

# EIKI

## SERVICE MANUAL

## Multimedia Projector

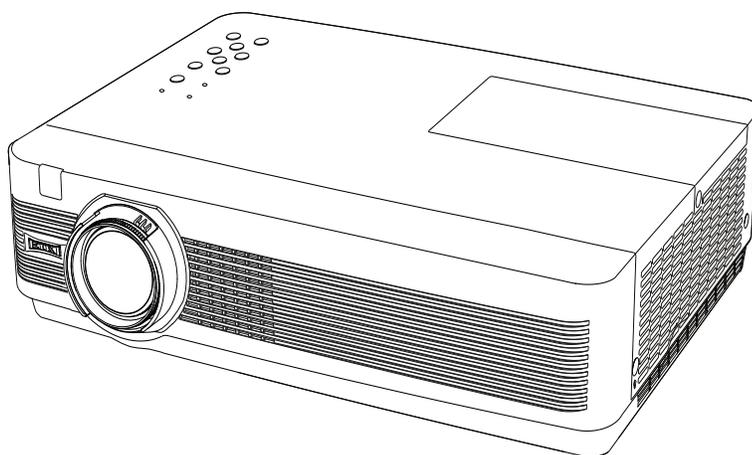
**Model No. LC-WB200**

U.S.A, Canada,  
Europe, Hong Kong

FILE NO.

**Original Version**

Chassis No. KC2-WB20000



Give complete " Chassis No." for parts order or servicing, it is shown on the rating sheet on the cabinet on the projector.

### FOREWORD

For your convenience, all service parts, identified in this manual are available through Eiki's normal distribution channels. In addition to service part number, the generic descriptions have been given, where possible, to allow your service technicians to substitute equivalent components which might be available from other sources.

All orders for service parts will be honored. However, in instances where generic components are considered to be available from several common sources, as would be the case with an industry standard fuse, resistor, or semiconductor, it may be more economical and expeditious to purchase the part locally.

### PRODUCT CODE

#### LC-WB200

1 122 545 01 (KC2BC)

1 122 550 01 (LC2BC)

1 122 550 06 (LC2GC)

REFERENCE NO. SM5111354-00

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# Safety Instructions

## Safety Precautions

### WARNING:

The chassis of this projector is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line (  ) in the schematic diagram. For continued product safety and protection of personnel injury, servicing should be made with qualified personnel.

The following precautions must be observed.

1: An isolation transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.

**DO NOT OPERATE THIS PROJECTOR WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.**

2: Comply with all caution and safety-related notes provided on the cabinet back, cabinet bottom, inside the cabinet or on the chassis.

4: Before replacing the cabinet cover, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, etc.

Before returning any projector to the customer, the service personnel must be sure it is completely safe to operate without danger of electric shock.

## Product Safety Notice

Product safety should be considered when a component replacement is made in any area of the projector. Components indicated by mark  in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of these parts must be made by exactly the same parts.

## Service Personnel Warning

Eye damage may result from directly viewing the light produced by the Lamp used in this equipment. Always turn off Lamp before opening cover. The Ultraviolet radiation eye protection required during this servicing. Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages (15kV - 25kV) at its starts.

Since the lamp is very high temperature during units operation replacement of the lamp should be done at least one hour after the power has been turned off, to allow the lamp cool-off.

# Specifications

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## Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	13.78" x 3.44" x 10.02" (350.0 mm X 87.5 mm X 254.4 mm ) (Not including protrusions)
Net Weight	7.51 lbs (3.4 kg)
Feet Adjustment	0° to 12°

## Panel Resolution

LCD Panel System	0.59" TFT Active Matrix type, 3 panels
Panel Resolution	1,280 x 800 dots
Number of Pixels	3,072,000 (1,280 x 800 x 3 panels)

## Signal Compatibility

Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M, and PAL-N
SD/HD TV Signal	Component: 480i, 480p, 575i, 575p, 720p, 1035i and 1080i HDMI: 480p, 575p, 720p, 1080i and 1080p
Input Scanning Frequency	H-sync. 15kHz–100 kHz, V-sync. 50–100 Hz

## Optical Information

Projection Image Size (Diagonal)	Adjustable from 30" to 300"
Throw Distance	2.4' ~ 25.2' (0.74 m ~ 7.67 m)
Projection Lens	F 1.65 ~ 2.33 lens with f 15.47 mm ~ 24.53 mm with manual zoom and focus
Projection Lamp	245 W

## Interface

Video Input Jack	RCA Type x 1
S-video Input Jack	Mini DIN 4 pin x 1
Audio Input Jacks	RCA Type x 2
Computer 1/Computer 2 Audio Input Jacks	Mini Jack (stereo) x 2
Computer In 1/Component Input Terminal	Mini D-sub 15 pin x 1
Computer In 2/Monitor Output Terminal	Mini D-sub 15 pin x 1
Control Port	D-sub 9 pin x 1
Audio Output Jack	Mini Jack (stereo) x 1 (variable)
LAN Connection Terminal	RJ-45
HDMI	HDMI (V.1.3 with Deep Color) x 1

## Audio

Internal Audio Amp	10 W RMS
Built-in Speaker	1 speaker, ø1.5"(37 mm)

## Power

Voltage and Power Consumption	AC 100–240 V (3.8-1.8 A Max.), 50/60 Hz
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## Operating Environment

Operating Temperature	41°F–95°F (5 °C–35 °C)
Storage Temperature	14°F–140°F (-10°C–60 °C)

## Remote Control

Battery	AAA or LR03 1.5V Alkaline Type x2
Operating Range	16.4' (5 m)/±30°
Dimensions	2.0" (W) x 0.7" (H) x 4.3" (D) (52 mm x 18 mm x 110 mm)
Net Weight	2.37 oz (67 g) (including batteries)

- The specifications are subject to change without notice.
- LCD panels are manufactured to the highest possible standards. Even though 99.99% of the pixels are effective, a tiny fraction of the pixels (0.01% or less) may be ineffective by the characteristics of the LCD panels.



This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

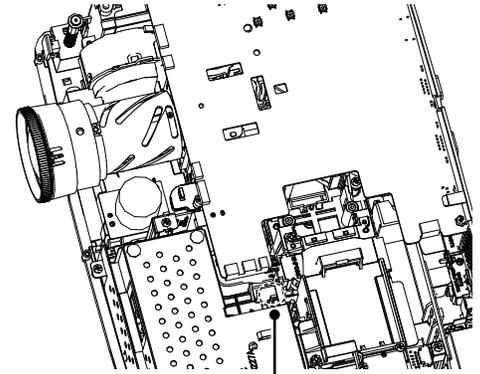
# Circuit Protections

This projector provides the following circuit protections to operate in safety. If the abnormality occurs inside the projector, it will automatically turn off by operating one of the following protection circuits.

## Thermal switch

There is the thermal switch (SW902) inside of the projector to detect the internal temperature rising abnormally. When the internal temperature reaches near 115°C, the thermal switch opens to stop the operation of the power supply circuit.

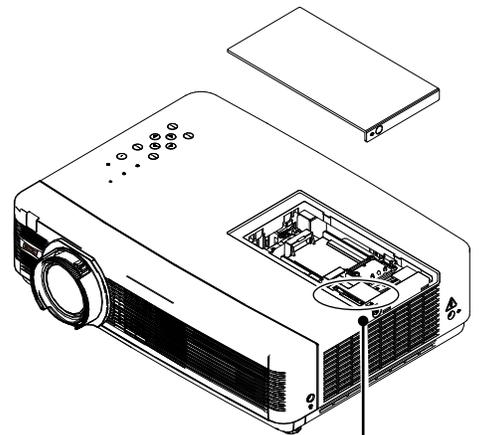
When the internal temperature reaches near 75°C, the thermal switch returns automatically.



Thermal switch (SW902)

## Lamp cover switch

The lamp cover switch (SW901) cuts off the drive signal to the lamp circuit when the lamp cover is removed or not closed completely. After opening the lamp cover for replacing the lamp ass'y, place the lamp cover correctly otherwise the projector can not turn on.



Lamp cover switch (SW901)

## Fuse

A fuse is located inside of the projector. When the POWER indicator is not lighting, the fuse may be opened. Check the fuse as following steps.

The fuse should be used with the following type;

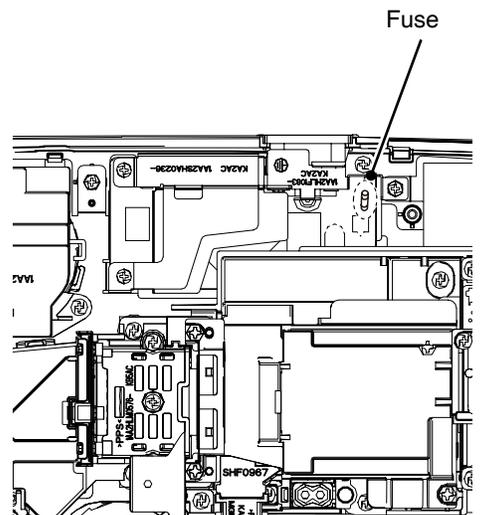
**Fuse Part No.: 323 021 7804**  
**TYPE T6.3AH 250V FUSE**  
**LITTEL FUSE INC. TYPE 21506.3**

or

**Fuse Part No, : 423 034 4101**  
**TYPE T6.3AH 250V FUSE**  
**Hollyland Co, Ltd. TYPE 50CT063H**

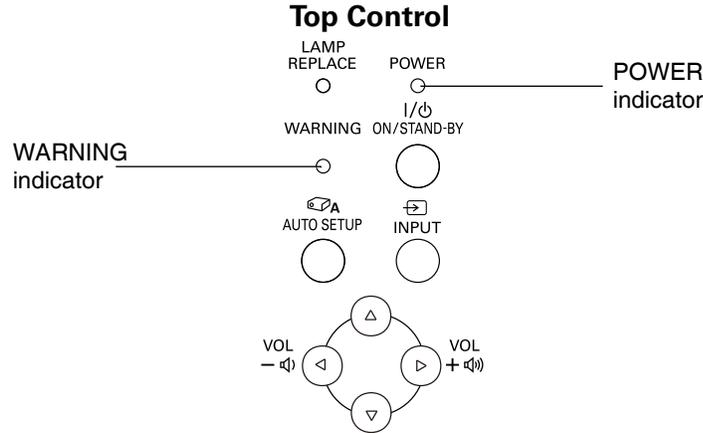
How to replace the fuse

1. The fuse is placed on the filter board. Remove the cabinet top following the "Mechanical Disassembly" .
2. Take the fuse off from the fuse holder, and replace the new one with the specified type.



## Warning temperature and power failure protection

The projector will be automatically turned off when the internal temperature of the projector is abnormally high, or the cooling fans stop spinning, or the power supplies in the projector are failed.



### The projector is shut down and the WARNING indicator is blinking red.

When the temperature inside the projector reaches a certain level, the projector will be automatically shut down to protect the inside of the projector and the WARNING and POWER indicators start blinking. When the projector has cooled down enough (to its normal operating temperature), the POWER indicator stops blinking and lights red, The projector can be turned on again by pressing the ON/STAND-BY button.

✓ **Note:**

The WARNING indicator continues to blink even after the temperature inside the projector returns to normal. When the projector is turned on again, the WARNING indicator stops blinking.

Check items

- Remove dust around the air filter.
- Ventilation slots of the projector are blocked. In such an event, reposition the projector so that ventilation slots are not obstructed.
- Check if projector is used at higher temperature place (Normal operating temperature is 5 to 35 °C or 41 to 95°F)

### The projector is shut down and the WARNING indicator lights red.

When the projector detects an abnormal condition, it is automatically shut down to protect the inside of the projector and the WARNING indicator lights red. In this case, unplug the AC power cord and reconnect it, and then turn the projector on once again to verify operation.

✓ **Note:**

- If the WARNING indicator lights red, it may defect the cooling fans or power supply circuits. Check fans operation and power supply lines referring to the chapter "Power supply & protection circuit" and "Fan control circuit" in the Chassis Block Diagram section.



**WARNING**

DO NOT LEAVE THE PROJECTOR WITH THE AC POWER CORD CONNECTED UNDER AN ABNORMAL CONDITION. IT MAY RESULT IN FIRE OR ELECTRIC SHOCK.

# Maintenance

## Replace the Filters

Filter prevents dust from accumulating on the optical elements inside the projector. Should the filter become clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat buildup and adversely affect the life of the projector. If a "Filter warning" icon appears on the screen, replace the filters immediately. Replace the filters by following the steps below.

- 1 Turn off the projector and unplug the AC power cord from the AC outlet.
- 2 Turn over the projector and pull out the filter cover (bottom); pull up the handle and take out the whole filter (bottom). Press up the latches and pull out the filter cover (side); pull out the handle and take out the side filter.
- 3 Put new filters back into the position. Make sure that the filters are fully inserted to the projector.
- 4 Connect the AC power cord to the projector and turn on the projector.



### CAUTION

- Do not operate the projector with the filters removed. Dust may accumulate on the optical elements degrading picture quality.
- Do not put anything into the air vents. Doing so may result in malfunction of the projector.
- Do not wash the filters with water or any other liquid matter. Otherwise the filters may be damaged.

### RECOMMENDATION

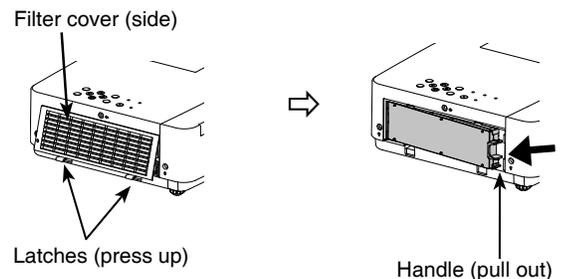
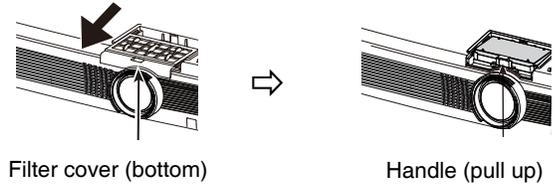
**We recommend avoiding dusty/smoky environments when you operate the projector. Usage in these environments may cause poor image quality.**

When using the projector under dusty or smoky conditions, dust may accumulate on a lens, LCD panels, or optical elements inside the projector degrading the quality of a projected image. When the symptoms above are noticed, contact your authorized dealer or service center for proper cleaning.

## Resetting the Filter Counter

Be sure to reset the Filter counter after replacing the filters.

- 1 Press the MENU button to display the On-Screen Menu. Use the Point ▲▼ buttons to select the **Setting** Menu and then press the Point ► or the SELECT button.
- 2 Use the Point ▲▼ buttons select Filter counter and then press the Point ► or the SELECT button. Use the Point ▲▼ buttons to select **Filter counter reset** and then press the SELECT button. The **Filter counter Reset?** appears. Select **Yes** to continue.
- 3 Another confirmation dialog box appears, select **Yes** to reset the Filter counter.



### Filter counter



The **Filter counter Reset?** appears.

Select **Yes**, then another confirmation box appears.



Select **Yes** again to reset the Filter counter.

## Maintenance

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### Cleaning

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After long periods of use, dust and other particles will accumulate on the LCD panel, prism, mirror, polarized glass, lens, etc., causing the picture to darken or color to blur. If this occurs, clean the inside of optical unit. Remove dust and other particles using air spray. If dirt cannot be removed by air spray, disassemble and clean the optical unit.

#### Cleaning with air spray

Remove the cabinet top following to “Mechanical Disassembly”. Clean up the LCD panel and polarizing plate by using the air spray from the cabinet top opening.

#### Caution:

Use a commercial (inert gas) air spray designed for cleaning camera and computer equipment. Use a resin-based nozzle only. Be very careful not to damage optical parts with the nozzle tip. Never use any kind of cleanser on the unit. Also, never use abrasive materials on the unit as this may cause irreparable damage.

#### Disassembly Cleaning

Disassembly cleaning method should only be performed when the unit is considerable dirty and cannot be sufficiently cleaned by air spraying alone.

**Be sure to readjust the optical system after performing disassembly cleaning.**

1. Remove the cabinet top and main units following to “Mechanical Disassembly”.
2. Remove the optical base top following to “Optical Unit Disassembly”. If the LCD panel needs cleaning, remove the LCD panel unit following to “LCD panel replacement”.
3. Clean the optical parts with a soft cloth. Clean extremely dirty areas using a cloth moistened with alcohol.

#### Caution:

The surface of the optical components consists of multiple dielectric layers with varying degrees of refraction. Never use organic solvents (thinner, etc.) or any kind of cleanser on these components.

Since the LCD panel is equipped with an electronic circuit, never use any liquids (water, etc.) to clean the unit. Use of liquid may cause the unit to malfunction.

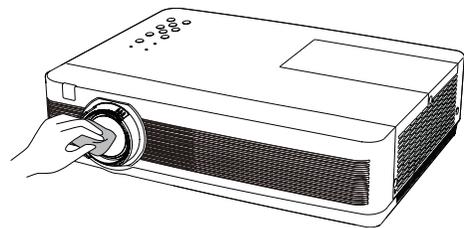
### Cleaning the Projection Lens

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Unplug the AC power cord before cleaning.

Gently wipe the projection lens with a cleaning cloth that contains a small amount of non-abrasive camera lens cleaner, or use a lens cleaning paper or commercially available air blower to clean the lens.

Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the lens.

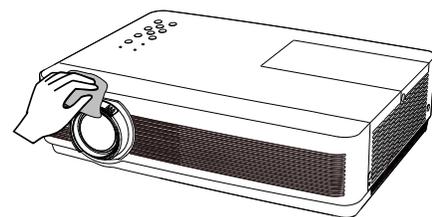


### Cleaning the Projector Cabinet

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Unplug the AC power cord before cleaning.

Gently wipe the projector body with a soft dry cleaning cloth. When the cabinet is heavily soiled, use a small amount of mild detergent and finish with a soft dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents or other harsh chemicals might scratch the surface of the cabinet.



When the projector is not in use, put the projector in an appropriate carrying case to protect it from dust and scratches.

# Lamp Replacement

## Lamp replacement

### WARNING:

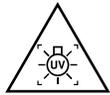
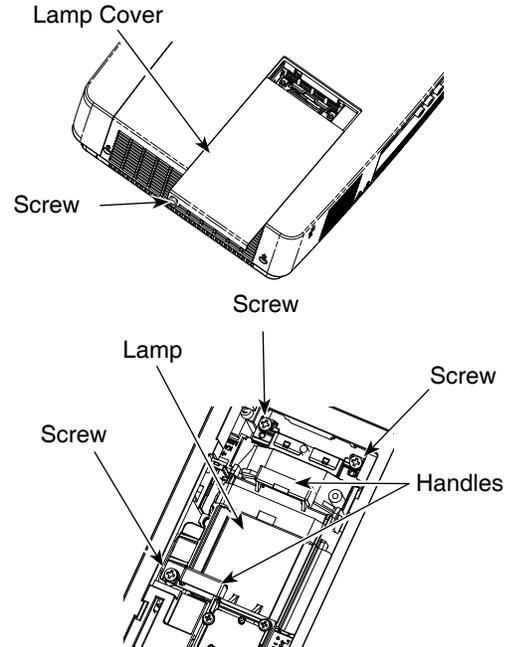
- For continued safety, replace with a lamp assembly of the same type.
- Allow the projector to cool for at least one hour before you open the lamp cover. The inside of the projector can become very hot.
- Do not drop the lamp module or touch the glass bulb! The glass can shatter and cause injury.

### Procedure

- 1** Unplug the AC power cord. Let the projector cool for at least 45 minutes.
- 2** Loosen the screw and open the lamp cover.
- 3** Loosen the three (3) screws that secure the lamp. Lift the lamp out of the projector by using the handles.
- 4** Replace the lamp with a new one and secure the three (3) screws. Make sure that the lamp is set properly. Close the lamp cover and secure the screw.
- 5** Connect the AC power cord to the projector and turn on the projector.

### ORDER REPLACEMENT LAMP

Type No. POA-LMP148  
Service Parts No. 610 352 7949



**WARNING : TURN OFF THE UV LAMP BEFORE OPENING THE LAMP COVER.  
USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING.**



### CAUTION

Allow a projector to cool for at least 45 minutes before you open the Lamp Cover. The inside of the projector can become very hot.



### CAUTION

When replacing the lamp because it has stopped illuminating, there is a possibility that the lamp may be broken.

If replacing the lamp of a projector which has been installed on the ceiling, you should always assume that the lamp is broken, and you should stand to the side of the lamp cover, not underneath it. Remove the lamp cover gently. Small pieces of glass may fall out when the lamp cover is opened. If pieces of glass get into your eyes or mouth, seek medical advice immediately.



### CAUTION

For continued safety, replace with a lamp of the same type. Do not drop a lamp or touch a glass bulb! The glass can shatter and may cause injury.

## How to check Lamp Used Time

The LAMP REPLACE indicator will light yellow when the total lamp used time (Corresponding value) reaches 5,000 hours. This is to indicate that lamp replacement is required.

The total lamp used time is calculated by using the below expression,

Total lamp used time

$$= T_{\text{normal}} \times 1.67 + T_{\text{eco}} + T_{\text{auto}} \times k^*$$

**T<sub>normal</sub>** : used time in the normal mode

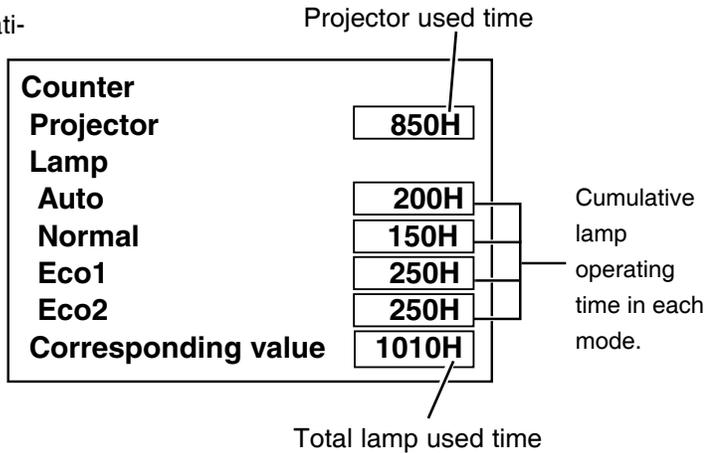
**T<sub>eco</sub>** : used time in the eco and eco2 mode

**T<sub>auto</sub>** : used time in the auto mode

\* Factor k is changed from 1.0 to 1.67 automatically depending on the input signal

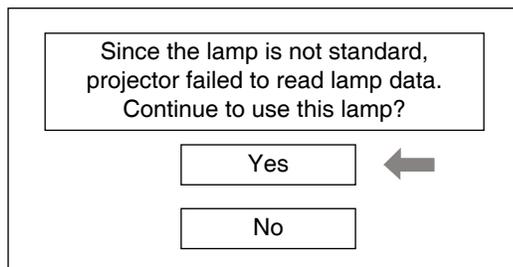
You can check the lamp used time following to the below procedure.

- 1 Press and hold the **ON/STAND-BY** button on the projector or the remote control for more than 20 seconds.
- 2 The projector used time and lamp used time will be displayed on the screen briefly as figure.



## Warning Message on the non-standard lamp used

If the non-standard lamp is used, the warning and confirmation messages will appear on the screen every startup. Some of the functions are limited when the non-standard lamp is used in spite of the warning.



## Security Function Notice

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This projector provides security functions such as "Key lock", "PIN code lock" and "Logo PIN code lock". When the projector has set these security function on, you are required to enter correct PIN code to use the projector. If you do not know the correct PIN code to the projector, the projector can no longer be operated or started. In this case, you must reset those function first according to the resetting procedure described below and then check up on the projector.

Function	Description
<b>Key lock</b>	Locks operation of the top control or the remote control. If the Key lock is enabled with top control lock, the projector can no longer be started. Initial setting: Key lock function is disabled
<b>PIN code lock</b>	Prevents the projector from being operated by an unauthorized person. Initial code: "1234"
<b>Logo PIN code lock</b>	Prevents an unauthorized person for changing the start-up logo on the screen. Initial code: "4321"

## Resetting procedure

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1. Disconnect the AC power cord from the AC outlet.
  2. As pressing the **SELECT** button, connect the AC power cord into an AC outlet again.
  3. Keep pressing the **SELECT** button and then press the **ON/STAND-BY** button.
  4. Release the **ON/STAND-BY** button first and then release the **SELECT** button.
- The PIN code lock and Logo PIN code lock will be reset as the initial PIN code at the factory and the key lock function is disabled.

Please refer to the owner's manual for further information of the security functions.

## Standby mode Notice

This projector provides 2 types of standby mode, Eco standby and Network standby. According to the standby mode "Eco" or "Network", several functions are restricted as shown in the table below. To change the standby mode, use the projector's menu "Setting".

Network..... Supply the power to the network function even after turning off the projector. You can turn on/ off the projector via network, modify network environment, and receive an e-mail about projector status while the projector is powered off.

Eco..... Select "Eco" when you do not use the projector via network. The projector's network function will stop when turning off the projector.

When "Eco" is selected, several functions will be restricted.

### Restricted Function in the standby mode

Function	Eco	Network
Serial command control	✓*1	✓
Network Function	--	✓
Monitor Out	--	✓
Audio Out	--	--
Mic Out (MIC Volume)	--	✓*2
Direct on	✓	✓

\*1 Effective only power-on command "C00".

\*2 MIC volume can be output when the Standby MIC Out function is set to **On**.

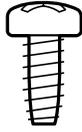
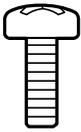
# Mechanical Disassembly

Mechanical disassembly should be made following procedures in numerical order.

Following steps show the basic procedures, therefore unnecessary step may be ignored.

Caution:

The parts and screws should be placed exactly the same position as the original otherwise it may cause loss of performance and product safety.

Screws Expression (Type Diameter x Length) mm	
T type	M Type
	

## 1. Filter cover (side), Cabinet Top, Front, RC Board removal

1. Pull up two Latches to take off the Filter cover(side).
2. Loosen 1 screw-A to remove the Lamp Cover.
3. Remove 6 screws-B (M3x8) and 1 screw C-(M3x8) to remove the Cabinet Top.
4. Remove 4 screws-D (M3x8) and 3 screws-E (T3x8) to remove the Cabinet Front.
5. Remove 2 screws-F(T3x8) to remove the RC board.

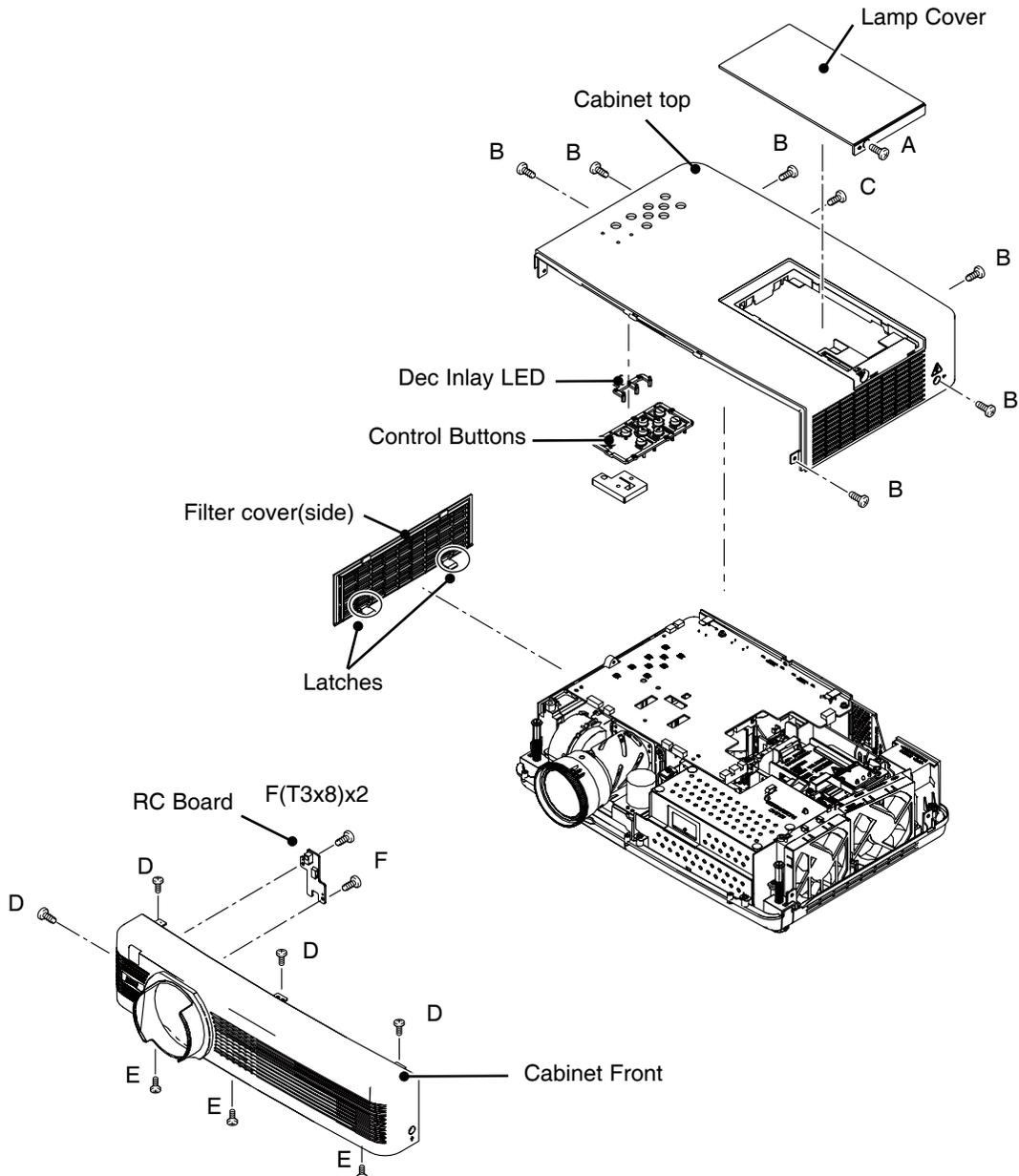


Fig.1

## 2. Main Board, AV Board and Fans(FN904 and FN905) removal

1. Remove 3 screws-A (T3x8) to remove the fans (FN904 and FN905).
2. Remove 3 screws-B (M2.5x6) and 2 screws-C (M3x8) to remove the assy Main Board.
3. Release the hooks to remove the AV Panel, remove 3 screws-D (T3x6) and 2 hex screws E to remove the AV Board.

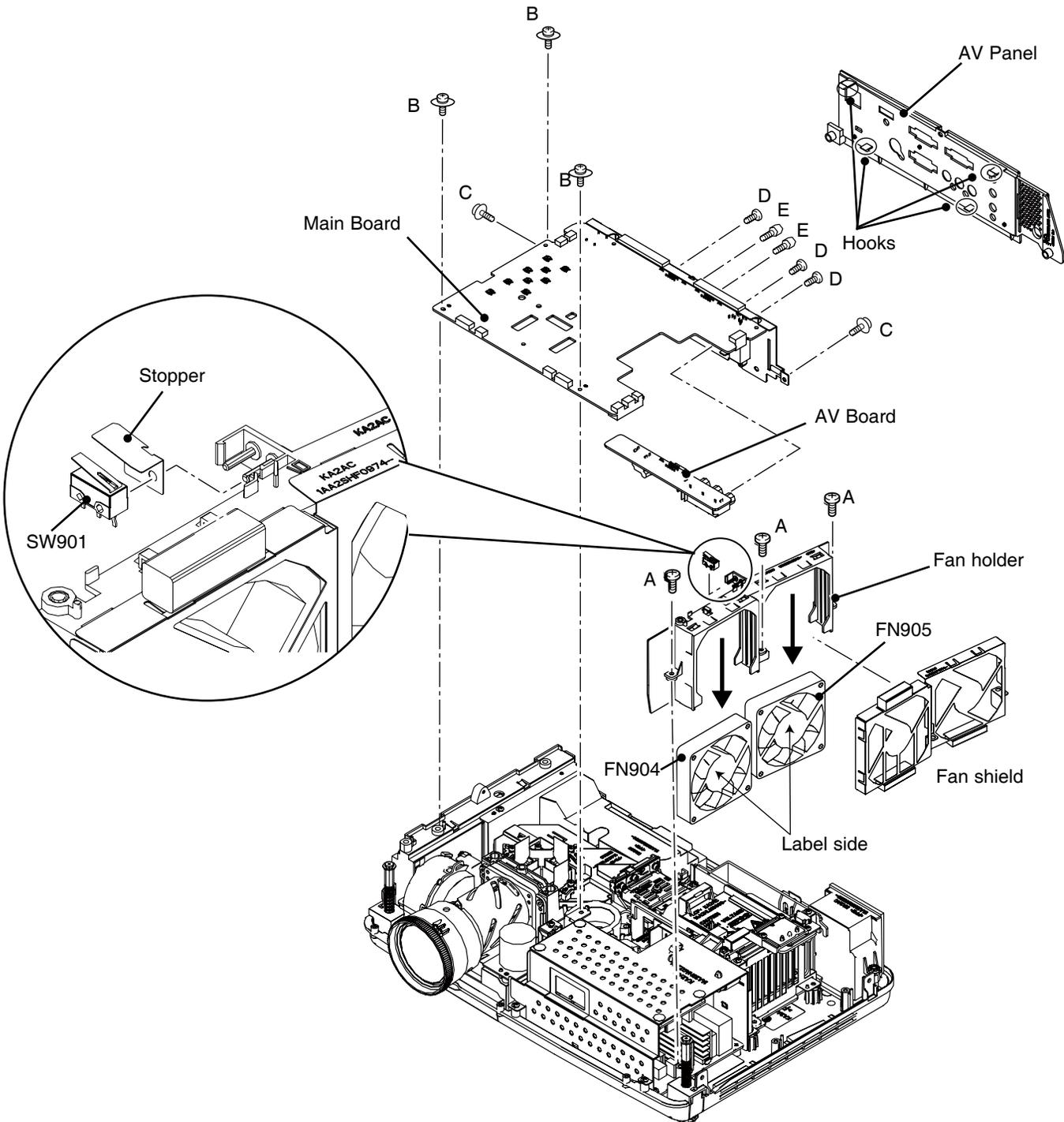


Fig.2

### 3. Speaker(SP901),Lamp assy(LP900), Optical Unit removal

1. Remove the 2 screws-A(T3x12) to remove the speaker holder. Remove the 2 screws-B(T3x8) to remove the speaker(SP901).
2. Loosen 3 screws-C to remove the Lamp assy (LP900).
3. Remove 4 screws-D (T3x8) to remove the Optical unit.
4. Remove 3 screws-E (T3x8) and 1 screw-F(M3x8) to remove the Lamp holder. Remove 2 screws-G(T3x6) to remove the ID Connect board.
5. Remove 2 screws-H(T3x8) to remove the Sub Power board.
6. Remove 3 screws-K (M3x8) and 1 screw-J (T3x8) to remove the Filter board.

**Note:**

When removing screws-G which is to fix the ID Connect board, the special screwdriver is needed as the below; Star screwdriver Size: T10

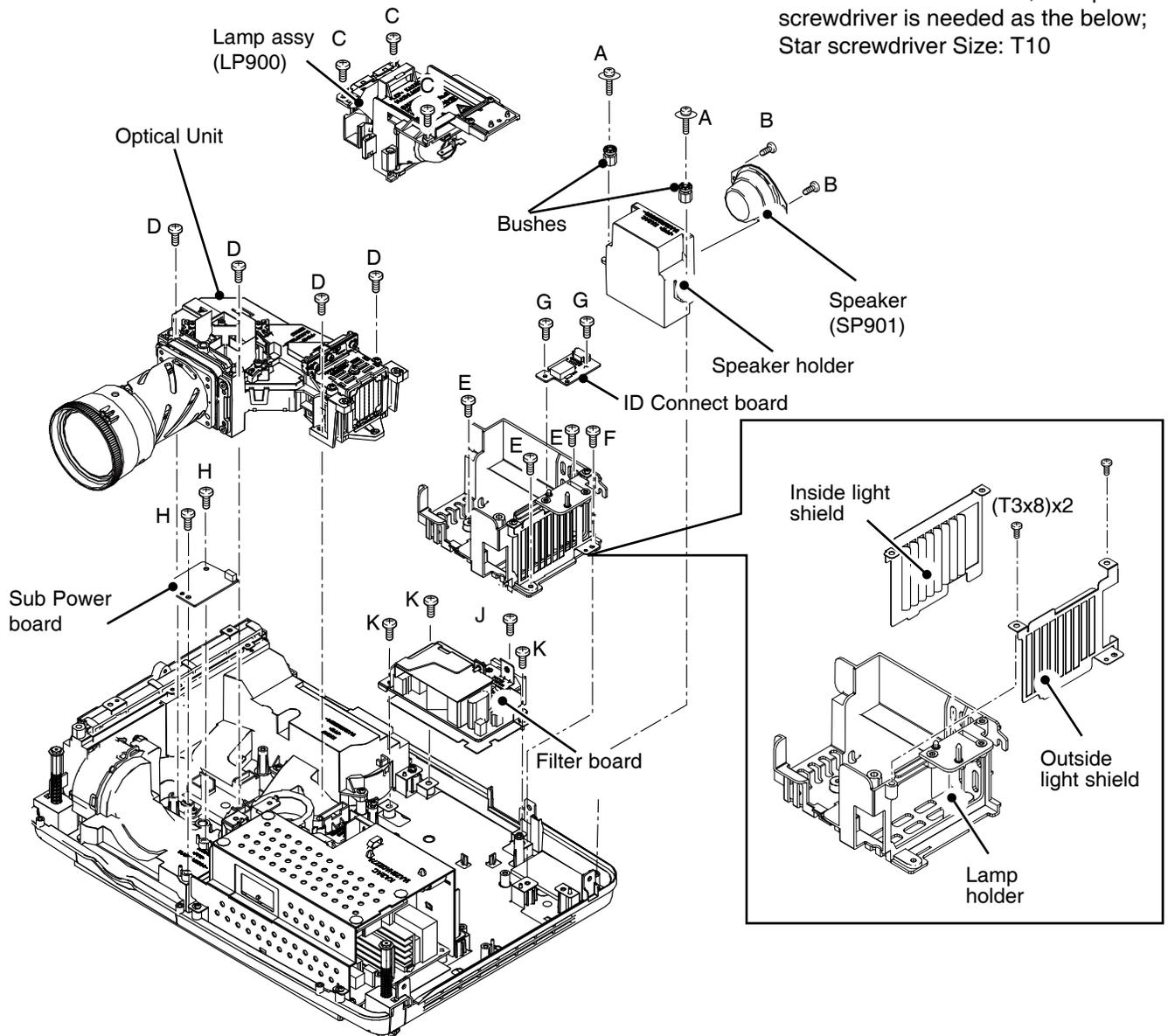


Fig.3

## 4. Fan (FN906) and Power Board removal

1. Remove 2 screws-A (T3x8) to remove the Cabinet front holder. Remove 1 screw-B (T3x8) to remove the Sensor holder and Thermal Switch(SW902).
2. Remove 2 screws-C(T3x8) to remove the Lamp fan duct ass'y. Remove 2 screws-D (T3x12) and 1 screw-E (T3x8) to remove the fan (FN906) and Lamp fan duct.
3. Remove 1 screw F (T3x8) and 2 screws-G (T3x8) to remove the Lamp Socket and Socket plug.
4. Remove 2 screws H (T3x8) and 1 screw-J (M3x8) to remove the Power board holder.
5. Remove 3 screws-K (T3x8) and 1 screw-L (M3x8) to remove the Power board.

