Preset and user modes

When the monitor receives an input signal, it automatically matches the signal to one of the factory preset modes stored in the monitor's memory to provide a high quality picture at the center of the screen. (See Appendix for a list of the factory preset modes.) For input signals that do not match one of the factory preset modes, the digital Multiscan technology of this monitor ensures that a clear picture appears on the screen for any timing in the monitor's frequency range (horizontal: 30 – 96 kHz, vertical: 48 – 120 Hz). If the picture is adjusted, the adjustment data is stored as a user mode and automatically recalled whenever the same input signal is received.

Note for Windows users

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.

Power saving function

This monitor meets the power-saving guidelines set by VESA, ENERGY STAR, and NUTEK. If the monitor is connected to a computer or video graphics board that is DPMS (Display Power Management Signaling) compliant, the monitor will automatically reduce power consumption in three stages as shown below.

Power mode	Power consumption	(power) indicator
normal operation	≤ 140 W	green
1 standby	≤ 15 W	green and orange alternate
2 suspend (sleep)*	≤ 15 W	green and orange alternate
3 active off** (deep sleep)*	≤ 3 W	orange
power off	0 W	off

* "Sleep" and "deep sleep" are power saving modes defined by the Environmental Protection Agency.

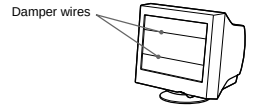
** When your computer is in a power saving mode, MONITOR IS IN POWER SAVE MODE appears on the screen if you press any button on the monitor. After a few seconds, the monitor enters the power saving mode again.

Troubleshooting

Before contacting technical support, refer to this section.

If thin lines appear on your screen (damper wires)

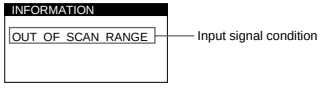
The lines you are experiencing on your screen are normal for the Trinitron monitor and are not a malfunction. These are shadows from the damper wires used to stabilize the aperture grille and are most noticeable when the screen's background is light (usually white). The aperture grille is the essential element that makes a Trinitron picture tube unique by allowing more light to reach the screen, resulting in a brighter, more detailed picture.



On-screen messages

US

If no picture appears on the screen, one of the following messages appears on the screen. To solve the problem, see "Trouble symptoms and remedies" on page 16.



The input signal condition

OUT OF SCAN RANGE
indicates that the input signal is not supported by the monitor's specifications.

NO INPUT SIGNAL
indicates that no signal is input.

MONITOR IS IN POWER SAVE MODE
indicates that the computer is in power saving mode. This message is displayed only when your computer is in a power saving mode and you press any one of the buttons on the monitor.

Trouble symptoms and remedies

If the problem is caused by the connected computer or other equipment, please refer to the connected equipment's instruction manual. Use the self-diagnosis function (page 18) if the following recommendations do not resolve the problem.

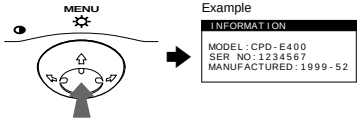
Symptom	Check these items
No picture	
If the ⏻ (power) indicator is not lit	• Check that the power cord is properly connected. • Check that the ⏻ (power) switch is in the "on" position.
If the NO INPUT SIGNAL message appears on the screen, or if the ⏻ (power) indicator is either orange or alternating between green and orange	• Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets (page 6). • Check that the HD15 video input connector's pins are not bent or pushed in. **■Problems caused by the connected computer or other equipment** • Check that the computer's power is "on." • Check that the graphic board is completely seated in the proper bus slot.
If the MONITOR IS IN POWER SAVE MODE message appears on the screen, or if the ⏻ (power) indicator is either orange or alternating between green and orange	**■Problems caused by the connected computer or other equipment** • The computer is in power saving mode. Try pressing any key on the computer keyboard. • Check that the computer's power is "on." • Check that the graphic board is completely seated in the proper bus slot.
If the OUT OF SCAN RANGE message appears on the screen	**■Problems caused by the connected computer or other equipment** • Check that the video frequency range is within that specified for the monitor. If you replaced an old monitor with this monitor, reconnect the old monitor and adjust the frequency range to the following. Horizontal: 30 – 96 kHz Vertical: 48 – 120 Hz
If no message is displayed and the ⏻ (power) indicator is green or flashing orange	• Use the Self-diagnosis function (page 18).
If using Windows 95/98	• If you replaced an old monitor with this monitor, reconnect the old monitor and do the following. Install the supplied Setup Disk (page 7) and select this monitor ("CPD-E400") from among the Sony monitors in the Windows 95/98 monitor selection screen.
If using a Macintosh system	• Check that the Macintosh adapter and the video signal cable are properly connected (page 6).
Picture flickers, bounces, oscillates, or is scrambled	• Isolate and eliminate any potential sources of electric or magnetic fields such as other monitors, laser printers, electric fans, fluorescent lighting, or televisions. • Move the monitor away from power lines or place a magnetic shield near the monitor. • Try plugging the monitor into a different AC outlet, preferably on a different circuit. • Try turning the monitor 90° to the left or right. **■Problems caused by the connected computer or other equipment** • Check your graphics board manual for the proper monitor setting. • Confirm that the graphics mode (VESA, Macintosh 16" Color, etc.) and the frequency of the input signal are supported by this monitor (Appendix). Even if the frequency is within the proper range, some video boards may have a sync pulse that is too narrow for the monitor to sync correctly. • Adjust the computer's refresh rate (vertical frequency) to obtain the best possible picture.
Picture is fuzzy	• Adjust the brightness and contrast (page 10). • Degauss the monitor* (page 12). • Select MOIRE ADJUST and adjust the moire cancellation effect (page 12).

Symptom	Check these items
Picture is ghosting	• Eliminate the use of video cable extensions and/or video switch boxes. • Check that all plugs are firmly seated in their sockets.
Picture is not centered or sized properly	• Adjust the size (page 10) or centering (page 10). Note that some video modes do not fill the screen to the edges.
Edges of the image are curved	• Adjust the geometry (page 11).
Wavy or elliptical pattern (moire) is visible	• Select MOIRE ADJUST and adjust the moire cancellation effect (page 12). **■Problems caused by the connected computer or other equipment** • Change your desktop pattern.
Color is not uniform	• Degauss the monitor* (page 12). If you place equipment that generates a magnetic field, such as a speaker, near the monitor, or if you change the direction the monitor faces, color may lose uniformity.
White does not look white	• Adjust the color temperature (page 11).
Letters and lines show red or blue shadows at the edges	• Adjust the convergence (page 12).
Monitor buttons do not operate (🔑 appears on the screen)	• If the control lock is set to ON, set it to OFF (page 13).
A hum is heard right after the power is turned on	• This is the sound of the auto-degauss cycle. When the power is turned on, the monitor is automatically degaussed for five seconds.

* If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. A humming noise may be heard, but this is not a malfunction.

Displaying this monitor's name, serial number, and date of manufacture.

While the monitor is receiving a video signal, press and hold the center of the control button for more than five seconds to display this monitor's information box.



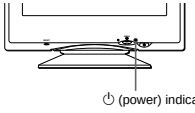
If the problem persists, call your authorized Sony dealer and give the following information.

- Model name: CPD-E400
- Serial number
- Name and specifications of your computer and graphics board.

US

Self-diagnosis function

This monitor is equipped with a self-diagnosis function. If there is a problem with your monitor or computer, the screen will go blank and the ⏻ (power) indicator will either light up green or flash orange. If the ⏻ (power) indicator is lit in orange, the computer is in power saving mode. Try pressing any key on the keyboard.

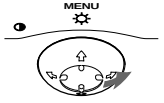


If the ⏻ (power) indicator is green

1 Disconnect the video input cable or turn off the connected computer.

2 Press the ⏻ (power) button twice to turn the monitor off and then on.

3 Move the control button ➡ for 2 seconds before the monitor enters power saving mode.



If all four color bars appear (white, red, green, blue), the monitor is working properly. Reconnect the video input cable and check the condition of your computer.

If the color bars do not appear, there is a potential monitor failure. Inform your authorized Sony dealer of the monitor's condition.

If the ⏻ (power) indicator is flashing orange

Press the ⏻ (power) button twice to turn the monitor off and then on.
If the ⏻ (power) indicator lights up green, the monitor is working properly.

If the ⏻ (power) indicator is still flashing, there is a potential monitor failure. Count the number of seconds between orange flashes of the ⏻ (power) indicator and inform your authorized Sony dealer of the monitor's condition. Be sure to note the model name and serial number of your monitor. Also note the make and model of your computer and video board.

Specifications

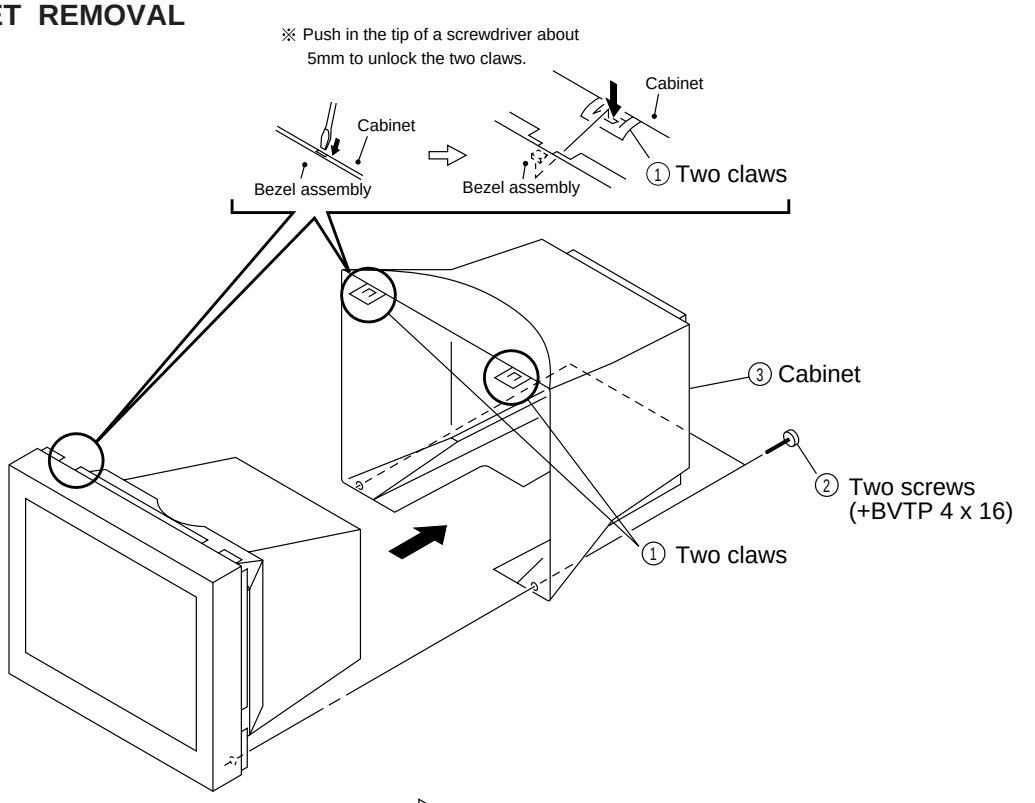
CRT	0.24 mm aperture grille pitch (center) 19 inches measured diagonally 90-degree deflection FD Trinitron
Viewable image size	Approx. 365 × 274 mm (w/h) (14 3/8 × 10 7/8 inches) 18.0" viewing image
Resolution	
Maximum	Horizontal: 1800 dots Vertical: 1440 lines
Recommended	Horizontal: 1280 dots Vertical: 1024 lines
Standard image area	Approx. 352 × 264 mm (w/h) (13 7/8 × 10 1/2 inches)
Deflection frequency*	Horizontal: 30 to 96 kHz Vertical: 48 to 120 Hz
AC input voltage/current	100 to 240 V, 50 – 60 Hz, Max. 2.0 A
Power consumption	140 W
Operating temperature	10˚C to 40˚C
Dimensions	Approx. 446 × 464 × 461 mm (w/h/d) (17 5/8 × 18 3/8 × 18 1/4 inches)
Mass	Approx. 26 kg (57 lb 5 oz)
Plug and Play	DDC1/DDC2B/DDC2Bi/GTF
Supplied accessories	See page 6

* Recommended horizontal and vertical timing condition
- Horizontal sync width should be more than 1.0 µsec.
- Horizontal blanking width should be more than 3.0 µsec.
- Vertical blanking width should be more than 500 µsec.

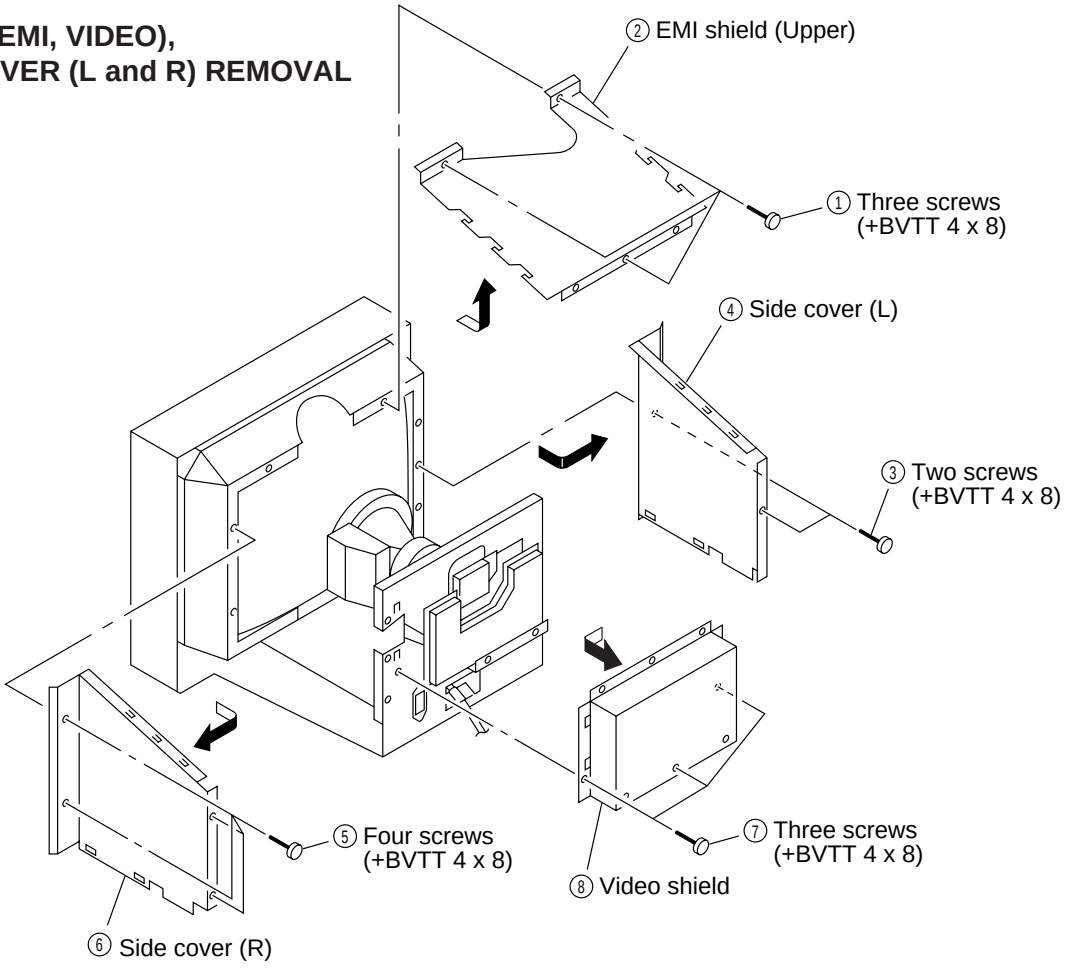
Design and specifications are subject to change without notice.

SECTION 2
DISASSEMBLY

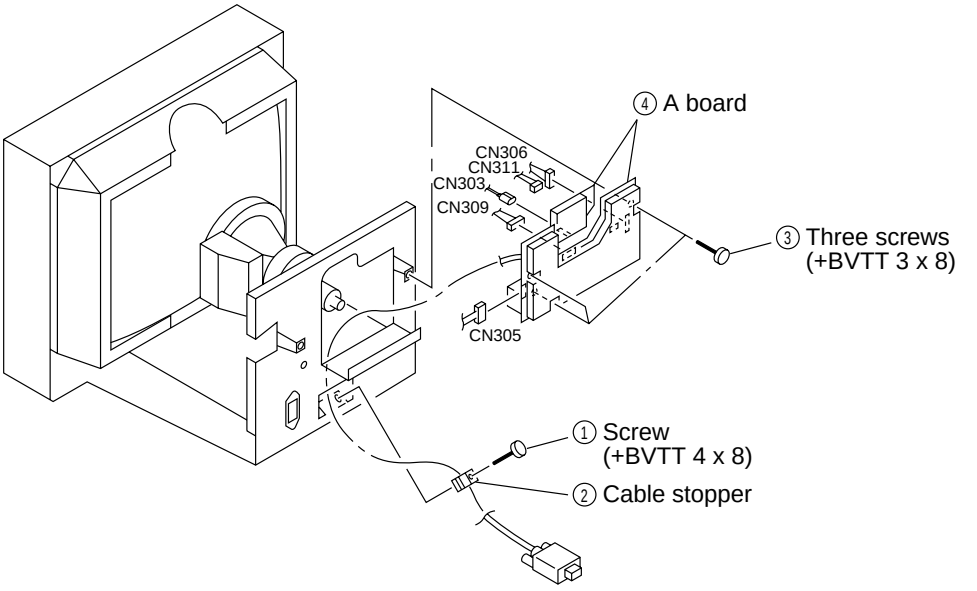
2-1. CABINET REMOVAL



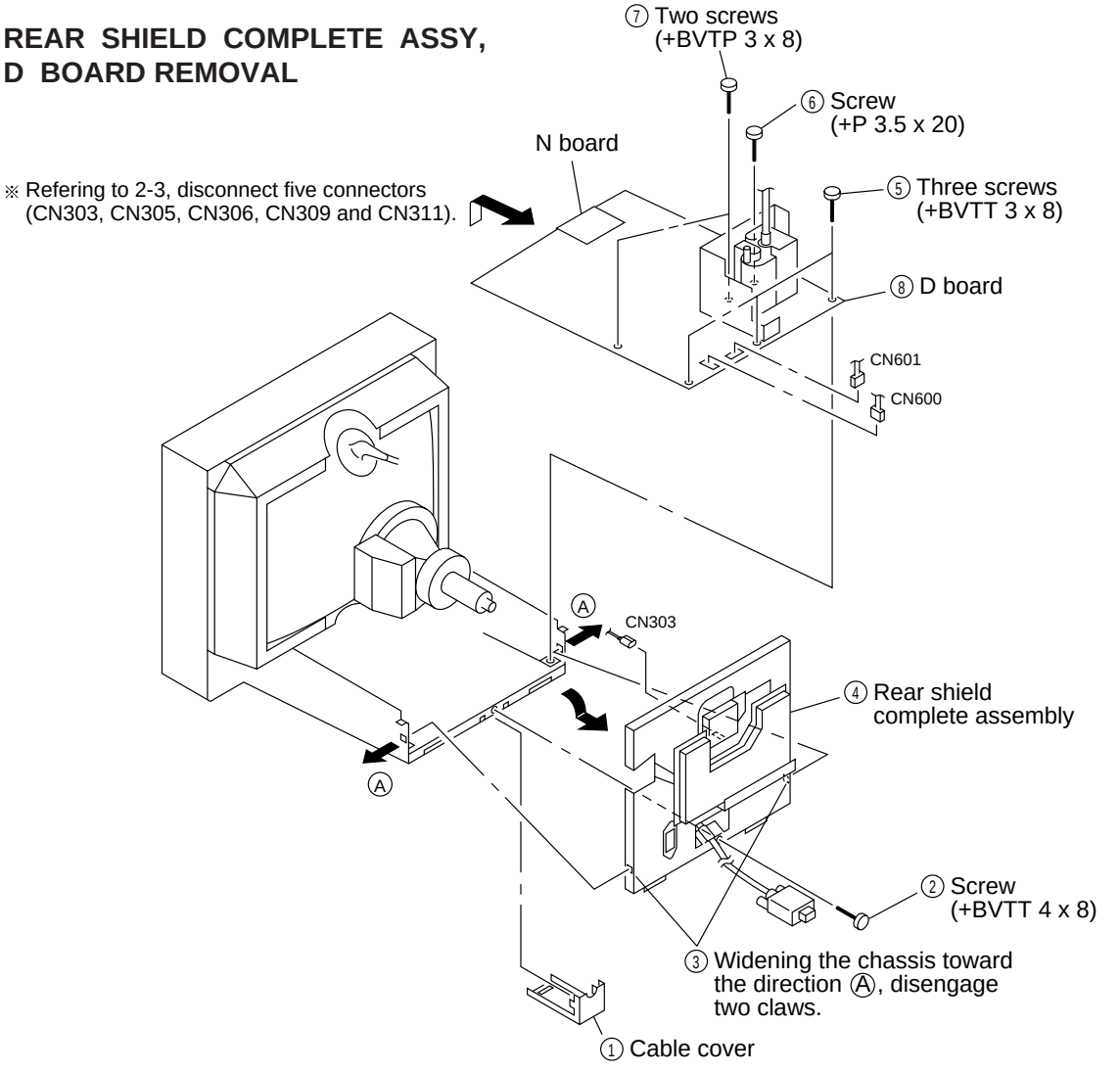
2-2. SHIELD (EMI, VIDEO), SIDE COVER (L and R) REMOVAL



