MODIFICATION HISTORY

MODEL NAME : CPD-G400

SERVICE MANUAL

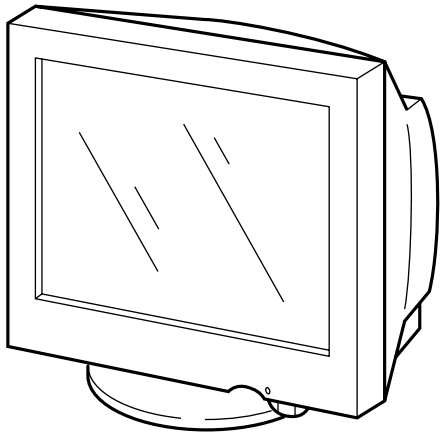
PARTS No. : 9-978-652-01

* Blue characters are linking.

# No.	DATA	CONTENTS
#1	2000.5	Correct error in writing. (Addition of missing the D board for BRZ model and information labels.) (P.6-1)
#2	2000.5	Correct error in writing. (Addition of missing factories.) (P.6-1, 6-3)
#3	2000.5	Addition of EQ, NH, SH models. (P.6-1, 6-3)

CPD-G400

SERVICE MANUAL



US Model
Canadian Model
AEP Model
Brazilian Model
N.Hemisphere Model
S.Hemisphere Model
Equator Model

Chassis No. SCC-L30A-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 107 kHz Vertical: 48 to 120 Hz
AC input voltage/current	120 V, 50/60 Hz, Max. 2.0 A
Power consumption	140 W
Operating temperature	10 to 40 ºC
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.

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.

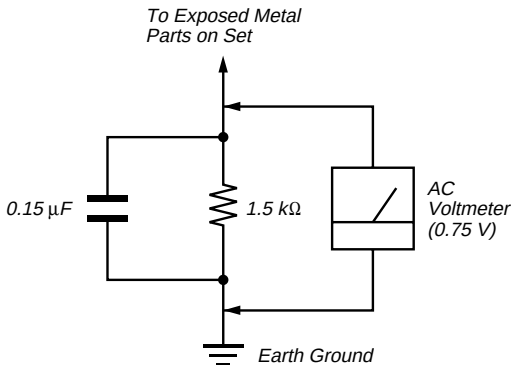


Fig. A. Using an AC voltmeter to check AC leakage.

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 microampers).

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.

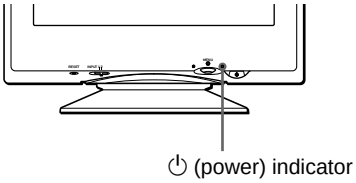
Power mode	Power consumption	⏻ (power) indicator
normal operation	≤ 140 W	green
1 standby	≤ 15 W	green and orange alternate
2 suspend (sleep)*	≤ 15 W	green and orange alternate
3 active off** (deep sleep)*	≤ 3 W	orange
power off	0 W	off

* "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.

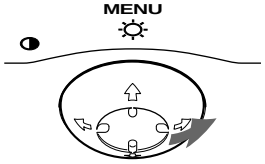


If the ⏻ (power) indicator is green

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 MODE AT PRODUCTION	TEST MODE MODE 1	MODE 2	MODE 3
RESOLUTION	738 X 414	1600 X 1200	1600 X 1200
CLOCK	28.322 MHz	229.500 MHz	202.500 MHz
HORIZONTAL			
H-FREQ	31.469 kHz	106.250 kHz	93.750 kHz
	usec	usec	usec
H. TOTAL	31.777	9.412	10.667
H. BLK	5.720	2.440	2.765
H. FP	0.318	0.279	0.316
H. SYNC	3.813	0.837	0.948
H. BP	1.589	1.325	1.501
H. ACTIV	26.057	6.972	7.901
– VERTICAL –			
V. FREQ(HZ)	70.087 Hz	85.000 Hz	75.000 Hz
	lines	lines	lines
V. TOTAL	449	1250	1250
V. BLK	35	50	50
V. FP	5	1	1
V. SYNC	2	3	3
V. BP	28	46	46
V. ACTIV	414	1200	1200
– SYNC –			
INT(G)	NO	NO	NO
EXT(H/V)/POLARITY	YES N/P	YES P/P	YES P/P
EXT(CS) /POLARITY	NO	NO	NO
INT/NON INT	NON INT	NON INT	NON INT
SIZE	352 X 264 mm	352 X 264 mm	352 X 264 mm

99.07.01 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.

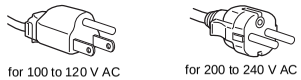
SECTION 1
GENERAL

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

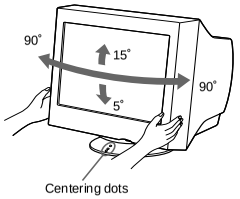
- Clean the screen with a soft cloth. If you use a glass cleaning liquid, do not use any type of cleaner containing an anti-static solution or similar additive as this may scratch the screen's coating.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a ballpoint 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

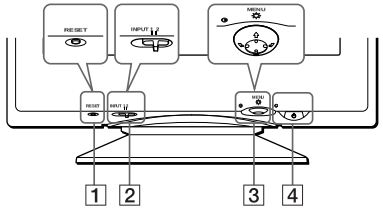
This monitor can be adjusted within the angles shown below. To find the center of the monitor's turning radius, align the center of the monitor's screen with the centering dots on the stand.
Hold the monitor at the bottom with both hands when you turn it horizontally or vertically. Be careful not to 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 15)
This button resets the adjustments to the factory settings.

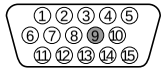
2 INPUT (input) switch (page 8)
This switch selects the INPUT 1 (video input 1 connector: ☞1) or INPUT 2 (video input 2 connector: ☞2).

3 Control button (page 10)
The control button is used to display the menu and make adjustments to the monitor, including brightness and contrast adjustments.

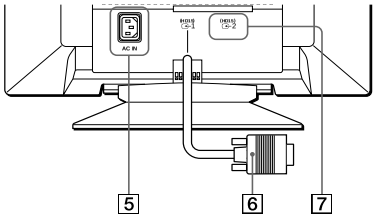
4 ⏻ (power) switch and indicator (pages 7, 16, 19)
This button turns the monitor on and off. The power indicator lights up in green when the monitor is turned on, and either flashes in green and orange, or lights up in orange when the monitor is in power saving mode.

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

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



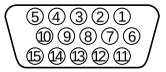
Rear



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.

7 Video input 2 connector (HD15) (☞2) (page 6)
This connector inputs RGB video signals (0.700 Vp-p, positive) and sync signals.
See the above table for the pin assignment.



US

1-1

Setup

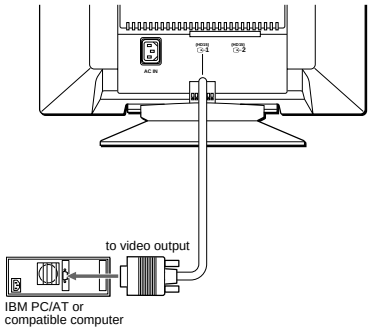
Before using your monitor, check that the following accessories are included in your carton:
- Power cord
- Macintosh adapter (1)
- Windows Monitor Information Disk
- Warranty card
- Notes on cleaning the screen's surface
- This instruction manual

Step 1: Connect your monitor to your computer

Turn off the monitor and computer before connecting.

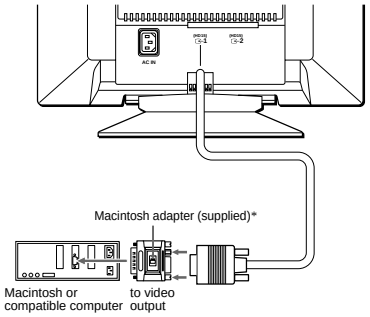
Notes
- Do not touch the pins of the video signal cable connector as this might bend the pins.
- When connecting the video signal cable, check the alignment of the HD15 connector. Do not force the connector in the wrong way or the pins might bend.

■ Connecting to an IBM PC/AT or compatible computer



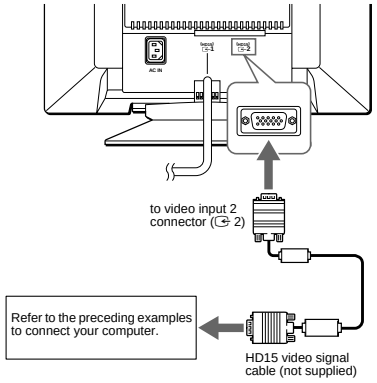
■ Connecting to a Macintosh or compatible computer

Use the supplied Macintosh adapter.



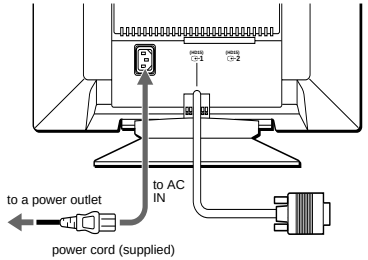
* Connect the supplied Macintosh adapter to the computer before connecting the cable. This adapter is compatible with Macintosh LC, Performa, Quadra, Power Macintosh and Power Macintosh G3 series computers (sold before January, 1999). If you are connecting to a Power Macintosh G3 series that sold after January 1999, you will need a different adapter (not supplied). Macintosh II series and some older versions of PowerBook models may need an adapter with micro switches (not supplied).

■ Connecting to a second computer



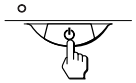
Step 2: Connect the power cord

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 – 107 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 17.

US

For customers using Windows 95/98
To maximize the potential of your monitor, install the new model information file from the supplied Windows Monitor Information Disk onto your PC.
This monitor complies with the "VESA DDC" Plug & Play standard. If your PC/graphics board complies with DDC, select "Plug & Play Monitor (VESA DDC)" or this monitor's model name as the monitor type in the "Control Panel" of Windows 95/98. If your PC/graphics board has difficulty communicating with this monitor, load the Windows Monitor Information Disk and select this monitor's model name as the monitor type.

For customers using Windows NT4.0
Monitor setup in Windows NT4.0 is different from Windows 95/98 and does not involve the selection of monitor type. Refer to the Windows NT4.0 instruction manual for further details on adjusting the resolution, refresh rate, and number of colors.

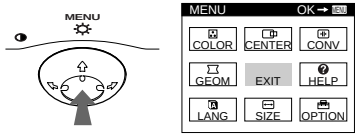
Adjusting the monitor's resolution and color number
Adjust the monitor's resolution and color number by referring to your computer's instruction manual. The color number may vary according to your computer or video board. The color palette setting and the actual number of colors are as follows:
- High Color (16 bit) → 65,536 colors
- True Color (24 bit) → about 16.77 million colors

In true color mode (24 bit), speed may be slower.

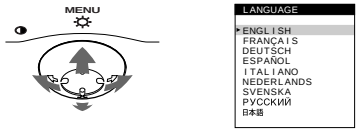
Selecting the on-screen menu language (LANG)

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 10 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

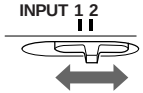
To close the menu
Press the center of the control button once to return to the main MENU, and twice to return to normal viewing. If no buttons are pressed, the menu closes automatically after about 30 seconds.

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

Selecting the input signal

You can connect two computers to this monitor using the video input 1 (☞1) and video input 2 (☞2) connectors. To select one of the two computers, use the INPUT switch.

Move the INPUT switch.
The selected connector appears on the screen for 3 seconds.



"INPUT 1" (video input 1 connector: ☞1) or "INPUT 2" (video input 2 connector: ☞2) appears on the screen.

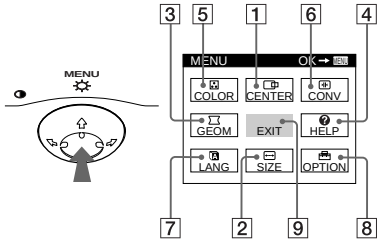
Note
If no signal is input to the selected connector, NO INPUT SIGNAL appears on the screen. After a few seconds, the monitor enters the power saving mode. If this happens, switch to the other connector.

Customizing Your Monitor

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

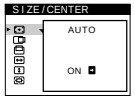
Navigating the menu

Press the center of the control button to display the main MENU on your screen. See page 10 for more information on using the control button.

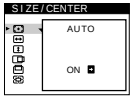


Use the control button to select one of the following menus.

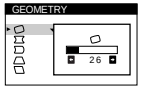
1 CENTER (page 11)
Selects the CENTER menu to adjust the picture's centering, size or zoom.



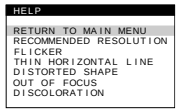
2 SIZE (page 11)
Selects the SIZE menu to adjust the picture's size, centering or zoom.



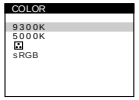
3 GEOM (page 12)
Selects the GEOM menu to adjust the picture's rotation and shape.



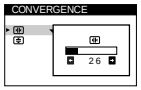
4 HELP (page 14)
Selects the HELP menu to display helpful hints and information about this monitor.



5 COLOR (page 12)
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.



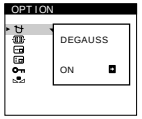
6 CONV (page 13)
Selects the CONV menu to adjust the picture's horizontal and vertical convergence.



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

8 OPTION (page 13)
Selects OPTION to adjust the monitor's options. The options include:

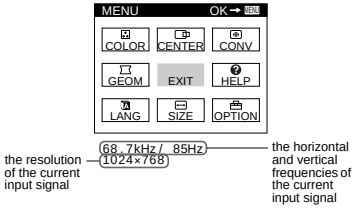
- degaussing the screen
- adjusting the moire cancellation level
- changing the on-screen menu position
- locking the controls
- image restoration



9 EXIT
Selects 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.

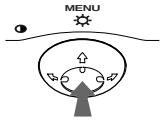


(continued)

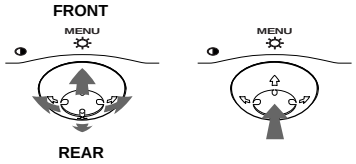
US

■ Using the control button

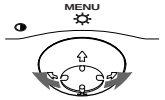
1 Display the main MENU.
Press the center of the control button to display the main MENU on your screen.



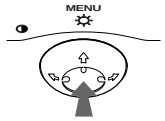
2 Select the menu you want to adjust.
Highlight the desired menu by moving the control button towards the rear to go up (↑), towards the front to go down (↓), and left (←) or right (→) to move sideways.



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 15 for more information on resetting the adjustments.

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 changed to "31" and "85" respectively.
For more information about sRGB, "Adjusting the color of the picture (COLOR) on page 12.

Automatically sizing and centering the picture (AUTO)

You can easily adjust the picture to fill the screen by using the (AUTO) item in the SIZE/CENTER menu.

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 First move the control button ↓/↑ to select (AUTO). Then move the control button →.
The picture automatically fills the screen.

Notes
- This function is intended for use with a computer running Windows or similar graphic user interface software that provides a full-screen picture. It may not work properly if the background color is dark or if the input picture does not fill the screen to the edges (such as an MS-DOS prompt).
- The displayed image moves for a few seconds while this function is performed. This is not a malfunction.

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.

US

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)

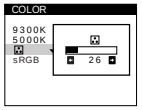
The COLOR settings allow you to adjust the picture's color temperature by changing the color level of the white color field. Colors appear reddish if the temperature is low, and bluish if the temperature is high. This adjustment is useful for matching the monitor's colors to a printed picture's colors.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

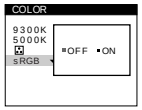
4 If necessary, fine tune the color temperature.
You can select your own color temperature between 9300K and 5000K.
First move the control button ↓/↑ to select . Then move the control button ←/→ to adjust the color temperature.



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.



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.

US

(continued)

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

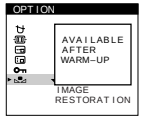
Repeat the procedure above and set (CONTROL LOCK) to OFF.

Restoring the color

The colors of most display monitors tend to gradually lose brilliance over several years of service. The IMAGE RESTORATION feature allows you to restore the color to the original factory quality levels. The explanation below explains how to restore the monitor's color.
To restore the color, first move the control button ↓/↑ to select (IMAGE RESTORATION). Then move the control button →.
The picture disappears while the color is being restored (about 2 seconds). After the color is restored, the picture reappears on the screen again.

Notes

- Before using this feature, the monitor must be in normal operation mode (green power indicator on) for at least 30 minutes. If the monitor goes into power saving mode, you must return the monitor to normal operation mode and wait for 30 minutes for the monitor to be ready. You may need to adjust your computer's power saving settings to keep the monitor in normal operation mode for the full 30 minutes. If the monitor is not ready, the following message will appear.



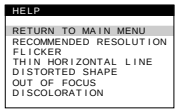
- The monitor may gradually lose its ability to perform this function due to the natural aging of the picture tube.

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 17.

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.



