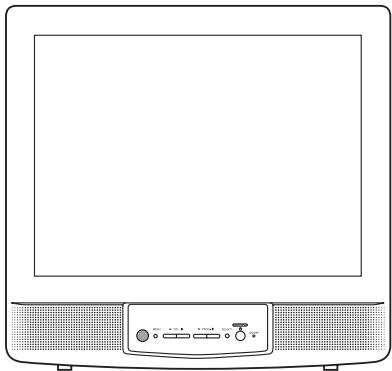


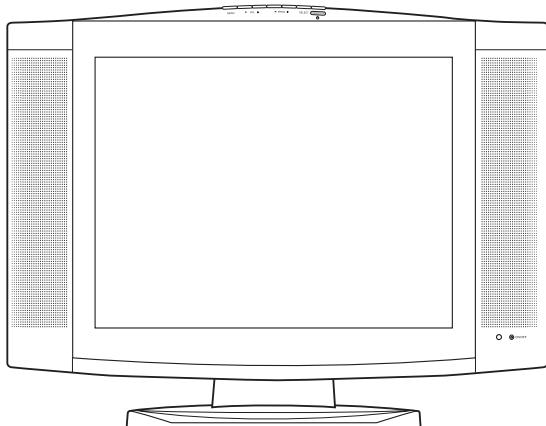


# SERVICE MANUAL

**15" COLOR LCD TELEVISION  
LCD-B1504**



**20" COLOR LCD TELEVISION  
LCD-B2004**



# **15"/20" COLOR LCD TELEVISION**

## **LCD-B1504**

## **LCD-B2004**

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**The LCD panel is manufactured to provide many years of useful life. Occasionally a few non active pixels may appear as a tiny spec of color. This is not to be considered a defect in the LCD screen.**

# SPECIFICATIONS

## <TUNER>

ANT. Input ----- 80 dB $\mu$ V, Video: PAL 87.5%, Audio: 30 kHz dev (1 kHz Sin)  
 Test Input Signal----- 400Hz 30% modulation

Description	Condition	Unit	Nominal	Limit
1. Intermediate Freq.	Picture Sound	MHz MHz	45.75 41.25	- -
2. Color Killer Sens.	CH-3	dB $\mu$ V	20	23
3. AFT Pull In Range (10mV input)	-	MHz	$\pm$ 1.6	$\pm$ 0.7

## <LCD PANEL>

Description	Condition	Unit	Nominal	Limit
1. Number of Pixels	Horizontal Vertical	pixels pixels	640 x 3 480	- -
2. Brightness	-	cd/m <sup>2</sup>	450	-
3. Response Time	-	msec	16	-
4. Support Color	-	-	16mil.(8bit)	-
5. Viewing Angle	Horizontal Vertical	° °	-85 to 85 -85 to 70	- -

## <VIDEO>

Description	Condition	Unit	Nominal	Limit
1. Over Scan	Horizontal Vertical	% %	8.5 6.5	10 $\pm$ 5 10 $\pm$ 5
2. Color Temperature	- x y	°K	8500 0.29 0.30	- 0.29 $\pm$ 0.03 0.30 $\pm$ 0.03
3. Resolution	Horizontal Vertical	line line	400 350	<250 <300

## <AUDIO>

All items are measured across 8Ω load at speaker output terminal with L.P.F.

Description	Condition	Unit	Nominal	Limit
1. Audio Output Power	10% THD: Lch/Rch	W	1.0/1.0	0.8/0.8
2. Audio Distortion	500mW: Lch/Rch	%	1.0/1.0	<3
3. Audio Freq. Response	-6dB: Lch -6dB: Rch	Hz Hz	50 to 12K 50 to 12K	- -
4. Audio S/N	RF VIDEO 1 VIDEO 2	dB dB dB	60 60 60	45 45 45

### Note:

Nominal specifications represent the design specifications. All units should be able to approximate these. Some will exceed and some may drop slightly below these specifications. Limit specifications represent the absolute worst condition that still might be considered acceptable. In no case should a unit fail to meet limit specifications.

# IMPORTANT SAFETY PRECAUTIONS

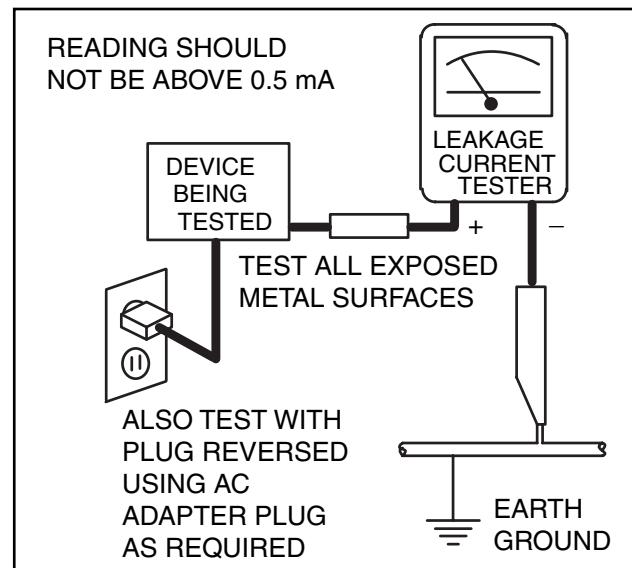
Prior to shipment from the factory, our products are strictly inspected for recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

## Safety Precautions for LCD TV Circuit

1. **Before returning an instrument to the customer,** always make a safety check of the entire instrument, including, but not limited to, the following items:
  - a. Be sure that no built-in protective devices are defective and have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.**
  - b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the LCD module and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.
  - c. **Antenna Cold Check** - With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the on position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each tuner antenna input exposed terminal screw and, if applicable, to the coaxial connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm, an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the instrument AC switch in the off position.
  - d. **Leakage Current Hot Check** - With the instrument completely reassembled, plug the AC line cord directly into a 230 V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American

National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7).

With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milli-ampere. Reverse the instrument power cord plug in the outlet and repeat the test.



ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING THE ANTENNA OR ACCESSORIES.

2. Read and comply with all caution and safety-related notes on or inside the receiver cabinet, on the receiver chassis, or on the LCD module.
3. **Design Alteration Warning** - Do not alter or add to the mechanical or electrical design of this LCD TV receiver. Design alterations and additions, including, but not limited to circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this receiver and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.

- 4. Hot Chassis Warning -**
  - a. Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord and maybe safety-serviced without an isolation transformer only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC power source. To confirm that the AC power plug is inserted correctly, with an AC voltmeter, measure between the chassis and a known earth ground. If a voltage reading in excess of 1.0V is obtained, remove and reinsert the AC power plug in the opposite polarity and again measure the voltage potential between the chassis and a known earth ground.
  - b. Some TV receiver chassis normally have 85V AC(RMS) between chassis and earth ground regardless of the AC plug polarity. This chassis can be safety-serviced only with an isolation transformer inserted in the power line between the receiver and the AC power source, for both personnel and test equipment protection.
  - c. Some TV receiver chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulation material that must not be defeated or altered.
- 5. Observe original lead dress. Take extra care to assure correct lead dress in the following areas:** a. near sharp edges, b. near thermally hot parts-be sure that leads and components do not touch thermally hot parts, c. the AC supply, d. high voltage, and, e. antenna wiring. Always inspect in all areas for pinched, out of place, or frayed wiring. Check AC power cord for damage.
- 6. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications.** Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
- 7. Product Safety Notice -** Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc.. Parts that have special safety characteristics are identified by a  on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The product's safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are strictly inspected to confirm they comply with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

## Precautions during Servicing

- A. Parts identified by the  symbol are critical for safety.  
Replace only with part number specified.
- B. In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.  
Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.
- C. Use specified internal wiring. Note especially:
  - 1) Wires covered with PVC tubing
  - 2) Double insulated wires
  - 3) High voltage leads
- D. Use specified insulating materials for hazardous live parts. Note especially:
  - 1) Insulation Tape
  - 2) PVC tubing
  - 3) Spacers
  - 4) Insulators for transistors.
- E. When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.
- F. Observe that the wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.)
- G. Check that replaced wires do not contact sharp edged or pointed parts.
- H. When a power cord has been replaced, check that 5~6 kg of force in any direction will not loosen it.
- I. Also check areas surrounding repaired locations.
- J. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.
- K. Crimp type wire connector  
The power transformer uses crimp type connectors which connect the power cord and the primary side of the transformer. When replacing the transformer, follow these steps carefully and precisely to prevent shock hazards.  
Replacement procedure
  - 1) Remove the old connector by cutting the wires at a point close to the connector.  
Important: Do not re-use a connector (discard it).
  - 2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.
  - 3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.
  - 4) Use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.
- L. When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC supply outlet.
- M. When installing parts or assembling the cabinet parts, be sure to use the proper screws and tighten certainly.

## Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

### 1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance ( $d$ ) and ( $d'$ ) between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

**Table 1 : Ratings for selected area**

AC Line Voltage	Clearance Distance ( $d$ ), ( $d'$ )
230 V	$\geq 3\text{mm}(d)$ $\geq 6 \text{ mm}(d')$

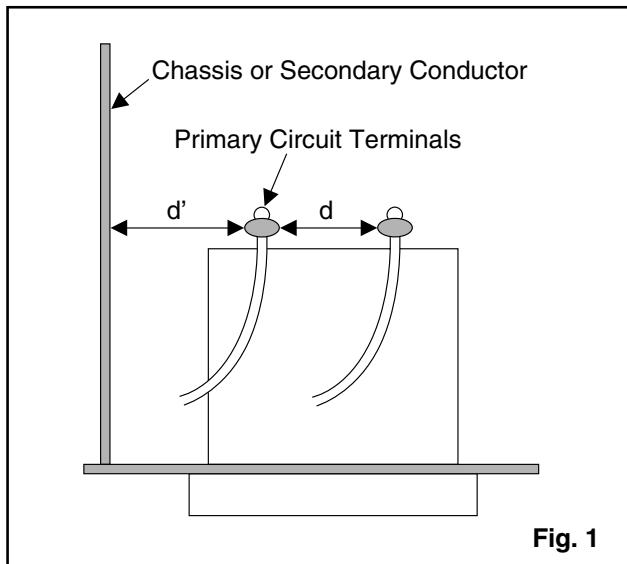
**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.

### 2. Leakage Current Test

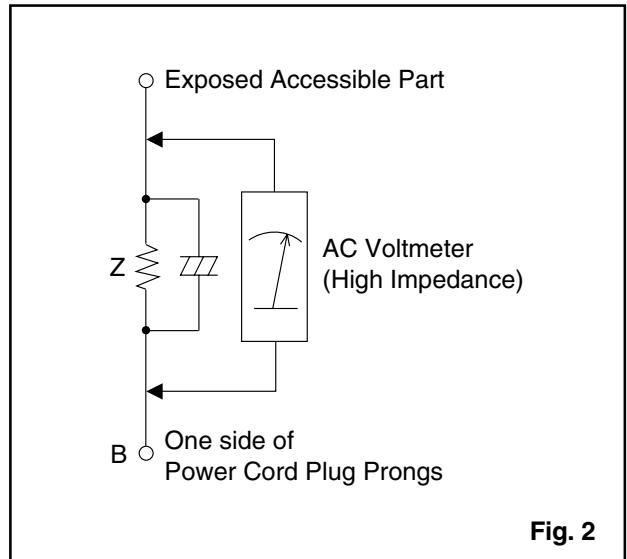
Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

#### Measuring Method : (Power ON)

Insert load  $Z$  between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load  $Z$ . See Fig. 2 and following table.



**Fig. 1**



**Fig. 2**

**Table 2: Leakage current ratings for selected areas**

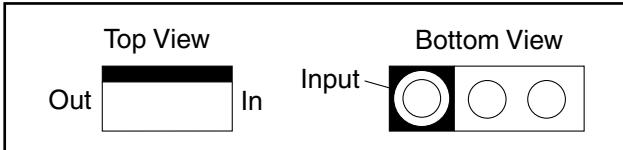
AC Line Voltage	Load Z	Leakage Current (i)	One side of power cord plug prongs (B) to:
230 V	2k $\Omega$ RES. Connected in parallel	i $\leq 0.7\text{mA}$ AC Peak i $\leq 2\text{mA}$ DC	RF or Antenna terminals
	50k $\Omega$ RES. Connected in parallel	i $\leq 0.7\text{mA}$ AC Peak i $\leq 2\text{mA}$ DC	A/V Input, Output

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.

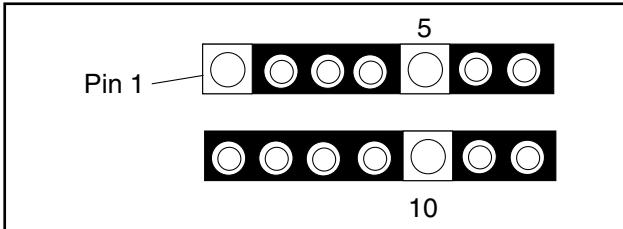
# STANDARD NOTES FOR SERVICING

## Circuit Board Indications

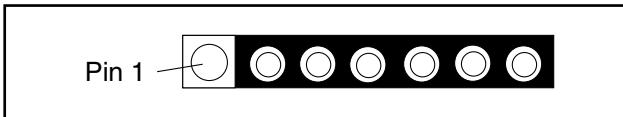
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



2. For other ICs, pin 1 and every fifth pin are indicated as shown.

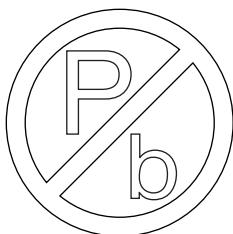


3. The 1st pin of every male connector is indicated as shown.



## Pb (Lead) Free Solder

Pb free mark will be found on PCBs which use Pb free solder. (Refer to figure.) For PCBs with Pb free mark, be sure to use Pb free solder. For PCBs without Pb free mark, use standard solder.



Pb free mark

## How to Remove / Install Flat Pack-IC

### 1. Removal

With Hot-Air Flat Pack-IC Desoldering Machine:

1. Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the Flat Pack-IC (about 5 to 6 seconds). (Fig. S-1-1)

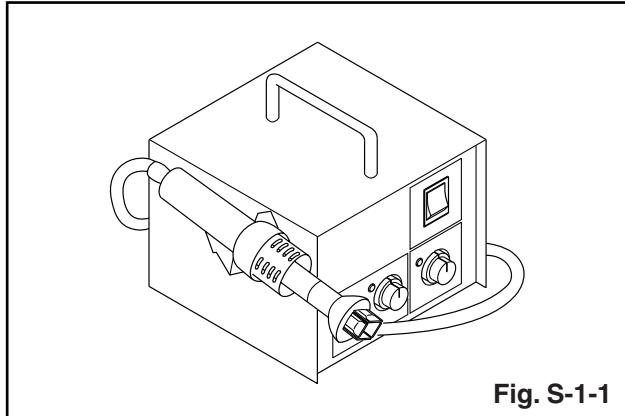


Fig. S-1-1

2. Remove the flat pack-IC with tweezers while applying the hot air.
3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### CAUTION:

1. The Flat Pack-IC shape may differ by models. Use an appropriate hot-air flat pack-IC desoldering machine, whose shape matches that of the Flat Pack-IC.
2. Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)
3. The flat pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or the solder lands under the IC when removing it.

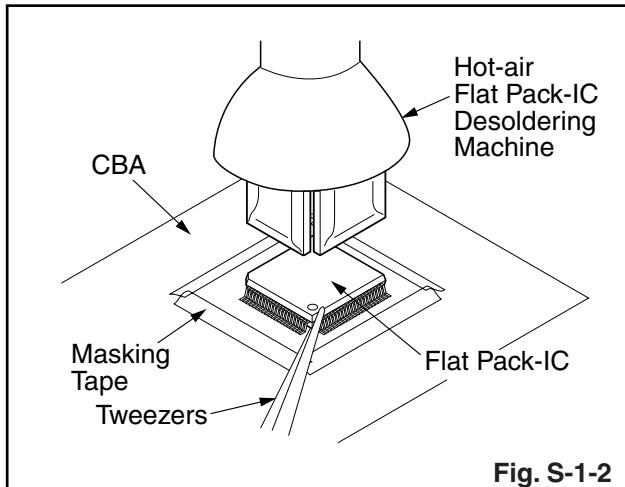
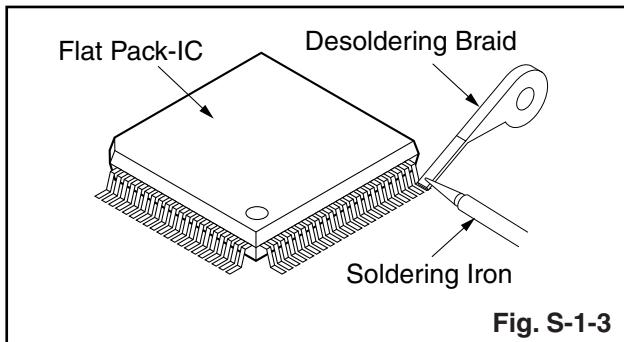


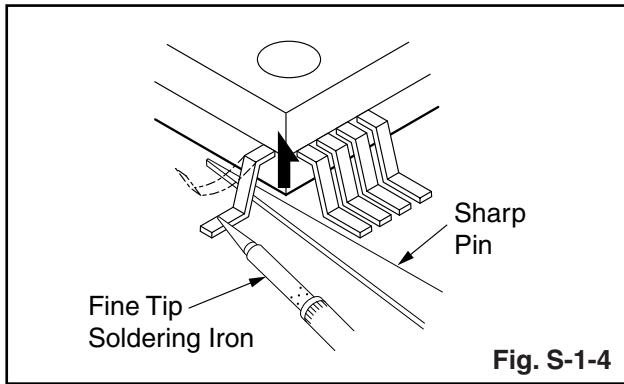
Fig. S-1-2

### With Soldering Iron:

1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)



2. Lift each lead of the flat pack-IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)

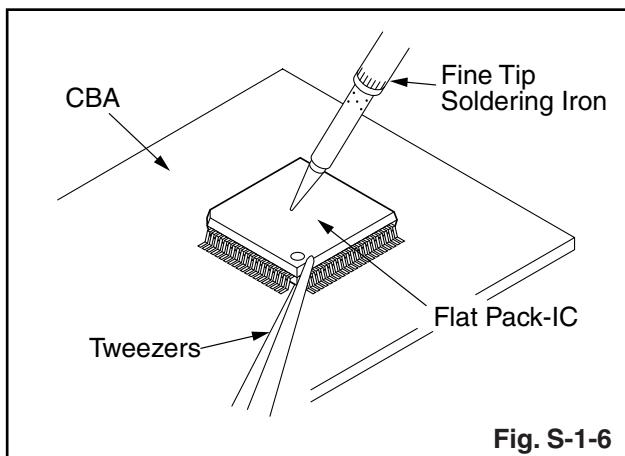
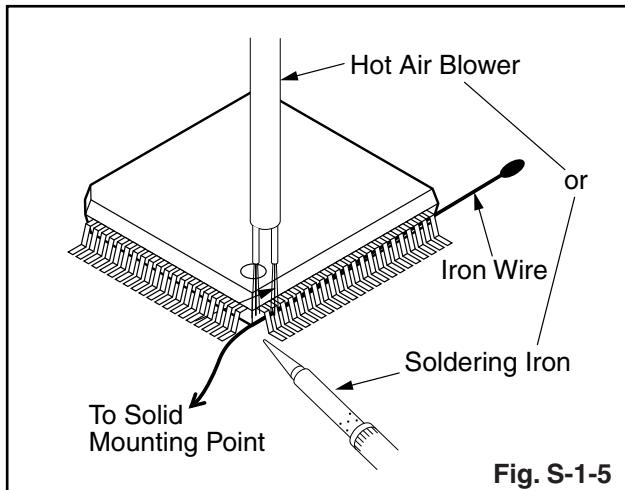


3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### With Iron Wire:

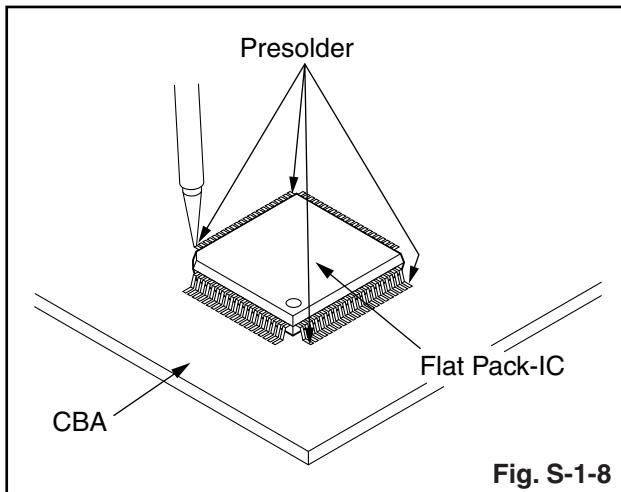
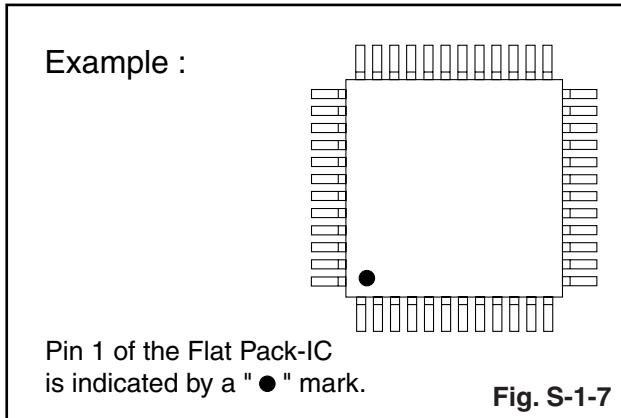
1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
2. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
3. While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the CBA contact pads as shown in Fig. S-1-5.
4. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
5. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

**Note:** When using a soldering iron, care must be taken to ensure that the flat pack-IC is not being held by glue. When the flat pack-IC is removed from the CBA, handle it gently because it may be damaged if force is applied.



## 2. Installation

1. Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the CBA so you can install a replacement flat pack-IC more easily.
2. The “●” mark on the flat pack-IC indicates pin 1. (See Fig. S-1-7.) Be sure this mark matches the 1 on the PCB when positioning for installation. Then presolder the four corners of the flat pack-IC. (See Fig. S-1-8.)
3. Solder all pins of the flat pack-IC. Be sure that none of the pins have solder bridges.



## Instructions for Handling Semiconductors

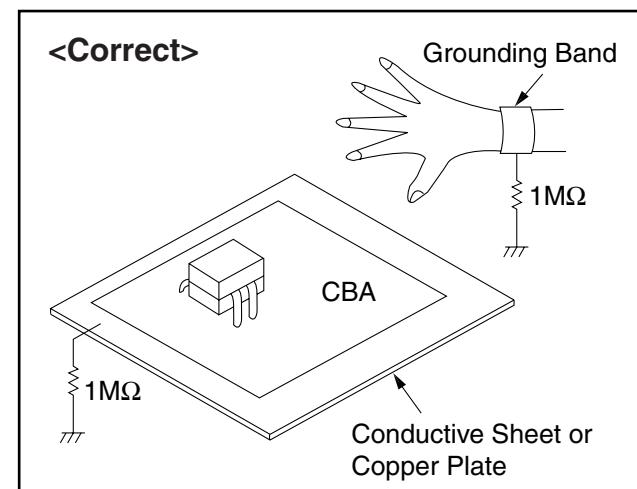
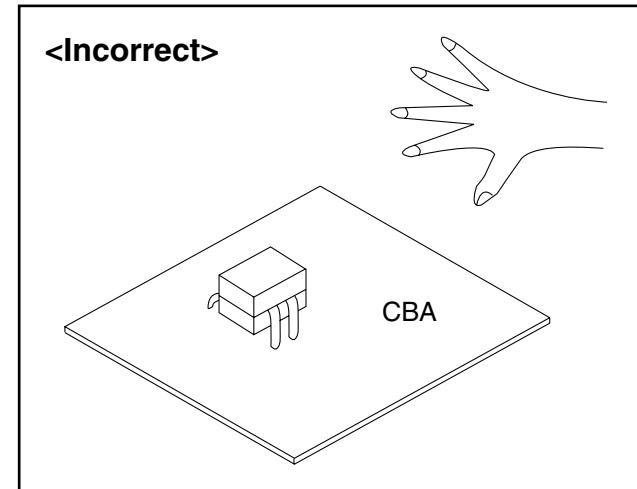
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

### 1. Ground for Human Body

Be sure to wear a grounding band ( $1\text{ M}\Omega$ ) that is properly grounded to remove any static electricity that may be charged on the body.

### 2. Ground for Workbench

Be sure to place a conductive sheet or copper plate with proper grounding ( $1\text{ M}\Omega$ ) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors with your clothing.

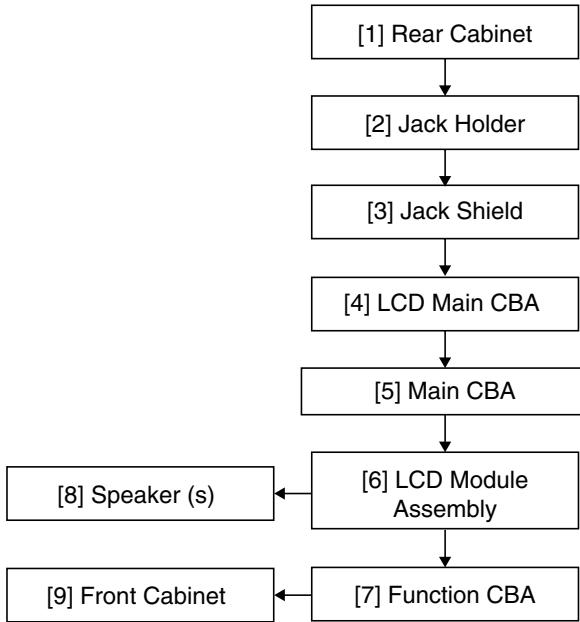


# CABINET DISASSEMBLY INSTRUCTIONS

[LCD-B1504]

## 1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts and the CBA in order to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route and dress the cables as they were.



## 2. Disassembly Method

ID/ LOC. No.	PART	REMOVAL		
		Fig. No.	REMOVE/ *UNHOOK/ UNLOCK/ RELEASE/UNPLUG/ DESOLDER	Note
[1]	Rear Cabinet	D1	6(S-1), 3(S-2)	---
[2]	Jack Holder	D2	2(S-3), (S-4)	---
[3]	Jack Shield	D2	-----	---
[4]	LCD Main CBA	D2 D3	3(S-5), *CN320A, *CN321A, *CN101B, *CN102B, *CN103B	---
[5]	Main CBA	D2 D3	5(S-6), (S-7), *CN801, *CN802, *T401, *T402, *CN31A	---
[6]	LCD Module Assembly	D2 D3	7(S-8)	---
[7]	Function CBA	D2 D3	4(S-9)	---
[8]	Speaker (s)	D2 D3	4(S-10)	---
[9]	Front Cabinet	D2	-----	---

↓      ↓      ↓      ↓      ↓  
(1)    (2)    (3)    (4)    (5)

### Note:

(1): Order of steps in Procedure. When reassembling, follow the steps in reverse order. These numbers are also used as the Identification (location) No. of parts in Figures.

(2): Parts to be removed or installed.

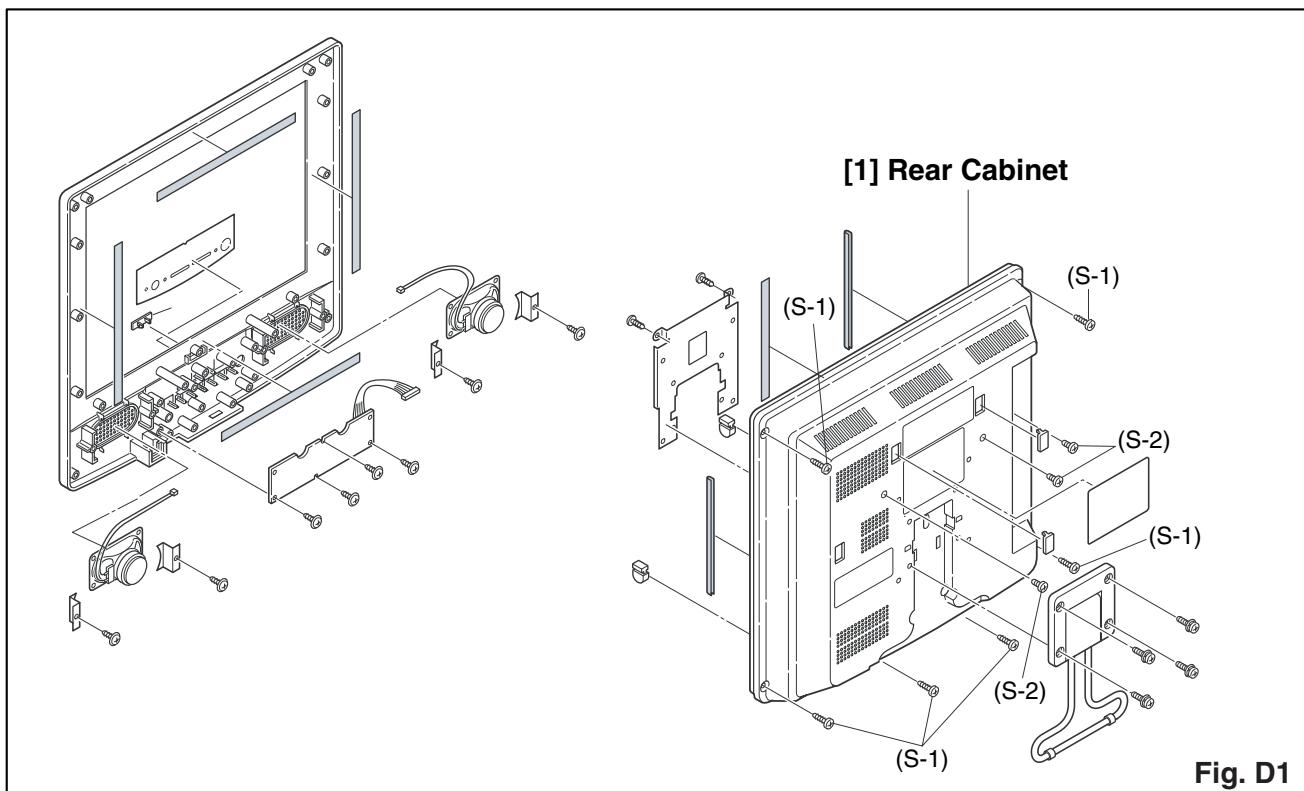
(3): Fig. No. showing Procedure of Part Location.

(4): Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.

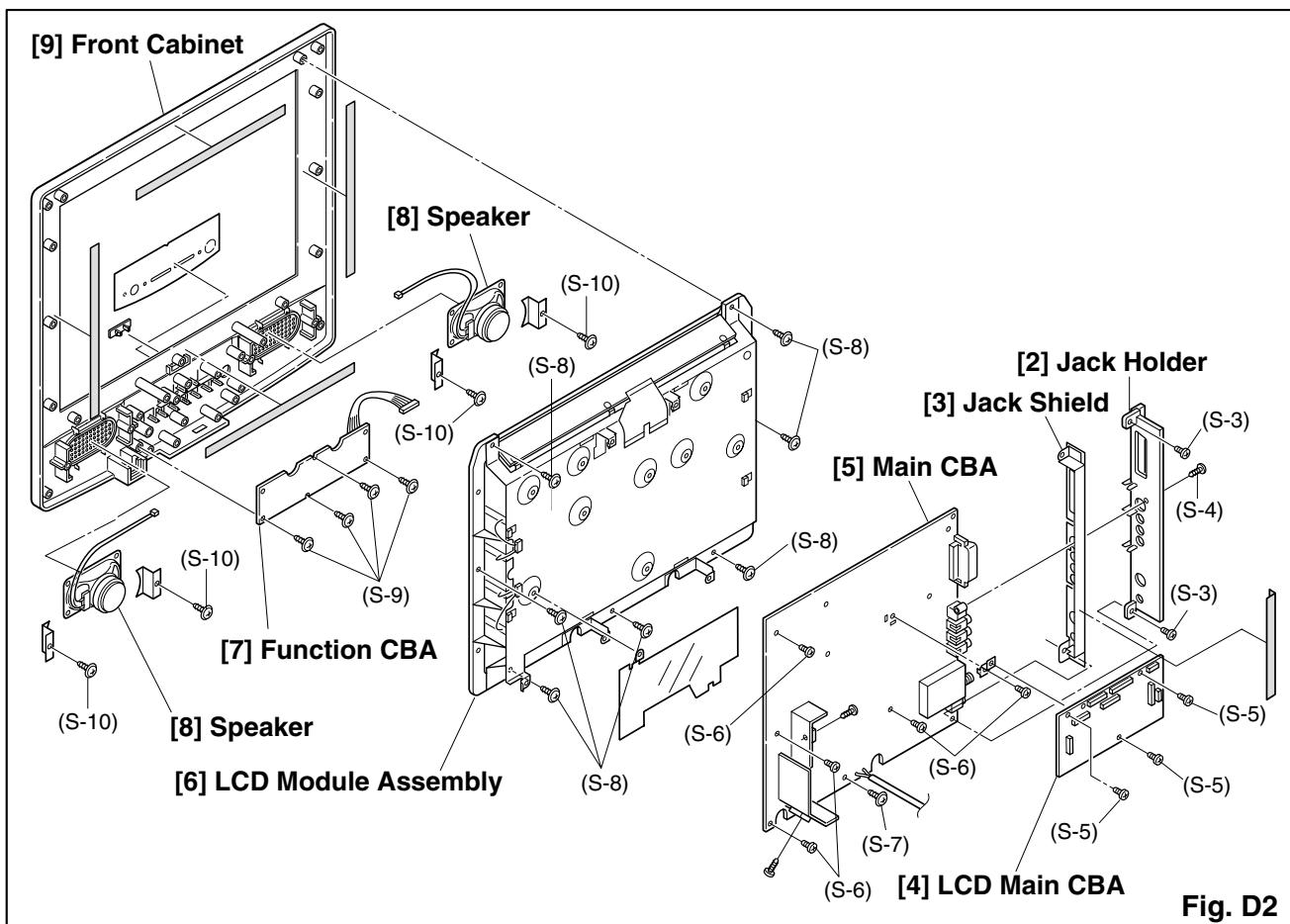
S=Screw, P=Spring, L=Locking Tab,  
CN=Connector, \*=Unhook, Unlock, Release,  
Unplug, or Desolder

2(S-2) = two screws (S-2)

(5): Refer to the following Reference Notes in the Table.



