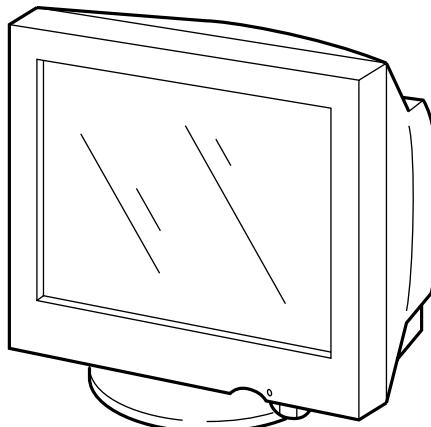


# CPD-E500/E500E

## SERVICE MANUAL



*CPD-E500  
US Model  
Canadian Model*

*Chassis No. SCC-L22P-A*

*CPD-E500E  
AEP Model*

*Chassis No. SCC-L22N-A*

## G1 CHASSIS

### SPECIFICATIONS

CRT	0.24 mm aperture grille pitch 21 inches measured diagonally 90-degree deflection FD Trinitron	AC input voltage/current Power consumption Dimensions Mass	100 to 240 V, 50 – 60 Hz, 2.0 – 1.0 A Approx. 145 W Approx. 497 × 480 × 478 mm (w/h/d) (19 5/8 × 19 × 18 7/8 inches)
Viewable image size	Approx. 403.8 × 302.2 mm (w/h) (16 × 12 inches) 19.8" viewing image	Plug and Play Supplied accessories	Approx. 32 kg (70 lb 9 oz) DDC1/2B/2Bi, GTF** See page 6
Resolution			
Maximum	Horizontal: 2048 dots Vertical: 1536 lines		* Recommended horizontal and vertical timing condition
Recommended	Horizontal: 1600 dots Vertical: 1200 lines		• Horizontal sync width duty should be more than 4.8% of total horizontal time or 0.8 µs, whichever is larger. • Horizontal blanking width should be more than 2.3 µsec. • Vertical blanking width should be more than 450 µsec.
Standard image area	Approx. 388 × 291 mm (w/h) (15 3/8 × 11 1/2 inches) or Approx. 364 × 291 mm (w/h) (14 3/8 × 11 1/2 inches)		** If the input signal is Generalized Timing Formula (GTF) compliant, the GTF feature of the monitor will automatically provide an optimal image for the screen.
Deflection frequency*	Horizontal: 30 to 109 kHz Vertical: 48 to 160 Hz		Design and specifications are subject to change without notice.

**TRINITRON® COLOR COMPUTER DISPLAY**  
**SONY®**

## SAFETY CHECK-OUT

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

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

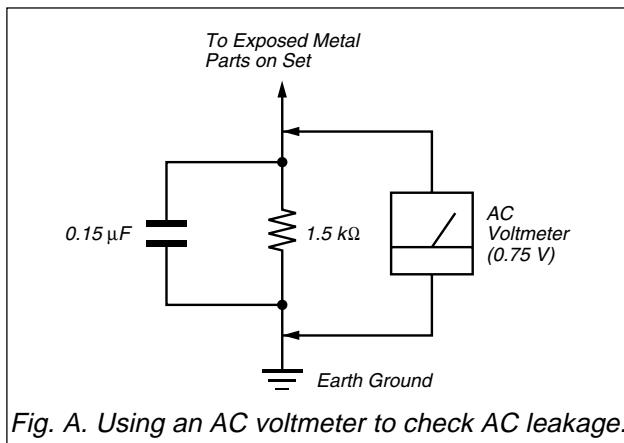


Fig. A. Using an AC voltmeter to check AC leakage.

## LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).

Leakage current can be measured by any one of three methods.

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

## WARNING!!

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

## SAFETY-RELATED COMPONENT WARNING!!

**COMPONENTS IDENTIFIED BY SHADING AND MARK**

⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

## AVERTISSEMENT!!

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

## ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

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

## 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.

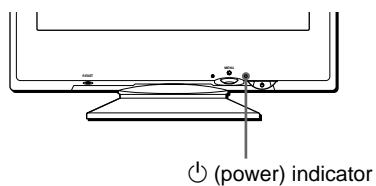
Power mode	Power consumption	⊕ (power) indicator
normal operation	≤ 145 W	green
1 standby	≤ 15 W	green and orange alternate
2 suspend (sleep)*	≤ 15 W	green and orange alternate
3 active off** (deep sleep)*	Approx. 1 W	orange
power off	0 W	off

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

\*\* When your computer enters a power saving mode, the input signal is cut and NO INPUT SIGNAL appears on the screen. After a few seconds, the monitor enters a power saving mode.

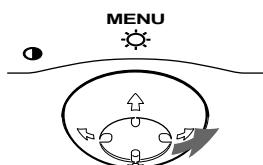
## DIAGNOSIS

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.

# CPD-E500/E500E

## TIMING SPECIFICATION

MODE AT PRODUCTION	MODE 1
RESOLUTION	1600 X 1200
CLOCK	229.500 MHz
— HORIZONTAL —	
H-FREQ	106.250 kHz usec
H. TOTAL	9.412
H. BLK	2.440
H. FP	0.279
H. SYNC	0.837
H. BP	1.325
H. ACTIV	6.972
— VERTICAL —	
V. FREQ(HZ)	85.000 Hz lines
V. TOTAL	1250
V. BLK	50
V. FP	1
V. SYNC	3
V. BP	46
V. ACTIV	1200
— SYNC —	
INT(G)	NO
EXT(H/V)/POLARITY	YES P/P
EXT(CS) /POLARITY	NO
INT/NON INT	NON INT

99.11.18 VER.

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Note: Hand degauss must be used on stand-by or power-off condition.

This model has an automatic earth magnetism correction function by using an earth magnetism sensor and a LCC coil. When using a hand degauss while monitor (LCC coil) is being operated, it sometimes gets magnetized, and the system may not work properly as a result.

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.

## Precautions

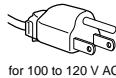
### Warning on power connections

- Use the supplied power cord. If you use a different power cord, be sure that it is compatible with your local power supply.

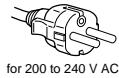
#### For the customers in the U.S.A.

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 screen's surface to discharge.
- After the power is turned on, the screen is demagnetized (degaussed) for about 2 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

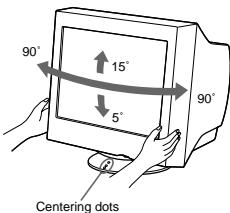
When you transport this monitor for repair or shipment, use the original carton and packing materials.

# SECTION 1

## GENERAL

### Use of the tilt-swivel

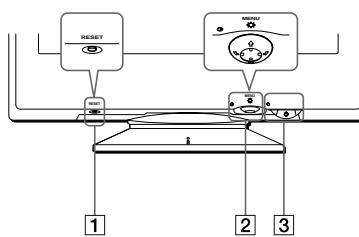
This monitor can be adjusted within the angles shown below. To find the center of the monitor's turning radius, align the center of the monitor's screen with the centering dots on the stand. Hold the monitor at the bottom with both hands when you turn it horizontally or vertically. Be careful not to 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 (reset) button (page 14)

This button resets the adjustments to the factory settings.

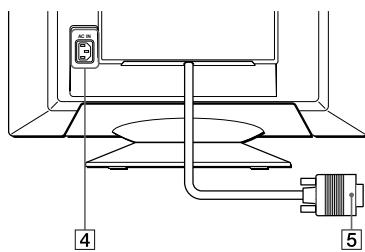
#### ② Control button (page 9)

The control button is used to display the menu and make adjustments to the monitor, including brightness and contrast adjustments.

#### ③ (power) switch and indicator (pages 7, 14, 18)

This button turns the monitor on and off. The power indicator lights up in green when the monitor is turned on, and either flashes in green and orange, or lights up in orange when the monitor is in power saving mode.

#### Rear

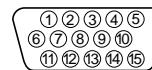


#### ④ AC IN connector (page 6)

This connector provides AC power to the monitor.

#### ⑤ Video input connector (HD15) (page 6)

This connector inputs RGB video signals (0.700 Vp-p, positive) and sync signals.



**US**

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	DDC + 5V*
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.

## Setup

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

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

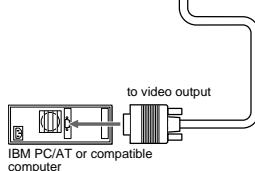
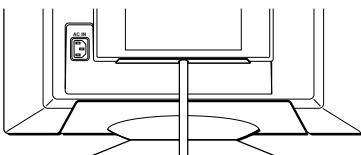
### Step 1: Connect your monitor to your computer

Turn off the monitor and computer before connecting.

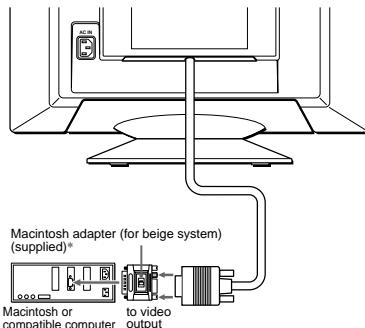
#### Note

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

#### Connecting to an IBM PC/AT or compatible computer



#### Connecting to a Macintosh or compatible computer

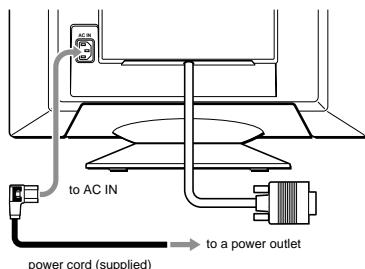


\* Connect the supplied Macintosh adapter to the computer before connecting the cable.

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

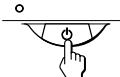
### Step 2: Connect the power cord

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



### Step 3: Turn on the monitor and computer

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



The installation of your monitor is complete.

If necessary, use the monitor's controls to adjust the picture.

#### If no picture appears on your screen

- Check that the monitor is correctly connected to the computer.
- If NO INPUT SIGNAL appears on the screen, confirm that your computer's graphic board is completely seated in the correct bus slot.
- 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 - 109 kHz, and the vertical frequency is between 48 - 160 Hz.

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

#### For customers using Windows 95/98

To maximize the potential of your monitor, install the new model information file from the supplied Setup 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 Setup Disk and select this monitor's model name as the monitor type.

#### For customers using Windows NT4.0

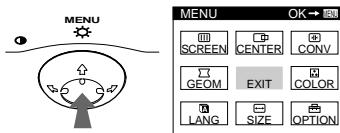
Monitor setup in Windows NT4.0 is different from Windows 95/98 and does not involve the selection of monitor type. Refer to the Windows NT4.0 instruction manual for further details on adjusting the resolution, refresh rate, and number of colors.

### Selecting the on-screen menu language (LANG)

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

#### 1 Press the center of the control button.

See page 9 for more information on using the control button.



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



#### 3 Move the control button ↓↑ to select a language.

- ENGLISH
- FRANÇAIS: French
- DEUTSCH: German
- ESPAÑOL: Spanish
- ITALIANO: Italian
- NEDERLANDS: Dutch
- SVENSKA: Swedish
- РУССКИЙ: Russian
- 日本語: Japanese

#### To close the menu

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

#### To reset to English

Press the RESET button while the LANGUAGE menu is displayed on the screen.

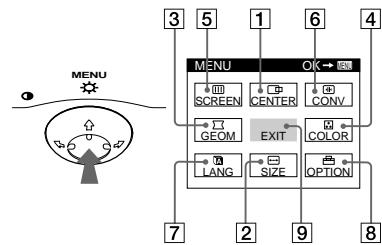
US

## Customizing Your Monitor

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

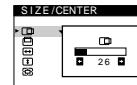
### Navigating the menu

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

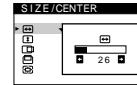


Use the control button to select one of the following menus.

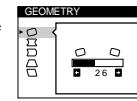
- 1 CENTER (page 10)**  
Selects the CENTER menu to adjust the picture's centering, size or zoom.



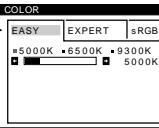
- 2 SIZE (page 10)**  
Selects the SIZE menu to adjust the picture's size, centering or zoom.



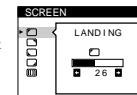
- 3 GEOM (page 10)**  
Select the GEOM menu to adjust the picture's rotation and shape.



- 4 COLOR (page 12)**  
Select 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.

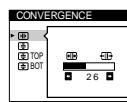


- 5 SCREEN (page 11)**  
Select the SCREEN menu to adjust the picture's quality. You can adjust the landing and moire cancellation effect.



### 6 CONV (page 11)

Select the CONV menu to adjust the picture's horizontal and vertical convergence.



### 7 LANG (page 7)

Select the LANG menu to choose the on-screen menu's language.



### 8 OPTION (page 13)

Select the OPTION menu to adjust the monitor's options. The options include:

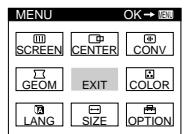
- degaussing the screen
- changing the on-screen menu position
- locking the controls

### 9 EXIT

Select EXIT to close the menu.

### Displaying the current input signal

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

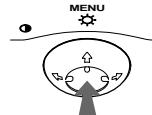


the resolution of the current input signal  
(1024x768)  
the horizontal and vertical frequencies of the current input signal

### Using the control button

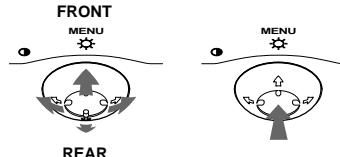
#### 1 Display the main MENU.

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



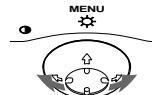
#### 2 Select the menu you want to adjust.

Highlight the desired menu by moving the control button towards the rear to go up ( $\uparrow$ ), towards the front to go down ( $\downarrow$ ), and left ( $\leftarrow$ ) or right ( $\rightarrow$ ) to move sideways.



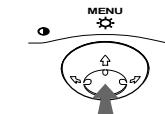
#### 3 Adjust the menu.

Move the control button left ( $\leftarrow$ ) or right ( $\rightarrow$ ) to make the adjustment.



#### 4 Close the menu.

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



### Resetting the adjustments

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



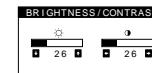
## Adjusting the brightness and contrast

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 $\downarrow/\uparrow$ to adjust the brightness ( $\odot$ ), and $\leftarrow/\rightarrow$ to adjust the contrast ( $\ominus$ ).

#### If you are using the sRGB mode

If you selected the sRGB mode in the COLOR menu, the following BRIGHTNESS/CONTRAST menu appears on the screen.



For more information about using the sRGB mode, see "Adjusting the color of the picture (COLOR)" on page 12.

The menu automatically disappears after about 3 seconds.

US

## 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 down/up to select for horizontal adjustment, or left/right for vertical adjustment. Then move the control button to adjust the size.**

## 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 down/up to select for horizontal adjustment, or left/right for vertical adjustment. Then move the control button to adjust the centering.**

## 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 down/up to select (zoom), and move to enlarge or reduce the picture.**

### Note

Adjustment stops when either the horizontal or vertical size reaches its maximum or minimum value.

## 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 down/up 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 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 down/up to select the desired adjustment item. Then move the control button to make the adjustment.**

Select	To
	horizontally shift red or blue shadows
	vertically shift red or blue shadows
TOP V CONVER TOP	vertically shift red or blue shadows at the top of the screen
BOT V CONVER BOTTOM	vertically shift red or blue shadows at the bottom of the screen

## Adjusting the quality of the picture (SCREEN)

The SCREEN settings allow you to adjust the quality of the picture by controlling the moire and landing.

- If the color is irregular at the corners of the screen, adjust the landing.
- If elliptical or wavy patterns appear on the screen, cancel the moire.

The CANCEL MOIRE and MOIRE ADJUST settings are stored in memory for the current input signal. All other 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 SCREEN and press the center of the control button again.**  
The SCREEN menu appears on the screen.
- 3 First move the control button down/up to select the desired adjustment item. Then move the control button to make the adjustment.**

Select	To
	reduce any color irregularities in the screen's top left corner to a minimum.
	reduce any color irregularities in the screen's top right corner to a minimum.
	reduce any color irregularities in the screen's bottom left corner to a minimum.
	reduce any color irregularities in the screen's bottom right corner to a minimum.
	turn the moire cancellation function ON or OFF. (MOIRE ADJUST) appears in the menu when you select ON.
	adjust the degree of moire cancellation until the moire 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



### Note

The picture may become fuzzy when CANCEL MOIRE is set to ON.

## 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 color to a printed picture's colors. 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 COLOR and press the center of the control button again.

The COLOR menu appears on the screen.

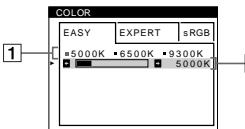
### 3 Move the control button to select the adjustment mode.

There are three types of adjustment modes, EASY, EXPERT and sRGB.

### 4 First move the control button to select the desired adjustment item. Then move the control button to make the adjustment.

Adjust the selected mode according to the following instructions.

### EASY mode



### 1 Move the control button to select the color temperature row . Then move the control button to select a color temperature.

The preset color temperatures are 5000K, 6500K, 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 6500K and 5000K.

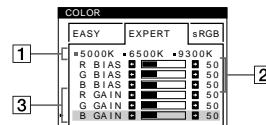
### 2 If necessary, fine tune the color temperature. Move the control button to select the color temperature row . Then move the control button to fine tune the color temperature.

If you fine tune the color temperature, the new color settings are stored in memory for each of the three color temperatures and item of the on-screen menu changes as follows.

- [5000K]→
- [6500K]→
- [9300K]→

### EXPERT mode

You can make additional adjustments to the color in greater detail by selecting the EXPERT mode.



### 1 Move the control button to select the color temperature row . Then move the control button to select a color temperature.

### 2 Move the control button to select the adjustment item . Then move the control button to adjust the BIAS (black level). This adjusts the dark areas of an image.

### 3 Move the control button to select the adjustment item . Then move the control button to adjust the GAIN (white level). This adjusts the light areas of an image.

You can adjust the R (red), G (green), B (blue) component of the input signal when making changes to items and .

If you fine tune the color temperature, the new color settings are stored in memory for each of the three color temperatures and item of the on-screen menu change as follows.

- [5000K]→
- [6500K]→
- [9300K]→

### 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 select the sRGB mode in the COLOR menu. However, in order to display the sRGB colors correctly ( $y=2.2$ , 6500K), you must set your computer to the sRGB profile and adjust the brightness ( ) and contrast ( ) to the numbers shown in the menu. For information on how to change the brightness ( ) and contrast ( ), see page 9.

### Note

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



## Additional settings (OPTION)

You can manually degauss (demagnetize) the monitor, 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 2 seconds. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

**US**

### Changing the menu's position

Change the menu's position if it is blocking an image on the screen.

### To change the menu's on-screen position, first move the control button to select (OSD H POSITION) for horizontal adjustment, or (OSD V POSITION) for vertical adjustment. Then move the control button to shift the on-screen menu.

### Locking the controls

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

### To cancel the control lock

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

## 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 7)
- adjustment mode in the COLOR menu (EASY, EXPERT, sRGB) (page 12)
- on-screen menu position (page 13)
- control lock (page 13)

### Resetting all of the adjustment data for all input signals

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

#### Note

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

**RESET**

## 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 - 109 kHz, vertical: 48 - 160 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	④ (power) indicator
normal operation	≤ 145 W	green
1 standby	≤ 15 W	green and orange alternate
2 suspend (sleep)*	≤ 15 W	green and orange alternate
3 active off** (deep sleep)*	Approx. 1 W	orange
power off	0 W	off

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

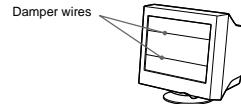
\*\* When your computer enters a power saving mode, the input signal is cut and NO INPUT SIGNAL appears on the screen. After a few seconds, the monitor enters a power saving mode.

## 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.

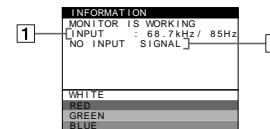


Damper wires

### On-screen messages

If there is something wrong with the input signal, one of the following messages appears on the screen.

#### If NO INPUT SIGNAL appears on the screen



##### ① The frequencies of the current input signal

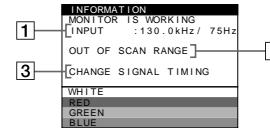
If the monitor recognizes the frequencies of the current input signal, the horizontal and vertical frequencies are displayed.

##### ② The input signal condition

#### NO INPUT SIGNAL

This indicates that no signal is input.

#### If OUT OF SCAN RANGE appears on the screen



##### ① The frequencies of the current input signal

If the monitor recognizes the frequencies of the current input signal, the horizontal and vertical frequencies are displayed.

##### ② The input signal condition

#### OUT OF SCAN RANGE

This indicates that the input signal is not supported by the monitor's specifications.

##### ③ The remedies

CHANGE SIGNAL TIMING appears on the screen. If you are replacing an old monitor with this monitor, reconnect the old monitor. Then adjust the computer's graphic board so that the horizontal frequency is between 30 - 109 kHz, and the vertical frequency is between 48 - 160 Hz.

**US**

For more information, see "Trouble symptoms and remedies" on page 16

## Trouble symptoms and remedies

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

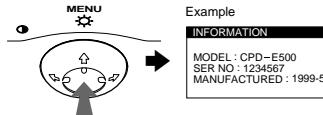
Symptom	Check these items
<b>No picture</b>	<ul style="list-style-type: none"> <li>If the  (power) indicator is not lit           <ul style="list-style-type: none"> <li>Check that the power cord is properly connected.</li> <li>Check that the  (power) switch is in the "on" position.</li> </ul> </li> <li>If the NO INPUT SIGNAL message appears on the screen, or if the  (power) indicator is either orange or alternating between green and orange           <ul style="list-style-type: none"> <li>Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets. (page 6).</li> <li>Check that the HD15 video input connector's pins are not bent or pushed in.</li> <li><b>■Problems caused by the connected computer or other equipment</b> <ul style="list-style-type: none"> <li>The computer is in power saving mode. Try pressing any key on the computer keyboard or moving the mouse.</li> <li>Check that the computer's power is "on."</li> <li>Check that the graphic board is completely seated in the proper bus slot.</li> </ul> </li> </ul> </li> </ul>
If the OUT OF SCAN RANGE message appears on the screen	<ul style="list-style-type: none"> <li><b>■Problems caused by the connected computer or other equipment</b> <ul style="list-style-type: none"> <li>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 – 109 kHz Vertical: 48 – 160 Hz</li> </ul> </li> </ul>
If no message is displayed and the  (power) indicator is green or flashing orange	<ul style="list-style-type: none"> <li>Use the Self-diagnosis function (page 18).</li> </ul>
If using Windows 95/98	<ul style="list-style-type: none"> <li>If you replaced an old monitor with this monitor, reconnect the old monitor and do the following. Install the Setup Disk (page 7) and select this monitor ("CPD-E500") from among the Sony monitors in the Windows 95/98 monitor selection screen.</li> </ul>
If using a Macintosh system	<ul style="list-style-type: none"> <li>Check that the supplied Macintosh adapter and the video signal cable are properly connected (page 6).</li> </ul>
<b>Picture flickers, bounces, oscillates, or is scrambled</b>	<ul style="list-style-type: none"> <li>Isolate and eliminate any potential sources of electric or magnetic fields such as other monitors, laser printers, electric fans, fluorescent lighting, or televisions.</li> <li>Move the monitor away from power lines or place a magnetic shield near the monitor.</li> <li>Try plugging the monitor into a different AC outlet, preferably on a different circuit.</li> <li>Try turning the monitor 90° to the left or right.</li> <li><b>■Problems caused by the connected computer or other equipment</b> <ul style="list-style-type: none"> <li>Check your graphics board manual for the proper monitor setting.</li> <li>Confirm that the graphics mode (VESA, Macintosh 21" 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 graphics boards may have a sync pulse that is too narrow for the monitor to sync correctly.</li> <li>Adjust the computer's refresh rate (vertical frequency) to obtain the best possible picture.</li> </ul> </li> </ul>
<b>Picture is fuzzy</b>	<ul style="list-style-type: none"> <li>Adjust the brightness and contrast (page 9).</li> <li>Degauss the monitor* (page 13).</li> <li>If CANCEL MOIRE is ON, the picture may become fuzzy. Decrease the moire cancellation effect or set CANCEL MOIRE to OFF (page 11).</li> </ul>

Symptom	Check these items
<b>Picture is ghosting</b>	<ul style="list-style-type: none"> <li>Eliminate the use of video cable extensions and/or video switch boxes.</li> <li>Check that all plugs are firmly seated in their sockets.</li> </ul>
<b>Picture is not centered or sized properly</b>	<ul style="list-style-type: none"> <li>Adjust the size (page 10) or centering (page 10). Note that some video modes do not fill the screen to the edges.</li> </ul>
<b>Edges of the image are curved</b>	<ul style="list-style-type: none"> <li>Adjust the geometry (page 10).</li> </ul>
<b>Wavy or elliptical pattern (moire) is visible</b>	<ul style="list-style-type: none"> <li>Set CANCEL MOIRE to ON and adjust the degree of moire cancellation until the moire is at a minimum (page 11).</li> </ul>
<b>■Problems caused by the connected computer or other equipment</b>	
<b>Color is not uniform</b>	<ul style="list-style-type: none"> <li>Change your desktop pattern.</li> <li>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.</li> <li>Adjust the landing (page 11).</li> </ul>
<b>White does not look white</b>	<ul style="list-style-type: none"> <li>Adjust the color temperature (page 12).</li> </ul>
<b>Letters and lines show red or blue shadows at the edges</b>	<ul style="list-style-type: none"> <li>Adjust the convergence (page 11).</li> </ul>
<b>Monitor buttons do not operate (On appears on the screen)</b>	<ul style="list-style-type: none"> <li>If the control lock is set to ON, set it to OFF (page 13).</li> </ul>
<b>A hum is heard right after the power is turned on</b>	<ul style="list-style-type: none"> <li>This is the sound of the auto-degauss cycle. When the power is turned on, the monitor is automatically degaussed for two seconds.</li> </ul>

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

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

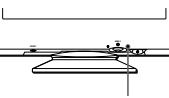
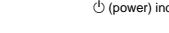
While the monitor is receiving a video signal, press and hold the center of the control button for more than five seconds to display this monitor's information box.

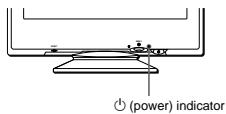


If the problem persists, call your authorized Sony dealer and give the following information.

- Model name: CPD-E500
- Serial number
- Name and specifications of your computer and graphics board.

## Self-diagnosis function

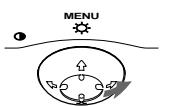
This monitor is equipped with a self-diagnosis function. If there is a problem with your monitor or computer, the screen will go blank and the  (power) indicator will either light up green or flash orange. If the  (power) indicator is lit in orange, the computer is in power saving mode. Try pressing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



 (power) indicator

### 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.



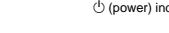
If all four color bars appear (white, red, green, blue), the monitor is working properly. Reconnect the video input cable and check the condition of your computer.

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 21 inches measured diagonally 90-degree deflection FD Trinitron
Viewable image size	Approx. 403.8 × 302.2 mm (w/h) (16 × 12 inches) 19.8" viewing image
Resolution	
Maximum	Horizontal: 2048 dots Vertical: 1536 lines
Recommended	Horizontal: 1600 dots Vertical: 1200 lines
Standard image area	Approx. 388 × 291 mm (w/h) (15 3/8 × 11 1/2 inches) or Approx. 364 × 291 mm (w/h) (14 3/8 × 11 1/2 inches)
Deflection frequency*	Horizontal: 30 to 109 kHz Vertical: 48 to 160 Hz
AC input voltage/current	100 to 240 V, 50 – 60 Hz, 2.0 – 1.0 A
Power consumption	Approx. 145 W
Dimensions	Approx. 497 × 480 × 478 mm (w/h/d) (19 5/8 × 19 × 18 7/8 inches)
Mass	Approx. 32 kg (70 lb 9 oz)
Plug and Play	DDC1/2B/2Bi, GTF**
Supplied accessories	See page 6

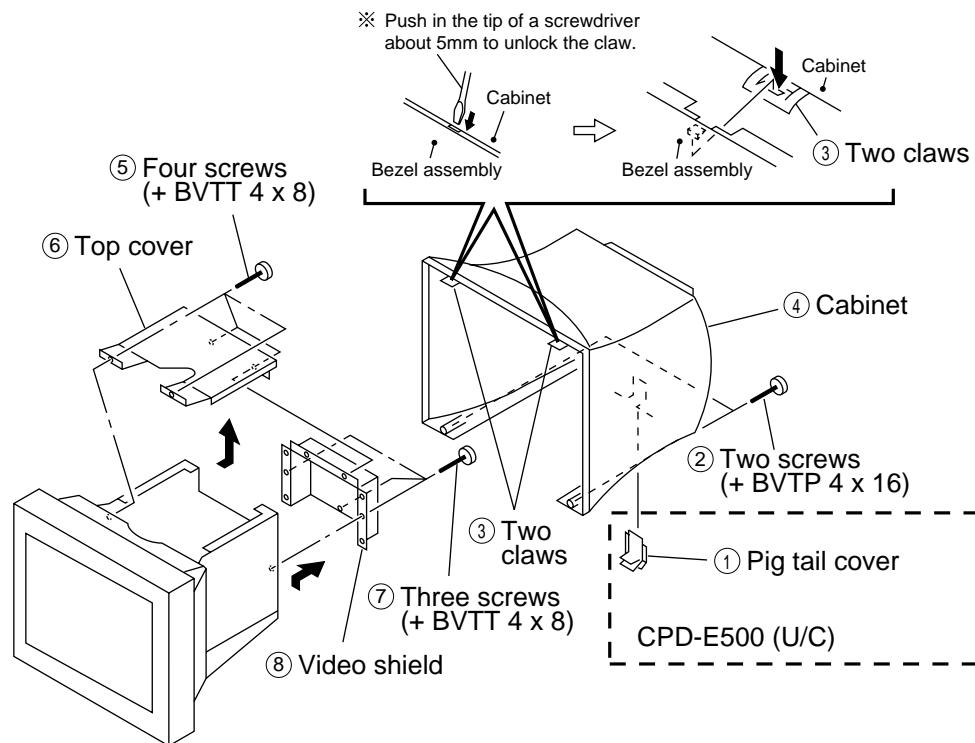
- \* Recommended horizontal and vertical timing condition
- Horizontal sync width duty should be more than 4.8% of total horizontal time or 0.8  $\mu$ s, whichever is larger.
  - Horizontal blanking width should be more than 2.3  $\mu$ sec.
  - Vertical blanking width should be more than 450  $\mu$ sec.
- \*\* If the input signal is Generalized Timing Formula (GTF) compliant, the GTF feature of the monitor will automatically provide an optimal image for the screen.

Design and specifications are subject to change without notice.