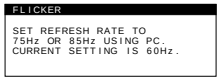
3 Move the control button ↓/↑ to select a HELP menu item and press the center of the control button again.
Instructions or information to resolve the problem appears on the screen. An explanation of each menu item is given below.

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.



THIN HORIZONTAL LINE

The lines that appear on your screen are damper wires. See page 16 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

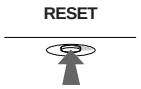
The picture may seem to be out of focus when the red and blue color signals are not aligned properly, causing red or blue shadows to appear around letters and lines. Try adjusting the picture's convergence to make the shadows disappear. Move the control button → to jump directly to the CONVERGENCE menu. 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 13)
- control lock (page 14)

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.

US

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 – 107 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.

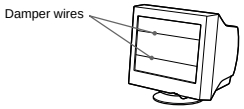
** When your computer is in a power saving mode, MONITOR IS IN POWER SAVE MODE appears on the screen if you press any button on the monitor. After a few seconds, the monitor enters the power saving mode again.

Troubleshooting

Before contacting technical support, refer to this section.

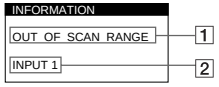
If thin lines appear on your screen (damper wires)

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

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 17.



1 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.

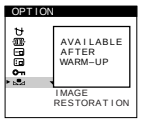
2 The selected connector
This message shows the currently selected connector (INPUT 1 or IINPUT 2).

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 19) 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 INPUT switch setting is correct (page 8). • 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 appeared 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 – 107 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 19).
If using Windows 95/98	• If you replaced an old monitor with this monitor, reconnect the old monitor and do the following. Install the Windows Monitor Information Disk (page 7) and select this monitor ("CPD-G400") 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 13). • Select MOIRE ADJUST and adjust the moire cancellation effect (page 13).

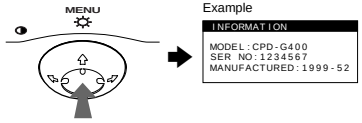
(continued)

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	• Perform the ⊡ (AUTO) function (page 11). • Adjust the size (page 11) or centering (page 11). Note that some video modes do not fill the screen to the edges.
Edges of the image are curved	• Adjust the geometry (page 12).
Wavy or elliptical pattern (moire) is visible	• Select MOIRE ADJUST and adjust the moire cancellation effect (page 13). **■Problems caused by the connected computer or other equipment** • Change your desktop pattern.
Color is not uniform	• Degauss the monitor* (page 13). 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 12).
Letters and lines show red or blue shadows at the edges	• Adjust the convergence (page 13).
Monitor buttons do not operate (🔑 appears on the screen)	• If the control lock is set to ON, set it to OFF (page 14).
IMAGE RESTORATION function does not operate 	• Before using this function, the monitor must be in normal operation mode (green power indicator on) for at least 30 minutes. For more information on using the IMAGE RESTORATION function, see page 14. • Adjust the computer's power saving settings to keep the monitor in normal operation mode for more than 30 minutes. • The monitor may gradually lose its ability to perform this function due to the natural aging of the picture tube.
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.



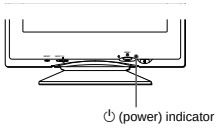
Example

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

- Model name: CPD-G400
- Serial number
- Name and specifications of your computer and graphics board.

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.

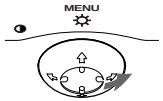


If the ⏻ (power) indicator is green

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) ($14\ ^{3}/_{8} \times 10\ ^{7}/_{8}$ 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) ($13\ ^{7}/_{8} \times 10\ ^{1}/_{2}$ inches)
Deflection frequency*	Horizontal: 30 to 107 kHz Vertical: 48 to 120 Hz
AC input voltage/current	120 V, 50/60 Hz, Max. 2.0 A
Power consumption	140 W
Operating temperature	10 to 40 ºC
Dimensions	Approx. 446 × 464 × 461 mm (w/h/d) ($17\ ^{5}/_{8} \times 18\ ^{3}/_{8} \times 18\ ^{1}/_{4}$ inches)
Mass	Approx. 26 kg (57 lb 5 oz)
Plug and Play	DDC1/DDC2B/DDC2Bi/GTF
Supplied accessories	See page 6

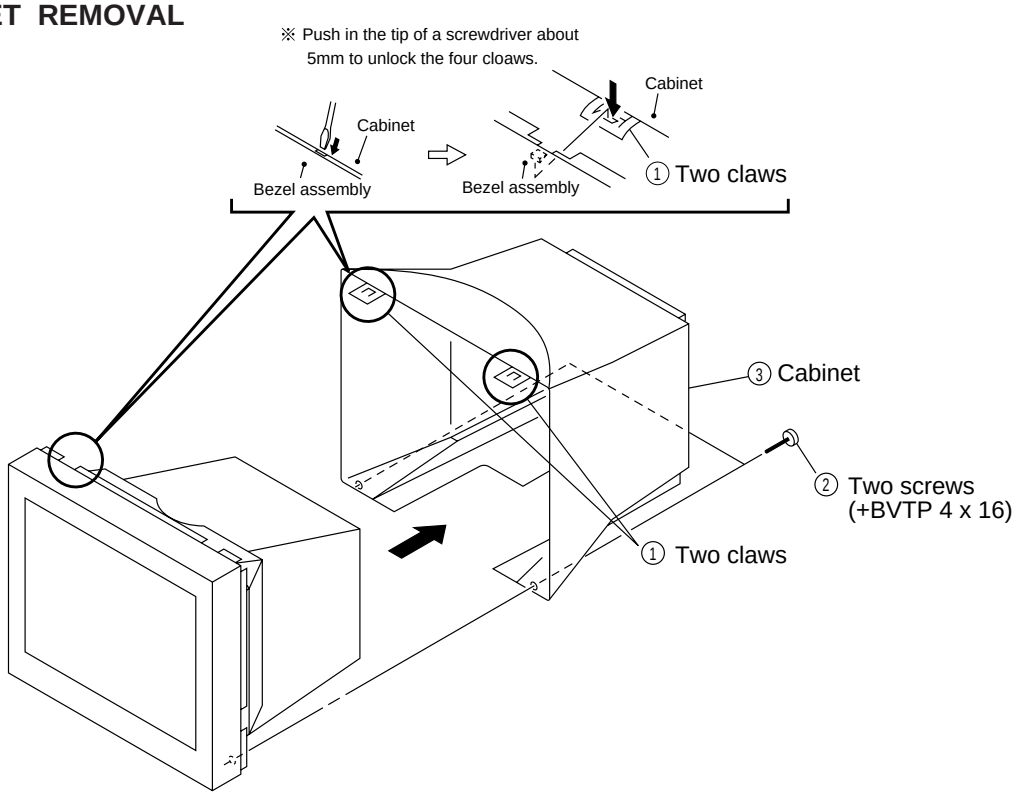
* Recommended horizontal and vertical timing condition
- Horizontal sync width should be more than 1.0 µsec.
- Horizontal blanking width should be more than 3.0 µsec.
- Vertical blanking width should be more than 500 µsec.

Design and specifications are subject to change without notice.