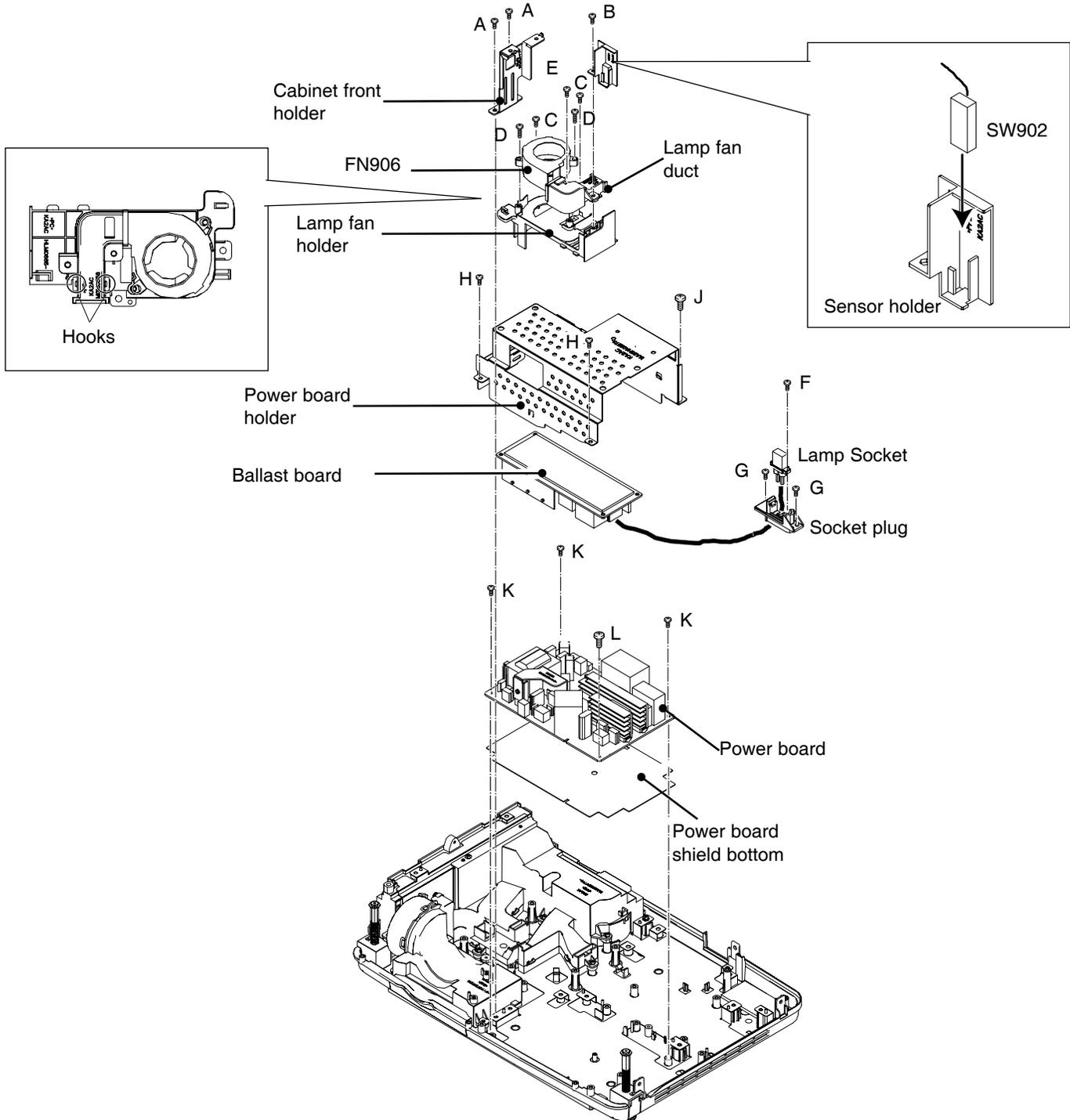


Fig.4

## 5. Mounting Duct, Fans(FN901, FN902, FN903) and Side Filter removal

1. Remove 5 screws-A (T3x8) and 2 screws-B (T3x12) to remove the Panel Mounting Duct top.
2. Remove 2 screws-C (T3x12) to remove fans (FN902 and FN903). Remove the Panel Mounting Duct bottom.
3. Remove 3 screws-D (T3x8) to remove the Filter Mounting Duct and remove 2 screws-E(T3x12) to remove fan (FN901).
4. Take out the Filter Box(side), and then remove 2 screws-F(T3x8) to remove the Side Filter Holder.
5. Take off the Filter Box(bottom) and Filter cover(bottom).

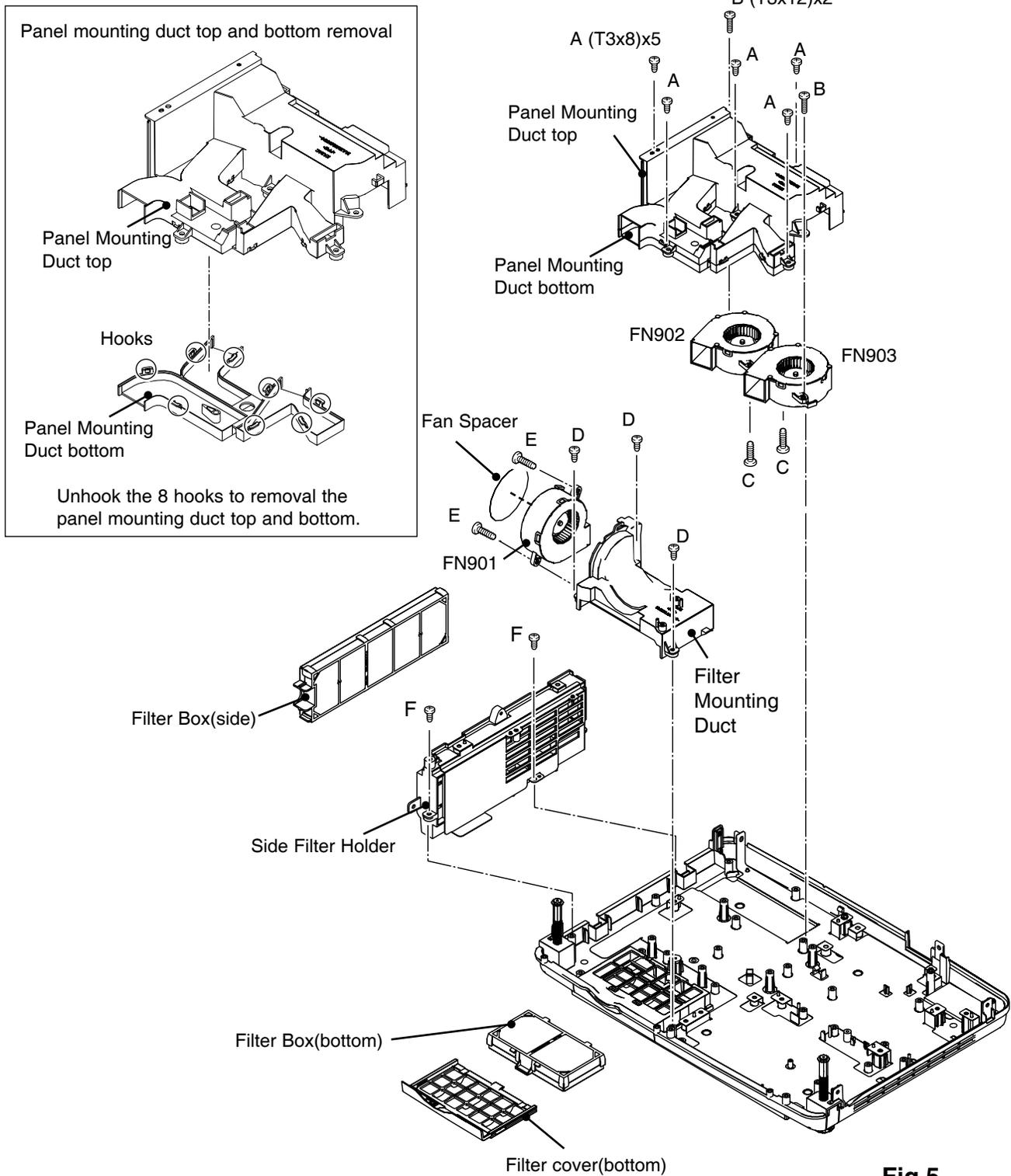


Fig.5

## 6. Cable Reforming

Reform cables as shown below.

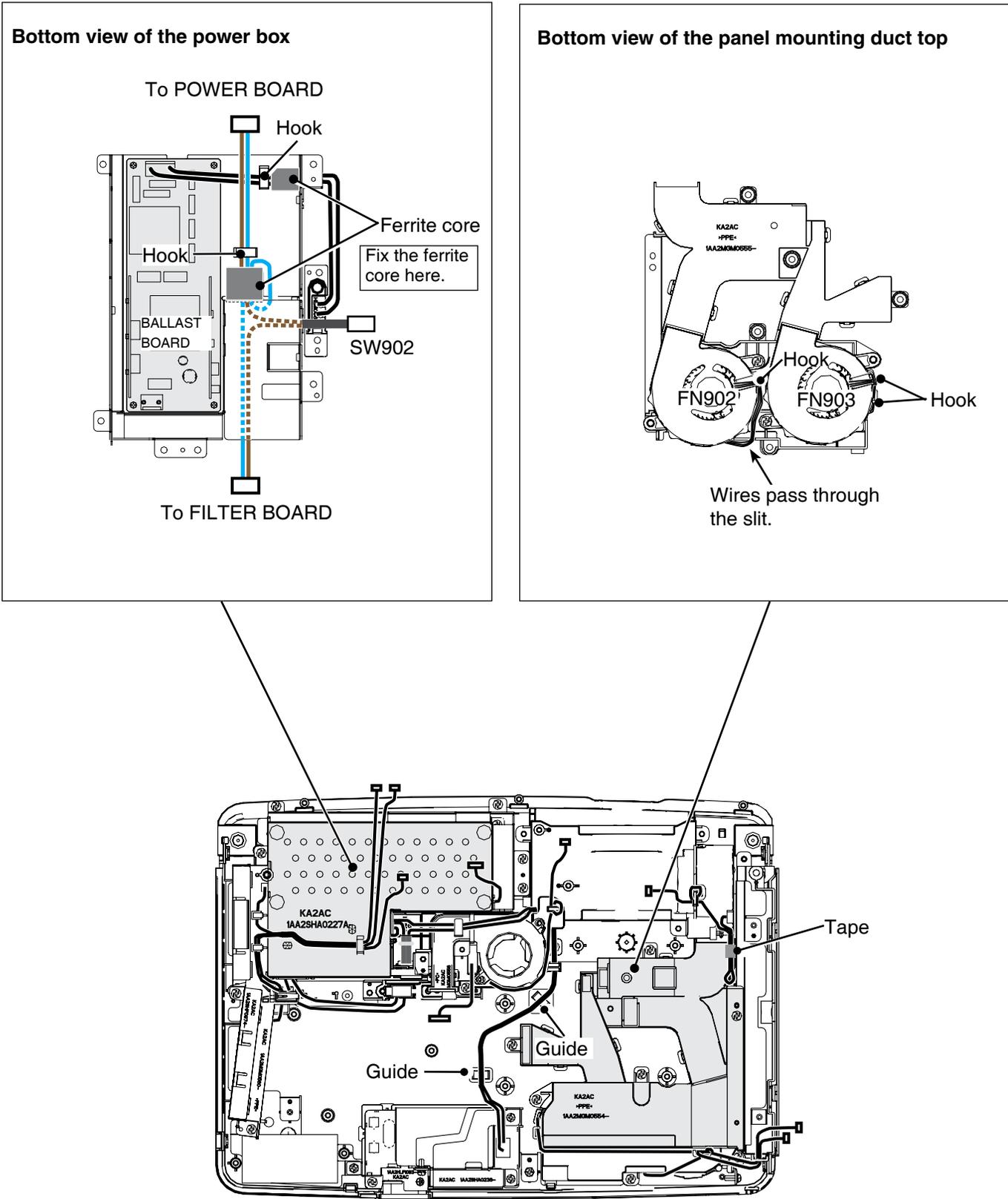


Fig.6

## Optical Parts Disassembly

Before taking this procedure, remove Cabinet Top and Main Board following to the “Mechanical Disassembly”. Disassembly requires a 2.0mm hex wrench.

### 1. LCD Panel/Prism assy removal

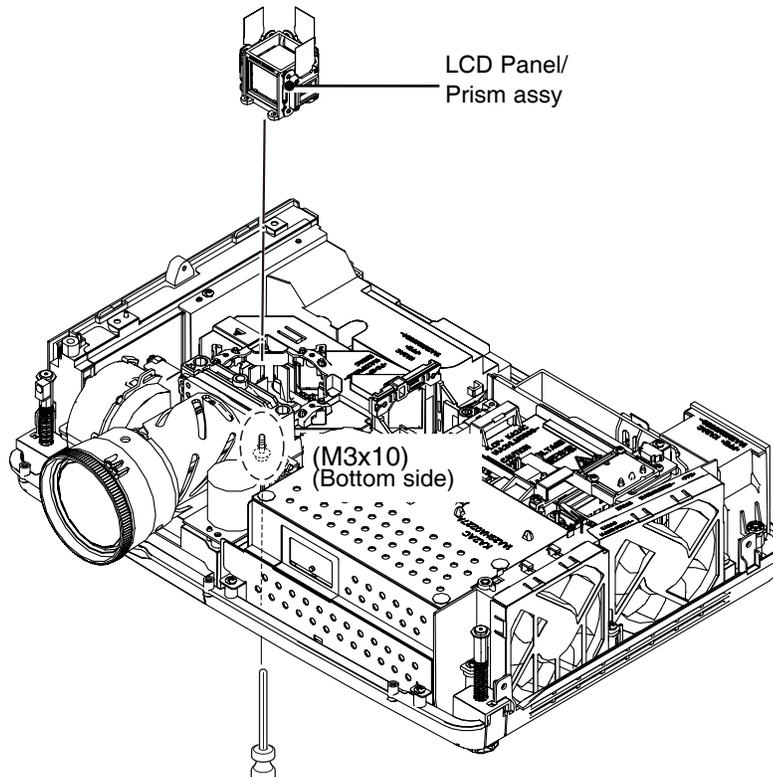


Fig.1

**\*Note on handling the LCD Panel/Prism Assy**

LCD Panel, Polarized glasses are very sensitive parts.

Never touch or wipe the surface. When removing the dust on the surface, use a commercial (inert gas) air spray to remove them.

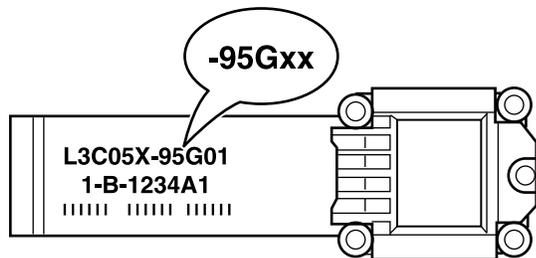
## LCD Panel Type Check

There are 2 types of LCD Panel/Prism Ass'y for this model. Either L-Type or R-Type LCD Panel/Prism Ass'y is used on the projector. Check which type of LCD Panel/Prism Ass'y is used with the figure below.

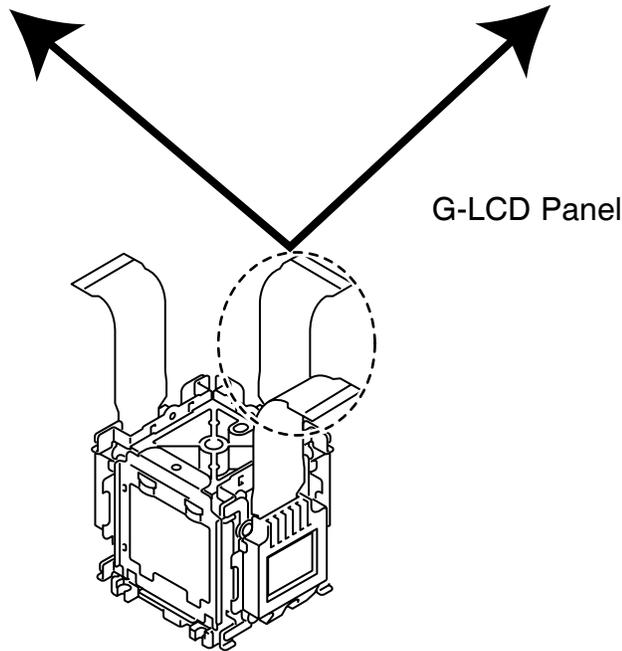
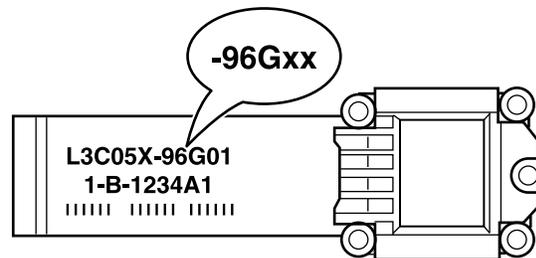
Since both have no compatibility, same type of the LCD Panel/Prism ass'y must be used for replacement. If not, it may have a serious effect on the optical characteristics.

### How to check the type of LCD Panel/Prism Ass'y

L-Type LCD Panel/Prism Ass'y



R-Type LCD Panel/Prism Ass'y

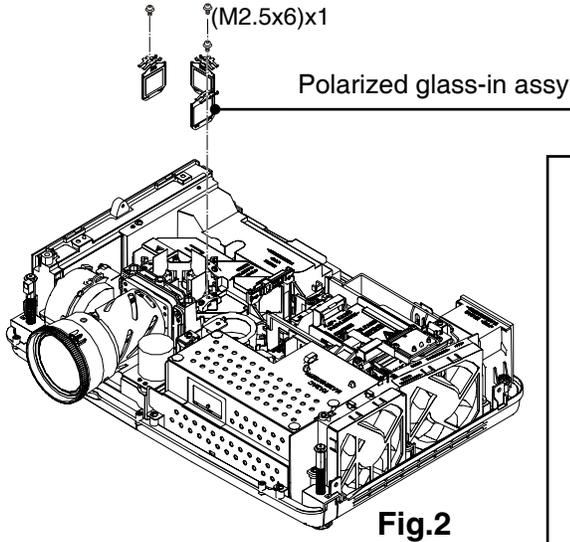


#### **IMPORTANT NOTICE on LCD Panel/Prism Ass'y Replacement**

LCD panels used for this model cannot be replaced separately. Do not disassemble the LCD Panel/Prism Ass'y. These LCD panels are installed with precision at the factory. When replacing the LCD panel, should be replaced whole of the LCD panels and prism ass'y at once.

When replacing LCD Panel/Prism ass'y, take the optical and electrical adjustments following to the chapter "Adjustment".

## 2. Polarized glass-in assy removal

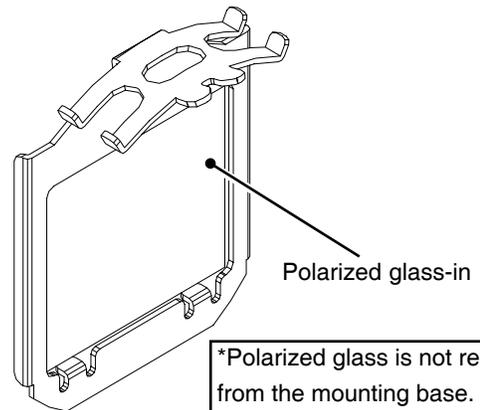


### \*Note on handling the polarized glass

B-Polarized glass-in is very sensitive parts. Never touch or wipe the surface. Grab the mounting base when handling the polarized glass assy. When removing the dust on the surface, use a commercial (inert gas) air spray to remove them. Never use organic solvents.

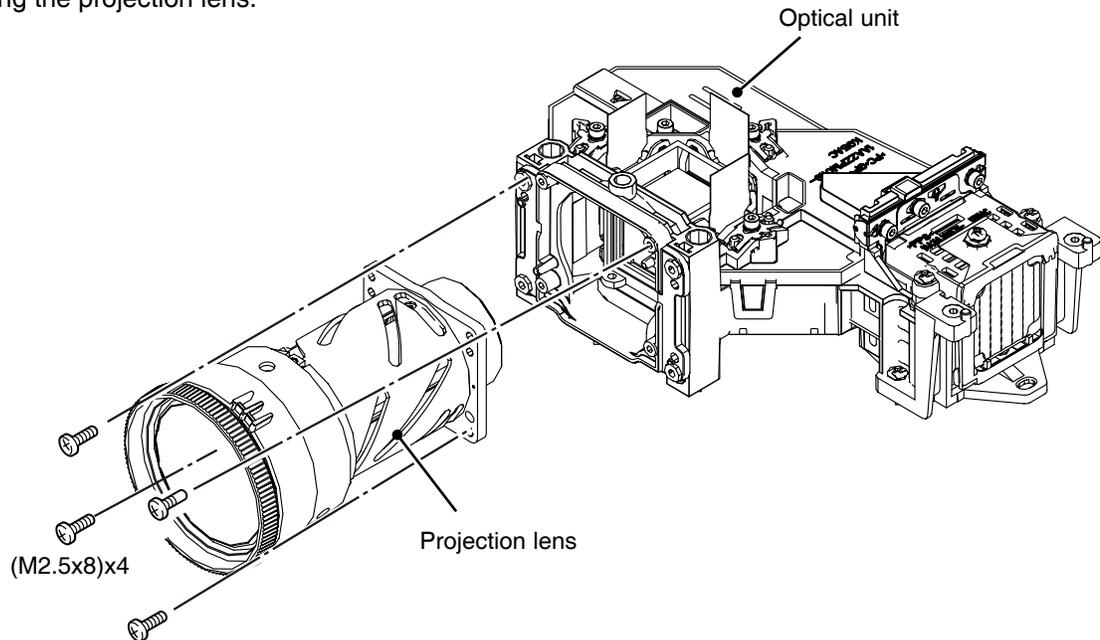
### Note on mounting the Polarized glass-in assy

When mounting the R-Polarized glass-in assy and B-Polarized glass-in assy, make sure that mounting position of the holder should be center.



## 3. Projection lens removal

Note: The optical unit should be removed from the cabinet bottom before removing the projection lens.



**Fig.3**

### 4. Integrator and Condenser out lens disassembly

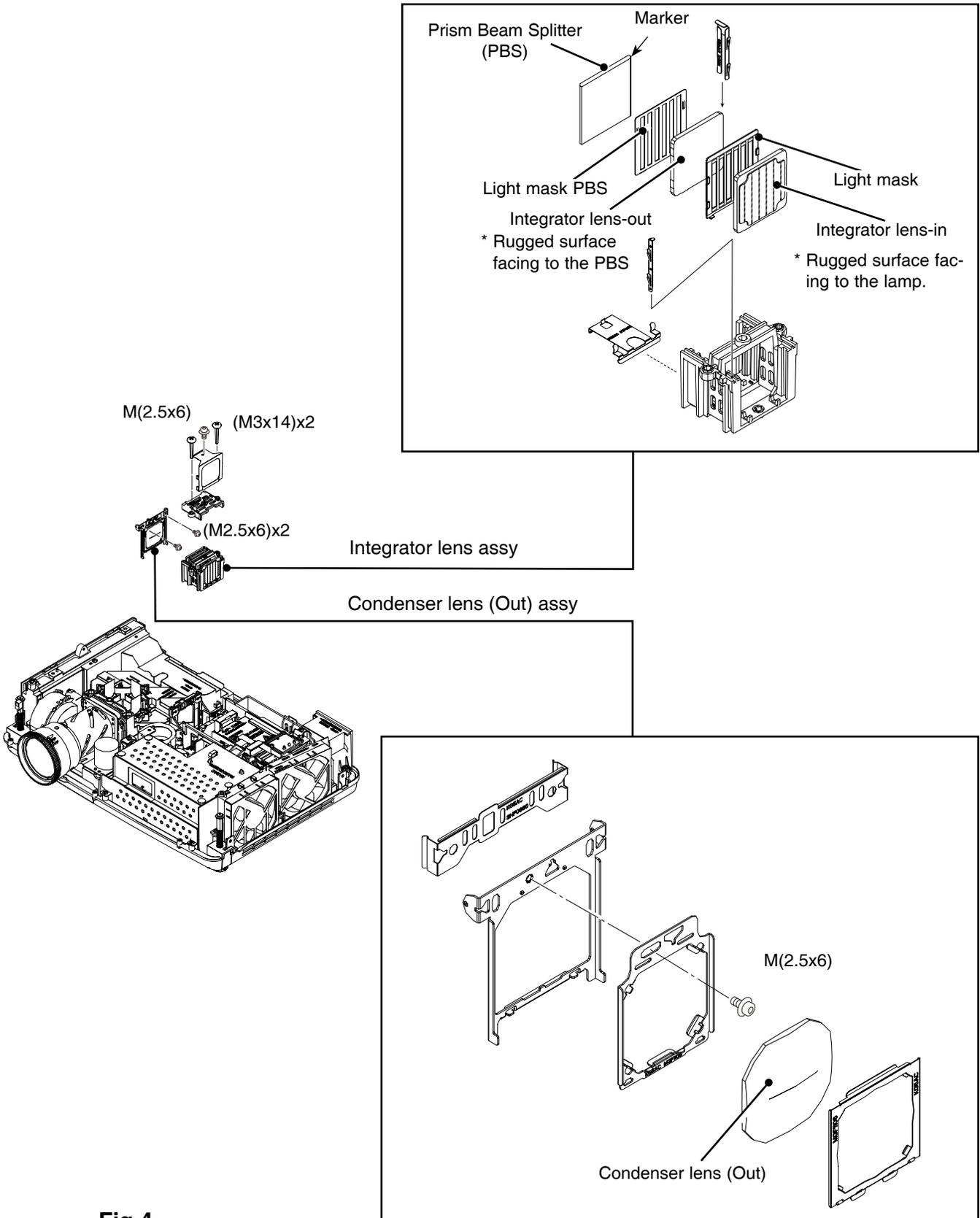


Fig.4

## 5. Optical unit top removal

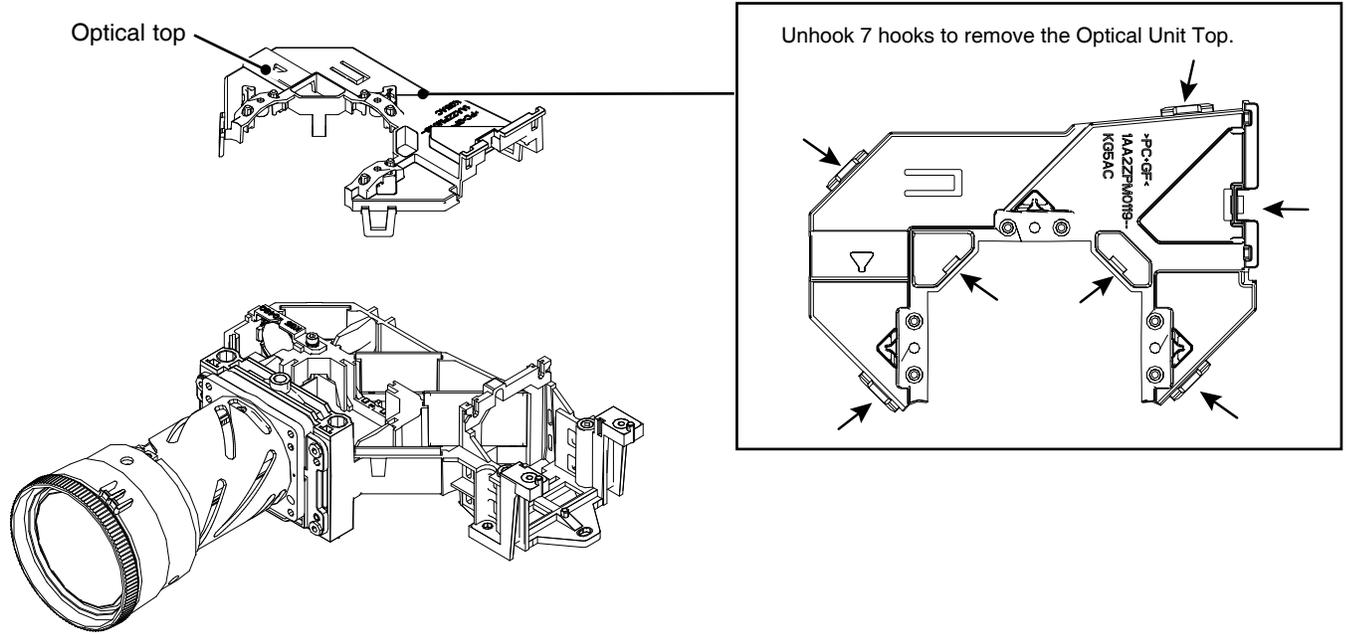


Fig.5

## 6. Relay lens removal

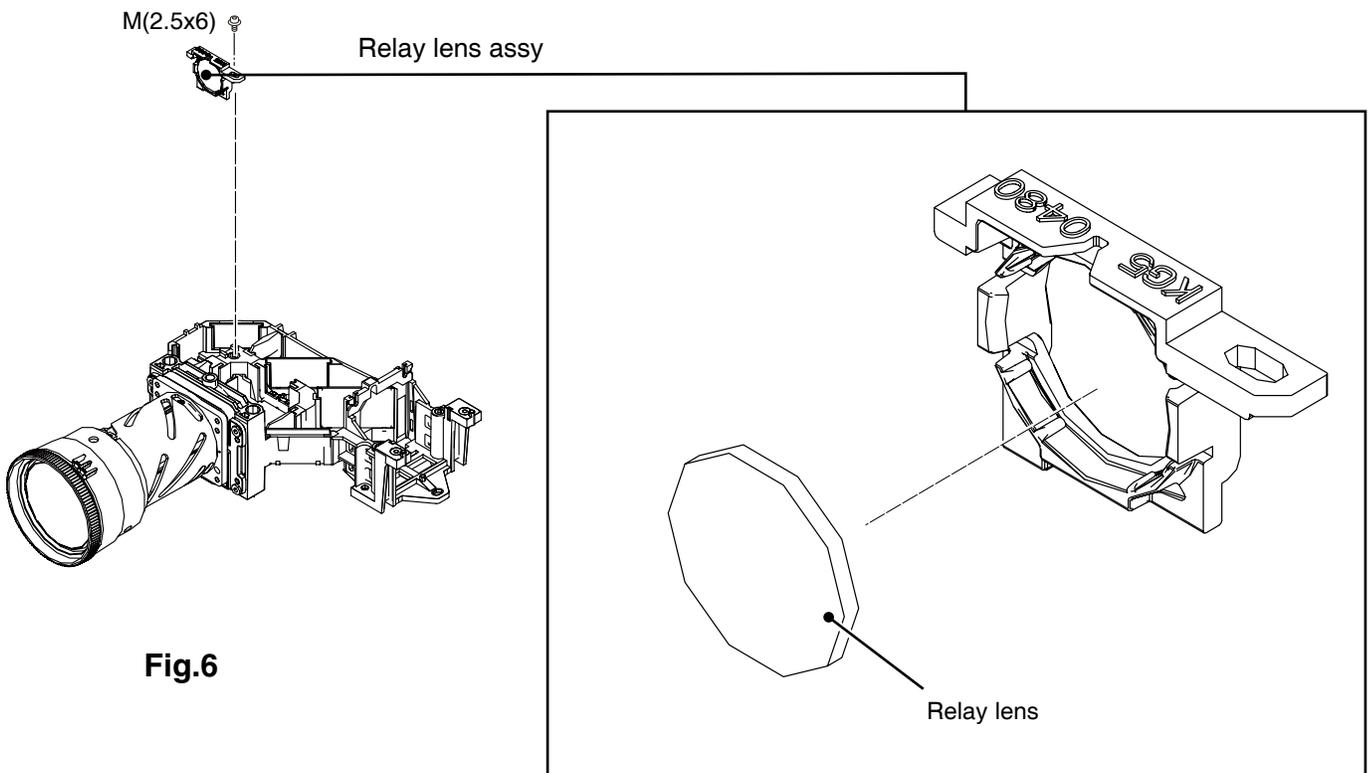


Fig.6

### 7. Locations and Directions

When mounting or assembling the optical parts in the optical unit, the parts must be mounted in the specified location and direction as shown in figure below.

No.	Parts Name
1	Dichroic mirror (B)
2	Dichroic mirror (G)
3	Condenser lens (G)
4	Mirror (R)
5	Relay lens (IN)
6	Mirror (B)

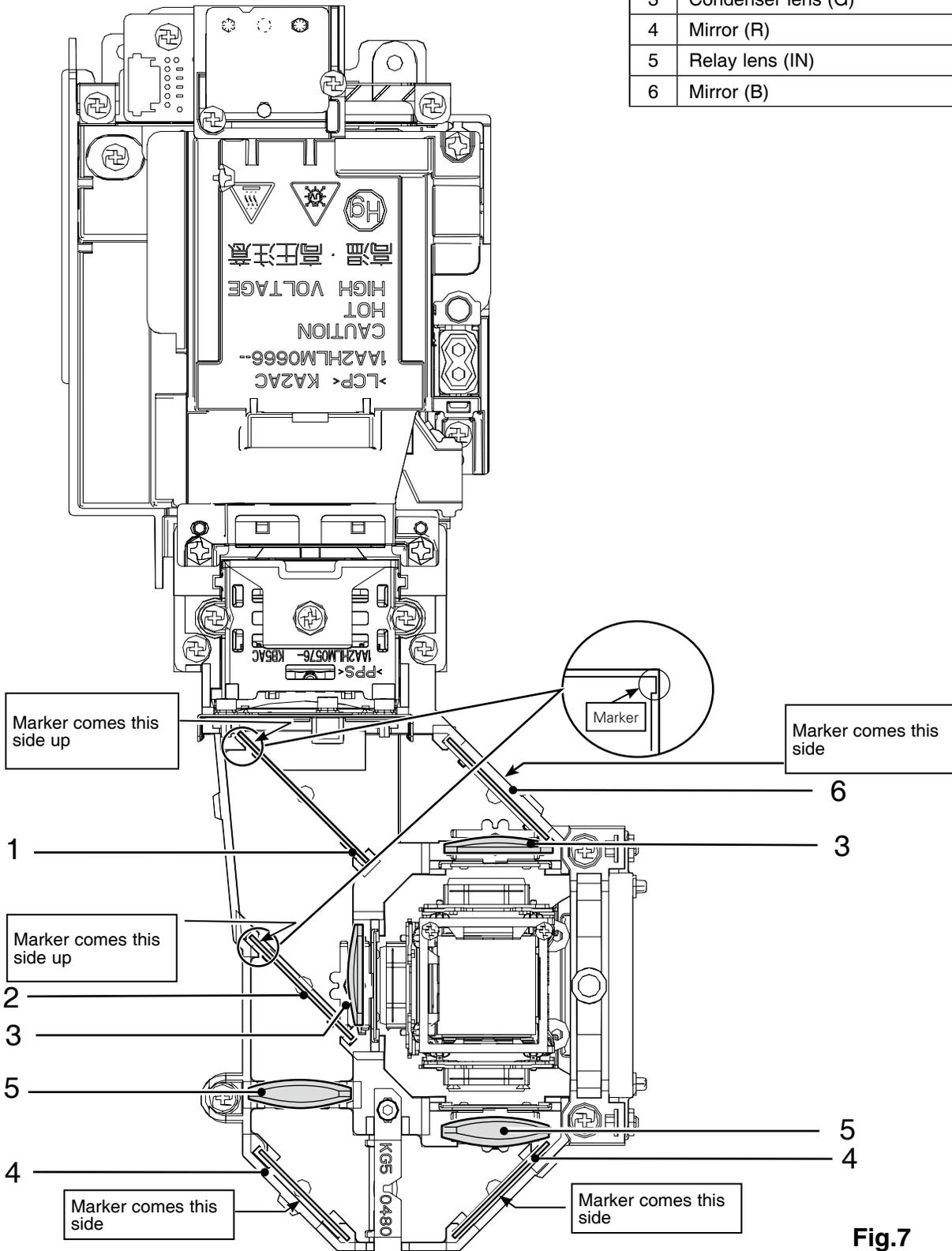


Fig.7

# Adjustments

## Adjustments after Parts Replacement

● : Adjustment necessary ○ : Check necessary

		Disassembly / Replaced Parts							
		LCD/ Prism assy	Condenser Lens (OUT)	Relay Lens (OUT)	Polarized Glass			Power Board	Main Board
					R	G	B		
Optical Adjustments	Contrast Adjustment	○				●			
	Optical center adjustment	○	●	●					
Electrical Adjustments	Fan control adjustment						●	●	
	Auto calibration adjustment [PC]							○	
	Auto calibration adjustment [Component]							○	
	Auto calibration adjustment [Video]							○	
	Common center adjustment	●						●	
	Panel type check and setting							●	
	Gamma correction adjustment *	●						●	
	White balance adjustment	○						○	
	Color shading correction adjustment *	○			○	○	○	○	
Keystone offset adjustment							●		

\* To setup or adjust those items, the Projector Service Tool v. 4.20 software is needed. Refer to the owner's manual for this software for the further details.

### Note on Main Board Replacement

Take the following setting when the main board is replaced.

- Shipment data setting (Color Shading Correction, Gamma Correction)
- Serial No. Setting

#### ● Adjustment Ship Data Setting

This projector stores "Color Shading Correction Data" and "Gamma Correction Data" in the memory IC on the main board. Those shipping data have been setup according to the optical characteristics of the mounted LCD panels precisely in the factory. When replacing the main board, you need to read out the those setting data stored in the memory IC on the previous main board and write down them into the memory IC on the new main board. By this way, the projector enables to reproduce the picture which has properly adjusted color shading correction, gamma correction. For further details, refer to the operation manual of the software [PROJECTOR SERVICE TOOL v4.20].

#### ● Serial No. Setting

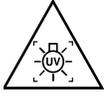
The serial no. displayed on the on-screen menu "Information" is stored in the memory IC on the main board. After replacing the main board, if the value of "SERIAL NO." on the "Information" menu is not displayed correctly, use the serial no. setting tool to write the correct serial no. referring to the serial no. printed on the rating label. For further details, refer to the operation manual of the software "Serial No. Setting Tool v1.00". The serial no. setting tool is included in the service CD-ROM below;

**PROJECTOR SERVICE TOOL CD-ROM v4.20**  
**SERVICE CODE: 610 343 5596**

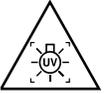
# Optical Adjustments

Before taking optical adjustments below, remove the Cabinet Top following to the “Mechanical Disassembly”. Adjustments require a 2.0mm hex wrench and a slot screwdriver.

Note: Do not disconnect connectors on the main board, because the projector cannot turn on due to operate the power failure protection.



**WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING**



**CAUTION: To prevent suffer of UV radiation, those adjustment must be completed within 25 minutes.**

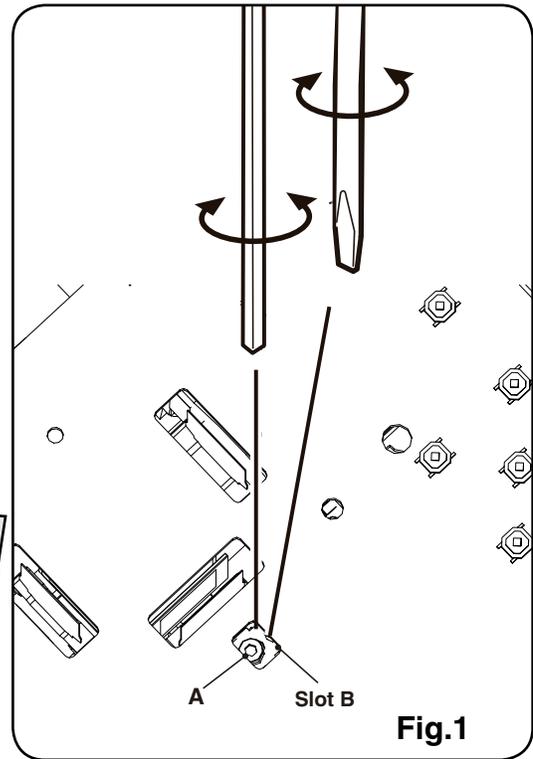
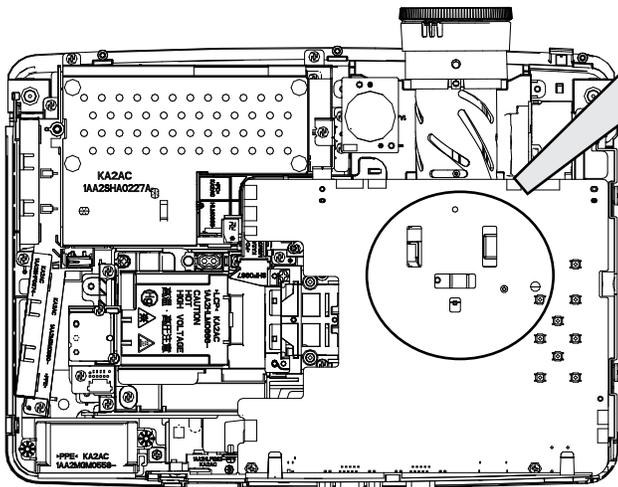
## Contrast adjustment

### [Before Adjustment]

- Input a 100% of black raster signal.