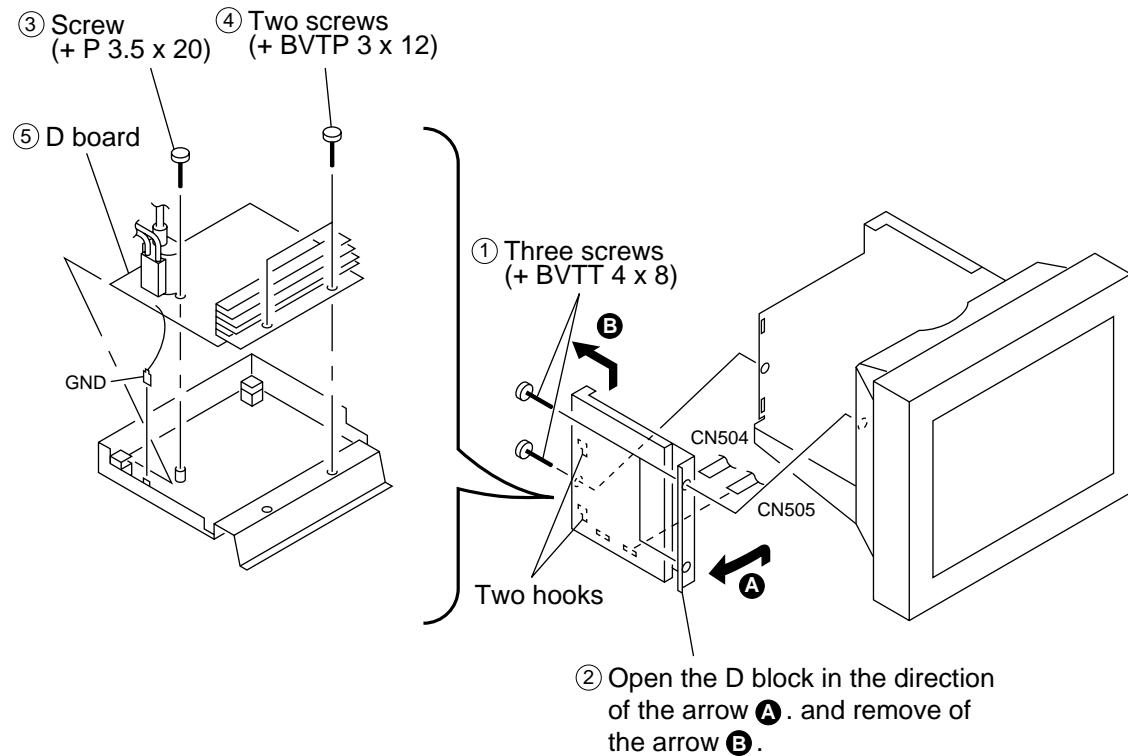
## SECTION 2

### DISASSEMBLY

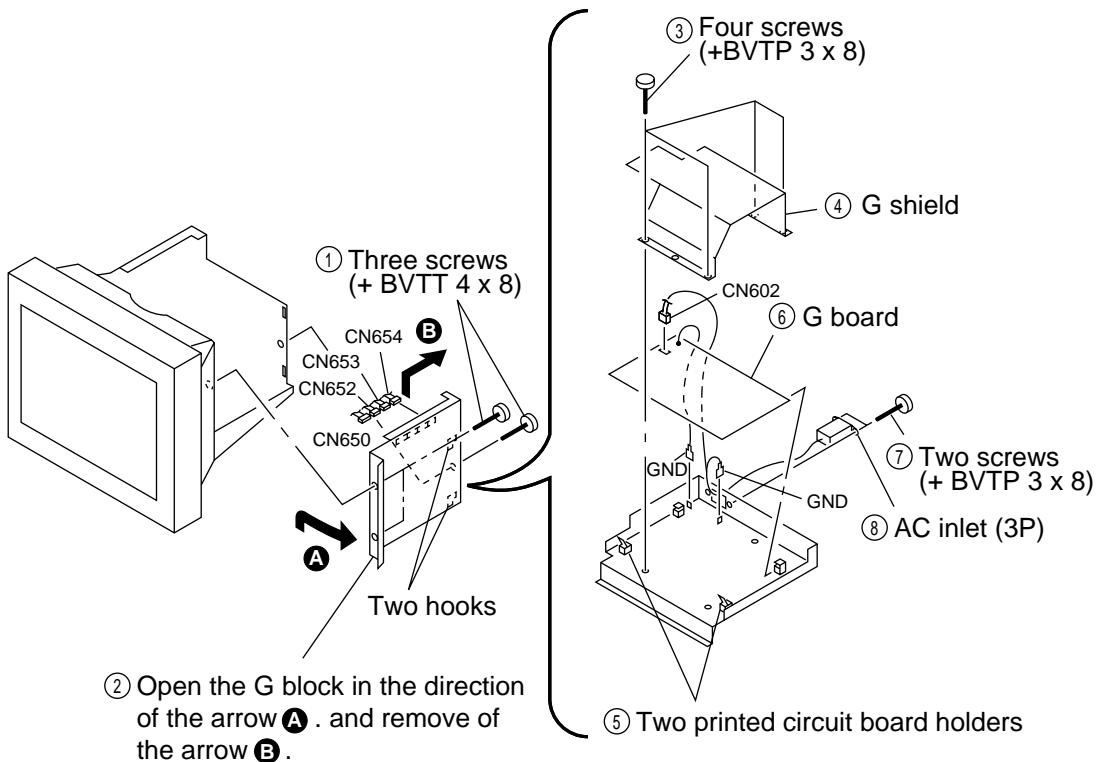
#### 2-1. CABINET REMOVAL



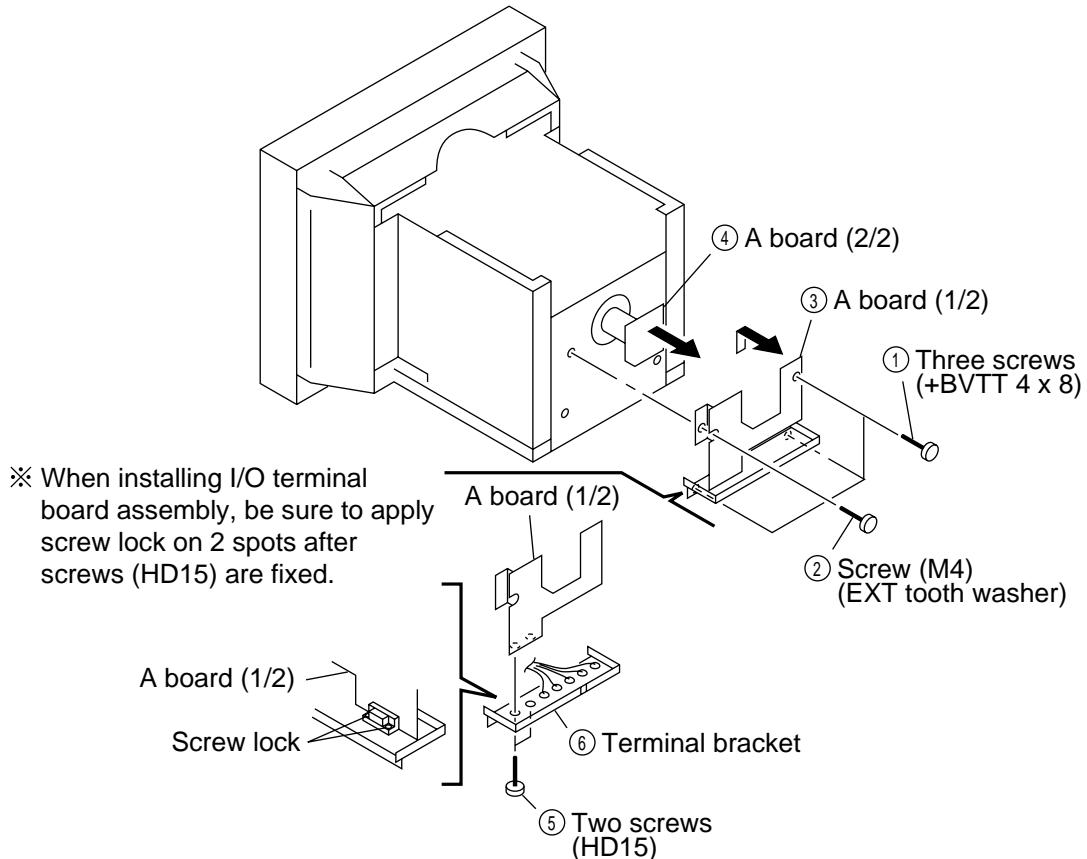
#### 2-2. D BOARD REMOVAL



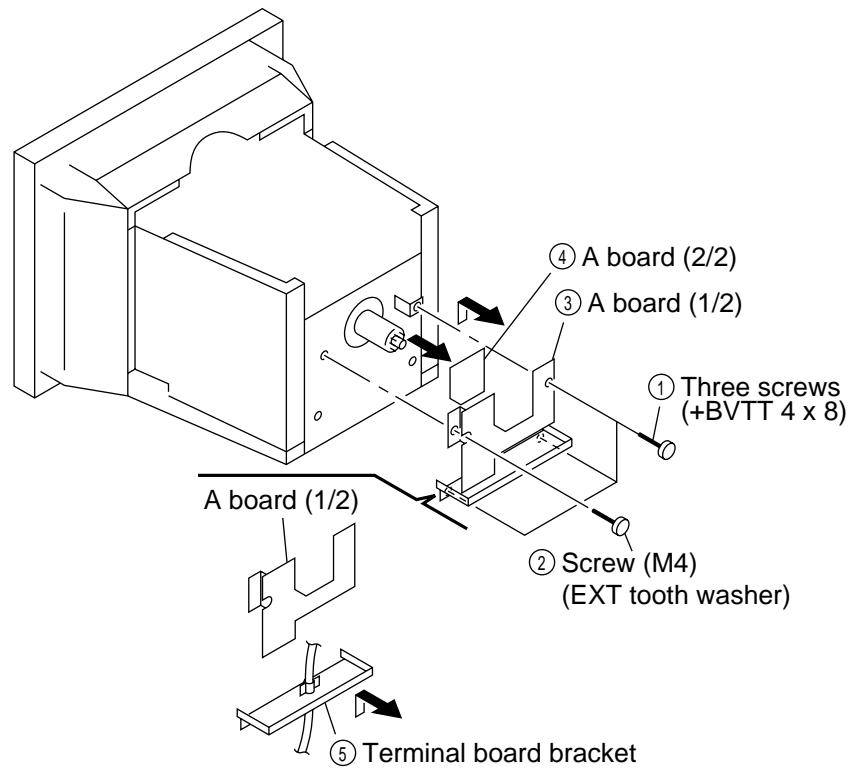
## 2-3. G BOARD REMOVAL



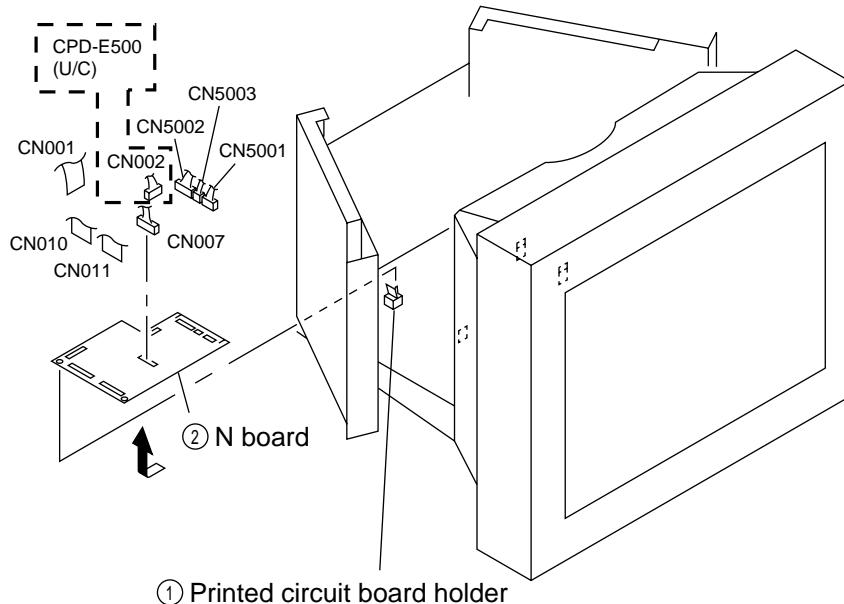
**2-4-1. A BOARD, I/O TERMINAL BOARD ASSEMBLY REMOVAL (CPD-E500E)**



**2-4-2. A BOARD, TERMINAL BRACKET REMOVAL (CPD-E500)**

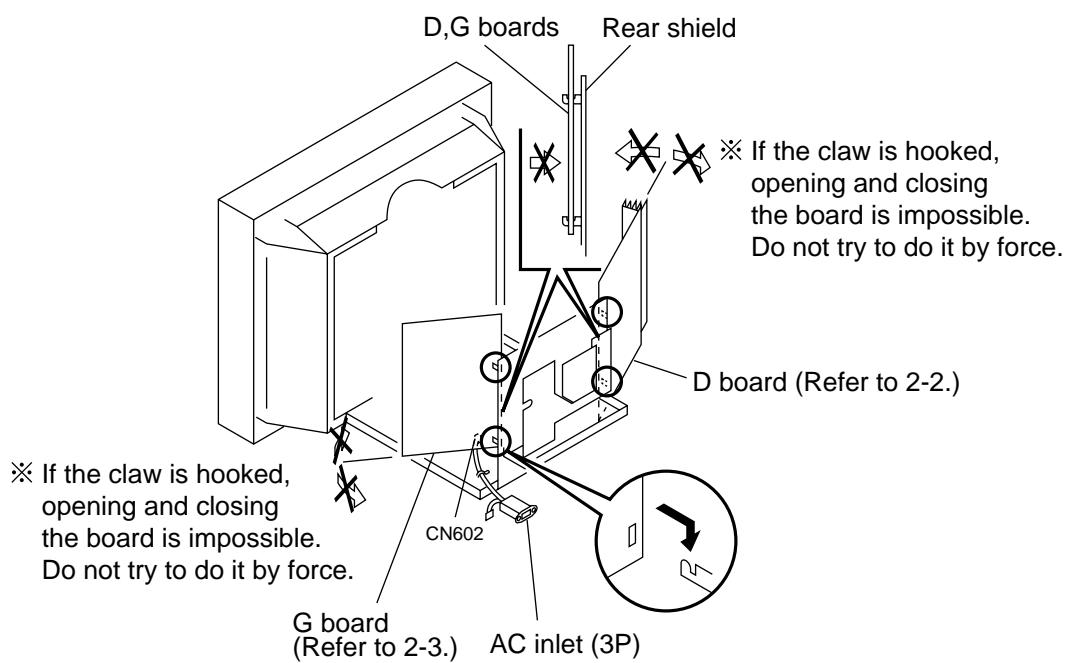


## 2-5. N BOARD REMOVAL



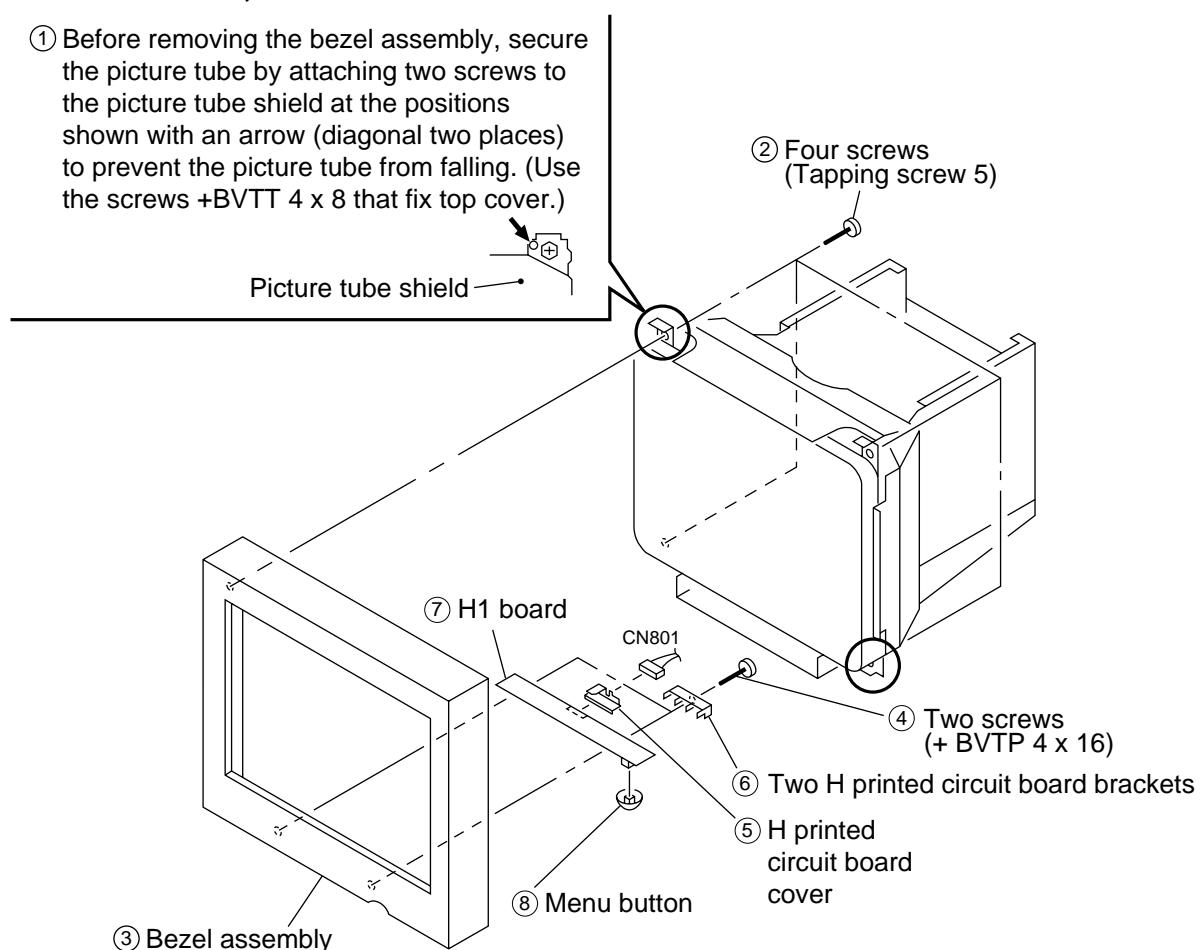
## 2-6. SERVICE POSITION

### CAUTION : SHORT

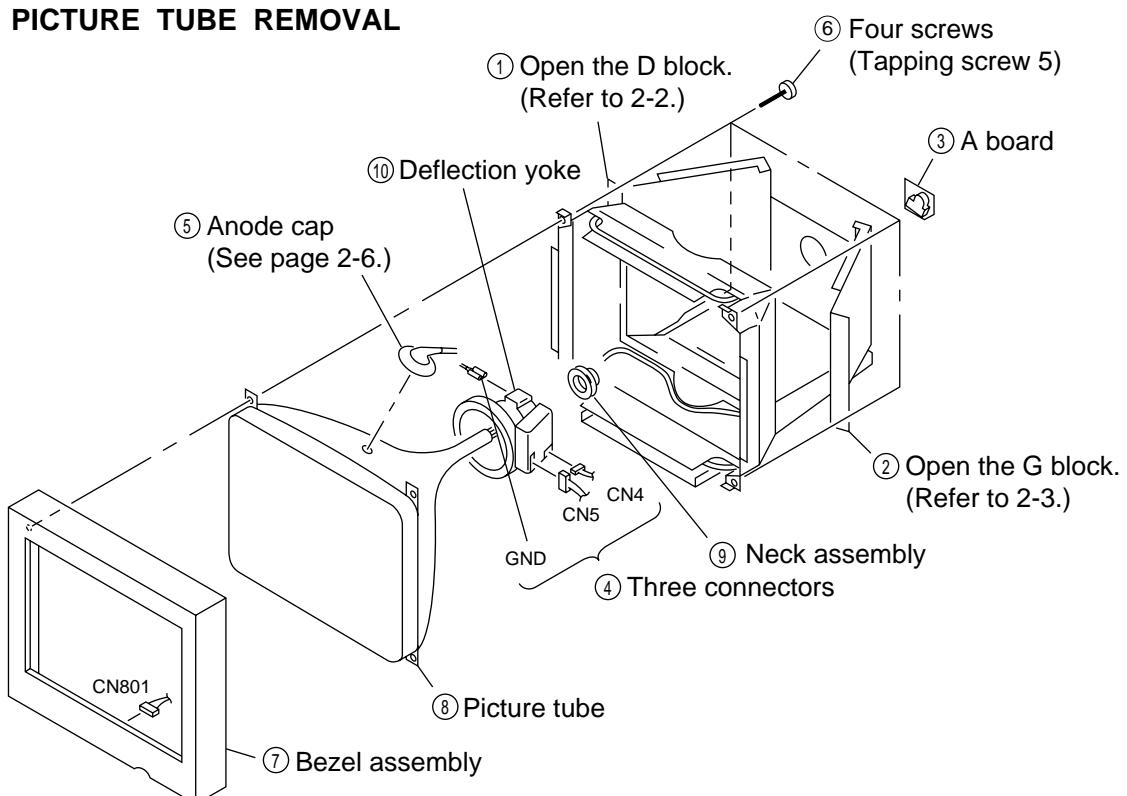


## 2-7. BEZEL ASSEMBLY, H1 BOARD REMOVAL

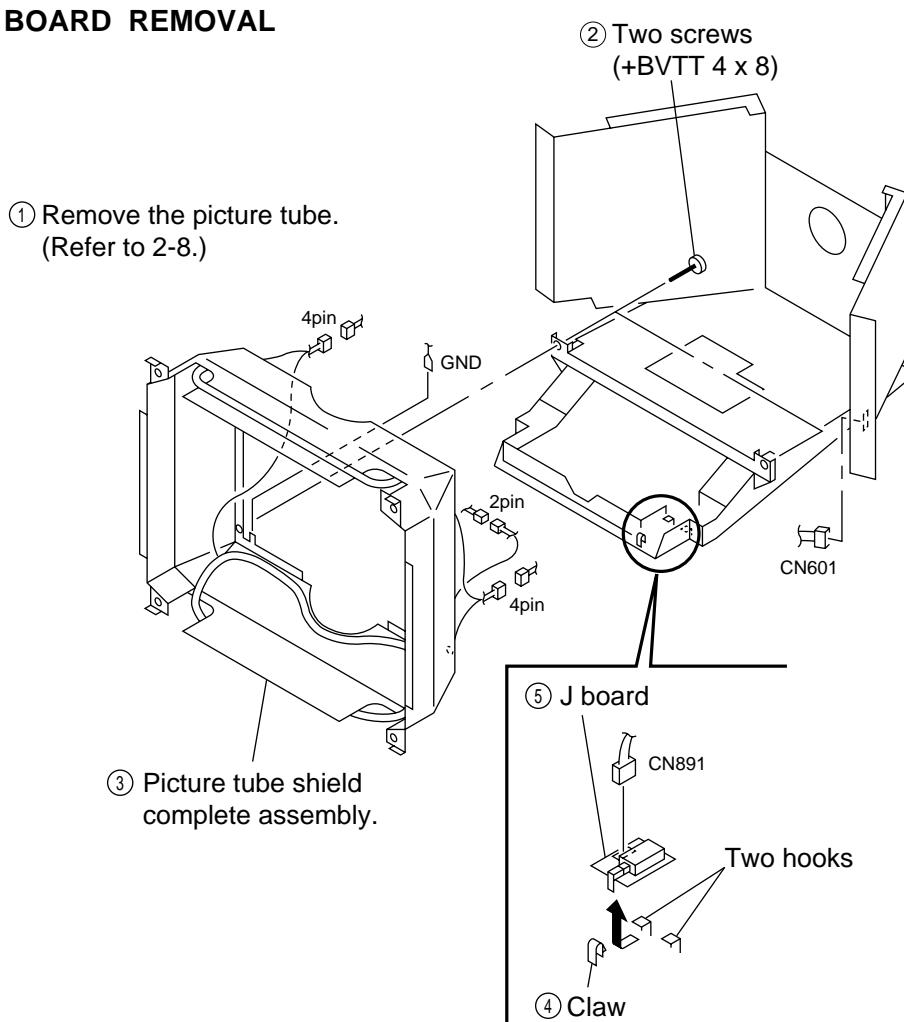
- ① Before removing the bezel assembly, secure the picture tube by attaching two screws to the picture tube shield at the positions shown with an arrow (diagonal two places) to prevent the picture tube from falling. (Use the screws +BVTT 4 x 8 that fix top cover.)



## 2-8. PICTURE TUBE REMOVAL



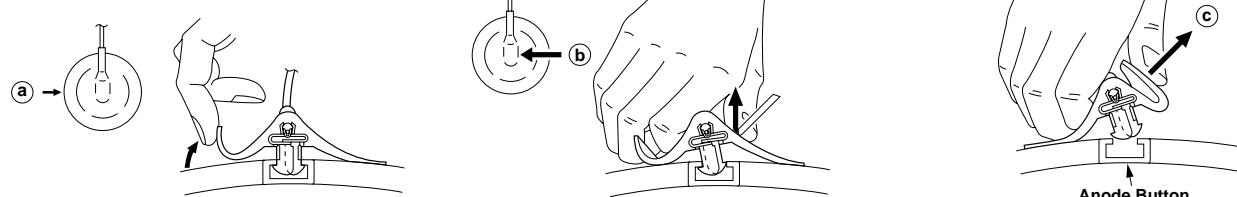
## 2-9. J BOARD REMOVAL



### • REMOVAL OF ANODE-CAP

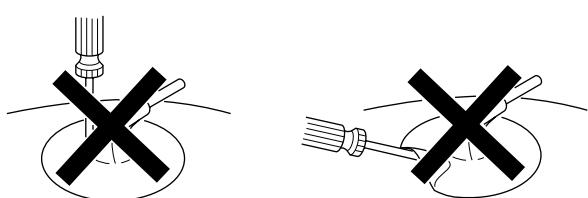
NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

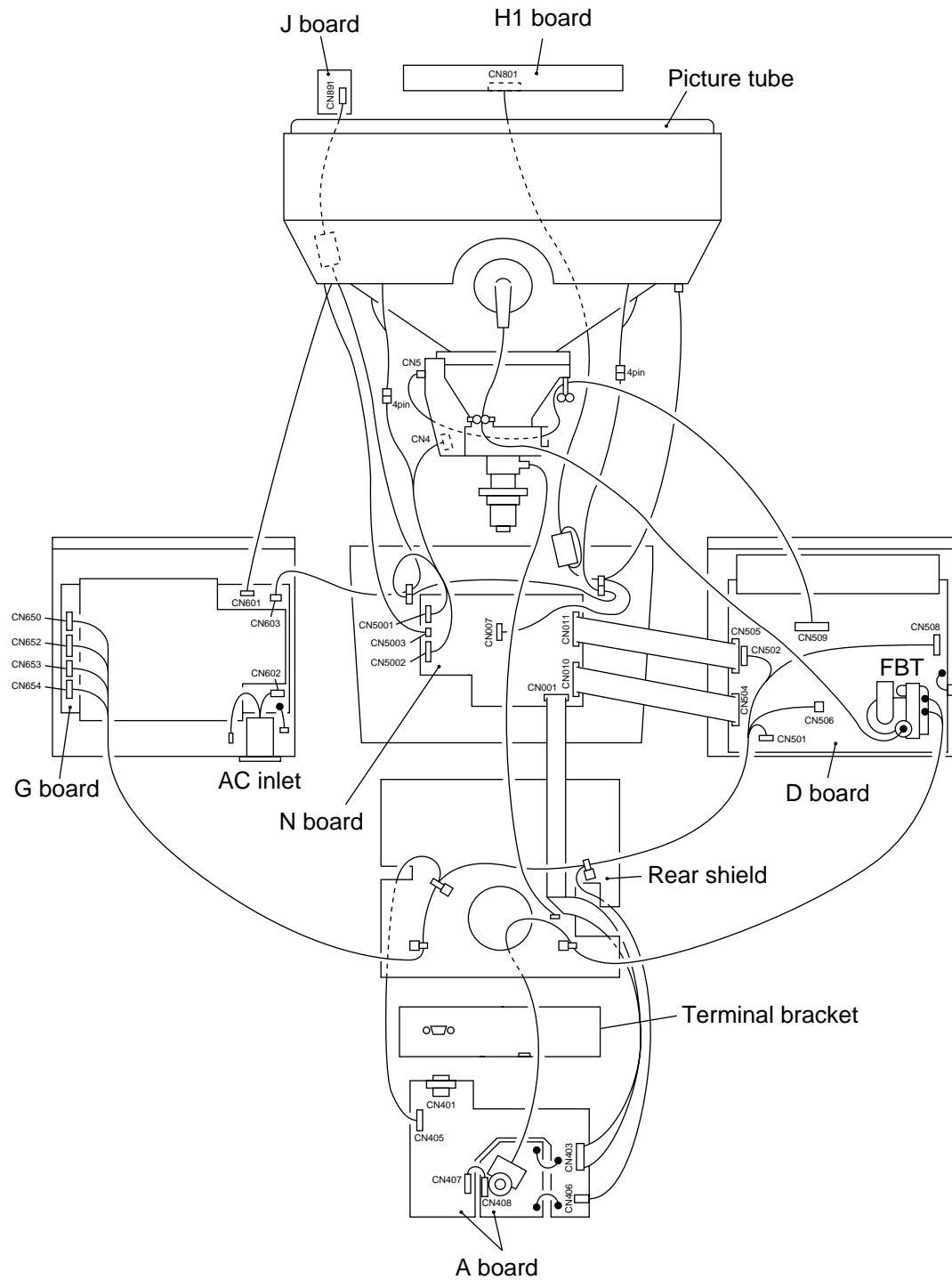
### • REMOVING PROCEDURES



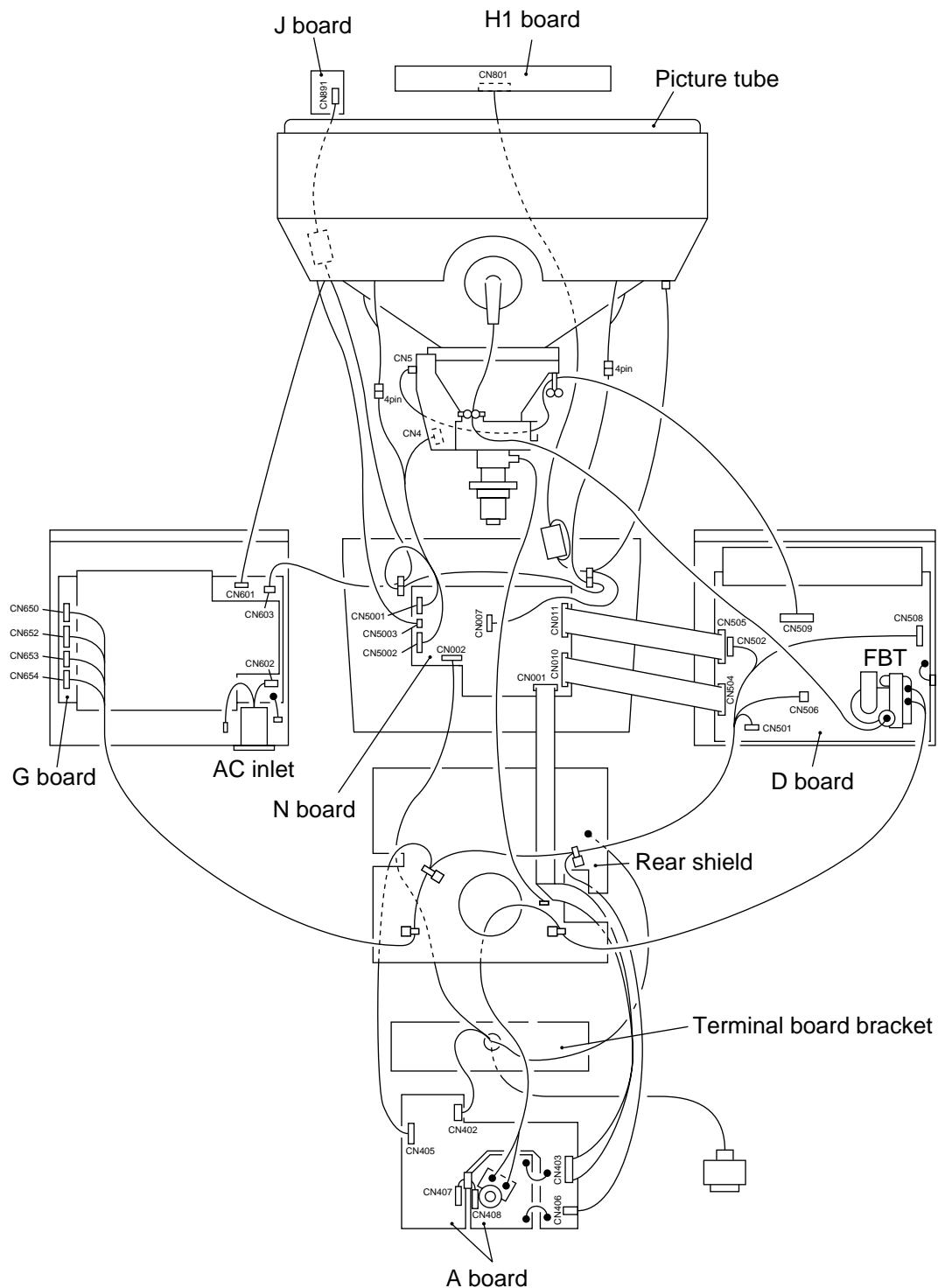
### • HOW TO HANDLE AN ANODE-CAP

- 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.



**2-10-1. HARNESS LOCATION (CPD-E500E)**

## 2-10-2. HARNESS LOCATION (CPD-E500)



## 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	C920, IC901, R923 R924, R929, R945, RV901, T902(FBT) • Mounted D Board
HV Protector Circuit Check	D Board	C922, C925, C926, D912, D914, D915, D921, Q907, Q908, R921, R922, R932, R937, R939, T902(FBT) • Mounted D Board
Beam Current Protector Circuit Check	D Board	C910, C921, C933, D901, D902, D913, IC503, IC901, R901, R920, R928, R930, R931, R940, R941, T902(FBT) • Mounted D Board
	G Board	IC652 • Mounted G Board
	N Board	IC001, R031, R032 • Mounted N Board

\* Confirm one minute after turning on the power.

#### a) HV Regulator Circuit Check

- 1) Enter black crosshatch signal (black on white background), and check that high voltage is in the specified range.

[Specification]:  $27.00 \pm 0.10$  kV

- 2) Check that the voltage of D912 cathode on the D board is 27.0 V or more.

#### b) HV Protector Circuit Check

- 1) Enter black crosshatch signal (black on white background).
- 2) Apply the specified voltage to the D912 cathode on the D board, and check that high voltage is 0.1 kV or less.