**Fig. D1**



**Fig. D2**

## Wiring Diagram

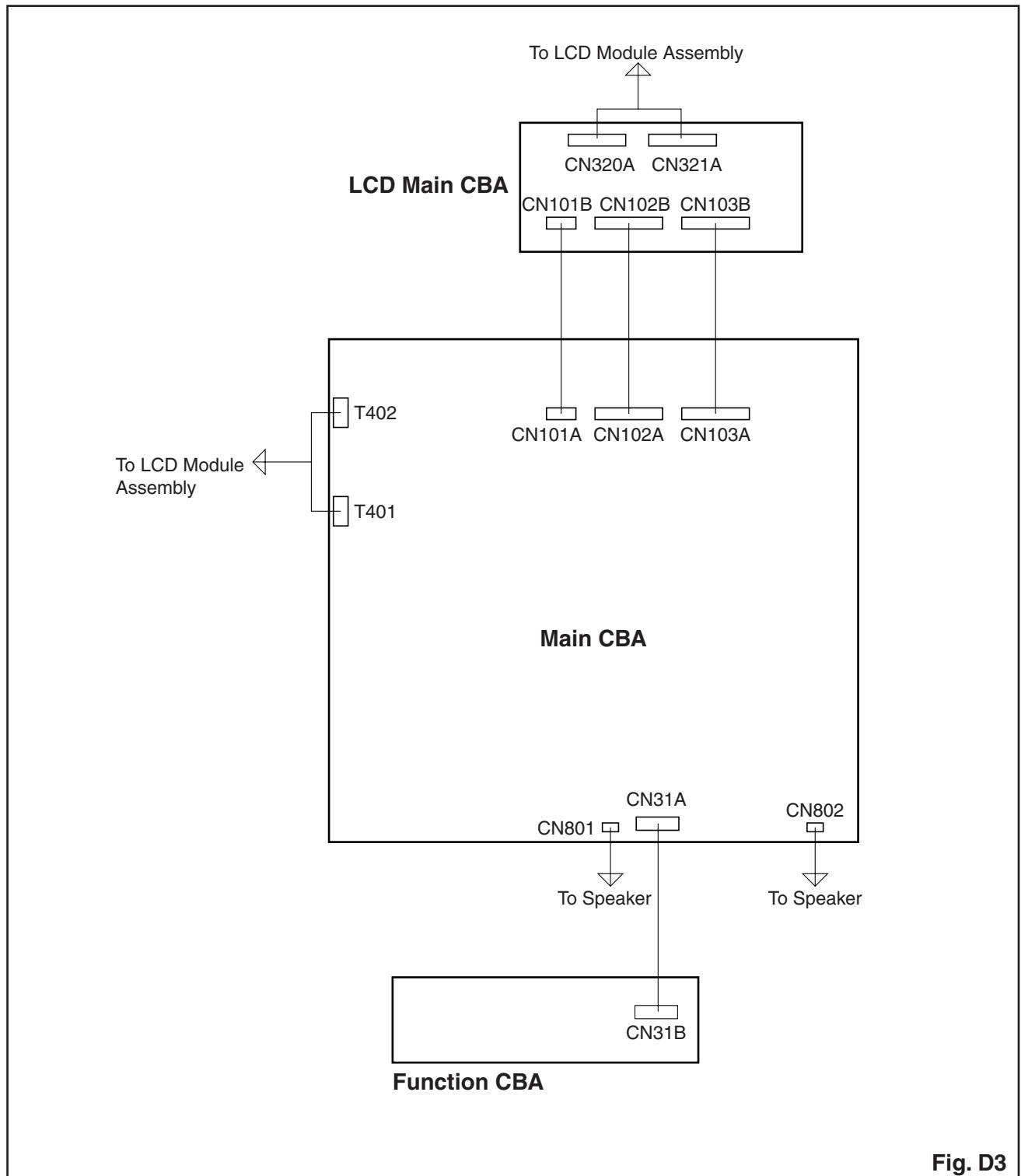
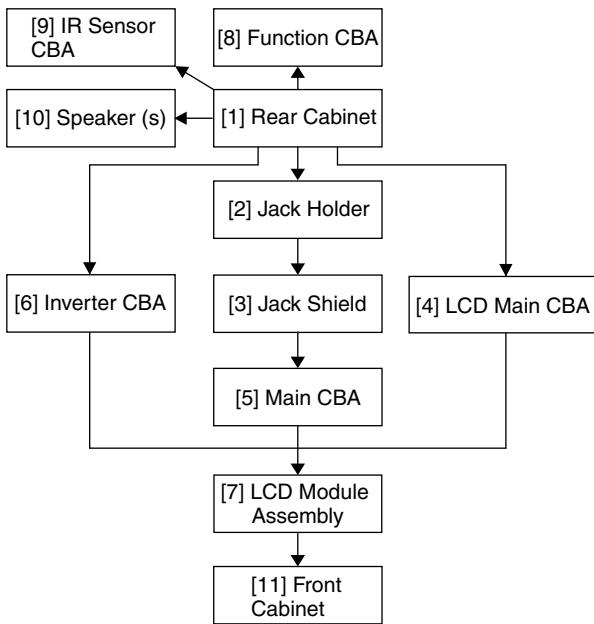


Fig. D3

## [LCD-B2004]

### 1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts and the CBA in order to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route and dress the cables as they were.



### 2. Disassembly Method

ID/ LOC. No.	PART	REMOVAL		Note
		Fig. No.	REMOVE/ *UNHOOK/UNLOCK/ RELEASE/UNPLUG/ DESOLDER	
[1]	Rear Cabinet	D1	11(S-1), 3(S-2)	---
[2]	Jack Holder	D2	2(S-3), (S-4)	---
[3]	Jack Shield	D2	-----	---
[4]	LCD Main CBA	D2 D3	3(S-5), *CN310A, *CN311A, *CN313A, *CN101B, *CN102B, *CN103B	---
[5]	Main CBA	D2 D3	5(S-6), *CN801, *CN802, *CN405, *CN51, *CN53	---
[6]	Inverter CBA	D2 D3	6(S-7), *T1401, *T1402, *T1403, *T1404	---
[7]	LCD Module Assembly	D2 D3	13(S-8)	---
[8]	Function CBA	D2 D3	4(S-9)	---
[9]	IR Sensor CBA	D2 D3	2(S-10)	---
[10]	Speaker (s)	D2 D3	4(S-11)	---
[11]	Front Cabinet	D2	-----	---

(1): Order of steps in Procedure. When reassembling, follow the steps in reverse order. These numbers are also used as the Identification (location) No. of parts in Figures.

(2): Parts to be removed or installed.

(3): Fig. No. showing Procedure of Part Location.

(4): Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.

S=Screw, P=Spring, L=Locking Tab, CN=Connector, \*=Unhook, Unlock, Release, Unplug, or Desolder

2(S-2) = two screws (S-2)

(5): Refer to the following Reference Notes in the Table.

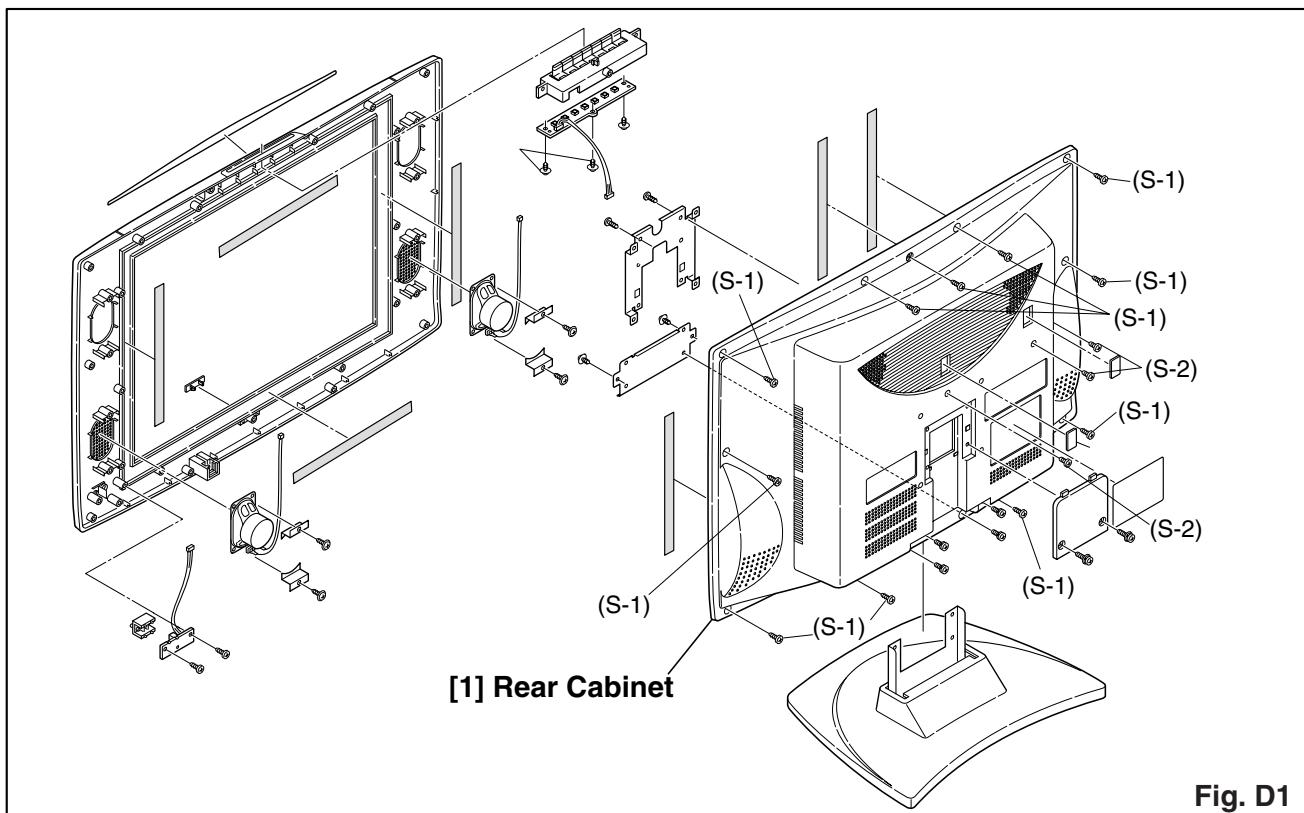


Fig. D1

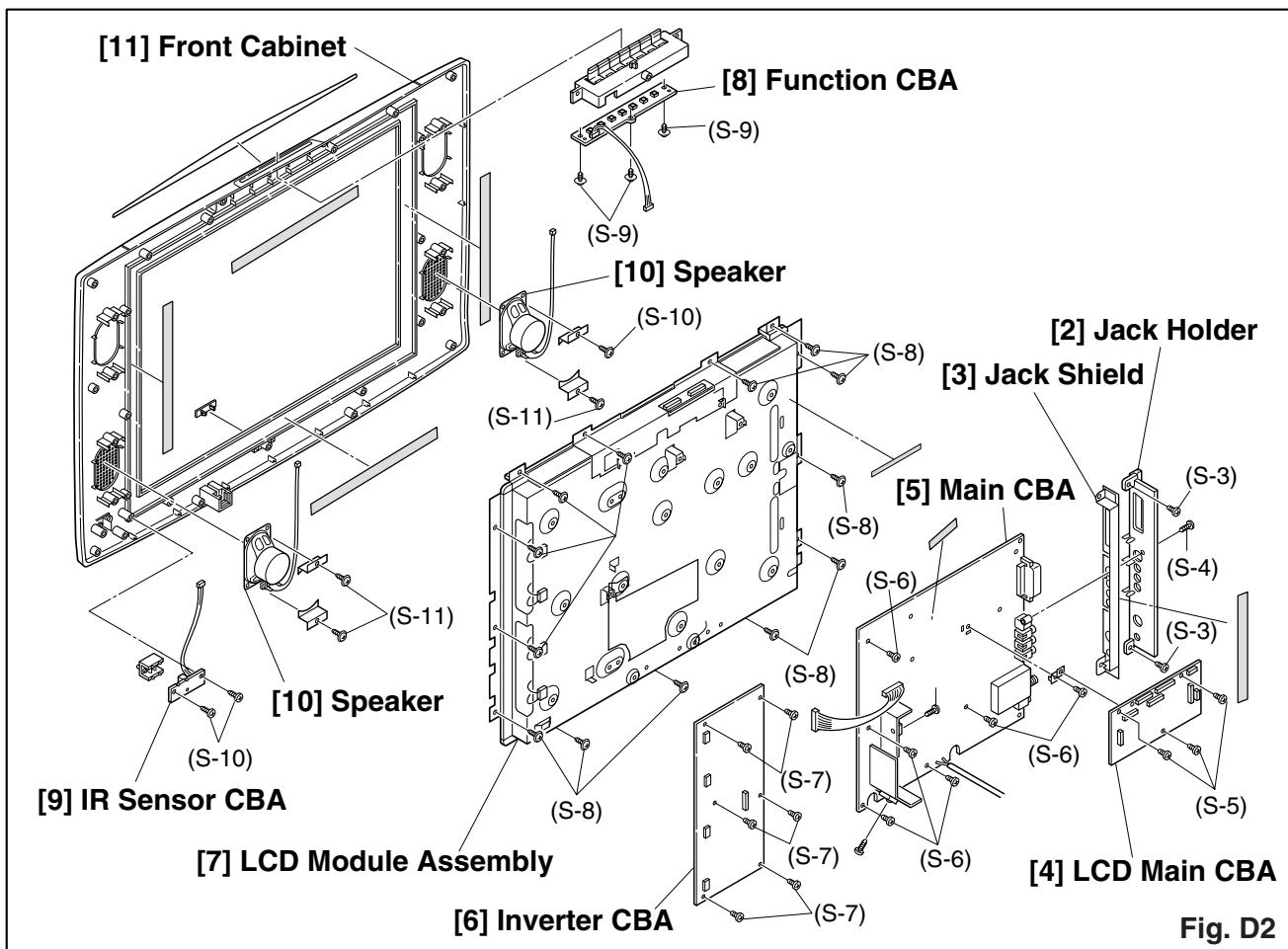


Fig. D2

## Cable Wiring Diagram

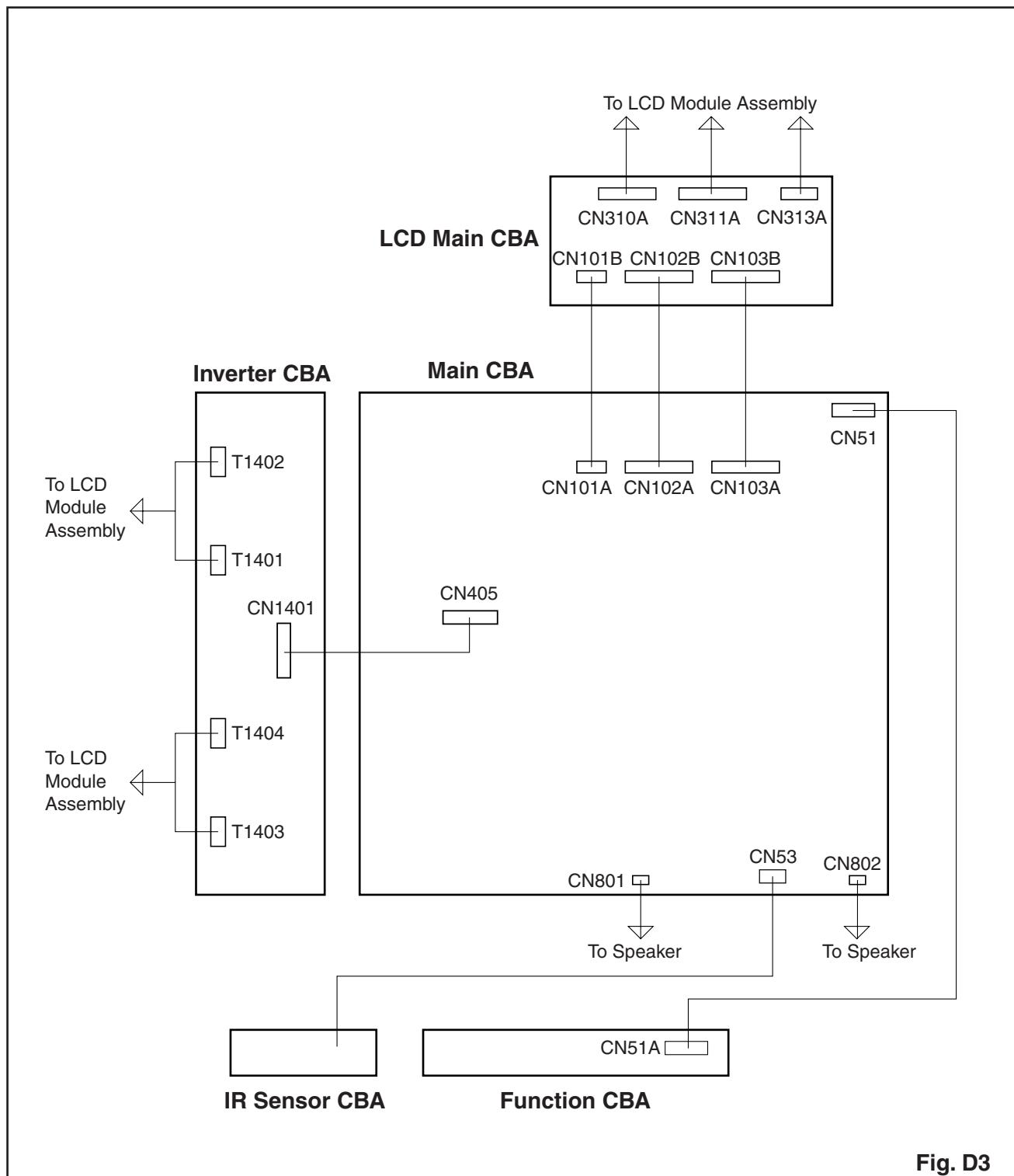


Fig. D3

# HOW TO INITIALIZE THE LCD TELEVISION

To put the program back at the factory-default, initialize the LCD television as the following procedure.

## How to initialize the LCD television:

1. Turn the power on. (Use main power on the TV unit.)
2. To enter the service mode, press [STANDBY], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds.
  - To cancel the service mode, press [STANDBY] button on the remote control.
3. To initialize the LCD television, press "DISPLAY" button on the remote control unit.
4. Confirm "FF" indication on the upper right of the screen.

# ELECTRICAL ADJUSTMENT INSTRUCTIONS

## General Note:

“CBA” is abbreviation for “Circuit Board Assembly.”

## NOTE:

Electrical adjustments are required after replacing circuit components and certain mechanical parts. It is important to perform these adjustments only after all repairs and replacements have been completed. Also, do not attempt these adjustments unless the proper equipment is available.

## Test Equipment Required

1. DC Voltmeter
2. Pattern Generator
3. Color Analyzer

## How to Set up the Service mode:

1. Turn the power on. (Use main power on the TV unit.)
2. Press [STANDBY], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds.
- To cancel the service mode, press [STANDBY] button on the remote control.

## 1. Initial Setting

### General

Enter the Service mode.

Set the each initial data as shown on table 1 below.

**Table 1: Initial Data**

ITEM	BUTTON (on the remote control)	DATA VALUE	
		LCD- B1504	LCD- B2004
BRT(PAL)	MENU → 1	130	134
CNT(PAL)		174	174
CLR-R(PAL)		78	74
CLR-B(PAL)		78	74
SHR(PAL)		143	143
S-BRT(PAL)	MENU → 2	130	134
S-CNT(PAL)		174	174
S-CLR-R(PAL)		78	74
S-CLR-B(PAL)		78	74
S-SHR(PAL)		143	143
C-BRT(PAL)	MENU → 3	134	134
C-CNT(PAL)		122	132
C-CLR-R(PAL)		156	154
C-CLR-B(PAL)		156	154
C-SHR(PAL)		143	143
BRT(SECAM)	MENU → 4	130	134
CNT(SECAM)		174	174
CLR-R(SECAM)		78	74
CLR-B(SECAM)		78	74
SHR(SECAM)		143	143
S-BRT(SECAM)	MENU → 5	130	134
S-CNT(SECAM)		174	174
S-CLR-R(SECAM)		78	74
S-CLR-B(SECAM)		78	74
S-SHR(SECAM)		143	143
C-BRT(SECAM)	MENU → 6	134	134
C-CNT(SECAM)		122	132
C-CLR-R(SECAM)		156	154
C-CLR-B(SECAM)		156	154
C-SHR(SECAM)		143	143
BRT(NTSC)	MENU → 7	134	134
CNT(NTSC)		172	174
CLR-R(NTSC)		78	70
CLR-B(NTSC)		78	70
TNT(NTSC)		148	148
SHR(NTSC)		143	143
S-BRT(NTSC)	MENU → 8	134	134
S-CNT(NTSC)		172	174
S-CLR-R(NTSC)		78	70
S-CLR-B(NTSC)		78	70
S-TNT(NTSC)		148	148
S-SHR(NTSC)		143	143

ITEM	BUTTON (on the remote control)	DATA VALUE	
		LCD- B1504	LCD- B2004
C-BRT(NTSC)	MENU → 9	134	134
C-CNT(NTSC)		122	132
C-CLR-R(NTSC)		156	154
C-CLR-B(NTSC)		156	154
C-TNT(NTSC)		148	148
C-SHR(NTSC)		143	143
BRIGHT	0	0	0
NORMAL	0	40	65
DARK	0	95	98
COR(C/D/S-1)	VOL. ▼ → 1	131	131
COG(C/D/S-1)	VOL. ▼ → 2	131	131
COB(C/D/S-1)	VOL. ▼ → 3	131	131
DR(C/D/S-1)	VOL. ▼ → 4	145	145
DG(C/D/S-1)	VOL. ▼ → 5	143	143
DB(C/D/S-1)	VOL. ▼ → 6	140	140
SBR(C/D/S-1)	VOL. ▼ → 7	0	0
SBB(C/D/S-1)	VOL. ▼ → 9	0	0
C-COR(C/D/S-2)	VOL. ▼ → 1	131	131
C-COG(C/D/S-2)	VOL. ▼ → 2	131	131
C-COB(C/D/S-2)	VOL. ▼ → 3	131	131
C-DR(C/D/S-2)	VOL. ▼ → 4	145	145
C-DG(C/D/S-2)	VOL. ▼ → 5	143	143
C-DB(C/D/S-2)	VOL. ▼ → 6	140	140
C-SBR(C/D/S-2)	VOL. ▼ → 7	0	0
C-SBB(C/D/S-2)	VOL. ▼ → 9	0	0
7F	VOL. ▼	FF	FF
LAST POWER		OFF	OFF
SYSTEM		PAL-I	PAL-I
NCM		ON	ON
ASPECT		OFF	OFF
RUSSIAN		OFF	OFF

## 2. +B Adjustment

**Purpose:** To obtain correct operation.

**Symptom of Misadjustment:** The picture is dark and the unit does not operate correctly.

Test Point	Adj. Point
TP401 (+B) TP300 (GND)	VR649
M. EQ.	Spec.
DC Voltmeter	+13.0±0.3V DC [LCD-B1504] +21.0±0.3V DC [LCD-B2004]

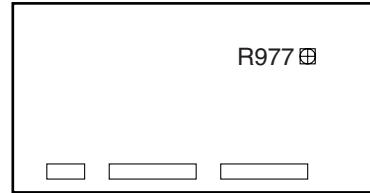
**Note:** TP401(+B), TP300(GND), VR649 --- Main CBA

1. Connect DC Volt Meter to TP401 and TP300(GND).
2. Adjust VR649 so that the voltage of TP401 becomes  $+13.0\pm0.3V$  DC [LCD-B1504] or  $+21.0\pm0.3V$  DC [LCD-B2004].

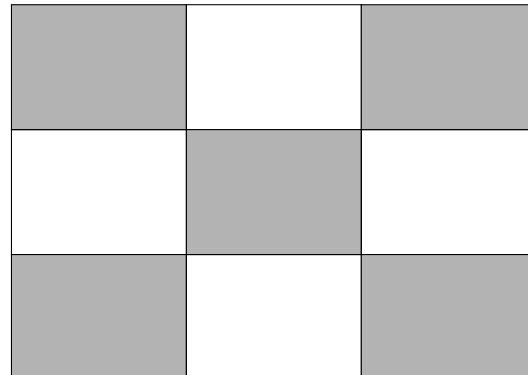
## 3. Flicker Adjustment

**Adjustment Point:** R977 (LCD Main CBA)

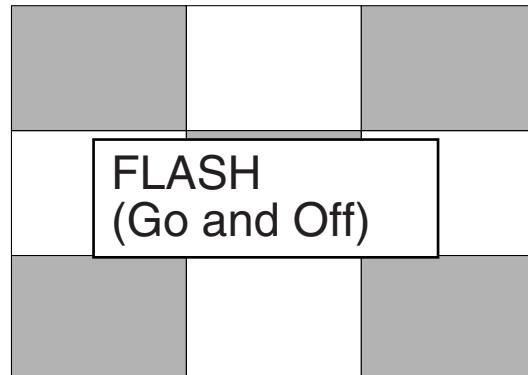
LCD Main CBA



1. Enter the Service mode.
2. Press "2" button on the remote control unit.  
The following screen appears.



3. If Flicker Adjustment is not fit, the screen become the following.



4. Adjust R977 so that flash stops.

The following adjustment normally are not attempted in the field. Only when replacing the LCD Panel then adjust as a preparation.

## 4. White Balance Adjustment

**Purpose:** To mix red, green and blue beams correctly for pure white.

**Symptom of Misadjustment:** White becomes bluish or reddish.

Test Point	Adj. Point	Mode	Input			
Screen	VOL. ▼ buttons	[RF/AV2(CVBS)] C/D/S-1 [AV1(RGB)] C/D/S-2	White Purity (APL 80%) or (APL 40%)			
M. EQ.	Spec.					
Pattern Generator, Color analyzer	x: 260 to 320, y: 270 to 330					
Figure						
<p>It carries out in a darkroom. Perpendicularity L = 50 cm INPUT: WHITE 80% Color Analyzer</p>						

1. Operate the unit for more than 20 minutes.
2. Input the White Purity (APL 80% or APL 40%).
3. Set the color analyzer to the CHROMA mode and bring the optical receptor to the center on the LCD-Panel surface after zero point calibration as shown above.

**Note:** The optical receptor must be set perpendicularly to the LCD Panel surface.

4. **[RF/AV2(CVBS)]**  
Enter the Service mode. Press "VOL ▼" button on the remote control unit and select "C/D/S-1" mode.

**[AV1(RGB)]**  
Enter the Service mode. Press "VOL ▼" button on the remote control unit and select "C/D/S-2" mode.

5. **[RF/AV2(CVBS)]**  
When "x" value and "y" value are not within specification, adjust "DB (C/D/S-1)" or "DR (C/D/S-1)". Refer to "1. Initial Setting."

**Note:** "DB(C/D/S1)" or "DR(C/D/S1)" must be adjusted within ±10.

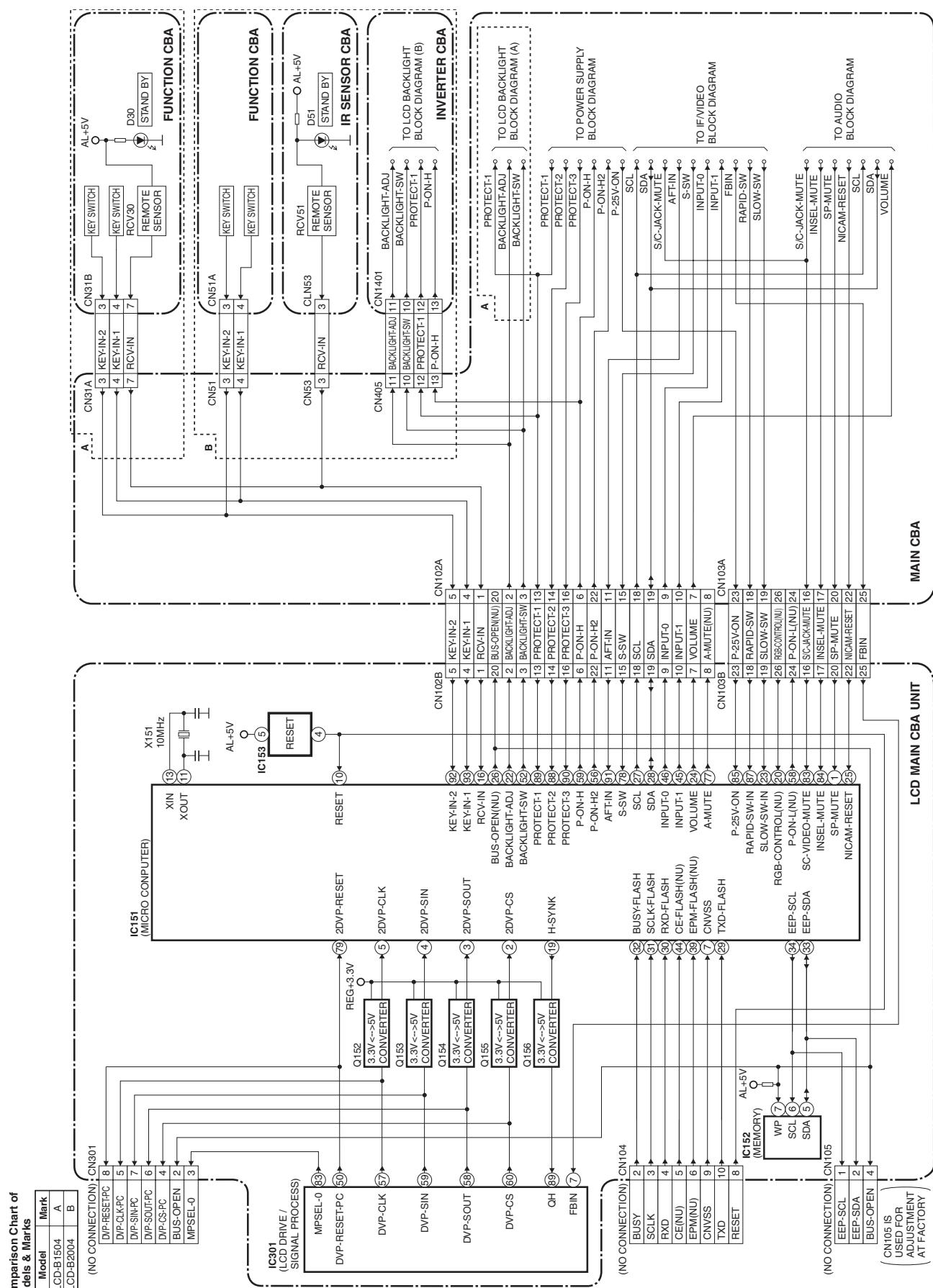
**[AV1(RGB)]**  
When "x" value and "y" value are not within specification, adjust "C-DB(C/D/S-2)" or "C-DR(C/D/S-2)". Refer to "1. Initial Setting."

**Note:** "C-DB(C/D/S-2)" or "C-DR(C/D/S-2)" must be adjusted within ±10.

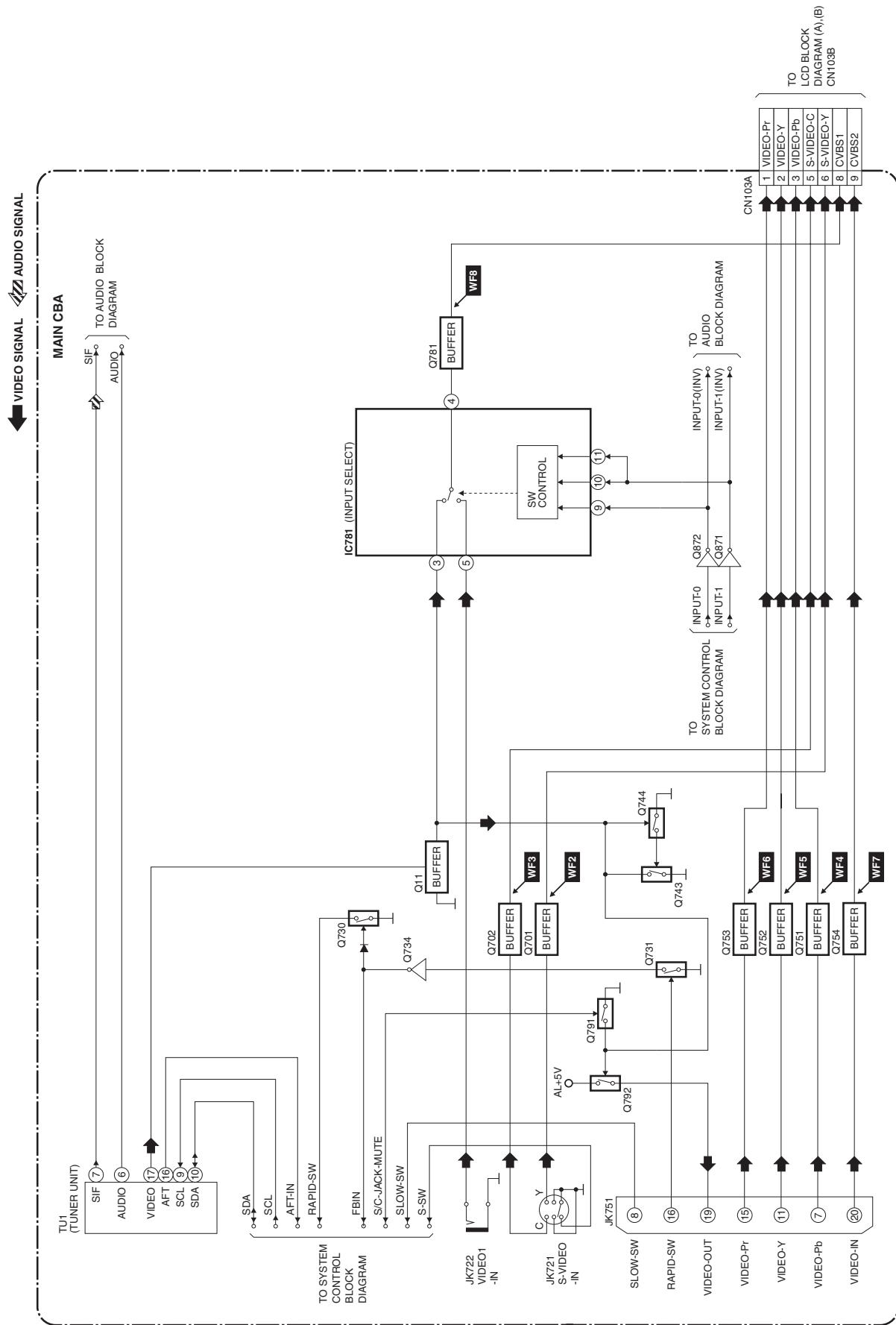
6. Turn the power off and on again. (Main power button on the TV unit.)