- 1 Loosen a screw **A** (**Fig.1**) on the G-polarized glass mounting base.
- 2 Adjust the slot **B** to obtain the darkest brightness on the screen by using a slot screwdriver.
- 3 Tighten the screw **A** to fix the G-polarized glass mounting base.

- This adjustment should be performed in the darkest room to improve the precision of adjustment.



## Optical Adjustments

### Optical center adjustment

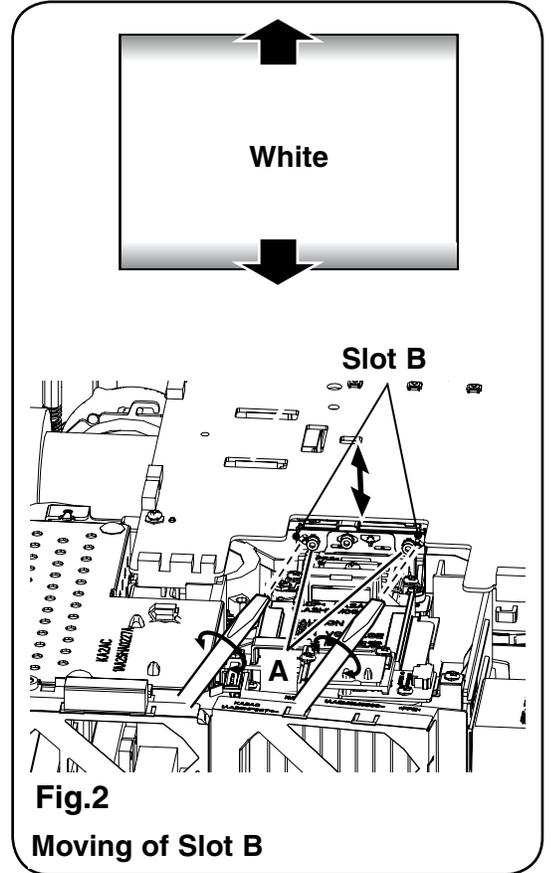
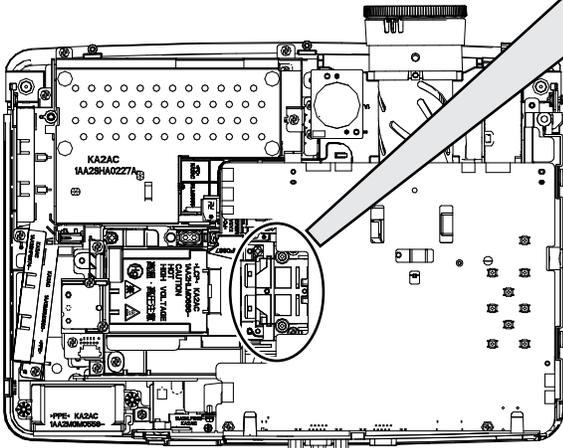
Take step-**1** to step-**3** sequentially for the optical center adjustment.

#### [Before Adjustment]

- Input a 100% of white raster signal.

#### **1** Condenser lens adjustment-1

- 1 Loosen 2 screws **A** on the condenser lens (OUT) base and insert a slot screwdriver into the slots **B** and turn it to disappear the color shading on the top or bottom of the screen as shown in **Fig.2**.
- 2 Tighten screws **A** to fix the condenser lens (OUT) unit.



## Optical Adjustments

### 2 Relay lens adjustment

- 1 Loosen 1 screw **C** on the condenser lens (OUT) base and insert a slot screwdriver into the slots **D** and turn it to show the color shading on the both left and right of the screen as shown in **Fig.3-1**.
- 2 Loosen 1 screw **A** on the relay lens (OUT) base and insert a slot screwdriver into the slots **B** and turn it to make the same band of color shading on the left and right of the screen as shown in **Fig.3-2**.
- 3 Tighten the screw **A** to fix the relay lens unit.

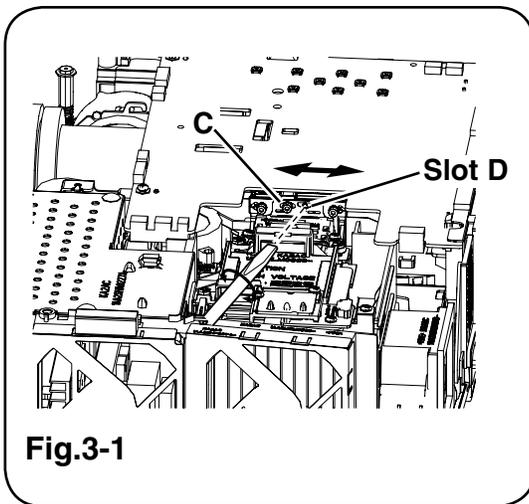


Fig.3-1

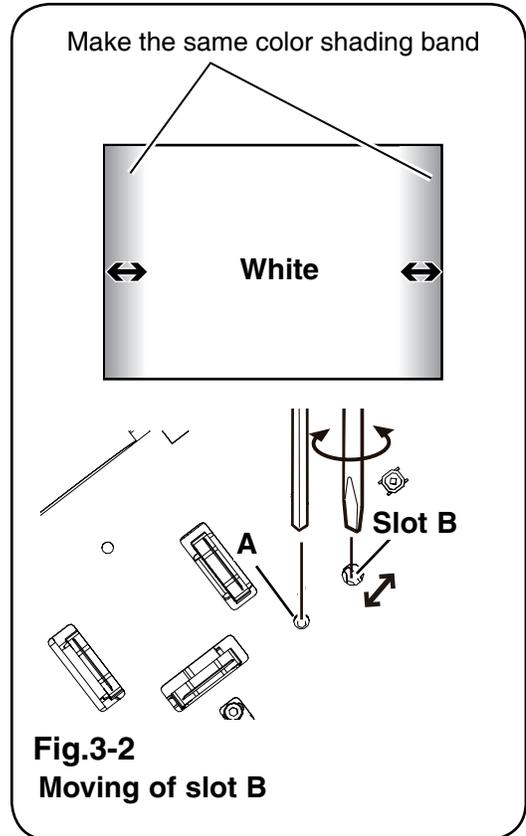
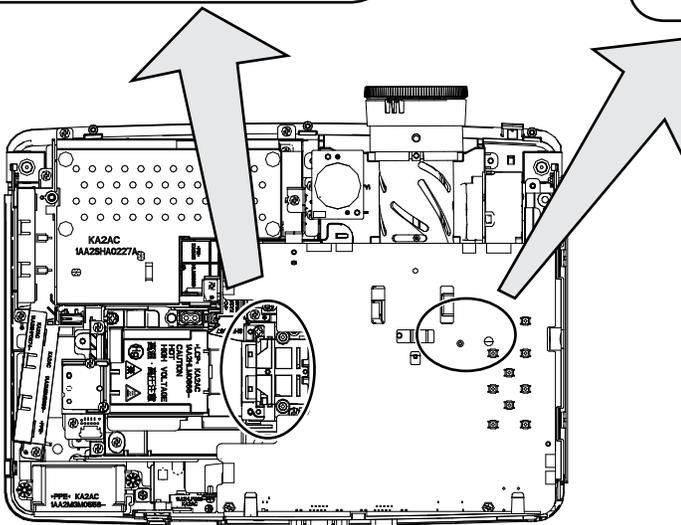


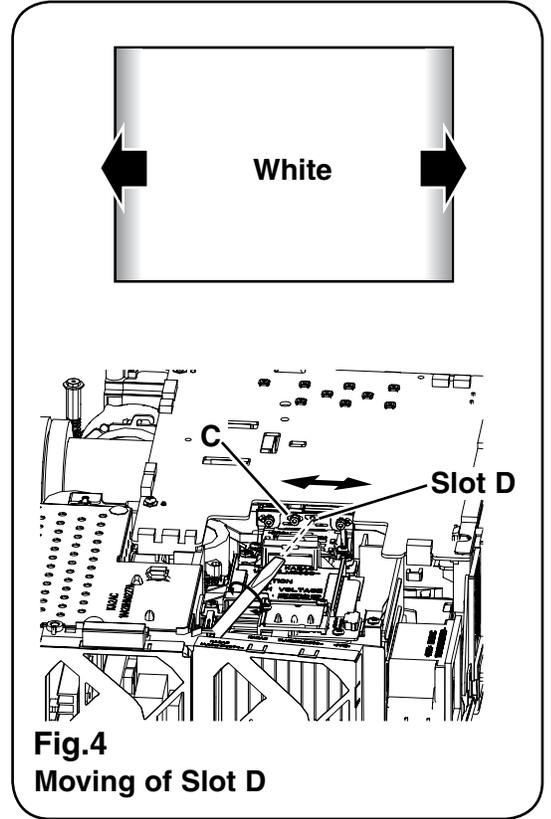
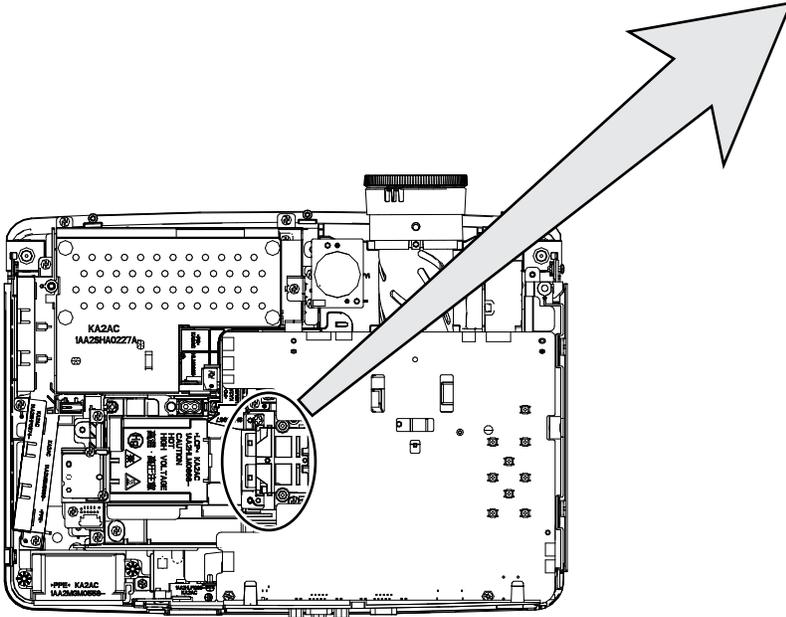
Fig.3-2  
Moving of slot B



## Optical Adjustments

### 3 Condenser lens adjustment-2

- 1 Loosen 1 screw **C** on the condenser lens (OUT) base and insert a slot screwdriver into the slots **D** and turn it to disappear the color shading on the left and right of the screen as shown in **Fig.4**.
- 2 Tighten screw **C** to fix the condenser lens (OUT) unit.



# Electrical Adjustments

## Service Adjustment Menu Operation

### To enter the service mode

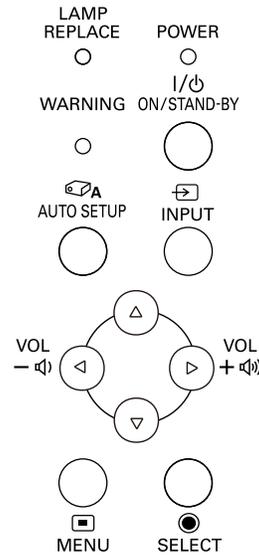
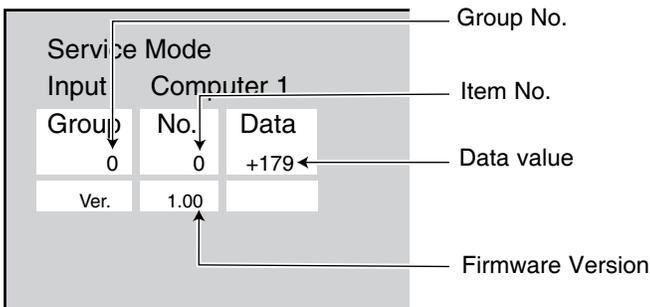
To enter the "Service Mode", press and hold the **MENU button** and **SELECT button** on the projector for more than 3 seconds or press and hold the **MENU button** on the remote control for more than 20 seconds. The service menu appears on the screen as follows.

### To adjust service data

Select the adjustment group no. by pressing the **MENU button** (increase) or **SELECT button** (decrease), and select the adjustment item no. by pressing the pointer **▲** or **▼ button**, and change the data value by pressing the **◀** or **▶ button**. Refer to the "Service Adjustment Data Table" for further description of adjustment group no., item no. and data value.

### To exit the service mode

To exit the service mode, press the **ON/STAND-BY button**.





## Electrical Adjustments

### 1. Fan Control adjustment

Equipment      Digital voltmeter

1. Enter the service mode.
2. Adjust the voltage on each test point by changing the data values of Group - No.

<u>Group - No.</u>	<u>Test Points</u>	<u>Adjustment value</u>
<b>250 - 0</b>	TPFANA	<b>4.0 ±0.1Vdc</b>
<b>250 - 1</b>	TPFANA	<b>13.5 ±0.1Vdc</b>
<b>250 - 2</b>	TPFANB	<b>5.2 ±0.1Vdc</b>
<b>250 - 3</b>	TPFANB	<b>13.5 ±0.1Vdc</b>
<b>250 - 4</b>	TPFANC	<b>3.5 ±0.1Vdc</b>
<b>250 - 5</b>	TPFANC	<b>12.0 ±0.1Vdc</b>

Adjustments item no. [2] and [4] are carried out at the spare parts shipment in the factory, therefore they are not required when the main board is replaced with new one.

### 2. Auto Calibration adjustment [PC]

Input mode      Computer 1 (Analog PC)  
Input signal     XGA Computer signal  
Signal pattern   16-step gray scale

1. Enter the service mode.
2. Select Group "200", No. "70" and set data value to "0". Select Group "260", No. "0" and set data value to "1".  
The projector begins auto-calibration and then "OK" will appear on the screen.
3. Select Group "200", No. "70" and set data value to "1". Select Group "260", No. "0" and set data value to "1".  
The projector begins auto-calibration and then "OK" will appear on the screen.
4. Select Group "200", No. "70" and set data value to "0".

Below adjustments are performed when the above auto calibration is failed.

### Gain adjustment [PC]

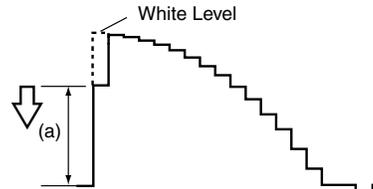
Equipment      Oscilloscope

1. Enter the service mode.
2. Select Group "200", No. "70" and set the data value to "1".
3. Adjust the amplitude "a" of waveform at each test point to be minimum by changing the data value of Group - No.

<u>Group - No.</u>	<u>Test Point</u>
<b>0 - 3</b>	<b>TP35R</b>
<b>0 - 4</b>	<b>TP35G</b>
<b>0 - 5</b>	<b>TP35B</b>

4. Select Group "200", No. "70" and set data value to "0".
5. Adjust the amplitude "a" of waveform at each test point to be minimum by changing the data value of Group - No.

<u>Group - No.</u>	<u>Test Point</u>
<b>10 - 3</b>	<b>TP35R</b>
<b>10 - 4</b>	<b>TP35G</b>
<b>10 - 5</b>	<b>TP35B</b>



### 3. Auto Calibration adjustment [Component]

Input mode      Computer 1 (Component)  
Input signal     1080i component signal  
Signal pattern   8 color bar

1. Enter the service mode
2. Select Group "200", No. "71" and set data value to "0". Select Group "260", No. "0" and set data value to "1".  
The projector begins auto-calibration and then "OK" will appear on the screen.
3. Select Group "200", No. "71" and set data value to "1". Select Group "260", No. "0" and set data value to "1".  
The projector begins auto-calibration and then "OK" will appear on the screen.

## Electrical Adjustments

Below adjustments are performed when the above auto calibration is failed.

### Gain adjustment [Component]

Input mode     Computer 1 (Component)  
Input signal    1080i component signal  
Signal pattern  16-step gray scale  
Equipment      Oscilloscope

1. Enter the service mode.
2. Select Group **"200"**, No. **"71"** and set the data value to **"1"**.

3. Adjust the amplitude **"a"** of waveform at each test point to be minimum by changing the data value of Group - No.

Group - No.   Test Point

**0 - 3    TP35R**

**0 - 4    TP35G**

**0 - 5    TP35B**

4. Select Group **"200"**, No. **"71"** and set data value to **"0"**.

5. Adjust the amplitude **"a"** of waveform at each test point to be minimum by changing the data value of Group - No.

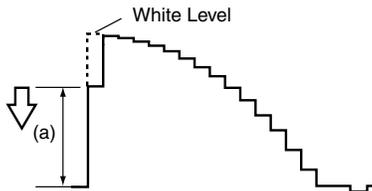
Group - No.   Test Point

**10 - 3   TP35R**

**10 - 4   TP35G**

**10 - 5   TP35B**

6. Select Group **"200"**, No. **"71"** and set the date value to **"1"**.



### 4. Auto Calibration adjustment [Video]

Input mode     Video  
Input signal    Composite video signal  
Signal pattern  16-step gray scale

1. Enter the service mode.
2. To start the auto-calibration for Component adjustment, select Group **"260"**, No. **"0"** and then change data value from **"0"** to **"1"**. After the auto-calibration completed, **"OK"** will appear on the screen.

Below adjustment is performed when the above auto calibration is failed.

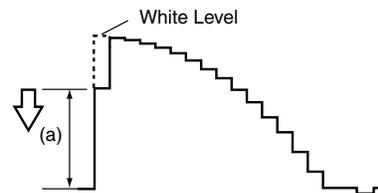
### Gain adjustment [Video]

Equipment     Oscilloscope

1. Enter the service mode.
2. Adjust the amplitude **"a"** of waveform at the test point to be minimum by changing the data value of Group - No.

Group - No.   Test Point

**20 - 0   TP35G**



### 5. Common Center adjustment

Input mode     Computer 1 (Analog PC)  
Input signal    XGA computer signal  
Signal patterns  50% R, G, B whole signals

1. Enter the service mode
2. Select Group **"104"**, No. **"76"** and change the data value to **"2"** to reduce the panel frequency.
3. Change data value to obtain the minimum flicker for each color on the screen.

Group - No.   Adjustment

**105 - 9    for red flicker**

**105 - 10   for green flicker**

**105 - 11   for blue flicker**

4. Select Group **"104"**, No. **"76"** and change the data value to **"0"** to reset the panel frequency.

### 6. Panel Type Check and Setting

---

\* Before setting, you need to check which type of LCD panel is placed on the projector according to the item "LCD Panel/Prism Ass'y removal" in the chapter "Optical Parts Disassembly".

1. Enter the service mode.
2. Panel Type Check  
Select Group "290", No. "0". Check the data value as follows;  
Data value: 0            For L-Type of LCD Panel  
Data value: 20          For R-Type of LCD panel  
If the mounted LCD panel type and set Panel mode are differ, take the step below.
3. Panel Type Mode Setting  
Select Group "290", No. "1" and change data value from 10 to 0 or 20 depending on your LCD Panel type. When the data value reaches 0 or 20, it returns to 10 quickly. The gamma-characteristics changes according to your selection.

### 7. Gamma shipment adjustment

---

Software PROJECTOR SERVICE TOOL v4.20

Use the software to obtain the proper gray scale of the screen. See the further information of the software instruction manual.

### 8. White balance adjustment

---

Input mode	Computer 1 (Analog PC) video
Input signal	XGA computer signal Composite video signal
Signal patterns	16-step gray scale

1. Enter the service mode,
2. Input PC analog signal. Select Group "104" No. "217" (Red) or "223" (Blue) and change data values respectively to make a proper white balance.  
Input composite video signal. Select Group "104" No. "217" (Red) or "223" (Blue) and change data values respectively to make a proper white balance.
3. Confirm that the same white balance is obtained in the video and computer mode.

### 9. Color Shading Correction adjustment

---

Software PROJECTOR SERVICE TOOL v4.20  
Signal pattern    6%, 13%, 30%, 60% whole gray

Use the software to correct the color shading of the screen. See the further information of the software instruction manual.

The color shading correction adjustment for this model should be performed with the whole-gray patterns specified as above.

Corresponding to the pull-down menu of the gray level selector on the software.

Level 0	: 6%
Level 384	: 13%
Level 640	: 30%
Level 1032	: 60%

Relation of level (%) indication and signal pattern

0%	: Black
100%	: White

### 10. Keystone Offset adjustment

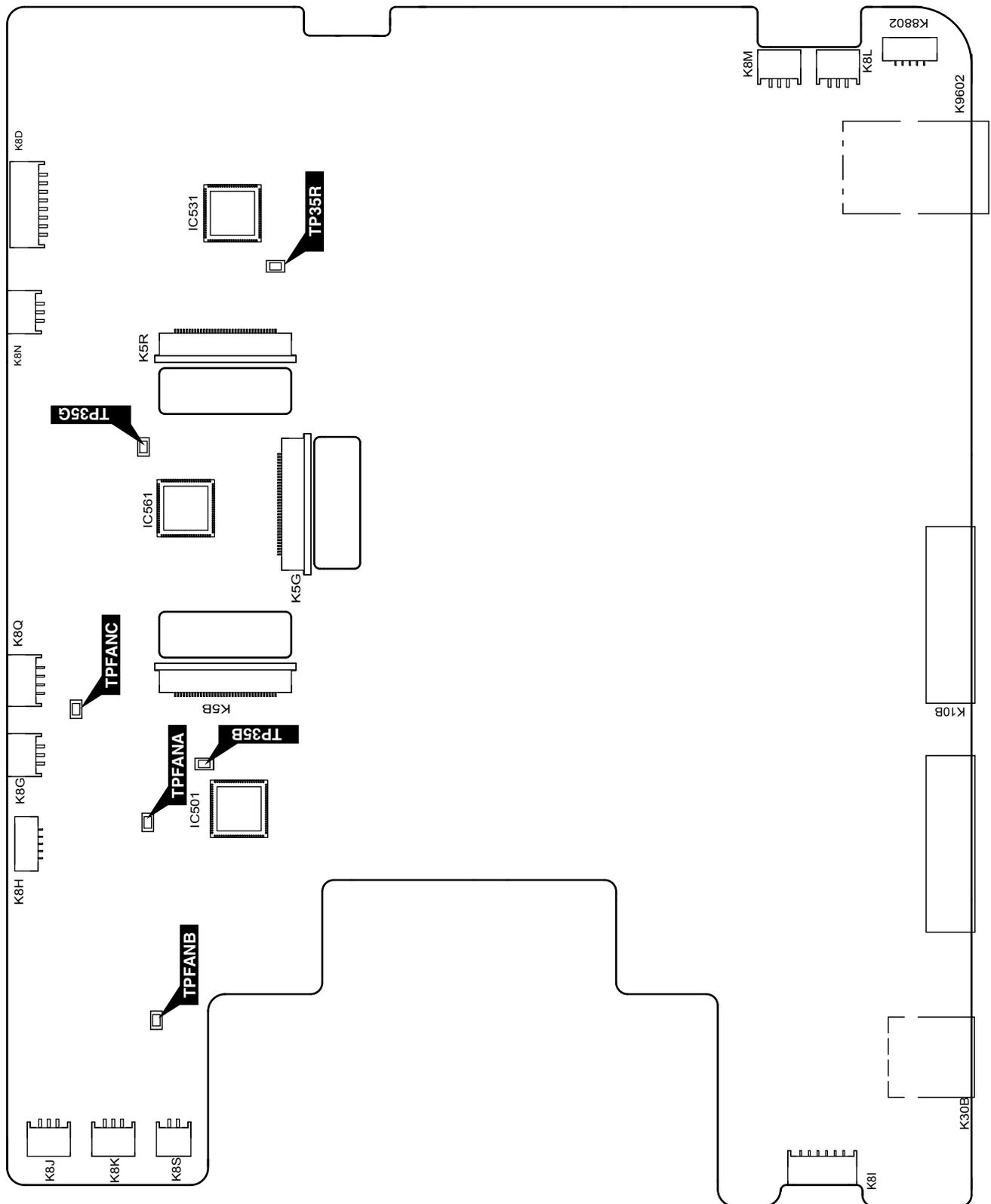
---

Input signal    no signal

1. Put the projector on a horizontal place with the adjustable feet being minimum range and then enter the service mode.
2. Select Group "75", No. "3" and set data value from "0" to "5".
3. By pressing the **OK** button, the Keystone Offset adjustment will start.
4. When it has completed, the "OK" message will appear on the screen.
5. By pressing any button on the projector or the remote control, the "OK" message will disappear. (Data value of Group "75", No. "3" will be back to "0" for initial value.)

# Test Points and Locations

## MAIN BOARD



## Electrical Adjustments

### Service Adjustment Data

These initial values are the reference data written from the CPU ROM to memory IC when replaced new memory IC. The adjustment items indicated with “\*” are required to readjust following to the “Electrical adjustments”. Other items should be used with the initial data value.

Group/Item	Item Name	Function	Initial	Range	Note
<b>Group 0</b>	<b>AD Converter (PW392)</b>				
3	ADC G-GAIN	YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50) / SCART	265/200/200/200/200/265	0 - 1023	* G-Gain Adjustment
4	ADC R-GAIN	YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50) / SCART	265/205/205/205/205/265	0 - 1023	* R-Gain Adjustment
5	ADC B-GAIN	YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50) / SCART	255/205/205/205/205/255	0 - 1023	* B-Gain Adjustment
10	SOGTH	RGB / COMPONENT / SCART	2/4/4	0 - 15	
11	SOGHYSDIS	RGB / COMPONENT / SCART	1/1/0	0 - 1	
12	HS1TH	H Sync1 Threshold RGB / COMPONENT / SCART	*4/4	0 - 15	
13	HS0TH	H Sync0 Threshold RGB / COMPONENT / SCART	*4/4	0 - 15	
<b>Group 10</b>	<b>Sync Processor</b>				
3	ADC G-GAIN	PC/YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50)	235/120/120/120/120	0 - 1023	
4	ADC R-GAIN	PC/YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50)	235/140/140/140/140	0 - 1023	
5	ADC B-GAIN	PC/YCbCr 480i (575i) / YCbCr 480p (575p) / YCbCr 720p (720p50) / YCbCr 1080i (1035i, 1080i50)	235/140/140/140/140	0-1023	
<b>Group 20</b>	<b>Video Decoder *R : Read Only Value</b>				
0	Y Level	Composite / S-Video - Y Level (ADC RGB Gain)	175/175/185/185	0 - 1023	Composite / S-Video * Gain Adjustment [Video]
1	C Level	Composite / S-Video - C Level (ADC Saturation)	405/405/440/440	0 - 1023	Composite / S-Video
10	XCXL Parameter	XCXL Level	2	0 - 4	
11	Sync Amp Low	Minimum sync amplitude threshold for HLOCK 1 to 0 transition	1792	0 - 9999	
12	Sync Amp High	Minimum sync amplitude threshold for HLOCK 0 to 1 transition	4096	0 - 9999	
13	Luma Setup Enable	7.5IRE Mode	0	0-1	
14	Anti-Alias Filter	Anti-Alias Filter	4	0-7	
15	Anti-Alias Downsample	Anti-Alias Downsample	0	0-3	
16	Anti-Alias High Frequency	Anti-Alias High Frequency	3	0-3	
20	Comb 3D Cross-Luma Top/Bottom Amplitude	for PAL/SECAM only	3	0-3	
<b>Group 35</b>	<b>DVI Equalizer(DS16E5110)</b>				
0	CH0 Boost Data	DVI Equalizer CHO Boost Value	-	0 - 7	
1	CH1 Boost Data	DVI Equalizer CH1 Boost Value	-	0 - 7	
2	CH2 Boost Data	DVI Equalizer CH2 Boost Value	-	0 - 7	
<b>Group 40</b>	<b>General</b>				
0	IP Mode	Sets for IP Off	1	0 - 1	0: IP Block not used 1: IP OFF used with IP Block
1	3:2 PullDown Mode	bit0 : Global Motion bit1 : Video Motion	1	1 - 3	bit0 : Global Motion bit1 : Video Motion
2	Detect Film Mode Enable	0 : 2:3pull down & 2:2pull down 1 : 2:3pull down 2 : 2:2pull down	0	0 - 2	0 : 2:3pull down & 2:2pull down 1 : 2:3pull down 2 : 2:2pull down

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
3	NR Enable for Digital YUV	0: Detect Y or UV, Noise Reduction 1: Detect Y, YUV for Noise Reduction	1	0 - 1	
4	NR Enable for Digital YUV	Analog YUV : PC/Video/S-Video/Component Digital YUV : HDMI <NSYUVEN>	0	0 - 1	
<b>Group 41</b>	<b>Deinterlacer setting</b> Effective only for Progressive Mode 1, Film mode.				
0	Motion Adaptive Weight Value	<KDEINT>	30/30/30	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4/4/4	0 - 5	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0/0/0	0 - 255	
<b>Group 42</b>	<b>Deinterlacer setting</b> Effective only for Progressive Mode2 mode.				
0	Motion Adaptive Weight Value	<KDEINT>	0/0/0	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	2/2/2	0 - 5	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0/0/0	0 - 255	
<b>Group 47</b>	<b>Noise Reduction (Time)</b> Effective only for N.R L1				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	100	0 - 255	
<b>Group 49</b>	<b>Noise Reduction (Time)</b> Effective only for N.R L2				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	100	0 - 255	
<b>Group 50</b>	<b>2:2pull down setting</b>				
0	22Film Mode Sensitivity	Film Detection Sensitivity <FILMSTVT22>	4	1 - 5	
1	22Film Mode Threshold Low	<FILMTHRD22A>	80	0 - 1023	
2	22Film Mode Threshold High	<FILMTHRD22B>	120	0 - 1023	
3	Video Motion Window Start X	<VOFSTARX>	10	0 - 255	
4	Video Motion Window Start X	<VOFSTARX>	10	0 - 255	
5	Video Motion Window Start Y	<VOFSTARY>	10	0 - 255	
6	Video Motion Window Start Y	<VOFSTARY>	10	0 - 255	
<b>Group 51</b>	<b>2:3pull down setting</b>				
0	Global Motion Sensitivity	Film Detection Sensitivity <FILMSTVT23>	4	1 - 5	
1	Video Motion Sensitivity	Film Detection Sensitivity <VOFSTVT>	4	1 - 5	
2	Video Motion Threshold Low	<VOFTHRDA>	120	0 - 1023	
3	Video Motion Threshold High	<VOFTHRDB>	180	0 - 1023	
4	Global Motion Threshold	<GMDTHRD>	100	0 - 1023	
5	23Film Mode Threshold	<FILMTHRD23>	10	0 - 1023	
6	Global Motion Window Start X	<GMDSTARX>	10	0 - 255	Range of detective for Film mode
7	Global Motion Window Stop X	<GMDSTOPX>	10	0 - 255	Range of detective for Film mode
8	Global Motion Window Start Y	<GMDSTARY>	10	0 - 255	Range of detective for Film mode
9	Global Motion Window Stop Y	<GMDSTOPY>	10	0 - 255	Range of detective for Film mode

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
<b>Group 55</b>	<b>LTI /CTI</b>				
0	Video Enhancement Enable	VEHEN	1	0 - 1	
1	DLTI Gain	DLTIGAIN	3	0 - 15	
2	DLTI Frequency	DLTIFREQ	2	0 - 3	
3	Bypass Anti-Alias Filter	DTIBYPASSAAL	0	0 - 1	
4	Lower DCTI Frequency	LOWERDCTIFREQ	1	0 - 1	
5	DCTI Gain	DCTIGAIN	4	0 - 15	
6	DCTI Frequency	DCTIFREQ	0	0 - 3	
7	Color Shift Limit	COLORSHIFTLMT	3	0 - 3	
<b>Group 60</b>	<b>Image</b>				
0	Center Contrast		512/512/512/492/492/534 /534/492/492/534/492	0 - 1023	
1	Center Brightness		512/512/512/512/512/496 496/512/512/496/512	0 - 1023	
2	Center Color		560/584/502/512/560/512 /512/512/560/560/512	0 - 1023	
3	Center Tint		90/90/90/90/90/90/ 90/90/90/90/90	0-180	
4	Fixed Sharpness (Up Scaling)		8/8/8/8/8/8/ 8/8/8/8/8	0 - 37	
5	Fixed Sharpness (Down Scaling)		8/8/8/8/8/8/ 8/8/8/8/8	0 - 37	Composite / S-Video / Component / Digital
6	Center Sharpness (Models without FPGA)		8/8/10/16/10/16/ 10/16/10/16/16	0 - 37	/D-RGB-Video /AnalogRGB / RGB-Video / HDCP-PC /HDCP-AV /SCART / PJ-Net
7	Center WB Red		512/512/512/512/512/512 /512/512/512/512/512	0 - 1023	Setting Value=(MENU Value - MENU Center Value ) x Alpha / 10 + Center
8	Center WB Green		512/512/512/512/512/512 /512/512/512/512/512	0 - 1023	For models without FPGA:
9	Center WB Blue		512/512/512/512/512/512 /512/512/512/512/512	0 - 1023	Sharpness setting Value=
10	Center BB Red		512/512/512/512/512/512 /512/512/512/512/512	0 - 1023	Center-(Menu Value- MENU Center Value)xAlpha/10
11	Center BB Green		512/512/512/512/512/512 /512/512/512/512/512	0 - 1023	[Setting Value to PW] Contrast [Max] 1023
12	Center BB Blue		512/512/512/512/512/512 /512/512/512/512/512	0 - 1023	[Min] 0 Brightness [Max] 1023
13	Alpha Contrast		60/60/60/60/60/60/ 60/60/60/60/60	0-1000	[Min] 0 Color [Max] 1023
14	Alpha Brightness		90/90/90/90/90/90/ 90/90/90/90/90	0-1000	[Min] 0 Tint [Max] 180
15	Alpha Color		140/140/140/140/140/140 /140/140/140/140/140	0-1000	[Min] 0 Sharpness [Max] 57
16	Alpha Tint		10/10/10/10/10/10/ 10/10/10/10/10	0-1000	[Min] 0
17	Alpha Sharpness		10/10/10/10/10/10/ 10/10/10/10/10	0-1000	
18	Alpha WB Red		40/40/40/40/40/40/ 40/40/40/40/40	0- 1000	
19	Alpha WB Green		40/40/40/40/40/40/ 40/40/40/40/40	0- 1000	
20	Alpha WB Blue		40/40/40/40/40/40/ 40/40/40/40/40	0-1000	
21	Alpha BB Red		20/20/20/20/20/20/ 20/20/20/20/20	0-1000	
22	Alpha BB Green		20/20/20/20/20/20/ 20/20/20/20/20	0-1000	
23	Alpha BB Blue		20/20/20/20/20/20/ 20/20/20/20/20	0-1000	
<b>Group 75</b>	<b>Auto Keystone Setup Value</b>				
0	OFFSET		0	-1056 - 1056	
1	OFFSET SWITCH		0	0 - 1	
2	DEBUG MODE		0	0 - 1	
3	SERVICE CALIBRATION		0	0 - 10	
4	LOCK COUNT		5	1 - 255	
5	DELT VERT RESULT		64	1 - 255	
6	ANGLE 1 COUNT		1	1 - 10	
7	ANGLE 2 COUNT		5	1 - 10	
8	BLIND SECTOR 1		160	0 - 1024	
9	BLIND SECTOR 2		32	0 - 1024	
10	BLIND SECTOR BIAS		61	0 - 1024	
<b>Group 104</b>	<b>Panel (EP7111) Services</b>				
0	FRP_SET		84	0-4095	
1	DXOut_R		262	0-1023	
2	DXOut_G		262	0-1023	
3	DXOut_B		262	0-1023	
4	H_Change_Pos		31	0-256	

## Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
	5 SH_Pos		273	0-4095	
	6 SH_Pos_R		1	0-12	
	7 SH_Pos_G		1	1-12	
	8 SH_Pos_B		1	0-12	
	9 NGR_Pos		44	0-127	
	10 NGR_Width		51	0-255	
	11 FRP_Pos		27	0-3	
	12 SWAP_InOut		1296	0-2047	
	13 OSD_Pos		2	0-3	
	14 OSD_Ptn		0	0-9	
	15 GammaCtrl		3	0-1023	
	16 GammaCtrl_Ena		1	0-1	1: Enable, 0: Disable
	17 GammaCtrl_PreEnable		0	0-1	1: Enable, 0: Disable
	18 REF_GatePos		21	0-1023	
	19 REF_GateDur		144	0-1023	
	20 BasePos_R		4	0-11	
	21 BasePos_G		4	0-11	
	22 BasePos_B		4	0-11	
	23 RGB_sIDEmODE		0	0-7	
	24 LineCont		0	0-4095	
	25 GhostPos_R		4	0-23	
	26 GhostPos_G		4	0-23	
	27 GhostPos_B		4	0-23	
	28 GHOSTCoef_R_C		0	0-2047	MIN<-->MAX cyclation
	29 GHOSTCoef_R_S		128	0-255	
	30 GHOSTCoef_R_E		128	0-255	
	31 GHSTCoef_G_C		0	0-2047	MIN<-->MAX cyclation
	32 GHSTCoef_G_S		128	0-255	
	33 GHSTCoef_G_E		128	0-255	
	34 GHSTCoef_B_C		0	0-2047	MIN<-->MAX cyclation
	35 GHSTCoef_B_S		128	0-255	
	36 GHSTCoef_B_E		128	0-255	
	37 GHSTCoef_1R		0	0-2047	MIN<-->MAX cyclation
	38 GHSTCoef_1G		0	0-2047	MIN<-->MAX cyclation
	39 GHSTCoef_1B		0	0-2047	MIN<-->MAX cyclation
	40 GHSTCoef_2R		0	0-2047	MIN<-->MAX cyclation
	41 GHSTCoef_2G		0	0-2047	MIN<-->MAX cyclation
	42 GHSTCoef_2B		0	0-2047	MIN<-->MAX cyclation
	43 BlkGHSTCoef_R		0	0-2047	MIN<-->MAX cyclation
	44 BlkGHSTCoef_G		0	0-2047	MIN<-->MAX cyclation
	45 BlkGHSTCoef_B		0	0-2047	MIN<-->MAX cyclation
	46 CRSTLKCoef_R_C		0	0-2047	MIN<-->MAX cyclation
	47 CRSTLKCoef_R_S		128	0-255	
	48 CRSTLKCoef_R_E		128	0-255	
	49 CRSTLKCoef_G_C		0	0-2047	MIN<-->MAX cyclation
	50 CRSTLKCoef_G_S		128	0-255	
	51 CRSTLKCoef_G_E		128	0-255	
	52 CRSTLKCoef_B_C		0	0-2047	MIN<-->MAX cyclation
	53 CRSTLKCoef_B_S		128	0-255	
	54 CRSTLKCoef_B_E		128	0-255	
	55 ColshdCtrl		16	0-511	
	56 ColshdCtrl_Ena		1	0-1	1: Enable, 0: Disable
	57 ColshdCtrl_PreEna		0	0-1	1: Enable, 0: Disable
	58 Colshd_RLMin		335	0-1023	
	59 Colshd_RLMid2		400	0-1023	
	60 Colshd_RLMid1		448	0-1023	
	61 Colshd_RLMax		564	0-1023	
	62 Colshd_GLMin		319	0-1023	
	63 Colshd_GLMid2		383	0-1023	
	64 Colshd_GLMid1		425	0-1023	
	65 Colshd_GLMax		516	0-1023	
	66 Colshd_BLMin		308	0-1023	
	67 Colshd_BLMid2		380	0-1023	
	68 Colshd_BLMid1		425	0-1023	
	69 Colshd_BLMax		530	0-1023	
	70 Colshd_Pre_Tbl		0	0-255	
	71 EnaHSync		0	0-1	
	72 OutPPos_H		112	0-2047	
	73 Pixel_CONT_Out		2048	0-4095	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
	74 H_Sync		0	0-2047	
	75 V_Sync		0	0-255	
	76 FlickerMode		0	0-3	
	77 EnaVSync		0	0-1	
	78 EnbyPosUp1		33	0-255	
	79 EnbyPosDwn1		821	0-1023	
	80 EnbyPosUp2		33	0-255	
	81 EnbyPosDwn2		821	0-1023	
	82 FrmIRRMMode		3	0-3	
	83 CRCTCoef_R_C		0	0-2047	
	84 CRCTCoef_R_S		128	0-255	
	85 CRCTCoef_R_E		128	0-255	
	86 CRCTCoef_G_C		0	0-2047	
	87 CRCTCoef_G_S		128	0-255	
	88 CRCTCoef_G_E		128	0-255	
	89 CRCTCoef_B_C		0	0-2047	
	90 CRCTCoef_B_S		128	0-255	
	91 CRCTCoef_B_E		128	0-255	
	92 CRSTLK_COEF2_R_C		0	0-2047	
	93 CRSTLK_COEF2_R_S		126	0-255	
	94 CRSTLK_COEF2_R_E		128	0-255	
	95 CRSTLK_COEF2_G_C		0	0-2047	
	96 CRSTLK_COEF2_G_S		126	0-255	
	97 CRSTLK_COEF2_G_E		128	0-255	
	98 CRSTLK_COEF2_B_C		0	0-2047	
	99 CRSTLK_COEF2_B_S		126	0-255	
	100 CRSTLK_COEF2_B_E		128	0-255	
	101 OutputLimitMax_R		4095	0-4095	STANDARD
			4095	0-4095	DYNAMIC
			4095	0-4095	REAL
			4095	0-4095	BLACKBOARD
			4095	0-4095	COLORBOARD
	102 OutputLimitMax_G		4095	0-4095	STANDARD
			4095	0-4095	DYNAMIC
			4095	0-4095	REAL
			4095	0-4095	BLACKBOARD
			4095	0-4095	COLORBOARD
	103 OutputLimitMax_B		4095	0-4095	STANDARD
			4095	0-4095	DYNAMIC
			4095	0-4095	REAL
	104 VideoRRefCont_H		0	0-4095	
	105 VideoRRefCont_L		3232	0-4095	
	106 DCOffset_MNS_R		0	0-1023	
	107 DCOffset_MNS_R_01		0	0-2047	
	108 DCOffset_MNS_R_02		0	0-2047	
	109 DCOffset_MNS_R_03		0	0-2047	
	110 DCOffset_MNS_R_04		0	0-2047	
	111 DCOffset_MNS_R_05		0	0-2047	
	112 DCOffset_MNS_R_06		0	0-2047	
	113 DCOffset_MNS_R_07		0	0-2047	
	114 DCOffset_MNS_R_08		0	0-2047	
	115 DCOffset_MNS_R_09		0	0-2047	
	116 DCOffset_MNS_R_10		0	0-2047	
	117 DCOffset_MNS_R_11		0	0-2047	
	118 DCOffset_MNS_R_12		21	0-2047	
	119 DCOffset_PLS_R		0	0-1023	MIN<-->MAX cyclation
	120 DCOffset_PLS_R_01		0	0-2047	MIN<-->MAX cyclation
	121 DCOffset_PLS_R_02		0	0-2047	MIN<-->MAX cyclation
	122 DCOffset_PLS_R_03		0	0-2047	MIN<-->MAX cyclation
	123 DCOffset_PLS_R_04		0	0-2047	MIN<-->MAX cyclation
	124 DCOffset_PLS_R_05		0	0-2047	MIN<-->MAX cyclation
	125 DCOffset_PLS_R_06		0	0-2047	MIN<-->MAX cyclation
	126 DCOffset_PLS_R_07		0	0-2047	MIN<-->MAX cyclation
	127 DCOffset_PLS_R_08		0	0-2047	MIN<-->MAX cyclation
	128 DCOffset_PLS_R_09		0	0-2047	MIN<-->MAX cyclation
	129 DCOffset_PLS_R_10		0	0-2047	MIN<-->MAX cyclation
	130 DCOffset_PLS_R_11		0	0-2047	MIN<-->MAX cyclation
	131 DCOffset_PLS_R_12		2046	0-2047	MIN<-->MAX cyclation
	132 Lvl9Mode_R_0000		0	0-1023	MIN<-->MAX cyclation
	133 Lvl9Mode_R_0512		0	0-1023	MIN<-->MAX cyclation