[Specification]:  $31.90 +0.00/-0.05$  V

#### c) Beam Current Protector Circuit Check

##### (1st Protector): D Board

- 1) Apply 4.5 V DC to CN504 ⑩ pin on the D board, and check high voltage value.
- 2) Connect constant current source to a section between T902 (FBT) ⑪ pin and ⑫ pin (GND) on the D board, and check that high voltage checked in 1) lowers by 1.50 kV or more when the specified current flows to the ⑪ pin.  
[Specification]:  $2.00 +0.00/-0.01$  mA

#### d) Beam Current Protector Circuit Check

##### (2nd Protector): D Board

- 1) Connect constant current source to a section between T902 (FBT) ⑪ pin and ⑫ pin (GND) on the D board, and check that the voltage of CN504 ⑩ pin becomes 0 V or less when the specified current flows to the ⑪ pin.  
[Specification]:  $1.70 +0.00/-0.01$  mA

#### e) Beam Current Protector Circuit Check

##### : G Board

- 1) Apply 264 V AC.
- 2) Enter about 5 V to CN650 ④ pin on the G board, and check that the output voltage of CN653 ② pin is about 15 V.
- 3) Enter about  $0\pm 0.2$  V to CN654 ④ pin, and check that the output voltage of CN653 ② pin becomes 1.0 V or less.

#### f) Beam Current Protector Circuit Check

##### : N Board

- 1) Check that the protector operates, when the voltage of CN010 ⑯ pin on the N board is lowered to 0 V or less (for more than 2 seconds).

## SECTION 4

### ADJUSTMENTS

**Note: Hand degauss must be used on stand-by or power-off condition.**

This model has an automatic earth magnetism correction function by using an earth magnetism sensor and a LCC coil. When using a hand degauss while monitor (LCC coil) is being operated, it sometimes gets magnetized, and the system may not work properly as a result.

#### • 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. Adjust the tilt of DY, and fix lightly with a clamp.
- Note: "TILT" = "128".

#### • Landing Fine Adjustment

1. Put the set inside the Helmholtz coil. ("LCC SW" = "12")
2. Input the single green signal and set the "CONTRAST" = "255".

Note: After the W/B adjustment with 9300K, measure an average of  $\Sigma I_k$  when a full white signal is entered in the CONT MAX/BRT CENT status. Then make adjustment so that the specified screen can be attained after aging for 2 hours with  $I_k$  equivalent to 30% of the average value.

3. Demagnetize the metal part of the chassis with the hand degausser and coil degausser, and the CRT surface with the hand degausser.
- Input AC 230V to AC IN, turn on and off the power to perform auto degaussing. (Perform auto degaussing by setting "FUNCTION SW"=1. Return to the original value after use.)

Demagnetize the CRT surface with the hand degausser again.

Note:

- (1) Hand degauss must be used on stand-by or power-off condition.

This model has an automatic earth magnetism correction function by using an earth magnetism sensor and a LCC coil. When using a hand degauss while monitor (LCC coil) is being operated, it sometimes gets magnetized, and the system may not work properly as a result.

- (2) Adjust in a non-magnetic field.
  - (3) If adjusting in a magnetic fields, add the shift from the non-magnetic field in your estimation.
  4. Attach the wobbling coil to the designated part of the CRT neck.
  5. Attach the sensor of the landing adjustment unit on the CRT surface.
  6. Adjust the DY position and purity, and the DY tilt, and landing of the center and 4 corners with the landing checker.
- After adjustment, set "LCC SW" to "13".

- Write terrestrial magnetism sensor reading VX and VY to "LCC VX" and LCC VY" respectively. Adjust the landing by moving "LCC NS", "LCC LT", "LCC LB", "LCC RT" and "LCC RB". However, the register adjustment must be limited within the following range.

"LCC NS"  $128 \pm 15$

"LCC LT", "LCC LB", "LCC RT", "LCC RB"  $128 \pm 40$

Save the service data.

#### <Specifications>

Adjust so that the green is within the specification given right.

4 corner adjust target : within  $\pm 1$

(μm)		
0 ± 3	0 ± 7.5	0 ± 3
0 ± 3	0 ± 7.5	0 ± 3
0 ± 3	0 ± 7.5	0 ± 3

The red and blue must be within the specification given right with respect to the green.

(μm)		
± 6	± 6	± 6
± 6	± 6	± 6
± 6	± 6	± 6

A difference between red and blue must be within the specification given right.

(μm)		
10	10	10
10	7	10
10	10	10

\* Adjustment and measurement should be made at the points one inch inside the fluorescent screen.

7. Tighten DY screw

Note: Torque  $22 \pm 2 \text{ kg}\cdot\text{cm}$  ( $2.2 \pm 0.2 \text{ Nm}$ ) autodegauss it.

8. For the up/down swing, swing the DY and insert a wedge so that the up and down pins are equal at the top and bottom. Adjust the H.TRP VR of DY so that the horizontal trapezoid is equal at the left and right. Insert the wedge firmly so that the DY does not shake.

9. Check the landing of each corner, and if it does not satisfy the specification, adjust the landing of four corners using "LCC LT", "LCC LB", "LCC RT" and "LCC RB". However, the register adjustment must be limited within the following range.

"LCC NS"  $128 \pm 15$

"LCC LT", "LCC LB", "LCC RT", "LCC RB"  $128 \pm 40$

After adjustment, save the service data.

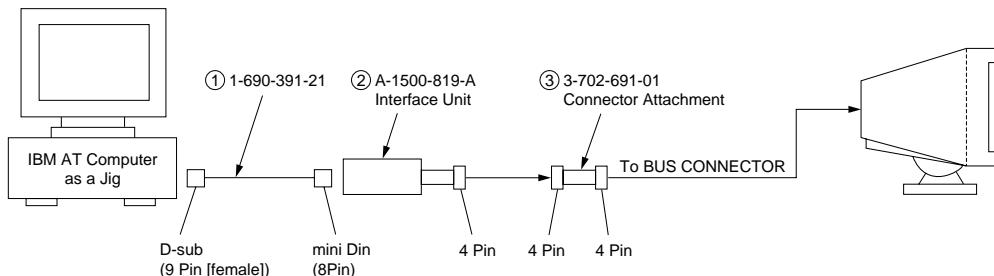
10. Remove the sensor and wobbling coil.

11. Switch the signal to R.G.B., and check that each color is pure.

12. Check that the DY is not tilting, and fix the purity Mg with a white pen. Fix wedges with RTV.

# CPD-E500/E500E

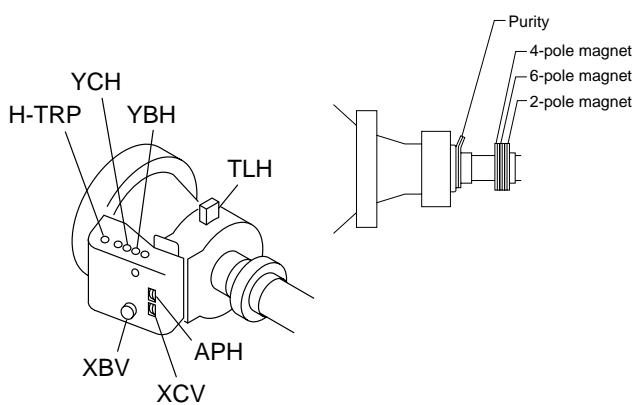
Connect the communication cable of the computer to the connector located on the D board. Run the service software and then follow the instruction.



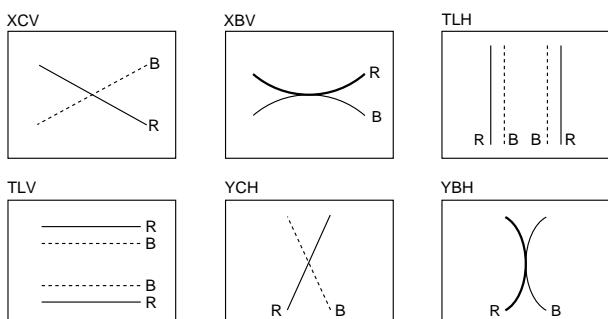
\*The parts above (① ~ ③) are necessary for DAS adjustment.

## • Convergence Rough Adjustment

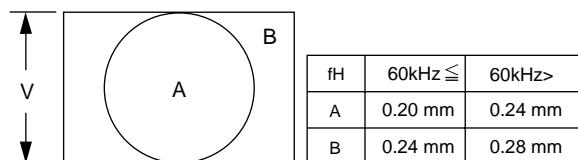
- (1) Receive an image of the white crosshatch signals (white lines on black).
- (2) Place the protrusions of the 6-fold poles magnet attached to the CRT neck upon each other.
- (3) Make rough adjustment of the H and V direction convergence by using 4-fold poles magnet.



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



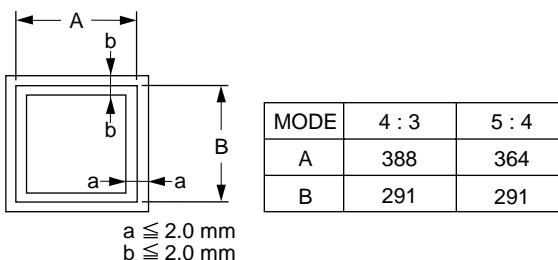
## • Convergence Specification



## • White Balance Adjustment Specification

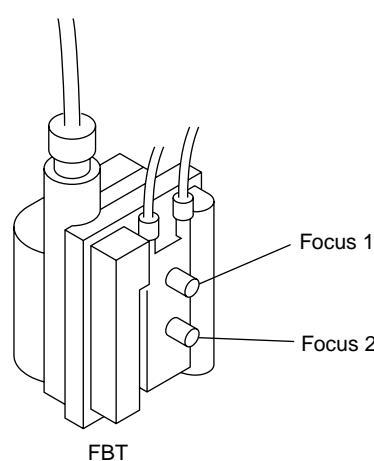
1. 9300K  
 $x=0.283 \pm 0.005$   
 $y=0.298 \pm 0.005$   
(All White)
2. 6500K  
 $x=0.313 \pm 0.005$   
 $y=0.329 \pm 0.005$   
(All White)
3. 5000K  
 $x=0.346 \pm 0.005$   
 $y=0.359 \pm 0.005$   
(All White)

## • Vertical and Horizontal Position and Size Specification



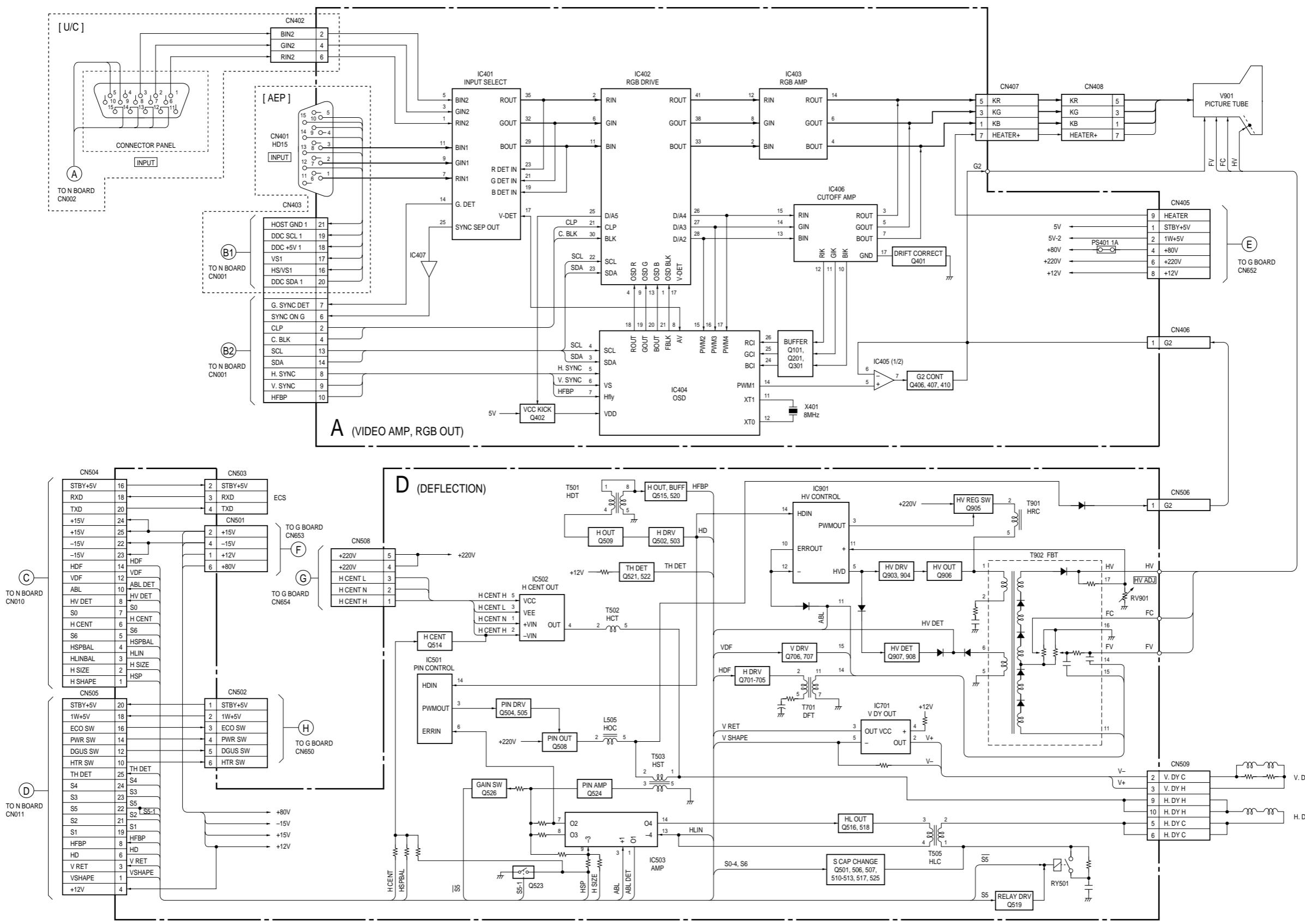
## • Focus adjustment

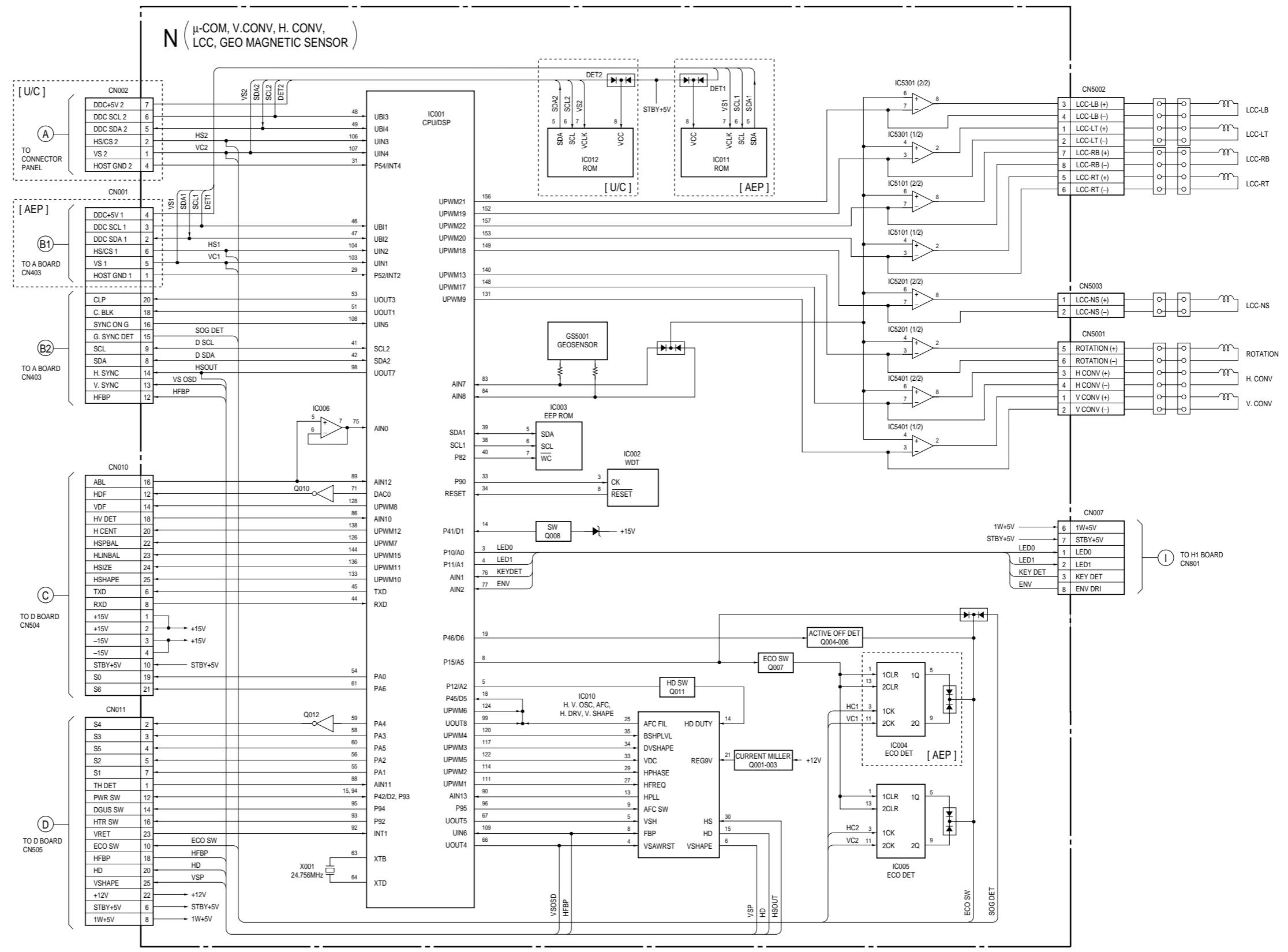
Adjust the focus volume 1 and 2 for the optimum focus.

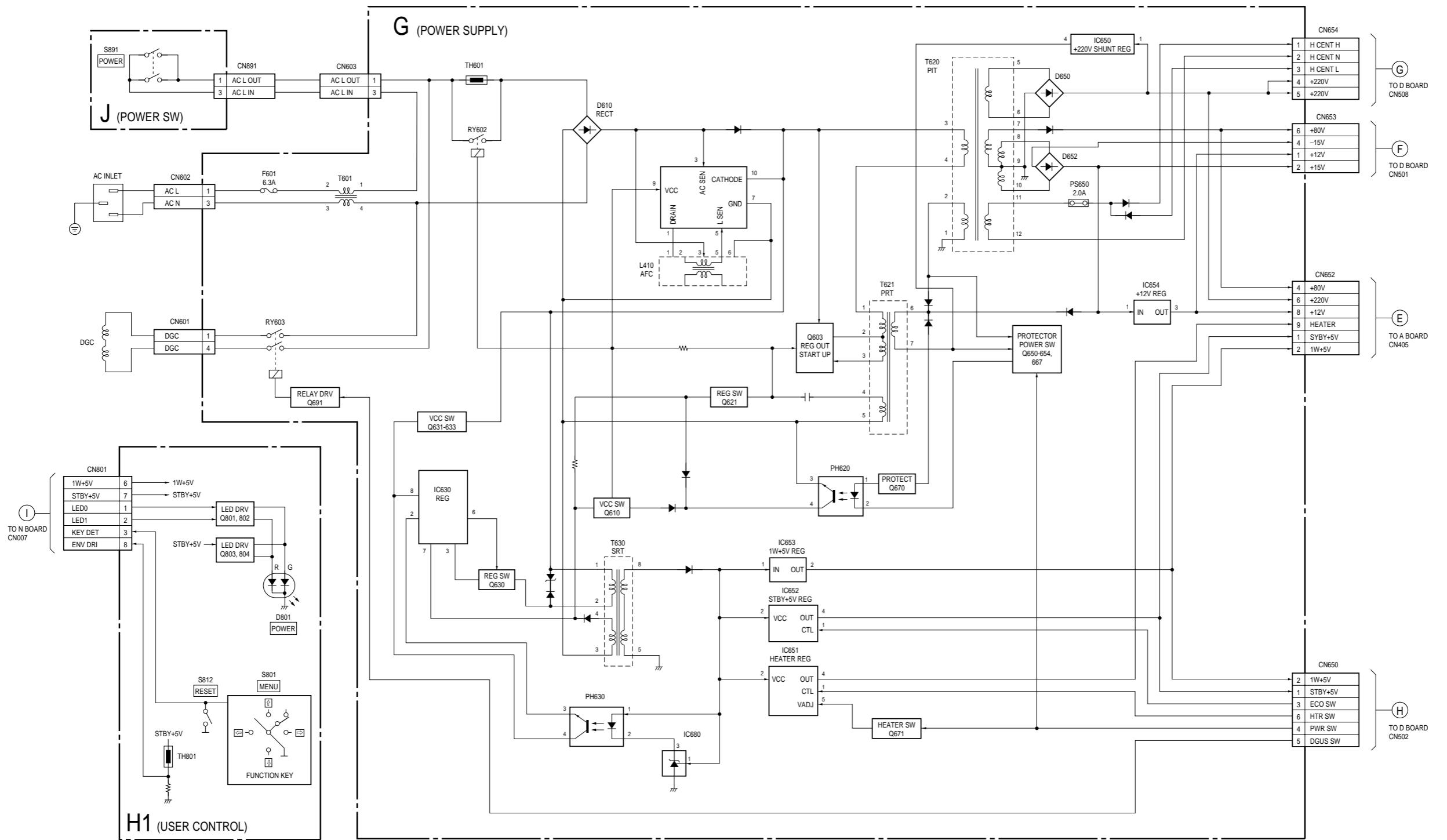


## SECTION 5 DIAGRAMS

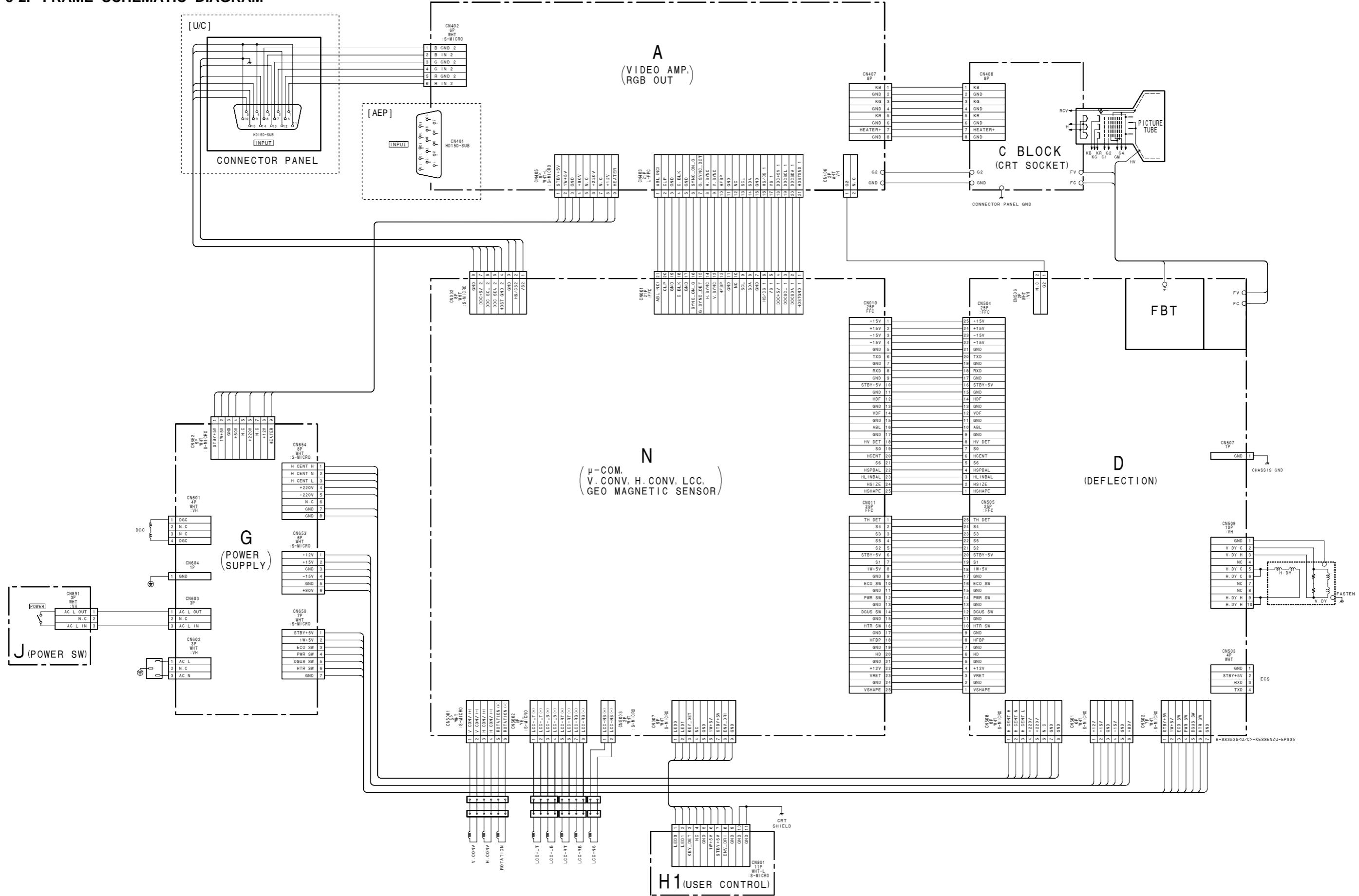
### 5-1. BLOCK DIAGRAMS



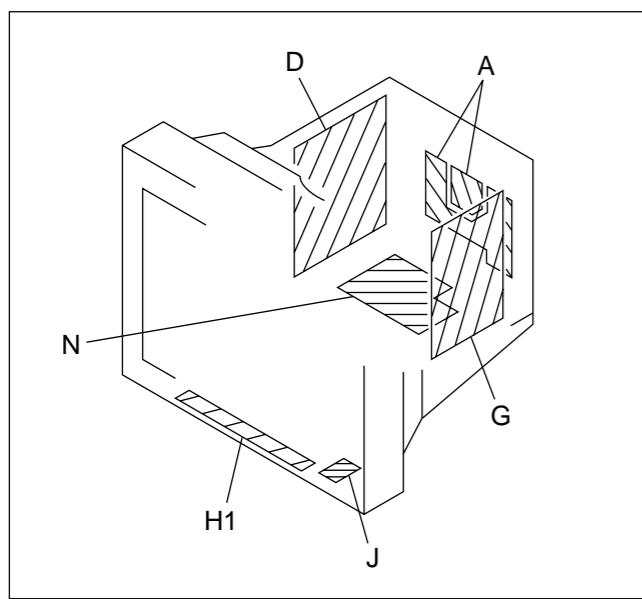




## 5-2. FRAME SCHEMATIC DIAGRAM



### 5-3. CIRCUIT BOARDS LOCATION



### 5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

#### Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. ( $\text{pF}$ :  $\mu\mu\text{F}$ )  
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.

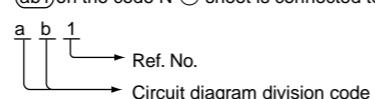
**Note: The components identified by shading and mark ! are critical for safety. Replace only with part number specified.**

**Note: Les composants identifiés par 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 M 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.
- Circle numbers are waveform references.
- : B + bus.
- : B - bus.

#### Divided circuit diagram

One sheet of N board circuit diagram is divided into three sheets, each having the code N-@ to N-@. For example, the destination on the code N-@ sheet is connected to on the N-@ sheet.



Part Replaced ()	
HV ADJ	RV901

Part Replaced ()	
HV Regulator Circuit Check	D Board C920, IC901, R923 R924, R929, R945, RV901, T902(FBT) • Mounted D Board
HV Protector Circuit Check	D Board C922, C925, C926, D912, D914, D915, D921, Q907, Q908, R921, R922, R932, R937, R939, T902(FBT) • Mounted D Board
Beam Current Protector Circuit Check	D Board C910, C921, C933, D901, D902, D913, IC503, IC901, R901, R920, R928, R930, R931, R940, R941, T902(FBT) • Mounted D Board G Board IC652 • Mounted G Board N Board IC001, R031, R032 • Mounted N Board

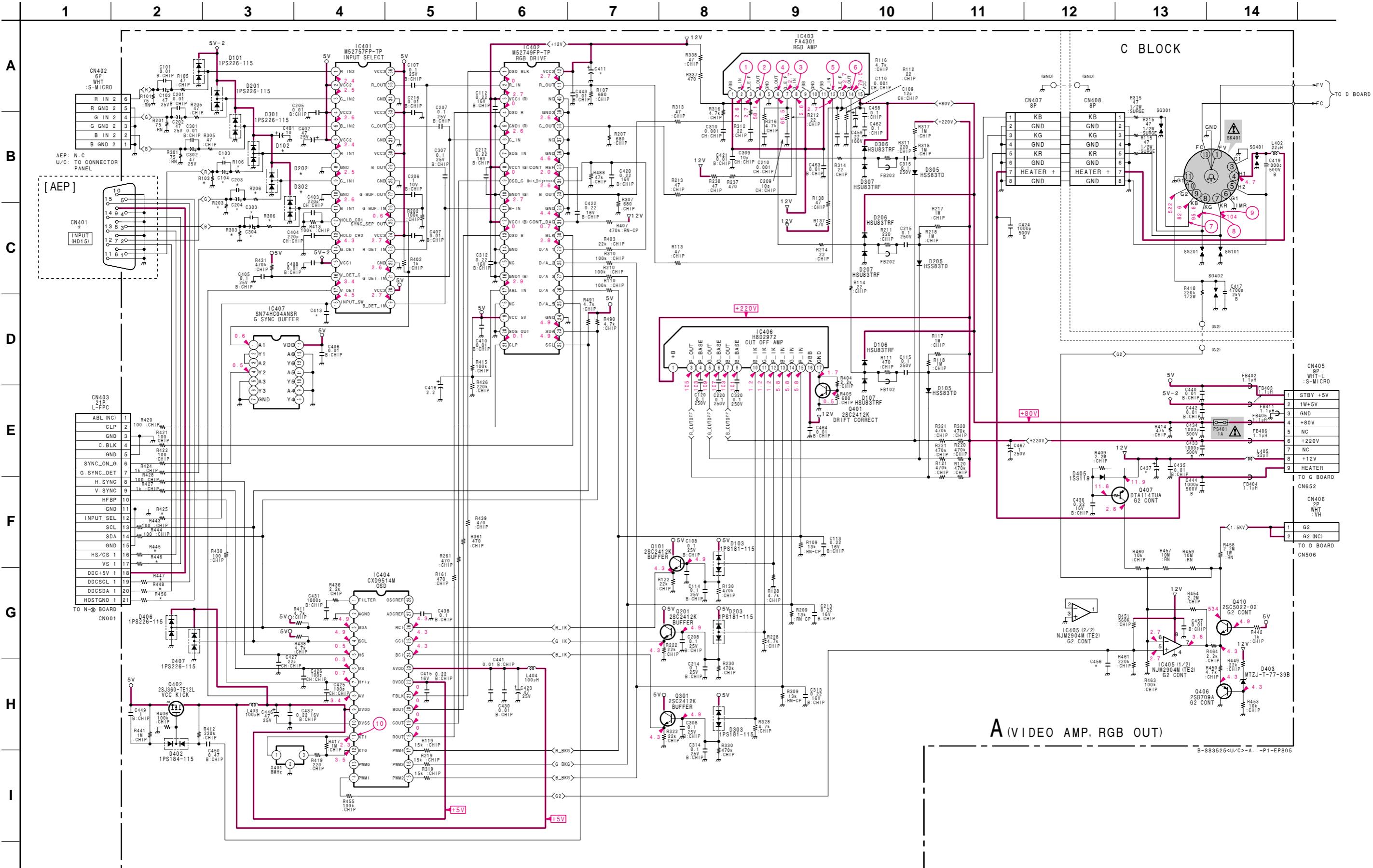
### Terminal name of semiconductors in silk screen printed circuit (\*)

Device	Printed symbol	Terminal name	Circuit
① Transistor		Collector Base Emitter	
② Transistor		Collector Base Emitter	
③ Diode		Cathode Anode	
④ Diode		Cathode Anode (NC)	
⑤ Diode		Cathode Anode (NC)	
⑥ Diode		Common Anode Cathode	
⑦ Diode		Common Anode Cathode	
⑧ Diode		Common Anode Anode	
⑨ Diode		Common Anode Anode	
⑩ Diode		Common Cathode Cathode	
⑪ Diode		Common Cathode Cathode	
⑫ Diode		Anode Anode Cathode 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 semiconductor	