# BLOCK DIAGRAMS

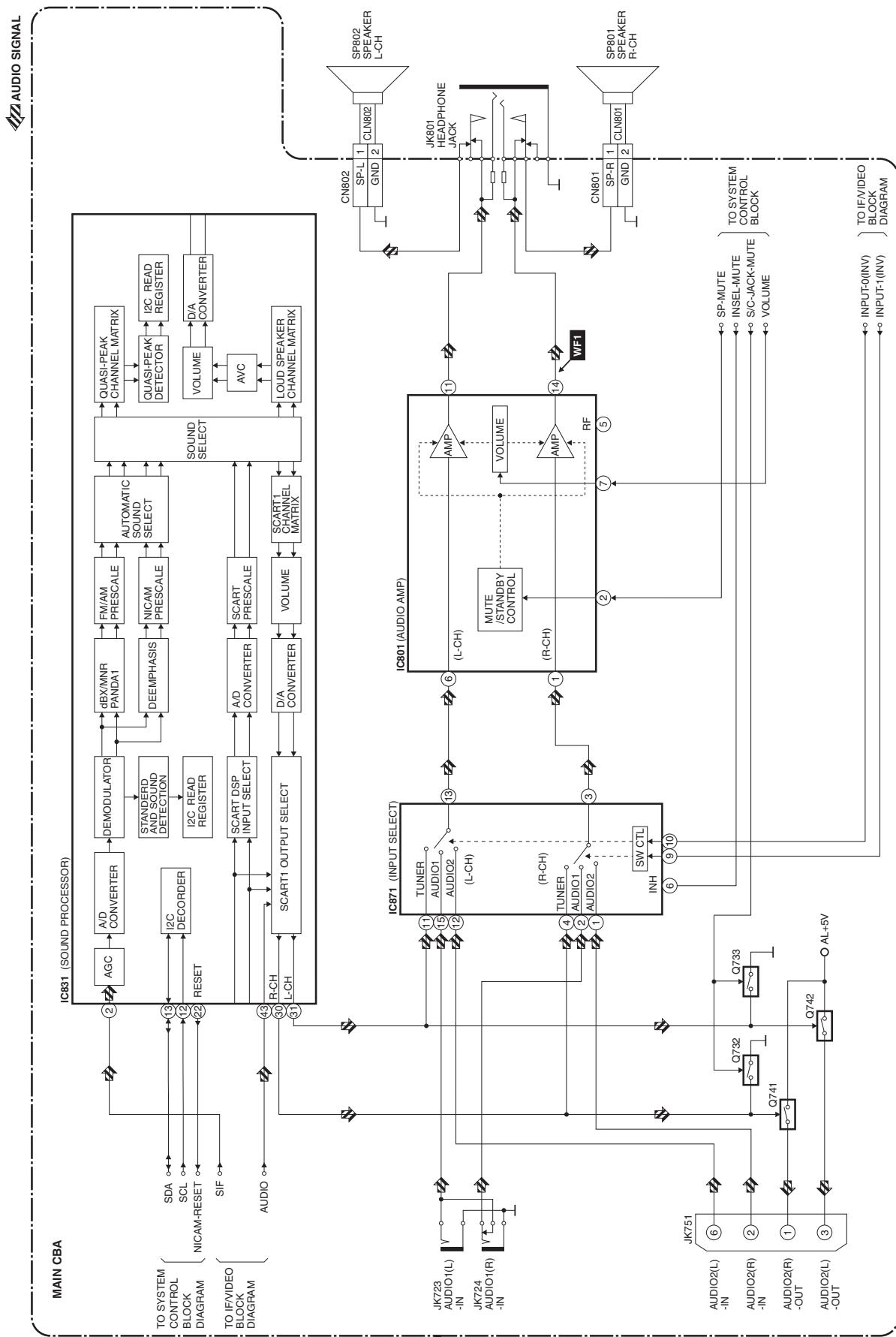
## System Control Block Diagram



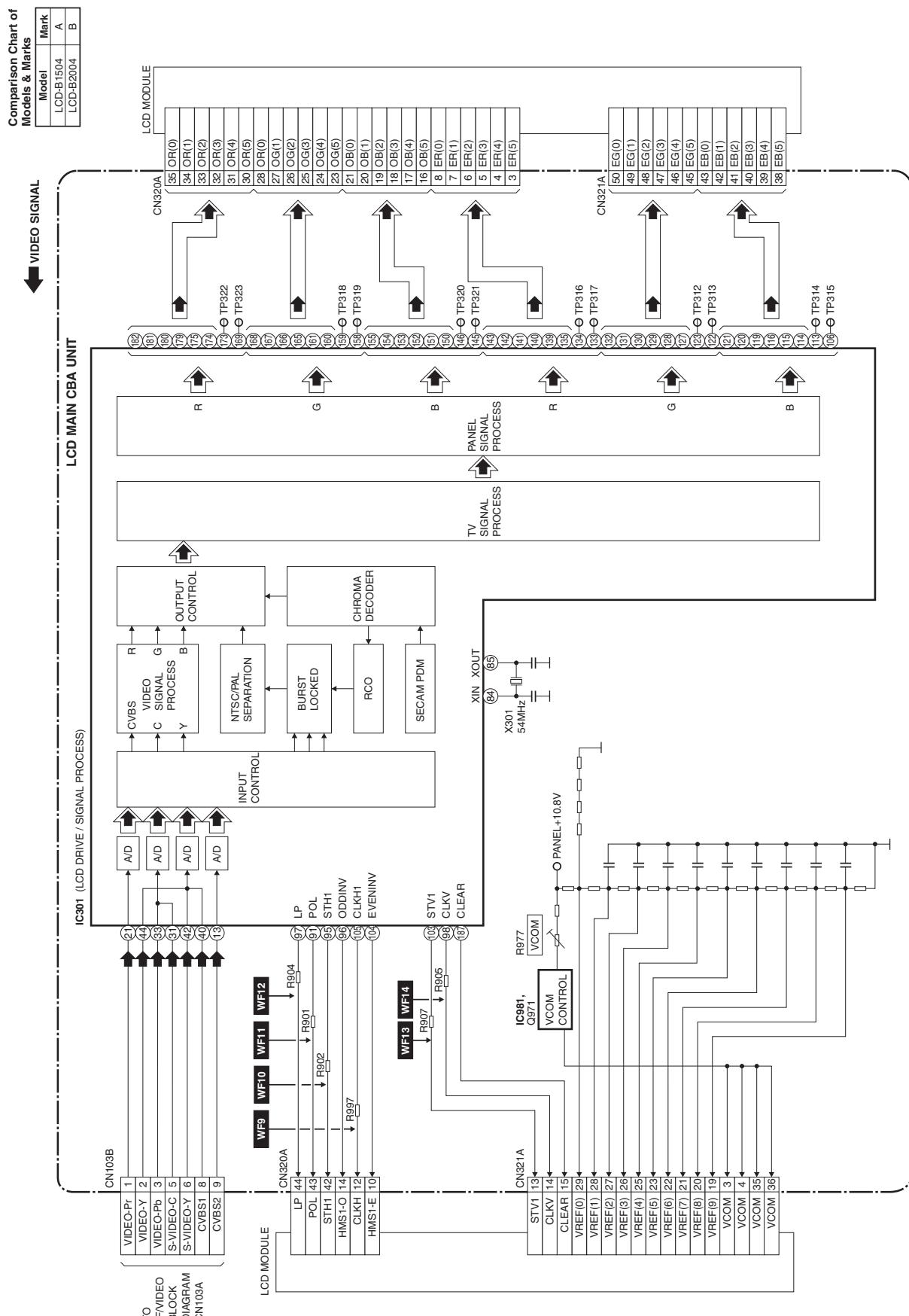
# IF/Video Block Diagram



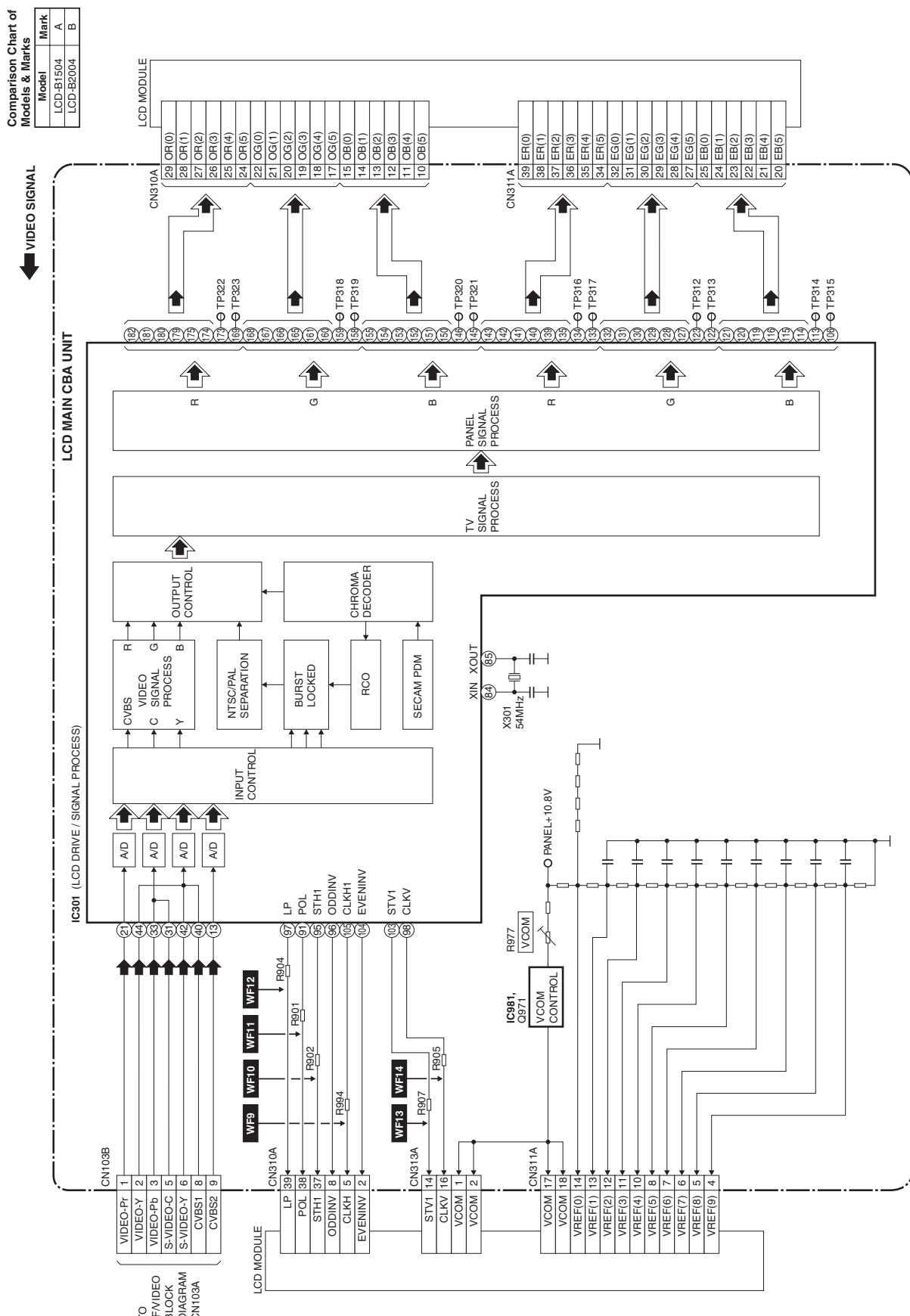
# Audio Block Diagram



# LCD Block Diagram ( A )



## LCD Block Diagram ( B )



# Power Supply Block Diagram

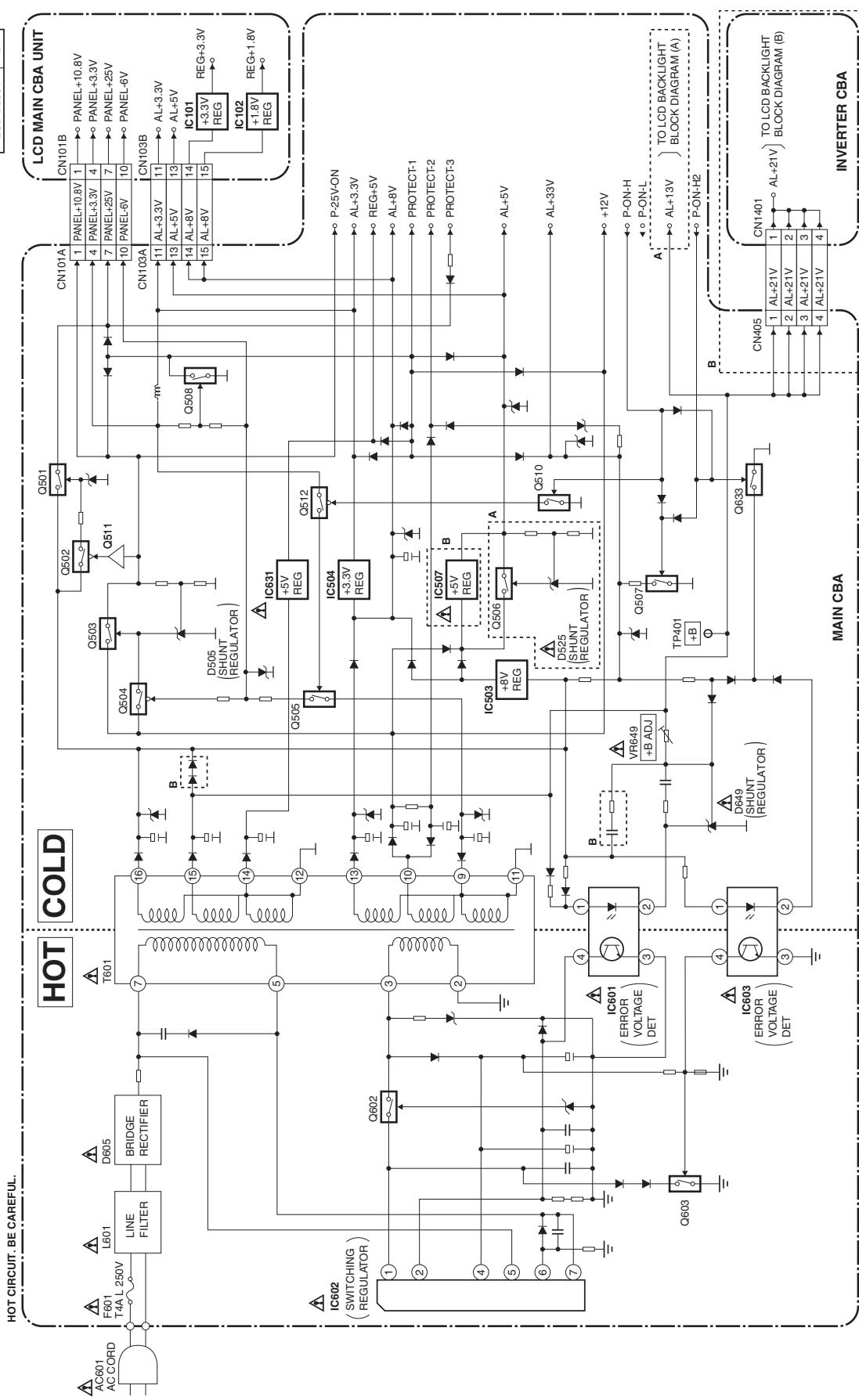
**NOTE :**  
The voltage for parts in hot circuit is measured using  
hot GND as a common terminal.

**CAUTION !**  
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,  
REPLACE ONLY WITH THE SAME TYPE 1A, 250 V FUSE.

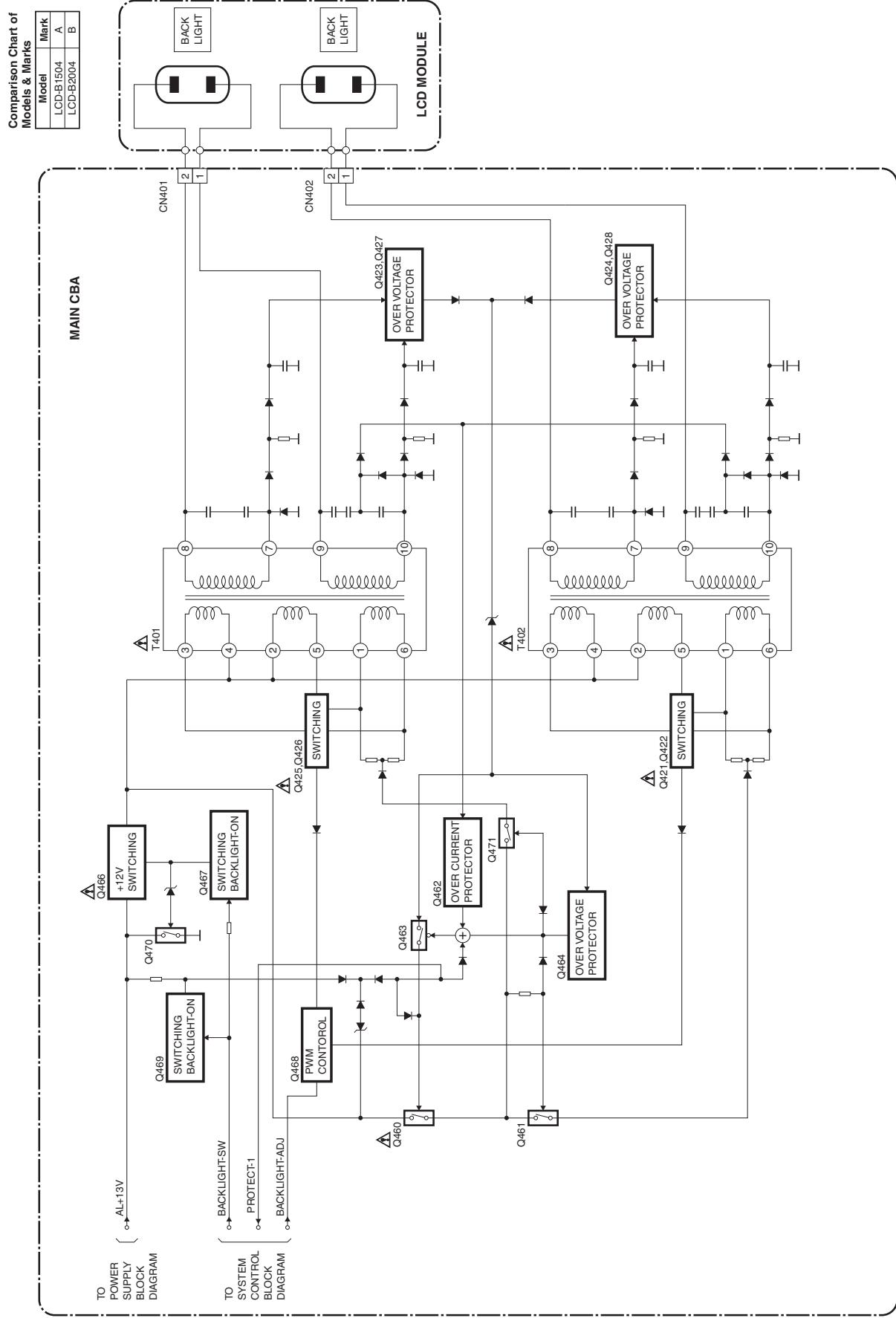
**CAUTION !**  
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F001) is blown, check to see that all components in the power supply  
circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.

Comparison Chart of  
Models & Marks

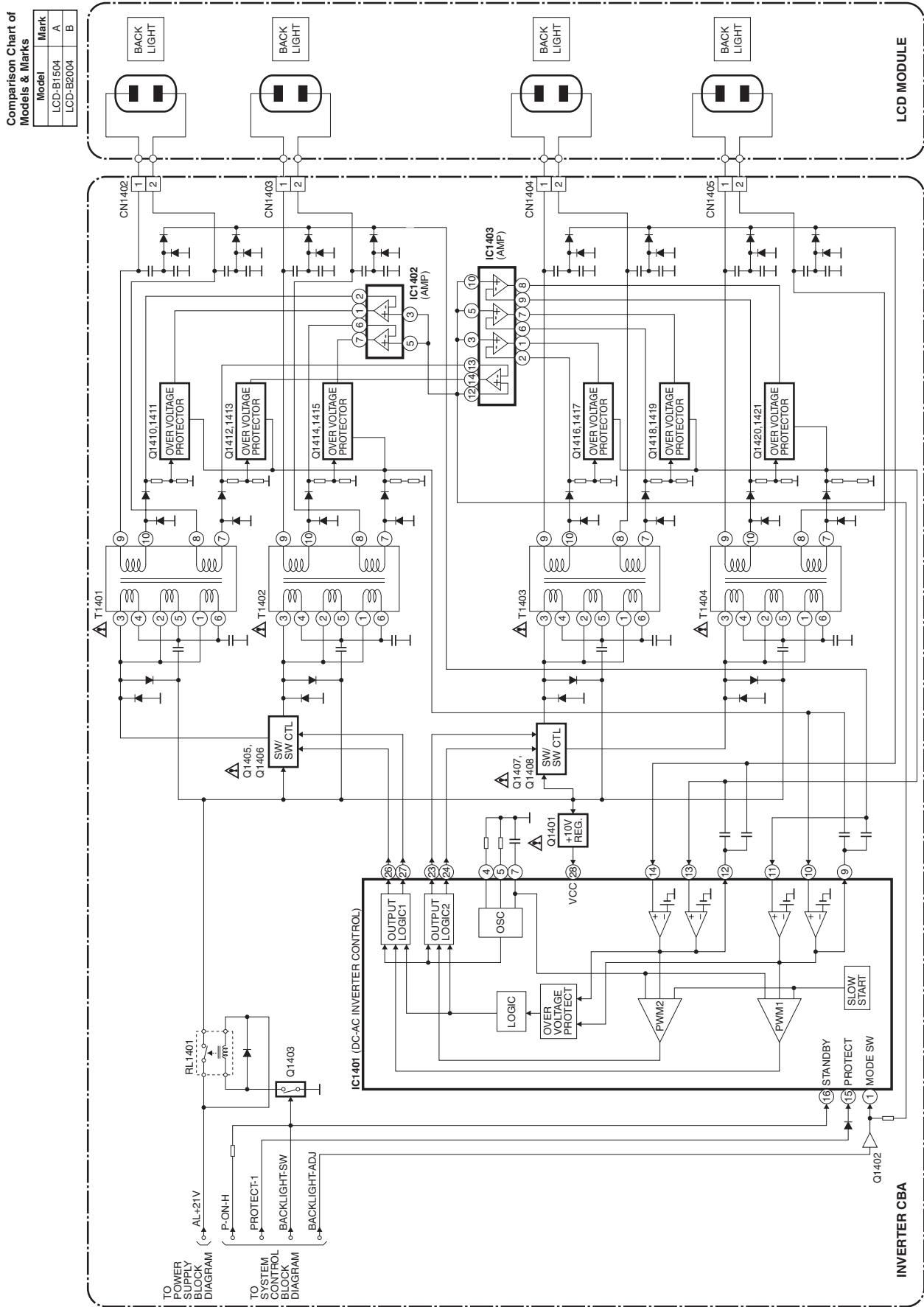
Model	Mark
LCD-B1504	A
LCD-B2004	B



# LCD Backlight Block Diagram ( A )



## LCD Backlight Block Diagram ( B )



# SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

## Standard Notes

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark "⚠" in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

### Notes:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ( $K = 10^3$ ,  $M = 10^6$ ).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in  $\mu F$  ( $P = 10^{-6} \mu F$ ).
5. All voltages are DC voltages unless otherwise specified.

### Note of Capacitors:

ML --- Mylar Cap. PP --- Metallized Film Cap. SC --- Semiconductor Cap. L --- Low Leakage type

### Temperature Characteristics of Capacitors are noted with the following:

B ---  $\pm 10\%$  CH ---  $0 \pm 60$  ppm/ $^{\circ}C$  CSL ---  $+350 \sim 1000$  ppm/ $^{\circ}C$

### Tolerance of Capacitors are noted with the following:

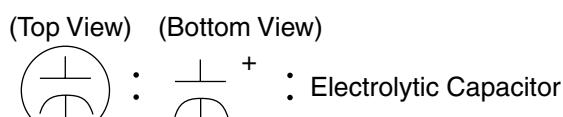
Z ---  $+80 \sim -20\%$

### Note of Resistors:

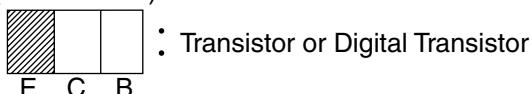
CEM --- Cement Res. MTL --- Metal Res. F --- Fuse Res.

### Capacitors and transistors are represented by the following symbols.

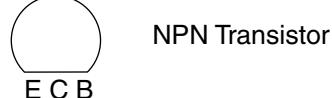
CBA Symbols



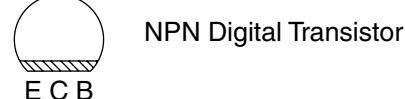
(Bottom View)



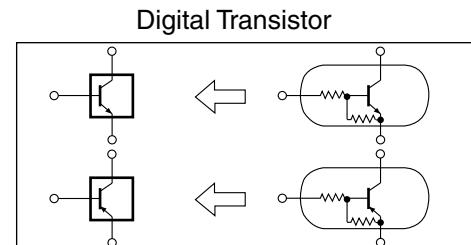
(Top View)



(Top View)



Schematic Diagram Symbols



(Top View)



NPN Transistor

(Top View)



PNP Transistor

8-1

## LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

### 1. CAUTION:

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

### 2. CAUTION:

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.

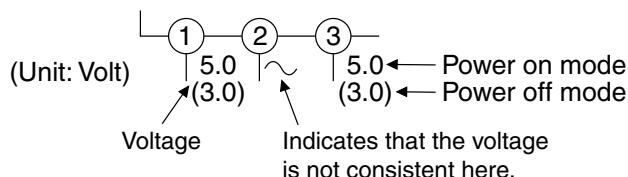
If Main Fuse (F601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

### 3. Note:

1. Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.
2. To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

### 4. Voltage indications on the schematics are as shown below:

Plug the TV power cord into a standard AC outlet.:

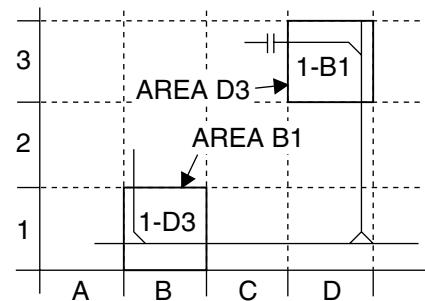


### 5. How to read converged lines

1-D3  
↑  
Distinction Area  
Line Number  
(1 to 3 digits)

Examples:

1. "1-D3" means that line number "1" goes to the line number "1" of the area "D3".
2. "1-B1" means that line number "1" goes to the line number "1" of the area "B1".



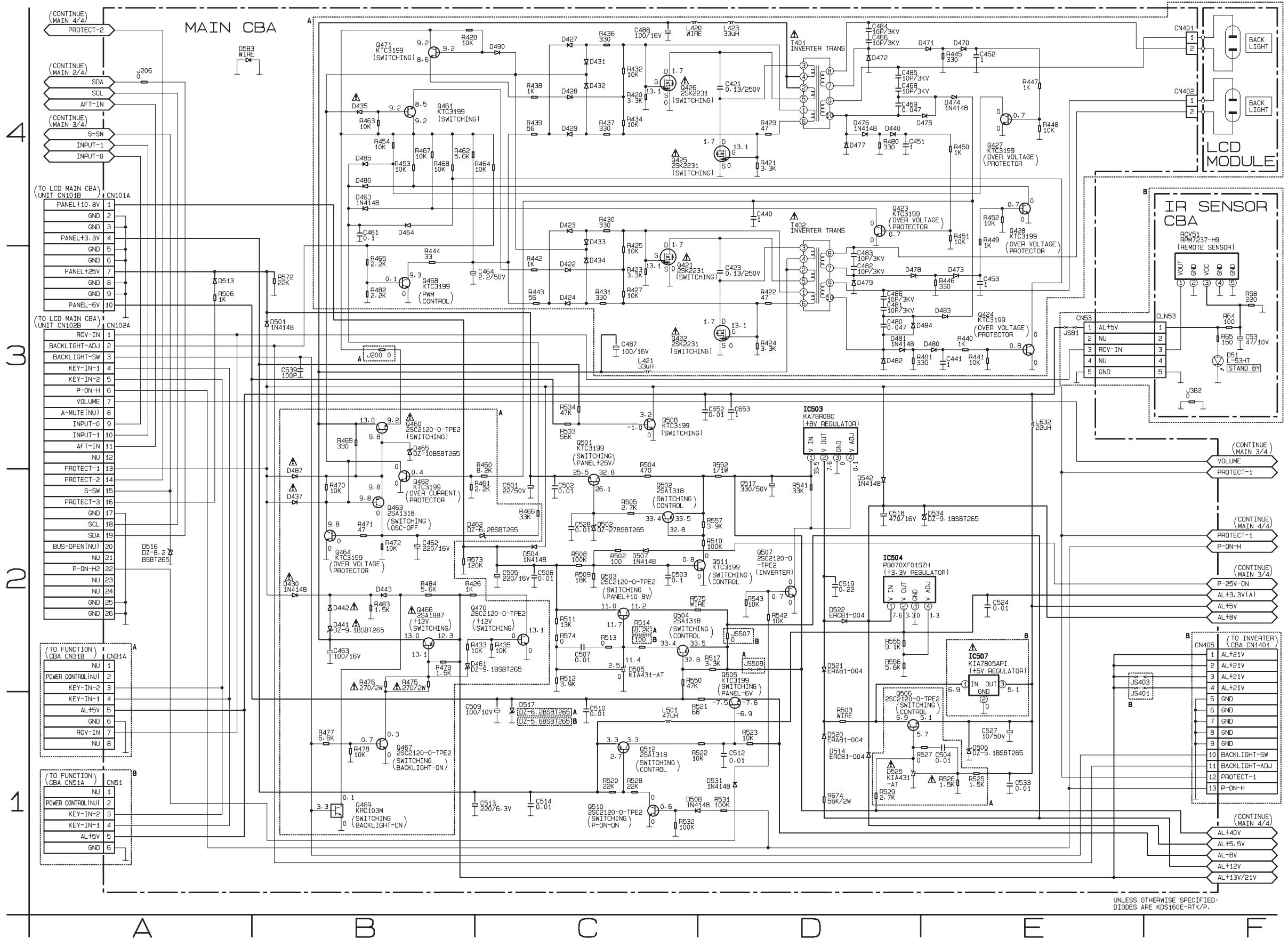
### 6. Test Point Information

- : Indicates a test point with a jumper wire across a hole in the PCB.
- : Used to indicate a test point with a component lead on foil side.
- ◎ : Used to indicate a test point with no test pin.
- : Used to indicate a test point with a test pin.

