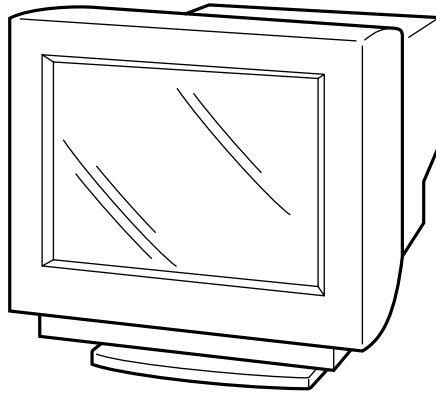


6558-03N/03S/43N/43S

SERVICE MANUAL



6558-03N/43N

US Model

Canadian Model

AEP Model

Japan Model

6558-03S/43S

S. Hemisphere Model

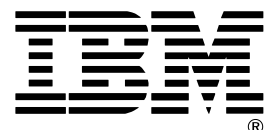
N3 CHASSIS

SPECIFICATIONS

Picture tube	0.25 – 0.27 mm aperture grille pitch 21 inches measured diagonally 90-degree deflection	Deflection frequency	Horizontal: 30 to 107 kHz Vertical: 50 to 160 Hz 256 < Total Line < 2048
Viewable image size	Approx. 403.8 × 302.2 mm (w/h) (16 × 12 inches) 19.8" viewing image	AC input voltage/current	100 to 240 V, 50 – 60 Hz, 2.0 – 1.0 A
Resolution	Horizontal: Max. 1600 dots Vertical: Max. 1200 lines	Power consumption	Max. 160 W
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)	Dimensions	498 × 513 × 500 mm (w/h/d) (19 ⁵ / ₈ × 20 ¹ / ₄ × 19 ³ / ₄ inches)
		Mass	Approx. 31 kg (68 lb 5 oz)
		Design and specifications are subject to change without notice.	

MODEL	SPEC.	
	BODY COLOR	DEST.
6558-03N	WHITE TYPE	U/C, AEP, J
6558-03S		SH
6558-43N	BLACK TYPE	U/C, AEP, J
6558-43S		SH

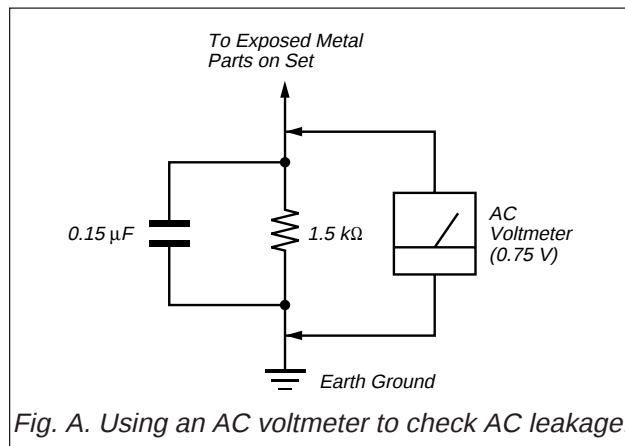
COLOR MONITOR



SAFETY CHECK-OUT (US Model only)

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

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



LEAKAGE TEST

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

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

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

WARNING!!

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

SAFETY-RELATED COMPONENT WARNING!!

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

AVERTISSEMENT!!

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

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

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

POWER SAVING FUNCTION

This monitor meets the power-saving guidelines set by VESA and Energy Star, as well as the more stringent NUTEK .

If the monitor is connected to a computer or video graphics board that is VESA DPMS (Display Power Management Signaling) compliant, the monitor will automatically reduce power consumption in three stages as shown below. You can set the delay time before the monitor enters the power saving mode using the OSD. Set the time according to “Setting the power saving delay time” on page 13.

Note

If no video signal is input to the monitor, the “NO INPUT SIGNAL” message (page 16) appears. After the delay time has passed, the power saving function automatically puts the monitor into the active-off mode and the ⏻ indicator lights up orange. Once the horizontal and vertical sync signals are detected, the monitor automatically resumes its normal operation mode.

	Power consumption mode	Screen	Horizontal sync signal	Vertical sync signal	Power consumption	Recovery time	⏻ indicator
1	Normal operation	active	present	present	≤ 160 W	—	Green
2	Standby (1st mode)	blank	absent	present	≤ 100 W	Approx. 3 sec.	Green and orange alternate
3	Suspend (2nd mode)	blank	present	absent	≤ 15 W	Approx. 3 sec.	Green and orange alternate
4	Active-off (3rd mode)	blank	absent	absent	< 5 W	Approx. 10 sec.	Orange
5	Power-off	—	—	—	0 W	—	Off

DIAGNOSIS

Failre	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) (0.5 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.

TIMING SPECIFICATION

MODE								TEST MODE
MODE AT PRODUCTION	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5	MODE 6	MODE 7	MODE 8
RESOLUTION	656 X 496	640 X 480	800 X 600	1024 X 768	1280 X 1024	1280 X 1024	1600 X 1200	1600 X 1200
CLOCK	25.175 MHZ	36.000 MHZ	56.250 MHZ	94.500 MHZ	135.000 MHZ	157.500 MHZ	202.500 MHZ	229.500 MHZ
— HORIZONTAL —								
H-FREQ	31.469 kHz	43.269 kHz	53.674 kHz	68.677 kHz	79.976 kHz	91.146 kHz	93.750 kHz	106.250 kHz
	usec	usec	usec	usec	usec	usec	usec	usec
H. TOTAL	31.778	23.111	18.631	14.561	12.504	10.971	10.667	9.412
H. BLK	5.720	5.333	4.409	3.725	3.022	2.844	2.765	2.440
H. FP	0.318	1.556	0.569	0.508	0.119	0.406	0.316	0.279
H. SYNC	3.813	1.556	1.138	1.016	1.067	1.016	0.948	0.837
H. BP	1.589	2.222	2.702	2.201	1.837	1.422	1.501	1.325
H. ACTIV	26.058	17.778	14.222	10.836	9.481	8.127	7.901	6.972
— VERTICAL —								
V. FREQ(HZ)	59.940 Hz	85.008 Hz	85.061 Hz	84.997 Hz	75.025 Hz	85.024 Hz	75.000 Hz	85.000 Hz
	lines	lines	lines	lines	lines	lines	lines	lines
V. TOTAL	525	509	631	808	1066	1072	1250	1250
V. BLK	29	29	31	40	42	48	50	50
V. FP	2	1	1	1	1	1	1	1
V. SYNC	2	3	3	3	3	3	3	3
V. BP	25	25	27	36	38	44	46	46
V. ACTIV	496	480	600	768	1024	1024	1200	1200
— SYNC —								
INT(G)	NO	NO	NO	NO	NO	NO	NO	NO
EXT(H/V)/POLARITY	YES N/N	YES N/N	YES P/P	YES P/P	YES P/P	YES P/P	YES P/P	YES P/P
EXT(CS)/POLARITY	NO	NO	NO	NO	NO	NO	NO	NO
INT/NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT	NON INT

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL		1-1
2. DISASSEMBLY		
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.	I/O TERMINAL Board Removal	2-3
2-7.	Service Position	2-4
2-8.	H and J Boards Removal	2-4
2-9.	Picture Tube Removal	2-5
3. SAFETY RELATED ADJUSTMENT		3-1
4. ADJUSTMENTS		4-1
5. DIAGRAMS		
5-1.	Block Diagrams	5-1
5-2.	Frame Schematic Diagram	5-7
5-3.	Circuit Boards Location	5-9
5-4.	Schematic Diagrams and Printed Wiring Boards	5-9
(1)	Schematic Diagram of D Board	5-13
(2)	Schematic Diagrams of G, GA, H, J and L Boards	5-17
(3)	Schematic Diagram of A Board	5-24
5-5.	Semiconductors	5-29
6. EXPLODED VIEWS		
6-1.	Chassis	6-1
6-2.	Picture Tube	6-2
6-3.	Packing Materials	6-3
7. ELECTRICAL PARTS LIST		7-1

Precautions

Installation

- Prevent internal heat build-up by allowing adequate air circulation. Do not place the monitor on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the monitor near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not place the monitor near equipment which generates magnetism, such as a transformer or high voltage power lines.

Maintenance

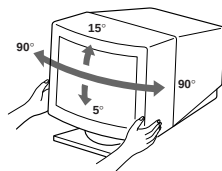
- Clean the cabinet, panel and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent, such as alcohol or benzene.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a ballpoint pen or screwdriver. This type of contact may result in a scratched picture tube.

Transportation

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

Use of the Tilt-Swivel

With the tilt-swivel, this monitor can be adjusted to the desired angle within 180° horizontally and 20° vertically. To turn the monitor vertically and horizontally, hold it at the bottom with both hands as illustrated below.



Warning on power connection

- Use an appropriate power cord for your local power supply.

Examples of plug types



for 100 to 120 V AC for 200 to 240 V AC for 240 V AC only

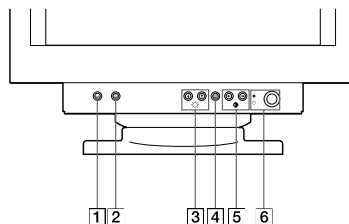
- Before disconnecting the power cord, wait at least 30 seconds after turning off the power to allow the static electricity on the CRT display surface to discharge.
- After the power has been turned on, the CRT is demagnetized (degaussed) for about 3 seconds. This generates a strong magnetic field around the metal frame, which may affect the data stored on magnetic tapes and disks near the bezel. Place magnetic recording equipment, tapes and disks away from this monitor.

The outlet should be installed near the equipment and be easily accessible.

Identifying Parts and Controls

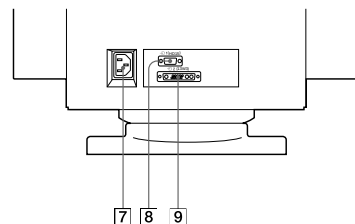
See the pages in parentheses for further details.

Front



- (reset) button (page 14)**
Resets the adjustments to the factory settings.
- ⊞ (auto sizing and centering) button (page 5)**
Automatically adjusts the size and centering of the images.
- ☀ (brightness) (↓/↑) buttons (pages 5 – 14)**
Adjust the picture brightness.
Function as the (↓/↑) buttons when adjusting other items.
- ⊞ (menu) button (pages 5 – 14)**
Displays the MENU OSD.
- ⊞ (contrast) (←/→) buttons (pages 5 – 14, 18)**
Adjust the contrast.
Function as the (←/→) buttons when adjusting other items.
- ⏻ (power) switch and indicator (pages 15, 18)**
Turns the monitor on or off.
The indicator lights up in green when the monitor is turned on, and lights up in orange when the monitor is in power saving mode.

Rear



- AC IN connector**
Provides AC power to the monitor.
- Video input 1 connector (HD15)**
Inputs RGB video signals (0.700 Vp-p, positive) and SYNC signals.



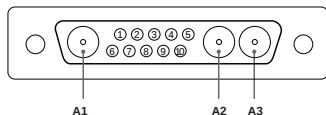
Pin No.	Signal	Pin No.	Signal
1	Red	8	Blue Ground
2	Green (Composite Sync on Green)	9	DDC + 5V*
		10	Ground
		11	ID (Ground)
3	Blue	12	Bi-Directional Data (SDA)*
4	ID (Ground)		
5	DDC Ground*	13	H. Sync
6	Red Ground	14	V. Sync
7	Green Ground	15	Data Clock(SCL)*

* Display Data Channel (DDC) Standard of VESA

(continued)

9 Video input 2 connector (13W3 cable)

Inputs RGB video signal (0.700 Vp-p, positive).



Pin No.	Signal	Pin No.	Signal
A1	Red Video & Ground	4	Ground
A2	Green Video & Ground	5	C.Sync*
A3	Blue Video & Ground	6	—
1	—	7	Bi-Directional Data (SDA)**
2	Data Clock (SCL)**	8	DDC + 5V**
3	—	9	V.Sync
		10	Ground

* Pins serve a dual purpose as combined sync input and as H.Sync input if V.Sync is present on pin no. 9.

** Display Data Channel (DDC) Standard by VESA

Note

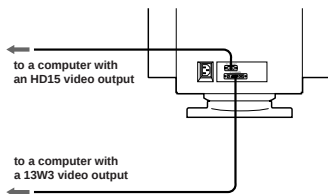
If you use a computer or video board of high output level (about 1.0 Vp-p), you may not be able to obtain the optimum display. In such case, try decreasing the picture contrast, or use a computer or video board with a lower output level.

Setup

This monitor works with platforms running at horizontal frequencies between 30 and 107 kHz.

Step1: Connect the monitor to the computer

With the computer switched off, connect the video signal cable to the video output of the computer.

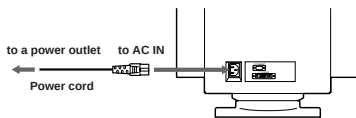


Note

Do not short the pins of the video signal cable.

Step2: Connect the power cord

With the monitor switched off, connect one end of the proper power cord for your local supply to the monitor and the other end to a power outlet.



Step3: Turn on the monitor and computer

The installation of your monitor is complete.

Note

If "OUT OF SCAN RANGE" or "NO INPUT SIGNAL" appears on the screen, see "Warning Messages" on page 16.

Automatically Adjusting the Size and Centering of the Picture

By pressing the button, the size and centering of the picture are automatically adjusted to fit the screen.

- 1 Turn on the monitor and computer.
- 2 Press the button.
The picture is adjusted to fit the center of the screen.



Notes

- This function is intended for use with a computer running graphic user interface software that provides a full-screen picture. It may not work properly if the background color is dark or if the input picture does not fill the screen to the edges.
- The screen may go blank for a few seconds while performing the auto-sizing function. This is not a malfunction.
- Although the signals for picture aspect ratio 5:4 (resolution: 1280 × 1024) do not fill the screen to the edges, the picture is accurately displayed.

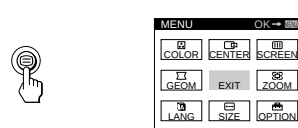
Selecting the On-screen Display Language

If you need to change the OSD language, see "Using the LANG (Language) On-screen Display" on page 14. The default setting is English.

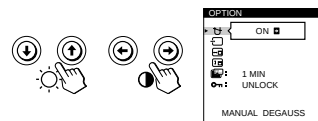
Selecting the Input Signal

This monitor has two signal input connectors (HD15 and 13W3) and can be connected to two computers simultaneously. Select the input signal you want to view as follows.

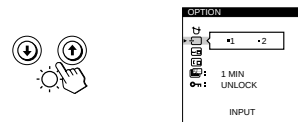
- 1 Turn on the monitor and both computers.
- 2 Press the button.
The MENU OSD appears.



- 3 Press the and buttons to select "OPTION," and press the button again.
The OPTION OSD appears.



- 4 Press the buttons to select "INPUT."



(continued)

- 5 Press the buttons to select "1" or "2."



When "1" is selected

The signal from the computer connected to the HD15 connector is input to the monitor.

When "2" is selected

The signal from the computer connected to the 13W3 connector is input to the monitor.

The OPTION OSD automatically disappears after about 30 seconds.

To close the OSD, press the button again.

For more information on using the OSD, see "Introducing the On-screen Display System" on page 7.

When you connect computers to both connectors

If you restart the computer you want to view, or that computer is in power saving mode, the monitor may automatically select the other connector's signal. This is because the monitor switches from the interrupted signal to the constant signal. If this happens, manually select the desired signal.

Before adjusting

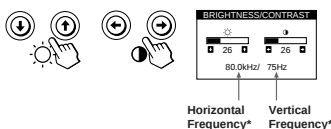
- Connect the monitor and the computer, and turn them on.
- Select "1 LANG" in the MENU OSD, then select "ENGLISH" (see page 14).

Adjusting the Picture Brightness and Contrast

Once the setting is adjusted, it will be stored in memory for all input signals received.

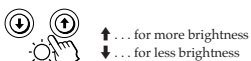
- 1 Press the or buttons.

The BRIGHTNESS/CONTRAST OSD appears.



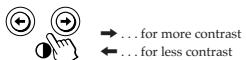
- 2 For brightness adjustment

Press the buttons.



For contrast adjustment

Press the buttons.



The OSD automatically disappears after about 3 seconds.

To reset, press the (reset) button while the OSD is on. The brightness and contrast are both reset to the factory settings.

* The horizontal and vertical frequencies for the received input signal appear in the BRIGHTNESS/CONTRAST OSD.

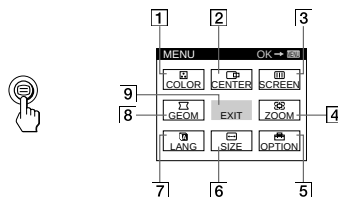
Introducing the On-screen Display System

Most adjustments are made using the MENU OSD.

MENU OSD

Press the button to display the MENU OSD.

This MENU OSD contains links to the other OSDs described below.



- 1 **COLOR**

Displays the COLOR OSD for adjusting the color temperature.

- 2 **CENTER**

Displays the CENTER OSD for adjusting the centering of the picture.

- 3 **SCREEN**

Displays the SCREEN OSD for adjusting the vertical and horizontal convergence, etc.

- 4 **ZOOM**

Displays the ZOOM OSD for enlarging and reducing the picture.

- 5 **OPTION**

Displays the OPTION OSD for adjusting the OSD position and degaussing the screen, etc.

- 6 **SIZE**

Displays the SIZE OSD for adjusting the picture size.

- 7 **LANG**

Displays the LANGUAGE OSD for selecting the language.

- 8 **GEOM**

Displays the GEOMETRY OSD for adjusting the picture rotation and pincushion, etc.

- 9 **EXIT**

Closes the MENU OSD.

Using the CENTER On-screen Display

The CENTER settings allow you to adjust the centering of the picture.

Once the setting is adjusted, it will be stored in memory for the current input signal.

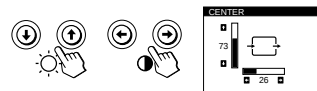
- 1 Press the button.

The MENU OSD appears.



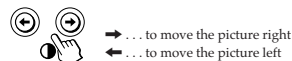
- 2 Press the and buttons to select "CENTER," and press the button again.

The CENTER OSD appears.



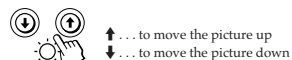
- 3 For horizontal adjustment

Press the buttons.



For vertical adjustment

Press the buttons.



The OSD automatically disappears after about 30 seconds. To close the OSD, press the button again.

To reset, press the (reset) button while the OSD is on. The horizontal and vertical centerings are both reset to the factory settings.

Using the SIZE On-screen Display

The SIZE settings allow you to adjust the size of the picture. Once the setting is adjusted, it will be stored in memory for the current input signal.

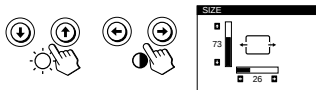
1 Press the button.

The MENU OSD appears.



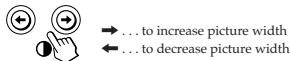
2 Press the and buttons to select "SIZE," and press the button again.

The SIZE OSD appears.



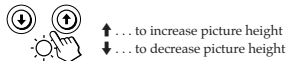
3 For horizontal adjustment

Press the  buttons.



For vertical adjustment

Press the  buttons.



The OSD automatically disappears after about 30 seconds. To close the OSD, press the  button again.

To reset, press the  (reset) button while the OSD is on. The horizontal and vertical sizes are both reset to the factory settings.

Using the GEOM (Geometry) On-screen Display

The GEOM (geometry) settings allow you to adjust the shape and orientation of the picture.

Once the rotation is adjusted, it will be stored in memory for all input signals received. All other adjustments will be stored in memory for the current input signal.

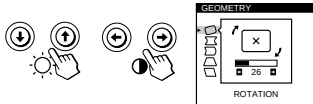
1 Press the button.

The MENU OSD appears.



2 Press the and buttons to select "GEOM," and press the button again.

The GEOMETRY OSD appears.



3 Press the and buttons to select the item you want to adjust.



Select	To
 ROTATION	adjust the picture rotation
 PINCUSHION	adjust the picture sides
 PIN BALANCE	adjust the picture side balance
 KEYSTONE	adjust the picture width
 KEY BALANCE	adjust the picture shape balance

4 Press the buttons to adjust the settings.



For	Press
 ROTATION	→ ... to rotate the picture clockwise ← ... to rotate the picture counterclockwise
 PINCUSHION	→ ... to expand the picture sides ← ... to contract the picture sides
 PIN BALANCE	→ ... to move the picture sides to the right ← ... to move the picture sides to the left
 KEYSTONE	→ ... to increase the picture width at the top ← ... to decrease the picture width at the top
 KEY BALANCE	→ ... to move the top of the picture to the right ← ... to move the top of the picture to the left

The OSD automatically disappears after about 30 seconds. To close the OSD, press the  button again.

To reset, press the  (reset) button while the OSD is on. The selected item is reset to the factory setting.

Using the ZOOM On-screen Display

The ZOOM settings allow you to enlarge or reduce the picture.

Once the setting is adjusted, it will be stored in memory for the current input signal.

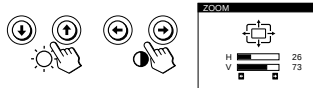
1 Press the button.

The MENU OSD appears.

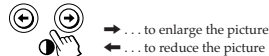


2 Press the and buttons to select "ZOOM," and press the button again.

The ZOOM OSD appears.



3 Press the buttons to adjust the picture zoom.



The OSD automatically disappears after about 30 seconds. To close the OSD, press the  button again.

To reset, press the  (reset) button while the OSD is on.

Note

The picture zoom adjustment will stop as soon as either the horizontal or vertical size reaches its maximum or minimum value.

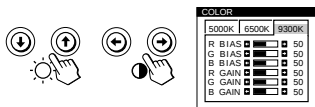
Using the COLOR On-screen Display

You can change the monitor's color temperature. For example, you can adjust or change the colors of a picture on the screen to match the actual colors of the printed picture. Once the setting is adjusted, it will be stored in memory for all input signals received.

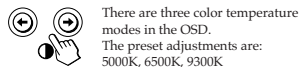
- 1 Press the button.
The MENU OSD appears.



- 2 Press the and buttons to select "COLOR," and press the button again.
The COLOR OSD appears.

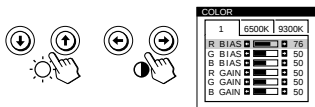


- 3 Press the buttons to select the color temperature.



There are three color temperature modes in the OSD.
The preset adjustments are:
5000K, 6500K, 9300K

- 4 Fine tuning the color temperature
Press the and buttons to select an item and adjust by pressing the buttons.



Select **R (red)**, **G (green)**, or **B (blue) BIAS** to adjust the black level of each color's signal.

Select **R (red)**, **G (green)**, or **B (blue) GAIN** to adjust the white level of each color's signal.

The "5000K," "6500K" or "9300K" disappears and the new color settings are memorized for each of the three color modes.

The color temperature modes change as follows:
5000K → 1, 6500K → 2, 9300K → 3

The OSD automatically disappears after about 30 seconds.
To close the OSD, press the button again.

To reset, press the (reset) button while the OSD is on.
The selected item is reset to the factory settings.

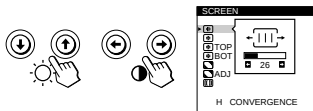
Using the SCREEN On-screen Display

You can adjust convergence settings to eliminate red or blue shadows that may appear around objects on the screen. Adjust the CANCEL MOIRE function to eliminate wavy or elliptical patterns that may appear on the screen. Adjust the LANDING function to correct color imbalances at the four corners of the screen due to influence from the earth's magnetism. Once CANCEL MOIRE is adjusted, it will be stored in memory for the current input signal. All other adjustments will be stored in memory for all input signals received.

- 1 Press the button.
The MENU OSD appears.



- 2 Press the and buttons to select "SCREEN," and press the button again.
The SCREEN OSD appears.



- 3 Press the buttons to select the item you want to adjust.



Select	To
H CONVERGENCE	adjust the horizontal convergence
V CONVERGENCE	adjust the vertical convergence
TOP V CONVER TOP	adjust the screen's upper vertical convergence
BOT V CONVER BOTTOM	adjust the screen's lower vertical convergence

Select	To
LANDING	select one of the four corners that needs color correction due to influence from the earth's magnetism
ADJ LANDING ADJUST	correct the color at one of the four corners of the screen
CANCEL MOIRE *	turn the moire cancellation function "ON" or "OFF." CANCEL MOIRE must be "ON" for " ADJ (MOIRE ADJUST)" to appear on the screen.
MOIRE ADJUST	adjust the degree of moire cancellation

* Moire is a type of natural interference which produces soft or wavy lines on your screen. It may appear due to interference between the regulated pattern of the picture from the input signal and the phosphor pitch pattern of the CRT.

Example of moire:



- 4 Press the buttons to adjust the settings.



For	Press
H CONVERGENCE	→ ... to shift red shadows to the right and blue shadows to the left ← ... to shift red shadows to the left and blue shadows to the right
V CONVERGENCE	→ ... to shift red shadows up and blue shadows down ← ... to shift red shadows down and blue shadows up
TOP V CONVER TOP	→ ... to shift red shadows up and blue shadows down ← ... to shift red shadows down and blue shadows up

For	Press
BOT V CONVER BOTTOM	→ ... to shift red shadows up and blue shadows down ← ... to shift red shadows down and blue shadows up
LANDING	→ or ← ... to select the corner of the screen you want to adjust : top left : top right : bottom left : bottom right
ADJ LANDING ADJUST	→ or ← ... to reduce any irregularities in the color to a minimum
CANCEL MOIRE	→ ... to turn CANCEL MOIRE "ON" ← ... to turn CANCEL MOIRE "OFF"
MOIRE ADJUST	→ or ← ... to adjust the screen until the moire is at a minimum

Note

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

The OSD automatically disappears after about 30 seconds.
To close the OSD, press the button again.

To reset, press the (reset) button while the OSD is on.
The selected item is reset to the factory setting.

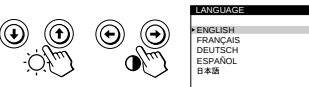
Using the LANG (Language) On-screen Display

English, French, German, Spanish and Japanese versions of the OSDs are available.

- 1 Press the  button.
The MENU OSD appears.



- 2 Press the  and  buttons to select "LANG," and press the  button again.
The LANGUAGE OSD appears.



- 3 Press the  and  buttons to select the desired language.



ENGLISH: English, FRANÇAIS: French,
DEUTSCH: German, ESPAÑOL: Spanish,
or 日本語: Japanese.

The OSD automatically disappears after about 30 seconds.
To close the OSD, press the  button again.

To reset to English, press the  (reset) button while the OSD is on.

Resetting the Adjustments

Resetting an adjustment item

- 1 Press the ,  and  buttons to select the OSD containing the item you want to reset.



- 2 Press the  and  buttons to select the item you want to reset.



- 3 Press the  (reset) button.



Resetting all of the adjustment data for the current input signal

When there is no OSD displayed, press the  (reset) button.