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

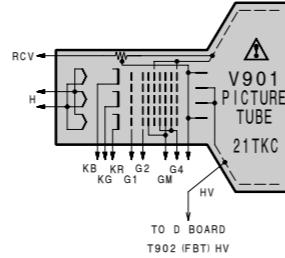
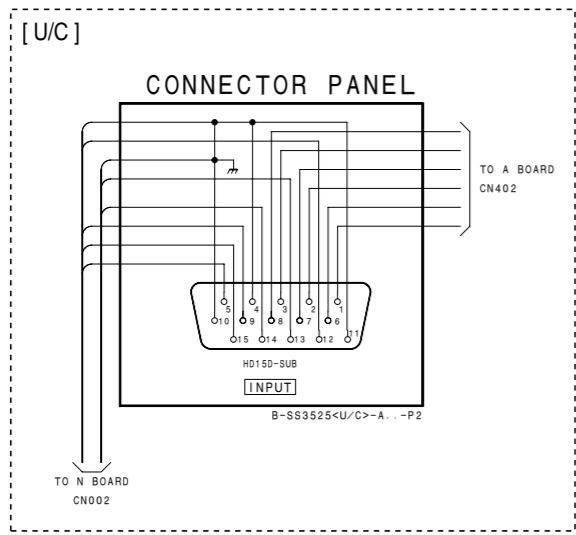
Ver.1.6

## (1) Schematic Diagram of A Board



## Schematic diagram

A board →

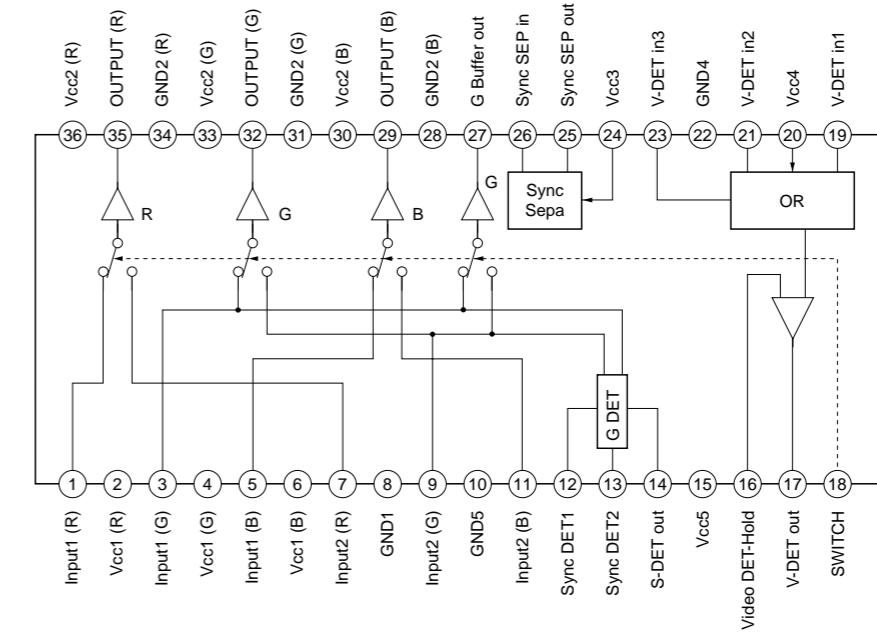


• A BOARD \* MARK LIST

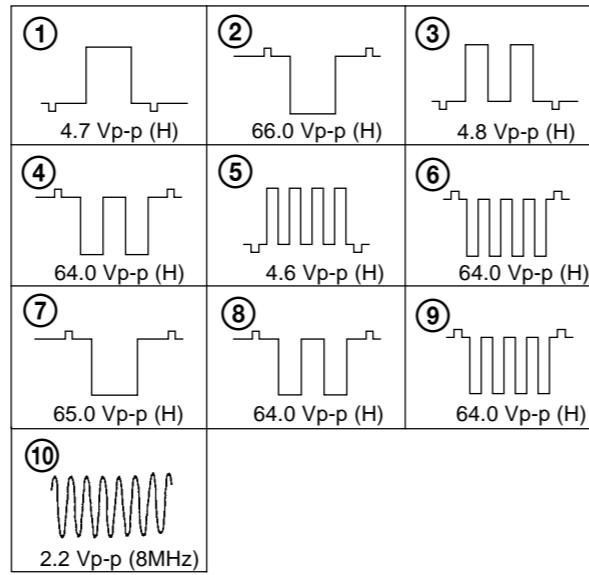
Ref. No.	[AEP]	[U/C]
C103	0.01/ B:CHIP	—
C104	47/ 25V	—
C203	0.01/ B:CHIP	—
C204	47/ 25V	—
C303	0.01/ B:CHIP	—
C304	47/ 25V	—
C411	220/ 16V	47/ 25V
C413	0.01/ B:CHIP	100/ :CHIP
C437	470/ :16V	220/ 16V
C456	0.22/ 16V/ B:CHIP	—
CN401	HD15D-SUB	—
D102	1PS226-115	—
D202	1PS226-115	—
D302	1PS226-115	—
R103	75/ :RN	—
R106	47/ :CHIP	—
R203	75/ :RN	—
R206	47/ :CHIP	—
R303	75/ :RN	—
R306	47/ :CHIP	—
R425	1K/ :CHIP	—
R445	100/ :CHIP	—
R446	100/ :CHIP	—
R447	47/ :CHIP	—
R448	47/ :CHIP	—
R456	100/ :CHIP	—

— : Not used

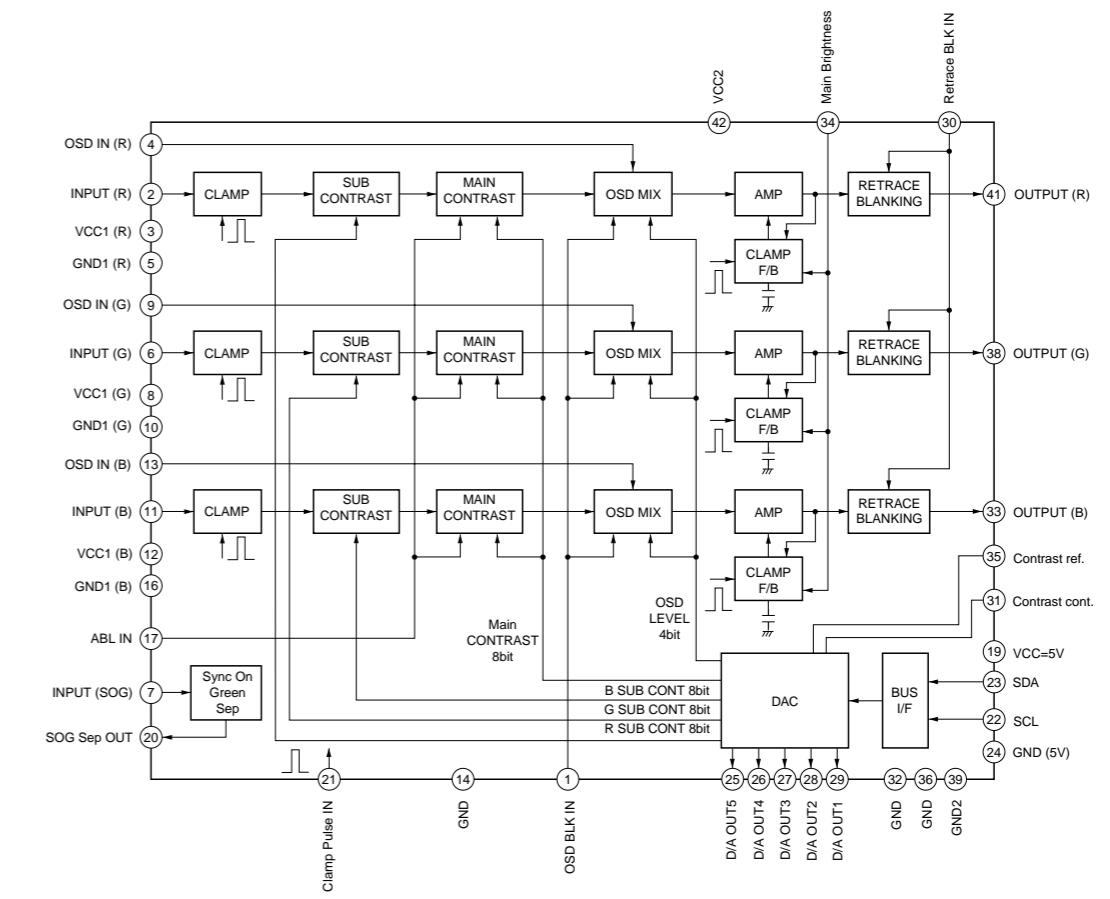
• A BOARD IC401 M52757FP



• A BOARD WAVEFORMS

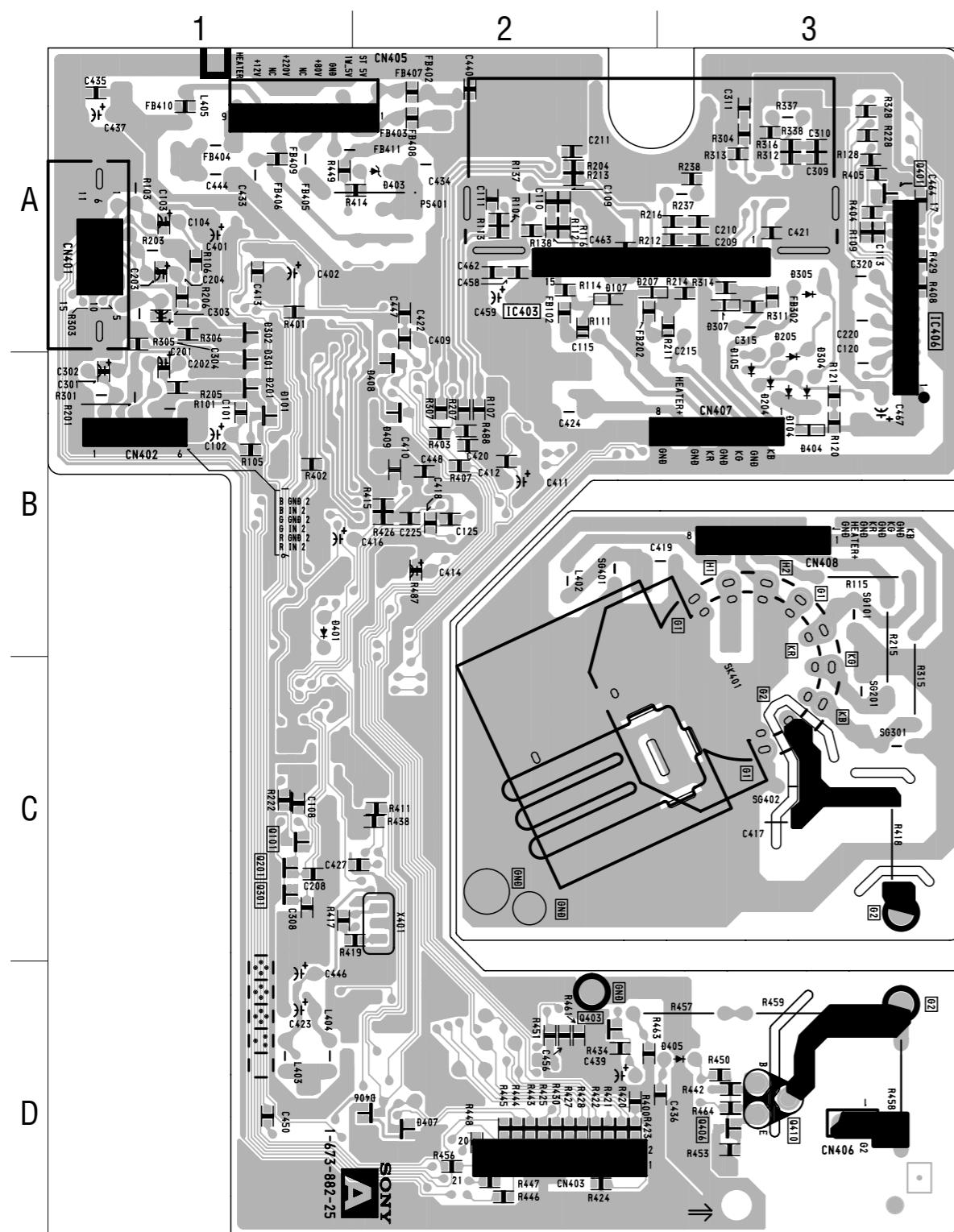


• A BOARD IC402 M52749FP



**A** [VIDEO AMP  
RGB OUT]

**— A BOARD (Conductor Side) —**

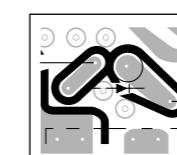
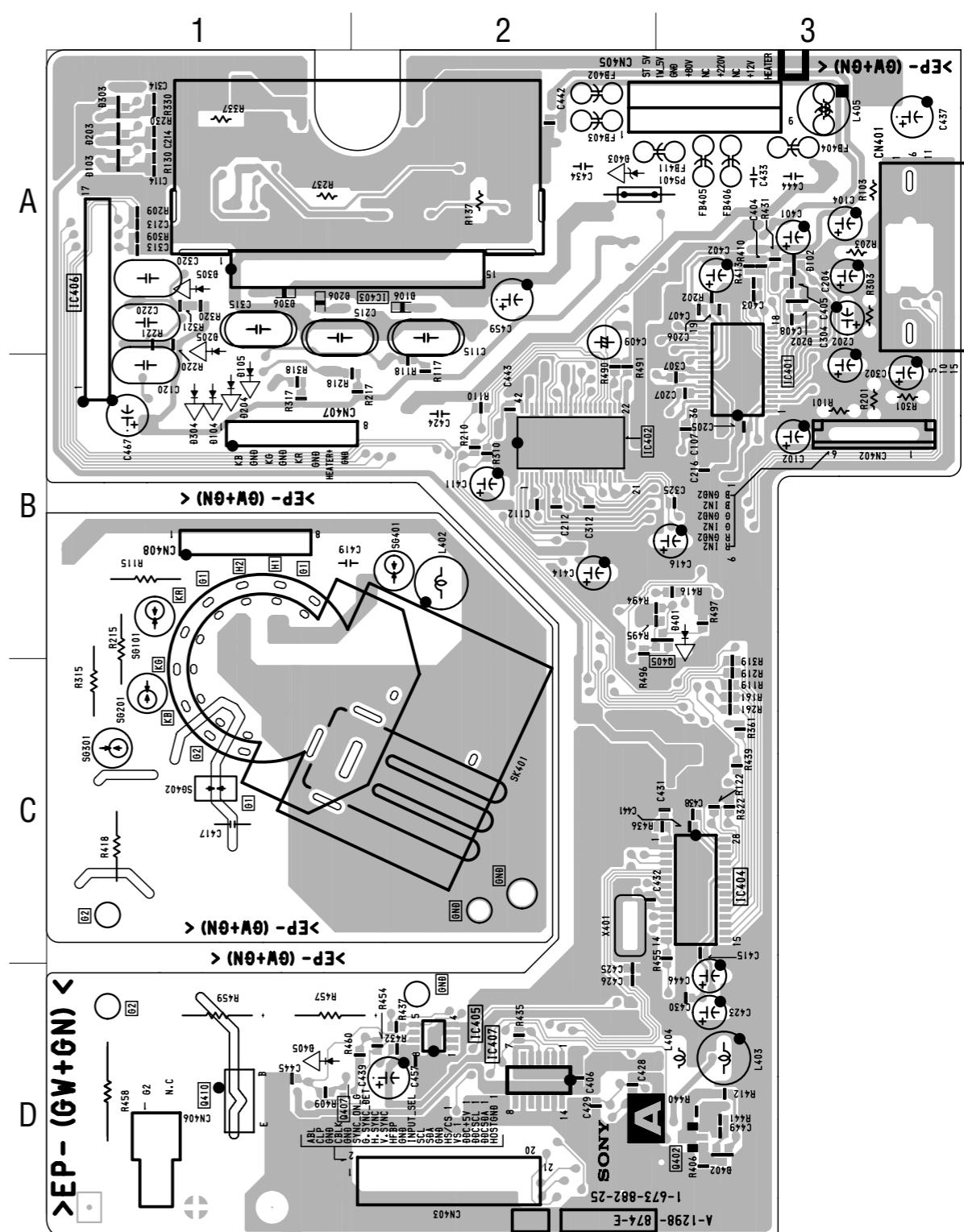


- A BOARD SEMICONDUCTOR LOCATION

IC		
	(Conductor Side)	(Component Side)
IC401		B-3
IC402		B-2
IC403	A-2	A-2
IC404		C-3
IC405		D-2
IC406	A-3	A-1
IC407		D-2
TRANSISTOR		
	(Conductor Side)	(Component Side)
Q101	C-1	①
Q201	C-1	①
Q301	C-1	①
Q401	A-3	①
Q402		D-3 ⑯
Q406	D-3	①
Q407		D-2 ②
Q410	D-3	D-1 -
DIODE		
	(Conductor Side)	(Component Side)
D101	B-1	⑥
D102		A-3 ⑦
D103		A-1 ⑪
D105	B-3	B-1 -
D106		A-2 ③
D107	A-2	③
D201	B-1	⑥
D202		A-3 ⑦
D203		A-1 ⑪
D205	B-3	A-1 -
D206		A-1 ③
D207	A-2	③
D301	B-1	⑥
D302	A-1	⑥
D303		A-1 ⑪
D305	A-3	A-1 -
D306		A-1 ③
D307	A-3	③
D402		D-3 ⑨
D403	A-2	A-2 -
D405	D-3	D-1 -
D406	D-2	⑥
D407	D-2	⑥
CRYSTAL		
	(Conductor Side)	(Component Side)
X401	C-2	C-2

\*: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 5-10)

## — A BOARD (Component Side) —



**NOTE-**

**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.

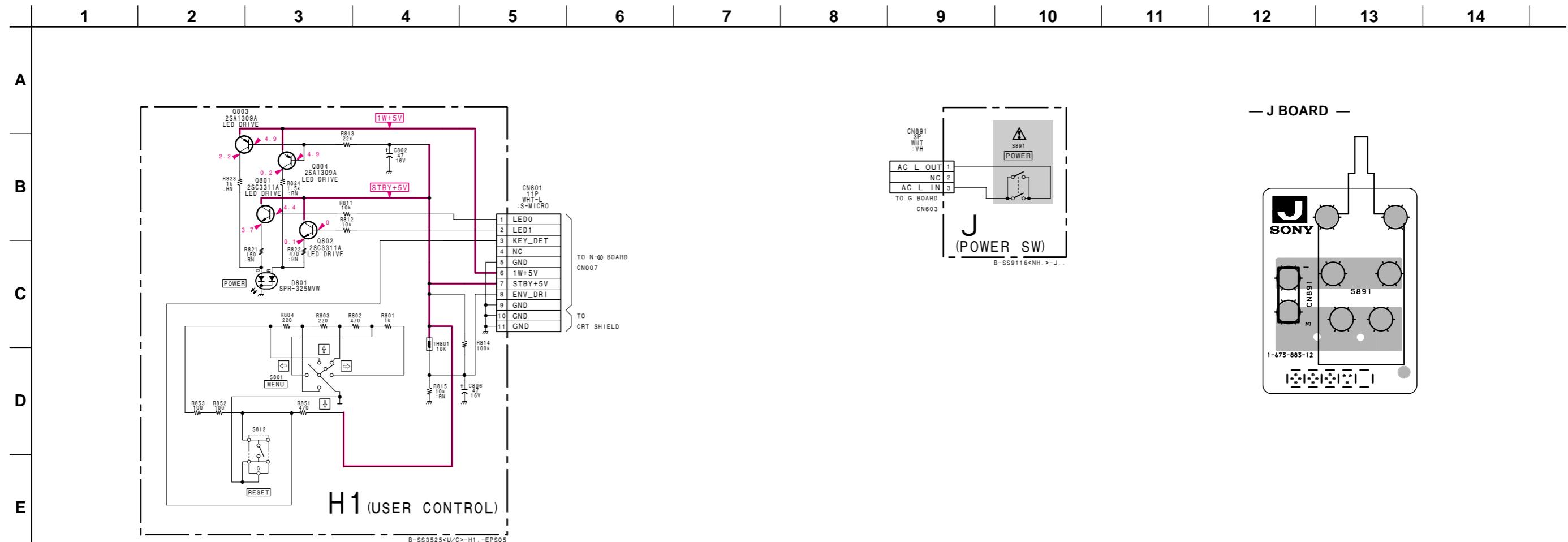
**H1**

[USER CONTROL]

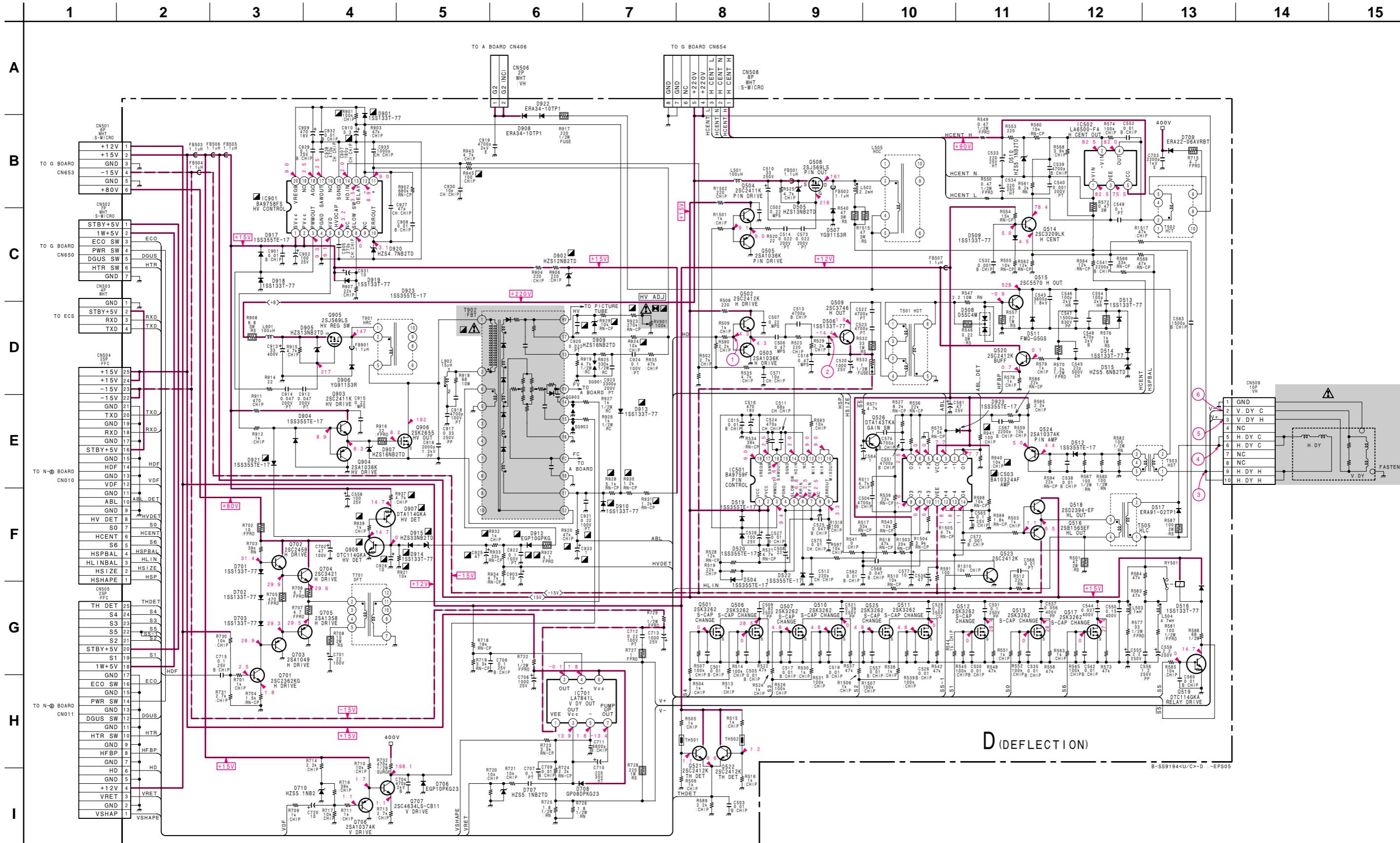
**J**

[POWER SW]

## (2) Schematic Diagrams of H1, J Boards

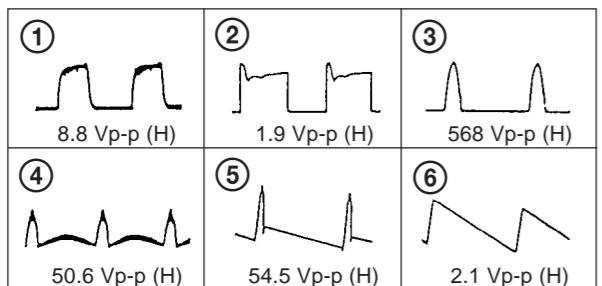


(3) Schematic Diagram of D Board



**D** [DEFLECTION]

• D BOARD WAVEFORMS

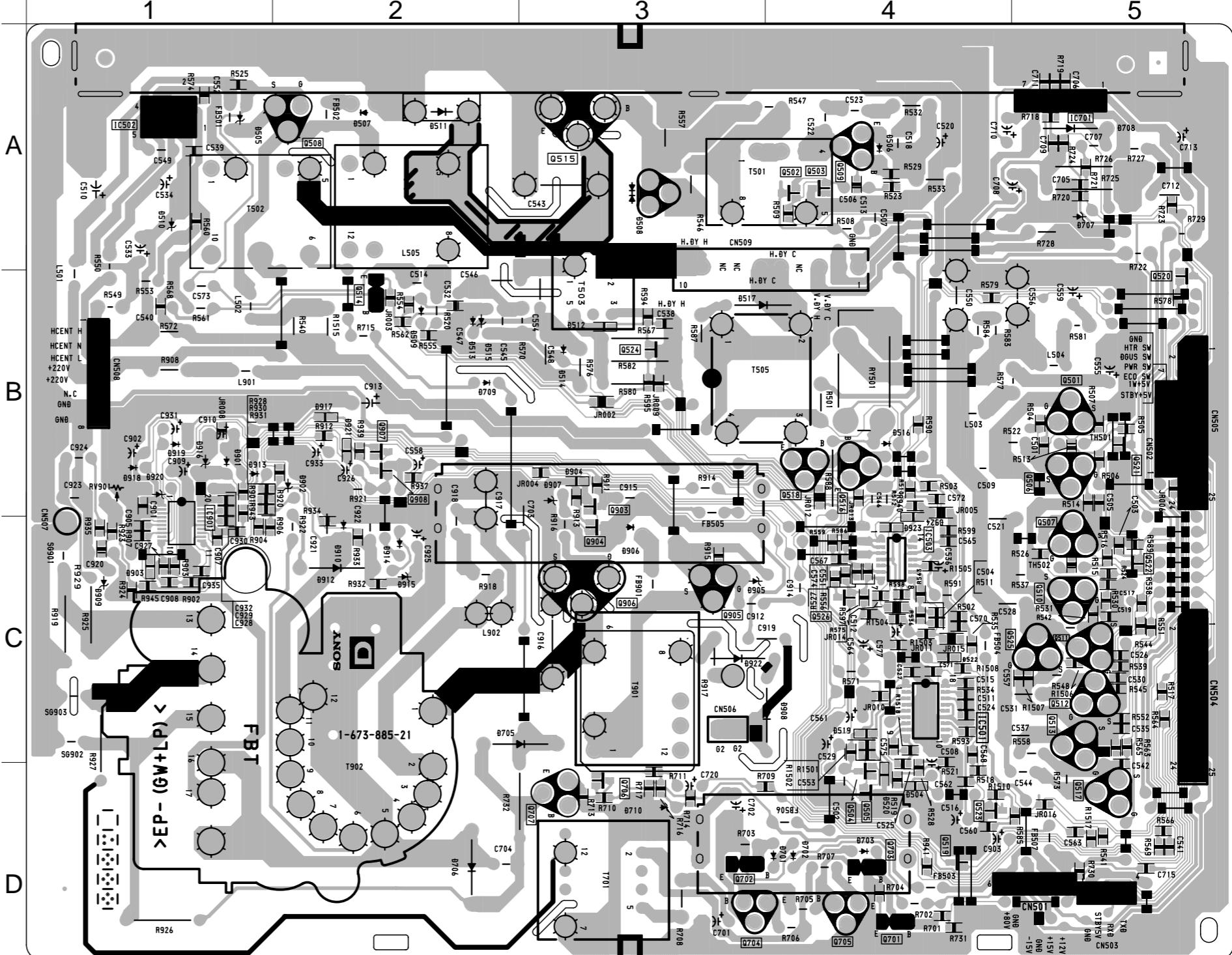


• D BOARD SEMICONDUCTOR LOCATION

IC	DIODE	
IC501	C-4	*
IC502	A-1	
IC503	C-4	
IC701	A-5	
IC901	C-1	
<hr/>		
TRANSISTOR		
Q501	B-5	*
Q502	A-4	①
Q503	A-4	①
Q504	C-4	①
Q505	D-4	①
Q506	B-5	-
Q507	C-5	-
Q508	A-2	-
Q509	A-4	-
Q510	C-5	-
Q511	C-5	-
Q512	C-5	-
Q513	C-5	-
Q514	B-2	-
Q515	A-3	-
Q516	B-4	-
Q517	D-5	-
Q518	B-4	-
Q519	D-4	③
Q520	B-5	①
Q521	B-5	①
Q522	C-5	①
Q523	D-4	①
Q524	B-3	①
Q525	C-5	-
Q526	C-4	①
Q701	D-4	-
Q702	D-3	-
Q703	D-4	-
Q704	D-3	-
Q705	D-4	-
Q706	D-3	①
Q707	D-3	-
Q903	B-3	①
Q904	C-3	①
Q905	C-3	-
Q906	C-3	-
Q907	B-2	①
Q908	B-2	①
<hr/>		
VARIABLE RESISTOR		
RV901	B-1	

\*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 5-10)

— D BOARD —

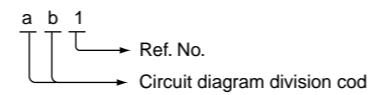


NOTE:

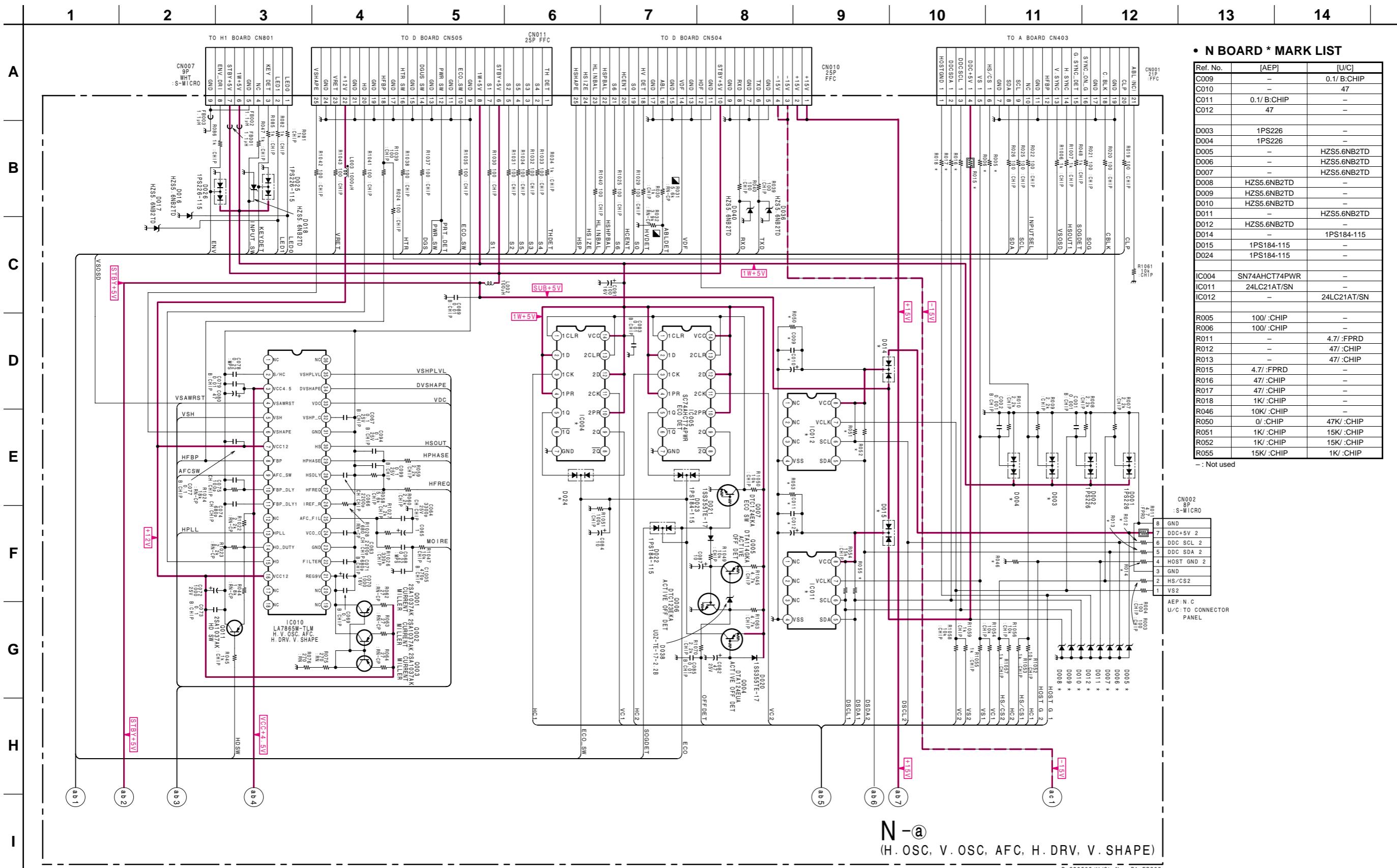
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