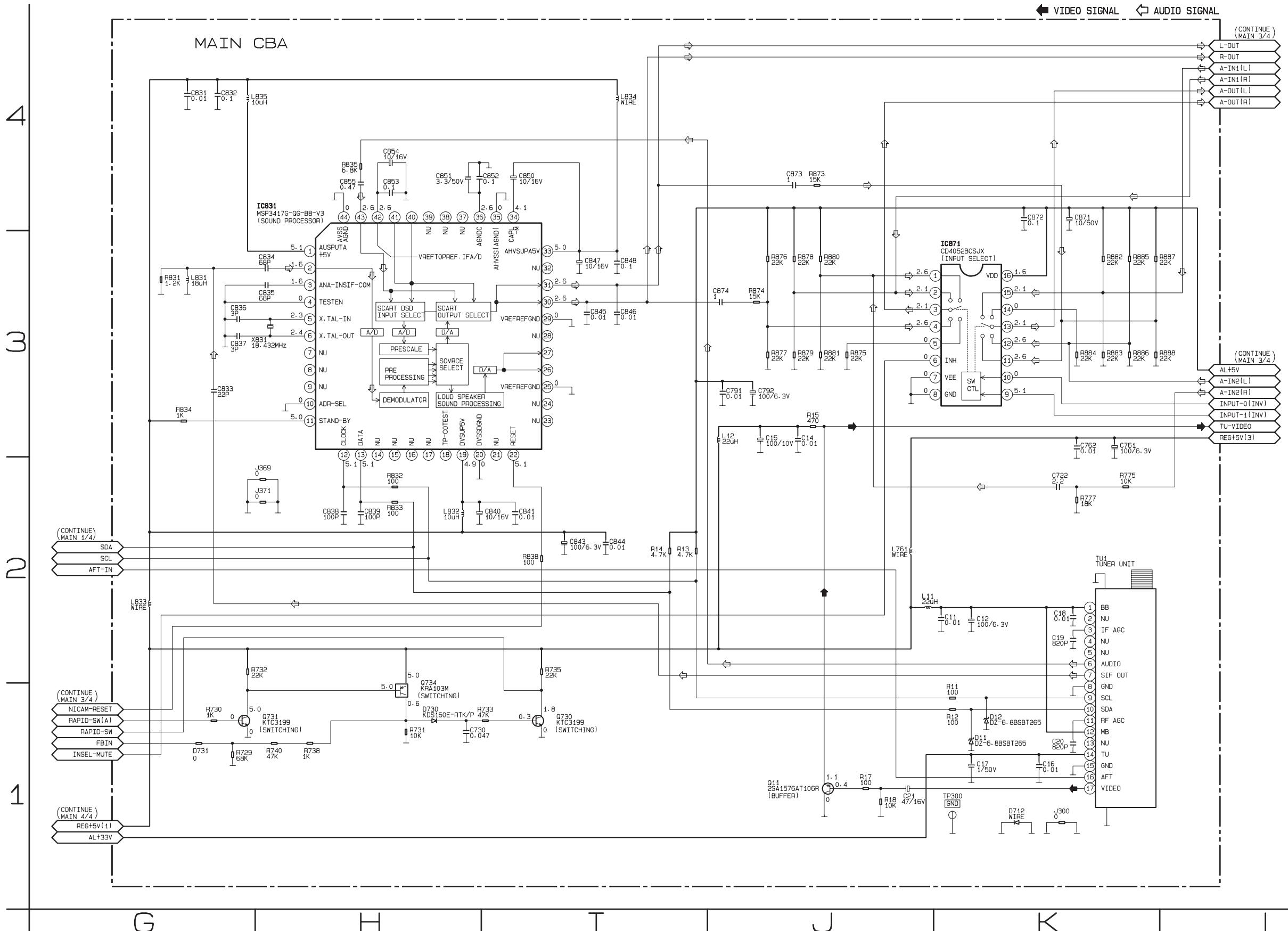
# Main 1/4 & IR Sensor Schematic Diagram

Comparison Chart of  
Models and Marks

MODEL	MARK
LCD-B1504	A
LCD-B2004	B



## Main 2/4 Schematic Diagram

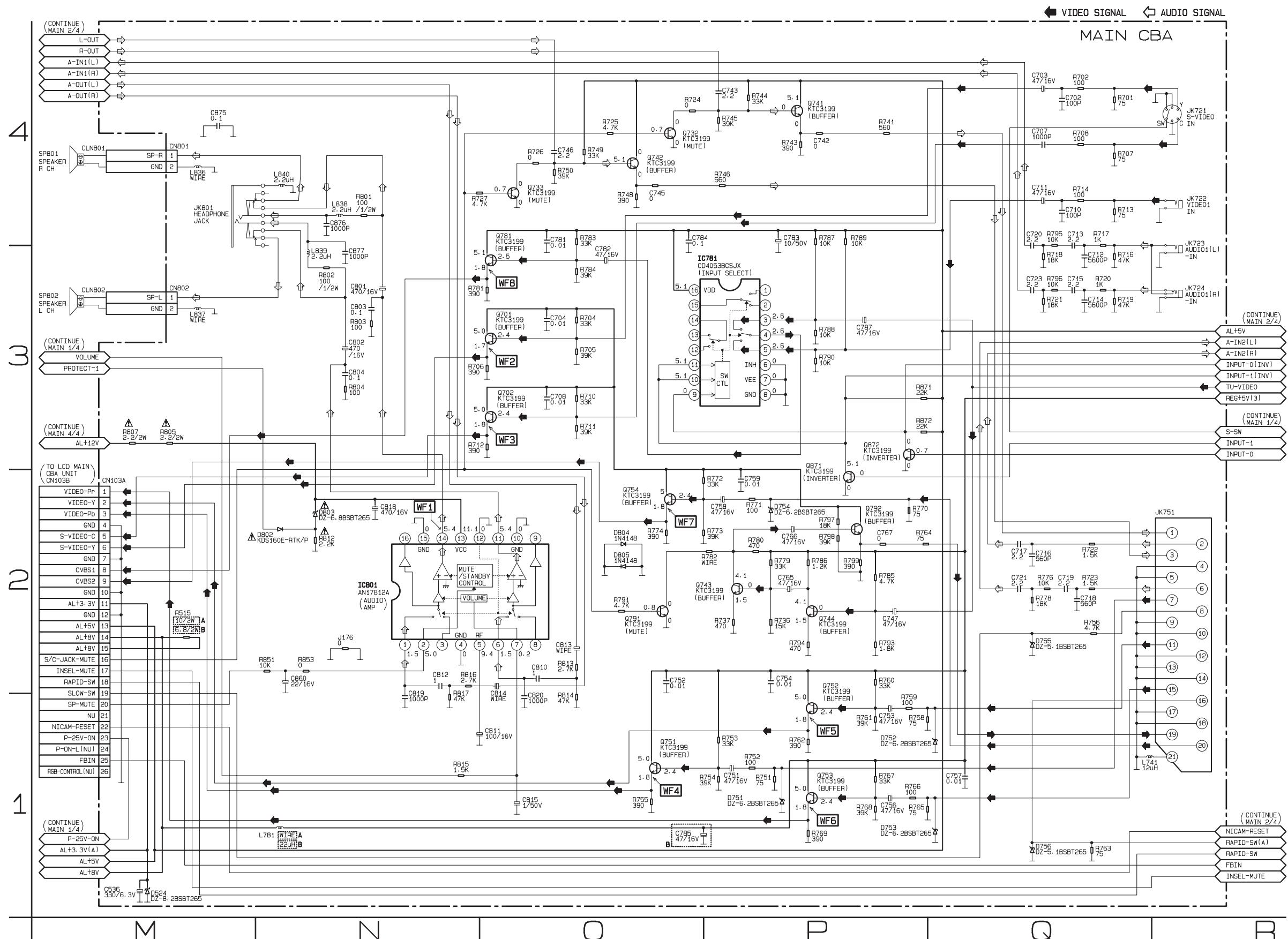


## Main 3/4 Schematic Diagram

## **Comparison Chart of Models and Marks**

---

MODEL	MARK
LCD-B1504	A
LCD-B2004	B



## Main 4/4 Schematic Diagram

## **CAUTION !**

For continued protection against fire hazard, replace only with the same type fuse.

**NOTE:**

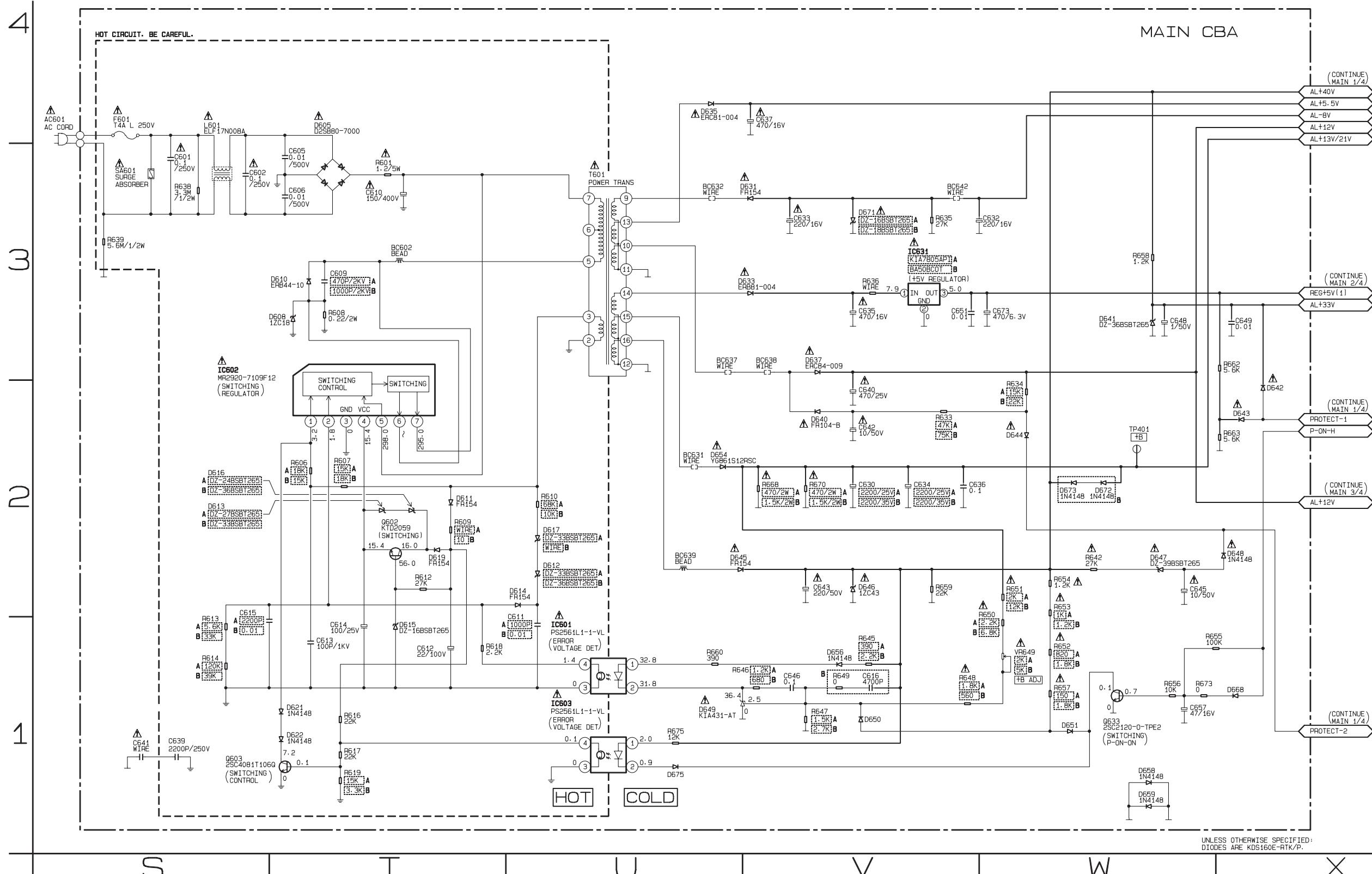
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

## **CAUTION**

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

## **Comparison Chart of Models and Marks**

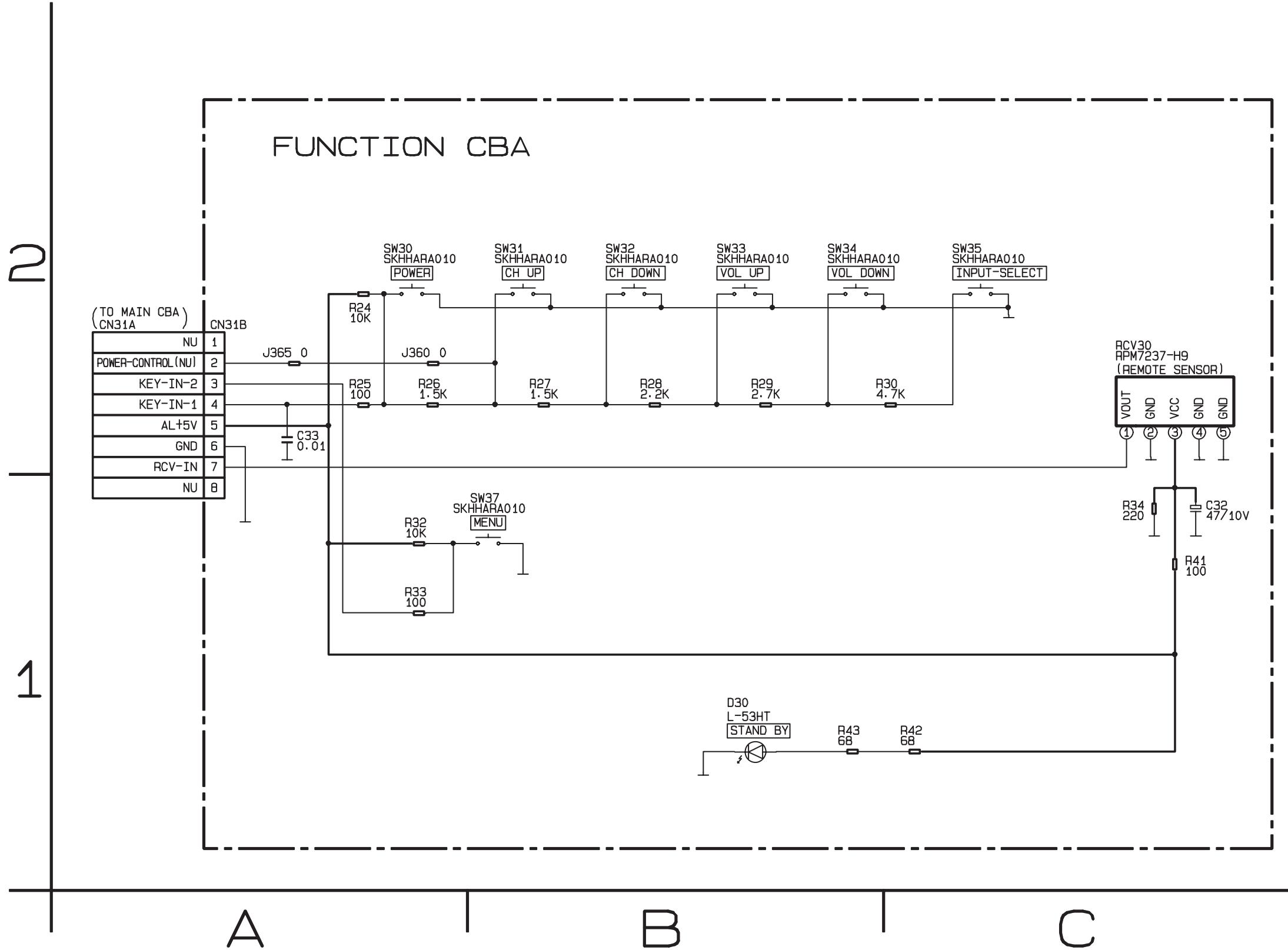
MODEL	MARK
LCD-B1504	A
LCD-B2004	B



## Function Schematic Diagram ( A )

Comparison Chart of  
Models and Marks

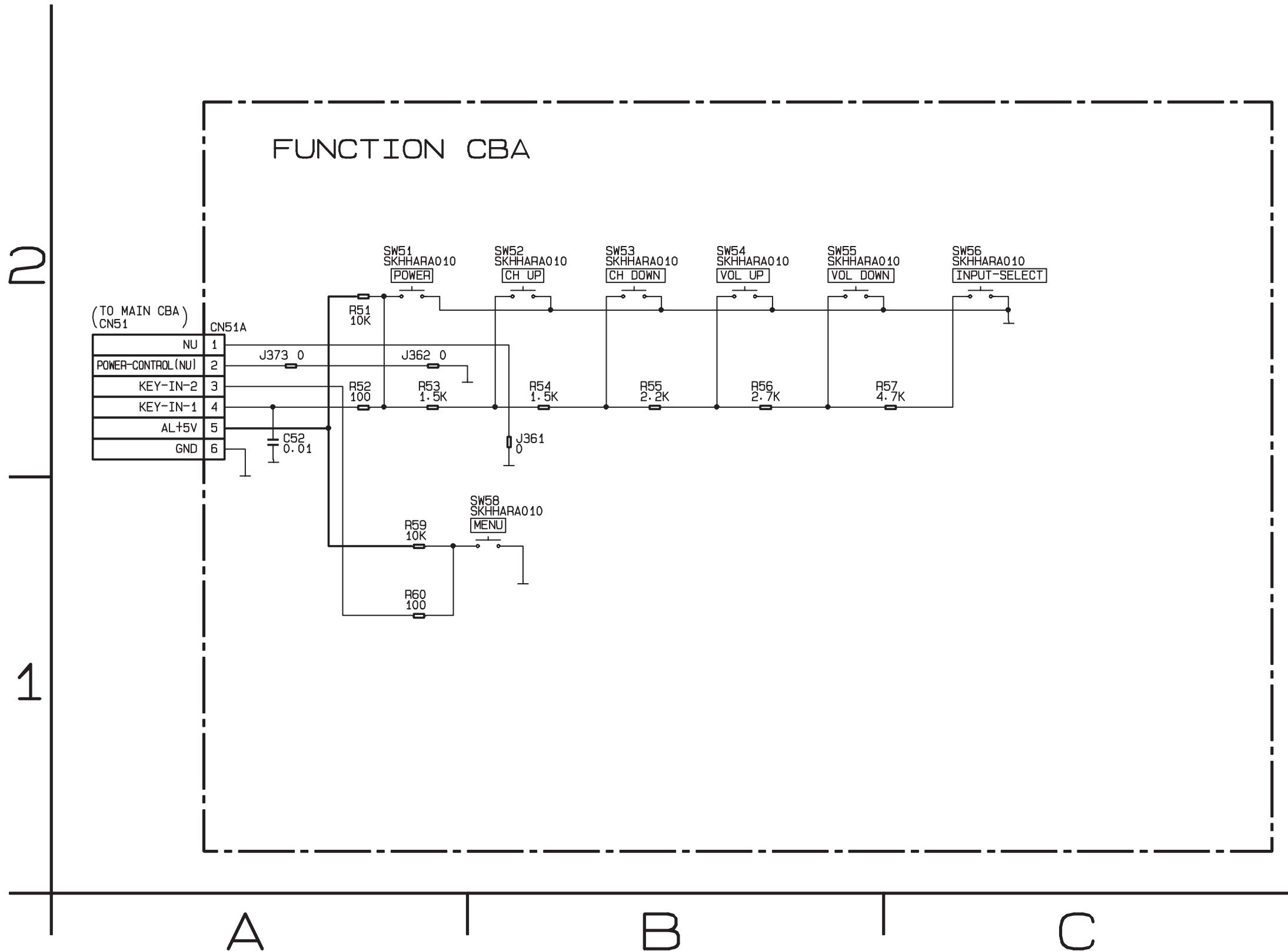
MODEL	MARK
LCD-B1504	A
LCD-B2004	B



## Function Schematic Diagram ( B )

Comparison Chart of  
Models and Marks

MODEL	MARK
LCD-B1504	A
LCD-B2004	B

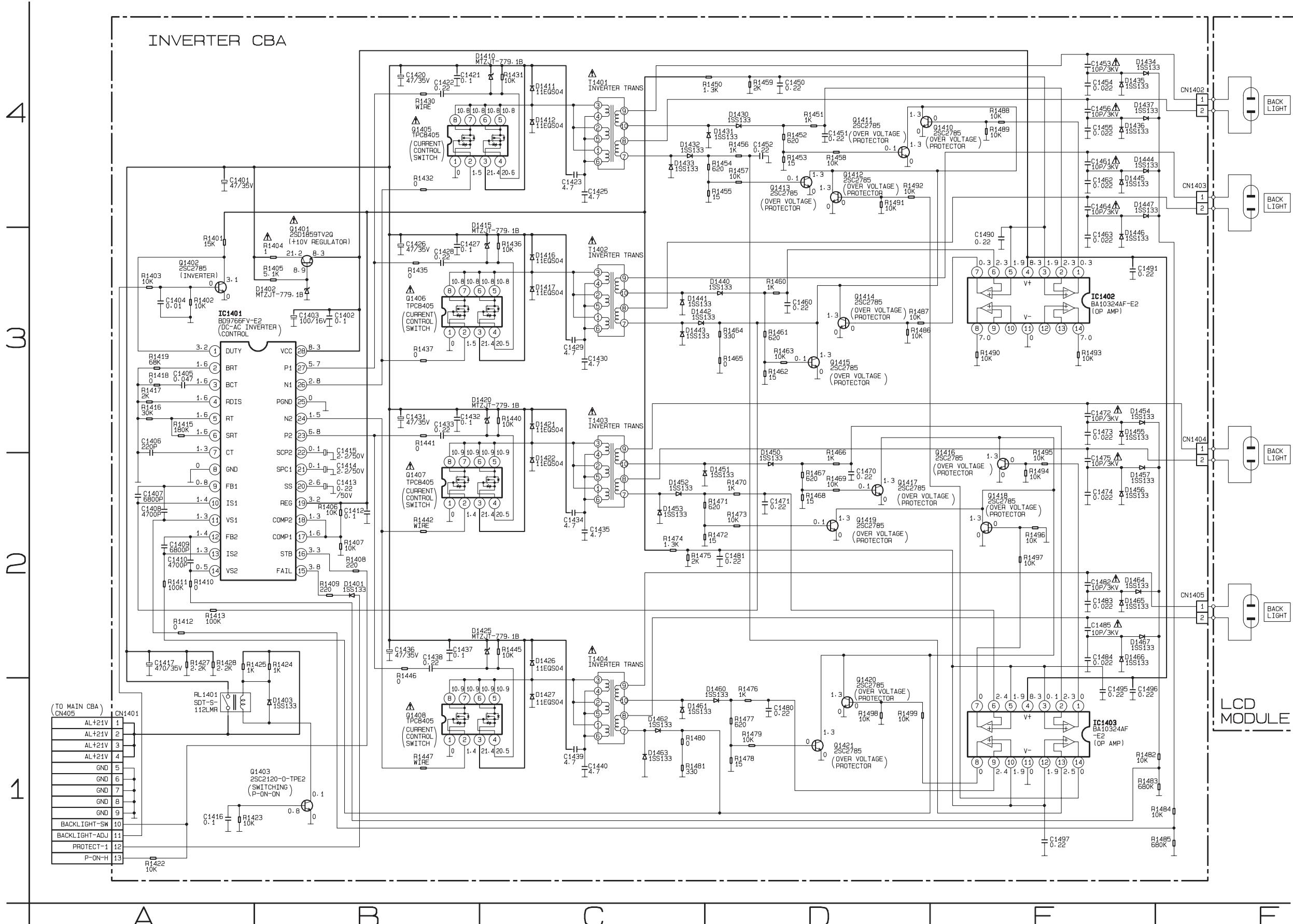


## Inverter Schematic Diagram ( B )

## **Comparison Chart of Models and Marks**

---

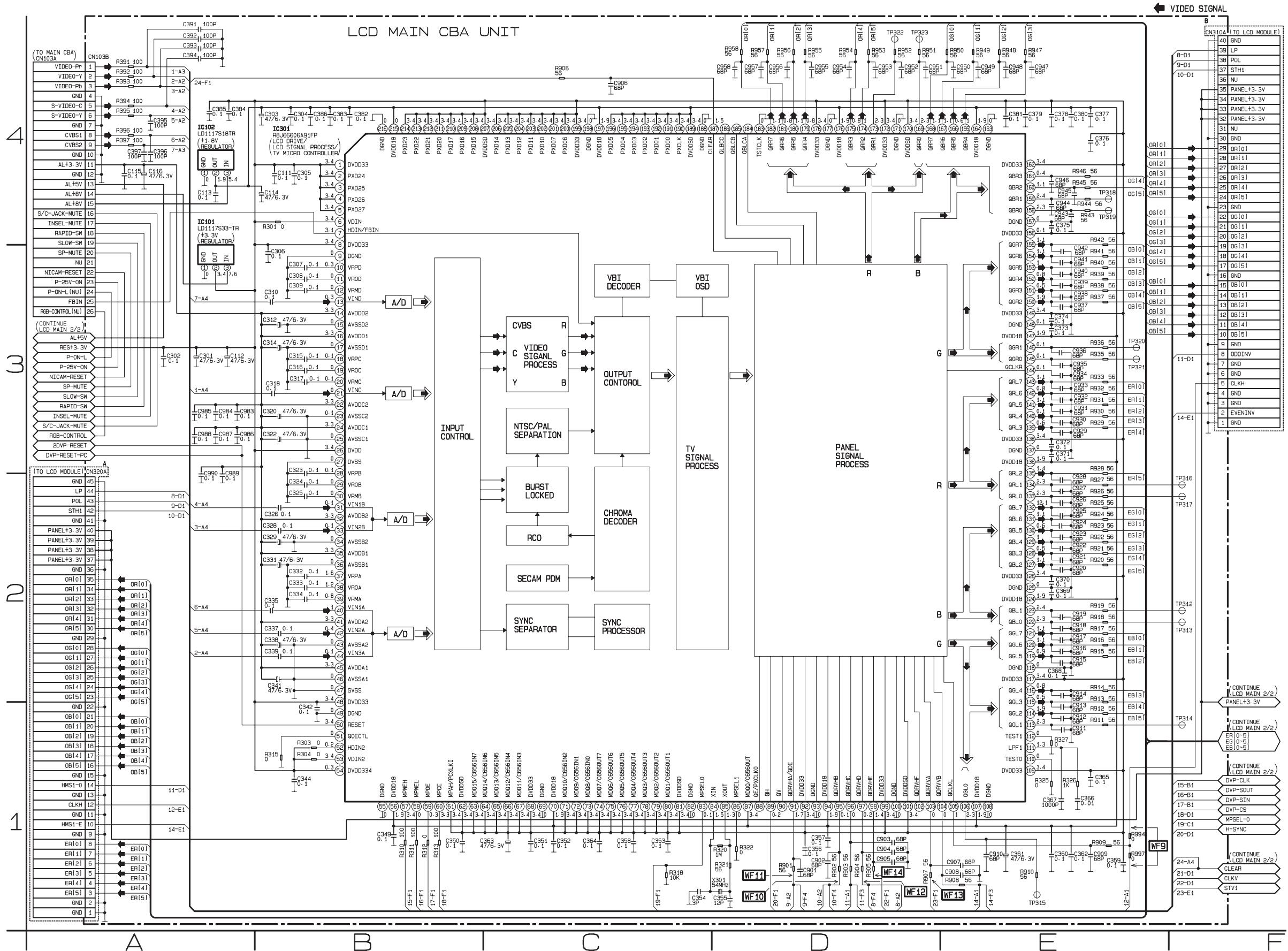
MODEL	MARK
LCD-B1504	A
LCD-B2004	B



# LCD Main 1/2 Schematic Diagram

Comparison Chart of  
Models and Marks

MODEL	MARK
LCD-B1504	A
LCD-B2004	B

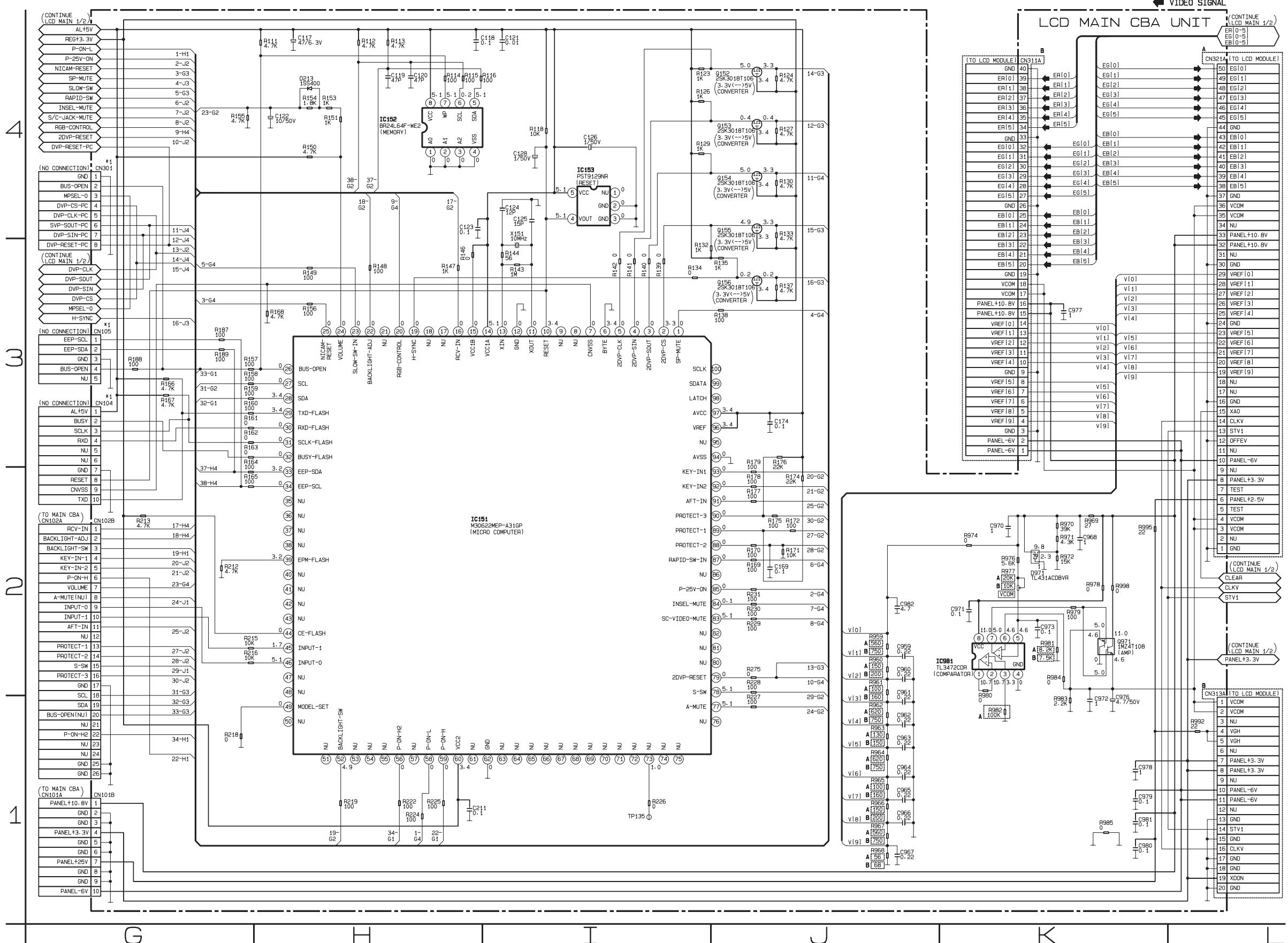


## LCD Main 2/2 Schematic Diagram

\*1 NOTE :  
CN104, CN105, CN301 are used for adjustment at factory.

Comparison Chart of  
Models and Marks

MODEL	MARK
LCD-B1504	A
LCD-B2004	B



## Main CBA Top View

### CAUTION !

For continued protection against fire hazard,  
replace only with the same type fuse.

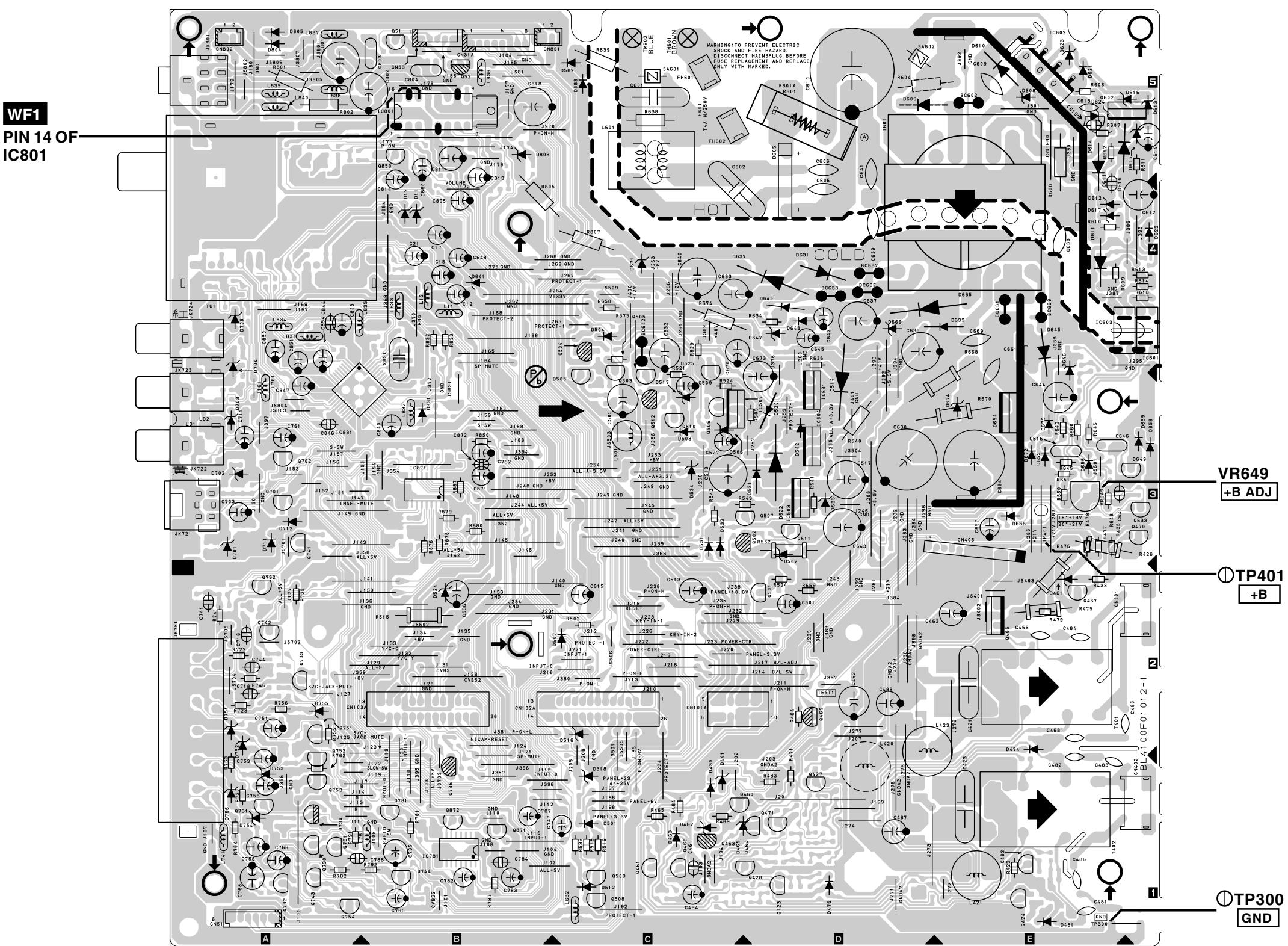
### NOTE:

The voltage for parts in hot circuit is measured using  
hot GND as a common terminal.

### CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F601) is blown , check to see that all components in the power supply  
circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.

Because a hot chassis ground is present in the power  
supply circuit, an isolation transformer must be used.  
Also, in order to have the ability to increase the input  
slowly, when troubleshooting this type power supply  
circuit, a variable isolation transformer is required.



## Main CBA Bottom View

### CAUTION !

For continued protection against fire hazard,  
replace only with the same type fuse.

### NOTE:

The voltage for parts in hot circuit is measured using  
hot GND as a common terminal.

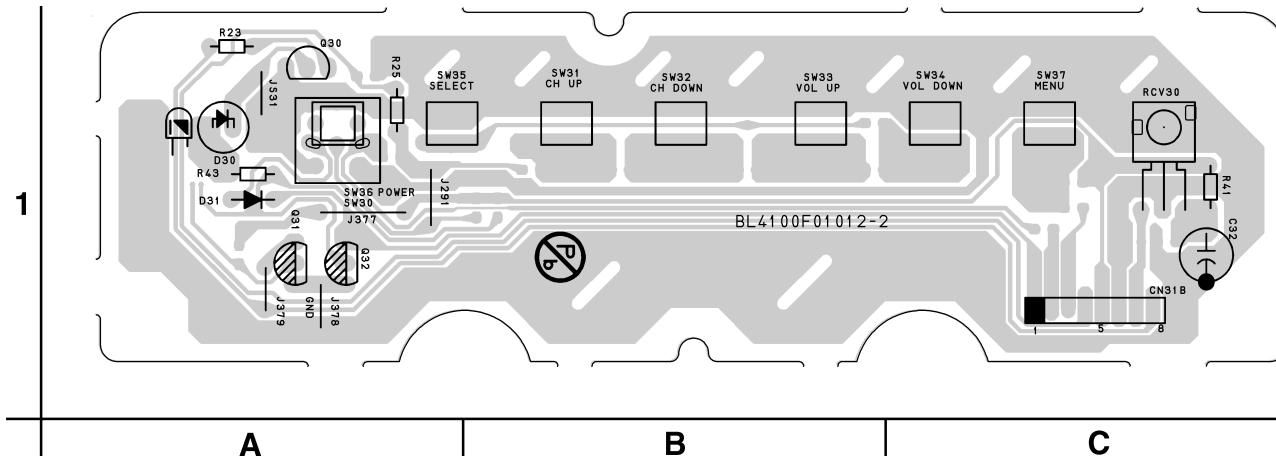
### CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F601) is blown , check to see that all components in the power supply  
circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.

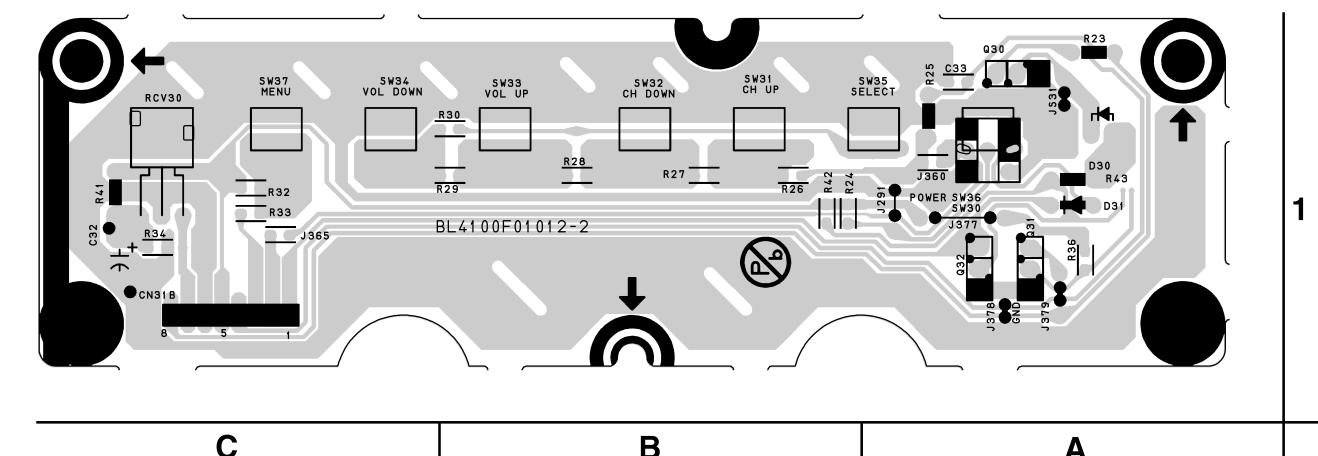
Because a hot chassis ground is present in the power  
supply circuit, an isolation transformer must be used.  
Also, in order to have the ability to increase the input  
slowly, when troubleshooting this type power supply  
circuit, a variable isolation transformer is required.



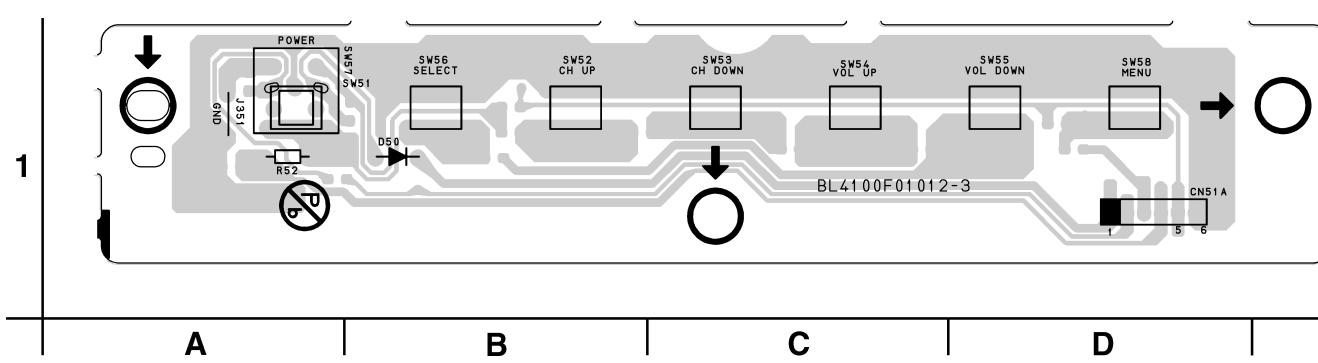
**Function CBA Top View ( A )**



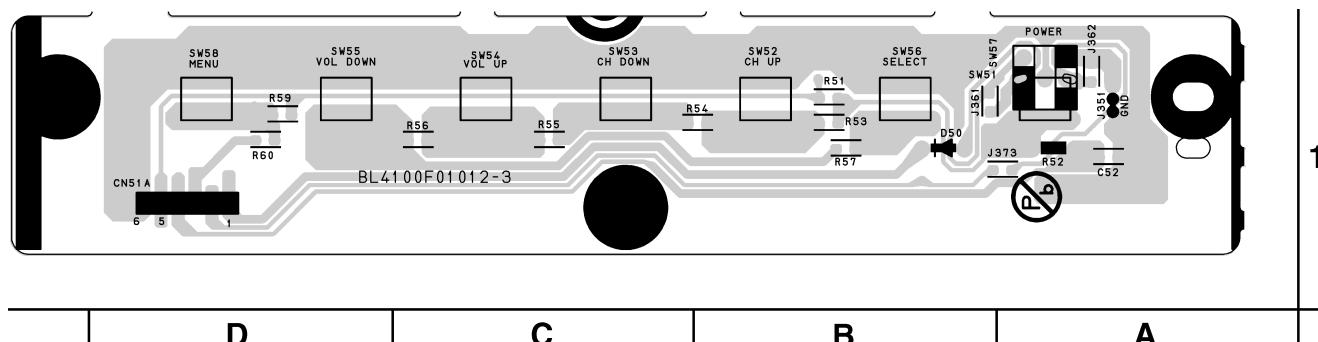
**Function CBA Bottom View ( A )**



**Function CBA Top View ( B )**



**Function CBA Bottom View ( B )**



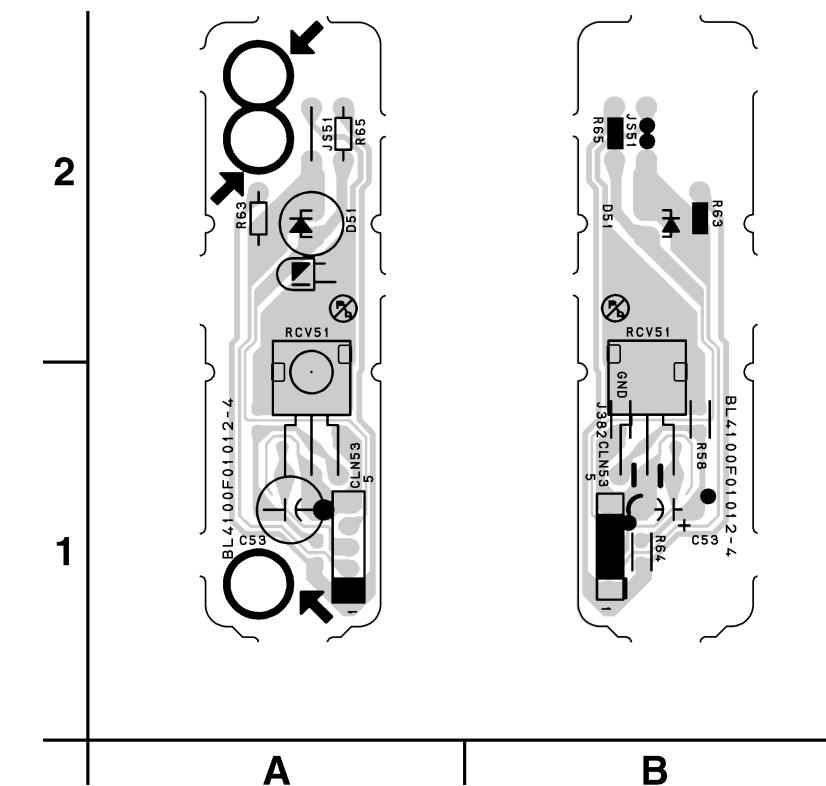
BL4100F01012-3

BL4100F01012-2

**Comparison Chart of Models and Marks**

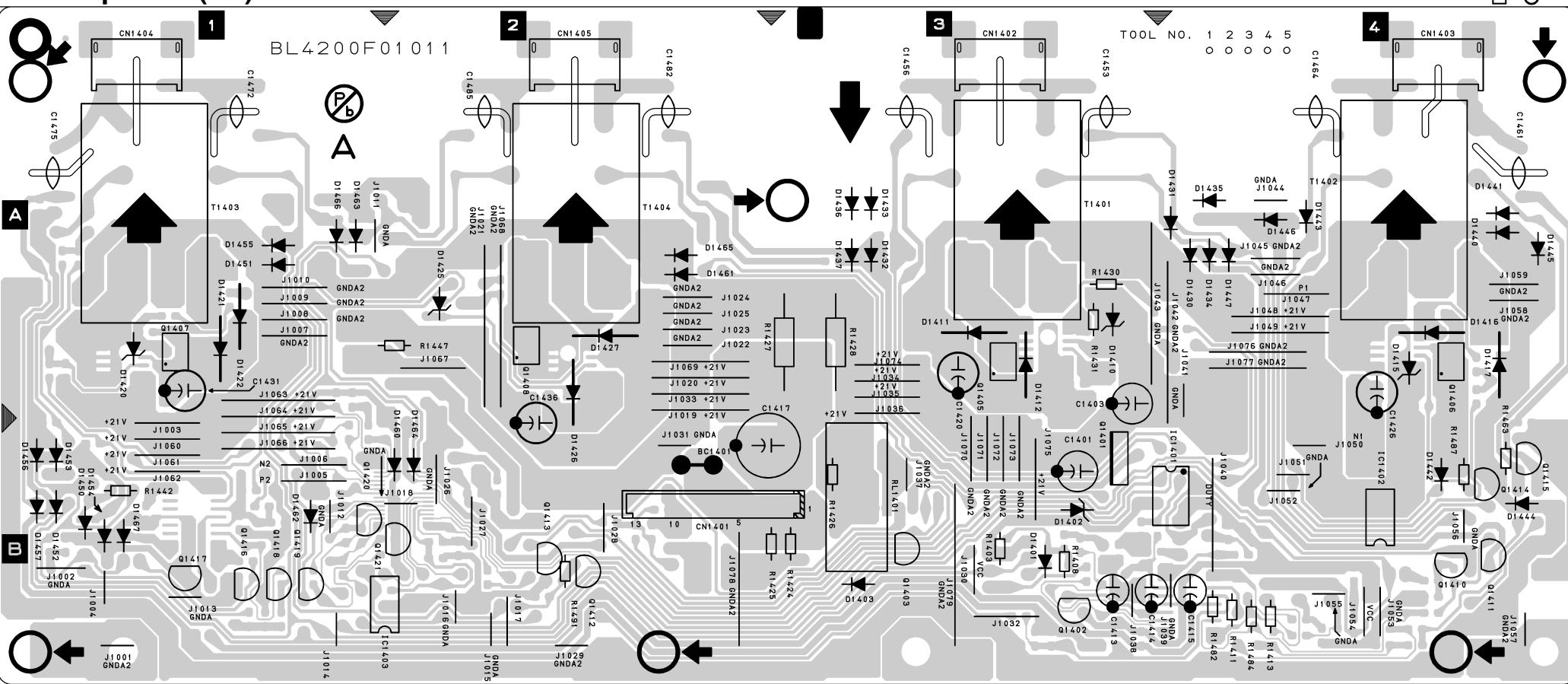
MODEL	MARK
LCD-B1504	A
LCD-B2004	B

**IR Sensor CBA Top & Bottom View ( B )**



BL4100F01012-4

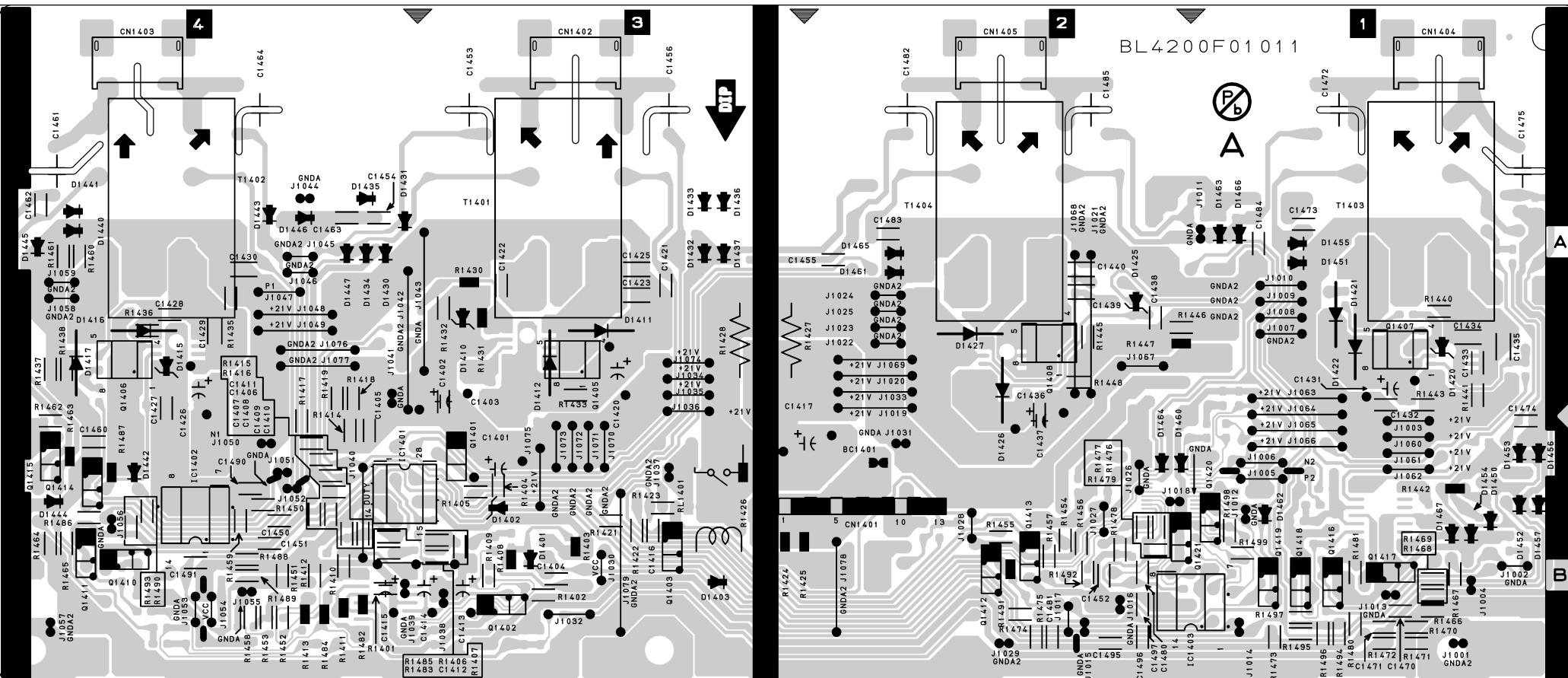
## Inverter CBA Top View ( B )



Comparison Chart of  
Models and Marks

MODEL	MARK
LCD-B1504	A
LCD-B2004	B

## Inverter CBA Bottom View ( B )

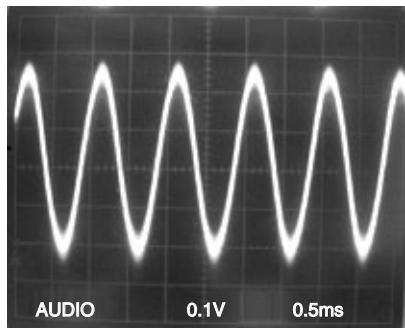


# WAVEFORMS

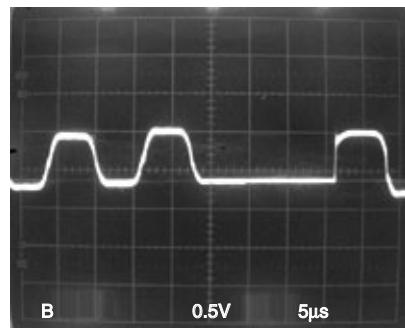
**WF1 ~ WF8 =** Waveforms to be observed at  
Waveform check points.  
(Shown in Schematic Diagram.)

**Input:** PAL Color Bar Signal (with 1kHz Audio Signal)

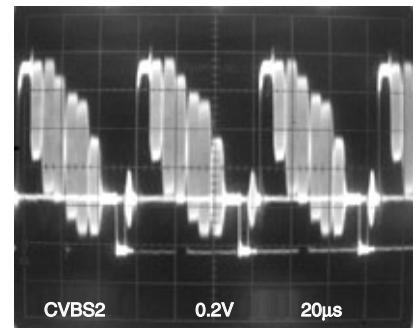
**WF1** Pin 14 of IC801



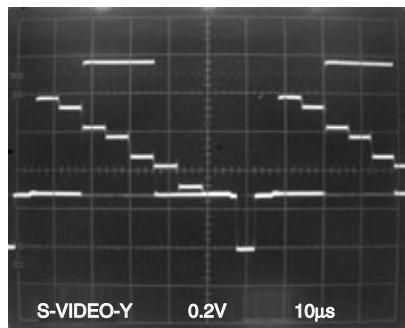
**WF4** Q751 Emitter



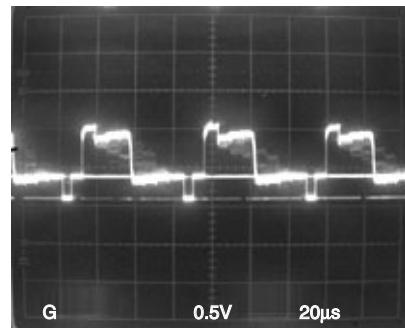
**WF7** Q754 Emitter



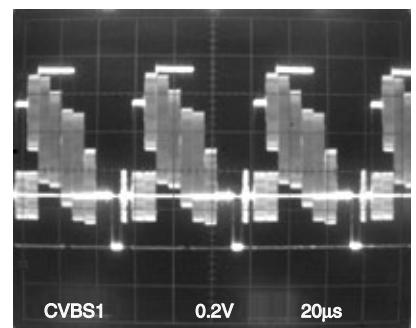
**WF2** Q701 Emitter



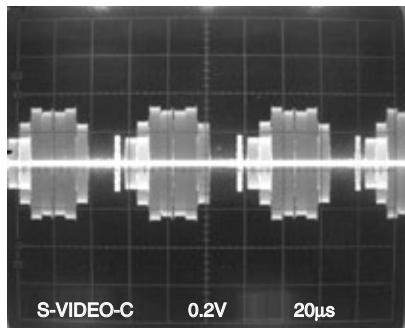
**WF5** Q752 Emitter



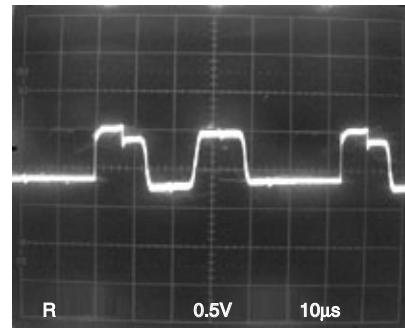
**WF8** Q781 Emitter



**WF3** Q702 Emitter



**WF6** Q753 Emitter



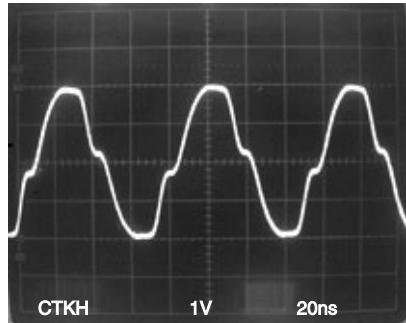
**WF9 ~ WF14 =** Waveforms to be observed at  
Waveform check points.  
(Shown in Schematic Diagram.)

**Input:** PAL Color Bar Signal (with 1kHz Audio Signal)

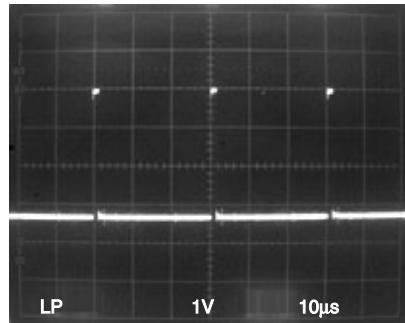
**Comparison Chart of  
Models and Marks**

MODEL	MARK
LCD-B1504	A
LCD-B2004	B

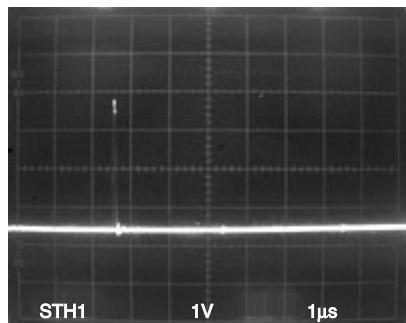
**WF9** R997 ( A )  
R994 ( B )



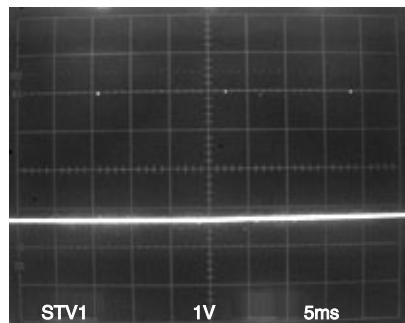
**WF12** R904



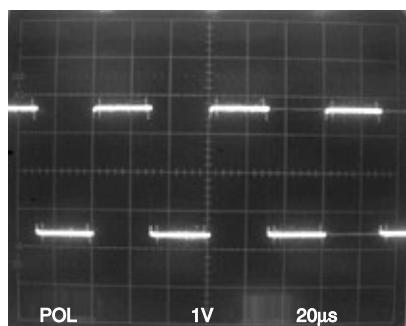
**WF10** R902



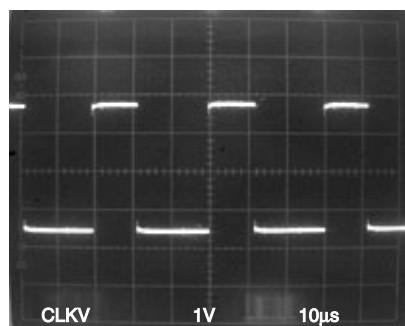
**WF13** R907



**WF11** R901



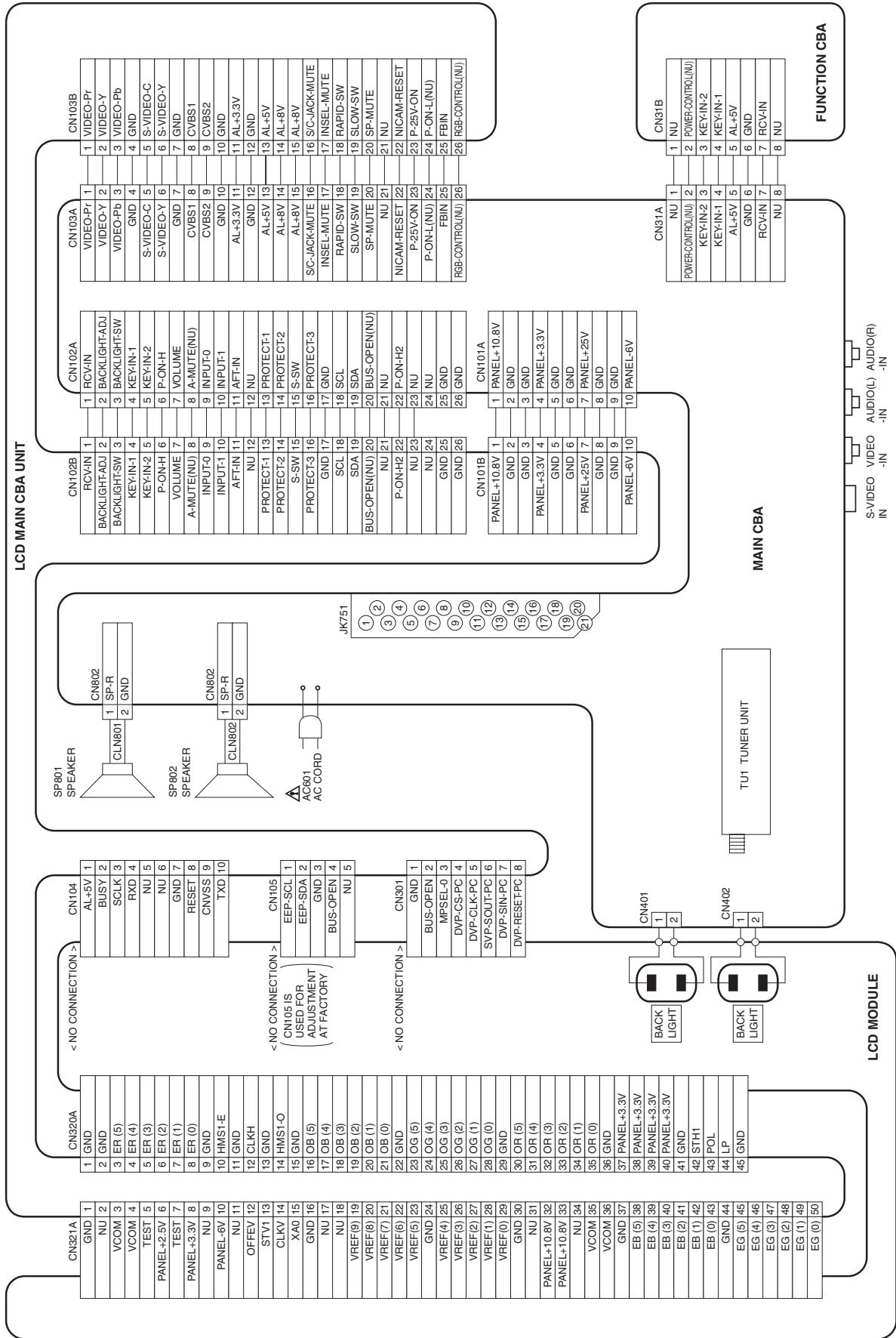
**WF14** R905



# WIRING DIAGRAMS ( A )

Comparison Chart of  
Models & Marks

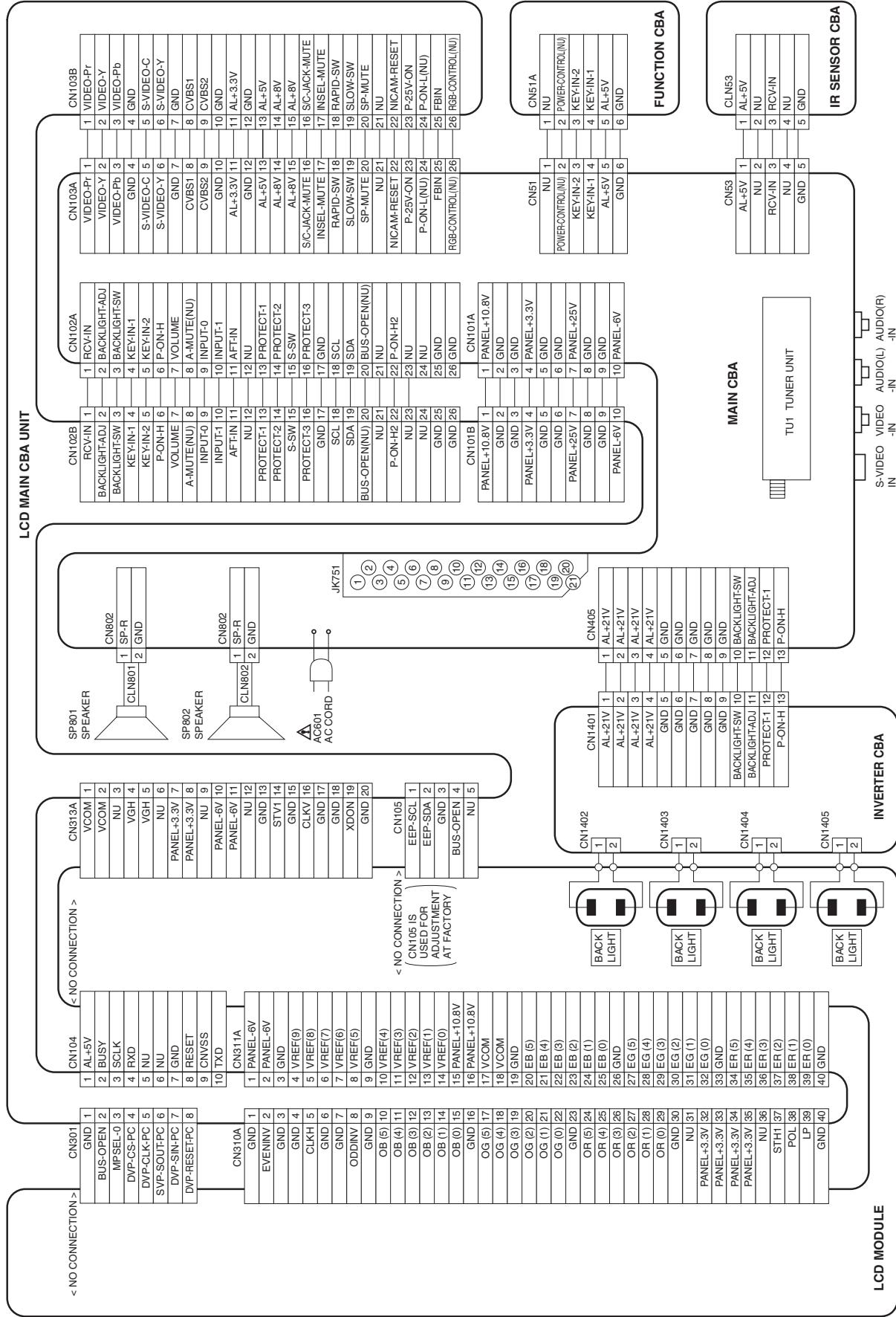
Model	Mark
LCD-B1504	A
LCD-B2004	B



Comparison Chart of  
Models & Marks

Model	Mark
LCD-B1504	A
LCD-B2004	B

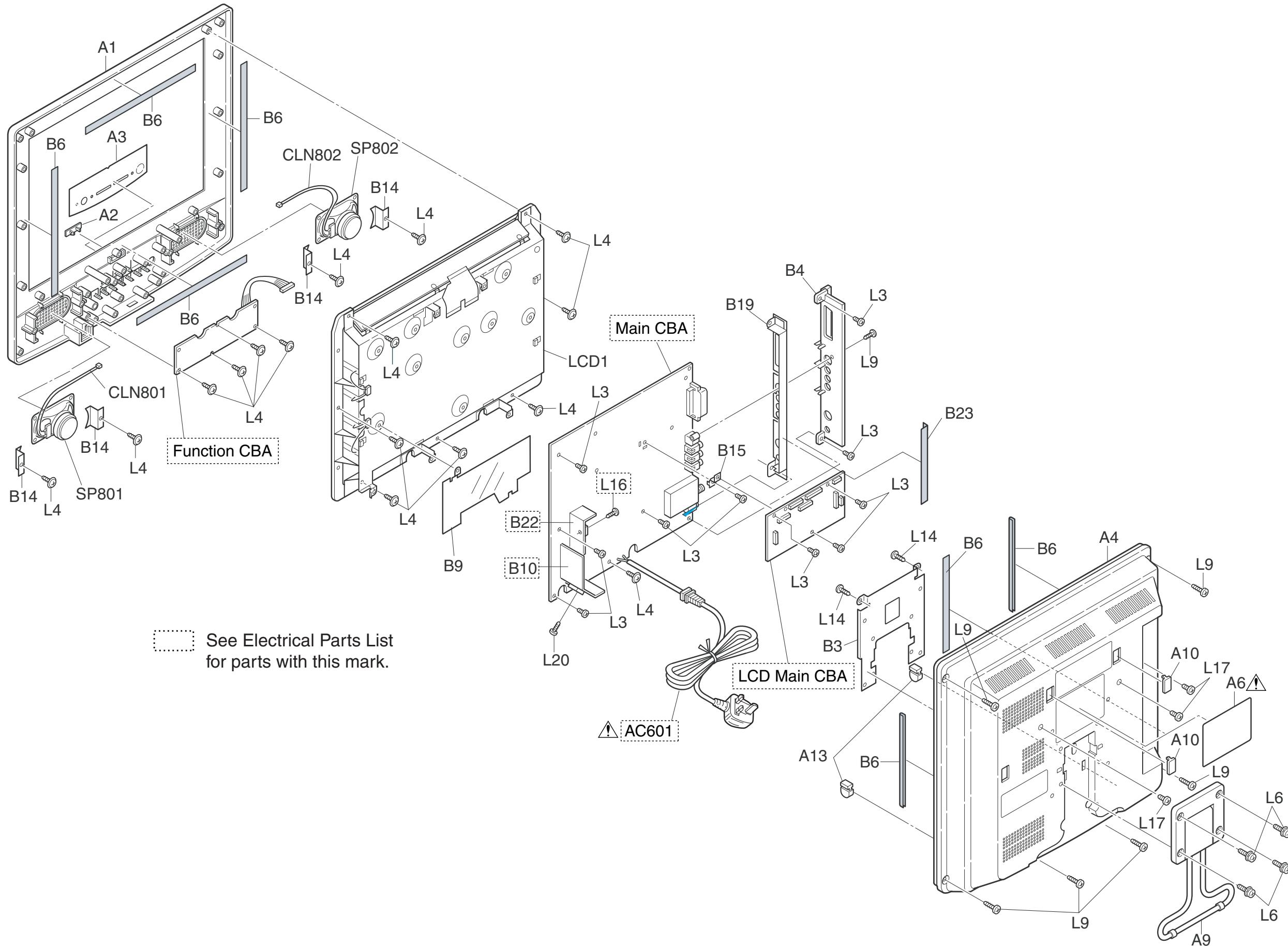
# WIRING DIAGRAMS ( B )