All of the adjustments data for the current input signal is reset to the factory settings.
Note that adjustment data not affected by changes in input signal (OSD language, OSD position, input signal selection, power saving delay time and the control lock function) is not reset to the factory settings.



Resetting all of the adjustment data for all inputsignals

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

All of the adjustment data, including the brightness and contrast, is reset to the factory settings.



Power Saving Function

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

	Power consumption mode	Screen	Horizontal sync signal	Vertical sync signal	Power consumption	Recovery time	Indicator
1	Normal operation	active	present	present	≤ 160 W	—	Green
2	Standby (1st mode)	blank	absent	present	≤ 100 W	Approx. 3 sec.	Green and orange alternate
3	Suspend (2nd mode)	blank	present	absent	≤ 15 W	Approx. 3 sec.	Green and orange alternate
4	Active-off (3rd mode)	blank	absent	absent	< 5 W	Approx. 10 sec.	Orange
5	Power-off	—	—	—	0 W	—	Off

You can set the delay time before the monitor enters the power saving mode using the OSD. Set the time according to "Setting the power saving delay time" on page 13.

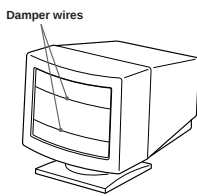
Note
If no video signal is input to the monitor, the "NO INPUT SIGNAL" message (page 16) appears. After the delay time has passed, the power saving function automatically puts the monitor into the active-off mode and the  indicator lights up orange. Once the horizontal and vertical sync signals are detected, the monitor automatically resumes its normal operation mode.

Preset Modes

No.	Resolution (dots × lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 × 480	31.5 kHz	60 Hz	VGA
2	640 × 480	43.3 kHz	85 Hz	VESA
3	800 × 600	53.7 kHz	85 Hz	VESA
4	1024 × 768	68.7 kHz	85 Hz	VESA
5	1280 × 1024	80.0 kHz	75 Hz	VESA
6	1280 × 1024	91.1 kHz	85 Hz	VESA
7	1600 × 1200	93.8 kHz	75 Hz	VESA
8	1600 × 1200	106.3 kHz	85 Hz	VESA

Damper Wires

When viewing a white background, very thin horizontal lines may be visible on the screen as shown below. These lines are the shadows of the damper wires and are characteristic of CRTs that use aperture grilles. The wires are attached to the aperture grille on the inside of the Trinitron tube and prevent the vibration of the aperture grille.



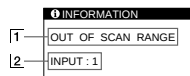
Plug & Play

This monitor complies with the DDC™1, DDC2B, DDC2AB and DDC2B+ Display Data Channel (DDC) standards of VESA.
When a DDC1 host system is connected, the monitor synchronizes with the V. CLK in accordance with the VESA standards and outputs the EDID (Extended Display Identification Data) to the data line.
When a DDC2B, DDC2AB or DDC2B+ host system is connected, the monitor automatically switches to the appropriate standard.

DDC™ is a trademark of the Video Electronics Standard Association.

Warning Messages

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



1 The input signal condition

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

“NO INPUT SIGNAL” indicates that no signal is input, or the input signal from the selected input connector is not received.

2 The selected input connector

Indicates which input connector is receiving the wrong signal. If there is something wrong with the signal from both input connectors, “1” (HD15) and “2” (13W3) are displayed alternately.

To solve these problems, see “Troubleshooting” below.

Troubleshooting

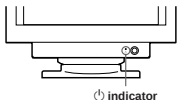
This section may help you isolate the cause of a problem and as a result, eliminate the need to contact technical support.

Symptom	Check these items
No picture	
If the  indicator is not lit	- Check that the power cord is properly connected. - Check that the  (power) switch is in the “on” position.
If the “NO INPUT SIGNAL” message appears on the screen, or if the  indicator is either orange or alternating between green and orange	- The screen is blank when the monitor is in power saving mode. Try pressing any key on the computer keyboard. - Check that your computer power switch is in the “on” position. - Check that the input select setting is correct. - Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets. - Ensure that no pins are bent or pushed in the HD15 or 13W3 video input connector. - Check that the video board is completely seated in the proper bus slot.
If the “OUT OF SCAN RANGE” message appears on the screen	- Check that the video frequency range is within that specified for the monitor. (Horizontal: 30 ~ 107 kHz, Vertical: 50 ~ 160 Hz) Refer to your computer’s instruction manual to adjust the video frequency range. - If you are using a video signal cable adapter, check that it is correct.
If no message is displayed and the  indicator is green or flashing orange	See “Self-diagnosis Function” (page 18).
Picture is scrambled	- Check your graphics board manual for the proper monitor setting. - Check this manual and confirm that the graphics mode and the frequency you are trying to operate at is supported. 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.
Color is not uniform	- Degauss the monitor (page 12). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. - Adjust the landing (pages 10 ~ 11).

Symptom	Check these items
You cannot adjust the monitor with the buttons on the front panel	If the control lock function is set to on, set it to off using the OPTION OSD (page 13).
White does not look white	Adjust the color temperature (page 10).
Screen image is not centered or sized properly	- Press the  button (page 5). - Adjust the size or centering (pages 7 ~ 8). - Some video modes do not fill the screen to the edges. This problem tends to occur with certain video boards.
Edges of the image are curved	Adjust the geometry (pages 8 ~ 9).
White lines show red or blue shadows at edges	Adjust the convergence (pages 10 ~ 11).
Picture is fuzzy	- Adjust the contrast and brightness (page 6). - Degauss the monitor (page 12). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. - If red or blue shadows appear along the edges of images, adjust the convergence (pages 10 ~ 11). - If the moire is cancelled, the picture may become fuzzy. Decrease the moire cancellation effect (pages 10 ~ 11).
Picture bounces or has wavy oscillations	- Isolate and eliminate any potential sources of electric or magnetic fields. Common causes for this symptom are electric fans, fluorescent lighting or laser printers. - If you have another monitor close to this monitor, increase the distance between them to reduce the interference. - Try plugging the monitor into a different AC outlet, preferably on a different circuit. - Try the monitor on a different computer in a different room.
Picture is flickering	Set the refresh rate on the computer to obtain the best possible picture by referring to the computer’s manual.
Picture appears to be ghosting	Eliminate the use of video cable extensions and/or video switch boxes if this symptom occurs. Excessive cable length or a weak connection can produce this symptom.
Wavy or elliptical (moire) pattern is visible	- Cancel the moire (pages 10 ~ 11). The moire may be modified depending on the connected computer. - Due to the relationship between resolution, monitor dot pitch and the pitch of some image patterns, certain screen backgrounds sometimes show moire. Change your desktop pattern.
Two fine horizontal lines (wires) are visible	These wires stabilize the vertically striped aperture grille (page 15). This aperture grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.
Hum is heard right after the power is turned on	When the power is turned on, the auto-degauss cycle is activated. While the auto-degauss cycle is activated (3 seconds), a hum may be heard. The same hum is heard when the monitor is manually degaussed. This is not a malfunction.

Self-diagnosisFunction

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  indicator will either light up green or flash orange.



If the indicator is green

- 1 Remove any plugs from the video input 1 and 2 connectors, or turn off the connected computer(s).
- 2 Press and hold the  button for 2 seconds.



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).

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

If the indicator is flashing orange

Press the  button to turn the monitor off and on.

If the  indicator lights up green, the monitor is working properly.

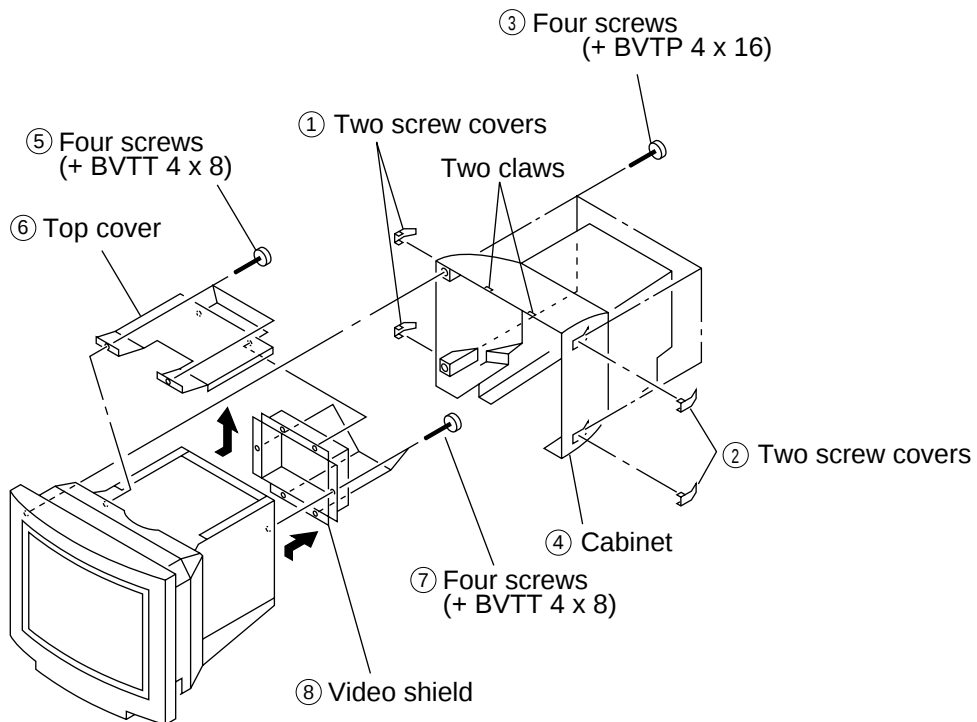
If the  indicator is still flashing, there is a potential monitor failure. Count the number of seconds between orange flashes of the  indicator and inform your service representative of the monitor's condition. Be sure to note the model name and serial number of your monitor. Also note the make and model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

Specifications

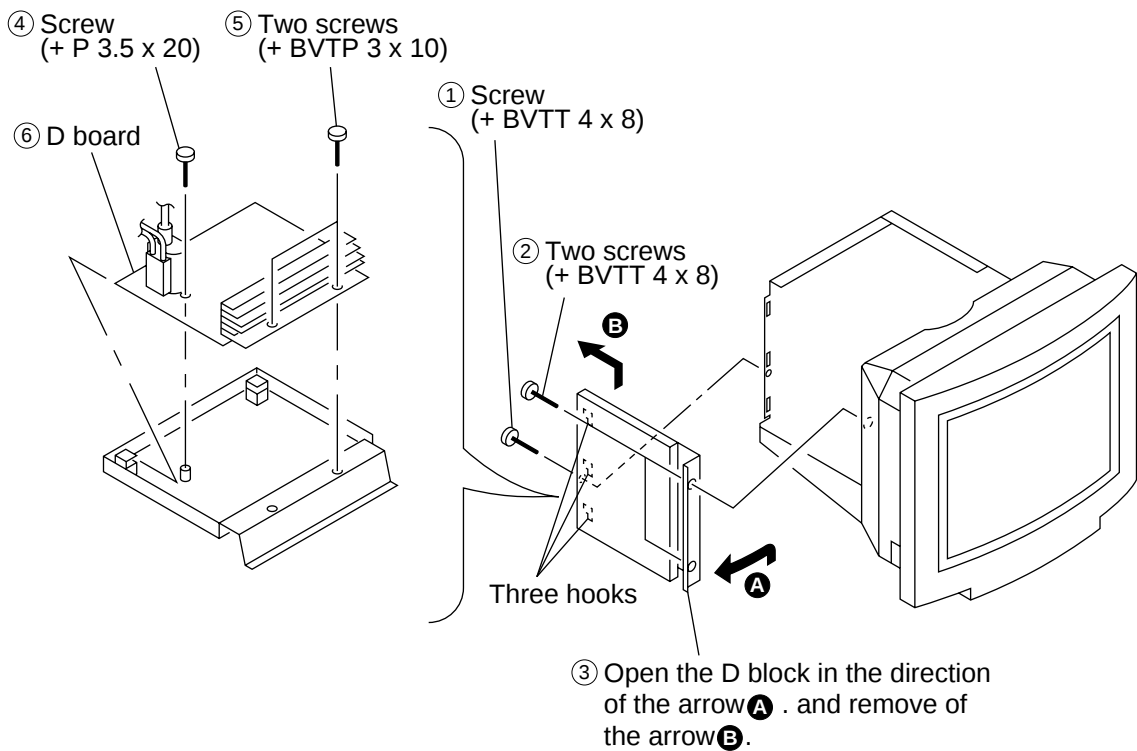
Picture tube	0.25 – 0.27 mm aperture grille pitch 21 inches measured diagonally 90-degree deflection
Viewable image size	Approx. 403.8 × 302.2 mm (w/h) (16 × 12 inches) 19.8" viewing image
Resolution	Horizontal: Max. 1600 dots Vertical: Max. 1200 lines
Standard image area	Approx. 388 × 291 mm (w/h) (15 ³ / ₈ × 11 ¹ / ₂ inches) or Approx. 364 × 291 mm (w/h) (14 ³ / ₈ × 11 ¹ / ₂ inches)
Deflection frequency	Horizontal: 30 to 107 kHz Vertical: 50 to 160 Hz 256 < Total Line < 2048
AC input voltage / current	100 to 240 V, 50 – 60 Hz, 2.0 – 1.0 A
Power consumption	Max. 160 W
Dimensions	498 × 513 × 500 mm (w/h/d) (19 ⁵ / ₈ × 20 ¹ / ₄ × 19 ³ / ₄ inches)
Mass	Approx. 31 kg (68 lb 5 oz)

Design and specifications are subject to change without notice.

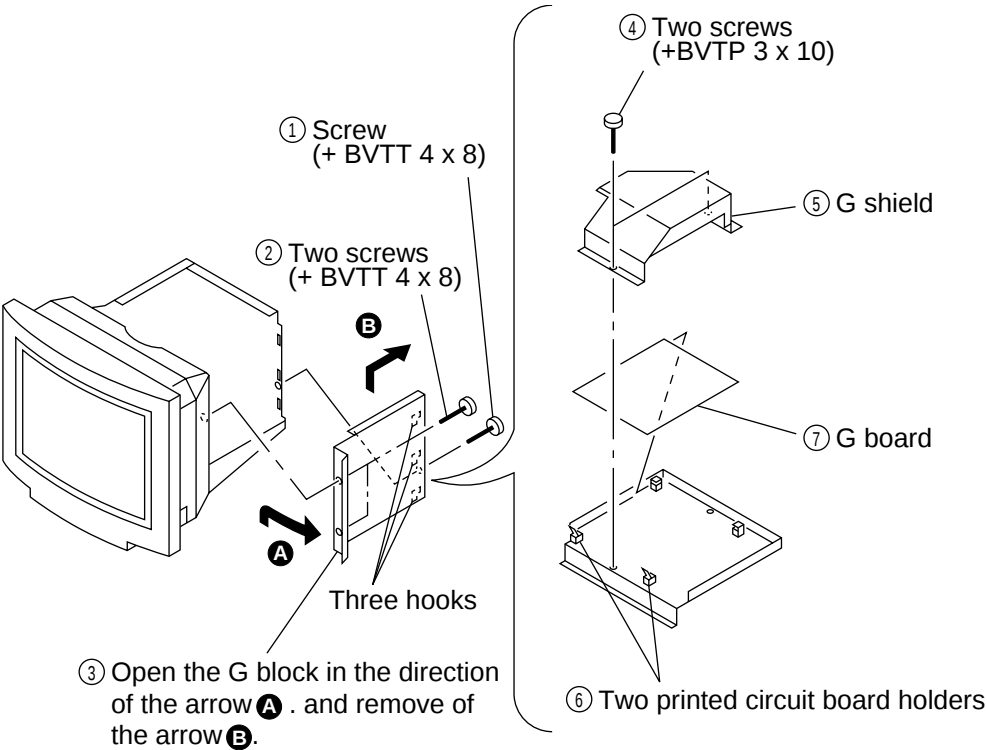
2-1. CABINET REMOVAL



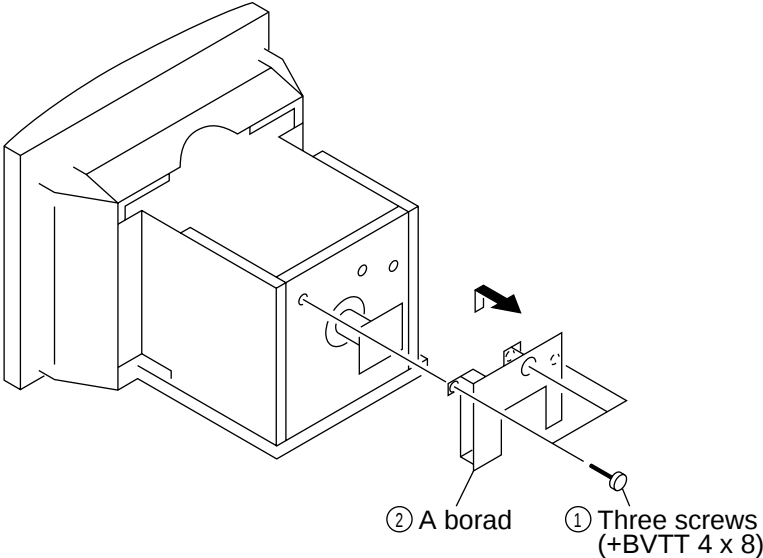
2-2. D BOARD REMOVAL



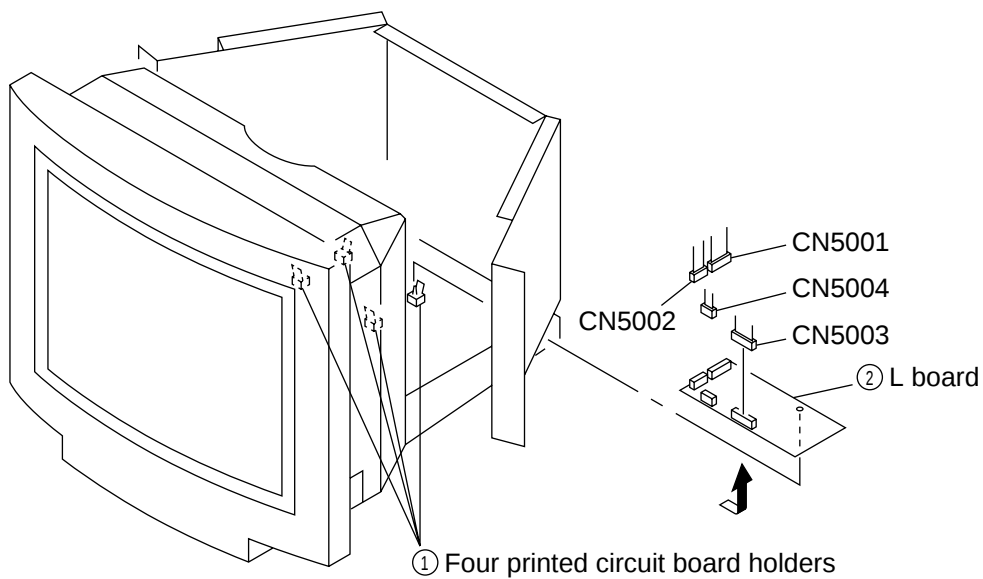
2-3. G BOARD REMOVAL



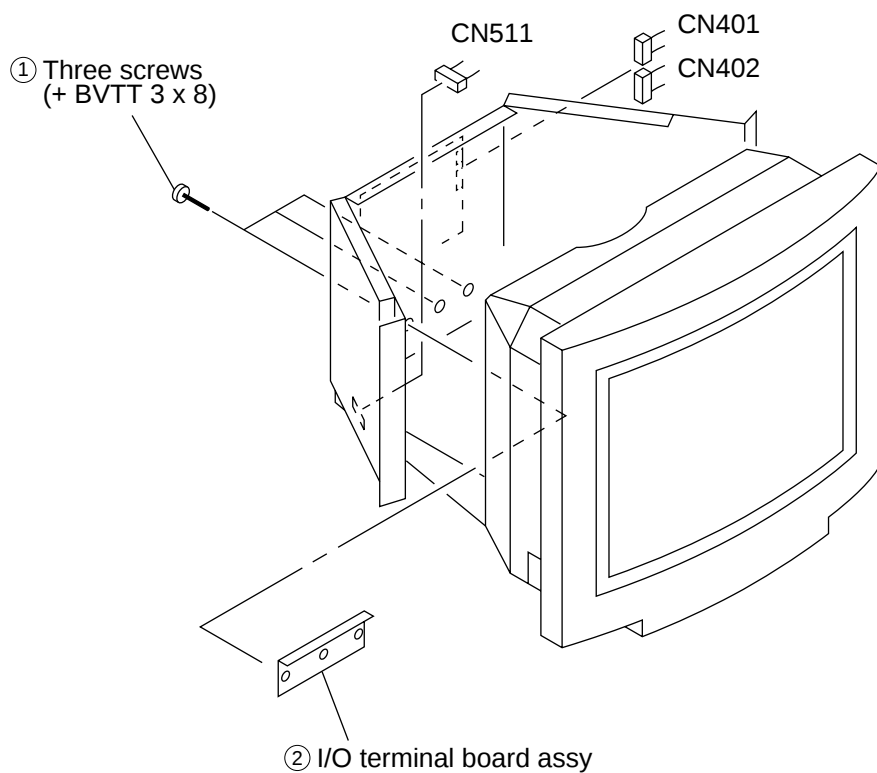
2-4. A BOARD REMOVAL



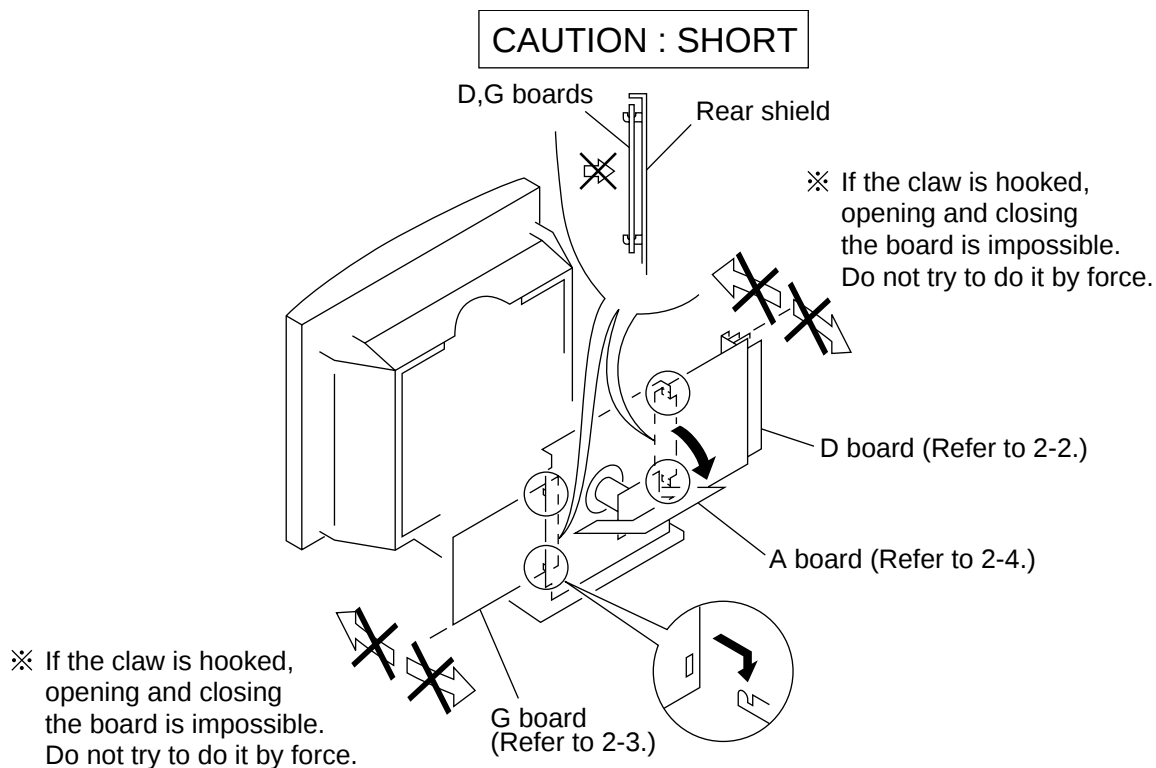
2-5. L BOARD REMOVAL



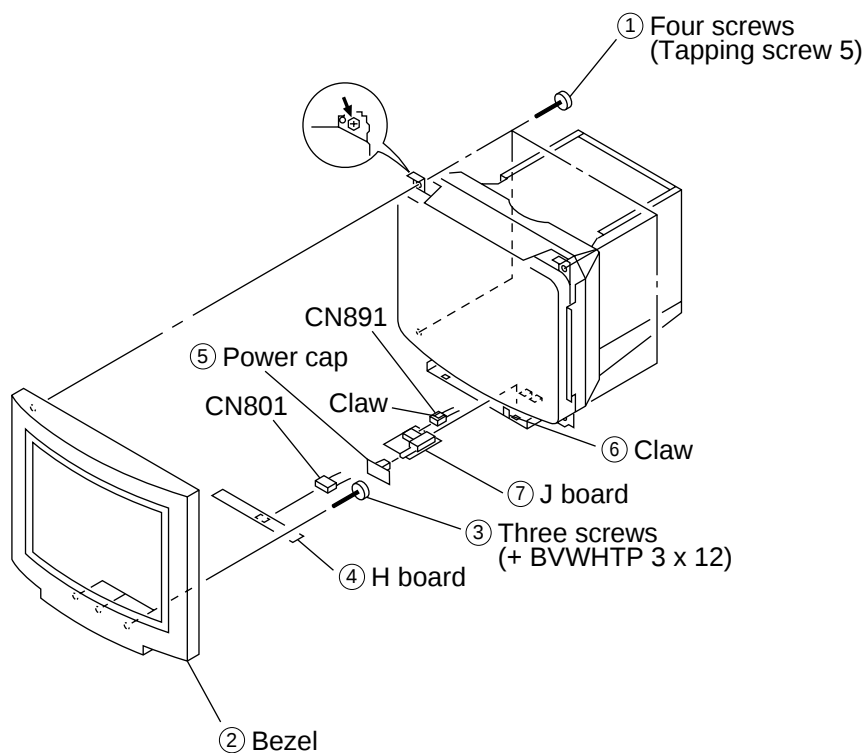
2-6. I/O TERMINAL BOARD ASSY REMOVAL



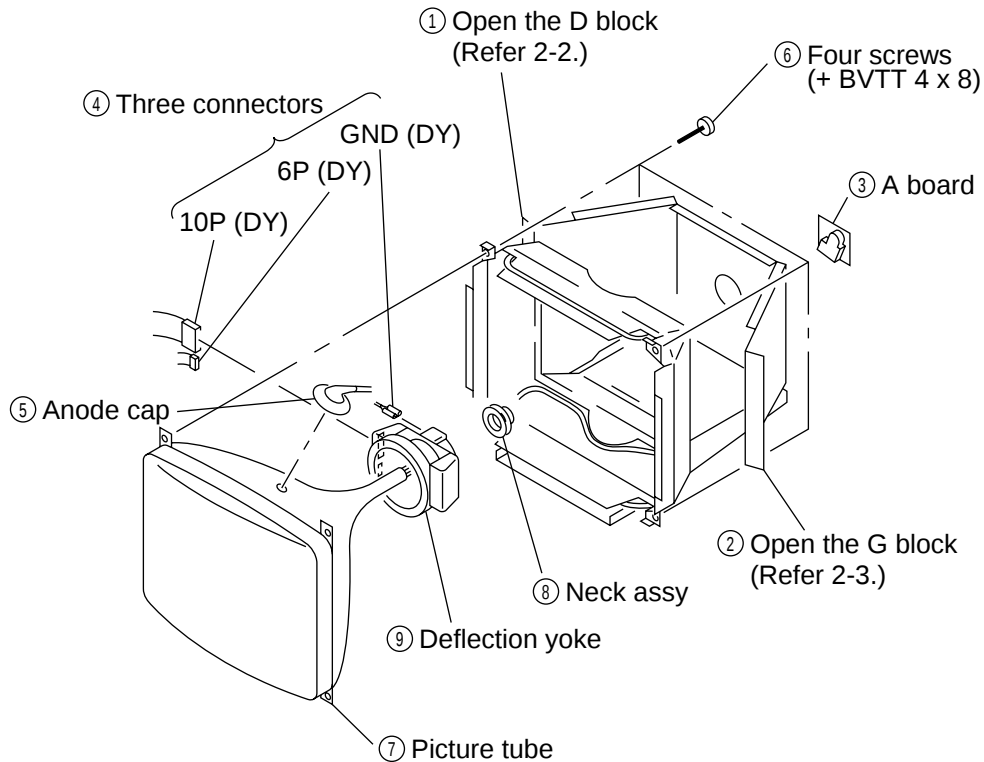
2-7. SERVICE POSITION



2-8. H AND J BOARDS REMOVAL



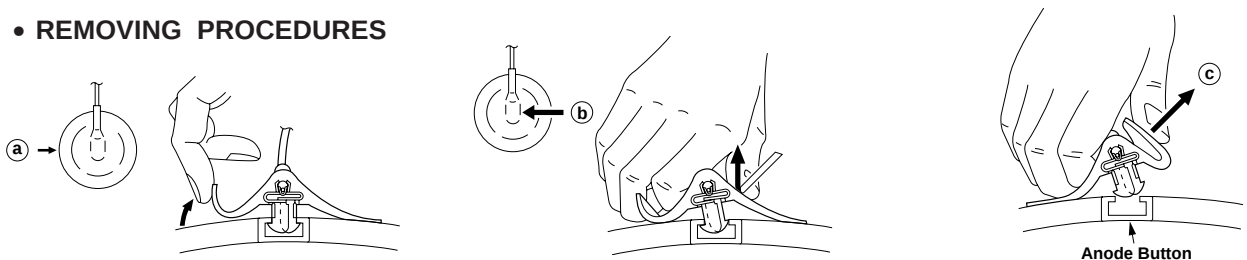
2-9. PICTURE TUBE REMOVAL



• 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.