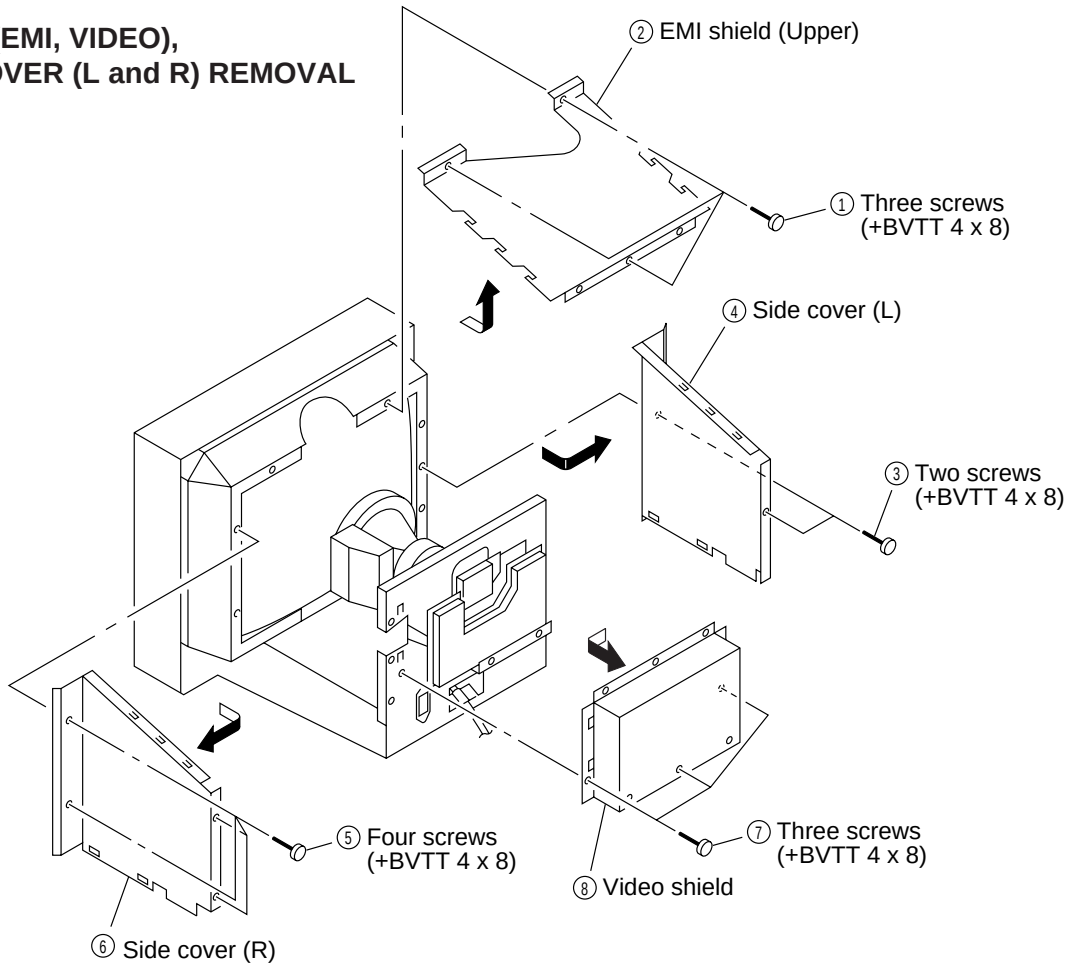
US

SECTION 2
DISASSEMBLY

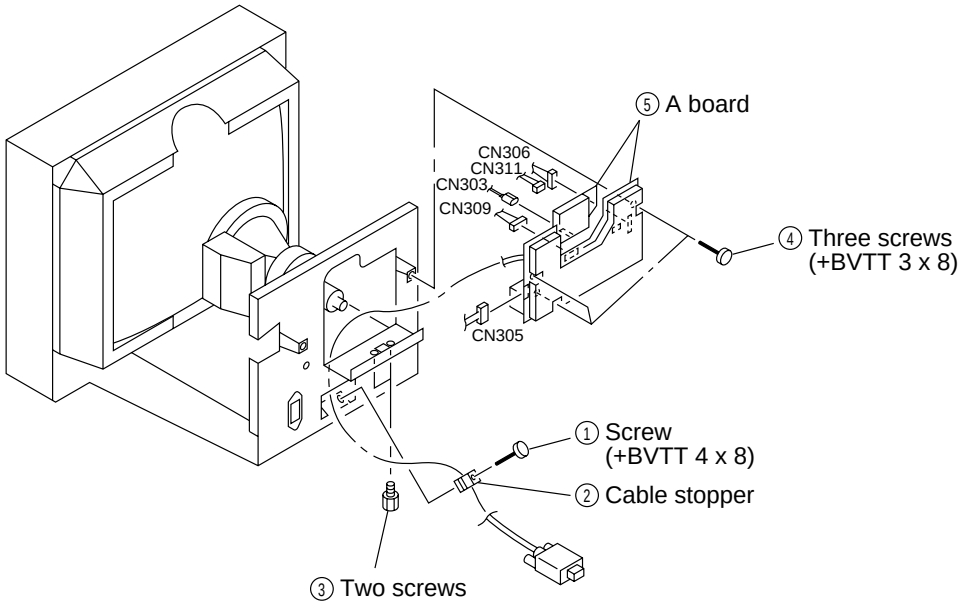
2-1. CABINET REMOVAL



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

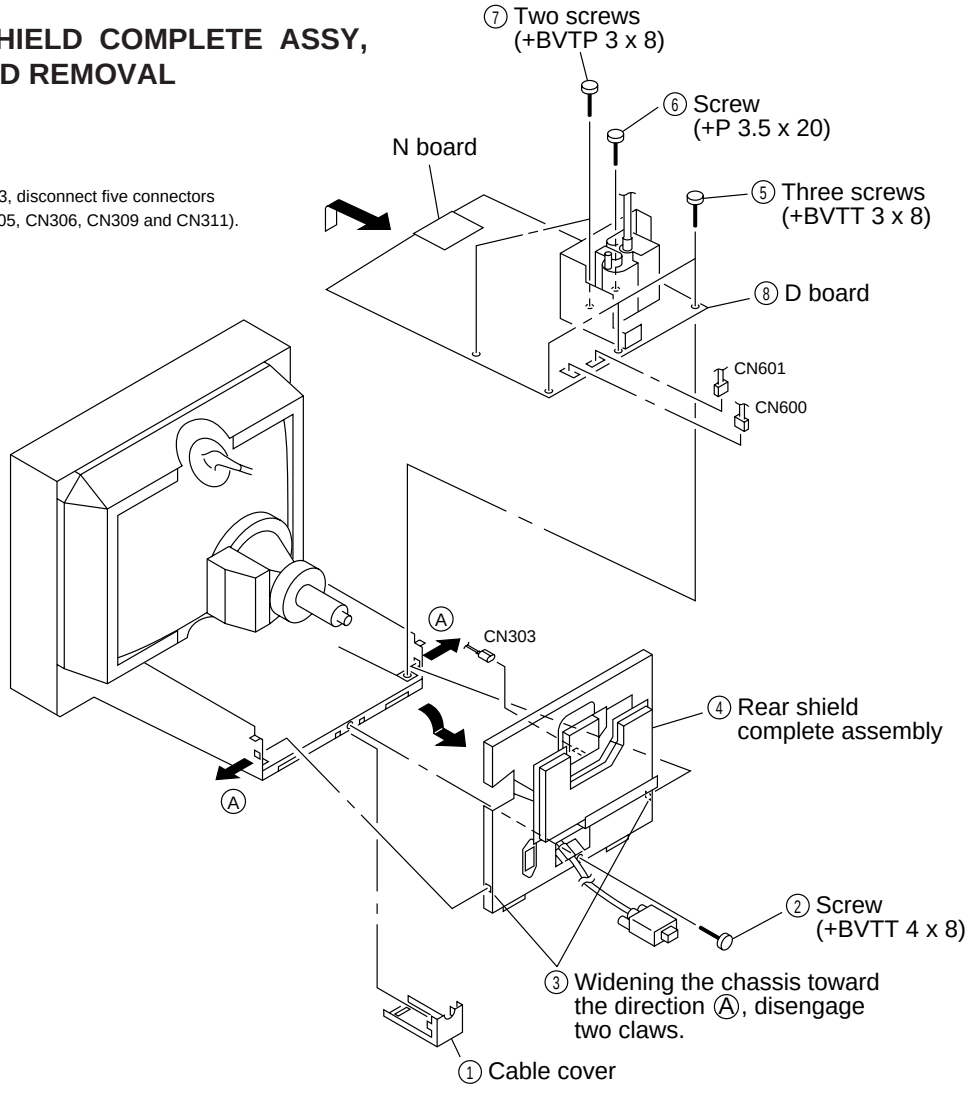


2-3. A BOARD REMOVAL

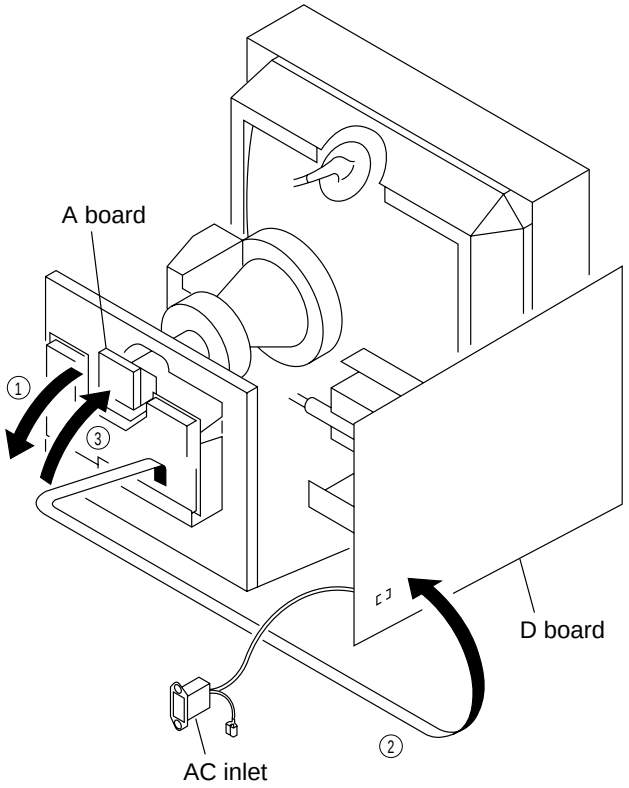


2-4. REAR SHIELD COMPLETE ASSY, D BOARD REMOVAL

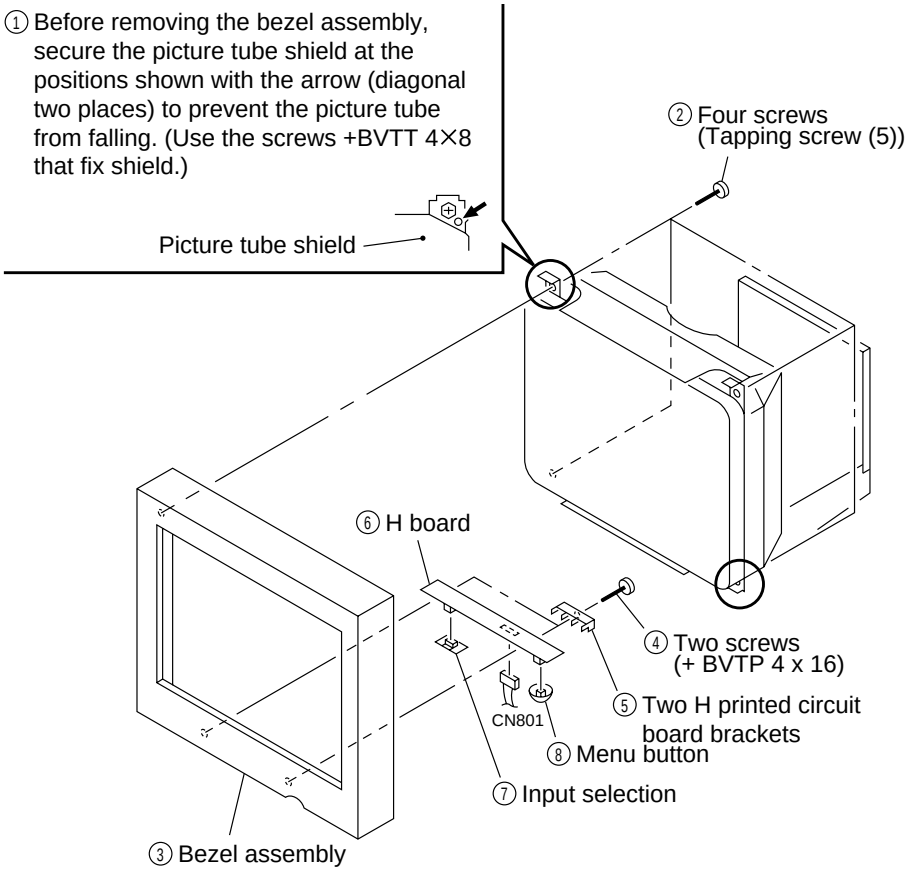
※ Refering to 2-3, disconnect five connectors (CN303, CN305, CN306, CN309 and CN311).



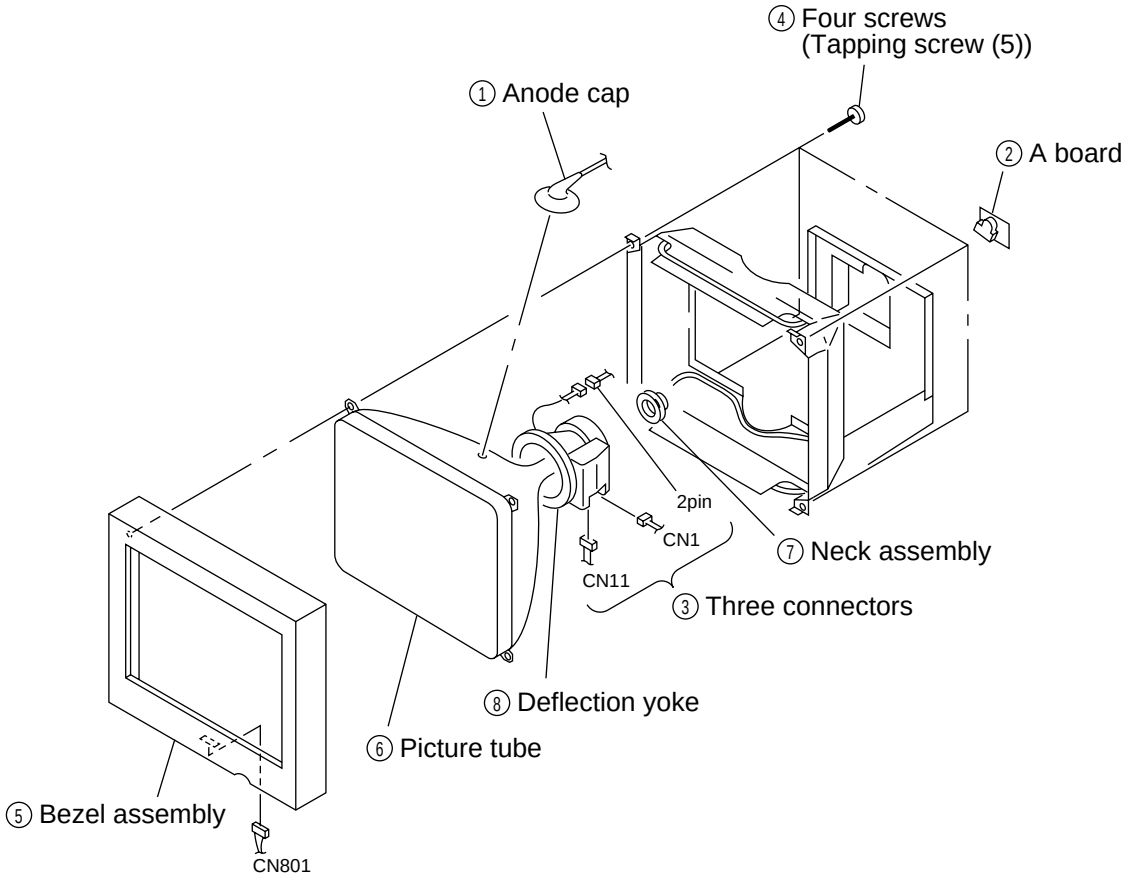
2-5. SERVICE POSITION



2-6. H BOARD REMOVAL



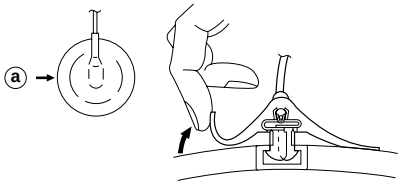
2-7. PICTURE TUBE REMOVAL



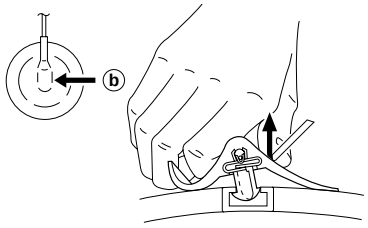
• REMOVAL OF ANODE-CAP

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.

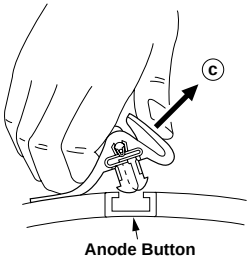
• REMOVING PROCEDURES



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 ⓑ.



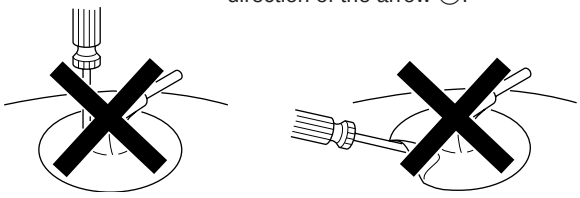
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

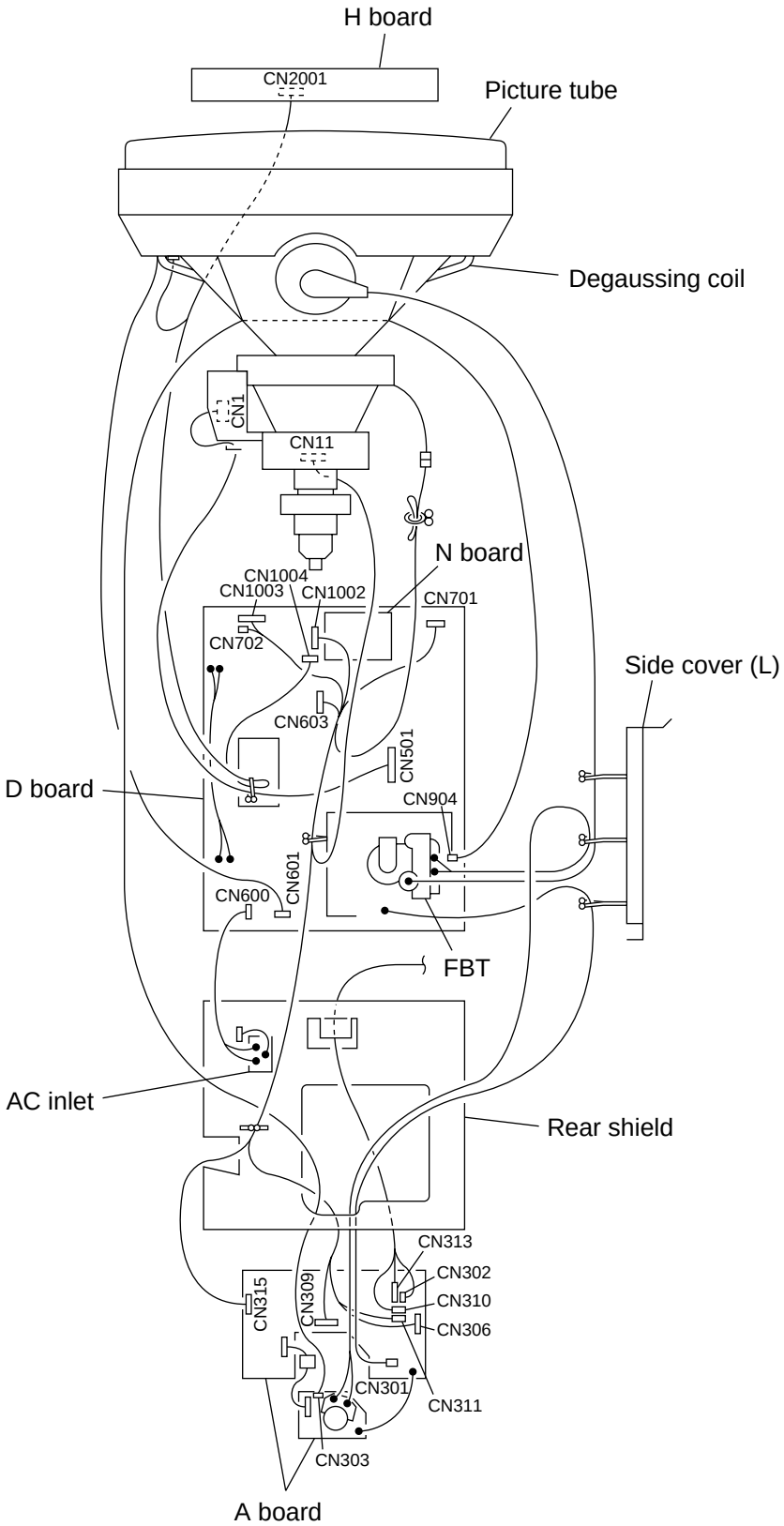
① Don't scratch the surface of anode-caps with sharp shaped material!

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.

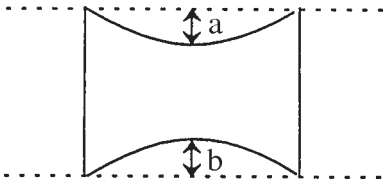
Note: Use purity magnet on the DY.

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.

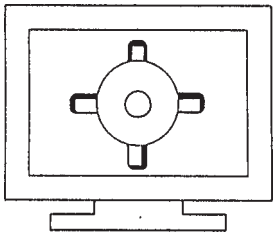
± 5	± 5	± 5	
± 5	± 5	± 5	
± 5	± 5	± 5	[μm]

c) Difference Red and Blue.

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

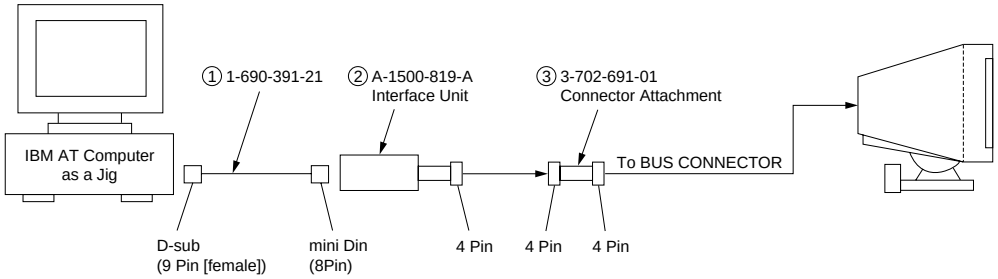
Note:
(1) Do not paste more than two magnets on one corner.
(2) Magnets will be placed in a range of 80 ~ 120 mm from the DY along the diagonal lines.

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.



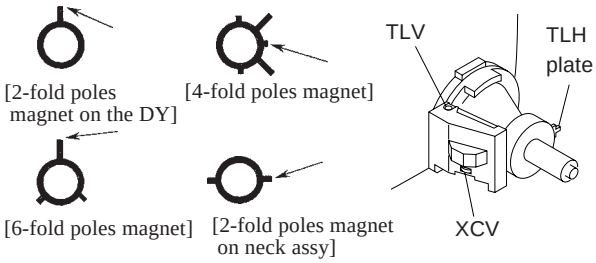
*The parts above (① ~ ③) are necessary for DAS adjustment.

- **Convergence Rough Adjustment**

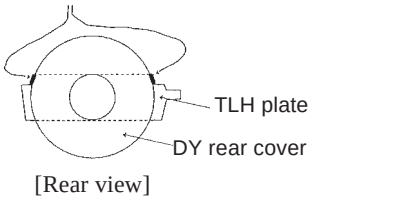
(1) Receive an image of the white crosshatch signals (white lines on black).
(2) Make rough adjustment of the H and V direction convergence by using 4-fold poles magnet.
(3) Make rough adjustment of the HMC and VMC by using 6-fold poles magnet.

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

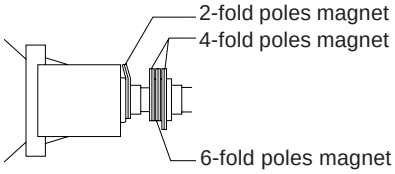
a) Align the protrusion marked with an arrow.

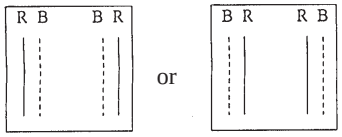


b) Flush the shaded portions of TLH plate with the DY rear cover, as shown below.