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
	134 Lvl9Mode_R_1024		0	0-1023	MIN<-->MAX cyclation
	135 Lvl9Mode_R_1536		0	0-1023	MIN<-->MAX cyclation
	136 Lvl9Mode_R_2048		0	0-1023	MIN<-->MAX cyclation
	137 Lvl9Mode_R_2560		0	0-1023	MIN<-->MAX cyclation
	138 Lvl9Mode_R_3072		0	0-1023	MIN<-->MAX cyclation
	139 Lvl9Mode_R_3584		0	0-1023	MIN<-->MAX cyclation
	140 Lvl9Mode_R_4096		0	0-1023	MIN<-->MAX cyclation
	141 VideoGRefCont_H		0	0-4095	
	142 VideoGRefCont_L		3232	0-4095	
	143 DCOffset_MNS_G		0	0-1023	MIN<-->MAX cyclation
	144 DCOffset_MNS_G_01		0	0-2047	MIN<-->MAX cyclation
	145 DCOffset_MNS_G_02		0	0-2047	MIN<-->MAX cyclation
	146 DCOffset_MNS_G_03		0	0-2047	MIN<-->MAX cyclation
	147 DCOffset_MNS_G_04		0	0-2047	MIN<-->MAX cyclation
	148 DCOffset_MNS_G_05		0	0-2047	MIN<-->MAX cyclation
	149 DCOffset_MNS_G_06		0	0-2047	MIN<-->MAX cyclation
	150 DCOffset_MNS_G_07		0	0-2047	MIN<-->MAX cyclation
	151 DCOffset_MNS_G_08		0	0-2047	MIN<-->MAX cyclation
	152 DCOffset_MNS_G_09		0	0-2047	MIN<-->MAX cyclation
	153 DCOffset_MNS_G_10		0	0-2047	MIN<-->MAX cyclation
	154 DCOffset_MNS_G_11		0	0-2047	MIN<-->MAX cyclation
	155 DCOffset_MNS_G_12		21	0-2047	MIN<-->MAX cyclation
	156 DCOffset_PLS_G		0	0-1023	MIN<-->MAX cyclation
	157 DCOffset_PLS_G_01		0	0-2047	MIN<-->MAX cyclation
	158 DCOffset_PLS_G_02		0	0-2047	MIN<-->MAX cyclation
	159 DCOffset_PLS_G_03		0	0-2047	MIN<-->MAX cyclation
	160 DCOffset_PLS_G_04		0	0-2047	MIN<-->MAX cyclation
	161 DCOffset_PLS_G_05		0	0-2047	MIN<-->MAX cyclation
	162 DCOffset_PLS_G_06		0	0-2047	MIN<-->MAX cyclation
	163 DCOffset_PLS_G_07		0	0-2047	MIN<-->MAX cyclation
	164 DCOffset_PLS_G_08		0	0-2047	MIN<-->MAX cyclation
	165 DCOffset_PLS_G_09		0	0-2047	MIN<-->MAX cyclation
	166 DCOffset_PLS_G_10		0	0-2047	MIN<-->MAX cyclation
	167 DCOffset_PLS_G_11		0	0-2047	MIN<-->MAX cyclation
	168 DCOffset_PLS_G_12		2046	0-2047	MIN<-->MAX cyclation
	169 Lvl9Mode_G_0000		0	0-1023	MIN<-->MAX cyclation
	170 Lvl9Mode_G_0512		0	0-1023	MIN<-->MAX cyclation
	171 Lvl9Mode_G_1024		0	0-1023	MIN<-->MAX cyclation
	172 Lvl9Mode_G_1536		0	0-1023	MIN<-->MAX cyclation
	173 Lvl9Mode_G_2048		0	0-1023	MIN<-->MAX cyclation
	174 Lvl9Mode_G_2560		0	0-1023	MIN<-->MAX cyclation
	175 Lvl9Mode_G_3072		0	0-1023	MIN<-->MAX cyclation
	176 Lvl9Mode_G_3584		0	0-1023	MIN<-->MAX cyclation
	177 Lvl9Mode_G_4096		0	0-1023	MIN<-->MAX cyclation
	178 VideoBRefCont_H		0	0-4095	
	179 VideoBRefCont_L		3232	0-4095	
	180 DCOffset_MNS_B		0	0-1023	MIN<-->MAX cyclation
	181 DCOffset_MNS_B_01		0	0-2047	MIN<-->MAX cyclation
	182 DCOffset_MNS_B_02		0	0-2047	MIN<-->MAX cyclation
	183 DCOffset_MNS_B_03		0	0-2047	MIN<-->MAX cyclation
	184 DCOffset_MNS_B_04		0	0-2047	MIN<-->MAX cyclation
	185 DCOffset_MNS_B_05		0	0-2047	MIN<-->MAX cyclation
	186 DCOffset_MNS_B_06		0	0-2047	MIN<-->MAX cyclation
	187 DCOffset_MNS_B_07		0	0-2047	MIN<-->MAX cyclation
	188 DCOffset_MNS_B_08		0	0-2047	MIN<-->MAX cyclation
	189 DCOffset_MNS_B_09		0	0-2047	MIN<-->MAX cyclation
	190 DCOffset_MNS_B_10		0	0-2047	MIN<-->MAX cyclation
	191 DCOffset_MNS_B_11		0	0-2047	MIN<-->MAX cyclation
	192 DCOffset_MNS_B_12		21	0-2047	MIN<-->MAX cyclation
	193 DCOffset_PLS_B		0	0-1023	MIN<-->MAX cyclation
	194 DCOffset_PLS_B_01		0	0-2047	MIN<-->MAX cyclation
	195 DCOffset_PLS_B_02		0	0-2047	MIN<-->MAX cyclation
	196 DCOffset_PLS_B_03		0	0-2047	MIN<-->MAX cyclation
	197 DCOffset_PLS_B_04		0	0-2047	MIN<-->MAX cyclation
	198 DCOffset_PLS_B_05		0	0-2047	MIN<-->MAX cyclation
	199 DCOffset_PLS_B_06		0	0-2047	MIN<-->MAX cyclation
	200 DCOffset_PLS_B_07		0	0-2047	MIN<-->MAX cyclation
	201 DCOffset_PLS_B_08		0	0-2047	MIN<-->MAX cyclation
	202 DCOffset_PLS_B_09		0	0-2047	MIN<-->MAX cyclation
	203 DCOffset_PLS_B_10		0	0-2047	MIN<-->MAX cyclation

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
	204 DCOffset_PLS_B_11		0	0-2047	MIN<-->MAX cyclation
	205 DCOffset_PLS_B_12		2046	0-2047	MIN<-->MAX cyclation
	206 LvI9Mode_B_0000		0	0-2047	MIN<-->MAX cyclation
	207 LvI9Mode_B_0512		0	0-1023	MIN<-->MAX cyclation
	208 LvI9Mode_B_1024		0	0-1023	MIN<-->MAX cyclation
	209 LvI9Mode_B_1536		0	0-1023	MIN<-->MAX cyclation
	210 LvI9Mode_B_2048		0	0-1023	MIN<-->MAX cyclation
	211 LvI9Mode_B_2560		0	0-1023	MIN<-->MAX cyclation
	212 LvI9Mode_B_3072		0	0-1023	MIN<-->MAX cyclation
	213 LvI9Mode_B_3584		0	0-1023	MIN<-->MAX cyclation
	214 LvI9Mode_B_4096		0	0-1023	MIN<-->MAX cyclation
	215 VideoCont_R		2048	0-4095	Standard
			2048	0-4095	Dynamic
			2048	0-4095	Real
			2048	0-4095	BlackBoard
			2048	0-4095	R_Board
			2048	0-4095	B_Board
			2048	0-4095	Y_Board
			2048	0-4095	G_Board
	216 VideoBright_R		0	0-4095	Standard
			0	0-4095	Dynamic
			0	0-4095	Real
			0	0-4095	BlackBoard
			0	0-4095	R_Board
			0	0-4095	B_Board
			0	0-4095	Y_Board
			0	0-4095	G_Board
	217 VideoGammaShift_R		0	0-4095	PC
			0	0-4095	AV
	218 VideoCont_G		2048	0-4095	Standard
			2048	0-4095	Dynamic
			2048	0-4095	Real
			2048	0-4095	BlackBoard
			2048	0-4095	R_Board
			2048	0-4095	B_Board
			2048	0-4095	Y_Board
			2048	0-4095	G_Board
	219 VideoBright_G		0	0-4095	Standard
			0	0-4095	Dynamic
			0	0-4095	Real
			0	0-4095	BlackBoard
			0	0-4095	R_Board
			0	0-4095	B_Board
			0	0-4095	Y_Board
			0	0-4095	G_Board
	220 VideoGammaShift_G		0	0-4095	PC
			0	0-4095	AV
	221 VideoCont_B		2048	0-4095	Standard
			2048	0-4095	Dynamic
			2048	0-4095	Real
			2048	0-4095	BlackBoard
			2048	0-4095	R_Board
			2048	0-4095	B_Board
			2048	0-4095	Y_Board
			2048	0-4095	G_Board
	222 VideoBright_B		0	0-4095	Standard
			0	0-4095	Dynamic
			0	0-4095	Real
			0	0-4095	BlackBoard
			0	0-4095	R_Board
			0	0-4095	B_Board
			0	0-4095	Y_Board
			0	0-4095	G_Board
	223 VideoGammaShift_B		0	0-4095	PC
			0	0-4095	AV
<b>Group 105</b>	<b>Panel Services(6200)</b>				
	0 201_R		4	0-15	
	1 601_G		4	0-15	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
	2 A01_B		4	0-15	
	3 202_R		4	0-127	
	4 602_G		4	0-127	
	5 A02_B		4	0-127	
	6 205_R		4	0-31	
	7 605_G		4	0-31	
	8 A05_B		4	0-31	
	9 300_R		190	0-255	
	10 700_G		190	0-255	
	11 B00_B		190	0-255	
	12 FPDDRIM_R		1/273	0-512	FPD-C,(Ready only)(L/R)
	13 FPD_MODE_R		1/1	0-3	FPD-C,(Ready only)(L/R)
	14 FPD_ED1_R		0/1	0-1	FPD-C(Ready only)(L/R)
	15 FPD_ED2_R		0/1	0-1	FPD-C,(Ready only)(L/R)
	16 PARA1_R		1	0-31	Ready only
	17 PARA1_1_R		1	0-7	
	18 PARA1_2_R		0	0-1	
	19 PARA2_R		513	0-1023	
	20 PARA3_R		512	0-1023	
	21 FPDDRI_R		879	0-1023	
	22 FPDDRI 1_R		0	0-1023	
	23 FPD_G		1/273	0-512	FPD-C,(Ready only)(L/R)
	24 FPD_MODE_G		1/1	0-3	FPD-C,(Ready only)(L/R)
	25 FPD_ED1_G		0/1	0-1	FPD-C,(Ready only)(L/R)
	26 FPD_ED2_G		0/1	0-1	FPD-C,(Ready only)(L/R)
	27 PARA1_G		1	0-31	Ready only
	28 PARA1-1_G		1	0-7	
	29 PARA1_2_G		0	0-1	
	30 PARA2_G		513	0-1023	
	31 PARA3_G		512	0-1023	
	32 FPDDI_G		879	0-1023	
	33 FPDDI 1_G		0	0-1023	
	34 FPD_B		1/273	1-512	FPD-C,(Ready only)(L/R)
	35 FPD_MODE_B		1/1	1-3	FPD-C,(Ready only)(L/R)
	36 FPD_ED1_B		0/1	0-1	FPD-C,(Ready only)(L/R)
	37 FPD_ED2_B		0/1	0-1	FPD-C,(Ready only)(L/R)
	38 PARA1_B		1	0-31	Ready only
	39 PARA1_1_B		1	0-7	
	40 PARA1_2_B		0	0-1	
	41 PARA2_B		513	0-1023	
	42 PARA3_B		512	0-1023	
	43 FPDDRI_B		879	0-1023	
	44 FPDDRI 1_B		0	0-1023	
<b>Group 107</b>	<b>Panel Service(8030)</b>				
	0 Vsync input		0	0-1	0:enable/1:disable
	1 Timer for Recovery starting		1	0-1	0:enable/1:disable
	2 Color correction		0	0-1	0:enable/1:disable
	3 SP1 receiver		0	0-1	0:enable/1:disable
	4 UART(UPUside)		0	0-1	can not be changed for service
	5 3Wire serial command generator		0	0-1	0:enable/1:disable
	6 Output of 3 wire serial I/F		0	0-1	0:enable/1:disable
	7 ColorCorrectionTable_R		1722	0-4095	AV/PC
	8 ColorCorrectionTable_R		1722	0-4095	AV/PC

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
9	ColorCorrectionTable_R		1722	0-4095	AV/PC
10	ColorCorrectionTable_R		1920	0-4095	AV/PC
11	ColorCorrectionTable_R		2029	0-4095	AV/PC
12	ColorCorrectionTable_R		2046	0-4095	AV/PC
13	ColorCorrectionTable_R		2047	0-4095	AV/PC
14	ColorCorrectionTable_R		2048	0-4095	AV/PC
15	ColorCorrectionTable_R		2048	0-4095	AV/PC
16	ColorCorrectionTable_R		2048	0-4095	AV/PC
17	ColorCorrectionTable_G		1370	0-4095	AV/PC
18	ColorCorrectionTable_G		1370	0-4095	AV/PC
19	ColorCorrectionTable_G		1370	0-4095	AV/PC
20	ColorCorrectionTable_G		1691	0-4095	AV/PC
21	ColorCorrectionTable_G		1894	0-4095	AV/PC
22	ColorCorrectionTable_G		1967	0-4095	AV/PC
23	ColorCorrectionTable_G		1993	0-4095	AV/PC
24	ColorCorrectionTable_G		2022	0-4095	AV/PC
25	ColorCorrectionTable_G		2048	0-4095	AV/PC
26	ColorCorrectionTable_G		2048	0-4095	AV/PC
27	ColorCorrectionTable_B		2048	0-4095	AV/PC
28	ColorCorrectionTable_B		2048	0-4095	AV/PC
29	ColorCorrectionTable_B		2048	0-4095	AV/PC
30	ColorCorrectionTable_B		2048	0-4095	AV/PC
31	ColorCorrectionTable_B		2048	0-4095	AV/PC
32	ColorCorrectionTable_B		2048	0-4095	AV/PC
33	ColorCorrectionTable_B		2048	0-4095	AV/PC
34	ColorCorrectionTable_B		2048	0-4095	AV/PC
35	ColorCorrectionTable_B		2048	0-4095	AV/PC
36	ColorCorrectionTable_B		2048	0-4095	AV/PC
37	VSYNC pulse width		13	0-4095	
38	Vsync generation interval		313	0-1023	
39	SCIOUT L-period		7	0-255	
40	Interval setting for recovery		8	0-1023	
<b>Group 200</b>	<b>Option</b>				
0	Logo Prohibition (Forced No Brand)	Logo Prohibition (0: Menu, 1: Forced, 2: China, 3-9: not used)	0	0 - 2	Effective after AC On
1	RS232C Baudrate	Baud Rate	0	0 - 1	0: 19200bps, 1: 9600bps
4	CABLE SW	Long Cable	0	0 - 10	0: Disable, 1: Enable
5	PW Debug Command Enable		0	0 - 1	0:Disable (Serial Command Enable) 1: Enable (PW Debug Mode)
6	Device Refresh Disable		0	0 - 1	0:Enable, 1:Disable No last memory
21	Lamp Warning Time(NORMAL)		4	1-16	
22	Lamp Warning(ECO)		5	1-16	
50	Lamp Replacement Display	Lamp Warning Display On / Off	1	0 - 1	1: On, 0: Off
51	Filter Warning Display	Filter Warning Display On / Off	1	0 - 1	1: On, 0: Off
52	Lamp Counter reset Times	Reset Times of Lamp Counter	0	0 - 255	Read only
54	Factory Default Execute Times	Reset times of Factory Default	0	0 - 255	Read only
55	Motor Disable	Motors Disable	0	0 - 1	0: On, 1: Off
56	Menu Position	Move menu (X axis)	0	0 - 1024	
57	Menu Position	Move menu (Y axis)	0	0 - 1024	
58	Lamp Go Out		0	0 - 1	
63	Source Search Enable	Source Search Enable	1	0 - 1	0: Disable 1:Enable
65	Mute with video		1	0-1	
67	Monitor		1	0-1	0:OFF 1:ON(default)
70	Analog ADC Device Select		0	0-1	0:ISL51002, 1:PW392 AFE
71	Component ADC Device Select	0: ISK51002, 1:PW392 AFE	1	0 - 1	
80	Determination Setting	0: English 1: Japanese	0	0 - 1	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
100	Disable Auto Picture Control	0: Normal operation 1:Auto Picture Control	-	0 - 1	
<b>Group 201</b>	<b>Option (signal)</b>				
0	FrameLock Option		1	0 - 1	
1	Dither Enable	VSBEQ Setting	1	0 - 1	
3	Field Sense Inert Enable	0: Disable, 1:Enable	0	0 - 1	
15	WPS PIN code (last 4 bits)		0	0 - 9999	
<b>Group 204</b>	<b>Simulation mode</b>				
0	PW392C Enable		0	0 - 1	
1	PW610 Enable		-	0 - 1	
<b>Group 205</b>	<b>Spread Spectrum</b>				
0	Enable	0: Disable 1: Enable	1	0 - 1	
1	Spead factor	Default: 100	100	0 - 300	
2	Wave period	Default: 300	80	1 - 500	
<b>Group 210</b>	<b>LampControl</b>				
2	DIMMER_CTRL_LEVEL MIN	Luminance Level 00h Data for Dimmer: Dim Level MIN at the Value	3	0 - 255	
3	DIMMER_CTRL_LEVEL1	Luminance Level 10h Data for Dimmer: Dim Level 10h at the less than the Value	5	0 - 255	
4	DIMMER_CTRL_LEVEL2	Luminance Level 20h Data for Dimmer: Dim Level 20h at the less than the Value	11	0 - 255	
5	DIMMER_CTRL_LEVEL3	Luminance Level 30h Data for Dimmer: Dim Level 30h at the less than the Value	28	0 - 255	
6	DIMMER_CTRL_LEVEL4	Luminance Level 40h Data for Dimmer: Dim Level 40h at the less than the Value	43	0 - 255	
7	DIMMER_CTRL_LEVEL5	Luminance Level 50h Data for Dimmer: Dim Level 50h at the less than the Value	58	0 - 255	
8	DIMMER_CTRL_LEVEL6	Luminance Level 60h Data for Dimmer: Dim Level 60h at the less than the Value	80	0 - 255	
9	DIMMER_CTRL_LEVEL7	Luminance Level 70h Data for Dimmer: Dim Level 70h at the less than the Value	130	0 - 255	
10	DIMMER_CTRL_LEVEL MAX	Luminance Level 80h Data for Dimmer: Dim Level 80h at the less than the Value	180	0 - 255	
11	DIMMER_LEVEL_AUTO_Max	Luminance Level Max Data when Lamp mode is Auto	128	0 - 80h	
12	DIMMER_LEVEL_AUTO_Min	Luminance Level Min Data when Lamp mode is Auto	38	0 - 80h	
16	DIMMER_LEVEL_ECO2	Eco2 Dimmer Level	71	1 - 128	
17	DIMMER_AVERAGE_POINT	Luminance Data Average Point for Dimmer	2	1 - 16	
18	DIMMER_AVERAGE_DATA	Luminance Data Average Value for Dimmer	-	-	* Read only
19	DIMMER_LEVEL_AUTO	Current Dimmer Level	-	-	* Read only
20	DIMMER_LEVEL_NORMAL	Normal Dimmer Level	128	0 - 128	
21	DIMMER_LEVEL_ECO	Eco Dimmer Level	89	0 - 128	
23	VOLTAGE_LEVEL	Lamp Voltage	-	-	* Read only
25	Past Calculation System		-	-	* Read only
26	New Calculation System		-	-	* Read only
27	Red Average Level		-	-	* Read only
28	Green Average Level		-	-	* Read only
29	Blue Average Level		-	-	* Read only
30	SAT		-	-	* Read only
31	Chroma Coefficient		160	0-255	
<b>Group 220</b>	<b>Projector Warning Log</b>				
0	Warning Log_1		-	0-32767	
..	..		-	-	
49	Warning Log_50		-	0-32767	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note		
50	Warning Log Reset		1	0-10			
<b>Group 250</b>	<b>FAN Control</b>						
0	FAN1 MIN ADJUST (DAC)		21	0 - 255			
1	FAN1 MAX ADJUST (DAC)		206	0 - 255			
2	FAN2 MIN ADJUST (DAC)	DAC Output for Fan	42	0 - 255			
3	FAN2 MAX ADJUST (DAC)	Adjust the tolerance of DAC and Fan Voltage.	205	0 - 255			
4	FAN3 MIN ADJUST (DAC)	* Lamp mode is forced Eco	38	0 - 255			
5	FAN3 MAX ADJUST (DAC)		193	0 - 255			
<b>Group 252</b>	<b>Fan Option</b>						
1	SAFETY Switch	For test purpose	0	0, 3 - 6			
2	FAN MANUAL SWITCH	0: Auto, 1: Manual	0	0 - 3			
3	FAN1 MANUAL VOLTAGE	Fan Voltage (unit : 0.1V)	100	0 - 255			
4	FAN2 MANUAL VOLTAGE	Effective only when Fan Manual switch is 1	100	0 - 255			
5	FAN3 MANUAL VOLTAGE		100	0 - 255			
9	All Fan MaxMin Control	0 : Normal 1 : Lamp Normal / Fan Min 2 : Lamp Normal / Fan Max 3 : Lamp Eco / Fan Min 4 : Lamp Eco / Fan Max	0	0 - 4			
<b>Group 253</b>	<b>Fan Temp Error Setting (Memorized)</b>		Normal (OFF)	Ceiling (OFF)	HiLand Normal (ON1/ ON2)	HiLand Ceiling (ON1/ ON2)	
5	Temp A Warning (Normal)	Temp. A to judge the Temp Error at Normal (Room)	38	38	35/35	35/35	30-100
6	Temp B Warning (Normal)	Temp. B to judge the Temp Error at Normal (Panel)	52	52	51/52	51/52	30-100
7	Temp C Warning (Normal)	Temp. C to judge the Temp Error at Normal (Lamp)	73	73	69/70	69/70	30-100
8	Temp B-A Warning (Normal)	Temp. B-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100/100	100/100	0-100
9	Temp C-A Warning (Normal)	Temp. C-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100/100	100/100	0-100
10	Temp A Warning (Eco)	Temp. A to judge the Temp Error at Eco (Room)	38	38	35/35	35/35	30-100
11	Temp B Warning (Eco)	Temp. B to judge the Temp Error at Eco (Panel)	52	52	50/52	50/52	30-100
12	Temp C Warning (Eco)	Temp. C to judge the Temp Error at Eco (Lamp)	70	70	65/68	65/68	30-100
13	Temp B-A Warning (Eco)	Temp. B-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100/100	100/100	0-100
14	Temp C-A Warning (Eco)	Temp. C-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100/100	100/100	0-100
15	Temp A Warning Offset (Temp)				5		0-100
16	Temp B Warning Offset (Temp)				5		0-100
17	Temp C Warning Offset (Temp)	Offset of Temp Error (Temp.) Error Setting Value is increased XC at the below condition * Standby			5		0-100
18	Temp B-A Warning Offset (Temp)	* Right to turn on the lamp *Right to change the Lamp mode			0		0-100
19	Temp C-A Warning Offset (Temp)				0		0-100
20	Temp A Warning Offset (Time)				3		0-5
21	Temp B Warning Offset (Time)				3		0-5
22	Temp C Warning Offset (Time)	Offset of Temp Error (Minutes) Error Setting Value is increased X minute at the below condition * Standby			3		0-5
23	Temp B-A Warning Offset (Time)	* Right to turn on the lamp *Right to change the Lamp mode			3		0-5
24	Temp C-A Warning Offset (Time)				3		0-5
<b>Group 254</b>	<b>Fan Control Range Setting (Temp./Voltage)</b>		Normal (OFF)	Ceiling (OFF)	HiLand Normal (ON1 DIF/ ON2)	HiLand Ceiling (ON1/ ON2)	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial				Range	Note
10	Normal Fan Control Min Temp	Temp Sensor Control Start/End Temp.p at Normal	28	27	27/27	27/26	20-100	
11	Normal Fan Control Max Temp		36	35	32/32	32/32	20-100	
12	Normal Fan1 Min		65	65	78/90	78/90	0-255	
13	Normal Fan1 Max		130	130	135/135	135/135	0-255	
14	Normal Fan2 Min	Fan voltage value at Normal (unit: 0.1V)	67	70	85/100	85/100	0-255	
15	Normal Fan2 Max		120	120	130/135	130/135	0-255	
16	Normal Fan3 Min		70	70	90/105	90/105	0-255	
17	Normal Fan3 Max		75	75	95/112	95/112	0-255	
20	Eco Fan Control Min Temp	Temp Senser Control Start/End Temp.p at Eco	28	28	26/26	26/26	20-100	
21	Eco Fan Control Max Temp		35	35	32/32	32/32	20-100	
22	Eco Fan1 Min		50	50	67/80	67/80	0-255	
23	Eco Fan1 Max		120	120	125/130	125/130	0-255	
24	Eco Fan2 Min	Fan voltage value at Eco (unit: 0.1V)	55	57	67/85	67/85	0-255	
25	Eco Fan2 Max		100	100	110/120	110/120	0-255	
26	Eco Fan3 Min		35	35	47/55	47/55	0-255	
27	Eco Fan3 Max		38	38	52/60	52/60	0-255	
<b>Group 255</b>	<b>Fan Start/Cooling Setting</b>							
0	Fan1 Initial Volt	Fan Start Voltage (0.1V)			60		0-255	
1	Fan2 Initial Volt				60		0-255	
2	Fan3 Initial Volt				50		0-255	
8	Cooling Time L1	Cooling Time setting at Fan Mode L1 (x 30 sec) 1: 30, 3: 90, 15: 450 sec.			2		1-15	
9	Cooling Time L2	Cooling Time setting at Fan Mode L2 (x 30 sec) 1: 30, 3: 90, 15: 450 sec.			3		1-15	
10	Temp Error Cooling Time	Cooling Time setting at Temp Error (x 30 sec)			3		1-15	
11	OnStart Cooling Start Threshold				38		0-100	
12	After shutdown cooling	Cooling after shutdown (0: No, 1: Yes)			1		0-1	
<b>Group 257</b>	<b>Fan Dimmer Setting</b>							
0	Dimmer Average Check Period	Dimmer Average measurement Time (0:10sec, 1:30sec, 2:6sec, 90sec...10:300sec)			1		0-10	
1	Cooling Gain	Dimmer Average Value (Read only)			-		-	
<b>Group 259</b>	<b>Fan Temp for MIC IC</b>							
0	Standby Fan B Voltage	Fan Voltage (Unit:0.1V)			52		30-135	
<b>Group 260</b>	<b>Auto Calibration (Common) * Auto Calibration</b>							
0	Execute Calibration				0		0 - 1	Executes Auto-Calibration when changing the Value (PC White 100%)
1	Loop Count	Maximum Execution Times (OFFSET->GAIN)			8		1 - 30	
2	Auto Status	Result of Auto-Calibration (Last Memory)			0		0 / 1 / 9	0: OK, 1: Adjusting,9: Error * ReadOnly
3	AutoWait	Wait Value for each setting			3		1 - 20	
4	CHECK -Tolerance	Tolerance of OFFSET			4		1 - 255	
5	Time out wait	Time out waiting time(sec)			20		1-255	
<b>Group 261</b>	<b>Auto Calibration (RGB)</b>							
0	OFFSET AREA H START	Black Level Acquiring Area H-Start Position			975		0 - 1000	
1	OFFSET AREA V START	Black Level Acquiring Area V-Start Position			500		0 - 1000	
2	GAIN AREA H START	White Level Acquiring Area H-Start Position			25		0 - 1000	
3	GAIN AREA V START	White Level Acquiring Area V-Start Position			500		0 - 1000	
4	Image AREA H WIDTH	Black/White Level Acquiring Area			13		0 - 4095	
5	Image AREA V HIGHT	Black/White Level Acquiring Area Height			9		0 - 4095	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
6	OFFSET target	Target Value of Black Level Adj.	20	0 - 1023	
7	OFFSET tolerance	Tolerance of Black Level Adj.	1	1 - 1023	
8	GAIN target	Target Value of White Level Adj.	955	0 - 1023	
9	GAIN tolerance	Tolerance of White Level Adj.	1	1 - 1023	
10	Image Level tolerance		8	1 - 255	
<b>Group 262 Auto Calibration (CVBS/SVIDEO)</b>					
0	Y Image Area Start X	Y Acquiring Area H-Start Position	20	0 - 1000	
1	Y Image Area Start Y	Y Acquiring Area V-Start Position	200	0 - 1000	
6	Image Area H Width	Image Level Acquiring Area	8	0 - 4095	
7	Image Area V Hight	Image Level Acquiring Area Height	9	0 - 4095	
8	Y Target Level	Target Value of Y Level Adj.	915	0 - 1023	
11	Gain Tolerance	Tolerance of Level Adj.	1	1 - 255	
12	Delta Gain	Deviation Width of Gain Value	2	1 - 255	
<b>Group 264 Auto Calibration (YCbCr)</b>					
0	Y-OFFSET AREA H START	Y - Offset Acquiring Area H-Start Position	925	0 - 1000	
1	Y-OFFSET AREA V START	Y - Offset Acquiring Area V-Start Position	500	0 - 1000	
2	CB - OFFSET AREA H START	CB - Offset Acquiring Area H-Start Position	925	0 - 1000	If not used: use Y's value
3	CB - OFFSET AREA V START	CB - Offset Acquiring Area V-Start Position	500	0 - 1000	If not used: use Y's value
4	CR - OFFSET AREA H START	CR - Offset Acquiring Area H-Start Position	925	0 - 1000	If not used: use Y's value
5	CR - OFFSET AREA V START	CR - Offset Acquiring Area V-Start Position	500	0 - 1000	If not used: use Y's value
6	Y - GAIN AREA H START		50	0 - 1000	
7	Y - GAIN AREA V START		500	0 - 1000	
8	CB - GAIN AREA H START		800	0 - 1000	
9	CB - GAIN AREA V START		500	0 - 1000	
10	CR - GAIN AREA H START		700	0 - 1000	
11	CR - GAIN AREA V START		500	0 - 1000	
12	Image AREA H WIDTH	YCBCR Level Acquiring Area	13	0 - 4095	
13	Image AREA V HIGHT	YCBCR Level Acquiring Area Height	9	0 - 4095	
14	Y - OFFSET TARTGET		4	0 - 1023	
15	CB OFFSET TARGET		512	0 - 1023	
16	CR OFFSET TARGET		512	0 - 1023	
17	Y - GAIN TARGET		906	0 - 1023	
18	CB - GAIN TARGET		955	0 - 1023	
19	CR - GAIN TARGET		955	0 - 1023	
20	OFFSET tolerance	Tolerance of OFFSET Adj.	1	1 - 255	
21	GAIN tolerance	Tolerance of GAIN Adj.	2	1 - 255	
22	Image Level Tolerance		8	1 - 255	
<b>Group 280 AutoPC Adjust</b>					
0	AutoPCAdjustEnable	Auto-PC Adj Operation Enable if Un-supported Signal Input	0	0 - 1	0: Enable, 1: Disable
1	Frequency Step	Frequency Steps of TotalDot	1	0-3	
2	Frequency Threshold	Total Dot Frequency Threshold	5	0 - 10	0 [] <--- -----> 10[Not matched]
3	Fine Phase	Do Phase Adj after Total Dot Adj.	1	0 - 1	0: Executes Fine Phase, 1: Not Execute
4	BLKDET	Black Level Detection Area	1	0 - 3	
5	PHASEMSK	Phase Detection Filter	0	0 - 3	0: Effective All Bit, 1: Disable Lower 1 bit, 2: Disable Lower 2 bit, 3: Disable Lower 3 bit
<b>Group 290 Panel Type Check and setting</b>					
0	GammaL/R-View	Current Setting Check	0	0-20	0: Gamma for L-Turn 20: Gamma for R-Turn * Read only
1	GammaL/R-Change	Setting of Gamma	10	0-20	Sets L-Turn Gamma if the Value is set to 0. Sets R-Turn Gamma if the Value is set to 20.
<b>Group 300 Closed capture</b>					

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
0	Caption Mode	Capture Mode: OFF/CC1/CC2/CC3/CC4	0	0-5	
1	Color Mode	Color Mode	0	0-1	
2	Multi Window Caption	0: OFF, 1:ON	1	0-1	
3	G2_MINLOWLEVEL	G2_MINLOWLEVEL(PW392 reg.0x0379)	0	0-255	
4	G2_MAXHILEVEL	G2_MAXHILEVEL(PW392 reg.0x037A)	255	0-255	
<b>Group 500 Composite (NTSC) Composite / S-Video</b>					
0					
1	Disp Dots		674	0 - 4095	
2	H Back Porch		25	0 - 4095	
3	V Back Porch		14	0 - 4095	
4	Disp Line		458	0 - 4095	
<b>Group 501 Composite (PAL) Composite / S-Video</b>					
0					
1	Disp Dots		662	0 - 4095	
2	H Back Porch		32	0 - 4095	
3	V Back Porch		18	0 - 4095	
4	Disp Line		542	0 - 4095	
<b>Group 502 Composite (SECAM) Composite / S-Video</b>					
0					
1	Disp Dots		662	0 - 4095	
2	H Back Porch		32	0 - 4095	
3	V Back Porch		18	0 - 4095	
4	Disp Line		542	0 - 4095	
<b>Group 510 SCART(480i)</b>					
0	Total Dots		858	0 - 4095	
1	Disp Dots		682	0 - 4095	
2	H Back Porch		133	0 - 4095	
3	V Back Porch		40	0 - 4095	
4	Disp Line		453	0 - 4095	
5	Clamp		68	0 - 255	
6	Clamp Width		20	0 - 255	
<b>Group 511 SCART(575i)</b>					
0			864	0 - 4095	
1	Disp Dots		650	0 - 4095	
2	H Back Porch		151	0 - 4095	
3	V Back Porch		63	0 - 4095	
4	Disp Line		516	0 - 4095	
5	Clamp		66	0 - 255	
6	Clamp Width		20	0 - 255	
<b>Group 520 YCbCr (480i)</b>					
0	Total Dots		858	0 - 4095	
1	Disp Dots		672	0 - 4095	
2	H Back Porch		145	0 - 4095	
3	V Back Porch		43	0 - 4095	
4	Disp Line		456	0 - 4095	
5	Clamp		72	0 - 4095	
6	Clamp Width		31	0 - 4095	
22	(USB) H Back Porch		91	0 - 4095	
23	(USB) V Back Porch		62	0 - 4095	
25	(USB)Clamp		10	0 - 4095	
26	(USB)Clamp Width		31	0 - 4095	
<b>Group 521 YCbCr (575i)</b>					
0	Total Dots		864	0 - 4095	
1	Disp Dots		656	0 - 4095	
2	H Back Porch		162	0 - 4095	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
	3	V Back Porch	59	0 - 4095	
	4	Disp Line	538	0 - 4095	
	5	Clamp	98	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	108	0 - 4095	
	23	(USB) V Back Porch	76	0 - 4095	
	25	(USB)Clamp	10	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 522</b>	<b>YCbCr (480P)</b>				
	0	Total Dots	1716	0 - 4095	* Read only
	1	Disp Dots	1368	0 - 4095	
	2	H Back Porch	279	0 - 4095	
	3	V Back Porch	46	0 - 4095	
	4	Disp Line	458	0 - 4095	
	5	Clamp	162	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	161	0 - 4095	
	23	(USB) V Back Porch	50	0 - 4095	
	25	(USB)Clamp	1	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 523</b>	<b>YCbCr (575P)</b>				
	0	Total Dots	1728	0 - 4095	* Read only
	1	Disp Dots	1360	0 - 4095	
	2	H Back Porch	302	0 - 4095	
	3	V Back Porch	58	0 - 4095	
	4	Disp Line	544	0 - 4095	
	5	Clamp	160	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	187	0 - 4095	
	23	(USB) V Back Porch	61	0 - 4095	
	25	(USB)Clamp	1	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 524</b>	<b>YCbCr (720P - 60)</b>				
	0	Total Dots	1650	0 - 4095	* Read only
	1	Disp Dots	1248	0 - 4095	
	2	H Back Porch	314	0 - 4095	
	3	V Back Porch	33	0 - 4095	
	4	Disp Line	700	0 - 4095	
	5	Clamp	187	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	284	0 - 4095	
	23	(USB) V Back Porch	31	0 - 4095	
	25	(USB)Clamp	110	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 525</b>	<b>YCbCr (720P - 50 )</b>				
	0	Total Dots	1980	0 - 4095	* Read only
	1	Disp Dots	1248	0 - 4095	
	2	H Back Porch	313	0 - 4095	
	3	V Back Porch	34	0 - 4095	
	4	Disp Line	701	0 - 4095	
	5	Clamp	110	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	281	0 - 4095	
	23	(USB) V Back Porch	39	0 - 4095	
	25	(USB)Clamp	110	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 526</b>	<b>YCbCr (1080i - 60)</b>				
	0	Total Dots	2200	0 - 4095	* Read only
	1	Disp Dots	1874	0 - 4095	
	2	H Back Porch	257	0 - 4095	
	3	V Back Porch	50	0 - 4095	

## Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
	4	Disp Line	1052	0 - 4095	
	5	Clamp	137	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	222	0 - 4095	
	23	(USB) V Back Porch	85	0 - 4095	
	25	(USB)Clamp	80	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 527</b>	<b>YCbCr (1080i - 50)</b>				
	0	Total Dots	2640	0 - 4095	* Read only
	1	Disp Dots	1872	0 - 4095	
	2	H Back Porch	258	0 - 4095	
	3	V Back Porch	49	0 - 4095	
	4	Disp Line	1052	0 - 4095	
	5	Clamp	137	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	222	0 - 4095	
	23	(USB) V Back Porch	83	0 - 4095	
	25	(USB)Clamp	80	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 528</b>	<b>YCbCr (1035i)</b>				
	0	Total Dots	2200	0 - 4095	* Read only
	1	Disp Dots	1872	0 - 4095	
	2	H Back Porch	258	0 - 4095	
	3	V Back Porch	87	0 - 4095	
	4	Disp Line	1010	0 - 4095	
	5	Clamp	141	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	222	0 - 4095	
	23	(USB) V Back Porch	124	0 - 4095	
	25	(USB)Clamp	80	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 540</b>	<b>RGB Video (480i)</b>				
	0	Total Dots	1716	0 - 4095	
	1	Disp Dots	1346	0 - 4095	
	2	H Back Porch	174	0 - 4095	
	3	V Back Porch	48	0 - 4095	
	4	Disp Line	460	0 - 4095	
	5	Clamp	1	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB) H Back Porch	292	0 - 4095	
	23	(USB) V Back Porch	45	0 - 4095	
	25	(USB)Clamp	32	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 541</b>	<b>RGB Video (575i)</b>				
	0	Total Dots	1728	0 - 4095	
	1	Disp Dots	1318	0 - 4095	
	2	H Back Porch	208	0 - 4095	
	3	V Back Porch	64	0 - 4095	
	4	Disp Line	536	0 - 4095	
	5	Clamp	1	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	328	0 - 4095	
	23	(USB)V Back Porch	62	0 - 4095	
	25	(USB) Clamp	32	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 542</b>	<b>RGB Video (480P)</b>				
	0	Total Dots	1716	0 - 4095	
	1	Disp Dots	1368	0 - 4095	
	2	H Back Porch	152	0 - 4095	
	3	V Back Porch	34	0 - 4095	
	4	Disp Line	479	0 - 4095	

## Electrical Adjustments

Group/Item	Item Name	Function	Initial	Range	Note
	5	Clamp	1	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	276	0 - 4095	
	23	(USB)V Back Porch	38	0 - 4095	
	25	(USB) Clamp	32	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 543</b>	<b>RGB Video (575P)</b>				
	0	Total Dots	1728	0 - 4095	
	1	Disp Dots	1360	0 - 4095	
	2	H Back Porch	185	0 - 4095	
	3	V Back Porch	56	0 - 4095	
	4	Disp Line	540	0 - 4095	
	5	Clamp	1	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	300	0 - 4095	
	23	(USB)V Back Porch	60	0 - 4095	
	25	(USB) Clamp	32	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 544</b>	<b>RGB Video (720P - 60 )</b>				
	0	Total Dots	1650	0 - 4095	
	1	Disp Dots	1248	0 - 4095	
	2	H Back Porch	241	0 - 4095	
	3	V Back Porch	30	0 - 4095	
	4	Disp Line	702	0 - 4095	
	5	Clamp	110	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	273	0 - 4095	
	23	(USB)V Back Porch	35	0 - 4095	
	25	(USB) Clamp	110	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 545</b>	<b>RGB Video (720P - 50 )</b>				
	0	Total Dots	1980	0 - 4095	
	1	Disp Dots	1216	0 - 4095	
	2	H Back Porch	273	0 - 4095	
	3	V Back Porch	30	0 - 4095	
	4	Disp Line	702	0 - 4095	
	5	Clamp	110	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	286	0 - 4095	
	23	(USB)V Back Porch	35	0 - 4095	
	25	(USB) Clamp	80	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 546</b>	<b>RGB Video (1080i - 60)</b>				
	0	Total Dots	2200	0 - 4095	
	1	Disp Dots	1872	0 - 4095	
	2	H Back Porch	221	0 - 4095	
	3	V Back Porch	46	0 - 4095	
	4	Disp Line	1052	0 - 4095	
	5	Clamp	80	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	257	0 - 4095	
	23	(USB)V Back Porch	53	0 - 4095	
	25	(USB) Clamp	80	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 547</b>	<b>RGB Video (1080i - 50)</b>				
	0	Total Dots	2640	0 - 4095	
	1	Disp Dots	1872	0 - 4095	
	2	H Back Porch	221	0 - 4095	
	3	V Back Porch	46	0 - 4095	
	4	Disp Line	1052	0 - 4095	
	5	Clamp	80	0 - 255	

## Electrical Adjustments

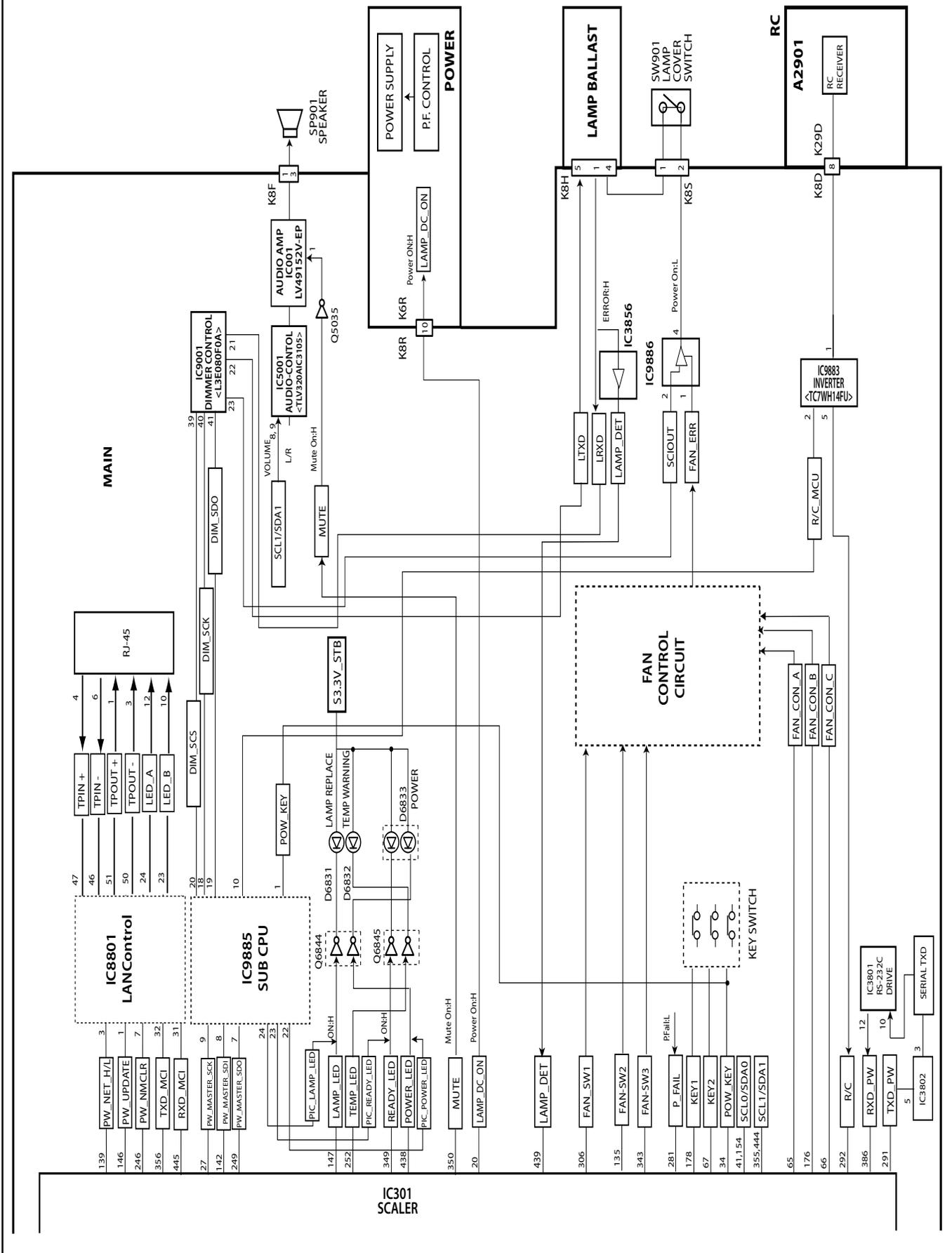
Group/Item	Item Name	Function	Initial	Range	Note
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	258	0 - 4095	
	23	(USB)V Back Porch	54	0 - 4095	
	25	(USB) Clamp	80	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 548</b>	<b>RGB Video (1035i)</b>				
	0	Total Dots	2200	0 - 4095	
	1	Disp Dots	1872	0 - 4095	
	2	H Back Porch	177	0 - 4095	
	3	V Back Porch	81	0 - 4095	
	4	Disp Line	1012	0 - 4095	
	5	Clamp	80	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	213	0 - 4095	
	23	(USB)V Back Porch	90	0 - 4095	
	25	(USB) Clamp	80	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 551</b>	<b>RGB Video (1080p-30)</b>				
	0	Total Dots	2200	0 - 4095	
	1	Disp Dots	1874	0 - 4095	
	2	H Back Porch	250	0 - 4095	
	3	V Back Porch	55	0 - 4095	
	4	Disp Line	1051	0 - 4095	
	5	Clamp	80	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	250	0 - 4095	
	23	(USB)V Back Porch	55	0 - 4095	
	25	(USB) Clamp	32	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 552</b>	<b>RGB Video (1080p-25)</b>				
	0	Total Dots	2640	0 - 4095	
	1	Disp Dots	1874	0 - 4095	
	2	H Back Porch	250	0 - 4095	
	3	V Back Porch	56	0 - 4095	
	4	Disp Line	1051	0 - 4095	
	5	Clamp	80	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	250	0 - 4095	
	23	(USB)V Back Porch	56	0 - 4095	
	25	(USB) Clamp	32	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 553</b>	<b>RGB Video (1080p-24)</b>				
	0	Total Dots	2750	0 - 4095	
	1	Disp Dots	1874	0 - 4095	
	2	H Back Porch	250	0 - 4095	
	3	V Back Porch	56	0 - 4095	
	4	Disp Line	1051	0 - 4095	
	5	Clamp	80	0 - 255	
	6	Clamp Width	31	0 - 255	
	22	(USB)H Back Porch	250	0 - 4095	
	23	(USB)V Back Porch	56	0 - 4095	
	25	(USB) Clamp	32	0 - 4095	
	26	(USB)Clamp Width	31	0 - 4095	
<b>Group 555</b>	<b>RGB Video (1080SF-30)</b>				
	0	Total Dots	2200	0 - 4095	
	1	Disp Dots	1875	0 - 4095	
	2	H Back Porch	249	0 - 4095	
	3	V Back Porch	90	0 - 4095	
	4	Disp Line	1013	0 - 4095	
	5	Clamp	80	0 - 255	
	6	Clamp Width	31	0 - 255	

## Electrical Adjustments

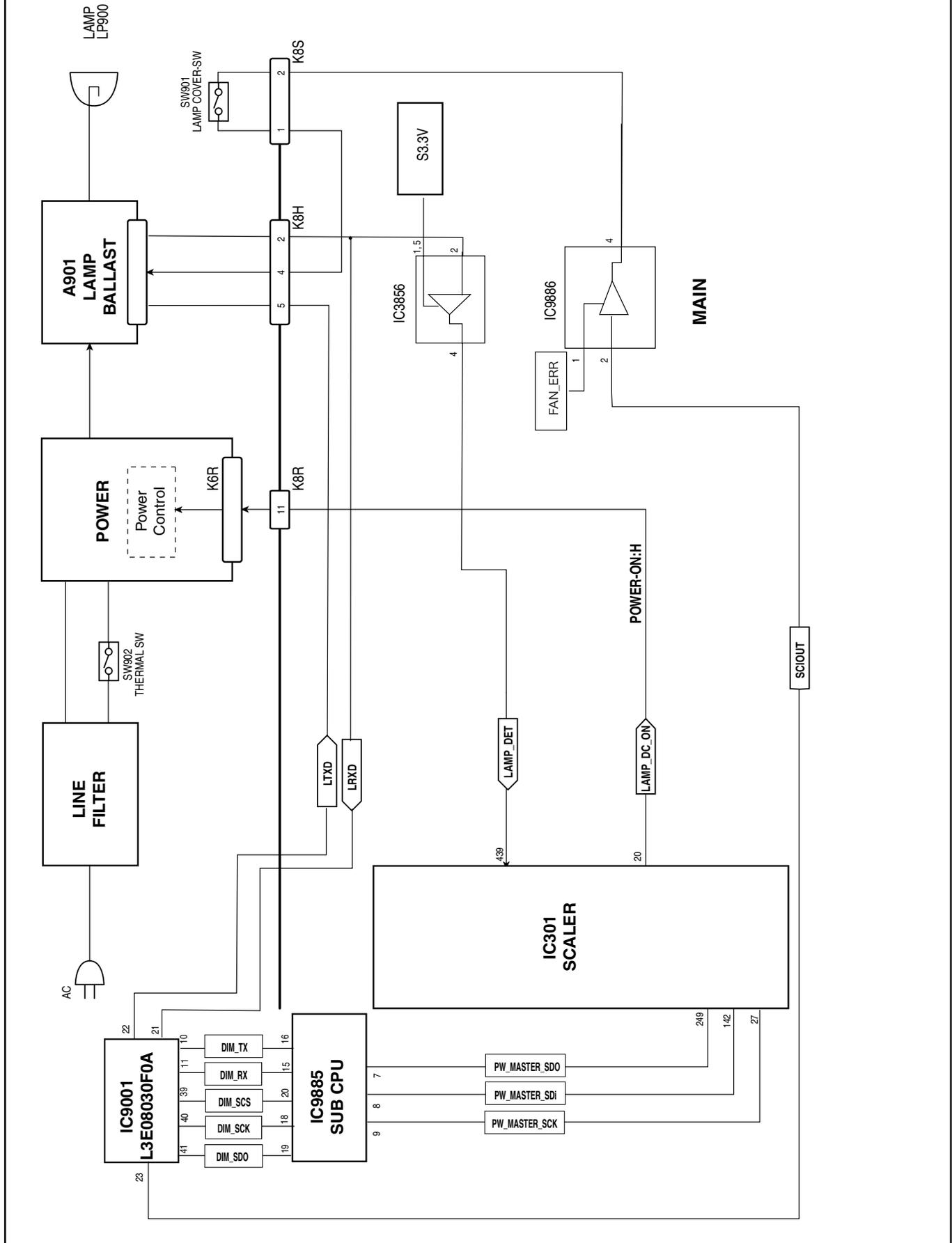
Group/Item	Item Name	Function	Initial	Range	Note
	22 (USB)H Back Porch		249	0 - 4095	
	23 (USB)V Back Porch		90	0 - 4095	
	25 (USB) Clamp		80	0 - 4095	
	26 (USB)Clamp Width		31	0 - 4095	
<b>Group 556</b>	<b>RGB Video (1080SF-25)</b>				
	0 Total Dots		2640	0 - 4095	
	1 Disp Dots		1875	0 - 4095	
	2 H Back Porch		249	0 - 4095	
	3 V Back Porch		90	0 - 4095	
	4 Disp Line		1013	0 - 4095	
	5 Clamp		80	0 - 255	
	6 Clamp Width		31	0 - 255	
	22 (USB)H Back Porch		249	0 - 4095	
	23 (USB)V Back Porch		90	0 - 4095	
	25 (USB) Clamp		80	0 - 4095	
	26 (USB)Clamp Width		31	0 - 4095	
<b>Group 557</b>	<b>RGB Video (1080PSF-24)</b>				
	0 Total Dots		2750	0 - 4095	
	1 Disp Dots		1888	0 - 4095	
	2 H Back Porch		145	0 - 4095	
	3 V Back Porch		47	0 - 4095	
	4 Disp Line		1063	0 - 4095	
	5 Clamp		80	0 - 255	
	6 Clamp Width		31	0 - 255	
	22 (USB)H Back Porch		181	0 - 4095	
	23 (USB)V Back Porch		51	0 - 4095	
	25 (USB) Clamp		80	0 - 4095	
	26 (USB)Clamp Width		31	0 - 4095	



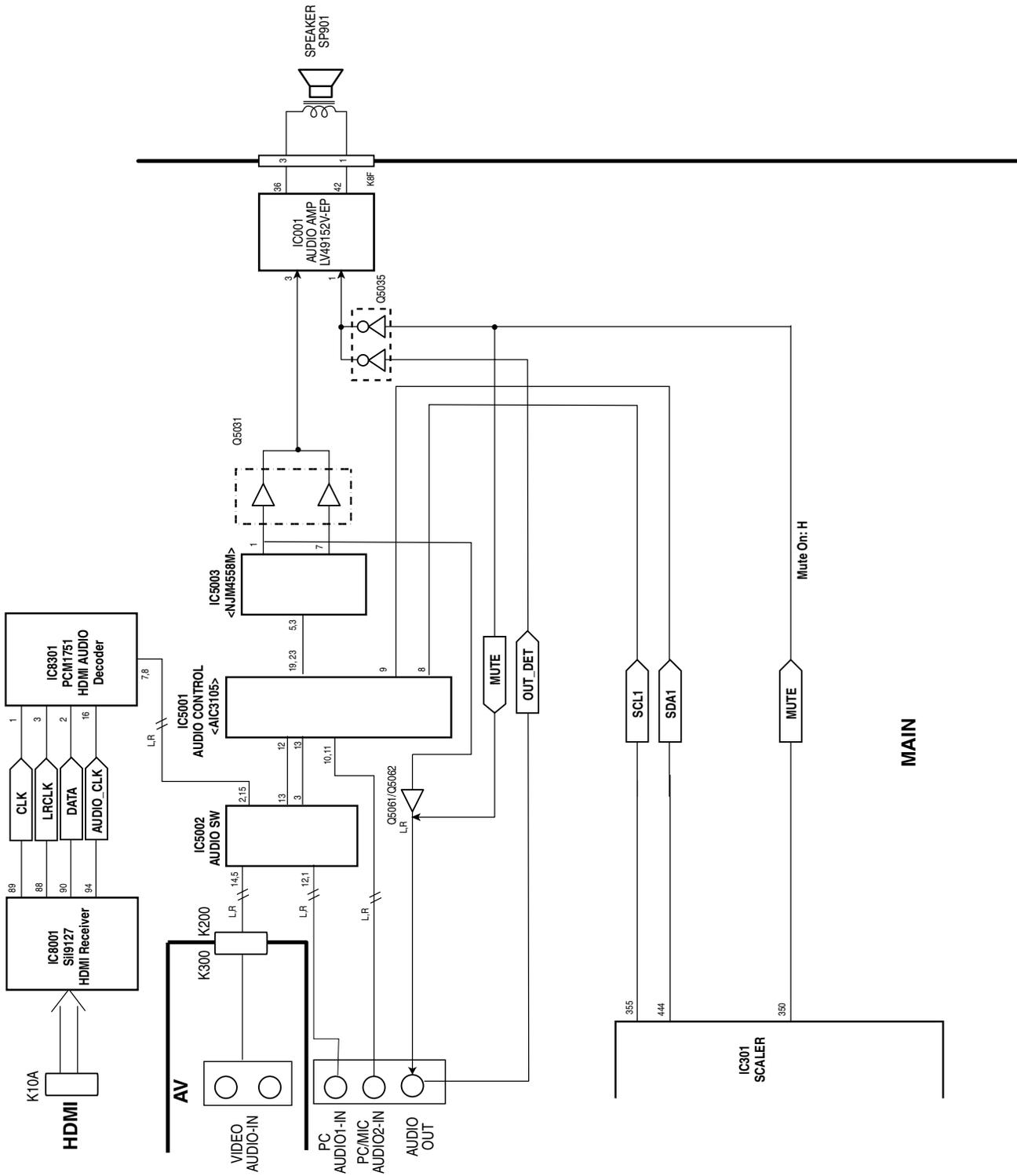
# System control



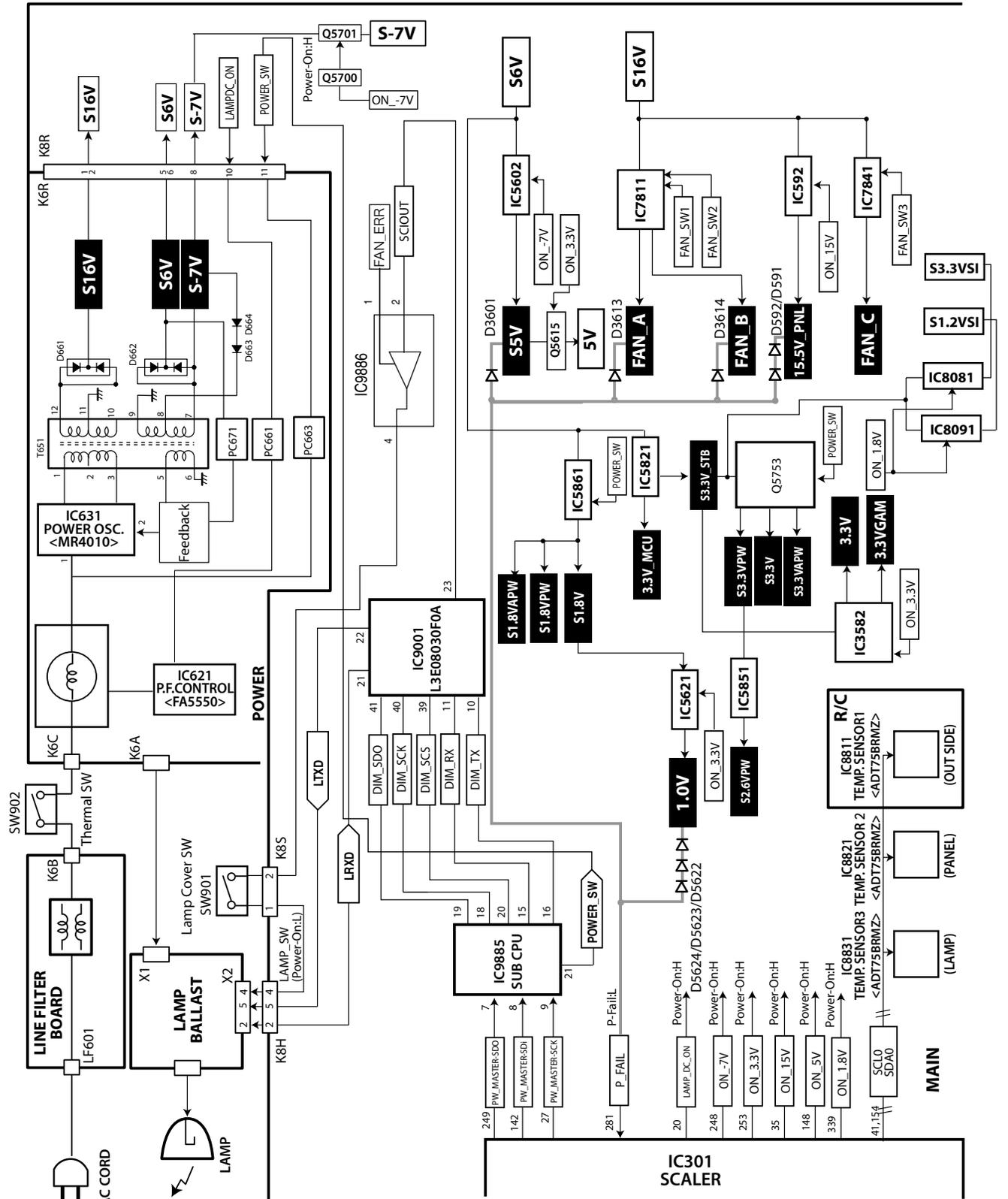
# Lamp control



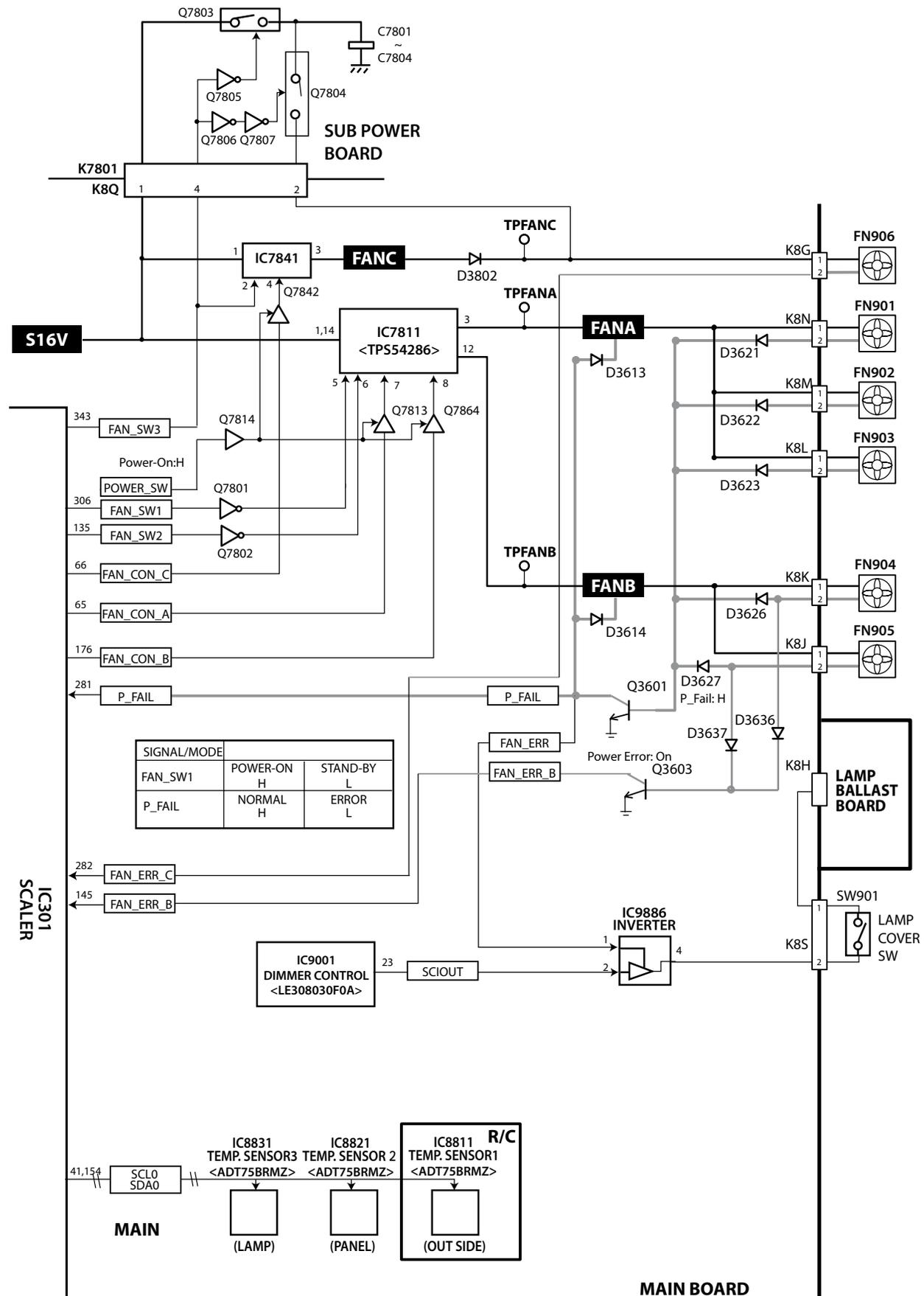
# Audio circuit



# Power supply & protection circuit



# Fan control circuit



# Troubleshooting

## Indicators and Projector Condition

Check the indicators for projector condition.

Indicators			Projector Condition
POWER red/green	WARNING red	LAMP REPLACE yellow	
			The projector is off. (The AC power cord is unplugged.)
			The projector is in stand-by mode. Press the ON/STAND-BY button to turn on the projector.
			The projector is operating normally.
			The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed and the POWER indicator stops blinking.
			The projector is in the Power management mode.
			The temperature inside the projector is abnormally high. The projector cannot be turned on. When the projector is cooled down enough and the temperature returns to normal, the POWER indicator stops blinking and the projector can be turned on. (The WARNING indicator keeps blinking.)
			The projector has been cooled down enough and the temperature returns to normal. When turning on the projector, the WARNING indicator stops blinking.
			The projector detects an abnormal condition and cannot be turned on. Unplug the AC power cord and plug it again to turn on the projector. If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center for service and checkup. Do not leave the projector on. It may cause an electric shock or a fire hazard.

 ••• green.

 ••• red

 ••• off

 ••• blinks green.

 ••• blinks red.

\* When the projection lamp reaches its end of life, the LAMP REPLACE indicator lights yellow. When this indicator lights yellow, replace the projection lamp with a new one promptly.

### No Power

This projector provides a function which can be specified a defective area simply by indicating the LEDs. Connect the AC cord and press the ON/STAND-BY button once and then check the LED indication.

- **When all of LED indicators are not lighting**, the symptom indicates that the primary power supply circuit does not operate properly. Check the primary power circuit and parts as follow;

AC cord, F601 (Fuse), Power board,

SW902 (Thermal sw) short in normal

SW902 opens when the surrounding temperature of the switch exceeds 115°C.

- **When the WARNING (red) and POWER (red) indicators are flashing**, the symptom indicates that the projector detected an abnormal temperature risen inside the projector. Check the air filters and remove the object near the intake and exhaust fan openings, and wait until the POWER indicator stops flashing, and then try to turn on the projector.

The internal temperature is monitored by sensor ICs, IC8831, IC8821 on the Main board and IC8811 on the R/C board.

- **When the WARNING indicator lights red**, the symptom indicates that the projector detected an abnormality in the cooling fan operation or in the power supply secondary circuits. Check fan operation and power supply lines, and the driving signal status.

The P\_FAIL signal (Error: L), FAN\_ERR\_B signal (Error: L), FAN\_ERR\_C (Error: H) are sent to pins, 281, 145, and 282 of IC301 <SYSTEM CONTROL> respectively when the abnormality occurred inside the projector, and then the IC301 sends the shutdown signal, LAMP\_DC\_ON, to the power supply circuit to stop its operation, and signal SCIOUT to the lamp ballast board via IC9886 and SW901<lamp cover switch> to stop operation of the lamp circuit.

An abnormality occurs on the secondary power supply;

Check power supplies S16V, S6V, S-7V. P\_FAIL signal becomes Low when the abnormality occurs on any of the power supply lines.

An abnormality occurs on the fan control circuit;

If fans FN901, FN902 or FN903 has an error, the FAN\_ERR and P\_FAIL signals become "L". If fans FN904 or FN905 has an error, the FAN\_ERR, P\_FAIL and FAN\_ERR\_B signals become "L". If fan FN906 has an error, the FAN\_ERR\_C signal becomes "H", The FAN\_ERR signal cut off the SCIOUT signal which is supplied to the lamp ballast board if the FAN\_ERR signal is "L".

An abnormality occurs on the drive signals;

ON\_15V signal (Power-on: H) is output from pin 35 of IC301 and switches IC592, 15.5VL supply circuit, ON\_3.3V signal (Power-on: H) is output from pin 253 of IC301 and switches IC5621 - 1.0V, IC3852 - 3.3V supply circuits.

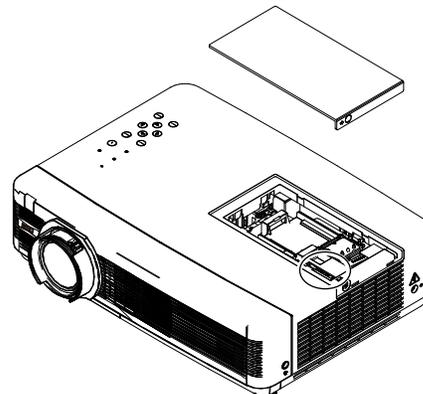
LAMP\_DC\_ON signal (Power-on: H) is output from pin 20 of IC301 and supplied to the PFC Control IC, IC621, on the power supply board.

SCIOUT signal (Power-on: H) is output from pin 23 of IC9001 and applied to pin 2 of IC9886 and output pin 4 and then supplied to the lamp ballast board through SW901<Lamp Cover SW>.

LAMP\_DET signal at the pin 439 of IC301 is applied from the lamp ballast unit. If the abnormality occurred on the lamp ballast unit, LAMP\_DET signal becomes "High" and then IC301 shuts down the power supply circuit.

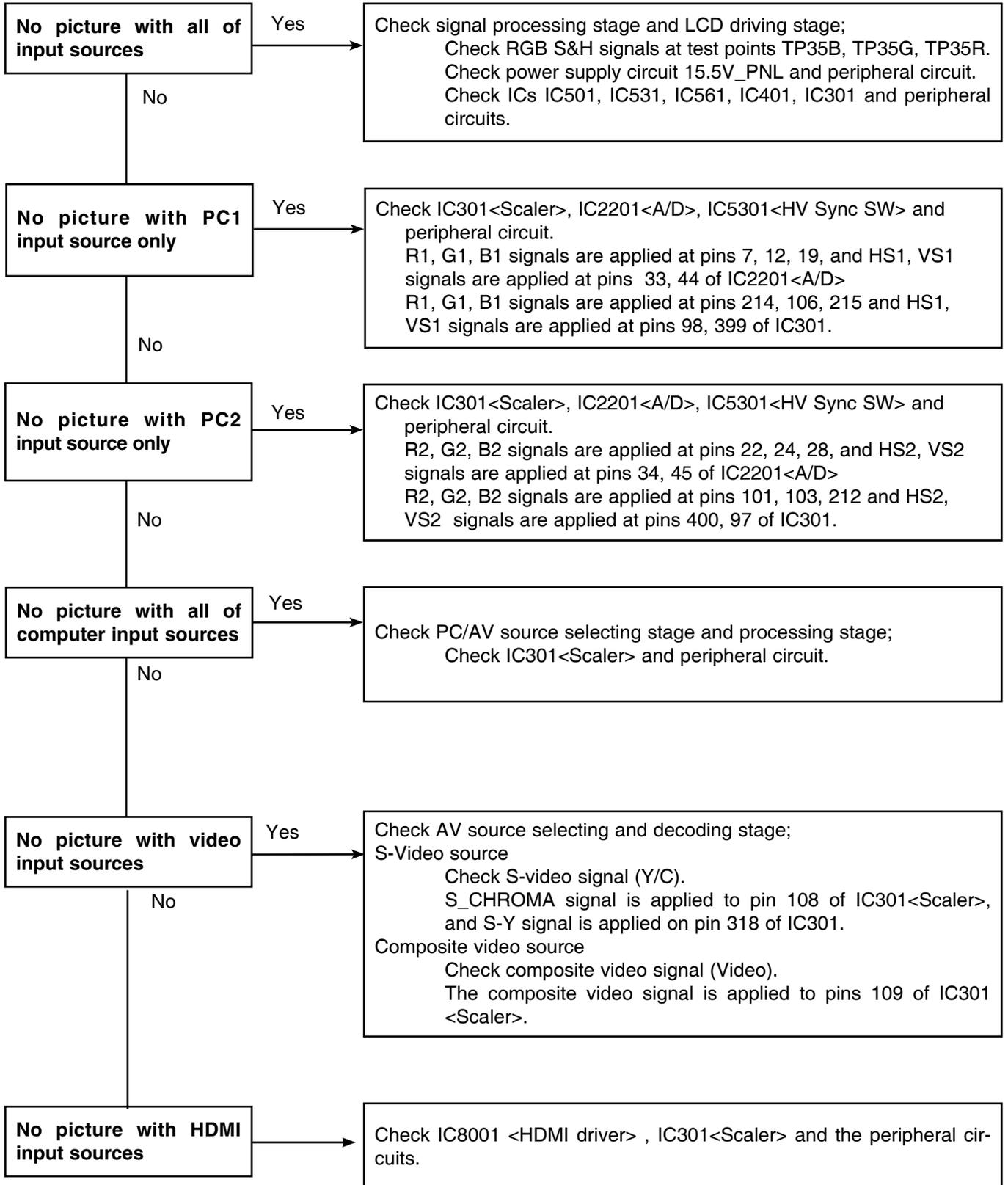
#### Lamp Cover switch

Make sure that the lamp cover is mounted correctly. If not or the lamp cover removed, the lamp does not light on for the safety. Check the lamp cover and lamp cover switch (SW901).



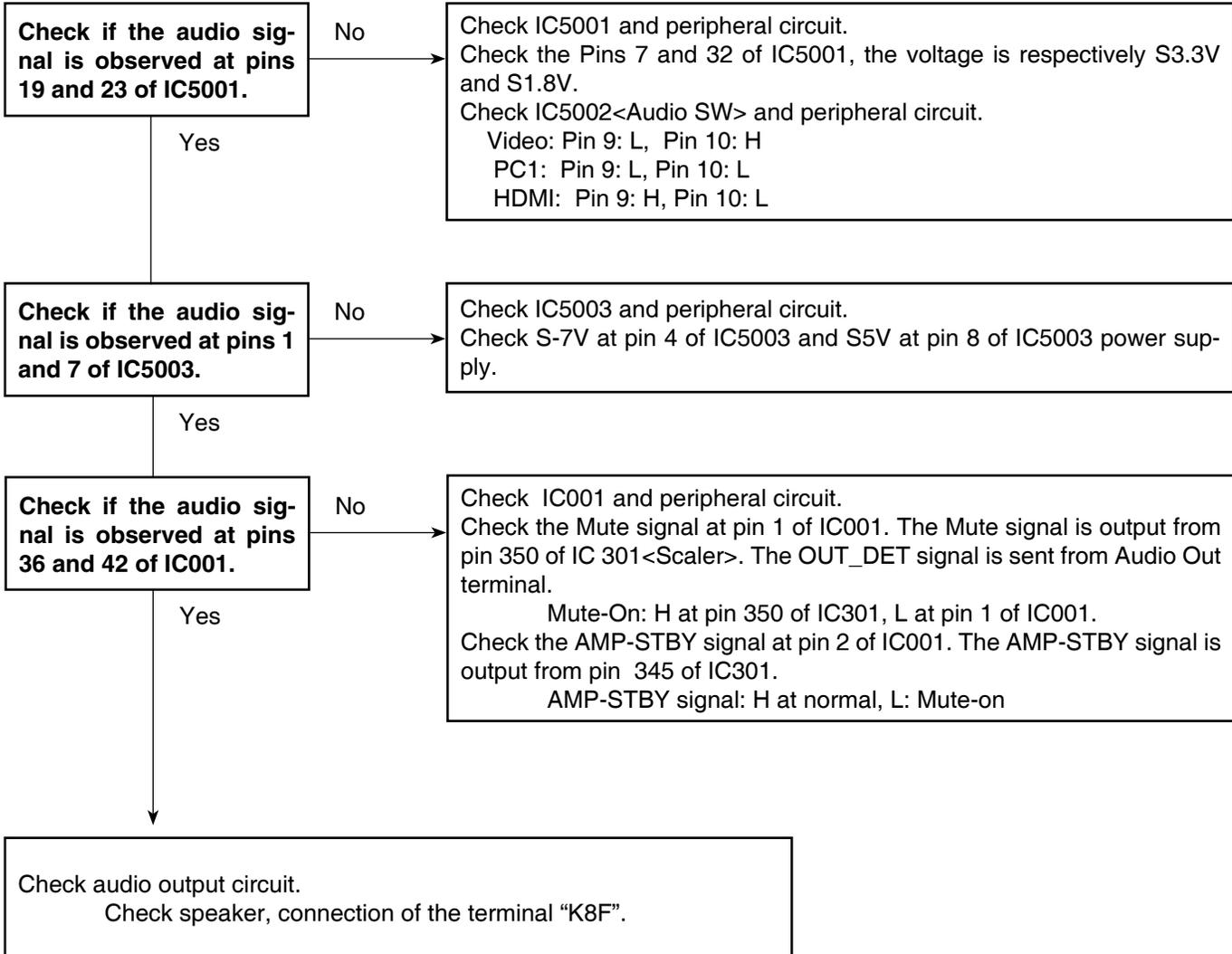
## No Picture

Check following steps.



