

# HISTORY

Model Name : GDM-F500

**Part No. : 9-978-620-11**

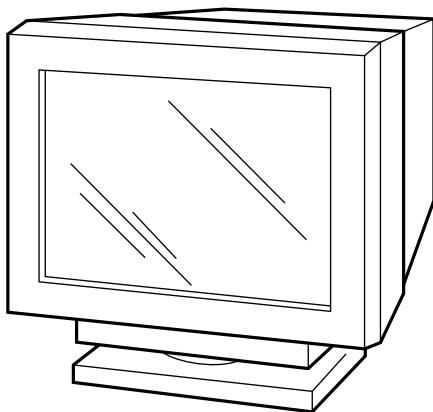
When clicking an item, its detail is displayed.

# GDM-F500

## SERVICE MANUAL

*US Model  
Canadian Model  
AEP Model*

*Chassis No. SCC-L03C-A*



**N3P CHASSIS**

### SPECIFICATIONS

CRT	0.22 mm aperture grille pitch 21 inches measured diagonally 90-degree deflection FD Trinitron	Deflection frequency* AC input voltage/current Power consumption	Horizontal: 30 to 121 kHz Vertical: 48 to 160 Hz 100 to 240 V, 50 – 60 Hz, 2.0 – 1.0 A Max. 160 W (with no USB devices connected)
Viewable image size	Approx. 403.8 × 302.2 mm (w/h) (16 × 12 inches) 19.8" viewing image	Dimensions	Approx. 502 × 511 × 486.3 mm (w/h/d) (19 7/8 × 20 1/8 × 19 1/4 inches)
Resolution	Horizontal: Max. 1800 dots Vertical: Max. 1440 lines	Mass	Approx. 34 kg (74 lb 15 oz)
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)	Plug and Play	DDC1/DDC2B/DDC2AB/DDC2B+

- \* Recommended horizontal and vertical timing condition
- 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 2.5 µsec.
  - Vertical blanking width should be more than 450 µsec.

Design and specifications are subject to change without notice.

**TRINITRON® COLOR GRAPHIC DISPLAY**



MICROFILM

**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.

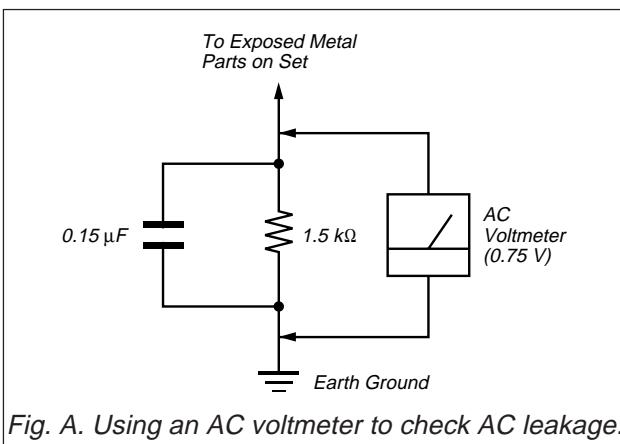
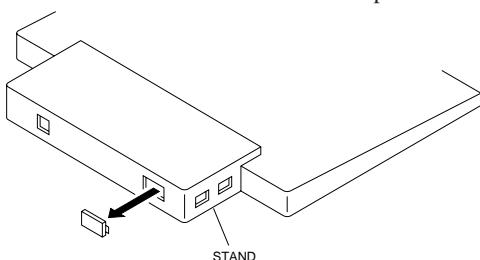


Fig. A. Using an AC voltmeter to check AC leakage.

#### CAUTION ON DAS (ECS) CONNECTOR

- The connector for DAS (ECS) adjustment is provided inside the cover shown below. Be careful with an electrical shock when connecting the connector with the power supplied. Also, return the removed cover to the home position.



#### LEAKAGE TEST

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

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

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

#### WARNING!!

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

#### SAFETY-RELATED COMPONENT WARNING!!

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

#### AVERTISSEMENT!!

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

#### ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

**LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE △ SONT CRITIQUES POUR LA SÉCURITÉ. NE LES REMPLACER QUE PAR UNE PIÈCE PORTANT LE NUMÉRO SPECIFIÉ. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS 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	≤ 160 W	green
1 standby	≤ 100 W	green and orange alternate
2 suspend	≤ 15 W	green and orange alternate
3 active off**	≤ 1 W	orange
power off	0 W	off

\* Figures reflect power consumption when no USB compatible peripherals are connected to the monitor.

\*\*When your computer enters the "active off" mode, the input signal is cut and NO INPUT SIGNAL appears on the screen. After the time set in "Changing the power saving delay time." (page 1 - 6) has elapsed, the monitor enters the power saving mode.

### To change the power saving delay time

See page 1 - 6.

## DIAGNOSIS

Failure	Power LED
+B failure	Orange → Off (0.5 sec) (0.5 sec)
Horizontal / Vertical Deflection failure, Thermal protector	Orange → Off (1.5 sec) (0.5 sec)
ABL protector	Orange → Off (0.5 sec) (1.5 sec)
HV failure	Orange → Off → Orange → Off (0.25 sec) (0.25 sec) (0.25 sec) (1.25 sec)
Aging / Self Test	Orange → Off → Green → Off (0.5 sec) (0.5 sec) (0.5 sec) (0.5 sec)

Aging Mode (Video Aging) : During Power Save, press "MENU" key for longer than 2 second.

Self Test (OSD Color Bar) : During Power Save, press "CONTRAST" + (→) key for longer than 2 second.

Reliability Check Mode : During Power Save, press "CONTRAST" - (←) key for longer than 2 second.

# GDM-F500

## TIMING SPECIFICATION

MODE AT PRODUCTION	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5
RESOLUTION	738 X 414	1600 X 1200	1800 X 1440	1800 X 1350	1364 X 1201
CLOCK	28.322 MHZ	229.500 MHZ	299.436 MHZ	299.000 MHZ	195.500 MHZ
— HORIZONTAL —					
H-FREQ	31.469 kHz usec	106.250 kHz usec	120.740 kHz usec	120.565 kHz usec	106.250 kHz usec
H. TOTAL	31.777	9.412	8.282	8.294	9.412
H. BLK	5.720	2.440	2.271	2.274	2.435
H. FP	0.318	0.279	0.668	0.669	0.276
H. SYNC	3.813	0.837	0.481	0.482	0.839
H. BP	1.589	1.325	1.122	1.124	1.320
H. ACTIV	26.057	6.972	6.011	6.020	6.977
— VERTICAL —					
V. FREQ(HZ)	70.087 Hz lines	85.000 Hz lines	80.120 Hz lines	85.084 Hz lines	85.000 Hz lines
V. TOTAL	449	1250	1507	1417	1250
V. BLK	35	50	67	67	49
V. FP	5	1	1	1	1
V. SYNC	2	3	3	3	3
V. BP	28	46	63	63	45
V. ACTIV	414	1200	1440	1350	1201
— SYNC —					
INT(G)	NO	NO	NO	NO	NO
EXT(H/V)/POLARITY	YES N/P	YES P/P	YES P / P	YES P / P	YES P/P
EXT(CS) /POLARITY	NO	NO	NO	NO	NO
INT/NON INT	NON INT	NON INT	NON INT	NON INT	NON INT
SIZE (21")	388 X 291mm	388 X 291mm	364 X 291mm	388 X 291mm	388 X 291 mm

98. 4.27 VER.

## TABLE OF CONTENTS

<i>Section</i>	<i>Title</i>	<i>Page</i>
<b>1. GENERAL .....</b>		1-1
<b>2. DISASSEMBLY</b>		
2-1. Cabinet Removal .....		2-1
2-2. D Board Removal .....		2-1
2-3. G Board Removal .....		2-2
2-4. A Board Removal .....		2-2
2-5. L Board Removal .....		2-3
2-6. Service Position .....		2-3
2-7. H1, H2 and J Boards Removal .....		2-4
2-8. US Board Removal .....		2-4
2-9. Picture Tube Removal .....		2-5
2-10. Harness Location .....		2-6
<b>3. SAFETY RELATED ADJUSTMENT .....</b>		3-1
<b>4. ADJUSTMENTS .....</b>		4-1
<b>5. DIAGRAMS</b>		
5-1. Block Diagrams .....		5-1
5-2. Frame Shchematic Diagram .....		5-7
5-3. Circuit Boards Location .....		5-9
5-4. Schematic Diagrams and Printed Wiring Boards .....		5-9
(1) Schematic Diagrams of D (1/2, 2/2) Board .....		5-13
(2) Schematic Diagrams of G, H1, H2, J and L Boards .....		5-17
(3) Schematic Diagram of A Board .....		5-24
(4) Schematic Diagram of US Board .....		5-29
5-5. Semiconductors .....		5-32
<b>6. EXPLODED VIEWS</b>		
6-1. Chassis .....		6-1
6-2. Picture Tube .....		6-2
6-3. Packing Materials .....		6-3
<b>7. ELECTRICAL PARTS LIST .....</b>		7-1

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 UK

If you use the monitor in the UK, be sure to use the supplied UK power cable.

#### Example of plug types



- Before disconnecting the power cord, wait at least 30 seconds after turning off the power to allow the static electricity on the screen's surface to discharge.

- After the power is turned on, the screen is demagnetized (degaussed) for about 3 seconds. This generates a strong magnetic field around the screen which may affect data stored on magnetic tapes and disks placed near the monitor. Be sure to keep magnetic recording equipment, tapes, and disks away from the monitor.

The equipment should be installed near an easily accessible outlet.



## Installation

Do not install the monitor in the following places:

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

## Maintenance

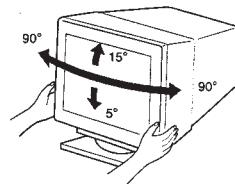
- Clean the screen with a soft cloth. If you use a glass cleaning liquid, do not use any type of cleaner containing an anti-static solution or similar additive as this may scratch the screen's coating.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a ballpoint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

## Transportation

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

### Use of the tilt-swivel

This monitor can be adjusted within the angles shown below. To turn the monitor vertically or horizontally, hold it at the bottom with both hands.



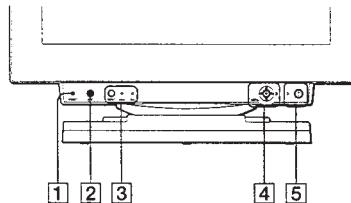
# SECTION 1

## GENERAL

### Identifying parts and controls

See the pages in parentheses for further details.

#### Front



#### ① RESET button (page 14)

This button resets the adjustments to the factory settings.

#### ② ASC (auto sizing and centering) button (page 9)

This button automatically adjusts the size and centering of the picture.

#### ③ INPUT button and HD 15/BNC indicators (page 9)

This button selects the HD15 or BNC video input signal. The input signal and corresponding input indicator change each time you press this button.

#### ④ Joystick (page 11)

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

#### ⑤ (power) switch and indicator (pages 7, 15, 18)

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

#### ⑥ AC IN connector (page 7)

This connector provides AC power to the monitor.

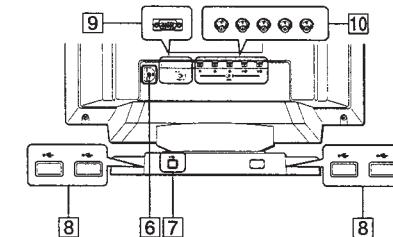
#### ⑦ USB (universal serial bus) upstream connector (page 8)

Use this connector to link the monitor to a USB compliant computer.

#### ⑧ USB (universal serial bus) downstream connectors (page 8)

Use these connectors to link USB peripheral devices to the monitor.

#### Rear



#### ⑨ Video input 1 connector (HD15) (page 6)

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



EN

Pin No.	Signal
1	Red
2	Green (Composite 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.

#### ⑩ Video input 2 connector (BNC) (page 6)

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

## Setup

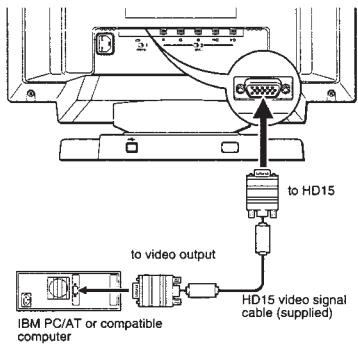
Before using your monitor, check that the following accessories are included in your carton:

- Power cord (1)
- HD15 video signal cable (1)
- USB cable (1)
- Macintosh adapter (1)
- Windows Monitor Information 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.

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



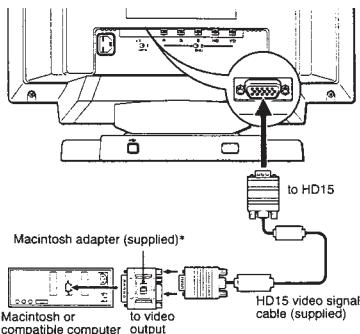
#### If your PC system is not compatible with Plug & Play (DDC2AB or DDC2B+)

This monitor uses the No.9 pin in the video signal connector for Plug & Play (DDC2AB or DDC2B+) compatibility. See page 5 for the location of the No.9 pin.

- If your computer accepts the No.9 pin, use the supplied HD15 video signal cable.
- If your computer does not accept the No.9 pin, please consult your dealer for advice on obtaining an HD15 adapter.

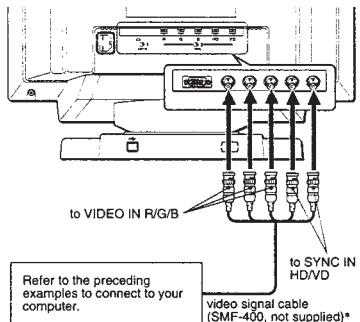
#### ■ Connecting to a Macintosh or compatible computer

Use the supplied Macintosh adapter.



\* Connect the supplied Macintosh adapter to the computer before connecting the cable. This adapter is compatible with Macintosh LC, Performa, Quadra, Power Macintosh and Power Macintosh G3 series computers. Macintosh II series and some older versions of PowerBook models may need an adapter with micro switches (not supplied).

#### ■ Connecting to the five BNC connectors



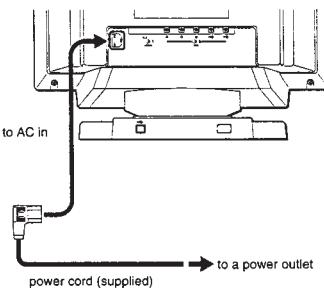
\* Connect the cables from left to right in the following order: Red-Green-Blue-HD-VD.

#### Notes

- Do not touch the pins of the video cable connector as this might bend the pins.
- Plug & Play (DDC) does not apply to the five BNC connectors. If you want to use Plug & Play, connect your computer to the HD15 connector using the supplied video signal cable.

### 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, try changing the input signal (page 9), and 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 – 121 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.

EN

#### For customers using Windows 95/98

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

#### For customers using Windows NT4.0

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

#### Adjusting the monitor's resolution and color number

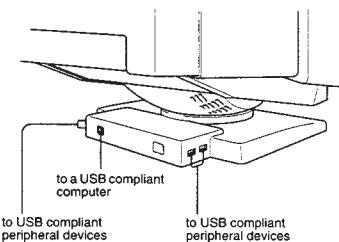
Adjust the monitor's resolution and color number by referring to your computer's instruction manual. The color number may vary according to your computer or video board. The color palette setting and the actual number of colors are as follows:

- High Color (16 bit) → 65,536 colors
- True Color (24 bit) → about 16.77 million colors

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

## Connecting Universal Serial Bus (USB) compliant peripherals

Your monitor has one upstream and four downstream USB connectors. They provide a fast and easy way to connect USB compliant peripheral devices (such as keyboards, mice, printers and scanners) to your computer using a standardized USB cable. To use your monitor as a hub for your peripheral devices, connect the USBs as illustrated below.



- 1 Turn on the monitor and computer.
- 2 Connect your computer to the square upstream  $\leftrightarrow$  connector using the supplied USB cable.

### For customers using Windows

If a message appears on your screen, follow the on-screen instructions and select Generic USB Hub as the default setting.

- 3 Connect your USB compliant peripheral devices to the rectangular downstream  $\leftrightarrow$  USB connectors.

### Notes

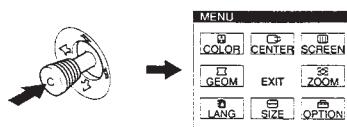
- Not all computers and /or operating systems support USB configurations. Check your computer's instruction manual to see if you can connect USB devices.
- In most cases, USB driver software needs to be installed on the host computer. Refer to the peripheral device's instruction manual for further details.
- The monitor functions as a USB hub as long as the monitor is either "on" or in power saving mode.
- If you connect a keyboard or mouse to the USB connectors and then boot your computer for the first time, the peripheral devices may not function. First connect the keyboard and mouse directly to the computer and set up the USB compliant devices. Then connect them to this monitor.
- Do not lean on the monitor when plugging in the USB cables. The monitor may suddenly shift and cause injury.

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

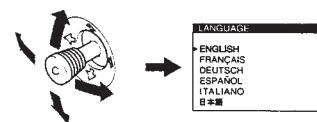
English, French, German, Spanish, Italian, and Japanese versions of the on-screen menus are available. The default setting is English.

### 1 Press the joystick

See page 11 for more information on using the joystick.



- 2 Move the joystick to highlight LANG and press the joystick again.



- 3 Move the joystick up or down to select a language and press the joystick again.

- ENGLISH
- FRANCAIS: French
- DEUTSCH: German
- ESPAÑOL: Spanish
- ITALIANO: Italian
- 日本語: Japanese

### To close the menu

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

### To reset to English

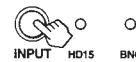
Press the RESET button while the LANGUAGE menu is displayed on the screen.

## Selecting the input signal

You can connect two computers to this monitor using the HD15 and BNC connectors. To switch between the two computers, use the INPUT button.

### Press the INPUT button.

The input signal and corresponding input indicator change each time you press this button.



### Notes

- If no signal is input to the selected connector, the monitor automatically switches to the other connector.
- If you restart the computer you want to view, or that computer is in power saving mode, the monitor may automatically switch to the other connector's signal. If this happens, manually select the desired signal using the INPUT button.
- Pictures with an aspect ratio of 5:4 (resolution: 1280 × 1024, 1800 × 1440) are displayed at their actual resolution and do not fill the screen to the edges.
- The screen may go blank for a few seconds when the ASC button is pressed. This is not a malfunction.

## Automatically sizing and centering the picture

You can easily adjust the picture to fill the screen by pressing the ASC (auto sizing and centering) button.

### Press the ASC button.

The picture automatically fills the screen.



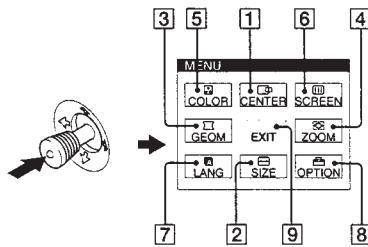
EN

## Customizing Your Monitor

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

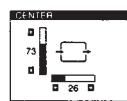
### Navigating the menu

Press the joystick to display the main MENU on your screen. See page 11 for more information on using the joystick.

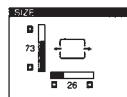


Use the joystick to select one of the following menus.

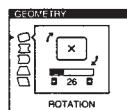
- 1 CENTER (page 11)**  
Select the CENTER menu to adjust the picture's centering.



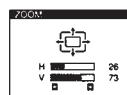
- 2 SIZE (page 11)**  
Select the SIZE menu to adjust the picture's horizontal and vertical size.



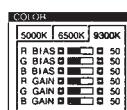
- 3 GEOM (page 12)**  
Select the GEOM menu to adjust the picture's rotation and shape.



- 4 ZOOM (page 12)**  
Select the ZOOM menu to enlarge or reduce the picture.

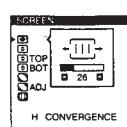


- 5 COLOR (page 12)**  
Select the COLOR menu to adjust the picture's color temperature. You can use this to match the monitor's colors to a printed picture's colors.



### 6 SCREEN (page 13)

Select the SCREEN menu to adjust the picture's quality. You can adjust the vertical and horizontal convergence, landing, and moire cancellation effect.



### 7 LANG (page 8)

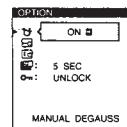
Select LANG to choose the on-screen menu's language.



### 8 OPTION (page 14)

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

- degaussing the screen
- changing the on-screen menu position
- changing the power saving delay time
- locking the controls



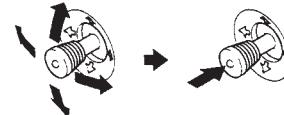
### 9 EXIT

Select EXIT to close the menu.

### Using the joystick

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

Move the joystick up, down, left, or right to highlight the desired menu. Press the joystick to select the menu item.



#### 2 Adjust the menu.

Move the joystick up, down, left, or right to make the adjustment.



#### 3 Close the menu.

Press the joystick 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.

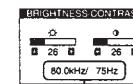


## Adjusting the brightness and contrast

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 joystick in any direction.

The BRIGHTNESS/CONTRAST menu appears on the screen.



- the horizontal and vertical frequencies of the current input signal
- 2 Move the joystick up or down to adjust the brightness (○), and left or right to adjust the contrast (□).**  
The menu automatically disappears after about 3 seconds.

## Adjusting the centering of the picture (CENTER) EN

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

#### 1 Press the joystick.

The main MENU appears on the screen.

#### 2 Move the joystick to highlight □ CENTER and press the joystick again.

The CENTER menu appears on the screen.

#### 3 Move the joystick up or down to adjust the vertical centering, and left or right to adjust the horizontal centering.

## Adjusting the size of the picture (SIZE)

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

#### 1 Press the joystick.

The main MENU appears on the screen.

#### 2 Move the joystick to highlight □ SIZE and press the joystick again.

The SIZE menu appears on the screen.

#### 3 Move the joystick up or down to adjust the vertical size, and left or right to adjust the horizontal size.

## 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 joystick.

The main MENU appears on the screen.

### 2 Move the joystick to highlight GEOM and press the joystick again.

The GEOMETRY menu appears on the screen.

### 3 First move the joystick up or down to select the desired adjustment item. Then move the joystick left or right to make the adjustment.

Select	To
<input type="checkbox"/> ROTATION	rotate the picture
<input checked="" type="checkbox"/> PINCUSHION	expand or contract the picture sides
<input type="checkbox"/> PIN BALANCE	shift the picture sides to the left or right
<input type="checkbox"/> KEYSTONE	adjust the picture width at the top of the screen
<input type="checkbox"/> KEY BALANCE	shift the picture to the left or right at the top of the screen

## Enlarging or reducing the picture (ZOOM)

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

### 1 Press the joystick.

The main MENU appears on the screen.

### 2 Move the joystick to highlight ZOOM and press the joystick again.

The ZOOM menu appears on the screen.

### 3 Move the joystick left or right to enlarge or reduce the picture.

#### Note

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

## Adjusting the color of the picture (COLOR)

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

This setting is stored in memory for all input signals.

### 1 Press the joystick.

The main MENU appears on the screen.

### 2 Move the joystick to highlight COLOR and press the joystick again.

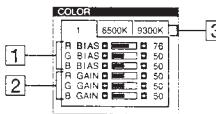
The COLOR menu appears on the screen.

### 3 Move the joystick left or right 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.

### 4 If necessary, fine tune the color temperature.

First move the joystick up or down to select the desired adjustment item. Then move the joystick left or right to make the adjustment.



#### ① Adjusting the BIAS (black level)

This changes the brightness of both the dark and light areas of an image.

#### ② Adjusting the GAIN (white level)

This changes the contrast of just the light areas of an image.

You can adjust the R(Red), G(Green), and B(Blue) component of the input signal when making changes to items ① and ②.

If you fine tune the color temperature, the new color settings are stored in memory for each of the three color temperatures and item ③ of the on-screen menu changes as follows:

- [5000K] → [1]
- [6500K] → [2]
- [9300K] → [3]

## Adjusting the quality of the picture (SCREEN)

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

- If you see red or blue shadows around letters or lines, adjust the convergence.
- If elliptical or wavy patterns appear on the screen, cancel the moire.
- If the color is irregular at the corners of the screen, adjust the landing.

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 joystick.

The main MENU appears on the screen.

### 2 Move the joystick to highlight SCREEN and press the joystick again.

The SCREEN menu appears on the screen.

### 3 First move the joystick up or down to select the desired adjustment item. Then move the joystick left or right to make the adjustment.

Select	To
<input checked="" type="checkbox"/> H CONVERGENCE	horizontally shift red or blue shadows
<input type="checkbox"/> V CONVERGENCE	vertically shift red or blue shadows
<input checked="" type="checkbox"/> V COVER TOP	vertically shift red or blue shadows at the top of the screen
<input checked="" type="checkbox"/> V COVER BOT	vertically shift red or blue shadows at the bottom of the screen
<input type="checkbox"/> LANDING	select one of the four corners of the screen <input type="checkbox"/> top left <input checked="" type="checkbox"/> top right <input type="checkbox"/> bottom left <input type="checkbox"/> bottom right
<input checked="" type="checkbox"/> ADJ LANDING ADJUST	reduce any irregularities in the color of the corner selected in LANDING to a minimum

Select	To
<input type="checkbox"/> CANCEL MOIRE*	turn the moire cancellation function ON or OFF <input checked="" type="checkbox"/> ADJ (MOIRE ADJUST) appears in the menu when you select ON
<input type="checkbox"/> ADJ MOIRE ADJUST	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.

EN

## Additional settings (OPTION)

You can manually degauss (demagnetize) the monitor, change the menu position, set the power saving delay time, and lock the controls.

- 1 **Press the joystick.**  
The main MENU appears on the screen.
- 2 **Move the joystick to highlight  OPTION and press the joystick again.**  
The OPTION menu appears on the screen.
- 3 **Move the joystick to highlight the desired adjustment item.**  
Adjust the selected item according to the following instructions.

### Degaussing the screen

The monitor is automatically demagnetized when the power is turned on.

To manually degauss the monitor, first move the joystick up or down to select  (MANUAL DEGAUSS). Then move the joystick to the right.

The screen is degaussed for about 3 seconds. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result.

### 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 joystick up or down to select  (OSD H POSITION) for horizontal adjustment, or  (OSD V POSITION) for vertical adjustment. Then move the joystick to the left or right to shift the on-screen menu.

### Changing the power saving delay time.

To adjust the time it takes to enter the power saving mode, first move the joystick up or down to select  (PWR SAVE DELAY). Then move the joystick to the left or right to select the desired time.

If you select OFF, the monitor does not enter power saving mode. See page 15 for more information about the monitor's power saving capabilities.

### Locking the controls.

To protect adjustment data by locking the controls, first move the joystick up or down to select  (CONTROL LOCK). Then move the joystick to the right to select LOCK.

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 UNLOCK.

## 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 joystick to select the adjustment item you want to reset, and press the RESET button.

### Resetting all of the adjustment data for the current input signal

Press the RESET button when no menu is displayed on the screen.

Note that the following items are not reset by this method:

- on-screen menu language (page 8)
- on-screen menu position (page 14)
- power saving delay time (page 14)
- control lock (page 14)

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

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

#### Note

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

## 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 page i 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 – 121 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*	 (power) indicator
normal operation	≤ 160 W	green
1 standby	≤ 100 W	green and orange alternate
2 suspend	≤ 15 W	green and orange alternate
3 active off**	≤ 1 W	orange
power off	0 W	off

\* Figures reflect power consumption when no USB compatible peripherals are connected to the monitor.

\*\* When your computer enters the "active off" mode, the input signal is cut and NO INPUT SIGNAL appears on the screen. After the time set in "Changing the power saving delay time." (page 14) has elapsed, the monitor enters the power saving mode.

#### To change the power saving delay time

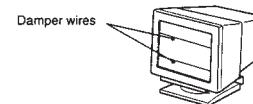
See page 14.

## Troubleshooting

Before contacting technical support, refer to this section.

### If thin lines appear on your screen (damper wires)

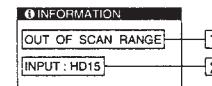
The lines you are experiencing on your screen are normal for the Trinitron monitor and are not a malfunction. These are shadows from the damper wires used to stabilize the aperture grille and are most noticeable when the screen's background is light (usually white). The aperture grille is the essential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



EN

### On-screen messages

If there is something wrong with the input signal, one of the following messages appears on the screen. To solve the problem, see "Trouble symptoms and remedies" on page 16.



#### ① The input signal condition

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

#### ② NO INPUT SIGNAL

indicates that no signal is input, or that no signal is input from the selected connector (HD15 or BNC).

#### ② The connector indicator

This message indicates which connector is receiving the wrong signal. If there is something wrong with the signal from both connectors, HD15 and BNC are displayed alternately.

## Trouble symptoms and remedies

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

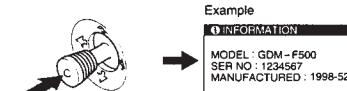
Symptom	Check these items
No picture	<ul style="list-style-type: none"> <li>If the  (power) indicator is not lit           <ul style="list-style-type: none"> <li>Check that the power cord is properly connected.</li> <li>Check that the  (power) switch is in the "on" position.</li> </ul> </li> <li>If the 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. If you are using the five BNC connectors, connect them in the correct order (from left to right: Red-Green-Blue-HD-VD) (page 6).</li> <li>Check that the input select setting is correct (page 9).</li> <li>Check that the HD15 video input connector's pins are not bent or pushed in.</li> </ul> </li> </ul> <p><b>■ Problems caused by the connected computer or other equipment</b></p> <ul style="list-style-type: none"> <li>The computer is in power saving mode. Try pressing any key on the computer keyboard.</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>
If the OUT OF SCAN RANGE message appears on the screen	<p><b>■ Problems caused by the connected computer or other equipment</b></p> <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.</li> <li>Horizontal: 30~121 kHz</li> <li>Vertical: 48~160 Hz</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 Windows Monitor Information Disk (page 7) and select "GDM-F500" from among the Sony monitors in the Windows 95/98 monitor selection screen. If you choose to select "Plug and Play," connect the monitor to the computer with the HD15 video signal. You cannot use the five BNC connectors.</li> </ul>
If using a Macintosh system	<ul style="list-style-type: none"> <li>Check that the Macintosh adapter and the video signal cable are properly connected (page 6).</li> <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> </ul> <p><b>■ Problems caused by the connected computer or other equipment</b></p> <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 (page i). Even if the frequency is within the proper range, some video boards may have a sync pulse that is too narrow for the monitor to sync correctly.</li> <li>Adjust the computer's refresh rate (vertical frequency) to obtain the best possible picture.</li> </ul>
Picture is fuzzy	<ul style="list-style-type: none"> <li>Adjust the brightness and contrast (page 11).</li> <li>Degauss the monitor* (page 14).</li> <li>If CANCEL MOIRE is ON, the picture may become fuzzy. Decrease the moire cancellation effect or set CANCEL MOIRE to OFF (page 13).</li> </ul>

Symptom	Check these items
Picture is ghosting	<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>
Picture is not centered or sized properly	<ul style="list-style-type: none"> <li>Press the ASC button (page 9).</li> <li>Adjust the size (page 11) or centering (page 11). Note that some video modes do not fill the screen to the edges.</li> </ul>
Edges of the image are curved	<ul style="list-style-type: none"> <li>Adjust the geometry (page 12).</li> </ul>
Wavy or elliptical pattern (moire) is visible	<p><b>■ Problems caused by the connected computer or other equipment</b></p> <ul style="list-style-type: none"> <li>Change your desktop pattern.</li> </ul>
Color is not uniform	<ul style="list-style-type: none"> <li>Degauss the monitor* (page 14). 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 13).</li> </ul>
White does not look white	<ul style="list-style-type: none"> <li>Adjust the color temperature (page 12).</li> <li>Check that the five BNC connectors are connected in the correct order (from left to right: Red-Green-Blue-HD-VD) (page 6).</li> </ul>
Letters and lines show red or blue shadows at the edges	<ul style="list-style-type: none"> <li>Adjust the convergence (page 13).</li> </ul>
Monitor buttons do not operate	<ul style="list-style-type: none"> <li>If the control lock is set to LOCK, set it to UNLOCK (page 14).</li> </ul>
USB peripherals do not function	<ul style="list-style-type: none"> <li>Check that the appropriate USB connectors are securely connected (page 8).</li> <li>Check that the  (power) switch is in the "on" position.</li> </ul> <p><b>■ Problems caused by the connected computer or other equipment</b></p> <ul style="list-style-type: none"> <li>Check that the power of any self-powered USB compliant peripheral devices is "on."</li> <li>Install the latest version of the device driver on your computer. Contact your device's manufacturer for information about the appropriate device driver.</li> <li>If your USB compliant keyboard or mouse does not function, connect them directly to your computer, reboot your computer, and make any necessary adjustments to the USB settings. Then reconnect the keyboard or mouse to the monitor.</li> <li>For customers using Windows 95           <ol style="list-style-type: none"> <li>Right-click on My Computer and select Properties.</li> <li>Click on the Device Manager tab. Scroll down and select Universal Serial Bus Controller.</li> <li>If Universal Serial Bus Controller does not appear, you need to load a USB supplement disk. Contact your computer's manufacturer for more information about obtaining a USB supplement disk.</li> <li>Select Generic USB Device from the USB controller list and click on Properties.</li> <li>If there is a check in the box next to "Disable in this hardware profile," remove the check.</li> <li>Click on Refresh.</li> </ol> </li> </ul>
A hum is heard right after the power is turned on	<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 three 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.