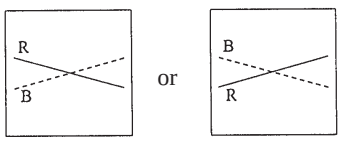


[Rear view]



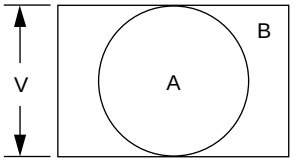


[Movements of TLH plate]



[Movements of XCV volume]

- **Convergence Specification**

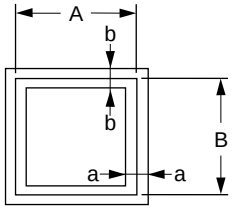


MODE	All mode
A	0.20 mm
B	0.24 mm

- **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**

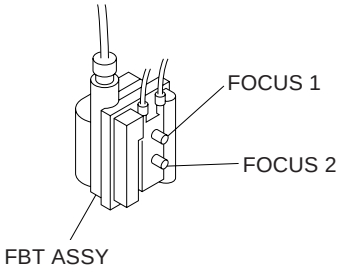


a ≦ 2.0 mm
b ≦ 2.0 mm

MODE	All mode
A	352 mm
B	264 mm

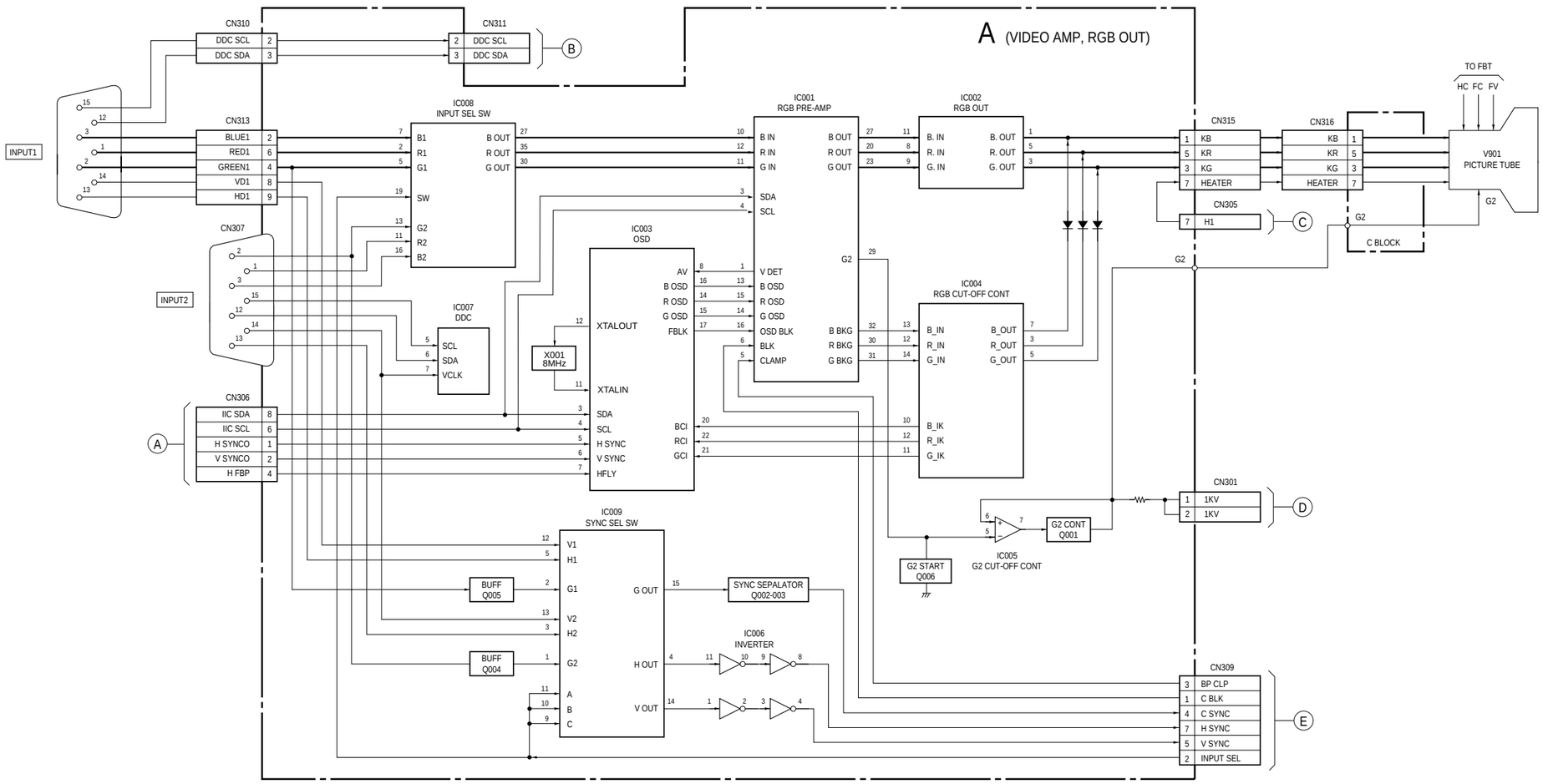
- **Focus adjustment**

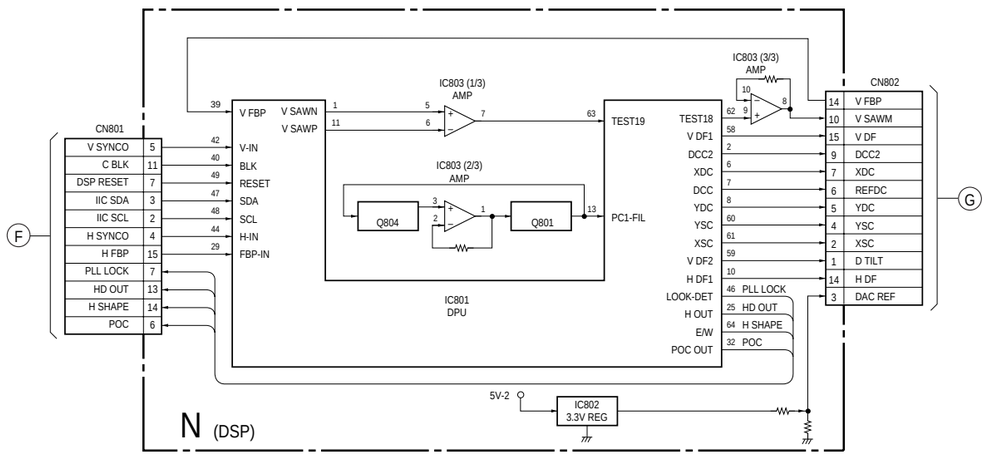
Adjust the focus volume 1 and 2 for the optimum focus.

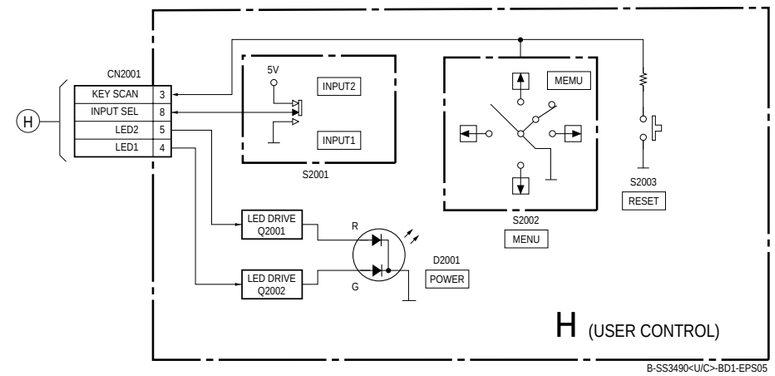


SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAMS

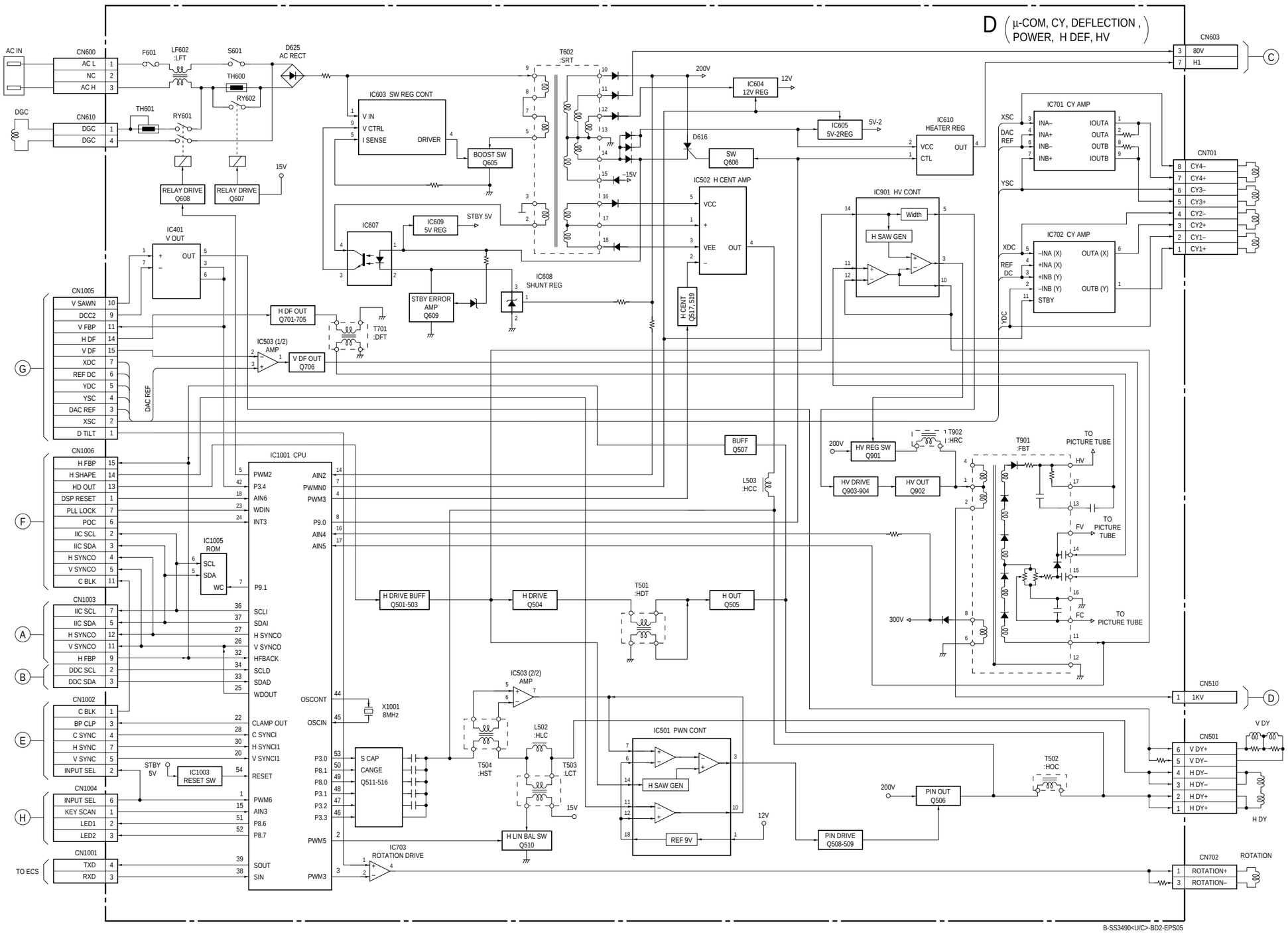




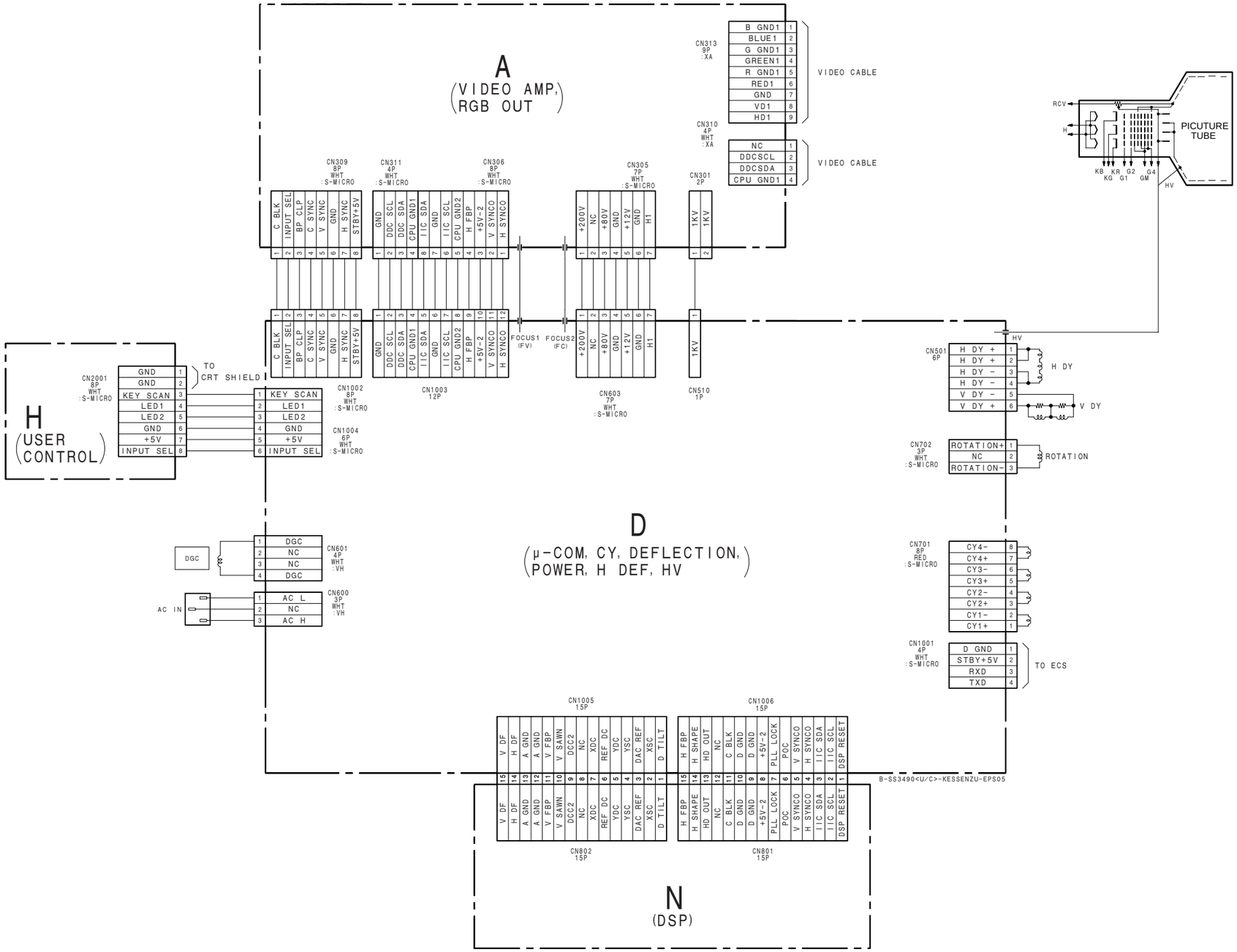


B-SS3490<U/C>-BD1-EPS05

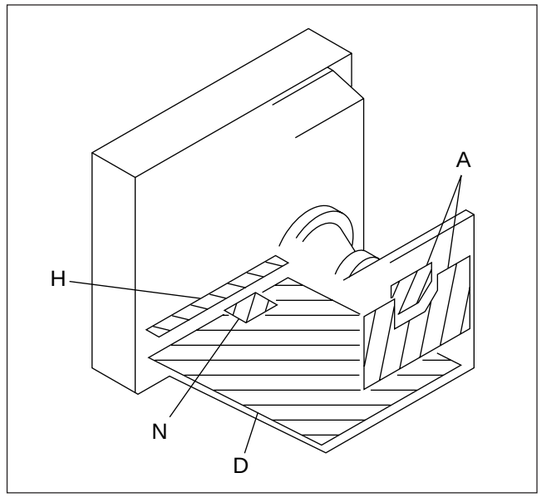
D (µ-COM, CY, DEFLECTION, POWER, H DEF, HV)



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
  → Ref. No.
  → 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

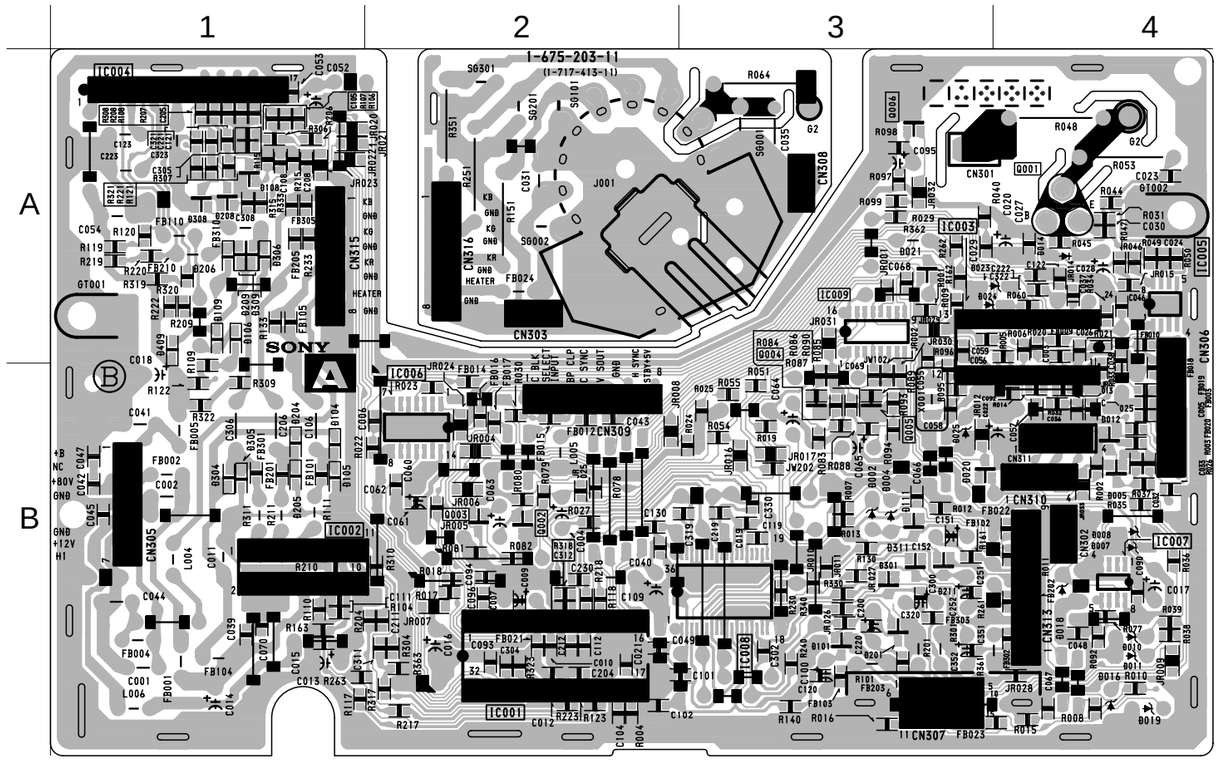
Terminal name of semiconductors in silk screen printed circuit (∗)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor	T	Collector / Base T Emitter	
②	Transistor	—	Collector / Base Emitter	
③	Diode	⊓	Cathode — Anode	
④	Diode	T	Cathode / Anode T (NC)	
⑤	Diode	—	Cathode / Anode (NC)	
⑥	Diode	T	Common / Anode T Cathode	
⑦	Diode	—	Common / Anode Cathode	
⑧	Diode	T	Common / Anode T Anode	
⑨	Diode	—	Common / Anode Anode	
⑩	Diode	T	Common / Cathode T Cathode	
⑪	Diode	—	Common / Cathode Cathode	
⑫	Diode	|	Anode Cathode / Anode Anode / Cathode 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.1.5