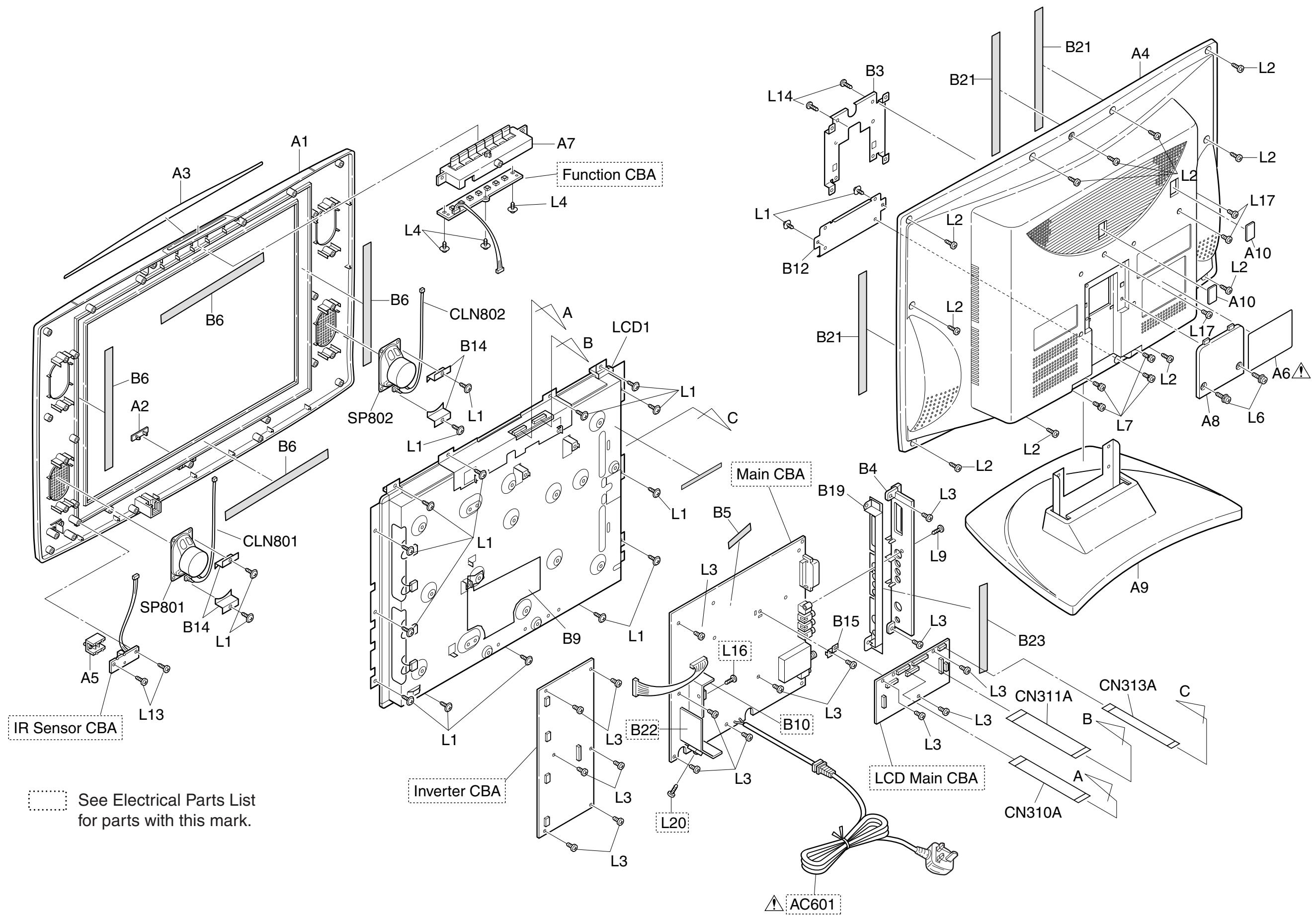
## EXPLODED VIEWS

### Cabinet

**[LCD-B1504]**

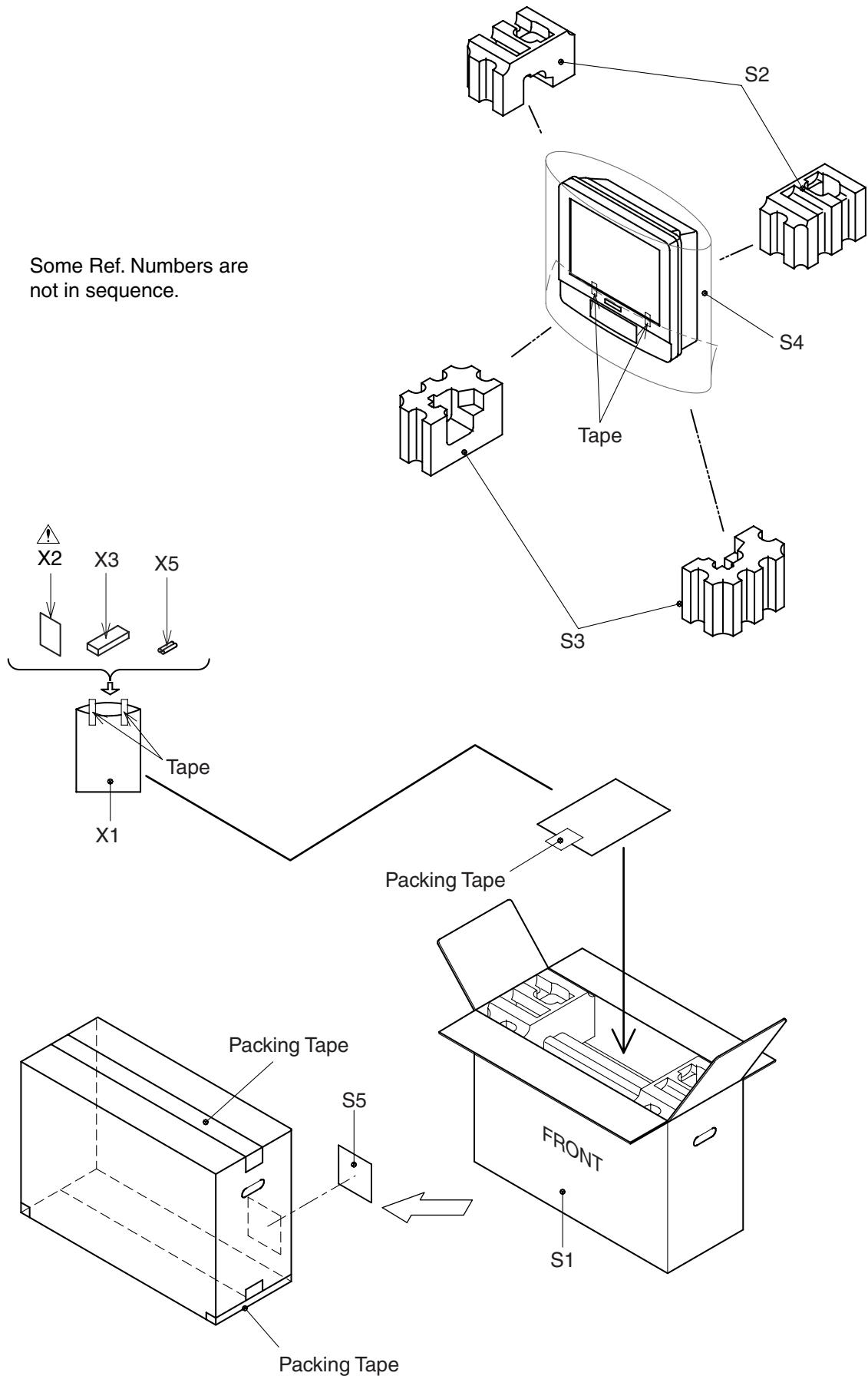


[LCD-B2004]

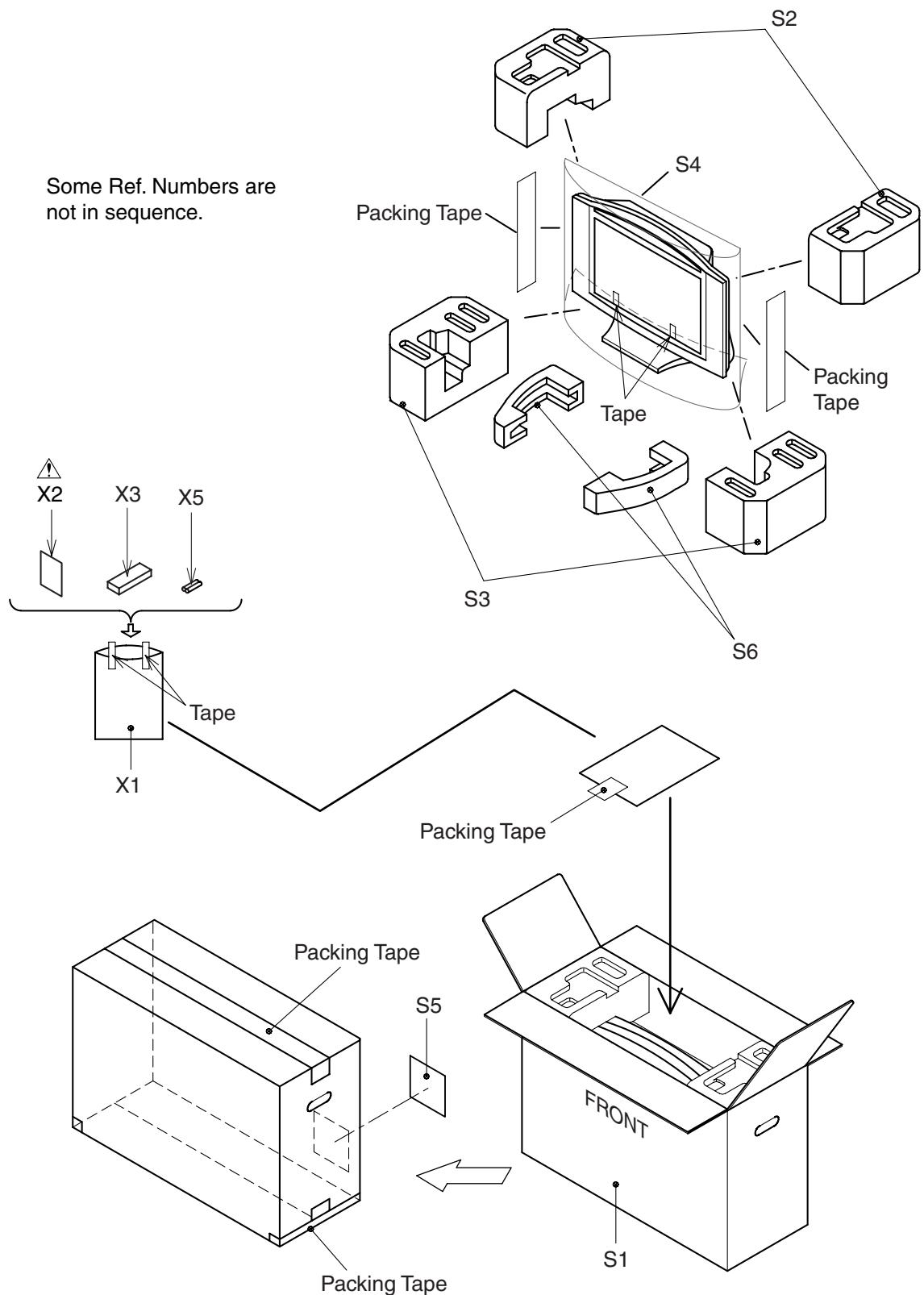


## Packing

[LCD-B1504]



## [LCD-B2004]



# MECHANICAL PARTS LIST

**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety.

Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTE:** Parts that are not assigned part numbers (-----) are not available.

## [ LCD-B1504 ]

Ref. No.	Description	Part No.
A1	FRONT CABINET L4100EA	1EM220073
A2	BRAND BADGE L0230JA-FUNAI~	0EM409021
A3	CONTROL PLATE L4100EA	1EM320137
A4	REAR CABINET L4100EA	1EM020115
A6 	RATING LABEL L4101BB	-----
A9	PHOTO STAND ASSEMBLY L0114UE	0EMN02343A
A10	CONNECTER CAP L4100EA	1EM420634
A13	RUBBER FOOT L0200UA	0EM302002
B3	15V STAND HOLDER L4100EA	1EM320139
B4	JACK HOLDER L4100EA	1EM120097
B6	CLOTH(10X190XT0.3) L0200UA	1EM420019
B9	15V INSULATION SHEET L4100EA	1EM320142A
B14	SPEAKER HOLDER L0110UA	0EM407855C
B15	DIGITAL PCB HOLDER L4100EA	1EM420568
B19	JACK SHIELD L4100EA	1EM320140
B21	CLOTH(10X180XT0.5) L0336JG	0EM408827
B23	CLOTH(12X125XT:0.5) L0101JB	0EM408489
CLN801	SPEAKER WIRE WX1L4100-002	WX1L4100-002
CLN802	WIRE ASSEMBLY	WX1L9200-001
L3	SCREW, S-TIGHT M3X8 BIND HEAD+	GBMS3080
L4	SCREW, P-TIGHT M3X10 WASHER HEAD+	GCMP3100
L6	DOUBLE SEMS SCREW M4X12 L0110UA	0EM408039
L9	SCREW, P-TIGHT 3X10 BIND HEAD+	GBK3100
L14	P-TIGHT SCREW 3X8 BIND +	GBMP3080
L17	SCREW, S-TIGHT M3X8 BIND HEAD + BLK	GBKS3080
LCD1	LCD MODULE ASSEMBLY UB500XE	1FSA10028
SP801	SPEAKER S0407F10	DSD0807XQ002
SP802	SPEAKER S0407F10	DSD0807XQ002

### PACKING

S1	CARTON L4101BB	1EM420659
S2	STYROFOAM TOP L4100EA	1EM020123
S3	STYROFOAM BOTTOM L4100EA	1EM020124
S4	SET BAG L0110UA	0EM301908
S5	SERIAL NO. LABEL L4200EA	-----

### ACCESSORIES

X1	BAG POLYETHYLENE 235X365XT0.03	0EM408420
X2 	OWNER'S MANUAL LCD-A1504~EN~	1EMN20204
X3	REMOTE CONTROL 192/ERC001/NE309RD	NE309RD
X5	DRY BATTERY R6P/2S or DRY BATTERY(SUNRISE) R6SSE/2S	XB0M451T0001 XB0M451MS002

## [ LCD-B2004 ]

Ref. No.	Description	Part No.
A1	FRONT CABINET L4200EA	1EM020125
A2	BRAND BADGE L0230JA-FUNAI~	0EM409021
A3	CONTROL PLATE L4200EA	1EM220077
A4	REAR CABINET L4200EA	1EM020116
A5	SENSOR/LED LENS L0301UB	1EM220004
A6 	RATING LABEL L4201BB	-----
A7	FUNCTION KNOB L4200EA	1EM320157
A8	REAR COVER L4200EA	1EM320158
A9	TILT STAND ASSEMBLY L0301UB	1EMN20039
A10	CONNECTER CAP L4200EA	1EM420585
B3	20V STAND HOLDER L4200EA	1EM320141
B4	JACK HOLDER L4100EA	1EM120097
B5	CLOTH(10X30XT0.5) B5900UA	0EM404486
B6	CLOTH(15X190XT:0.5) L0100JA	0EM407894
B9	20V INSULATION SHEET L4200EA	1EM320146
B12	20V TILT STAND HOLDER L4200EA	1EM320145
B14	SPEAKER HOLDER L0110UA	0EM407855C
B15	DIGITAL PCB HOLDER L4100EA	1EM420568
B19	JACK SHIELD L4100EA	1EM320140
B21	CLOTH(10X180XT0.5) L0336JG	0EM408827
B23	CLOTH(12X125XT:0.5) L0101JB	0EM408489
CLN801	SPEAKER WIRE WX1L4200-003	WX1L4200-003
CLN802	SPEAKER WIRE 2P 2P	WX1L0300-007
CN310A	FFC WIRE 40P WX1L4200-007	WX1L4200-007
CN311A	FFC WIRE 40P WX1L4200-007	WX1L4200-007
CN313A	FFC WIRE 20P WX1L4200-008	WX1L4200-008
L1	SCREW, P-TIGHT 3X12 WASHER HEAD+	GCMP3120
L2	SCREW, P-TIGHT 3X12 BIND HEAD+ BLK	GBKP3120
L3	SCREW, S-TIGHT M3X8 BIND HEAD+	GBMS3080
L4	SCREW, P-TIGHT M3X10 WASHER HEAD+	GCMP3100
L6	DOUBLE SEMS SCREW M4X9 L0130UA	0EM408146
L7	DOUBLE SEMS SCREW M4X12 + BLAK	FPK34120
L9	SCREW, P-TIGHT 3X10 BIND HEAD+	GBK3100
L13	SCREW, P-TIGHT 3X12 BIND HEAD+	GBMP3120
L14	P-TIGHT SCREW 3X8 BIND +	GBMP3080
L17	SCREW, S-TIGHT M3X8 BIND HEAD + BLK	GBKS3080
LCD1	LCD MODULE ASSEMBLY UC000XE	1FSA10030
SP801	SPEAKER S0407F10	DSD0807XQ002
SP802	SPEAKER S0407F10	DSD0807XQ002

### PACKING

S1	CARTON L4201BB	1EM420664
S2	STYROFOAM TOP L0301UB	1EM020018A
S3	STYROFOAM BOTTOM L0301UB	1EM020019
S4	SET BAG L0301UB	1EM320014
S5	SERIAL NO. LABEL L4200EA	-----
S6	STYROFOAM STAND BOTTOM L0301UB	1EM020020A

### ACCESSORIES

X1	BAG POLYETHYLENE 235X365XT0.03	0EM408420
X2 	OWNER'S MANUAL LCD-A1504~EN~	1EMN20204
X3	REMOTE CONTROL 192/ERC001/NE309RD	NE309RD
X5	DRY BATTERY R6P/2S or DRY BATTERY(SUNRISE) R6SSE/2S	XB0M451T0001 XB0M451MS002

# ELECTRICAL PARTS LIST

**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

## NOTES:

1. Parts that are not assigned part numbers (-----) are not available.
2. Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25%    D.....±0.5%    F.....±1%  
 G.....±2%       J.....±5%       K.....±10%  
 M.....±20%      N.....±30%      Z.....+80/-20%

## Comparison Chart of Models and Marks

Model	Mark
LCD-B1504	A
LCD-B2004	B

## LCD MAIN CBA UNIT

Ref. No.	Mark	Description	Part No.
	A	LCD MAIN CBA UNIT	1ESA10479
	B	LCD MAIN CBA UNIT	1ESA10487

## MMA CBA

Ref. No.	Mark	Description	Part No.
	A	MMA CBA	1ESA10565
	B	MMA CBA	1ESA10569
		Consists of the following:	
		MAIN CBA	-----
		FUNCTION CBA	-----
	B	IR SENSOR CBA	-----

## MAIN CBA

Ref. No.	Mark	Description	Part No.
		MAIN CBA	-----
Consists of the following:			
<b>CAPACITORS</b>			
C11		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C12		ELECTROLYTIC CAP. 100µF/ 6.3V M or	CE0KMASDL101
		ELECTROLYTIC CAP. 100µF/ 6.3V M	CE0KMASTL101
C14		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C15		ELECTROLYTIC CAP. 100µF/ 10V M or	CE1AMASDL101
		ELECTROLYTIC CAP. 100µF/ 10V M	CE1AMASTL101
C16		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C17		ELECTROLYTIC CAP. 1µF/ 50V M or	CE1JMASDL1R0
		ELECTROLYTIC CAP. 1µF/ 50V M or	CE1JMASDL010
		ELECTROLYTIC CAP. 1µF/ 50V M	CE1JMASTL1R0
C18		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C19		CHIP CERAMIC CAP. B K 820pF/ 50V	CHD1JK30B821
C20		CHIP CERAMIC CAP. B K 820pF/ 50V	CHD1JK30B821
C21		ELECTROLYTIC CAP. 47µF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47µF/ 16V M	CE1CMASTL470
C421	A	PP CAP. 0.13µF/ 250V J	CT2E134MS041
C423	A	PP CAP. 0.13µF/ 250V J	CT2E134MS041
C440	A	CHIP CERAMIC CAP. F Z 1µF/ 10V	CHD1AZ30F105

Ref. No.	Mark	Description	Part No.
C441	A	CHIP CERAMIC CAP. F Z 1µF/ 10V	CHD1AZ30F105
C451	A	CHIP CERAMIC CAP. F Z 1µF/ 10V	CHD1AZ30F105
C452	A	CHIP CERAMIC CAP. F Z 1µF/ 10V	CHD1AZ30F105
C453	A	CHIP CERAMIC CAP. F Z 1µF/ 10V	CHD1AZ30F105
C461	A	CERAMIC CAP.(AX) B K 0.1µF/ 50V	CA1J104TU011
C462	A	ELECTROLYTIC CAP. 220µF/ 16V M or	CE1CMASDL221
	A	ELECTROLYTIC CAP. 220µF/ 16V M	CE1CMASTL221
C463	A	ELECTROLYTIC CAP. 100µF/ 16V M or	CE1CMASDL101
	A	ELECTROLYTIC CAP. 100µF/ 16V M	CE1CMASTL101
C464	A	ELECTROLYTIC CAP. 2.2µF/ 50V M H7	CE1JMAVSL2R2
C466	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C468	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C469	A	CHIP CERAMIC CAP.(1608) B K 0.047µF/ 50V	CHD1JK30B473
C480	A	CHIP CERAMIC CAP.(1608) B K 0.047µF/ 50V	CHD1JK30B473
C481	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C482	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C483	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C484	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C485	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C486	A	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C487	A	ELECTROLYTIC CAP. 100µF/ 16V M or	CE1CMASDL101
	A	ELECTROLYTIC CAP. 100µF/ 16V M	CE1CMASTL101
C488	A	ELECTROLYTIC CAP. 100µF/ 16V M or	CE1CMASDL101
	A	ELECTROLYTIC CAP. 100µF/ 16V M	CE1CMASTL101
C501		ELECTROLYTIC CAP. 22µF/ 50V M or	CE1JMASDL220
		ELECTROLYTIC CAP. 22µF/ 50V M	CE1JMASTL220
C502		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C503		CHIP CERAMIC CAP.(1608) B K 0.1µF/ 50V	CHD1JK30B104
C504	A	CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C505		ELECTROLYTIC CAP. 220µF/ 16V M or	CE1CMASDL221
		ELECTROLYTIC CAP. 220µF/ 16V M	CE1CMASTL221
C506		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C507		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C509		ELECTROLYTIC CAP. 100µF/ 10V M or	CE1AMASDL101
		ELECTROLYTIC CAP. 100µF/ 10V M	CE1AMASTL101
C510		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C512		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C513		ELECTROLYTIC CAP. 220µF/ 6.3V M or	CE0KMASDL221
		ELECTROLYTIC CAP. 220µF/ 6.3V M	CE0KMASTL221
C514		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C517		ELECTROLYTIC CAP. 330µF/ 50V M or	CE1JMZPDL331
		ELECTROLYTIC CAP. 330µF/ 50V M	CE1JMZNLDL331
C518		ELECTROLYTIC CAP. 470µF/ 16V M or	CE1CMASDL471
		ELECTROLYTIC CAP. 470µF/ 16V M	CE1CMASTL471
C519		CHIP CERAMIC CAP.(1608) B K 0.22µF/ 25V	CHD1EK30B224
C524		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C527		ELECTROLYTIC CAP. 10µF/ 50V M or	CE1JMASDL100
		ELECTROLYTIC CAP. 10µF/ 50V M	CE1JMASTL100
C528		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C533		CHIP CERAMIC CAP.(1608) B K 0.01µF/ 50V	CHD1JK30B103
C536		ELECTROLYTIC CAP. 330µF/ 6.3V M or	CE0KMASDL331
		ELECTROLYTIC CAP. 330µF/ 6.3V M	CE0KMASTL331
C539		CHIP CERAMIC CAP.(1608) CH J 100pF/ 50V	CHD1JJ3CH101
C601△		METALLIZED FILM CAP. 0.1µF/ 250V or	CT2E104MS037
△		FILM CAP.(MP) 0.1µF/ 250V K or	CT2E104DC011

Ref. No.	Mark	Description	Part No.
		METALLIZED FILM CAP. 0.1μF/ 275V K or	CT2E104HJE06
		LINE ACROSS CAP. 0.1U/250V	CT2E104DC015
C602△		METALLIZED FILM CAP. 0.1μF/ 250V or	CT2E104MS037
		FILM CAP.(MP) 0.1μF/ 250V K or	CT2E104DC011
		METALLIZED FILM CAP. 0.1μF/ 275V K or	CT2E104HJE06
		LINE ACROSS CAP. 0.1U/250V	CT2E104DC015
C605		CERAMIC CAP. B K 0.01μF/ 500V	CCD2JKP0B103
C606		CERAMIC CAP. B K 0.01μF/ 500V	CCD2JKP0B103
C609	A	CERAMIC CAP. BN 470pF/ 2KV or	CCD3DKA0B471
	A	CERAMIC CAP. 470pF/ 2KV or	CA3D471PAN04
	A	CERAMIC CAP. RB 470pF/ 2KV	CA3D471TE006
C609	B	CERAMIC CAP. BN 1000pF/ 2KV or	CCD3DKA0B102
	B	CERAMIC CAP. 1000pF/ 2KV or	CA3D102PAN04
	B	CERAMIC CAP. RB 1000pF/ 2KV	CA3D102TE006
C610△		ELECTROLYTIC CAP. 150μF/ 400V(LQ TYPE)	CA2H151NC013
C611	A	CERAMIC CAP.(AX) B K 1000pF/ 50V	CCA1JKT0B102
C611	B	CERAMIC CAP.(AX) B K 0.01μF/ 50V	CA1J103TU011
C612		ELECTROLYTIC CAP. 22μF/ 100V M or	CE2AMASDL220
		ELECTROLYTIC CAP. 22μF/ 100V M	CE2AMASTL220
C613		CERAMIC CAP. B K 100pF/ 1KV or	CCD3AKD0B101
		CERAMIC CAP. B K 100pF/ 1KV or	CA3A101MR028
		CERAMIC CAP. B K 100pF/ 1KV	CCD3AKP0B101
C614		ELECTROLYTIC CAP. 100μF/ 25V M or	CE1EMASDL101
		ELECTROLYTIC CAP. 100μF/ 25V M	CE1EMASTL101
C615	A	CERAMIC CAP.(AX) CH J 2200pF/ 50V	CA1J222TU008
C615	B	CERAMIC CAP.(AX) B K 0.01μF/ 50V	CA1J103TU011
C616	B	FILM CAP.(P) 0.0047μF/ 50V J or	CMA1JJS00472
	B	FILM CAP.(P) 0.0047μF/ 50V J	CA1J472MS029
C630	A	ELECTROLYTIC CAP. 2200μF/ 25V M or	CE1EMZPDL222
	A	ELECTROLYTIC CAP. 2200μF/ 25V M or	CE1EMZNDL222
	A	ELECTROLYTIC CAP. 2200μF/ 25V M	CE1EMZNTL222
C630	B	ELECTROLYTIC CAP. 2200μF/ 35V M or	CE1GMZPDL222
	B	ELECTROLYTIC CAP. 2200μF/ 35V M or	CE1GMZNDL222
	B	ELECTROLYTIC CAP. 2200μF/ 35V M	CE1GMZNTL222
C632		ELECTROLYTIC CAP. 220μF/ 16V M or	CE1CMASDL221
		ELECTROLYTIC CAP. 220μF/ 16V M	CE1CMASTL221
C633△		ELECTROLYTIC CAP. 220μF/ 16V M or	CE1CMASDL221
△		ELECTROLYTIC CAP. 220μF/ 16V M	CE1CMASTL221
C634	A	ELECTROLYTIC CAP. 2200μF/ 25V M(105°C) or	CE1EMASTJ222
	A	ELECTROLYTIC CAP. 2200μF/ 25V M(105°C)	CA1E222SP090
C634	B	ELECTROLYTIC CAP. 2200μF/ 35V M(105°C) or	CE1GMAYTJ222
	B	ELECTROLYTIC CAP. 2200μF/ 35V M(105°C)	CA1G222SP090
C635△		ELECTROLYTIC CAP. 470μF/ 16V M or	CE1CMASDL471
△		ELECTROLYTIC CAP. 470μF/ 16V M	CE1CMASTL471
C636		CHIP CERAMIC CAP.(1608) B K 0.1μF/ 50V	CHD1JK30B104
C637△		ELECTROLYTIC CAP. 470μF/ 16V M or	CE1CMASDL471
△		ELECTROLYTIC CAP. 470μF/ 16V M	CE1CMASTL471
C639		SAFETY CAP. 2200pF/ 250V KX	CA2E222MR050
C640△		ELECTROLYTIC CAP. 470μF/ 25V M or	CE1EMASDL471
△		ELECTROLYTIC CAP. 470μF/ 25V M	CE1EMASTL471
C641△		PCB JUMPER D0.6-P10.0	JW10.0T
C642△		ELECTROLYTIC CAP. 10μF/ 50V M or	CE1JMASDL100
△		ELECTROLYTIC CAP. 10μF/ 50V M	CE1JMASTL100
C643△		ELECTROLYTIC CAP. 220μF/ 50V M or	CE1JMASDL221
△		ELECTROLYTIC CAP. 220μF/ 50V M	CE1JMASTL221
C645△		ELECTROLYTIC CAP. 10μF/ 50V M or	CE1JMASDL100
△		ELECTROLYTIC CAP. 10μF/ 50V M	CE1JMASTL100
C646		FILM CAP.(P) 0.1μF/ 50V J or	CMA1JJS00104
		FILM CAP.(P) 0.1μF/ 50V J	CA1J104MS029
C648		ELECTROLYTIC CAP. 1μF/ 50V M or	CE1JMASDL1R0
		ELECTROLYTIC CAP. 1μF/ 50V M or	CE1JMASDL010
		ELECTROLYTIC CAP. 1μF/ 50V M	CE1JMASTL1R0
C649		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103

Ref. No.	Mark	Description	Part No.
C651		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C652		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C653		CHIP CERAMIC CAP. F Z 1μF/ 10V	CHD1AZ30F105
C657		ELECTROLYTIC CAP. 47μF/ 16V M H7	CE1CMAVSL470
C673		ELECTROLYTIC CAP. 470μF/ 6.3V M or	CE0KMASDL471
		ELECTROLYTIC CAP. 470μF/ 6.3V M	CE0KMASTL471
C702		CHIP CERAMIC CAP.(1608) CH J 100pF/ 50V	CHD1JJ3CH101
C703		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C704		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C707		CHIP CERAMIC CAP.(1608) CH J 1000pF/ 50V	CHD1JJ3CH102
C708		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C710		CHIP CERAMIC CAP.(1608) CH J 100pF/ 50V	CHD1JJ3CH101
C711		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C712		CHIP CERAMIC CAP.(1608) B K 5600pF/ 50V	CHD1JK30B562
C713		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C714		CHIP CERAMIC CAP.(1608) B K 5600pF/ 50V	CHD1JK30B562
C715		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C716		CERAMIC CAP.(AX) CH J 560pF/ 50V	CA1J561TU008
C717		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C718		CERAMIC CAP.(AX) CH J 560pF/ 50V	CA1J561TU008
C719		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C720		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C721		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C722		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C723		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C730		CHIP CERAMIC CAP.(1608) B K 0.047μF/ 50V	CHD1JK30B473
C742		CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000
C743		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C745		CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000
C746		CHIP CERAMIC CAP. F Z 2.2μF/ 10V	CHD1AZ30F225
C747		ELECTROLYTIC CAP. 47μF/ 16V M H7	CE1CMAVSL470
C751		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C752		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C753		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C754		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C756		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C757		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C758		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C759		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C761		ELECTROLYTIC CAP. 100μF/ 6.3V M or	CE0KMASDL101
		ELECTROLYTIC CAP. 100μF/ 6.3V M	CE0KMASTL101
C762		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C765		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C766		ELECTROLYTIC CAP. 47μF/ 16V M or	CE1CMASDL470
		ELECTROLYTIC CAP. 47μF/ 16V M	CE1CMASTL470
C767		CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000
C781		CHIP CERAMIC CAP.(1608) B K 0.01μF/ 50V	CHD1JK30B103
C782		ELECTROLYTIC CAP. 47μF/ 16V M H7	CE1CMAVSL470
C783		ELECTROLYTIC CAP. 10μF/ 50V M H7	CE1JMAVSL100
C784		CERAMIC CAP.(AX) B K 0.1μF/ 50V	CA1J104TU011