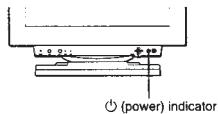
While the monitor is receiving a video signal, press and hold the joystick for more than three seconds to display this monitor's information box.



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

- Model name: GDM-F500
- Serial number
- Name and specifications of your computer and graphics board.

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



#### If the $\odot$ (power) indicator is green

- 1 Remove any plugs from the video input 1 and 2 connectors, or turn off the connected computer(s).
- 2 Press the  $\odot$  (power) button to turn the monitor off and on.
- 3 Move the joystick to the right 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 cables and check the condition of your computer(s).

18

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 $\odot$ (power) indicator is flashing orange

Press the  $\odot$  (power) button to turn the monitor off again.

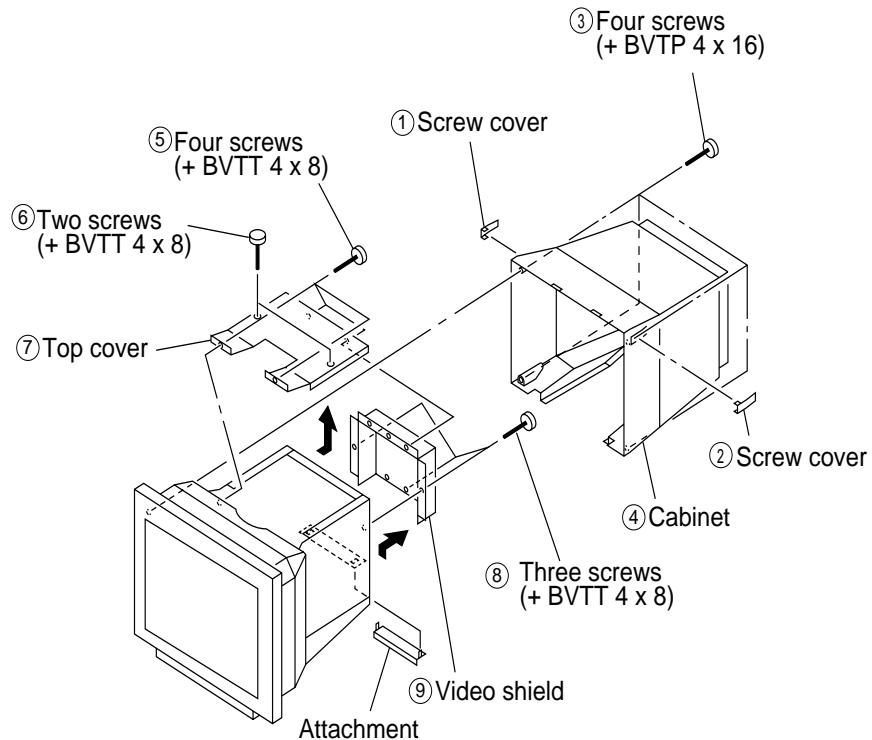
If the  $\odot$  (power) indicator lights up green, the monitor is working properly.

If the  $\odot$  (power) indicator is still flashing, there is a potential monitor failure. Count the number of seconds between orange flashes of the  $\odot$  (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.

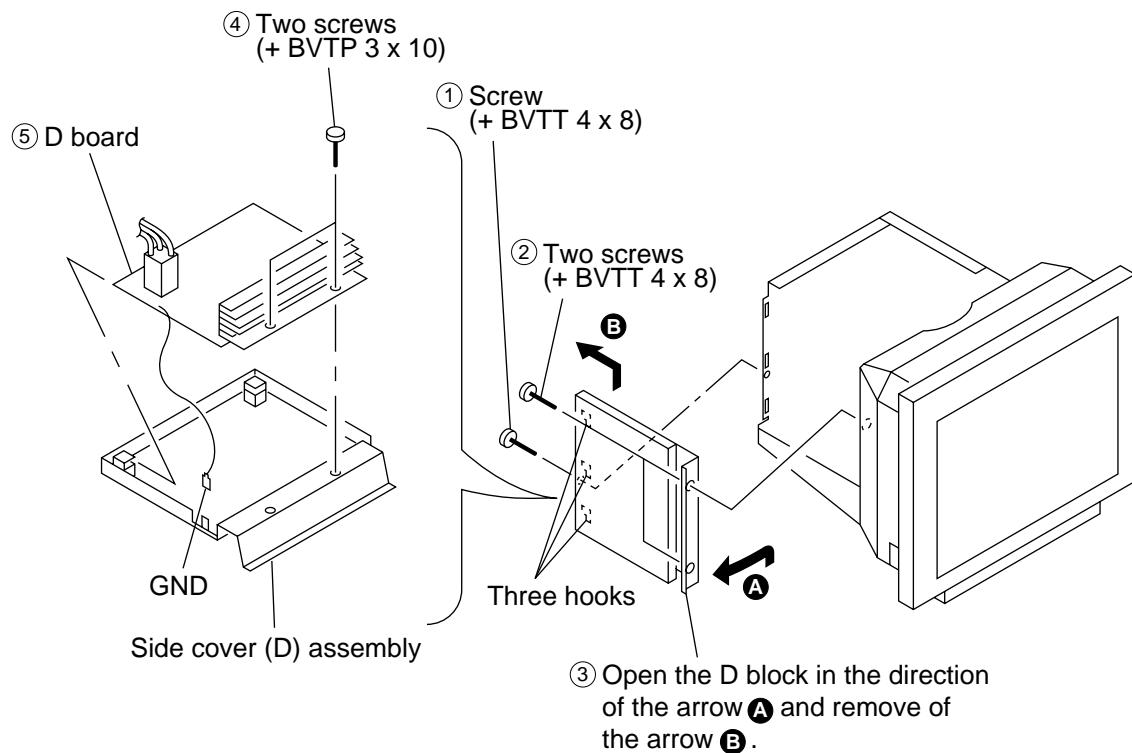
## SECTION 2

### DISASSEMBLY

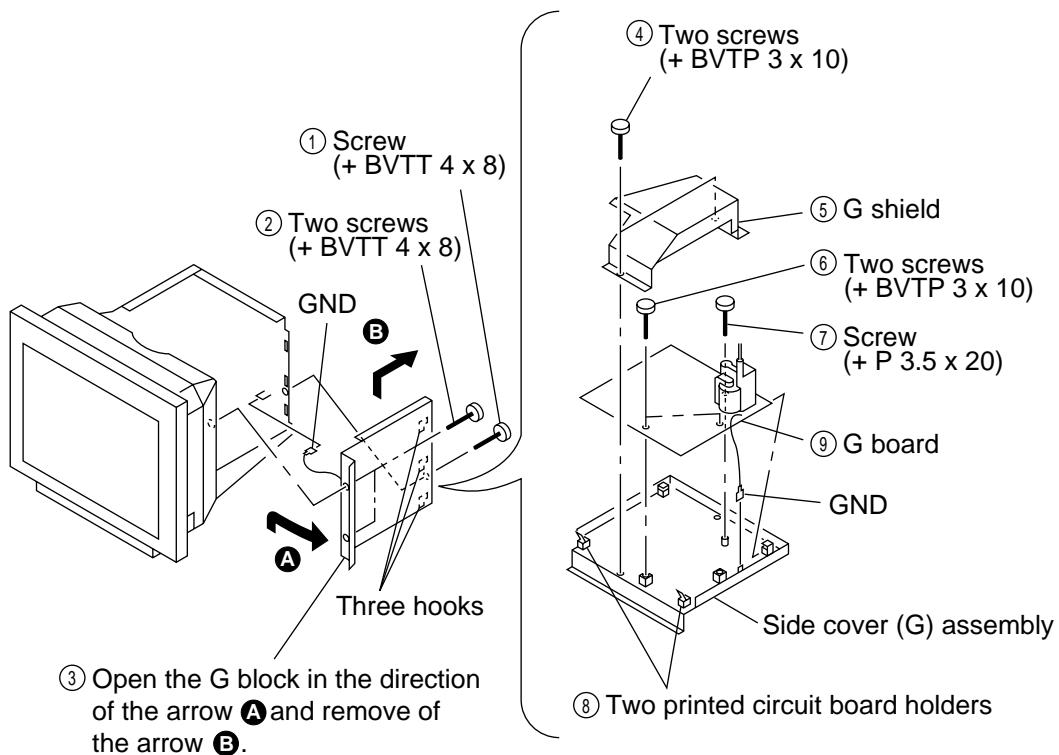
#### 2-1. CABINET REMOVAL



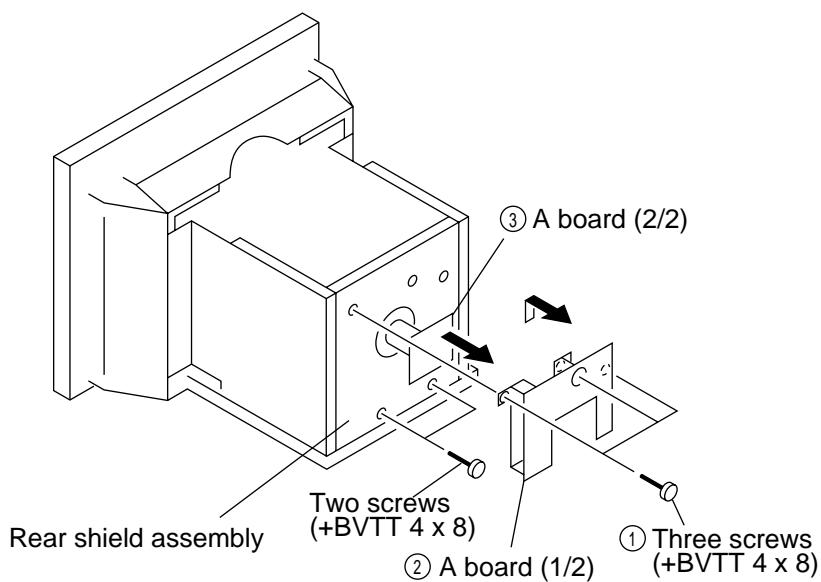
#### 2-2. D BOARD REMOVAL



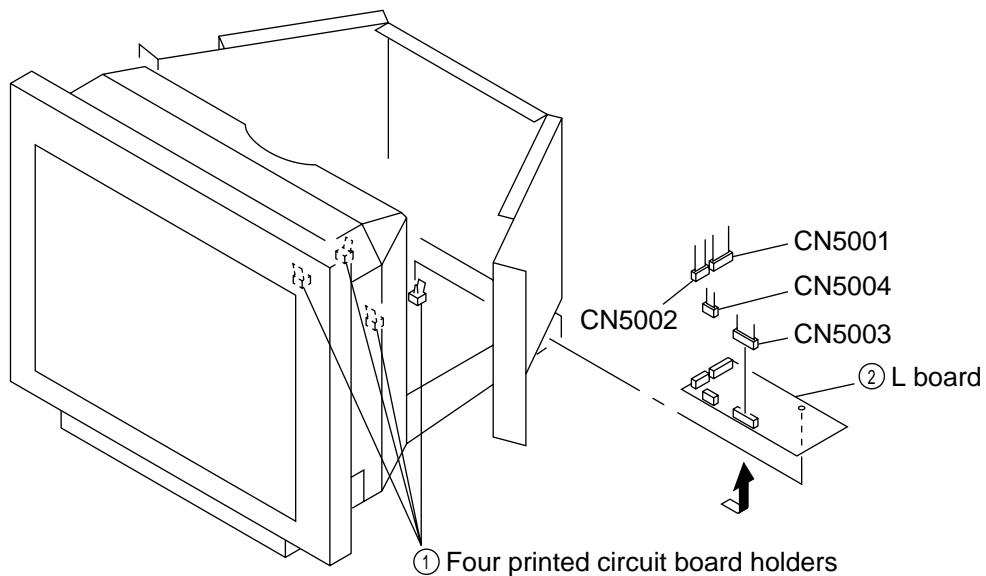
## 2-3. G BOARD REMOVAL



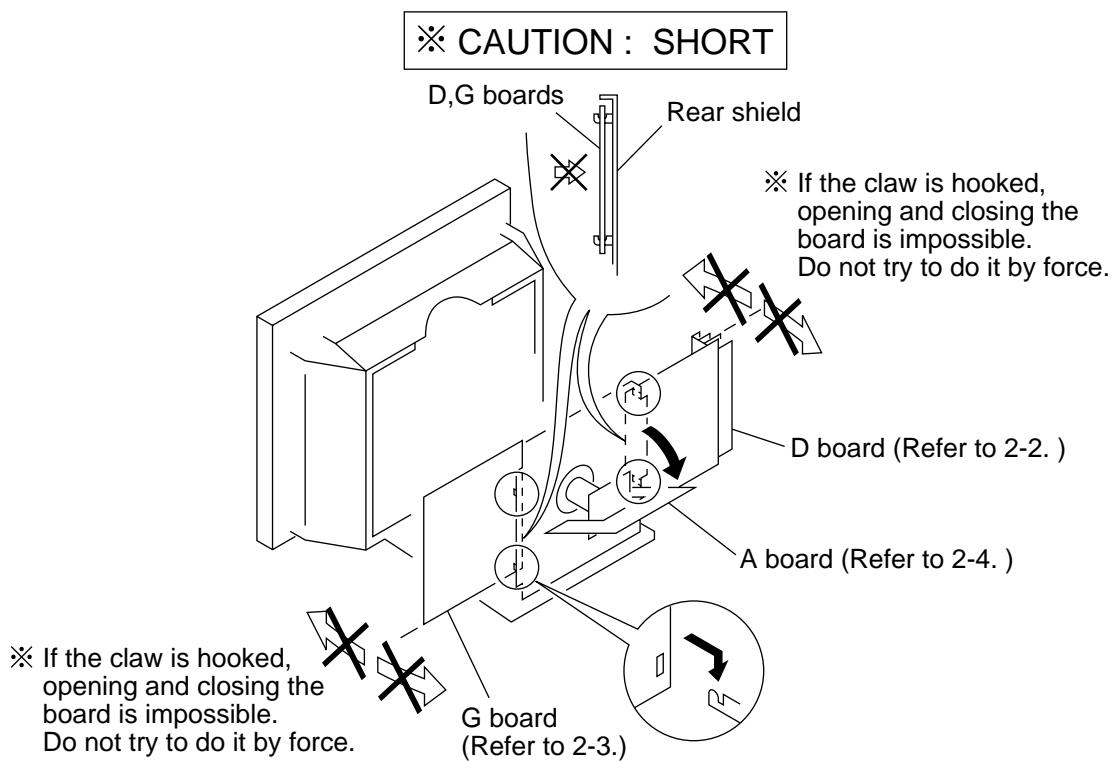
## 2-4. A BOARD REMOVAL



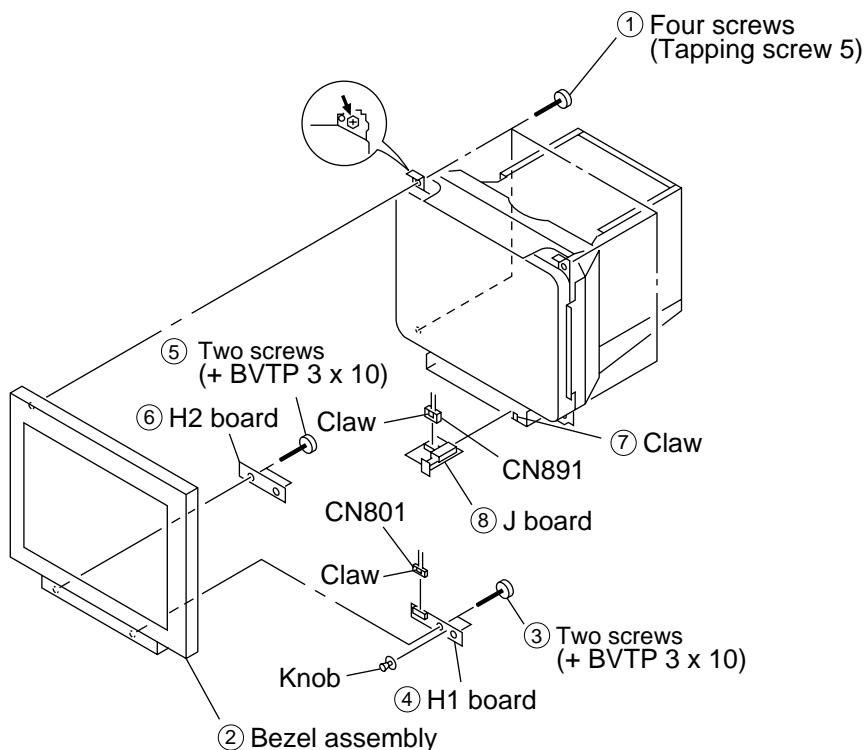
## 2-5. L BOARD REMOVAL



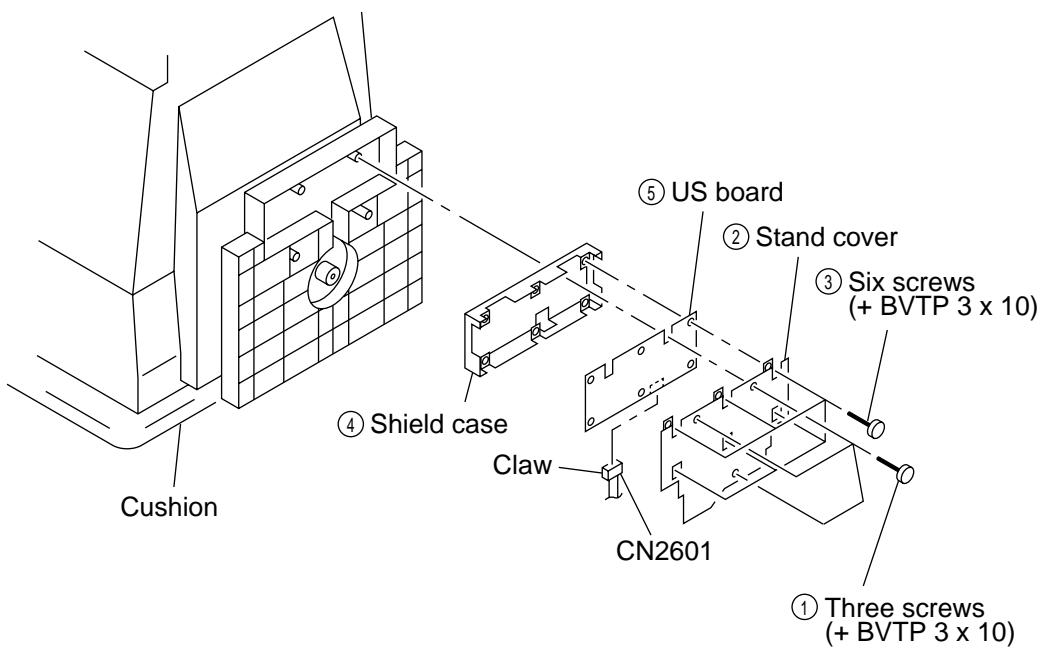
## 2-6. SERVICE POSITION



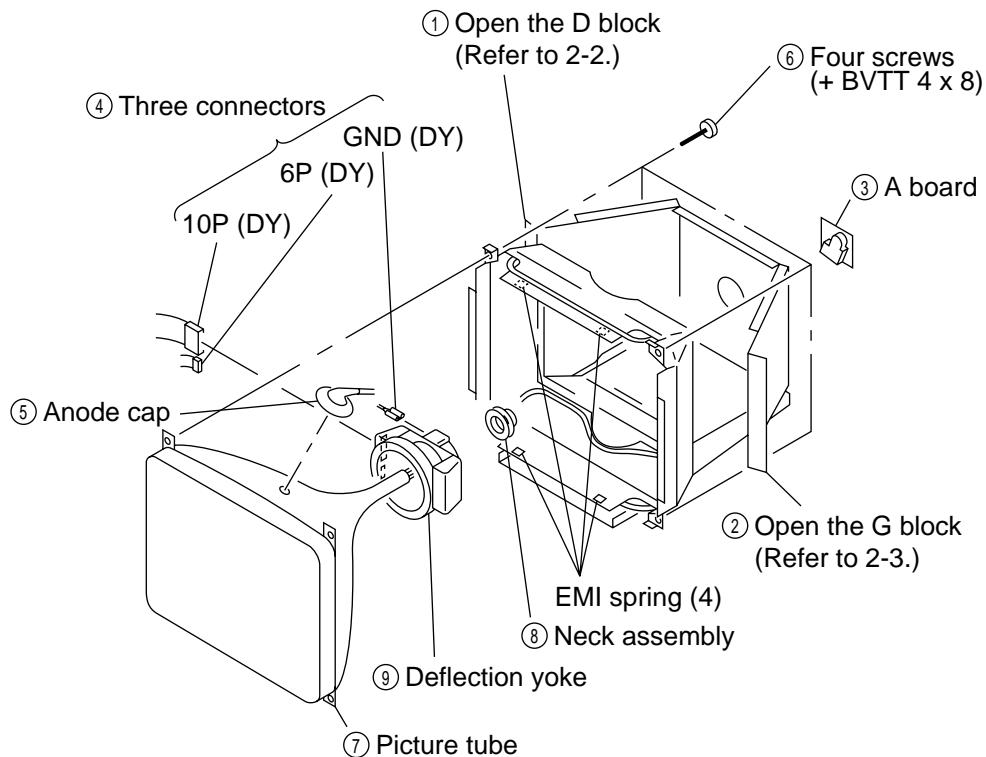
## 2-7. H1, H2 AND J BOARDS REMOVAL



## 2-8. US BOARD REMOVAL



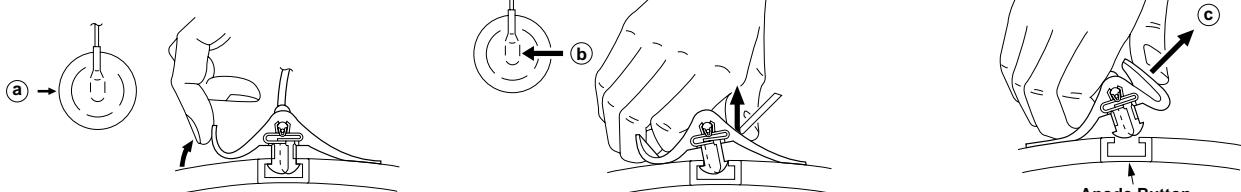
## 2-9. PICTURE TUBE REMOVAL



### • REMOVAL OF ANODE-CAP

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

### • REMOVING PROCEDURES



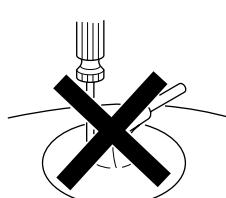
① Turn up one side of the rubber cap in the direction indicated by the arrow ①.

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

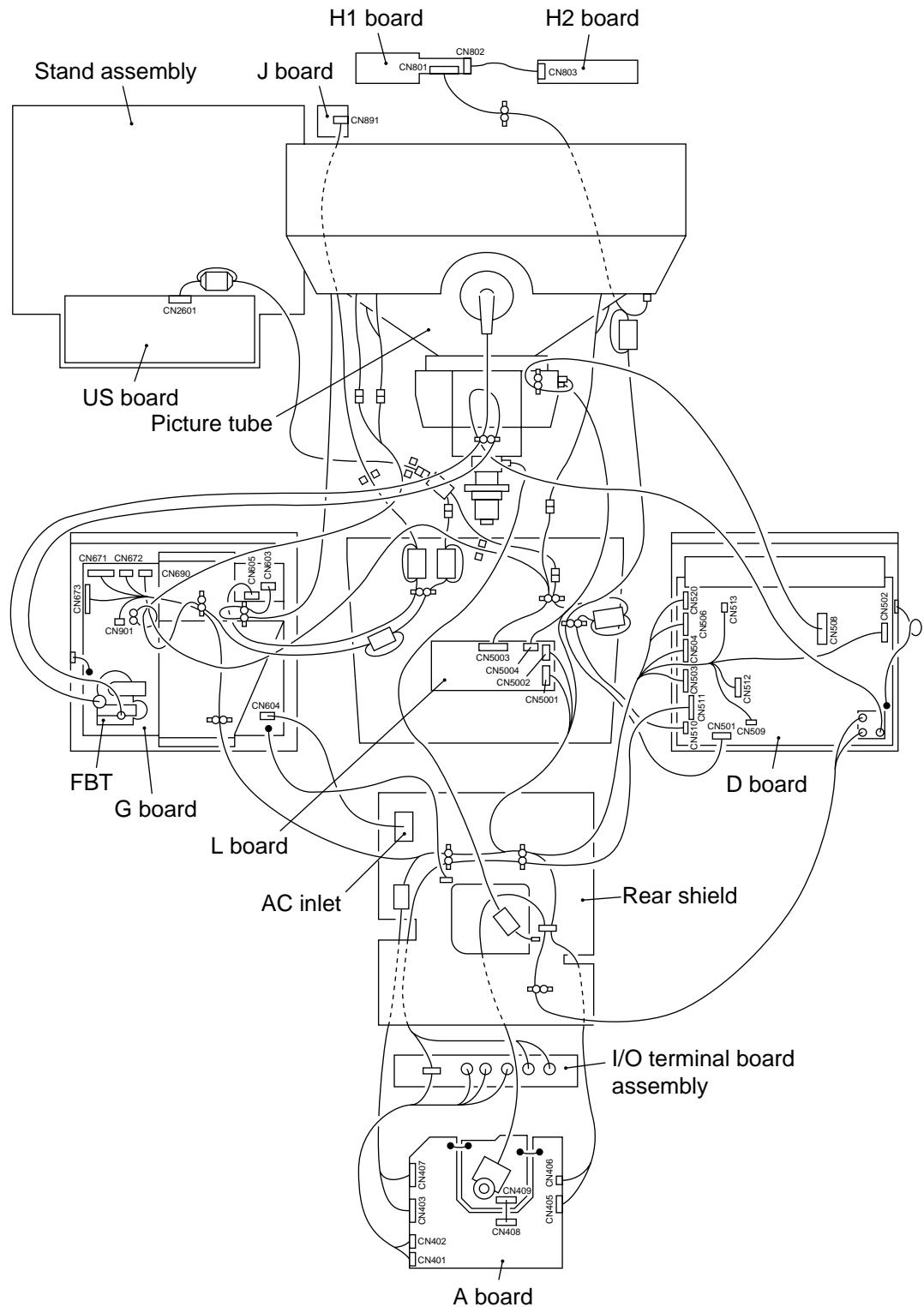
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③.

### • HOW TO HANDLE AN ANODE-CAP

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



## **2-10. HARNESS LOCATION**



### SECTION 3

## SAFETY RELATED ADJUSTMENT

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

	Part Replaced (█)	
HV Regulator Circuit Check	G Board	IC901, T901 • Mounted G board
HV Protector Circuit Check	G Board	Q907, Q908, D913, D916, C923, R920, R927, R952, T901 • Mounted G board
Beam Current Protector Circuit Check	D Board	R011, R1068 • Mounted D board
	G Board	IC901, IC902, Q907, Q908, D902, D918, D919, R923, R928, R933, R934, R942, R944, R945, R947, R948, R951, R952, T901 • Mounted G board

\* Confirm one minute later turning on the power.

#### a) B+ Voltage Check

Check Condition

- Input voltage : 100 ~ 240 VAC
- Input signal : White Cross Hatch at 120.7 kHz
- Beam control : BRT and CONT → MAX
- Standard :  $200 \pm 3.0$  V DC

#### b) HV Regulator Circuit Check

- 1) Confirm that the voltage of the + side of C910 on G board is within the voltage range shown below.

Standard:  $8.940 \sim 9.065$  V DC

#### c) HV Protector Circuit Check

- 1) Confirm that the voltage between cathode of D913 on G board and GND is more than 26.5 V DC.
- 2) Confirm that the HV protector circuit works and TV Raster disappears when apply the voltage as shown below between cathode of D913 and GND using an external DC power supply.

Check Condition

- Input voltage : 100 ~ 240 VAC
- Input signal : White Cross Hatch at 120.7 kHz
- Beam control : BRT and CONT → MIN
- Standard : Less than 34.20 V DC

#### d) Beam Current Protector Circuit Check-1

##### (Hardware)

Connect a variable resistor (20 kΩ or more) and an ammeter in series between pin ⑪ of T901 (FBT) and -15 V line. Decrease gradually the resistance of the variable resistor from maximum to minimum, and confirm that the Beam Current Protector Circuit works and TV Raster disappears. The current must be within the range shown below.

Check Condition

- Input signal : White Cross Hatch at 120.7 kHz
- Beam control : BRT = 0, CONT = 0
- Standard : 1.49 mA

#### e) Beam Current Protector Circuit Check-2

##### (Software)

- 1) Short between + of C937 and GND.
- 2) Connect a variable resistor (20 kΩ or more) and an ammeter in series between pin ⑪ of T901 (FBT) and -15 V line. Decrease gradually the resistance of the variable resistor from maximum to minimum, and confirm that the Beam Current Protector Circuit works and TV Raster disappears. The current must be within the range shown below.

Check Condition

- Input signal : White Cross Hatch at 120.7 kHz
- Beam control : BRT = 0, CONT = 0
- Standard : 1.59 mA

## 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" shall be set at 128.

#### • Landing Fine Adjustment

1. Put the set inside the Helmholtz coil. ("LCC SW" = "12")
2. Input the single green signal and set the CONT control to MAX.

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 "MON CON REG2"=152. 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. BV=45uT.
  - (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.
- 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"                                     $128 \pm 40$

After adjustment, set "LCC SW" to "13" and save the service data.

<Specifications>

Adjust so that the green is within the specification given right.  
Adjust target : within  $\pm 1$

$0 \pm 3$	$0 \pm 7.5$	$0 \pm 3$
$0 \pm 5$	$0 \pm 5$	$0 \pm 5$
$0 \pm 3$	$0 \pm 7.5$	$0 \pm 3$

$\pm 6$	$\pm 6$	$\pm 6$
$\pm 6$	$\pm 4$	$\pm 6$
$\pm 6$	$\pm 6$	$\pm 6$

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

10	10	10
10	7	10
10	10	10

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

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

7. Insert wedges to make the DY neck stand upright without moving it.  
At this time, without shaking the DY, firmly insert the wedges.
8. 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"                                     $128 \pm 40$

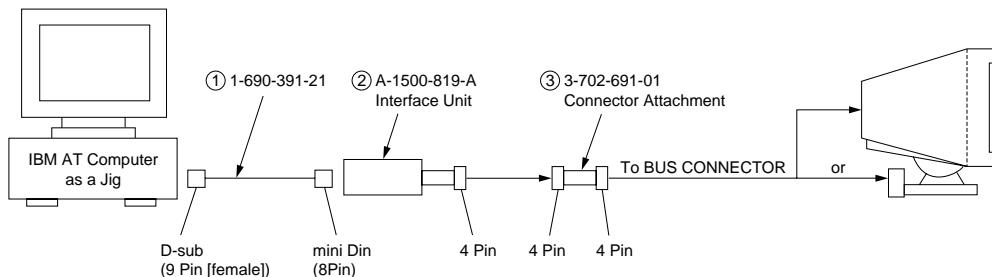
After adjustment, save the service data.

If it does not yet satisfy the specification, paste a Disk-Mg onto the funnel and adjust.