— 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		
IC001	B-2	
IC002	B-1	
IC003	A-4	
IC004	A-1	
IC005	A-4	
IC006	B-2	
IC007	B-4	
IC008	B-3	
IC009	A-3	

TRANSISTOR		∗
Q001	A-4	–
Q002	B-2	①
Q003	B-2	①
Q004	B-3	①
Q005	B-3	①
Q006	A-3	①

DIODE		∗
D002	B-3	–
D004	B-3	–
D005	B-4	⑦
D007	B-4	–
D008	B-4	–
D010	B-4	–
D011	B-4	–
D012	B-4	⑦
D014	A-4	–
D016	B-4	–
D019	B-4	–
D023	A-3	–
D024	A-3	–
D025	B-3	–
D101	B-3	⑦
D104	B-1	③
D105	B-1	③
D106	A-1	③
D108	A-1	⑦
D109	A-1	③
D111	B-3	⑦
D201	B-3	⑦
D204	B-1	③
D205	B-1	③
D206	A-1	③
D208	A-1	⑦
D209	A-1	③
D211	B-3	⑦
D301	B-3	⑦
D304	B-1	③
D305	B-1	③
D306	A-1	③
D308	A-1	⑦
D309	A-1	③
D311	B-3	⑦
D409	A-1	③

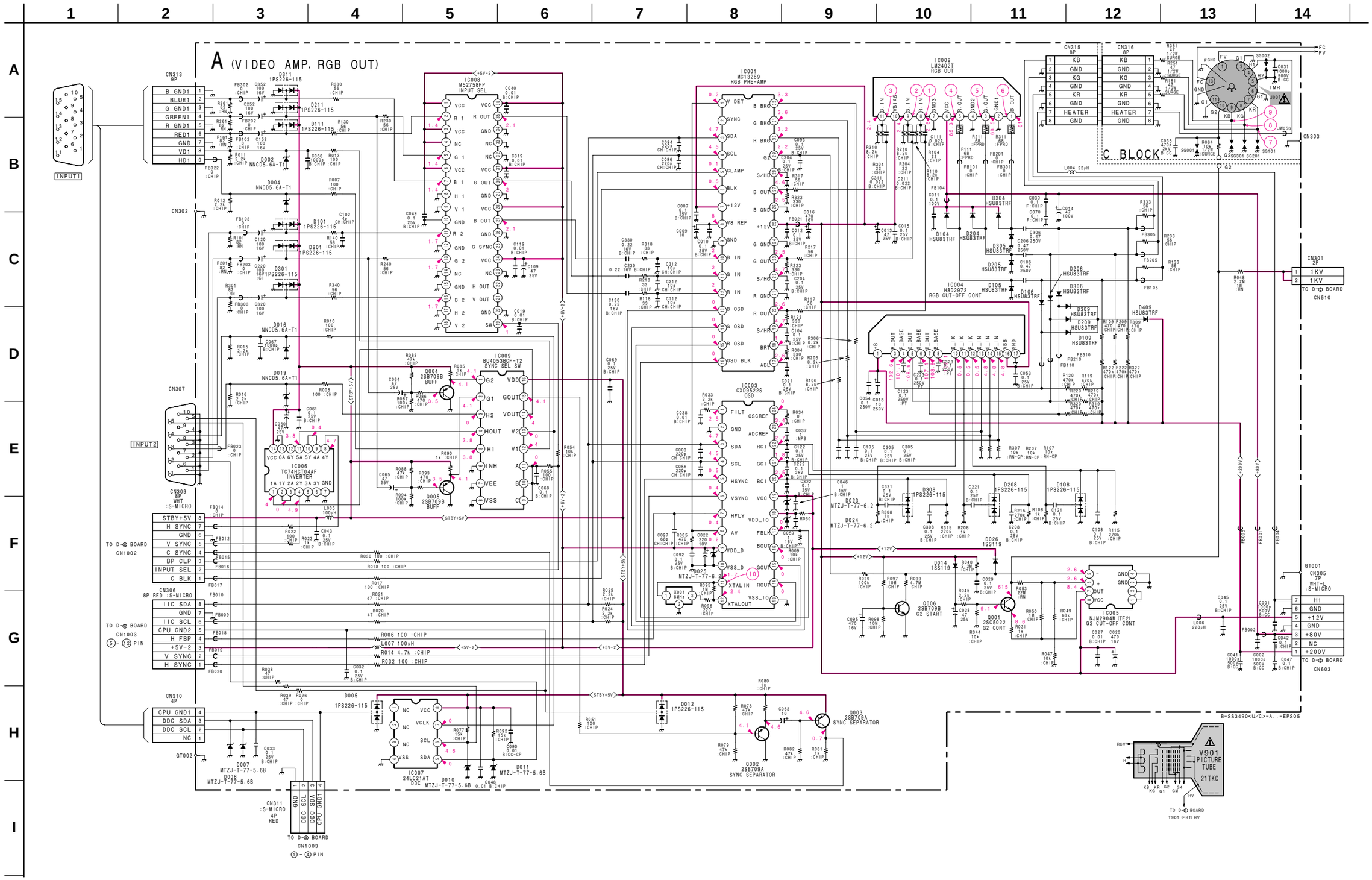
CRYSTAL	
X001	B-3

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

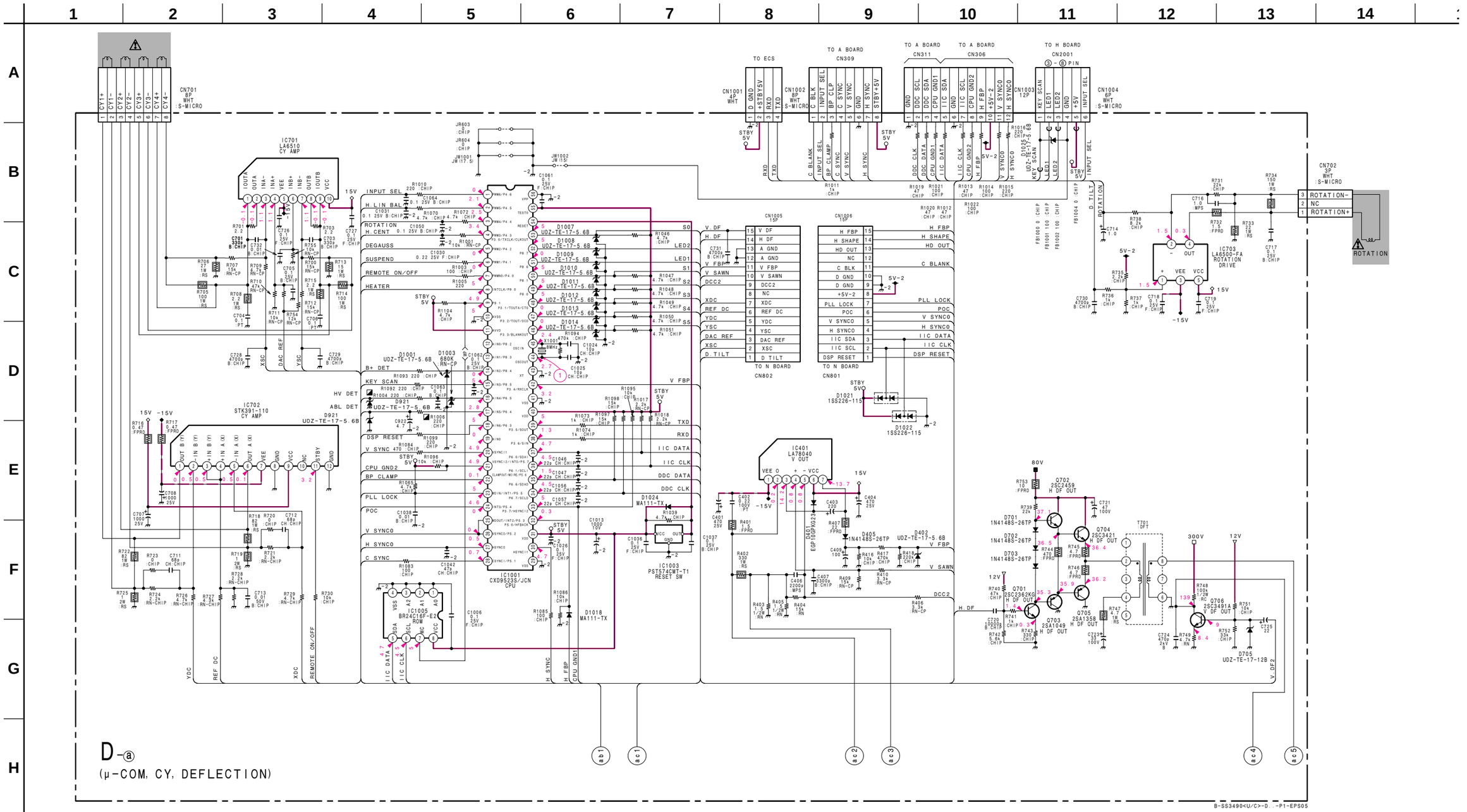
(1) Schematic Diagram of A Board

• **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.

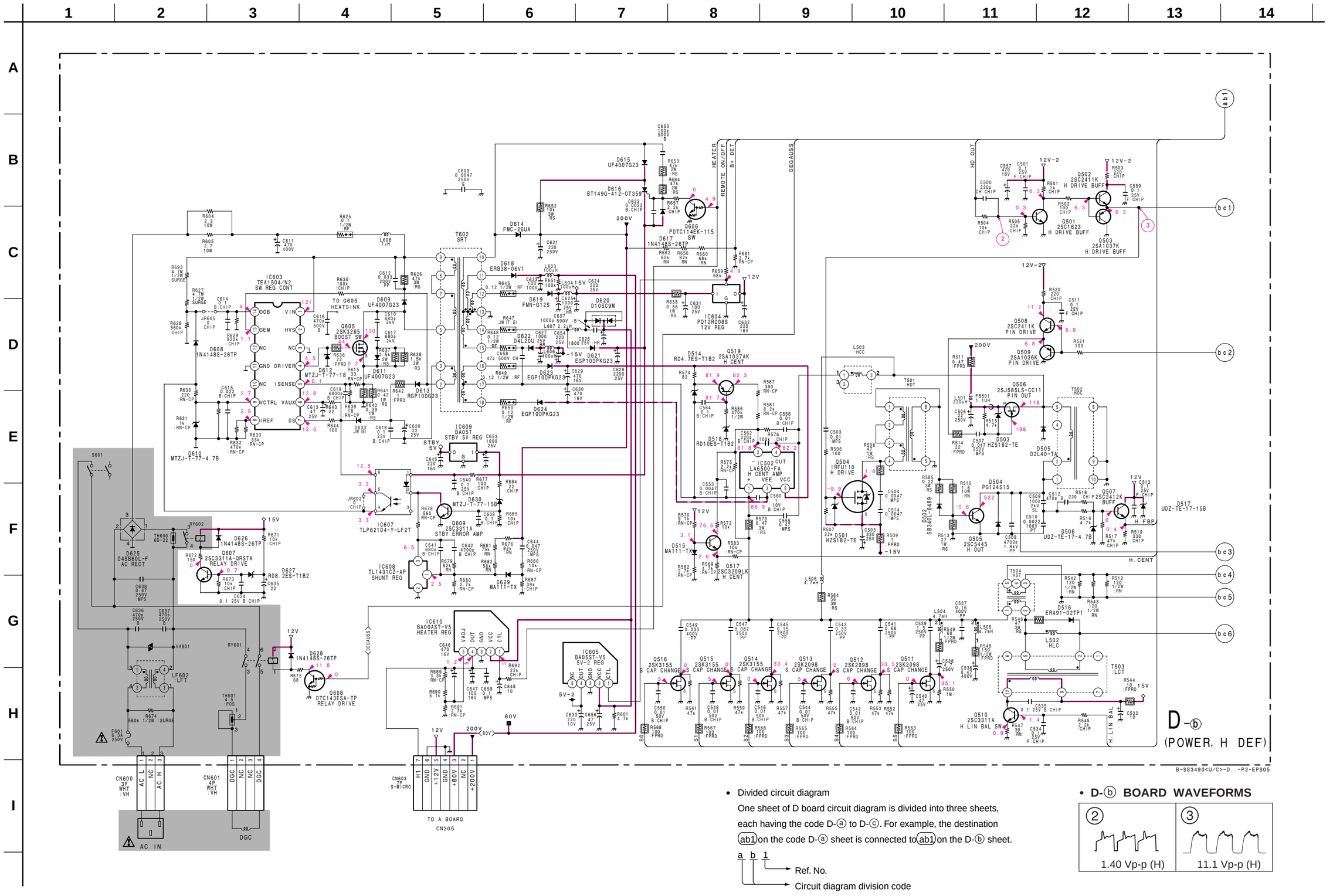
  a b 1
  - 1 → Ref. No.
  - a b → Circuit diagram division code

- **D-ⓐ BOARD WAVEFORM**

  ① 1.94 Vp-p (8 MHz)

Schematic diagram
← **A board**

Schematic diagram
D-ⓐ **board** →

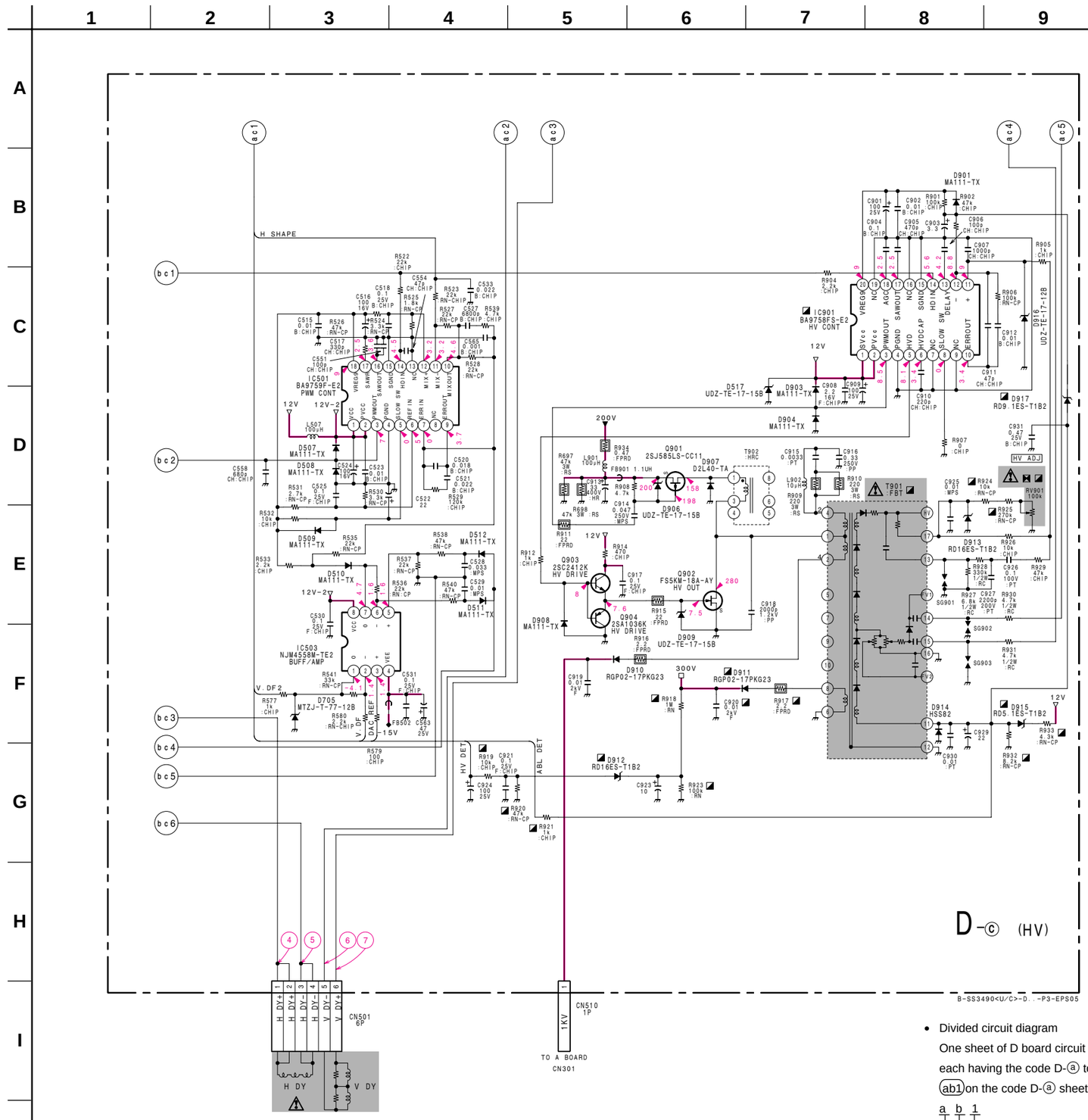


- Divided circuit diagram
  One sheet of D board circuit diagram is divided into three sheets, each having the code D-ⓐ to D-ⓒ. For example, the destination ab1 on the code D-ⓐ sheet is connected to ab1 on the D-ⓑ sheet.