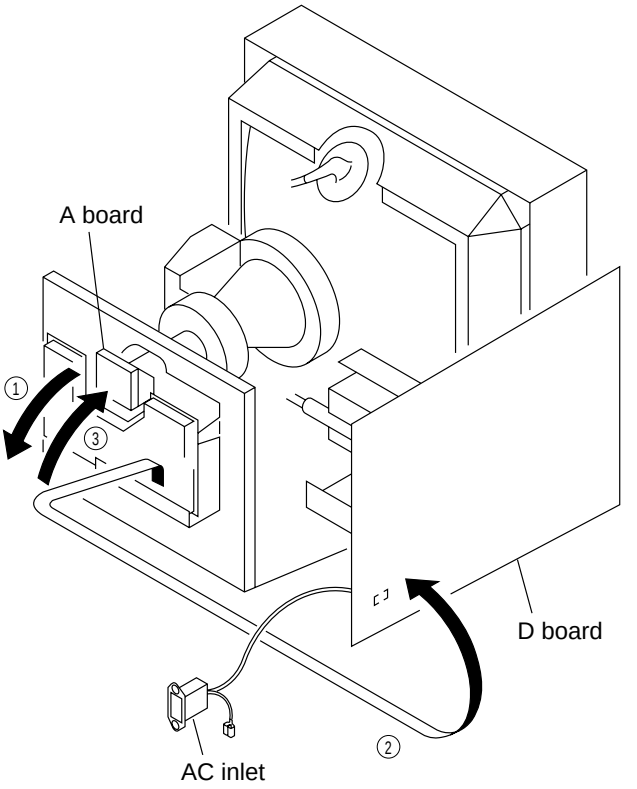
2-3. A BOARD REMOVAL



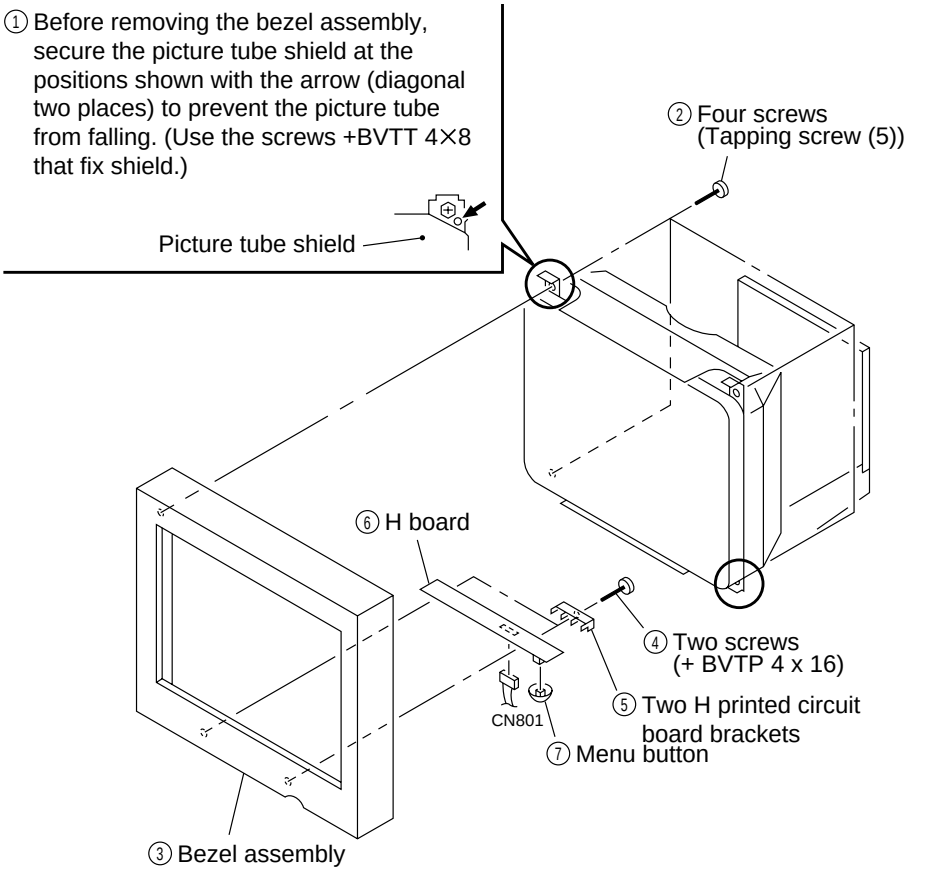
2-4. REAR SHIELD COMPLETE ASSY, D BOARD REMOVAL



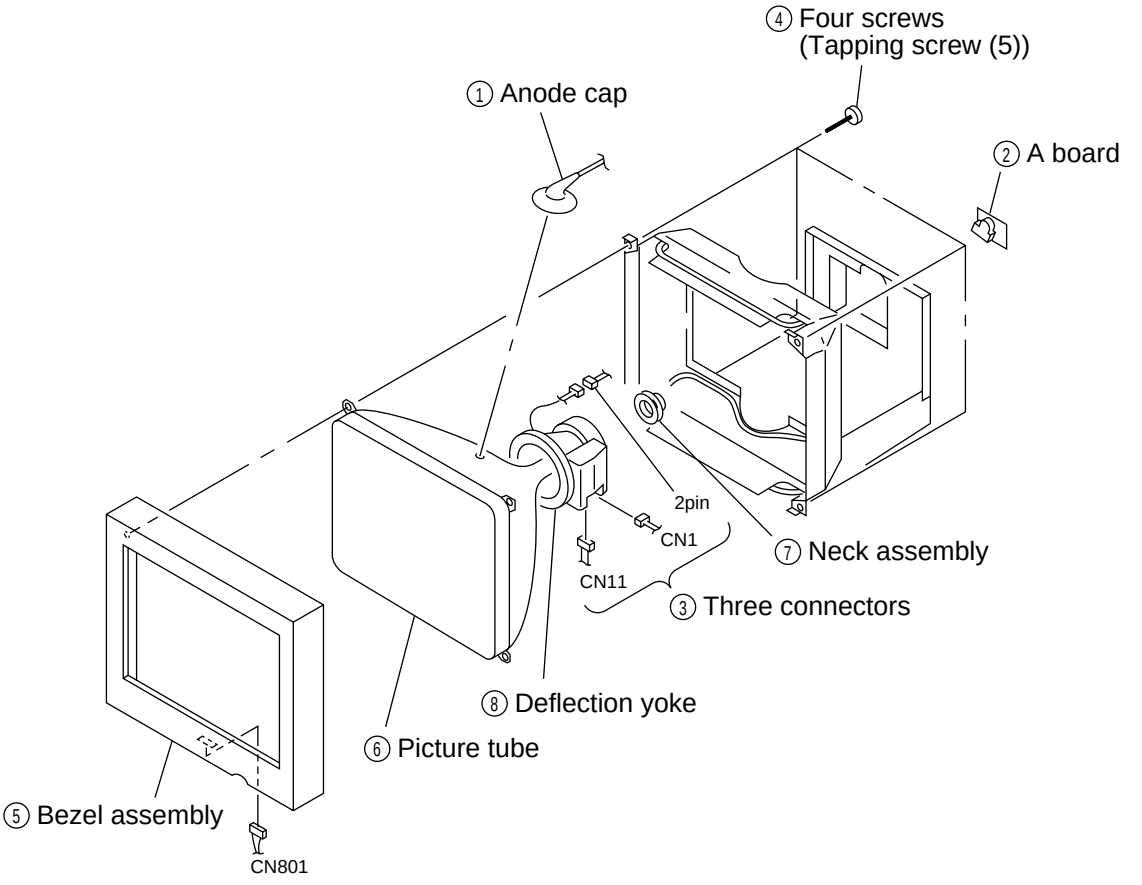
2-5. SERVICE POSITION



2-6. H BOARD REMOVAL



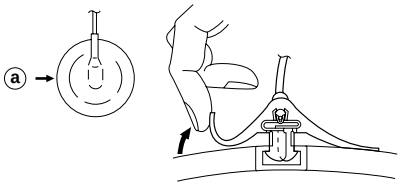
2-7. PICTURE TUBE REMOVAL



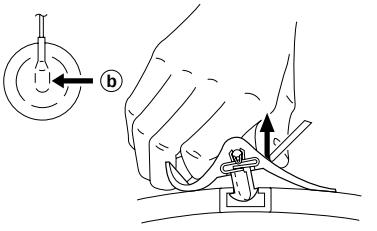
• REMOVAL OF ANODE-CAP

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.

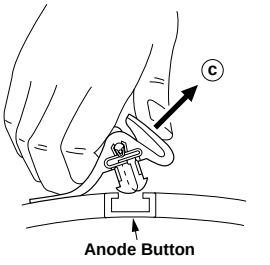
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



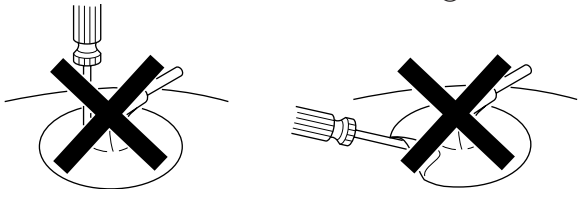
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



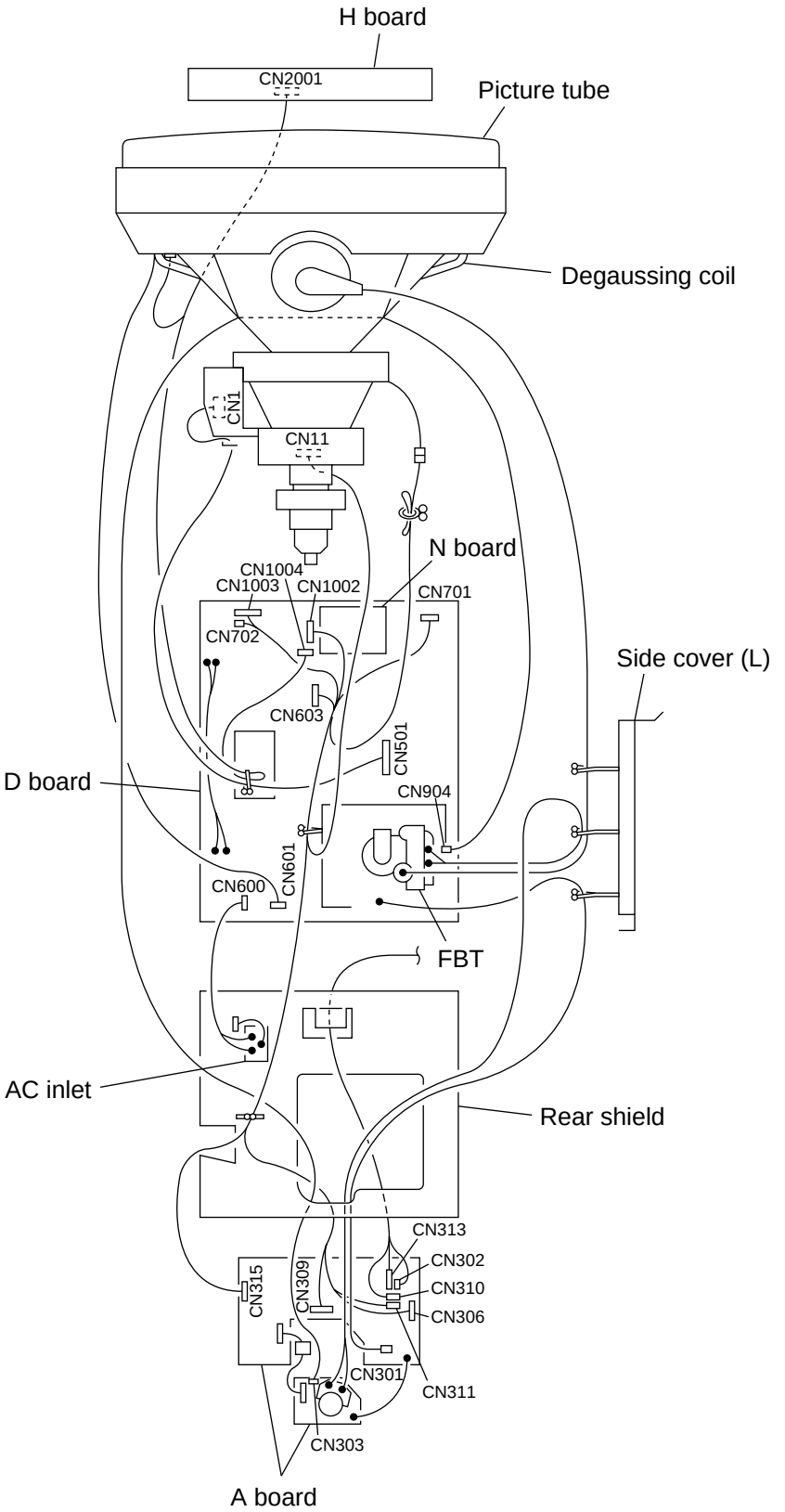
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Don't scratch the surface of anode-caps with sharp shaped material!
② Don't press the rubber hardly not to damage 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 damage the rubber.



2-8. HARNESS LOCATION



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 ADJ	RV901

	Part Replaced (◪)
HV Regulator Circuit Check	D Board T901(FBT), IC901, R924, R925, RV901 • Mounted D board
HV Protector Circuit Check	D Board T901(FBT), R917, R918, R923, R920, R919, R1004, C920, D911, R912, • Mounted D board
Beam Current Protector Circuit Check	D Board R933, R932, R921, R1006, D915, D917, IC901, T901(FBT) • Mounted D board

* Confirm one minute after turning on the power.

a) High Voltage Adjustment

1) Adjust the high voltage 27.0 kV ± 0.2 kV by the RV901.

Note: Perform high voltage adjustment after the rough adjustments were completed on PICTURE size and FOCUS.

b) High Voltage Hold-Down Function Check

1) Apply the voltage $21.1^{+0.00}_{-0.05}$ VDC between D912 cathode and GND shown on the right to confirm that the RASTER will vanish.

c) Beam Current Protector Function Check

1) Connect Power Supply 1.68 mA to between pin 11 ~ GND of FBT (T901).
2) Confirm that voltage on C922 (ABL DET.) is less than 2.25 V or monitor will shut down.

d) OCP Function Check

1) Turn ON Power Supply.
2) Connect 3 Ω/20 W of Resistor between +200 V Line and GND, and make sure that OCP will function (Power LED will vanish and the sound “chi,chi,chi will be heard.), and cut-off AC input promptly.

e) Power Supply Operation Check

1) Apply AC100 V to the D Board.
2) Make sure that the line voltage at the both ends of C621 is 200 ± 3.0 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.

Note: Off the outputs from R ch and B ch of SG.

4. Reverse the DY, and adjust coarsely the purity magnet so that a green raster positions in the center of screen.
5. Moving the DY forward, adjust so that an entire screen becomes monogreen.
6. Adjust the tilt of DY. For the TILT component, use TLV of DY.

Note: Observe the following adjustment conditions:
"TILT" = 0
"VPIN SAW TOP" = 0
"VPIN SAW BTM" = 0

7. Lock the DY lightly with a locking fitting.

• Landing Fine Adjustment

<Landing adjustment conditions>

a) Brightness: 1/3 Σ IK (Σ IK = 750 μA)
b) Aging time: 2 hours or more.
c) Atmospheric temperature: 25 °C
d) magnetic Field:
BH = 0 ± 2 μT
BV = 45 ± 2 μT (U/C, AEP)
–55 ± 2 μT (South Hemisphere)
–10 ± 2 μT (Equator destination)
e) Adjustment point:
1-inch inside from the edge of CRT effective tube surface.

1. Put the set inside the Helmholtz coil.
2. Set the TLH plate to "0" position.
3. Set the purity magnet of Neck Assy in "0" position, and lock with a white pen.
4. Set "VPIN SAW TOP" and "VPIN SAW BTM" to "0" position.
5. Receive an image of the monogreen signal.
6. Degauss the CRT and iron shield parts.

Note: Iron bottom chassis and EMI shield should be degaussed before assembling the chassis.

7. Perform auto degaussing.
8. Attach the wobbling coil to the designated part of the CRT neck.
9. Attach the sensor of the landing adjustment unit on the CRT surface.
10. Adjust the DY position and purity, and the DY tilt.

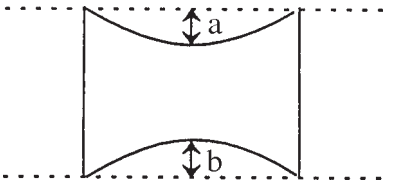
Note: Use purity magnet on the DY.

11. Fasten DY with screw.

Note: Torque 22 ± 2 kg•cm (2.2 ± 0.2 Nm).

12. Perform auto degaussing.
13. Using two wedges, adjust vertical pins so as to attain a=b as shown below. Further, insert two wedges as shown in the right figure, and lock the center so that DY does not fluctuate horizontally.

Note: Insert wedges completely so that the DY does not move.



14. If the corner landing is out of the specification, use the landing magnet so as to satisfy the specification.
<Specification>
a) Green

x ± 4	x ± 7.5	x ± 4	
x ± 4	x ± 7.5	x ± 4	
x ± 4	x ± 7.5	x ± 4	

[X] is bias value for a difference caused depending on whether the EMI shield and rear cover are present or not.
J Models : x = 1.5 [μm]
b) Difference between Green and Red, and between Green and Blue.

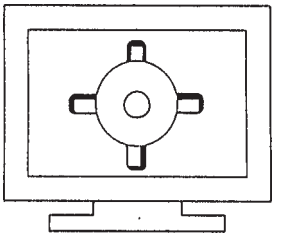
± 5	± 5	± 5	
± 5	± 5	± 5	
± 5	± 5	± 5	[μm]

c) Difference Red and Blue.

± 8	± 8	± 8	
± 8	± 7	± 8	
± 8	± 8	± 8	[μm]

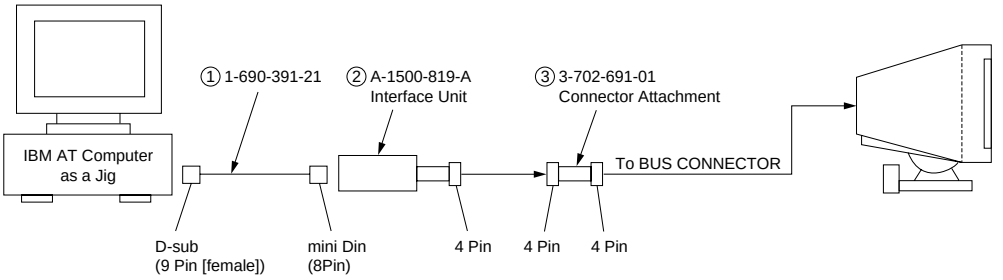
Note:
(1) Do not paste more than two magnets on one corner.
(2) Magnets will be placed in a range of 80 ~ 120 mm from the DY along the diagonal lines.

15. After placing magnets, absolutely degauss and check the results.
16. Remove the sensor and wobbling coil.
17. Check that the DY is not tilting, and fix the purity Mg with a white pen.
<RTV and wedge position>
(1) Apply RTV to the shaded portions.
(2) Lock CRT, wedges, and DY with RTV.



[Rear view]

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.



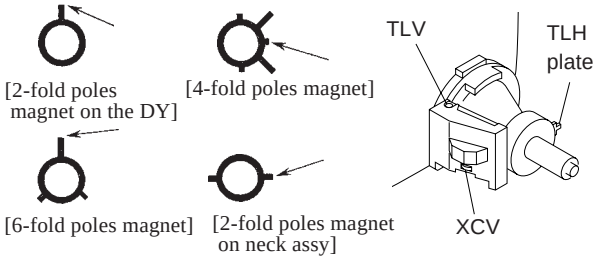
*The parts above (① ~ ③) are necessary for DAS adjustment.

- **Convergence Rough Adjustment**

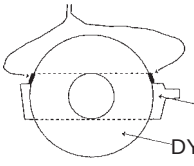
(1) Receive an image of the white crosshatch signals (white lines on black).
(2) Make rough adjustment of the H and V direction convergence by using 4-fold poles magnet.
(3) Make rough adjustment of the HMC and VMC by using 6-fold poles magnet.

<"0" position of each magnet and TLH plate>

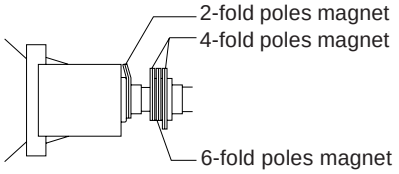
a) Align the protrusion marked with an arrow.

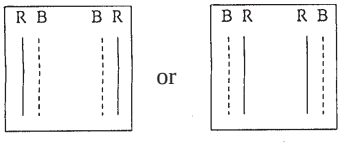


b) Flush the shaded portions of TLH plate with the DY rear cover, as shown below.

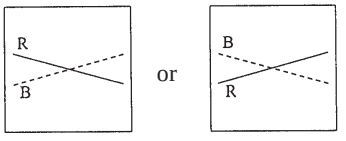


[Rear view]



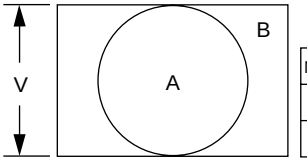


[Movements of TLH plate]



[Movements of XCV volume]

- **Convergence Specification**

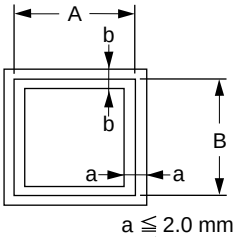


MODE	All mode
A	0.20 mm
B	0.24 mm

- **White Balance Adjustment Specification**

1. 9300 K
   x = 0.283 ± 0.005
   y = 0.298 ± 0.005
   (All White)
2. 5000 K
   x = 0.346 ± 0.005
   y = 0.359 ± 0.005
   (All White)
3. sRGB
   x = 0.313 ± 0.005
   y = 0.329 ± 0.005
   (All White)

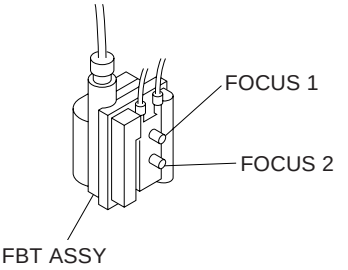
- **Vertical and Horizontal Position and Size Specification**



MODE	All mode
A	352 mm
B	264 mm

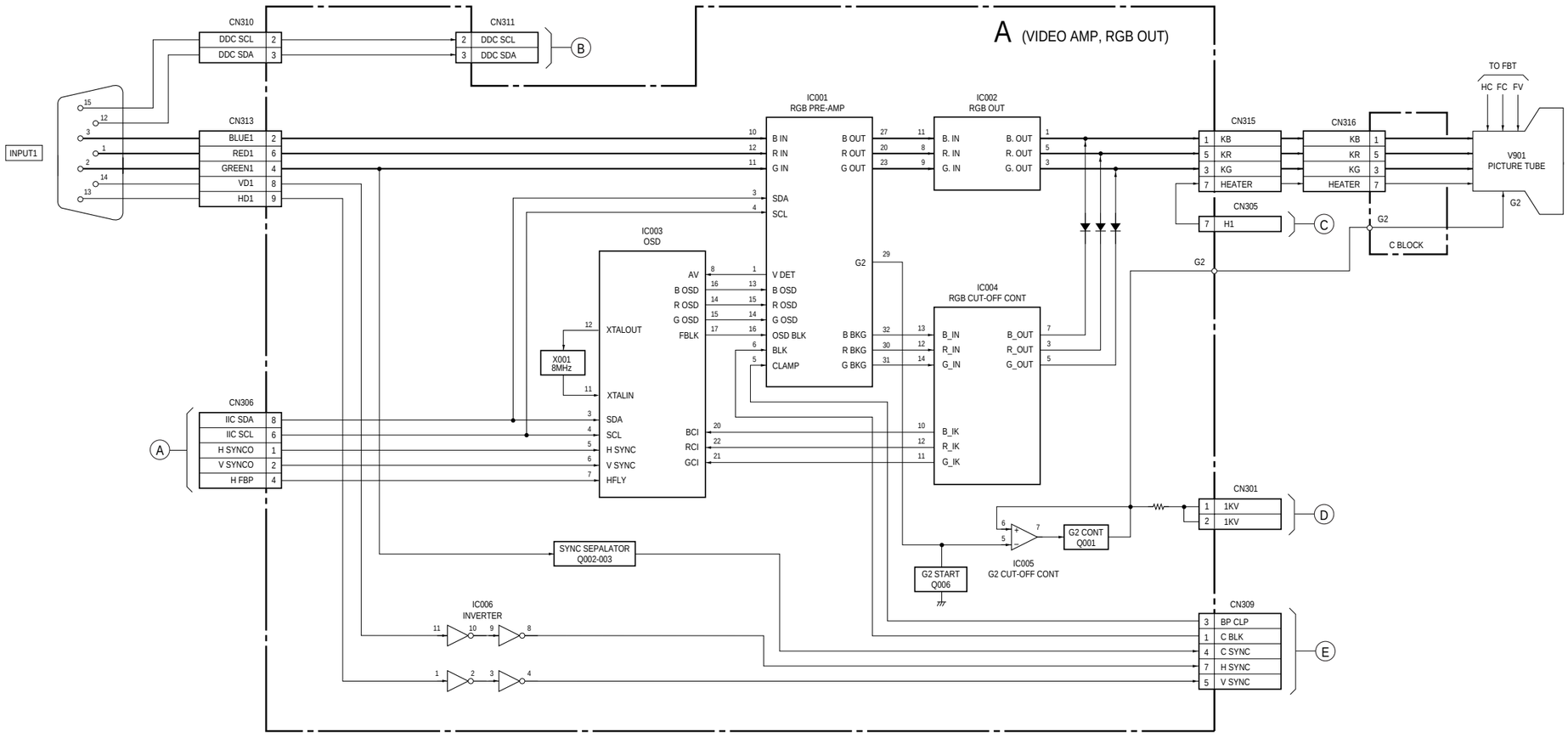
- **Focus adjustment**

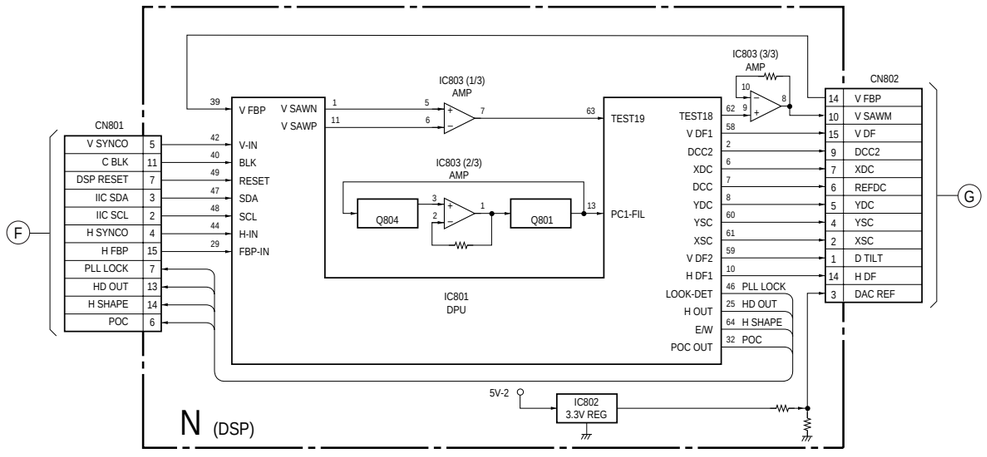
Adjust the focus volume 1 and 2 for the optimum focus.