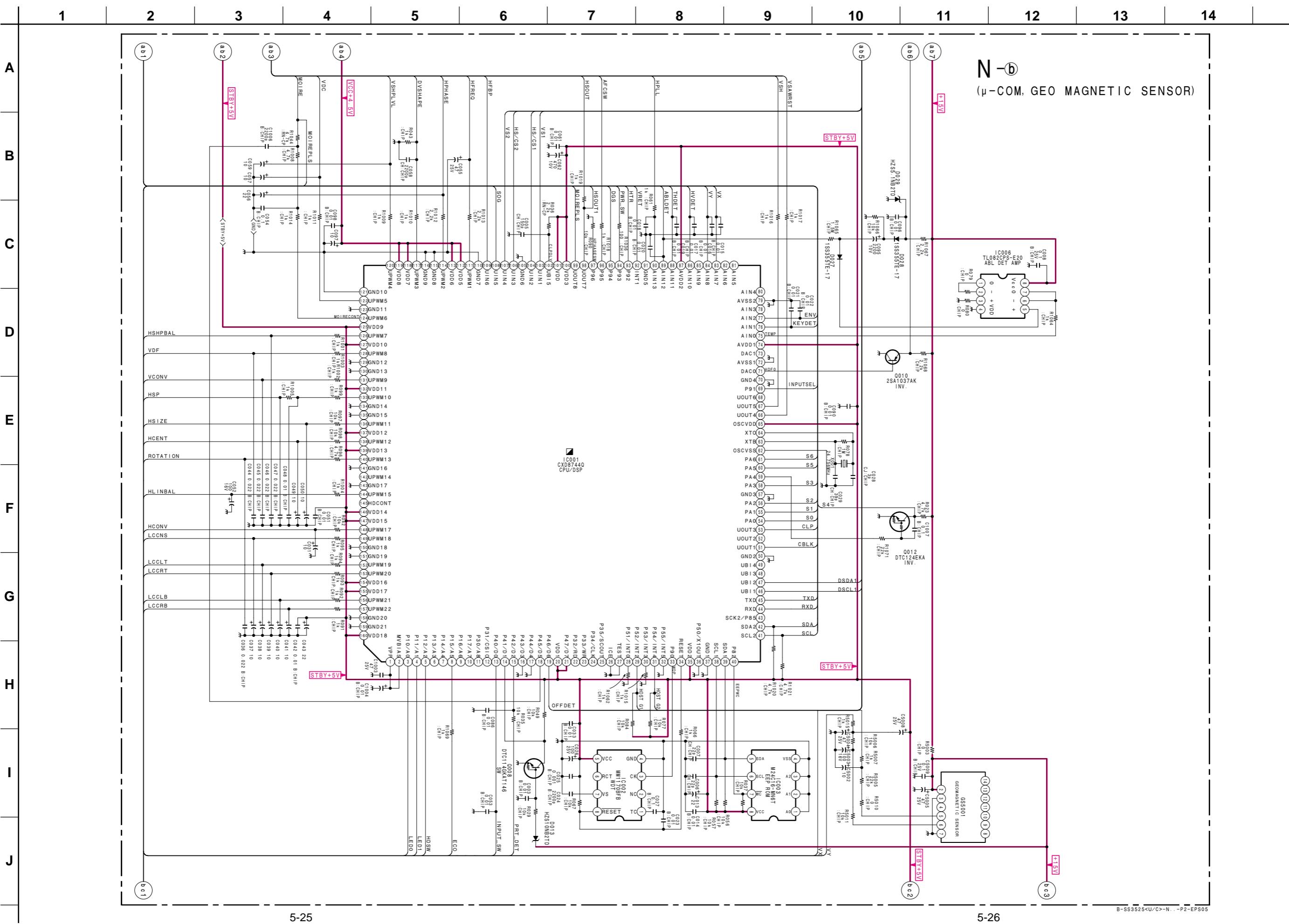
• Divided circuit diagram

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



(4) Schematic Diagrams of N (ⓐ, ⓑ, ⓒ) Board





A

B

C

D

E

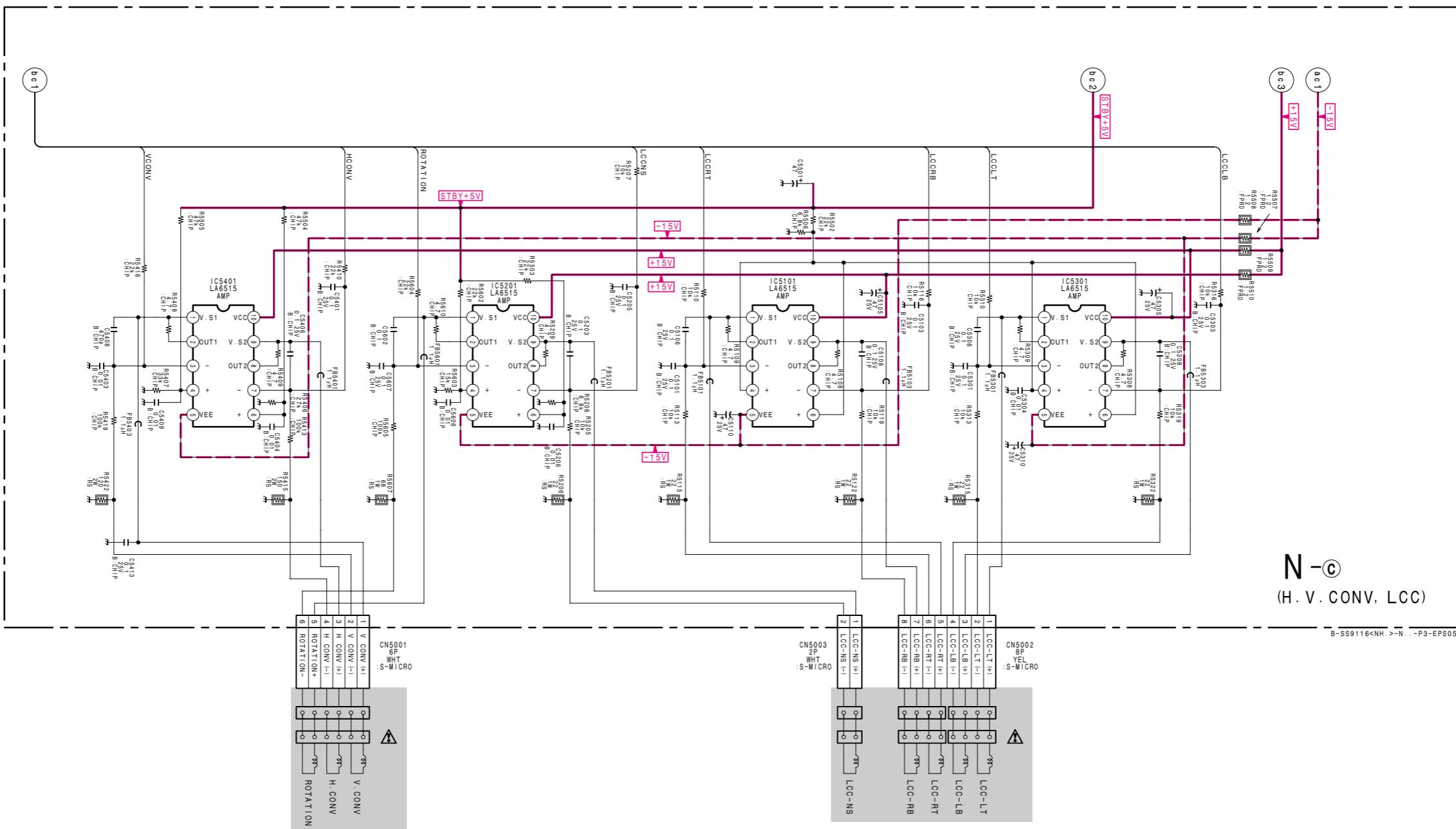
F

G

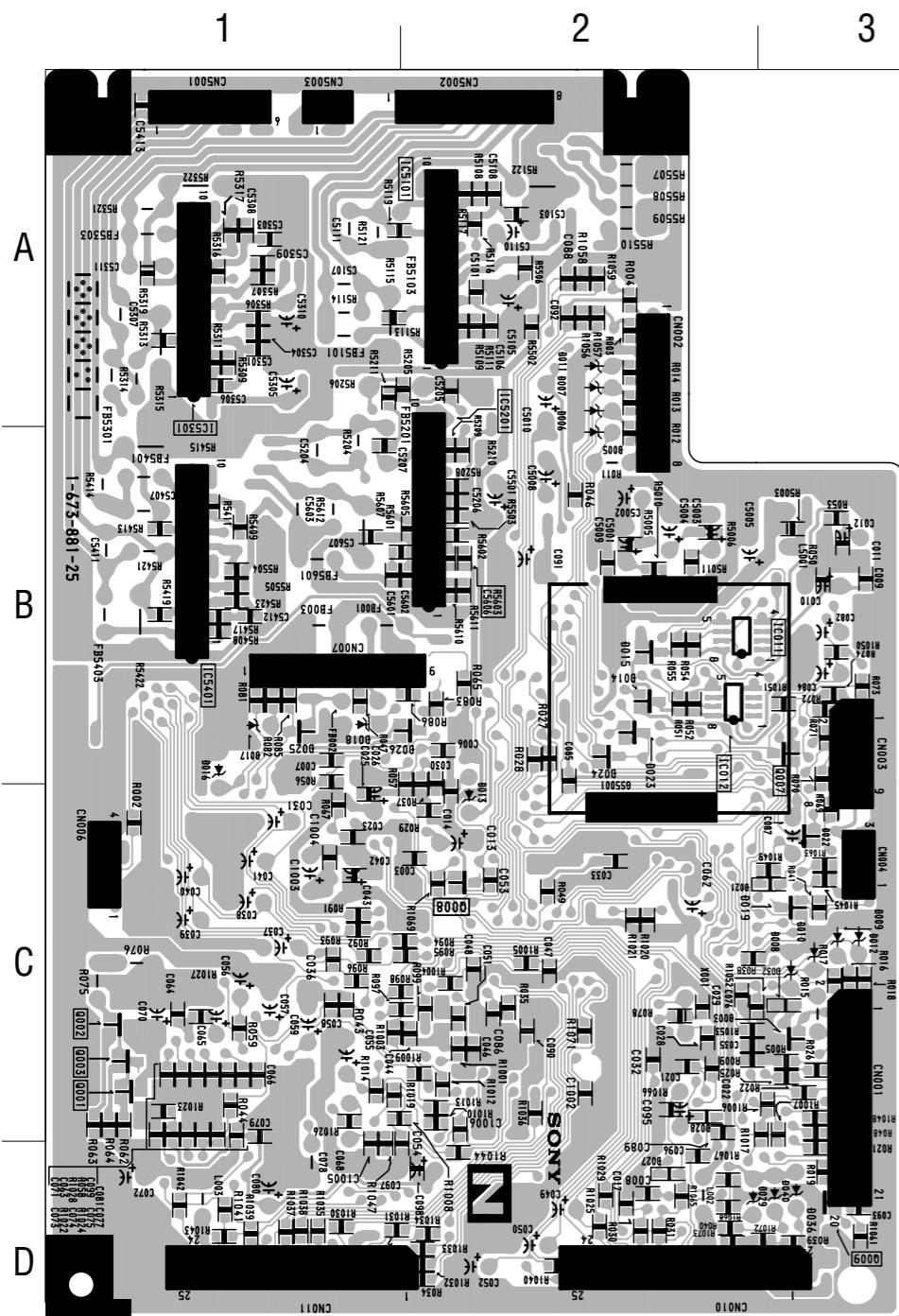
H

Schematic diagram

← [N] -b board



— N BOARD (Conductor Side) —



• N BOARD  
SEMICONDUCTOR  
LOCATION

IC	
(Conductor Side)	(Component Side)
IC001	C-2
IC002	C-2
IC003	C-2
IC004	B-2
IC005	B-2
IC006	D-1
IC010	C-2
IC011	B-2
IC012	B-2
IC5101	A-2
IC5201	B-2
IC5301	A-1
IC5401	B-1

TRANSISTOR	
(Conductor Side)	(Component Side)
Q001	C-1
Q002	C-1
Q003	C-1
Q004	B-1
Q005	C-1
Q006	C-1
Q007	B-3
Q008	C-2
Q010	C-1
Q011	C-2
Q012	D-2

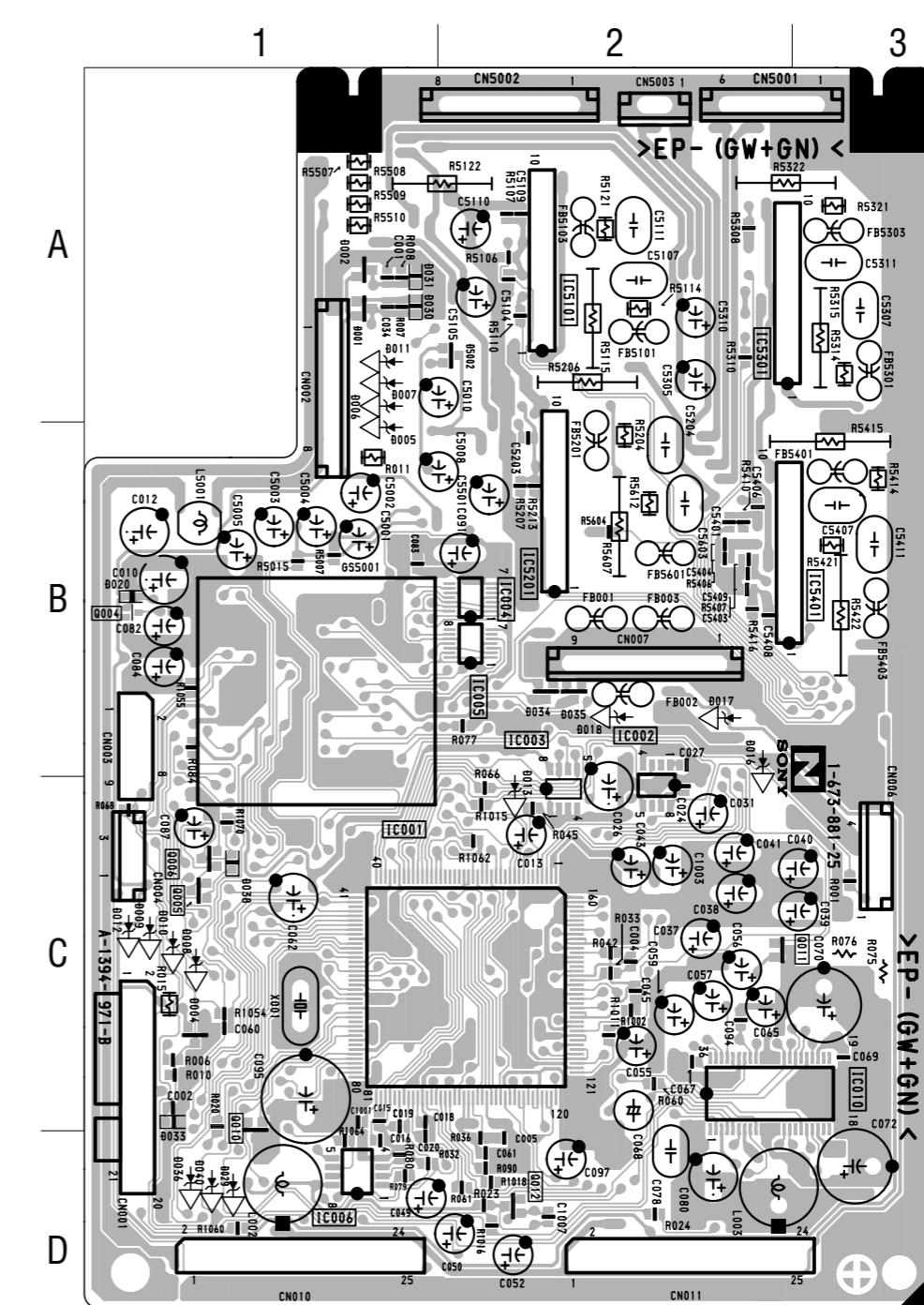
DIODE	
(Conductor Side)	(Component Side)
D001	A-1
D002	A-1
D003	C-3
D004	C-1
D005	B-2
D006	A-2
D007	A-2
D008	C-3
D009	C-3
D010	C-3
D011	A-2
D012	C-3
D013	C-2
D014	B-2
D015	B-2
D016	B-1
D017	B-1
D018	B-1
D020	C-3
D021	C-3
D022	B-2
D023	B-2
D024	B-2
D025	B-1
D026	B-2
D027	D-2
D028	D-2
D029	D-3
D036	D-3
D038	C-1
D040	D-3

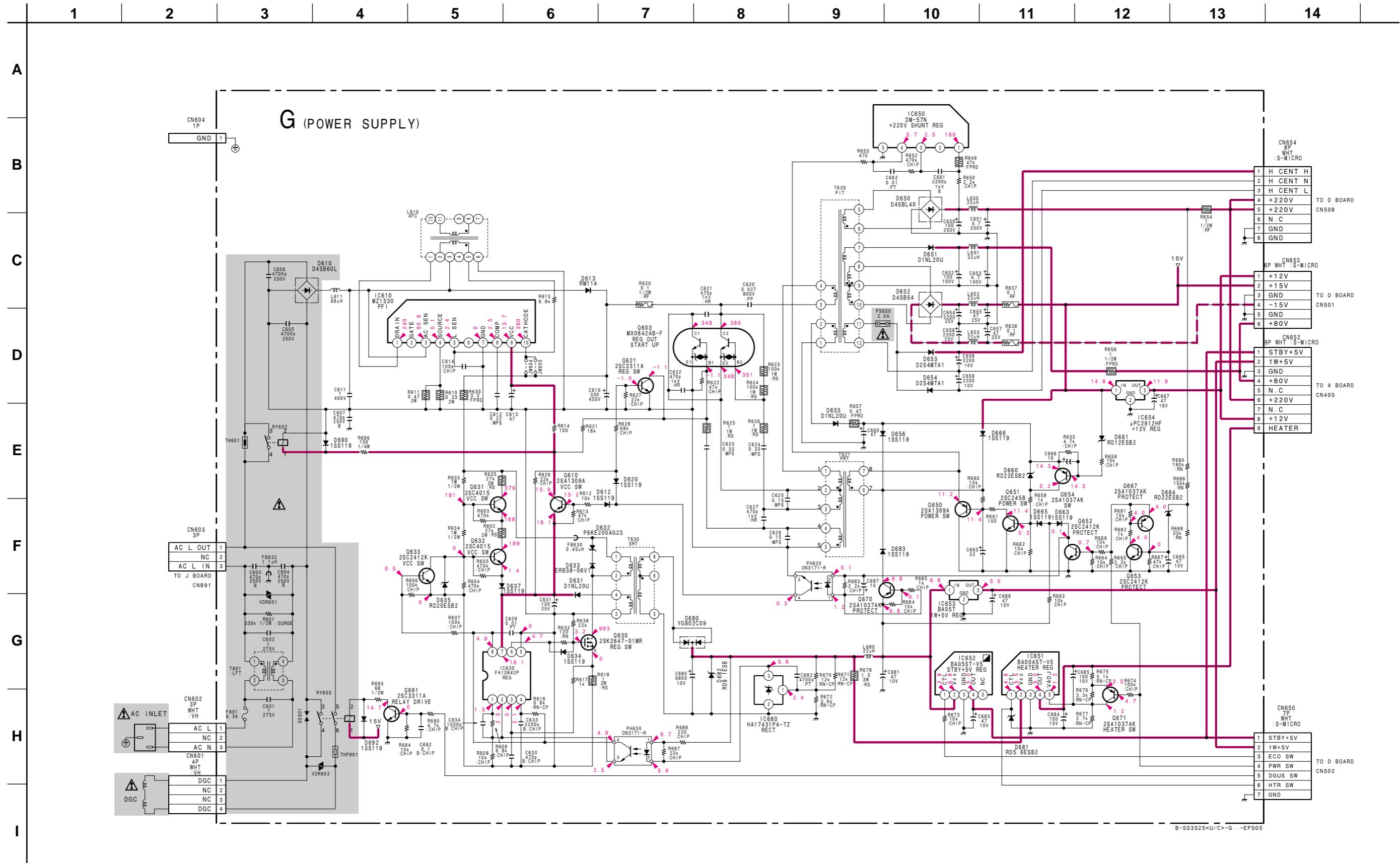
CRYSTAL	
(Conductor Side)	(Component Side)
X001	C-2
	C-1

\*: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 5-10)

— N BOARD (Component Side) —



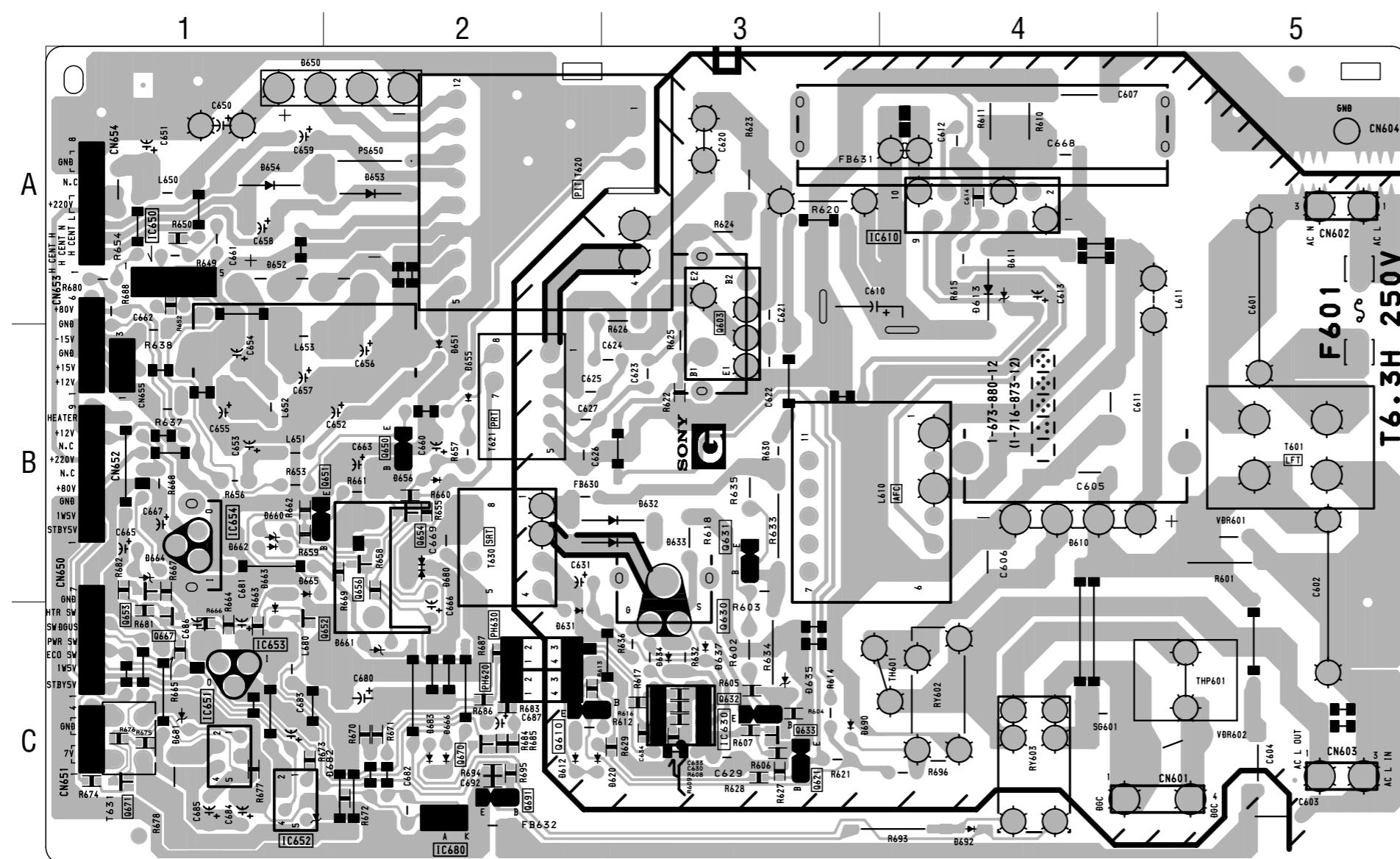
(5) Schematic Diagram of G Board



G

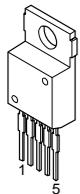
[POWER SUPPLY]

## — G BOARD —



## 5-5. SEMICONDUCTORS

BA00AST-V5  
BA05ST-V5  
LA6500-FA



BA9759F-E2  
TOP VIEW  
18pin SOP

CXD8744Q-0007

BA05T  
TOP VIEW  
160pin QFP

BA10324AF-E2  
SN74AHCT74PWR  
SN74HC04ANS  
SN74HC04ANSR  
XRA10324AF

TOP VIEW  
28pin SOP

NJM2904M  
NJM2904M(TE2)  
TL082CPS-E20  
NJM082M  
24LC21AT/SN

TOP VIEW  
8pin SOP

BA9758FS-E2

TOP VIEW  
20pin SOP

HA17431PA  
HA17431PA-TZ  
TOP VIEW  
18pin SOP

H8D2972

TOP VIEW  
36pin SOP

CXD9514M

LA6515  
TOP VIEW  
28pin SOP

DM-57N

MARKING SIDE VIEW  
5pin SIP

FA13842P  
M24C16-MN6T  
MM170BFB  
TOP VIEW  
8pin DIP

FA4301

MARKING SIDE VIEW  
15pin SIP

MZ1530

TOP VIEW  
10pin SIP

M52749FP-TP  
TOP VIEW  
42pin SOP

M52757FP-TP

TOP VIEW  
36pin SOP

μPC2912HF (12)

MARKING SIDE VIEW  
10pin SIP

DTA114GKAT146  
DTA114TUA-T106  
DTA124EUA-T106  
DTC114GKA  
DTC114GKAT146  
DTC124EK  
DTC124EKA-T146  
2SA1036K-Q

2SA1036K-T-146-Q  
2SA1037AK-T146-QR  
2SA1037AK-T146-R  
2SA1162-G

2SB709A-QRS-TX  
2SC1623-L5L6  
2SC2411K-CQ  
2SC2411K-T-146-CQ  
2SC2412K-T-146-QR

LA7841L

MARKING SIDE VIEW

7pin SIP

DTA124ESA  
DTA124ESA-TP

2SA1175-HFE

2SA1309A-QRSTA

2SC2459-GR-TPE4

2SC2784

2SC2785-HFE

2SC3311A-QRSTA

MX0842AB-F  
TOP VIEW

2SA1049-GR  
2SA1049TP-GR

2SC2458-YGR  
2SC2458TP-YGR

2SA1358-Y  
2SC3421-Y

2SC1565EF  
2SC3746  
2SC5022-02

2SC2362K-G  
2SC2362KG-AA

2SC3209LK  
2SC3209LK-TP

2SC4015TV2  
TOP VIEW

2SC5570(LBSONY)

TOP VIEW

2SD2394-EF

2SK569LS-CB11  
2SK2655-01R-F165  
2SK3262-01MR-F119

2SK2103T100

TOP VIEW

ERA22-06AVRBT  
ERA22-08

ERA34-10TP1

ERB38-06V1

GP08D

GP08DPKG23

HSS83TD

P6KE200AG23

RD2.2M-T1B

RGP02-20EL-6394

TOP VIEW

ERA22-06AVRBT  
ERA22-08

ERA34-10TP1

ERB38-06V1

GP08D

GP08DPKG23

HSS83TD

P6KE200AG23

RD2.2M-T1B

RGP02-20EL-6394

D1NL20U-TR  
D2S4MF  
D2S4MTA1

CATHODE

ANODE

D4SB60L  
D4SBL40  
D4SBS4  
D4SBS4-F

D5SC4M  
1PS184-115

2SD2394-EF

2SK569LS-CB11  
2SK2655-01R-F165  
2SK3262-01MR-F119

2SK2103T100

TOP VIEW

ERA22-06AVRBT  
ERA22-08

ERA34-10TP1

ERB38-06V1

GP08D

GP08DPKG23

HSS83TD

P6KE200AG23

RD2.2M-T1B

RGP02-20EL-6394

TOP VIEW

ERA22-06AVRBT  
ERA22-08

ERA34-10TP1

ERB38-06V1

GP08D

GP08DPKG23

HSS83TD

P6KE200AG23

RD2.2M-T1B

RGP02-20EL-6394

TOP VIEW

FMQ-G5GS

CATHODE

HSU83TRF

RM11A  
RM11C

HZS10NB2TD  
HZS12NB2TD  
HZS13NB2TD  
HZS16NB2TD  
HZS33NB2  
HZS33NB2TD  
HZS4.7NB2  
HZS4.7NB2TD  
HZS5.1NB2TD  
HZS5.6NB2TD  
MTZJ-T-77-39B  
MTZJ-39B

RD10ESB2  
RD12ES-B2  
RD12ES-T1B2  
RD13ES-B2  
RD20ES-B2  
RD20ES-T1B2  
RD22ES-B2  
RD22ES-T1B2  
RD5.1ESB2  
RD5.6ESB2  
RD6.8ES-B2  
1SS119-25  
1SS119-25TD  
1SS133T-77

EGP10D  
EGP10GPKG23  
ERA91-02  
ERA91-02TP1

2SK2103T100

CATHODE

ON3171-R

CATHODE

YG802C09

CATHODE

YG911S3R

ANODE

1PS181-115

RD9.1ES-L2  
RD9.1ES-T1B

1PS226-115

1SS355TE-17

1SS376TE-17

ANODE  
(GRN)  
CATHODE  
(RED)

## SECTION 6

### EXPLODED VIEWS

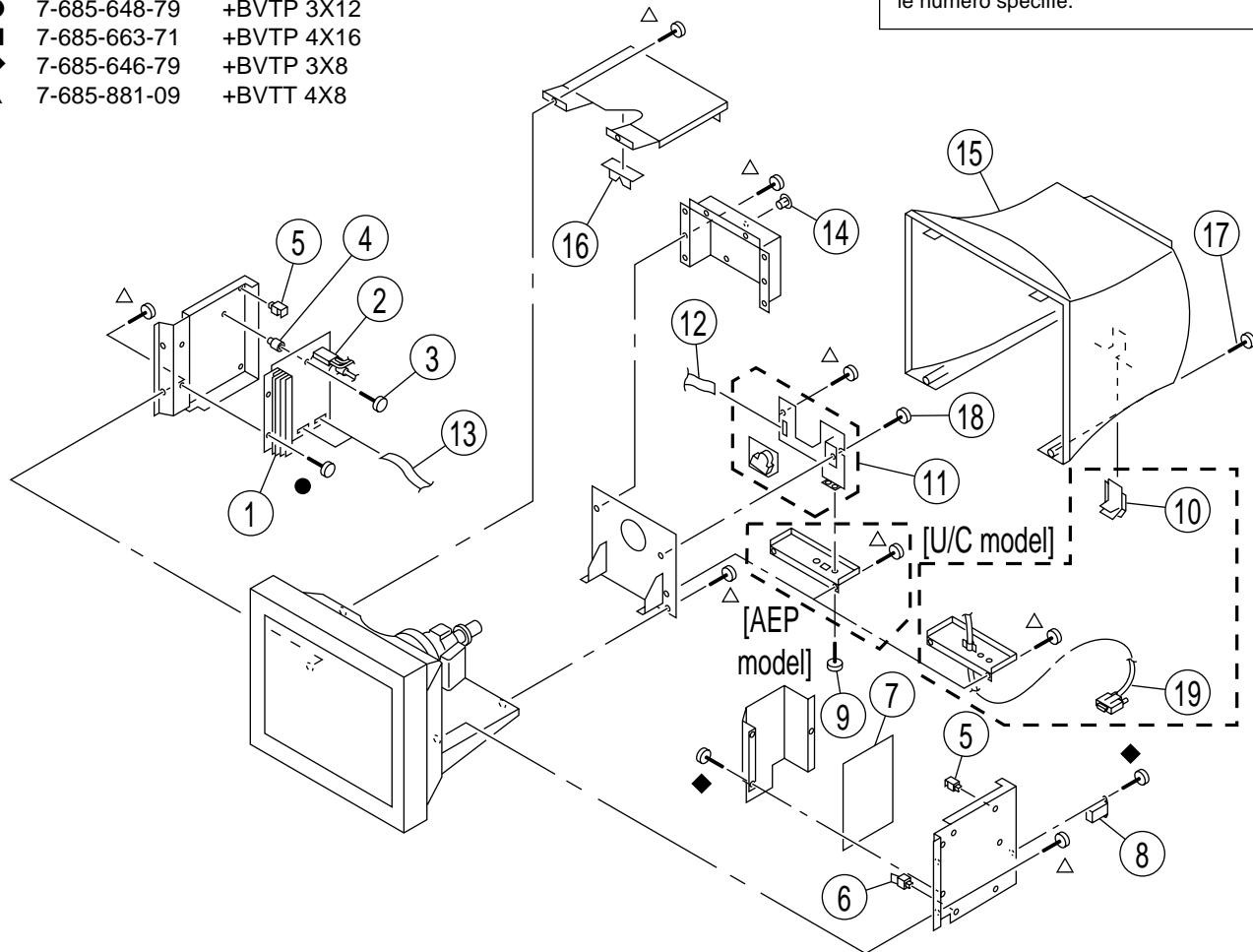
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " \* " are not stocked since they are seldom required for routine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