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

• 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	–
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	–
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-6	–
D915	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

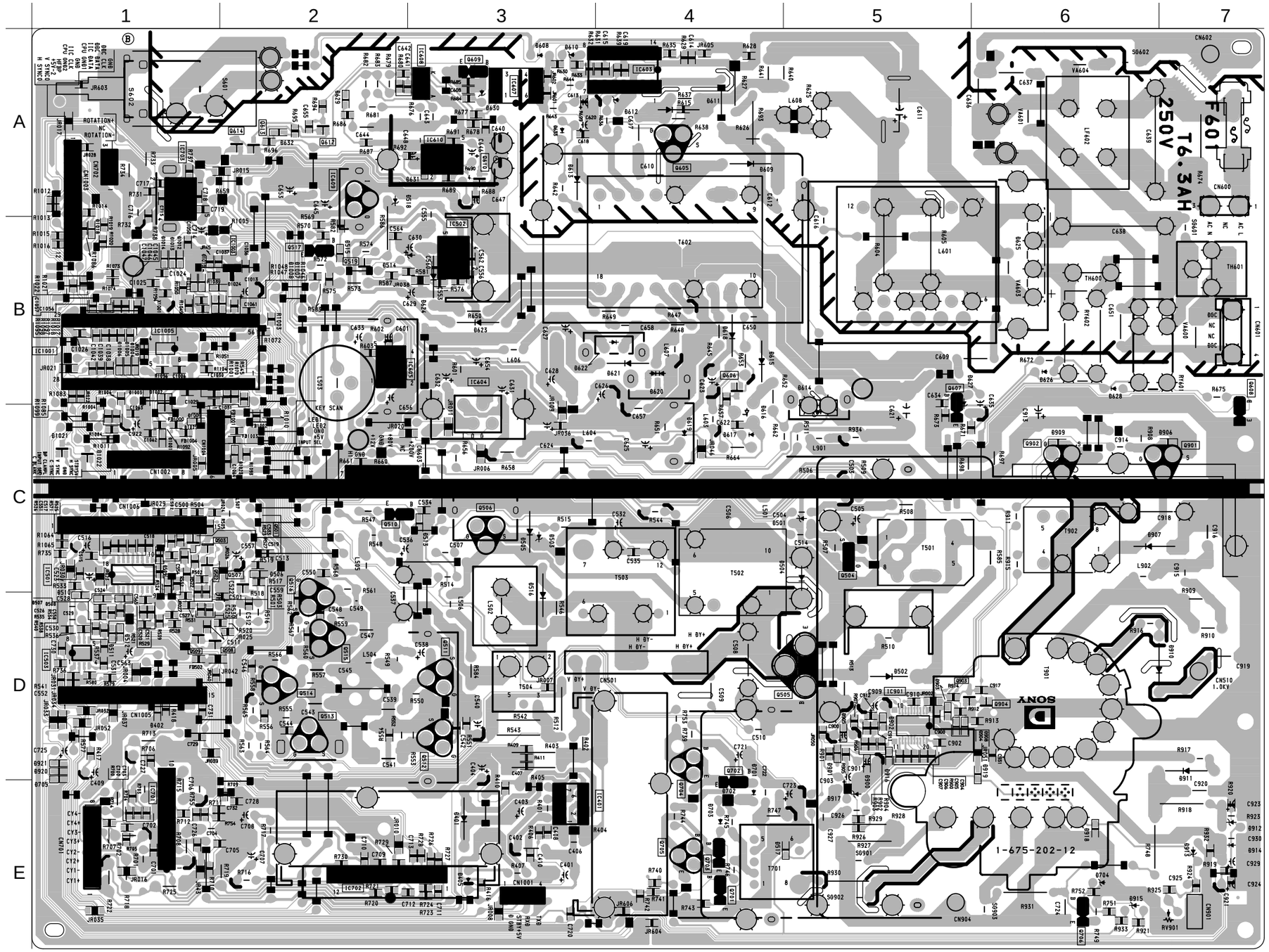
CRYSTAL

X1001	B-1

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

D [µ-COM, POWER DEFLECTION]

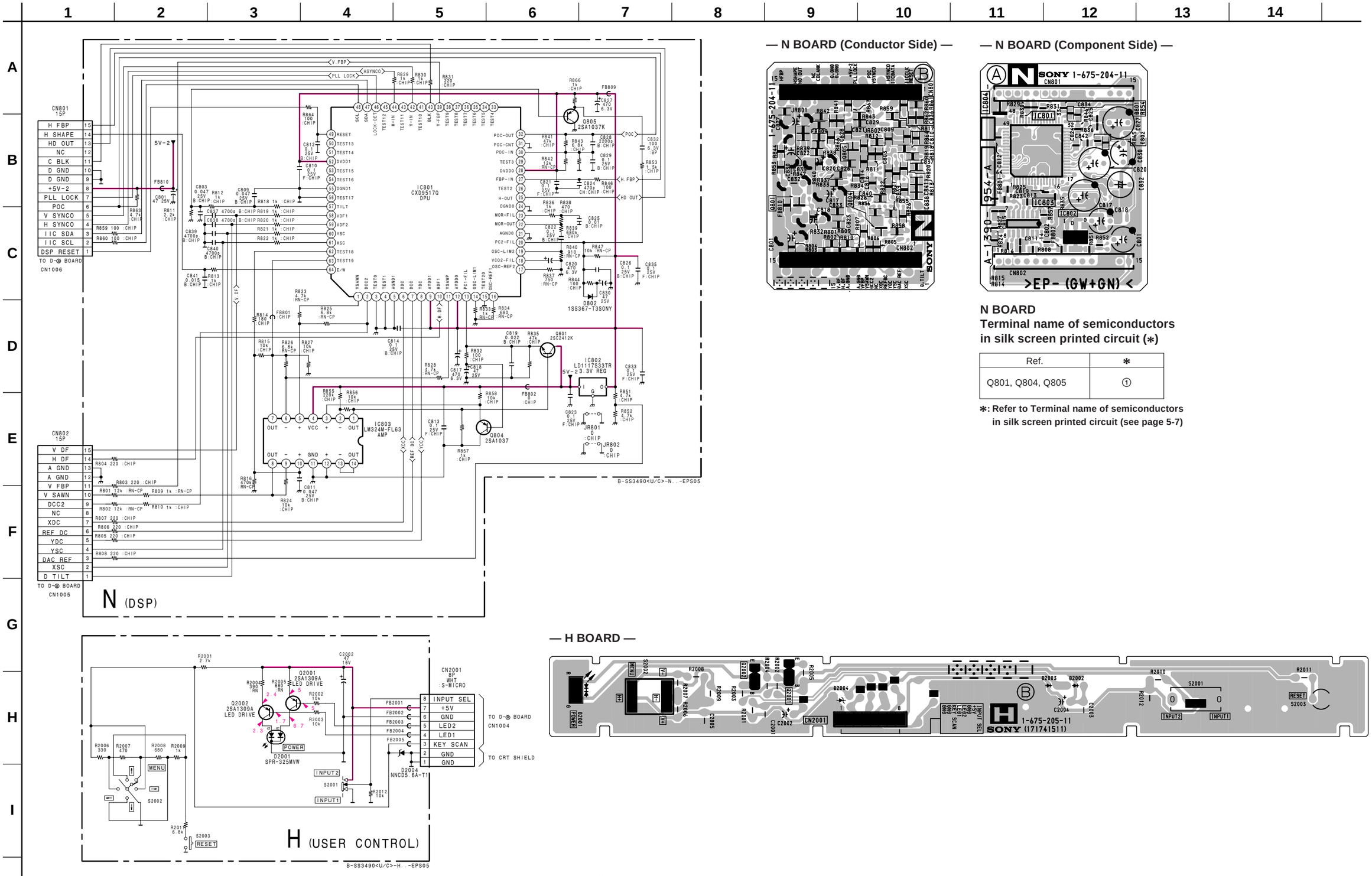
— D BOARD —



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

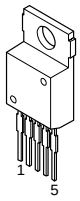
∗: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-7)

— H BOARD —

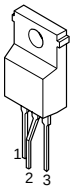
Schematic diagrams
N, H boards ➡

5-5. SEMICONDUCTORS

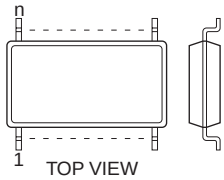
BA00AST-V5
BA05ST-V5
H8D2972
LA6500-FA



BA05T
LD1117S33TR

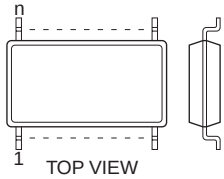


BA9758FS-E2
BA9759F-E2



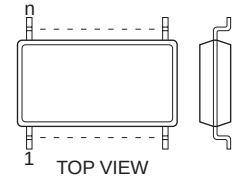
18 pin SOP

BR24C16F-E2
NJM2904M
NJM2904M(TE2)
NJM4558M-TE2
μPC4558G2
24LC21AT/SN



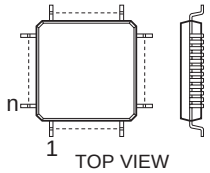
8 pin SOP

BU4053BCF-T2



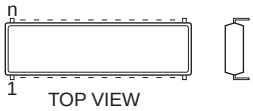
16 pin SOP

CXD9517Q



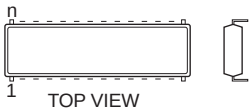
64 pin QFP

CXD9522S



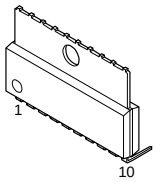
24 pin DIP

CXD9523S/JCN (Ver. 1.2)
ST92T175N1B1/JCJ

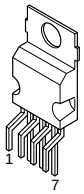


56 pin DIP

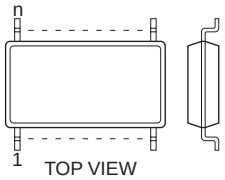
LA6510



LM324M
LA78040
LM2402T

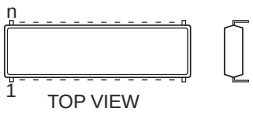


LM324M-FL63
MC74HCT14AFEL



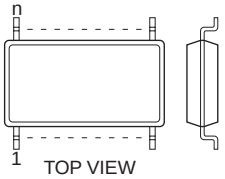
14 pin SOP

MC13289



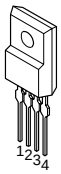
32 pin DIP

M52758FP

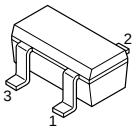


36 pin SOP

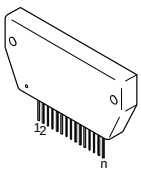
PQ12RD8S



PST574CMT-T1

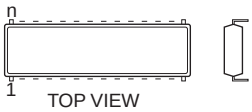


STK391-110



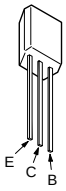
MARKING SIDE VIEW

TEA1504/N2

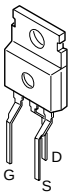


14 pin DIP

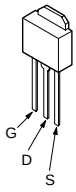
DTC144ESA-TP
PDTC114-EK-115
2SA1049-GR
2SA1049TP-GR



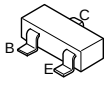
FS5KM-16A
FS5KM-18A-AY
2SJ516LB2SONY
2SJ585LS-CC11
2SK3265LB2SONY



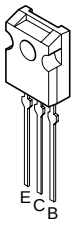
IRFU110
IRFU110A



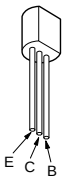
2SA1036K-Q
2SA1036K-T-146-Q
2SA1037AK-T146-R
2SA1037K-T-146-QR
2SA1162-G
2SB709A-QRS-TX
2SC1623-L5L6
2SC1623-T1-L5L6
2SC2411K-CQ
2SC2411K-T-146-CQ
2SC2412K-T-146-QR



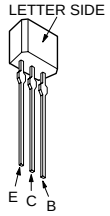
2SA1358-Y
2SC3421-Y



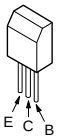
2SC2362K-G
2SC2362KG-AA



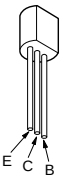
2SA1175-HFE
2SA1309A-QASTA
2SC2459-GR-TPE4
2SC2784
2SC2784-E
2SC2785-HFE
2SC3311A-QRSTA
2SC3311A-RTA



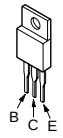
2SC3209LK-TP
2SD774-34



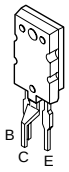
2SC3941A-Q (TA)



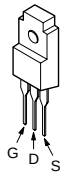
2SC5022-02



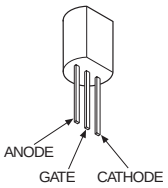
2SC5445(LBSONY1)



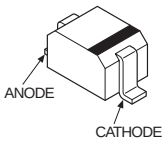
2SK2098-01MR-F119
2SK3155-01
2SK3157-01



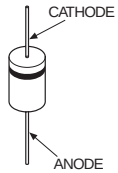
BT149G-412-OT359
TL1431CZ



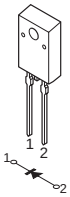
DTZ-TT11-15B
DTZ-4.7C
MA111-(K8).S0
MA111-TX
RD12SB2
RD5.6S-B
UDZ-TE-17-12B
UDZ-TE-17-4.7B
UDZ-TE-17-5.6B



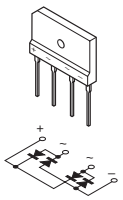
D2L40-TA
ERB38-06V1
HSS82
MTZJ-T-77-18
MTZJ-T-77-5.6B
NNCD5.6A-T1
RGP02-17EL-6433
RGP02-17PKG23
RGP10DG23
UF4007G23
1N4148S-26TP
1SS367-T3SONY



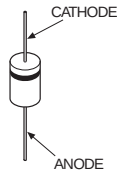
D4L20U
FMC-26UA
FMN-G12S
FMQ-G5FMS
PG124S15
YG911S2R



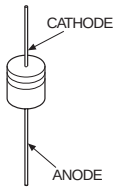
D4SB60L
D4SB60L-F



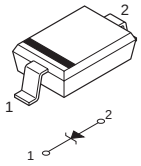
EGP10D
EGP10GPKG23
ERA91-02
ERA91-02TP1
RH-1A



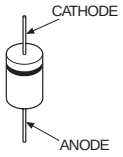
EGP10DPKG23
HZS182-TE
HZS9.1NB2
MTZJ-T-77-15B
MTZJ-6.2B
MTZJ-T-77-4.7B
MTZJ-T-77-6.2
RD10ES-T1B2
RD10ESB2
RD15ES-B2
RD16ES-B3
RD16ES-T1B2
RD18ES-B2
RD18ESB
RD4.7ES-T1B2
RD4.7ESB2
RD5.1ES-B2
RD5.1ES-T1B2
RD5.6ESB2
RD8.2ES-B2
RD8.2ES-T1B2
RD9.1ES-T1B2
1SS119-25
1SS119-25TD