Note:

- (1) Do not paste more than two magnets on one corner.
- (2) Magnets will be placed in a range 80 ~ 100 mm from the DY along diagonal lines.
- (3) After placing magnets, absolutely hand degauss and check the results. (Hand degauss must be used on stand-by or power-off condition.)
9. Remove the sensor and wobbling coil.
10. Switch the signal to R.G.B., and check that each color is pure.
11. Check that the DY is not tilting, and fix the purity Mg with a white pen.

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



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

### • Convergence Rough Adjustment

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

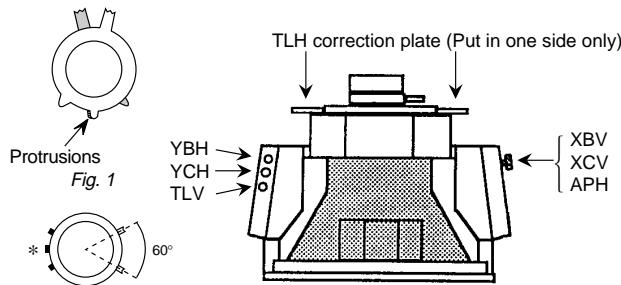
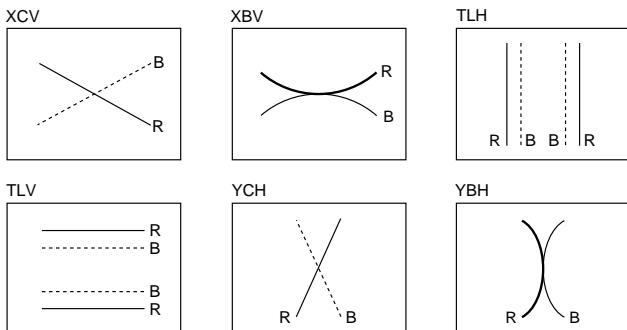


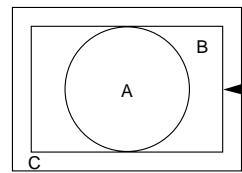
Fig. 3

Fig. 2

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



### • Convergence Specification

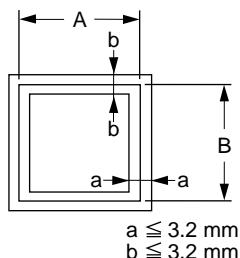


$f_H$	$60\text{kHz} \leq$	$60\text{kHz} \geq$
A Zone	0.24 mm	0.24 mm
B Zone	0.28 mm	0.32 mm
C Zone	0.32 mm	0.36 mm

### • 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

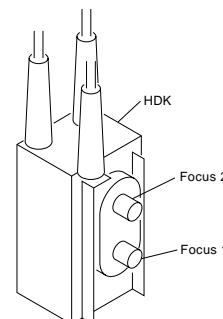


MODE	1, 2, 4, 5	3
A	388 mm	364 mm
B	291 mm	291 mm

$a \leq 3.2 \text{ mm}$   
 $b \leq 3.2 \text{ mm}$

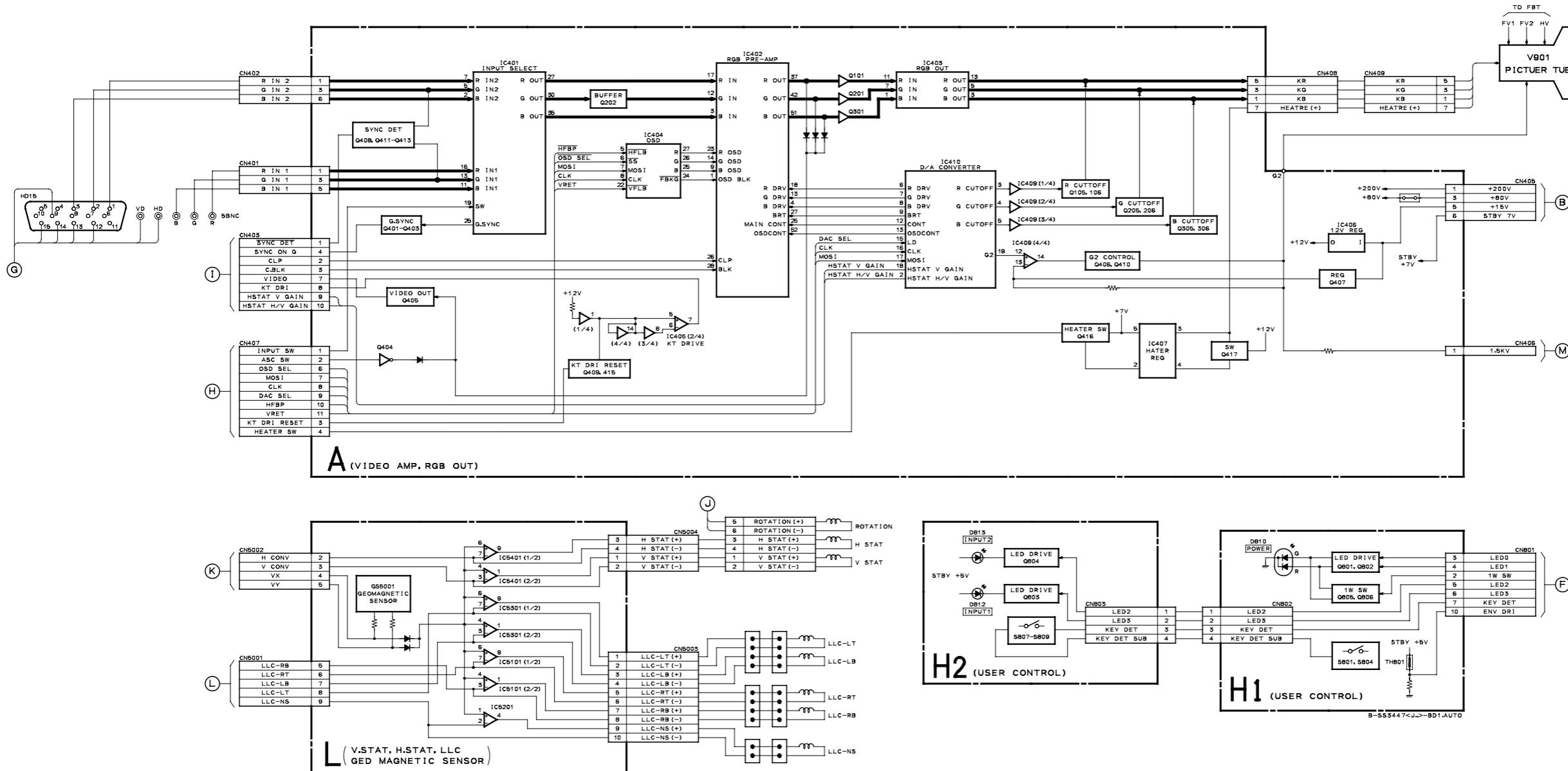
### • Focus adjustment

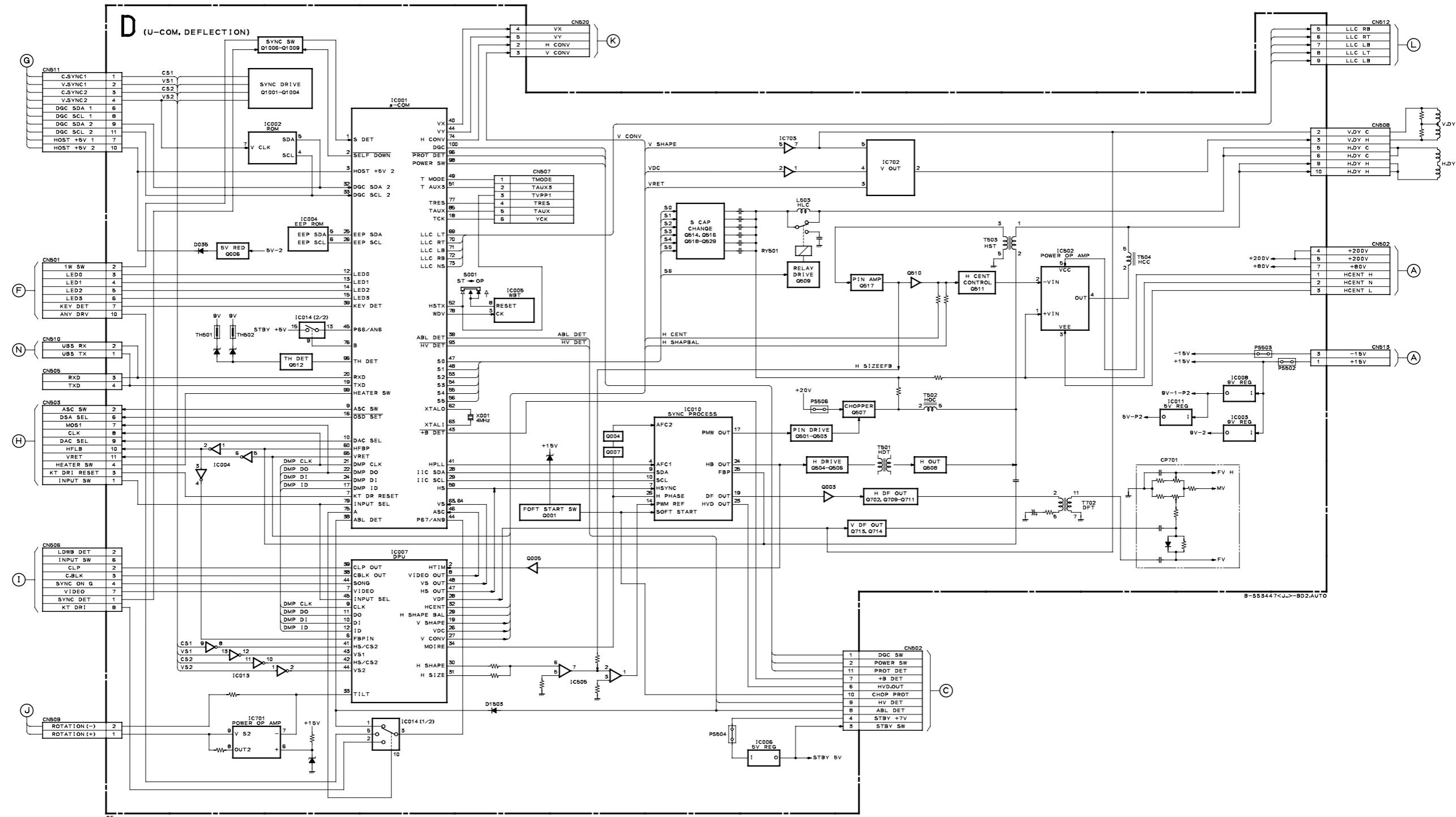
Adjust the focus volume 1 and 2 for the optimum focus.



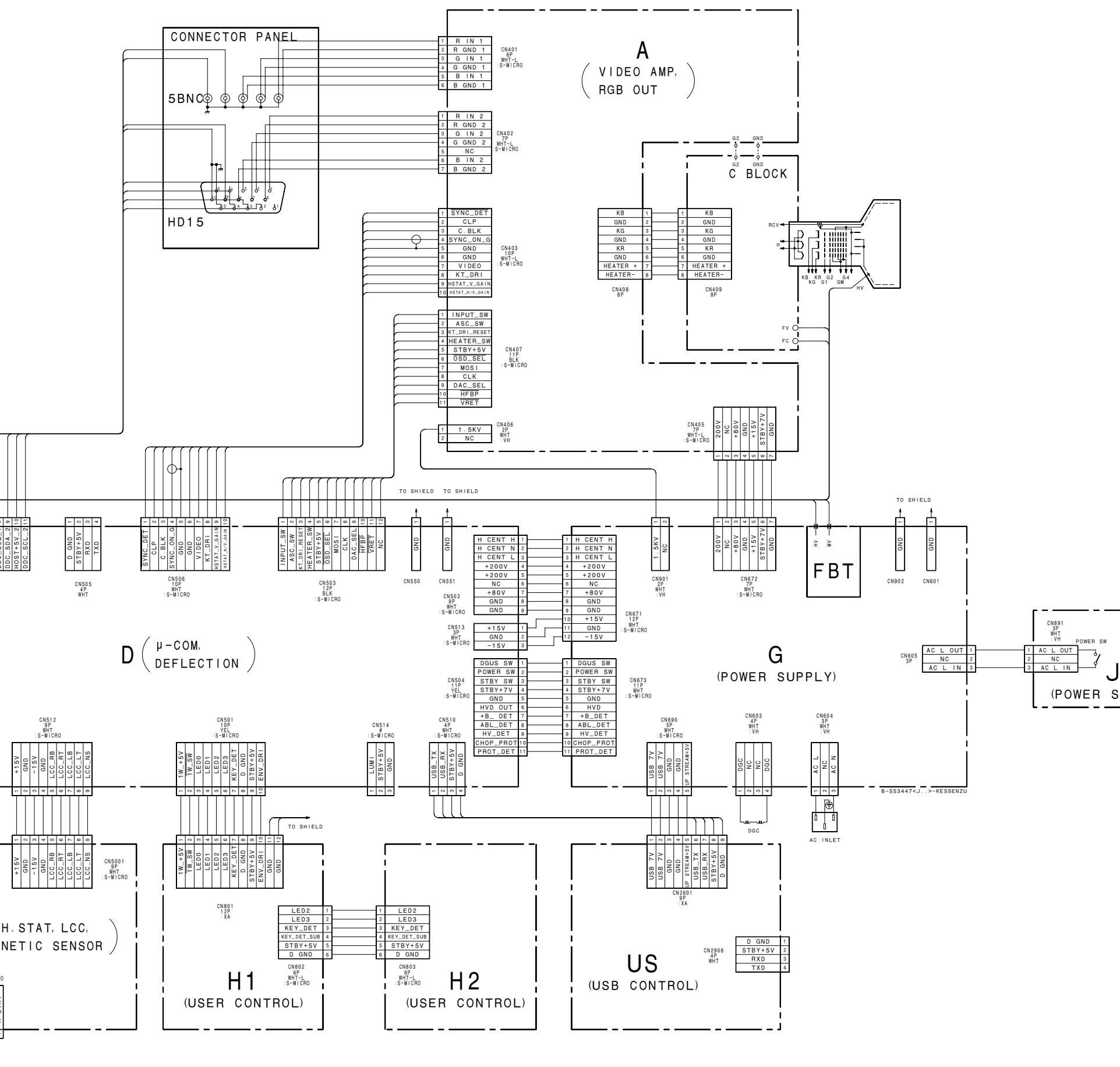
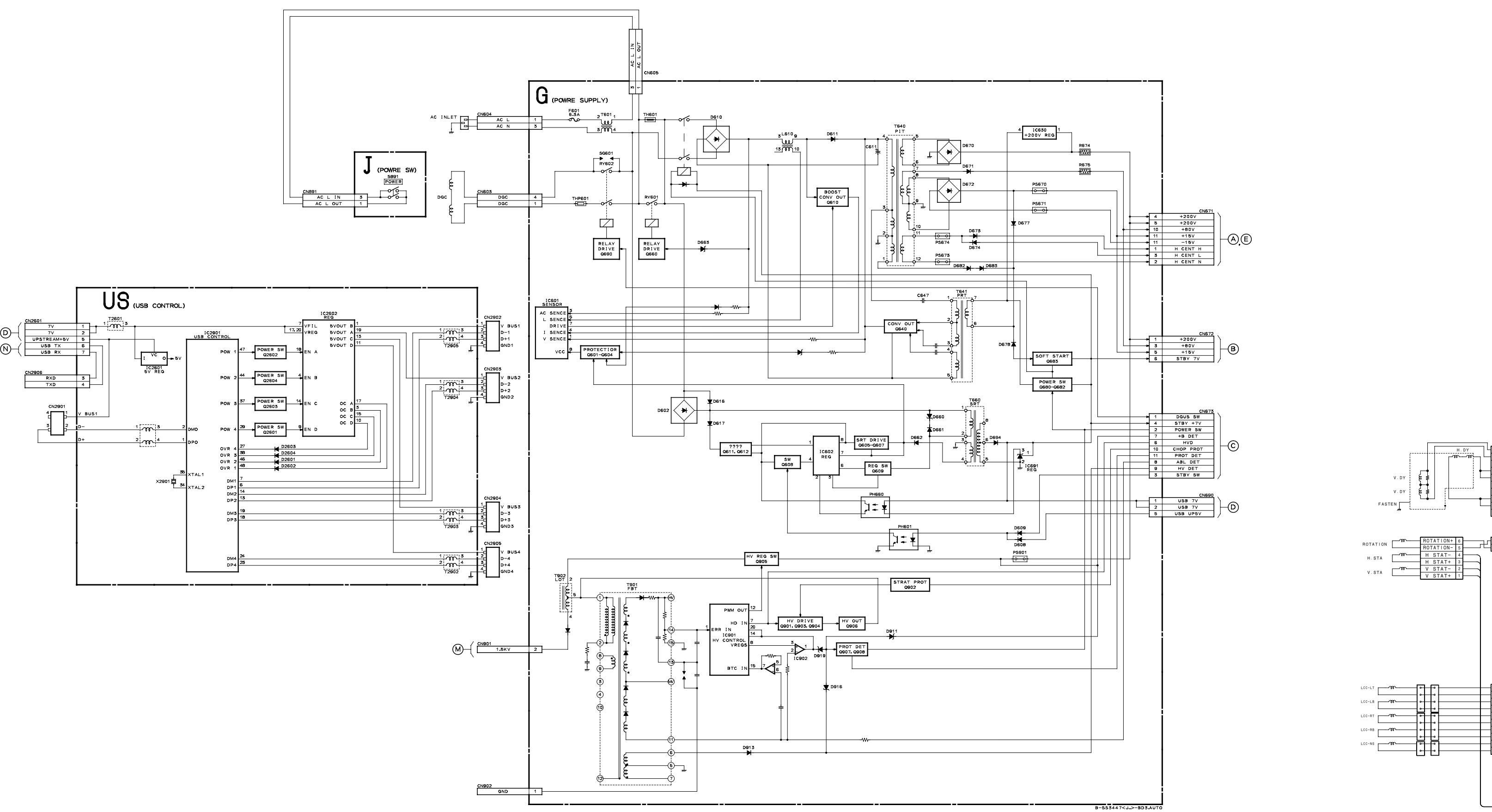
## SECTION 5 DIAGRAMS

### 5-1. BLOCK DIAGRAMS

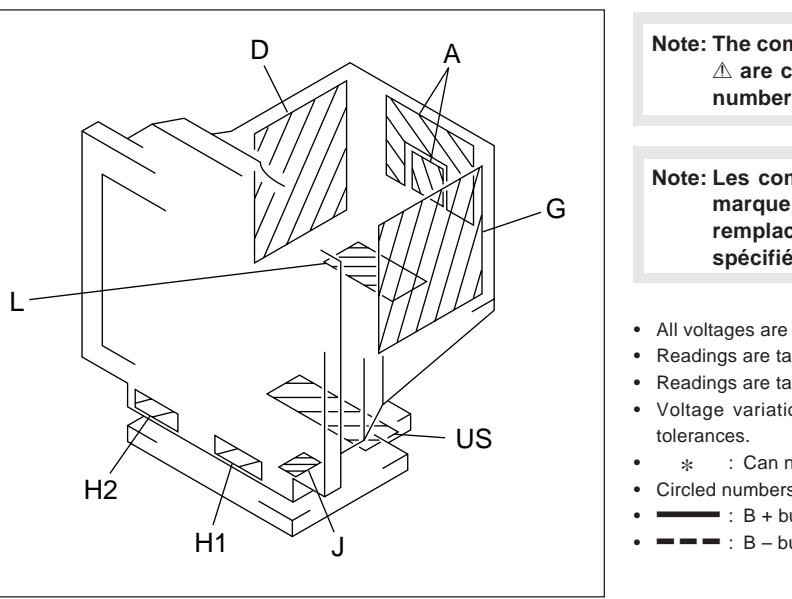




5-2. FRAME SCHEMATIC DIAGRAM



### 5-3. CIRCUIT BOARDS LOCATION



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

Note: Les composants identifiés par un trame 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.
- Circled numbers are waveform references.
- : B + bus.
- - - : B - bus.

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

#### Note:

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

	Part Replaced ()
HV Regulator Circuit Check	G Board IC901, T901 • Mounted G board
HV Protector Circuit Check	G Board Q907, Q908, D913, D916, C923, R920, R927, R952, T901 • Mounted G board
Beam Current Protector Circuit Check	D Board R011, R1068 • Mounted D board G Board IC901, IC902, Q907, Q908, D902, D918, D919, R923, R928, R933, R934, R942, R944, R945, R947, R948, R951, R952, T901 • Mounted D board

(Chip semiconductors that are not actually used are included.) Ver.1.5

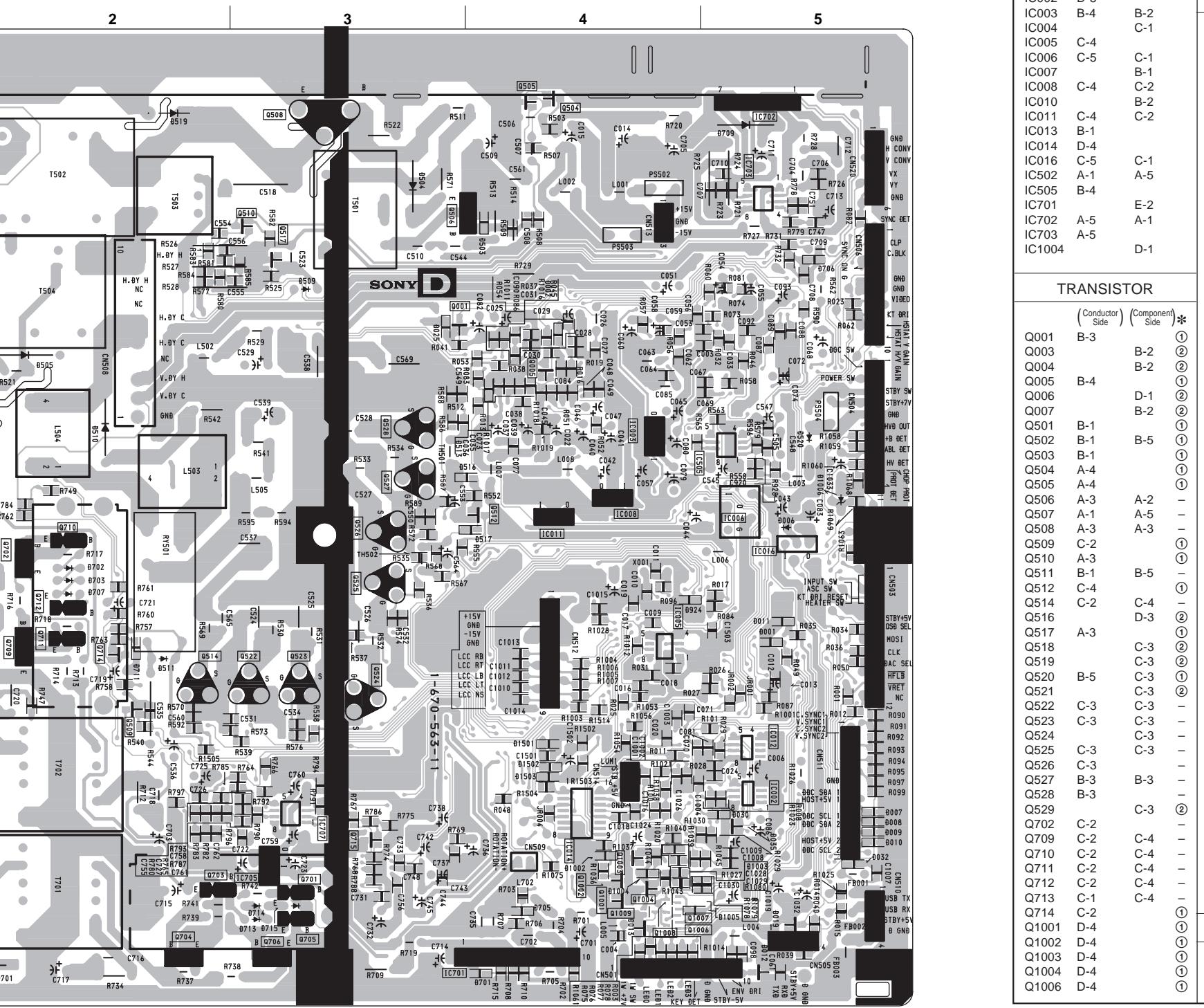
#### Terminal name of semiconductors in silk screen printed circuit (\*)

Device	Printed symbol	Terminal name	Circuit
① Transistor		Collector Base Emitter	
② Transistor		Collector Base Emitter	
③ Diode		Cathode Anode	
④ Diode		Anode (NC) Cathode	
⑤ Diode		Anode (NC) Cathode	
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 Cathode Anode Anode	
⑬ Transistor (FET)		Drain Source Gate	
⑭ Transistor (FET)		Drain Source Gate	
⑮ Transistor (FET)		Source Drain Gate	
⑯ Transistor		Emitter Collector Base	

— Discrete semiconductor

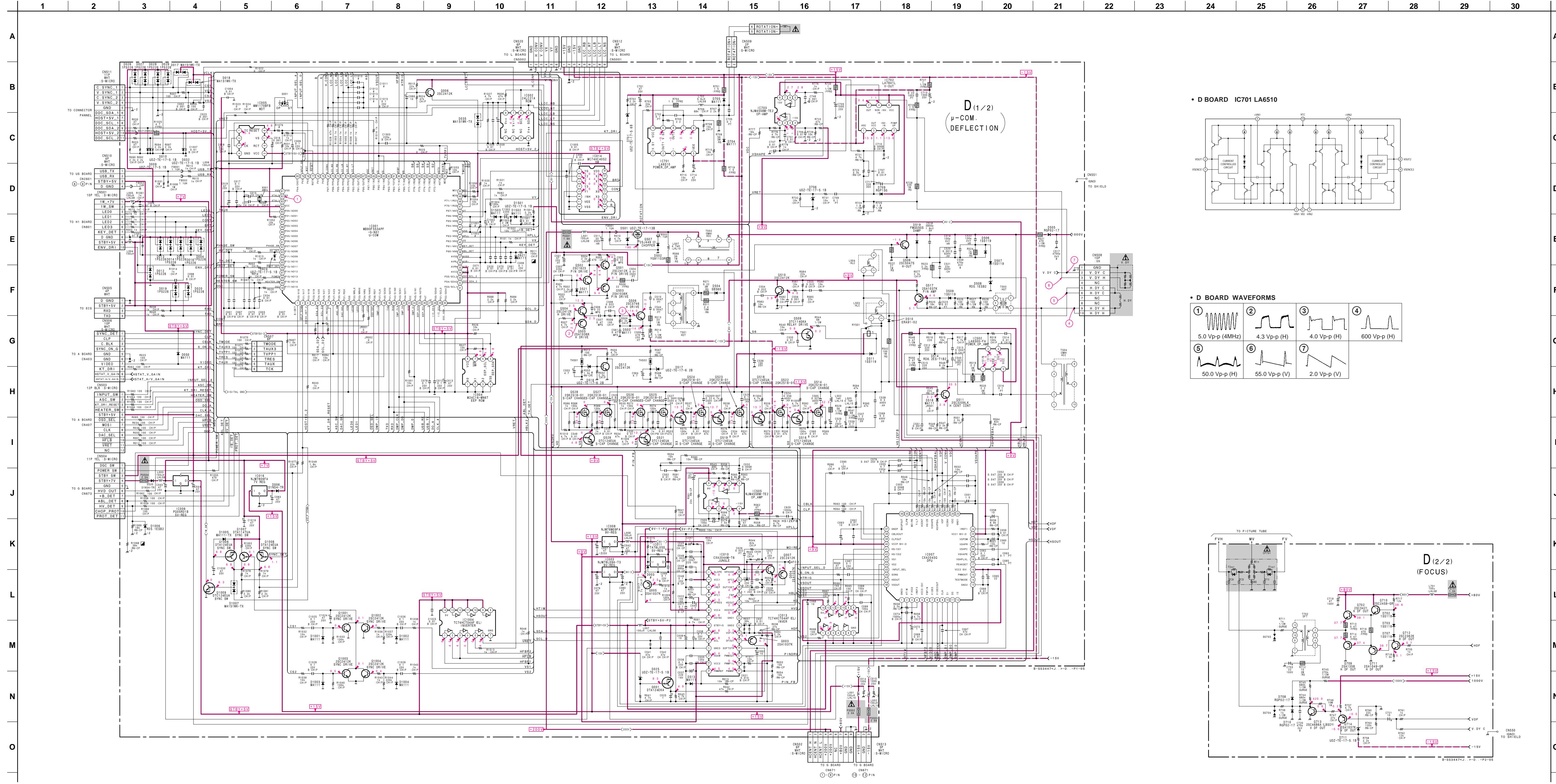
(Chip semiconductors that are not actually used are included.)