## No Sound

Check following steps.



# Control Port Functions

## Scaler I/O Port Functions (PW392)

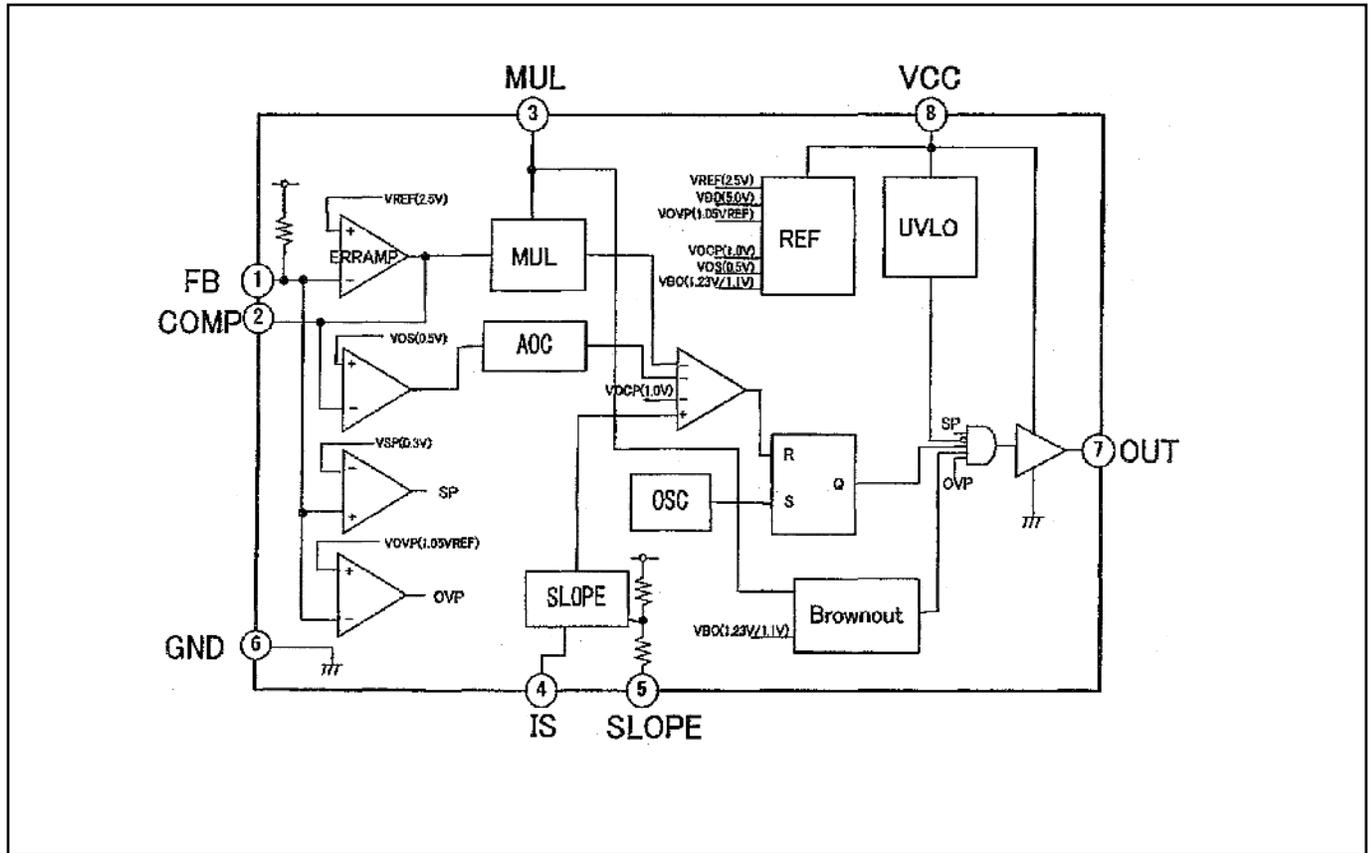
PIN NO.	PORT NO.	PORT NAME	FUNCTION	SIGNAL NAME	DESCRIPTION	I/O
145	C29	PortA6		FAN_ERR_B	FAN B error alarm	I
33	D30	PortA4		SCS_SUB		
146	D29	PortA3		PW_UPDATE	NET UPDATE FLAG	O
34	E30	PortB7		POW_KEY	POW KEY	I
147	E29	PortB6		LAMP_LED	LAMP LED DRIVER ON:H	O
252	E28	PortB5		TEMP_LED	TEMP LED DRIVER ON:H	O
349	E27	PortB4		READY_LED	READY LED DRIVER ON:H	O
438	E26	PortB3		POWER_LED	POWER LED DRIVER ON:H	O
35	F30	PortB2		ON_15V	15V POWER SWITCH ON:H	O
148	F29	PortB1		ON_5V	5V POWER SWITCH ON:H	O
253	F28	PortB0		ON_3.3V	3.3V POWER SWITCH ON:H	O
350	F27	PortC7		MUTE	SOUND MUTE DRIVER	O
389	F26	PortC6		LAMP_DET	LAMP POWER DETECTION	I
36	G30	PortC5		S_SW	S_VIDEO INPUT SWITCH	I
149	G29	PortC4		DDC_SW1	DDC WIRE SWITCH	O
254	G28	PortC3		MONIT_OUT	PC2 OUTPUT SWITCH	O
351	G27	PortC2		SDATA_PW	3 WIRE SERIAL CONTROL DATA	O
440	G26	PortC1		SCS_PW	3 WIRE SERIAL CONTROL SELECT	O
306	AB3	PortD7		FAN_SW1	FAN SWITCH	O
135	B20	PortD6		FAN_SW2	FAN SWITCH	O
20	A20	PortD5		LAMP_DC_ON	LAMP POWER SWITCH ON:H	O
340	D19	PortD4		IRM_RST	RESET RGB COMMON	O
241	C19	PortD3		SIRST	SII9127 RESET	O
134	B19	PortD2		PW_NMCLR	NET RESET	O
19	A19	PortD1		SISCDT		I
339	D18	PortD0		ON_1.8V	1.8V POWER SWITCH ON:H	O
248	C26	PortE7		ON_-7V	S-7V POWER SWITCH ON:H	O
27	A27	PortE6		PW_MASTER_SCK	SUB CPU COMMUNICATION	I
142	B27	PortE5		PW_MASTER_SDI	SUB CPU COMMUNICATION	I
249	C27	PortE3		PW_MASTER_SDO	SUB CPU COMMUNICATION	O
139	B24	PortF7		PW_NET_H/L	NET STATE	O
345	D24	PortF5		AMP_STBY		O
247	C25	PortF2		AUDIO_SEL1		O
346	D25	PortF1		MIC_OFF	MIC Control, MIC On:H	O
437	E25	PortF0		AUDIO_SEL2		O
342	D21	PortG7		RST_DB	DB IC9001 RESET	O
22	A22	PortG6		PW_LAMP_ID_C	LAMP_ID_DATA	I
137	B22	PortG5		PW_LAMP_ID_B	LAMP_ID_DATA	I
244	C22	PortG4		PW_LAMP_ID_A	LAMP_ID_DATA	I
343	D22	PortG3		FAN_SW3	FAN SWITCH	O
138	B23	PortG1		ID_PWR_SW	LAMP_ID_POWER_SWITCH	O
245	C23	PortG0		RESET_MIC		O
154	M29	PortH7		SDA0	IIC Bus Temp Sensor [S3.3V]	O
41	M30	PortH6		SCL0	IIC Bus Control Clock	O
258	L28	PortH5		EEPROM-SDA		I
153	L29	PortH4		EEPROM-SCL		I
444	L26	PortH3		SDA1	IIC Bus Control Data	O
355	L27	PortH2		SCL1	IIC Bus Control Clock	O
291	AH12	PortH1	PW_EX_UART	PW_TXD		O
386	AG12	PortH0		PW_RXD		I
293	AH10	PortI6		PW_CEA_C		O
441	H26	PortI5		PC1_L_OFF		O
356	M27	PortJ7		TXD_MCI		O
445	M26	PortJ6		RXD_MCI		I
40	L30	PortJ0		CEC_D		O
67	AK22	ADC0		KEY2	KEY2	O
178	AJ22	ADC1		KEY1	KEY1	O
281	AH22	ADC2		P_FAIL	POWER PROTECTION	I

## Control Port Functions

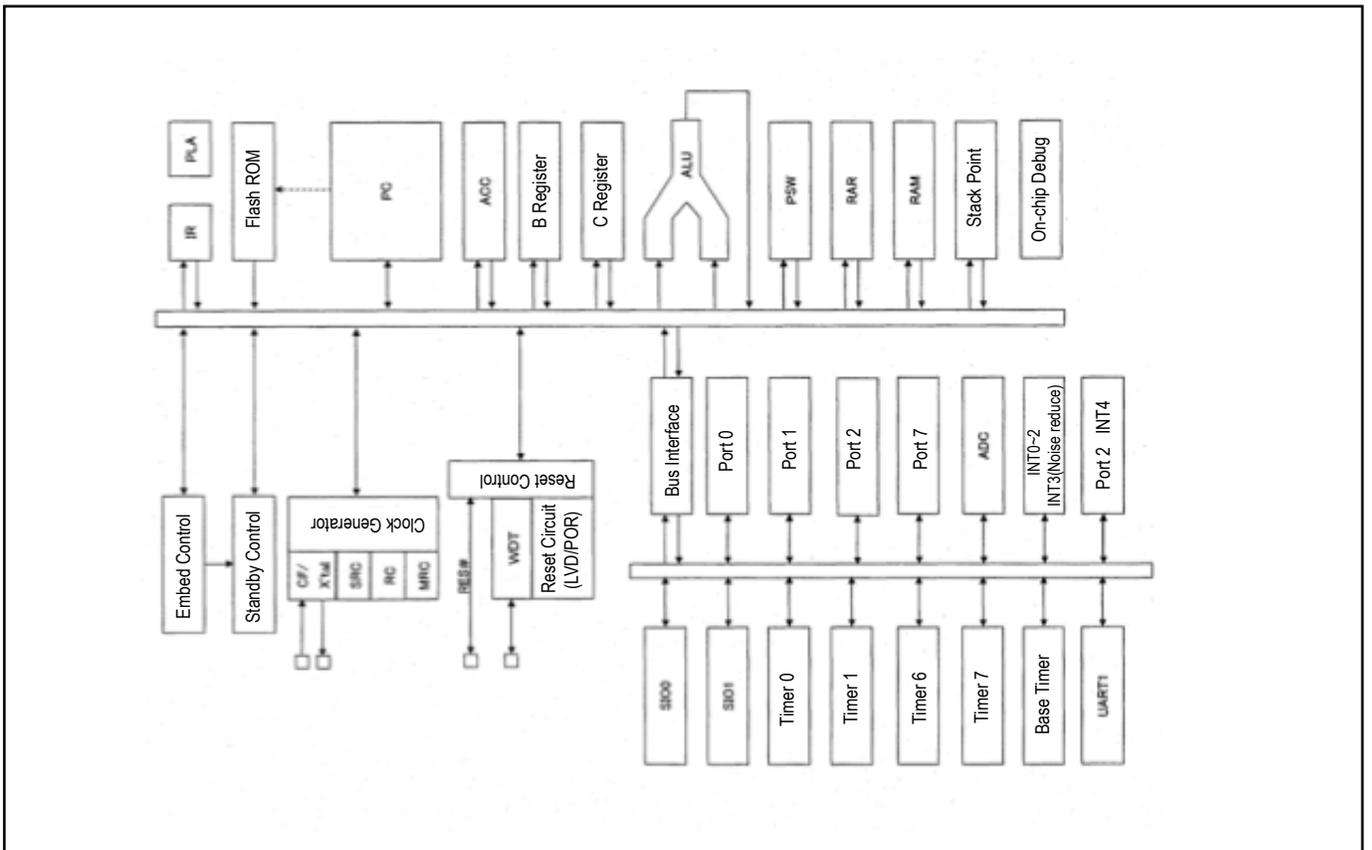
PIN NO.	PORT NO.	PORT NAME	FUNCTION	SIGNAL NAME	DESCRIPTION	I/O
179	AJ21	ADC4		P_FAIL_FAN	FAN POWER PROTECTION	I
282	AH21	ADC5		FAN_ERR_C	FAN C error alarm	I
65	AK24	DAC0		FAN_CON_A	FAN CON_A	O
176	AJ24	DAC1		FAN_CON_B	FAN CON_B	O
66	AK23	DAC2		FAN_CON_C	FAN CON_C	O
475	AF10	EXTINT0		SIINT		I
292	AH11	IRRCVR0		R/C		I
294	AH9	IRRCVR2		SWNMI301		I