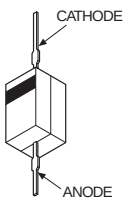
HSU83TRF



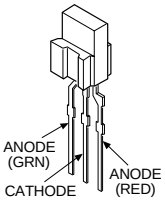
SB340



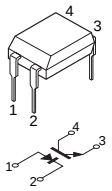
SB340L-6489



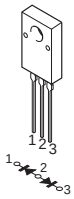
SPR325MVW



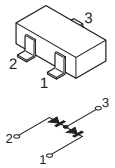
TLP621D4-Y-LF2T



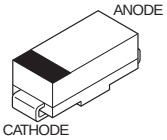
UDZ-TE-17-15B



1PS226-115



1SS376TE-17



SECTION 6
EXPLODED VIEWS

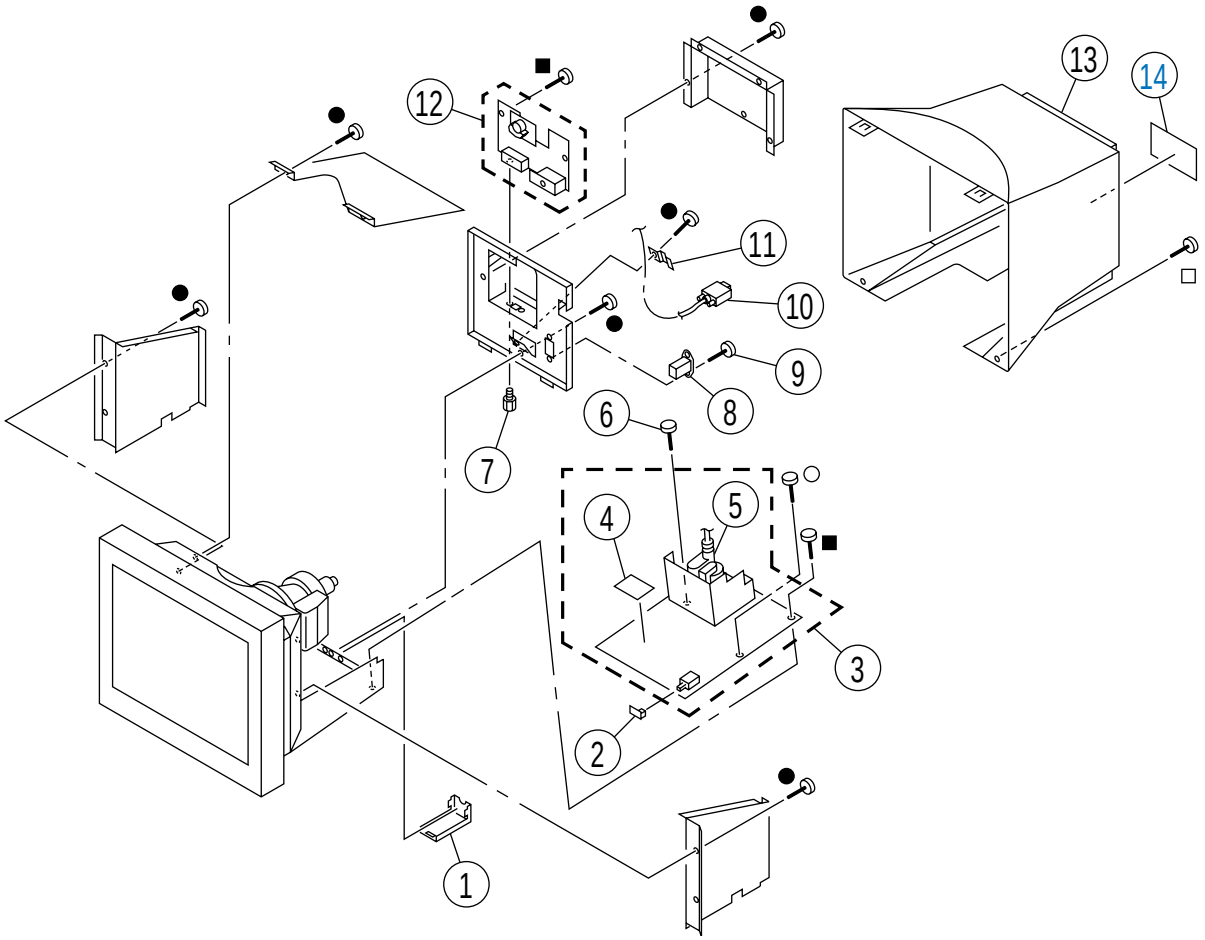
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine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

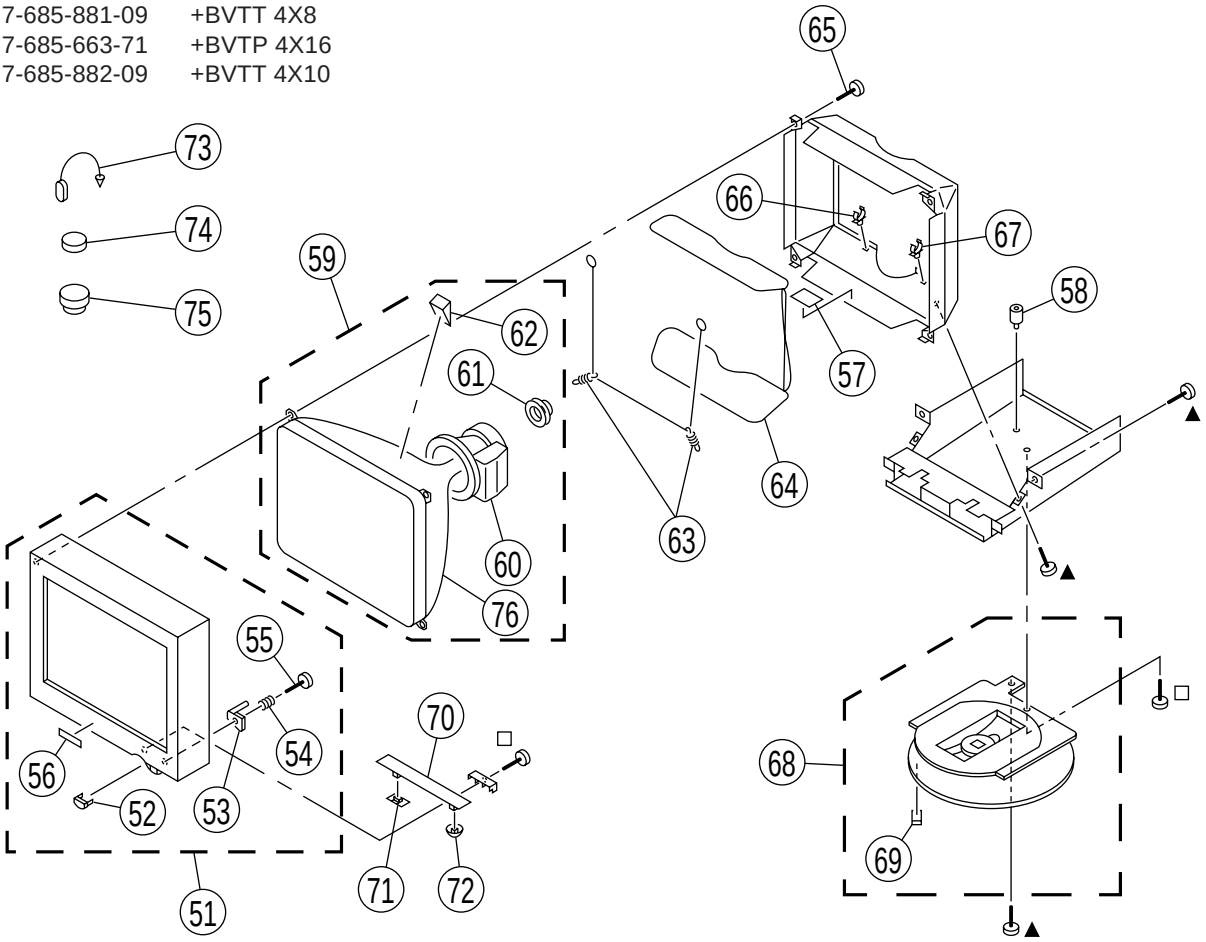
● 7-685-881-09 +BVTT 4X8
■ 7-685-872-09 +BVTT 3X8
○ 7-685-646-79 +BVTP 3X8
□ 7-685-663-71 +BVTP 4X16



REF.NO.		PART NO.	DESCRIPTION	REMARK
1		4-071-715-11	COVER, CABLE	
2		*4-394-972-21	CAP, POWER	
#3	3	*8-933-403-00	D BOARD, COMPLETE	4, 5
			[U/C Japan-made set, AEP, EQ, NH, SH]	
#2	3	*A-1346-889-A	D BOARD, COMPLETE	4, 5
			[U/C USA-made set, U/C Mexico-made set]	
#1	3	*A-1346-916-A	D BOARD, COMPLETE [BRZ]	4, 5
4		*8-933-406-00	N BOARD, COMPLETE	
5		⚠X-4560-174-1	TRANSFORMER ASSY, FLYBACK	
			(NX4700//J1E4)	
6		4-062-115-01	SCREW +P 3.5X20 TYPE2	
7		4-070-122-01	SCREW (HD15)	
8		⚠1-251-382-31	INLET, AC 3P (WITH NOISE FILTER)	
9		4-052-345-01	SCREW, (3X8) (+K), TAPPING	
10		1-791-490-11	CABLE ASSY	
			(15P D-SUB CONNECTOR)	
11		*4-045-131-01	STOPPER, CABLE	
12		*8-933-402-00	A BOARD, COMPLETE	
13		4-071-714-11	CABINET	
#2	14	4-073-062-01	LABEL, INFORMATION	
			[U/C USA-made set]	
#2	14	4-073-062-11	LABEL, INFORMATION	
			[U/C Mexico-made set]	
#2	14	4-073-543-01	LABEL, INFORMATION	
			[AEP Japan-made set]	
#1	14	4-074-993-01	LABEL, INFORMATION [BRZ]	
#3	14	4-075-280-01	LABEL, INFORMATION	
			[U/C Japan-made set, EQ, SH]	
#3	14	4-078-326-01	LABEL, INFORMATION [NH]	

6-2. PICTURE TUBE

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



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

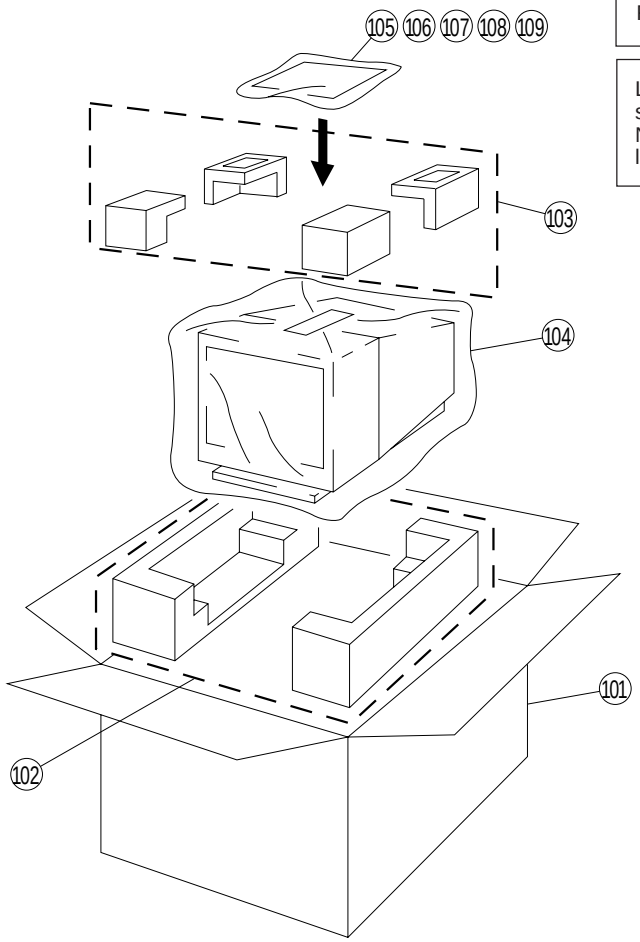
The components identified ⚠ marked are critical for safety.
Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4037-001-1	BEZEL ASSY	52-56
52	4-070-660-01	BUTTON, POWER	
53	4-071-713-01	BAR, EXTENSION	
54	4-070-001-01	SPRING, COMPRESSION	
55	4-046-797-01	SCREW (3X12), (+) BV TAP	
56	4-044-932-11	EMBLEM (NO, 8), SONY	
57	*4-070-217-01	CUSHION	
58	*4-060-359-01	HOLDER, PRINTED CIRCUIT BOARD	
59	⚠8-736-407-61	ITC ASSY (19TKC-R1)	60-62 [AEP, U/C, NH]
59	⚠8-736-408-61	ITC ASSY (19TKC-RS1)	60-62 [BRZ, EQ, SH]
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	
63	*4-047-316-01	SPRING, EXTENSION	
64	⚠1-419-285-11	COIL, DEGAUSSING	
65	4-365-808-01	SCREW (5), TAPPING	
66	4-071-175-01	HOLDER, DEGAUSSING COIL	
67	4-041-021-02	HOLDER, DEGAUSSING COIL	
68	X-4036-988-1	STAND ASSY	69
69	*4-061-996-11	CUSHION	
70	*8-933-405-00	H BOARD, COMPLETE	
71	4-071-112-01	INPUT SELECTION	
72	4-070-665-01	BUTTON, MENU	
73	4-308-870-00	CLIP, LEAD WIRE	
74	1-452-032-00	MAGNET, DISC; 10mm ϕ	
75	1-452-094-00	MAGNET, ROTATABLE DISC; 15mm ϕ	
76	8-736-407-05	PICTURE TUBE [AEP, U/C, NH]	
76	8-736-408-05	PICTURE TUBE [BRZ, EQ, SH]	

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
#2 101	4-072-859-01	INDIVIDUAL CARTON	[AEP Japan-made set]
#2 101	4-072-901-01	INDIVIDUAL CARTON	[AEP UK-made set]
#2 101	4-074-221-01	INDIVIDUAL CARTON	[U/C USA-made set]
101	4-075-000-01	INDIVIDUAL CARTON [BRZ]	
#2 101	4-075-186-01	INDIVIDUAL CARTON	[U/C Japan-made set]
#3 101	4-075-235-01	INDIVIDUAL CARTON [EQ, SH]	
#2 101	4-075-649-01	INDIVIDUAL CARTON	[U/C Mexico-made set]
#3 101	4-078-364-01	INDIVIDUAL CARTON [NH]	
#3 102	4-072-262-01	CUSHION (LOWER) ASSY	[AEP Japan-made set, EQ, SH]
#2 102	4-072-843-01	CUSHION (LOWER) ASSY	[U/C USA-made set, U/C Mexico-made set]
#2 102	4-072-903-01	CUSHION (LOWER) ASSY	[AEP UK-made set]
102	4-074-997-01	CUSHION (LOWER) ASSY [BRZ]	
#3 102	4-075-217-01	CUSHION (LOWER) ASSY	[U/C Japan-made set, NH]
#3 103	4-072-261-01	CUSHION (UPPER) ASSY	[AEP Japan-made set, EQ, SH]
#2 103	4-072-842-01	CUSHION (UPPER) ASSY	[U/C USA-made set, U/C Mexico-made set]
#2 103	4-072-902-01	CUSHION (UPPER) ASSY	[AEP UK-made set]
103	4-074-994-01	CUSHION (UPPER) ASSY [BRZ]	
#3 103	4-075-216-01	CUSHION (UPPER) ASSY	[U/C Japan-made set, NH]
104	* 4-041-927-31	BAG, POLYETHYLENE	
105	1-793-504-11	CABLE ASSY (15P DSUB X2 CONNECTOR)	
#3 106	⚠ 1-558-481-21	CORD SET, POWER [SH]	
#3 106	⚠ 1-765-719-31	CORD SET, POWER [AEP, EQ, NH]	
106	⚠ 1-790-662-11	CORD SET, POWER [BRZ, U/C]	
#3 107	1-785-429-11	ADAPTOR, CONVERSION for Macintosh	[U/C, EQ, NH, SH, BRZ]
107	1-785-512-31	CONNECTOR, D SUB (15P CHANGER) for Macintosh new G3 [AEP]	
#3 108	3-867-606-01	MANUAL, INSTRUCTION	[U/C Japan-made set, EQ, SH]
#2 108	3-867-606-11	MANUAL, INSTRUCTION	[AEP Japan-made set]
#2 108	3-867-606-21	MANUAL, INSTRUCTION	[U/C USA-made set, U/C Mexico-made set]
#2 108	3-867-606-31	MANUAL, INSTRUCTION	[AEP UK-made set]
#3 108	3-867-606-61	MANUAL, INSTRUCTION [NH]	
108	4-075-001-51	MANUAL, INSTRUCTION [BRZ]	
109	* 1-772-337-11	DISK, INFORMATION	

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.