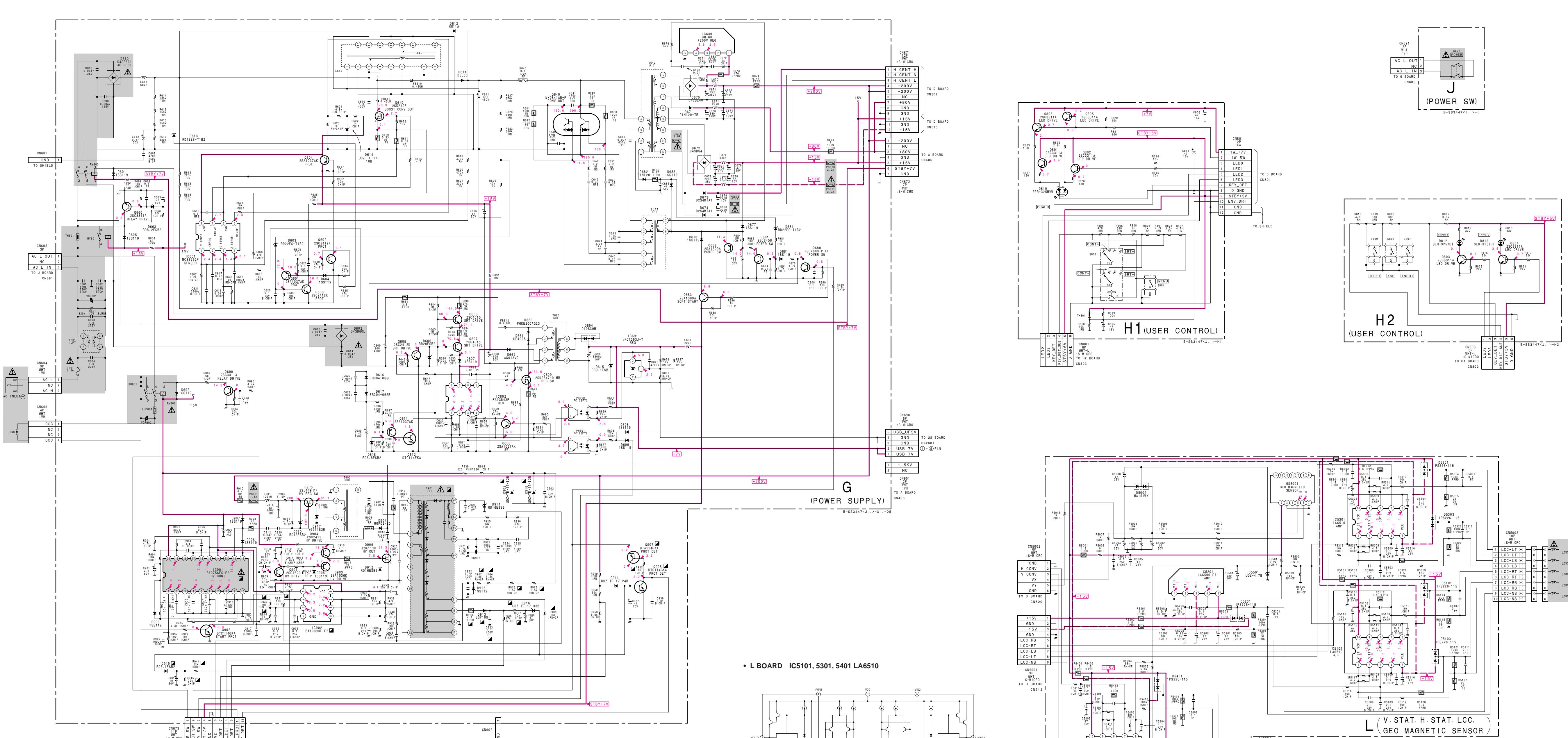
#### — D BOARD (Conductor Side) —

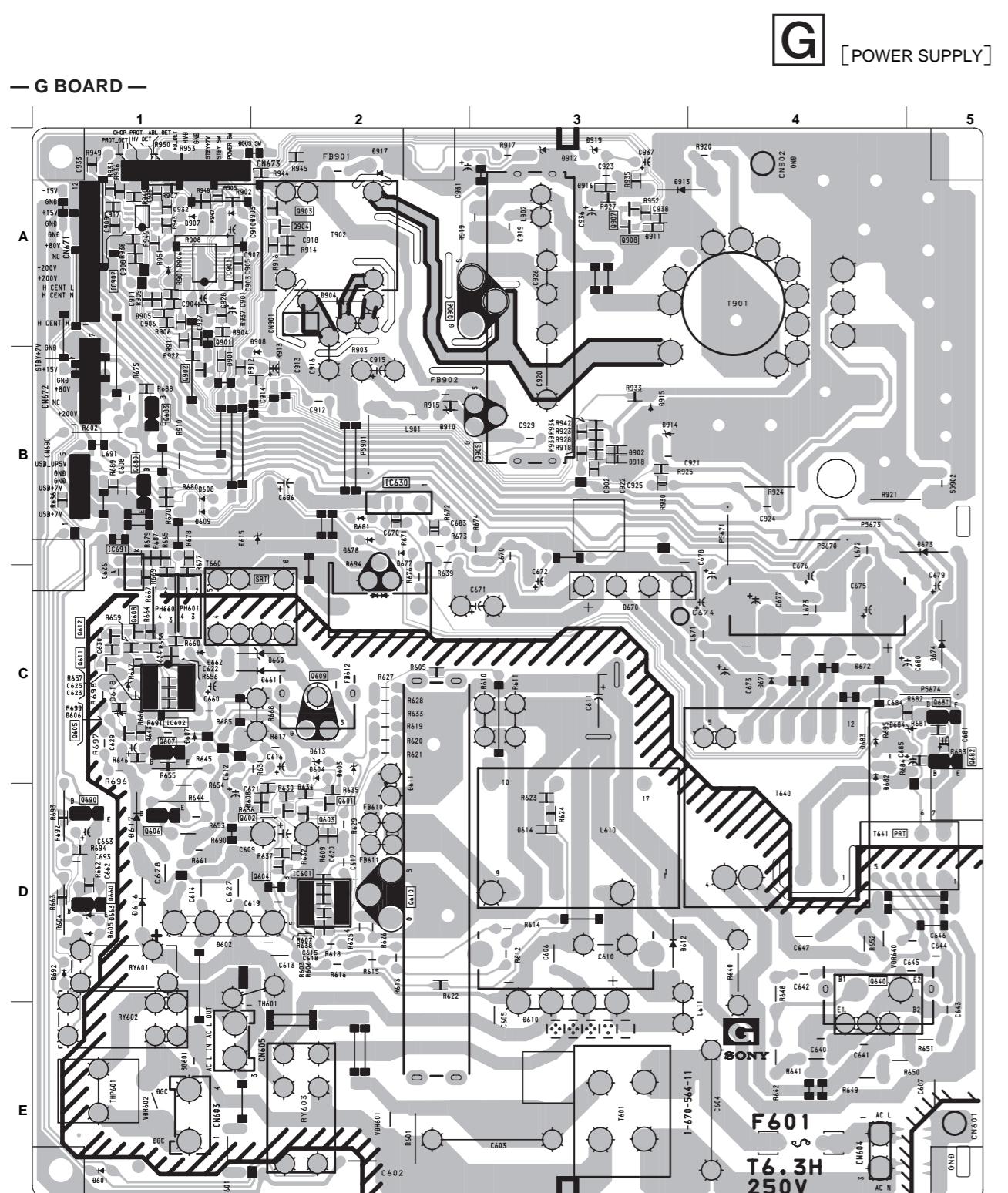


#### • D BOARD SEMICONDUCTOR LOCATION

IC	(Conductor Side)	(Component Side)	Q1007 D-4	①
IC001	D-5	C-1	Q1008 D-4	①
IC002	B-4	C-2	Q1009 D-9	①
IC003	C-4			
IC004	C-5			
IC005	C-4			
IC006	C-5			
IC007	C-4			
IC008	C-4			
IC009	C-4			
IC010	C-4			
IC011	B-1			
IC012	B-1			
IC013	D-4			
IC014	D-4			
IC015	C-5			
IC016	C-5			
IC017	A-1			
IC018	B-4			
IC019	A-5			
IC020	D-5			
IC021	B-3			
IC022	C-1			
IC023	C-2			
IC024	D-1			
IC025	B-3			
IC026	C-1			
IC027	C-1			
IC028	D-1			
IC029	D-1			
IC030	D-5			
IC031	D-5			
IC032	D-5			
IC033	D-5			
IC034	D-5			
IC035	D-5			
IC036	D-5			
IC037	D-5			
IC038	D-5			
IC039	D-5			
IC040	D-5			
IC041	D-5			
IC042	D-5			
IC043	D-5			
IC044	D-5			
IC045	D-5			
IC046	D-5			
IC047	D-5			
IC048	D-5			
IC049	D-5			
IC050	D-5			
IC051	D-5			
IC052	D-5			
IC053	D-5			
IC054	D-5			
IC055	D-5			
IC056	D-5			
IC057	D-5			
IC058	D-5			
IC059	D-5			
IC060	D-5			
IC061	D-5			
IC062	D-5			
IC063	D-5			
IC064	D-5			
IC065	D-5			
IC066	D-5			
IC067	D-5			
IC068	D-5			
IC069	D-5			
IC070	D-5			
IC071	D-5			
IC072	D-5			
IC073	D-5			
IC074	D-5			
IC075	D-5			
IC076	D-5			
IC077	D-5			
IC078	D-5			
IC079	D-5			
IC080	D-5			
IC081	D-5			
IC082	D-5			
IC083	D-5			
IC084	D-5			
IC085	D-5			
IC086	D-5			
IC087	D-5			
IC088	D-5			
IC089	D-5			
IC090	D-5			
IC091	D-5			
IC092	D-5			
IC093	D-5			
IC094	D-5			
IC095	D-5			
IC096	D-5			
IC097	D-5			
IC098	D-5			
IC099	D-5			
IC100	D-5			
IC101	D-5			
IC102	D-5			
IC103	D-5			
IC104	D-5			
IC105	D-5			
IC106	D-5			
IC107	D-5			
IC108	D-5			
IC109	D-5			
IC110	D-5			
IC111	D-5			
IC112	D-5			
IC113	D-5			
IC114	D-5			
IC115	D-5			
IC116	D-5			
IC117	D-5			
IC118	D-5			
IC119	D-5			
IC120	D-5			
IC121	D-5			
IC122	D-5			
IC123	D-5			
IC124	D-5			
IC125	D-5			
IC126	D-5			
IC127	D-5			
IC128	D-5			
IC129	D-5			
IC130	D-5			
IC131	D-5			
IC132	D-5			
IC133	D-5			
IC134	D-5			
IC135	D-5			
IC136	D-5			
IC137	D-5			
IC138	D-5			
IC139	D-5			
IC140	D-5			
IC141	D-5			
IC142	D-5			
IC143	D-5			
IC144	D-5			
IC145	D-5			
IC146	D-5			
IC147	D-5			
IC148	D-5			
IC149	D-5			
IC150	D-5</td			







## **G BOARD**

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

Ref.	*
601–Q605, Q608, Q611	
612, Q901–Q904,	①
907, Q908	
614, D902, D911,	
916, D918	③

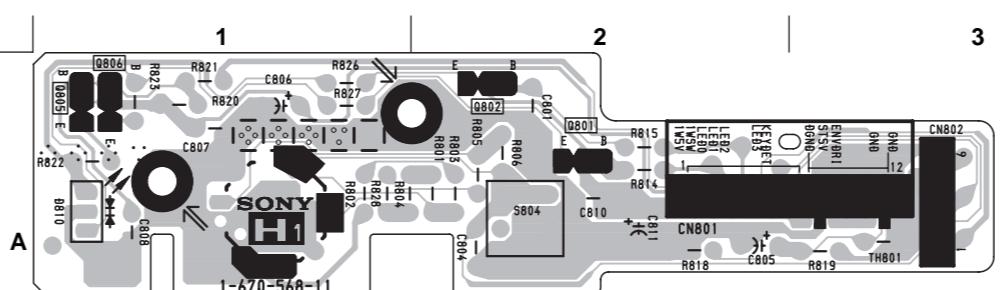
\*: Refer to Terminal name of semiconductors  
in silk screen printed circuit (see page 5-9)

H<sub>1</sub> [u]

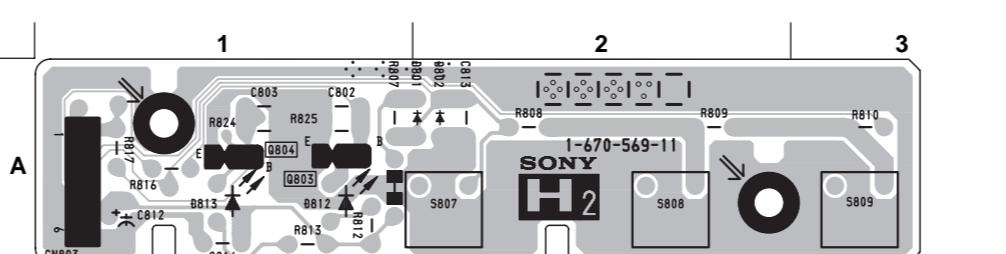
ER CONTROL ] H<sub>2</sub>

[USER CONTROL] [POWER SW]

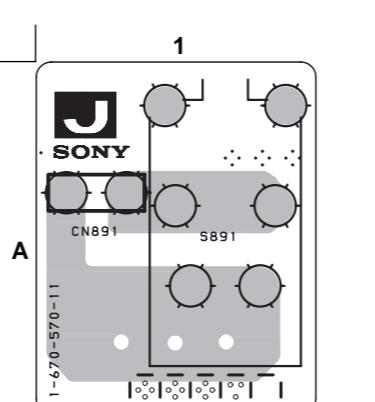
## — H1 BOARD —



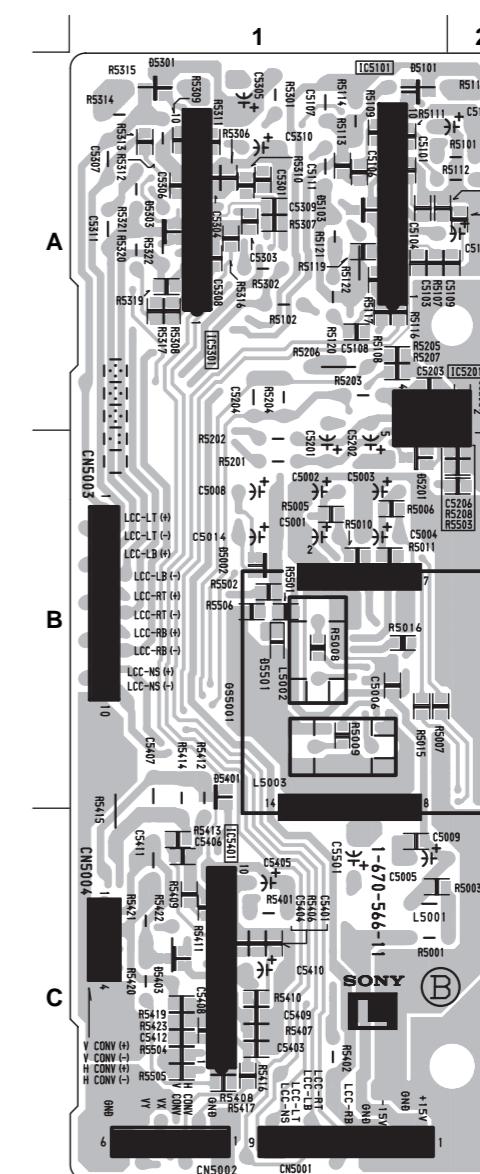
— H2 BOARD —



-J BOARD -



**— L BOARD (Conductor Side) —**



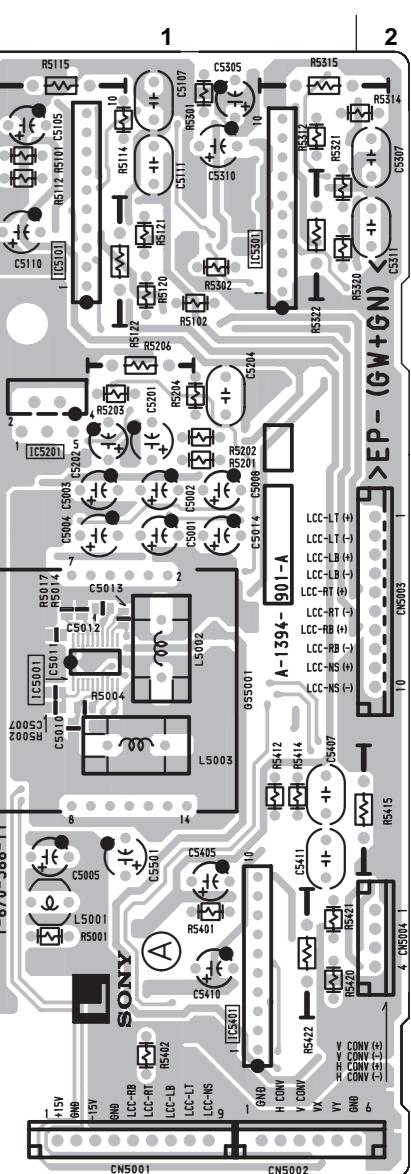
**L BOARD**  
**Terminal name of semiconductors**  
**in silk screen printed circuit (\*)**

Ref.	*
D5501	(3)
D5101, D5103, D5201, D5301, D5303, D5401, D5403	(6)
D5002	(8)

\*: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 5-9)

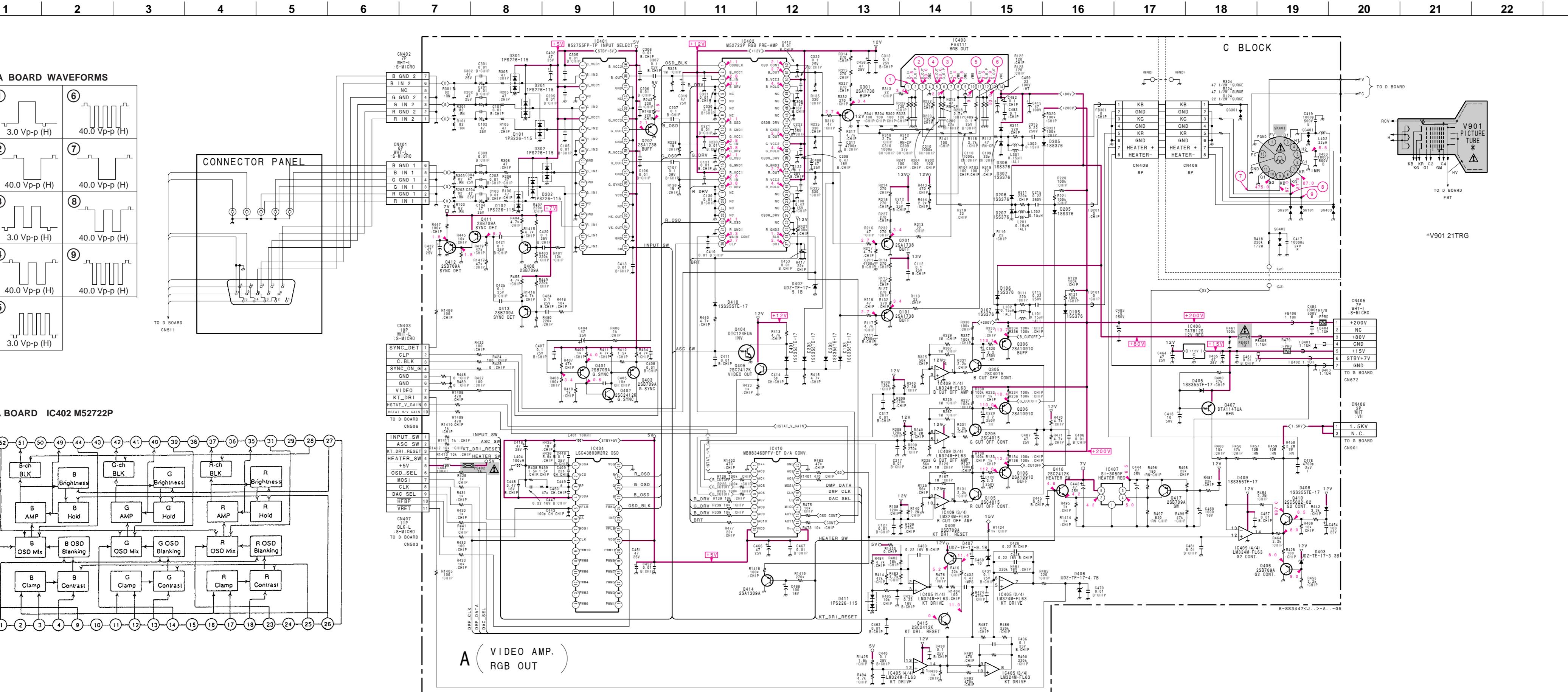
**L** [V.STAT, H.STAT, LCC,  
GEO MAGNETIC SENSOR]

#### **— L BOARD (Component Side) —**



**A** schematic diagram board →

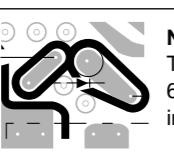
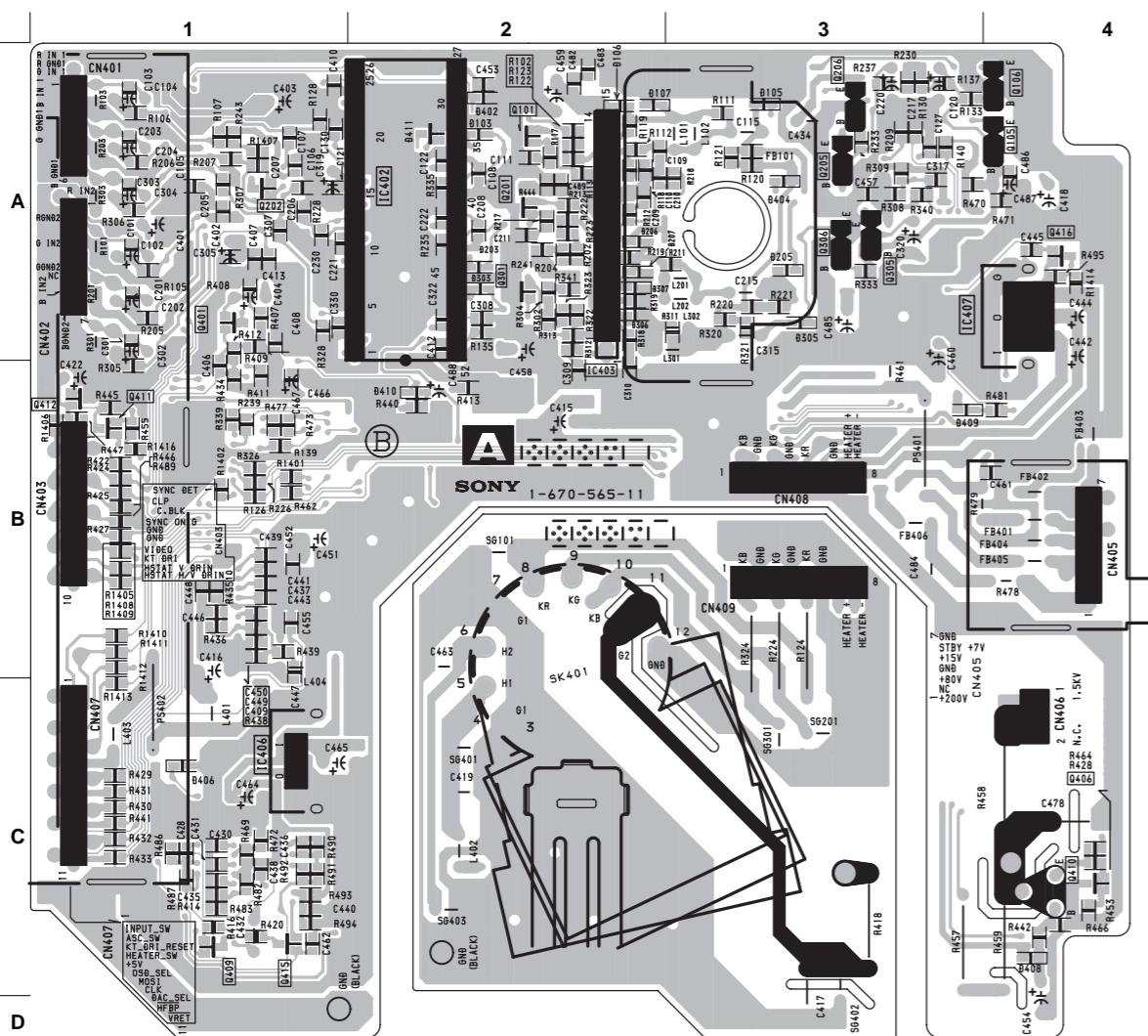
(3) Schematic Diagram of A Board



A

VIDEO AMP  
RGB OUT

## — A BOARD (Conductor Side) —



## NOTE:

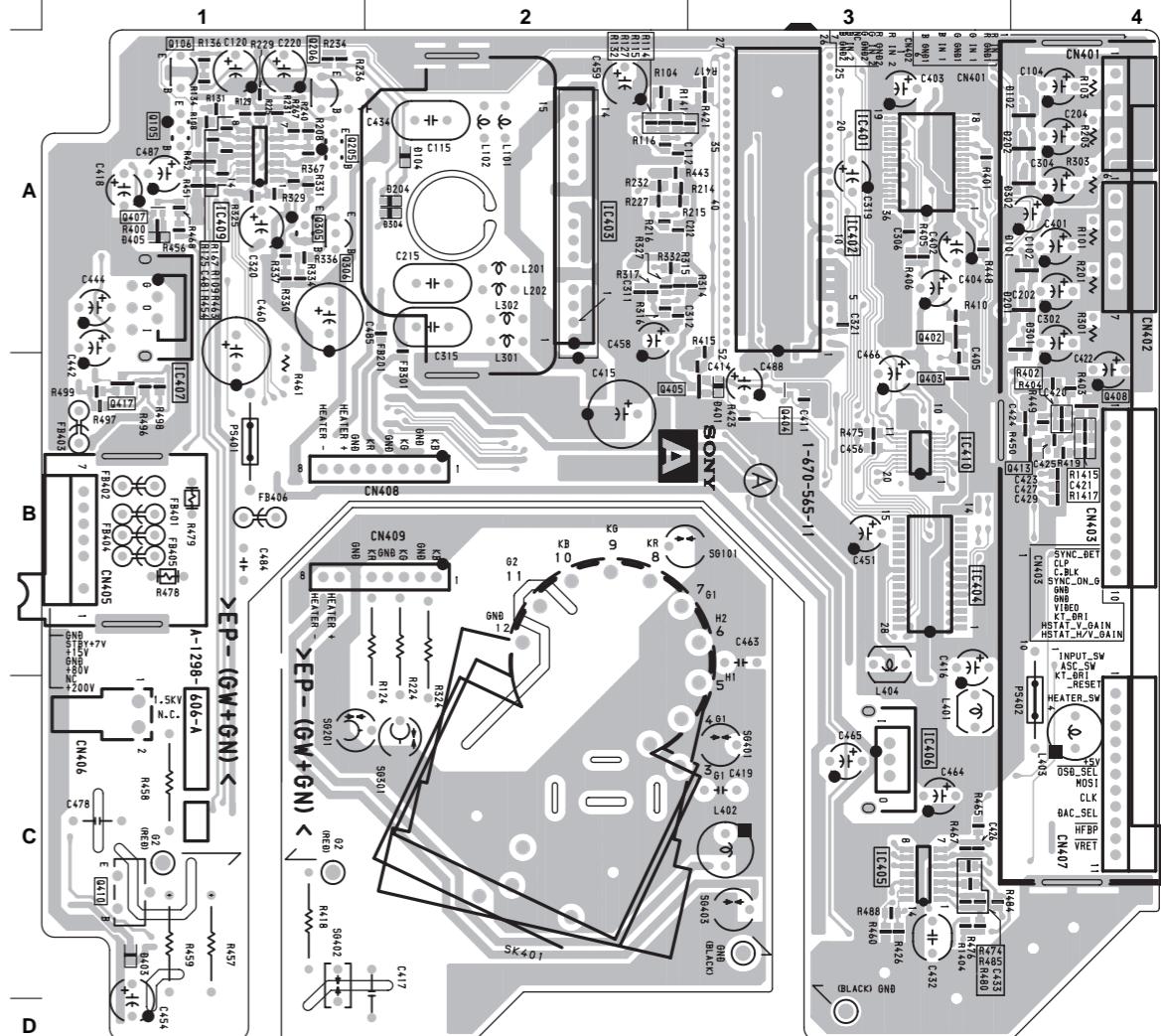
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

• A BOARD  
SEMICONDUCTOR  
LOCATION

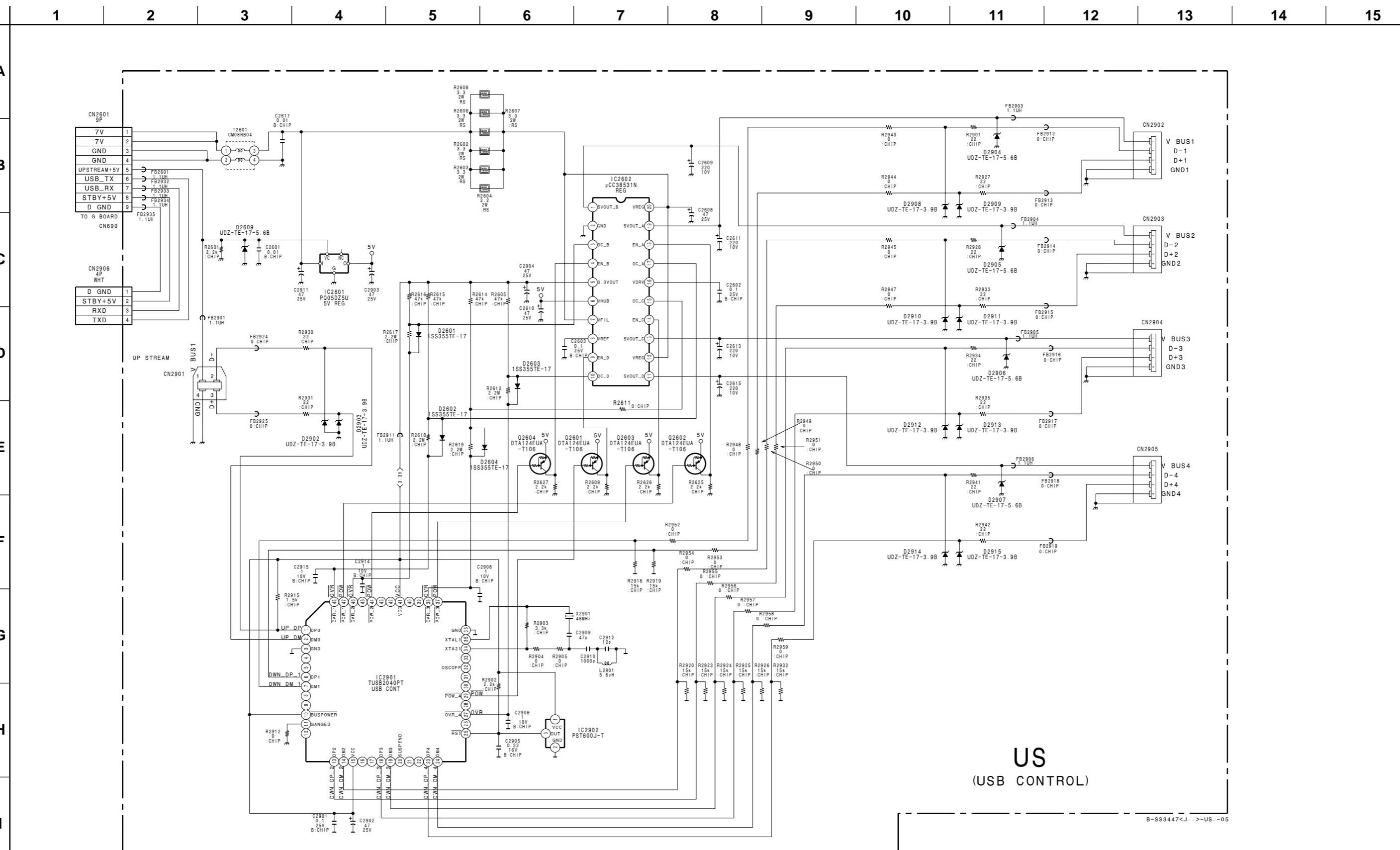
IC	
(Conductor Side)	(Component Side)
IC401	A-1
IC402	B-3
IC403	B-3
IC404	A-2
IC406	A-1
IC408	A-1
IC409	C-1
IC410	A-2
TRANSISTOR	
(Conductor Side)	(Component Side)
Q101	A-2
Q105	A-4
Q106	A-4
Q201	A-2
Q202	A-1
Q205	A-3
Q206	A-3
Q301	A-2
Q305	A-3
Q306	A-3
Q401	A-1
Q402	A-3
Q403	B-3
Q404	B-3
Q405	B-2
Q406	A-1
Q407	A-1
Q408	B-4
Q409	C-1
Q410	C-4
Q411	B-1
Q412	B-1
Q413	C-1
Q415	C-1
Q416	A-4
Q417	B-1
DIODE	
(Conductor Side)	(Component Side)
D101	A-4
D102	A-4
D103	A-2
D105	A-3
D106	A-2
D107	A-2
D201	A-4
D202	A-4
D203	A-2
D205	A-3
D206	A-2
D207	A-3
D301	A-4
D302	A-4
D303	A-2
D305	A-3
D306	A-2
D307	A-2
D401	B-3
D402	A-2
D403	C-1
D405	A-1
D406	C-1
D408	C-4
D409	B-3
D410	B-2

\*: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 5-9)