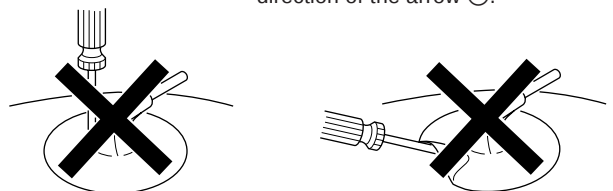
• REMOVING PROCEDURES



- ① Turn up one side of the rubber cap in the direction indicated by the arrow (a).
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b).
- 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 (c).

• HOW TO HANDLE AN ANODE-CAP

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



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	D Board	IC901, T902 • Mounted D board
HV Protector Circuit Check	D Board	Q660, Q661, D916, D935, C924, R665, R667, R940, R980, T902 • Mounted D board
	G Board	PH680, Q680, Q683, D680, R680, R685, R686, R687, R688, R689 • Mounted G board
Beam Current Protector Circuit Check	D Board	IC901, D904, D907, D908, R011, R908, R909, R921, R925, R926, R929, R930, T902 • Mounted D board

Check Condition

- Input voltage : 100 ~ 240 VAC
- Input signal : White Cross Hatch at 107 kHz
- Beam control : BRT and CONT → Minimum
- B+ voltage : 195 ~ 205 VDC

a) HV Regulator Circuit Check

- 1) Confirm that the voltage of the pin ② of CN901 on D board is within the voltage range shown below.
Standard: 9.00 ± 0.065 VDC

b) HV Protector Circuit Check

- 1) Confirm that the HV protector circuit works and TV Raster disappears when apply the voltage as shown below between pin ③ of CN901 on D board and GND using an external DC power supply.
Check Condition: Less than 34.10 VDC

c) Beam Current Protector Circuit Check-1

- 1) Measure HV voltage and record that value.
- 2) Shorted between pin ① and pin ④ of CN901 on D board.
- 3) Connect to the Constant Current Jig (A) between pin ① of CN901 on D board and GND, confirm that the Beam Current Protector Circuit works and HV go down more than 1.25 kV from the value of (1).
Check Condition: 1.50 mA

d) Beam Current Protector Circuit Check-2

- 1) Connect to the Constant Current Jig (B) between pin ① of CN901 on D board and GND, confirm that the Beam Current Protector Circuit works and TV Raster disappears.
Check Condition: 1.59 mA

e) Voltage of 3rd winding of FBT

- 1) Confirm that the voltage of pin ③ of CN901 on D board is within the voltage range shown below.
Standard: more than 28.0 VDC

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 0.

• 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 ΣI_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. $BV=45\mu T$.
- (3) If adjusting in a magnetic fields, add the shift from the non-magnetic field in your estimation.
4. Attach the wobbling coil to the designated part of the CRT neck.
5. Attach the sensor of the landing adjustment unit on the CRT surface.

6. Adjust the DY position and purity, and the DY tilt, and landing of the center and 4 corners with the landing checker.

After adjustment, set "LCC SW" to "13".

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

"LCC NS" 128 ± 15

"LCC LT", "LCC LB", "LCC RT", "LCC RB" 128 ± 40

Save the service data.

<Specifications>

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

4 corner adjust target : within ± 1

(μm)		
0 ± 3	0 ± 7.5	0 ± 3
0 ± 5	0 ± 5	0 ± 5
0 ± 3	0 ± 7.5	0 ± 3

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

(μm)		
± 6	± 6	± 6
± 6	± 4	± 6
± 6	± 6	± 6

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

(μm)		
10	10	10
10	7	10
10	10	10

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

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

8. Check the landing of each corner, and if 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.

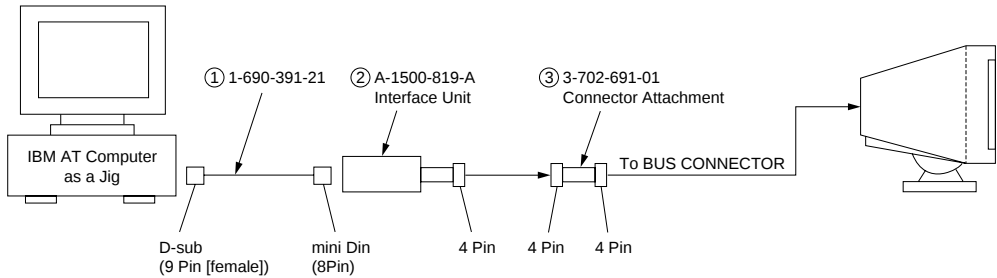
"LCC NS" 128 ± 15

"LCC LT", "LCC LB", "LCC RT", "LCC RB" 128 ± 40

After adjustment, save the service data.

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.

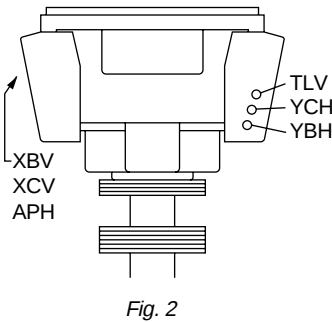
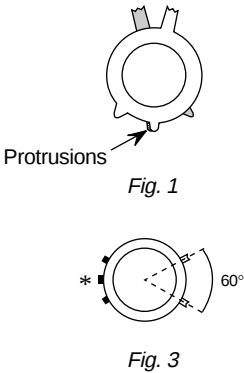
Connect the communication cable of the computer to the connector located on the D board on the monitor. Run the service software and then follow the instruction.



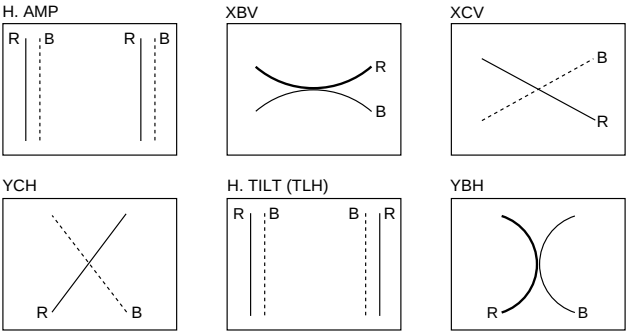
*The parts above (① ~ ③) are necessary for DAS adjustment.

• Convergence Rough Adjustment

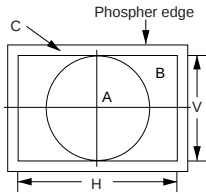
- (1) Receive an image of the white crosshatch signals (white lines on black).
- (2) Place the protrusions of the 6-fold poles magnet attached to the CRT neck upon each other. (Fig. 1)
- (3) Make rough adjustment of the H and V direction convergence by using 4-fold poles magnet.
- (4) Make a rough adjustment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



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



• Convergence Specification

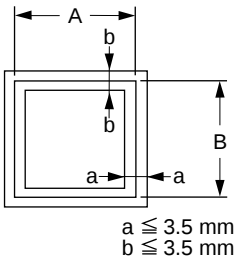


MODE	Zone	N. Hemisphere	S. Hemisphere
ftHz 60 kHz	A Zone	0.24 mm	0.24 mm
	B Zone	0.24 mm	0.28 mm
	C Zone	0.32 mm	0.32 mm
ftHz 60 kHz	A Zone	0.24 mm	0.28 mm
	B Zone	0.32 mm	0.36 mm
	C Zone	0.36 mm	0.40 mm

• White Balance Adjustment Specification

- (1) 9300K
 $x = 0.281 \pm 0.005$
 $y = 0.311 \pm 0.005$
(All White)
- (2) 6500K
 $x = 0.313 \pm 0.005$
 $y = 0.329 \pm 0.005$
(All White)

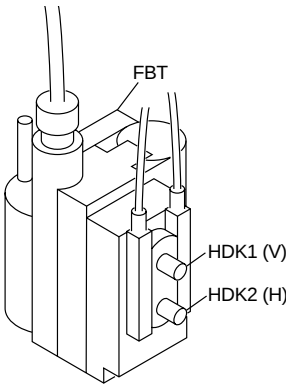
• Vertical and Horizontal Position and Size Specification



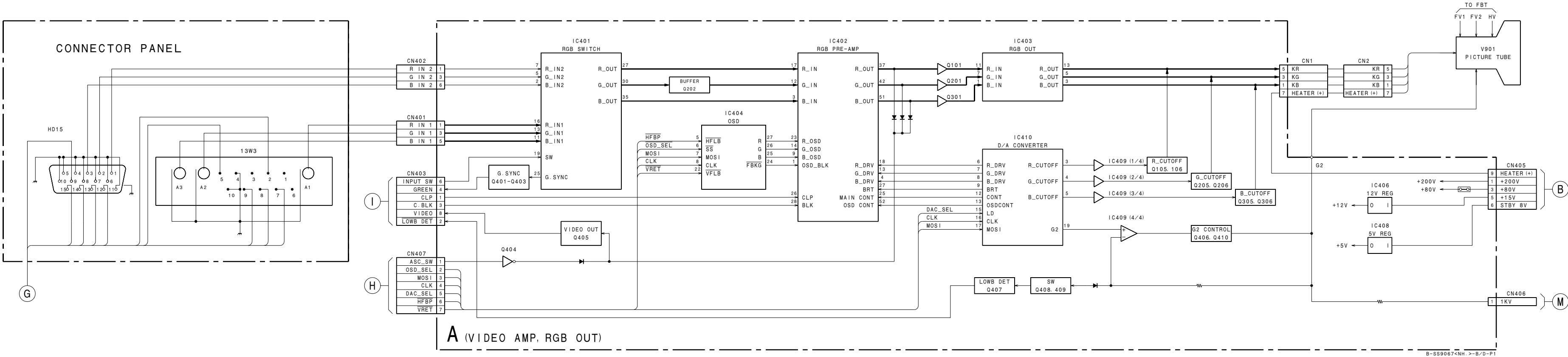
MODE	1-4, 7, 8	5, 6
A	388 mm	364 mm
B	291 mm	291 mm

• Focus adjustment

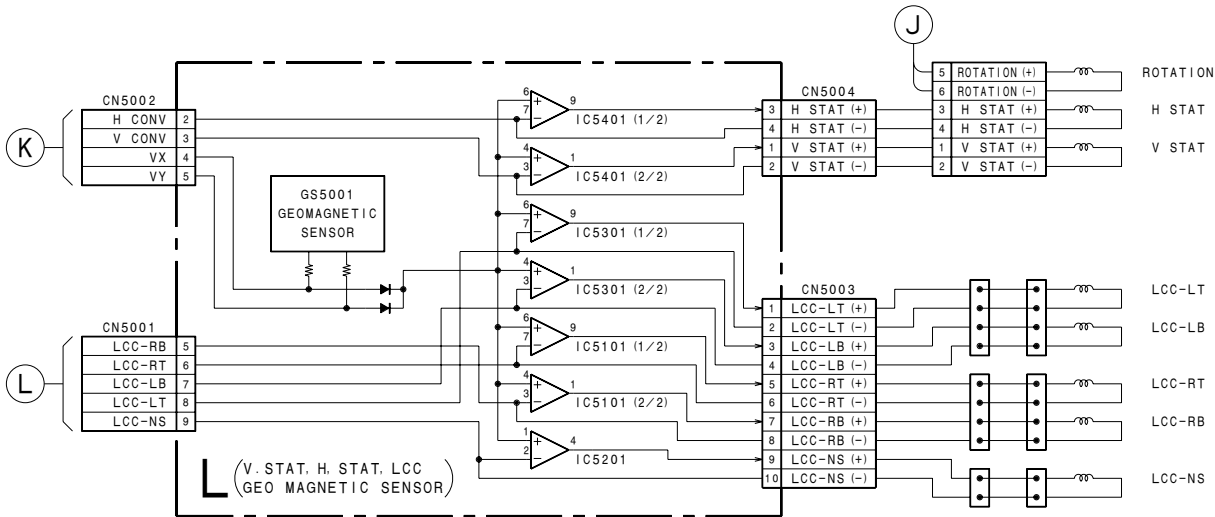
Adjust the focus volume 1 and 2 (HDK 1 and 2) for the optimum focus.

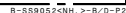


BLOCK DIAGRAMS

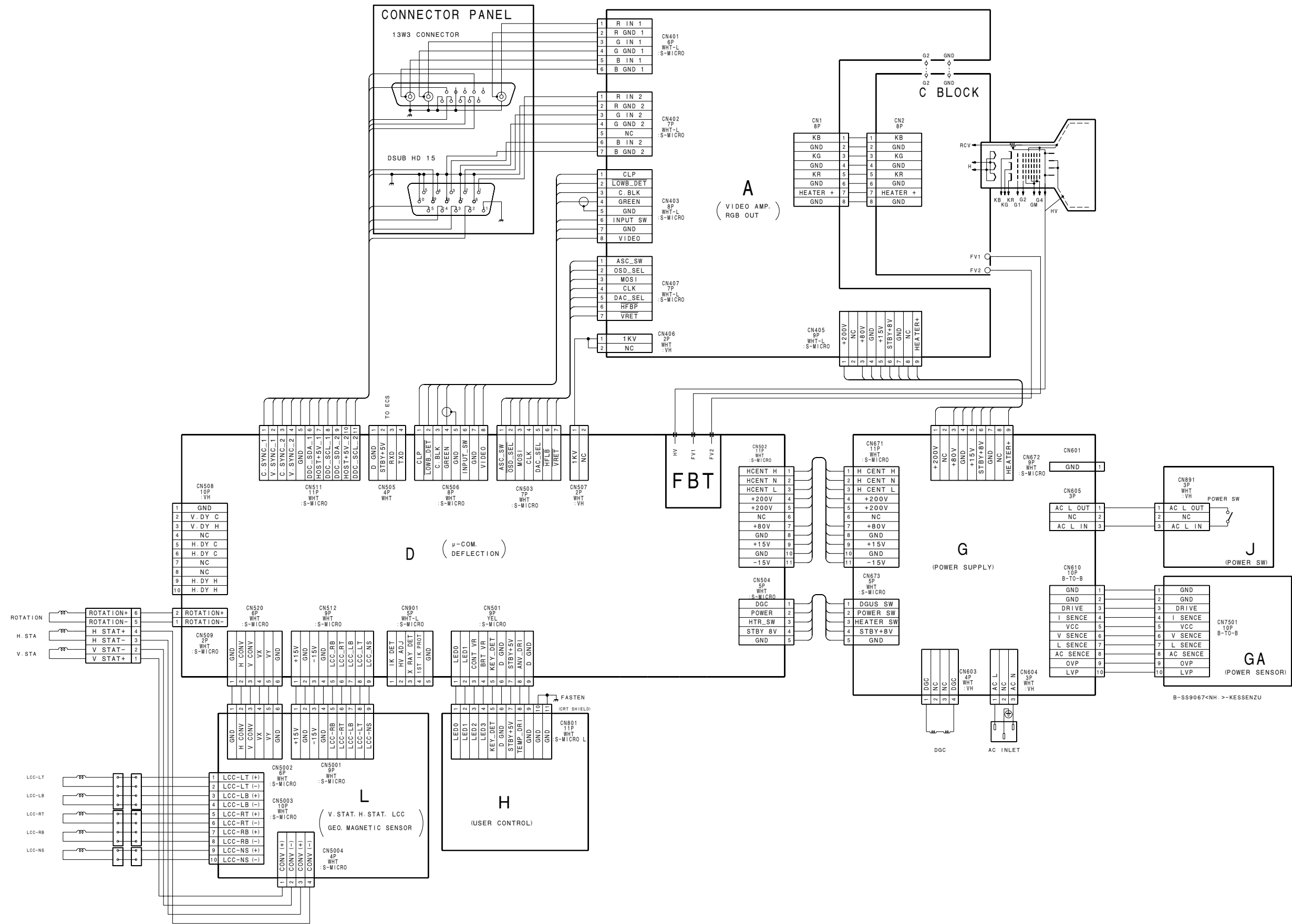


B-SS9067<NH. >-B/D-P1

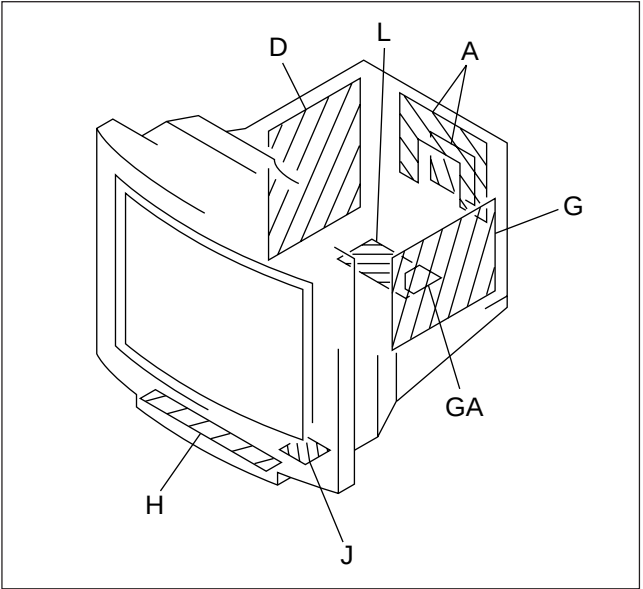




5-2. FRAME SCHEMATIC DIAGRAM



5-3. CIRCUIT BOARDS LOCATION

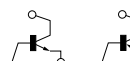
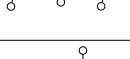
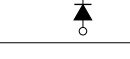
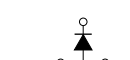
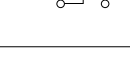
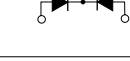
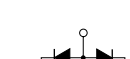
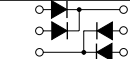
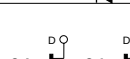
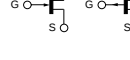
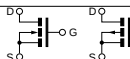
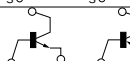
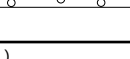


Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

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

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

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

	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Cathode Anode	
⑬	Transistor (FET)		Drain Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		Source Drain Gate	
⑯	Transistor (FET)		Emitter Collector Base	
⑰	Transistor		Emitter Collector Base	
—	Discrete semiconductor			

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

Ver.1.5

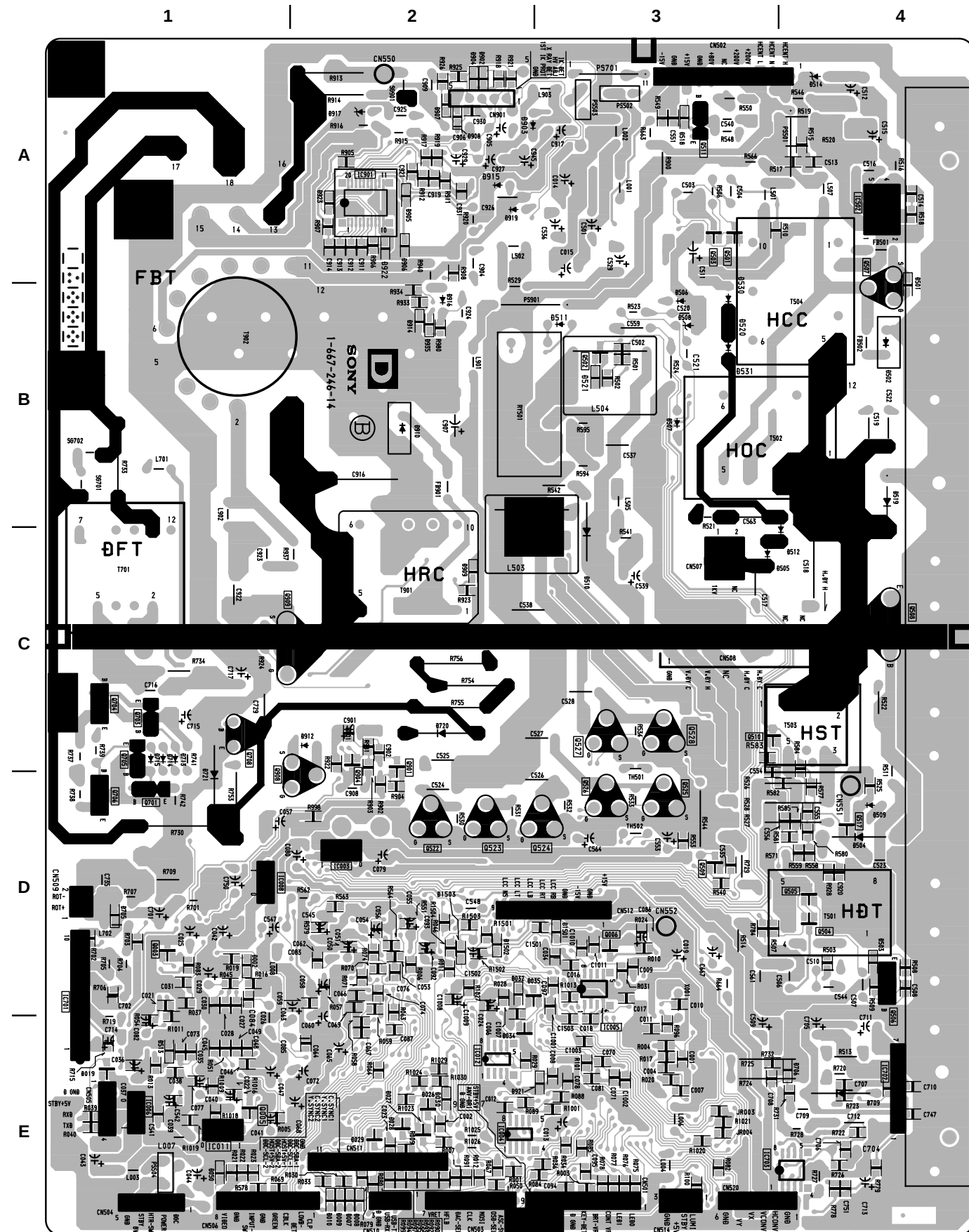
5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note:
- All capacitors are in μF unless otherwise noted. (pF: μF)
 - 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.