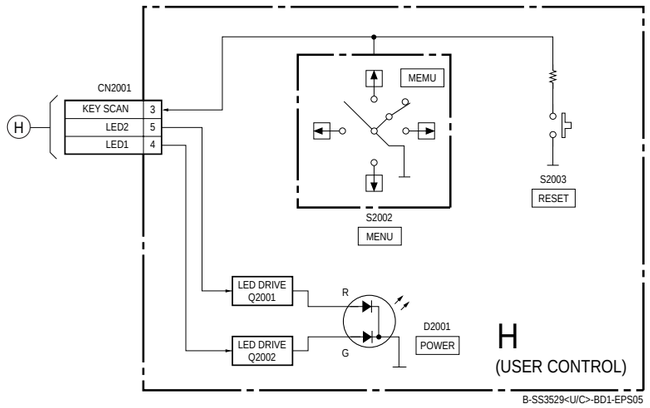


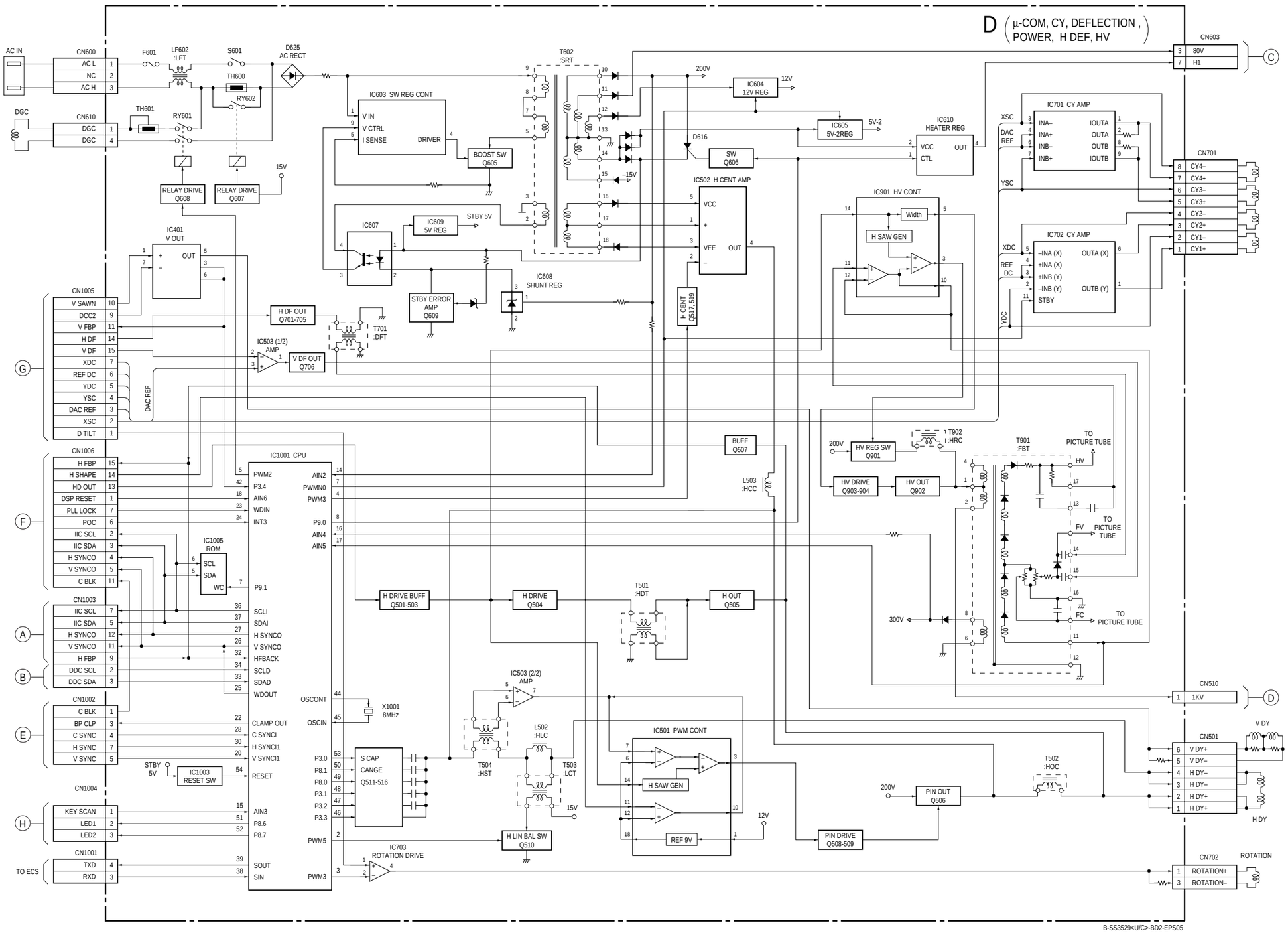
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAMS

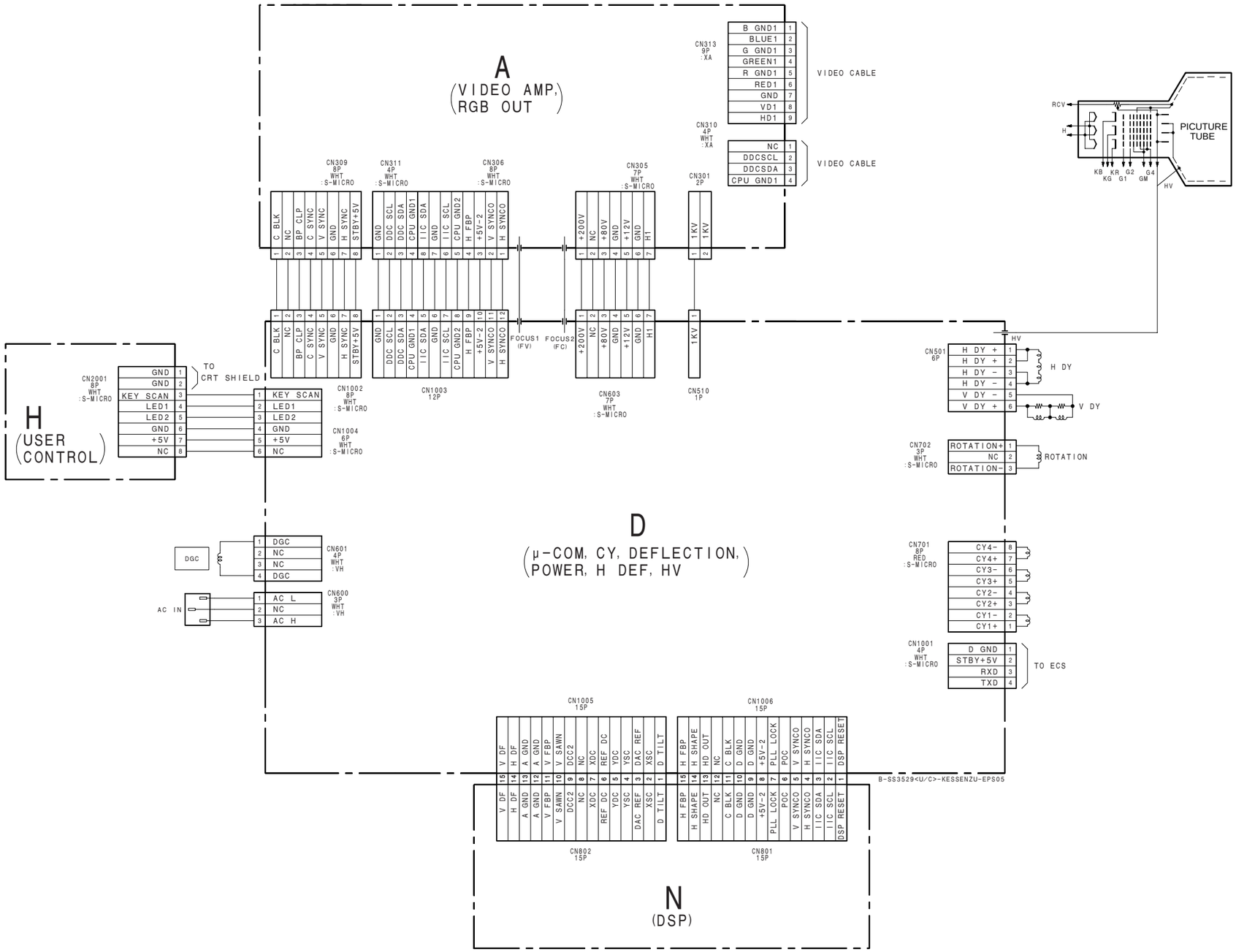




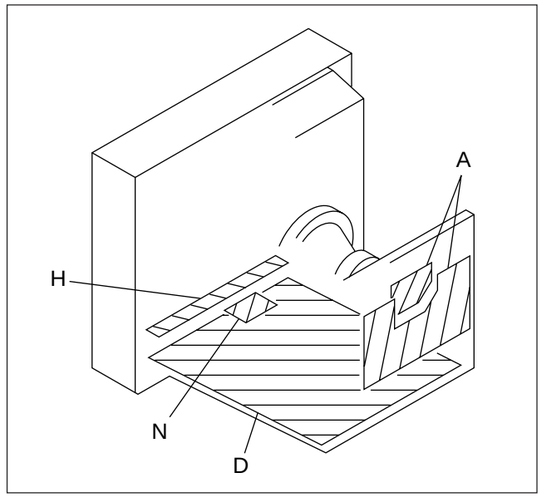



D (µ-COM, CY, DEFLECTION , POWER, H DEF, HV)
AC IN
CN600
AC L 1
NC 2
AC H 3
F601
LF602 :LFT
S601
D625 AC RECT
TH600
RY602
DGC
CN610
DGC 1
DGC 4
TH601
RY601
RELAY DRIVE Q608
RELAY DRIVE Q607
15V
T602 :SRT
IC603 SW REG CONT
V IN
V CTRL
I SENSE
DRIVER
BOOST SW Q605
200V
IC604 12V REG
12V
IC605 5V-2REG
5V-2
D616
SW Q606
IC610 HEATER REG
VCC
CTL
OUT
CN603
3 80V
7 H1
C
IC701 CY AMP
INA–
INA+
INB–
INB+
IOUTA
OUTA
OUTB
IOUTB
XSC
DAC REF
YSC
CN701
8 CY4–
7 CY4+
6 CY3–
5 CY3+
4 CY2–
3 CY2+
2 CY1–
1 CY1+
IC702 CY AMP
–INA (X)
+INA (X)
+INB (Y)
–INB (Y)
STBY
OUTA (X)
OUTB (Y)
XDC
REF DC
YDC
IC607
IC609 5V REG
STBY 5V
IC608 SHUNT REG
IC502 H CENT AMP
VCC
VEE
OUT
H CENT Q517,519
IC901 HV CONT
Width
H SAW GEN
IC401 V OUT
OUT
CN1005
V SAWN 10
DCC2 9
V FBP 11
H DF 14
V DF 15
XDC 7
REF DC 6
YDC 5
YSC 4
DAC REF 3
XSC 2
D TILT 1
G
H DF OUT Q701-705
T701 :DFT
IC503 (1/2) AMP
V DF OUT Q706
STBY ERROR AMP Q609
BUFF Q507
L503 :HCC
HV REG SW Q901
HV DRIVE Q903-904
HV OUT Q902
T902 :HRC
T901 :FBT
TO PICTURE TUBE
HV
FV
FC
CN1006
H FBP 15
H SHAPE 14
HD OUT 13
DSP RESET 1
PLL LOCK 7
POC 6
IIC SCL 2
IIC SDA 3
H SYNCO 4
V SYNCO 5
C BLK 11
F
IC1001 CPU
PWM2
P3.4
AIN6
WDIN
INT3
P9.0
P9.1
SCLI
SDAI
H SYNCO
V SYNCO
HFBACK
SCLD
SDAD
WDOUT
AIN2
PWMN0
PWM3
AIN4
AIN5
IC1005 ROM
SCL
SDA
WC
CN1003
IIC SCL 7
IIC SDA 5
H SYNCO 12
V SYNCO 11
H FBP 9
DDC SCL 2
DDC SDA 3
A
B
H DRIVE BUFF Q501-503
H DRIVE Q504
T501 :HDT
H OUT Q505
300V
CN1002
C BLK 1
BP CLP 3
C SYNC 4
H SYNC 7
V SYNC 5
E
CLAMP OUT
C SYNCI
H SYNCI1
V SYNCI1
OSCONT
OSCIN
X1001 8MHz
IC503 (2/2) AMP
L502 :HLC
T504 :HST
T503 :LCT
S CAP CANGE Q511-516
STBY 5V
IC1003 RESET SW
RESET
IC501 PWM CONT
H SAW GEN
REF 9V
15V
12V
CN1004
KEY SCAN 1
LED1 2
LED2 3
H
AIN3
P8.6
P8.7
H LIN BAL SW Q510
PIN DRIVE Q508-509
200V
PIN OUT Q506
T502 :HOC
CN510
1 1KV
D
V DY
CN501
6 V DY+
5 V DY–
4 H DY–
3 H DY–
2 H DY+
1 H DY+
H DY
CN1001
TXD 4
RXD 3
TO ECS
SOUT
SIN
IC703 ROTATION DRIVE
CN702
ROTATION
1 ROTATION+
3 ROTATION–
B-SS3529<U/C>-BD2-EPS05

5-2. FRAME SCHEMATIC DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. (pF: μμF) Capacitors without voltage indication are all 50 V.
- 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.
- The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. (See page 3-1)
- When replacing the part in below table, be sure to perform the related adjustment.

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

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

- All voltages are in V.
- Readings are taken with a 10 MΩ 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.

- Divided circuit diagram

  One sheet of D board circuit diagram is divided into three sheets, each having the code D-ⓐ to D-ⓒ. For example, the destination (ab1) on the code D-ⓐ sheet is connected to (ab1) on the D-ⓑ sheet.

  a b 1
  - 1 → Ref. No.
  - a b → Circuit diagram division code

	Part Replaced (⧓)
HV ADJ	RV901

	Part Replaced (◪)	
HV Regulator Circuit Check	D Board	T901 (FBT), IC901, R924, R925, RV901 • Mounted D board
HV Protector Circuit Check	D Board	T901 (FBT), R917, R918, R923, R920, R919, R1004, C920, D911, D912 • Mounted D board
Beam Current Protector Circuit Check	D Board	R933, R932, R921, R1006, D915, D917, IC901, T901 (FBT) • Mounted D board

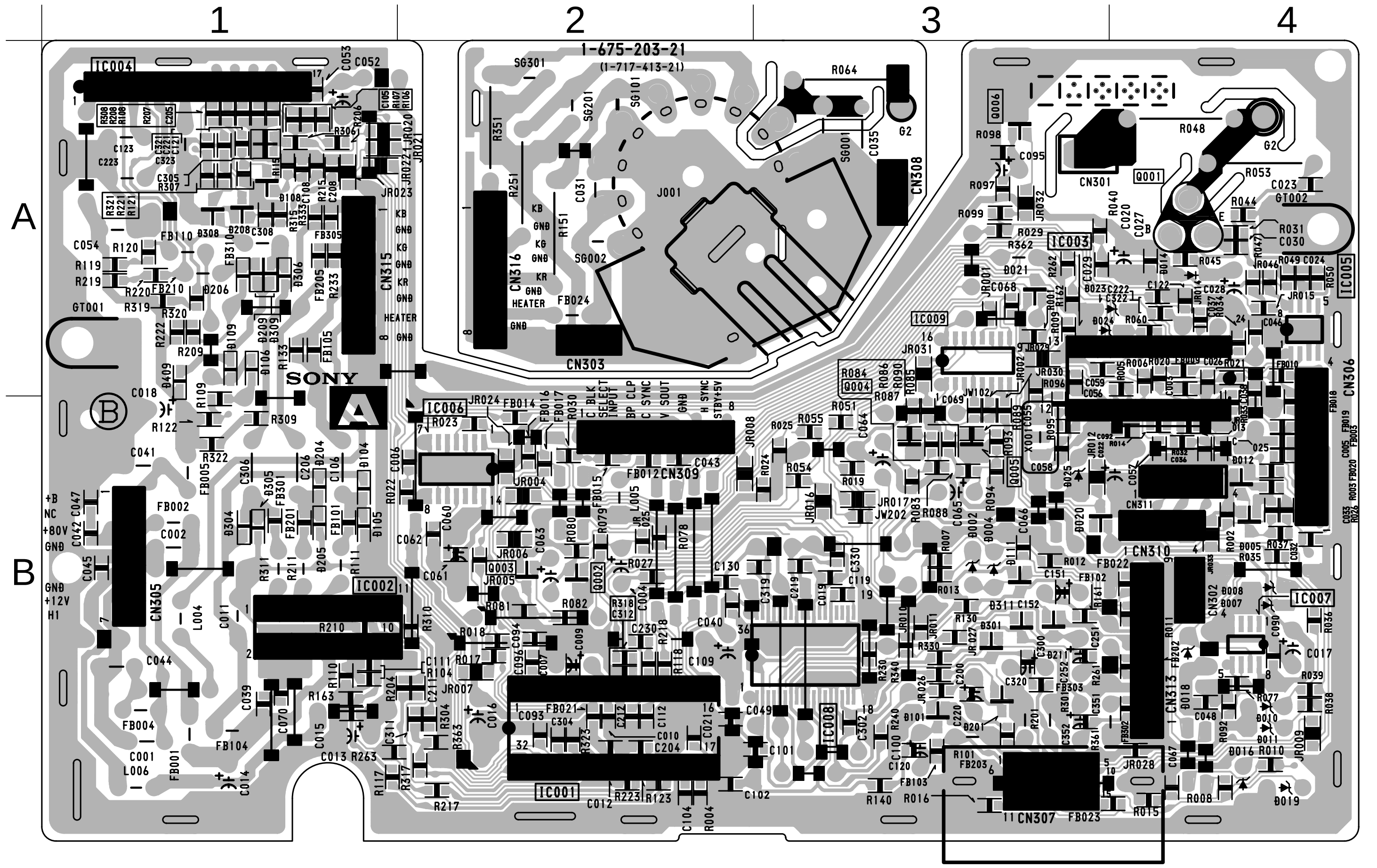
Terminal name of semiconductors in silk screen printed circuit (∗)

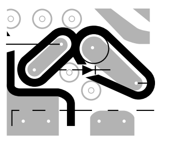
	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector / Base / Emitter	
②	Transistor		Collector / Base / Emitter	
③	Diode		Cathode / Anode	
④	Diode		Cathode / Anode / (NC)	
⑤	Diode		Cathode / Anode / (NC)	
⑥	Diode		Common / Anode / Cathode	
⑦	Diode		Common / Anode / Cathode	
⑧	Diode		Common / Anode / Anode	
⑨	Diode		Common / Anode / Anode	
⑩	Diode		Common / Cathode / Cathode	
⑪	Diode		Common / Cathode / Cathode	
⑫	Diode		Anode / Anode / Cathode / Cathode / Anode / Anode	
⑬	Transistor (FET)		Drain / Source / Gate	
⑭	Transistor (FET)		Drain / Source / Gate	
⑮	Transistor (FET)		Source / Drain / Gate	
⑯	Transistor		Emitter / Collector / Base	
–	Discrete semiconductot			

(Chip semiconductors that are not actually used are included.)