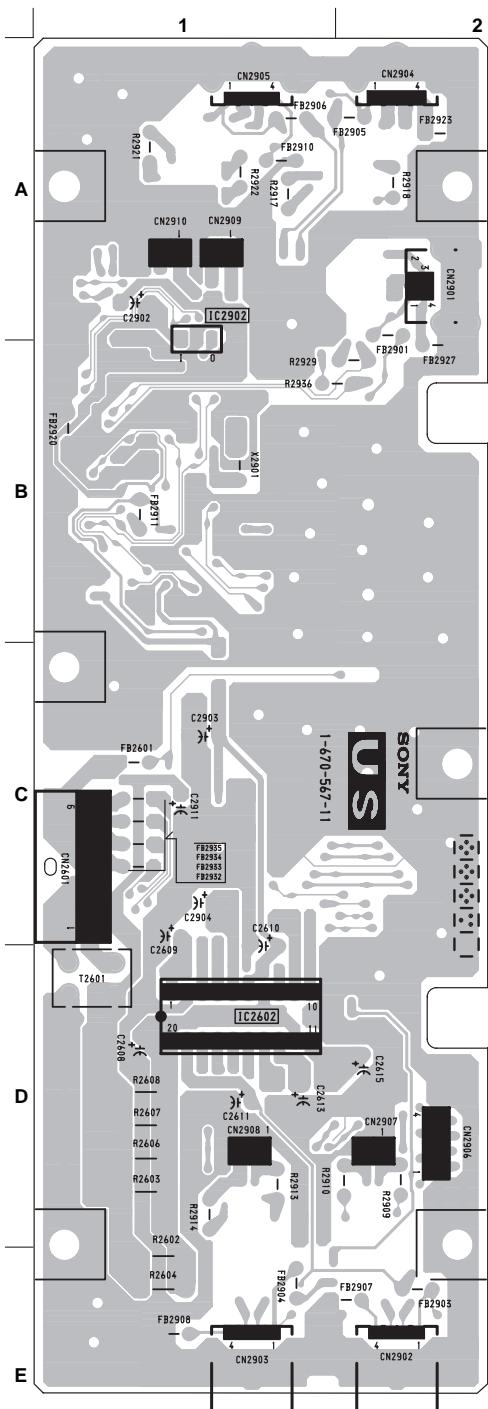
## — A BOARD (Component Side) —



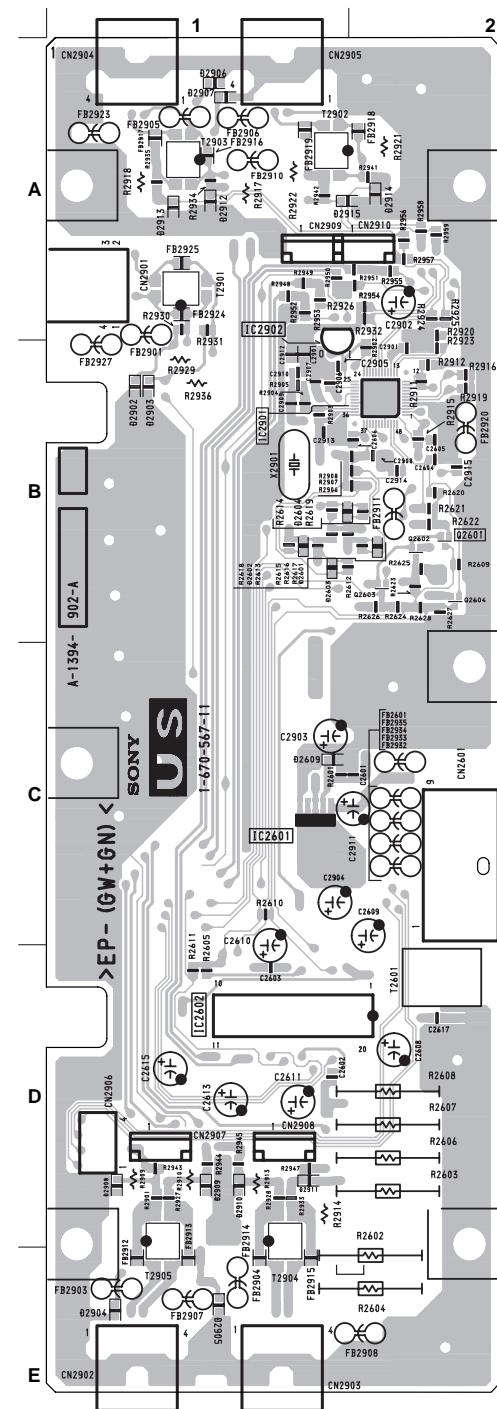
(4) Schematic Diagram of US Board



— US BOARD (Conductor Side) —



— US BOARD (Component Side) —



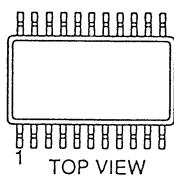
**US BOARD**  
Terminal name of semiconductors  
in silk screen printed circuit (\*)

Ref.	*
D2601-D2604, D2609, D2902-D2915	③

\*: Refer to Terminal name of semiconductors  
in silk screen printed circuit (see page 5-9)

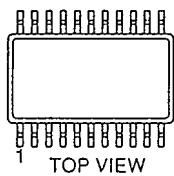
## 5-5. SEMICONDUCTORS

BA10393F-E2  
NJM4558M  
μPC4558G2  
24LC21AT/SN



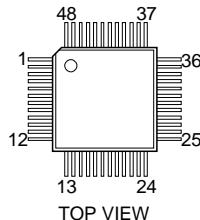
8 pin SOP

BA9756FS-E2  
MB88346BPFV  
MB88346BPFV-EF



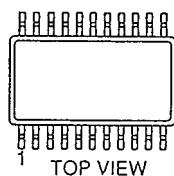
20 pin SOP

CXA2043Q



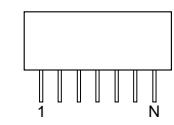
TOP VIEW

CXA2044M-T6  
LSC4380DW2R2



28 pin SOP

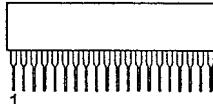
DM-60



MARKING SIDE VIEW  
• pin 1 N  
• Mt (one side, both side)

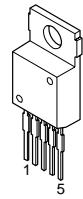
FA4111

MARKING SIDE VIEW



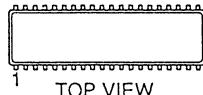
14 pin SIP

LA6500-FA



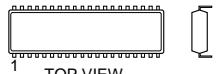
52 pin DIP

M52722P



TOP VIEW

TUSB2040PT



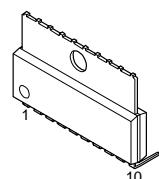
TOP VIEW

2SA1049-GR  
2SC2458-YGR  
2SC2603-EF  
2SC2603TP-EF

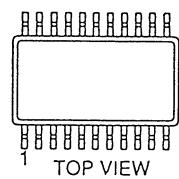


28 pin DIP

LA6510

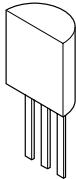


M52755FP-TP



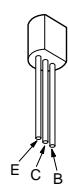
TOP VIEW

μPC1093J



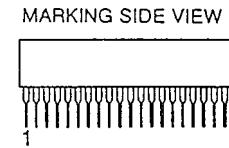
TOP VIEW

2SA1091-O



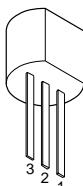
TOP VIEW

LA7841L



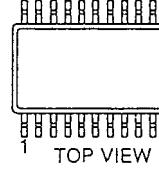
7 pin SIP

NJM78L09A  
TA78L05S  
TA78L09S



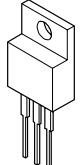
TOP VIEW

LM324M  
TC74HCT04AF



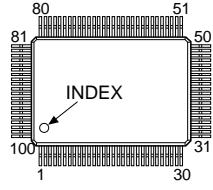
14 pin SOP

NJM78M09FA  
TA7805S  
TA7812S

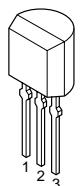


TOP VIEW

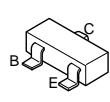
MB90F553APF-G-N01



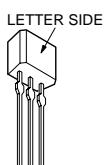
PST600J-T



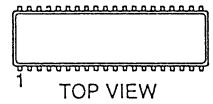
DTA114GKAT146  
DTA114TUA-T106  
DTA124EKA-T146  
DTA124EUA-T106  
DTC114EK  
DTC114EKA-T146  
DTC114GKA  
DTC114GKAT146  
2SA1036K-Q  
2SA1036K-T-146-Q  
2SA1037AK-T146-QR  
2SA1037AK-T146-R  
2SA1162-G  
2SA1462-Y33  
2SA1738-TX  
2SB709A-QRS-TX  
2SC1623-L5L6  
2SC2412K-T-146-QR



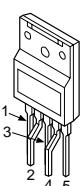
2SA1175-HFE  
2SA1309A-QRSTA  
2SC2459-GR-TPE4  
2SC2784  
2SC2785-HFE  
2SC3311A-QRSTA



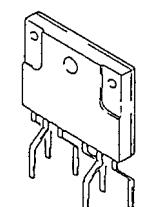
FA13842P  
MC33262P  
MM1170BFB  
M24C16-MN6T



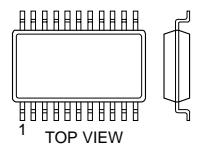
SI-3050F



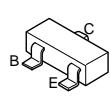
MX0841AB-F



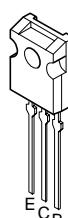
MC74HC4052F



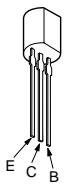
16 pin SOP



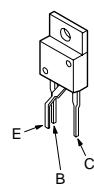
2SA1358-Y  
2SC3421-Y



**2SC2362K-G**  
**2SC2362KG-AA**

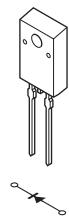


**2SK2195F04**

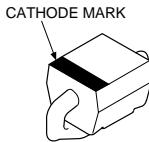


**D1NL20-TR**  
**D1NS4**  
**RD13ES-B2**  
**RD26ES-B2**  
**RD22ES-B2**  
**RD16ES-B3**  
**RD18ES-B2**  
**RD22ES-B2**  
**RD5.1ES-B2**  
**RD6.2ESB2**  
**RD6.8ES-B2**  
**RD8.2ES-B2**  
**RD9.1ES-L**  
**RD9.1ES-T1B**  
**S2LA20F**  
**1SS119-25TD**  
**1SS119-25**

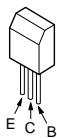
**FMQ-G5GS**  
**D5L60**



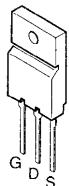
**SB560**



**2SC3209LK**



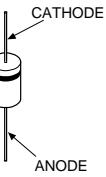
**2SK2647-01MR-F91**



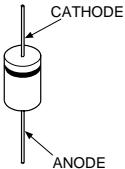
**2SC3746**  
**2SC4686A (LBSONY)**  
**2SJ449**  
**2SJ449 (1)**  
**2SJ449 (2)**



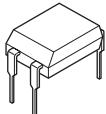
**AG01A-V0**  
**ERA91-02**  
**EGP10D**  
**EGP10GPKG23**



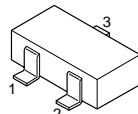
**D2S4MF**  
**D2S4MTA1**



**ON3171-R**  
**PC123F2**  
**PC123FY2**



**1PS226-115**



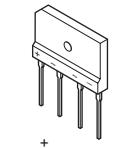
**2SC4015TV2**



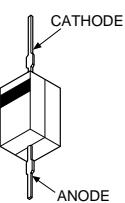
**DTZ-TT11-3.3B**

**DTZ10B**  
**DTZ13B**  
**DTZ24B**  
**DTZ33B**  
**DTZ4.7C**  
**DTZ5.1B**  
**DTZ9.1**  
**MA111**  
**MA111-TX**  
**MA8039**  
**RD12SB2**  
**RD5.6S-B**  
**RD6.2M-B1**

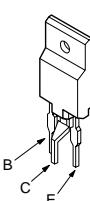
**D4SBS4**  
**D4SBS4-F**  
**D4SBL40**  
**D4SB60L**



**P6KE200AG23**  
**UF4005PKG23**

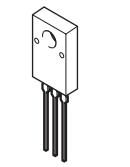


**2SC5047S-SONY-CA**

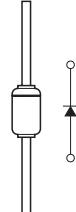


**UDZ-TE-17-10B**  
**UDZ-TE-17-12B**  
**UDZ-TE-17-13B**  
**UDZ-TE-17-24B**  
**UDZ-TE-17-33B**  
**UDZ-TE-17-3.3B**  
**UDZ-TE-17-3.9B**  
**UDZ-TE-17-4.7B**  
**UDZ-TE-17-5.1B**  
**UDZ-TE-17-5.6B**  
**UDZ-TE-17-6.2B**  
**UDZ-TE-17-9.1B**

**D10SC9M**



**RD9.1ES-L2**

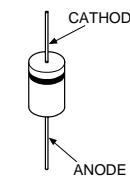


**2SK1120LBSONY2**

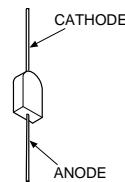


**ANODE**  
**CATHODE**

**EGP20G**  
**ERC04-06SE**  
**RGP02-17EL-6433**  
**RGP02-17PKG23**  
**RGP02-20EG23**  
**RGP15GPKG23**



**RM11A**  
**RM11C**



## 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.

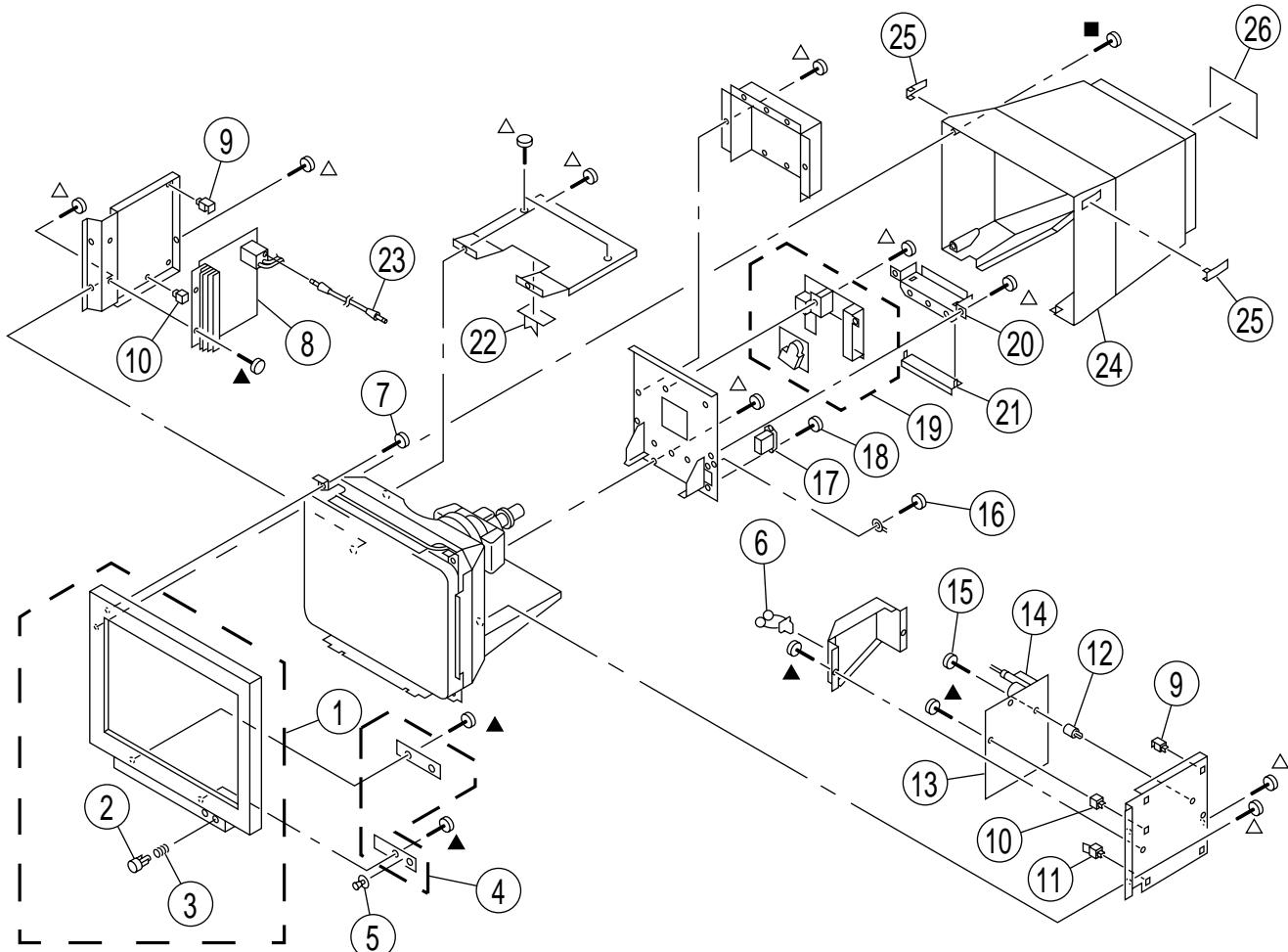
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

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

#### 6-1. CHASSIS

- |                  |              |            |
|------------------|--------------|------------|
| $\blacktriangle$ | 7-685-647-79 | +BVTP 3X10 |
| $\blacksquare$   | 7-685-663-71 | +BVTP 4X16 |
| $\triangle$      | 7-685-881-09 | +BVTT 4X8  |



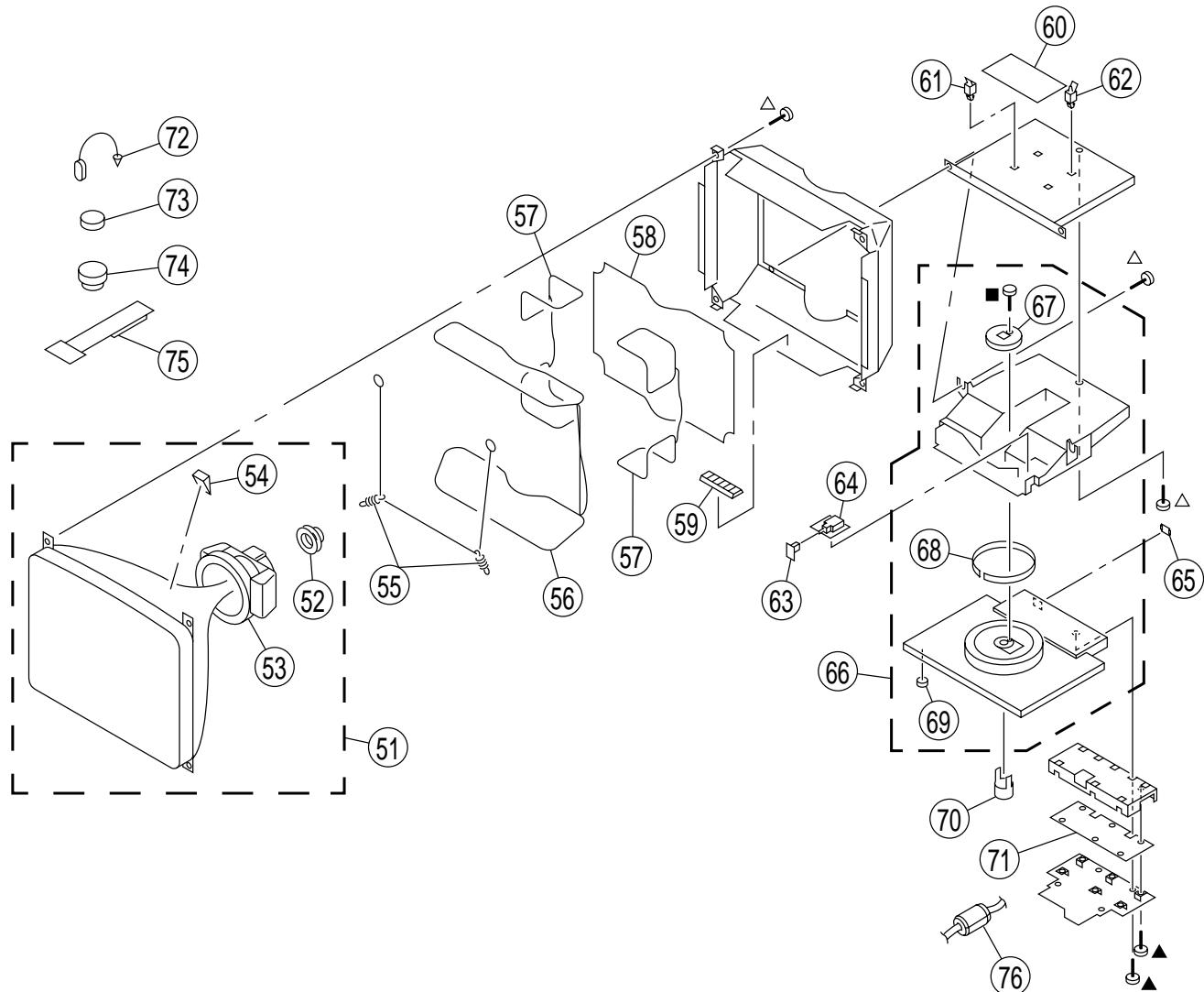
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4035-841-1	BEZEL ASSY	2, 3	15	4-062-115-01	SCREW +P 3.5X20 TYPE2	
2	4-065-308-01	BUTTON, POWER		16	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)	
3	3-653-339-01	SPRING, COMPRESSION		17	$\triangle$ 1-251-382-12	INLET, AC 3P (WITH NOISE FILTER)	
4	* 8-933-324-00	H1, H2 BOARD, COMPLETE		18	4-052-345-01	SCREW, (3X8) (+K), TAPPING	
5	4-065-309-01	KNOB (MENU)		19	* 8-933-318-00	A BOARD, COMPLETE	
6	2-132-434-01	CLIP, WIRE		20	1-694-456-11	TERMINAL BOARD ASSY, I/O	
7	4-365-808-01	SCREW (5), TAPPING		21	4-065-315-01	ATTACHMENT	
8	* 8-933-319-00	D BOARD, COMPLETE		22	* 4-063-711-01	SUPPORT, HV CABLE	
9	* 3-701-903-11	HOLDER, PRINTED CIRCUIT BOARD		23	1-900-215-90	CONNECTOR ASSY	
10	* 4-382-848-01	HOLDER, PRINTED CIRCUIT BOARD		24	4-065-325-01	CABINET	
11	* 3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD		25	4-065-304-01	COVER, SCREW	
12	* 4-060-359-01	HOLDER, PRINTED CIRCUIT BOARD		26	* 4-066-155-01	LABEL, INFORMATION [U/C]	
13	* 8-933-320-00	G BOARD, COMPLETE				* 4-066-156-01	LABEL, INFORMATION [AEP]
14	$\triangle$ X-4043-094-1	TRANSFORMER ASSY, FLYBACK (NX-4202//J1D4)					

**6-2. PICTURE TUBE**

- |                |            |
|----------------|------------|
| ▲ 7-685-647-79 | +BVTP 3X10 |
| ■ 7-685-663-71 | +BVTP 4X16 |
| △ 7-685-881-09 | +BVTT 4X8  |

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

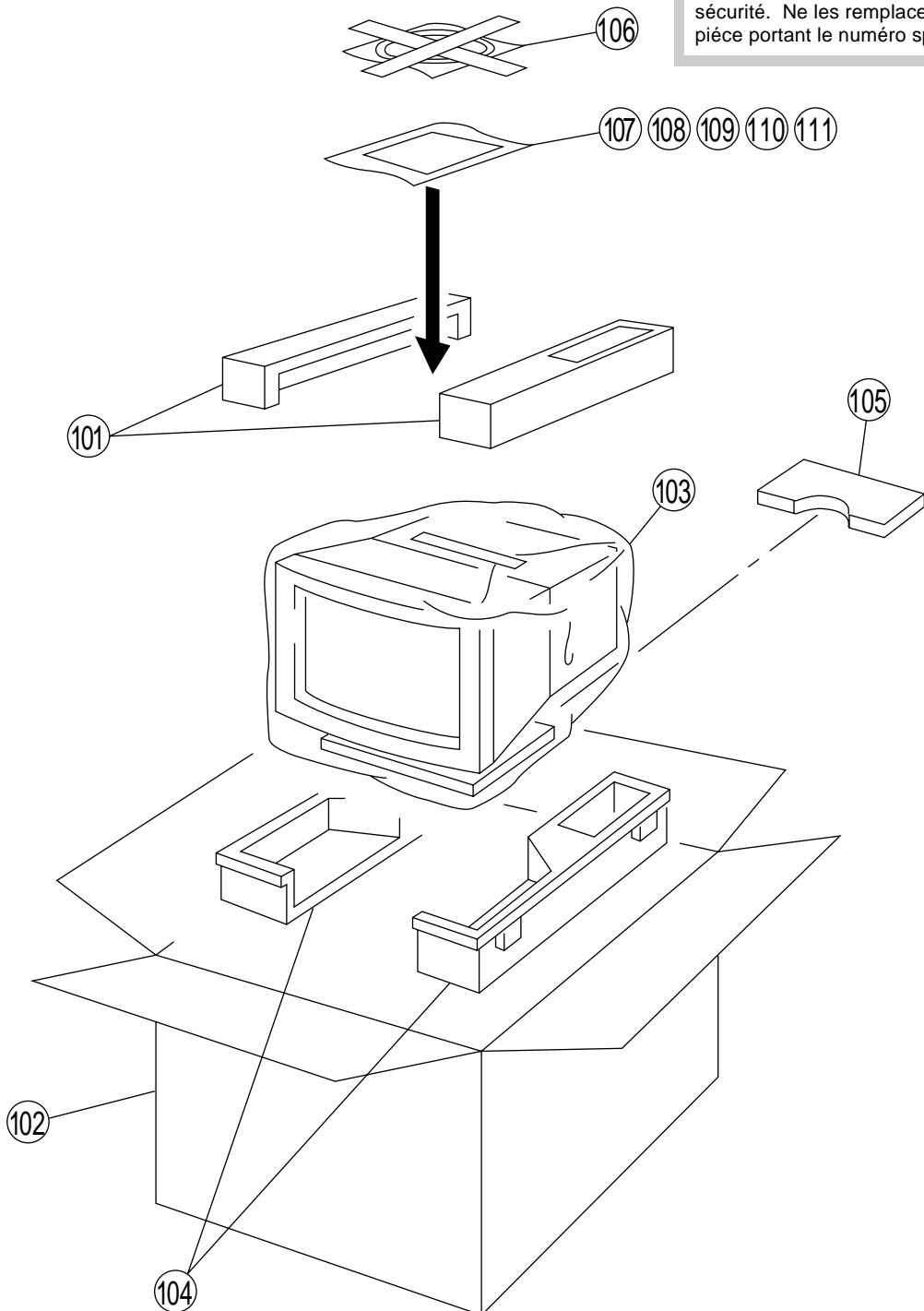
Les composants identifiés par un trame et une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	△ 8-738-804-81	ITC ASSY (21TRG-R1)	52-54	64	* 8-933-322-00	J BOARD, COMPLETE	
52	△ 1-452-912-31	NECK ASSY, PICTURE TUBE (NA2914)		65	4-065-302-01	COVER, ECS	
53	△ 8-451-502-11	DEFLECTION YOKE (Y21TRL-M)		66	X-4035-843-1	STAND ASSY	67-69
54	4-050-492-01	SPACER, DEFLECTION YOKE		67	4-061-396-01	STOPPER (A)	
55	* 4-047-316-01	SPRING, TENSION		68	4-060-339-01	RING, TILT SWIVEL	
56	△ 1-416-792-11	COIL, DEMAGNETIC		69	4-047-474-01	FOOT, RUBBER	
57	△ 1-416-794-11	COIL, LANDING CORRECTION		70	4-062-381-01	STOPPER (B)	
58	△ 1-416-793-11	COIL, LANDING CORRECTION		71	* 8-933-321-00	US BOARD, COMPLETE	
59	4-062-670-01	SPACER, PICTURE TUBE		72	4-308-870-00	CLIP, LEAD WIRE	
60	* 8-933-325-00	L BOARD, COMPLETE		73	1-452-032-00	MAGNET, DISK: 10mm φ	
61	* 4-321-929-00	HOLDER, PRINTED CIRCUIT BOARD		74	1-452-094-00	MAGNET, ROTATABLE DISK: 15mm φ	
62	* 3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD		75	4-051-736-21	PIECE A (90), CONV. CORRECT	
63	4-065-310-01	CAP, POWER		76	1-543-798-11	FILTER, CLAMP (FERRITE CORE)	

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

## 6-4. PACKING MATERIALS



Les composants identifiés par un trame et une 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	* 4-065-176-01	CUSHION (UPPER) (ASSY)		107	1-759-641-11	DISK, INFORMATION (V2.30, Windows)	
102	* 4-066-792-01	INDIVIDUAL CARTON (U/C)		108	1-777-626-31	CABLE, USB	
102	* 4-066-791-01	INDIVIDUAL CARTON (AEP)		109	1-778-967-21	ADAPTOR, CONVERSION (for Macintosh)	
103	* 4-041-927-31	BAG, POLYETHYLENE		110	$\triangle$ 1-782-783-11	CORD SET, POWER [U/C]	
104	* 4-065-177-01	CUSHION (LOWER) (ASSY)		110	$\triangle$ 1-782-784-11	CORD SET, POWER [AEP]	
105	* 4-066-347-01	PAD FOR TILT FIXING		111	3-864-156-11	MANUAL, INSTRUCTION [AEP]	
106	1-777-743-11	CABLE ASSY (15P DSUB X2 CONNECTOR)		111	3-864-156-21	MANUAL, INSTRUCTION [U/C]	

# SECTION 7

## ELECTRICAL PARTS LIST

## NOTE:

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

Les composants identifiés par un tramé et une marque  $\Delta$  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.