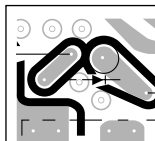
		Part replaced ()
HV Regulator Circuit Check	D Board	IC901, T902 • Mounted D board
HV Protector Circuit Check	D Board	Q660, Q661, D916, D935, C924, R665, R667, R940, R980, T902 • Mounted D board
	G Board	PH680, Q680, Q683, D680, R680, R685, R686, R687, R688, R689 • Mounted G board
Beam Current Protector Circuit Check	D Board	IC901, D904, D907, D908, R011, R908, R909, R921, R925, R926, R929, R930, T902 • Mounted D board



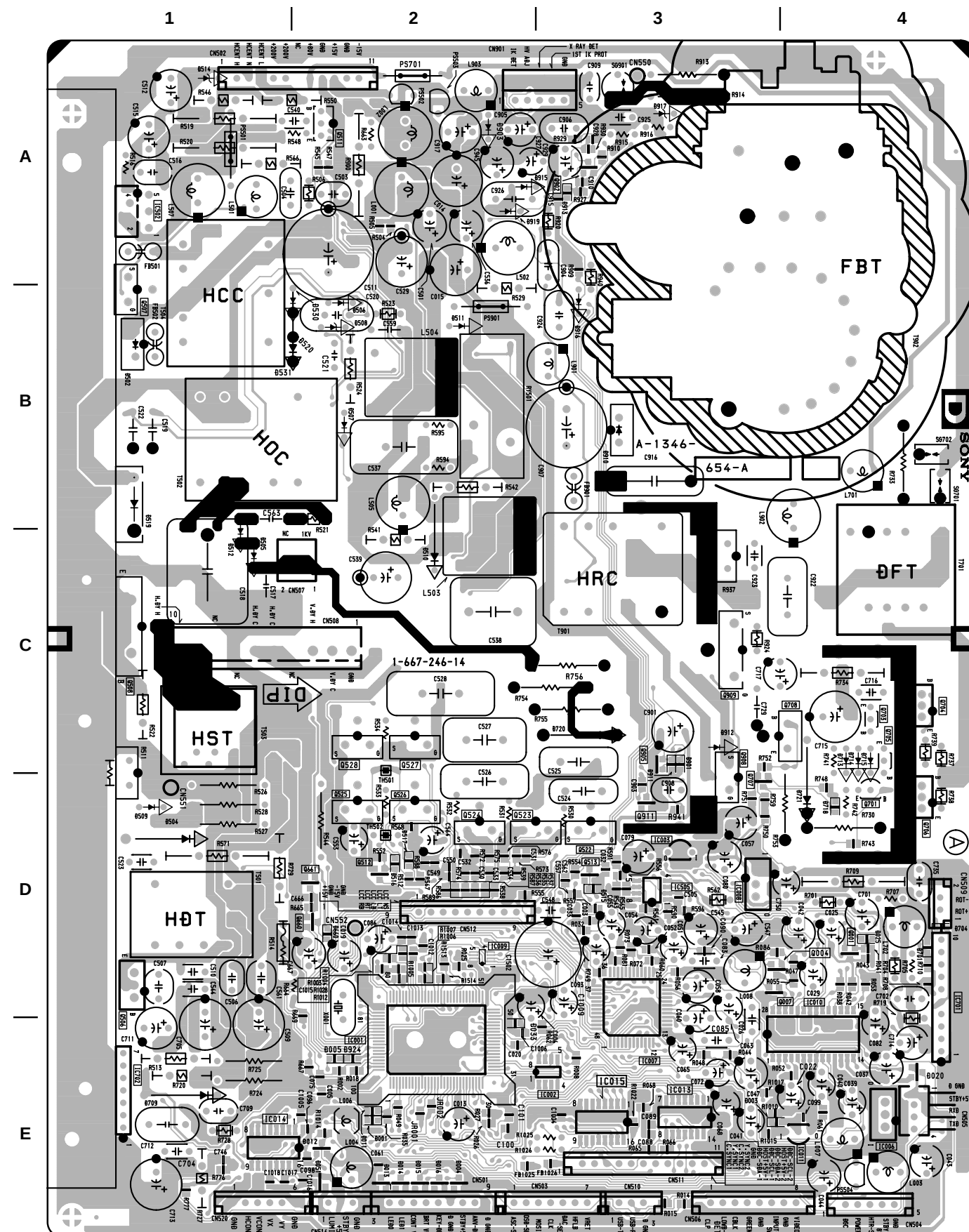
• D BOARD SEMICONDUCTOR LOCATION

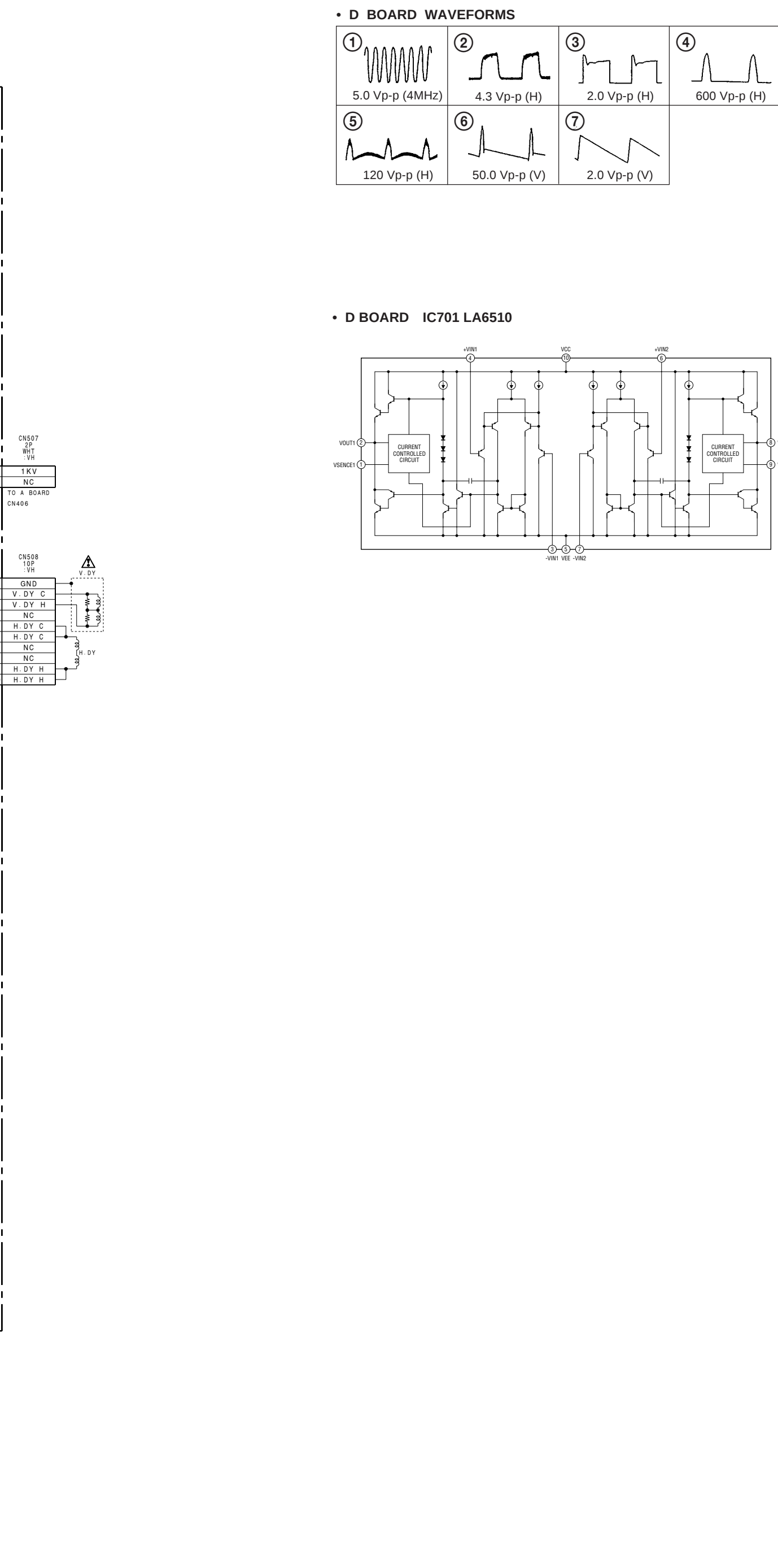
IC	(Conductor Side) (Component Side)							
	(Conductor Side)	(Component Side)						
IC001	E-2		Q660	D-2	②	D511	B-3	B-2
IC002	E-3		Q661	D-2	②	D512	C-4	C-1
IC003	D-3		Q701	D-1	—	D513	E-1	—
IC004	E-2		Q703	C-1	—	D514	A-4	A-1
IC005	D-3		Q704	C-1	—	D516		D-2
IC006	E-1	E-4	Q705	C-1	—	D517		D-2
IC007		D-3	Q706	D-1	—	D518	A-3	B-1
IC008		D-3	Q707		②	D519	B-4	B-2
IC009		D-2	Q708	C-1	—	D521	B-3	B-2
IC010		E-4	Q901	C-2	①	D530	B-3	B-2
IC011	E-1	E-4	Q902		②	D660		D-2
IC012	E-2		Q904	C-2	①	D701		D-4
IC013		E-3	Q905		②	D704		D-5
IC502	A-4	A-1	Q908	D-2	—	D705	D-1	—
IC505		D-3	Q909	C-2	—	D706	E-4	—
IC701	D-1	D-4	Q911		②	D709	E-4	E-1
IC702	E-4	E-1				D713	C-1	C-4
IC703	E-3					D714	C-1	C-4
IC901	A-2					D715	C-1	C-4
			DIODE			D718		—
			(Conductor Side) (Component Side) *			D720	C-2	C-3
						D721	D-1	D-4
						D901		C-3
						D902	A-2	—
						D903	A-2	A-2
						D904	A-2	—
						D905	A-2	—
						D906	A-2	—
						D907	A-2	—
						D908	A-2	—
						D909	C-2	—
						D910	B-2	B-3
						D911		C-3
						D913		A-3
						D915	A-2	A-2
						D916	B-2	B-3
						D917	A-2	A-3
						D919	A-2	A-2
						D921	E-3	—
						D922	A-2	—
						D923	A-2	—
						D924		E-2
						D935	B-2	—
						D1501	D-3	—
						D1502	D-2	—
						D1503	D-2	—
			CRYSTAL					
			(Conductor Side) (Component Side)					
						X001	D-3	D-2

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



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.



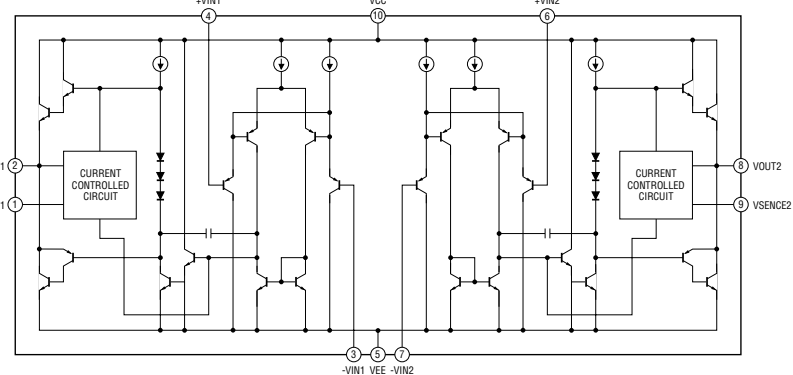
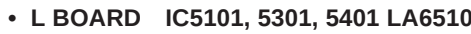
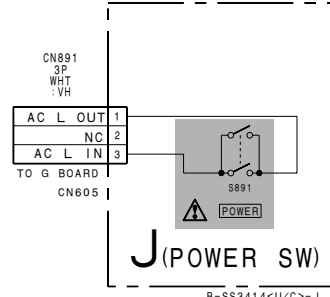


① 5.0 Vp-p (4MHz)	② 4.3 Vp-p (H)	③ 2.0 Vp-p (H)	④ 600 Vp-p (H)
⑤ 120 Vp-p (H)	⑥ 50.0 Vp-p (V)	⑦ 2.0 Vp-p (V)	

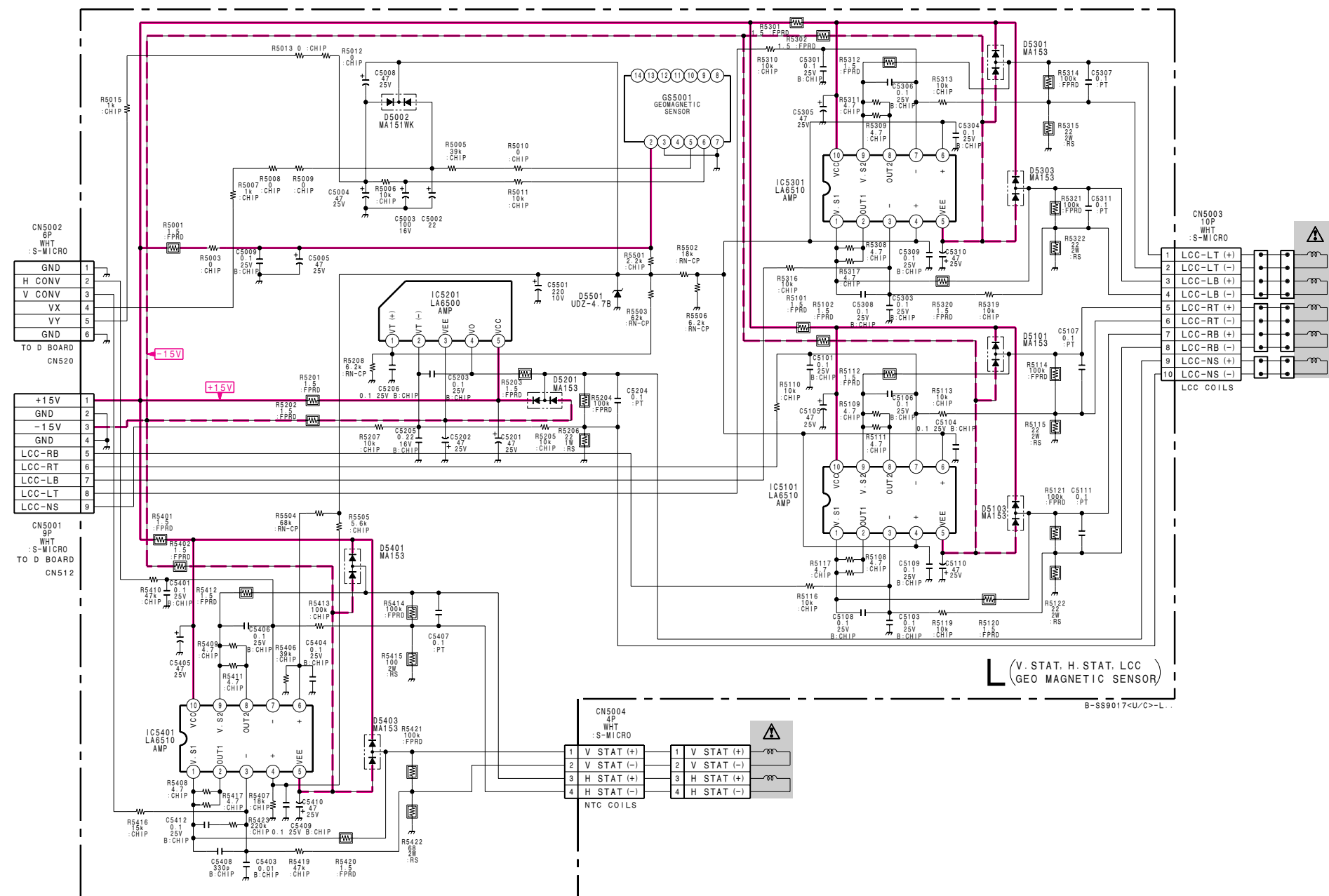
Ref.	Pin	Voltage [V]	Ref.	Pin	Voltage [V]
IC002	5	1.1		11	0
	6	4.2		12	11.2
	7	0		15	0
IC004	5	4.8	Q003	16	8.4
	6	4.8		19	9.2
IC005	1	0.4		B	5.1
	3	0		C	0
	7	1.5		E	5.7
IC009	1	0	Q005	B	2.5
	2	-0.1		C	0
	3	4.7		E	3.1
	3	4.5	Q501	B	11.2
	5	0.3		C	13.8
	6	0.3		E	10.8
	7	4.5	Q502	B	0.2
				C	11.1
IC010	1	4.0	Q503	B	11.2
	3	3.0		E	10.9
	4	2.8	Q504	B	2.5
	5	2.3		C	12.0
	6	2.6		E	2.5
	7	0.6	Q505	B	2.5
	9	4.8		E	2.4
	10	4.8	Q506	B	-14.0
	12	5.4		C	-0.2
	14	4.5		E	-14.0
	15	4.5	Q507	D	197.8
	16	5.4		G	41.4
	17	1.0	Q508	B	-1.4
	18	0		C	41.0
	19	5.1	Q509	B	0
	20	3.7		C	14.1
	23	0.8	Q510	B	4.5
	24	2.5		E	3.9
	25	-0.1	Q511	B	3.2
	26	4.0		C	33.5
	27	4.0		E	2.6
IC012	28	4.4	Q517	B	4.6
	5	0.6		E	5.1
	6	3.9	Q522	G	0
	7	4.1		D	15.2
			Q523	G	4.7
IC013	1	0		D	0
	2	4.9	Q524	G	4.7
	8	0.6		D	0
	9	3.6	Q525	G	4.7
	10	4.9		D	0
	11	0	Q527	G	4.7
IC014	13	5.7		D	0
	1	3.5	Q528	G	4.7
	3	3.5		D	0
	5	2.7	Q660	B	4.2
	9	0		C	0
	10	0.1		E	4.2
	12	4.9	Q661	B	0
	13	4.9		C	4.2
	14	3.2	Q701	B	5.7
IC015	15	3.9		C	36.0
	1	0.5		E	5.0
	2	4.2	Q703	B	37.9
	3	0.5		E	37.9
	4	0.5	Q704	B	37.4
	5	0		E	37.0
	6	0	Q705	B	36.0
	8	0		E	36.6
	9	0	Q706	B	36.6
IC502	13	0		E	37.0
	1	41.4	Q707	B	-0.6
	2	41.4		C	-5.0
	3	33.7			



Ref.	Pin No.	Voltage [V]
IC7501	1	2.6
	2	2.5
	3	1.7
	4	0.2
	5	0
	7	8.6
Q7501	B	14.0
	C	0
	E	14.0
Q7502	B	0.7
	C	0.1
Q7503	B	0
	C	14.0
Q7504	B	13.4



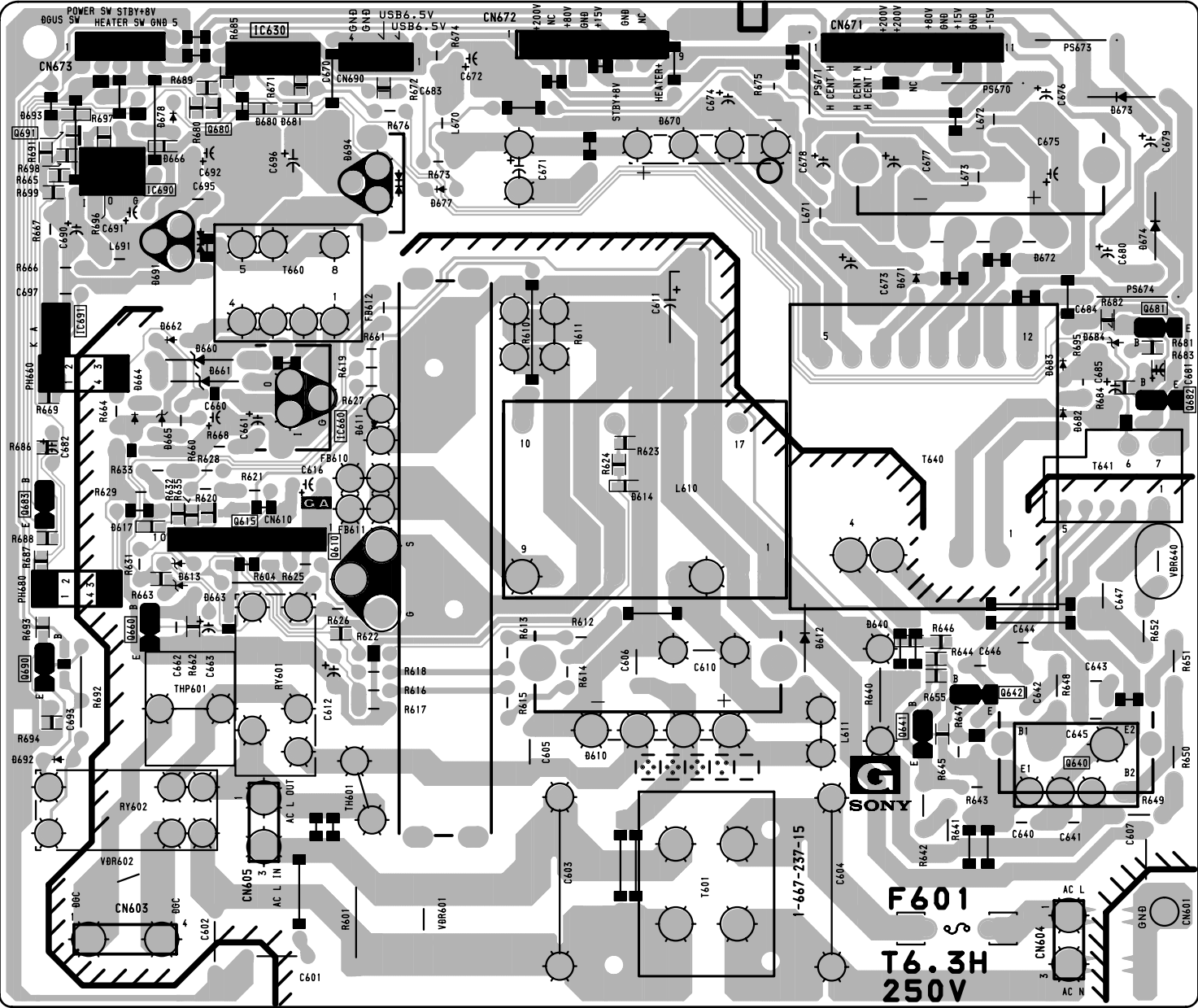
Ref.	Pin No.	Voltage [V]
IC630	3	2.5
	4	11.6
IC660	IN	6.1
	OUT	410.0
IC690	2	5.0
	3	6.7
PH660	4	5.3
	1	4.5
	2	3.3
PH680	3	6.1
	4	16.7
	1	1.3
Q610	2	0.1
	3	0
	4	0.1
Q615	G	8.7
	D	102.4
	S	0.2
Q640	B	13.6
	C	14.2
	E	14.3
Q641	B1	-2.0
	C1	199.2
	B2	196.8
	C2	408.0
	E2	199.2
Q642	B	1.1
	C	-2.0
	E	2.0
Q660	B	-1.8
	C	-2.0
Q680	B	0.9
	C	0.3
Q680	B	0.8
	C	0
Q681	B	0.3
	C	11.7
Q682	B	11.7
	E	11.7
Q683	B	7.5
	C	8.3
Q690	B	0
	C	15.0
Q691	B	8.6
	C	5.3
	E	6.7



- L BOARD
VOLTAGE LIST

Ref.	Pin No.	Voltage [V]
GS5001	5	2.8
	6	2.8
IC5101	1	1.0
	2	1.0
	3	1.2
	4	1.2
	6	1.2
	7	1.2
	8	-0.2
IC5201	1	1.2
	2	1.2
	4	1.1
IC5301	1	-0.2
	2	-0.2
	3	1.2
	4	1.2
	6	1.2
	7	1.2
	8	0.4
IC5401	9	0.4
	1	0.6
	2	0.6
	3	3.4
	4	3.4
	6	1.8
	7	1.8
8	0.4	
9	0.4	

G BOARD

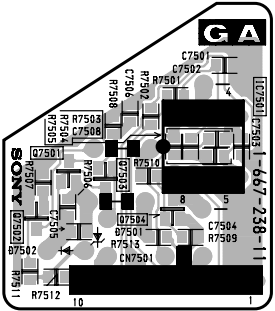


G BOARD
Terminal name of semiconductors
in silk screen printed circuit (*)

Ref.	*
Q615, Q680, Q691	①
D614, D617, D640, D680, D681, D693	③

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

GA BOARD

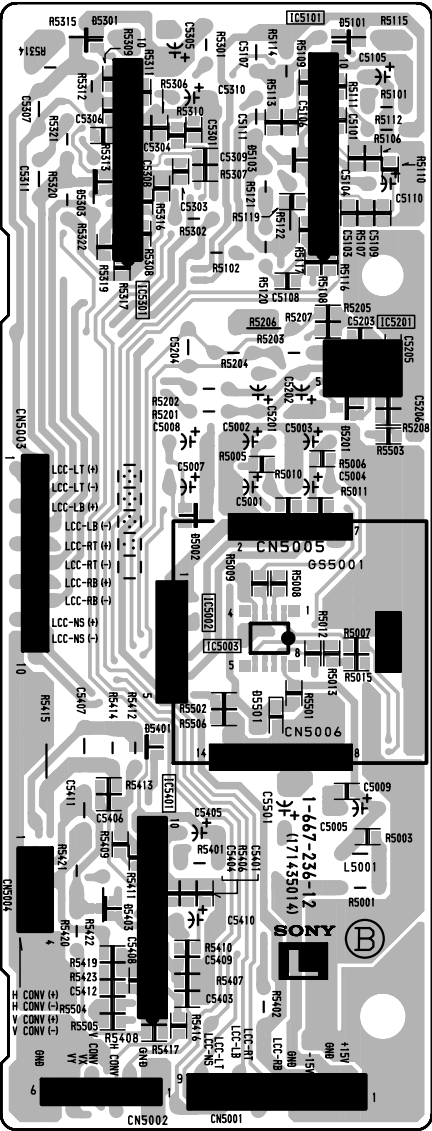


GA BOARD
Terminal name of semiconductors
in silk screen printed circuit (*)

Ref.	*
Q7501-Q7504	①

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

L BOARD (Conductor Side)

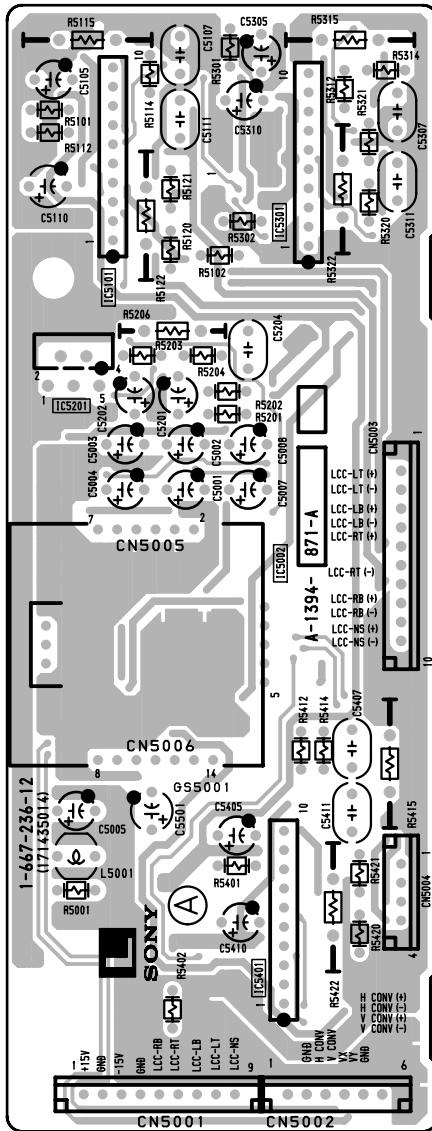


L BOARD
Terminal name of semiconductors
in silk screen printed circuit (*)

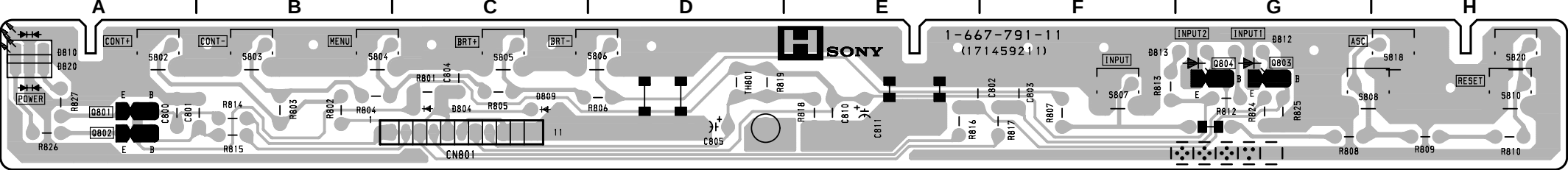
Ref.	*
D5501	③
D5101, D5103, D5201, D5301, D5303, D5401, D5403	⑥
D5002	⑧