Ver.1.6

A [VIDEO AMP RGB OUT]
— A BOARD —





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 SEMICONDUCTOR LOCATION

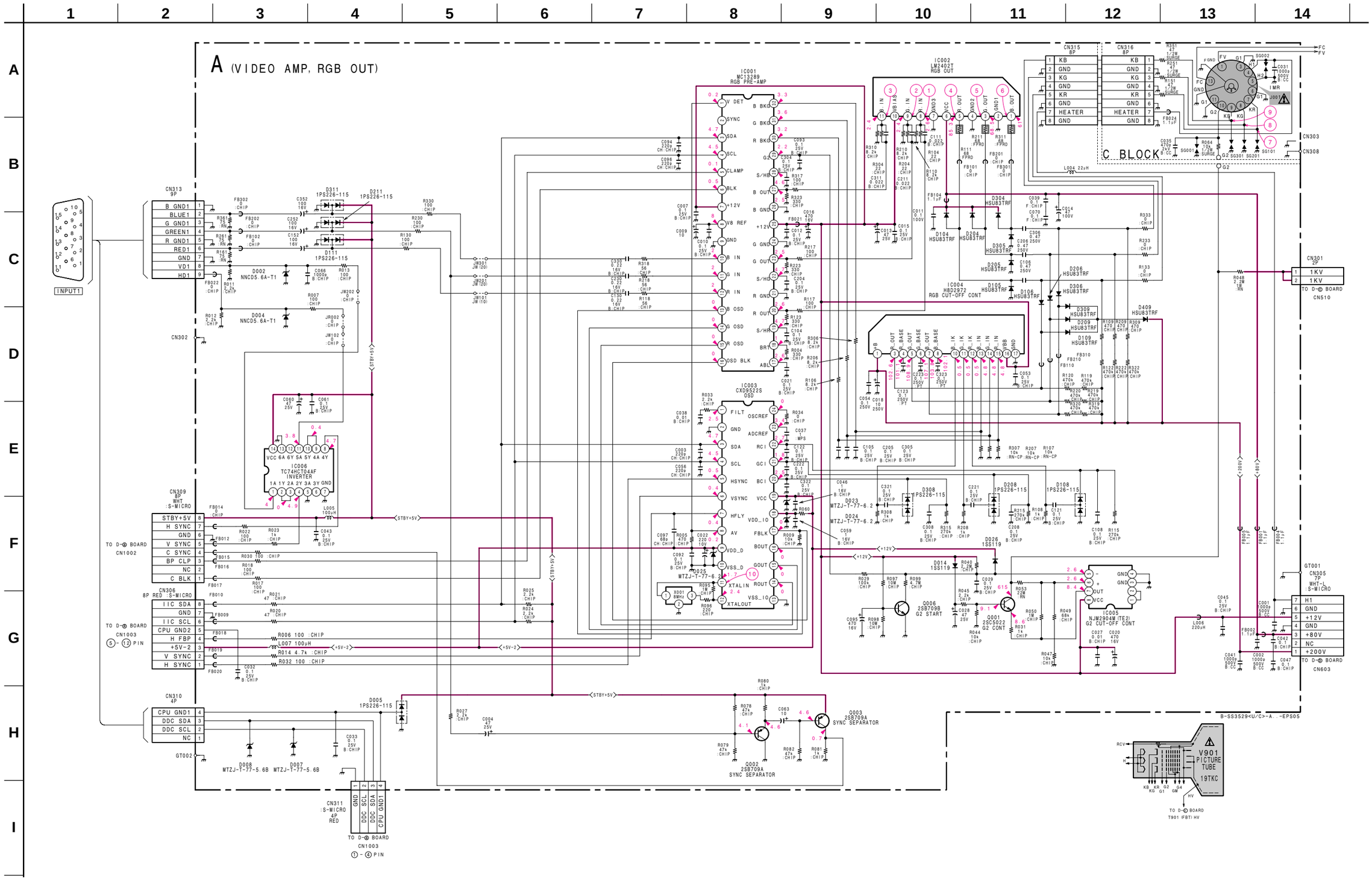
IC			DIODE		∗			
IC001	B-2		D002	B-3	–	D206	A-1	③
IC002	B-1		D004	B-3	–	D208	A-1	⑥
IC003	A-4		D005	B-4	⑥	D209	A-1	③
IC004	A-1		D007	B-4	–	D211	B-3	⑥
IC005	A-4		D008	B-4	–	D301	B-3	⑥
IC006	B-2		D014	A-4	–	D304	B-1	③
TRANSISTOR		∗	D023	A-3	–	D305	B-1	③
Q001	A-4	–	D024	A-3	–	D306	A-1	③
Q002	B-2	①	D025	B-3	–	D308	A-1	⑥
Q003	B-2	①	D104	B-1	③	D309	A-1	③
Q006	A-3	①	D105	B-1	③	D311	B-3	⑦
			D106	A-1	③	D409	A-1	③
			D108	A-1	⑥	**CRYSTAL**		
			D109	A-1	③	X001	B-3	
			D111	B-3	⑥			
			D204	B-1	③			
			D205	B-1	③			

∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)

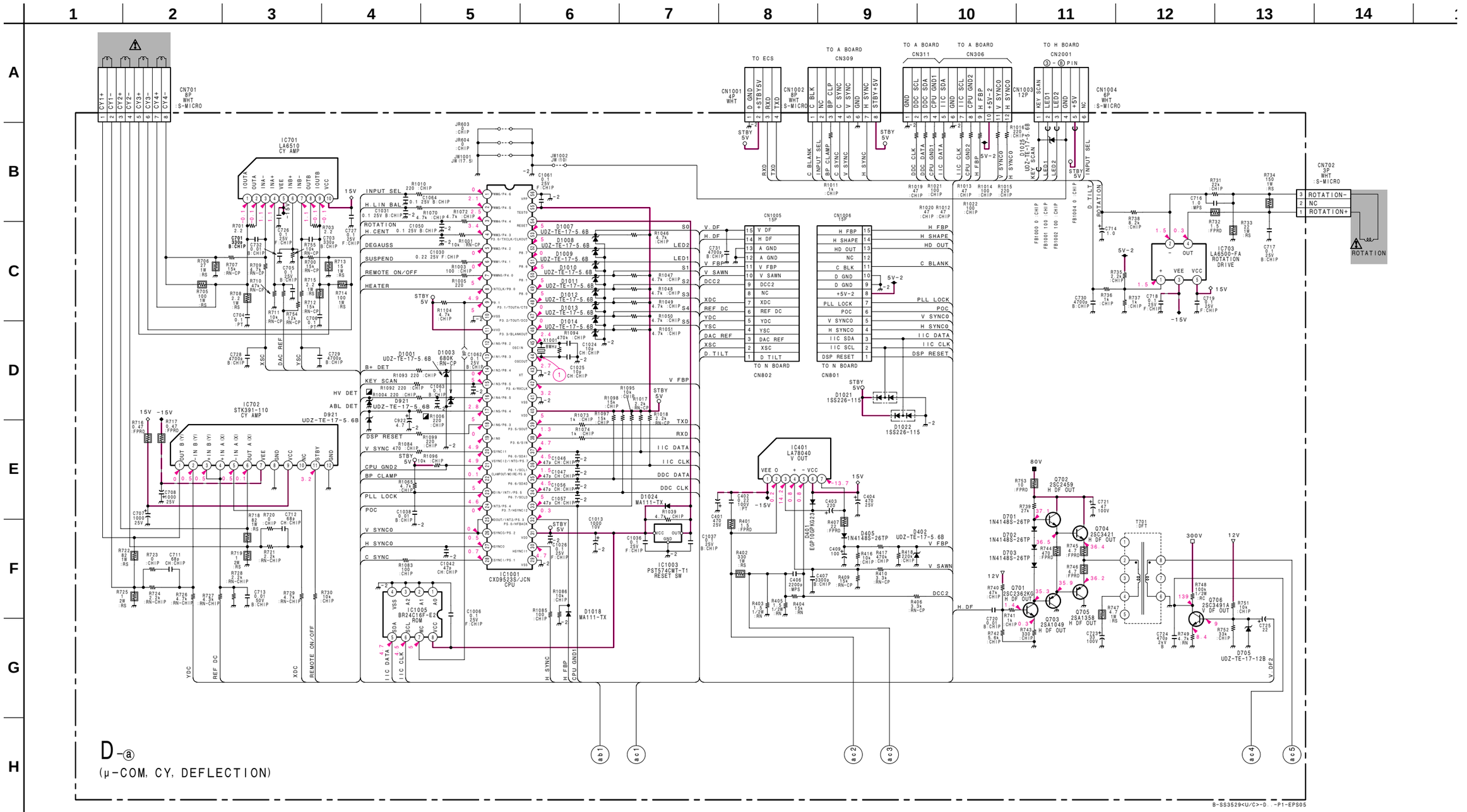
(1) Schematic Diagram of A Board

• A BOARD WAVEFORMS

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
4.16 Vp-p (H)	4.16 Vp-p (H)	4.08 Vp-p (H)	49.8 Vp-p (H)	49.8 Vp-p (H)	48.8 Vp-p (H)	49.8 Vp-p (H)	49.8 Vp-p (H)	48.8 Vp-p (H)	1.78 Vp-p (8 MHz)



(2) Schematic Diagrams of D (ⓐ, ⓑ, ⓒ) Board



- Divided circuit diagram
  One sheet of D board circuit diagram is divided into three sheets, each having the code D-ⓐ to D-ⓒ. For example, the destination (ab1) on the code D-ⓐ sheet is connected to (ab1) on the D-ⓑ sheet.

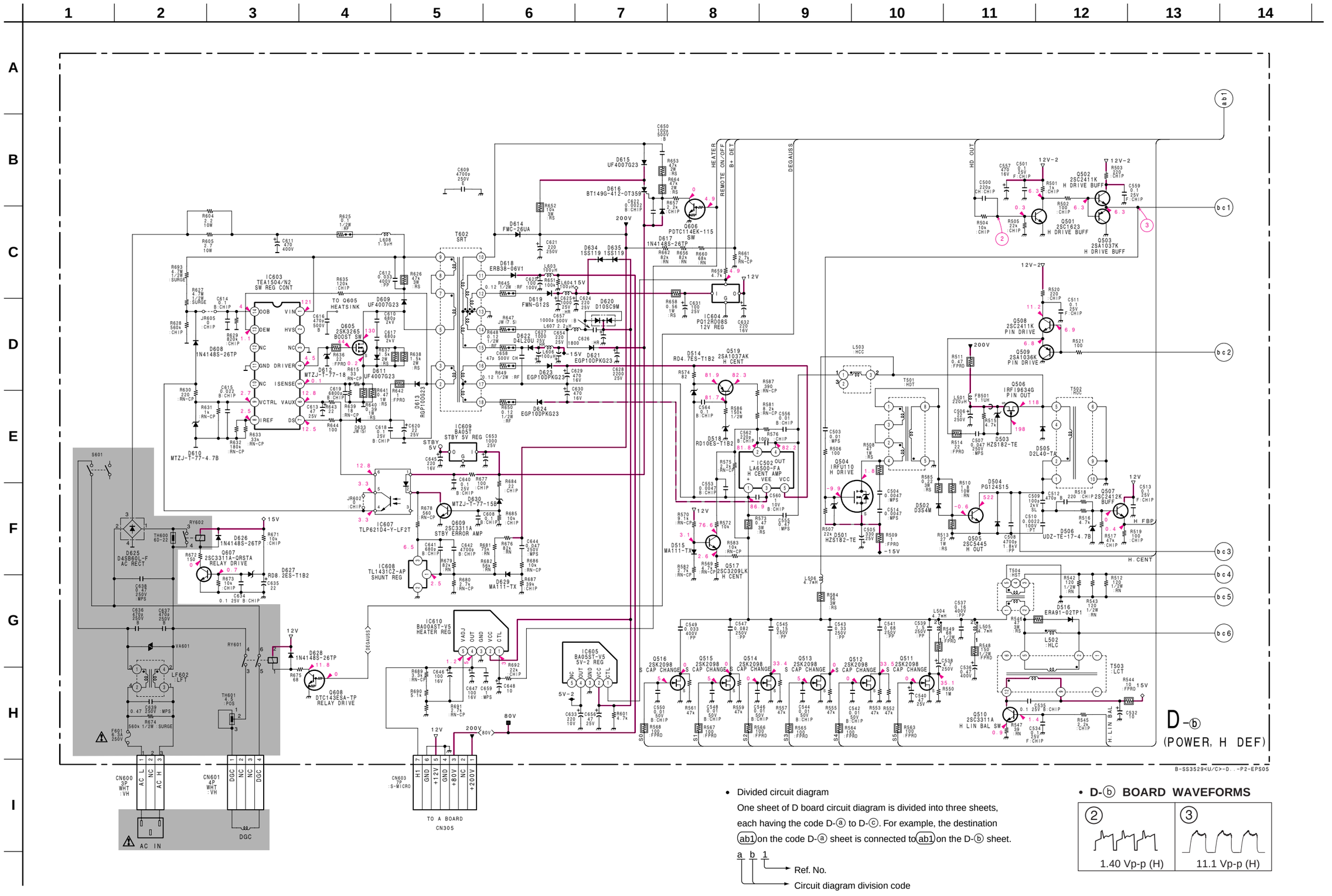
  a b 1
  - 1 → Ref. No.
  - b → Circuit diagram division code
  - a → Circuit diagram division code

- **D-ⓐ BOARD WAVEFORM**

  ① 1.94 Vp-p (8 MHz)

Schematic diagram
← **A board**

Schematic diagram
D-ⓐ board →

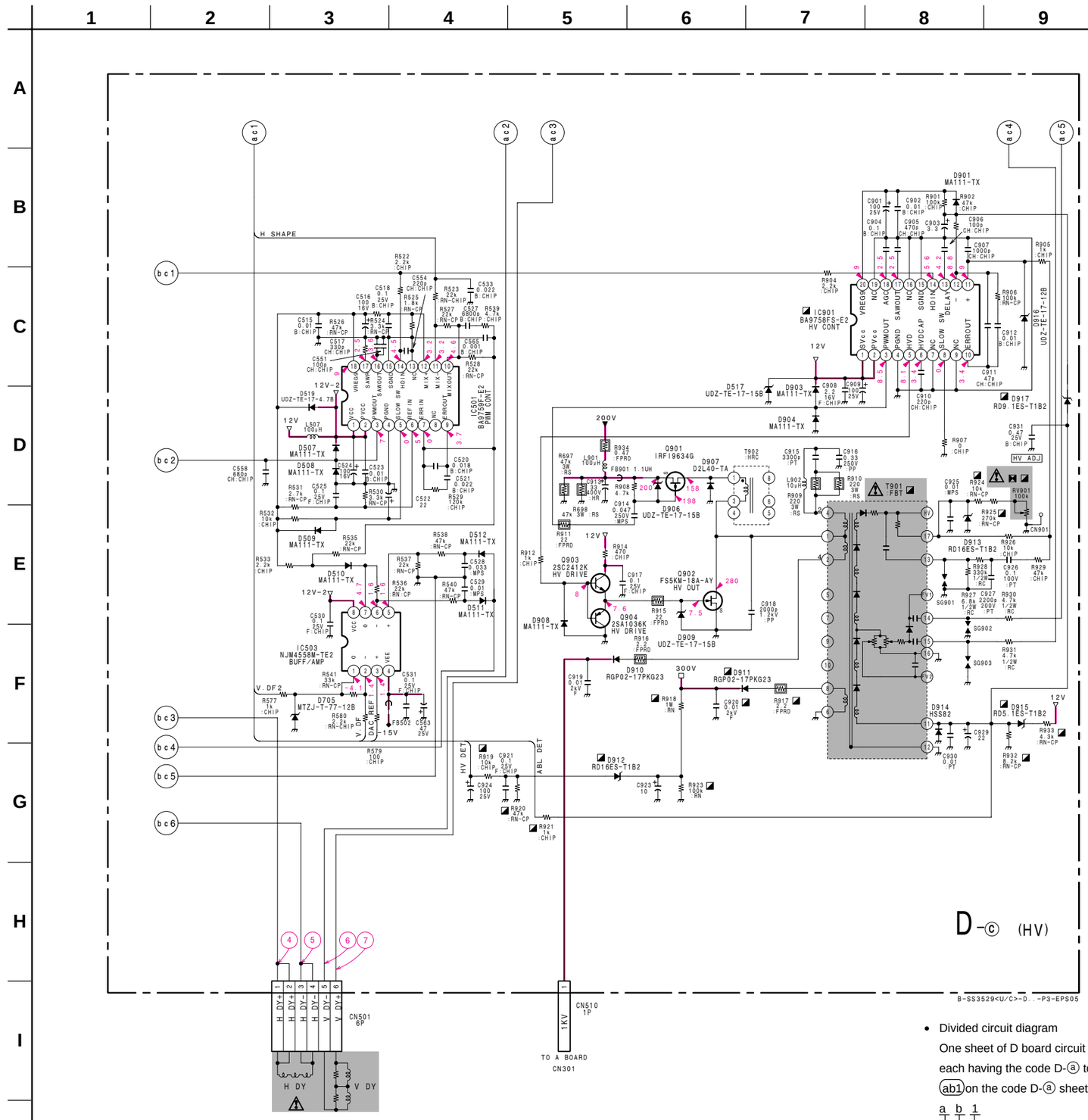


- Divided circuit diagram
  One sheet of D board circuit diagram is divided into three sheets, each having the code D-ⓐ to D-ⓒ. For example, the destination (ab1) on the code D-ⓐ sheet is connected to (ab1) on the D-ⓑ sheet.

a b 1 → Ref. No.
Circuit diagram division code

- **D-ⓑ BOARD WAVEFORMS**

②	③
1.40 Vp-p (H)	11.1 Vp-p (H)



- Divided circuit diagram
  One sheet of D board circuit diagram is divided into three sheets, each having the code D-ⓐ to D-ⓒ. For example, the destination ab1 on the code D-ⓐ sheet is connected to ab1 on the D-ⓑ sheet.

  a b 1 → Ref. No.
  Circuit diagram division code

Schematic diagram
← D-ⓑ board

Schematic diagram
D-ⓒ board →

• D-ⓒ BOARD WAVEFORMS

④ 131.5 Vp-p (H)

⑤ 60.8 Vp-p (H)

⑥ 1.41 Vp-p (H)

⑦ 53.0 Vp-p (H)

• D BOARD SEMICONDUCTOR LOCATION

IC		
IC401	E-3	
IC501	C-1	
IC502	B-3	
IC503	D-1	
IC603	A-4	
IC604	C-3	
IC605	B-2	
IC607	A-3	
IC608	A-3	
IC609	A-2	
IC610	A-3	
IC701	E-1	
IC702	E-2	
IC703	A-1	
IC901	D-5	
IC1001	B-1	
IC1003	B-2	
IC1005	B-1	

TRANSISTOR		
		*
Q501	C-1	①
Q502	C-1	①
Q503	C-1	①
Q504	C-5	–
Q505	D-5	–
Q506	C-3	–
Q507	C-2	①
Q508	D-1	①
Q509	D-1	①
Q510	C-2	–
Q511	D-3	–
Q512	D-3	–
Q513	D-2	–
Q514	D-2	–
Q515	D-2	–
Q516	D-2	–
Q517	B-2	–
Q519	B-2	①
Q605	A-4	–
Q606	B-4	①
Q607	B-5	–
Q608	C-7	–
Q609	A-3	–
Q610	A-3	①
Q701	E-4	–
Q702	E-4	–
Q703	E-4	–
Q704	D-4	–
Q705	E-4	–
Q706	E-6	–
Q901	C-7	–
Q902	C-6	–
Q903	D-5	①
Q904	D-6	①

DIODE		
		*
D401	E-3	–
D405	E-3	–
D501	C-5	–
D502	D-5	–
D503	C-3	–
D504	C-5	–
D505	C-3	–
D506	C-2	③
D507	D-1	③
D508	D-1	③
D509	C-1	③
D510	D-1	③
D511	D-1	③
D512	D-1	③
D514	B-3	–
D515	B-2	③
D516	D-3	–
D517	E-5	③
D518	A-2	–
D519	C-1	③
D608	A-3	–
D609	A-4	–
D610	A-3	–
D611	A-4	–
D612	A-4	–
D613	A-3	–
D614	B-5	–
D615	B-4	–
D616	C-4	–
D617	C-4	–
D618	B-4	–
D619	C-4	–
D620	B-4	–
D621	B-4	–
D622	B-4	–
D623	B-3	–
D624	B-3	–
D625	B-6	–
D626	B-6	–
D627	B-5	–
D628	B-6	–
D629	A-2	③
D630	A-3	–
D634	C-3	–
D635	B-3	–
D701	E-4	–
D702	E-4	–
D703	E-4	–
D901	D-5	③
D903	D-5	③
D904	D-5	③
D905	D-5	③
D906	C-7	③
D907	C-6	–
D908	D-5	③
D909	C-6	③
D910	D-7	–
D911	D-7	–
D912	E-7	–
D913	E-7	–
D914	E-7	–
D915	E-6	–
D917	E-5	–
D1001	C-1	③
D1003	B-1	③
D1004	B-1	③
D1005	B-1	③
D1006	B-1	③
D1007	B-2	③
D1008	B-1	③
D1009	C-1	③
D1010	B-1	③
D1011	B-1	③
D1012	B-1	③
D1013	B-1	③
D1018	B-1	③
D1021	C-1	③
D1022	C-1	⑥
D1024	B-1	③
D1025	C-1	③

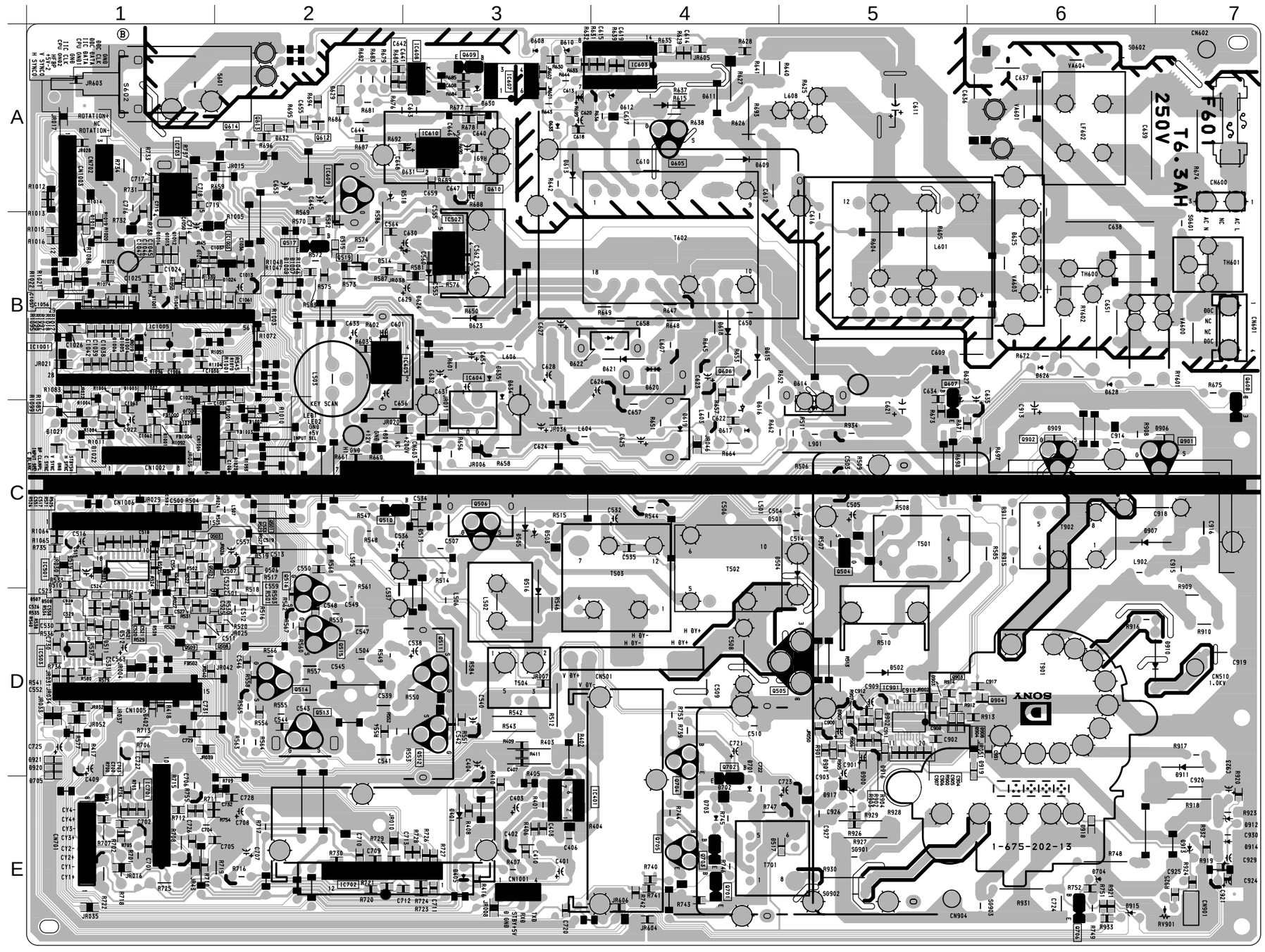
VARIABLE RESISTOR	
RV901	E-7

CRYSTAL	
X1001	B-1

*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)

D [µ-COM, CY, DEFLECTION, POWER, H DEF, HV]

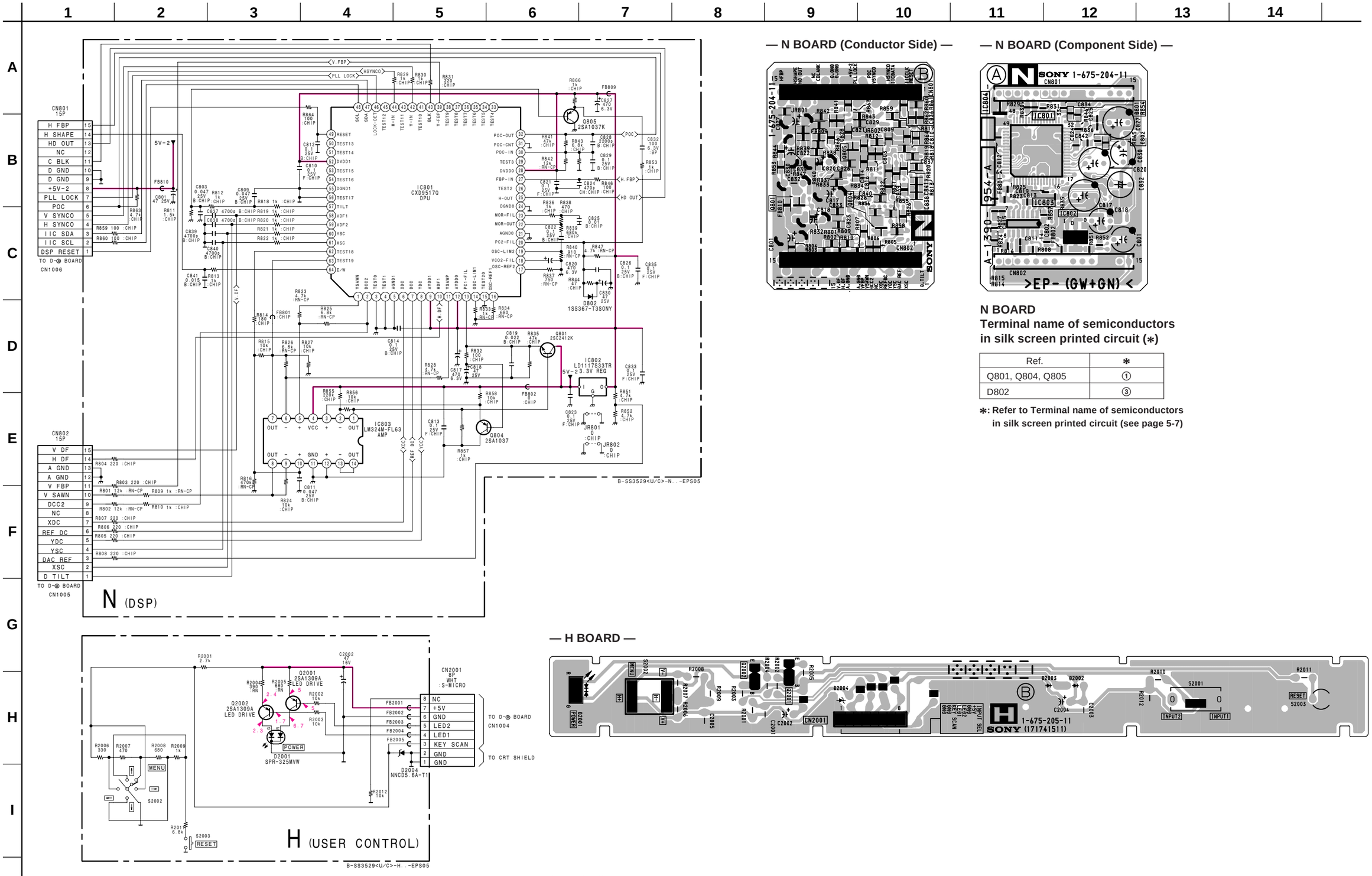
— D BOARD —



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.