# IC Block Diagrams

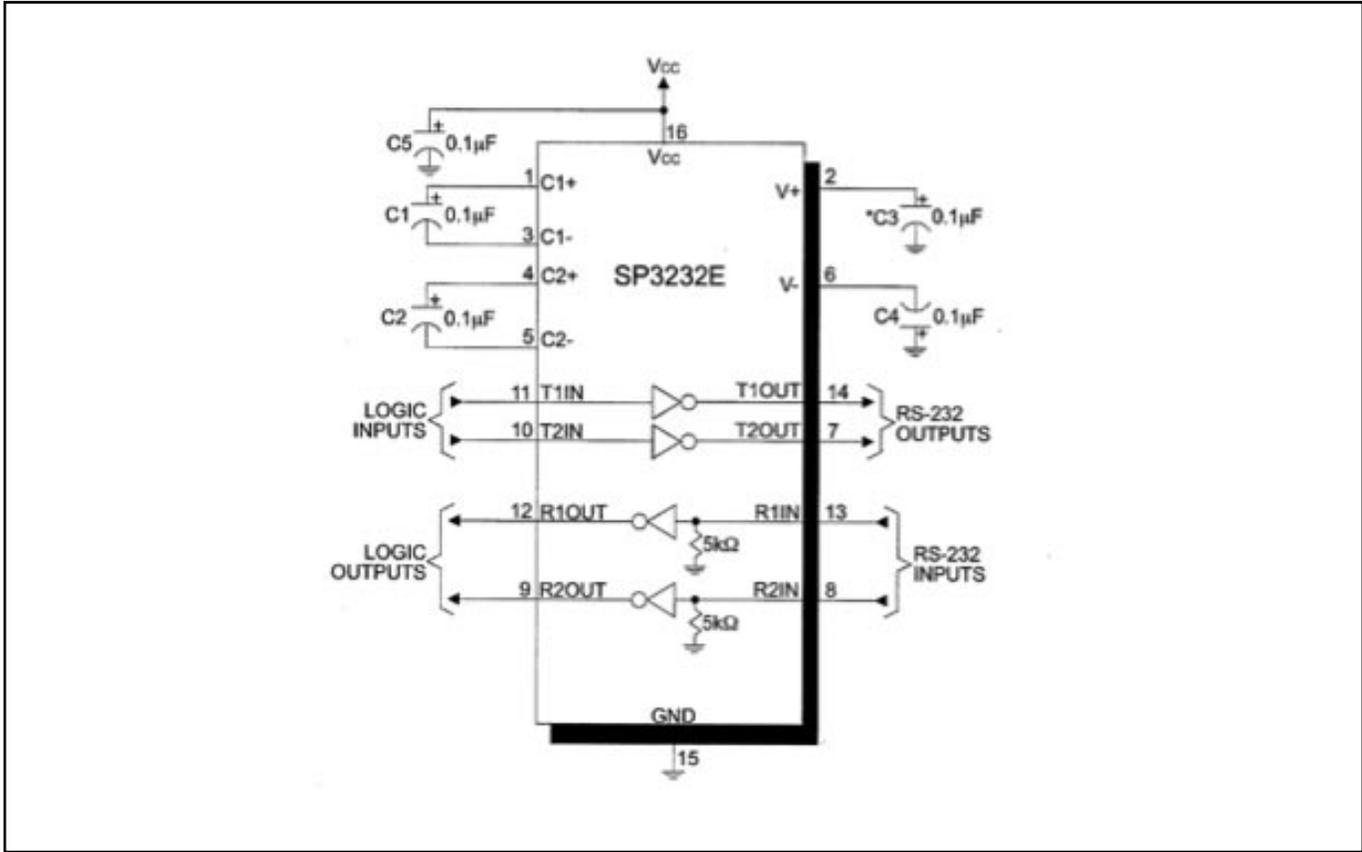
## ● FA550NG <P.F. Control, IC621>



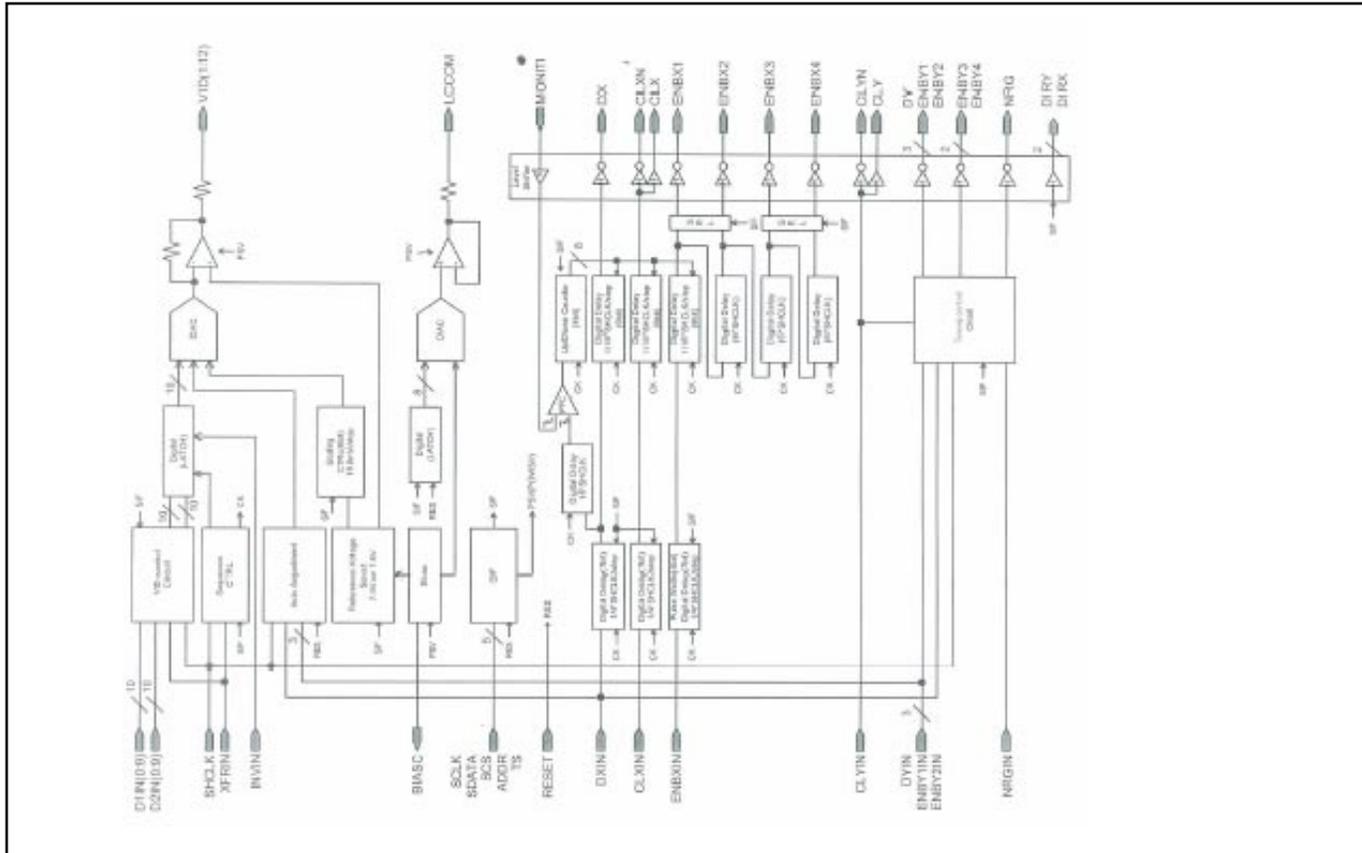
## ● LC87F2G08AUSSOP <SUB CPU, IC9885>



● SP3232EYP <RS-232 Driver, IC3801>

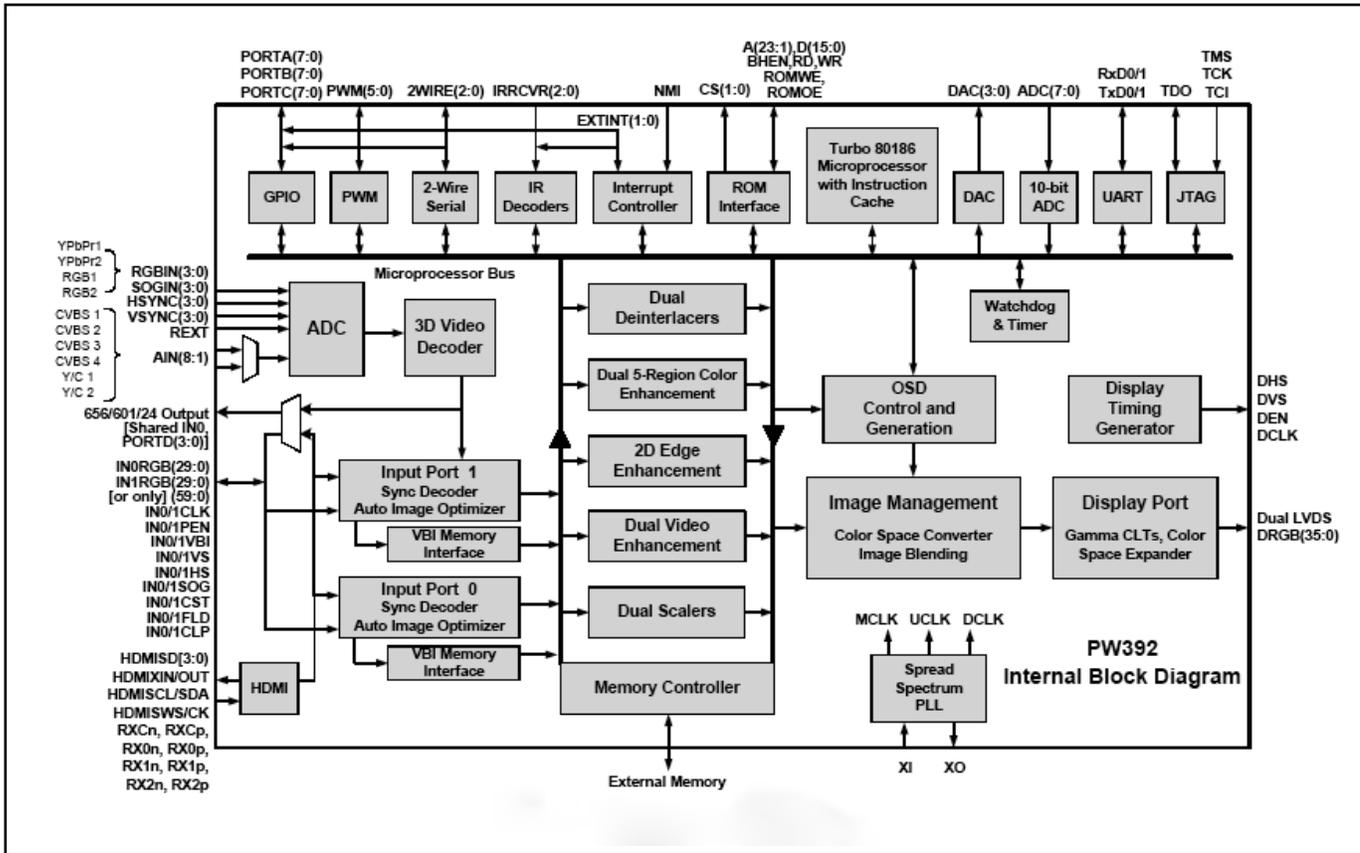


● L3E06200P0A <D/A, S/H-LCD Driver, IC501, IC531, IC561>

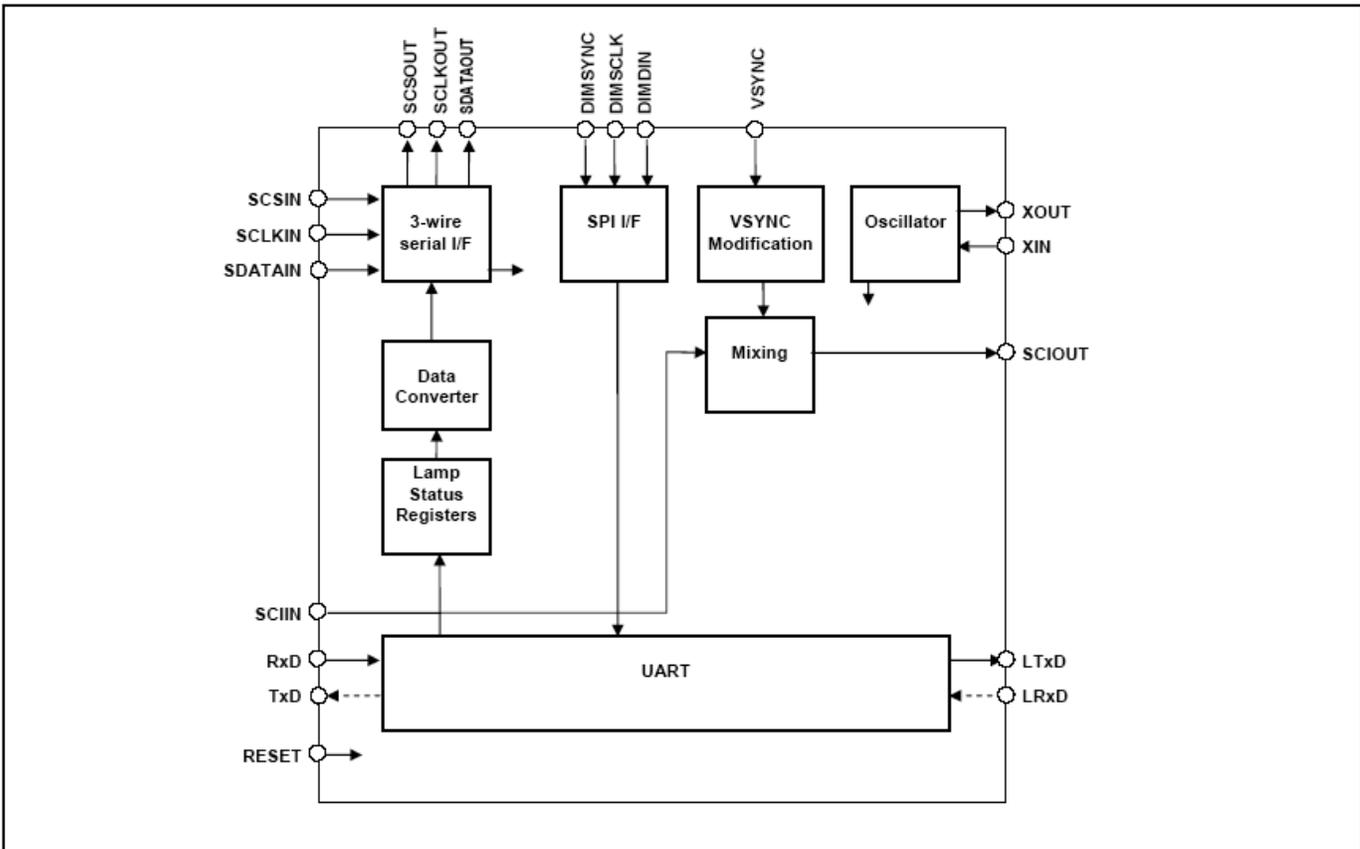




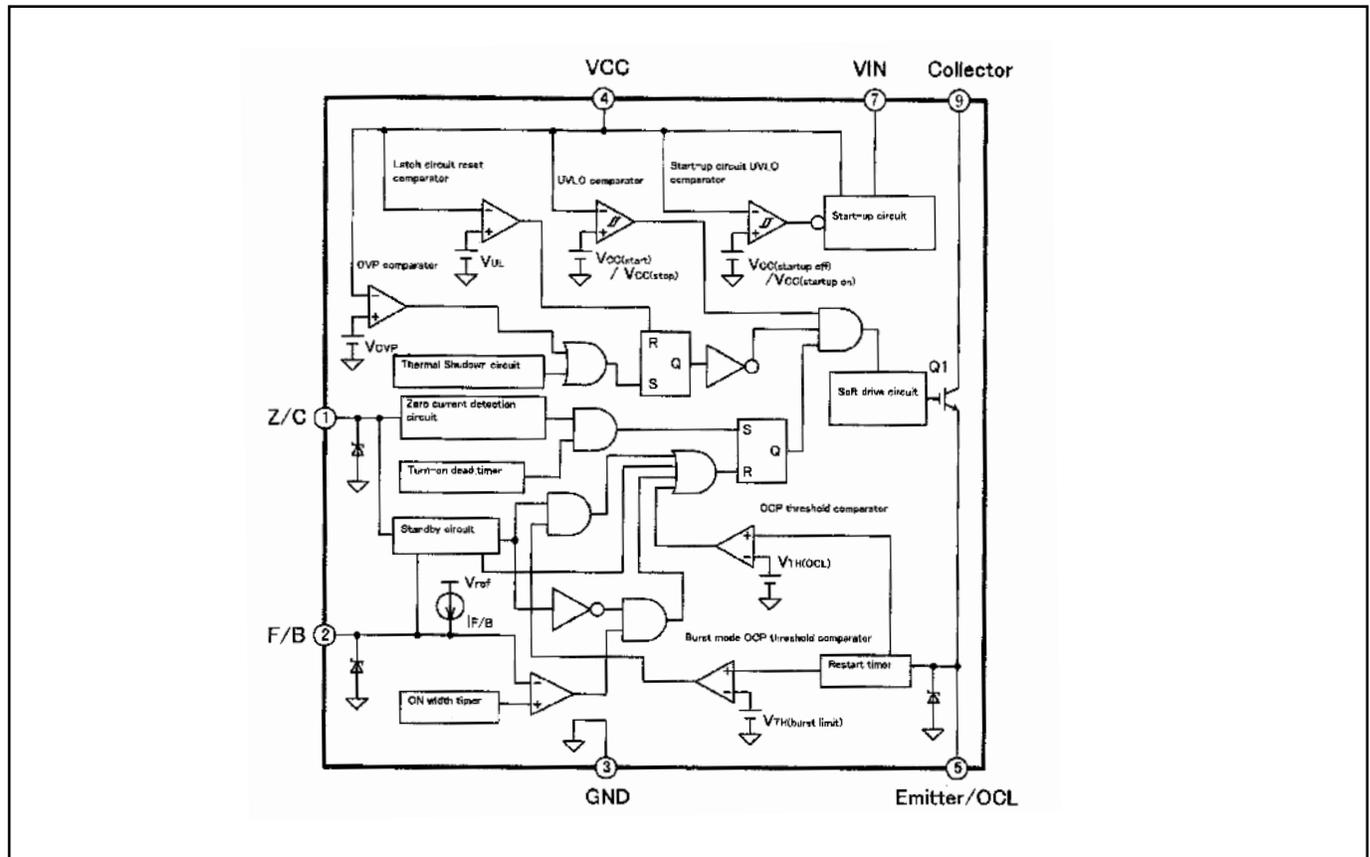
● PW392 <Scaler, IC301>



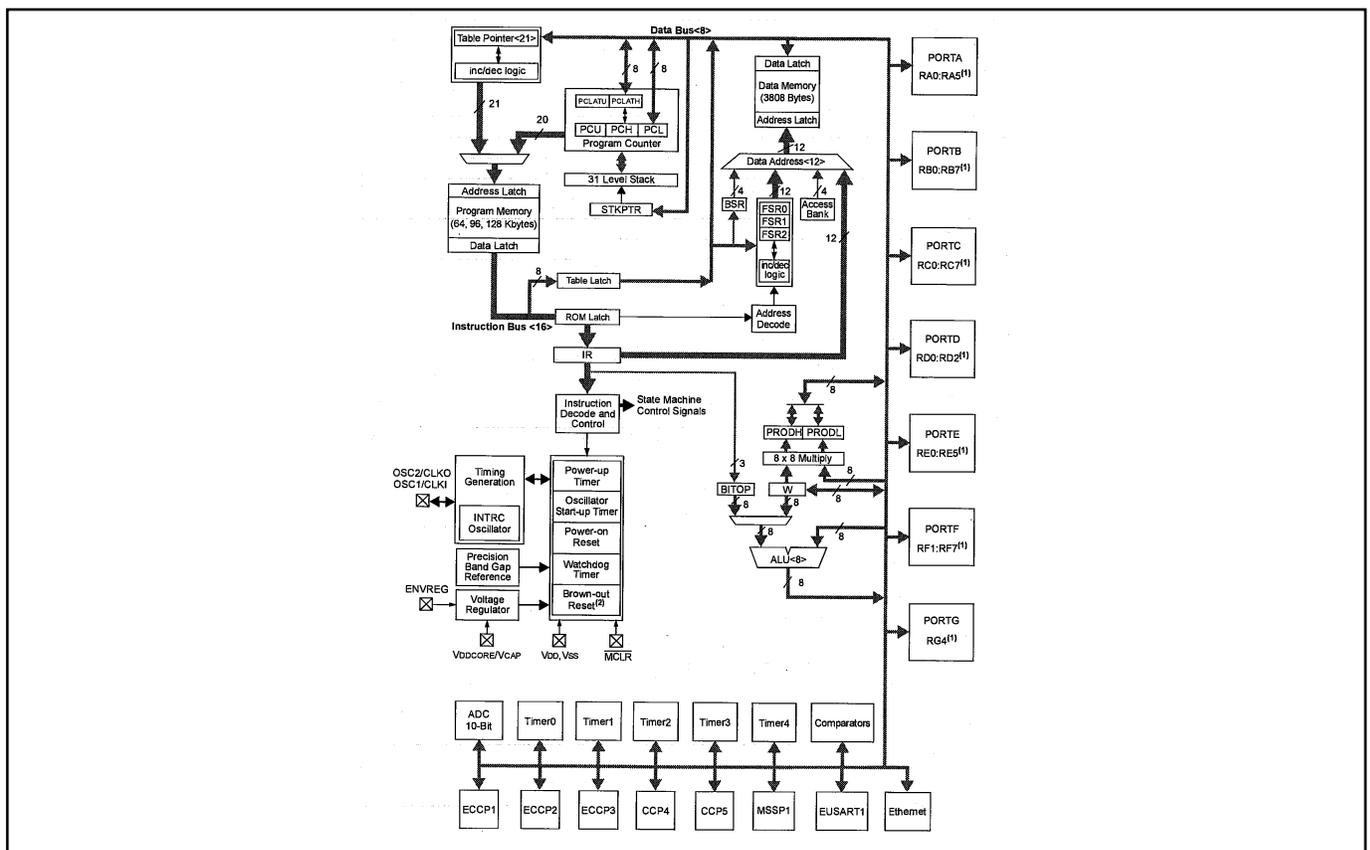
● L3E08030F0A <Dimmer Control, IC9001>



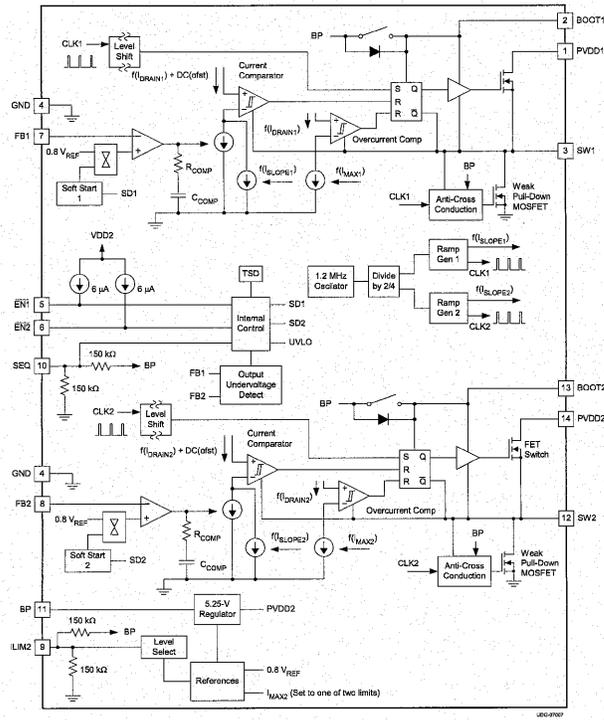
● MR4010 <Power OSC, IC631>



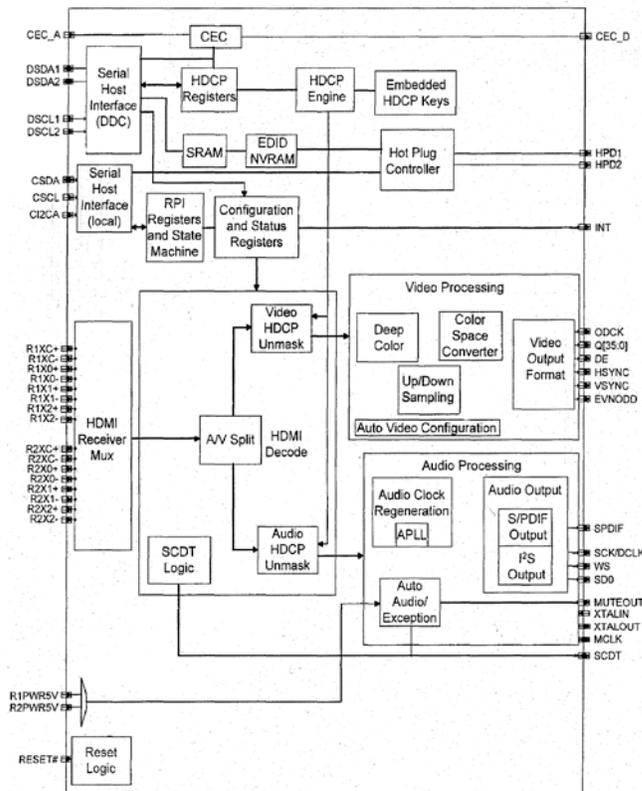
● PIC18F67J60 <LAN CONTROL, IC8801>



● TPS54286 <DC-DC Converter, IC7811>

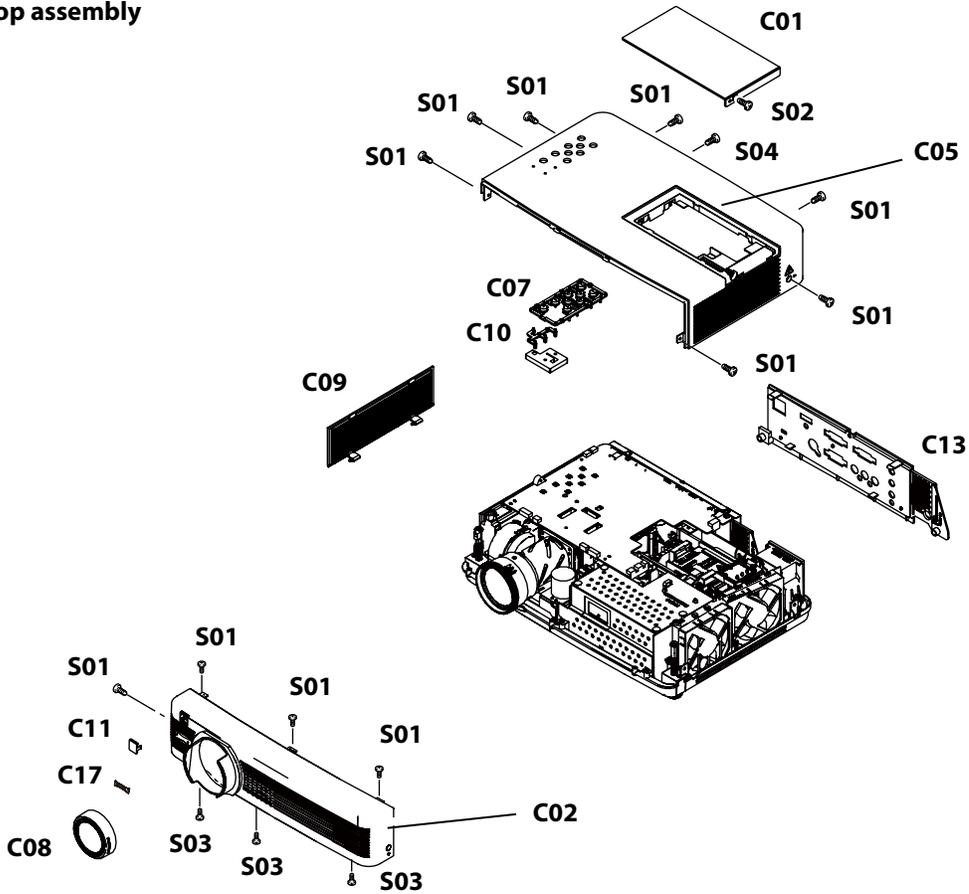


● SIL9127 <HDMI RECEIVER, IC8001>

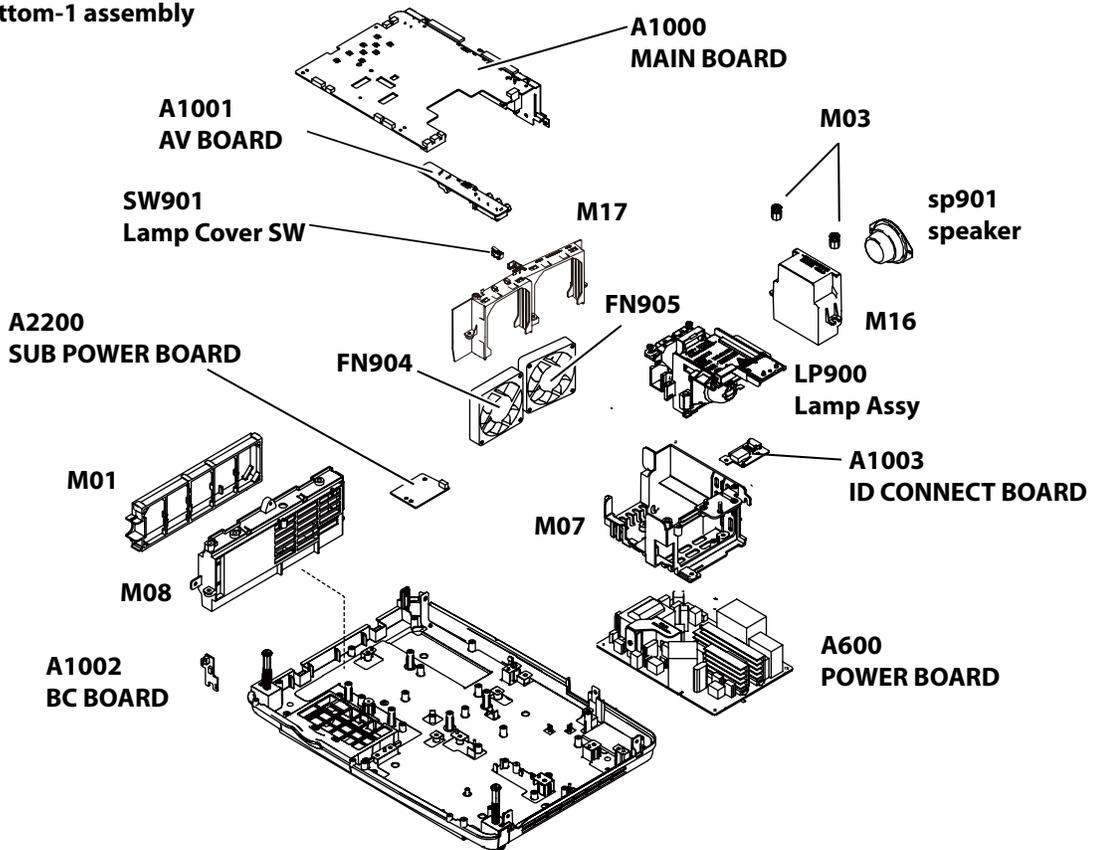


# Parts Location Diagrams

## Cabinet top assembly

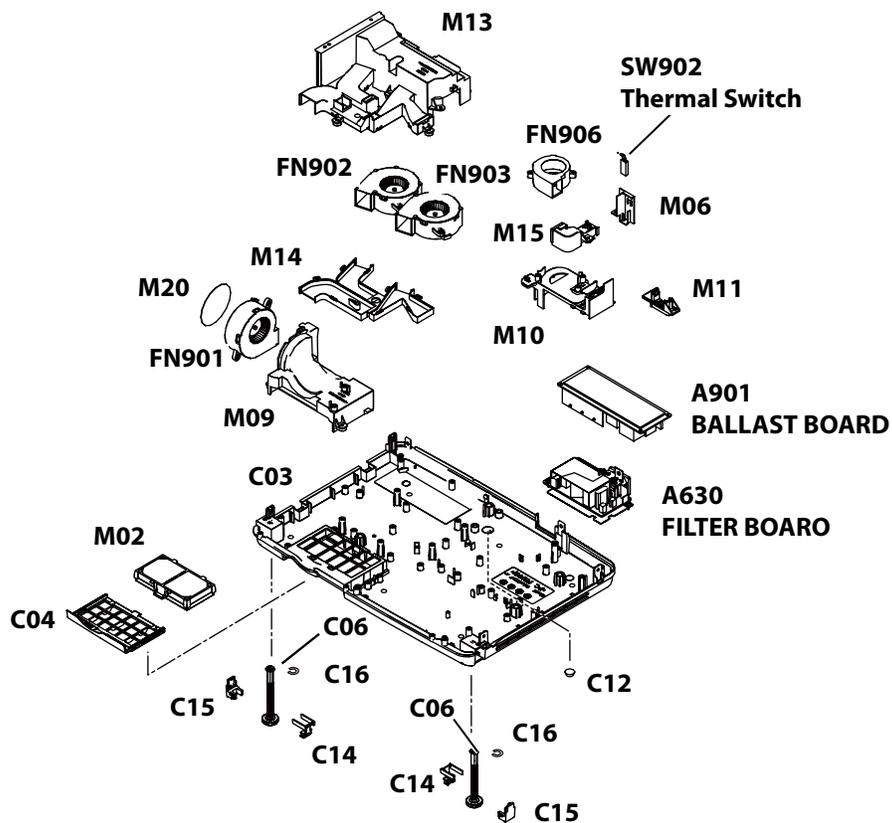


## Cabinet bottom-1 assembly

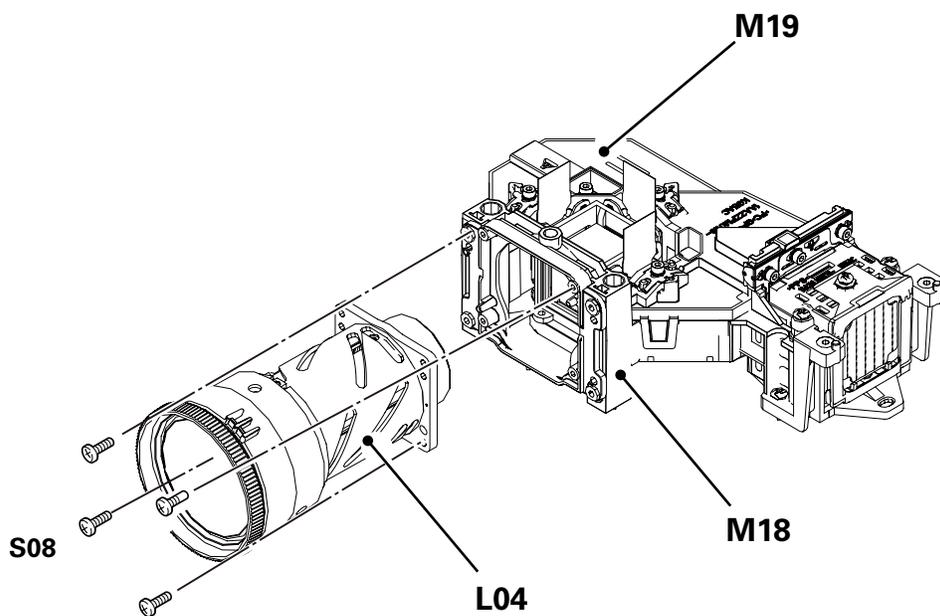


Parts Location Diagrams

Cabinet bottom-2 assembly

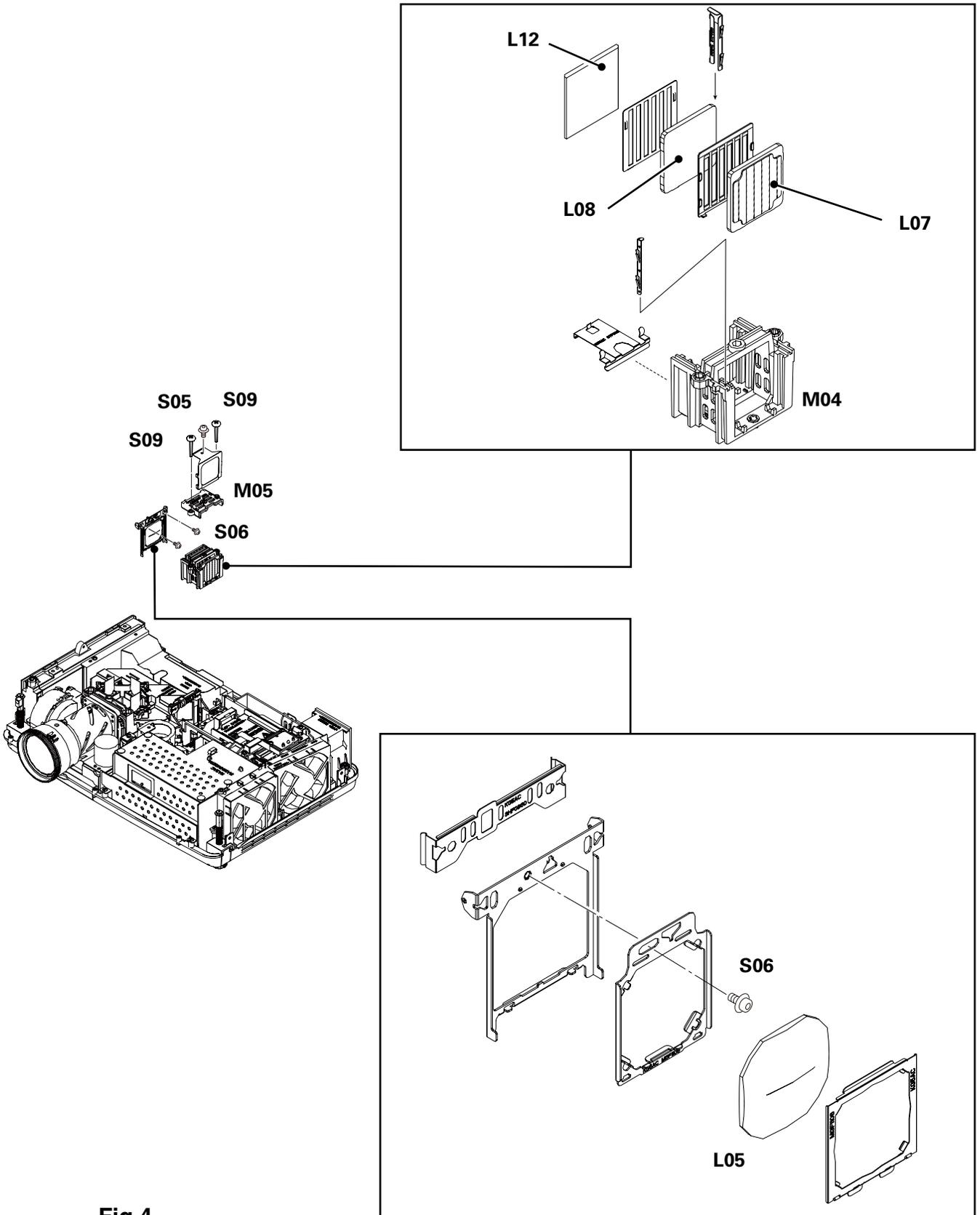


Projection Lens



Parts Location Diagrams

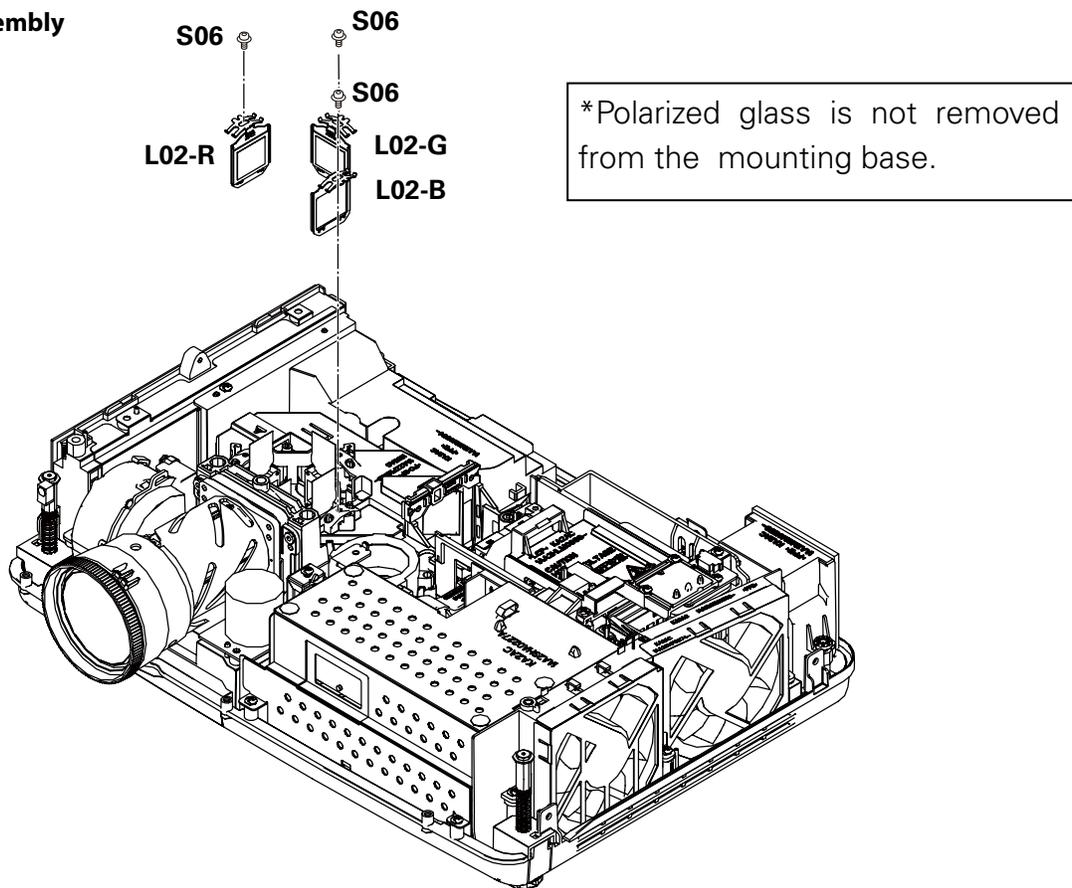
**Integrator lens and Condenser lens(out) assembly**



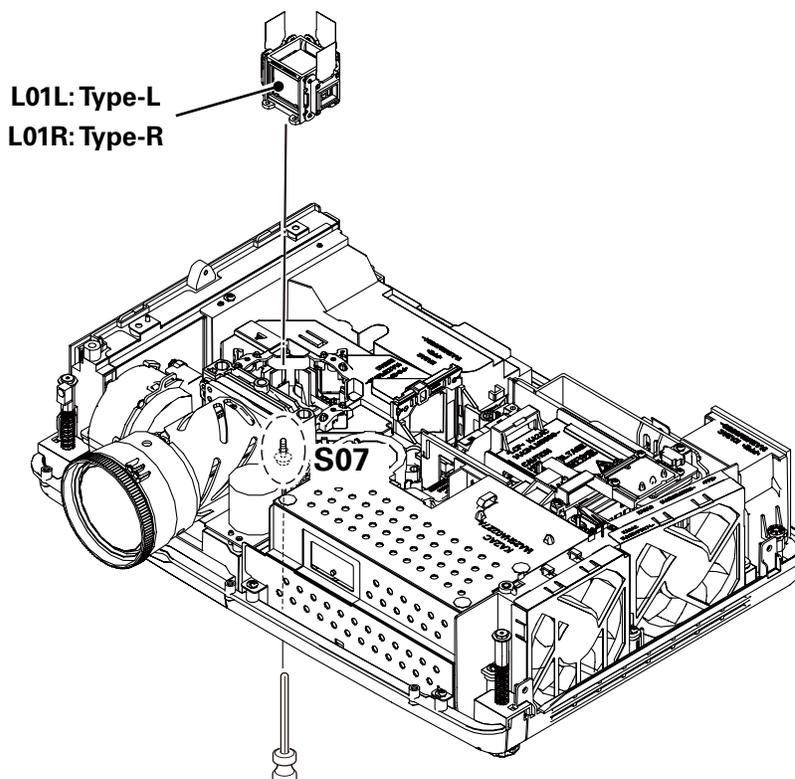
**Fig.4**

Parts Location Diagrams

**Polarized glass-in assembly**

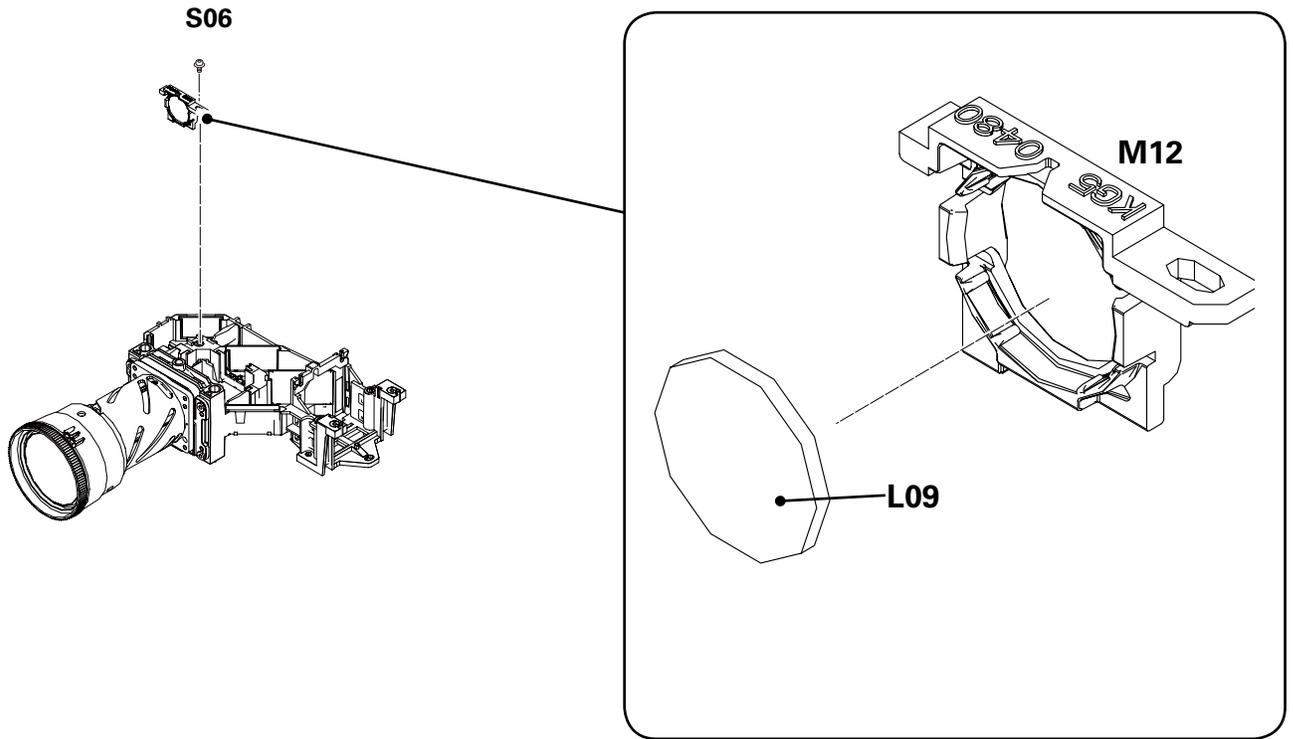


**LCD Panel/Prism Assembly**



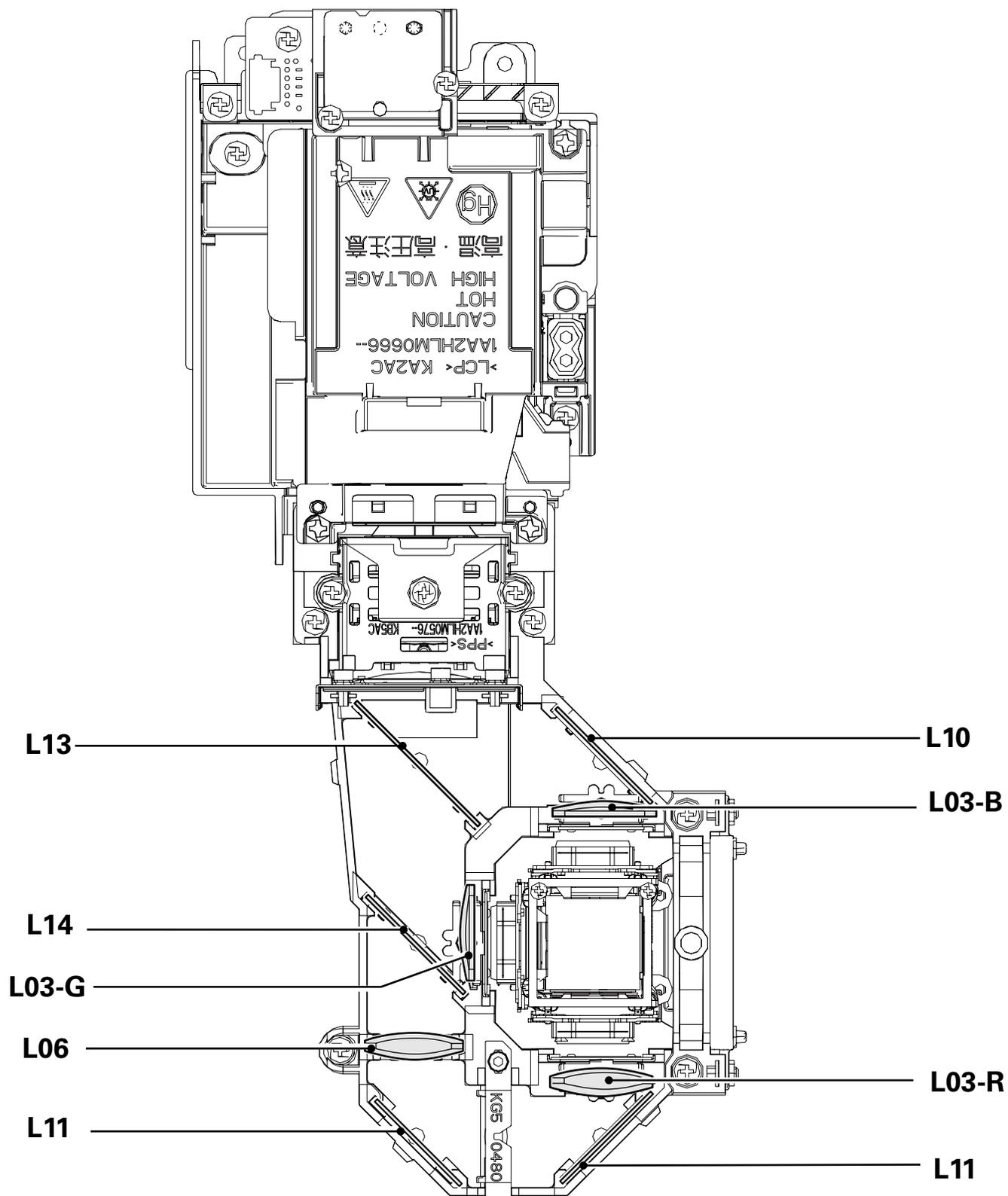
Parts Location Diagrams

Relay lens (Out) assembly



Parts Location Diagrams

● In the optical unit



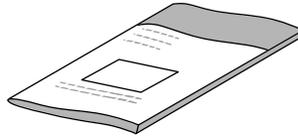
**CAUTION:**  
 Part must be placed in specified direction when replacing the optical parts. Please see “Optical Parts Disassembly” for further instructions.

Parts Location Diagrams

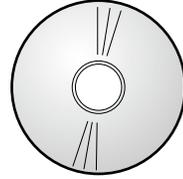
REMOTE CONTROL



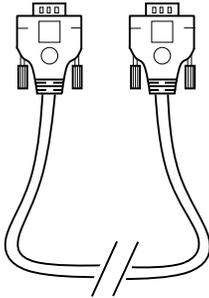
MANUAL



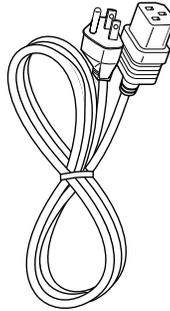
CD-ROM



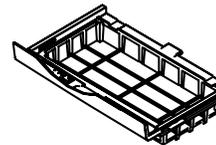
VGA CABLE



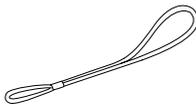
AC CORD



FILTER COVER



STRAP



CARRYING CASE



# Mechanical Parts List

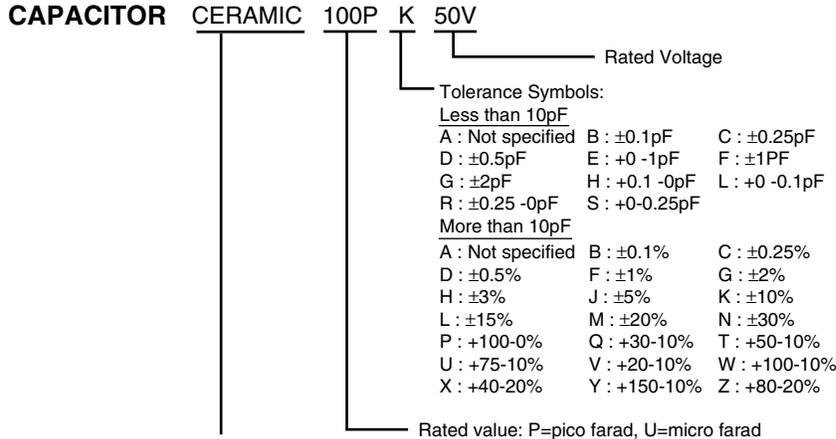
Key No.	Part No.	Description	Key No.	Part No.	Description
<b>PACKING MATERIALS</b>			M09	610 352 7499	HLD FLT DUCT BTM-KA2AC
	610 354 7527	CARTON CASE-KC2BC	M10	610 352 7482	HLD FN LMP-KA2AC
	610 354 7756	POLY BAG 0440*0480*NC	M11	610 352 9097	HLD PULG-KA2AC
	610 353 7382	CASE ACC-KA2AC	M12	610 343 1314	MTG RELAY OUT-KG5AC
	610 352 7857	CUSHION TOP-KA2AC	M13	610 355 6796	MTG DUCT PNL TOP-KC2AC
	610 352 7833	CUSHION BTM-KA2AC	M14	610 352 6720	MTG DUCT PNL BTM-KA2AC
<b>ACCESSORIES</b>			M15	610 352 7536	MTG DUCT LMP T-KA2AC
<b>OWNER'S MANUAL</b>			M16	610 352 7581	MTG SP-KA2AC
	610 354 7381	CD-ROM,OWNERS MANUAL-KC2BC	M17	610 353 1137	MTG EXH FN-KA2AC
	655 005 0533	SETUP INST-KC2BC	M18	610 353 4442	OPTICAL BASE BTM-KA2AC
	610 353 7825	CD-ROM(PJ NW MANAGER)	M19	610 353 3759	OPTICAL BASE TOP(A)-KG5AC
<b>REMOTE CONTROL</b>			M20	610 353 1151	SPC SHT FN-KA2AC
	645 099 3206	ASSY,REMOCON MXAD	<b>SCREWS</b>		
	610 344 9944	RC-BATTERY LID-MXAC	S01	411 189 8600	SCR BIN 3X8
<b>AC CORD</b>			S02	412 078 7001	SPECIAL SCREW
△US	945 064 6363	CORD,POWER-3.0MK,US	S03	411 200 2808	SCR TPG FLT 3X8
△EU	945 054 1156	CORD,POWER-3.0MK	S04	411 192 9809	SCR PAN 3X8
△HK	945 054 1149	CORD,POWER-3.138MK	S05	411 192 5108	SCR PAN+SW+W 2.5X6
<b>MISCELLANEOUS</b>			S06	412 077 8108	SPECIAL SCREW-2.5X6
	610 343 0249	STRAP CAP-KT7AC	S07	312 070 3400	SPECIAL SCREW-3.0X10V
	610 354 1525	COVER,FLT BOTTOM TTR-KA2AC	S08	411 191 6304	SCR BIN 2.5X8
	610 355 0220	CARRY BAG-KL6A	S09	411 189 8303	SCR BIN 3X14
	945 073 4855	CABLE,INTERFACE VGA	<b>OPTICAL PARTS</b>		
	645 093 1642	CABLE,INTERFACE VGA	L01L*	610 355 2484	ASSY,PNL/PRISM L-KC2AC
	652 002 9552	CABLE,INTERFACE VGA	L01R*	610 357 0488	ASSY,PNL/PRISM R-KC2AC
<b>CABINET PARTS</b>			L02-R	610 346 5562	ASSY,POL R IN-KG5AC
C01	610 354 4045	COVER LMP-KA2BC	L02-G	610 357 3595	ASSY,POL G IN-KC2AC
C02	610 354 4038	CAB FRONT-KA2BC	L02-B	610 346 5548	ASSY,POL B IN-KD5AC
C03	610 357 2772	CAB BTM-KA2AC	L03-R	645 099 0571	LENS,RELAY(IN)
C04	610 352 7260	COVER FLT BTM-KA2AC	L03-G	645 096 4657	LENS,CONDENSER(G)
C05	610 355 4372	CAB TOP SERVICE-KC2BC	L03-B	645 096 4657	LENS,CONDENSER(G)
C06	610 357 5056	ASSY,ADJ SCREW STEM-KA2AC	L04	645 103 9170	LENS,PROJECTION
C07	610 344 8169	BUTTON CONTROL-KG5BC	L05	645 099 9109	LENS,CONDENSER(OUT)NC
C08	610 354 5790	CAP LNS-KA2BC	L06	645 099 0571	LENS,RELAY(IN)
C09	610 354 4076	COVER FLT SD-KA2BC	L07	645 099 9161	LENS,INTEGRATOR(IN)
C10	610 344 1788	DEC INLAY LED-KF5AC	L08	645 099 9178	LENS,INTEGRATOR(OUT)
C11	610 343 0942	DEC INLAY RC-KG5AC	L09	645 099 0601	LENS,RELAY(OUT)
C12	910 325 2477	DEC LEG-PT5EC	L10	645 096 4701	MIRROR(B)
C13	610 354 7510	PNL AV-KC2BC		645 101 0247	MIRROR(B)
C14	610 357 5063	ADJ_CORE_KG5AC	L11	645 096 4718	MIRROR(R)
C15	610 352 7659	STD ADJ BTN-KA2AC		645 101 0254	MIRROR(R)
C16	411 001 0300	RING E 5	L12	945 086 6372	PRISM(PBS)
C17	910 327 3748	BADGE EIKI-MT5BC	L13	645 104 6918	DICHROIC MIRROR (B)
<b>CHASSIS PARTS</b>			L14	645 104 6901	DICHROIC MIRROR (G)
M01	610 353 6996	FILTER BOX SD-KA2AC	*There are 2 type of LCD Panel/Prism Assy. Check which type of LCD Panel/Prism Assy is used. How to check the type, see the item "Optical PartsDisassembly".		
M02	610 353 7009	FILTER BOX BTM-KA2AC	<b>SERVICE TOOLS</b>		
M03	610 349 0830	BUSH -KJ8AC	610 343 5596	CD-ROM,PJ SVC TOOL V420	
M04	610 356 9536	HOLDER INT PBS BTM-KJ8YC			
M05	610 356 9543	HOLDER INT PBS TOP-KJ8YC			
M06	610 352 7413	HLD SN-KA2AC			
M07	610 356 9406	LMP_HOUSE-KA2AC			
M08	610 352 7451	HLD FLT DUCT SD-KA2AC			

# Electrical Parts List

Product safety should be considered when a component replacement is made in any area of a projector. Components indicated by a  $\Delta$  mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

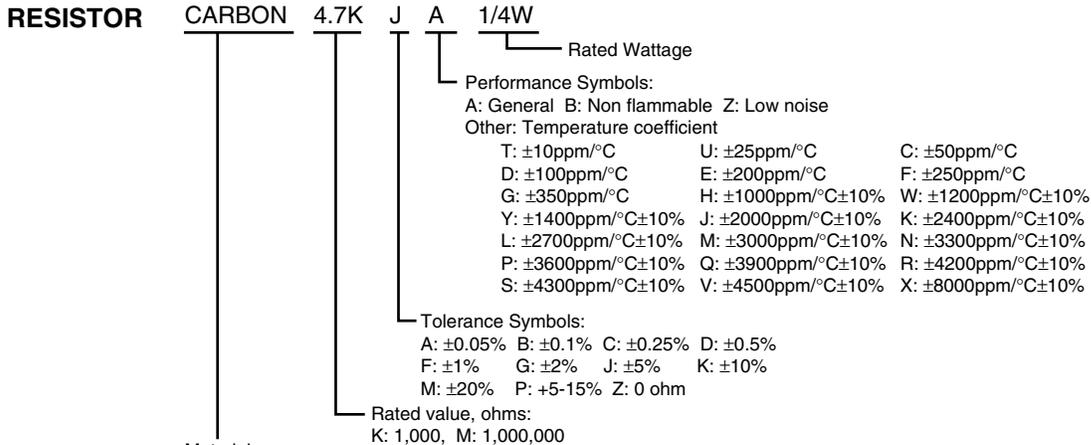
## ● Read Description in the parts list

Read description in the Capacitor and Resistor as follows:



Material:

- CERAMIC..... Ceramic
- MT-PAPER..... Metallized Paper
- POLYESTER..... Polyester
- MT-POLYEST..... Metallized Polyester
- POLYPRO..... Polypropylene
- MT-POLYPRO..... Metallized Polypropylene
- COMPO FILM..... Composite film
- MT-COMPO..... Metallized Composite
- STYRENE..... Styrene
- TA-SOLID..... Tantalum Oxide Solid Electrolytic
- AL-SOLID..... Aluminium Solid Electrolytic
- ELECT..... Aluminum Foil Electrolytic
- NP-ELECT..... Non-polarised Electrolytic
- OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic
- POS-SOLID..... Polymerized Organic Semiconductive
- DL-ELECT..... Double Layered Electrolytic
- PPS-FILM..... Polyphenylene Sulfide Film
- MT-PPS-FILM..... Metalized Polyphenylene Sulfide Film
- MT-PEN-FILM..... Metalized Polyethylenenaphthalate Film
- CAPACITOR..... Other



Material:

- CARBON..... Carbon
- MT-FILM..... Metal Film
- OXIDE-MT..... Oxide Metal Film
- SOLID..... Composition
- MT-GLAZE..... Metal Glaze
- WIRE WOUND... Wire Wound
- CERAMIC RES.. Ceramic
- FUSIBLE RES.... Fusible
- RESISTOR ..... Other