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

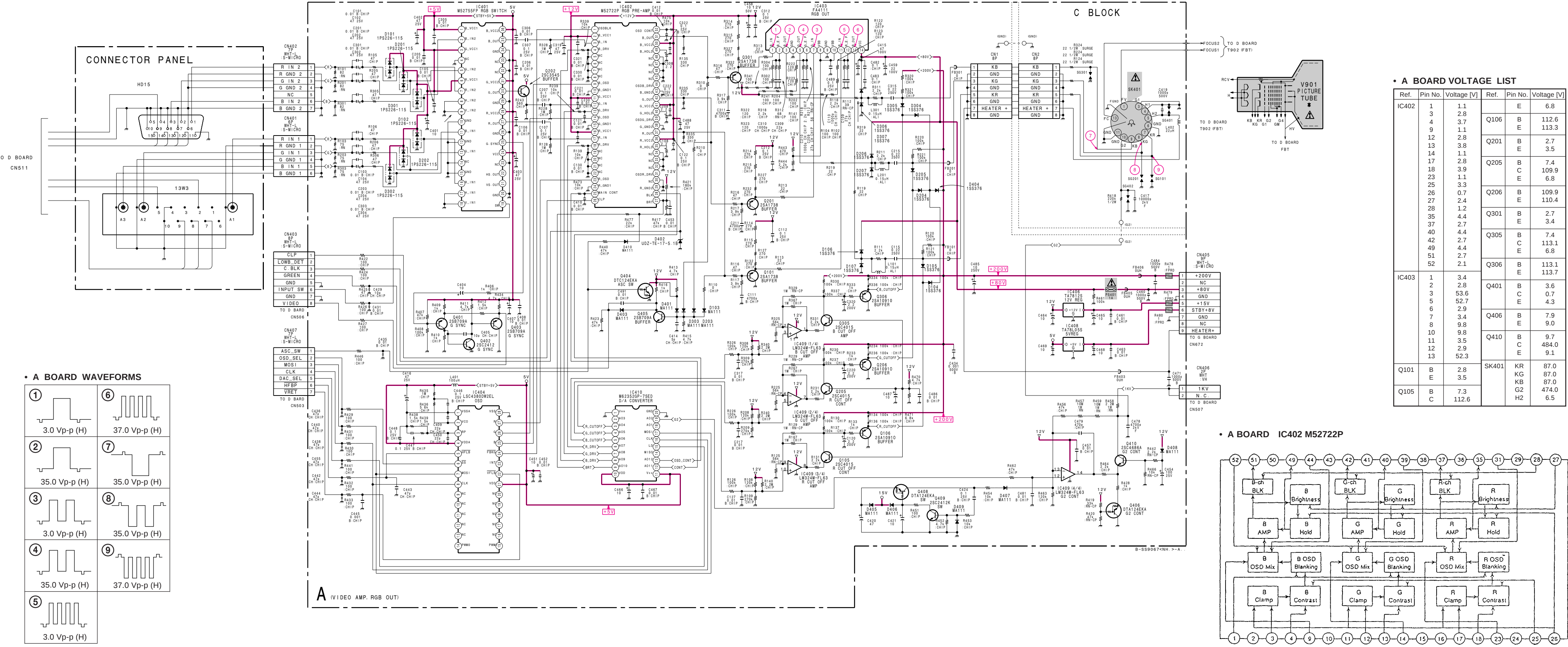
L BOARD (Component Side)



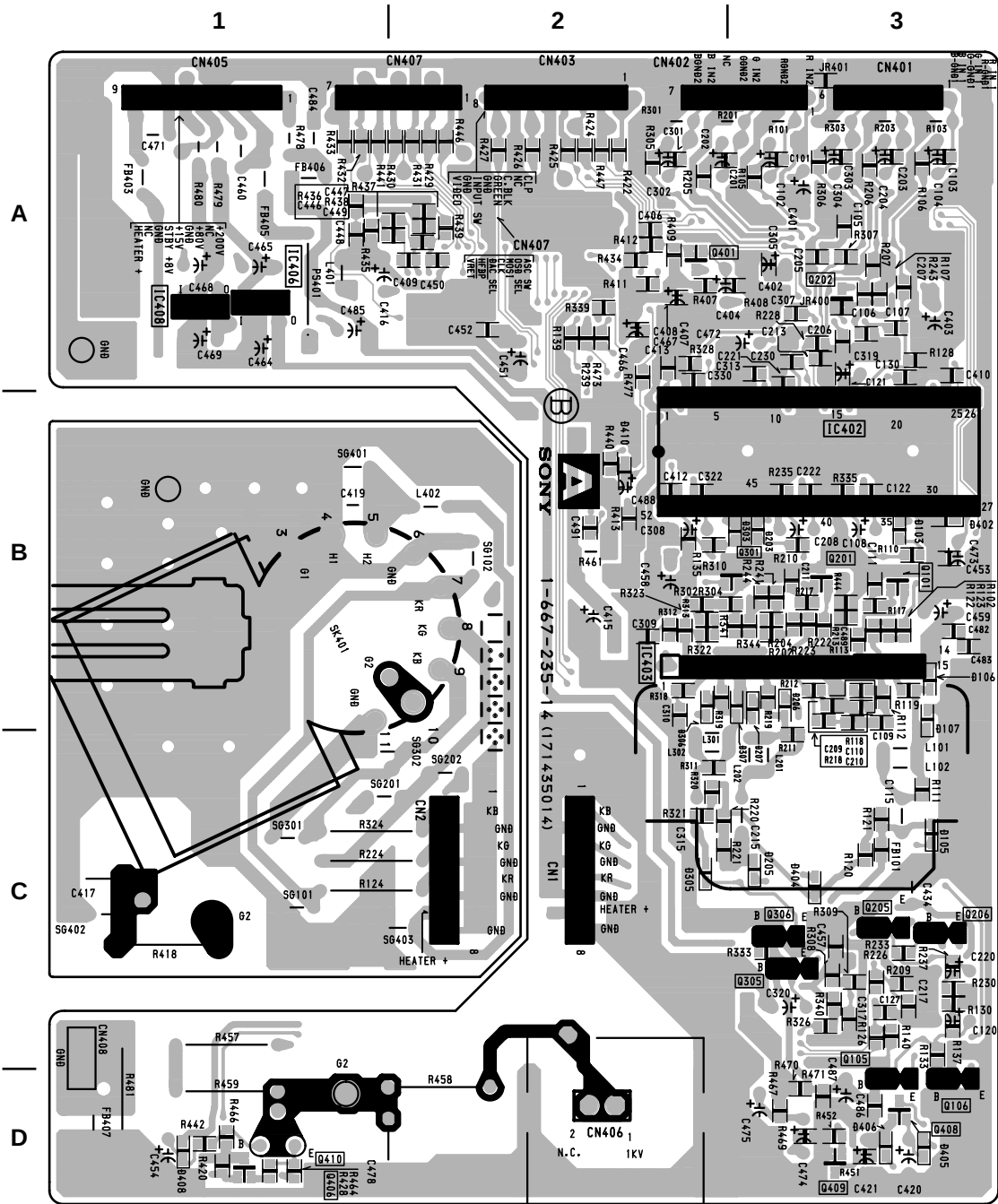
H BOARD



3) Schematic Diagram of A Board



— A BOARD (Conductor Side) —



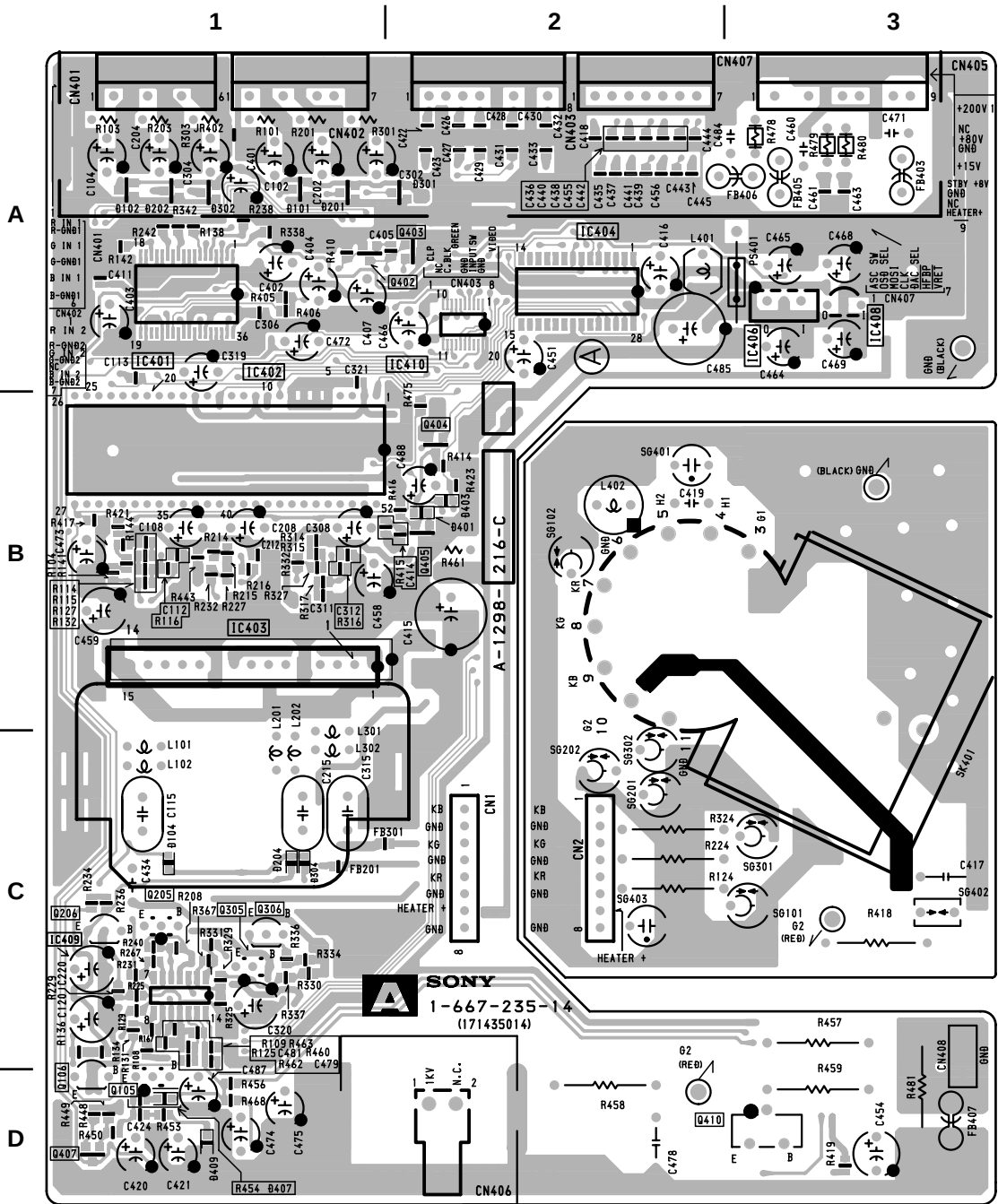
• A BOARD
SEMICONDUCTOR
LOCATION

IC			
(Conductor Side)	(Component Side)		
IC401	A-1		
IC402	B-3	B-1	
IC403	B-3	B-1	
IC404	A-1	A-2	
IC406	A-1	A-3	
IC408	A-1	A-3	
IC409		C-1	
IC410		A-2	

TRANSISTOR			
(Conductor Side)	(Component Side)		*
Q101	B-3	D-1	①
Q105	D-3	D-1	①
Q106	D-3	D-1	①
Q201	B-3		①
Q202	A-3		①
Q205	C-3	C-1	①
Q206	C-3	C-1	①
Q301	B-3		①
Q305	C-3	C-1	①
Q306	C-3	C-1	①
Q401	A-2		①
Q402		A-1	②
Q403		A-2	②
Q404		B-2	②
Q405		B-2	②
Q406	D-1		①
Q407		D-1	①
Q408	D-3		①
Q409	D-3		①
Q410	D-1	D-3	①

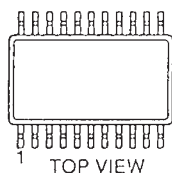
DIODE			
(Conductor Side)	(Component Side)		*
D101	A-1		⑦
D102		A-1	⑦
D103	B-3		③
D104		C-1	③
D105	C-3		③
D106	B-3		③
D107	B-3		③
D201	A-1		⑦
D202	A-1		⑦
D203	B-3		③
D204		C-1	③
D205	C-3		③
D206	B-3		③
D207	B-3		③
D301	A-2		⑦
D302	A-1		⑦
D303	B-3		③
D304		C-1	③
D305	C-2		③
D306	B-2		③
D307	B-3		③
D401		B-2	③
D402	B-3		③
D404	C-3		③
D405	D-3		③
D406	D-3		③
D407		D-1	③
D408	D-1		③
D409		D-1	③
D410	B-2		③

— A BOARD (Component Side) —

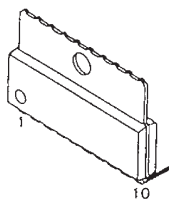


5-4. SEMICONDUCTORS

BA9756FS-E2
M62352GP-75E
M62352GP-75ED

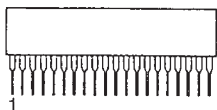


LA6510

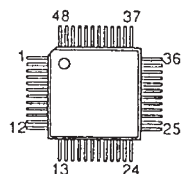


LA7841L

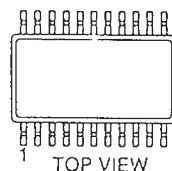
MARKING SIDE VIEW



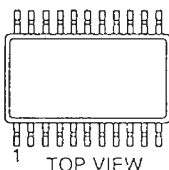
CXA2043Q



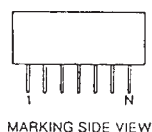
CXA2044M
LSC4380DW2EL



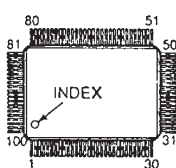
LM324M
TC74HCT04AF



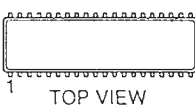
DM-60



MB90553PF-G-112-BND

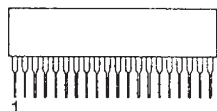


MC33262P
MM1170BFB

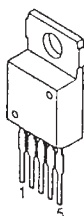


FA4111

MARKING SIDE VIEW



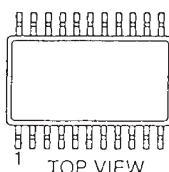
LA6500-FA



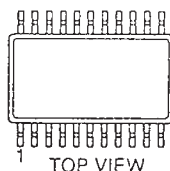
M52722P



M52755FP



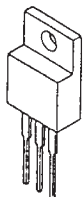
NJM4558M
TC7W04FU
 μ PC4558G2
24LC16BT/SN
24LC21A/SN



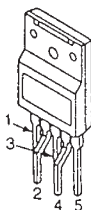
NJM78L05A
NJM78L09A
TA78L05S
TA78L09S



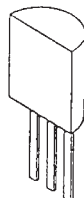
NJM78M09FA
TA7805S
TA7812S



SI-3050F



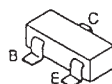
μ PC1093J



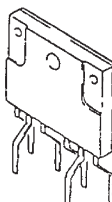
μ PC78L05J



DTA114GKAT146
DTA124EKA-T146
DTC114GKA
DTC114GKAT146
DTC124EK
DTC124EKA-T146
2SA1036K-Q
2SA1036K-T-146-Q
2SA1037AK-T146-QR
2SA1037AK-T146-R
2SA1037K-T-146-QR
2SA1162G
2SA1462-Y33
2SA1738-TX
2SB709A-QRS-TX
2SC1623-L5L6
2SC2411K-CQ
2SC2411K-T-146-CQ
2SC2412K-T-146-QR
2SC3545-T43



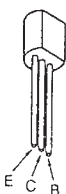
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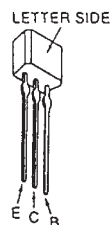
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2SC2458-YGR
2SC2459-GR



2SA1091-O
2SC2362K-G



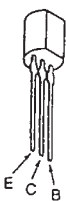
2SA1175-HFE
2SA1309A-QRSTA
2SC2784
2SC2785-HFE
2SC3311A-QRSTA



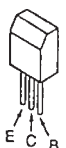
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2SC3421-Y



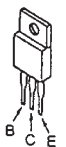
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2SC3209LK



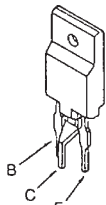
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2SC4686A (LBSONY)
2SJ449
2SJ449 (1)
2SJ449 (2)



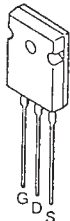
2SC4015TV2



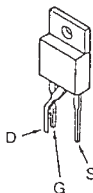
2SC5047-CA



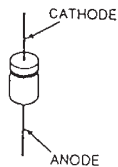
2SK1120LBSony2
2SK2098-01MR



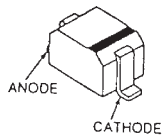
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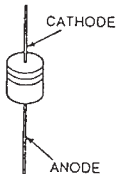
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ERA91-02
S2LA20F



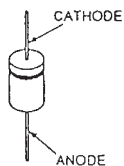
DTZ-TT11-16B
DTZ10B
DTZ13B
DTZ24B
DTZ33B
DTZ4.7C
DTZ5.1B
MA111
RD12SB2
RD5.6SB
UDZ-TE-17-10B
UDZ-TE-17-12B
UDZ-TE-17-13B
UDZ-TE-17-16B
UDZ-TE-17-24B
UDZ-TE-17-33B
UDZ-TE-17-4.7B
UDZ-TE-17-5.1B
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UDZ-TE-17-6.2B
UDZ-TE-17-7.5B



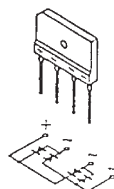
D1NL20-TR
GMA01
RD12ES-B2
RD16ES-B2
RD16ES-B3
RD18ES-B2
RD22ES-B2
RD5.1ES-B2
RD6.2ESB2
1SS119-25TD
1SS119-25
1SS120TD



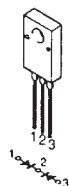
D2S4MF
D2S4MTA1



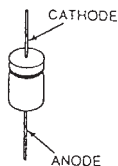
D4SBS4
D4SBS4-F
D4SBL40
D4SB60L



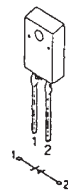
D5LC20U



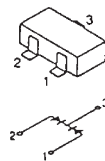
EGP20G
ERA34-10
RGP02-17EL-6433
RGP02-17PKG23
RGP02-20EG23
RGP02-20EL-6394
RGP15GPKG23
UF4005PKG23



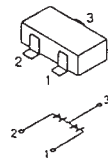
FMQ-G5GS
D5L60



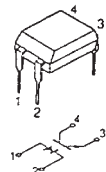
MA151WK
1SS184



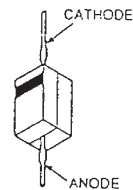
MA153
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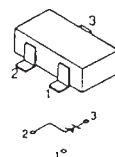
PC123F2
PC123FY2



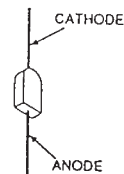
P6KE200AG23



RD6.2M-B1



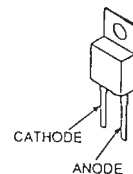
RM11A
RM11C



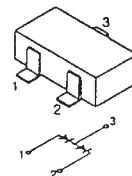
SB560



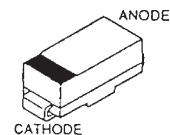
YG911S3R



1PS226-115



1SS376TE-17



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.

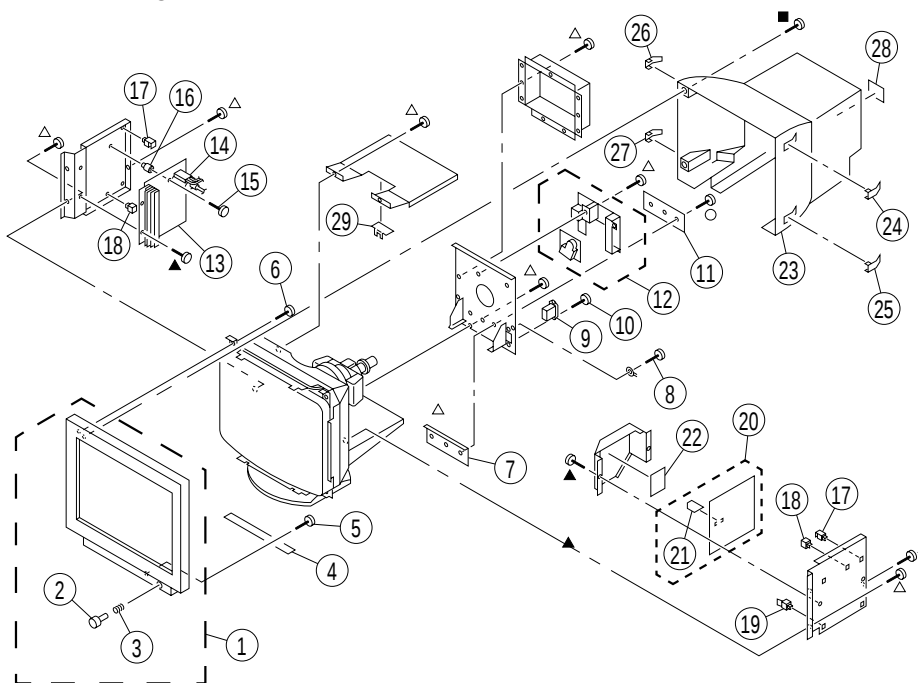
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

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

6-1. CHASSIS

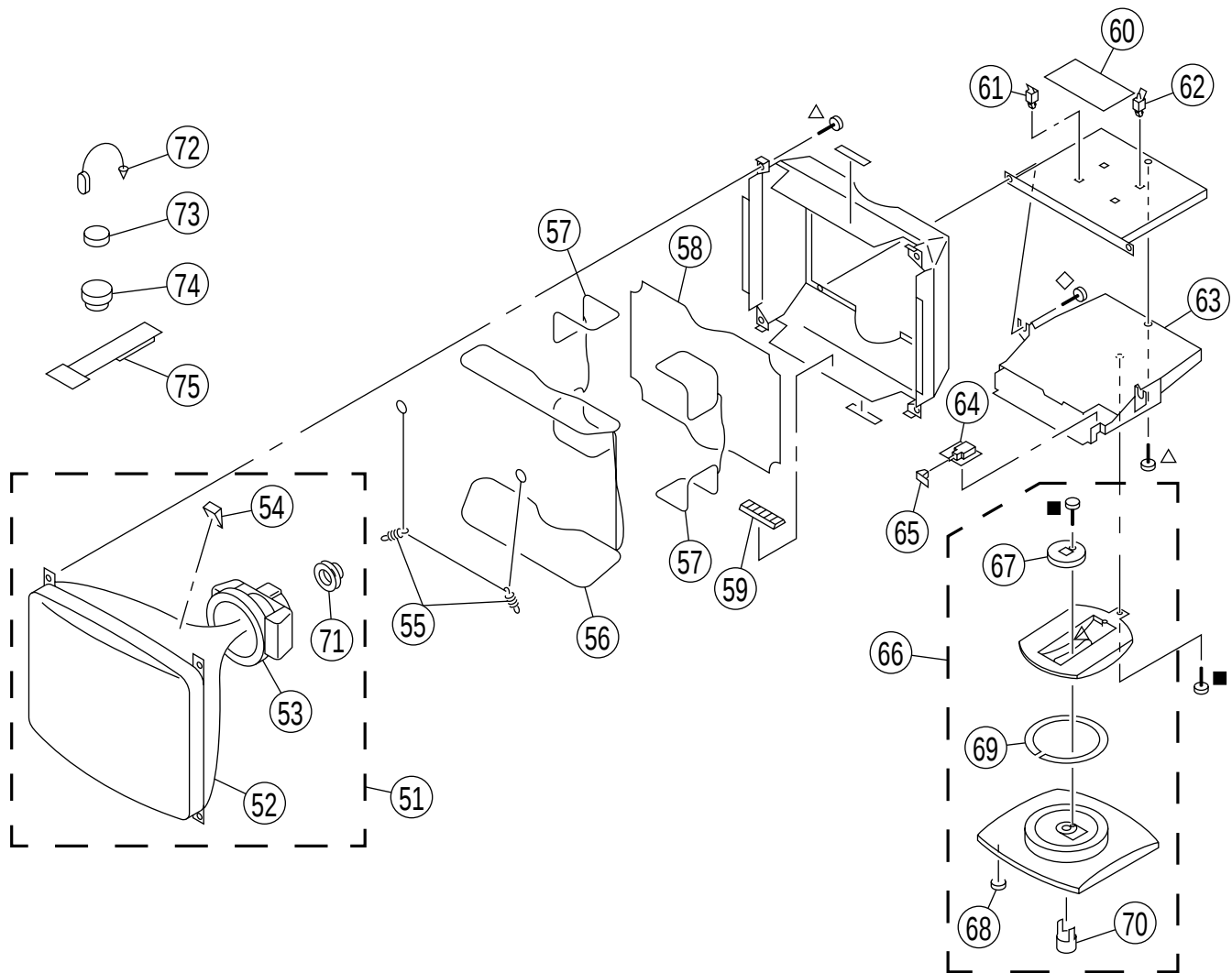
- ▲ 7-685-647-79 +BVTP 3X10
- 7-685-663-71 +BVTP 4X16
- 7-685-872-09 +BVTT 3X8
- △ 7-685-881-09 +BVTT 4X8



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4035-342-1	BEZEL ASSY [03N/03S]	2.3	22	*4-061-494-01	SHEET, INSULATE	
1	X-4035-486-1	BEZEL ASSY [43N/43S]	2.3	23	X-4035-382-1	CABINET ASSY [03N/03S]	
2	4-063-129-01	BUTTON, POWER		23	X-4035-488-1	CABINET ASSY [43N/43S]	
3	3-653-339-01	SPRING, COMPRESSION		24	4-063-133-01	COVER (RIGHT UPPER), SCREW	
4	*8-933-283-00	H BOARD, COMPLETE					[03N/03S]
5	4-029-432-01	SCREW (3x12), (+) BVWHTP		24	4-063-133-11	COVER (RIGHT UPPER), SCREW	
6	4-365-808-01	SCREW (5), TAPPING					[43N/43S]
7	1-694-381-11	TREMINAL BOARD ASSY, I/O		25	4-063-135-01	COVER (RIGHT LOWER), SCREW	
8	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)					[03N/03S]
9	△ 1-251-382-12	INLET, AC 3P (WITH NOISE FILTE)		25	4-063-135-11	COVER (RIGHT LOWER), SCREW	
							[43N/43S]
10	4-052-345-01	SCREW, (3x8) (+K), TAPPING		26	4-063-134-01	COVER (LEFT UPPER), SCREW	
11	*4-063-091-01	SHEET, CONNECTOR					[03N/03S]
12	*8-933-306-00	A BOARD, COMPLETE		26	4-063-134-11	COVER (LEFT UPPER), SCREW	
13	*8-933-307-00	D BOARD, COMPLETE					[43N/43S]
14	△ X-4035-170-1	TRANSFOMER ASSY, FLYBACK		27	4-063-136-01	COVER (LEFT LOWER), SCREW	
		(NX-4142//J1D4)					[03N/03S]
15	4-062-115-01	SCREW +P 3.5x20 TYPE2		27	4-063-136-11	COVER (LEFT LOWER), SCREW	
16	*4-060-359-01	HOLDER, PRINTED CIRCUIT BOARD					[43N/43S]
17	*3-701-903-11	HOLDER, PRINTED CIRCUIT BOARD		28	*4-064-137-01	LABEL, INFORMATION [03N]	
18	*4-382-848-01	HOLDER, PRINTED CIRCUIT BOARD		28	*4-064-137-11	LABEL, INFORMATION [03S]	
19	*3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD		28	*4-064-137-21	LABEL, INFORMATION [43N]	
20	*8-933-277-00	G BOARD, COMPLETE	21	28	*4-064-137-31	LABEL, INFORMATION [43S]	
21	*8-933-269-00	GA BOARD, COMPLETE		29	4-063-711-01	SUPPORT, HV CABLE	

6-2. PICTURE TUBE

■	7-685-663-71	+BVTP 4X16
△	7-685-881-09	+BVTT 4X8
◇	7-685-883-01	+BVTT 4X12



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	△ 8-738-796-81	ITC ASSY (21SRG-R2) [03N/43N]	52-54, 71	63	* 4-061-603-31	COVER, BOTTOM [03N/03S]	
51	△ 8-738-799-81	ITC ASSY (21SRG-RS2) [03S/43S]	52-54, 71	63	* 4-061-603-51	COVER, BOTTOM [43N/43S]	
52	△ 8-738-796-00	PICTURE TUBE (21SRG)		64	* 8-933-279-00	J BOARD, COMPLETE	
		[03N/43N Japan model]		65	* 4-394-972-21	CAP, POWER	
52	△ 8-738-796-05	PICTURE TUBE (21SRG)		66	X-4035-384-1	STAND ASSY [03N/03S]	67-70
		[03N/43N U/C, AEP model]		66	X-4035-590-2	STAND ASSY [43N/43S]	67-70
52	△ 8-738-799-05	PICTURE TUBE (21SRG) [03S/43S]		67	4-061-396-01	STOPPER (A)	
53	△ 8-451-493-31	DEFLECTION YOKE (Y21SRL-M3)		68	4-047-474-01	FOOT, RUBBER	
54	4-050-492-01	SPACER, DY		69	4-060-339-01	RING, TILT SWIVEL	
55	* 4-047-316-01	SPRING, TENSION		70	4-062-381-01	STOPPER (B)	
56	△ 1-416-437-11	COIL, DEMAGNETIC		71	△ 1-452-932-11	NECK ASSEMBLY, PICTURE TUBE	
57	△ 1-416-140-21	COIL, LANDING CORRECTION		72	4-308-870-00	CLIP, LEAD WIRE	
58	△ 1-416-438-21	COIL, LANDING CORRECTION		73	1-452-032-00	MAGNET, DISK:10mmφ	
59	4-062-670-03	SPACER, PICTURE TUBE		74	1-452-094-00	MAGNET, ROTATABLE DISK:15mmφ	
60	* 8-933-263-00	L BOARD, COMPLETE		75	4-059-493-01	PERMALLOY (90), CONV.CORRECT	
61	* 4-321-929-00	HOLDER, PRINTED CIRCUIT BOARD					
62	* 3-703-141-00	HOLDER, PRINTED CIRCUIT BOARD					

SECTION 7



ELECTRICAL PARTS LIST

NOTE:

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

Les composants identifiés par un tramé et une marque **A** 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.