N [DSP] H [USER CONTROL]

(3) Schematic Diagrams of N, H Boards



— N BOARD (Conductor Side) —

— N BOARD (Component Side) —

N BOARD
Terminal name of semiconductors in silk screen printed circuit (∗)

Ref.	∗
Q801, Q804, Q805	①
D802	③

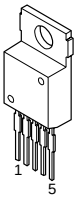
∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)

— H BOARD —

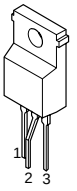
Schematic diagrams
N, H boards ➡

5-5. SEMICONDUCTORS

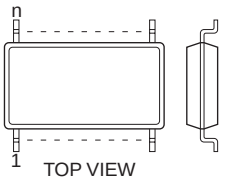
BA00AST-V5
BA05ST-V5
H8D2972
LA6500-FA



BA05T
LD1117S33TR

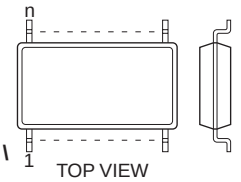


BA9758FS-E2
BA9759F-E2



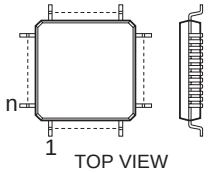
18 pin SOP

BR24C16F-E2
NJM2904M
NJM2904M(TE2)
NJM4558M-TE2
µPC4558G2



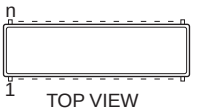
8 pin SOP

CXD9517Q



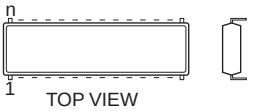
64 pin QFP

CXD9522S



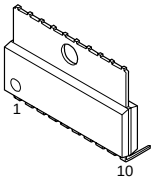
24 pin DIP

CXD9523S/JCN (Ver. 1.2)

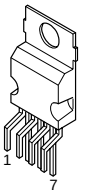


56 pin DIP

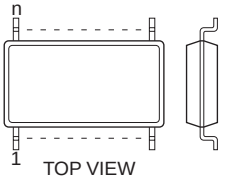
LA6510



LM324M
LA78040
LM2402T

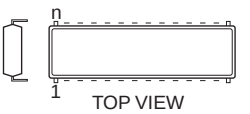


LM324M
LM324M-FL63
TC74HCT04AF
TC74HCT04AF (EL)



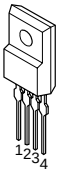
14 pin SOP

MC13289

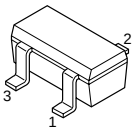


32 pin DIP

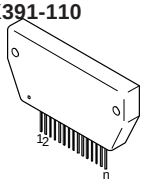
PQ12RD8S



PST574CMT-T1

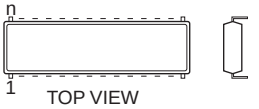


STK391-110



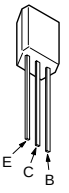
MARKING SIDE VIEW

TEA1504/N2

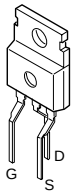


14 pin DIP

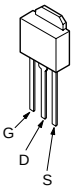
DTC143ESA
DTC143ESA-TP
PDTC114-EK-115
2SA1049-GR
2SA1049TP-GR



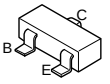
FS5KM-16A
FS5KM-18A-AY
IRFI9634G-LF35
2SK3265 (LB2SONY)



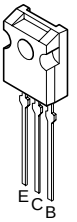
IRFU110
IRFU110A



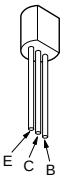
2SA1036K-Q
2SA1036K-T-146-Q
2SA1037AK-T146-R
2SA1037AK-T146-QR
2SA1037K-T-146-QR
2SA1162-G
2SB709A-QRS-TX
2SC1623-L5L6
2SC1623-T1-L5L6
2SC2411K-CQ
2SC2411K-T-146-CQ
2SC2412K-T-146-QR



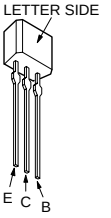
2SA1358-Y
2SC3421-Y



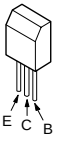
2SC2362K-G
2SC2362KG-AA



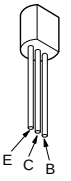
2SA1175-HFE
2SA1309A-QRSTA
2SC2459-GR-TPE4
2SC2784
2SC2785-HFE
2SC3311A-QRSTA
2SC3311A-RTA



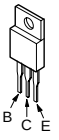
2SC3209LK
2SC3209LK-TP



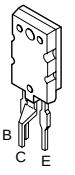
2SC3941A-Q (TA)



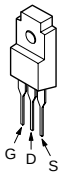
2SC5022-02



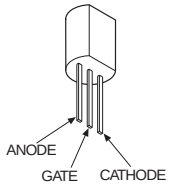
2SC5445 (LBSONY1)



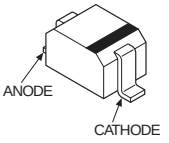
2SK2098-01MR-F119



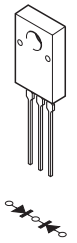
BT149G-412-OT359
TL1431CZ-AP



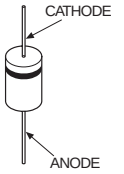
DTZ-TT11-15B
DTZ-4.7C
MA111-(K8).S0
MA111-TX
RD12SB2
RD5.6S-B
UDZ-TE-17-12B
UDZ-TE-17-15B
UDZ-TE-17-4.7B
UDZ-TE-17-5.6B



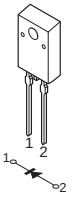
D10SC9M



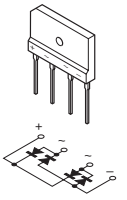
D2L40-TA
ERB38-06V1
HSS82
MTZJ-T-77-18
MTZJ-T-77-5.6B
NNCD5.6A-T1
RGP02-17EL-6433
RGP02-17PKG23
RGP10DG23
UF4007G23
1N4148S-26TP
1SS367-T3SONY



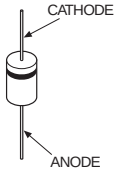
D4L20U
FMC-26UA
FMN-G12S
FMQ-G5FMS
PG124S15
YG911S2R



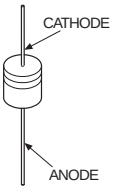
D4SB60L
D4SB60L-F



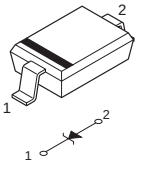
D3S4M
EGP10D
EGP10GPKG23
ERA91-02
ERA91-02TP1
ERC81-004
RH-1A



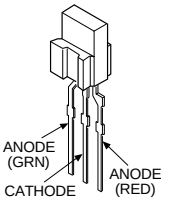
EGP10DPKG23
HZS182-TE
HZS9.1NB2
MTZJ-T-77-15B
MTZJ-T-77-4.7B
MTZJ-T-77-6.2
MTZJ-4.7C
MTZJ-6.2B
RD10ES-T1B2
RD10ESB2
RD15ES-B2
RD16ES-B3
RD16ES-T1B2
RD18ES-B2
RD18ESB
RD4.7ES-T1B2
RD4.7ESB2
RD5.1ES-B2
RD5.1ES-T1B2
RD5.6ESB2
RD8.2ES-B2
RD8.2ES-T1B2
RD9.1ES-T1B2
1SS119
1SS119-25
1SS119-25TD



HSU83TRF



SPR325MVW



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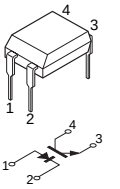
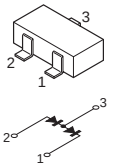
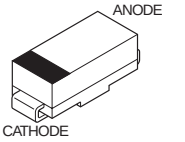


1PS226-115



1SS376TE-17



SECTION 6
EXPLODED VIEWS

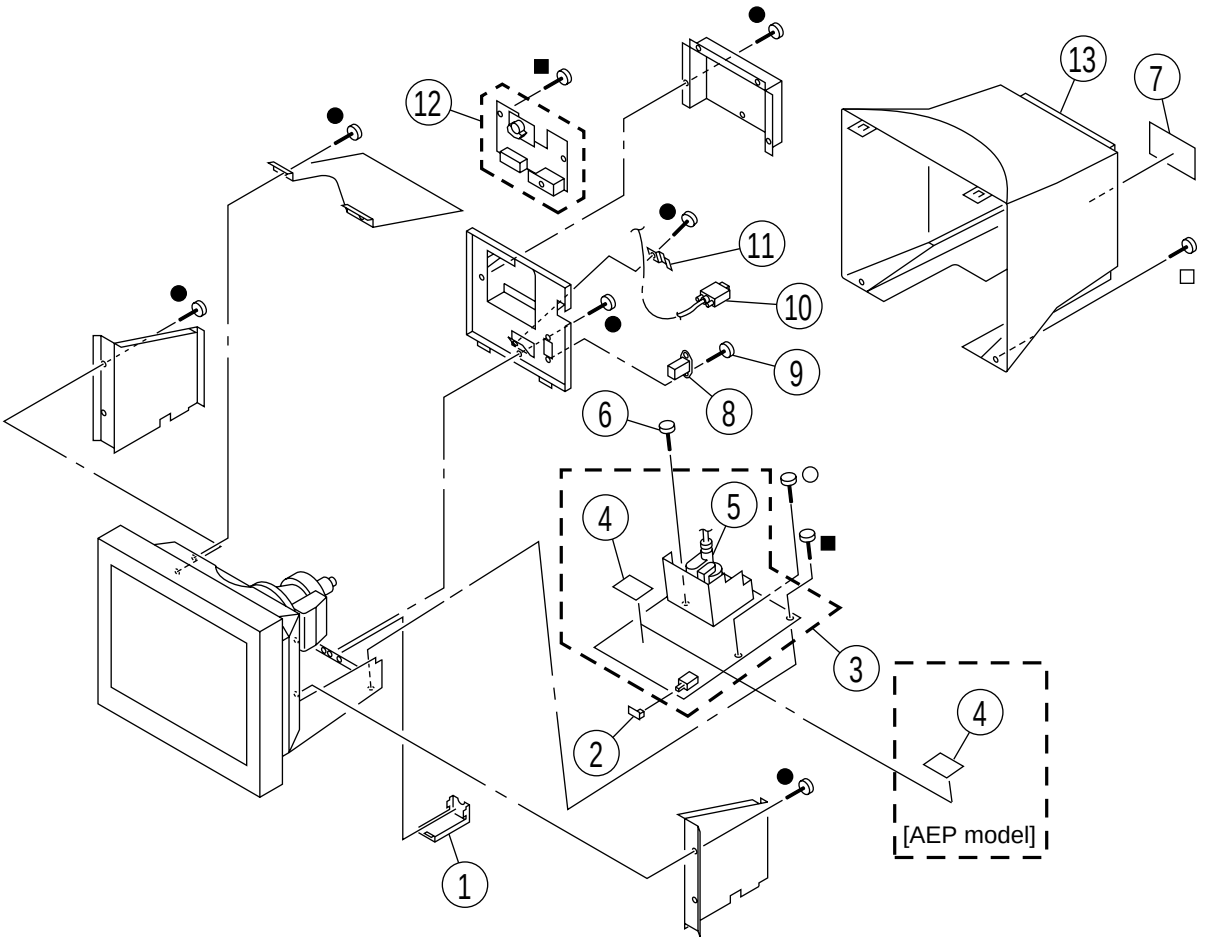
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine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

The components identified ⚠ marked are critical for safety.
Replace only with the part number specified.

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

6-1. CHASSIS

● 7-685-881-09 +BVTT 4X8
■ 7-685-872-09 +BVTT 3X8
○ 7-685-646-79 +BVTP 3X8
□ 7-685-663-71 +BVTP 4X16



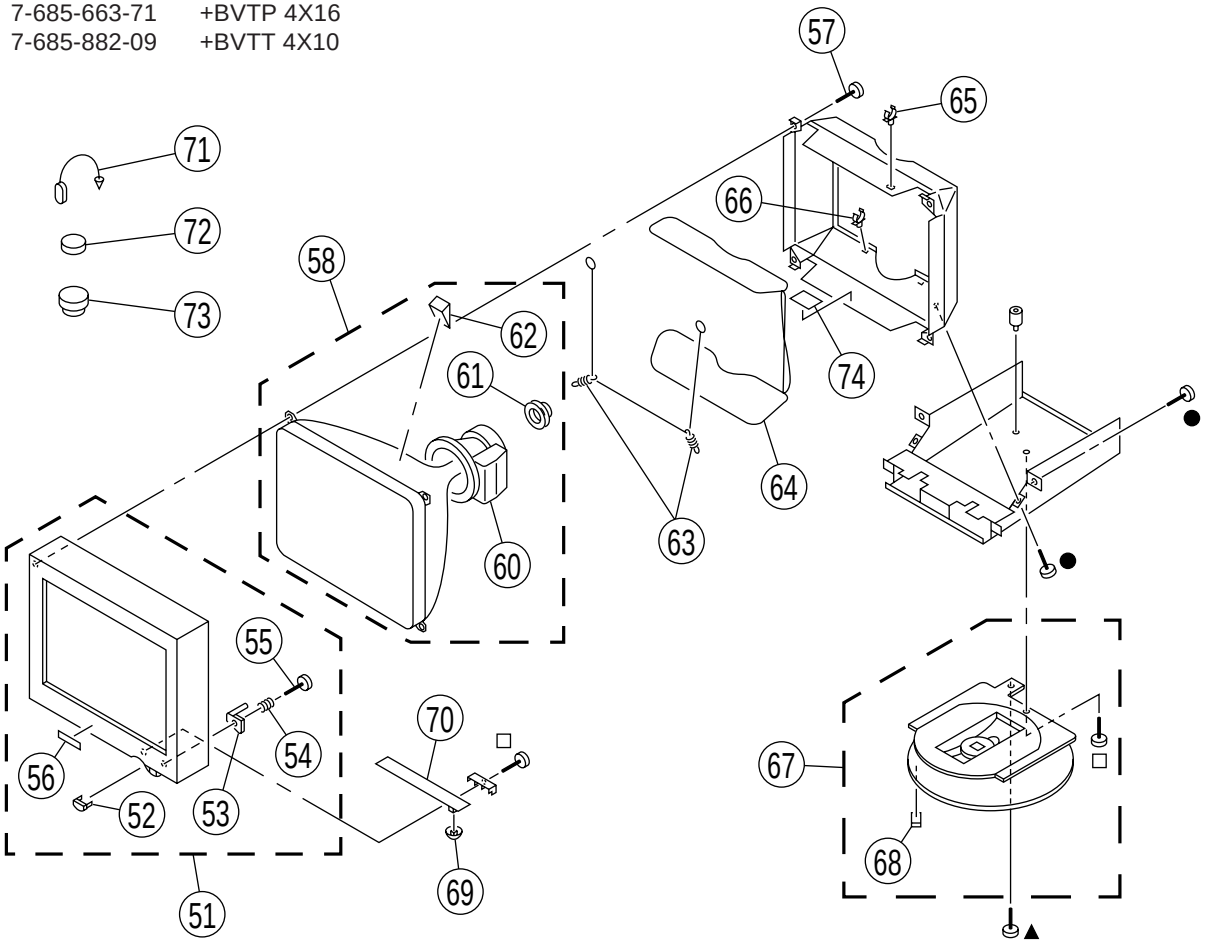
REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-072-438-01	COVER, CABLE [AEP]	
1	4-072-434-01	COVER, CABLE [U/C]	
2	* 4-394-972-21	CAP, POWER	
3	* A-1343-765-C	D BOARD, COMPLETE [AEP]	5
3	* A-1346-889-C	D BOARD, COMPLETE [U/C]	4, 5
4	* A-1390-957-A	N BOARD, COMPLETE [U/C]	
4	* A-1390-978-A	N BOARD, COMPLETE [AEP]	
5	⚠ X-4560-174-1	TRANSFORMER ASSY, FLYBACK (NX4700//J1E4)	
6	4-062-115-01	SCREW +P 3.5X20 TYPE2	
7	* 4-073-936-01	LABEL, INFORMATION [only U/C]	
8	⚠ 1-251-382-31	INLET, AC 3P (WITH NOISE FILTER)	
9	4-052-345-01	SCREW, (3X8) (+K), TAPPING	
10	1-783-982-11	CABLE ASSY (15P DSUB CONNECTOR) [U/C]	
10	1-791-490-11	CABLE ASSY (15P DSUB CONNECTOR) [AEP]	
11	* 4-045-131-01	STOPPER, CABLE [U/C]	
11	* 4-045-131-11	STOPPER, CABLE [AEP]	
12	* A-1299-002-C	A BOARD, COMPLETE [U/C]	
12	* A-1299-090-C	A BOARD, COMPLETE [AEP]	
13	4-072-437-01	CABINET [AEP]	
13	* 4-072-433-12	CABINET [U/C]	

The components identified ⚠ marked are critical for safety.
Replace only with the part number specified.

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

6-2. PICTURE TUBE

● 7-685-881-09 +BVTT 4X8
□ 7-685-663-71 +BVTP 4X16
▲ 7-685-882-09 +BVTT 4X10

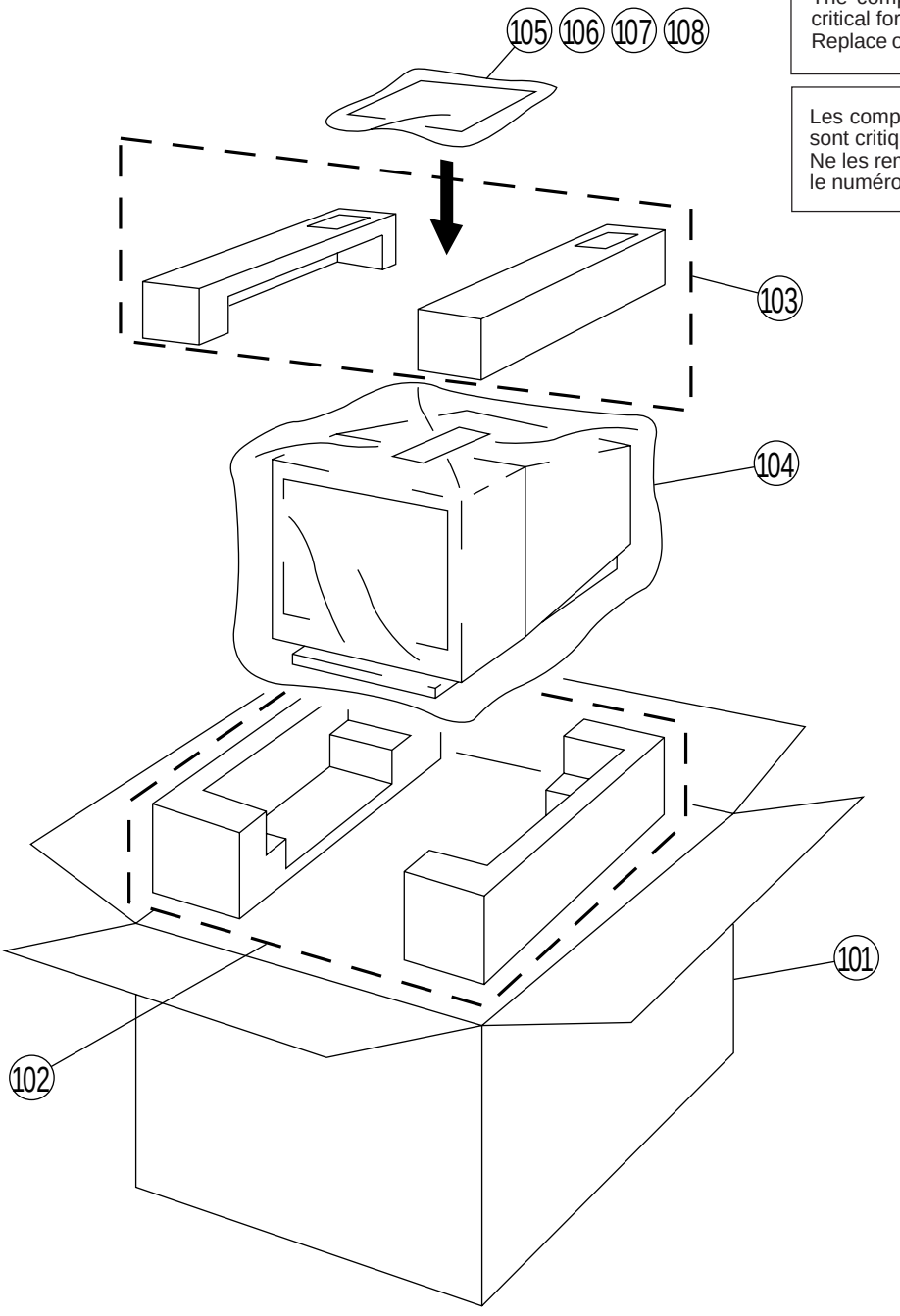


REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4037-315-1	BEZEL ASSY [AEP]	52-56
51	X-4037-401-2	BEZEL ASSY [U/C]	52-56
52	4-204-957-01	BUTTON, POWER [AEP]	
52	4-071-152-12	BUTTON, POWER [U/C]	
53	4-072-439-01	BAR, EXTENSION [AEP]	
53	* 4-072-435-02	BAR, EXTENSION [U/C]	
54	4-070-001-11	SPRING, COMPRESSION [U/C]	
54	4-205-260-01	SPRING, EXTENSION BAR [AEP]	
55	4-046-797-01	SCREW (3X12), (+) BVTP	
56	4-044-932-11	EMBLEM (NO.8), SONY [AEP]	
56	4-044-932-31	EMBLEM (NO.8), SONY [U/C]	
57	4-203-648-01	SCREW (5), SELF TAPPING [AEP]	
57	4-365-808-01	SCREW (5), TAPPING [U/C]	
58	⚠ 8-736-407-61	ITC ASSY (19TKC-R1)	60-62
60	⚠ 8-451-284-11	DEFLECTION YOKE Y19TKK-V	
61	⚠ 1-452-912-61	NECK ASSEMBLY (NA-2914)	
62	2-162-100-21	SPACER, DEFLECTION YOKE [AEP]	
62	4-040-897-01	SPACER, DEFLECTION YOKE [U/C]	
63	* 4-047-316-01	SPRING, EXTENSION [AEP]	
63	* 4-061-573-01	SPRING, TENSION [U/C]	
64	⚠ 1-419-285-11	COIL, DEGAUSSING	
65	4-071-175-01	HOLDER, DEGAUSSING COIL [AEP]	
65	4-395-824-01	HOLDER, DEGAUSSING COIL [U/C]	
66	4-041-021-02	HOLDER, DEGAUSE COIL [AEP]	
66	4-041-021-11	HOLDER, DEGAUSE COIL [U/C]	
67	X-4036-988-2	ASSY, STAND	68
68	* 4-061-996-11	CUSHION	
69	4-071-155-02	BUTTON, MENU [U/C]	
69	4-204-970-01	BUTTON, MENU [AEP]	
70	* A-1372-736-A	H BOARD, COMPLETE [U/C]	
70	* A-1372-744-A	H BOARD, COMPLETE [AEP]	
71	4-308-870-00	CLIP, LEAD WIRE	
72	1-452-032-11	MAGNET, DISC	
73	1-452-094-00	MAGNET, ROTATABLE DISC; 15mmϕ	
74	* 4-070-217-01	CUSHION [only AEP]	

6-3. PACKING MATERIALS

The components identified ⚠ marked are critical for safety.
Replace only with the part number specified.