Ref. No.	Mark	Description	Part No.
C785	B	ELECTROLYTIC CAP 47 $\mu$ F/ 16V M H7	CE1CMASL470
C787		ELECTROLYTIC CAP 47 $\mu$ F/ 16V M H7	CE1CMASL470
C791		CHIP CERAMIC CAP(1608) B K 0.01 $\mu$ F/ 50V	CHD1JK30B103
C792		ELECTROLYTIC CAP 100 $\mu$ F/ 6.3V M or	CE0KMASTL101
		ELECTROLYTIC CAP 100 $\mu$ F/ 6.3V M	CE0KMASTL101
C801		ELECTROLYTIC CAP 470 $\mu$ F/ 16V M or	CE1CMASDL471
		ELECTROLYTIC CAP 470 $\mu$ F/ 16V M	CE1CMASL471
C802		ELECTROLYTIC CAP 470 $\mu$ F/ 16V M or	CE1CMASDL471
		ELECTROLYTIC CAP 470 $\mu$ F/ 16V M	CE1CMASL471
C803		FILM CAP(P) 0.1 $\mu$ F/ 50V J or	CMA1JJS00104
		FILM CAP(P) 0.1 $\mu$ F/ 50V J	CA1J104MS029
C804		FILM CAP(P) 0.1 $\mu$ F/ 50V J or	CMA1JJS00104
		FILM CAP(P) 0.1 $\mu$ F/ 50V J	CA1J104MS029
C810		CHIP CERAMIC CAP F Z 1 $\mu$ F/ 10V	CHD1AZ30F105
C811		ELECTROLYTIC CAP 100 $\mu$ F/ 16V M or	CE1CMASDL101
		ELECTROLYTIC CAP 100 $\mu$ F/ 16V M	CE1CMASL101
C812		CHIP CERAMIC CAP F Z 1 $\mu$ F/ 10V	CHD1AZ30F105
C813		PCB JUMPER D0.6-P5.0	JW5.0T
C814		PCB JUMPER D0.6-P5.0	JW5.0T
C815		ELECTROLYTIC CAP 1 $\mu$ F/ 50V M or	CE1JMASDL1R0
		ELECTROLYTIC CAP 1 $\mu$ F/ 50V M or	CE1JMASDL010
		ELECTROLYTIC CAP 1 $\mu$ F/ 50V M	CE1JMASTL1R0
C818		ELECTROLYTIC CAP 470 $\mu$ F/ 16V M or	CE1CMASDL471
		ELECTROLYTIC CAP 470 $\mu$ F/ 16V M	CE1CMASL471
C819		CHIP CERAMIC CAP(1608) B K 1000pF/ 50V	CHD1JK30B102
C820		CHIP CERAMIC CAP(1608) B K 1000pF/ 50V	CHD1JK30B102
C831		CHIP CERAMIC CAP F Z 0.01 $\mu$ F/ 50V	CHD1JJZ30F103
C832		CHIP CERAMIC CAP(1608) F Z 0.1 $\mu$ F/ 50V	CHD1JJZ30F104
C833		CHIP CERAMIC CAP(1608) CH J 22pF/ 50V	CHD1JJ3CH220
C834		CHIP CERAMIC CAP(1608) CH J 68pF/ 50V	CHD1JJ3CH680
C835		CHIP CERAMIC CAP(1608) CH J 68pF/ 50V	CHD1JJ3CH680
C836		CHIP CERAMIC CAP CH D 3pF/ 50V	CHD1JD3CH3R0
C837		CHIP CERAMIC CAP CH D 3pF/ 50V	CHD1JD3CH3R0
C838		CHIP CERAMIC CAP(1608) CH J 100pF/ 50V	CHD1JJ3CH101
C839		CHIP CERAMIC CAP(1608) CH J 100pF/ 50V	CHD1JJ3CH101
C840		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M or	CE1CMASDL100
		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M	CE1CMASL100
C841		CHIP CERAMIC CAP F Z 0.01 $\mu$ F/ 50V	CHD1JJZ30F103
C843		ELECTROLYTIC CAP 100 $\mu$ F/ 6.3V M or	CE0KMASTL101
		ELECTROLYTIC CAP 100 $\mu$ F/ 6.3V M	CE0KMASTL101
C844		CERAMIC CAP(AX) B K 0.01 $\mu$ F/ 50V	CA1J103TU011
C845		CHIP CERAMIC CAP(1608) B K 0.01 $\mu$ F/ 50V	CHD1JK30B103
C846		CERAMIC CAP(AX) B K 0.01 $\mu$ F/ 50V	CA1J103TU011
C847		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M or	CE1CMASDL100
		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M	CE1CMASL100
C848		CHIP CERAMIC CAP(1608) F Z 0.1 $\mu$ F/ 50V	CHD1JJZ30F104
C850		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M or	CE1CMASDL100
		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M	CE1CMASL100
C851		ELECTROLYTIC CAP 3.3 $\mu$ F/ 50V M or	CE1JMASDL3R3
		ELECTROLYTIC CAP 3.3 $\mu$ F/ 50V M	CE1JMASTL3R3
C852		CHIP CERAMIC CAP(1608) F Z 0.1 $\mu$ F/ 50V	CHD1JJZ30F104
C853		CHIP CERAMIC CAP(1608) F Z 0.1 $\mu$ F/ 50V	CHD1JJZ30F104
C854		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M or	CE1CMASDL100
		ELECTROLYTIC CAP 10 $\mu$ F/ 16V M	CE1CMASL100
C855		CHIP CERAMIC CAP F Z 0.47 $\mu$ F/ 16V	CHD1CZ30F474
C860		ELECTROLYTIC CAP 22 $\mu$ F/ 16V M or	CE1CMASDL220
		ELECTROLYTIC CAP 22 $\mu$ F/ 16V M	CE1CMASL220
C871		ELECTROLYTIC CAP 10 $\mu$ F/ 50V M or	CE1JMASDL100
		ELECTROLYTIC CAP 10 $\mu$ F/ 50V M	CE1JMASTL100

Ref. No.	Mark	Description	Part No.
C872		CERAMIC CAP(AX) B K 0.1 $\mu$ F/ 50V	CA1J104TU011
C873		CHIP CERAMIC CAP F Z 1 $\mu$ F/ 10V	CHD1AZ30F105
C874		CHIP CERAMIC CAP F Z 1 $\mu$ F/ 10V	CHD1AZ30F105
C875		CHIP CERAMIC CAP(1608) F Z 0.1 $\mu$ F/ 50V	CHD1JJZ30F104
C876		CHIP CERAMIC CAP(1608) B K 1000pF/ 50V	CHD1JK30B102
C877		CHIP CERAMIC CAP(1608) B K 1000pF/ 50V	CHD1JK30B102
<b>CONNECTORS</b>			
CN31A	A	CONNECTOR BASE, TOP 8P B8-B-PH-K-S	J3PHC08JG001
CN51	B	PH CONNECTOR, TOP 6P B6B-PH-K-S	J3PHC06JG001
CN53	B	CONNECTOR BASE, TOP 5P B5B-PH-K-S	J3PHC05JG001
CN101A		CONNECTOR 10P TKC-W10P-B1 BLK ST	JCTKT10TG008
CN102A		CONNECTOR 26P TKC-W26P-B1 BLK ST	JCTKT26TG008
CN103A		CONNECTOR 26P TKC-W26P-B1 BLK ST	JCTKT26TG008
CN401	A	BACK LIGHT CONNECTOR 1717369-1	JB17D02AP001
CN402	A	BACK LIGHT CONNECTOR 1717369-1	JB17D02AP001
CN405	B	WIRE ASSEMBLY 13P WX1L4200-006	WX1L4200-006
CN801		STRAIGHT CONNECTOR BASE 00 8283 0212 00 000	J383C02UG002
CN801	A	STRAIGHT PIN HEADER, 2P 173981-2	1770258
CN801	B	STRAIGHT PIN HEADER, 2P 173981-2	1770258
CN802		STRAIGHT CONNECTOR BASE 00 8283 0212 00 000	J383C02UG002
CN802	A	STRAIGHT PIN HEADER, 2P 173981-2	1770258
CN802	B	STRAIGHT PIN HEADER, 2P 173981-2	1770258
<b>DIODES</b>			
D11		ZENER DIODE MTZJT-776.8B or	QDTB0MTZJ6R8
		ZENER DIODE DZ-6.8BSBT265	NDTB0DZ6R8BS
D12		ZENER DIODE MTZJT-776.8B or	QDTB0MTZJ6R8
		ZENER DIODE DZ-6.8BSBT265	NDTB0DZ6R8BS
D422	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D423	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D424	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D427	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D428	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D429	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D430△	A	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
△	A	SWITCHING DIODE 1N4148	NDTZ001N4148
D431	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D432	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D433	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D435△	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
△	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D437△	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
△	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D440	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D441△	A	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
△	A	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D442△	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
△	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D443	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP

Ref. No.	Mark	Description	Part No.
D461	A	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
	A	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D462	A	ZENER DIODE MTZJT-776.2B or	QDTB0MTZJ6R2
	A	ZENER DIODE DZ-6.2BSBT265	NDTB0DZ6R2BS
D463	A	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	A	SWITCHING DIODE 1N4148	NDTZ001N4148
D464	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D465	A	ZENER DIODE MTZJT-7710B or	QDTB00MTZJ10
	A	ZENER DIODE DZ-10BSBT265	NDTB00DZ10BS
D470	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D471	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D472	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D473	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D474	A	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	A	SWITCHING DIODE 1N4148	NDTZ001N4148
D475	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D476	A	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	A	SWITCHING DIODE 1N4148	NDTZ001N4148
D477	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D478	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D479	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D480	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D481	A	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	A	SWITCHING DIODE 1N4148	NDTZ001N4148
D482	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D483	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D484	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D485	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D486	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D487△	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
△	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D490	A	SWITCHING DIODE 1SS400 or	QD1Z001SS400
	A	SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D501		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D502		ZENER DIODE MTZJT-7727B or	QDTB00MTZJ27
		ZENER DIODE DZ-27BSBT265	NDTB00DZ27BS
D504		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D505		IC:SHUNT REGULATOR KIA431-AT	NSZLA0TJY001
D506		ZENER DIODE MTZJT-775.1B or	QDTB0MTZJ5R1
		ZENER DIODE DZ-5.1BSBT265	NDTB0DZ5R1BS
D507		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D508		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D513		SWITCHING DIODE 1SS400 or	QD1Z001SS400
		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D514		SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D516		ZENER DIODE MTZJT-778.2B or	QDTB0MTZJ8R2
		ZENER DIODE DZ-8.2BSBT265	NDTB0DZ8R2BS

Ref. No.	Mark	Description	Part No.
D517	A	ZENER DIODE MTZJT-776.2B or	QDTB0MTZJ6R2
	A	ZENER DIODE DZ-6.2BSBT265	NDTB0DZ6R2BS
D517	B	ZENER DIODE MTZJT-775.6B or	QDTB0MTZJ5R6
	B	ZENER DIODE DZ-5.6BSBT265	NDTB0DZ5R6BS
D520		SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D521		SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D522		SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D524		ZENER DIODE MTZJT-778.2B or	QDTB0MTZJ8R2
		ZENER DIODE DZ-8.2BSBT265	NDTB0DZ8R2BS
D525△	A	IC:SHUNT REGULATOR KIA431-AT	NSZLA0TJY001
D531		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D534		ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
		ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D542		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D583		PCB JUMPER D0.6-P5.0	JW5.0T
D605△		DIODE D2SB80-7000	QDWZ00D2SB80
D608		DIODE 1ZC18 or	QDQZ0001ZC18
		ZENER DIODE RD18F	QDQZ000RD18F
D610		FAST RECOVERY DIODE ERB44-10	QDLZ0ERB4410
D611		DIODE FR154 or	NDLZ000FR154
		FAST RECOVERY DIODE ERB44-02	QDPZ0ERB4402
D612	A	ZENER DIODE MTZJT-7733B or	QDTB00MTZJ33
	A	ZENER DIODE DZ-33BSBT265	NDTB00DZ33BS
D612	B	ZENER DIODE MTZJT-7736B or	QDTB00MTZJ36
	B	ZENER DIODE DZ-36BSBT265	NDTB00DZ36BS
D613	A	ZENER DIODE MTZJT-7727B or	QDTB00MTZJ27
	A	ZENER DIODE DZ-27BSBT265	NDTB00DZ27BS
D613	B	ZENER DIODE MTZJT-7733B or	QDTB00MTZJ33
	B	ZENER DIODE DZ-33BSBT265	NDTB00DZ33BS
D614		DIODE FR154 or	NDLZ000FR154
		FAST RECOVERY DIODE ERB44-02	QDPZ0ERB4402
D615		ZENER DIODE MTZJT-7716B or	QDTB00MTZJ16
		ZENER DIODE DZ-16BSBT265	NDTB00DZ16BS
D616	A	ZENER DIODE MTZJT-7724B or	QDTB00MTZJ24
	A	ZENER DIODE DZ-24BSBT265	NDTB00DZ24BS
D616	B	ZENER DIODE MTZJT-7736B or	QDTB00MTZJ36
	B	ZENER DIODE DZ-36BSBT265	NDTB00DZ36BS
D617	A	ZENER DIODE MTZJT-7733B or	QDTB00MTZJ33
	A	ZENER DIODE DZ-33BSBT265	NDTB00DZ33BS
D617	B	PCB JUMPER D0.6-P5.0	JW5.0T
D619		DIODE FR154 or	NDLZ000FR154
		FAST RECOVERY DIODE ERB44-02	QDPZ0ERB4402
D621		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D622		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D631△		DIODE FR154 or	NDLZ000FR154
△		FAST RECOVERY DIODE ERB44-02	QDPZ0ERB4402
D633△		SCHOTTKY BARRIER DIODE 21DQ04 or	QDQZ0021DQ04
△		SCHOTTKY BARRIER DIODE ERB81-004	AERB81004***
D635△		SCHOTTKY BARRIER DIODE ERC81-004	QDPZERC81004
D637△		SCHOTTKY BARRIER DIODE ERC84-009	QDLZERC84009
D640△		DIODE FR104-B	NDLZ000FR104
D641		ZENER DIODE MTZJT-7736B or	QDTB00MTZJ36
		ZENER DIODE DZ-36BSBT265	NDTB00DZ36BS
D642△		SWITCHING DIODE 1SS400 or	QD1Z001SS400
△		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D643△		SWITCHING DIODE 1SS400 or	QD1Z001SS400
△		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D644△		SWITCHING DIODE 1SS400 or	QD1Z001SS400
△		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP

Ref. No.	Mark	Description	Part No.
D645△		DIODE FR154 or	NDLZ000FR154
△		FAST RECOVERY DIODE ERB44-02	QDPZ0ERB4402
D646△		DIODE 1ZC43 or	QDQZ0001ZC43
△		ZENER DIODE RD43F	QDQZ000RD43F
D647△		ZENER DIODE MTZJT-7739B or	QDTB00MTZJ39
△		ZENER DIODE DZ-39BSBT265	NDTB00DZ39BS
D648△		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
△		SWITCHING DIODE 1N4148	NDTZ001N4148
D649△		IC:SHUNT REGULATOR KIA431-AT	NSZLA0TJY001
D650		SWITCHING DIODE 1SS400 or	QD1Z001SS400
		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D651		SWITCHING DIODE 1SS400 or	QD1Z001SS400
		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D654△		SCHOTTKY BARRIER DIODE YG861S12RSC	QDQZYG861S12
D654△	A	SCHOTTKY BARRIER DIODE YG811S06R	QDWZYG811S06
D654△	B	SCHOTTKY BARRIER DIODE YG811S09R	QDWZYG811S09
D656		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D658		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D659		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D668		SWITCHING DIODE 1SS400 or	QD1Z001SS400
		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D671△	A	ZENER DIODE MTZJT-7716B or	QDTB00MTZJ16
△	A	ZENER DIODE DZ-16BSBT265	NDTB00DZ16BS
D671△	B	ZENER DIODE MTZJT-7718B or	QDTB00MTZJ18
△	B	ZENER DIODE DZ-18BSBT265	NDTB00DZ18BS
D672	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D673	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D675		SWITCHING DIODE 1SS400 or	QD1Z001SS400
		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D712		PCB JUMPER D0.6-P5.0	JW5.0T
D730		SWITCHING DIODE 1SS400 or	QD1Z001SS400
		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D731		CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000
D751		ZENER DIODE MTZJT-776.2B or	QDTB00MTZJ6R2
		ZENER DIODE DZ-6.2BSBT265	NDTB00DZ6R2BS
D752		ZENER DIODE MTZJT-776.2B or	QDTB00MTZJ6R2
		ZENER DIODE DZ-6.2BSBT265	NDTB00DZ6R2BS
D753		ZENER DIODE MTZJT-776.2B or	QDTB00MTZJ6R2
		ZENER DIODE DZ-6.2BSBT265	NDTB00DZ6R2BS
D754		ZENER DIODE MTZJT-776.2B or	QDTB00MTZJ6R2
		ZENER DIODE DZ-6.2BSBT265	NDTB00DZ6R2BS
D755		ZENER DIODE MTZJT-775.1B or	QDTB00MTZJ5R1
		ZENER DIODE DZ-5.1BSBT265	NDTB00DZ5R1BS
D756		ZENER DIODE MTZJT-775.1B or	QDTB00MTZJ5R1
		ZENER DIODE DZ-5.1BSBT265	NDTB00DZ5R1BS
D802△		SWITCHING DIODE 1SS400 or	QD1Z001SS400
△		SWITCHING DIODE KDS160E-RTK/P	ND1ZKDS160EP
D803△		ZENER DIODE MTZJT-776.2B or	QDTB00MTZJ6R2
△		ZENER DIODE DZ-6.2BSBT265	NDTB00DZ6R2BS
D804		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
D805		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148	NDTZ001N4148
<b>ICS</b>			
IC503		IC:REGULATOR KA78R08C	NSZBA0SF3119
IC504		VOLTAGE REGULATOR PQ070XF01SZH	QSZBA0SSH054
IC507△	B	VOLTAGE REGULATOR KIA7805API or	NSBBA0SJY011
△	B	VOLTAGE REGULATOR KA7805A	NSZBA0SF3052
IC601△		PHOTOCOUPLER PS2561L1-1-VL	QPEL2561L11V

Ref. No.	Mark	Description	Part No.
IC602△		POWER SUPPLY IC MODULE MR2920-7109F12	QSZBA0SSD004
IC603△		PHOTOCOUPLER PS2561L1-1-VL	QPEL2561L11V
IC631△	A	VOLTAGE REGULATOR KIA7805API or	NSBBA0SJY011
△	A	VOLTAGE REGULATOR KA7805A	NSZBA0SF3052
IC631△	B	LOW DROP VOLTAGE REGULATOR BA50BCOT	QSZBA0SRM092
IC781		IC TC4053BF(ELN) or	QSZBA0TTS131
		IC:ANALOG MULTIPLEXERS CD4053BCSJX or	NSZBA0TF3071
		IC:ANALOG MULTIPLEXER CD4053BNR	NSZBA0TTY093
IC801		IC AN17812A	QSZBA0SMS017
IC831		IC:AUDIO PROCESSOR MSP3417G-QG-B8-V3	NSZBA0SP3005
IC871		IC:SWITCHING TC4052BF(EL) or	QSZBA0TTS096
		IC:SWITCHING CD4052BCSJX or	NSZBA0TF3079
		IC:SWITCHING CD4052BNR	NSZBA0TTY091
<b>COILS</b>			
L11		INDUCTOR 22μH-K-5FT or	LLARKBSTRU220
		INDUCTOR 22μH-K	LLARKDQKA220
L12		INDUCTOR 22μH-K-5FT or	LLARKBSTRU220
		INDUCTOR 22μH-K	LLARKDQKA220
L420	A	PCB JUMPER D0.6-P5.0	JW5.0T
L421	A	CHOKE COIL ELC10D330E or	LLC330KMS003
	A	RADIAL LEAD INDUCTORS 33UH	LLARKGQUTU330
L423	A	CHOKE COIL ELC10D330E or	LLC330KMS003
	A	RADIAL LEAD INDUCTORS 33UH	LLARKGQUTU330
L501		CHOKE COIL 47μH-K or	LLBD00PKV007
		POT COIL 47μH K	LLBD00DQE001
L601△		LINE FILTER ELF17N008A	LLBG00ZMS048
L632		INDUCTOR 22μH-K-26T or	LLAXJATTU220
		INDUCTOR 22μH-K-26T	LLAXKDTKA220
L741		INDUCTOR 12μH-J-26T or	LLAXJATTU120
		INDUCTOR 12μH-K-26T	LLAXKDTKA120
L761		PCB JUMPER D0.6-P5.0	JW5.0T
L781	A	PCB JUMPER D0.6-P5.0	JW5.0T
L781	B	INDUCTOR 22μH-K-5FT or	LLARKBSTRU220
	B	INDUCTOR 22μH-K	LLARKDQKA220
L831		INDUCTOR 18μH-J-26T or	LLAXJATTU180
		INDUCTOR 18μH-K-26T	LLAXKDTKA180
L832		INDUCTOR 10μH-J-26T or	LLAXJATTU100
		INDUCTOR 10μH-K-26T	LLAXKDTKA100
L833		PCB JUMPER D0.6-P5.0	JW5.0T
L834		PCB JUMPER D0.6-P5.0	JW5.0T
L835		INDUCTOR 10μH-J-26T or	LLAXJATTU100
		INDUCTOR 10μH-K-26T	LLAXKDTKA100
L836		PCB JUMPER D0.6-P5.0	JW5.0T
L837		PCB JUMPER D0.6-P5.0	JW5.0T
L838		INDUCTOR 2.2μH-K-5FT or	LLARKBSTRU2R2
		INDUCTOR 2.2μH-K-5FT	LLARKDSKA2R2
L839		INDUCTOR 2.2μH-K-5FT or	LLARKBSTRU2R2
		INDUCTOR 2.2μH-K-5FT	LLARKDSKA2R2
L840		INDUCTOR 2.2μH-K-5FT or	LLARKBSTRU2R2
		INDUCTOR 2.2μH-K-5FT	LLARKDSKA2R2
<b>TRANSISTORS</b>			
Q11		TRANSISTOR 2SA1576A T106R	QQ1R2SA1576A
Q421△	A	MOS FET 2SK2231	QF1Z2SK2231Q
Q422△	A	MOS FET 2SK2231	QF1Z2SK2231Q
Q423	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q424	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198

Ref. No.	Mark	Description	Part No.
Q425△	A	MOS FET 2SK2231	QF1Z2SK2231Q
Q426△	A	MOS FET 2SK2231	QF1Z2SK2231Q
Q427	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q428	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q460△	A	TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
△	A	TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q461	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q462	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q463	A	TRANSISTOR 2SA1175(F) or	QQSF02SA1175
	A	TRANSISTOR KTA1267(GR) or	NQS10KTA1267
	A	TRANSISTOR KTA1266(GR) or	NQS40KTA1266
	A	TRANSISTOR 2SA1318(T)-AANP or	2SA1318TZ
	A	TRANSISTOR 2SA1318(U)-AANP	2SA1318UZ
Q464	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q466△	A	TRANSISTOR 2SA1887	QQWZ02SA1887
Q467	A	TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
	A	TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q468	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q469	A	RES. BUILT-IN TRANSISTOR KRC103M or	NQSZ0KRC103M
	A	RES. BUILT-IN TRANSISTOR BA1F4M-T	QQSZ00BA1F4M
Q470	A	TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
	A	TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q471	A	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	A	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	A	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	A	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	A	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q501		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q502		TRANSISTOR 2SA1175(F) or	QQSF02SA1175
		TRANSISTOR KTA1267(GR) or	NQS10KTA1267
		TRANSISTOR KTA1266(GR) or	NQS40KTA1266
		TRANSISTOR 2SA1318(T)-AANP or	2SA1318TZ
		TRANSISTOR 2SA1318(U)-AANP	2SA1318UZ
Q503		TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
		TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q504		TRANSISTOR 2SA1175(F) or	QQSF02SA1175
		TRANSISTOR KTA1267(GR) or	NQS10KTA1267
		TRANSISTOR KTA1266(GR) or	NQS40KTA1266

Ref. No.	Mark	Description	Part No.
		TRANSISTOR 2SA1318(T)-AANP or	2SA1318TZ
		TRANSISTOR 2SA1318(U)-AANP	2SA1318UZ
Q505		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q506	A	TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
	A	TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q507		TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
		TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q508		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q510		TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
		TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q511		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q512		TRANSISTOR 2SA1175(F) or	QQSF02SA1175
		TRANSISTOR KTA1267(GR) or	NQS10KTA1267
		TRANSISTOR KTA1266(GR) or	NQS40KTA1266
		TRANSISTOR 2SA1318(T)-AANP or	2SA1318TZ
		TRANSISTOR 2SA1318(U)-AANP	2SA1318UZ
Q602		TRANSISTOR 2SD1666R or	QQER02SD1666
		TRANSISTOR 2SD1666S or	QQES02SD1666
		TRANSISTOR KTD2059(Y)	NQ4Y0KTD2059
Q603		TRANSISTOR 2SC4081 T106 Q	QQ1Q02SC4081
Q633		TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
		TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q701		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q702		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q730		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q731		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q732		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q733		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q734		RES. BUILT-IN TRANSISTOR KRA103M or	NQSZ0KRA103M
		RES. BUILT-IN TRANSISTOR BN1F4M-T	QQSZ00BN1F4M

Ref. No.	Mark	Description	Part No.
Q741		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q742		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q743		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q744		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q751		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q752		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q753		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q754		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q781		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q791		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q792		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q871		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q872		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR KTC3199(GR) or	NQS10KTC3199
		TRANSISTOR KTC3198(GR)	NQS40KTC3198
<b>RESISTORS</b>			
R11		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101

Ref. No.	Mark	Description	Part No.
R12		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R13		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R14		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R15		CHIP RES.(1608) 1/10W J 470 Ω	RRXAJR5Z0471
R17		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R18		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R420	A	CHIP RES.(1608) 1/10W J 3.3k Ω	RRXAJR5Z0332
R421	A	CHIP RES.(1608) 1/10W J 3.3k Ω	RRXAJR5Z0332
R422	A	CHIP RES.(1608) 1/10W J 47 Ω	RRXAJR5Z0470
R423	A	CARBON RES. 1/4W J 3.3k Ω	RCX4JATZ0332
R424	A	CHIP RES.(1608) 1/10W J 3.3k Ω	RRXAJR5Z0332
R425	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R426	A	METAL OXIDE FILM RES. 1W J 1k Ω or	RN01102ZZU001
	A	METAL OXIDE FILM RES. 1W J 1k Ω	RN01102DP003
R427	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R428	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R429	A	CHIP RES.(1608) 1/10W J 47 Ω	RRXAJR5Z0470
R430	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R431	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R432	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R433	A	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R434	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R435	A	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R436	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R437	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R438	A	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R439	A	CHIP RES.(1608) 1/10W J 56 Ω	RRXAJR5Z0560
R440	A	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R441	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R442	A	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R443	A	CHIP RES.(1608) 1/10W J 56 Ω	RRXAJR5Z0560
R444	A	CHIP RES.(1608) 1/10W J 33 Ω	RRXAJR5Z0330
R445	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R446	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R447	A	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R448	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R449	A	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R450	A	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R451	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R452	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R453	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R454	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R460	A	CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R461	A	CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R462	A	CHIP RES.(1608) 1/10W J 5.6k Ω	RRXAJR5Z0562
R463	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R464	A	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R465	A	CARBON RES. 1/4W J 2.2k Ω	RCX4JATZ0222
R466	A	CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R467	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R468	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R469	A	CARBON RES. 1/4W J 330 Ω	RCX4JATZ0331
R470	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R471	A	CARBON RES. 1/4W J 47 Ω	RCX4JATZ0470
R472	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R475△	A	METAL RES. 2W J 270 Ω or	RN02271ZU001
△	A	METAL OXIDE FILM RES. 2W J 270 Ω	RN02271DP004
R476△	A	METAL RES. 2W J 270 Ω or	RN02271ZU001
△	A	METAL OXIDE FILM RES. 2W J 270 Ω	RN02271DP004
R477	A	CARBON RES. 1/4W J 5.6k Ω	RCX4JATZ0562
R478	A	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R479	A	CARBON RES. 1/4W J 1.5k Ω	RCX4JATZ0152
R480	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R481	A	CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R482	A	CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R483	A	CARBON RES. 1/4W J 1.5k Ω	RCX4JATZ0152
R484	A	CARBON RES. 1/4W J 5.6k Ω	RCX4JATZ0562

Ref. No.	Mark	Description	Part No.
R502		CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R503		PCB JUMPER D0.6-P5.0	JW5.0T
R504		CARBON RES. 1/4W J 470 Ω	RCX4JATZ0471
R505		CHIP RES.(1608) 1/10W J 2.7k Ω	RRXAJR5Z0272
R506		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R508		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R509		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R510		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R511		CHIP RES.(1608) 1/10W F 13k Ω or	RRXAFR5H1302
		CHIP RES.(1608) 1/10W F 13k Ω	RRXAJR5Z1302
R512		CHIP RES.(1608) 1/10W F 3.9k Ω or	RRXAFR5H3901
		CHIP RES.(1608) 1/10W F 3.9k Ω	RRXAJR5Z3901
R513		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R514	A	CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R514	B	CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R515	A	METAL OXIDE FILM RES. 2W J 10 Ω or	RN02100ZU001
	A	METAL OXIDE FILM RES. 2W J 10 Ω	RN02100DP004
R515	B	METAL OXIDE FILM RES. 2W J 6.8 Ω or	RN026R8ZU001
	B	METAL OXIDE FILM RES. 2W J 6.8 Ω	RN026R8DP004
R517		CHIP RES.(1608) 1/10W J 3.3k Ω	RRXAJR5Z0332
R520		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R521		CARBON RES. 1/4W J 68 Ω	RCX4JATZ0680
R522		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R523		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R525	A	CHIP RES.(1608) 1/10W F 1.5k Ω or	RRXAFR5H1501
	A	CHIP RES.(1608) 1/10W F 1.5k Ω	RRXAJR5Z1501
R526△	A	CHIP RES.(1608) 1/10W F 1.5k Ω or	RRXAFR5H1501
△	A	CHIP RES.(1608) 1/10W F 1.5k Ω	RRXAJR5Z1501
R527	A	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R528		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R529	A	CARBON RES. 1/4W J 2.7k Ω	RCX4JATZ0272
R531		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R532		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R533		CARBON RES. 1/4W J 56k Ω	RCX4JATZ0563
R534		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R541		CARBON RES. 1/4W J 33k Ω	RCX4JATZ0333
R542		CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R543		CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R550		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R552		METAL OXIDE FILM RES. 1W J 1 Ω or	RN011R0ZU001
		METAL OXIDE FILM RES. 1W J 1 Ω	RN011R0DP003
R555		CHIP RES.(1608) 1/10W F 9.1k Ω or	RRXAFR5H9101
		CHIP RES.(1608) 1/10W F 9.1k Ω	RRXAJR5Z9101
R556		CHIP RES.(1608) 1/10W F 5.6k Ω or	RRXAFR5H5601
		CHIP RES. 1/10W F 5.6k Ω	RRXAJR5Z5601
R557		CHIP RES.(1608) 1/10W J 3.9k Ω	RRXAJR5Z0392
R572		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R573		CHIP RES.(1608) 1/10W J 120k Ω	RRXAJR5Z0124
R574		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R575		PCB JUMPER D0.6-P5.0	JW5.0T
R601△		CEMENT RES. 5W K 1.2 Ω or	RW051R2DP005
△		CEMENT RESISTOR 5W K 1.2 Ω or	RW051R2PG001
△		CEMENT RESISTOR 5W J 1.2 Ω H 10MM	RW051R2PAK10
R606	A	CARBON RES. 1/4W J 18k Ω	RCX4JATZ0183
R606	B	CARBON RES. 1/4W J 15k Ω	RCX4JATZ0153
R607	A	CARBON RES. 1/4W J 15k Ω	RCX4JATZ0153
R607	B	CARBON RES. 1/4W J 18k Ω	RCX4JATZ0183
R608		METAL OXIDE FILM RES. 2W J 0.22 Ω or	RN02R22ZU001
		METAL OXIDE FILM RES. 2W J 0.22 Ω	RN02R22DP004
R609	A	PCB JUMPER D0.6-P5.0	JW5.0T
R609	B	CARBON RES. 1/4W J 10 Ω	RCX4JATZ0100
R610	A	CARBON RES. 1/4W J 68k Ω	RCX4JATZ0683
R610	B	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R612		CARBON RES. 1/4W J 27k Ω	RCX4JATZ0273
R613	A	CARBON RES. 1/4W J 5.6k Ω	RCX4JATZ0562
R613	B	CARBON RES. 1/4W J 33k Ω	RCX4JATZ0333