RESISTORS

- All resistors are in ohms
- F : nonflammable

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

CAPACITORS

MF : μ F

COILS

UH : μ H

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		*8-933-306-00 A BOARD, COMPLETE *****		C230	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
		4-382-854-11 SCREW (M3X10), P, SW (+) (IC403)		C301	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
		<CAPACITOR>		C302	1-104-664-11	ELECT 47MF	20% 25V
C101	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C303	1-164-232-11	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	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C305	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C104	1-104-664-11	ELECT 47MF	20% 25V	C306	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C105	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C307	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C106	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C308	1-107-903-11	ELECT 2.2MF	20% 50V
C107	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C309	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C108	1-107-903-11	ELECT 2.2MF	20% 50V	C310	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C109	1-163-237-11	CERAMIC CHIP 27PF	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	1-164-232-11	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	1-107-949-11	ELECT 2.2MF	20% 200V	C320	1-107-949-11	ELECT 2.2MF	20% 200V
C121	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C321	1-164-232-11	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	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C330	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C130	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C401	1-126-964-11	ELECT 10MF	20% 50V
C201	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C402	1-104-664-11	ELECT 47MF	20% 25V
C202	1-104-664-11	ELECT 47MF	20% 25V	C403	1-104-664-11	ELECT 47MF	20% 25V
C203	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C404	1-126-964-11	ELECT 10MF	20% 50V
C204	1-104-664-11	ELECT 47MF	20% 25V	C405	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
C205	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C407	1-126-964-11	ELECT 10MF	20% 50V
C206	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C408	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C207	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C409	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C208	1-107-903-11	ELECT 2.2MF	20% 50V	C410	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C209	1-163-237-11	CERAMIC CHIP 27PF	5% 50V	C412	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C210	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C414	1-163-239-11	CERAMIC CHIP 33PF	5% 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	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C419	1-162-318-11	CERAMIC 0.001MF	10% 500V
C220	1-107-949-11	ELECT 2.2MF	20% 200V	C420	1-126-967-11	ELECT 47MF	20% 50V
C221	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C421	1-126-964-11	ELECT 10MF	20% 50V
C222	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C424	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C429	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
				C431	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C434	1-162-318-11	CERAMIC 0.001MF	10% 500V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C435	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D102	8-719-062-51	DIODE 1PS226-115	
C436	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	D103	8-719-404-49	DIODE MA111	
C438	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	D104	8-719-052-12	DIODE 1SS376TE-17	
C440	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	D105	8-719-052-12	DIODE 1SS376TE-17	
C442	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	D106	8-719-052-12	DIODE 1SS376TE-17	
C443	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	D107	8-719-052-12	DIODE 1SS376TE-17	
C444	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	D201	8-719-062-51	DIODE 1PS226-115	
C445	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	D202	8-719-062-51	DIODE 1PS226-115	
C446	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D203	8-719-404-49	DIODE MA111	
C447	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D204	8-719-052-12	DIODE 1SS376TE-17	
C448	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	D205	8-719-052-12	DIODE 1SS376TE-17	
C450	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	D206	8-719-052-12	DIODE 1SS376TE-17	
C451	1-126-964-11	ELECT 10MF	20% 50V	D207	8-719-052-12	DIODE 1SS376TE-17	
C452	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D301	8-719-062-51	DIODE 1PS226-115	
C453	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D302	8-719-062-51	DIODE 1PS226-115	
C454	1-104-665-11	ELECT 100MF	20% 25V	D303	8-719-404-49	DIODE MA111	
C455	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	D304	8-719-052-12	DIODE 1SS376TE-17	
C457	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D305	8-719-052-12	DIODE 1SS376TE-17	
C458	1-126-964-11	ELECT 10MF	20% 50V	D306	8-719-052-12	DIODE 1SS376TE-17	
C459	1-107-930-91	ELECT 22MF	20% 100V	D307	8-719-052-12	DIODE 1SS376TE-17	
C460	1-162-318-11	CERAMIC 0.001MF	10% 500V	D401	8-719-404-49	DIODE MA111	
C461	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D402	8-719-976-99	ZENER DIODE DTZ5.1B	
C463	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D403	8-719-404-49	DIODE MA111	
C464	1-107-906-11	ELECT 10MF	20% 50V	D404	8-719-052-12	DIODE 1SS376TE-17	
C465	1-107-906-11	ELECT 10MF	20% 50V	D405	8-719-404-49	DIODE MA111	
C466	1-126-964-11	ELECT 10MF	20% 50V	D406	8-719-404-49	DIODE MA111	
C467	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D407	8-719-404-49	DIODE MA111	
C468	1-126-964-11	ELECT 10MF	20% 50V	D408	8-719-404-49	DIODE MA111	
C469	1-126-964-11	ELECT 10MF	20% 50V	D409	8-719-404-49	DIODE MA111	
C471	1-162-318-11	CERAMIC 0.001MF	10% 500V	D410	8-719-404-49	DIODE MA111	
C478	1-115-350-51	CERAMIC 0.0047MF	2KV				
C479	1-163-133-00	CERAMIC CHIP 470PF	5% 50V				
C481	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
C482	1-115-339-11	CERAMIC CHIP 0.1MF	10% 50V				
C483	1-115-339-11	CERAMIC CHIP 0.1MF	10% 50V				
C484	1-162-318-11	CERAMIC 0.001MF	10% 500V				
C485	1-107-652-11	ELECT 10MF	20% 250V				
C486	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
C487	1-126-964-11	ELECT 10MF	20% 50V				
C488	1-104-664-11	ELECT 47MF	20% 25V				
C489	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C491	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
<CONNECTOR>							
CN401*1-564-521-11 PLUG, CONNECTOR 6P							
CN402*1-564-522-11 PLUG, CONNECTOR 7P							
CN403 1-564-523-11 PLUG, CONNECTOR 8P							
CN405 1-564-524-11 PLUG, CONNECTOR 9P							
CN406*1-766-179-11 PIN, CONNECTOR (PC BOARD) 2P							
CN407*1-564-522-11 PLUG, CONNECTOR 7P							
<DIODE>							
D101	8-719-062-51	DIODE 1PS226-115					
<FERRITE BEAD>							
FB101	1-216-295-91	SHORT	0				
FB201	1-216-295-91	SHORT	0				
FB301	1-216-295-91	SHORT	0				
FB403	1-412-911-31	FERRITE	0UH				
FB405	1-412-911-31	FERRITE	0UH				
FB406	1-412-911-31	FERRITE	0UH				
<IC>							
IC401	8-759-522-86	IC M52755FP-TP					
IC402	8-759-468-63	IC M52722P					
IC403	8-749-013-74	IC FA4111					
IC404	8-759-492-78	IC LSC4380DW2EL					
IC406	8-759-231-58	IC TA7812S					
IC408	8-759-239-14	IC TA78L05S					
IC409	8-759-502-82	IC LM324M					
IC410	8-759-635-27	IC M62352GP-75E					
<COIL>							
L101	1-412-478-11	INDUCTOR	0.15UH				
L201	1-412-478-11	INDUCTOR	0.15UH				



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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
L301	1-412-478-11	INDUCTOR	0.15UH	R126	1-216-097-91	RES,CHIP	100K 5% 1/10W
L401	1-408-421-00	INDUCTOR	100UH	R127	1-216-035-00	RES,CHIP	270 5% 1/10W
L402	1-412-529-11	INDUCTOR	22UH	R128	1-216-121-91	RES,CHIP	1M 5% 1/10W
<IC LINK>				R129	1-218-776-11	METAL CHIP	1M 0.50%1/10W
PS401 Δ 1-533-590-31 LINK, IC (1A/90V AC, 60V DC)				R130	1-216-097-91	RES,CHIP	100K 5% 1/10W
<TRANSISTOR>				R131	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q101	8-729-112-65	TRANSISTOR 2SA1462-Y33		R132	1-216-035-00	RES,CHIP	270 5% 1/10W
Q105	8-729-041-66	TRANSISTOR 2SC4015TV2		R133	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q106	8-729-200-17	TRANSISTOR 2SA1091-O		R134	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q201	8-729-112-65	TRANSISTOR 2SA1462-Y33		R135	1-216-037-00	RES,CHIP	330 5% 1/10W
Q202	8-729-107-31	TRANSISTOR 2SC3545-T43		R136	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q205	8-729-041-66	TRANSISTOR 2SC4015TV2		R137	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q206	8-729-200-17	TRANSISTOR 2SA1091-O		R139	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q301	8-729-112-65	TRANSISTOR 2SA1462-Y33		R140	1-216-129-00	RES,CHIP	2.2M 5% 1/10W
Q305	8-729-041-66	TRANSISTOR 2SC4015TV2		R141	1-216-025-91	RES,CHIP	100 5% 1/10W
Q306	8-729-200-17	TRANSISTOR 2SA1091-O		R144	1-216-295-91	SHORT	0
Q401	8-729-216-22	TRANSISTOR 2SA1162-G		R167	1-216-121-91	RES,CHIP	1M 5% 1/10W
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R201	1-215-395-00	METAL	82 1% 1/4W
Q403	8-729-216-22	TRANSISTOR 2SA1162-G		R202	1-216-025-91	RES,CHIP	100 5% 1/10W
Q404	8-729-901-00	TRANSISTOR DTC124EK		R203	1-215-395-00	METAL	82 1% 1/4W
Q405	8-729-216-22	TRANSISTOR 2SA1162-G		R204	1-216-025-91	RES,CHIP	100 5% 1/10W
Q406	8-729-027-31	TRANSISTOR DTA124EKA-T146		R205	1-216-017-91	RES,CHIP	47 5% 1/10W
Q408	8-729-027-31	TRANSISTOR DTA124EKA-T146		R206	1-216-017-91	RES,CHIP	47 5% 1/10W
Q409	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R208	1-216-099-00	RES,CHIP	120K 5% 1/10W
Q410	8-729-020-07	TRANSISTOR 2SC4686A(LBSONY)		R209	1-216-107-00	RES,CHIP	270K 5% 1/10W
<RESISTOR>				R210	1-216-295-91	SHORT	0
R101	1-215-395-00	METAL	82 1% 1/4W	R211	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R102	1-216-025-91	RES,CHIP	100 5% 1/10W	R212	1-216-621-11	METAL CHIP	56 0.50%1/10W
R103	1-215-395-00	METAL	82 1% 1/4W	R213	1-216-009-00	RES,CHIP	22 5% 1/10W
R104	1-216-025-91	RES,CHIP	100 5% 1/10W	R214	1-216-035-00	RES,CHIP	270 5% 1/10W
R105	1-216-017-91	RES,CHIP	47 5% 1/10W	R215	1-216-035-00	RES,CHIP	270 5% 1/10W
R106	1-216-017-91	RES,CHIP	47 5% 1/10W	R216	1-216-017-91	RES,CHIP	47 5% 1/10W
R108	1-216-099-00	RES,CHIP	120K 5% 1/10W	R217	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
R109	1-216-107-00	RES,CHIP	270K 5% 1/10W	R218	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R110	1-216-295-91	SHORT	0	R219	1-216-009-00	RES,CHIP	22 5% 1/10W
R111	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R220	1-216-097-91	RES,CHIP	100K 5% 1/10W
R112	1-216-617-11	METAL CHIP	39 0.50%1/10W	R221	1-216-097-91	RES,CHIP	100K 5% 1/10W
R113	1-216-009-00	RES,CHIP	22 5% 1/10W	R222	1-216-027-00	RES,CHIP	120 5% 1/10W
R114	1-216-035-00	RES,CHIP	270 5% 1/10W	R223	1-216-027-00	RES,CHIP	120 5% 1/10W
R115	1-216-035-00	RES,CHIP	270 5% 1/10W	R224	1-219-497-11	CARBON	22 5% 1/2W
R116	1-216-017-91	RES,CHIP	47 5% 1/10W	R225	1-216-693-11	METAL CHIP	56K 0.50%1/10W
R117	1-216-063-91	RES,CHIP	3.9K 5% 1/10W	R226	1-216-097-91	RES,CHIP	100K 5% 1/10W
R118	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R227	1-216-035-00	RES,CHIP	270 5% 1/10W
R119	1-216-009-00	RES,CHIP	22 5% 1/10W	R228	1-216-121-91	RES,CHIP	1M 5% 1/10W
R120	1-216-097-91	RES,CHIP	100K 5% 1/10W	R229	1-218-776-11	METAL CHIP	1M 0.50%1/10W
R121	1-216-097-91	RES,CHIP	100K 5% 1/10W	R230	1-216-097-91	RES,CHIP	100K 5% 1/10W
R122	1-216-027-00	RES,CHIP	120 5% 1/10W	R231	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R123	1-216-027-00	RES,CHIP	120 5% 1/10W	R232	1-216-035-00	RES,CHIP	270 5% 1/10W
R124	1-219-497-11	CARBON	22 5% 1/2W	R233	1-216-049-91	RES,CHIP	1K 5% 1/10W
R125	1-216-693-11	METAL CHIP	56K 0.50%1/10W	R234	1-216-097-91	RES,CHIP	100K 5% 1/10W
				R235	1-216-037-00	RES,CHIP	330 5% 1/10W
				R236	1-216-097-91	RES,CHIP	100K 5% 1/10W
				R237	1-216-097-91	RES,CHIP	100K 5% 1/10W
				R239	1-216-073-00	RES,CHIP	10K 5% 1/10W
				R240	1-216-129-00	RES,CHIP	2.2M 5% 1/10W



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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
SG401	1-519-526-11	LAMP, NEON		R7512	1-216-089-91	RES,CHIP 47K 5% 1/10W	
SG402	1-519-422-11	GAP, SPARK		R7513	1-216-093-00	RES,CHIP 68K 5% 1/10W	
<SOCKET>				*****			
SK401 Δ 1-251-640-11 SOCKET, PICTURE TUBE				* 8-933-277-00 G BOARD, COMPLETE			
*****				*****			
* 8-933-269-00 GA BOARD, COMPLETE				4-382-854-01 SCREW (M3X8), P, SW (+) (IC660)			
*****				4-382-854-11 SCREW (M3X10), P, SW (+)			
<CAPACITOR>				(Q610, Q640, D610, D611, D672)			
C7501	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	* 7-322-065-72 RUBBER, RTV (SE-9168) (130G)			
C7502	1-136-169-00	FILM 0.22MF	5% 50V	(C671, C682, VDR640)			
C7503	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	<CAPACITOR>			
C7504	1-136-165-00	FILM 0.1MF	5% 50V	C601 Δ 1-113-900-51	CERAMIC	470PF	10% 250V
C7505	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C602 Δ 1-113-900-51	CERAMIC	470PF	10% 250V
C7506	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C603 Δ 1-107-533-51	FILM	1MF	20% 250V
<CONNECTOR>				C604 Δ 1-107-533-51	FILM	1MF	20% 250V
CN7501	1-774-512-11	CONNECTOR, BPARD TO BOARD 10P		C605 Δ 1-113-926-91	CERAMIC	0.0047MF	250V
<DIODE>				C606 Δ 1-113-926-91	CERAMIC	0.0047MF	250V
D7501	8-719-110-57	DIODE RD22ESB2		C607	1-113-900-11	CERAMIC	470PF 10% 250V
D7502	8-719-911-19	DIODE 1SS119-25		C610	1-137-479-11	FILM	1MF 10% 400V
<IC>				C611	1-117-849-11	ELECT	330MF 20% 450V
IC7501	8-759-482-62	IC MC33262P		C612	1-126-959-11	ELECT	0.47MF 20% 50V
<TRANSISTOR>				C616	1-107-888-11	ELECT	47MF 20% 25V
Q7501	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		C640	1-165-127-11	CERAMIC	470PF 10% 500V
Q7502	8-729-120-28	TRANSISTOR 2SC1623-L5L6		C641	1-165-127-11	CERAMIC	470PF 10% 500V
Q7503	8-729-120-28	TRANSISTOR 2SC1623-L5L6		C642	1-136-171-00	FILM	0.33MF 5% 50V
Q7504	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		C643	1-136-171-00	FILM	0.33MF 5% 50V
<RESISTOR>				C644	1-165-127-11	CERAMIC	470PF 10% 500V
R7501	1-216-025-91	RES,CHIP 100 5% 1/10W		C645	1-136-167-00	FILM	0.15MF 5% 50V
R7502	1-216-073-00	RES,CHIP 10K 5% 1/10W		C646	1-136-167-00	FILM	0.15MF 5% 50V
R7503	1-216-041-00	RES,CHIP 470 5% 1/10W		C647	1-129-719-00	FILM	0.027MF 5% 630V
R7504	1-216-675-11	METAL CHIP 10K 0.50%1/10W		C660	1-111-057-11	ELECT	120MF 20% 25V
R7505	1-216-673-11	METAL CHIP 8.2K 0.50%1/10W		C661	1-128-526-11	ELECT	100MF 20% 16V
R7506	1-216-073-00	RES,CHIP 10K 5% 1/10W		C662	1-137-399-11	FILM	0.1MF 5% 50V
R7507	1-216-089-91	RES,CHIP 47K 5% 1/10W		C663	1-126-965-11	ELECT	22MF 20% 50V
R7508	1-216-073-00	RES,CHIP 10K 5% 1/10W		C670	1-137-370-11	FILM	0.01MF 5% 50V
R7509	1-216-073-00	RES,CHIP 10K 5% 1/10W		C671	1-107-966-51	ELECT	220MF 20% 250V
R7510	1-216-073-00	RES,CHIP 10K 5% 1/10W		C672	1-107-959-11	ELECT	3.3MF 20% 250V
R7511	1-216-073-00	RES,CHIP 10K 5% 1/10W		C673	1-107-935-11	ELECT	330MF 20% 100V
				C674	1-107-928-11	ELECT	4.7MF 20% 100V
				C675	1-107-890-11	ELECT	2200MF 20% 25V
				C676	1-107-888-11	ELECT	47MF 20% 25V
				C677	1-107-890-11	ELECT	2200MF 20% 25V
				C678	1-107-888-11	ELECT	47MF 20% 25V
				C679	1-126-927-11	ELECT	2200MF 20% 10V
				C680	1-126-927-11	ELECT	2200MF 20% 10V
				C681	1-107-905-11	ELECT	4.7MF 20% 50V
				C682	1-126-963-11	ELECT	4.7MF 20% 50V
				C683	1-164-646-11	CERAMIC	2200PF 10% 500V
				C684	1-137-370-11	FILM	0.01MF 5% 50V
				C685	1-107-909-11	ELECT	47MF 20% 50V
				C690	1-107-888-11	ELECT	47MF 20% 25V

The components identified by shading
and mark Δ are critical for safety.
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Les composants identifiés par un trame
et une marque Δ sont critiques pour la
sécurité. Ne les remplacer que par une
pièce portant le numéro spécifié.

6558-03N/03S/43N/43S



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C691	1-107-888-11	ELECT	47MF 20% 25V			<IC>	
C692	1-111-016-11	ELECT	0.0012F 20% 10V				
C693	1-137-399-11	FILM	0.1MF 5% 50V	IC630	8-749-013-03	IC DM-60	
C695	1-164-644-11	CERAMIC	330PF 10% 500V	IC660	8-759-470-64	IC TOP223Y-BB	
C697	1-136-165-00	FILM	0.1MF 5% 50V	IC690	8-749-011-42	IC SI-3050F	
				IC691	8-759-140-85	IC UPC1093J	
						<COIL>	
		<CONNECTOR>					
		CN603*1-580-689-11 PIN, CONNECTOR (PC BOARD) 4P		L610	1-416-409-11	INDUCTOR 0UH	
		CN604 1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P		L611	1-411-674-11	INDUCTOR 0UH	
		CN605 1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P		L670	1-412-529-11	INDUCTOR 22UH	
		CN610*1-774-511-11 CONNECTOR, BOARD TO BOARD 10P		L671	1-412-529-11	INDUCTOR 22UH	
		CN671*1-564-514-11 PLUG, CONNECTOR 11P		L672	1-412-529-11	INDUCTOR 22UH	
		CN672*1-564-512-11 PLUG, CONNECTOR 9P					
		CN673*1-564-508-11 PLUG, CONNECTOR 5P		L673	1-412-529-11	INDUCTOR 22UH	
				L691	1-412-529-11	INDUCTOR 22UH	
		<DIODE>				<PHOTO COUPLER>	
		D610 Δ 8-719-510-53 DIODE D4SB60L					
		D611 8-719-029-04 DIODE D5L60		PH660	8-749-010-64	PHOTO COUPLER PC123F2	
		D612 8-719-304-63 DIODE RM11C		PH680	8-749-010-64	PHOTO COUPLER PC123F2	
		D613 8-719-110-49 DIODE RD18ESB2					
		D614 8-719-977-28 DIODE DTZ10B				<IC LINK>	
		D617 8-719-404-49 DIODE MA111					
		D640 8-719-404-49 DIODE MA111				PS670 Δ 1-533-593-31 LINK, IC (2A/90V AV, 60V DC)	
		D660 8-719-059-23 DIODE P6KE200AG23				PS671 Δ 1-533-593-31 LINK, IC (2A/90V AV, 60V DC)	
		D661 8-719-979-64 DIODE UF4005PKG23				PS673 Δ 1-533-593-31 LINK, IC (2A/90V AV, 60V DC)	
		D662 8-719-058-91 DIODE AG01A-V0				PS674 Δ 1-533-593-31 LINK, IC (2A/90V AV, 60V DC)	
		D663 8-719-110-31 DIODE RD12ESB2				<TRANSISTOR>	
		D666 8-719-105-99 DIODE RD6.2M-B1					
		D670 8-719-064-49 DIODE D4SBL40		Q610	8-729-041-65	TRANSISTOR 2SK2195F04	
		D671 8-719-510-64 DIODE S2LA20F		Q615	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		D672 8-719-052-91 DIODE D4SBS4-F		Q640	8-729-041-12	TRANSISTOR MX0841AB-F	
		D673 8-719-022-97 DIODE D2S4MF		Q641	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		D674 8-719-022-97 DIODE D2S4MF		Q642	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		D677 8-719-911-19 DIODE 1SS119-25					
		D678 8-719-911-19 DIODE 1SS119-25		Q660	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		D680 8-719-404-49 DIODE MA111		Q680	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		D681 8-719-404-49 DIODE MA111		Q681	8-729-230-45	TRANSISTOR 2SC2458-YGR	
		D682 8-719-510-64 DIODE S2LA20F		Q682	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		D683 8-719-911-19 DIODE 1SS119-25		Q683	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		D684 8-719-110-57 DIODE RD22ESB2					
		D691 8-719-510-37 DIODE D5LC20U		Q690	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		D692 8-719-911-19 DIODE 1SS119-25		Q691	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		D693 8-719-404-49 DIODE MA111				<RESISTOR>	
		<FUSE>					
		F601 Δ 1-576-233-11 FUSE (H.B.C.) (6.3A/250V)				R601 Δ 1-220-825-91 CARBON 330K 5% 1/2W	
		1-533-223-11 HOLDER, FUSE ;F601				R604 1-260-089-11 CARBON 150 5% 1/2W	
						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	
		<FERRITE BEAD>				R613 1-215-477-00 METAL 220K 1% 1/4W	
						R614 1-215-473-00 METAL 150K 1% 1/4W	
		FB610 1-410-396-41 FERRITE 0.45UH				R615 1-215-473-00 METAL 150K 1% 1/4W	
		FB611 1-410-396-41 FERRITE 0.45UH				R616 1-215-473-00 METAL 150K 1% 1/4W	
		FB612 1-410-396-41 FERRITE 0.45UH				R617 1-215-481-00 METAL 330K 1% 1/4W	
						R618 1-215-477-00 METAL 220K 1% 1/4W	