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



REF.NO.	PART NO.	DESCRIPTION	REMARK
101	4-072-908-01	INDIVIDUAL CARTON [AEP]	
101	* 4-073-937-01	CARTON, INDIVIDUAL [U/C]	
102	* 4-072-843-01	CUSHION ASSY, LOWER [U/C]	
102	* 4-072-903-01	CUSHION (LOWER) (ASSY) [AEP]	
103	* 4-072-842-01	CUSHION ASSY, UPPER [U/C]	
103	* 4-072-902-01	CUSHION (UPPER) (ASSY) [AEP]	
104	4-041-927-11	BAG, POLYETHYLENE	
105	1-759-641-14	DISK, INFORMATION [U/C]	
105	1-772-337-12	DISK, INFORMATION [AEP]	
106	⚠ 1-765-719-31	CORD SET, POWER [AEP]	
106	⚠ 1-790-662-11	CORD SET, POWER [U/C]	
107	1-785-512-21	CONNECTOR, DSUB (15P CHANGER)	[U/C]
107	1-785-512-31	CONNECTOR, DSUB (15P CHANGER)	[AEP]
108	4-074-104-12	MANUAL, INSTRUCTION [U/C]	
108	4-075-351-11	MANUAL, INSTRUCTION [AEP]	

SECTION 7
ELECTRICAL PARTS LIST

A

NOTE:

The components identified ⚠ marked are critical for safety.
Replace only with the part number specified.

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

When indicating parts by reference number, please include the board name.

The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

RESISTORS
- All resistors are in ohms
- F : nonflammable

REF.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1299-002-C	A BOARD, COMPLETE [U/C]			
	* A-1299-090-C	A BOARD, COMPLETE [AEP]			
		**********			
	4-382-854-01	SCREW (M3X8), P, SW (+) (IC002)			
		<CAPACITOR>			
C001	1-162-318-11	CERAMIC	0.001µF	10%	500V
C002	1-162-318-11	CERAMIC	0.001µF	10%	500V
C003	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C004	1-104-664-91	ELECT	47µF	20%	25V
C007	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C009	1-126-964-11	ELECT	10µF	20%	50V
C010	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C011	1-106-220-00	MYLAR	0.1µF	10%	100V
C012	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C013	1-107-888-11	ELECT	47µF	20%	25V
C014	1-107-932-11	ELECT	47µF	20%	100V
C015	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C016	1-126-935-11	ELECT	470µF	20%	16V
C018	1-107-652-11	ELECT	10µF	20%	250V
C020	1-126-935-11	ELECT	470µF	20%	16V
C021	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C022	1-126-934-11	ELECT	220µF	20%	10V
C027	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C028	1-104-664-11	ELECT	47µF	20%	25V
C029	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C031	1-162-318-11	CERAMIC	0.001µF	10%	500V
C032	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C033	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C035	1-162-134-11	CERAMIC	470pF	10%	2KV
C037	1-136-177-00	MYLAR	1µF	5%	50V
C038	1-163-021-91	CERAMIC CHIP	0.001µF	10%	50V
C039	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C041	1-162-318-11	CERAMIC	0.001µF	10%	500V
C042	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C043	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C045	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C046	1-164-346-11	CERAMIC CHIP	1µF	10%	16V
C047	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C053	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C054	1-104-341-11	MYLAR	0.1µF	10%	250V
C056	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C059	1-164-346-11	CERAMIC CHIP	1µF		16V
C060	1-104-664-11	ELECT	47µF	20%	25V
C061	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C063	1-126-964-11	ELECT	10µF	20%	50V
C066	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C070	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C092	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C093	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C094	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C095	1-126-935-11	ELECT	470µF	20%	16V
C096	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C097	1-163-113-00	CERAMIC CHIP	68pF	5%	50V
C104	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C105	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C106	1-117-450-11	MYLAR	0.47µF	10%	250V
C108	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C111	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C121	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C122	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C123	1-104-341-11	MYLAR	0.1µF	10%	250V
C130	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C152	1-126-933-11	ELECT	100µF	20%	16V
C204	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C205	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C206	1-117-450-11	MYLAR	0.47µF	10%	250V
C208	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C211	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C221	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C222	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C223	1-104-341-11	MYLAR	0.1µF	10%	250V
C230	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
C252	1-126-933-11	ELECT	100µF	20%	16V
C304	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C305	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C306	1-117-450-11	MYLAR	0.47µF	10%	250V
C308	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C311	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C321	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C322	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C323	1-104-341-11	MYLAR	0.1µF	10%	250V
C330	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V

A

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

The components identified ⚠ marked are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
C352	1-126-933-11	ELECT 100µF 20% 16V	
		<CONNECTOR>	
CN301	1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P	
CN302	1-695-915-11	TAB (CONTACT)	
CN303	1-695-915-11	TAB (CONTACT)	
CN305*	1-564-522-11	PLUG, CONNECTOR 7P	
CN306*	1-564-511-11	PLUG, CONNECTOR 8P	
CN308	1-695-915-11	TAB (CONTACT)	
CN309*	1-564-511-11	PLUG, CONNECTOR 8P	
CN310*	1-779-944-21	PIN, CONNECTOR (PC BOARD) 4P	
CN311*	1-564-507-11	PLUG, CONNECTOR 4P	
CN313*	1-785-705-11	PIN, CONNECTOR (PC BOARD) 9P	
		<DIODE>	
D002	8-719-109-89	ZENER DIODE RD5.6ESB2	
D004	8-719-109-89	ZENER DIODE RD5.6ESB2	
D005	8-719-062-51	DIODE 1PS226-115	
D007	8-719-109-89	ZENER DIODE RD5.6ESB2	
D008	8-719-109-89	ZENER DIODE RD5.6ESB2	
D014	8-719-911-19	DIODE 1SS119-25	
D023	8-719-921-54	DIODE MTZJ-6.2B	
D024	8-719-921-54	DIODE MTZJ-6.2B	
D025	8-719-921-54	DIODE MTZJ-6.2B	
D026	8-719-911-19	DIODE 1SS119-25	
D104	8-719-052-12	DIODE 1SS376TE-17	
D105	8-719-052-12	DIODE 1SS376TE-17	
D106	8-719-052-12	DIODE 1SS376TE-17	
D108	8-719-062-51	DIODE 1PS226-115	
D109	8-719-052-12	DIODE 1SS376TE-17	
D111	8-719-062-51	DIODE 1PS226-115	
D204	8-719-052-12	DIODE 1SS376TE-17	
D205	8-719-052-12	DIODE 1SS376TE-17	
D206	8-719-052-12	DIODE 1SS376TE-17	
D208	8-719-062-51	DIODE 1PS226-115	
D209	8-719-052-12	DIODE 1SS376TE-17	
D211	8-719-062-51	DIODE 1PS226-115	
D304	8-719-052-12	DIODE 1SS376TE-17	
D305	8-719-052-12	DIODE 1SS376TE-17	
D306	8-719-052-12	DIODE 1SS376TE-17	
D308	8-719-062-51	DIODE 1PS226-115	
D309	8-719-052-12	DIODE 1SS376TE-17	
D311	8-719-062-51	DIODE 1PS226-115	
D409	8-719-052-12	DIODE 1SS376TE-17	
		<FERRITE BEAD>	
FB001	1-412-911-11	FERRITE 1.1µH	
FB002	1-412-911-11	FERRITE 1.1µH	
FB004	1-412-911-11	FERRITE 1.1µH	
FB005	1-412-911-11	FERRITE 1.1µH	
FB009	1-414-231-22	INDUCTOR CHIP	
FB010	1-414-231-22	INDUCTOR CHIP	
FB012	1-414-231-22	INDUCTOR CHIP	
FB014	1-216-295-91	SHORT 0	
FB015	1-414-231-22	INDUCTOR CHIP	
FB016	1-414-231-22	INDUCTOR CHIP	
FB017	1-414-231-22	INDUCTOR CHIP	
FB018	1-414-231-22	INDUCTOR CHIP	
FB019	1-414-231-22	INDUCTOR CHIP	
FB020	1-414-231-22	INDUCTOR CHIP	
FB021	1-414-231-22	INDUCTOR CHIP	
FB022	1-216-295-91	SHORT 0	
FB024	1-412-911-11	FERRITE 1.1µH	
FB101	1-216-295-91	SHORT 0	
FB102	1-216-295-91	SHORT 0	
FB104	1-412-911-11	FERRITE 1.1µH	
FB110	1-412-911-11	FERRITE 1.1µH	
FB201	1-216-295-91	SHORT 0	
FB202	1-216-295-91	SHORT 0	
FB210	1-412-911-11	FERRITE 1.1µH	
FB301	1-216-295-91	SHORT 0	
FB302	1-216-295-91	SHORT 0	
FB310	1-412-911-11	FERRITE 1.1µH	
		<TERMINAL>	
GT001*	1-537-738-21	TERMINAL, EARTH	
GT002*	1-537-738-21	TERMINAL, EARTH	
		<IC>	
IC001	8-759-599-70	IC MC13289	
IC002	8-759-591-40	IC LM2402T	
IC003	8-759-639-50	IC CXD9522S	
IC004	8-749-015-92	IC H8D2972	
IC005	8-759-701-01	IC NJM2904M	
IC006	8-759-233-66	IC TC74HCT04AF	
		<JACK>	
J001 ⚠	1-451-499-11	SOCKET, PICTURE TUBE	
		<CHIP CONDUCTOR>	
JR002	1-216-295-91	SHORT 0	
JR004	1-216-296-91	SHORT 0	
JR005	1-216-295-91	SHORT 0	
JR006	1-216-296-91	SHORT 0	
JR007	1-216-296-91	SHORT 0	
JR008	1-216-296-91	SHORT 0	
JR010	1-216-295-91	SHORT 0	
JR011	1-216-295-91	SHORT 0	
JR012	1-216-296-91	SHORT 0	
JR013	1-216-295-91	SHORT 0	
JR014	1-216-295-91	SHORT 0	
JR015	1-216-295-91	SHORT 0	
JR016	1-216-296-91	SHORT 0	
JR017	1-216-296-91	SHORT 0	
JR020	1-216-296-91	SHORT 0	

REF.NO.	PART NO.	DESCRIPTION			REMARK
JR021	1-216-296-91	SHORT	0		
JR022	1-216-296-91	SHORT	0		
JR023	1-216-296-91	SHORT	0		
JR024	1-216-296-91	SHORT	0		
JR025	1-216-295-91	SHORT	0		
JR026	1-216-295-91	SHORT	0		
JR027	1-216-295-91	SHORT	0		
JR028	1-216-295-91	SHORT	0		
JR029	1-216-296-91	SHORT	0		
JR030	1-216-295-91	SHORT	0		
JR031	1-216-296-91	SHORT	0		
JR032	1-216-295-91	SHORT	0		
JR033	1-216-296-91	SHORT	0		
JR034	1-216-296-91	SHORT	0		
JW120	1-216-295-91	SHORT	0		
JW202	1-216-295-91	SHORT	0		
	<COIL>				
L004	1-412-529-11	INDUCTOR	22µH		
L005	1-412-537-31	INDUCTOR	100µH		
L006	1-412-541-41	INDUCTOR	220µH		
L007	1-408-615-31	INDUCTOR	100µH		
	<TRANSISTOR>				
Q001	8-729-032-61	TRANSISTOR	2SC5022-02		
Q002	8-729-216-22	TRANSISTOR	2SA1162-G		
Q003	8-729-216-22	TRANSISTOR	2SA1162-G		
Q006	8-729-216-22	TRANSISTOR	2SA1162-G		
	<RESISTOR>				
R004	1-216-037-00	RES,CHIP	330	5%	1/10W
R005	1-216-041-00	RES,CHIP	470	5%	1/10W
R006	1-216-025-91	RES,CHIP	100	5%	1/10W
R007	1-216-025-91	RES,CHIP	100	5%	1/10W
R009	1-216-073-00	RES,CHIP	10K	5%	1/10W
R011	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R012	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R013	1-216-025-91	RES,CHIP	100	5%	1/10W
R014	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R017	1-216-025-91	RES,CHIP	100	5%	1/10W
R018	1-216-025-91	RES,CHIP	100	5%	1/10W
R020	1-216-017-91	RES,CHIP	47	5%	1/10W
R021	1-216-017-91	RES,CHIP	47	5%	1/10W
R022	1-216-025-91	RES,CHIP	100	5%	1/10W
R023	1-216-049-91	RES,CHIP	1K	5%	1/10W
R024	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R025	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R027	1-216-057-91	RES,CHIP	2.2K	5%	1/10W
R029	1-216-097-91	RES,CHIP	100K	5%	1/10W
R030	1-216-025-91	RES,CHIP	100	5%	1/10W
R031	1-216-049-91	RES,CHIP	1K	5%	1/10W
R032	1-216-025-91	RES,CHIP	100	5%	1/10W
R033	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R034	1-216-295-91	SHORT	0		

REF.NO.	PART NO.	DESCRIPTION			REMARK
R040	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R044	1-216-073-00	RES,CHIP	10K	5%	1/10W
R045	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R047	1-216-073-00	RES,CHIP	10K	5%	1/10W
R048	1-219-398-51	METAL	2.2M	5%	1W
R049	1-216-093-91	RES,CHIP	68K	5%	1/10W
R050	1-216-121-91	RES,CHIP	1M	5%	1/10W
R053	1-219-621-91	METAL	22M	10%	1/4W
R060	1-414-231-22	INDUCTOR CHIP			
R064	1-219-749-91	CARBON	10K	5%	1/2W
R078	1-216-089-91	RES,CHIP	47K	5%	1/10W
R079	1-216-089-91	RES,CHIP	47K	5%	1/10W
R080	1-216-049-91	RES,CHIP	1K	5%	1/10W
R081	1-216-049-91	RES,CHIP	1K	5%	1/10W
R082	1-216-089-91	RES,CHIP	47K	5%	1/10W
R095	1-216-121-91	RES,CHIP	1M	5%	1/10W
R096	1-216-033-00	RES,CHIP	220	5%	1/10W
R097	1-218-179-11	RES,CHIP	10M	5%	1/10W
R098	1-218-179-11	RES,CHIP	10M	5%	1/10W
R099	1-208-291-11	RES,CHIP	4.7M	5%	1/10W
R104	1-216-009-91	RES,CHIP	22	5%	1/10W
R106	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R107	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R108	1-216-049-91	RES,CHIP	1K	5%	1/10W
R109	1-216-041-00	RES,CHIP	470	5%	1/10W
R110	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R111	1-249-403-11	CARBON	68	5%	1/4W F
R115	1-216-107-00	RES,CHIP	270K	5%	1/10W
R117	1-216-025-91	RES,CHIP	100	5%	1/10W
R118	1-216-019-00	RES,CHIP	56	5%	1/10W
R119	1-216-113-00	RES,CHIP	470K	5%	1/10W
R120	1-216-113-00	RES,CHIP	470K	5%	1/10W
R122	1-216-113-00	RES,CHIP	470K	5%	1/10W
R123	1-216-037-00	RES,CHIP	330	5%	1/10W
R130	1-216-025-91	RES,CHIP	100	5%	1/10W
R133	1-216-295-91	SHORT	0		
R151	1-219-742-11	CARBON	47	5%	1/2W
R161	1-215-394-00	METAL	75	1%	1/4W
R204	1-216-009-91	RES,CHIP	22	5%	1/10W
R206	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R207	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R208	1-216-049-91	RES,CHIP	1K	5%	1/10W
R209	1-216-041-00	RES,CHIP	470	5%	1/10W
R210	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R211	1-249-403-11	CARBON	68	5%	1/4W F
R215	1-216-107-00	RES,CHIP	270K	5%	1/10W
R217	1-216-025-91	RES,CHIP	100	5%	1/10W
R218	1-216-019-00	RES,CHIP	56	5%	1/10W
R219	1-216-113-00	RES,CHIP	470K	5%	1/10W
R220	1-216-113-00	RES,CHIP	470K	5%	1/10W
R222	1-216-113-00	RES,CHIP	470K	5%	1/10W
R223	1-216-037-00	RES,CHIP	330	5%	1/10W
R230	1-216-025-91	RES,CHIP	100	5%	1/10W
R233	1-216-295-91	SHORT	0		
R251	1-219-742-11	CARBON	47	5%	1/2W
R261	1-215-394-00	METAL	75	1%	1/4W

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R304	1-216-009-91	RES,CHIP	22	5%	1/10W
R306	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R307	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R308	1-216-049-91	RES,CHIP	1K	5%	1/10W
R309	1-216-041-00	RES,CHIP	470	5%	1/10W
R310	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R311	1-249-403-11	CARBON	68	5%	1/4W F
R315	1-216-107-00	RES,CHIP	270K	5%	1/10W
R317	1-216-025-91	RES,CHIP	100	5%	1/10W
R318	1-216-019-00	RES,CHIP	56	5%	1/10W
R319	1-216-113-00	RES,CHIP	470K	5%	1/10W
R320	1-216-113-00	RES,CHIP	470K	5%	1/10W
R322	1-216-113-00	RES,CHIP	470K	5%	1/10W
R323	1-216-037-00	RES,CHIP	330	5%	1/10W
R330	1-216-025-91	RES,CHIP	100	5%	1/10W
R333	1-216-295-91	SHORT	0		
R351	1-219-742-11	CARBON	47	5%	1/2W
R361	1-215-394-00	METAL	75	1%	1/4W
		<SPARK GAP>			
SG001	1-519-422-11	GAP, SPARK			
SG002	1-576-354-21	GAP, DISCHARGE			
SG101	1-576-354-21	GAP, DISCHARGE			
SG201	1-576-354-21	GAP, DISCHARGE			
SG301	1-576-354-21	GAP, DISCHARGE			
		<CRYSTAL>			
X001	1-781-472-21	VIBRATOR, CERAMIC (8MHz)			

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* A-1343-765-C D BOARD, COMPLETE [AEP]
* A-1346-889-C D BOARD, COMPLETE [U/C]
****

1-533-223-11 HOLDER, FUSE (F601)
3-710-578-01 COVER, VOLUME, 6 MOLD (RV901)
4-061-192-11 SHEET, INSULATING (Q505)
4-382-854-01 SCREW (M3X8), P, SW (+) (D614, D619, IC401, IC502, IC604, IC605, IC609, IC610, IC703, Q506, Q511, Q512, Q513, Q605, Q704, Q705, Q901, Q902, R510)
4-382-854-11 SCREW (M3X10), P, SW (+) (D504, D620, D622, Q505)
4-382-854-21 SCREW (M3X14), P, SW (+) (IC702)
7-685-881-09 SCREW +BVTT 4X8 (S)

<CAPACITOR>

C401	1-128-730-91	ELECT	470µF	20%	25V
C402	1-106-228-00	MYLAR	0.22µF	10%	100V
C403	1-128-749-91	ELECT	220µF	20%	50V
C404	1-128-730-91	ELECT	470µF	20%	25V
C406	1-137-366-11	MYLAR	0.0022µF	5%	50V
C407	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C409	1-126-968-11	ELECT	100µF	20%	50V
C500	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C501	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C503	1-137-370-11	MYLAR	0.01µF	5%	50V
C504	1-137-368-11	MYLAR	0.0047µF	5%	50V
C505	1-128-729-91	ELECT	330µF	20%	25V
C506	1-127-810-51	ELECT MELF	22µF	20%	250V
C507	1-136-187-11	MYLAR	0.047µF	10%	250V
C508	1-117-959-11	FILM	4700pF	3%	1.8KV
C509	1-107-444-11	CERAMIC	100pF	5%	2KV
C510	1-136-684-51	MYLAR	0.0022µF	10%	100V
C511	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C512	1-102-114-00	CERAMIC	470pF	10%	50V
C513	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C514	1-137-368-11	MYLAR	0.0047µF	5%	50V
C515	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C516	1-126-382-11	ELECT	100µF	20%	16V
C517	1-163-263-11	CERAMIC CHIP	330pF	5%	50V
C518	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C520	1-163-024-00	CERAMIC CHIP	0.018µF	10%	50V
C521	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C522	1-126-965-11	ELECT	22µF	20%	50V
C523	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C524	1-126-382-11	ELECT	100µF	20%	16V
C525	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C527	1-163-019-00	CERAMIC CHIP	0.0068µF	10%	50V
C528	1-130-489-00	MYLAR	0.033µF	5%	50V
C529	1-137-370-11	MYLAR	0.01µF	5%	50V
C530	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C531	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C532	1-107-906-11	ELECT	10µF	20%	50V
C533	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C534	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C535	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C536	1-107-665-11	ELECT	0.47µF	20%	400V
C537	1-107-770-11	FILM	0.16µF	3%	400V
C538	1-107-651-11	ELECT	4.7µF	20%	250V
C539	1-117-673-11	FILM	1.5µF	5%	250V
C540	1-107-888-11	ELECT	47µF	20%	25V
C541	1-109-844-11	FILM	0.68µF	5%	250V
C542	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C543	1-117-665-11	FILM	0.33µF	5%	250V
C544	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C545	1-117-661-21	FILM	0.15µF	5%	250V
C546	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C547	1-119-860-11	FILM	0.082µF	5%	250V
C548	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C549	1-117-953-91	FILM	0.033µF	5%	400V
C550	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C551	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C553	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C554	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C555	1-137-194-81	MYLAR	0.47µF	5%	50V
C556	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C557	1-126-935-11	ELECT	470µF	20%	16V

The components identified ⚠ marked are critical for safety.
Replace only with the part number specified.