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

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

#### 6-1. CHASSIS

- |                          |            |
|--------------------------|------------|
| ● 7-685-648-79           | +BVTP 3X12 |
| ■ 7-685-663-71           | +BVTP 4X16 |
| ◆ 7-685-646-79           | +BVTP 3X8  |
| $\triangle$ 7-685-881-09 | +BVTT 4X8  |



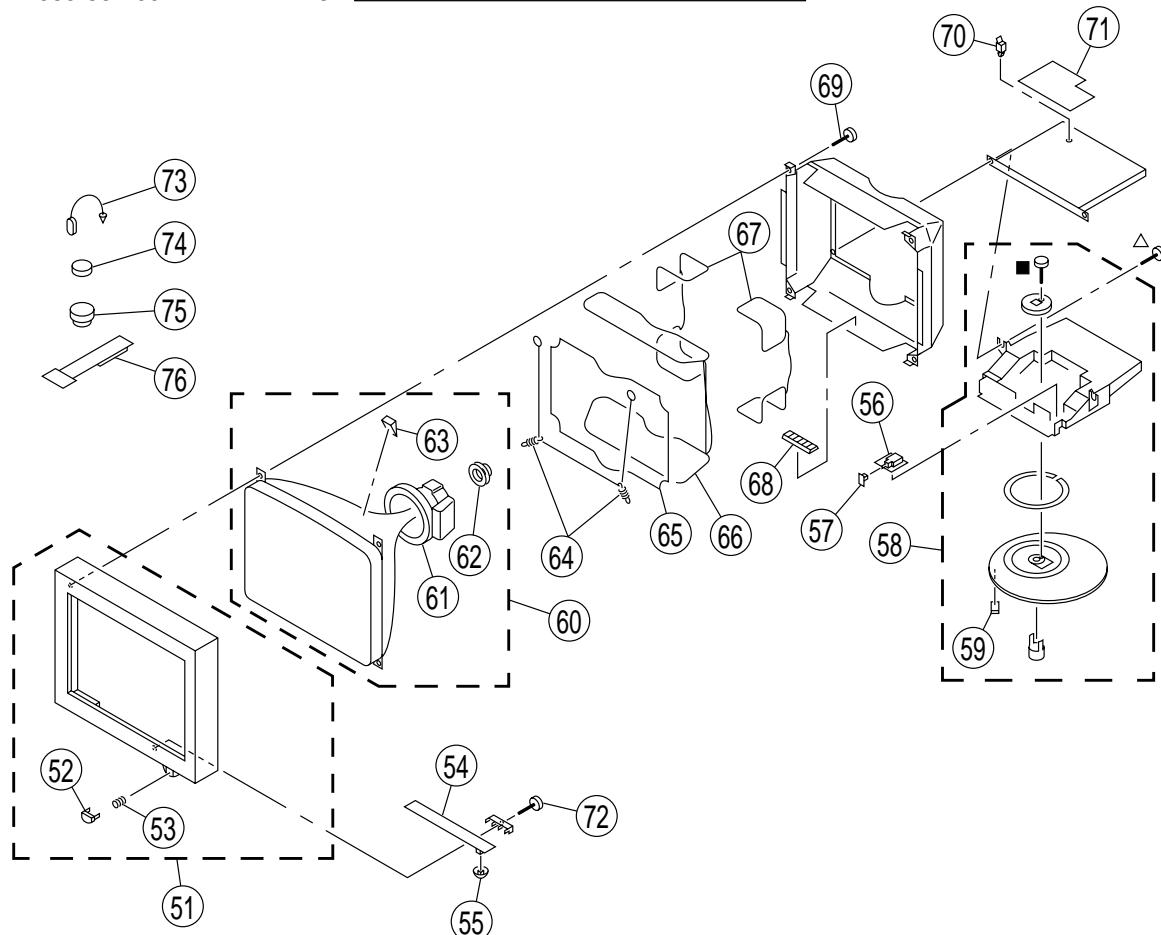
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	* A-1346-859-B	D BOARD, COMPLETE [AEP]		2	7-685-881-09	SCREW +BVTP 4X8 (S) [U/C]	
1	* A-1346-827-B	D BOARD, COMPLETE		10	4-074-915-01	COVER, PIG TAIL [only U/C]	
		[U/C for Japan-made set]		11	* A-1298-988-B	A BOARD, COMPLETE [AEP]	
1	* A-1346-860-B	D BOARD, COMPLETE		11	* A-1299-191-A	A BOARD, COMPLETE	
		[U/C for Mexico-made set]		11	* A-1299-135-A	A BOARD, COMPLETE	[U/C for Japan-made set]
2	$\triangle$ X-4560-175-1	TRANSFORMER ASSY, FLYBACK		12	1-900-246-08	CONNECTOR ASSY (F)	
		(NX-4502/J1D4)		13	1-900-250-06	CONNECTOR ASSY (F)	
3	4-062-115-01	SCREW +P 3.5X20 TYPE2		14	* 4-069-570-01	SPACER, PRINTED CIRCUIT BOARD	
4	* 4-060-359-01	HOLDER, PRINTED CIRCUIT BOARD		15	4-071-452-11	CABINET [AEP]	
5	* 3-701-903-11	HOLDER, PRINTED CIRCUIT BOARD		15	4-071-493-11	CABINET [U/C]	
6	4-070-730-01	HOLDER, PRINTED CIRCUIT BOARD		16	* 4-063-711-01	SUPPORT, HV CABLE	
7	* A-1316-480-A	G BOARD, COMPLETE [AEP]		17	4-039-358-01	SCREW (4X16), (+) BV TAPPING [AEP]	
7	* A-1316-443-B	G BOARD, COMPLETE	[U/C for Japan-made set]	17	7-685-663-71	SCREW +BVTP 4X16 TYPE2 IT-3 [U/C]	
7	* A-1316-481-A	G BOARD, COMPLETE	[U/C for Mexico-made set]	18	4-389-025-11	SCREW (M4) (EXT TOOTH WASHER)	
8	$\triangle$ 1-251-382-31	INLET, AC 3P (WITH NOISE FILTER)		19	1-792-123-11	CORD, CONNECTION [only U/C]	
9	4-205-206-01	SCREW (HD15) [AEP]					

## 6-2. PICTURE TUBE

■ 7-685-663-71 +BVTP 4X16  
 △ 7-685-881-09 +BVTT 4X8

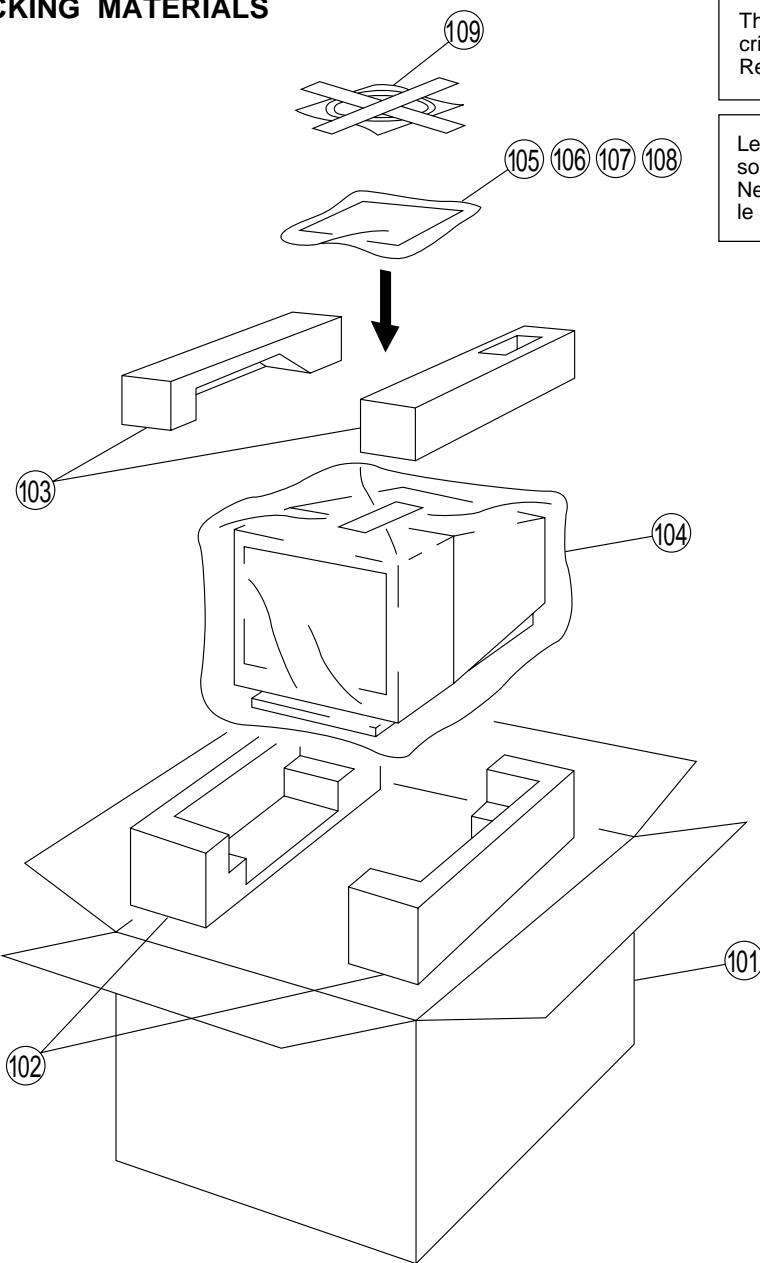
Les composants identifiés par la marque  $\triangle$  sont critiques pour la sécurité.  
 Ne les remplacer que par une pièce portant le numéro spécifié.

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



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4037-550-1	BEZEL ASSY [U/C]	52,53	62	$\triangle$ 1-452-912-61	NECK ASSEMBLY (NA-2914)	
51	X-4200-569-1	BEZEL ASSY [AEP]	52,53	63	2-162-100-21	SPACER, DEFLECTION YOKE	
52	4-071-152-22	BUTTON, POWER [U/C]		64	* 4-047-316-01	SPRING, EXTENSION	[U/C for Japan-made set, AEP]
52	4-204-957-01	BUTTON, POWER [AEP]		64	* 4-061-573-01	SPRING, TENSION	[U/C for Mexico-made set]
53	3-653-339-21	SPRING, COMPRESSION [U/C]		65	$\triangle$ 1-419-130-21	COIL, LANDING CORRECTION	
53	3-653-339-11	SPRING, COMPRESSION [AEP]		66	$\triangle$ 1-419-128-21	COIL, DEGAUSSING	
54	* A-1372-799-A	H1 BOARD, COMPLETE	[U/C for Japan-made set]	67	$\triangle$ 1-419-129-21	COIL, LANDING CORRECTION	
54	* A-1372-770-A	H1 BOARD, COMPLETE	[U/C for Mexico-made set]	68	4-062-670-01	SPACER, PICTURE TUBE	
54	* A-1646-206-A	H1 BOARD, COMPLETE [AEP]		69	4-203-648-01	SCREW (5), SELF TAPPING [AEP]	
55	4-070-665-02	BUTTON, MENU	[U/C for Japan-made set]	69	4-365-808-01	SCREW (5), TAPPING [U/C]	
55	4-071-155-02	BUTTON, MENU	[U/C for Mexico-made set]	70	4-070-730-01	HOLDER, PRINTED CIRCUIT BOARD	
55	4-204-970-01	BUTTON, MENU [AEP]		71	* A-1394-950-B	N BOARD, COMPLETE [AEP]	
56	* A-1388-260-B	J BOARD, COMPLETE [AEP]		71	* A-1394-984-A	N BOARD, COMPLETE	[U/C for Japan-made set]
56	* A-1388-250-B	J BOARD, COMPLETE	[U/C for Japan-made set]	71	* A-1394-973-A	N BOARD, COMPLETE	[U/C for Mexico-made set]
56	* A-1388-261-B	J BOARD, COMPLETE	[U/C for Mexico-made set]	72	7-685-663-71	SCREW +BVTP 4X16 TYPE2 IT-3 [U/C]	
57	* 4-394-972-21	CAP, POWER		72	4-039-358-01	SCREW (4X16), (+) BV TAPPING [AEP]	
58	X-4036-844-2	STAND ASSY	59	73	4-308-870-00	CLIP, LEAD WIRE	
59	* 4-061-996-11	CUSHION		74	1-452-032-00	MAGNET, DISK; 10mm $\phi$	
60	$\triangle$ 8-738-813-61	ITC ASSY (21TKC-R1)	61-63	75	1-452-094-00	MAGNET, ROTATABLLE DISK; 15mm $\phi$	
61	$\triangle$ 8-451-509-11	DEFLECTION YOKE Y21TKM-M		76	4-051-736-21	PIECE A (90), CONV. CORRECT	

## 6-3. PACKING MATERIALS



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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
101	* 4-075-604-01	INDIVIDUAL CARTON		104	* 4-047-293-01	BAG, POLYETHYLENE	
		[U/C for Japan-made set]					[U/C for Mexico-made set]
101	* 4-074-479-01	INDIVIDUAL CARTON		104	* 4-368-079-01	BAG, POLYETHYLENE [AEP]	
		[U/C for Mexico-made set]		105	$\triangle$ 1-782-783-31	CORD SET, POWER [U/C]	
101	* 4-205-252-01	CARTON [AEP]		105	$\triangle$ 1-782-784-21	CORD SET, POWER [AEP]	
102	* 4-071-781-01	CUSHION (LOWER) (ASSY) [AEP]		106	4-075-164-11	MANUAL, INSTRUCTION [U/C]	
102	* 4-071-731-01	CUSHION (LOWER) (ASSY)	[U/C for Japan-made set]	106	4-075-164-21	MANUAL, INSTRUCTION [AEP]	
				107	1-772-380-11	DISK, INFORMATION [AEP]	
102	* 4-072-876-01	CUSHION (LOWER) (ASSY)	[U/C for Mexico-made set]	107	1-772-380-21	DISK, INFORMATION [U/C]	
103	* 4-071-780-01	CUSHION (UPPER) (ASSY) [AEP]		108	1-785-512-21	CONNECTOR, DSUB (15P CHANGER)	[U/C]
103	* 4-071-730-01	CUSHION (UPPER) (ASSY)	[U/C for Japan-made set]	108	1-785-512-31	CONNECTOR, DSUB (15P CHANGER)	[AEP]
103	* 4-072-875-01	CUSHION (UPPER) (ASSY)	[U/C for Mexico-made set]	109	1-791-500-11	CABLE [only AEP]	
104	* 4-041-927-31	BAG, POLYETHYLENE	[U/C for Japan-made set]				

## SECTION 7

## ELECTRICAL PARTS LIST

A

## NOTE:

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

Les composants identifiés par la marque  $\triangle$  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  $\blacksquare$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

## RESISTORS

- All resistors are in ohms
- F : nonflammable

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		* A-1298-988-B A BOARD, COMPLETE [AEP]		C302	1-104-664-11	ELECT	47 $\mu$ F 20% 25V
		* A-1299-135-A A BOARD, COMPLETE [U/C for Mexico-made set]		C303	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V [AEP]
		* A-1299-191-A A BOARD, COMPLETE [U/C for Japan-made set]		C304	1-104-664-11	ELECT	47 $\mu$ F 20% 25V [AEP]
		*****		C307	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V
		7-682-950-01 SCREW +PSW 3X12 (IC403)		C308	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V
		<CAPACITOR>		C309	1-163-227-11	CERAMIC CHIP 10pF	0.5pF 50V
C101	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V	C310	1-163-275-11	CERAMIC CHIP 0.001 $\mu$ F	5% 50V
C102	1-104-664-11	ELECT 47 $\mu$ F	20% 25V	C312	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V
C103	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V [AEP]	C313	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V
C104	1-104-664-11	ELECT 47 $\mu$ F	20% 25V [AEP]	C314	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V
C107	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V	C315	1-104-341-11	FILM 0.1 $\mu$ F	10% 250V
C108	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V	C320	1-104-341-11	FILM 0.1 $\mu$ F	10% 250V
C109	1-163-229-11	CERAMIC CHIP 12pF	5% 50V	C401	1-126-964-11	ELECT 10 $\mu$ F	20% 50V
C110	1-163-275-11	CERAMIC CHIP 0.001 $\mu$ F	5% 50V	C402	1-104-664-11	ELECT 47 $\mu$ F	20% 25V
C112	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V	C403	1-163-259-91	CERAMIC CHIP 220pF	5% 50V
C113	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V	C404	1-163-259-91	CERAMIC CHIP 220pF	5% 50V
C114	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V	C405	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V
C115	1-104-341-11	FILM 0.1 $\mu$ F	10% 250V	C406	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V
C120	1-104-341-11	FILM 0.1 $\mu$ F	10% 250V	C407	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V
C201	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V	C408	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V
C202	1-104-664-11	ELECT 47 $\mu$ F	20% 25V	C410	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V
C203	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V [AEP]	C411	1-104-664-11	ELECT 47 $\mu$ F	20% 25V [U/C]
C204	1-104-664-11	ELECT 47 $\mu$ F	20% 25V [AEP]	C411	1-126-934-11	ELECT 220 $\mu$ F	20% 16V [AEP]
C205	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V	C413	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V [AEP]
C206	1-109-982-11	CERAMIC CHIP 1 $\mu$ F	10% 10V	C413	1-216-025-91	RES, CHIP 100	5% 1/10W [U/C]
C207	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V	C415	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V
C208	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V	C416	1-126-961-11	ELECT 2.2 $\mu$ F	20% 50V
C209	1-163-227-11	CERAMIC CHIP 10pF	0.5pF 50V	C417	1-104-574-11	CERAMIC 0.0047 $\mu$ F	10% 2KV
C210	1-163-275-11	CERAMIC CHIP 0.001 $\mu$ F	5% 50V	C419	1-162-318-11	CERAMIC 0.001 $\mu$ F	10% 500V
C212	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V	C420	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V
C213	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V	C421	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V
C214	1-164-004-11	CERAMIC CHIP 0.1 $\mu$ F	10% 25V	C422	1-164-489-11	CERAMIC CHIP 0.22 $\mu$ F	10% 16V
C215	1-104-341-11	FILM 0.1 $\mu$ F	10% 250V	C423	1-104-664-11	ELECT 47 $\mu$ F	20% 25V
C216	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V	C424	1-162-318-11	CERAMIC 0.001 $\mu$ F	10% 500V
C220	1-104-341-11	FILM 0.1 $\mu$ F	10% 250V	C425	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C301	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V	C426	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
				C427	1-163-235-11	CERAMIC CHIP 22pF	5% 50V
				C430	1-163-021-91	CERAMIC CHIP 0.01 $\mu$ F	10% 50V

# CPD-E500/E500E

**A**

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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C431	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V	D402	8-719-066-11	DIODE 1PS184-115	
C432	1-164-489-11	CERAMIC CHIP 0.22μF	10% 16V	D403	8-719-982-36	ZENER DIODE MTZJ-39B	
C433	1-162-318-11	CERAMIC 0.001μF	10% 500V	D405	8-719-911-19	DIODE 1SS119-25	
C434	1-162-318-11	CERAMIC 0.001μF	10% 500V	D406	8-719-062-51	DIODE 1PS226-115	
C435	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D407	8-719-062-51	DIODE 1PS226-115	
C436	1-164-489-11	CERAMIC CHIP 0.22μF	10% 16V				
C437	1-126-934-11	ELECT 220μF	20% 16V [U/C]				
			<FERRITE BEAD>				
C437	1-126-935-11	ELECT 470μF	20% 16V [AEP]	FB102	1-500-419-22	FERRITE	
C438	1-115-339-11	CERAMIC CHIP 0.1μF	10% 50V	FB202	1-500-419-22	FERRITE	
C440	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB302	1-500-419-22	FERRITE	
C441	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB402	1-412-911-11	FERRITE 1.1μH	
C442	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB403	1-412-911-11	FERRITE 1.1μH	
C443	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB404	1-412-911-11	FERRITE 1.1μH	
C444	1-162-318-11	CERAMIC 0.001μF	10% 500V	FB405	1-412-911-11	FERRITE 1.1μH	
C446	1-104-664-11	ELECT 47μF	20% 25V	FB406	1-412-911-11	FERRITE 1.1μH	
C449	1-109-982-11	CERAMIC CHIP 1μF	10% 10V	FB411	1-412-911-11	FERRITE 1.1μH	
C450	1-107-823-11	CERAMIC CHIP 0.47μF	10% 16V				
C456	1-164-489-11	CERAMIC CHIP 0.22μF	10% 16V [AEP]				
C457	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	IC401	8-759-584-87	IC M52757FP-TP	
C458	1-115-339-11	CERAMIC CHIP 0.1μF	10% 50V	IC402	8-759-584-86	IC M52749FP-TP	
C459	1-128-560-11	ELECT 22μF	20% 100V	IC403	8-749-015-91	IC FA4301	
C462	1-115-339-11	CERAMIC CHIP 0.1μF	10% 50V	IC404	8-759-585-72	IC CXD9514M	
C463	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	IC405	8-759-701-01	IC NJM2904M	
C464	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V				
C467	1-107-957-11	ELECT 1μF	20% 250V	IC406	8-749-015-92	IC H8D2972	
				IC407	8-759-925-74	IC SN74HC04ANS	
			<CONNECTOR>				
CN401	1-793-183-11	CONNECTOR, D SUB 15P [AEP]					
CN402*	1-564-509-11	PLUG, CONNECTOR 6P					
CN403	1-784-463-11	CONNECTOR, FFC/FPC 21P					
CN405*	1-564-524-11	PLUG, CONNECTOR 9P					
CN406*	1-766-179-11	PIN, CONNECTOR (PC BOARD) 2P					
			<DIODE>				
D101	8-719-062-51	DIODE 1PS226-115					
D102	8-719-062-51	DIODE 1PS226-115 [AEP]					
D103	8-719-066-10	DIODE 1PS181-115					
D105	8-719-051-85	DIODE HSS83TD					
D106	8-719-052-12	DIODE 1SS376TE-17					
D107	8-719-052-12	DIODE 1SS376TE-17					
D201	8-719-062-51	DIODE 1PS226-115					
D202	8-719-062-51	DIODE 1PS226-115 [AEP]					
D203	8-719-066-10	DIODE 1PS181-115					
D205	8-719-051-85	DIODE HSS83TD					
D206	8-719-052-12	DIODE 1SS376TE-17					
D207	8-719-052-12	DIODE 1SS376TE-17					
D301	8-719-062-51	DIODE 1PS226-115					
D302	8-719-062-51	DIODE 1PS226-115 [AEP]					
D303	8-719-066-10	DIODE 1PS181-115					
D305	8-719-051-85	DIODE HSS83TD					
D306	8-719-052-12	DIODE 1SS376TE-17					
D307	8-719-052-12	DIODE 1SS376TE-17					
			<TRANSISTOR>				
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q401	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q402	8-729-050-41	TRANSISTOR 2SJ360TE12L					
Q406	8-729-216-22	TRANSISTOR 2SA1162-G					
Q407	8-729-028-74	TRANSISTOR DTA114TUA-T106					
Q410	8-729-032-61	TRANSISTOR 2SC5022-02					
			<RESISTOR>				
R101	1-215-394-00	METAL 75 1% 1/4W					
R103	1-215-394-00	METAL 75 1% 1/4W [AEP]					
R105	1-216-017-91	RES,CHIP 47 5% 1/10W					
R106	1-216-017-91	RES, CHIP 47 5% 1/10W [AEP]					



REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R107	1-216-045-00	RES,CHIP	680	5%	1/10W	R311	1-216-033-00	RES,CHIP	220	5%	1/10W
R109	1-216-678-11	METAL CHIP	13K	0.5%	1/10W	R312	1-216-009-91	RES,CHIP	22	5%	1/10W
R110	1-216-097-91	RES,CHIP	100K	5%	1/10W	R313	1-216-017-91	RES,CHIP	47	5%	1/10W
R111	1-216-041-00	RES,CHIP	470	5%	1/10W	R314	1-216-009-91	RES,CHIP	22	5%	1/10W
R112	1-216-009-91	RES,CHIP	22	5%	1/10W	R315	1-219-742-11	CARBON	47	5%	1/2W
R113	1-216-017-91	RES,CHIP	47	5%	1/10W	R316	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R114	1-216-009-91	RES,CHIP	22	5%	1/10W	R317	1-216-121-91	RES,CHIP	1M	5%	1/10W
R115	1-219-742-11	CARBON	47	5%	1/2W	R318	1-216-121-91	RES,CHIP	1M	5%	1/10W
R116	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R319	1-216-077-91	RES,CHIP	15K	5%	1/10W
R117	1-216-121-91	RES,CHIP	1M	5%	1/10W	R320	1-216-113-00	RES,CHIP	470K	5%	1/10W
R118	1-216-121-91	RES,CHIP	1M	5%	1/10W	R321	1-216-113-00	RES,CHIP	470K	5%	1/10W
R119	1-216-077-91	RES,CHIP	15K	5%	1/10W	R322	1-216-081-00	RES,CHIP	22K	5%	1/10W
R120	1-216-113-00	RES,CHIP	470K	5%	1/10W	R328	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R121	1-216-113-00	RES,CHIP	470K	5%	1/10W	R330	1-216-113-00	RES,CHIP	470K	5%	1/10W
R122	1-216-081-00	RES,CHIP	22K	5%	1/10W	R337	1-249-413-11	CARBON	470	5%	1/4W
R128	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R338	1-216-017-91	RES,CHIP	47	5%	1/10W
R130	1-216-113-00	RES,CHIP	470K	5%	1/10W	R361	1-216-041-00	RES,CHIP	470	5%	1/10W
R137	1-249-413-11	CARBON	470	5%	1/4W	R402	1-216-049-91	RES,CHIP	1K	5%	1/10W
R138	1-216-017-91	RES,CHIP	47	5%	1/10W	R403	1-216-081-00	RES,CHIP	22K	5%	1/10W
R161	1-216-041-00	RES,CHIP	470	5%	1/10W	R404	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R201	1-215-394-00	METAL	75	1%	1/4W	R405	1-216-045-00	RES,CHIP	680	5%	1/10W
R202	1-216-097-91	RES,CHIP	100K	5%	1/10W	R406	1-216-097-91	RES,CHIP	100K	5%	1/10W
R203	1-215-394-00	METAL	75	1%	1/4W	R407	1-218-768-11	METAL CHIP	470K	0.5%	1/10W
		[AEP]				R409	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R205	1-216-017-91	RES,CHIP	47	5%	1/10W	R411	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R206	1-216-017-91	RES,CHIP	47	5%	1/10W	R412	1-216-105-91	RES,CHIP	220K	5%	1/10W
		[AEP]				R413	1-216-097-91	RES,CHIP	100K	5%	1/10W
R207	1-216-045-00	RES,CHIP	680	5%	1/10W	R414	1-216-089-91	RES,CHIP	47K	5%	1/10W
		[AEP]				R415	1-216-097-91	RES,CHIP	100K	5%	1/10W
R209	1-216-678-11	METAL CHIP	13K	0.5%	1/10W	R417	1-216-121-91	RES,CHIP	1M	5%	1/10W
R210	1-216-097-91	RES,CHIP	100K	5%	1/10W	R418	1-260-127-11	CARBON	220K	5%	1/2W
R211	1-216-033-00	RES,CHIP	220	5%	1/10W	R419	1-216-033-00	RES,CHIP	220	5%	1/10W
R212	1-216-009-91	RES,CHIP	22	5%	1/10W	R420	1-216-025-91	RES,CHIP	100	5%	1/10W
R213	1-216-017-91	RES,CHIP	47	5%	1/10W	R421	1-216-025-91	RES,CHIP	100	5%	1/10W
R214	1-216-009-91	RES,CHIP	22	5%	1/10W	R422	1-216-025-91	RES,CHIP	100	5%	1/10W
R215	1-219-742-11	CARBON	47	5%	1/2W	R424	1-216-049-91	RES,CHIP	1K	5%	1/10W
R216	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R425	1-216-049-91	RES,CHIP	1K	5%	1/10W
R217	1-216-121-91	RES,CHIP	1M	5%	1/10W						[AEP]
R218	1-216-121-91	RES,CHIP	1M	5%	1/10W	R426	1-216-105-91	RES,CHIP	220K	5%	1/10W
R219	1-216-077-91	RES,CHIP	15K	5%	1/10W	R427	1-216-049-91	RES,CHIP	1K	5%	1/10W
R220	1-216-113-00	RES,CHIP	470K	5%	1/10W	R428	1-216-025-91	RES,CHIP	100	5%	1/10W
R221	1-216-113-00	RES,CHIP	470K	5%	1/10W	R430	1-216-025-91	RES,CHIP	100	5%	1/10W
R222	1-216-081-00	RES,CHIP	22K	5%	1/10W	R431	1-216-113-00	RES,CHIP	470K	5%	1/10W
R228	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R436	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R230	1-216-113-00	RES,CHIP	470K	5%	1/10W	R438	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R237	1-249-413-11	CARBON	470	5%	1/4W	R439	1-216-041-00	RES,CHIP	470	5%	1/10W
R238	1-216-017-91	RES,CHIP	47	5%	1/10W	R441	1-216-121-91	RES,CHIP	1M	5%	1/10W
R261	1-216-041-00	RES,CHIP	470	5%	1/10W	R442	1-216-049-91	RES,CHIP	1K	5%	1/10W
R301	1-215-394-00	METAL	75	1%	1/4W	R443	1-216-025-91	RES,CHIP	100	5%	1/10W
R303	1-215-394-00	METAL	75	1%	1/4W	R444	1-216-025-91	RES,CHIP	100	5%	1/10W
		[AEP]				R445	1-216-025-91	RES,CHIP	100	5%	1/10W
R305	1-216-017-91	RES,CHIP	47	5%	1/10W						[AEP]
R306	1-216-017-91	RES,CHIP	47	5%	1/10W	R446	1-216-025-91	RES,CHIP	100	5%	1/10W
		[AEP]									[AEP]
R307	1-216-045-00	RES,CHIP	680	5%	1/10W	R447	1-216-017-91	RES,CHIP	47	5%	1/10W
R309	1-216-678-11	METAL CHIP	13K	0.5%	1/10W						[AEP]
R310	1-216-097-91	RES,CHIP	100K	5%	1/10W	R448	1-216-017-91	RES,CHIP	47	5%	1/10W
		[AEP]									[AEP]