Ref. No.	Mark	Description	Part No.
R614	A	CARBON RES. 1/4W J 120k Ω	RCX4JATZ0124
R614	B	CARBON RES. 1/4W J 39k Ω	RCX4JATZ0393
R616		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R617		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R618		CARBON RES. 1/4W J 2.2k Ω	RCX4JATZ0222
R619	A	CHIP RES.(1608) 1/10W J 15k Ω	RRXAJR5Z0153
R619	B	CHIP RES.(1608) 1/10W J 3.3k Ω	RRXAJR5Z0332
R633	A	CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R633	B	CHIP RES.(1608) 1/10W J 75k Ω	RRXAJR5Z0753
R634	A	CARBON RES. 1/4W J 15k Ω	RCX4JATZ0153
R634	B	CARBON RES. 1/4W J 22k Ω	RCX4JATZ0223
R635		CHIP RES.(1608) 1/10W J 27k Ω	RRXAJR5Z0273
R636		PCB JUMPER D0.6-P5.0	JW5.0T
R638		CARBON RES. 1/2W J 3.3M Ω or	RCX2335DP001
		ANTI-SURGE RESISTOR 1/2W J 3.3M Ω	RMX2335KA011
R639		SPECIAL POWER TYPE ANTI-SURGE RES. 1/2W J 5.6M Ω or	RCX2565DP003
		CARBON RES. 1/2W J 5.6M Ω or	RCX2565FS001
		GLASS GLAZE RES. 1/2W J 5.6M Ω	RXX2JZLZ0565
R642△		CHIP RES.(1608) 1/10W J 27k Ω	RRXAJR5Z0273
R645	A	CARBON RES. 1/4W J 390 Ω	RCX4JATZ0391
R645	B	CARBON RES. 1/4W J 2.2k Ω	RCX4JATZ0222
R646	A	CARBON RES. 1/4W J 1.2k Ω	RCX4JATZ0122
R646	B	CARBON RES. 1/4W J 680 Ω	RCX4JATZ0681
R647	A	CHIP RES.(1608) 1/10W F 1.5k Ω or	RRXAFR5H1501
	A	CHIP RES.(1608) 1/10W F 1.5k Ω	RRXAJR5Z1501
R647	B	CHIP RES.(1608) 1/10W F 2.7k Ω or	RRXAFR5H2701
	B	CHIP RES.(1608) 1/10W F 2.7k Ω	RRXAFR5Z2701
R648△	A	CARBON RES. 1/4W J 1.8k Ω	RCX4JATZ0182
R648△	B	CARBON RES. 1/4W J 560 Ω	RCX4JATZ0561
R649	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R650△	A	CARBON RES. 1/4W J 2.2k Ω	RCX4JATZ0222
R650△	B	CARBON RES. 1/4W J 6.8k Ω	RCX4JATZ0682
R651△	A	CARBON RES. 1/4W J 2k Ω	RCX4JATZ0202
R651△	B	CARBON RES. 1/4W J 12k Ω	RCX4JATZ0123
R652△	A	CHIP RES.(100PPM) 1/10W F 820 Ω or	RRXAFR5H8200
△	A	CHIP RES.(1608) 1/10W F 820 Ω	RRXAFR5Z8200
R652△	B	CHIP RES.(1608) 1/10W F 1.8k Ω or	RRXAFR5H1801
△	B	CHIP RES. 1/10W F 1.8k Ω	RRXAJR5Z1801
R653△	A	CHIP RES.(100PPM) 1/10W F 1.0k Ω or	RRXAFR5H1001
△	A	CHIP RES.(1608) 1/10W F 1k Ω	RRXAJR5Z1001
R653△	B	CHIP RES. 1/10W F 1.2k Ω or	RRXAFR5H1201
△	B	CHIP RES.(1608) 1/10W F 1.2k Ω	RRXAFR5Z1201
R654△	A	CHIP RES. 1/10W F 1.2k Ω or	RRXAFR5H1201
△	A	CHIP RES.(1608) 1/10W F 1.2k Ω	RRXAFR5Z1201
R655		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R656		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R657△	A	CHIP RES.(1608) 1/10W F 150 Ω or	RRXAFR5H1500
△	A	CHIP RES.(1608) 1/10W F 150 Ω	RRXAFR5Z1500
R657△	B	CHIP RES.(1608) 1/10W F 1.8k Ω or	RRXAFR5H1801
△	B	CHIP RES. 1/10W F 1.8k Ω	RRXAFR5Z1801
R658		CARBON RES. 1/4W J 1.2k Ω	RCX4JATZ0122
R659		CARBON RES. 1/4W J 22k Ω	RCX4JATZ0223
R660		CARBON RES. 1/4W J 390 Ω	RCX4JATZ0391
R662		CHIP RES.(1608) 1/10W J 5.6k Ω	RRXAJR5Z0562
R663		CHIP RES.(1608) 1/10W J 5.6k Ω	RRXAJR5Z0562
R668△	A	METAL OXIDE FILM RES. 2W J 470 Ω or	RN02471ZU001
△	A	METAL OXIDE FILM RES. 2W J 470 Ω	RN02471DP004
R668△	B	METAL OXIDE FILM RES. 2W J 1.5k Ω or	RN02152ZU001
△	B	METAL OXIDE FILM RES. 2W J 1.5k Ω	RN02152DP004
R670△	A	METAL OXIDE FILM RES. 2W J 470 Ω or	RN02471ZU001
△	A	METAL OXIDE FILM RES. 2W J 470 Ω	RN02471DP004
R670△	B	METAL OXIDE FILM RES. 2W J 1.5k Ω or	RN02152ZU001
△	B	METAL OXIDE FILM RES. 2W J 1.5k Ω	RN02152DP004
R673		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R674		METAL OXIDE FILM RES. 2W J 56 Ω or	RN02560ZU001
		METAL OXIDE FILM RES. 2W J 56 Ω	RN02560DP004

Ref. No.	Mark	Description	Part No.
R675		CHIP RES.(1608) 1/10W J 12k Ω	RRXAJR5Z0123
R701		CHIP RES.(1608) 1/10W J 75 Ω	RRXAJR5Z0750
R702		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R704		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R705		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R706		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R707		CHIP RES.(1608) 1/10W J 75 Ω	RRXAJR5Z0750
R708		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R710		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R711		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R712		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R713		CHIP RES.(1608) 1/10W J 75 Ω	RRXAJR5Z0750
R714		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R716		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R717		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R718		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R719		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R720		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R721		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R722		CARBON RES. 1/4W J 1.5k Ω	RCX4JATZ0152
R723		CARBON RES. 1/4W J 1.5k Ω	RCX4JATZ0152
R724		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R725		CARBON RES. 1/4W J 4.7k Ω	RCX4JATZ0472
R726		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R727		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R729		CHIP RES.(1608) 1/10W J 68k Ω	RRXAJR5Z0683
R730		CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R731		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R732		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R733		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R735		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R736		CHIP RES.(1608) 1/10W J 15k Ω	RRXAJR5Z0153
R737		CHIP RES.(1608) 1/10W J 470 Ω	RRXAJR5Z0471
R738		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R740		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R741		CARBON RES. 1/4W J 560 Ω	RCX4JATZ0561
R743		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R744		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R745		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R746		CARBON RES. 1/4W J 560 Ω	RCX4JATZ0561
R748		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R749		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R750		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R751		CHIP RES.(1608) 1/10W J 75 Ω	RRXAJR5Z0750
R752		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R753		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R754		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R755		CARBON RES. 1/4W J 390 Ω	RCX4JATZ0391
R756		CARBON RES. 1/4W J 4.7k Ω	RCX4JATZ0472
R758		CHIP RES.(1608) 1/10W J 75 Ω	RRXAJR5Z0750
R759		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R760		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R761		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R762		CARBON RES. 1/4W J 390 Ω	RCX4JATZ0391
R763		CARBON RES. 1/4W J 75 Ω	RCX4JATZ0750
R764		CARBON RES. 1/4W J 75 Ω	RCX4JATZ0750
R765		CHIP RES.(1608) 1/10W J 75 Ω	RRXAJR5Z0750
R766		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R767		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R768		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R769		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R770		CHIP RES.(1608) 1/10W J 75 Ω	RRXAJR5Z0750
R771		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R772		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R773		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R774		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R775		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103

Ref. No.	Mark	Description	Part No.
R776		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R777		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R778		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R779		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R780		CHIP RES.(1608) 1/10W J 470 Ω	RRXAJR5Z0471
R781		CARBON RES. 1/4W J 390 Ω	RCX4JATZ0391
R782		PCB JUMPER D0.6-P5.0	JW5.0T
R783		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R784		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R785		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R786		CHIP RES.(1608) 1/10W J 1.2k Ω	RRXAJR5Z0122
R787		CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R788		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R789		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R790		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R791		CARBON RES. 1/4W J 4.7k Ω	RCX4JATZ0472
R793		CHIP RES.(1608) 1/10W J 1.8k Ω	RRXAJR5Z0182
R794		CHIP RES.(1608) 1/10W J 470 Ω	RRXAJR5Z0471
R795		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R796		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R797		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R798		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R799		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R801		CARBON RES. 1/2W J 100 Ω or	RCX2JZQZ0101
		CARBON RES. 1/2W J 100 Ω or	RCX2JZPZ0101
		CARBON RES. 1/2W J 100 Ω	RCX2101KA013
R802		CARBON RES. 1/2W J 100 Ω or	RCX2JZQZ0101
		CARBON RES. 1/2W J 100 Ω or	RCX2JZPZ0101
		CARBON RES. 1/2W J 100 Ω	RCX2101KA013
R803		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R804		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R805△		METAL OXIDE FILM RES. 2W J 2.2 Ω or	RN022R2ZZU001
△		METAL OXIDE FILM RES. 2W J 2.2 Ω or	RN022R2DP004
R807△		METAL OXIDE FILM RES. 2W J 2.2 Ω or	RN022R2ZZU001
△		METAL OXIDE FILM RES. 2W J 2.2 Ω	RN022R2DP004
R812△		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R813		CHIP RES.(1608) 1/10W J 2.7k Ω	RRXAJR5Z0272
R814		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R815		CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R816		CHIP RES.(1608) 1/10W J 2.7k Ω	RRXAJR5Z0272
R817		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R831		CHIP RES.(1608) 1/10W J 1.2k Ω	RRXAJR5Z0122
R832		CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R833		CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R834		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R835		CHIP RES.(1608) 1/10W J 6.8k Ω	RRXAJR5Z0682
R838		CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R851		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R853		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R871		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R872		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R873		CHIP RES.(1608) 1/10W J 15k Ω	RRXAJR5Z0153
R874		CHIP RES.(1608) 1/10W J 15k Ω	RRXAJR5Z0153
R875		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R876		CARBON RES. 1/4W J 22k Ω	RCX4JATZ0223
R877		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R878		CARBON RES. 1/4W J 22k Ω	RCX4JATZ0223
R879		CARBON RES. 1/4W J 22k Ω	RCX4JATZ0223
R880		CARBON RES. 1/4W J 22k Ω	RCX4JATZ0223
R881		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R882		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R883		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R884		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R885		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R886		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R887		CARBON RES. 1/4W J 22k Ω	RCX4JATZ0223
R888		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223

Ref. No.	Mark	Description	Part No.
<b>MISCELLANEOUS</b>			
AC601△	A	AC CORD PE8B2V91H0A-05B	WAB0182LW011
AC601△	B	AC CORD PE8G2XA1H0AA061	WAB0182LW015
B10		HEAT SINK PKB ASSEMBLY L4100EA	1EM420583
B22		HEAT SINK PIS ASSEMBLY L0200UA or	0EM408833A
		HEAT SINK PKP ASSEMBLY L4200EA	1EM420855
BC602		BEAD INDUCTORS FBR07HA121TB-00	LLBF00ZTU021
BC631		PCB JUMPER D0.6-P5.0	JW5.0T
BC632		PCB JUMPER D0.6-P5.0	JW5.0T
BC637		PCB JUMPER D0.6-P5.0	JW5.0T
BC638		PCB JUMPER D0.6-P5.0	JW5.0T
BC639		BEAD INDUCTORS FBR07HA121TB-00	LLBF00ZTU021
BC642		PCB JUMPER D0.6-P5.0	JW5.0T
F601△		FUSE 4A/250V 215004	PAGF20BAG402
FH601		FUSE HOLDER MSF-015 or	XH01Z00LY001
		FUSE HOLDER FH-V-03078	XH01Z00DK001
FH602		FUSE HOLDER MSF-015 or	XH01Z00LY001
		FUSE HOLDER FH-V-03078	XH01Z00DK001
J176		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
J200	A	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
J206		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
J300		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
J369		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
J371		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JK721		Y/C JACK 1P(SW) MDC-070V1-A	JYEL040LY002
JK722		RCA JACK(YELLOW) MTJ-032-06B-20 or	JXRL010LY050
		RCA JACK 1P AV-8.4-9Y	JXRL010RP010
JK723		RCA JACK(WHITE) MTJ-032-06B-22 or	JXRL010LY052
		RCA JACK 1P AV-8.4-9W	JXRL010RP011
JK724		RCA JACK(RED) MTJ-032-06A-21 or	JYRL010LY014
		RCA JACK 1P(RED)WITH SW ITCH AV-09S-2	JYRL010RP008
JK751		RGB CONNECTOR MRC-021V-05	JXGL210LY004
JK801		HEADPHONE JACK MSJ-035-10A B or	JYSL020LY002
		HEADPHONE JACK DP3-26-7-001	JYSL020RP001
JS401	B	PCB JUMPER D0.6-P5.0	JW5.0T
JS403	B	PCB JUMPER D0.6-P5.0	JW5.0T
JS504		PCB JUMPER D0.6-P5.0	JW5.0T
JS505		PCB JUMPER D0.6-P5.0	JW5.0T
JS507	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS509	A	PCB JUMPER D0.6-P5.0	JW5.0T
JS703		PCB JUMPER D0.6-P5.0	JW5.0T
JS806		PCB JUMPER D0.6-P5.0	JW5.0T
JS81	B	PCB JUMPER D0.6-P5.0	JW5.0T
JS831		PCB JUMPER D0.6-P7.5	JW7.5T
L16		SCREW, B-TIGHT D3X8 BIND HEAD+	GBMB3080
L20		SCREW, B-TIGHT D3X10 BIND HEAD+	GBMB3100
SA601△		SURGE ABSORBER 470V+/-10PER or	NVQZ10D471KB
△		SURGE ABSORBER CNR-10D471K or	NVQZR10D471K
△		SURGE ABSORBER JVR-10N471K	NVQZR10N471K
T401△	A	INVERTER TRANS ETJV25ZB13AC	LTZ00EPMS006
T402△	A	INVERTER TRANS ETJV25ZB13AC	LTZ00EPMS006
T601△	A	SWITCHING TRANS 5712	LTT00EPKT171
T601△	B	SWITCHING TRANS 05713	LTT00EPKT172
TM601		EYELET TYPE D-1	0VM406868
TM602		EYELET TYPE D-1	0VM406868
TP300		PCB JUMPER D0.6-P7.5	JW7.5T
TP401		PCB JUMPER D0.6-P17.5	JW17.5T
TU1		TUNER UNIT TMQZ6-302A	UTUNPLGAL016
VR649△	A	CARBON P.O.T VZ067TL1 B202 PB(F)	VRCB202HH014
VR649△	B	CARBON P.O.T. VZ067TL1 B502 PB(F)	VRCB502HH014
X831		X'TAL 18.432MHz	FXD186LLN001

## FUNCTION CBA

Ref. No.	Mark	Description	Part No.
	A	FUNCTION CBA Consists of the following:	-----

Ref. No.	Mark	Description	Part No.
<b>CAPACITORS</b>			
C32	A	ELECTROLYTIC CAP. 47μF/ 10V M or	CE1AMASDL470
	A	ELECTROLYTIC CAP. 47μF/ 10V M	CE1AMASTL470
C33	A	CHIP CERAMIC CAP. F Z 0.01μF/ 50V	CHD1JZ30F103
<b>CONNECTOR</b>			
CN31B	A	WIRE ASSEMBLY 8P WX1L4100-001	WX1L4100-001
<b>DIODE</b>			
D30	A	LED L-53HT	NP4Z000L53HT
<b>RESISTORS</b>			
R24	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R25	A	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R26	A	CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R27	A	CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R28	A	CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R29	A	CHIP RES.(1608) 1/10W J 2.7k Ω	RRXAJR5Z0272
R30	A	CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R32	A	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R33	A	CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
R34	A	CHIP RES.(1608) 1/10W J 220 Ω	RRXAJR5Z0221
R41	A	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R42	A	CHIP RES.(1608) 1/10W J 68 Ω	RRXAJR5Z0680
R43	A	CARBON RES. 1/4W J 68 Ω	RCX4JATZ0680
<b>SWITCHES</b>			
SW30	A	TACT SWITCH SKHHARA010 or	SST0101AL060
	A	TACT SWITCH KSMC622A	SST0101HH031
SW31	A	TACT SWITCH SKHHARA010 or	SST0101AL060
	A	TACT SWITCH KSMC622A	SST0101HH031
SW32	A	TACT SWITCH SKHHARA010 or	SST0101AL060
	A	TACT SWITCH KSMC622A	SST0101HH031
SW33	A	TACT SWITCH SKHHARA010 or	SST0101AL060
	A	TACT SWITCH KSMC622A	SST0101HH031
SW34	A	TACT SWITCH SKHHARA010 or	SST0101AL060
	A	TACT SWITCH KSMC622A	SST0101HH031
SW35	A	TACT SWITCH SKHHARA010 or	SST0101AL060
	A	TACT SWITCH KSMC622A	SST0101HH031
SW37	A	TACT SWITCH SKHHARA010 or	SST0101AL060
	A	TACT SWITCH KSMC622A	SST0101HH031
<b>MISCELLANEOUS</b>			
J360	A	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
J365	A	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JS31	A	PCB JUMPER D0.6-P5.0	JW5.0T
RCV30	A	PHOTO LINK MODULE RPM7237-H9	USESJRSRM006

## FUNCTION CBA

Ref. No.	Mark	Description	Part No.
	B	FUNCTION CBA Consists of the following:	-----
<b>CAPACITOR</b>			
C52	B	CHIP CERAMIC CAP. F Z 0.01μF/ 50V	CHD1JZ30F103
<b>CONNECTOR</b>			
CN51A	B	WIRE ASSEMBLY 6P WX1L4200-005	WX1L4200-005
<b>RESISTORS</b>			
R51	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R52	B	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R53	B	CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R54	B	CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R55	B	CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R56	B	CHIP RES.(1608) 1/10W J 2.7k Ω	RRXAJR5Z0272
R57	B	CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R59	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R60	B	CHIP RES.(1608) 1/10W J 100 Ω	RRXAJR5Z0101
<b>SWITCHES</b>			
SW51	B	TACT SWITCH SKHHARA010 or	SST0101AL060
	B	TACT SWITCH KSMC622A	SST0101HH031
SW52	B	TACT SWITCH SKHHARA010 or	SST0101AL060
	B	TACT SWITCH KSMC622A	SST0101HH031

Ref. No.	Mark	Description	Part No.
SW53	B	TACT SWITCH SKHHARA010 or	SST0101AL060
	B	TACT SWITCH KSMC622A	SST0101HH031
SW54	B	TACT SWITCH SKHHARA010 or	SST0101AL060
	B	TACT SWITCH KSMC622A	SST0101HH031
SW55	B	TACT SWITCH SKHHARA010 or	SST0101AL060
	B	TACT SWITCH KSMC622A	SST0101HH031
SW56	B	TACT SWITCH SKHHARA010 or	SST0101AL060
	B	TACT SWITCH KSMC622A	SST0101HH031
SW58	B	TACT SWITCH SKHHARA010 or	SST0101AL060
	B	TACT SWITCH KSMC622A	SST0101HH031
<b>MISCELLANEOUS</b>			
J361	B	CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000
J362	B	CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000
J373	B	CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000

## IR SENSOR CBA

Ref. No.	Mark	Description	Part No.
	B	IR SENSOR CBA Consists of the following:	-----
<b>CAPACITORS</b>			
C53	B	ELECTROLYTIC CAP 47μF/ 10V M or	CE1AMASDL470
	B	ELECTROLYTIC CAP 47μF/ 10V M	CE1AMASTL470
<b>DIODE</b>			
D51	B	LED L-53HT	NP4Z000L53HT
<b>RESISTORS</b>			
R58	B	CHIP RES.(1608) 1/10W J 220Ω	RRXAJB5Z0221
R64	B	CHIP RES.(1608) 1/10W J 100Ω	RRXAJR5Z0101
R65	B	CARBON RES. 1/4W J 150Ω	RCX4JATZ0151
<b>MISCELLANEOUS</b>			
CLN53	B	WIRE ASSEMBLY 5P WX1L4200-004	WX1L4200-004
J382	B	CHIP RES.(1608) 1/10W 0Ω	RRXAZR5Z0000
JS51	B	PCB JUMPER D0.6-P5.0	JW5.0T
RCV51	B	PHOTO LINK MODULE RPM7237-H9	USESJRSRM006

## INVERTER CBA

Ref. No.	Mark	Description	Part No.
	B	INVERTER CBA Consists of the following:	1ESA10484
<b>CAPACITORS</b>			
C1401	B	ELECTROLYTIC CAP 47μF/ 35V M or	CE1GMASDL470
	B	ELECTROLYTIC CAP 47μF/ 35V M	CE1GMASTL470
C1402	B	CHIP CERAMIC CAP(1608) B K 0.1μF/ 50V	CHD1JK30B104
C1403	B	ELECTROLYTIC CAP 100μF/ 16V M or	CE1CMASDL101
	B	ELECTROLYTIC CAP 100μF/ 16V M	CE1CMASTL101
C1404	B	CHIP CERAMIC CAP(1608) B K 0.01μF/ 50V	CHD1JK30B103
C1405	B	CHIP CERAMIC CAP(1608) B K 0.047μF/ 50V	CHD1JK30B473
C1406	B	CHIP CERAMIC CAP. CH J 220pF/ 50V	CHD1JJ3CH221
C1407	B	CHIP CERAMIC CAP(1608) B K 6800pF/ 50V	CHD1JK30B682
C1408	B	CHIP CERAMIC CAP(1608) B K 4700pF/ 50V	CHD1JK30B472
C1409	B	CHIP CERAMIC CAP(1608) B K 6800pF/ 50V	CHD1JK30B682
C1410	B	CHIP CERAMIC CAP(1608) B K 4700pF/ 50V	CHD1JK30B472
C1412	B	CHIP CERAMIC CAP(1608) B K 0.1μF/ 50V	CHD1JK30B104
C1413	B	ELECTROLYTIC CAP 0.22μF/ 50V M or	CE1JMASDLR22
	B	ELECTROLYTIC CAP 0.22μF/ 50V M	CE1JMASTLR22
C1414	B	ELECTROLYTIC CAP 2.2μF/ 50V M or	CE1JMASDL2R2
	B	ELECTROLYTIC CAP 2.2μF/ 50V M	CE1JMASTL2R2
C1415	B	ELECTROLYTIC CAP 2.2μF/ 50V M or	CE1JMASDL2R2
	B	ELECTROLYTIC CAP 2.2μF/ 50V M	CE1JMASTL2R2
C1416	B	CHIP CERAMIC CAP(1608) B K 0.1μF/ 50V	CHD1JK30B104

Ref. No.	Mark	Description	Part No.
C1417	B	ELECTROLYTIC CAP. 470μF/ 35V M(VR) or	CE1GMZNTL471
	B	ELECTROLYTIC CAP. 470μF/ 35V M or	CE1GMZADL471
	B	ELECTROLYTIC CAP. 470μF/ 35V M or	CE1GMZNLDL471
	B	ELECTROLYTIC CAP. 470μF/ 35V M	CE1GMZPDL471
C1420	B	ELECTROLYTIC CAP. 47μF/ 35V M	CA1G470SP068
C1421	B	CHIP CERAMIC CAP.(1608) B K 0.1μF/ 50V	CHD1JK30B104
C1422	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1423	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1425	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1426	B	ELECTROLYTIC CAP. 47μF/ 35V M	CA1G470SP068
C1427	B	CHIP CERAMIC CAP.(1608) B K 0.1μF/ 50V	CHD1JK30B104
C1428	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1429	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1430	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1431	B	ELECTROLYTIC CAP. 47μF/ 35V M	CA1G470SP068
C1432	B	CHIP CERAMIC CAP.(1608) B K 0.1μF/ 50V	CHD1JK30B104
C1433	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1434	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1435	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1436	B	ELECTROLYTIC CAP. 47μF/ 35V M	CA1G470SP068
C1437	B	CHIP CERAMIC CAP.(1608) B K 0.1μF/ 50V	CHD1JK30B104
C1438	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1439	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1440	B	CHIP CERAMIC CAP. B K 4.7μF/ 25V	CHF1EK30B475
C1450	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1451	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1452	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1453	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1454	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1455	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1456	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1460	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1461	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1462	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1463	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1464	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1470	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1471	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1472	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1473	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1474	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1475	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1480	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1481	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1482	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1483	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1484	B	CHIP CERAMIC CAP.(1608) B K 0.022μF/ 50V	CHD1JK30B223
C1485	▲	CERAMIC CAP. SL D 10pF/ 3KV	CCD3FDASL100
C1490	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1491	B	CHIP CERAMIC CAP.(1608) B K 0.22μF/ 25V	CHD1EK30B224

Ref. No.	Mark	Description	Part No.
C1495	B	CHIP CERAMIC CAP(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1496	B	CHIP CERAMIC CAP(1608) B K 0.22μF/ 25V	CHD1EK30B224
C1497	B	CHIP CERAMIC CAP(1608) B K 0.22μF/ 25V	CHD1EK30B224
<b>CONNECTORS</b>			
CN1401	B	CONNECTOR BASE, TOP 13P B13B-PH-K-S	J3PHC13JG001
CN1402	B	BACK LIGHT CONNECTOR 1717369-1	JB17D02AP001
CN1403	B	BACK LIGHT CONNECTOR 1717369-1	JB17D02AP001
CN1404	B	BACK LIGHT CONNECTOR 1717369-1	JB17D02AP001
CN1405	B	BACK LIGHT CONNECTOR 1717369-1	JB17D02AP001
<b>DIODES</b>			
D1401	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1402	B	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
	B	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D1403	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1410	B	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
	B	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D1411	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1412	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1415	B	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
	B	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D1416	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1417	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1420	B	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
	B	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D1421	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1422	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1425	B	ZENER DIODE MTZJT-779.1B or	QDTB0MTZJ9R1
	B	ZENER DIODE DZ-9.1BSBT265	NDTB0DZ9R1BS
D1426	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1427	B	SCHOTTKY BARRIER DIODE 11EQS04 or	QD4Z011EQS04
	B	SCHOTTKY BARRIER DIODE ERA81-004	QDPZERA81004
D1430	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1431	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1432	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1433	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1434	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1435	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1436	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148

Ref. No.	Mark	Description	Part No.
D1437	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1440	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1441	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1442	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1443	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1444	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1445	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1446	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1447	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1450	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1451	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1452	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1453	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1454	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1455	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1456	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1457	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1460	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1461	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1462	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1463	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1464	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1465	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1466	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
D1467	B	SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
	B	SWITCHING DIODE 1N4148	NDTZ001N4148
<b>ICS</b>			
IC1401	B	IC BD9766FV-E2	QSZBA0TRM062
IC1402	B	IC BA10324AF-E2 or	QSZBA0TRM032
	B	IC(OPAMP) LM324NSR	NSZBA0TTY190
IC1403	B	IC BA10324AF-E2 or	QSZBA0TRM032
	B	IC(OPAMP) LM324NSR	NSZBA0TTY190
<b>TRANSISTORS</b>			
Q1401▲	B	TRANSISTOR 2SD1859 TV2 Q	QQSQ02SD1859
Q1402	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1403	B	TRANSISTOR 2SC2120-O-TPE2 or	QQS002SC2120
	B	TRANSISTOR 2SC2120-Y(TPE2)	QQSY02SC2120
Q1405▲	B	FET TPC8405(TE12 L Q)	QF2ZTPC8405Q
Q1406▲	B	FET TPC8405(TE12 L Q)	QF2ZTPC8405Q

Ref. No.	Mark	Description	Part No.
Q1407△	B	FET TPC8405(TE12 L Q)	QF2ZTPC8405Q
Q1408△	B	FET TPC8405(TE12 L Q)	QF2ZTPC8405Q
Q1410	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1411	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1412	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1413	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1414	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1415	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1416	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1417	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1418	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1419	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1420	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
Q1421	B	TRANSISTOR 2SC2785(F) or	QQSF02SC2785
	B	TRANSISTOR 2SC2785(H) or	QQSH02SC2785
	B	TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
	B	TRANSISTOR KTC3199(GR) or	NQS10KTC3199
	B	TRANSISTOR KTC3198(GR)	NQS40KTC3198
<b>RESISTORS</b>			
R1401	B	CHIP RES.(1608) 1/10W J 15k Ω	RRXAJR5Z0153
R1402	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1403	B	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R1404	B	CHIP RES.(1608) 1/10W J 1 Ω	RRXAJR5Z01R0

Ref. No.	Mark	Description	Part No.
R1405	B	CHIP RES.(1608) 1/10W J 5.1k Ω	RRXAJR5Z0512
R1406	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1407	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1408	B	CARBON RES. 1/4W J 220 Ω	RCX4JATZ0221
R1409	B	CHIP RES.(1608) 1/10W J 220 Ω	RRXAJR5Z0221
R1410	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1411	B	CARBON RES. 1/4W J 100k Ω	RCX4JATZ0104
R1412	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1413	B	CARBON RES. 1/4W J 100k Ω	RCX4JATZ0104
R1415	B	CHIP RES.(1608) 1/10W J 180k Ω	RRXAJR5Z0184
R1416	B	CHIP RES.(1608) 1/10W F 30k Ω	RRXAFR5H3002
R1417	B	CHIP RES.(1608) 1/10W F 2k Ω	RRXAFR5H2001
R1418	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1419	B	CHIP RES.(1608) 1/10W J 68k Ω	RRXAJR5Z0683
R1422	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1423	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1424	B	CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R1425	B	CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R1427	B	METAL RESISITOR 2W J 2.2k Ω or	RN02222ZU001
	B	METAL RESISTOR 2W J 2.2k Ω	RN02222DP004
R1428	B	METAL RESISITOR 2W J 2.2k Ω or	RN02222ZU001
	B	METAL RESISTOR 2W J 2.2k Ω	RN02222DP004
R1430	B	PCB JUMPER D0.6-P5.0	JW5.0T
R1431	B	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R1432	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1435	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1436	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1437	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1440	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1441	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1442	B	PCB JUMPER D0.6-P5.0	JW5.0T
R1445	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1446	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1447	B	PCB JUMPER D0.6-P5.0	JW5.0T
R1450	B	CHIP RES.(1608) 1/10W F 1.3k Ω	RRXAFR5H1301
R1451	B	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R1452	B	CHIP RES.(100PPM) 1/10W F 620 Ω	RRXAFR5H6200
R1453	B	CHIP RES.(1608) 1/10W F 15 Ω	RRXAFR5H15R0
R1454	B	CHIP RES.(100PPM) 1/10W F 620 Ω	RRXAFR5H6200
R1455	B	CHIP RES.(1608) 1/10W F 15 Ω	RRXAFR5H15R0
R1456	B	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R1457	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1458	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1459	B	CHIP RES.(1608) 1/10W F 2k Ω	RRXAFR5H2001
R1460	B	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R1461	B	CHIP RES.(100PPM) 1/10W F 620 Ω	RRXAFR5H6200
R1462	B	CHIP RES.(1608) 1/10W F 15 Ω	RRXAFR5H15R0
R1463	B	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R1464	B	CHIP RES.(100PPM) 1/10W F 330 Ω	RRXAFR5H3300
R1465	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1466	B	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R1467	B	CHIP RES.(100PPM) 1/10W F 620 Ω	RRXAFR5H6200
R1468	B	CHIP RES.(1608) 1/10W F 15 Ω	RRXAFR5H15R0
R1469	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1470	B	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R1471	B	CHIP RES.(100PPM) 1/10W F 620 Ω	RRXAFR5H6200
R1472	B	CHIP RES.(1608) 1/10W F 15 Ω	RRXAFR5H15R0
R1473	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1474	B	CHIP RES.(1608) 1/10W F 1.3k Ω	RRXAFR5H1301
R1475	B	CHIP RES.(1608) 1/10W F 2k Ω	RRXAFR5H2001
R1476	B	CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R1477	B	CHIP RES.(100PPM) 1/10W F 620 Ω	RRXAFR5H6200
R1478	B	CHIP RES.(1608) 1/10W F 15 Ω	RRXAFR5H15R0
R1479	B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R1480	B	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1481	B	CHIP RES.(100PPM) 1/10W F 330 Ω	RRXAFR5H3300
R1482	B	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103

Ref. No.	Mark	Description	Part No.
R1483	B	CHIP RES.(1608) 1/10W J 680k $\Omega$	RRXAJR5Z0684
R1484	B	CARBON RES. 1/4W J 10k $\Omega$	RCX4JATZ0103
R1485	B	CHIP RES.(1608) 1/10W J 680k $\Omega$	RRXAJR5Z0684
R1486	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1487	B	CARBON RES. 1/4W J 10k $\Omega$	RCX4JATZ0103
R1488	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1489	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1490	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1491	B	CARBON RES. 1/4W J 10k $\Omega$	RCX4JATZ0103
R1492	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1493	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1494	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1495	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1496	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1497	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1498	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
R1499	B	CHIP RES.(1608) 1/10W J 10k $\Omega$	RRXAJR5Z0103
<b>MISCELLANEOUS</b>			
RL1401	B	POWER RELAY SDT-S-112LMR	MRNDC12QN014
BC1401	B	PCB JUMPER D0.6-P5.0	JW5.0T
T1401 $\triangle$	B	INVERTER TRANS ETJV25ZB12AC	LTZ00CPMS004
T1402 $\triangle$	B	INVERTER TRANS ETJV25ZB12AC	LTZ00CPMS004
T1403 $\triangle$	B	INVERTER TRANS ETJV25ZB12AC	LTZ00CPMS004
T1404 $\triangle$	B	INVERTER TRANS ETJV25ZB12AC	LTZ00CPMS004

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