- 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

- CAPACITORS
- MF :  $\mu$ F
- COILS
- UH :  $\mu$ H

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*8-933-318-00	A BOARD, COMPLETE	*****	C230	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
	4-382-854-11	SCREW (M3X10), P, SW (+)	(IC403, IC407)	C301	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
	<CAPACITOR>			C302	1-104-664-11	ELECT 47MF	20% 25V
C101	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C303	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C102	1-104-664-11	ELECT 47MF	20% 25V	C304	1-104-664-11	ELECT 47MF	20% 25V
C103	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C305	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C104	1-104-664-11	ELECT 47MF	20% 25V	C306	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C105	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C307	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C106	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C308	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C107	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C309	1-163-237-11	CERAMIC CHIP 27PF	5% 50V
C108	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V	C310	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C109	1-163-239-11	CERAMIC CHIP 33PF	5% 50V	C311	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C110	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C312	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C111	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C315	1-104-514-11	FILM 0.22MF	10% 250V
C112	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C317	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C115	1-104-514-11	FILM 0.22MF	10% 250V	C319	1-107-888-11	ELECT 47MF	20% 25V
C120	1-107-958-11	ELECT 2.2MF	20% 250V	C320	1-107-958-11	ELECT 2.2MF	20% 250V
C121	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C321	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C122	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C322	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C127	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C330	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C130	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C402	1-104-664-11	ELECT 47MF	20% 25V
C201	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C404	1-104-664-11	ELECT 47MF	20% 25V
C202	1-104-664-11	ELECT 47MF	20% 25V	C405	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
C203	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C407	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C204	1-104-664-11	ELECT 47MF	20% 25V	C408	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C205	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C409	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C206	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C410	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C207	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C411	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C208	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V	C412	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C209	1-163-237-11	CERAMIC CHIP 27PF	5% 50V	C413	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C210	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C414	1-163-222-11	CERAMIC CHIP 5PF	0.25PF 50V
C211	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C415	1-128-562-11	ELECT 47MF	20% 100V
C212	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C416	1-104-664-11	ELECT 47MF	20% 25V
C215	1-104-514-11	FILM 0.22MF	10% 250V	C417	1-115-349-51	CERAMIC 0.01MF	2KV
C217	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C418	1-126-964-11	ELECT 10MF	20% 50V
C220	1-107-958-11	ELECT 2.2MF	20% 250V	C419	1-162-318-11	CERAMIC 0.001MF	10% 500V
C221	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C420	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C222	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C421	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C422	1-104-664-11	ELECT 47MF	20% 25V
				C424	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C425	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C426	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V

**A**

REF.NO.	PART NO.	DESCRIPTION	REMARK		REF.NO.	PART NO.	DESCRIPTION	REMARK		
C428	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V	<DIODE>					
C431	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	D101	8-719-062-51	DIODE 1PS226-115			
C432	1-136-173-00	FILM	0.47MF	5%	50V	D102	8-719-062-51	DIODE 1PS226-115		
C433	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V	D103	8-719-988-62	DIODE 1SS355			
C435	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V	D105	8-719-052-12	DIODE 1SS376TE-17			
C436	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	D106	8-719-052-12	DIODE 1SS376TE-17			
C438	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	D107	8-719-052-12	DIODE 1SS376TE-17			
C440	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	D201	8-719-062-51	DIODE 1PS226-115			
C442	1-104-664-11	ELECT	47MF	20%	25V	D202	8-719-062-51	DIODE 1PS226-115		
C443	1-163-251-11	CERAMIC CHIP 100PF		5%	50V	D203	8-719-988-62	DIODE 1SS355		
C444	1-104-664-11	ELECT	47MF	20%	25V	D205	8-719-052-12	DIODE 1SS376TE-17		
C445	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	D206	8-719-052-12	DIODE 1SS376TE-17		
C446	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V	D207	8-719-052-12	DIODE 1SS376TE-17		
C447	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V	D301	8-719-062-51	DIODE 1PS226-115			
C448	1-107-823-11	CERAMIC CHIP 0.47MF		10%	16V	D302	8-719-062-51	DIODE 1PS226-115		
C450	1-163-243-11	CERAMIC CHIP 47PF		5%	50V	D303	8-719-988-62	DIODE 1SS355		
C451	1-104-664-11	ELECT	47MF	20%	25V	D305	8-719-052-12	DIODE 1SS376TE-17		
C452	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	D306	8-719-052-12	DIODE 1SS376TE-17		
C453	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	D307	8-719-052-12	DIODE 1SS376TE-17		
C454	1-104-665-11	ELECT	100MF	20%	25V	D401	8-719-988-62	DIODE 1SS355		
C457	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	D402	8-719-976-99	ZENER DIODE DTZ-5.1B		
C458	1-104-664-11	ELECT	47MF	20%	25V	D403	8-719-978-04	ZENER DIODE DTZ-TT11-3.3B		
C459	1-107-930-91	ELECT	22MF	20%	100V	D405	8-719-988-62	DIODE 1SS355		
C460	1-126-767-11	ELECT	1000MF	20%	16V	D406	8-719-976-96	ZENER DIODE DTZ4.7C		
C461	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	D407	8-719-977-22	ZENER DIODE DTZ9.1		
C462	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	D408	8-719-988-62	DIODE 1SS355		
C463	1-162-318-11	CERAMIC	0.001MF	10%	500V	D409	8-719-988-62	DIODE 1SS355		
C464	1-104-664-11	ELECT	47MF	20%	25V	D410	8-719-988-62	DIODE 1SS355		
C465	1-104-664-11	ELECT	47MF	20%	25V	D411	8-719-062-51	DIODE 1PS226-115		
C466	1-104-664-11	ELECT	47MF	20%	25V	<FERRITE BEAD>				
C467	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	FB101	1-216-295-91	SHORT	0	
C468	1-126-933-11	ELECT	100MF	20%	16V	FB201	1-216-295-91	SHORT	0	
C469	1-126-964-11	ELECT	10MF	20%	50V	FB301	1-216-295-91	SHORT	0	
C470	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	FB401	1-412-911-11	FERRITE	1.1UH	
C478	1-115-350-51	CERAMIC	0.0047MF		2KV	FB402	1-412-911-11	FERRITE	1.1UH	
C481	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	FB403	1-412-911-11	FERRITE	1.1UH	
C482	1-115-339-11	CERAMIC CHIP 0.1MF		10%	50V	FB404	1-412-911-11	FERRITE	1.1UH	
C483	1-115-339-11	CERAMIC CHIP 0.1MF		10%	50V	FB405	1-412-911-11	FERRITE	1.1UH	
C484	1-162-318-11	CERAMIC	0.001MF	10%	500V	FB406	1-412-911-11	FERRITE	1.1UH	
C485	1-107-652-11	ELECT	10MF	20%	250V	<IC>				
C486	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	IC401	8-759-522-86	IC M52755FP-TP		
C487	1-104-664-11	ELECT	47MF	20%	25V	IC402	8-759-468-63	IC M52722P		
C488	1-104-664-11	ELECT	47MF	20%	25V	IC403	8-749-013-74	IC FA4111		
C489	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V	IC404	8-759-525-20	IC LSC4380DW2R2		
<CONNECTOR>				IC405	8-759-502-82	IC LM324M				
CN401*1-564-521-11	PLUG, CONNECTOR 6P				IC406	8-759-231-58	IC TA7812S			
CN402*1-564-522-11	PLUG, CONNECTOR 7P				IC407	8-749-011-42	IC SI-3050F			
CN403*1-564-525-11	PLUG, CONNECTOR 10P				IC409	8-759-502-82	IC LM324M			
CN405*1-564-522-11	PLUG, CONNECTOR 7P				IC410	8-759-064-36	IC MB88346BPFV			
CN406*1-766-179-11	PIN, CONNECTOR (PC BOARD) 2P									
CN407*1-564-526-11	PLUG, CONNECTOR 11P									



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

Les composants identifiés par un trame et une 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
		<COIL>		R109	1-216-107-00	RES,CHIP	270K 5% 1/10W
L101	1-412-478-11	INDUCTOR	0.15UH	R111	1-216-033-00	RES,CHIP	220 5% 1/10W
L102	1-412-478-11	INDUCTOR	0.15UH	R112	1-216-619-11	METAL CHIP	47 0.50% 1/10W
L201	1-412-478-11	INDUCTOR	0.15UH	R113	1-216-009-00	RES,CHIP	22 5% 1/10W
L202	1-412-478-11	INDUCTOR	0.15UH	R114	1-216-035-00	RES,CHIP	270 5% 1/10W
L301	1-412-478-11	INDUCTOR	0.15UH	R115	1-216-035-00	RES,CHIP	270 5% 1/10W
L302	1-412-478-11	INDUCTOR	0.15UH	R116	1-216-017-91	RES,CHIP	47 5% 1/10W
L401	1-408-615-31	INDUCTOR	100UH	R117	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L402	1-412-529-11	INDUCTOR	22UH	R118	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
L403	1-412-537-31	INDUCTOR	100UH	R119	1-216-009-00	RES,CHIP	22 5% 1/10W
L404	1-408-615-31	INDUCTOR	100UH	R120	1-216-097-91	RES,CHIP	100K 5% 1/10W
		<IC LINK>		R121	1-216-097-91	RES,CHIP	100K 5% 1/10W
		PS401 $\triangle$ 1-533-590-31LINK, IC (1A/90V AC, 60V DC)		R122	1-216-027-00	RES,CHIP	120 5% 1/10W
		PS402 $\triangle$ 1-533-590-31LINK, IC (1A/90V AC, 60V DC)		R123	1-216-027-00	RES,CHIP	120 5% 1/10W
		<TRANSISTOR>		R124	1-219-497-11	CARBON	22 5% 1/2W
Q101	8-729-112-65	TRANSISTOR 2SA1462-Y33		R125	1-216-091-00	RES,CHIP	56K 5% 1/10W
Q105	8-729-041-66	TRANSISTOR 2SC4015TV2		R126	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q106	8-729-200-17	TRANSISTOR 2SA1091-O		R127	1-216-035-00	RES,CHIP	270 5% 1/10W
Q201	8-729-112-65	TRANSISTOR 2SA1462-Y33		R128	1-216-121-91	RES,CHIP	1M 5% 1/10W
Q202	8-729-112-65	TRANSISTOR 2SA1462-Y33		R129	1-216-121-91	RES,CHIP	1M 5% 1/10W
Q205	8-729-041-66	TRANSISTOR 2SC4015TV2		R130	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q206	8-729-200-17	TRANSISTOR 2SA1091-O		R131	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q301	8-729-112-65	TRANSISTOR 2SA1462-Y33		R132	1-216-035-00	RES,CHIP	270 5% 1/10W
Q305	8-729-041-66	TRANSISTOR 2SC4015TV2		R133	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q306	8-729-200-17	TRANSISTOR 2SA1091-O		R134	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q401	8-729-216-22	TRANSISTOR 2SA1162-G		R135	1-216-037-00	RES,CHIP	330 5% 1/10W
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R136	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q403	8-729-216-22	TRANSISTOR 2SA1162-G		R137	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q404	8-729-029-06	TRANSISTOR DTC124EUA-T106		R139	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R140	1-216-129-00	RES,CHIP	2.2M 5% 1/10W
Q406	8-729-216-22	TRANSISTOR 2SA1162-G		R141	1-216-025-91	RES,CHIP	100 5% 1/10W
Q407	8-729-028-74	TRANSISTOR DTA114TUA-T106		R167	1-216-121-91	RES,CHIP	1M 5% 1/10W
Q408	8-729-216-22	TRANSISTOR 2SA1162-G		R201	1-215-395-00	METAL	82 1% 1/4W
Q409	8-729-216-22	TRANSISTOR 2SA1162-G		R202	1-216-025-91	RES,CHIP	100 5% 1/10W
Q410	8-729-032-61	TRANSISTOR 2SC5022-02		R203	1-215-395-00	METAL	82 1% 1/4W
Q411	8-729-216-22	TRANSISTOR 2SA1162-G		R204	1-216-025-91	RES,CHIP	100 5% 1/10W
Q412	8-729-216-22	TRANSISTOR 2SA1162-G		R205	1-216-017-91	RES,CHIP	47 5% 1/10W
Q413	8-729-216-22	TRANSISTOR 2SA1162-G		R206	1-216-017-91	RES,CHIP	47 5% 1/10W
Q414	8-729-119-76	TRANSISTOR 2SA1175-HFE		R208	1-216-099-00	RES,CHIP	120K 5% 1/10W
Q415	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R209	1-216-107-00	RES,CHIP	270K 5% 1/10W
Q416	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R211	1-216-033-00	RES,CHIP	220 5% 1/10W
Q417	8-729-216-22	TRANSISTOR 2SA1162-G		R212	1-216-619-11	METAL CHIP	47 0.50% 1/10W
		<RESISTOR>		R213	1-216-009-00	RES,CHIP	22 5% 1/10W
R101	1-215-395-00	METAL	82 1% 1/4W	R214	1-216-035-00	RES,CHIP	270 5% 1/10W
R102	1-216-025-91	RES,CHIP	100 5% 1/10W	R215	1-216-035-00	RES,CHIP	270 5% 1/10W
R103	1-215-395-00	METAL	82 1% 1/4W	R216	1-216-017-91	RES,CHIP	47 5% 1/10W
R104	1-216-025-91	RES,CHIP	100 5% 1/10W	R217	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R105	1-216-017-91	RES,CHIP	47 5% 1/10W	R218	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R106	1-216-017-91	RES,CHIP	47 5% 1/10W	R219	1-216-009-00	RES,CHIP	22 5% 1/10W
R108	1-216-099-00	RES,CHIP	120K 5% 1/10W	R220	1-216-097-91	RES,CHIP	100K 5% 1/10W
				R221	1-216-097-91	RES,CHIP	100K 5% 1/10W
				R222	1-216-027-00	RES,CHIP	120 5% 1/10W
				R223	1-216-027-00	RES,CHIP	120 5% 1/10W
				R224	1-219-742-11	CARBON	47 5% 1/2W
				R225	1-216-091-00	RES,CHIP	56K 5% 1/10W
				R226	1-216-097-91	RES,CHIP	100K 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R227	1-216-035-00	RES,CHIP	270	5%	1/10W	R401	1-216-073-00	RES,CHIP	10K	5%	1/10W
R228	1-216-121-91	RES,CHIP	1M	5%	1/10W	R402	1-216-105-91	RES,CHIP	220K	5%	1/10W
R229	1-216-121-91	RES,CHIP	1M	5%	1/10W	R403	1-216-105-91	RES,CHIP	220K	5%	1/10W
R230	1-216-097-91	RES,CHIP	100K	5%	1/10W	R404	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R406	1-216-049-91	RES,CHIP	1K	5%	1/10W
R232	1-216-035-00	RES,CHIP	270	5%	1/10W	R407	1-216-089-91	RES,CHIP	47K	5%	1/10W
R233	1-216-049-91	RES,CHIP	1K	5%	1/10W	R408	1-216-097-91	RES,CHIP	100K	5%	1/10W
R234	1-216-097-91	RES,CHIP	100K	5%	1/10W	R409	1-216-049-91	RES,CHIP	1K	5%	1/10W
R235	1-216-037-00	RES,CHIP	330	5%	1/10W	R410	1-216-049-91	RES,CHIP	1K	5%	1/10W
R236	1-216-097-91	RES,CHIP	100K	5%	1/10W	R411	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R237	1-216-097-91	RES,CHIP	100K	5%	1/10W	R412	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R239	1-216-073-00	RES,CHIP	10K	5%	1/10W	R413	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R240	1-216-129-00	RES,CHIP	2.2M	5%	1/10W	R414	1-216-089-91	RES,CHIP	47K	5%	1/10W
R241	1-216-025-91	RES,CHIP	100	5%	1/10W	R415	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R243	1-216-033-00	RES,CHIP	220	5%	1/10W	R416	1-216-081-00	RES,CHIP	22K	5%	1/10W
R267	1-216-121-91	RES,CHIP	1M	5%	1/10W	R417	1-216-081-00	RES,CHIP	22K	5%	1/10W
R301	1-215-395-00	METAL	82	1%	1/4W	R418	1-260-127-11	CARBON	220K	5%	1/2W
R302	1-216-025-91	RES,CHIP	100	5%	1/10W	R419	1-216-089-91	RES,CHIP	47K	5%	1/10W
R303	1-215-395-00	METAL	82	1%	1/4W	R421	1-216-097-91	RES,CHIP	100K	5%	1/10W
R304	1-216-025-91	RES,CHIP	100	5%	1/10W	R422	1-216-025-91	RES,CHIP	100	5%	1/10W
R305	1-216-017-91	RES,CHIP	47	5%	1/10W	R423	1-216-049-91	RES,CHIP	1K	5%	1/10W
R306	1-216-017-91	RES,CHIP	47	5%	1/10W	R424	1-216-025-91	RES,CHIP	100	5%	1/10W
R308	1-216-099-00	RES,CHIP	120K	5%	1/10W	R425	1-216-295-91	SHORT	0		
R309	1-216-107-00	RES,CHIP	270K	5%	1/10W	R426	1-216-049-91	RES,CHIP	1K	5%	1/10W
R311	1-216-033-00	RES,CHIP	220	5%	1/10W	R427	1-216-025-91	RES,CHIP	100	5%	1/10W
R312	1-216-619-11	METAL CHIP	47	0.50%	1/10W	R428	1-216-025-91	RES,CHIP	100	5%	1/10W
R313	1-216-009-00	RES,CHIP	22	5%	1/10W	R429	1-216-049-91	RES,CHIP	1K	5%	1/10W
R314	1-216-035-00	RES,CHIP	270	5%	1/10W	R430	1-216-049-91	RES,CHIP	1K	5%	1/10W
R315	1-216-035-00	RES,CHIP	270	5%	1/10W	R431	1-216-049-91	RES,CHIP	1K	5%	1/10W
R316	1-216-017-91	RES,CHIP	47	5%	1/10W	R432	1-216-025-91	RES,CHIP	100	5%	1/10W
R317	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R433	1-216-073-00	RES,CHIP	10K	5%	1/10W
R318	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	R434	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R319	1-216-009-00	RES,CHIP	22	5%	1/10W	R435	1-216-121-91	RES,CHIP	1M	5%	1/10W
R320	1-216-097-91	RES,CHIP	100K	5%	1/10W	R436	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R321	1-216-097-91	RES,CHIP	100K	5%	1/10W	R438	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R322	1-216-027-00	RES,CHIP	120	5%	1/10W	R439	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R323	1-216-027-00	RES,CHIP	120	5%	1/10W	R440	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R324	1-219-742-11	CARBON	47	5%	1/2W	R441	1-216-049-91	RES,CHIP	1K	5%	1/10W
R325	1-216-091-00	RES,CHIP	56K	5%	1/10W	R442	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R326	1-216-097-91	RES,CHIP	100K	5%	1/10W	R443	1-216-041-00	RES,CHIP	470	5%	1/10W
R327	1-216-035-00	RES,CHIP	270	5%	1/10W	R444	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R328	1-216-121-91	RES,CHIP	1M	5%	1/10W	R445	1-216-073-00	RES,CHIP	10K	5%	1/10W
R329	1-216-121-91	RES,CHIP	1M	5%	1/10W	R446	1-216-295-91	SHORT	0		
R330	1-216-097-91	RES,CHIP	100K	5%	1/10W	R447	1-216-097-91	RES,CHIP	100K	5%	1/10W
R331	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R448	1-216-073-00	RES,CHIP	10K	5%	1/10W
R332	1-216-035-00	RES,CHIP	270	5%	1/10W	R449	1-216-105-91	RES,CHIP	220K	5%	1/10W
R333	1-216-049-91	RES,CHIP	1K	5%	1/10W	R450	1-216-105-91	RES,CHIP	220K	5%	1/10W
R334	1-216-097-91	RES,CHIP	100K	5%	1/10W	R453	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R335	1-216-037-00	RES,CHIP	330	5%	1/10W	R454	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R336	1-216-097-91	RES,CHIP	100K	5%	1/10W	R455	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R337	1-216-097-91	RES,CHIP	100K	5%	1/10W	R456	1-216-089-91	RES,CHIP	47K	5%	1/10W
R339	1-216-073-00	RES,CHIP	10K	5%	1/10W	R457	1-211-895-11	METAL	10M	10%	1/4W
R340	1-216-129-00	RES,CHIP	2.2M	5%	1/10W	R458	1-211-885-21	METAL	2.2M	5%	1W
R341	1-216-025-91	RES,CHIP	100	5%	1/10W	R459	1-211-895-11	METAL	10M	10%	1/4W
R367	1-216-121-91	RES,CHIP	1M	5%	1/10W	R461	1-249-441-11	CARBON	100K	5%	1/4W
R400	1-216-089-91	RES,CHIP	47K	5%	1/10W	R462	1-216-089-91	RES,CHIP	47K	5%	1/10W

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

Les composants identifiés par un trame et une 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	
R464	1-216-057-00 RES,CHIP	2.2K	5%	1/10W	SG201	1-517-499-21 GAP, SPARK			
R465	1-216-033-00 RES,CHIP	220	5%	1/10W	SG301	1-517-499-21 GAP, SPARK			
R466	1-216-073-00 RES,CHIP	10K	5%	1/10W	SG401	1-517-499-21 GAP, SPARK			
R467	1-216-105-91 RES,CHIP	220K	5%	1/10W	SG402	1-519-422-11 GAP, SPARK			
R468	1-216-073-00 RES,CHIP	10K	5%	1/10W	SG403	1-517-499-21 GAP, SPARK			
R470	1-216-065-91 RES,CHIP	4.7K	5%	1/10W					
R471	1-216-065-91 RES,CHIP	4.7K	5%	1/10W					
R473	1-216-073-00 RES,CHIP	10K	5%	1/10W					
R474	1-216-113-00 RES,CHIP	470K	5%	1/10W					
R475	1-216-073-00 RES,CHIP	10K	5%	1/10W					
R476	1-216-057-00 RES,CHIP	2.2K	5%	1/10W					
R477	1-216-081-00 RES,CHIP	22K	5%	1/10W					
R478	1-249-381-11 CARBON	1	5%	1/4W F					
R479	1-249-381-11 CARBON	1	5%	1/4W F					
R481	1-216-081-00 RES,CHIP	22K	5%	1/10W					
R482	1-216-681-11 METAL CHIP	18K	0.50%	1/10W					
R483	1-216-065-91 RES,CHIP	4.7K	5%	1/10W					
R484	1-216-065-91 RES,CHIP	4.7K	5%	1/10W					
R485	1-216-073-00 RES,CHIP	10K	5%	1/10W					
R486	1-216-105-91 RES,CHIP	220K	5%	1/10W					
R487	1-216-041-00 RES,CHIP	470	5%	1/10W					
R489	1-216-295-91 SHORT	0							
R490	1-216-105-91 RES,CHIP	220K	5%	1/10W	C601 $\triangle$	1-117-697-51 CERAMIC	470PF	10%	250V
R491	1-216-041-00 RES,CHIP	470	5%	1/10W	C602 $\triangle$	1-117-697-51 CERAMIC	470PF	10%	250V
R492	1-216-113-00 RES,CHIP	470K	5%	1/10W	C603 $\triangle$	1-113-513-11 FILM	1MF	20%	250V
R494	1-216-065-91 RES,CHIP	4.7K	5%	1/10W	C604 $\triangle$	1-113-513-11 FILM	1MF	20%	250V
R495	1-216-049-91 RES,CHIP	1K	5%	1/10W	C605 $\triangle$	1-113-942-91 CERAMIC	0.0047MF		250V
R496	1-216-633-11 METAL CHIP	180	0.50%	1/10W					
R497	1-216-649-11 METAL CHIP	820	0.50%	1/10W	C606 $\triangle$	1-113-942-91 CERAMIC	0.0047MF		250V
R498	1-216-081-00 RES,CHIP	22K	5%	1/10W	C607	1-113-900-11 CERAMIC	470PF	10%	250V
R499	1-216-089-91 RES,CHIP	47K	5%	1/10W	C608	1-130-495-00 FILM	0.1MF	5%	50V
R1401	1-216-041-00 RES,CHIP	470	5%	1/10W	C609	1-125-917-11 ELECT(BLOCK)	100MF	20%	400V
R1402	1-216-041-00 RES,CHIP	470	5%	1/10W	C610	1-137-479-11 FILM	1MF	10%	400V
R1404	1-216-025-91 RES,CHIP	100	5%	1/10W	C611	1-117-849-11 ELECT	330MF	20%	450V
R1405	1-216-025-91 RES,CHIP	100	5%	1/10W	C612	1-126-959-11 ELECT	0.47MF	20%	50V
R1406	1-216-025-91 RES,CHIP	100	5%	1/10W	C613 $\triangle$	1-113-942-91 CERAMIC	0.0047MF		250V
R1407	1-216-033-00 RES,CHIP	220	5%	1/10W	C614 $\triangle$	1-113-942-91 CERAMIC	0.0047MF		250V
R1408	1-216-041-00 RES,CHIP	470	5%	1/10W	C615	1-163-021-91 CERAMIC CHIP	0.01MF	10%	50V
R1409	1-216-041-00 RES,CHIP	470	5%	1/10W					
R1410	1-216-049-91 RES,CHIP	1K	5%	1/10W	C616	1-107-909-11 ELECT	47MF	20%	50V
R1411	1-216-049-91 RES,CHIP	1K	5%	1/10W	C617	1-136-169-00 FILM	0.22MF	5%	50V
R1412	1-216-073-00 RES,CHIP	10K	5%	1/10W	C618	1-163-009-11 CERAMIC CHIP	0.001MF	10%	50V
R1413	1-216-073-00 RES,CHIP	10K	5%	1/10W	C619	1-136-165-00 FILM	0.1MF	5%	50V
R1414	1-216-049-91 RES,CHIP	1K	5%	1/10W	C620	1-164-004-11 CERAMIC CHIP	0.1MF	10%	25V
R1415	1-216-065-91 RES,CHIP	4.7K	5%	1/10W					
R1416	1-216-065-91 RES,CHIP	4.7K	5%	1/10W	C621	1-164-004-11 CERAMIC CHIP	0.1MF	10%	25V
R1417	1-216-089-91 RES,CHIP	47K	5%	1/10W	C622	1-163-009-11 CERAMIC CHIP	0.001MF	10%	50V
R1418	1-249-441-11 CARBON	100K	5%	1/4W	C623	1-164-161-11 CERAMIC CHIP	0.0022MF	10%	50V
R1419	1-247-889-00 CARBON	270K	5%	1/4W	C624	1-137-370-11 FILM	0.01MF	5%	50V
R1423	1-216-295-91 SHORT	0			C625	1-163-005-11 CERAMIC CHIP	470PF	10%	50V
R1424	1-216-049-91 RES,CHIP	1K	5%	1/10W					
R1425	1-216-053-00 RES,CHIP	1.5K	5%	1/10W	C626	1-137-368-11 FILM	0.0047MF	5%	50V
					C627	1-113-926-11 CERAMIC	0.0047MF		250V
					C628	1-113-926-11 CERAMIC	0.0047MF		250V
					C629	1-107-674-91 ELECT	0.47MF	20%	450V
					C630	1-164-004-11 CERAMIC CHIP	0.1MF	10%	25V
					C631	1-164-161-11 CERAMIC CHIP	0.0022MF	10%	50V
					C640	1-104-330-91 CERAMIC	470PF	10%	1KV
					C641	1-104-330-91 CERAMIC	470PF	10%	1KV
					C642	1-136-171-00 FILM	0.33MF	5%	50V
					C643	1-136-171-00 FILM	0.33MF	5%	50V
<SPARK GAP>									
SG101 1-517-499-21 GAP, SPARK									



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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
C644	1-104-330-91	CERAMIC	470PF	10%	1KV	C935	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C645	1-136-167-00	FILM	0.15MF	5%	50V	C936	1-107-909-11	ELECT	47MF	20%	50V
C646	1-136-167-00	FILM	0.15MF	5%	50V	C937	1-104-664-11	ELECT	47MF	20%	25V
C647	1-129-719-00	FILM	0.027MF	5%	630V	C938	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
C660	1-107-910-11	ELECT	100MF	20%	50V						
C662	1-130-495-00	FILM	0.1MF	5%	50V			<CONNECTOR>			
C663	1-126-965-11	ELECT	22MF	20%	50V	CN603*	1-784-222-11	PIN, CONNECTOR (WITH PWB)			
C670	1-137-370-11	FILM	0.01MF	5%	50V	CN604	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			
C671	1-107-966-51	ELECT	220MF	20%	250V	CN605	1-785-294-11	PIN, CONNECTOR (PC BOARD) 3P			
C672	1-107-959-11	ELECT	3.3MF	20%	250V	CN671*	1-564-515-11	PLUG, CONNECTOR 12P			
C673	1-107-935-11	ELECT	330MF	20%	100V	CN672*	1-564-510-11	PLUG, CONNECTOR 7P			
C674	1-107-928-11	ELECT	4.7MF	20%	100V	CN673*	1-564-514-11	PLUG, CONNECTOR 11P			
C675	1-107-890-11	ELECT	2200MF	20%	25V	CN690*	1-564-508-11	PLUG, CONNECTOR 5P			
C676	1-107-888-11	ELECT	47MF	20%	25V	CN901	1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P			
C677	1-107-890-11	ELECT	2200MF	20%	25V						
C678	1-107-888-11	ELECT	47MF	20%	25V			<DIODE>			
C679	1-126-927-11	ELECT	2200MF	20%	10V	D601	8-719-911-19	DIODE 1SS119-25			
C680	1-126-927-11	ELECT	2200MF	20%	10V	D602 $\Delta$	8-719-510-53	DIODE D4SB60L			
C681	1-126-965-11	ELECT	22MF	20%	50V	D603	8-719-110-57	ZENER DIODE RD22ESB2			
C683	1-164-646-11	CERAMIC	2200PF	10%	500V	D604	8-719-911-19	DIODE 1SS119-25			
C684	1-137-370-11	FILM	0.01MF	5%	50V	D605	8-719-911-19	DIODE 1SS119-25			
C685	1-107-909-11	ELECT	47MF	20%	50V	D606	8-719-110-53	ZENER DIODE RD20ESB2			
C693	1-130-495-00	FILM	0.1MF	5%	50V	D607	8-719-911-19	DIODE 1SS119-25			
C696	1-111-025-51	ELECT	0.0068F	20%	10V	D608	8-719-911-19	DIODE 1SS119-25			
C901	1-126-961-11	ELECT	2.2MF	20%	50V	D609	8-719-911-19	DIODE 1SS119-25			
C902	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V	D610 $\Delta$	8-719-510-53	DIODE D4SB60L			
C903	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V	D611	8-719-029-04	DIODE D5L60			
C904	1-163-243-11	CERAMIC CHIP 47PF		5%	50V	D612	8-719-304-63	DIODE RM11C			
C905	1-163-145-00	CERAMIC CHIP 0.0015MF		5%	50V	D613	8-719-110-49	ZENER DIODE RD18ESB2			
C906	1-163-021-91	CERAMIC CHIP 0.01MF		10%	50V	D614	8-719-977-28	ZENER DIODE DTZ10B			
C907	1-163-275-11	CERAMIC CHIP 0.001MF		5%	50V	D615	8-719-121-26	ZENER DIODE RD9.1ESL2			
C908	1-163-017-00	CERAMIC CHIP 0.0047MF		10%	50V	D616	8-719-068-00	DIODE ERC04-06SE			
C909	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V	D617	8-719-068-00	DIODE ERC04-06SE			
C910	1-126-934-11	ELECT	220MF	20%	16V	D618	8-719-109-97	ZENER DIODE RD6.8ESB2			
C911	1-163-259-91	CERAMIC CHIP 220PF		5%	50V	D660	8-719-059-23	DIODE P6KE200AG23			
C912	1-106-383-00	MYLAR	0.047MF	10%	200V	D661	8-719-979-64	DIODE UF4005PKG23			
C913	1-126-967-11	ELECT	47MF	20%	50V	D662	8-719-058-91	DIODE AG01A-V0			
C914	1-104-760-11	CERAMIC CHIP 0.047MF		10%	50V	D663	8-719-110-08	ZENER DIODE RD8.2ESB2			
C915	1-119-748-11	ELECT	33MF	20%	400V	D670	8-719-064-49	DIODE D4SBL40			
C916	1-162-114-00	CERAMIC	0.0047MF		2KV	D671	8-719-510-64	DIODE S2LA20F			
C917	1-163-009-11	CERAMIC CHIP 0.001MF		10%	50V	D672	8-719-052-91	DIODE D4SBS4-F			
C918	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V	D673	8-719-022-97	DIODE D2S4MF			
C919	1-137-368-11	FILM	0.0047MF	5%	50V	D674	8-719-022-97	DIODE D2S4MF			
C920	1-117-624-11	FILM	1600PF	3%	1.2KV	D677	8-719-911-19	DIODE 1SS119-25			
C921	1-137-372-11	FILM	0.022MF	5%	50V	D678	8-719-911-19	DIODE 1SS119-25			
C922	1-106-228-00	MYLAR	0.22MF	10%	100V	D681	8-719-911-19	DIODE 1SS119-25			
C923	1-106-220-00	MYLAR	0.1MF	10%	100V	D682	8-719-510-64	DIODE S2LA20F			
C924	1-106-355-12	MYLAR	0.0033MF	10%	200V	D683	8-719-911-19	DIODE 1SS119-25			
C925	1-106-220-00	MYLAR	0.1MF	10%	100V	D684	8-719-110-57	ZENER DIODE RD22ESB2			
C926	1-115-516-11	FILM	0.33MF	5%	250V	D692	8-719-911-19	DIODE 1SS119-25			
C927	1-163-009-11	CERAMIC CHIP 0.001MF		10%	50V	D694	8-719-510-41	DIODE D10SC9M			
C928	1-104-665-11	ELECT	100MF	20%	25V	D902	8-719-158-49	ZENER DIODE RD12SB2			
C929	1-136-187-11	FILM	0.047MF	10%	250V	D903	8-719-911-19	DIODE 1SS119-25			
C931	1-107-906-11	ELECT	10MF	20%	50V	D904	8-719-031-34	DIODE RGP02-20EG23			
C932	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V	D906	8-719-911-19	DIODE 1SS119-25			
C933	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V						



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

Les composants identifiés par un trame et une 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
D907	8-719-911-19	DIODE 1SS119-25		PS674 $\triangle$ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)		
D908	8-719-911-19	DIODE 1SS119-25		PS901 $\triangle$ 1-533-592-31	LINK, IC (1.6A/90V AC, 60V DC)		
D910	8-719-110-36	ZENER DIODE RD13ESB2					
D911	8-719-977-69	ZENER DIODE DTZ24B					
D912	8-719-110-46	ZENER DIODE RD16ESB3					
D913	8-719-979-58	DIODE EGP10D					
D914	8-719-110-46	ZENER DIODE RD16ESB3					
D915	8-719-911-19	DIODE 1SS119-25					
D916	8-719-977-81	ZENER DIODE DTZ33B					
D917	8-719-063-89	DIODE YG911S3R					
D918	8-719-158-49	ZENER DIODE RD12SB2					
D919	8-719-109-85	ZENER DIODE RD5.1ESB2					
<b>&lt;FUSE&gt;</b>							
F601 $\triangle$	1-576-233-11	FUSE (H.B.C.) (6.3A/250V)					
	1-533-223-11	HOLDER, FUSE; F601					
<b>&lt;FERRITE BEAD&gt;</b>							
FB610	1-410-396-41	FERRITE	0.45UH				
FB611	1-410-396-41	FERRITE	0.45UH				
FB612	1-410-396-41	FERRITE	0.45UH				
FB901	1-410-397-21	FERRITE	1.1UH				
FB902	1-410-397-21	FERRITE	1.1UH				
<b>&lt;IC&gt;</b>							
IC601	8-759-482-62	IC MC33262P					
IC602	8-759-535-32	IC FA13842P					
IC630	8-749-013-03	IC DM-60					
IC691	8-759-140-85	IC UPC1093J					
IC901 $\triangle$	8-759-467-70	IC BA9756FS-E2					
IC902	8-759-510-73	IC BA10393F-E2					
<b>&lt;COIL&gt;</b>							
L610	1-416-409-11	COIL, CHOKE					
L611	1-411-674-11	COIL, CHOKE	68UH				
L670	1-412-529-11	INDUCTOR	22UH				
L671	1-412-529-11	INDUCTOR	22UH				
L672	1-412-529-11	INDUCTOR	22UH				
L673	1-412-529-11	INDUCTOR	22UH				
L691	1-412-529-11	INDUCTOR	22UH				
L901	1-412-537-31	INDUCTOR	100UH				
L902	1-406-660-41	INDUCTOR	15UH				
<b>&lt;PHOTO COUPLER&gt;</b>							
PH601	8-749-010-64	PHOTO COUPLER PC123F2					
PH660	8-749-010-64	PHOTO COUPLER PC123F2					
<b>&lt;IC LINK&gt;</b>							
PS670 $\triangle$ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)						
PS671 $\triangle$ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)						
PS673 $\triangle$ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)						
<b>&lt;RESISTOR&gt;</b>							
R601 $\triangle$	1-220-825-91	CARBON	330K	5%	1/2W		
R602	1-260-079-11	CARBON	22	5%	1/2W		
R603	1-216-025-91	RES,CHIP	100	5%	1/10W		
R604	1-260-085-11	CARBON	68	5%	1/2W		
R605	1-216-073-00	RES,CHIP	10K	5%	1/10W		
R606	1-216-041-00	RES,CHIP	470	5%	1/10W		
R607	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W		
R608	1-216-073-00	RES,CHIP	10K	5%	1/10W		
R609	1-216-073-00	RES,CHIP	10K	5%	1/10W		
R610	1-216-383-11	METAL OXIDE	0.33	5%	3W F		
R611	1-216-383-11	METAL OXIDE	0.33	5%	3W F		
R612	1-215-477-00	METAL	220K	1%	1/4W		
R613	1-215-477-00	METAL	220K	1%	1/4W		
R614	1-215-473-00	METAL	150K	1%	1/4W		
R615	1-215-473-00	METAL	150K	1%	1/4W		
R616	1-215-473-00	METAL	150K	1%	1/4W		
R617	1-215-481-00	METAL	330K	1%	1/4W		
R618	1-215-477-00	METAL	220K	1%	1/4W		
R619	1-215-485-00	METAL	470K	1%	1/4W		
R620	1-215-485-00	METAL	470K	1%	1/4W		