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

REF.NO.	PART NO.	DESCRIPTION			REMARK
C558	1-163-007-11	CERAMIC CHIP	680pF	10%	50V
C559	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C560	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C562	1-163-001-11	CERAMIC CHIP	220pF	10%	50V
C563	1-113-340-11	ELECT	47µF	20%	25V
C564	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C565	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C608	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C609	1-117-703-11	CERAMIC	0.0047µF	20%	250V
C610	1-117-769-91	CERAMIC	680pF	10%	2KV
C611	1-113-608-11	ELECT(BLOCK)	470µF	20%	400V
C612	1-117-953-91	FILM	0.033µF	5%	400V
C613	1-104-664-11	ELECT	47µF	20%	25V
C614	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C615	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C616	1-102-228-00	CERAMIC	470pF	10%	500V
C617	1-117-769-91	CERAMIC	680pF	10%	2KV
C618	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C619	1-163-019-00	CERAMIC CHIP	0.0068µF	10%	50V
C620	1-128-551-11	ELECT	22µF	20%	25V
C621	1-131-723-21	ELECT(BLOCK)	220µF	20%	250V
C622	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C623	1-107-933-11	ELECT	100µF	20%	100V
C624	1-104-666-11	ELECT	220µF	20%	25V
C625	1-115-789-11	ELECT	0.001F	20%	25V
C626	1-115-791-11	ELECT	0.0018F	20%	25V
C627	1-115-789-11	ELECT	0.001F	20%	25V
C628	1-107-890-11	ELECT	2200µF	20%	25V
C629	1-126-935-11	ELECT	470µF	20%	16V
C630	1-126-935-11	ELECT	470µF	20%	16V
C631	1-128-526-11	ELECT	100µF	20%	25V
C632	1-104-653-11	ELECT	220µF	20%	16V
C633	1-126-934-11	ELECT	220µF	20%	10V
C634	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C635	1-126-965-11	ELECT	22µF	20%	50V
C636⚠	1-113-900-51	CERAMIC	470pF	10%	250V
C637⚠	1-113-900-51	CERAMIC	470pF	10%	250V
C638⚠	1-104-708-51	MYLAR	0.47µF	20%	250V
C639⚠	1-104-708-51	MYLAR	0.47µF	20%	250V
C640	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C641	1-163-007-11	CERAMIC CHIP	680pF	10%	50V
C642	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C644	1-136-187-11	MYLAR	0.047µF	10%	250V
C645	1-126-934-11	ELECT	220µF	20%	16V
C646	1-107-882-91	ELECT	100µF	20%	16V
C647	1-107-882-91	ELECT	100µF	20%	16V
C648	1-107-906-11	ELECT	10µF	20%	50V
C650	1-162-117-00	CERAMIC	100pF	10%	500V
C653	1-126-942-61	ELECT	1000µF	20%	25V
C654	1-104-666-11	ELECT	220µF	20%	25V
C656	1-104-664-11	ELECT	47µF	20%	25V
C657	1-162-318-11	CERAMIC	0.001µF	10%	500V
C658	1-162-815-11	CERAMIC	47pF	5%	500V
C659	1-136-177-00	MYLAR	1µF	5%	50V
C701	1-163-003-11	CERAMIC CHIP	330pF	10%	50V
C703	1-163-003-11	CERAMIC CHIP	330pF	10%	50V
C704	1-130-495-00	MYLAR	0.1µF	5%	50V
C705	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C706	1-130-495-00	MYLAR	0.1µF	5%	50V
C707	1-126-942-61	ELECT	1000µF	20%	25V
C708	1-126-942-61	ELECT	1000µF	20%	25V
C711	1-163-113-00	CERAMIC CHIP	68pF	5%	50V
C712	1-163-113-00	CERAMIC CHIP	68pF	5%	50V
C713	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C714	1-126-960-11	ELECT	1µF	20%	50V
C716	1-136-177-00	MYLAR	1µF	5%	50V
C717	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C718	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C719	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C720	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C721	1-128-562-11	ELECT	47µF	20%	100V
C723	1-128-561-91	ELECT	33µF	20%	100V
C724	1-162-134-11	CERAMIC	470pF	10%	2KV
C725	1-126-965-11	ELECT	22µF	20%	50V
C726	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C727	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C728	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C729	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C730	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C731	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C732	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C901	1-104-665-11	ELECT	100µF	20%	25V
C902	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C903	1-107-904-11	ELECT	3.3µF	20%	50V
C904	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
C905	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C906	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C907	1-163-275-11	CERAMIC CHIP	0.001µF	5%	50V
C908	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C909	1-104-665-11	ELECT	100µF	20%	25V
C910	1-163-259-91	CERAMIC CHIP	220pF	5%	50V
C911	1-163-243-11	CERAMIC CHIP	47pF	5%	50V
C912	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C913	1-119-748-11	ELECT	33µF	20%	400V
C914	1-136-187-11	MYLAR	0.047µF	10%	250V
C915	1-137-367-11	MYLAR	0.0033µF	5%	50V
C916	1-117-665-11	FILM	0.33µF	5%	250V
C917	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C918	1-117-626-11	FILM	2000pF	3%	1.2KV
C919	1-115-349-51	CERAMIC	0.01µF		2KV
C920	1-115-349-51	CERAMIC	0.01µF		2KV
C921	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C922	1-126-963-11	ELECT	4.7µF	20%	50V
C923	1-126-964-11	ELECT	10µF	20%	50V
C924	1-104-665-11	ELECT	100µF	20%	25V
C925	1-137-370-11	MYLAR	0.01µF	5%	50V
C926	1-106-220-00	MYLAR	0.1µF	10%	100V
C927	1-106-351-00	MYLAR	0.0022µF	20%	200V
C929	1-126-965-11	ELECT	22µF	20%	50V
C930	1-137-370-11	MYLAR	0.01µF	5%	50V
C931	1-164-005-11	CERAMIC CHIP	0.47µF		25V
C1006	1-163-038-91	CERAMIC CHIP	0.1µF		25V

D

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REF.NO.	PART NO.	DESCRIPTION	REMARK
C1013	1-126-926-11	ELECT 1000µF 20% 10V	
C1024	1-163-227-11	CERAMIC CHIP 10pF 0.5pF 50V	
C1025	1-163-227-11	CERAMIC CHIP 10pF 0.5pF 50V	
C1026	1-163-038-91	CERAMIC CHIP 0.1µF 25V	
C1030	1-164-222-11	CERAMIC CHIP 0.22µF 25V	
C1031	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1036	1-163-038-91	CERAMIC CHIP 0.1µF 25V	
C1037	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1038	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C1042	1-163-243-11	CERAMIC CHIP 47pF 5% 50V	
C1046	1-163-243-11	CERAMIC CHIP 47pF 5% 50V	
C1047	1-163-243-11	CERAMIC CHIP 47pF 5% 50V	
C1050	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1056	1-163-243-11	CERAMIC CHIP 47pF 5% 50V	
C1057	1-163-243-11	CERAMIC CHIP 47pF 5% 50V	
C1061	1-163-038-91	CERAMIC CHIP 0.1µF 25V	
C1062	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
C1063	1-115-339-11	CERAMIC CHIP 0.1µF 10% 50V	
C1064	1-164-004-11	CERAMIC CHIP 0.1µF 10% 25V	
		<CONNECTOR>	
CN501*	1-580-798-11	CONNECTOR PIN (DY) 6P	
CN600*	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
CN601*	1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN603*	1-564-510-11	PLUG, CONNECTOR 7P	
CN701*	1-564-511-11	PLUG, CONNECTOR 8P	
CN702*	1-564-506-11	PLUG, CONNECTOR 3P	
CN901	1-695-915-11	TAB (CONTACT)	
CN1001*	1-508-879-11	BASE POST	
CN1002*	1-564-511-11	PLUG, CONNECTOR 8P	
CN1003*	1-564-515-11	PLUG, CONNECTOR 12P	
CN1004*	1-564-509-11	PLUG, CONNECTOR 6P	
		<DIODE>	
D401	8-719-979-58	DIODE EGP10D	
D402	8-719-158-15	ZENER DIODE RD5.6SB	
D405	8-719-061-42	DIODE 1N4148S-26TP	
D501	8-719-110-47	ZENER DIODE RD18ESB	
D502	8-719-981-00	DIODE ERC81-004	
D503	8-719-110-47	ZENER DIODE RD18ESB	
D504	8-719-061-21	DIODE FMQ-G5FMS	
D505	8-719-052-86	DIODE D2L40-TA	
D506	8-719-976-96	ZENER DIODE DTZ4.7C	
D507	8-719-073-01	DIODE MA111-(K8).S0	
D508	8-719-073-01	DIODE MA111-(K8).S0	
D509	8-719-073-01	DIODE MA111-(K8).S0	
D510	8-719-073-01	DIODE MA111-(K8).S0	
D511	8-719-073-01	DIODE MA111-(K8).S0	
D512	8-719-073-01	DIODE MA111-(K8).S0	
D514	8-719-109-81	ZENER DIODE RD4.7ESB2	
D515	8-719-073-01	DIODE MA111-(K8).S0	
D516	8-719-951-30	DIODE ERA91-02	
D517	8-719-978-65	ZENER DIODE DTZ-TT11-15B	
D518	8-719-110-17	ZENER DIODE RD10ESB2	
D519	8-719-109-81	ZENER DIODE DTZ4.7C	
D608	8-719-061-42	DIODE 1N4148S-26TP	
D609	8-719-053-19	DIODE UF4007G23	
D610	8-719-921-40	DIODE MTZJ-4.7C	
D611	8-719-053-19	DIODE UF4007G23	
D612	8-719-110-49	ZENER DIODE RD18ESB2	
D613	8-719-300-76	DIODE RH-1A	
D614	8-719-067-68	DIODE FMC-26UA	
D615	8-719-053-19	DIODE UF4007G23	
D616	8-719-076-20	DIODE BT149G-412-OT359	
D617	8-719-061-42	DIODE 1N4148S-26TP	
D618	8-719-069-63	DIODE ERB38-06V1	
D619	8-719-058-38	DIODE FMN-G12S	
D620	8-719-510-41	DIODE D10SC9M	
D621	8-719-979-58	DIODE EGP10D	
D622	8-719-074-79	DIODE YG911S2R	
D623	8-719-979-58	DIODE EGP10D	
D624	8-719-979-58	DIODE EGP10D	
D625⚠	8-719-510-63	DIODE D4SB60L-F	
D626	8-719-061-42	DIODE 1N4148S-26TP	
D627	8-719-110-08	ZENER DIODE RD8.2ESB2	
D628	8-719-061-42	DIODE 1N4148S-26TP	
D629	8-719-073-01	DIODE MA111-(K8).S0	
D630	8-719-110-41	ZENER DIODE RD15ESB2	
D634	8-719-061-42	DIODE 1SS119	
D635	8-719-061-42	DIODE 1SS119	
D701	8-719-061-42	DIODE 1N4148S-26TP	
D702	8-719-061-42	DIODE 1N4148S-26TP	
D703	8-719-061-42	DIODE 1N4148S-26TP	
D705	8-719-158-49	ZENER DIODE RD12SB2	
D901	8-719-073-01	DIODE MA111-(K8).S0	
D903	8-719-073-01	DIODE MA111-(K8).S0	
D904	8-719-073-01	DIODE MA111-(K8).S0	
D906	8-719-978-65	ZENER DIODE DTZ-TT11-15B	
D907	8-719-052-86	DIODE D2L40-TA	
D908	8-719-073-01	DIODE MA111-(K8).S0	
D909	8-719-978-65	ZENER DIODE DTZ-TT11-15B	
D910	8-719-028-72	DIODE RGP02-17EL-6433	
D911	8-719-028-72	DIODE RGP02-17EL-6433	
D912	8-719-110-46	ZENER DIODE RD16ESB3	
D913	8-719-110-46	ZENER DIODE RD16ESB3	
D914	8-719-970-83	DIODE HSS82	
D915	8-719-109-85	ZENER DIODE RD5.1ESB2	
D916	8-719-158-49	ZENER DIODE RD12SB2	
D917	8-719-929-15	ZENER DIODE HZS9.1NB2	
D920	8-719-158-15	ZENER DIODE RD5.6SB	
D921	8-719-158-15	ZENER DIODE RD5.6SB	
D1001	8-719-158-15	ZENER DIODE RD5.6SB	
D1003	1-218-772-11	METAL CHIP 680K 0.5% 1/10W	
D1007	8-719-158-15	ZENER DIODE RD5.6SB	
D1008	8-719-158-15	ZENER DIODE RD5.6SB	
D1009	8-719-158-15	ZENER DIODE RD5.6SB	
D1010	8-719-158-15	ZENER DIODE RD5.6SB	
D1011	8-719-158-15	ZENER DIODE RD5.6SB	
D1012	8-719-158-15	ZENER DIODE RD5.6SB	
D1013	8-719-158-15	ZENER DIODE RD5.6SB	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
D1014	8-719-158-15	ZENER DIODE RD5.6SB			
D1018	8-719-073-01	DIODE MA111-(K8).S0			
D1021	8-719-062-51	DIODE 1PS226-115			
D1022	8-719-062-51	DIODE 1PS226-115			
D1024	8-719-073-01	DIODE MA111-(K8).S0			
D1025	8-719-158-15	ZENER DIODE RD5.6SB			
		<FUSE>			
F601 ⚠	1-576-233-11	FUSE (H.B.C.) (6.3A/250V)			
		<FERRITE BEAD>			
FB501	1-412-911-11	FERRITE	1.1µH		
FB502	1-543-960-22	FERRITE			
FB901	1-412-911-11	FERRITE	1.1µH		
FB1000	1-216-295-91	SHORT	0		
FB1001	1-216-025-91	RES,CHIP	100	5%	1/10W
FB1002	1-216-025-91	RES,CHIP	100	5%	1/10W
FB1004	1-216-295-91	SHORT	0		
		<IC>			
IC401	8-759-593-28	IC LA78040			
IC501	8-759-585-82	IC BA9759F-E2			
IC502	8-759-803-42	IC LA6500-FA			
IC503	8-759-100-96	IC µPC4558G2			
IC603	8-759-594-75	IC TEA1504/N2			
IC604	8-759-637-83	IC PQ12RD8S			
IC605	8-759-496-15	IC BA05ST-V5			
IC607	8-749-016-35	IC TLP621D4-Y-LF2T			
IC608	8-759-586-17	IC TL1431CZ-AP			
IC609	8-759-450-47	IC BA05T			
IC610	8-759-592-79	IC BA00AST-V5			
IC701	8-759-822-38	IC LA6510			
IC702	8-749-015-00	IC STK391-110			
IC703	8-759-803-42	IC LA6500-FA			
IC901	8-759-585-81	IC BA9758FS-E2			
IC1001	8-759-639-51	IC CXD9523S/JCN (Ver. 1.2)			
IC1003	8-759-420-77	IC PST574CMT-T1			
IC1005	8-759-641-86	IC BR24C16F-E2			
		<CHIP CONDUCTOR>			
JR43	1-216-296-91	SHORT	0		
JR45	1-216-295-91	SHORT	0		
JR002	1-216-296-91	SHORT	0		
JR004	1-216-296-91	SHORT	0		
JR005	1-216-295-91	SHORT	0		
JR006	1-216-296-91	SHORT	0		
JR007	1-216-295-91	SHORT	0		
JR008	1-216-296-91	SHORT	0		
JR009	1-216-296-91	SHORT	0		
JR010	1-216-296-91	SHORT	0		
JR011	1-216-296-91	SHORT	0		
JR015	1-216-296-91	SHORT	0		
JR016	1-216-296-91	SHORT	0		
JR017	1-216-296-91	SHORT	0		
JR019	1-216-296-91	SHORT	0		
JR020	1-216-296-91	SHORT	0		
JR021	1-216-296-91	SHORT	0		
JR022	1-216-295-91	SHORT	0		
JR023	1-216-296-91	SHORT	0		
JR024	1-216-295-91	SHORT	0		
JR025	1-216-295-91	SHORT	0		
JR026	1-216-296-91	SHORT	0		
JR027	1-216-295-91	SHORT	0		
JR028	1-216-295-91	SHORT	0		
JR029	1-216-295-91	SHORT	0		
JR030	1-216-296-91	SHORT	0		
JR031	1-216-295-91	SHORT	0		
JR032	1-216-296-91	SHORT	0		
JR033	1-216-296-91	SHORT	0		
JR034	1-216-296-91	SHORT	0		
JR035	1-216-296-91	SHORT	0		
JR036	1-216-295-91	SHORT	0		
JR037	1-216-296-91	SHORT	0		
JR038	1-216-296-91	SHORT	0		
JR039	1-216-296-91	SHORT	0		
JR040	1-216-295-91	SHORT	0		
JR042	1-216-296-91	SHORT	0		
JR046	1-216-296-91	SHORT	0		
JR050	1-216-295-91	SHORT	0		
JR051	1-216-296-91	SHORT	0		
JR052	1-216-296-91	SHORT	0		
JR602	1-216-295-91	SHORT	0		
JR603	1-216-295-91	SHORT	0		
JR604	1-216-295-91	SHORT	0		
JR605	1-216-295-91	SHORT	0		
JR606	1-216-295-91	SHORT	0		
		<COIL>			
L501	1-412-541-21	INDUCTOR	220µH		
L502	1-419-299-11	COIL, HORIZONTAL LINEARITY			
L503	1-419-298-11	COIL, HORIZONTAL CENTER			
L504	1-406-675-11	INDUCTOR	4.7mH		
L505	1-406-675-11	INDUCTOR	4.7mH		
L506	1-406-675-11	INDUCTOR	4.7mH		
L507	1-412-537-31	INDUCTOR	100µH		
L603	1-412-537-31	INDUCTOR	100µH		
L604	1-406-665-11	INDUCTOR	100µH		
L606	1-406-665-11	INDUCTOR	100µH		
L607	1-414-158-11	INDUCTOR	2.2µH		
L608	1-414-488-21	INDUCTOR	1.5µH		
L901	1-412-537-31	INDUCTOR	100µH		
L902	1-406-659-11	INDUCTOR	10µH		
		<FILTER>			
LF602 ⚠	1-429-180-11	TRANSFORMER, LINE FILTER			