CPD-E500/E500E



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	REF.NO.	PART NO.	DESCRIPTION	REMARK
R449	1-216-081-00	RES,CHIP	22K 5% 1/10W	C607	1-113-900-11	CERAMIC	470pF 10% 250V
R450	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	C610	1-117-849-11	ELECT	330μF 20% 450V
R451	1-216-115-00	RES,CHIP	560K 5% 1/10W	C611	1-137-479-11	FILM	1μF 10% 400V
R453	1-216-073-00	RES,CHIP	10K 5% 1/10W	C612	1-136-169-00	FILM	0.22μF 5% 50V
R454	1-216-129-00	RES,CHIP	2.2M 5% 1/10W	C613	1-126-967-11	ELECT	47μF 20% 50V
R455	1-216-097-91	RES,CHIP	100K 5% 1/10W	C614	1-163-251-11	CERAMIC CHIP	100pF 5% 50V
R456	1-216-025-91	RES,CHIP	100 5% 1/10W [AEP]	C620	1-128-990-11	FILM	27000pF 5% 800V
R457	1-211-895-11	METAL	10M 10% 1/4W	C621	1-104-330-91	CERAMIC	470pF 10% 1KV
R458	1-219-398-51	METAL	2.2M 5% 1W	C622	1-104-330-91	CERAMIC	470pF 10% 1KV
R459	1-211-895-11	METAL	10M 10% 1/4W	C623	1-136-171-00	FILM	0.33μF 5% 50V
R460	1-216-073-00	RES,CHIP	10K 5% 1/10W	C624	1-136-171-00	FILM	0.33μF 5% 50V
R461	1-216-105-91	RES,CHIP	220K 5% 1/10W	C625	1-136-167-00	FILM	0.15μF 5% 50V
R463	1-216-097-91	RES,CHIP	100K 5% 1/10W	C626	1-136-167-00	FILM	0.15μF 5% 50V
R464	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	C627	1-104-330-91	CERAMIC	470pF 10% 1KV
R488	1-216-089-91	RES,CHIP	47K 5% 1/10W	C629	1-137-370-11	FILM	0.01μF 5% 50V
R490	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	C630	1-163-005-11	CERAMIC CHIP	470pF 10% 50V
R491	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	C631	1-104-665-11	ELECT	100μF 20% 25V
				C633	1-164-161-11	CERAMIC CHIP	0.0022μF 10% 50V
				C634	1-163-009-11	CERAMIC CHIP	0.001μF 10% 50V
				C650	1-107-656-11	ELECT	100μF 20% 250V
				C651	1-107-651-11	ELECT	4.7μF 20% 250V
				C652	1-128-563-11	ELECT	100μF 20% 100V
				C653	1-128-581-11	ELECT	4.7μF 20% 100V
				C654	1-126-943-11	ELECT	2200μF 20% 25V
				C655	1-104-664-11	ELECT	47μF 20% 25V
				C656	1-126-943-11	ELECT	2200μF 20% 25V
				C657	1-104-664-11	ELECT	47μF 20% 25V
				C658	1-126-927-11	ELECT	2200μF 20% 10V
				C659	1-128-339-11	ELECT	2200μF 20% 10V
				C660	1-126-967-11	ELECT	47μF 20% 50V
				C661	1-107-429-11	CERAMIC	0.0022μF 10% 1KV
				C662	1-137-370-11	FILM	0.01μF 5% 50V
				C663	1-126-965-11	ELECT	22μF 20% 50V
				C665	1-107-909-11	ELECT	47μF 20% 10V
X401	1-781-472-21	VIBRATOR, CERAMIC (8MHz)		C666	1-126-964-11	ELECT	10μF 20% 50V
				C667	1-107-909-11	ELECT	47μF 20% 16V
				C680	1-115-747-51	ELECT	0.0068F 20% 10V
				C681	1-104-664-11	ELECT	47μF 20% 10V
				C682	1-137-368-11	FILM	0.0047μF 5% 50V
				C683	1-104-664-11	ELECT	47μF 20% 10V
				C684	1-128-526-11	ELECT	100μF 20% 10V
				C685	1-128-526-11	ELECT	100μF 20% 10V
				C686	1-104-664-11	ELECT	47μF 20% 10V
				C687	1-126-964-11	ELECT	10μF 20% 50V
				C692	1-115-339-11	CERAMIC CHIP	0.1μF 10% 50V
							<CONNECTOR>
							CN601*1-580-689-11 PIN, CONNECTOR (PC BOARD) 4P
							CN602*1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P
							CN603*1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P
							CN650*1-564-510-11 PLUG, CONNECTOR 7P
							CN652*1-564-512-11 PLUG, CONNECTOR 9P
							CN653*1-564-509-11 PLUG, CONNECTOR 6P
							CN654*1-564-511-11 PLUG, CONNECTOR 8P
							<CAPACITOR>
C601	△1-113-513-11	FILM	1μF 20% 275V				
C602	△1-113-513-11	FILM	1μF 20% 275V				
C603	△1-113-900-51	CERAMIC	470pF 10% 250V				
C604	△1-113-900-51	CERAMIC	470pF 10% 250V				
C605	△1-113-926-91	CERAMIC	0.0047μF 250V				
C606	△1-113-926-91	CERAMIC	0.0047μF 250V				



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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>		L651	1-414-742-21	INDUCTOR	22 $\mu$ H
D610	$\Delta$ 8-719-510-53	DIODE D4SB60L		L652	1-412-529-11	INDUCTOR	22 $\mu$ H
D612	8-719-911-19	DIODE 1SS119-25		L653	1-412-529-11	INDUCTOR	22 $\mu$ H
D613	8-719-304-63	DIODE RM11C		L680	1-414-742-21	INDUCTOR	22 $\mu$ H
D620	8-719-911-19	DIODE 1SS119-25					
D631	8-719-063-73	DIODE D1NL20U-TR					
D632	8-719-059-23	DIODE P6KE200AG23					
D633	8-719-069-63	DIODE ERB38-06V1					
D634	8-719-911-19	DIODE 1SS119-25					
D635	8-719-110-53	ZENER DIODE RD20ESB2					
D637	8-719-911-19	DIODE 1SS119-25					
D650	8-719-064-49	DIODE D4SBL40					
D651	8-719-063-73	DIODE D1NL20U-TR					
D652	8-719-052-91	DIODE D4SBS4-F					
D653	8-719-022-97	DIODE D2S4MF					
D654	8-719-022-97	DIODE D2S4MF					
D655	8-719-063-73	DIODE D1NL20U-TR					
D656	8-719-911-19	DIODE 1SS119-25					
D660	8-719-110-57	ZENER DIODE RD22ESB2					
D661	8-719-110-31	ZENER DIODE RD12ESB2					
D663	8-719-911-19	DIODE 1SS119-25					
D664	8-719-110-57	ZENER DIODE RD22ESB2					
D665	8-719-911-19	DIODE 1SS119-25					
D666	8-719-911-19	DIODE 1SS119-25					
D680	8-719-989-87	DIODE YG802C09					
D681	8-719-109-89	ZENER DIODE RD5.6ESB2					
D682	8-719-121-26	ZENER DIODE RD9.1ESL2					
D683	8-719-911-19	DIODE 1SS119-25					
D690	8-719-911-19	DIODE 1SS119-25					
D692	8-719-911-19	DIODE 1SS119-25					
		<FUSE>					
F601	$\Delta$ 1-576-233-11	FUSE (H.B.C.) (6.3A/250V)					
		<FERRITE BEAD>					
FB630	1-410-396-41	FERRITE	0.45 $\mu$ H	R601	$\Delta$ 1-220-825-91	CARBON	330K
FB632	$\Delta$ 1-410-397-31	FERRITE	1.1 $\mu$ H	R602	1-216-465-11	METAL OXIDE	27K
				R603	1-247-895-91	CARBON	470K
				R604	1-216-113-00	RES,CHIP	470K
				R605	1-216-113-00	RES,CHIP	470K
				R606	1-216-097-91	RES,CHIP	100K
				R607	1-216-097-91	RES,CHIP	100K
				R608	1-216-073-00	RES,CHIP	10K
				R609	1-216-069-00	RES,CHIP	6.8K
				R610	1-217-152-00	METAL	0.33
				R611	1-217-153-00	METAL	0.47
				R612	1-249-429-11	CARBON	10K
				R613	1-216-089-91	RES,CHIP	47K
				R614	1-247-807-31	CARBON	100
				R615	1-249-427-11	CARBON	6.8K
				R616	1-216-671-11	METAL CHIP	6.8K
				R617	1-249-417-11	CARBON	1K
				R618	1-216-369-00	METAL OXIDE	1
				R620	1-202-933-61	FUSIBLE	0.1
				R621	1-249-432-11	CARBON	18K
		<COIL>					
L610	1-419-126-21	COIL, CHOKE (AFC)	216 $\mu$ H				
L611	1-411-674-11	INDUCTOR	68 $\mu$ H				
L650	1-414-742-21	INDUCTOR	22 $\mu$ H				

# CPD-E500/E500E



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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	REF.NO.	PART NO.	DESCRIPTION	REMARK					
R622	1-216-089-91	RES,CHIP	47K	5%	1/10W	R695	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R623	1-218-642-11	METAL OXIDE	100K	5%	1W F	R696	1-249-407-11	CARBON	150	5%	1/4W	
R624	1-218-642-11	METAL OXIDE	100K	5%	1W F							
R625	1-216-349-00	METAL OXIDE	1	5%	1W F							
R626	1-216-349-00	METAL OXIDE	1	5%	1W F							
R627	1-216-683-11	METAL CHIP	22K	0.5%	1/10W	R627	1-216-683-11	RELAY, POWER	RY602△1-755-318-11			
R628	1-216-695-11	METAL CHIP	68K	0.5%	1/10W	R628	1-216-695-11	RELAY	RY603△1-755-067-21			
R629	1-216-683-11	METAL CHIP	22K	0.5%	1/10W							
R630	1-249-387-11	CARBON	3.3	5%	1/4W F							
R632	1-215-399-00	METAL	120	1%	1/4W							
R633	1-260-135-11	CARBON	1M	5%	1/2W	R633	1-260-135-11	GAP, SPARK	SG601△1-533-982-11			
R634	1-260-135-11	CARBON	1M	5%	1/2W							
R635	1-216-465-11	METAL OXIDE	27K	5%	2W F							
R636	1-247-863-91	CARBON	22K	5%	1/4W							
R637	1-219-134-11	FUSIBLE	0.1	10%	1/4W							
R638	1-219-134-11	FUSIBLE	0.1	10%	1/4W	R638	1-219-134-11	TRANSFORMER, LINE FILTER	T601△1-429-180-11			
R649	1-249-437-11	CARBON	47K	5%	1/4W F	R649	1-249-437-11	TRANSFORMER, CONVERTER (PIT)	T620			
R650	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R650	1-216-057-00	TRANSFORMER, CONVERTER (PRT)	T621			
R652	1-216-113-00	RES,CHIP	470K	5%	1/10W	R652	1-216-113-00	TRANSFORMER, CONVERTER (SRT)	T630			
R653	1-249-413-11	CARBON	470	5%	1/4W							
R654	1-211-796-11	FUSIBLE	1	5%	1/2W F	R654	1-211-796-11	TRANSFORMER, LINE FILTER	T601△1-429-180-11			
R655	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R655	1-216-065-91	TRANSFORMER, CONVERTER (PIT)	T620			
R656	1-260-292-11	CARBON	1	5%	1/2W	R656	1-260-292-11	TRANSFORMER, CONVERTER (PRT)	T621			
R657	1-249-443-11	CARBON	0.47	5%	1/4W F	R657	1-249-443-11	TRANSFORMER, CONVERTER (SRT)	T630			
R658	1-216-073-00	RES,CHIP	10K	5%	1/10W							
R659	1-216-049-91	RES,CHIP	1K	5%	1/10W	R659	1-216-049-91	TRANSFORMER, LINE FILTER	T601△1-429-180-11			
R660	1-216-073-00	RES,CHIP	10K	5%	1/10W	R660	1-216-073-00	TRANSFORMER, CONVERTER (PIT)	T620			
R661	1-247-807-31	CARBON	100	5%	1/4W	R661	1-247-807-31	TRANSFORMER, CONVERTER (PRT)	T621			
R662	1-216-073-00	RES,CHIP	10K	5%	1/10W	R662	1-216-073-00	TRANSFORMER, CONVERTER (SRT)	T630			
R663	1-216-073-00	RES,CHIP	10K	5%	1/10W							
R664	1-216-073-00	RES,CHIP	10K	5%	1/10W	R664	1-216-073-00	TRANSFORMER, LINE FILTER	T601△1-429-180-11			
R665	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R665	1-216-057-00	TRANSFORMER, CONVERTER (PIT)	T620			
R666	1-216-073-00	RES,CHIP	10K	5%	1/10W	R666	1-216-073-00	TRANSFORMER, CONVERTER (PRT)	T621			
R667	1-216-089-91	RES,CHIP	47K	5%	1/10W	R667	1-216-089-91	TRANSFORMER, CONVERTER (SRT)	T630			
R668	1-215-457-00	METAL	33K	1%	1/4W							
R670	1-216-677-11	METAL CHIP	12K	0.5%	1/10W	R670	1-216-677-11	METAL CHIP	RY602△1-755-318-11			
R671	1-216-677-11	METAL CHIP	12K	0.5%	1/10W	R671	1-216-677-11	METAL CHIP	RY603△1-755-067-21			
R672	1-216-664-11	METAL CHIP	3.6K	0.5%	1/10W	R672	1-216-664-11	METAL CHIP	RY602△1-810-622-11			
R673	1-216-073-00	RES,CHIP	10K	5%	1/10W	R673	1-216-073-00	RES,CHIP	VDR601△1-801-268-51			
R674	1-216-097-91	RES,CHIP	100K	5%	1/10W	R674	1-216-097-91	RES,CHIP	VDR602△1-810-622-11			
R675	1-216-668-11	METAL CHIP	5.1K	0.5%	1/10W	R675	1-216-668-11	METAL CHIP	RY602△1-810-622-11			
R676	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W	R676	1-216-663-11	METAL CHIP	RY603△1-810-622-11			
R677	1-216-661-11	METAL CHIP	2.7K	0.5%	1/10W	R677	1-216-661-11	METAL CHIP	RY602△1-810-622-11			
R678	1-216-391-11	METAL OXIDE	1.5	5%	3W F	R678	1-216-391-11	METAL OXIDE	RY602△1-810-622-11			
R680	1-215-475-00	METAL	180K	1%	1/4W	R680	1-215-475-00	METAL	RY602△1-810-622-11			
R681	1-216-073-00	RES,CHIP	10K	5%	1/10W	R681	1-216-073-00	RES,CHIP	RY602△1-810-622-11			
R682	1-216-049-91	RES,CHIP	1K	5%	1/10W	R682	1-216-049-91	RES,CHIP	RY603△1-810-622-11			
R683	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R683	1-216-057-00	RES,CHIP	RY602△1-810-622-11			
R684	1-216-073-00	RES,CHIP	10K	5%	1/10W	R684	1-216-073-00	RES,CHIP	RY602△1-810-622-11			
R685	1-216-049-91	RES,CHIP	1K	5%	1/10W	R685	1-216-049-91	RES,CHIP	RY602△1-810-622-11			
R686	1-216-033-00	RES,CHIP	220	5%	1/10W	R686	1-216-033-00	RES,CHIP	RY602△1-810-622-11			
R687	1-216-081-00	RES,CHIP	22K	5%	1/10W	R687	1-216-081-00	RES,CHIP	RY603△1-810-622-11			
R688	1-215-473-00	METAL	150K	1%	1/4W	R688	1-215-473-00	METAL	RY602△1-810-622-11			
R693	1-260-085-11	CARBON	68	5%	1/2W	R693	1-260-085-11	CARBON	RY602△1-810-622-11			
R694	1-216-073-00	RES,CHIP	10K	5%	1/10W	R694	1-216-073-00	RES,CHIP	RY602△1-810-622-11			
C501	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C501	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	
C502	1-136-169-00	FILM	0.22μF	5%	50V	C502	1-136-169-00	FILM	0.22μF	5%	50V	
C503	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C503	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	
C504	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V	C504	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V	
C505	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	C505	1-163-021-91	CERAMIC CHIP	0.01μF	10%	50V	
C506	1-137-194-81	FILM	0.47μF	5%	50V	C506	1-137-194-81	FILM	0.47μF	5%	50V	
C507	1-136-169-00	FILM	0.22μF	5%	50V	C507	1-136-169-00	FILM	0.22μF	5%	50V	



REF.NO.	PART NO.	DESCRIPTION	REMARK		REF.NO.	PART NO.	DESCRIPTION	REMARK		
C508	1-126-965-11	ELECT	22μF	20%	50V	C565	1-164-004-11	CERAMIC CHIP0.1μF	10%	25V
C509	1-115-521-11	FILM	0.82μF	5%	250V	C566	1-137-370-11	FILM	0.01μF	5% 50V
C510	1-117-398-11	ELECT	33μF	20%	250V	C567	1-164-161-11	CERAMIC CHIP0.0022μF	10%	50V
C511	1-163-113-00	CERAMIC CHIP68pF		5%	50V	C568	1-104-760-11	CERAMIC CHIP0.047μF	10%	50V
C512	1-163-259-91	CERAMIC CHIP220pF		5%	50V	C571	1-163-227-11	CERAMIC CHIP10pF	0.5pF	50V
C513	1-163-017-00	CERAMIC CHIP0.0047μF	10%	50V	C572	1-163-009-11	CERAMIC CHIP0.001μF	10%	50V	
C514	1-106-375-12	MYLAR	0.022μF		200V	C573	1-106-375-12	MYLAR	0.022μF	200V
C515	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C574	1-163-017-00	CERAMIC CHIP0.0047μF	10%	50V	
C516	1-126-935-11	ELECT	470μF	20%	16V	C575	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V
C517	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C577	1-126-964-11	ELECT	10μF	20% 50V	
C518	1-137-194-81	FILM	0.47μF	5%	50V	C701	1-128-560-11	ELECT	22μF	20% 100V
C519	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C702	1-128-562-11	ELECT	47μF	20% 100V	
C520	1-107-914-11	ELECT	1000μF	20%	25V	C703	1-104-331-11	CERAMIC	0.0022μF	10% 1KV
C521	1-117-666-11	FILM	0.39μF	5%	250V	C704	1-104-568-11	CERAMIC	470pF	10% 2KV
C522	1-137-368-11	FILM	0.0047μF	5%	50V	C706	1-164-004-11	CERAMIC CHIP0.1μF	10%	25V
C523	1-137-368-11	FILM	0.0047μF	5%	50V	C707	1-130-495-00	FILM	0.1μF	5% 50V
C524	1-163-133-00	CERAMIC CHIP470pF	5%	50V	C708	1-126-942-61	ELECT	1000μF	20% 25V	
C525	1-104-760-11	CERAMIC CHIP0.047μF	10%	50V	C709	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	
C526	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C710	1-107-894-11	ELECT	220μF	20% 35V	
C527	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C711	1-163-019-00	CERAMIC CHIP0.0068μF	10%	50V	
C528	1-117-663-11	FILM	0.22μF	5%	250V	C712	1-106-228-00	MYLAR	0.22μF	10% 100V
C529	1-104-665-11	ELECT	100μF	20%	25V	C713	1-126-942-61	ELECT	1000μF	20% 25V
C530	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C715	1-164-004-11	CERAMIC CHIP0.1μF	10%	25V	
C531	1-107-846-11	FILM	0.1μF	5%	250V	C720	1-126-964-11	ELECT	10μF	20% 50V
C532	1-163-009-11	CERAMIC CHIP0.001μF	10%	50V	C901	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	
C533	1-107-889-11	ELECT	220μF	20%	25V	C902	1-104-665-11	ELECT	100μF	20% 25V
C534	1-107-889-11	ELECT	220μF	20%	25V	C903	1-126-964-11	ELECT	10μF	20% 50V
C535	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C905	1-163-127-00	CERAMIC CHIP270pF	5%	50V	
C536	1-126-967-11	ELECT	47μF	20%	50V	C907	1-163-257-11	CERAMIC CHIP180pF	5%	50V
C537	1-113-694-11	FILM	0.056μF	5%	400V	C908	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V
C538	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C909	1-126-935-11	ELECT	470μF	20% 16V	
C539	1-163-017-00	CERAMIC CHIP0.0047μF	10%	50V	C910	1-126-962-11	ELECT	3.3μF	20% 50V	
C540	1-106-343-00	MYLAR	0.001μF	10%	200V	C912	1-106-383-00	MYLAR	0.047μF	10% 200V
C541	1-164-161-11	CERAMIC CHIP0.0022μF	10%	50V	C913	1-119-748-11	ELECT	33μF	20% 400V	
C542	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C914	1-106-383-00	MYLAR	0.047μF	10% 200V	
C543	1-135-350-11	FILM	3600pF	3%	1.8KV	C915	1-136-169-00	FILM	0.22μF	5% 50V
C544	1-125-925-11	FILM MELF	0.027μF	5%	400V	C916	1-117-626-11	FILM	2000pF	3% 1.2KV
C545	1-107-597-11	CERAMIC	22pF	5%	500V	C917	1-117-665-11	FILM	0.33μF	5% 250V
C546	1-107-444-11	CERAMIC	100pF	5%	2KV	C918	1-106-359-00	MYLAR	0.0047μF	10% 100V
C547	1-130-061-91	FILM	0.0015μF	5%	630V	C919	1-115-350-51	CERAMIC	0.0047μF	2KV
C548	1-162-134-11	CERAMIC	470pF	10%	2KV	C920	1-137-372-11	FILM	0.022μF	5% 50V
C549	1-130-495-00	FILM	0.1μF	5%	50V	C921	1-106-228-00	MYLAR	0.22μF	10% 100V
C550	1-127-833-11	FILM	0.15μF	5%	400V	C922	1-106-220-00	MYLAR	0.1μF	10% 100V
C551	1-163-017-00	CERAMIC CHIP0.0047μF	10%	50V	C923	1-106-355-12	MYLAR	0.0033μF	10% 200V	
C552	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C924	1-106-220-00	MYLAR	0.1μF	10% 100V	
C554	1-107-444-11	CERAMIC	100pF	5%	2KV	C925	1-126-967-11	ELECT	47μF	20% 50V
C555	1-107-683-11	ELECT	2.2μF		250V	C926	1-126-964-11	ELECT	10μF	20% 50V
C556	1-115-356-11	FILM	1.2μF	5%	250V	C927	1-163-243-11	CERAMIC CHIP47pF	5%	50V
C557	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C928	1-163-133-00	CERAMIC CHIP470pF	5%	50V	
C558	1-104-665-11	ELECT	100μF	20%	25V	C929	1-164-004-11	CERAMIC CHIP0.1μF	10%	25V
C559	1-107-649-11	ELECT	2.2μF	20%	250V	C930	1-163-227-11	CERAMIC CHIP10pF	0.5pF	50V
C560	1-163-021-91	ELECT	0.01μF	10%	50V	C931	1-126-964-11	ELECT	10μF	20% 50V
C561	1-104-664-11	ELECT	47μF	20%	25V	C932	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V
C562	1-163-021-91	CERAMIC CHIP0.01μF	10%	50V	C933	1-126-960-11	ELECT	1μF	20% 50V	
C563	1-163-011-11	CERAMIC CHIP0.0015μF	10%	50V	C935	1-163-275-11	CERAMIC CHIP0.001μF	5%	50V	
C564	1-126-960-11	ELECT	1μF	20%	50V					

# CPD-E500/E500E

**D**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>		D923	8-719-988-61	DIODE 1SS355TE-17	
CN501*1-564-509-11	PLUG, CONNECTOR 6P						
CN502*1-564-510-11	PLUG, CONNECTOR 7P						
CN503*1-508-879-11	BASE POST						
CN504 1-784-786-11	CONNECTOR, FFC 25P						
CN505 1-784-786-11	CONNECTOR, FFC 25P						
CN506 1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P						
CN508*1-564-511-11	PLUG, CONNECTOR 8P						
CN509*1-778-955-11	PIN, CONNECTOR (PC BOARD) 10P						
		<DIODE>					
D504	8-719-988-61	DIODE 1SS355TE-17					
D505	8-719-110-36	ZENER DIODE RD13ESB2					
D506	8-719-991-33	DIODE 1SS133T-77					
D507	8-719-063-89	DIODE YG911S3R					
D508	8-719-031-79	DIODE D5SC4M					
D509	8-719-991-33	DIODE 1SS133T-77					
D510	8-719-109-85	ZENER DIODE RD5.1ESB2					
D511	8-719-066-36	DIODE FMQ-G5GS					
D512	8-719-988-61	DIODE 1SS355TE-17					
D513	8-719-991-33	DIODE 1SS133T-77					
D514	8-719-991-33	DIODE 1SS133T-77					
D515	8-719-109-89	ZENER DIODE RD5.6ESB2					
D516	8-719-991-33	DIODE 1SS133T-77					
D517	8-719-951-30	DIODE ERA91-02					
D519	8-719-988-61	DIODE 1SS355TE-17					
D520	8-719-988-61	DIODE 1SS355TE-17					
D522	8-719-988-61	DIODE 1SS355TE-17					
D701	8-719-991-33	DIODE 1SS133T-77					
D702	8-719-991-33	DIODE 1SS133T-77					
D703	8-719-991-33	DIODE 1SS133T-77					
D706	8-719-979-58	DIODE EGP10D					
D707	8-719-109-85	ZENER DIODE RD5.1ESB2					
D708	8-719-908-03	DIODE GP08D					
D709	8-719-948-45	DIODE ERA22-08					
D710	8-719-109-85	ZENER DIODE RD5.1ESB2					
D901	8-719-991-33	DIODE 1SS133T-77					
D902	8-719-110-31	ZENER DIODE RD12ESB2					
D904	8-719-988-61	DIODE 1SS355TE-17					
D905	8-719-110-36	ZENER DIODE RD13ESB2					
D906	8-719-063-89	DIODE YG911S3R					
D907	8-719-930-97	ZENER DIODE HZS16NB2TD					
D908	8-719-018-82	DIODE RGP02-20EL-6394					
D909	8-719-930-97	ZENER DIODE HZS16NB2TD					
D910	8-719-991-33	DIODE 1SS133T-77					
D912	8-719-979-58	DIODE EGP10D					
D913	8-719-991-33	DIODE 1SS133T-77					
D914	8-719-991-33	DIODE 1SS133T-77					
D915	8-719-929-72	ZENER DIODE HZS33NB2					
D917	8-719-988-61	DIODE 1SS355TE-17					
D918	8-719-991-33	DIODE 1SS133T-77					
D919	8-719-991-33	DIODE 1SS133T-77					
D920	8-719-928-85	ZENER DIODE HZS4.7NB2					
D921	8-719-988-61	DIODE 1SS355TE-17					
D922	8-719-018-82	DIODE RGP02-20EL-6394					
		<FERRITE BEAD>					
FB501	1-410-397-21	FERRITE	1.1μH				
FB502	1-410-397-21	FERRITE	1.1μH				
FB503	1-412-911-11	FERRITE	1.1μH				
FB504	1-412-911-11	FERRITE	1.1μH				
FB505	1-412-911-11	FERRITE	1.1μH				
FB506	1-410-397-21	FERRITE	1.1μH				
FB507	1-410-397-21	FERRITE	1.1μH				
FB901	1-410-397-21	FERRITE	1.1μH				
		<IC>					
IC501	8-759-585-82	IC BA9759F-E2					
IC502	8-759-803-42	IC LA6500-FA					
IC503	8-759-058-50	IC XRA10324AF					
IC701	8-759-444-82	IC LA7841L					
IC901	8-759-585-81	IC BA9758FS-E2					
		<CHIP CONDUCTOR>					
JR002	1-216-296-91	SHORT	0				
JR003	1-216-295-91	SHORT	0				
JR004	1-216-295-91	SHORT	0				
JR005	1-216-296-91	SHORT	0				
JR006	1-216-295-91	SHORT	0				
JR008	1-216-295-91	SHORT	0				
JR009	1-216-295-91	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	1-216-296-91	SHORT	0				
JR015	1-216-296-91	SHORT	0				
JR016	1-216-295-91	SHORT	0				
		<COIL>					
L501	1-412-537-31	INDUCTOR	100μH				
L502	1-406-673-11	COIL, CHOKE	2.2mH				
L503	1-406-671-11	COIL, CHOKE	1mH				
L504	1-406-675-11	COIL, CHOKE	4.7mH				
L505	1-416-401-31	COIL, CHOKE	5mH				
L901	1-412-537-31	INDUCTOR	100μH				
L902	1-406-660-41	COIL, CHOKE	15μH				
		<TRANSISTOR>					
Q501	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119					
Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q503	8-729-901-97	TRANSISTOR 2SA1036K-Q					
Q504	8-729-901-87	TRANSISTOR 2SC2411K-CQ					
Q505	8-729-901-97	TRANSISTOR 2SA1036K-Q					
Q506	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119					
Q507	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119					



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q508	8-729-048-53	TRANSISTOR 2SJ569LS-CB11		R522	1-249-437-11	CARBON	47K 5% 1/4W
Q509	8-729-820-73	TRANSISTOR 2SC3746		R523	1-216-033-00	RES,CHIP	220 5% 1/10W
Q510	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119		R524	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q511	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119		R525	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q512	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119		R526	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q513	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119		R527	1-216-673-11	METAL CHIP	8.2K 0.5% 1/10W
Q514	8-729-140-50	TRANSISTOR 2SC3209LK		R528	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
Q515	8-729-048-48	TRANSISTOR 2SC5570 (LBSONY)		R529	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q516	8-729-024-95	TRANSISTOR 2SB1565EF		R530	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q517	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119		R531	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q518	8-729-019-01	TRANSISTOR 2SD2394-EF		R532	1-215-860-11	METAL OXIDE	33 5% 1W F
Q519	8-729-033-25	TRANSISTOR DTC114GKA		R533	1-211-796-11	FUSIBLE	1 5% 1/2W F
Q520	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R534	1-216-689-11	METAL CHIP	39K 0.5% 1/10W
Q521	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R535	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q522	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R536	1-216-683-11	METAL CHIP	22K 0.5% 1/10W
Q523	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R537	1-249-437-11	CARBON	47K 5% 1/4W
Q524	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R538	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q525	8-729-048-49	TRANSISTOR 2SK3262-01MR-F119		R539	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q526	8-729-027-35	TRANSISTOR DTA143TKA-T146		R540	1-215-909-11	METAL OXIDE	47 5% 3W F
Q701	8-729-800-32	TRANSISTOR 2SC2362K-G		R541	1-216-295-91	SHORT	0
Q702	8-729-178-43	TRANSISTOR 2SC2784-E		R542	1-249-437-11	CARBON	47K 5% 1/4W
Q703	8-729-204-91	TRANSISTOR 2SA1049-GR		R543	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
Q704	8-729-207-82	TRANSISTOR 2SC3421-Y		R544	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q705	8-729-207-89	TRANSISTOR 2SA1358-Y		R545	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q706	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R546	1-216-381-11	METAL OXIDE	0.22 5% 3W F
Q707	8-729-046-80	TRANSISTOR 2SC4634LS-CB11		R547	1-219-726-11	METAL	2.2 5% 10W
Q903	8-729-901-87	TRANSISTOR 2SC2411K-CQ		R548	1-249-437-11	CARBON	47K 5% 1/4W
Q904	8-729-901-97	TRANSISTOR 2SA1036K-Q		R549	1-260-288-11	CARBON	0.47 5% 1/2W
Q905	8-729-048-53	TRANSISTOR 2SJ569LS-CB11		R550	1-260-288-11	CARBON	0.47 5% 1/2W
Q906	8-729-044-21	TRANSISTOR 2SK2655-01R-F165		R551	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q907	8-729-033-26	TRANSISTOR DTA114GKAT146		R552	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q908	8-729-033-25	TRANSISTOR DTC114GKA		R553	1-247-815-91	CARBON	220 5% 1/4W
<RESISTOR>				R554	1-216-679-11	METAL CHIP	15K 0.5% 1/10W
<RESISTOR>				R555	1-216-675-91	METAL CHIP	10K 0.5% 1/10W
R501	1-215-884-11	METAL OXIDE	47 5% 2W F	R556	1-216-683-11	METAL CHIP	22K 0.5% 1/10W
R502	1-216-059-00	RES,CHIP	2.7K 5% 1/10W	R557	1-216-423-11	METAL OXIDE	27 5% 1W F
R503	1-216-049-91	RES,CHIP	1K 5% 1/10W	R558	1-249-437-11	CARBON	47K 5% 1/4W
R504	1-216-049-91	RES,CHIP	1K 5% 1/10W	R559	1-216-073-00	RES,CHIP	10K 5% 1/10W
R505	1-216-049-91	RES,CHIP	1K 5% 1/10W	R560	1-216-675-91	METAL CHIP	10K 0.5% 1/10W
R506	1-216-049-91	RES,CHIP	1K 5% 1/10W	R561	1-215-443-00	METAL	8.2K 1% 1/4W
R507	1-216-097-91	RES,CHIP	100K 5% 1/10W	R562	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
R508	1-247-815-91	CARBON	220 5% 1/4W	R563	1-216-049-91	RES,CHIP	1K 5% 1/10W
R509	1-216-049-91	RES,CHIP	1K 5% 1/10W	R564	1-216-677-11	METAL CHIP	12K 0.5% 1/10W
R510	1-216-675-91	METAL CHIP	10K 0.5% 1/10W	R565	1-216-097-91	RES,CHIP	100K 5% 1/10W
R511	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R566	1-216-687-11	METAL CHIP	33K 0.5% 1/10W
R512	1-215-453-00	METAL	22K 1% 1/4W	R567	1-214-840-00	METAL	100 1% 1/2W
R513	1-216-049-91	RES,CHIP	1K 5% 1/10W	R568	1-216-665-11	METAL CHIP	3.9K 0.5% 1/10W
R514	1-216-097-91	RES,CHIP	100K 5% 1/10W	R569	1-216-691-11	METAL CHIP	47K 0.5% 1/10W
R515	1-216-049-91	RES,CHIP	1K 5% 1/10W	R570	1-260-332-51	CARBON	2.2K 5% 1/2W
R516	1-216-049-91	RES,CHIP	1K 5% 1/10W	R571	1-249-425-11	CARBON	4.7K 5% 1/4W
R517	1-216-687-11	METAL CHIP	33K 0.5% 1/10W	R572	1-216-385-11	METAL OXIDE	0.47 5% 3W F
R518	1-216-691-11	METAL CHIP	47K 0.5% 1/10W	R573	1-249-437-11	CARBON	47K 5% 1/4W
R519	1-216-081-00	RES,CHIP	22K 5% 1/10W	R574	1-216-097-91	RES,CHIP	100K 5% 1/10W
R520	1-247-791-91	CARBON	22 5% 1/4W	R575	1-216-672-11	METAL CHIP	7.5K 0.5% 1/10W
R521	1-216-667-11	METAL CHIP	4.7K 0.5% 1/10W	R576	1-215-869-11	METAL OXIDE	1K 5% 1W F
				R577	1-260-310-71	CARBON	33 5% 1/2W