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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R619	1-215-485-00	METAL 470K	1% 1/4W	R693	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R620	1-215-485-00	METAL 470K	1% 1/4W	R694	1-216-073-00	RES,CHIP 10K	5% 1/10W
R621	1-215-481-00	METAL 330K	1% 1/4W	R695	1-249-443-11	CARBON 0.47	5% 1/4W F
R622	1-216-049-91	RES,CHIP 1K	5% 1/10W	R696	1-216-633-11	METAL CHIP 180	0.50%1/10W
R623	1-216-651-11	METAL CHIP 1K	0.50%1/10W	R697	1-216-649-11	METAL CHIP 820	0.50%1/10W
R624	1-216-671-11	METAL CHIP 6.8K	0.50%1/10W	R698	1-216-073-00	RES,CHIP 10K	5% 1/10W
R625	1-249-389-11	CARBON 4.7	5% 1/4W	R699	1-216-081-00	RES,CHIP 22K	5% 1/10W
R626	1-249-429-11	CARBON 10K	5% 1/4W				
R627	1-215-479-00	METAL 270K	1% 1/4W				
R628	1-215-481-00	METAL 330K	1% 1/4W	<RELAY>			
R629	1-215-461-00	METAL 47K	1% 1/4W	RY601 Δ 1-515-669-21 RELAY			
R631	1-247-807-31	CARBON 100	5% 1/4W	RY602 Δ 1-755-031-11 RELAY			
R632	1-216-073-00	RES,CHIP 10K	5% 1/10W				
R633	1-215-481-00	METAL 330K	1% 1/4W	<TRANSFORMER>			
R635	1-216-073-00	RES,CHIP 10K	5% 1/10W	T601 Δ 1-429-180-11 TRANSFORMER, LINE FILTER			
R640	1-202-933-61	FUSIBLE 0.1	10% 1/2W F	T640 1-431-538-11 TRANSFORMER, CONVERTER (PIT)			
R641	1-218-642-11	METAL OXIDE 100K	5% 1W F	T641 1-429-992-11 TRANSFORMER, CONVERTER (PRT)			
R642	1-218-642-11	METAL OXIDE 100K	5% 1W F	T660 1-431-565-11 TRANSFORMER, CONVERTER (SRT)			
R643	1-247-863-91	CARBON 22K	5% 1/4W				
R644	1-216-105-91	RES,CHIP 220K	5% 1/10W	<THERMISTOR>			
R645	1-216-081-00	RES,CHIP 22K	5% 1/10W	TH601 Δ 1-809-260-11 THERMISTOR, POWER			
R646	1-216-073-00	RES,CHIP 10K	5% 1/10W	THP601 Δ 1-809-827-11 THERMISTOR, POSITIVE			
R647	1-249-441-11	CARBON 100K	5% 1/4W				
R648	1-216-353-00	METAL OXIDE 2.2	5% 1W F	<VARISTOR>			
R649	1-218-642-11	METAL OXIDE 100K	5% 1W F	VDR601 Δ 1-801-268-51VARISTOR TNR14V471K660			
R650	1-218-642-11	METAL OXIDE 100K	5% 1W F	VDR602 Δ 1-810-622-21VARISTOR			
R651	1-216-353-00	METAL OXIDE 2.2	5% 1W F	VDR640 1-810-974-21VARISTOR TNR10V431K660			
R652	1-212-942-00	FUSIBLE 2.2	5% 1/2W F				
R655	1-216-073-00	RES,CHIP 10K	5% 1/10W	*****			
R661	1-249-387-11	CARBON 3.3	5% 1/4W F	* 8-933-307-00 D BOARD, COMPLETE			
R662	1-216-073-00	RES,CHIP 10K	5% 1/10W	*****			
R663	1-216-073-00	RES,CHIP 10K	5% 1/10W	4-040-989-01 SPRING (A), TR RETAINER (IC702, R511)			
R664	1-247-791-91	CARBON 22	5% 1/4W	4-040-992-01 SPRING (AA), TR RETAINER			
R665	1-216-033-00	RES,CHIP 220	5% 1/10W	(IC502, Q507)			
R666	1-215-441-00	METAL 6.8K	1% 1/4W	4-040-994-01 SPRING (BB), TR RETAINER			
R667	1-215-433-00	METAL 3.3K	1% 1/4W	(Q508, D519)			
R668	1-249-401-11	CARBON 47	5% 1/4W	4-047-285-01 SHEET, INSULATING (Q909)			
R669	1-216-057-00	RES,CHIP 2.2K	5% 1/10W	4-060-719-02 SHEET, INSULATE (IC502)			
R671	1-216-113-00	RES,CHIP 470K	5% 1/10W	4-060-720-01 SHEET, INSULATE (Q508)			
R672	1-216-049-91	RES,CHIP 1K	5% 1/10W	4-060-844-01 SHEET, INSULATING (IC702)			
R673	1-249-413-11	CARBON 470	5% 1/4W F	4-382-854-01 SCREW (M3X8), P, SW (+) (R937)			
R674	1-249-377-11	CARBON 0.47	5% 1/4W F	4-382-854-11 SCREW (M3X10), P, SW (+)			
R675	1-260-292-11	CARBON 1	5% 1/2W	(IC702, Q704, Q706, Q908, Q909, R937)			
R676	1-249-413-11	CARBON 470	5% 1/4W	7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3			
R680	1-216-073-00	RES,CHIP 10K	5% 1/10W	(IC502, Q507, Q508, D519, R511)			
R681	1-216-049-91	RES,CHIP 1K	5% 1/10W	<CAPACITOR>			
R682	1-216-065-00	RES,CHIP 4.7K	5% 1/10W	C001 1-164-232-11 CERAMIC CHIP 0.01MF 10% 50V			
R683	1-216-025-91	RES,CHIP 100	5% 1/10W	C002 1-163-009-11 CERAMIC CHIP 0.001MF 10% 50V			
R685	1-216-073-00	RES,CHIP 10K	5% 1/10W	C003 1-163-019-00 CERAMIC CHIP 0.0068MF 10% 50V			
R686	1-216-049-91	RES,CHIP 1K	5% 1/10W	C004 1-164-232-11 CERAMIC CHIP 0.01MF 10% 50V			
R687	1-216-049-91	RES,CHIP 1K	5% 1/10W	C005 1-164-232-11 CERAMIC CHIP 0.01MF 10% 50V			
R688	1-216-073-00	RES,CHIP 10K	5% 1/10W				
R689	1-216-073-00	RES,CHIP 10K	5% 1/10W				
R691	1-216-073-00	RES,CHIP 10K	5% 1/10W				
R692	1-260-085-11	CARBON 68	5% 1/2W				



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C006	1-126-960-11	ELECT 1MF	20% 50V	C066	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C007	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C067	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
C008	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C068	1-126-964-11	ELECT 10MF	20% 50V
C009	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C069	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C010	1-163-237-11	CERAMIC CHIP 27PF	5% 50V	C070	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C011	1-163-237-11	CERAMIC CHIP 27PF	5% 50V	C072	1-126-960-11	ELECT 1MF	20% 50V
C012	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C073	1-163-222-11	CERAMIC CHIP 5PF	0.25PF 50V
C013	1-126-967-11	ELECT 47MF	20% 50V	C074	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C014	1-107-914-11	ELECT 1000MF	20% 25V	C075	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C015	1-107-914-11	ELECT 1000MF	20% 25V	C076	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C016	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C077	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C017	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C078	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C018	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C079	1-126-967-11	ELECT 47MF	20% 50V
C019	1-126-967-11	ELECT 47MF	20% 50V	C080	1-126-967-11	ELECT 47MF	20% 50V
C020	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C081	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C021	1-163-023-00	CERAMIC CHIP 0.015MF	10% 50V	C082	1-126-964-11	ELECT 10MF	20% 50V
C022	1-126-933-11	ELECT 100MF	20% 16V	C083	1-137-399-11	FILM 0.1MF	5% 50V
C023	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C084	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C024	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C085	1-137-399-11	FILM 0.1MF	5% 50V
C025	1-126-960-11	ELECT 1MF	20% 50V	C086	1-126-964-11	ELECT 10MF	20% 50V
C026	1-137-372-11	FILM 0.022MF	5% 50V	C087	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C027	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C090	1-109-982-11	CERAMIC CHIP 1MF	10% 10V
C028	1-164-695-11	CERAMIC CHIP 0.0022MF	5% 50V	C092	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C029	1-126-960-11	ELECT 1MF	20% 50V	C093	1-126-964-11	ELECT 10MF	20% 50V
C030	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C094	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C031	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C095	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C032	1-163-019-00	CERAMIC CHIP 0.0068MF	10% 50V	C096	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C034	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C097	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C035	1-163-253-11	CERAMIC CHIP 120PF	5% 50V	C098	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C036	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C099	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C037	1-126-934-11	ELECT 220MF	20% 16V	C501	1-107-909-11	ELECT 47MF	20% 50V
C038	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C502	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
C039	1-126-964-11	ELECT 10MF	20% 50V	C503	1-136-169-00	FILM 0.22MF	5% 50V
C040	1-126-963-11	ELECT 4.7MF	20% 50V	C504	1-137-605-11	FILM 0.01MF	10% 250V
C041	1-126-960-11	ELECT 1MF	20% 50V	C505	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C042	1-126-967-11	ELECT 47MF	20% 50V	C506	1-136-169-00	FILM 0.22MF	5% 50V
C043	1-126-967-11	ELECT 47MF	20% 50V	C507	1-136-173-00	FILM 0.47MF	5% 50V
C044	1-126-967-11	ELECT 47MF	20% 50V	C508	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C045	1-163-137-00	CERAMIC CHIP 680PF	5% 50V	C509	1-126-941-11	ELECT 470MF	20% 25V
C046	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C510	1-137-368-11	FILM 0.0047MF	5% 50V
C047	1-126-934-11	ELECT 220MF	20% 16V	C511	1-117-398-11	ELECT 33MF	20% 250V
C048	1-164-695-11	CERAMIC CHIP 0.0022MF	5% 50V	C512	1-107-889-11	ELECT 220MF	20% 25V
C049	1-163-137-00	CERAMIC CHIP 680PF	5% 50V	C513	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C050	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	C514	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C051	1-126-960-11	ELECT 1MF	20% 50V	C515	1-107-889-11	ELECT 220MF	20% 25V
C052	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	C516	1-137-399-11	FILM 0.1MF	5% 50V
C054	1-126-963-11	ELECT 4.7MF	20% 50V	C517	1-104-574-11	CERAMIC 0.0047MF	10% 2KV
C055	1-126-963-11	ELECT 4.7MF	20% 50V	C518	1-117-959-11	FILM 4700PF	3% 1.8KV
C056	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	C519	1-107-444-11	CERAMIC 100PF	5% 2KV
C057	1-107-909-11	ELECT 47MF	20% 50V	C520	1-136-553-11	FILM 0.0015MF	5% 630V
C058	1-126-934-11	ELECT 220MF	20% 16V	C521	1-107-597-11	CERAMIC 22PF	5% 500V
C059	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C522	1-107-444-11	CERAMIC 100PF	5% 2KV
C060	1-126-964-11	ELECT 10MF	20% 50V	C523	1-137-370-11	FILM 0.01MF	5% 50V
C061	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C524	1-113-694-11	FILM 0.056MF	5% 250V
C063	1-137-399-11	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



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C527	1-115-517-11	FILM	0.39MF 5% 250V	C903	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
C528	1-115-521-11	FILM	0.82MF 5% 250V	C904	1-137-605-11	FILM 0.01MF	10% 250V
C529	1-107-683-11	ELECT	2.2MF 0 250V	C905	1-104-653-11	ELECT 220MF	20% 16V
C530	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C906	1-106-220-00	MYLAR 0.1MF	10% 100V
C531	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C907	1-119-748-11	ELECT 33MF	20% 400V
C532	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C908	1-136-169-00	FILM 0.22MF	5% 50V
C533	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C909	1-106-355-12	MYLAR 0.0033MF	10% 200V
C534	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C910	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C535	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C911	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C536	1-128-526-11	ELECT	100MF 20% 25V	C912	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C537	1-115-523-21	FILM	1.2MF 5% 250V	C913	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C538	1-117-958-11	FILM	0.24MF 5% 400V	C914	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
C539	1-107-960-11	ELECT	4.7MF 20% 250V	C915	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C540	1-106-343-00	MYLAR	0.001MF 10% 200V	C916	1-136-064-00	FILM 2200PF	3% 1.2KV
C541	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C917	1-107-889-11	ELECT 220MF	20% 25V
C542	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C919	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C544	1-137-368-11	FILM	0.0047MF 5% 50V	C920	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C545	1-126-967-11	ELECT	47MF 20% 50V	C921	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
C547	1-126-967-11	ELECT	47MF 20% 50V	C922	1-117-665-11	FILM 0.33MF	5% 200V
C549	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C923	1-106-359-00	MYLAR 0.0047MF	10% 100V
C550	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C924	1-106-220-00	MYLAR 0.1MF	10% 100V
C551	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C925	1-137-372-11	FILM 0.022MF	5% 50V
C553	1-126-963-11	ELECT	4.7MF 20% 50V	C926	1-106-228-00	MYLAR 0.22MF	10% 100V
C554	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C927	1-107-903-11	ELECT 2.2MF	20% 50V
C555	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C928	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C556	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C929	1-128-526-11	ELECT 100MF	20% 25V
C557	1-115-185-11	CERAMIC CHIP 0.033MF	10% 50V	C930	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C559	1-162-134-11	CERAMIC	470PF 10% 2KV	C931	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C561	1-136-173-00	FILM	0.47MF 5% 50V	C945	1-107-909-11	ELECT 47MF	20% 50V
C562	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1003	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C563	1-117-214-11	CERAMIC	0.001MF 10% 2KV	C1004	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C564	1-126-963-11	ELECT	4.7MF 20% 50V	C1005	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C666	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1006	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C667	1-126-967-11	ELECT	47MF 20% 50V	C1007	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C701	1-126-967-11	ELECT	47MF 20% 50V	C1008	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C702	1-137-399-11	FILM	0.1MF 5% 50V	C1009	1-126-960-11	ELECT 1MF	20% 50V
C705	1-126-942-61	ELECT	1000MF 20% 25V	C1501	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C706	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1502	1-117-722-11	ELECT 2200MF	20% 10V
C707	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1503	1-163-001-11	CERAMIC CHIP 220PF	10% 50V
C709	1-137-399-11	FILM	0.1MF 5% 50V	<CONNECTOR>			
C710	1-163-019-00	CERAMIC CHIP 0.0068MF	10% 50V	CN501*	1-564-512-11	PLUG, CONNECTOR 9P	
C711	1-107-894-11	ELECT	220MF 20% 35V	CN502*	1-564-514-11	PLUG, CONNECTOR 11P	
C712	1-106-228-00	MYLAR	0.22MF 10% 100V	CN503*	1-564-510-11	PLUG, CONNECTOR 7P	
C713	1-126-942-61	ELECT	1000MF 20% 25V	CN504*	1-564-508-11	PLUG, CONNECTOR 5P	
C714	1-126-967-11	ELECT	47MF 20% 50V	CN505*	1-508-879-11	BASE POST	
C715	1-107-932-11	ELECT	47MF 20% 100V	CN506*	1-564-511-11	PLUG, CONNECTOR 8P	
C717	1-107-930-91	ELECT	22MF 20% 100V	CN507	1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P	
C729	1-162-134-11	CERAMIC	470PF 10% 2KV	CN508*	1-778-955-11	PIN, CONNECTOR (PC BOARD) 10P	
C735	1-137-399-11	FILM	0.1MF 5% 50V	CN509	1-564-505-11	PLUG, CONNECTOR 2P	
C746	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	CN511*	1-564-514-11	PLUG, CONNECTOR 11P	
C747	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	CN512*	1-564-512-11	PLUG, CONNECTOR 9P	
C750	1-126-964-11	ELECT	10MF 20% 50V	CN520*	1-564-509-11	PLUG, CONNECTOR 6P	
C751	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	CN901*	1-564-520-11	PLUG, CONNECTOR 5P	
C901	1-107-889-11	ELECT	220MF 20% 25V				
C902	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V				



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>		D721	8-719-028-72	DIODE RGP02-17EL-6433	
D004	8-719-800-76	DIODE 1SS226		D901	8-719-404-49	DIODE MA111	
D007	8-719-976-99	ZENER DIODE DTZ5.1B		D902	8-719-404-49	DIODE MA111	
D008	8-719-976-99	ZENER DIODE DTZ5.1B		D903	8-719-911-19	DIODE 1SS119-25	
D009	8-719-976-99	ZENER DIODE DTZ5.1B		D904	8-719-404-49	DIODE MA111	
D010	8-719-976-99	ZENER DIODE DTZ5.1B		D905	8-719-404-49	DIODE MA111	
D012	8-719-800-76	DIODE 1SS226		D906	8-719-404-49	DIODE MA111	
D013	8-719-800-76	DIODE 1SS226		D907	8-719-158-49	ZENER DIODE RD12SB2	
D014	8-719-800-76	DIODE 1SS226		D908	8-719-158-49	ZENER DIODE RD12SB2	
D015	8-719-800-76	DIODE 1SS226		D909	8-719-977-40	ZENER DIODE DTZ13B	
D016	8-719-800-76	DIODE 1SS226		D910	8-719-063-89	DIODE YG911S3R	
D019	8-719-800-76	DIODE 1SS226		D911	8-719-978-69	ZENER DIODE DTZ-TT11-16B	
D020	8-719-800-76	DIODE 1SS226		D913	8-719-158-49	ZENER DIODE RD12SB2	
D025	8-719-976-99	ZENER DIODE DTZ5.1B		D915	8-719-109-85	ZENER DIODE RD5.1ESB2	
D026	8-719-800-76	DIODE 1SS226		D916	8-719-939-79	DIODE GMA01-BT	
D027	8-719-800-76	DIODE 1SS226		D917	8-719-110-46	ZENER DIODE RD16ESB3	
D028	8-719-800-76	DIODE 1SS226		D919	8-719-911-19	DIODE 1SS119-25	
D029	8-719-800-76	DIODE 1SS226		D921	8-719-404-49	DIODE MA111	
D032	8-719-976-99	ZENER DIODE DTZ5.1B		D922	8-719-404-49	DIODE MA111	
D033	8-719-976-99	ZENER DIODE DTZ5.1B		D923	8-719-404-49	DIODE MA111	
D034	8-719-801-78	DIODE 1SS184		D924	8-719-976-99	ZENER DIODE DTZ5.1B	
D035	8-719-801-78	DIODE 1SS184		D935	8-719-977-81	ZENER DIODE DTZ33B	
D050	8-719-404-49	DIODE MA111		D1501	8-719-976-99	ZENER DIODE DTZ5.1B	
D501	8-719-977-40	ZENER DIODE DTZ13B		D1502	8-719-404-49	DIODE MA111	
D502	8-719-063-89	DIODE YG911S3R		D1503	8-719-404-49	DIODE MA111	
D503	8-719-404-49	DIODE MA111					
D504	8-719-984-73	DIODE SB560				<FERRITE BEAD>	
D505	8-719-018-82	DIODE RGP02-20EL-6394		FB501	1-410-397-21	FERRITE 1.1UH	
D506	8-719-911-19	DIODE 1SS119-25		FB502	1-410-397-21	FERRITE 1.1UH	
D507	8-719-911-19	DIODE 1SS119-25		FB901	1-410-397-21	FERRITE 1.1UH	
D508	8-719-109-85	ZENER DIODE RD5.1ESB2		FB10251	414-232-11	INDUCTOR CHIP	0UH
D509	8-719-911-19	DIODE 1SS119-25		FB10261	414-232-11	INDUCTOR CHIP	0UH
D510	8-719-951-30	DIODE ERA91-02					
D511	8-719-911-19	DIODE 1SS119-25				<IC>	
D512	8-719-018-82	DIODE RGP02-20EL-6394		IC001	8-759-531-24	IC MB90553PF-G-120-BND	
D513	8-719-404-49	DIODE MA111		IC002	8-759-442-20	IC 24LC21A/SN	
D514	8-719-109-93	ZENER DIODE RD6.2ESB2		IC003	8-759-168-20	IC TA78L09S	
D516	8-719-105-99	ZENER DIODE RD6.2M-B1		IC004	8-759-454-79	IC 24LC16BT/SN	
D517	8-719-105-99	ZENER DIODE RD6.2M-B1		IC005	8-759-162-80	IC MM1170BFB	
D518	8-719-404-49	DIODE MA111					
D519	8-719-066-36	DIODE FMQ-G5GS		IC006	8-759-231-53	IC TA7805S	
D521	8-719-404-49	DIODE MA111		IC007	8-752-078-46	IC CXA2043Q	
D530	8-719-018-82	DIODE RGP02-20EL-6394		IC008	8-759-701-59	IC NJM78M09FA	
D531	8-719-018-82	DIODE RGP02-20EL-6394		IC009	8-759-082-57	IC TC7W04FU	
D660	8-719-977-69	ZENER DIODE DTZ24B		IC010	8-752-083-83	IC CXA2044M-T6	
D701	8-719-158-15	ZENER DIODE RD5.6SB					
D704	8-719-404-49	DIODE MA111		IC011	8-759-708-05	IC NJM78L05A	
D705	8-719-404-49	DIODE MA111		IC012	8-759-442-20	IC 24LC21A/SN	
D706	8-719-976-99	ZENER DIODE DTZ5.1B		IC013	8-759-233-66	IC TC74HCT04AF	
D709	8-719-979-85	DIODE EGP20G		IC502	8-759-803-42	IC LA6500-FA	
D713	8-719-911-19	DIODE 1SS119-25		IC505	8-759-100-96	IC UPC4558G2	
D714	8-719-911-19	DIODE 1SS119-25		IC701	8-759-822-38	IC LA6510	
D715	8-719-911-19	DIODE 1SS119-25		IC702	8-759-444-82	IC LA7841L	
D718	8-719-976-99	ZENER DIODE DTZ5.1B		IC703	8-759-100-96	IC UPC4558G2	
D720	8-719-028-72	DIODE RGP02-17EL-6433		IC901	8-759-467-70	IC BA9756FS-E2	