D

REF.NO.	PART NO.	DESCRIPTION			REMARK
	<TRANSISTOR>				
Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q502	8-729-901-87	TRANSISTOR 2SC2411K-CQ			
Q503	8-729-026-50	TRANSISTOR 2SA1037AK-T146-QR			
Q504	8-729-042-34	TRANSISTOR IRFU110A			
Q505	8-729-050-12	TRANSISTOR 2SC5445(LBSONY1)			
Q506	8-729-043-63	TRANSISTOR IRFI9634G-LF35			
Q507	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q508	8-729-901-87	TRANSISTOR 2SC2411K-CQ			
Q509	8-729-901-97	TRANSISTOR 2SA1036K-Q			
Q510	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q511	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119			
Q512	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119			
Q513	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119			
Q514	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119			
Q515	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119			
Q516	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119			
Q517	8-729-140-50	TRANSISTOR 2SC3209LK			
Q519	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q605	8-729-050-14	TRANSISTOR 2SK3265 (LB2SONY)			
Q606	8-729-043-27	TRANSISTOR PDTC114EK-115			
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q608	8-729-029-92	TRANSISTOR DTC143ESA			
Q609	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q701	8-729-800-32	TRANSISTOR 2SC2362K-G			
Q702	8-729-178-43	TRANSISTOR 2SC2784-E			
Q703	8-729-204-91	TRANSISTOR 2SA1049-GR			
Q704	8-729-207-82	TRANSISTOR 2SC3421-Y			
Q705	8-729-207-89	TRANSISTOR 2SA1358-Y			
Q706	8-729-031-89	TRANSISTOR 2SC3941A-Q (TA)			
Q901	8-729-043-63	TRANSISTOR IRFI9634G-LF35			
Q902	8-729-041-45	TRANSISTOR FS5KM-16A			
Q903	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q904	8-729-901-97	TRANSISTOR 2SA1036K-Q			
	<RESISTOR>				
R401	1-249-383-11	CARBON	1.5	5% 1/4W	F
R402	1-215-866-11	METAL OXIDE	330	5% 1W	F
R403	1-214-796-00	METAL	1.5	1% 1/2W	
R404	1-215-449-00	METAL	15K	1% 1/4W	
R405	1-214-796-00	METAL	1.5	1% 1/2W	
R406	1-216-663-11	METAL CHIP	3.3K	0.5% 1/10W	
R407	1-249-397-11	CARBON	22	5% 1/4W	F
R409	1-216-679-11	METAL CHIP	15K	0.5% 1/10W	
R410	1-216-663-11	METAL CHIP	3.3K	0.5% 1/10W	
R416	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R417	1-216-113-00	RES,CHIP	470K	5% 1/10W	
R418	1-216-105-91	RES,CHIP	220K	5% 1/10W	
R501	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R502	1-216-025-91	RES,CHIP	100	5% 1/10W	
R503	1-216-033-00	RES,CHIP	220	5% 1/10W	
R504	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R505	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R506	1-247-807-31	CARBON	100	5% 1/4W	
R507	1-247-863-91	CARBON	22K	5% 1/4W	
R508	1-215-861-00	METAL OXIDE	47	5% 1W	F
R509	1-249-381-11	CARBON	1	5% 1/4W	F
R510	1-219-677-11	METAL	1.8	5% 10W	
R511	1-249-377-11	CARBON	0.47	5% 1/4W	F
R512	1-214-842-11	METAL	120	1% 1/2W	
R513	1-216-423-11	METAL OXIDE	27	5% 1W	F
R514	1-249-397-11	CARBON	22	5% 1/4W	F
R515	1-249-425-11	CARBON	4.7K	5% 1/4W	
R516	1-249-425-11	CARBON	4.7K	5% 1/4W	
R517	1-216-089-91	RES,CHIP	47K	5% 1/10W	
R518	1-216-033-00	RES,CHIP	220	5% 1/10W	
R519	1-216-025-91	RES,CHIP	100	5% 1/10W	
R520	1-216-033-00	RES,CHIP	220	5% 1/10W	
R521	1-247-807-31	CARBON	100	5% 1/4W	
R522	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R523	1-216-683-11	METAL CHIP	22K	0.5% 1/10W	
R524	1-216-663-11	METAL CHIP	3.3K	0.5% 1/10W	
R525	1-216-657-11	METAL CHIP	1.8K	0.5% 1/10W	
R526	1-216-691-11	METAL CHIP	47K	0.5% 1/10W	
R527	1-216-683-11	METAL CHIP	22K	0.5% 1/10W	
R528	1-216-683-11	METAL CHIP	22K	0.5% 1/10W	
R529	1-216-099-00	RES,CHIP	120K	5% 1/10W	
R530	1-216-663-11	METAL CHIP	3.3K	0.5% 1/10W	
R531	1-216-661-11	METAL CHIP	2.7K	0.5% 1/10W	
R532	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R533	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R535	1-216-683-11	METAL CHIP	22K	0.5% 1/10W	
R536	1-216-683-11	METAL CHIP	22K	0.5% 1/10W	
R537	1-216-683-11	METAL CHIP	22K	0.5% 1/10W	
R538	1-216-691-11	METAL CHIP	47K	0.5% 1/10W	
R539	1-216-065-91	RES,CHIP	4.7K	5% 1/10W	
R540	1-216-691-11	METAL CHIP	47K	0.5% 1/10W	
R541	1-216-687-11	METAL CHIP	33K	0.5% 1/10W	
R542	1-214-842-11	METAL	120	1% 1/2W	
R543	1-214-842-11	METAL	120	1% 1/2W	
R544	1-249-393-11	CARBON	10	5% 1/4W	F
R545	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R546	1-215-909-11	METAL OXIDE	47	5% 3W	F
R547	1-215-387-00	METAL	39	1% 1/4W	
R548	1-260-318-71	CARBON	150	5% 1/2W	
R549	1-260-314-11	CARBON	68	5% 1/2W	
R550	1-247-903-00	CARBON	1M	5% 1/4W	
R552	1-249-437-11	CARBON	47K	5% 1/4W	
R553	1-249-437-11	CARBON	47K	5% 1/4W	
R555	1-249-437-11	CARBON	47K	5% 1/4W	
R557	1-249-437-11	CARBON	47K	5% 1/4W	
R559	1-249-437-11	CARBON	47K	5% 1/4W	
R561	1-249-437-11	CARBON	47K	5% 1/4W	
R563	1-249-405-11	CARBON	100	5% 1/4W	F
R564	1-249-405-11	CARBON	100	5% 1/4W	F
R565	1-249-405-11	CARBON	100	5% 1/4W	F
R566	1-249-405-11	CARBON	100	5% 1/4W	F
R567	1-249-405-11	CARBON	100	5% 1/4W	F
R568	1-249-405-11	CARBON	100	5% 1/4W	F
R569	1-216-667-11	METAL CHIP	4.7K	0.5% 1/10W	
R570	1-216-674-11	METAL CHIP	9.1K	0.5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION			REMARK
R572	1-249-429-11	CARBON	10K	5% 1/4W	
R573	1-216-385-11	METAL OXIDE	0.47	5% 3W	F
R574	1-249-404-00	CARBON	82	5% 1/4W	
R575	1-216-659-11	METAL CHIP	2.2K	0.5% 1/10W	
R576	1-216-097-91	RES,CHIP	100K	5% 1/10W	
R577	1-216-049-91	RES,CHIP	1K	5% 1/10W	
R579	1-216-025-91	RES,CHIP	100	5% 1/10W	
R580	1-216-659-11	METAL CHIP	2.2K	0.5% 1/10W	
R581	1-216-673-11	METAL CHIP	8.2K	0.5% 1/10W	
R582	1-216-661-11	METAL CHIP	2.7K	0.5% 1/10W	
R583	1-216-675-91	METAL CHIP	10K	0.5% 1/10W	
R584	1-216-473-11	METAL OXIDE	56	5% 3W	F
R585	1-216-381-11	METAL OXIDE	0.22	5% 3W	F
R586	1-260-125-11	CARBON	150K	5% 1/2W	
R587	1-216-641-11	METAL CHIP	390	0.5% 1/10W	
R601	1-249-425-11	CARBON	4.7K	5% 1/4W	
R604	1-205-997-11	CEMENTED	2.2	5% 10W	
R605	1-240-265-11	CMT,MELF	2.7	5% 10W	
R615	1-216-615-91	METAL CHIP	33	0.5% 1/10W	
R625	1-202-933-61	FUSIBLE	0.1	10% 1/2W	
R626	1-215-927-00	METAL OXIDE	47K	5% 3W	F
R627	1-219-513-11	CARBON	4.7M	5% 1/2W	
R628	1-216-115-00	RES,CHIP	560K	5% 1/10W	
R629	1-216-119-00	RES,CHIP	820K	5% 1/10W	
R630	1-216-635-11	METAL CHIP	220	0.5% 1/10W	
R631	1-216-651-11	METAL CHIP	1K	0.5% 1/10W	
R632	1-218-758-11	METAL CHIP	180K	0.5% 1/10W	
R633	1-216-687-11	METAL CHIP	33K	0.5% 1/10W	
R635	1-218-754-11	METAL CHIP	120K	0.5% 1/10W	
R636	1-249-397-11	CARBON	22	5% 1/4W	F
R637	1-215-893-11	METAL OXIDE	1.5K	5% 2W	F
R638	1-215-893-11	METAL OXIDE	1.5K	5% 2W	F
R639	1-216-609-11	METAL CHIP	18	0.5% 1/10W	
R640	1-216-344-00	METAL OXIDE	0.39	5% 1W	F
R641	1-216-345-11	METAL OXIDE	0.47	5% 1W	F
R642	1-249-381-11	CARBON	1	5% 1/4W	F
R643	1-247-791-91	CARBON	22	5% 1/4W	
R644	1-247-807-31	CARBON	100	5% 1/4W	
R645	1-211-874-71	FUSIBLE MELF	0.12	10% 1/2W	
R648	1-211-874-71	FUSIBLE MELF	0.12	10% 1/2W	
R649	1-211-874-71	FUSIBLE MELF	0.12	10% 1/2W	
R650	1-211-874-71	FUSIBLE MELF	0.12	10% 1/2W	
R651	1-249-441-11	CARBON	100K	5% 1/4W	
R652	1-215-923-00	METAL OXIDE	10K	5% 3W	F
R653	1-215-902-11	METAL OXIDE	47K	5% 2W	F
R656	1-215-467-00	METAL	82K	1% 1/4W	
R657	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R658	1-216-346-00	METAL OXIDE	0.56	5% 1W	F
R659	1-249-425-11	CARBON	4.7K	5% 1/4W	
R660	1-215-465-00	METAL	68K	1% 1/4W	
R661	1-216-661-11	METAL CHIP	2.7K	0.5% 1/10W	
R662	1-215-467-00	METAL	82K	1% 1/4W	
R664	1-215-902-11	METAL OXIDE	47K	5% 2W	F
R671	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R672	1-249-407-11	CARBON	150	5% 1/4W	
R673	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R674 ⚠	1-220-827-91	REGISTER	560K	5% 1/2W	
R675	1-249-403-11	CARBON	68	5% 1/4W	
R676	1-215-467-00	METAL	82K	1% 1/4W	
R677	1-216-025-91	RES,CHIP	100	5% 1/10W	
R678	1-216-645-11	METAL CHIP	560	0.5% 1/10W	
R679	1-215-467-00	METAL	82K	1% 1/4W	
R680	1-216-661-11	METAL CHIP	2.7K	0.5% 1/10W	
R681	1-215-466-00	METAL	75K	1% 1/4W	
R682	1-215-463-00	METAL	56K	1% 1/4W	
R684	1-216-009-91	RES,CHIP	22	5% 1/10W	
R685	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R686	1-216-675-91	METAL CHIP	10K	0.5% 1/10W	
R687	1-216-689-11	RES,CHIP	39K	5% 1/10W	
R689	1-216-663-11	METAL CHIP	3.3K	0.5% 1/10W	
R690	1-216-668-11	METAL CHIP	5.1K	0.5% 1/10W	
R691	1-216-661-11	METAL CHIP	2.7K	0.5% 1/10W	
R692	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R693	1-219-513-11	CARBON	4.7M	5% 1/2W	
R697	1-215-927-00	METAL OXIDE	47K	5% 3W	F
R698	1-215-927-00	METAL OXIDE	47K	5% 3W	F
R700	1-216-679-11	METAL CHIP	15K	0.5% 1/10W	
R701	1-249-385-11	CARBON	2.2	5% 1/4W	
R703	1-249-385-11	CARBON	2.2	5% 1/4W	
R705	1-215-863-11	METAL OXIDE	100	5% 1W	F
R706	1-216-423-11	METAL OXIDE	27	5% 1W	F
R707	1-216-679-11	METAL CHIP	15K	0.5% 1/10W	
R708	1-216-353-00	METAL OXIDE	2.2	5% 1W	F
R709	1-216-667-11	METAL CHIP	4.7K	0.5% 1/10W	
R710	1-216-691-11	METAL CHIP	47K	0.5% 1/10W	
R711	1-216-675-91	METAL CHIP	10K	0.5% 1/10W	
R712	1-216-679-11	METAL CHIP	15K	0.5% 1/10W	
R713	1-215-858-00	METAL OXIDE	15	5% 1W	F
R714	1-215-863-11	METAL OXIDE	100	5% 1W	F
R715	1-216-353-00	METAL OXIDE	2.2	5% 1W	F
R716	1-249-377-11	CARBON	0.47	5% 1/4W	F
R717	1-249-377-11	CARBON	0.47	5% 1/4W	F
R718	1-216-426-11	METAL OXIDE	82	5% 1W	F
R719	1-216-369-00	METAL OXIDE	1	5% 2W	F
R720	1-216-295-91	SHORT	0		
R721	1-216-659-11	METAL CHIP	2.2K	0.5% 1/10W	
R722	1-216-426-11	METAL OXIDE	82	5% 1W	F
R723	1-216-295-91	SHORT	0		
R724	1-216-659-11	METAL CHIP	2.2K	0.5% 1/10W	
R725	1-216-369-00	METAL OXIDE	1	5% 2W	F
R726	1-216-667-11	METAL CHIP	4.7K	0.5% 1/10W	
R727	1-216-666-11	METAL CHIP	4.3K	0.5% 1/10W	
R728	1-216-659-11	METAL CHIP	2.2K	0.5% 1/10W	
R729	1-216-667-11	METAL CHIP	4.7K	0.5% 1/10W	
R730	1-216-073-00	RES,CHIP	10K	5% 1/10W	
R731	1-216-081-00	RES,CHIP	22K	5% 1/10W	
R732	1-249-383-11	CARBON	1.5	5% 1/4W	F
R733	1-215-859-00	METAL OXIDE	22	5% 1W	F
R734	1-215-864-00	METAL OXIDE	150	5% 1W	F
R735	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	
R736	1-216-049-91	RES,CHIP	1K	5% 1/10W	

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The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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Ne les remplacer que par une pièce portant le numéro spécifié.

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Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
R737	1-216-049-91	RES,CHIP	1K	5%	1/10W
R738	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R739	1-249-434-11	CARBON	27K	5%	1/4W
R740	1-216-089-91	RES,CHIP	47K	5%	1/10W
R741	1-216-049-91	RES,CHIP	1K	5%	1/10W
R742	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R743	1-216-037-00	RES,CHIP	330	5%	1/10W
R744	1-249-413-11	CARBON	470	5%	1/4W F
R745	1-249-389-11	CARBON	4.7	5%	1/4W F
R746	1-249-389-11	CARBON	4.7	5%	1/4W F
R747	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R748	1-219-752-11	CARBON	100K	5%	1/2W
R749	1-215-437-00	METAL	4.7K	1%	1/4W
R751	1-216-073-00	RES,CHIP	10K	5%	1/10W
R752	1-216-085-00	RES,CHIP	33K	5%	1/10W
R753	1-249-393-11	CARBON	10	5%	1/4W F
R754	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R755	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R901	1-216-097-91	RES,CHIP	100K	5%	1/10W
R902	1-216-089-91	RES,CHIP	47K	5%	1/10W
R904	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R905	1-216-049-91	RES,CHIP	1K	5%	1/10W
R906	1-216-699-91	METAL CHIP	100K	0.5%	1/10W
R907	1-216-295-91	SHORT	0		
R908	1-249-425-11	CARBON	4.7K	5%	1/4W
R909	1-215-913-11	METAL OXIDE	220	5%	3W F
R910	1-215-913-11	METAL OXIDE	220	5%	3W F
R911	1-249-397-11	CARBON	22	5%	1/4W F
R912	1-216-049-91	RES,CHIP	1K	5%	1/10W
R914	1-216-041-00	RES,CHIP	470	5%	1/10W
R915	1-249-397-11	CARBON	22	5%	1/4W F
R916	1-249-385-11	CARBON	2.2	5%	1/4W F
R917	1-249-385-11	CARBON	2.2	5%	1/4W F
R918	1-214-964-00	METAL	1M	1%	1/4W
R919	1-216-073-00	RES,CHIP	10K	5%	1/10W
R920	1-216-691-11	METAL CHIP	47K	0.5%	1/10W
R921	1-216-049-91	RES,CHIP	1K	5%	1/10W
R923	1-215-469-00	METAL	100K	1%	1/4W
R924	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R925	1-218-762-11	METAL CHIP	270K	0.5%	1/10W
R926	1-216-073-00	RES,CHIP	10K	5%	1/10W
R927	1-220-823-91	CARBON	6.8K	5%	1/2W
R928	1-220-825-11	CARBON	330K	5%	1/2W
R929	1-216-089-91	RES,CHIP	47K	5%	1/10W
R930	1-219-748-11	CARBON	4.7K	5%	1/2W
R931	1-219-748-11	CARBON	4.7K	5%	1/2W
R932	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R933	1-216-666-11	METAL CHIP	4.3K	0.5%	1/10W
R934	1-249-377-11	CARBON	0.47	5%	1/4W F
R1001	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R1003	1-216-025-91	RES,CHIP	100	5%	1/10W
R1004	1-216-033-00	RES,CHIP	220	5%	1/10W
R1005	1-247-815-91	CARBON	220	5%	1/4W
R1006	1-216-033-00	RES,CHIP	220	5%	1/10W
R1010	1-216-033-00	RES,CHIP	220	5%	1/10W
R1011	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1012	1-216-017-91	RES,CHIP	47	5%	1/10W
R1013	1-216-017-91	RES,CHIP	47	5%	1/10W
R1014	1-216-025-91	RES,CHIP	100	5%	1/10W
R1015	1-216-033-00	RES,CHIP	220	5%	1/10W
R1016	1-216-033-00	RES,CHIP	220	5%	1/10W
R1017	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1018	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1019	1-216-017-91	RES,CHIP	47	5%	1/10W
R1020	1-216-017-91	RES,CHIP	47	5%	1/10W
R1021	1-216-025-91	RES,CHIP	100	5%	1/10W
R1022	1-216-025-91	RES,CHIP	100	5%	1/10W
R1039	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1046	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1047	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1048	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1049	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1050	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1051	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1065	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1070	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1072	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1073	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1074	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1083	1-216-025-91	RES,CHIP	100	5%	1/10W
R1084	1-216-041-00	RES,CHIP	470	5%	1/10W
R1085	1-216-025-91	RES,CHIP	100	5%	1/10W
R1086	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1092	1-216-033-00	RES,CHIP	220	5%	1/10W
R1093	1-216-033-00	RES,CHIP	220	5%	1/10W
R1094	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1095	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1096	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1097	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1098	1-216-077-91	RES,CHIP	15K	5%	1/10W
R1099	1-216-033-00	RES,CHIP	220	5%	1/10W
R1104	1-216-065-91	RES,CHIP	4.7K	5%	1/10W

<VARIABLE RESISTOR>

⧓RV901⚠ 1-241-767-21 RES, ADJ, CERMET 100K

<RELAY>

RY601⚠ 1-755-279-11 RELAY, AC POWER
RY602⚠ 1-755-318-11 RELAY, POWER

<SWITCH>

S601⚠ 1-771-727-11 SWITCH, AC POWER PUSH (POWER)

<SPARK GAP>

SG901 1-517-499-21 GAP, SPARK
SG902 1-519-422-11 GAP, SPARK
SG903 1-519-422-11 GAP, SPARK

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Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<TRANSFORMER>	
T501	1-435-188-11	TRANSFORMER, FERRITE (HDT)	
T502	1-411-594-11	INDUCTOR 5mH	
T503	1-435-140-11	TRANSFORMER, FERRITE (LCT)	
T504	1-431-413-21	TRANSFORMER, FERRITE (HST)	
T602	1-435-141-11	TRANSFORMER, CONVERTER (SRT)	
T701	1-435-142-11	TRANSFORMER, FERRITE (DFT)	
T901 ⚠	X-4560-174-1	TRANSFORMER ASSY, FLYBACK	(NX4700//J1E4)
T902	1-419-345-11	COIL, CHOKE 500µH	
		<THERMISTOR>	
TH600⚠	1-809-260-11	THERMISTOR, POWER	
TH601⚠	1-803-540-11	THERMISTOR	
		<VARISTOR>	
VA601⚠	1-801-268-51	VARISTOR TNR14V471K660	
		<CRYSTAL>	
X1001	1-567-890-11	VIBRATOR, CRYSTAL (8MHz)	

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* A-1372-736-A H BOARD, COMPLETE [U/C]
* A-1372-744-A H BOARD, COMPLETE [AEP]
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		<CAPACITOR>		
C2002	1-126-786-11	ELECT 47µF	20%	16V
		<CONNECTOR>		
CN2001*	1-564-511-11	PLUG, CONNECTOR 8P		
		<DIODE>		
D2001	8-719-064-11	DIODE SPR-325MVW (POWER)		
D2004	8-719-109-89	ZENER DIODE RD5.6ESB2		
		<FERRITE BEAD>		
FB2001	1-412-911-11	FERRITE 1.1µH		
FB2002	1-412-911-11	FERRITE 1.1µH		
FB2003	1-412-911-11	FERRITE 1.1µH		
FB2004	1-412-911-11	FERRITE 1.1µH		
FB2005	1-412-911-11	FERRITE 1.1µH		

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<TRANSISTOR>	
Q2001	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q2002	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		<RESISTOR>	
R2001	1-249-422-11	CARBON 2.7K 5%	1/4W
R2002	1-249-429-11	CARBON 10K 5%	1/4W
R2003	1-249-429-11	CARBON 10K 5%	1/4W
R2004	1-215-411-00	METAL 390 1%	1/4W
R2005	1-215-417-00	METAL 680 1%	1/4W
R2006	1-249-411-11	CARBON 330 5%	1/4W
R2007	1-249-413-11	CARBON 470 5%	1/4W
R2008	1-249-415-11	CARBON 680 5%	1/4W
R2009	1-247-831-91	CARBON 1K 5%	1/4W
R2011	1-249-427-11	CARBON 6.8K 5%	1/4W
R2012	1-249-429-11	CARBON 10K 5%	1/4W
		<SWITCH>	
S2002	1-771-734-11	SWITCH, TACTILE (MENU)	
S2003	1-762-196-21	SWITCH, TACT (RESET)	

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* A-1390-957-A N BOARD, COMPLETE [U/C]
* A-1390-978-A N BOARD, COMPLETE [AEP]
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		<CAPACITOR>		
C801	1-113-340-11	ELECT 47µF	20%	25V
C803	1-163-809-11	CERAMIC CHIP 0.047µF	10%	25V
C809	1-163-809-11	CERAMIC CHIP 0.047µF	10%	25V
C810	1-163-038-91	CERAMIC CHIP 0.1µF		25V
C811	1-163-809-11	CERAMIC CHIP 0.047µF	10%	25V
C812	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V
C813	1-163-038-91	CERAMIC CHIP 0.1µF		25V
C814	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V
C817	1-119-941-91	ELECT 470µF	20%	6.3V
C818	1-113-340-11	ELECT 47µF	20%	25V
C819	1-163-037-11	CERAMIC CHIP 0.022µF	10%	50V
C820	1-119-941-91	ELECT 470µF	20%	6.3V
C821	1-163-038-91	CERAMIC CHIP 0.1µF		25V
C822	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V
C823	1-163-038-91	CERAMIC CHIP 0.1µF		25V
C824	1-163-133-00	CERAMIC CHIP 470pF	5%	50V
C825	1-163-021-91	CERAMIC CHIP 0.01µF	10%	50V
C826	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V
C827	1-119-941-91	ELECT 470µF	20%	6.3V
C828	1-164-161-11	CERAMIC CHIP 0.0022µF	10%	50V
C829	1-164-004-11	CERAMIC CHIP 0.1µF	10%	25V
C830	1-113-340-11	ELECT 47µF	20%	25V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C832	1-131-722-91	ELECT	100µF	20%	6.3V
C833	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C835	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C837	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C838	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C839	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C840	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C841	1-163-023-00	CERAMIC CHIP	0.015µF	10%	50V
		<CONNECTOR>			
CN801	1-793-585-11	PIN, CONNECTOR (PC BOARD)			15P
CN802	1-793-586-11	PIN, CONNECTOR (PC BOARD)			15P
		<DIODE>			
D802	8-719-049-09	DIODE ISS367-T3 SONY			
		<FERRITE BEAD>			
FB801	1-543-960-22	FERRITE			
FB802	1-216-295-91	SHORT	0		
FB809	1-543-963-22	FERRITE			
FB810	1-543-963-22	FERRITE			
		<IC>			
IC801	8-759-589-56	IC CXD9517Q			
IC802	8-759-569-45	IC LD1117S33TR			
IC803	8-759-502-82	IC LM324M			
		<CHIP CONDUCTOR>			
JR801	1-216-295-91	SHORT	0		
JR802	1-216-295-91	SHORT	0		
		<TRANSISTOR>			
Q801	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q804	8-729-026-50	TRANSISTOR 2SA1037AK-T146-QR			
Q805	8-729-026-50	TRANSISTOR 2SA1037AK-T146-QR			
		<RESISTOR>			
R801	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R802	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R803	1-216-033-00	RES,CHIP	220	5%	1/10W
R804	1-216-033-00	RES,CHIP	220	5%	1/10W
R805	1-216-033-00	RES,CHIP	220	5%	1/10W
R806	1-216-033-00	RES,CHIP	220	5%	1/10W
R807	1-216-033-00	RES,CHIP	220	5%	1/10W
R808	1-216-033-00	RES,CHIP	220	5%	1/10W
R809	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R810	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R811	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R812	1-216-049-91	RES,CHIP	1K	5%	1/10W
R813	1-216-049-91	RES,CHIP	1K	5%	1/10W
R814	1-216-031-00	RES,CHIP	180	5%	1/10W
R815	1-216-073-00	RES,CHIP	10K	5%	1/10W
R816	1-218-768-11	METAL CHIP	470K	0.5%	1/10W
R818	1-216-049-91	RES,CHIP	1K	5%	1/10W
R819	1-216-049-91	RES,CHIP	1K	5%	1/10W
R820	1-216-049-91	RES,CHIP	1K	5%	1/10W
R821	1-216-049-91	RES,CHIP	1K	5%	1/10W
R822	1-216-049-91	RES,CHIP	1K	5%	1/10W
R823	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R824	1-216-073-00	RES,CHIP	10K	5%	1/10W
R825	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R826	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R827	1-216-073-00	RES,CHIP	10K	5%	1/10W
R828	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R829	1-216-049-91	RES,CHIP	1K	5%	1/10W
R830	1-216-049-91	RES,CHIP	1K	5%	1/10W
R831	1-216-033-00	RES,CHIP	220	5%	1/10W
R832	1-216-025-91	RES,CHIP	100	5%	1/10W
R833	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R834	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R835	1-216-089-91	RES,CHIP	47K	5%	1/10W
R836	1-216-049-91	RES,CHIP	1K	5%	1/10W
R837	1-216-648-11	METAL CHIP	750	0.5%	1/10W
R838	1-216-041-00	RES,CHIP	470	5%	1/10W
R839	1-216-117-00	RES,CHIP	680K	5%	1/10W
R840	1-216-650-11	METAL CHIP	910	0.5%	1/10W
R841	1-216-089-91	RES,CHIP	47K	5%	1/10W
R842	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R843	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R844	1-216-017-91	RES,CHIP	47	5%	1/10W
R846	1-216-025-91	RES,CHIP	100	5%	1/10W
R847	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R851	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R852	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R853	1-216-049-00	RES,CHIP	1K	5%	1/10W
R855	1-216-105-91	RES,CHIP	220K	5%	1/10W
R856	1-216-073-00	RES,CHIP	10K	5%	1/10W
R857	1-216-049-91	RES,CHIP	1K	5%	1/10W
R858	1-216-073-00	RES,CHIP	10K	5%	1/10W
R859	1-216-025-91	RES,CHIP	100	5%	1/10W
R860	1-216-025-91	RES,CHIP	100	5%	1/10W
R863	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R864	1-216-025-91	RES,CHIP	100	5%	1/10W
R866	1-216-049-91	RES,CHIP	1K	5%	1/10W

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