# CPD-E500/E500E

**D**

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

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	REF.NO.	PART NO.	DESCRIPTION	REMARK				
R578	1-216-049-91	RES,CHIP	1K	5%	1/10W	R907	1-216-081-00	RES,CHIP	22K	5%	1/10W
R579	1-216-049-91	RES,CHIP	1K	5%	1/10W	R908	1-216-399-00	METAL OXIDE	6.8	5%	3W F
R580	1-214-840-00	METAL	100	1%	1/2W	R911	1-216-041-00	RES,CHIP	470	5%	1/10W
R581	1-260-316-51	CARBON	100	5%	1/2W	R912	1-216-049-91	RES,CHIP	1K	5%	1/10W
R582	1-214-840-00	METAL	100	1%	1/2W	R914	1-247-791-91	CARBON	22	5%	1/4W
R583	1-249-437-11	CARBON	47K	5%	1/4W	R915	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R584	1-249-437-11	CARBON	47K	5%	1/4W	R916	1-249-397-11	CARBON	22	5%	1/4W F
R585	1-216-073-00	RES,CHIP	10K	5%	1/10W	R917	1-211-824-71	FUSIBLE	220	5%	1/2W F
R586	1-216-683-11	METAL CHIP	22K	0.5%	1/10W	R918	1-219-727-11	METAL	68	5%	10W
R587	1-215-886-11	METAL OXIDE	100	5%	2W F	R919	1-219-748-11	CARBON	4.7K	5%	1/2W
R588	1-260-085-11	CARBON	68	5%	1/2W	R920	1-216-089-91	RES,CHIP	47K	5%	1/10W
R589	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R921	1-249-429-11	CARBON	10K	5%	1/4W
R590	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R922	1-249-389-11	CARBON	4.7	5%	1/4W F
R591	1-247-807-31	CARBON	100	5%	1/4W	R923	1-218-762-11	METAL CHIP	270K	0.5%	1/10W
R593	1-216-073-00	RES,CHIP	10K	5%	1/10W	R924	1-216-073-00	RES,CHIP	10K	5%	1/10W
R594	1-216-683-11	METAL CHIP	22K	0.5%	1/10W	R925	1-220-825-11	CARBON	330K	5%	1/2W
R595	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W	R926	1-219-746-11	CARBON	1K	5%	1/2W
R597	1-216-073-00	RES,CHIP	10K	5%	1/10W	R927	1-219-746-11	CARBON	1K	5%	1/2W
R598	1-216-675-91	METAL CHIP	10K	0.5%	1/10W	R928	1-216-668-11	METAL CHIP	5.1K	0.5%	1/10W
R599	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W	R929	1-216-675-91	METAL CHIP	10K	0.5%	1/10W
R701	1-216-049-91	RES,CHIP	1K	5%	1/10W	R930	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R702	1-249-393-11	CARBON	10	5%	1/4W F	R931	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W
R703	1-215-459-00	METAL	39K	1%	1/4W	R932	1-216-049-91	RES,CHIP	1K	5%	1/10W
R704	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W	R933	1-216-687-11	METAL CHIP	33K	0.5%	1/10W
R705	1-249-413-11	CARBON	470	5%	1/4W F	R934	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R706	1-249-389-11	CARBON	4.7	5%	1/4W F	R935	1-216-089-91	RES,CHIP	47K	5%	1/10W
R707	1-249-389-11	CARBON	4.7	5%	1/4W F	R937	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R708	1-215-881-11	METAL OXIDE	15	5%	2W F	R939	1-216-049-91	RES,CHIP	1K	5%	1/10W
R709	1-216-049-91	RES,CHIP	1K	5%	1/10W	R940	1-216-073-00	RES,CHIP	10K	5%	1/10W
R710	1-216-073-00	RES,CHIP	10K	5%	1/10W	R941	1-216-025-91	RES,CHIP	100	5%	1/10W
R711	1-216-049-91	RES,CHIP	1K	5%	1/10W	R943	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R713	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	R945	1-216-025-91	RES,CHIP	100	5%	1/10W
R714	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R1501	1-216-049-91	RES,CHIP	1K	5%	1/10W
R715	1-249-389-11	CARBON	4.7	5%	1/4W F	R1502	1-216-033-00	RES,CHIP	220	5%	1/10W
R716	1-216-689-11	RES,CHIP	39K	5%	1/10W	R1503	1-216-682-11	METAL CHIP	20K	0.5%	1/10W
R717	1-216-073-00	RES,CHIP	10K	5%	1/10W	R1504	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R718	1-216-681-11	METAL CHIP	18K	0.5%	1/10W	R1505	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R719	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W	R1506	1-216-049-91	RES,CHIP	1K	5%	1/10W
R720	1-216-073-00	RES,CHIP	10K	5%	1/10W	R1507	1-216-097-91	RES,CHIP	100K	5%	1/10W
R721	1-216-073-00	RES,CHIP	10K	5%	1/10W	R1510	1-216-073-00	RES,CHIP	10K	5%	1/10W
R722	1-260-292-11	CARBON	1	5%	1/2W	R1515	1-215-909-11	METAL OXIDE	47	5%	3W F
R723	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W	R1517	1-216-089-91	RES,CHIP	47K	5%	1/10W
R724	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W	R1518	1-216-025-91	RES,CHIP	100	5%	1/10W
R725	1-214-798-21	METAL	1.8	1%	1/2W	<VARIABLE RESISTOR>					
R726	1-214-798-21	METAL	1.8	1%	1/2W	☒ RV901△1-241-767-21 RES, ADJ, CERMET					
R727	1-249-381-11	CARBON	1	5%	1/4W F	100K (HV ADJ)					
R728	1-215-865-11	METAL OXIDE	220	5%	1W F	<RELAY>					
R729	1-260-292-11	CARBON	1	5%	1/2W	RY501 1-755-198-11 RELAY					
R730	1-216-073-00	RES,CHIP	10K	5%	1/10W						
R731	1-216-059-00	RES,CHIP	2.7K	5%	1/10W						
R732	1-219-510-11	CARBON	470K	5%	1/2W						
R901	1-216-097-91	RES,CHIP	100K	5%	1/10W						
R902	1-216-117-00	RES,CHIP	680K	5%	1/10W						
R903	1-216-089-91	RES,CHIP	47K	5%	1/10W						
R904	1-216-033-00	RES,CHIP	220	5%	1/10W						
R906	1-216-033-00	RES,CHIP	220	5%	1/10W						

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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<SPARK GAP>		R804	1-247-815-91	CARBON	220 5% 1/4W
		SG901 1-517-499-21 GAP, SPARK		R811	1-249-429-11	CARBON	10K 5% 1/4W
		SG902 1-519-422-11 GAP, SPARK		R812	1-249-429-11	CARBON	10K 5% 1/4W
		SG903 1-519-422-11 GAP, SPARK		R813	1-247-863-91	CARBON	22K 5% 1/4W
		<TRANSFORMER>		R814	1-249-441-11	CARBON	100K 5% 1/4W
		T501 1-435-070-11 TRANSFORMER, HORIZONTAL DRIVE		R815	1-215-445-00	METAL	10K 1% 1/4W
		T502 1-429-301-11 TRANSFORMER, FERRITE (HCT)		R821	1-215-401-11	METAL	150 1% 1/4W
		T503 1-431-413-21 TRANSFORMER, FERRITE (HST)		R822	1-215-413-00	METAL	470 1% 1/4W
		T505 1-419-127-11 COIL, HORIZONTAL LINEARITY		R823	1-215-421-00	METAL	1K 1% 1/4W
		T701 1-431-414-11 TRANSFORMER, FERRITE (DFT)		R824	1-215-425-00	METAL	1.5K 1% 1/4W
		T901 1-416-402-11 INDUCTOR 500 $\mu$ H		R851	1-249-413-11	CARBON	470 5% 1/4W
		T902 $\Delta$ X-4560-175-1 TRANSFORMER ASSY, FLYBACK (NX-4502/J1D4)		R852	1-247-807-31	CARBON	100 5% 1/4W
		<SWITCH>		R853	1-247-807-31	CARBON	100 5% 1/4W
		S801 1-771-734-11 SWITCH, TACTILE (MENU)					
		TH501 1-807-796-11 THERMISTOR		S812	1-554-303-21	SWITCH, KEY BOARD (RESET)	
		TH502 1-807-796-11 THERMISTOR					
		<THERMISTOR>					
		TH801 1-807-796-11 THERMISTOR					
		*****					
		* A-1372-770-A H1 BOARD, COMPLETE [U/C for Mexico-made set]					
		* A-1372-799-A H1 BOARD, COMPLETE [U/C for Japan-made set]					
		* A-1646-206-A H1 BOARD, COMPLETE [AEP] *****					
		* A-1388-250-B J BOARD, COMPLETE [U/C for Japan-made set]					
		* A-1388-260-B J BOARD, COMPLETE [AEP]					
		* A-1388-261-B J BOARD, COMPLETE [U/C for Mexico-made set] *****					
		<CAPACITOR>					
		C802 1-126-791-11 ELECT 10 $\mu$ F 20% 16V					
		C806 1-126-786-11 ELECT 47 $\mu$ F 20% 16V					
		<CONNECTOR>					
		CN891*1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P					
		<SWITCH>					
		S891 $\Delta$ 1-571-433-31 SWITCH, PUSH (AC POWER)					
		*****					
		D801 8-719-064-11 DIODE SPR-325MVW (POWER)					
		<DIODE>					
		<TRANSISTOR>					
		Q801 8-729-119-78 TRANSISTOR 2SC2785-HFE					
		Q802 8-729-119-78 TRANSISTOR 2SC2785-HFE					
		Q803 8-729-029-40 TRANSISTOR DTA124ESA					
		Q804 8-729-029-40 TRANSISTOR DTA124ESA					
		<RESISTOR>					
		R801 1-249-417-11 CARBON 1K 5% 1/4W					
		R802 1-249-413-11 CARBON 470 5% 1/4W					
		R803 1-247-815-91 CARBON 220 5% 1/4W					
		<CAPACITOR>					
		C001 1-163-009-11 CERAMIC CHIP 0.001 $\mu$ F 10% 50V					
		C002 1-163-009-11 CERAMIC CHIP 0.001 $\mu$ F 10% 50V					

# CPD-E500/E500E

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C003	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C061	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C005	1-163-255-11	CERAMIC CHIP 150pF	5% 50V	C062	1-126-925-11	ELECT 470µF	20% 10V
C006	1-163-235-11	CERAMIC CHIP 22pF	5% 50V	C063	1-164-690-91	CERAMIC CHIP 0.0022µF	5% 50V
C007	1-163-235-11	CERAMIC CHIP 22pF	5% 50V	C064	1-115-419-11	CERAMIC CHIP 3300pF	5% 25V
C008	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V [AEP]	C065	1-126-960-11	ELECT 1µF	20% 50V
C009	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V [U/C]	C066	1-164-690-91	CERAMIC CHIP 0.0022µF	5% 50V
C010	1-126-967-11	ELECT 47µF	20% 50V [U/C]	C067	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C011	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V [AEP]	C068	1-136-169-00	FILM 0.22µF	5% 50V
C012	1-126-967-11	ELECT 47µF	20% 50V [AEP]	C069	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V
C013	1-126-965-11	ELECT 22µF	20% 50V	C070	1-126-767-11	ELECT 1000µF	20% 16V
C014	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C071	1-163-007-11	CERAMIC CHIP 680pF	10% 50V
C015	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C072	1-126-942-61	ELECT 1000µF	20% 25V
C016	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C073	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V
C017	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C074	1-163-137-00	CERAMIC CHIP 680pF	5% 50V
C018	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C075	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C019	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C077	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V
C020	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C078	1-136-169-00	FILM 0.22µF	5% 50V
C021	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C079	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C022	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C080	1-126-967-11	ELECT 47µF	20% 50V
C023	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C082	1-104-664-11	ELECT 47µF	20% 25V
C024	1-164-161-11	CERAMIC CHIP 2200pF	10% 50V	C083	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C025	1-163-009-11	CERAMIC CHIP 0.001µF	10% 50V	C084	1-126-964-11	ELECT 10µF	20% 50V
C026	1-104-665-11	ELECT 100µF	20% 25V	C085	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C027	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V	C086	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C028	1-163-220-11	CERAMIC CHIP 3pF	0.25pF 50V	C087	1-126-964-11	ELECT 10µF	20% 50V
C029	1-163-241-11	CERAMIC CHIP 39pF	5% 50V	C089	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C031	1-126-964-11	ELECT 10µF	20% 50V	C090	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C033	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C091	1-126-933-11	ELECT 100µF	20% 16V
C036	1-163-037-11	CERAMIC CHIP 0.022µF	10% 50V	C094	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C037	1-126-964-11	ELECT 10µF	20% 50V	C095	1-117-722-11	ELECT 2200µF	20% 10V
C038	1-126-964-11	ELECT 10µF	20% 50V	C096	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C039	1-126-964-11	ELECT 10µF	20% 50V	C097	1-126-964-11	ELECT 10µF	20% 50V
C040	1-126-964-11	ELECT 10µF	20% 50V	C098	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C041	1-126-964-11	ELECT 10µF	20% 50V	C099	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C042	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C1003	1-104-664-11	ELECT 47µF	20% 25V
C043	1-126-965-11	ELECT 22µF	20% 50V	C1004	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V
C044	1-163-037-11	CERAMIC CHIP 0.022µF	10% 50V	C1005	1-163-005-11	CERAMIC CHIP 470pF	10% 50V
C045	1-163-037-11	CERAMIC CHIP 0.022µF	10% 50V	C1006	1-164-161-11	CERAMIC CHIP 0.0022µF	10% 50V
C046	1-163-037-11	CERAMIC CHIP 0.022µF	10% 50V	C1007	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V
C047	1-163-037-11	CERAMIC CHIP 0.022µF	10% 50V	C5002	1-126-964-11	ELECT 10µF	20% 50V
C048	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C5003	1-126-933-11	ELECT 100µF	20% 16V
C049	1-126-964-11	ELECT 10µF	20% 50V	C5004	1-104-664-11	ELECT 47µF	20% 25V
C050	1-126-964-11	ELECT 10µF	20% 50V	C5005	1-104-664-11	ELECT 47µF	20% 25V
C051	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C5008	1-104-664-11	ELECT 47µF	20% 25V
C052	1-126-933-11	ELECT 100µF	20% 16V	C5009	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C053	1-163-021-91	CERAMIC CHIP 0.01µF	10% 50V	C5101	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C054	1-115-339-11	CERAMIC CHIP 0.1µF	10% 50V	C5103	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C055	1-104-664-11	ELECT 47µF	20% 25V	C5105	1-104-664-11	ELECT 47µF	20% 25V
C056	1-126-965-11	ELECT 22µF	20% 50V	C5106	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C057	1-126-964-11	ELECT 10µF	20% 50V	C5108	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V
C058	1-164-690-91	CERAMIC CHIP 0.0022µF	5% 50V	C5110	1-104-664-11	ELECT 47µF	20% 25V
C059	1-126-964-11	ELECT 10µF	20% 50V	C5203	1-164-004-11	CERAMIC CHIP 0.1µF	10% 25V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK					
C5304	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D027	8-719-988-61	DIODE 1SS355TE-17						
C5305	1-104-664-11	ELECT 47μF	20% 25V	D028	8-719-988-61	DIODE 1SS355TE-17						
C5306	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	D029	8-719-109-85	ZENER DIODE RD5.1ESB2						
C5308	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	D036	8-719-109-89	ZENER DIODE RD5.6ESB2						
C5310	1-104-664-11	ELECT 47μF	20% 25V	D038	8-719-045-99	ZENER DIODE RD2.2M-T1B						
C5401	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	D040	8-719-109-89	ZENER DIODE RD5.6ESB2						
C5403	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	<FERRITE BEAD>								
C5404	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB001	1-410-397-21	FERRITE	1.1μH					
C5406	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	FB002	1-410-397-21	FERRITE	1.1μH					
C5408	1-163-005-11	CERAMIC CHIP 470pF	10% 50V	FB003	1-410-397-21	FERRITE	1.1μH					
C5409	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB51011-412-911-11	FERRITE	1.1μH						
C5413	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	FB51031-412-911-11	FERRITE	1.1μH						
C5501	1-126-967-11	ELECT 47μF	20% 50V	FB52011-412-911-11	FERRITE	1.1μH						
C5602	1-115-339-11	CERAMIC CHIP 0.1μF	10% 50V	FB53011-412-911-11	FERRITE	1.1μH						
C5606	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	FB53031-412-911-11	FERRITE	1.1μH						
C5607	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	FB54011-412-911-11	FERRITE	1.1μH						
<CONNECTOR>												
CN001	1-784-500-11	CONNECTOR, FFC/FPC 21P		FB54031-412-911-11	FERRITE	1.1μH						
CN002*1-564-511-11	PLUG, CONNECTOR 8P			FB56011-412-911-11	FERRITE	1.1μH						
CN007*1-564-512-11	PLUG, CONNECTOR 9P			<SENSOR>								
CN010	1-784-786-11	CONNECTOR, FFC 25P		GS5001	1-418-473-11	SENSOR UNIT, GEOMAGNETIC						
CN011	1-784-786-11	CONNECTOR, FFC 25P		<IC>								
CN5001*1-564-509-11 PLUG, CONNECTOR 6P												
CN5002*1-564-511-11 PLUG, CONNECTOR 8P				IC001	8-759-658-88	IC CXD8744Q-0007						
CN5003*1-564-505-11 PLUG, CONNECTOR 2P				IC002	8-759-162-80	IC MM1170BFB						
<DIODE>				IC003	8-759-527-77	IC M24C16-MN6T						
D001	8-719-062-51	DIODE 1PS226-115		IC004	8-759-639-81	IC SN74AHCT74PWR [AEP]						
D002	8-719-062-51	DIODE 1PS226-115		IC005	8-759-639-81	IC SN74AHCT74PWR						
D003	8-719-109-89	DIODE 1PS226-115 [AEP]		IC006	8-759-700-78	NJM082M						
D004	8-719-109-89	DIODE 1PS226-115 [AEP]		IC010	8-759-585-70	IC LA7865M-TLM						
D005	8-719-109-89	ZENER DIODE RD5.6ESB2 [U/C]		IC011	8-759-442-20	IC 24LC21AT/SN [AEP]						
D006	8-719-109-89	ZENER DIODE RD5.6ESB2 [U/C]		IC012	8-759-442-20	IC 24LC21AT/SN [U/C]						
D007	8-719-109-89	ZENER DIODE RD5.6ESB2 [U/C]		IC5101	8-759-822-07	IC LA6515						
D008	8-719-109-89	ZENER DIODE RD5.6ESB2 [AEP]		IC5201	8-759-822-07	IC LA6515						
D009	8-719-109-89	ZENER DIODE RD5.6ESB2 [AEP]		IC5301	8-759-822-07	IC LA6515						
D010	8-719-109-89	ZENER DIODE RD5.6ESB2 [AEP]		IC5401	8-759-822-07	IC LA6515						
D011	8-719-109-89	ZENER DIODE RD5.6ESB2 [U/C]		<COIL>								
D012	8-719-109-89	ZENER DIODE RD5.6ESB2 [AEP]		L002	1-406-665-11	COIL, CHOKE 100μH						
D013	8-719-110-17	ZENER DIODE RD10ESB2		L003	1-406-671-11	COIL, CHOKE 1mH						
D014	8-719-066-11	DIODE 1PS184-115 [U/C]		<TRANSISTOR>								
D015	8-719-066-11	DIODE 1PS184-115 [AEP]		Q001	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R						
D016	8-719-109-89	ZENER DIODE RD5.6ESB2		Q002	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R						
D017	8-719-109-89	ZENER DIODE RD5.6ESB2		Q003	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R						
D018	8-719-109-89	ZENER DIODE RD5.6ESB2		Q004	8-729-028-83	TRANSISTOR DTA124EUA-T106						
D020	8-719-988-61	DIODE 1SS355TE-17		Q005	8-729-033-26	TRANSISTOR DTA114GKAT146						
D021	8-719-988-61	DIODE 1SS355TE-17		Q006	8-729-027-49	TRANSISTOR DTC123EKA-T146						
D022	8-719-066-11	DIODE 1PS184-115		Q007	8-729-901-00	TRANSISTOR DTC124EK						
D023	8-719-066-11	DIODE 1PS184-115		Q008	8-729-033-25	TRANSISTOR DTC114GKA						
D024	8-719-066-11	DIODE 1PS184-115 [AEP]										
D025	8-719-062-51	DIODE 1PS226-115										
D026	8-719-062-51	DIODE 1PS226-115										

# CPD-E500/E500E



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q010	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R049	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q011	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R050	1-216-089-91	RES,CHIP	47K 5% 1/10W [U/C]
Q012	8-729-901-00	TRANSISTOR DTC124EK		R050	1-216-295-91	SHORT	0 [AEP]
	<RESISTOR>			R051	1-216-077-91	RES,CHIP	15K 5% 1/10W [U/C]
R003	1-216-025-91	RES,CHIP	100 5% 1/10W	R051	1-216-049-91	RES,CHIP	1K 5% 1/10W [AEP]
R004	1-216-025-91	RES,CHIP	100 5% 1/10W	R052	1-216-077-91	RES,CHIP	15K 5% 1/10W [U/C]
R005	1-216-025-91	RES,CHIP	100 5% 1/10W [AEP]	R052	1-216-049-91	RES,CHIP	1K 5% 1/10W [AEP]
R006	1-216-025-91	RES,CHIP	100 5% 1/10W [AEP]	R053	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R007	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R054	1-216-077-91	RES,CHIP	15K 5% 1/10W
R008	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R055	1-216-049-91	RES,CHIP	1K 5% 1/10W [U/C]
R009	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R055	1-216-077-91	RES,CHIP	15K 5% 1/10W [AEP]
R010	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R056	1-216-073-00	RES,CHIP	10K 5% 1/10W
R011	1-249-389-11	CARBON	4.7 5% 1/4W [U/C]	R057	1-216-073-00	RES,CHIP	10K 5% 1/10W
R012	1-216-017-91	RES,CHIP	47 5% 1/10W [U/C]	R058	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
R013	1-216-017-91	RES,CHIP	47 5% 1/10W [U/C]	R059	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R014	1-216-049-91	RES,CHIP	1K 5% 1/10W	R060	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R015	1-249-389-11	CARBON	4.7 5% 1/4W [AEP]	R061	1-216-049-91	RES,CHIP	1K 5% 1/10W
R016	1-216-017-91	RES,CHIP	47 5% 1/10W [AEP]	R062	1-216-613-11	METAL CHIP	27 0.5% 1/10W
R017	1-216-017-91	RES,CHIP	47 5% 1/10W [AEP]	R063	1-216-613-11	METAL CHIP	27 0.5% 1/10W
R018	1-216-049-91	RES,CHIP	1K 5% 1/10W [AEP]	R064	1-216-613-11	METAL CHIP	27 0.5% 1/10W
R019	1-216-025-91	RES,CHIP	100 5% 1/10W	R066	1-216-049-91	RES,CHIP	1K 5% 1/10W
R020	1-216-025-91	RES,CHIP	100 5% 1/10W	R067	1-216-073-00	RES,CHIP	10K 5% 1/10W
R021	1-216-025-91	RES,CHIP	100 5% 1/10W	R075	1-215-407-00	METAL	270 1% 1/4W
R022	1-216-025-91	RES,CHIP	100 5% 1/10W	R076	1-215-407-00	METAL	270 1% 1/4W
R023	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R077	1-216-073-00	RES,CHIP	10K 5% 1/10W
R024	1-216-025-91	RES,CHIP	100 5% 1/10W	R078	1-216-121-91	RES,CHIP	1M 5% 1/10W
R025	1-216-025-91	RES,CHIP	100 5% 1/10W	R079	1-216-295-91	SHORT	0 [AEP]
R026	1-216-025-91	RES,CHIP	100 5% 1/10W	R080	1-216-295-91	SHORT	0 [AEP]
R029	1-216-073-00	RES,CHIP	10K 5% 1/10W	R081	1-216-049-91	RES,CHIP	1K 5% 1/10W
R030	1-216-049-91	RES,CHIP	1K 5% 1/10W	R082	1-216-049-91	RES,CHIP	1K 5% 1/10W
R031	1-216-669-11	METAL CHIP	5.6K 0.5% 1/10W	R084	1-216-073-00	RES,CHIP	10K 5% 1/10W
R032	1-216-665-11	METAL CHIP	3.9K 0.5% 1/10W	R085	1-216-049-91	RES,CHIP	1K 5% 1/10W
R034	1-216-049-91	RES,CHIP	1K 5% 1/10W	R086	1-216-049-91	RES,CHIP	1K 5% 1/10W
R035	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R090	1-216-073-00	RES,CHIP	10K 5% 1/10W
R036	1-216-659-11	METAL CHIP	2.2K 0.5% 1/10W	R091	1-216-049-91	RES,CHIP	1K 5% 1/10W
R037	1-216-073-00	RES,CHIP	10K 5% 1/10W	R092	1-216-049-91	RES,CHIP	1K 5% 1/10W
R039	1-216-025-91	RES,CHIP	100 5% 1/10W	R093	1-216-049-91	RES,CHIP	1K 5% 1/10W
R040	1-216-025-91	RES,CHIP	100 5% 1/10W	R094	1-216-049-91	RES,CHIP	1K 5% 1/10W
R042	1-216-073-00	RES,CHIP	10K 5% 1/10W	R095	1-216-049-91	RES,CHIP	1K 5% 1/10W
R043	1-216-049-91	RES,CHIP	1K 5% 1/10W	R096	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R044	1-216-657-11	METAL CHIP	1.8K 0.5% 1/10W	R097	1-216-073-00	RES,CHIP	10K 5% 1/10W
R045	1-216-049-91	RES,CHIP	1K 5% 1/10W	R098	1-216-073-00	RES,CHIP	10K 5% 1/10W
R046	1-216-073-00	RES,CHIP	10K 5% 1/10W [AEP]	R099	1-216-049-91	RES,CHIP	1K 5% 1/10W
R047	1-216-049-91	RES,CHIP	1K 5% 1/10W	R1001	1-216-049-91	RES,CHIP	1K 5% 1/10W
R048	1-216-049-91	RES,CHIP	1K 5% 1/10W	R1002	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R1003	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R1004	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R1005	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R1006	1-216-049-91	RES,CHIP	1K 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1007	1-216-049-91	RES,CHIP	1K 5% 1/10W	R1066	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1008	1-216-667-11	METAL CHIP	4.7K 0.5% 1/10W	R1067	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R1009	1-216-049-91	RES,CHIP	1K 5% 1/10W	R1068	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R1010	1-216-049-91	RES,CHIP	1K 5% 1/10W	R1069	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1011	1-216-049-91	RES,CHIP	1K 5% 1/10W	R1070	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R1012	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R1071	1-216-081-00	RES,CHIP	22K 5% 1/10W
R1013	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R5003	1-216-295-91	SHORT 0	
R1014	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5005	1-216-081-00	RES,CHIP	22K 5% 1/10W
R1015	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5006	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1016	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5007	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1017	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5010	1-216-295-91	SHORT 0	
R1018	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5011	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1019	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5015	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1020	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R5108	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R1021	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R5109	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R1022	1-216-659-11	METAL CHIP	2.2K 0.5% 1/10W	R5110	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1023	1-216-659-11	METAL CHIP	2.2K 0.5% 1/10W	R5113	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1024	1-216-681-11	METAL CHIP	18K 0.5% 1/10W	R5115	1-215-859-00	METAL OXIDE 22	5% 1W F
R1025	1-216-025-91	RES,CHIP	100 5% 1/10W	R5116	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1026	1-216-109-00	RES,CHIP	330K 5% 1/10W	R5119	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1027	1-216-659-11	METAL CHIP	2.2K 0.5% 1/10W	R5122	1-215-859-00	METAL OXIDE 22	5% 1W F
R1028	1-216-647-11	METAL CHIP	680 0.5% 1/10W	R5205	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1029	1-216-025-91	RES,CHIP	100 5% 1/10W	R5206	1-215-859-00	METAL OXIDE 22	5% 1W F
R1030	1-216-025-91	RES,CHIP	100 5% 1/10W	R5207	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1031	1-216-025-91	RES,CHIP	100 5% 1/10W	R5208	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R1032	1-216-025-91	RES,CHIP	100 5% 1/10W	R5209	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R1033	1-216-025-91	RES,CHIP	100 5% 1/10W	R5308	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R1034	1-216-025-91	RES,CHIP	100 5% 1/10W	R5309	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R1035	1-216-025-91	RES,CHIP	100 5% 1/10W	R5310	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1036	1-216-025-91	RES,CHIP	100 5% 1/10W	R5313	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1037	1-216-025-91	RES,CHIP	100 5% 1/10W	R5315	1-215-859-00	METAL OXIDE 22	5% 1W F
R1038	1-216-025-91	RES,CHIP	100 5% 1/10W	R5316	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1039	1-216-025-91	RES,CHIP	100 5% 1/10W	R5319	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1040	1-216-025-91	RES,CHIP	100 5% 1/10W	R5322	1-215-859-00	METAL OXIDE 22	5% 1W F
R1041	1-216-025-91	RES,CHIP	100 5% 1/10W	R5406	1-216-083-00	RES,CHIP	27K 5% 1/10W
R1042	1-216-025-91	RES,CHIP	100 5% 1/10W	R5407	1-216-085-00	RES,CHIP	33K 5% 1/10W
R1043	1-216-025-91	RES,CHIP	100 5% 1/10W	R5408	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R1044	1-216-667-11	METAL CHIP	4.7K 0.5% 1/10W	R5409	1-216-308-00	RES,CHIP	4.7 5% 1/10W
R1045	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R5410	1-216-081-00	RES,CHIP	22K 5% 1/10W
R1047	1-216-073-00	RES,CHIP	10K 5% 1/10W	R5413	1-216-097-91	RES,CHIP	100K 5% 1/10W
R1049	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R5415	1-215-887-00	METAL OXIDE 150	5% 2W F
R1050	1-216-073-00	RES,CHIP	10K 5% 1/10W	R5416	1-216-081-00	RES,CHIP	22K 5% 1/10W
R1051	1-216-097-91	RES,CHIP	100K 5% 1/10W	R5419	1-216-097-91	RES,CHIP	100K 5% 1/10W
R1052	1-216-073-00	RES,CHIP	10K 5% 1/10W	R5422	1-216-451-11	METAL OXIDE 120	5% 2W F
R1053	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5502	1-216-081-00	RES,CHIP	22K 5% 1/10W
R1054	1-216-073-00	RES,CHIP	10K 5% 1/10W	R5503	1-216-081-00	RES,CHIP	22K 5% 1/10W
R1055	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5504	1-216-089-91	RES,CHIP	47K 5% 1/10W
R1056	1-216-073-00	RES,CHIP	10K 5% 1/10W	R5505	1-216-089-91	RES,CHIP	47K 5% 1/10W
R1057	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5506	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R1058	1-216-073-00	RES,CHIP	10K 5% 1/10W	R5507	1-249-382-11	CARBON 1.2	5% 1/4W F
R1059	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5508	1-249-382-11	CARBON 1.2	5% 1/4W F
R1061	1-216-073-00	RES,CHIP	10K 5% 1/10W	R5509	1-249-382-11	CARBON 1.2	5% 1/4W F
R1062	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5510	1-249-382-11	CARBON 1.2	5% 1/4W F
R1063	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R5602	1-216-081-00	RES,CHIP	22K 5% 1/10W
R1064	1-216-049-91	RES,CHIP	1K 5% 1/10W	R5603	1-216-077-91	RES,CHIP	15K 5% 1/10W
R1065	1-216-125-00	RES,CHIP	1.5M 5% 1/10W	R5604	1-216-081-00	RES,CHIP	22K 5% 1/10W

# CPD-E500/E500E

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REF.NO.	PART NO.	DESCRIPTION	REMARK
R5605	1-216-097-91	RES,CHIP	100K 5% 1/10W
R5607	1-215-862-11	METAL OXIDE	68 5% 1W F
R5610	1-216-308-00	RES,CHIP	4.7 5% 1/10W

<CRYSTAL>

X001 1-760-682-21 VIBRATOR, CRYSTAL (24.756MHz)

CPD-E500/E500E

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