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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<CHIP CONDUCTOR>				Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR001	1-216-295-91	SHORT	0	Q517	8-729-216-22	TRANSISTOR 2SA1162-G	
JR002	1-216-295-91	SHORT	0	Q522	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
JR003	1-216-295-91	SHORT	0	Q523	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
JR004	1-216-295-91	SHORT	0	Q524	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
<COIL>				Q525	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
L001	1-406-665-11	INDUCTOR	0UH	Q526	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
L002	1-406-665-11	INDUCTOR	0UH	Q527	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
L003	1-412-537-31	INDUCTOR	100UH	Q528	8-729-043-41	TRANSISTOR 2SK2098-01MR-F119	
L004	1-412-537-31	INDUCTOR	100UH	Q660	8-729-033-26	TRANSISTOR DTA114GKAT146	
L006	1-410-482-31	INDUCTOR	100UH	Q661	8-729-033-25	TRANSISTOR DTC114GKA	
L007	1-412-537-31	INDUCTOR	100UH	Q701	8-729-800-32	TRANSISTOR 2SC2362K-G	
L008	1-412-537-31	INDUCTOR	100UH	Q703	8-729-178-43	TRANSISTOR 2SC2784-E	
L501	1-412-537-31	INDUCTOR	100UH	Q704	8-729-207-82	TRANSISTOR 2SC3421-Y	
L502	1-406-671-11	INDUCTOR	0UH	Q705	8-729-204-91	TRANSISTOR 2SA1049-GR	
L503	1-416-455-11	COIL, HORIZONTAL LINEARITY		Q706	8-729-207-89	TRANSISTOR 2SA1358-Y	
L504	1-416-456-11	COIL, HORIZONTAL LINEARITY		Q707	8-729-216-22	TRANSISTOR 2SA1162-G	
L505	1-406-675-11	INDUCTOR	0UH	Q708	8-729-020-07	TRANSISTOR 2SC4686A(LBSONY)	
L507	1-406-675-11	INDUCTOR	0UH	Q901	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L701	1-412-537-31	INDUCTOR	100UH	Q902	8-729-216-22	TRANSISTOR 2SA1162-G	
L702	1-412-522-31	INDUCTOR	5.6UH	Q904	8-729-901-87	TRANSISTOR 2SC2411K-CQ	
L901	1-412-537-31	INDUCTOR	100UH	Q905	8-729-901-97	TRANSISTOR 2SA1036K-Q	
L902	1-406-660-41	INDUCTOR	0UH	Q908	8-729-035-54	TRANSISTOR 2SJ449	
L903	1-412-537-31	INDUCTOR	100UH	Q909	8-729-033-91	TRANSISTOR 2SK1120LBSONY2	
<IC LINK>				Q911	8-729-033-25	TRANSISTOR DTC114GKA	
PS501 Δ	1-533-592-31	LINK, IC (1.6A/90V AC, 60V DC)		<RESISTOR>			
PS502 Δ	1-532-984-91	LINK, IC (2A/90V)		R001	1-216-025-91	RES,CHIP	100 5% 1/10W
PS503 Δ	1-532-984-91	LINK, IC (2A/90V)		R002	1-216-049-91	RES,CHIP	1K 5% 1/10W
PS504 Δ	1-532-984-91	LINK, IC (2A/90V)		R003	1-216-049-91	RES,CHIP	1K 5% 1/10W
PS701 Δ	1-533-590-31	LINK, IC (1A/90V AC, 60V DC)		R004	1-216-049-91	RES,CHIP	1K 5% 1/10W
PS901 Δ	1-533-592-31	LINK, IC (1.6A/90V AC, 60V DC)		R005	1-216-073-00	RES,CHIP	10K 5% 1/10W
<TRANSISTOR>				R006	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q001	8-729-027-31	TRANSISTOR DTA124EKA-T146		R007	1-216-025-91	RES,CHIP	100 5% 1/10W
Q003	8-729-216-22	TRANSISTOR 2SA1162-G		R008	1-216-089-91	RES,CHIP	47K 5% 1/10W
Q004	8-729-216-22	TRANSISTOR 2SA1162-G		R009	1-216-025-91	RES,CHIP	100 5% 1/10W
Q005	8-729-216-22	TRANSISTOR 2SA1162-G		R010	1-216-081-00	RES,CHIP	22K 5% 1/10W
Q006	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R011	1-216-097-91	RES,CHIP	100K 5% 1/10W
Q007	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R012	1-216-025-91	RES,CHIP	100 5% 1/10W
Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R013	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R017	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q503	8-729-901-97	TRANSISTOR 2SA1036K-Q		R018	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R020	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q505	8-729-901-97	TRANSISTOR 2SA1036K-Q		R023	1-216-025-91	RES,CHIP	100 5% 1/10W
Q506	8-729-820-73	TRANSISTOR 2SC3746		R024	1-216-089-91	RES,CHIP	47K 5% 1/10W
Q507	8-729-035-54	TRANSISTOR 2SJ449		R025	1-216-295-91	SHORT	0
Q508	8-729-031-87	TRANSISTOR 2SC5047-CA		R026	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q509	8-729-033-25	TRANSISTOR DTC114GKA		R027	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R028	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
Q511	8-729-140-50	TRANSISTOR 2SC3209LK		R029	1-216-089-91	RES,CHIP	47K 5% 1/10W
				R030	1-216-017-91	RES,CHIP	47 5% 1/10W
				R031	1-216-073-00	RES,CHIP	10K 5% 1/10W
				R032	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
				R033	1-216-017-91	RES,CHIP	47 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R034	1-216-025-91	RES,CHIP	100 5% 1/10W	R094	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R035	1-216-049-91	RES,CHIP	1K 5% 1/10W	R096	1-216-671-11	METAL CHIP	6.8K 0.50%1/10W
R036	1-216-025-91	RES,CHIP	100 5% 1/10W				
R037	1-216-686-11	METAL CHIP	30K 0.50%1/10W	R097	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R038	1-216-685-11	METAL CHIP	27K 0.50%1/10W	R101	1-216-049-91	RES,CHIP	1K 5% 1/10W
R039	1-216-049-91	RES,CHIP	1K 5% 1/10W	R501	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R040	1-216-049-91	RES,CHIP	1K 5% 1/10W	R502	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R041	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R503	1-216-041-00	RES,CHIP	470 5% 1/10W
R042	1-216-089-91	RES,CHIP	47K 5% 1/10W	R504	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R043	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R505	1-216-041-00	RES,CHIP	470 5% 1/10W
R044	1-216-095-00	RES,CHIP	82K 5% 1/10W	R506	1-249-397-11	CARBON	22 5% 1/4W F
R045	1-216-073-00	RES,CHIP	10K 5% 1/10W	R507	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R046	1-216-675-11	METAL CHIP	10K 0.50%1/10W	R508	1-216-025-91	RES,CHIP	100 5% 1/10W
R047	1-216-073-00	RES,CHIP	10K 5% 1/10W	R509	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R048	1-216-049-91	RES,CHIP	1K 5% 1/10W	R510	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R049	1-216-049-91	RES,CHIP	1K 5% 1/10W	R511	1-219-726-11	METAL	2.2 5% 10W
R050	1-216-025-91	RES,CHIP	100 5% 1/10W	R512	1-216-627-11	METAL CHIP	100 0.50%1/10W
R051	1-216-679-11	METAL CHIP	15K 0.50%1/10W	R513	1-215-860-11	METAL OXIDE	33 5% 1W F
R052	1-216-073-00	RES,CHIP	10K 5% 1/10W	R514	1-211-796-11	FUSIBLE	1 5% 1/2W F
R053	1-216-675-11	METAL CHIP	10K 0.50%1/10W	R515	1-216-675-11	METAL CHIP	10K 0.50%1/10W
R054	1-216-675-11	METAL CHIP	10K 0.50%1/10W	R516	1-247-815-91	CARBON	220 5% 1/4W
R055	1-216-089-91	RES,CHIP	47K 5% 1/10W	R517	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R056	1-216-671-11	METAL CHIP	6.8K 0.50%1/10W	R518	1-216-097-91	RES,CHIP	100K 5% 1/10W
R057	1-216-679-11	METAL CHIP	15K 0.50%1/10W	R519	1-216-393-00	METAL OXIDE	2.2 5% 3W F
R058	1-216-663-11	METAL CHIP	3.3K 0.50%1/10W	R520	1-216-393-00	METAL OXIDE	2.2 5% 3W F
R059	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R521	1-249-413-11	CARBON	470 5% 1/4W F
R060	1-216-025-91	RES,CHIP	100 5% 1/10W	R522	1-216-423-11	METAL OXIDE	27 5% 1W F
R061	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R523	1-249-421-11	CARBON	2.2K 5% 1/4W F
R063	1-216-025-91	RES,CHIP	100 5% 1/10W	R524	1-215-869-11	METAL OXIDE	1K 5% 1W F
R064	1-216-025-91	RES,CHIP	100 5% 1/10W	R525	1-216-681-11	METAL CHIP	18K 0.50%1/10W
R065	1-216-025-91	RES,CHIP	100 5% 1/10W	R526	1-214-840-00	METAL	100 1% 1/2W
R066	1-216-025-91	RES,CHIP	100 5% 1/10W	R527	1-214-840-00	METAL	100 1% 1/2W
R067	1-216-025-91	RES,CHIP	100 5% 1/10W	R528	1-214-840-00	METAL	100 1% 1/2W
R068	1-216-025-91	RES,CHIP	100 5% 1/10W	R529	1-260-313-51	CARBON	56 5% 1/2W
R069	1-216-017-91	RES,CHIP	47 5% 1/10W	R530	1-249-437-11	CARBON	47K 5% 1/4W
R070	1-216-675-11	METAL CHIP	10K 0.50%1/10W	R531	1-249-437-11	CARBON	47K 5% 1/4W
R071	1-216-049-91	RES,CHIP	1K 5% 1/10W	R532	1-249-437-11	CARBON	47K 5% 1/4W
R072	1-216-651-11	METAL CHIP	1K 0.50%1/10W	R533	1-249-437-11	CARBON	47K 5% 1/4W
R073	1-216-295-91	SHORT	0	R534	1-249-437-11	CARBON	47K 5% 1/4W
R074	1-216-675-11	METAL CHIP	10K 0.50%1/10W	R535	1-216-049-91	RES,CHIP	1K 5% 1/10W
R075	1-216-049-91	RES,CHIP	1K 5% 1/10W	R536	1-216-049-91	RES,CHIP	1K 5% 1/10W
R076	1-216-049-91	RES,CHIP	1K 5% 1/10W	R537	1-216-049-91	RES,CHIP	1K 5% 1/10W
R077	1-216-049-91	RES,CHIP	1K 5% 1/10W	R538	1-216-049-91	RES,CHIP	1K 5% 1/10W
R078	1-216-049-91	RES,CHIP	1K 5% 1/10W	R539	1-216-049-91	RES,CHIP	1K 5% 1/10W
R079	1-216-017-91	RES,CHIP	47 5% 1/10W	R540	1-216-073-00	RES,CHIP	10K 5% 1/10W
R080	1-216-017-91	RES,CHIP	47 5% 1/10W	R541	1-260-314-11	CARBON	68 5% 1/2W
R081	1-216-675-11	METAL CHIP	10K 0.50%1/10W	R542	1-215-863-11	METAL OXIDE	100 5% 1W F
R082	1-216-049-91	RES,CHIP	1K 5% 1/10W	R543	1-216-640-11	METAL CHIP	360 0.50%1/10W
R083	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R544	1-260-085-11	CARBON	68 5% 1/2W
R084	1-216-025-91	RES,CHIP	100 5% 1/10W	R545	1-216-683-11	METAL CHIP	22K 0.50%1/10W
R085	1-216-025-91	RES,CHIP	100 5% 1/10W	R546	1-260-288-11	CARBON	0.47 5% 1/2W
R086	1-216-049-91	RES,CHIP	1K 5% 1/10W	R547	1-216-663-11	METAL CHIP	3.3K 0.50%1/10W
R088	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R548	1-215-443-00	METAL	8.2K 1% 1/4W
R089	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R549	1-216-675-11	METAL CHIP	10K 0.50%1/10W
R090	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R550	1-260-288-11	CARBON	0.47 5% 1/2W
R092	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R551	1-216-659-11	METAL CHIP	2.2K 0.50%1/10W
				R552	1-216-057-00	RES,CHIP	2.2K 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R553	1-216-655-11	METAL CHIP	1.5K	0.50%1/10W	R721	1-216-667-11	METAL CHIP 4.7K 0.50%1/10W
R554	1-216-675-11	METAL CHIP	10K	0.50%1/10W	R722	1-216-691-11	METAL CHIP 47K 0.50%1/10W
R555	1-216-065-00	RES,CHIP	4.7K	5% 1/10W	R723	1-216-663-11	METAL CHIP 3.3K 0.50%1/10W
R556	1-216-674-11	METAL CHIP	9.1K	0.50%1/10W	R724	1-214-798-21	METAL 1.8 1% 1/2W
R557	1-218-760-11	METAL CHIP	220K	0.50%1/10W	R725	1-214-798-21	METAL 1.8 1% 1/2W
R558	1-216-683-11	METAL CHIP	22K	0.50%1/10W	R726	1-216-675-11	METAL CHIP 10K 0.50%1/10W
R561	1-216-683-11	METAL CHIP	22K	0.50%1/10W	R727	1-260-292-11	CARBON 1 5% 1/2W
R562	1-249-401-11	CARBON	47	5% 1/4W F	R728	1-249-381-11	CARBON 1 5% 1/4W F
R563	1-216-662-11	METAL CHIP	3K	0.50%1/10W	R729	1-215-865-11	METAL OXIDE 220 5% 1W F
R564	1-216-697-91	METAL CHIP	82K	0.50%1/10W	R730	1-219-746-11	CARBON 1K 5% 1/2W
R565	1-216-671-11	METAL CHIP	6.8K	0.50%1/10W	R731	1-216-073-00	RES,CHIP 10K 5% 1/10W
R566	1-260-311-11	CARBON	39	5% 1/2W	R732	1-216-073-00	RES,CHIP 10K 5% 1/10W
R567	1-216-627-11	METAL CHIP	100	0.50%1/10W	R733	1-219-746-11	CARBON 1K 5% 1/2W
R568	1-216-655-11	METAL CHIP	1.5K	0.50%1/10W	R734	1-215-881-11	METAL OXIDE 15 5% 2W F
R571	1-216-381-11	METAL OXIDE	0.22	5% 3W F	R737	1-249-377-11	CARBON 0.47 5% 1/4W F
R572	1-216-097-91	RES,CHIP	100K	5% 1/10W	R738	1-249-377-11	CARBON 0.47 5% 1/4W F
R573	1-216-097-91	RES,CHIP	100K	5% 1/10W	R739	1-249-413-11	CARBON 470 5% 1/4W F
R574	1-216-097-91	RES,CHIP	100K	5% 1/10W	R741	1-249-430-11	CARBON 12K 5% 1/4W
R575	1-216-097-91	RES,CHIP	100K	5% 1/10W	R742	1-249-419-11	CARBON 1.5K 5% 1/4W
R576	1-216-097-91	RES,CHIP	100K	5% 1/10W	R743	1-216-049-91	RES,CHIP 1K 5% 1/10W
R577	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	R748	1-216-683-11	METAL CHIP 22K 0.50%1/10W
R578	1-216-025-91	RES,CHIP	100	5% 1/10W	R749	1-216-049-91	RES,CHIP 1K 5% 1/10W
R579	1-216-672-11	METAL CHIP	7.5K	0.50%1/10W	R750	1-216-057-00	RES,CHIP 2.2K 5% 1/10W
R580	1-216-073-00	RES,CHIP	10K	5% 1/10W	R751	1-216-065-00	RES,CHIP 4.7K 5% 1/10W
R581	1-216-073-00	RES,CHIP	10K	5% 1/10W	R752	1-216-083-00	RES,CHIP 27K 5% 1/10W
R582	1-216-073-00	RES,CHIP	10K	5% 1/10W	R753	1-219-720-11	METAL 10M 5% 1W
R583	1-216-677-11	METAL CHIP	12K	0.50%1/10W	R754	1-219-754-11	CARBON 680K 5% 1/2W
R584	1-216-081-00	RES,CHIP	22K	5% 1/10W	R755	1-219-754-11	CARBON 680K 5% 1/2W
R585	1-216-081-00	RES,CHIP	22K	5% 1/10W	R756	1-220-824-11	CARBON 270K 5% 1/2W
R586	1-216-049-91	RES,CHIP	1K	5% 1/10W	R759	1-218-754-11	METAL CHIP 120K 0.50%1/10W
R587	1-216-049-91	RES,CHIP	1K	5% 1/10W	R776	1-216-049-91	RES,CHIP 1K 5% 1/10W
R588	1-216-097-91	RES,CHIP	100K	5% 1/10W	R777	1-216-681-11	METAL CHIP 18K 0.50%1/10W
R589	1-216-097-91	RES,CHIP	100K	5% 1/10W	R778	1-216-667-11	METAL CHIP 4.7K 0.50%1/10W
R590	1-216-675-11	METAL CHIP	10K	0.50%1/10W	R779	1-216-049-91	RES,CHIP 1K 5% 1/10W
R591	1-216-675-11	METAL CHIP	10K	0.50%1/10W	R784	1-216-081-00	RES,CHIP 22K 5% 1/10W
R594	1-249-437-11	CARBON	47K	5% 1/4W	R900	1-216-399-00	METAL OXIDE 6.8 5% 3W F
R595	1-249-437-11	CARBON	47K	5% 1/4W	R901	1-216-057-00	RES,CHIP 2.2K 5% 1/10W
R596	1-216-683-11	METAL CHIP	22K	0.50%1/10W	R902	1-216-065-00	RES,CHIP 4.7K 5% 1/10W
R663	1-215-482-00	METAL	360K	1% 1/4W	R903	1-216-073-00	RES,CHIP 10K 5% 1/10W
R664	1-215-459-00	METAL	39K	1% 1/4W	R904	1-216-057-00	RES,CHIP 2.2K 5% 1/10W
R665	1-216-049-91	RES,CHIP	1K	5% 1/10W	R905	1-216-025-91	RES,CHIP 100 5% 1/10W
R667	1-216-041-00	RES,CHIP	470	5% 1/10W	R906	1-216-065-00	RES,CHIP 4.7K 5% 1/10W
R669	1-216-671-11	METAL CHIP	6.8K	0.50%1/10W	R907	1-216-025-91	RES,CHIP 100 5% 1/10W
R701	1-249-383-11	CARBON	1.5	5% 1/4W F	R908	1-216-091-00	RES,CHIP 56K 5% 1/10W
R702	1-216-057-00	RES,CHIP	2.2K	5% 1/10W	R909	1-216-689-11	RES,CHIP 39K 5% 1/10W
R703	1-216-085-00	RES,CHIP	33K	5% 1/10W	R910	1-216-073-00	RES,CHIP 10K 5% 1/10W
R704	1-249-383-11	CARBON	1.5	5% 1/4W F	R911	1-216-049-91	RES,CHIP 1K 5% 1/10W
R705	1-249-385-11	CARBON	2.2	5% 1/4W	R912	1-218-772-11	METAL CHIP 680K 0.50%1/10W
R706	1-216-093-00	RES,CHIP	68K	5% 1/10W	R913	1-219-748-11	CARBON 4.7K 5% 1/2W
R707	1-249-421-11	CARBON	2.2K	5% 1/4W	R914	1-219-510-11	CARBON 470K 5% 1/2W
R708	1-216-073-00	RES,CHIP	10K	5% 1/10W	R915	1-249-437-11	CARBON 47K 5% 1/4W
R709	1-216-473-11	METAL OXIDE	56	5% 3W F	R916	1-249-429-11	CARBON 10K 5% 1/4W
R710	1-216-073-00	RES,CHIP	10K	5% 1/10W	R917	1-216-073-00	RES,CHIP 10K 5% 1/10W
R715	1-216-077-00	RES,CHIP	15K	5% 1/10W	R918	1-216-097-91	RES,CHIP 100K 5% 1/10W
R719	1-249-383-11	CARBON	1.5	5% 1/4W F	R919	1-216-025-91	RES,CHIP 100 5% 1/10W
R720	1-260-292-11	CARBON	1	5% 1/2W	R920	1-249-401-11	CARBON 47 5% 1/4W F



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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R808	1-215-421-00	METAL	1K 1% 1/4W	C5105	1-104-664-11	ELECT 47MF 20% 25V	
R809	1-215-429-00	METAL	2.2K 1% 1/4W	C5106	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
R810	1-215-433-00	METAL	3.3K 1% 1/4W	C5107	1-137-399-11	FILM 0.1MF 5% 50V	
R814	1-249-429-11	CARBON	10K 5% 1/4W	C5108	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
R815	1-249-429-11	CARBON	10K 5% 1/4W	C5109	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
R818	1-215-445-00	METAL	10K 1% 1/4W	C5110	1-104-664-11	ELECT 47MF 20% 25V	
R819	1-249-441-11	CARBON	100K 5% 1/4W	C5111	1-137-399-11	FILM 0.1MF 5% 50V	
R826	1-249-408-11	CARBON	180 5% 1/4W	C5201	1-104-664-11	ELECT 47MF 20% 25V	
R827	1-249-407-11	CARBON	150 5% 1/4W	C5202	1-104-664-11	ELECT 47MF 20% 25V	
<SWITCH>				C5203	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
S802	1-692-431-21	SWITCH, TACTILE (CONT+)		C5204	1-137-399-11	FILM 0.1MF 5% 50V	
S803	1-692-431-21	SWITCH, TACTILE (CONT-)		C5205	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
S804	1-692-431-21	SWITCH, TACTILE (MENU)		C5206	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
S805	1-692-431-21	SWITCH, TACTILE (BRT+)		C5301	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
S806	1-692-431-21	SWITCH, TACTILE (BRT-)		C5303	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
S818	1-692-431-21	SWITCH, TACTILE (ASC)		C5304	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
S820	1-692-431-21	SWITCH, TACTILE (RESET)		C5305	1-104-664-11	ELECT 47MF 20% 25V	
<THERMISTOR>				C5306	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
TH801	1-807-796-11	THERMISTOR		C5307	1-137-399-11	FILM 0.1MF 5% 50V	
*****				C5308	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
*8-933-279-00 J BOARD, COMPLETE				C5309	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
*****				C5310	1-104-664-11	ELECT 47MF 20% 25V	
<CONNECTOR>				C5311	1-137-399-11	FILM 0.1MF 5% 50V	
CN891*	1-691-961-11	PIN, CONNECTOR (PC BOARD) 2P		C5401	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
<SWITCH>				C5403	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
S891 Δ	1-571-433-31	SWITCH, PUSH (AC POWER)		C5404	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
*****				C5405	1-104-664-11	ELECT 47MF 20% 25V	
*8-933-263-00 L BOARD, COMPLETE				C5406	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
*****				C5407	1-137-399-11	FILM 0.1MF 5% 50V	
<CAPACITOR>				C5408	1-163-003-11	CERAMIC CHIP 330PF 10% 50V	
C5002	1-126-964-11	ELECT	10MF 20% 50V	C5409	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5003	1-126-933-11	ELECT	100MF 20% 16V	C5410	1-104-664-11	ELECT 47MF 20% 25V	
C5004	1-104-664-11	ELECT	47MF 20% 25V	C5412	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C5005	1-104-664-11	ELECT	47MF 20% 25V	C5501	1-126-923-11	ELECT 220MF 20% 10V	
C5008	1-104-664-11	ELECT	47MF 20% 25V	<CONNECTOR>			
C5009	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	CN5001*	1-564-512-11	PLUG, CONNECTOR 9P	
C5101	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	CN5002*	1-564-509-11	PLUG, CONNECTOR 6P	
C5103	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	CN5003	1-564-513-11	PLUG, CONNECTOR 10P	
C5104	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	CN5004*	1-564-507-11	PLUG, CONNECTOR 4P	
				<DIODE>			
				D5002	8-719-801-78	DIODE 1SS184	
				D5101	8-719-800-76	DIODE 1SS226	
				D5103	8-719-800-76	DIODE 1SS226	
				D5201	8-719-800-76	DIODE 1SS226	
				D5301	8-719-800-76	DIODE 1SS226	
				D5303	8-719-800-76	DIODE 1SS226	
				D5401	8-719-800-76	DIODE 1SS226	
				D5403	8-719-800-76	DIODE 1SS226	
				D5501	8-719-976-96	ZENER DIODE DTZ4.7C	

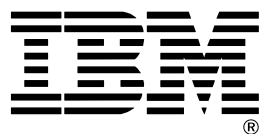


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<SENSOR>		R5206	1-215-859-00	METAL OXIDE 22	5% 1W F
		GS5001*1-475-351-11	SENSOR UNIT, MAGNETIC	R5207	1-216-073-00	RES,CHIP 10K	5% 1/10W
		<IC>		R5208	1-216-670-11	METAL CHIP 6.2K	0.50%1/10W
		IC5101 8-759-822-38	IC LA6510	R5301	1-249-383-11	CARBON 1.5	5% 1/4W F
		IC5201 8-759-803-42	IC LA6500-FA	R5302	1-249-383-11	CARBON 1.5	5% 1/4W F
		IC5301 8-759-822-38	IC LA6510	R5308	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		IC5401 8-759-822-38	IC LA6510	R5309	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		<RESISTOR>		R5310	1-216-073-00	RES,CHIP 10K	5% 1/10W
		R5001 1-249-383-11	CARBON 1.5 5% 1/4W F	R5311	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		R5003 1-216-295-91	SHORT 0	R5312	1-249-383-11	CARBON 1.5	5% 1/4W F
		R5005 1-216-689-11	RES,CHIP 39K 5% 1/10W	R5313	1-216-073-00	RES,CHIP 10K	5% 1/10W
		R5006 1-216-073-00	RES,CHIP 10K 5% 1/10W	R5314	1-249-441-11	CARBON 100K	5% 1/4W F
		R5007 1-216-049-91	RES,CHIP 1K 5% 1/10W	R5315	1-215-882-00	METAL OXIDE 22	5% 2W F
		R5008 1-216-295-91	SHORT 0	R5316	1-216-073-00	RES,CHIP 10K	5% 1/10W
		R5009 1-216-295-91	SHORT 0	R5317	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		R5010 1-216-295-91	SHORT 0	R5319	1-216-073-00	RES,CHIP 10K	5% 1/10W
		R5011 1-216-073-00	RES,CHIP 10K 5% 1/10W	R5320	1-249-383-11	CARBON 1.5	5% 1/4W F
		R5012 1-216-295-91	SHORT 0	R5321	1-249-441-11	CARBON 100K	5% 1/4W F
		R5013 1-216-295-91	SHORT 0	R5322	1-215-882-00	METAL OXIDE 22	5% 2W F
		R5015 1-216-049-91	RES,CHIP 1K 5% 1/10W	R5401	1-249-383-11	CARBON 1.5	5% 1/4W F
		R5101 1-249-383-11	CARBON 1.5 5% 1/4W F	R5402	1-249-383-11	CARBON 1.5	5% 1/4W F
		R5102 1-249-383-11	CARBON 1.5 5% 1/4W F	R5406	1-216-689-11	RES,CHIP 39K	5% 1/10W
		R5108 1-216-308-00	RES,CHIP 4.7 5% 1/10W	R5407	1-216-079-00	RES,CHIP 18K	5% 1/10W
		R5109 1-216-308-00	RES,CHIP 4.7 5% 1/10W	R5408	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		R5110 1-216-073-00	RES,CHIP 10K 5% 1/10W	R5409	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		R5111 1-216-308-00	RES,CHIP 4.7 5% 1/10W	R5410	1-216-089-91	RES,CHIP 47K	5% 1/10W
		R5112 1-249-383-11	CARBON 1.5 5% 1/4W F	R5411	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		R5113 1-216-073-00	RES,CHIP 10K 5% 1/10W	R5412	1-249-383-11	CARBON 1.5	5% 1/4W F
		R5114 1-249-441-11	CARBON 100K 5% 1/4W F	R5413	1-216-097-91	RES,CHIP 100K	5% 1/10W
		R5115 1-215-882-00	METAL OXIDE 22 5% 2W F	R5414	1-249-441-11	CARBON 100K	5% 1/4W F
		R5116 1-216-073-00	RES,CHIP 10K 5% 1/10W	R5415	1-215-886-11	METAL OXIDE 100	5% 2W F
		R5117 1-216-308-00	RES,CHIP 4.7 5% 1/10W	R5416	1-216-077-00	RES,CHIP 15K	5% 1/10W
		R5119 1-216-073-00	RES,CHIP 10K 5% 1/10W	R5417	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		R5120 1-249-383-11	CARBON 1.5 5% 1/4W F	R5419	1-216-089-91	RES,CHIP 47K	5% 1/10W
		R5121 1-249-441-11	CARBON 100K 5% 1/4W F	R5420	1-249-383-11	CARBON 1.5	5% 1/4W F
		R5122 1-215-882-00	METAL OXIDE 22 5% 2W F	R5421	1-249-441-11	CARBON 100K	5% 1/4W F
		R5201 1-249-383-11	CARBON 1.5 5% 1/4W F	R5422	1-215-885-00	METAL OXIDE 68	5% 2W F
		R5202 1-249-383-11	CARBON 1.5 5% 1/4W F	R5423	1-216-105-91	RES,CHIP 220K	5% 1/10W
		R5203 1-249-383-11	CARBON 1.5 5% 1/4W F	R5501	1-216-057-00	RES,CHIP 2.2K	5% 1/10W
		R5204 1-249-441-11	CARBON 100K 5% 1/4W F	R5502	1-216-681-11	METAL CHIP 18K	0.50%1/10W
		R5205 1-216-073-00	RES,CHIP 10K 5% 1/10W	R5503	1-216-681-11	METAL CHIP 18K	0.50%1/10W
				R5504	1-216-093-00	RES,CHIP 68K	5% 1/10W
				R5505	1-216-067-00	RES,CHIP 5.6K	5% 1/10W
				R5506	1-216-670-11	METAL CHIP 6.2K	0.50%1/10W

6558-03N/03S/43N/43S

SERVICE MANUAL

COLOR MONITOR



6558-03N/43N

US Model

Canadian Model

AEP Model

Japan Model

6558-03S/43S

S. Hemisphere Model

CORRECTION-1

File this correction with the service manual.

**SUBJECT : CORRECTION OF DIFFERENT COLOR PARTS
MISSING FROM PARTS LIST.**



: Indicates corrected portion

SECTION 6 EXPLODED VIEWS (See page 6-2 and 6-3)

Incorrect				Correct			
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
63	* 4-061-603-31	COVER, BOTTOM		63	* 4-061-603-31	COVER, BOTTOM (03N/03S)	
				63	* 4-061-603-51	COVER, BOTTOM (43N/43S)	
66	X-4035-384-1	STAND ASSY		66	X-4035-384-1	STAND ASSY (03N/03S)	
				66	X-4035-590-2	STAND ASSY (43N/43S)	
107	1-783-247-11	CABLE ASSY		107	1-783-247-11	CABLE ASSY (03N/03S)	
				107	1-783-250-11	CABLE ASSY (43N/43S)	