REF.NO.	PART NO.	DESCRIPTION	REMARK		REF.NO.	PART NO.	DESCRIPTION	REMARK	
R621	1-215-481-00 METAL	330K	1%	1/4W	R679	1-216-677-11 METAL CHIP	12K	0.50%	1/10W
R622	1-216-049-91 RES,CHIP	1K	5%	1/10W	R680	1-216-057-00 RES,CHIP	2.2K	5%	1/10W
R623	1-216-651-11 METAL CHIP	1K	0.50%	1/10W	R681	1-216-049-91 RES,CHIP	1K	5%	1/10W
R624	1-216-671-11 METAL CHIP	6.8K	0.50%	1/10W	R682	1-216-065-91 RES,CHIP	4.7K	5%	1/10W
R625	1-249-389-11 CARBON	4.7	5%	1/4W	R683	1-216-025-91 RES,CHIP	100	5%	1/10W
R626	1-249-429-11 CARBON	10K	5%	1/4W	R684	1-216-073-00 RES,CHIP	10K	5%	1/10W
R627	1-215-479-00 METAL	270K	1%	1/4W	R685	1-249-417-11 CARBON	1K	5%	1/4W
R628	1-215-481-00 METAL	330K	1%	1/4W	R686	1-216-049-91 RES,CHIP	1K	5%	1/10W
R629	1-215-461-00 METAL	47K	1%	1/4W	R687	1-216-677-11 METAL CHIP	12K	0.50%	1/10W
R630	1-216-089-91 RES,CHIP	47K	5%	1/10W	R688	1-216-073-00 RES,CHIP	10K	5%	1/10W
R631	1-247-807-31 CARBON	100	5%	1/4W	R689	1-216-073-00 RES,CHIP	10K	5%	1/10W
R632	1-216-073-00 RES,CHIP	10K	5%	1/10W	R690	1-216-465-11 METAL OXIDE	27K	5%	2W F
R633	1-215-481-00 METAL	330K	1%	1/4W	R691	1-247-863-91 CARBON	22K	5%	1/4W
R634	1-216-073-00 RES,CHIP	10K	5%	1/10W	R692	1-260-085-11 CARBON	68	5%	1/2W
R635	1-216-089-91 RES,CHIP	47K	5%	1/10W	R693	1-216-065-91 RES,CHIP	4.7K	5%	1/10W
R636	1-216-093-00 RES,CHIP	68K	5%	1/10W	R694	1-216-073-00 RES,CHIP	10K	5%	1/10W
R637	1-216-073-00 RES,CHIP	10K	5%	1/10W	R695	1-249-443-11 CARBON	0.47	5%	1/4W F
R638	1-216-675-11 METAL CHIP	10K	0.50%	1/10W	R696	1-215-485-00 METAL	470K	1%	1/4W
R640	1-202-933-61 FUSIBLE	0.1	10%	1/2W F	R697	1-215-485-00 METAL	470K	1%	1/4W
R641	1-218-642-11 METAL OXIDE	100K	5%	1W F	R698	1-215-485-00 METAL	470K	1%	1/4W
R642	1-218-642-11 METAL OXIDE	100K	5%	1W F	R699	1-216-097-91 RES,CHIP	100K	5%	1/10W
R643	1-216-097-91 RES,CHIP	100K	5%	1/10W	R901	1-216-065-91 RES,CHIP	4.7K	5%	1/10W
R644	1-260-135-11 CARBON	1M	5%	1/2W	R902	1-216-097-91 RES,CHIP	100K	5%	1/10W
R645	1-260-135-11 CARBON	1M	5%	1/2W	R903	1-211-795-11 FUSIBLE	470	5%	1/4W F
R646	1-216-113-00 RES,CHIP	470K	5%	1/10W	R904	1-216-073-00 RES,CHIP	10K	5%	1/10W
R647	1-216-097-91 RES,CHIP	100K	5%	1/10W	R905	1-216-061-00 RES,CHIP	3.3K	5%	1/10W
R648	1-216-353-00 METAL OXIDE	2.2	5%	1W F	R906	1-216-109-00 RES,CHIP	330K	5%	1/10W
R649	1-218-642-11 METAL OXIDE	100K	5%	1W F	R907	1-216-065-91 RES,CHIP	4.7K	5%	1/10W
R650	1-218-642-11 METAL OXIDE	100K	5%	1W F	R908	1-249-397-11 CARBON	22	5%	1/4W F
R651	1-216-353-00 METAL OXIDE	2.2	5%	1W F	R909	1-216-073-00 RES,CHIP	10K	5%	1/10W
R653	1-247-895-91 CARBON	470K	5%	1/4W	R910	1-216-397-11 METAL OXIDE	4.7	5%	3W F
R654	1-216-465-11 METAL OXIDE	27K	5%	2W F	R911	1-216-081-00 RES,CHIP	22K	5%	1/10W
R655	1-216-113-00 RES,CHIP	470K	5%	1/10W	R912	1-216-057-00 RES,CHIP	2.2K	5%	1/10W
R656	1-216-069-00 RES,CHIP	6.8K	5%	1/10W	R913	1-216-025-91 RES,CHIP	100	5%	1/10W
R657	1-216-073-00 RES,CHIP	10K	5%	1/10W	R914	1-216-073-00 RES,CHIP	10K	5%	1/10W
R658	1-216-671-11 METAL CHIP	6.8K	0.50%	1/10W	R915	1-216-065-91 RES,CHIP	4.7K	5%	1/10W
R659	1-216-685-11 METAL CHIP	27K	0.50%	1/10W	R916	1-216-033-00 RES,CHIP	220	5%	1/10W
R660	1-216-081-00 RES,CHIP	22K	5%	1/10W	R917	1-249-397-11 CARBON	22	5%	1/4W F
R661	1-249-387-11 CARBON	3.3	5%	1/4W F	R918	1-216-033-00 RES,CHIP	220	5%	1/10W
R662	1-216-073-00 RES,CHIP	10K	5%	1/10W	R919	1-219-727-11 METAL	68	5%	10W
R663	1-216-073-00 RES,CHIP	10K	5%	1/10W	R920	1-249-389-11 CARBON	4.7	5%	1/4W F
R664	1-216-097-91 RES,CHIP	100K	5%	1/10W	R921	1-219-748-11 CARBON	4.7K	5%	1/2W
R665	1-216-033-00 RES,CHIP	220	5%	1/10W	R922	1-216-073-00 RES,CHIP	10K	5%	1/10W
R666	1-247-791-91 CARBON	22	5%	1/4W	R923	1-216-655-11 METAL CHIP	1.5K	0.50%	1/10W
R667	1-216-663-11 METAL CHIP	3.3K	0.50%	1/10W	R924	1-220-825-11 CARBON	330K	5%	1/2W
R668	1-216-369-00 METAL OXIDE	1	5%	2W F	R925	1-216-073-00 RES,CHIP	10K	5%	1/10W
R669	1-216-081-00 RES,CHIP	22K	5%	1/10W	R926	1-216-025-91 RES,CHIP	100	5%	1/10W
R670	1-216-065-91 RES,CHIP	4.7K	5%	1/10W	R927	1-216-073-00 RES,CHIP	10K	5%	1/10W
R671	1-216-113-00 RES,CHIP	470K	5%	1/10W	R928	1-216-655-11 METAL CHIP	1.5K	0.50%	1/10W
R672	1-216-049-91 RES,CHIP	1K	5%	1/10W	R930	1-216-089-91 RES,CHIP	47K	5%	1/10W
R673	1-249-413-11 CARBON	470	5%	1/4W F	R931	1-216-075-00 RES,CHIP	12K	5%	1/10W
R674	1-249-377-11 CARBON	0.47	5%	1/4W F	R933	1-216-693-11 METAL CHIP	56K	0.50%	1/10W
R675	1-260-292-11 CARBON	1	5%	1/2W	R934	1-216-653-11 METAL CHIP	1.2K	0.50%	1/10W
R676	1-249-413-11 CARBON	470	5%	1/4W	R935	1-216-691-11 METAL CHIP	47K	0.50%	1/10W
R677	1-216-097-91 RES,CHIP	100K	5%	1/10W	R936	1-216-073-00 RES,CHIP	10K	5%	1/10W
R678	1-216-081-00 RES,CHIP	22K	5%	1/10W	R937	1-216-025-91 RES,CHIP	100	5%	1/10W

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

Les composants identifiés par un trame et une 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		
R938	1-216-089-91	RES,CHIP	47K	5%	1/10W		7-685-647-79	SCREW +BVTP 3X10 TYPE2 TT(B)			
R939	1-216-033-00	RES,CHIP	220	5%	1/10W						(IC502, Q507)
R940	1-216-089-91	RES,CHIP	47K	5%	1/10W						
R942	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W			<CAPACITOR>			
R943	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	C001	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
R944	1-216-081-00	RES,CHIP	22K	5%	1/10W	C002	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	
R945	1-216-081-00	RES,CHIP	22K	5%	1/10W	C003	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V	
R946	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	C004	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
R947	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	C005	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
R948	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	C007	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
R949	1-215-482-00	METAL	360K	1%	1/4W	C008	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
R950	1-215-459-00	METAL	39K	1%	1/4W	C009	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
R951	1-216-073-00	RES,CHIP	10K	5%	1/10W	C010	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	
R952	1-216-049-91	RES,CHIP	1K	5%	1/10W	C011	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	
R953	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	C012	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C013	1-104-664-11	ELECT	47MF	20%	25V
						C014	1-126-942-61	ELECT	1000MF	20%	25V
						C015	1-126-942-61	ELECT	1000MF	20%	25V
						C016	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	
						C017	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C018	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C019	1-104-664-11	ELECT	47MF	20%	25V
						C020	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
						C021	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	
						C022	1-126-933-11	ELECT	100MF	20%	16V
						C023	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	
						C025	1-126-960-11	ELECT	1MF	20%	50V
						C026	1-137-372-11	FILM	0.022MF	5%	50V
						C027	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C028	1-164-695-11	CERAMIC CHIP 0.0022MF	5%	50V	
						C029	1-126-960-11	ELECT	1MF	20%	50V
						C030	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C031	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
						C032	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V	
						C034	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	
						C035	1-163-253-11	CERAMIC CHIP 120PF	5%	50V	
						C036	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C037	1-126-934-11	ELECT	220MF	20%	16V
						C038	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C039	1-126-964-11	ELECT	10MF	20%	50V
						C040	1-126-963-11	ELECT	4.7MF	20%	50V
						C041	1-126-960-11	ELECT	1MF	20%	50V
						C042	1-104-664-11	ELECT	47MF	20%	25V
						C043	1-104-664-11	ELECT	47MF	20%	25V
						C044	1-104-664-11	ELECT	47MF	20%	25V
						C045	1-163-137-00	CERAMIC CHIP 680PF	5%	50V	
						C046	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
						C047	1-126-934-11	ELECT	220MF	20%	16V
						C048	1-164-695-11	CERAMIC CHIP 0.0022MF	5%	50V	
						C049	1-163-137-00	CERAMIC CHIP 680PF	5%	50V	
						C050	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
						C051	1-126-960-11	ELECT	1MF	20%	50V
						C052	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
						C054	1-126-963-11	ELECT	4.7MF	20%	50V
						C055	1-126-963-11	ELECT	4.7MF	20%	50V

# GDM-F500

**D**

REF.NO.	PART NO.	DESCRIPTION	REMARK		REF.NO.	PART NO.	DESCRIPTION	REMARK	
C056	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	C518	1-125-924-11	FILM	3900PF	3% 1.8KV
C057	1-104-664-11	ELECT 47MF	20%	25V	C519	1-107-444-11	CERAMIC	100PF	5% 2KV
C058	1-126-964-11	ELECT 10MF	20%	50V	C520	1-117-948-91	FILM	1500PF	5% 630V
C059	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C521	1-107-597-11	CERAMIC	22PF	5% 500V
C060	1-126-964-11	ELECT 10MF	20%	50V	C522	1-107-444-11	CERAMIC	100PF	5% 2KV
C061	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C523	1-137-370-11	FILM	0.01MF	5% 50V
C062	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C524	1-113-694-11	FILM	0.056MF	5% 400V
C063	1-130-495-00	FILM 0.1MF	5%	50V	C525	1-107-846-11	FILM	0.1MF	5% 250V
C065	1-126-965-11	ELECT 22MF	20%	50V	C526	1-115-514-11	FILM	0.22MF	5% 250V
C066	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C527	1-115-517-11	FILM	0.39MF	5% 250V
C067	1-163-243-11	CERAMIC CHIP 47PF	5%	50V	C528	1-115-521-11	FILM	0.82MF	5% 250V
C068	1-126-964-11	ELECT 10MF	20%	50V	C529	1-107-683-11	ELECT	2.2MF	0 250V
C069	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C530	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C070	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C531	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C071	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C532	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C072	1-126-960-11	ELECT 1MF	20%	50V	C533	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C074	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	C534	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C075	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C535	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C076	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	C536	1-104-665-11	ELECT	100MF	20% 25V
C077	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C537	1-115-523-21	FILM	1.2MF	5% 250V
C078	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C538	1-125-979-11	FILM	0.3MF	5% 400V
C079	1-104-664-11	ELECT 47MF	20%	25V	C539	1-107-651-11	ELECT	4.7MF	20% 250V
C080	1-104-664-11	ELECT 47MF	20%	25V	C540	1-106-343-00	MYLAR	0.001MF	10% 200V
C081	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C541	1-163-243-11	CERAMIC CHIP 47PF	5%	50V
C082	1-126-964-11	ELECT 10MF	20%	50V	C542	1-163-243-11	CERAMIC CHIP 47PF	5%	50V
C083	1-104-664-11	ELECT 47MF	20%	25V	C544	1-137-368-11	FILM	0.0047MF	5% 50V
C084	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C545	1-104-664-11	ELECT	47MF	20% 25V
C085	1-130-495-00	FILM 0.1MF	5%	50V	C547	1-104-664-11	ELECT	47MF	20% 25V
C086	1-126-964-11	ELECT 10MF	20%	50V	C549	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C087	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C550	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C088	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	C551	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C089	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	C553	1-126-963-11	ELECT	4.7MF	20% 50V
C090	1-109-982-11	CERAMIC CHIP 1MF	10%	10V	C554	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V
C092	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C555	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V
C093	1-126-964-11	ELECT 10MF	20%	50V	C556	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C096	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C559	1-162-134-11	CERAMIC	470PF	10% 2KV
C097	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C560	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C098	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C561	1-136-173-00	FILM	0.47MF	5% 50V
C099	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C562	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C501	1-107-888-11	ELECT 47MF	20%	25V	C564	1-126-963-11	ELECT	4.7MF	20% 50V
C502	1-163-259-91	CERAMIC CHIP 220PF	5%	50V	C565	1-125-925-11	FILM MELF	0.027MF	5% 400V
C503	1-136-169-00	FILM 0.22MF	5%	50V	C569	1-125-979-11	FILM	0.3MF	5% 400V
C504	1-137-605-11	FILM 0.01MF	10%	250V	C701	1-104-664-11	ELECT	47MF	20% 25V
C505	1-163-251-11	CERAMIC CHIP 100PF	5%	50V	C702	1-130-495-00	FILM	0.1MF	5% 50V
C506	1-136-169-00	FILM 0.22MF	5%	50V	C703	1-128-560-11	ELECT	22MF	20% 100V
C507	1-136-173-00	FILM 0.47MF	5%	50V	C705	1-126-942-61	ELECT	1000MF	20% 25V
C508	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V	C706	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C509	1-111-063-11	ELECT 470MF	20%	25V	C707	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C510	1-137-368-11	FILM 0.0047MF	5%	50V	C709	1-130-495-00	FILM	0.1MF	5% 50V
C511	1-117-398-11	ELECT 33MF	20%	250V	C710	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V
C512	1-104-666-11	ELECT 220MF	20%	25V	C711	1-126-949-11	ELECT	220MF	20% 35V
C513	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	C712	1-106-228-00	MYLAR	0.22MF	10% 100V
C514	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	C713	1-126-942-61	ELECT	1000MF	20% 25V
C515	1-104-666-11	ELECT 220MF	20%	25V	C714	1-104-664-11	ELECT	47MF	20% 25V
C516	1-130-495-00	FILM 0.1MF	5%	50V	C719	1-128-562-11	ELECT	47MF	20% 100V
C517	1-104-574-11	CERAMIC 0.0047MF	10%	2KV	C720	1-162-134-11	CERAMIC	470PF	10% 2KV



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

Les composants identifiés par un trame et une 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
C721	1-126-964-11 ELECT	10MF	20%	50V		D016	8-719-062-51 DIODE 1PS226-115		
C735	1-130-495-00 FILM	0.1MF	5%	50V		D017	8-719-801-78 DIODE 1SS184		
C746	1-163-009-11 CERAMIC CHIP 0.001MF	10%	50V			D018	8-719-801-78 DIODE 1SS184		
C747	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D019	8-719-062-51 DIODE 1PS226-115		
C751	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D020	8-719-062-51 DIODE 1PS226-115		
C920	1-163-009-11 CERAMIC CHIP 0.001MF	10%	50V			D025	8-719-976-99 ZENER DIODE DTZ5.1B		
C1003	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D026	8-719-062-51 DIODE 1PS226-115		
C1004	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D027	8-719-062-51 DIODE 1PS226-115		
C1005	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D028	8-719-062-51 DIODE 1PS226-115		
C1007	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D029	8-719-062-51 DIODE 1PS226-115		
C1008	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D032	8-719-976-99 ZENER DIODE DTZ5.1B		
C1009	1-126-960-11 ELECT	1MF	20%	50V		D035	8-719-801-78 DIODE 1SS184		
C1015	1-164-004-11 CERAMIC CHIP 0.1MF	10%	25V			D050	8-719-404-49 DIODE MA111		
C1019	1-104-664-11 ELECT	47MF	20%	25V		D501	8-719-977-40 ZENER DIODE DTZ13B		
C1023	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D502	8-719-063-89 DIODE YG911S3R		
C1024	1-104-664-11 ELECT	47MF	20%	25V		D503	8-719-404-49 DIODE MA111		
C1025	1-164-004-11 CERAMIC CHIP 0.1MF	10%	25V			D504	8-719-984-73 DIODE SB560		
C1026	1-164-004-11 CERAMIC CHIP 0.1MF	10%	25V			D505	8-719-028-72 DIODE RGP02-17EL-6433		
C1028	1-164-004-11 CERAMIC CHIP 0.1MF	10%	25V			D506	8-719-911-19 DIODE 1SS119-25		
C1029	1-164-004-11 CERAMIC CHIP 0.1MF	10%	25V			D507	8-719-911-19 DIODE 1SS119-25		
C1030	1-104-664-11 ELECT	47MF	20%	25V		D508	8-719-109-85 ZENER DIODE RD5.1ESB2		
C1501	1-163-021-91 CERAMIC CHIP 0.01MF	10%	50V			D509	8-719-911-19 DIODE 1SS119-25		
C1502	1-117-722-11 ELECT	2200MF	20%	10V		D510	8-719-951-30 DIODE ERA91-02		
C1503	1-163-001-11 CERAMIC CHIP 220PF		10%	50V		D511	8-719-911-19 DIODE 1SS119-25		
<CONNECTOR>									
CN501	*1-564-513-11 PLUG, CONNECTOR 10P					D513	8-719-404-49 DIODE MA111		
CN502	*1-564-512-11 PLUG, CONNECTOR 9P					D514	8-719-109-93 ZENER DIODE RD6.2ESB2		
CN503	*1-564-515-11 PLUG, CONNECTOR 12P					D516	8-719-105-99 ZENER DIODE RD6.2M-B1		
CN504	*1-564-514-11 PLUG, CONNECTOR 11P								
CN505	*1-508-879-11 BASE POST								
CN506	1-564-513-11 PLUG, CONNECTOR 10P								
CN507	*1-695-207-21 PIN, AONNECTOR (PC BOARD) 6P								
CN508	*1-778-955-11 PIN, CONNECTOR (PC BOARD) 10P								
CN509	1-564-505-11 PLUG, CONNECTOR 2P								
CN510	*1-564-507-11 PLUG, CONNECTOR 4P								
CN511	*1-564-514-11 PLUG, CONNECTOR 11P								
CN512	*1-564-512-11 PLUG, CONNECTOR 9P								
CN513	*1-564-506-11 PLUG, CONNECTOR 3P								
CN520	*1-564-509-11 PLUG, CONNECTOR 6P								
<COMPOSITION CIRCUIT BLOCK>									
CP701 $\triangle$ 1-453-271-11RESISTER ASSY, HV (WF-722,HK)									
<DIODE>									
D004	8-719-062-51 DIODE 1PS226-115					D706	8-719-976-99 ZENER DIODE DTZ5.1B		
D006	8-719-510-02 DIODE D1NS4					D707	8-719-911-19 DIODE 1SS119-25		
D009	8-719-976-99 ZENER DIODE DTZ5.1B					D708	8-719-028-72 DIODE RGP02-17EL-6433		
D010	8-719-976-99 ZENER DIODE DTZ5.1B					D709	8-719-979-85 DIODE EGP20G		
D012	8-719-062-51 DIODE 1PS226-115					D710	8-719-028-72 DIODE RGP02-17EL-6433		
D013	8-719-062-51 DIODE 1PS226-115					D711	8-719-976-99 ZENER DIODE DTZ5.1B		
D014	8-719-062-51 DIODE 1PS226-115					D921	8-719-404-49 DIODE MA111		
D015	8-719-062-51 DIODE 1PS226-115					D924	8-719-976-99 ZENER DIODE DTZ5.1B		
						D1001	8-719-404-49 DIODE MA111		
						D1002	8-719-404-49 DIODE MA111		
						D1003	8-719-404-49 DIODE MA111		
						D1004	8-719-404-49 DIODE MA111		
						D1005	8-719-404-49 DIODE MA111		
						D1006	8-719-109-85 ZENER DIODE RD5.1ESB2		
						D1007	8-719-801-78 DIODE 1SS184		
						D1501	8-719-976-99 ZENER DIODE DTZ5.1B		
						D1502	8-719-404-49 DIODE MA111		
						D1503	8-719-404-49 DIODE MA111		

# GDM-F500

D

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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<b>&lt;FERRITE BEAD&gt;</b>							
FB001	1-410-397-21	FERRITE	1.1UH	PS501	$\Delta$ 1-533-592-31	LINK, IC (1.6A/90V AC, 60V DC)	
FB002	1-410-397-21	FERRITE	1.1UH	PS502	$\Delta$ 1-532-984-91	LINK, IC (2A/90V)	
FB003	1-410-397-21	FERRITE	1.1UH	PS503	$\Delta$ 1-532-984-91	LINK, IC (2A/90V)	
FB501	1-410-397-21	FERRITE	1.1UH	PS504	$\Delta$ 1-532-984-91	LINK, IC (2A/90V)	
FB502	1-410-397-21	FERRITE	1.1UH	PS701	$\Delta$ 1-533-590-31	LINK, IC (1A/90V AC, 60V DC)	
FB10251-414-232-11 INDUCTOR CHIP 0UH							
<b>&lt;IC&gt;</b>							
IC001	8-759-545-58	IC MB90F553APF-G-N01		Q001	8-729-027-31	TRANSISTOR DTA124EKA-T146	
IC002	8-759-442-20	IC 24LC21AT/SN		Q003	8-729-216-22	TRANSISTOR 2SA1162-G	
IC003	8-759-168-20	IC TA78L09S		Q004	8-729-216-22	TRANSISTOR 2SA1162-G	
IC004	8-759-527-77	IC M24C16-MN6T		Q005	8-729-216-22	TRANSISTOR 2SA1162-G	
IC005	8-759-162-80	IC MM1170BFB		Q006	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC006	8-759-470-65	IC PQ05RD1B		Q007	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC007	8-752-078-46	IC CXA2043Q		Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC008	8-759-701-59	IC NJM78M09FA		Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC010	8-752-083-83	IC CXA2044M-T6		Q503	8-729-901-97	TRANSISTOR 2SA1036K-Q	
IC011	8-759-239-14	IC TA78L05S		Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC013	8-759-233-66	IC TC74HCT04AF		Q505	8-729-901-97	TRANSISTOR 2SA1036K-Q	
IC014	8-759-011-64	IC MC74HC4052F		Q506	8-729-820-73	TRANSISTOR 2SC3746	
IC016	8-759-332-39	IC UPC24M06HF		Q507	8-729-035-54	TRANSISTOR 2SJ449	
IC502	8-759-803-42	IC LA6500-FA		Q508	8-729-045-36	TRANSISTOR 2SC5047S-SONY-CA	
IC505	8-759-100-96	IC UPC4558G2		Q509	8-729-033-25	TRANSISTOR DTC114GKA	
IC701	8-759-822-38	IC LA6510		Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC702	8-759-444-82	IC LA7841L		Q511	8-729-140-50	TRANSISTOR 2SC3209LK	
IC703	8-759-100-96	IC UPC4558G2		Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1004	8-759-233-66	IC TC74HCT04AF		Q514	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
<b>&lt;CHIP CONDUCTOR&gt;</b>							
JR001	1-216-295-91	SHORT	0	Q516	8-729-029-06	TRANSISTOR DTC124EUA-T106	
JR002	1-216-295-91	SHORT	0	Q517	8-729-216-22	TRANSISTOR 2SA1162-G	
JR501	1-216-295-91	SHORT	0	Q518	8-729-029-06	TRANSISTOR DTC124EUA-T106	
<b>&lt;COIL&gt;</b>							
L001	1-406-665-11	COIL, CHOKE	100UH	Q519	8-729-029-06	TRANSISTOR DTC124EUA-T106	
L002	1-406-665-11	COIL, CHOKE	100UH	Q520	8-729-029-06	TRANSISTOR DTC124EUA-T106	
L003	1-412-537-31	INDUCTOR	100UH	Q521	8-729-029-06	TRANSISTOR DTC124EUA-T106	
L004	1-412-537-31	INDUCTOR	100UH	Q522	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
L005	1-412-537-31	INDUCTOR	100UH	Q523	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
L006	1-410-482-31	INDUCTOR	100UH	Q524	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
L007	1-412-537-31	INDUCTOR	100UH	Q525	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
L008	1-412-537-31	INDUCTOR	100UH	Q526	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
L501	1-412-537-31	INDUCTOR	100UH	Q527	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
L502	1-406-671-11	COIL, CHOKE	1.0MH	Q528	8-729-045-94	TRANSISTOR 2SK2518-01MR-F119	
L503	1-416-455-11	COIL, HORIZONTAL LINEARITY		Q529	8-729-029-06	TRANSISTOR DTC124EUA-T106	
L504	1-416-836-11	COIL, HORIZONTAL LINEARITY		Q702	8-729-207-82	TRANSISTOR 2SC3421-Y	
L505	1-406-675-11	COIL, CHOKE	4.7MH	Q709	8-729-207-89	TRANSISTOR 2SA1358-Y	
L507	1-406-675-11	COIL, CHOKE	4.7MH	Q710	8-729-178-43	TRANSISTOR 2SC2784-E	
L701	1-412-537-31	INDUCTOR	100UH	Q711	8-729-204-91	TRANSISTOR 2SA1049-GR	
L702	1-412-522-41	INDUCTOR	5.6UH	Q712	8-729-800-32	TRANSISTOR 2SC2362K-G	
				Q713	8-729-020-07	TRANSISTOR 2SC4686A(LBSONY)	
				Q714	8-729-216-22	TRANSISTOR 2SA1162-G	
				Q1001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q1002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q1003	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q1004	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q1006	8-729-028-83	TRANSISTOR DTA124EUA-T106	
				Q1007	8-729-028-74	TRANSISTOR DTA114TUA-T106	
				Q1008	8-729-028-83	TRANSISTOR DTA124EUA-T106	