RESISTORS
- All resistors are in ohms
- F : nonflammable

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  MF : µF
- COILS
  UH : µH

REF.NO.	PART NO.	DESCRIPTION			REMARK
*	A-1298-985-B	A BOARD, COMPLETE			
		**********			
	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
C005	1-164-004-11	CERAMIC CHIP	0.1µF	10%	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
C019	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
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	1-101-006-00	CERAMIC	0.047µF		50V
C038	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C039	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C040	1-163-021-91	CERAMIC CHIP	0.01µF	10%	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	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C047	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C048	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C049	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
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
C057	1-163-113-00	CERAMIC CHIP	68pF	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
C064	1-104-664-11	ELECT	47µF	20%	25V
C065	1-104-664-11	ELECT	47µF	20%	25V
C066	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C067	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C068	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C069	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C070	1-165-319-11	CERAMIC CHIP	0.1µF		50V
C090	1-163-021-91	CERAMIC CHIP	0.01µF	10%	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
C102	1-163-087-00	CERAMIC CHIP	4pF	0.25pF	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
C109	1-104-664-11	ELECT	47µF	20%	25V
C111	1-163-037-11	CERAMIC CHIP	0.022µF	10%	50V
C112	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V
C119	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C120	1-126-933-11	ELECT	100µF	20%	16V
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
C212	1-163-227-11	CERAMIC CHIP	10pF	0.5pF	50V

A

REF.NO.	PART NO.	DESCRIPTION	REMARK
C220	1-126-933-11	ELECT 100µF 20% 16V	
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	
C312	1-163-227-11	CERAMIC CHIP 10pF 0.5pF 50V	
C319	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C320	1-126-933-11	ELECT 100µF 20% 16V	
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	
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	
CN307	1-793-183-11	CONNECTOR, D SUB 15P	
CN309*	1-564-511-11	PLUG, CONNECTOR 8P	
CN310*	1-564-507-11	PLUG, CONNECTOR 4P	
CN311*	1-564-507-11	PLUG, CONNECTOR 4P	
CN313*	1-564-512-11	PLUG, CONNECTOR 9P	
		<DIODE>	
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	
D010	8-719-109-89	ZENER DIODE RD5.6ESB2	
D011	8-719-109-89	ZENER DIODE RD5.6ESB2	
D012	8-719-062-51	DIODE 1PS226-115	
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	
D101	8-719-062-51	DIODE 1PS226-115	
D104	8-719-052-12	DIODE 1SS376TE-17	
D104	8-719-052-12	DIODE 1SS376TE-17	
D105	8-719-052-12	DIODE 1SS376TE-17	
D105	8-719-052-12	DIODE 1SS376TE-17	
D106	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	
D109	8-719-052-12	DIODE 1SS376TE-17	
D111	8-719-062-51	DIODE 1PS226-115	
D201	8-719-062-51	DIODE 1PS226-115	
D204	8-719-052-12	DIODE 1SS376TE-17	
D204	8-719-052-12	DIODE 1SS376TE-17	
D205	8-719-052-12	DIODE 1SS376TE-17	
D205	8-719-052-12	DIODE 1SS376TE-17	
D206	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	
D209	8-719-052-12	DIODE 1SS376TE-17	
D211	8-719-062-51	DIODE 1PS226-115	
D301	8-719-062-51	DIODE 1PS226-115	
D304	8-719-052-12	DIODE 1SS376TE-17	
D304	8-719-052-12	DIODE 1SS376TE-17	
D305	8-719-052-12	DIODE 1SS376TE-17	
D305	8-719-052-12	DIODE 1SS376TE-17	
D306	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	
D309	8-719-052-12	DIODE 1SS376TE-17	
D311	8-719-062-51	DIODE 1PS226-115	
D409	8-719-052-12	DIODE 1SS376TE-17	
D409	8-719-052-12	DIODE 1SS376TE-17	
		<FERRITE BEAD>	
FB001	1-412-911-31	FERRITE 1.1µH	
FB002	1-412-911-31	FERRITE 1.1µH	
FB004	1-412-911-31	FERRITE 1.1µH	
FB005	1-412-911-31	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	
FB023	1-216-295-91	SHORT 0	
FB024	1-412-911-31	FERRITE 1.1µH	
FB101	1-216-295-91	SHORT 0	
FB102	1-216-295-91	SHORT 0	
FB103	1-216-295-91	SHORT 0	
FB104	1-412-911-31	FERRITE 1.1µH	
FB105	1-500-419-22	FERRITE	
FB110	1-412-911-31	FERRITE 1.1µH	
FB201	1-216-295-91	SHORT 0	
FB202	1-216-295-91	SHORT 0	
FB203	1-216-295-91	SHORT 0	
FB205	1-500-419-22	FERRITE	

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Replace only with the part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK
FB210	1-412-911-31	FERRITE 1.1µH	
FB301	1-216-295-91	SHORT 0	
FB302	1-216-295-91	SHORT 0	
FB303	1-216-295-91	SHORT 0	
FB305	1-500-419-22	FERRITE	
FB310	1-412-911-31	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	
IC007	8-759-442-20	IC 24LC21AT/SN	
IC008	8-759-541-25	IC M52758FP	
IC009	8-759-932-69	IC BU4053BCF-T2	
		<JACK>	
J001 ⚠	1-451-499-11	SOCKET, PICTURE TUBE	
		<CHIP CONDUCTOR>	
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	
JR009	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	
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	1-216-296-91	SHORT 0	
JR033	1-216-296-91	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	
Q004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q005	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	
R008	1-216-025-91	RES,CHIP 100 5% 1/10W	
R009	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R010	1-216-025-91	RES,CHIP 100 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	
R015	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R016	1-216-057-00	RES,CHIP 2.2K 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	
R026	1-216-295-91	SHORT 0	
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	
R038	1-216-017-91	RES,CHIP 47 5% 1/10W	
R039	1-216-017-91	RES,CHIP 47 5% 1/10W	
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	

A

REF.NO.	PART NO.	DESCRIPTION			REMARK
R049	1-216-093-91	RES,CHIP	68K	5%	1/10W
R050	1-216-121-91	RES,CHIP	1M	5%	1/10W
R051	1-216-025-91	RES,CHIP	100	5%	1/10W
R053	1-219-621-91	METAL	22M	10%	1/4W
R054	1-216-073-00	RES,CHIP	10K	5%	1/10W
R055	1-216-025-91	RES,CHIP	100	5%	1/10W
R060	1-414-231-22	INDUCTOR CHIP			
R064	1-219-749-91	CARBON	10K	5%	1/2W
R077	1-216-077-91	RES,CHIP	15K	5%	1/10W
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
R083	1-216-089-91	RES,CHIP	47K	5%	1/10W
R085	1-216-049-91	RES,CHIP	1K	5%	1/10W
R086	1-216-041-00	RES,CHIP	470	5%	1/10W
R087	1-216-097-91	RES,CHIP	100K	5%	1/10W
R088	1-216-089-91	RES,CHIP	47K	5%	1/10W
R090	1-216-049-91	RES,CHIP	1K	5%	1/10W
R092	1-216-077-91	RES,CHIP	15K	5%	1/10W
R093	1-216-041-00	RES,CHIP	470	5%	1/10W
R094	1-216-097-91	RES,CHIP	100K	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
R101	1-215-395-00	METAL	82	1%	1/4W
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	0.50%	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	1-216-019-00	RES,CHIP	56	5%	1/10W
R118	1-216-013-00	RES,CHIP	33	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	1-216-019-00	RES,CHIP	56	5%	1/10W
R133	1-216-019-00	RES,CHIP	56	5%	1/10W
R140	1-216-019-00	RES,CHIP	56	5%	1/10W
R151	1-219-742-11	CARBON	47	5%	1/2W
R161	1-215-395-00	METAL	82	1%	1/4W
R201	1-215-395-00	METAL	82	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	0.50%	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

REF.NO.	PART NO.	DESCRIPTION			REMARK
R215	1-216-107-00	RES,CHIP	270K	5%	1/10W
R217	1-216-019-00	RES,CHIP	56	5%	1/10W
R218	1-216-013-00	RES,CHIP	33	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	1-216-019-00	RES,CHIP	56	5%	1/10W
R233	1-216-019-00	RES,CHIP	56	5%	1/10W
R240	1-216-019-00	RES,CHIP	56	5%	1/10W
R251	1-219-742-11	CARBON	47	5%	1/2W
R261	1-215-395-00	METAL	82	1%	1/4W
R301	1-215-395-00	METAL	82	1%	1/4W
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	0.50%	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	1-216-019-00	RES,CHIP	56	5%	1/10W
R318	1-216-013-00	RES,CHIP	33	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	1-216-019-00	RES,CHIP	56	5%	1/10W
R333	1-216-019-00	RES,CHIP	56	5%	1/10W
R340	1-216-019-00	RES,CHIP	56	5%	1/10W
R351	1-219-742-11	CARBON	47	5%	1/2W
R361	1-215-395-00	METAL	82	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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REF.NO.	PART NO.	DESCRIPTION			REMARK
	* A-1346-879-B	D BOARD, COMPLETE			
		**********			
	1-533-223-11	HOLDER, FUSE (F601)			
	3-710-578-01	COVER, VOLUME, 6 MOLD (RV901)			
	4-047-285-01	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)			
		<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	1-117-661-71	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	1-163-243-11	CERAMIC CHIP	47pF	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
C558	1-163-251-11	CERAMIC CHIP	100pF	5%	50V
C559	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C560	1-115-339-11	CERAMIC CHIP	0.1µF	10%	50V
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	99%	250V
C610	1-117-769-91	CERAMIC	680pF	10%	2KV
C611	1-125-483-11	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

D

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C638⚠	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	1-126-964-11	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	99%	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
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
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
CN1005	1-793-585-11	PIN, CONNECTOR (PC BOARD)	15P
CN1006	1-793-586-11	PIN, CONNECTOR (PC BOARD)	15P

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REF.NO.	PART NO.	DESCRIPTION	REMARK
		<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	8-719-975-77	DIODE SB340	
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	
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 ⚠	8-719-510-53	DIODE D4SB60L	
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	
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	0.50%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	
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	

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

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1001	8-759-656-95	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	
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	1-414-487-41	INDUCTOR 1µH	
L901	1-412-537-31	INDUCTOR 100µH	
L902	1-406-659-11	INDUCTOR 10µH	
		<FILTER>	
LF602⚠	1-429-180-11	TRANSFORMER, LINE FILTER	
		<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	8-729-050-13	TRANSISTOR 2SJ585LS-CC11	
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	8-729-047-72	TRANSISTOR 2SK3155-01	
Q515	8-729-047-72	TRANSISTOR 2SK3155-01	
Q516	8-729-047-72	TRANSISTOR 2SK3155-01	
Q517	8-729-140-50	TRANSISTOR 2SC3209LK	
Q519	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q605	8-729-050-14	TRANSISTOR 2SK3265LB2SONY	
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	8-729-050-13	TRANSISTOR 2SJ585LS-CC11	
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	

REF.NO.	PART NO.	DESCRIPTION			REMARK
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	0.50%	1/10W
R407	1-249-397-11	CARBON	22	5%	1/4W F
R409	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R410	1-216-663-11	METAL CHIP	3.3K	0.50%	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	1-216-037-00	RES,CHIP	330	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	1-216-081-00	RES,CHIP	22K	5%	1/10W
R523	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R524	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R525	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R526	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R527	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R528	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R529	1-216-099-00	RES,CHIP	120K	5%	1/10W
R530	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R531	1-216-661-11	METAL CHIP	2.7K	0.50%	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	0.50%	1/10W
R536	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R537	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R538	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R539	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R540	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R541	1-216-687-11	METAL CHIP	33K	0.50%	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	0.50%	1/10W
R570	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W
R572	1-249-429-11	CARBON	10K	5%	1/4W
R573	1-216-385-11	METAL OXIDE	0.47	5%	3W F
R574	1-249-407-11	CARBON	150	5%	1/4W
R575	1-216-659-11	METAL CHIP	2.2K	0.50%	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	0.50%	1/10W
R581	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R582	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R583	1-216-675-91	METAL CHIP	10K	0.50%	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	0.50%	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	0.50%	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	0.50%	1/10W
R631	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R632	1-218-758-11	METAL CHIP	180K	0.50%	1/10W
R633	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R635	1-216-097-91	RES,CHIP	100K	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	0.50%	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

D

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REF.NO.	PART NO.	DESCRIPTION			REMARK
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	0.50% 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	0.50% 1/10W	
R679	1-215-467-00	METAL	82K	1% 1/4W	
R680	1-216-661-11	METAL CHIP	2.7K	0.50% 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	0.50% 1/10W	
R687	1-216-689-11	RES,CHIP	39K	5% 1/10W	
R689	1-216-663-11	METAL CHIP	3.3K	0.50% 1/10W	
R690	1-216-668-11	METAL CHIP	5.1K	0.50% 1/10W	
R691	1-216-661-11	METAL CHIP	2.7K	0.50% 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	0.50% 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	0.50% 1/10W	
R708	1-216-353-00	METAL OXIDE	2.2	5% 1W	F
R709	1-216-667-11	METAL CHIP	4.7K	0.50% 1/10W	
R710	1-216-691-11	METAL CHIP	47K	0.50% 1/10W	
R711	1-216-675-91	METAL CHIP	10K	0.50% 1/10W	
R712	1-216-679-11	METAL CHIP	15K	0.50% 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	0.50% 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	0.50% 1/10W	
R725	1-216-369-00	METAL OXIDE	1	5% 2W	F
R726	1-216-667-11	METAL CHIP	4.7K	0.50% 1/10W	
R727	1-216-666-11	METAL CHIP	4.3K	0.50% 1/10W	
R728	1-216-659-11	METAL CHIP	2.2K	0.50% 1/10W	
R729	1-216-667-11	METAL CHIP	4.7K	0.50% 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	
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	0.50% 1/10W	
R755	1-216-675-91	METAL CHIP	10K	0.50% 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	0.50% 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	0.50% 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	0.50% 1/10W	
R925	1-218-762-11	METAL CHIP	270K	0.50% 1/10W	

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.

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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REF.NO.	PART NO.	DESCRIPTION			REMARK
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	0.50% 1/10W	
R933	1-216-666-11	METAL CHIP	4.3K	0.50% 1/10W	
R934	1-249-377-11	CARBON	0.47	5% 1/4W F	
R1001	1-216-675-91	METAL CHIP	10K	0.50% 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

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<RELAY>	
RY601⚠	1-755-067-21	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	
		<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-1390-954-A N BOARD, COMPLETE
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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

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REF.NO.	PART NO.	DESCRIPTION			REMARK
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
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			

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R801	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R802	1-216-677-11	METAL CHIP	12K	0.50%	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	0.50%	1/10W
R810	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R811	1-216-057-00	RES,CHIP	2.2K	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	0.50%	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	0.50%	1/10W
R824	1-216-073-00	RES,CHIP	10K	5%	1/10W
R825	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R826	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R827	1-216-073-00	RES,CHIP	10K	5%	1/10W
R828	1-216-667-11	METAL CHIP	4.7K	0.50%	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	0.50%	1/10W
R834	1-216-647-11	METAL CHIP	680	0.50%	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	0.50%	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	0.50%	1/10W
R841	1-216-089-91	RES,CHIP	47K	5%	1/10W
R842	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R843	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R844	1-216-025-91	RES,CHIP	100	5%	1/10W
R846	1-216-025-91	RES,CHIP	100	5%	1/10W
R847	1-216-675-91	METAL CHIP	10K	0.50%	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	1-216-053-00	RES,CHIP	1.5K	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

REF.NO.	PART NO.	DESCRIPTION			REMARK
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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* A-1372-689-A H BOARD, COMPLETE
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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)			

<FERRITE BEAD>

FB2001	1-412-911-31	FERRITE	1.1µH		
FB2002	1-412-911-31	FERRITE	1.1µH		
FB2003	1-412-911-31	FERRITE	1.1µH		
FB2004	1-412-911-31	FERRITE	1.1µH		
FB2005	1-412-911-31	FERRITE	1.1µH		

<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	1-249-417-11	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>

S2001	1-571-427-11	SWITCH, SLIDE (INPUT1/INPUT2)			
S2002	1-771-734-11	SWITCH, TACTILE (MENU)			
S2003	1-762-196-21	SWITCH, TACT (RESET)			

CPD-G400

9-978-652-01 99JL05252-1

SONY

9-978-652-01

Sony Corporation
Computer Display Company
Computer Display DIV.

English
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