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1009	8-729-029-06	TRANSISTOR DTC124EUA-T106		R060	1-216-025-91	RES,CHIP	100 5% 1/10W
				R061	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
				R062	1-216-025-91	RES,CHIP	100 5% 1/10W
		<RESISTOR>		R063	1-216-025-91	RES,CHIP	100 5% 1/10W
R001	1-216-025-91	RES,CHIP	100 5% 1/10W	R064	1-216-025-91	RES,CHIP	100 5% 1/10W
R002	1-216-049-91	RES,CHIP	1K 5% 1/10W	R065	1-216-025-91	RES,CHIP	100 5% 1/10W
R003	1-216-049-91	RES,CHIP	1K 5% 1/10W	R066	1-216-025-91	RES,CHIP	100 5% 1/10W
R004	1-216-049-91	RES,CHIP	1K 5% 1/10W	R067	1-216-025-91	RES,CHIP	100 5% 1/10W
R005	1-216-073-00	RES,CHIP	10K 5% 1/10W	R068	1-216-025-91	RES,CHIP	100 5% 1/10W
R006	1-216-049-91	RES,CHIP	1K 5% 1/10W	R069	1-216-017-91	RES,CHIP	47 5% 1/10W
R007	1-216-025-91	RES,CHIP	100 5% 1/10W	R070	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R008	1-216-089-91	RES,CHIP	47K 5% 1/10W	R071	1-216-049-91	RES,CHIP	1K 5% 1/10W
R009	1-216-025-91	RES,CHIP	100 5% 1/10W	R072	1-216-651-11	METAL CHIP	1K 0.50% 1/10W
R010	1-216-081-00	RES,CHIP	22K 5% 1/10W	R073	1-216-295-91	SHORT	0
R011	1-216-097-91	RES,CHIP	100K 5% 1/10W	R074	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R012	1-216-025-91	RES,CHIP	100 5% 1/10W	R075	1-216-049-91	RES,CHIP	1K 5% 1/10W
R013	1-216-675-11	METAL CHIP	10K 0.50% 1/10W	R076	1-216-049-91	RES,CHIP	1K 5% 1/10W
R014	1-216-049-91	RES,CHIP	1K 5% 1/10W	R077	1-216-049-91	RES,CHIP	1K 5% 1/10W
R015	1-216-049-91	RES,CHIP	1K 5% 1/10W	R078	1-216-049-91	RES,CHIP	1K 5% 1/10W
R017	1-216-073-00	RES,CHIP	10K 5% 1/10W	R081	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R018	1-216-049-91	RES,CHIP	1K 5% 1/10W	R082	1-216-049-91	RES,CHIP	1K 5% 1/10W
R020	1-216-049-91	RES,CHIP	1K 5% 1/10W	R083	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R023	1-216-025-91	RES,CHIP	100 5% 1/10W	R084	1-216-073-00	RES,CHIP	10K 5% 1/10W
R024	1-216-089-91	RES,CHIP	47K 5% 1/10W	R085	1-216-025-91	RES,CHIP	100 5% 1/10W
R025	1-216-295-91	SHORT	0	R086	1-216-049-91	RES,CHIP	1K 5% 1/10W
R026	1-216-073-00	RES,CHIP	10K 5% 1/10W	R087	1-216-049-91	RES,CHIP	1K 5% 1/10W
R027	1-216-073-00	RES,CHIP	10K 5% 1/10W	R088	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R030	1-216-017-91	RES,CHIP	47 5% 1/10W	R089	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R031	1-216-073-00	RES,CHIP	10K 5% 1/10W	R090	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R032	1-216-675-11	METAL CHIP	10K 0.50% 1/10W	R092	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R033	1-216-017-91	RES,CHIP	47 5% 1/10W	R094	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R034	1-216-025-91	RES,CHIP	100 5% 1/10W	R096	1-216-295-91	SHORT	0
R035	1-216-049-91	RES,CHIP	1K 5% 1/10W	R097	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R036	1-216-025-91	RES,CHIP	100 5% 1/10W	R101	1-216-049-91	RES,CHIP	1K 5% 1/10W
R037	1-216-686-11	METAL CHIP	30K 0.50% 1/10W	R501	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R038	1-216-685-11	METAL CHIP	27K 0.50% 1/10W	R502	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R039	1-216-049-91	RES,CHIP	1K 5% 1/10W	R503	1-216-041-00	RES,CHIP	470 5% 1/10W
R040	1-216-049-91	RES,CHIP	1K 5% 1/10W	R504	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R041	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R505	1-216-041-00	RES,CHIP	470 5% 1/10W
R042	1-216-089-91	RES,CHIP	47K 5% 1/10W	R506	1-249-397-11	CARBON	22 5% 1/4W F
R043	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R507	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R044	1-216-095-00	RES,CHIP	82K 5% 1/10W	R508	1-216-025-91	RES,CHIP	100 5% 1/10W
R045	1-216-073-00	RES,CHIP	10K 5% 1/10W	R509	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R046	1-216-675-11	METAL CHIP	10K 0.50% 1/10W	R510	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R047	1-216-073-00	RES,CHIP	10K 5% 1/10W	R511	1-219-731-11	METAL	2.4 1% 10W
R048	1-216-049-91	RES,CHIP	1K 5% 1/10W	R512	1-216-627-11	METAL CHIP	100 0.50% 1/10W
R050	1-216-025-91	RES,CHIP	100 5% 1/10W	R513	1-215-860-11	METAL OXIDE	33 5% 1W F
R051	1-216-679-11	METAL CHIP	15K 0.50% 1/10W	R514	1-211-796-11	FUSIBLE	1 5% 1/2W F
R052	1-216-073-00	RES,CHIP	10K 5% 1/10W	R515	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R053	1-216-675-11	METAL CHIP	10K 0.50% 1/10W	R516	1-247-815-91	CARBON	220 5% 1/4W
R054	1-216-675-11	METAL CHIP	10K 0.50% 1/10W	R517	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R055	1-216-089-91	RES,CHIP	47K 5% 1/10W	R518	1-216-097-91	RES,CHIP	100K 5% 1/10W
R056	1-216-671-11	METAL CHIP	6.8K 0.50% 1/10W	R519	1-216-393-00	METAL OXIDE	2.2 5% 3W F
R057	1-216-679-11	METAL CHIP	15K 0.50% 1/10W	R520	1-216-393-00	METAL OXIDE	2.2 5% 3W F
R058	1-216-663-11	METAL CHIP	3.3K 0.50% 1/10W	R521	1-260-324-11	CARBON	470 5% 1/2W
R059	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R522	1-216-423-11	METAL OXIDE	27 5% 1W F



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK						
R523	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R583	1-216-675-11	METAL CHIP	10K	0.50%1/10W		
R524	1-215-869-11	METAL OXIDE	1K	5%	1W	F	R584	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R525	1-216-681-11	METAL CHIP	18K	0.50%	1/10W		R585	1-216-081-00	RES,CHIP	22K	5%	1/10W	
R526	1-214-840-00	METAL	100	1%	1/2W		R586	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R527	1-214-840-00	METAL	100	1%	1/2W		R587	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R528	1-214-840-00	METAL	100	1%	1/2W		R588	1-216-097-91	RES,CHIP	100K	5%	1/10W	
R529	1-260-313-51	CARBON	56	5%	1/2W		R589	1-216-097-91	RES,CHIP	100K	5%	1/10W	
R530	1-249-437-11	CARBON	47K	5%	1/4W		R590	1-216-675-11	METAL CHIP	10K	0.50%1/10W		
R531	1-249-437-11	CARBON	47K	5%	1/4W		R591	1-216-675-11	METAL CHIP	10K	0.50% 1/10W		
R532	1-249-437-11	CARBON	47K	5%	1/4W		R592	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R533	1-249-437-11	CARBON	47K	5%	1/4W		R594	1-249-437-11	CARBON	47K	5%	1/4W	
R534	1-249-437-11	CARBON	47K	5%	1/4W		R595	1-249-437-11	CARBON	47K	5%	1/4W	
R535	1-216-049-91	RES,CHIP	1K	5%	1/10W		R596	1-216-683-11	METAL CHIP	22K	0.50%1/10W		
R536	1-216-049-91	RES,CHIP	1K	5%	1/10W		R701	1-249-383-11	CARBON	1.5	5%	1/4W F	
R537	1-216-049-91	RES,CHIP	1K	5%	1/10W		R702	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R538	1-216-049-91	RES,CHIP	1K	5%	1/10W		R703	1-216-085-00	RES,CHIP	33K	5%	1/10W	
R539	1-216-049-91	RES,CHIP	1K	5%	1/10W		R704	1-249-383-11	CARBON	1.5	5%	1/4W F	
R540	1-216-073-00	RES,CHIP	10K	5%	1/10W		R705	1-249-385-11	CARBON	2.2	5%	1/4W	
R541	1-260-314-11	CARBON	68	5%	1/2W		R706	1-216-093-00	RES,CHIP	68K	5%	1/10W	
R542	1-215-863-11	METAL OXIDE	100	5%	1W F		R707	1-249-421-11	CARBON	2.2K	5%	1/4W	
R543	1-216-647-11	METAL CHIP	680	0.50%	1/10W		R708	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R544	1-260-085-11	CARBON	68	5%	1/2W		R709	1-216-473-11	METAL OXIDE	56	5%	3W F	
R545	1-216-683-11	METAL CHIP	22K	0.50%	1/10W		R710	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R546	1-260-288-11	CARBON	0.47	5%	1/2W		R711	1-219-746-11	CARBON	1K	5%	1/2W	
R547	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W		R712	1-215-881-11	METAL OXIDE	15	5%	2W F	
R548	1-215-443-00	METAL	8.2K	1%	1/4W		R713	1-249-377-11	CARBON	0.47	5%	1/4W F	
R549	1-216-675-11	METAL CHIP	10K	0.50%	1/10W		R714	1-249-377-11	CARBON	0.47	5%	1/4W F	
R550	1-260-288-11	CARBON	0.47	5%	1/2W		R715	1-216-077-00	RES,CHIP	15K	5%	1/10W	
R551	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W		R716	1-249-413-11	CARBON	470	5%	1/4W F	
R552	1-216-057-00	RES,CHIP	2.2K	5%	1/10W		R717	1-249-430-11	CARBON	12K	5%	1/4W	
R553	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W		R718	1-249-419-11	CARBON	1.5K	5%	1/4W	
R554	1-216-675-11	METAL CHIP	10K	0.50%	1/10W		R719	1-249-383-11	CARBON	1.5	5%	1/4W F	
R555	1-216-065-91	RES,CHIP	4.7K	5%	1/10W		R720	1-260-292-11	CARBON	1	5%	1/2W	
R556	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W		R721	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R558	1-216-683-11	METAL CHIP	22K	0.50%	1/10W		R722	1-216-691-11	METAL CHIP	47K	0.50%	1/10W	
R561	1-216-683-11	METAL CHIP	22K	0.50%	1/10W		R723	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	
R562	1-249-401-11	CARBON	47	5%	1/4W F		R724	1-214-798-21	METAL	1.8	1%	1/2W	
R563	1-216-662-11	METAL CHIP	3K	0.50%	1/10W		R725	1-214-798-21	METAL	1.8	1%	1/2W	
R564	1-216-697-91	METAL CHIP	82K	0.50%	1/10W		R726	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R565	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W		R727	1-260-292-11	CARBON	1	5%	1/2W	
R566	1-216-424-11	METAL OXIDE	39	5%	1W F		R728	1-249-381-11	CARBON	1	5%	1/4W F	
R567	1-216-627-11	METAL CHIP	100	0.50%	1/10W		R729	1-215-865-11	METAL OXIDE	220	5%	1W F	
R568	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W		R731	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R569	1-249-437-11	CARBON	47K	5%	1/4W		R732	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R570	1-216-097-91	RES,CHIP	100K	5%	1/10W		R735	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R571	1-216-381-11	METAL OXIDE	0.22	5%	3W F		R736	1-219-746-11	CARBON	1K	5%	1/2W	
R572	1-216-097-91	RES,CHIP	100K	5%	1/10W		R740	1-219-754-11	CARBON	680K	5%	1/2W	
R573	1-216-097-91	RES,CHIP	100K	5%	1/10W		R744	1-219-754-11	CARBON	680K	5%	1/2W	
R574	1-216-097-91	RES,CHIP	100K	5%	1/10W		R745	1-220-824-11	CARBON	270K	5%	1/2W	
R575	1-216-097-91	RES,CHIP	100K	5%	1/10W		R746	1-219-720-11	METAL	10M	5%	1W	
R576	1-216-097-91	RES,CHIP	100K	5%	1/10W		R747	1-216-083-00	RES,CHIP	27K	5%	1/10W	
R577	1-216-057-00	RES,CHIP	2.2K	5%	1/10W		R757	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R579	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W		R758	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	
R580	1-216-073-00	RES,CHIP	10K	5%	1/10W		R760	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	
R581	1-216-073-00	RES,CHIP	10K	5%	1/10W		R761	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R582	1-216-073-00	RES,CHIP	10K	5%	1/10W		R762	1-216-075-00	RES,CHIP	12K	5%	1/10W	



# GDM-F500

**D H<sub>1</sub> H<sub>2</sub> J**

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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CRYSTAL>				<THERMISTOR>	
X001	1-567-781-61	VIBRATOR, CRYSTAL		TH801	1-807-796-11	THERMISTOR	
		*****				*****	
		* 8-933-324-00 H1 BOARD, COMPLETE (included H2)	*****			* 8-933-324-00 H2 BOARD, COMPLETE (included H1)	*****
		<CAPACITOR>				<DIODE>	
C805	1-124-589-11 ELECT	47MF	20%	D812	8-719-060-26	DIODE SLR-325YCT31	
C806	1-124-589-11 ELECT	47MF	20%	D813	8-719-060-26	DIODE SLR-325YCT31	
C811	1-124-589-11 ELECT	47MF	20%			<TRANSISTOR>	
		<CONNECTOR>		Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE	
CN801	1-784-970-11	PIN, CONNECTOR (PC BOARD) 12P		Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		<DIODE>				<RESISTOR>	
D810	8-719-064-11	DIODE SPR-325MVW		R807	1-215-433-00	METAL	3.3K 1% 1/4W
		<TRANSISTOR>		R808	1-215-409-00	METAL	330 1% 1/4W
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE		R809	1-215-409-00	METAL	330 1% 1/4W
Q802	8-729-119-78	TRANSISTOR 2SC2785-HFE		R810	1-215-413-00	METAL	470 1% 1/4W
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE		R812	1-247-815-91	CARBON	220 5% 1/4W
Q806	8-729-119-78	TRANSISTOR 2SC2785-HFE		R813	1-247-815-91	CARBON	220 5% 1/4W
		<RESISTOR>		R816	1-247-863-91	CARBON	22K 5% 1/4W
R801	1-215-429-00	METAL	2.2K	R817	1-247-863-91	CARBON	22K 5% 1/4W
R802	1-215-437-00	METAL	4.7K	R824	1-247-863-91	CARBON	22K 5% 1/4W
R803	1-215-433-00	METAL	3.3K	R825	1-247-863-91	CARBON	22K 5% 1/4W
R804	1-215-421-00	METAL	1K			<SWITCH>	
R805	1-215-417-00	METAL	680	S807	1-554-303-21	SWITCH, KEY BOARD(INPUT)	
				S808	1-554-303-21	SWITCH, KEY BOARD(ASC)	
R806	1-215-413-00	METAL	470	S809	1-554-303-21	SWITCH, KEY BOARD(RESET)	
R814	1-249-429-11	CARBON	10K			*****	
R815	1-249-429-11	CARBON	10K			* 8-933-322-00 J BOARD, COMPLETE	*****
R818	1-215-445-00	METAL	10K			<CONNECTOR>	
R819	1-249-441-11	CARBON	100K			CN891 1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P	
						<SWITCH>	
R820	1-249-429-11	CARBON	10K			S891 $\Delta$ 1-571-433-31 SWITCH, PUSH (AC POWER)	
R821	1-247-807-31	CARBON	100			*****	
R822	1-249-421-11	CARBON	2.2K				
R823	1-249-420-11	CARBON	1.8K				
R826	1-249-408-11	CARBON	180				
R827	1-249-407-11	CARBON	150				
R828	1-215-421-00	METAL	1K				
		<SWITCH>					
S801	1-771-464-11	SWITCH, STICK (CONT +/-, BRT +/-)					
S804	1-554-303-21	SWITCH, KEY BOARD (MENU)					



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
* 8-933-325-00 L BOARD, COMPLETE *****				<DIODE>			
<CAPACITOR>				D5002	8-719-801-78	DIODE 1SS184	
C5002	1-126-964-11 ELECT	10MF	20% 50V	D5101	8-719-062-51	DIODE 1PS226-115	
C5003	1-126-933-11 ELECT	100MF	20% 16V	D5103	8-719-062-51	DIODE 1PS226-115	
C5004	1-104-664-11 ELECT	47MF	20% 25V	D5201	8-719-062-51	DIODE 1PS226-115	
C5005	1-104-664-11 ELECT	47MF	20% 25V	D5301	8-719-062-51	DIODE 1PS226-115	
C5008	1-104-664-11 ELECT	47MF	20% 25V	D5303	8-719-062-51	DIODE 1PS226-115	
C5009	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	D5401	8-719-062-51	DIODE 1PS226-115	
C5101	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	D5403	8-719-062-51	DIODE 1PS226-115	
C5103	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	D5501	8-719-976-96	ZENER DIODE DTZ4.7C	
C5104	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V				
C5105	1-104-664-11 ELECT	47MF	20% 25V				
C5106	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	<SENSOR>			
C5107	1-130-495-00 FILM	0.1MF	5% 50V	GS50011-475-592-11 SENSOR UNIT, MAGNETIC			
C5108	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V				
C5109	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	<IC>			
C5110	1-104-664-11 ELECT	47MF	20% 25V	IC5101	8-759-822-38	IC LA6510	
C5111	1-130-495-00 FILM	0.1MF	5% 50V	IC5201	8-759-803-42	IC LA6500-FA	
C5201	1-104-664-11 ELECT	47MF	20% 25V	IC5301	8-759-822-38	IC LA6510	
C5202	1-104-664-11 ELECT	47MF	20% 25V	IC5401	8-759-822-38	IC LA6510	
C5203	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V				
C5204	1-130-495-00 FILM	0.1MF	5% 50V	<RESISTOR>			
C5205	1-164-489-11 CERAMIC CHIP	0.22MF	10% 16V	R5001	1-249-383-11	CARBON	1.5 5% 1/4W F
C5206	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5003	1-216-295-91	SHORT	0
C5301	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5005	1-216-689-11	RES,CHIP	39K 5% 1/10W
C5303	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5006	1-216-073-00	RES,CHIP	10K 5% 1/10W
C5304	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5007	1-216-049-91	RES,CHIP	1K 5% 1/10W
C5305	1-104-664-11 ELECT	47MF	20% 25V	R5010	1-216-295-91	SHORT	0
C5306	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5011	1-216-073-00	RES,CHIP	10K 5% 1/10W
C5307	1-130-495-00 FILM	0.1MF	5% 50V	R5015	1-216-049-91	RES,CHIP	1K 5% 1/10W
C5308	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5101	1-249-383-11	CARBON	1.5 5% 1/4W F
C5309	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5102	1-249-383-11	CARBON	1.5 5% 1/4W F
C5310	1-104-664-11 ELECT	47MF	20% 25V	R5108	1-216-308-00	RES,CHIP	4.7 5% 1/10W
C5311	1-130-495-00 FILM	0.1MF	5% 50V	R5109	1-216-308-00	RES,CHIP	4.7 5% 1/10W
C5401	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5110	1-216-073-00	RES,CHIP	10K 5% 1/10W
C5403	1-163-021-91 CERAMIC CHIP	0.01MF	10% 50V	R5111	1-216-308-00	RES,CHIP	4.7 5% 1/10W
C5404	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5112	1-249-383-11	CARBON	1.5 5% 1/4W F
C5405	1-104-664-11 ELECT	47MF	20% 25V	R5113	1-216-073-00	RES,CHIP	10K 5% 1/10W
C5406	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5114	1-249-441-11	CARBON	100K 5% 1/4W F
C5407	1-130-495-00 FILM	0.1MF	5% 50V	R5115	1-215-882-00	METAL OXIDE	22 5% 2W F
C5408	1-163-003-11 CERAMIC CHIP	330PF	10% 50V	R5116	1-216-073-00	RES,CHIP	10K 5% 1/10W
C5409	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5117	1-216-308-00	RES,CHIP	4.7 5% 1/10W
C5410	1-104-664-11 ELECT	47MF	20% 25V	R5119	1-216-073-00	RES,CHIP	10K 5% 1/10W
C5412	1-164-004-11 CERAMIC CHIP	0.1MF	10% 25V	R5120	1-249-383-11	CARBON	1.5 5% 1/4W F
C5501	1-126-934-11 ELECT	220MF	20% 10V	R5121	1-249-441-11	CARBON	100K 5% 1/4W F
				R5122	1-215-882-00	METAL OXIDE	22 5% 2W F
				R5201	1-249-383-11	CARBON	1.5 5% 1/4W F
<CONNECTOR>				R5202	1-249-383-11	CARBON	1.5 5% 1/4W F
CN5001*1-564-512-11 PLUG, CONNECTOR 9P				R5203	1-249-383-11	CARBON	1.5 5% 1/4W F
CN5002*1-564-509-11 PLUG, CONNECTOR 6P				R5204	1-249-441-11	CARBON	100K 5% 1/4W F
CN5003 1-564-513-11 PLUG, CONNECTOR 10P				R5205	1-216-073-00	RES,CHIP	10K 5% 1/10W
CN5004*1-564-507-11 PLUG, CONNECTOR 4P				R5206	1-215-859-00	METAL OXIDE	22 5% 1W F
				R5207	1-216-073-00	RES,CHIP	10K 5% 1/10W
				R5208	1-216-670-11	METAL CHIP	6.2K 0.50% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
R5301	1-249-383-11	CARBON	1.5	5%	1/4W F	C2613	1-126-934-11 ELECT	220MF 20% 10V
R5302	1-249-383-11	CARBON	1.5	5%	1/4W F	C2615	1-126-934-11 ELECT	220MF 20% 10V
R5308	1-216-308-00	RES,CHIP	4.7	5%	1/10W	C2617	1-163-021-91 CERAMIC CHIP 0.01MF	10% 50V
R5309	1-216-308-00	RES,CHIP	4.7	5%	1/10W	C2901	1-164-004-11 CERAMIC CHIP 0.1MF	10% 25V
R5310	1-216-073-00	RES,CHIP	10K	5%	1/10W	C2902	1-104-664-11 ELECT	47MF 20% 25V
R5311	1-216-308-00	RES,CHIP	4.7	5%	1/10W	C2903	1-104-664-11 ELECT	47MF 20% 25V
R5312	1-249-383-11	CARBON	1.5	5%	1/4W F	C2904	1-104-664-11 ELECT	47MF 20% 25V
R5313	1-216-073-00	RES,CHIP	10K	5%	1/10W	C2905	1-164-489-11 CERAMIC CHIP 0.22MF	10% 16V
R5314	1-249-441-11	CARBON	100K	5%	1/4W F	C2906	1-109-982-11 CERAMIC CHIP 1MF	10% 10V
R5315	1-215-882-00	METAL OXIDE	22	5%	2W F	C2908	1-109-982-11 CERAMIC CHIP 1MF	10% 10V
R5316	1-216-073-00	RES,CHIP	10K	5%	1/10W	C2909	1-163-243-11 CERAMIC CHIP 47PF	5% 50V
R5317	1-216-308-00	RES,CHIP	4.7	5%	1/10W	C2910	1-163-275-11 CERAMIC CHIP 0.001MF	5% 50V
R5319	1-216-073-00	RES,CHIP	10K	5%	1/10W	C2911	1-104-664-11 ELECT	47MF 20% 25V
R5320	1-249-383-11	CARBON	1.5	5%	1/4W F	C2912	1-163-229-11 CERAMIC CHIP 12PF	5% 50V
R5321	1-249-441-11	CARBON	100K	5%	1/4W F	C2914	1-109-982-11 CERAMIC CHIP 1MF	10% 10V
R5322	1-215-882-00	METAL OXIDE	22	5%	2W F	C2915	1-109-982-11 CERAMIC CHIP 1MF	10% 10V
R5401	1-249-383-11	CARBON	1.5	5%	1/4W F	<CONNECTOR>		
R5402	1-249-383-11	CARBON	1.5	5%	1/4W F	CN2601	1-785-120-11 PIN, CONNECTOR (PC BOARD) 9P	
R5406	1-216-689-11	RES,CHIP	39K	5%	1/10W	CN2901	1-779-677-11 CONNECTOR, USB (B)	
R5407	1-216-079-00	RES,CHIP	18K	5%	1/10W	CN2902	1-779-642-12 CONNECTOR, USB (A)	
R5408	1-216-308-00	RES,CHIP	4.7	5%	1/10W	CN2903	1-779-642-12 CONNECTOR, USB (A)	
R5409	1-216-308-00	RES,CHIP	4.7	5%	1/10W	CN2904	1-779-642-12 CONNECTOR, USB (A)	
R5410	1-216-049-91	RES,CHIP	1K	5%	1/10W	CN2905	1-779-642-12 CONNECTOR, USB (A)	
R5411	1-216-308-00	RES,CHIP	4.7	5%	1/10W	CN2906*	1-508-879-11 BASE POST	
R5412	1-249-383-11	CARBON	1.5	5%	1/4W F	<DIODE>		
R5413	1-216-097-91	RES,CHIP	100K	5%	1/10W	D2601	8-719-988-62 DIODE 1SS355	
R5414	1-249-441-11	CARBON	100K	5%	1/4W F	D2602	8-719-988-62 DIODE 1SS355	
R5415	1-215-886-11	METAL OXIDE	100	5%	2W F	D2603	8-719-988-62 DIODE 1SS355	
R5416	1-216-077-00	RES,CHIP	15K	5%	1/10W	D2604	8-719-988-62 DIODE 1SS355	
R5417	1-216-308-00	RES,CHIP	4.7	5%	1/10W	D2609	8-719-158-15 ZENER DIODE RD5.6SB	
R5419	1-216-089-91	RES,CHIP	47K	5%	1/10W	D2902	8-719-422-12 DIODE MA8039	
R5420	1-249-383-11	CARBON	1.5	5%	1/4W F	D2903	8-719-422-12 DIODE MA8039	
R5421	1-249-441-11	CARBON	100K	5%	1/4W F	D2904	8-719-158-15 ZENER DIODE RD5.6SB	
R5422	1-215-885-00	METAL OXIDE	68	5%	2W F	D2905	8-719-158-15 ZENER DIODE RD5.6SB	
R5423	1-216-105-91	RES,CHIP	220K	5%	1/10W	D2906	8-719-158-15 ZENER DIODE RD5.6SB	
R5501	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	D2907	8-719-158-15 ZENER DIODE RD5.6SB	
R5502	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	D2908	8-719-422-12 DIODE MA8039	
R5503	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	D2909	8-719-422-12 DIODE MA8039	
R5504	1-216-093-00	RES,CHIP	68K	5%	1/10W	D2910	8-719-422-12 DIODE MA8039	
R5505	1-216-067-00	RES,CHIP	5.6K	5%	1/10W	D2911	8-719-422-12 DIODE MA8039	
R5506	1-216-670-11	METAL CHIP	6.2K	0.50%	1/10W	D2912	8-719-422-12 DIODE MA8039	
*****								
* 8-933-321-00 US BOARD, COMPLETE								
*****								
<CAPACITOR>								
C2601	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V	<FERRITE BEAD>			
C2602	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	FB2601	1-412-911-11FERRITE	1.1UH	
C2603	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	FB2901	1-412-911-11FERRITE	1.1UH	
C2608	1-104-664-11	ELECT	47MF	20%	25V	FB2903	1-412-911-11FERRITE	1.1UH
C2609	1-126-934-11	ELECT	220MF	20%	10V	FB2904	1-412-911-11FERRITE	1.1UH
C2610	1-104-664-11	ELECT	47MF	20%	25V	FB2905	1-412-911-11FERRITE	1.1UH
C2611	1-126-934-11	ELECT	220MF	20%	10V	FB2906	1-412-911-11FERRITE	1.1UH



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
FB2911	1-412-911-11FERRITE	1.1UH		R2902	1-216-057-00 RES,CHIP	2.2K	5% 1/10W
FB2912	1-216-295-91SHORT	0		R2903	1-216-061-00 RES,CHIP	3.3K	5% 1/10W
FB2913	1-216-295-91SHORT	0		R2904	1-216-295-91 SHORT	0	
FB2914	1-216-295-91SHORT	0		R2905	1-216-295-91 SHORT	0	
FB2915	1-216-295-91SHORT	0		R2912	1-216-295-91 SHORT	0	
FB2916	1-216-295-91SHORT	0		R2915	1-216-053-00 RES,CHIP	1.5K	5% 1/10W
FB2917	1-216-295-91SHORT	0		R2916	1-216-077-00 RES,CHIP	15K	5% 1/10W
FB2918	1-216-295-91SHORT	0		R2919	1-216-077-00 RES,CHIP	15K	5% 1/10W
FB2919	1-216-295-91SHORT	0		R2920	1-216-077-00 RES,CHIP	15K	5% 1/10W
FB2924	1-216-295-91SHORT	0		R2923	1-216-077-00 RES,CHIP	15K	5% 1/10W
FB2925	1-216-295-91SHORT	0		R2924	1-216-077-00 RES,CHIP	15K	5% 1/10W
FB2926	1-412-911-11FERRITE	1.1UH		R2925	1-216-077-00 RES,CHIP	15K	5% 1/10W
FB2933	1-412-911-11FERRITE	1.1UH		R2926	1-216-077-00 RES,CHIP	15K	5% 1/10W
FB2934	1-412-911-11FERRITE	1.1UH		R2927	1-216-009-00 RES,CHIP	22	5% 1/10W
FB2935	1-412-911-11FERRITE	1.1UH		R2928	1-216-009-00 RES,CHIP	22	5% 1/10W
<IC>				R2930	1-216-009-00 RES,CHIP	22	5% 1/10W
IC2601 8-759-521-90 IC PQ05DZ5U IC2602 8-759-535-22 IC UCC38531N IC2901 8-759-542-53 IC TUSB2040PT IC2902 8-759-165-87 IC PST600J-T				R2931	1-216-009-00 RES,CHIP	22	5% 1/10W
				R2932	1-216-077-00 RES,CHIP	15K	5% 1/10W
				R2933	1-216-009-00 RES,CHIP	22	5% 1/10W
<COIL>				R2934	1-216-009-00 RES,CHIP	22	5% 1/10W
L2901	1-412-003-41 INDUCTOR CHIP	5.6UH		R2935	1-216-009-00 RES,CHIP	22	5% 1/10W
<TRANSISTOR>				R2941	1-216-009-00 RES,CHIP	22	5% 1/10W
Q2601 8-729-028-83 TRANSISTOR DTA124EUA-T106 Q2602 8-729-028-83 TRANSISTOR DTA124EUA-T106 Q2603 8-729-028-83 TRANSISTOR DTA124EUA-T106 Q2604 8-729-028-83 TRANSISTOR DTA124EUA-T106				R2942	1-216-009-00 RES,CHIP	22	5% 1/10W
				R2943	1-216-295-91 SHORT	0	
<RESISTOR>				R2944	1-216-295-91 SHORT	0	
R2601	1-216-057-00 RES,CHIP	2.2K	5% 1/10W	R2945	1-216-295-91 SHORT	0	
R2602	1-216-375-00 METAL OXIDE	3.3	5% 2W F	R2947	1-216-295-91 SHORT	0	
R2603	1-216-375-00 METAL OXIDE	3.3	5% 2W F	R2948	1-216-295-91 SHORT	0	
R2604	1-216-373-11 METAL OXIDE	2.2	5% 2W F	R2949	1-216-295-91 SHORT	0	
R2605	1-216-089-91 RES,CHIP	47K	5% 1/10W	R2950	1-216-295-91 SHORT	0	
<TRANSFORMER>				R2951	1-216-295-91 SHORT	0	
R2606	1-216-375-00 METAL OXIDE	3.3	5% 2W F	R2952	1-216-295-91 SHORT	0	
R2607	1-216-375-00 METAL OXIDE	3.3	5% 2W F	R2953	1-216-295-91 SHORT	0	
R2608	1-216-375-00 METAL OXIDE	3.3	5% 2W F	R2954	1-216-295-91 SHORT	0	
R2609	1-216-057-00 RES,CHIP	2.2K	5% 1/10W	R2955	1-216-295-91 SHORT	0	
R2611	1-216-295-91 SHORT	0		R2956	1-216-295-91 SHORT	0	
<CRYSTAL>				R2957	1-216-295-91 SHORT	0	
R2612	1-216-129-00 RES,CHIP	2.2M	5% 1/10W	T2601	1-416-762-11 COIL, CHOKE		
R2614	1-216-089-91 RES,CHIP	47K	5% 1/10W	X2901	1-767-587-31 VIBRATOR, CRYSTAL (48MHz)		
R2615	1-216-089-91 RES,CHIP	47K	5% 1/10W				
R2616	1-216-089-91 RES,CHIP	47K	5% 1/10W				
R2617	1-216-129-00 RES,CHIP	2.2M	5% 1/10W				
R2618	1-216-129-00 RES,CHIP	2.2M	5% 1/10W				
R2619	1-216-129-00 RES,CHIP	2.2M	5% 1/10W				
R2625	1-216-057-00 RES,CHIP	2.2K	5% 1/10W				
R2626	1-216-057-00 RES,CHIP	2.2K	5% 1/10W				
R2627	1-216-057-00 RES,CHIP	2.2K	5% 1/10W				
R2901	1-216-009-00 RES,CHIP	22	5% 1/10W				



# GDM-F500

## SONY® SERVICE MANUAL

US Model  
Canadian Model  
AEP Model

Chassis No. SCC-L03C-A

N3P CHASSIS

## CORRECTION-1

Please correct your service manual.

SUBJECT : CORRECTED PART NO. OF TRANSFORMER ASSY, FLYBACK

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

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

### SECTION 6 EXPLODED VIEWS

#### 6-1. CHASSIS (See page 6-1)

Incorrect	Correct			Correct			
REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO.	DESCRIPTION	REMARK		
14 $\triangle$ X-4043-094-1	TRANSFORMER ASSY, FLYBACK (NX-4202//J1D4)		14 $\triangle$ X-4034-094-1	TRANSFORMER ASSY, FLYBACK (NX-4202//J1D4)			

### SECTION 7 ELECTRICAL PARTS LIST (See page 7-9)

Incorrect	Correct			Correct			
REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO.	DESCRIPTION	REMARK		
T901 $\triangle$ X-4043-094-1	TRANSFORMER ASSY, FLYBACK (NX-4202//J1D4)		T901 $\triangle$ X-4034-094-1	TRANSFORMER ASSY, FLYBACK (NX-4202//J1D4)			