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
<b>ASSEMBLED BOARDS</b>					
△A600	655 004 5621	ASSY,PWB,POWER KA2PC		405 220 3115	TR ISA1235AC1E
△A630	655 004 5638	ASSY,PWB,FILTER KA2PC		305 173 9717	TR 2SA1235A1F
△A1000	655 004 6215	ASSY,PWB,MAIN KC2BC		305 173 9618	TR 2SA1235A1E
△A1001	655 004 4228	ASSY,PWB,AV KC2AC	Q661	305 015 8727	TR 2SC2812-L6-TB
△A1002	655 004 4235	ASSY,PWB,RC KC2AC		305 015 8925	TR 2SC2812-L7-TB
△A1003	655 004 4242	ASSY,PWB,ID CONNECT KC2AC		305 163 1615	TR 2SC2812N-L6-TB0
△A2200	655 004 3313	ASSY,PWB,SUB POWER KA2AC		305 173 9816	TR 2SC3928A1R
				305 173 9915	TR 2SC3928A1S
<b>OUT OF CIRCUIT BOARD</b>			<b>INTEGRATED CIRCUIT</b>		
L601	945 033 2228	CORE,FERRITE	IC621	409 690 7918	IC FA5550N
	952 001 9431	CORE,CLAMP	IC631	309 653 7405	IC MR4010-7101
△A901	645 103 7121	UNIT,BALLAST	IC671	409 692 2515	IC TA76L431FB
A901A	610 345 4276	CABLE,BALLAST KR5AC	<b>CAPACITOR</b>		
△LP900	610 352 7949	COMPL OPTICAL LAMP-KC2AC	C611	303 222 1316	CERAMIC 1000P K 1K
△FN901	645 103 9774	MOTOR,BLW DC 2.4W	C612	303 222 1316	CERAMIC 1000P K 1K
△FN902	645 103 9774	MOTOR,BLW DC 2.4W	C613	303 451 4119	MT-POLYEST 1U K 450V
△FN903	645 103 9774	MOTOR,BLW DC 2.4W	C614	303 451 4119	MT-POLYEST 1U K 450V
△FN904	645 104 1098	MOTOR,FAN DC 2.52W	C615	404 125 6501	ELECT 220U M 420V
△FN905	645 104 1104	MOTOR,FAN DC 2.52W	C621	303 336 3510	CERAMIC 0.47U K 16V
△FN906	645 104 1081	MOTOR,BLW DC 2.04W	C622	304 091 4504	CERAMIC 0.047U K 50V
K10B1	312 073 0406	SPECIAL SCREW	C623	304 090 1207	CERAMIC 0.01U K 50V
K10B2	312 073 0406	SPECIAL SCREW	C625	304 090 1108	CERAMIC 1000P K 50V
K10C1	312 073 0406	SPECIAL SCREW	C626	303 396 9613	CERAMIC 1U K 25V
K10C2	312 073 0406	SPECIAL SCREW		403 478 5912	CERAMIC 1U K 25V
K20A1	312 073 0406	SPECIAL SCREW	C627	304 091 3309	CERAMIC 2200P K 50V
K20A2	312 073 0406	SPECIAL SCREW	C629	303 265 3216	CERAMIC 1000P J 50V
SP901	652 003 2699	SPEAKER,8	C631	303 157 4215	CERAMIC 220P J 50V
SW901	645 097 3925	SWITCH,MICRO 1P-2T	C632	303 245 4417	CERAMIC 470P K 2K
△Z6B&6C(SW902)			C633	303 265 3216	CERAMIC 1000P J 50V
	652 003 3672	ASSY,WIRE	C634	304 091 3309	CERAMIC 2200P K 50V
<b>A600 655 004 5621 ASSY,PWB,POWER KA2PC</b>			C641	304 091 2609	CERAMIC 0.1U K 50V
<b>TRANSISTOR</b>			C644	303 417 9912	CERAMIC 4.7U K 25V
Q611	305 217 6600	TR 2SK3934	C651	304 108 0901	ELECT 220U M 25V
Q612	305 217 6600	TR 2SK3934	C653	303 370 1510	CERAMIC 0.1U K 50V
Q621	305 015 8727	TR 2SC2812-L6-TB	C661	403 468 6219	ELECT 1500U M 25V
	305 015 8925	TR 2SC2812-L7-TB	C662	304 091 2609	CERAMIC 0.1U K 50V
	305 163 1615	TR 2SC2812N-L6-TB0		303 367 0410	CERAMIC 0.1U K 50V
	305 173 9816	TR 2SC3928A1R	C663	304 091 2609	CERAMIC 0.1U K 50V
	305 173 9915	TR 2SC3928A1S		303 367 0410	CERAMIC 0.1U K 50V
Q622	305 015 8727	TR 2SC2812-L6-TB	C664	303 429 6708	ELECT 1500U M 10V
	305 015 8925	TR 2SC2812-L7-TB	C665	303 409 9913	ELECT 470U M 16V
	305 163 1615	TR 2SC2812N-L6-TB0	C666	303 392 0733	ELECT 1000U M 25V
	305 173 9816	TR 2SC3928A1R	C671	304 091 2609	CERAMIC 0.1U K 50V
Q641	305 015 8727	TR 2SC2812-L6-TB	C674	403 477 6514	MT-POLYEST 0.01U J 630V
	305 015 8925	TR 2SC2812-L7-TB	C691	304 104 9502	CERAMIC 1500P M 250V
	305 163 1615	TR 2SC2812N-L6-TB0	C692	304 104 9502	CERAMIC 1500P M 250V
	305 173 9816	TR 2SC3928A1R	△C693	304 073 4508	CERAMIC 2200P M 250V
	305 173 9915	TR 2SC3928A1S	<b>RESISTOR</b>		
Q642	305 015 8727	TR 2SC2812-L6-TB	R611	401 353 0311	MT-GLAZE 430K JA 1/3W
	305 015 8925	TR 2SC2812-L7-TB	R612	401 353 0212	MT-GLAZE 360K JA 1/3W
	305 163 1615	TR 2SC2812N-L6-TB0	R613	301 256 6314	MT-GLAZE 47K JA 1/10W
	305 173 9816	TR 2SC3928A1R	R614	302 106 5508	RESISTER 0.075 KB 5W
Q643	405 223 4406	TR 254085LS	R615	402 122 0409	MT-GLAZE 680K DD 1/4W
Q651	305 147 2218	TR 2SA1037AK-S-T146	R616	402 122 0409	MT-GLAZE 680K DD 1/4W
	405 220 3016	TR ISA1235AC1F	R617	301 256 6314	MT-GLAZE 47K JA 1/10W
	305 134 5928	TR 2SA1037AK-T146-R	R618	401 361 2314	MT-GLAZE 750K JA 1/3W
			R619	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
			R620	301 256 5614	MT-GLAZE 47 JA 1/10W
			R621	301 326 1812	MT-GLAZE 8.2K DA 1/10W
			R622	301 309 8517	MT-GLAZE 330 DA 1/10W
			R623	401 360 8010	MT-GLAZE 470 DA 1/10W
			R624	301 162 2912	MT-GLAZE 220 JA 1/10W
			R625	301 256 5614	MT-GLAZE 47 JA 1/10W
			R626	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
			R627	301 150 5918	MT-GLAZE 10K JA 1/10W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R628	301 150 5918	MT-GLAZE 10K JA 1/10W		407 269 8509	DIODE FMW-2106
R629	301 255 7312	MT-GLAZE 510K JA 1/10W	D663	307 190 4119	DIODE SFPL-52V
R631	301 255 7718	MT-GLAZE 11K JA 1/10W		307 247 8827	DIODE RF101L2S
R632	401 361 2314	MT-GLAZE 750K JA 1/3W	D664	307 210 5416	DIODE RB551V-30-TE-17
R633	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	D666	307 146 8106	DIODE EG01C
R634	301 256 1715	MT-GLAZE 33K JA 1/10W	DB611	307 202 7708	DIODE D10XB60
R635	402 122 1802	OXIDE-MT 0.39JA 1W	<b>MISCELLANEOUS</b>		
	302 099 6308	OXIDE-MT 0.39JA 1W	△ F631	324 006 1305	FUSE 250V 2.5A
R636	301 162 3018	MT-GLAZE 22K JA 1/10W	△ PC661	407 265 7813	PC TLP781F(D4-GB-TP7)
R637	301 255 6117	MT-GLAZE 20K JA 1/10W		307 223 8312	PC TLP421F(D4-GR-TP4)
R638	301 256 6314	MT-GLAZE 47K JA 1/10W		307 223 7315	PC TLP421F(D4-GB-TP4)
R639	301 277 7215	MT-GLAZE 470 JA 1/3W	△ PC663	407 265 7813	PC TLP781F(D4-GB-TP7)
R640	301 150 6014	MT-GLAZE 0.000 ZA 1/10W		307 223 8312	PC TLP421F(D4-GR-TP4)
R641	301 150 5918	MT-GLAZE 10K JA 1/10W		307 223 7315	PC TLP421F(D4-GB-TP4)
R642	301 255 9514	MT-GLAZE 220K JA 1/10W	△ PC671	407 265 7813	PC TLP781F(D4-GB-TP7)
R643	301 150 5918	MT-GLAZE 10K JA 1/10W		307 223 8312	PC TLP421F(D4-GR-TP4)
R644	301 150 5918	MT-GLAZE 10K JA 1/10W		307 223 7315	PC TLP421F(D4-GB-TP4)
R646	301 256 7212	MT-GLAZE 18K JA 1/10W	PTH611	308 037 5501	THERMISTOR NTPDB5R0LDHBO
R648	301 256 7212	MT-GLAZE 18K JA 1/10W	PTH641	408 062 4606	TH PRF18BD471QB1RB
R651	301 150 5918	MT-GLAZE 10K JA 1/10W	ZD631	307 206 5413	ZD UDZS-TE-178.2B
R652	301 292 1915	MT-GLAZE 22 FA 1/2W	ZD632	307 179 1214	ZENER DIODE PTZ13B-TE25
R662	301 152 3219	MT-GLAZE 330 JA 1/10W	<b>A630 655 004 5638 ASSY,PWB,FILTER KA2PC</b>		
R665	402 109 6806	OXIDE-MT 100KJA 2W	<b>CAPACITOR</b>		
	302 093 4805	OXIDE-MT 100KJA 2W	△ C601	404 113 2904	MT-POLYEST 0.33U K 275V
R671	301 256 7618	MT-GLAZE 3.9K JA 1/10W	△ C602	404 117 8902	MT-POLYEST 1U K 310V
R672	301 150 6212	MT-GLAZE 1K JA 1/10W		404 117 6403	MT-POLYEST 1U K 275V
R673	301 264 2919	MT-GLAZE 12K FA 1/10W	△ C603	304 073 5109	CERAMIC 470P K 250V
R674	301 264 7518	MT-GLAZE 2.7K FA 1/10W	△ C604	304 073 5109	CERAMIC 470P K 250V
R675	301 162 3711	MT-GLAZE 4.7K JA 1/10W	<b>RESISTOR</b>		
R676	301 264 2810	MT-GLAZE 1.2K FA 1/10W	△ R601	301 287 5416	MT-GLAZE 200K JA 1W
R683	301 265 0211	MT-GLAZE 390 FA 1/10W	△ R602	301 287 5416	MT-GLAZE 200K JA 1W
R684	301 264 9314	MT-GLAZE 3.3K FA 1/10W	<b>VARIABLE RESISTOR</b>		
R692	301 037 5413	MT-GLAZE 1K JA 1/10W	△ VA601	408 066 1700	VD TND14SE471KB0SLAA0
R693	301 037 6717	MT-GLAZE 1.2K JA 1/10W	<b>COIL</b>		
<b>TRANSFORMER</b>			△ L601	645 099 6825	LINE FILTER
△ T651	645 097 6483	TRANS,POWER,PULSE	△ LF601	645 093 1765	SOCKET,INLET AC 3P
<b>COIL</b>			<b>MISCELLANEOUS</b>		
△ L611	945 081 4878	LINE FILTER	△ F601	323 021 7804	FUSE 250V 6.3A
△ L612	645 089 2561	INDUCTOR,700U		423 034 4101	FUSE 250V 6.3A
L613	910 229 3532	CORE	<b>A1000 655 004 6215 ASSY,PWB,MAIN KC2BC</b>		
L614	910 229 3532	CORE	<b>TRANSISTOR</b>		
L631	952 001 0124	CORE,PIPE	Q1001	406 021 7804	TR 2SC4617
	910 078 5954	PIPE CORE	Q1002	406 021 7804	TR 2SC4617
L661	910 229 3532	CORE	Q1003	305 217 7815	TR HN1B04FE-Y TE85L
L662	910 229 3532	CORE	Q1004	305 217 7815	TR HN1B04FE-Y TE85L
L663	652 002 8500	INDUCTOR 330OHM, P	Q1005	406 021 7804	TR 2SC4617
<b>DIODE</b>			Q1006	305 217 7815	TR HN1B04FE-Y TE85L
D611	307 253 7405	DIODE FMXA-1106S	Q1007	406 021 7804	TR 2SC4617
D611D	645 098 1715	CORE,FERRITE	Q1008	406 021 7804	TR 2SC4617
D611E	645 098 1715	CORE,FERRITE	Q1062	406 021 7804	TR 2SC4617
D612	307 149 0810	DIODE 1SS355-TE-17	Q2011	406 021 7804	TR 2SC4617
	408 062 7201	DIODE 1SS355	Q2021	406 021 7804	TR 2SC4617
	307 163 0414	DIODE 1SS352-(TPH3)	Q2031	406 021 7804	TR 2SC4617
D613	307 149 0810	DIODE 1SS355-TE-17	Q3051	406 021 7804	TR 2SC4617
	408 062 7201	DIODE 1SS355	Q3601	406 021 7804	TR 2SC4617
	307 163 0414	DIODE 1SS352-(TPH3)	Q3603	406 021 7804	TR 2SC4617
D631	307 149 0810	DIODE 1SS355-TE-17	Q4012	305 147 2218	TR 2SA1037AK-S-T146
	408 062 7201	DIODE 1SS355		405 220 3016	TR ISA1235AC1F
	307 163 0414	DIODE 1SS352-(TPH3)		305 134 5928	TR 2SA1037AK-T146-R
D632	307 247 8827	DIODE RF101L2S			
D633	307 146 8106	DIODE EG01C			
D651	307 247 8827	DIODE RF101L2S			
D661	407 267 3100	DIODE SG10SC9M			
	407 269 8400	DIODE FMEN-210A			
D662	407 267 3001	DIODE SG10SC6M			



Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
C041	303 409 3426	CERAMIC 0.1U K 16V	C1308	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C042	303 409 3426	CERAMIC 0.1U K 16V	C1309	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C047	303 396 9613	CERAMIC 1U K 25V	C1311	303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
	403 478 5912	CERAMIC 1U K 25V		303 453 8917	CERAMIC 0.1U K 16V
C049	303 314 5918	CERAMIC 0.47U K 16V	C1312	303 409 3426	CERAMIC 0.1U K 16V
C1001	303 398 3312	ELECT 47U M 10V		303 453 8610	CERAMIC 0.1U K 16V
C1002	303 387 6119	ELECT 47U M 10V		303 453 8917	CERAMIC 0.1U K 16V
	303 398 3312	ELECT 47U M 10V	C1313	303 409 3426	CERAMIC 0.1U K 16V
C1004	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C1321	303 383 5215	CERAMIC 4.7U K 6.3V
C1006	303 409 3426	CERAMIC 0.1U K 16V	C1322	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C1007	303 409 3426	CERAMIC 0.1U K 16V	C1323	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C1008	303 409 3426	CERAMIC 0.1U K 16V	C1324	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C1009	303 409 3426	CERAMIC 0.1U K 16V	C1326	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C1012	303 409 3426	CERAMIC 0.1U K 16V	C1327	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C1016	303 369 0527	CERAMIC 0.01U K 25V	C1328	303 409 3426	CERAMIC 0.1U K 16V
C1019	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C1329	303 409 3426	CERAMIC 0.1U K 16V
C1041	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C1331	303 276 1911	CERAMIC 22P J 50V
C1049	303 409 3426	CERAMIC 0.1U K 16V	C1332	303 276 2819	CERAMIC 18P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 454 0712	CERAMIC 18P J 50V
	303 453 8917	CERAMIC 0.1U K 16V	C1333	303 409 3426	CERAMIC 0.1U K 16V
C1092	303 370 0018	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V		303 453 8917	CERAMIC 0.1U K 16V
	303 358 3215	CERAMIC 10U K 6.3V	C1334	303 409 3426	CERAMIC 0.1U K 16V
C1103	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C1335	303 409 3426	CERAMIC 0.1U K 16V
C1105	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C1341	303 409 3426	CERAMIC 0.1U K 16V
C1301	303 383 5215	CERAMIC 4.7U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
C1302	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C1342	303 441 9810	CERAMIC 0.01U K 50V
	303 453 8917	CERAMIC 0.1U K 16V	C1343	303 276 1317	CERAMIC 1000P K 50V
C1303	303 409 3426	CERAMIC 0.1U K 16V	C1344	303 387 5310	ELECT 47U M 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 392 1215	ELECT 47U M 6.3V
	303 453 8917	CERAMIC 0.1U K 16V	C1391	303 409 3426	CERAMIC 0.1U K 16V
C1304	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C2002	303 398 3312	ELECT 47U M 10V
C1306	303 409 3426	CERAMIC 0.1U K 16V	C2003	303 449 1212	POS-SOLID 47U M 6.3V
	303 453 8610	CERAMIC 0.1U K 16V	C2201	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C1307	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C2202	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 453 8917	CERAMIC 0.1U K 16V			
C2203	303 409 3426	CERAMIC 0.1U K 16V	C2234	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2204	303 409 3426	CERAMIC 0.1U K 16V	C2236	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2206	303 409 3426	CERAMIC 0.1U K 16V	C2237	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2207	303 409 3426	CERAMIC 0.1U K 16V	C2238	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2208	303 409 3426	CERAMIC 0.1U K 16V	C2239	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2211	303 409 3426	CERAMIC 0.1U K 16V	C2241	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2212	303 409 3426	CERAMIC 0.1U K 16V	C2243	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2213	303 409 3426	CERAMIC 0.1U K 16V	C2244	303 370 0018	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8917	CERAMIC 0.1U K 16V		303 358 3215	CERAMIC 10U K 6.3V
C2214	303 409 3426	CERAMIC 0.1U K 16V	C2245	303 370 0018	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8917	CERAMIC 0.1U K 16V		303 358 3215	CERAMIC 10U K 6.3V
C2216	303 409 3426	CERAMIC 0.1U K 16V	C2891	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2217	303 441 9810	CERAMIC 0.01U K 50V	C2892	303 305 8812	CERAMIC 47P J 50V
C2218	303 409 3426	CERAMIC 0.1U K 16V		303 454 1610	CERAMIC 47P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 7217	CERAMIC 47P J 50V
	303 453 8917	CERAMIC 0.1U K 16V	C3001	303 294 6110	CERAMIC 100P J 50V
C2219	303 409 3426	CERAMIC 0.1U K 16V		303 454 0910	CERAMIC 100P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 6319	CERAMIC 100P J 50V
	303 453 8917	CERAMIC 0.1U K 16V	C301	303 409 3426	CERAMIC 0.1U K 16V
C2221	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C3011	303 294 6110	CERAMIC 100P J 50V
C2222	303 409 3426	CERAMIC 0.1U K 16V		303 454 0910	CERAMIC 100P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 6319	CERAMIC 100P J 50V
	303 453 8917	CERAMIC 0.1U K 16V	C302	303 409 3426	CERAMIC 0.1U K 16V
C2223	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C3021	303 294 6110	CERAMIC 100P J 50V
C2224	303 145 9918	CERAMIC 22P J 50V		303 454 0910	CERAMIC 100P J 50V
C2226	303 145 9918	CERAMIC 22P J 50V		303 453 6319	CERAMIC 100P J 50V
C2227	303 409 3426	CERAMIC 0.1U K 16V	C303	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2228	303 409 3426	CERAMIC 0.1U K 16V	C3031	303 294 6110	CERAMIC 100P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 454 0910	CERAMIC 100P J 50V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 6319	CERAMIC 100P J 50V
C2229	303 409 3426	CERAMIC 0.1U K 16V	C304	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C2231	303 370 0018	CERAMIC 10U K 6.3V	C3051	303 454 0910	CERAMIC 100P J 50V
	303 368 7319	CERAMIC 10U K 6.3V	C3052	303 382 7814	CERAMIC 2.2U K 10V
	303 358 3215	CERAMIC 10U K 6.3V	C3053	303 409 3426	CERAMIC 0.1U K 16V
C2232	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C306	303 409 3426	CERAMIC 0.1U K 16V
C2233	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C3061	303 454 0910	CERAMIC 100P J 50V

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
C307	403 455 1012	CERAMIC 1U K 10V		303 453 8917	CERAMIC 0.1U K 16V
	303 433 1112	CERAMIC 1U K 10V	C334	303 409 3426	CERAMIC 0.1U K 16V
C308	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C336	303 409 3426	CERAMIC 0.1U K 16V
C309	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C337	303 409 3426	CERAMIC 0.1U K 16V
C311	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C338	303 409 3426	CERAMIC 0.1U K 16V
C312	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C339	303 409 3426	CERAMIC 0.1U K 16V
C313	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C341	303 409 3426	CERAMIC 0.1U K 16V
C314	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C342	303 409 3426	CERAMIC 0.1U K 16V
C315	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C343	303 409 3426	CERAMIC 0.1U K 16V
C316	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C344	303 409 3426	CERAMIC 0.1U K 16V
C317	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C346	403 455 1012	CERAMIC 1U K 10V
C318	303 409 3426	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V	C347	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C319	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C348	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C321	403 455 1012	CERAMIC 1U K 10V		303 453 8917	CERAMIC 0.1U K 16V
	303 433 1112	CERAMIC 1U K 10V	C349	403 455 1012	CERAMIC 1U K 10V
C322	303 409 3426	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V	C3501	303 396 9613	CERAMIC 1U K 25V
	303 453 8917	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
C323	303 409 3426	CERAMIC 0.1U K 16V		403 478 5912	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C3502	303 396 9613	CERAMIC 1U K 25V
	303 453 8917	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
C324	403 455 1012	CERAMIC 1U K 10V		403 478 5912	CERAMIC 1U K 25V
	303 433 1112	CERAMIC 1U K 10V	C3503	403 467 0911	CERAMIC 0.1U K 25V
C325	303 409 3426	CERAMIC 0.1U K 16V	C3504	303 396 9613	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 453 8917	CERAMIC 0.1U K 16V		403 478 5912	CERAMIC 1U K 25V
C326	303 409 3426	CERAMIC 0.1U K 16V	C3506	303 369 3211	ELECT 100U M 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 381 5316	ELECT 100U M 16V
	303 453 8917	CERAMIC 0.1U K 16V	C3508	303 437 4614	CERAMIC 10U K 25V
C327	303 409 3426	CERAMIC 0.1U K 16V	C3509	303 396 9613	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 453 8917	CERAMIC 0.1U K 16V		403 478 5912	CERAMIC 1U K 25V
C328	303 409 3426	CERAMIC 0.1U K 16V	C351	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C329	403 455 1012	CERAMIC 1U K 10V	C352	403 455 1012	CERAMIC 1U K 10V
	303 433 1112	CERAMIC 1U K 10V		303 433 1112	CERAMIC 1U K 10V
C331	403 455 1012	CERAMIC 1U K 10V	C3524	303 157 4215	CERAMIC 220P J 50V
	303 433 1112	CERAMIC 1U K 10V	C353	303 409 3426	CERAMIC 0.1U K 16V
C332	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C3531	303 396 9613	CERAMIC 1U K 25V
C333	303 409 3426	CERAMIC 0.1U K 16V		303 397 7618	CERAMIC 1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V		403 478 5912	CERAMIC 1U K 25V
			C3532	303 396 9613	CERAMIC 1U K 25V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 397 7618	CERAMIC 1U K 25V		403 478 5813	CERAMIC 10U K 16V
	403 478 5912	CERAMIC 1U K 25V	C363	303 409 3426	CERAMIC 0.1U K 16V
C3533	403 467 0911	CERAMIC 0.1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C3534	303 396 9613	CERAMIC 1U K 25V		303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C364	303 409 3426	CERAMIC 0.1U K 16V
	403 478 5912	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C3536	303 369 3211	ELECT 100U M 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 381 5316	ELECT 100U M 16V	C365	403 455 1616	CERAMIC 10U K 16V
C3538	303 437 4614	CERAMIC 10U K 25V		403 478 5813	CERAMIC 10U K 16V
C3539	303 396 9613	CERAMIC 1U K 25V	C366	303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
	403 478 5912	CERAMIC 1U K 25V		303 453 8917	CERAMIC 0.1U K 16V
C354	303 409 3426	CERAMIC 0.1U K 16V	C367	403 455 1012	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8917	CERAMIC 0.1U K 16V	C368	303 409 3426	CERAMIC 0.1U K 16V
C3554	303 157 4215	CERAMIC 220P J 50V		303 453 8610	CERAMIC 0.1U K 16V
C356	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C369	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C3561	303 396 9613	CERAMIC 1U K 25V		303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C370	403 455 1616	CERAMIC 10U K 16V
	403 478 5912	CERAMIC 1U K 25V		403 478 5813	CERAMIC 10U K 16V
C3562	303 396 9613	CERAMIC 1U K 25V	C371	303 409 3426	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
	403 478 5912	CERAMIC 1U K 25V		303 453 8917	CERAMIC 0.1U K 16V
C3563	403 467 0911	CERAMIC 0.1U K 25V	C372	303 370 0018	CERAMIC 10U K 6.3V
C3564	303 396 9613	CERAMIC 1U K 25V		303 368 7319	CERAMIC 10U K 6.3V
	303 397 7618	CERAMIC 1U K 25V		303 358 3215	CERAMIC 10U K 6.3V
	403 478 5912	CERAMIC 1U K 25V	C373	303 409 3426	CERAMIC 0.1U K 16V
C3566	303 369 3211	ELECT 100U M 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 381 5316	ELECT 100U M 16V		303 453 8917	CERAMIC 0.1U K 16V
C3568	303 437 4614	CERAMIC 10U K 25V	C374	403 455 1012	CERAMIC 1U K 10V
C3569	303 409 3426	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V	C375	403 455 1616	CERAMIC 10U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		403 478 5813	CERAMIC 10U K 16V
C357	303 409 3426	CERAMIC 0.1U K 16V	C376	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C358	303 409 3426	CERAMIC 0.1U K 16V	C377	403 455 1012	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8917	CERAMIC 0.1U K 16V	C378	303 409 3426	CERAMIC 0.1U K 16V
C3584	303 157 4215	CERAMIC 220P J 50V		303 453 8610	CERAMIC 0.1U K 16V
C359	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C379	403 455 1012	CERAMIC 1U K 10V
	303 453 8917	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
C3598	303 394 5815	CERAMIC 4.7U K 16V	C380	403 455 1012	CERAMIC 1U K 10V
C3599	403 455 1012	CERAMIC 1U K 10V		303 433 1112	CERAMIC 1U K 10V
	303 433 1112	CERAMIC 1U K 10V	C3801	403 455 1012	CERAMIC 1U K 10V
C360	403 455 1616	CERAMIC 10U K 16V		303 433 1112	CERAMIC 1U K 10V
	403 478 5813	CERAMIC 10U K 16V	C3802	403 455 1012	CERAMIC 1U K 10V
C361	303 409 3426	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V	C3803	403 455 1012	CERAMIC 1U K 10V
	303 453 8917	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
C362	303 409 3426	CERAMIC 0.1U K 16V	C3804	403 455 1012	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8917	CERAMIC 0.1U K 16V	C3806	403 455 1012	CERAMIC 1U K 10V
C3621	403 455 1616	CERAMIC 10U K 16V		303 433 1112	CERAMIC 1U K 10V
	403 478 5813	CERAMIC 10U K 16V	C3807	303 409 3426	CERAMIC 0.1U K 16V
C3622	403 455 1616	CERAMIC 10U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	403 478 5813	CERAMIC 10U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C3623	403 455 1616	CERAMIC 10U K 16V	C3808	303 409 3426	CERAMIC 0.1U K 16V
	403 478 5813	CERAMIC 10U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C3625	403 455 1616	CERAMIC 10U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	403 478 5813	CERAMIC 10U K 16V	C3809	303 409 3426	CERAMIC 0.1U K 16V
C3626	403 455 1616	CERAMIC 10U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	403 478 5813	CERAMIC 10U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C3627	403 455 1616	CERAMIC 10U K 16V	C381	303 409 3426	CERAMIC 0.1U K 16V

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Key No.	Part No.	Description	Key No.	Part No.	Description
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C382	403 455 1012	CERAMIC 1U K 10V	C406	303 409 3426	CERAMIC 0.1U K 16V
	303 433 1112	CERAMIC 1U K 10V		303 453 8610	CERAMIC 0.1U K 16V
C383	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C407	303 282 5118	CERAMIC 470P K 50V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
C384	303 409 3426	CERAMIC 0.1U K 16V		303 453 8719	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V	C411	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C385	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C412	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C3851	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C413	303 282 5118	CERAMIC 470P K 50V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
C3857	303 370 0018	CERAMIC 10U K 6.3V		303 453 8719	CERAMIC 470P K 50V
	303 368 7319	CERAMIC 10U K 6.3V	C414	303 409 3426	CERAMIC 0.1U K 16V
	303 358 3215	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
C3858	303 409 3426	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C416	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C386	403 455 1012	CERAMIC 1U K 10V		303 453 8917	CERAMIC 0.1U K 16V
	303 433 1112	CERAMIC 1U K 10V	C417	303 370 0216	CERAMIC 2.2U K 6.3V
C387	403 455 1012	CERAMIC 1U K 10V	C421	303 282 5118	CERAMIC 470P K 50V
	303 433 1112	CERAMIC 1U K 10V		303 453 9211	CERAMIC 470P K 50V
C389	303 409 3426	CERAMIC 0.1U K 16V		303 453 8719	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V	C422	403 455 1012	CERAMIC 1U K 10V
	303 453 8917	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
C391	303 409 3426	CERAMIC 0.1U K 16V	C423	303 282 5118	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8719	CERAMIC 470P K 50V
C392	303 409 3426	CERAMIC 0.1U K 16V	C424	403 455 1012	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8917	CERAMIC 0.1U K 16V	C426	403 455 1012	CERAMIC 1U K 10V
C393	303 409 3426	CERAMIC 0.1U K 16V		303 433 1112	CERAMIC 1U K 10V
	303 453 8610	CERAMIC 0.1U K 16V	C427	303 282 5118	CERAMIC 470P K 50V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
C396	303 409 3426	CERAMIC 0.1U K 16V		303 453 8719	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V	C431	303 282 5118	CERAMIC 470P K 50V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
C397	403 455 1012	CERAMIC 1U K 10V		303 453 8719	CERAMIC 470P K 50V
	303 433 1112	CERAMIC 1U K 10V	C432	303 409 3426	CERAMIC 0.1U K 16V
C398	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C433	303 282 5118	CERAMIC 470P K 50V
C399	303 409 3426	CERAMIC 0.1U K 16V		303 453 9211	CERAMIC 470P K 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8719	CERAMIC 470P K 50V
	303 453 8917	CERAMIC 0.1U K 16V	C434	303 409 3426	CERAMIC 0.1U K 16V
C4001	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C436	303 409 3426	CERAMIC 0.1U K 16V
C4002	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C437	303 409 3426	CERAMIC 0.1U K 16V
C4003	303 382 7814	CERAMIC 2.2U K 10V		303 453 8610	CERAMIC 0.1U K 16V
C4004	303 382 7814	CERAMIC 2.2U K 10V		303 453 8917	CERAMIC 0.1U K 16V
C401	303 282 5118	CERAMIC 470P K 50V	C438	303 441 9810	CERAMIC 0.01U K 50V
	303 453 9211	CERAMIC 470P K 50V	C439	403 455 1012	CERAMIC 1U K 10V
	303 453 8719	CERAMIC 470P K 50V		303 433 1112	CERAMIC 1U K 10V
C402	303 409 3426	CERAMIC 0.1U K 16V	C441	403 455 1616	CERAMIC 10U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		403 478 5813	CERAMIC 10U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C442	403 455 1012	CERAMIC 1U K 10V
C403	303 282 5118	CERAMIC 470P K 50V		303 433 1112	CERAMIC 1U K 10V
	303 453 9211	CERAMIC 470P K 50V	C443	303 370 0216	CERAMIC 2.2U K 6.3V
	303 453 8719	CERAMIC 470P K 50V	C480	303 370 0018	CERAMIC 10U K 6.3V
C404	303 409 3426	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 358 3215	CERAMIC		303 453 8917	CERAMIC
	10U K	6.3V		0.1U K	16V
C4805	303 409 3426	CERAMIC	C5041	303 454 0613	CERAMIC
	0.1U K	16V		10000P K	50V
	303 453 8610	CERAMIC	C5042	403 455 1012	CERAMIC
	0.1U K	16V		1U K	10V
C4808	303 453 8917	CERAMIC		303 433 1112	CERAMIC
	0.1U K	16V	C5043	403 455 1012	CERAMIC
	303 370 0018	CERAMIC		1U K	10V
	10U K	6.3V		303 455 1012	CERAMIC
	303 368 7319	CERAMIC		1U K	10V
	10U K	6.3V	C5044	303 409 3426	CERAMIC
	303 358 3215	CERAMIC		0.1U K	16V
C481	303 370 0018	CERAMIC		303 453 8610	CERAMIC
	10U K	6.3V		0.1U K	16V
	303 368 7319	CERAMIC		303 453 8917	CERAMIC
	10U K	6.3V	C5045	303 358 3215	CERAMIC
	303 358 3215	CERAMIC		10U K	6.3V
C482	303 370 0018	CERAMIC	C5046	403 455 1012	CERAMIC
	10U K	6.3V		1U K	10V
	303 368 7319	CERAMIC		303 433 1112	CERAMIC
	10U K	6.3V	C5047	303 409 3426	CERAMIC
	303 358 3215	CERAMIC		0.1U K	16V
C483	303 370 0018	CERAMIC		303 453 8610	CERAMIC
	10U K	6.3V		0.1U K	16V
	303 368 7319	CERAMIC		303 453 8917	CERAMIC
	10U K	6.3V	C5048	303 409 3426	CERAMIC
	303 358 3215	CERAMIC		0.1U K	16V
C5001	303 396 9613	CERAMIC		303 453 8610	CERAMIC
	1U K	25V		0.1U K	16V
	303 397 7618	CERAMIC		303 453 8917	CERAMIC
	1U K	25V	C5049	303 409 3426	CERAMIC
	403 478 5912	CERAMIC		0.1U K	16V
C5002	303 396 9613	CERAMIC		303 453 8610	CERAMIC
	1U K	25V		0.1U K	16V
	303 397 7618	CERAMIC		303 453 8917	CERAMIC
	1U K	25V	C5050	303 409 3426	CERAMIC
	403 478 5912	CERAMIC		0.1U K	16V
C5020	303 396 9613	CERAMIC		303 453 8610	CERAMIC
	1U K	25V		0.1U K	16V
	303 397 7618	CERAMIC		303 453 8917	CERAMIC
	1U K	25V	C5051	303 409 3426	CERAMIC
	403 478 5912	CERAMIC		0.1U K	16V
C5021	303 396 9613	CERAMIC		303 453 8610	CERAMIC
	1U K	25V		0.1U K	16V
	303 397 7618	CERAMIC		303 453 8917	CERAMIC
	1U K	25V	C5052	303 401 2219	ELECT
	403 478 5912	CERAMIC		100U M	6.3V
C5022	303 409 3426	CERAMIC		303 467 0911	CERAMIC
	0.1U K	16V	C5053	403 467 0911	CERAMIC
	303 453 8610	CERAMIC		0.1U K	25V
	0.1U K	16V	C5054	303 437 4614	CERAMIC
	303 453 8917	CERAMIC		10U K	25V
C5023	303 139 6916	CERAMIC	C5055	303 437 4614	CERAMIC
	1P C	50V		10U K	25V
C5025	303 396 9613	CERAMIC	C5058	403 455 1012	CERAMIC
	1U K	25V		1U K	10V
	303 397 7618	CERAMIC		303 433 1112	CERAMIC
	1U K	25V	C5059	403 455 1012	CERAMIC
	403 478 5912	CERAMIC		1U K	10V
C5026	303 396 9613	CERAMIC		303 433 1112	CERAMIC
	1U K	25V	C5060	303 370 0018	CERAMIC
	303 397 7618	CERAMIC		10U K	6.3V
	1U K	25V		303 368 7319	CERAMIC
	403 478 5912	CERAMIC		10U K	6.3V
C5027	403 455 1012	CERAMIC		303 358 3215	CERAMIC
	1U K	10V	C5061	403 455 1616	CERAMIC
	303 433 1112	CERAMIC		10U K	16V
C5028	403 455 1012	CERAMIC		403 478 5813	CERAMIC
	1U K	10V		10U K	16V
	303 433 1112	CERAMIC	C5062	303 409 3426	CERAMIC
C5029	403 455 1012	CERAMIC		0.1U K	16V
	1U K	10V		303 453 8610	CERAMIC
	303 433 1112	CERAMIC		0.1U K	16V
C503	303 409 3426	CERAMIC		303 453 8917	CERAMIC
	0.1U K	16V	C5063	303 409 3426	CERAMIC
	303 453 8610	CERAMIC		0.1U K	16V
	0.1U K	16V		303 453 8610	CERAMIC
C5030	403 455 1012	CERAMIC		0.1U K	16V
	1U K	10V		303 453 8917	CERAMIC
	303 433 1112	CERAMIC		0.1U K	16V
C5031	403 455 1012	CERAMIC		303 453 8610	CERAMIC
	1U K	10V		0.1U K	16V
	303 433 1112	CERAMIC	C5069	403 455 1616	CERAMIC
C5032	303 139 6916	CERAMIC		10U K	16V
	1P C	50V		403 478 5813	CERAMIC
C5033	303 139 6916	CERAMIC		10U K	16V
	1P C	50V	C507	403 455 1616	CERAMIC
C5034	403 455 1012	CERAMIC		10U K	16V
	1U K	10V		403 478 5813	CERAMIC
	303 433 1112	CERAMIC		10U K	16V
C5035	403 455 1012	CERAMIC	C5075	403 455 1012	CERAMIC
	1U K	10V		1U K	10V
	303 433 1112	CERAMIC		303 433 1112	CERAMIC
	1U K	10V		1U K	10V
C5036	403 455 1012	CERAMIC	C508	303 419 5219	ELECT
	1U K	10V		47.0UM	25V
	303 433 1112	CERAMIC		303 401 4312	ELECT
C5037	303 139 6916	CERAMIC		47U M	25V
	1P C	50V	C509	303 372 7510	CERAMIC
C5038	303 454 0613	CERAMIC		2.2U K	6.3V
	10000P K	50V	C511	303 397 8219	CERAMIC
C5039	303 454 0613	CERAMIC		2.2U K	25V
	10000P K	50V	C512	403 467 0911	CERAMIC
C504	303 409 3426	CERAMIC		0.1U K	25V
	0.1U K	16V	C514	403 467 0911	CERAMIC
	303 453 8610	CERAMIC		0.1U K	25V
	0.1U K	16V	C516	403 467 0911	CERAMIC
	303 453 8917	CERAMIC		0.1U K	25V
	0.1U K	16V	C517	403 467 0911	CERAMIC
C5040	303 409 3426	CERAMIC		0.1U K	25V
	0.1U K	16V	C519	403 467 0911	CERAMIC
	303 453 8610	CERAMIC		0.1U K	25V
	0.1U K	16V	C521	303 396 9613	CERAMIC
				1U K	25V
				303 397 7618	CERAMIC
				1U K	25V

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	403 478 5912	CERAMIC 1U K 25V		303 433 1112	CERAMIC 1U K 10V
C523	303 342 3313	CERAMIC 0.1U K 25V	C567	403 455 1616	CERAMIC 10U K 16V
C524	303 342 3313	CERAMIC 0.1U K 25V		403 478 5813	CERAMIC 10U K 16V
C527	403 467 0911	CERAMIC 0.1U K 25V	C568	303 419 5219	ELECT 47.0UM 25V
C528	403 467 0911	CERAMIC 0.1U K 25V		303 401 4312	ELECT 47U M 25V
C5315	303 409 3426	CERAMIC 0.1U K 16V	C569	303 372 7510	CERAMIC 2.2U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V	C5704	303 372 7510	CERAMIC 2.2U K 6.3V
	303 453 8917	CERAMIC 0.1U K 16V	C5705	303 401 4312	ELECT 47U M 25V
C533	303 409 3426	CERAMIC 0.1U K 16V	C5706	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C5331	303 370 0216	CERAMIC 2.2U K 6.3V	C5707	303 324 6417	CERAMIC 0.022U K 16V
C5332	303 409 3426	CERAMIC 0.1U K 16V	C5708	303 397 5713	ELECT 100U M 10V
	303 453 8610	CERAMIC 0.1U K 16V	C571	303 397 8219	CERAMIC 2.2U K 25V
	303 453 8917	CERAMIC 0.1U K 16V	C572	403 467 0911	CERAMIC 0.1U K 25V
C5334	303 320 0419	CERAMIC 68P J 50V	C573	403 467 0911	CERAMIC 0.1U K 25V
	303 454 0019	CERAMIC 68P J 50V	C574	403 467 0911	CERAMIC 0.1U K 25V
	303 453 6814	CERAMIC 68P J 50V	C5751	303 382 7814	CERAMIC 2.2U K 10V
C5336	303 309 2519	CERAMIC 27P J 50V	C576	403 467 0911	CERAMIC 0.1U K 25V
	403 456 4616	CERAMIC 27P J 50V	C577	403 467 0911	CERAMIC 0.1U K 25V
C5337	303 294 6110	CERAMIC 100P J 50V	C579	403 467 0911	CERAMIC 0.1U K 25V
C5338	303 409 3426	CERAMIC 0.1U K 16V	C581	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C534	303 409 3426	CERAMIC 0.1U K 16V	C5821	403 455 1616	CERAMIC 10U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		403 478 5813	CERAMIC 10U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C5822	403 455 1616	CERAMIC 10U K 16V
C537	403 455 1616	CERAMIC 10U K 16V		403 478 5813	CERAMIC 10U K 16V
	403 478 5813	CERAMIC 10U K 16V	C5823	303 454 1917	CERAMIC 4700P K 50V
C538	303 419 5219	ELECT 47.0UM 25V	C5824	303 392 5015	CERAMIC 22U M 6.3V
	303 401 4312	ELECT 47U M 25V	C5825	403 455 1616	CERAMIC 10U K 16V
C539	303 372 7510	CERAMIC 2.2U K 6.3V		403 478 5813	CERAMIC 10U K 16V
C541	303 397 8219	CERAMIC 2.2U K 25V	C583	303 342 3313	CERAMIC 0.1U K 25V
C542	403 467 0911	CERAMIC 0.1U K 25V	C584	303 342 3313	CERAMIC 0.1U K 25V
C543	403 467 0911	CERAMIC 0.1U K 25V	C5841	403 455 1012	CERAMIC 1U K 10V
C544	403 467 0911	CERAMIC 0.1U K 25V		303 433 1112	CERAMIC 1U K 10V
C546	403 467 0911	CERAMIC 0.1U K 25V	C5852	303 370 0018	CERAMIC 10U K 6.3V
C547	403 467 0911	CERAMIC 0.1U K 25V		303 368 7319	CERAMIC 10U K 6.3V
C549	403 467 0911	CERAMIC 0.1U K 25V		303 358 3215	CERAMIC 10U K 6.3V
C551	303 409 3426	CERAMIC 0.1U K 16V	C5853	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C553	303 342 3313	CERAMIC 0.1U K 25V	C5854	303 387 5112	ELECT 220U M 6.3V
C554	303 342 3313	CERAMIC 0.1U K 25V		303 394 9318	ELECT 220U M 6.3V
C557	403 467 0911	CERAMIC 0.1U K 25V	C5855	303 409 3426	CERAMIC 0.1U K 16V
C558	403 467 0911	CERAMIC 0.1U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C5611	303 396 9613	CERAMIC 1U K 25V		303 453 8917	CERAMIC 0.1U K 16V
	303 397 7618	CERAMIC 1U K 25V	C5860	403 455 1012	CERAMIC 1U K 10V
	403 478 5912	CERAMIC 1U K 25V		303 433 1112	CERAMIC 1U K 10V
C5612	303 372 7510	CERAMIC 2.2U K 6.3V	C5862	403 455 1616	CERAMIC 10U K 16V
C5614	403 455 1012	CERAMIC 1U K 10V		403 478 5813	CERAMIC 10U K 16V
	303 433 1112	CERAMIC 1U K 10V	C5863	403 455 1616	CERAMIC 10U K 16V
C5621	303 383 5215	CERAMIC 4.7U K 6.3V		403 478 5813	CERAMIC 10U K 16V
C5623	303 383 5215	CERAMIC 4.7U K 6.3V	C5864	403 455 1616	CERAMIC 10U K 16V
C563	303 409 3426	CERAMIC 0.1U K 16V		403 478 5813	CERAMIC 10U K 16V
	303 453 8610	CERAMIC 0.1U K 16V	C5867	303 392 5015	CERAMIC 22U M 6.3V
	303 453 8917	CERAMIC 0.1U K 16V	C5868	303 392 1215	ELECT 47U M 6.3V
C5636	303 424 0315	ELECT 100U M 6.3V	C5869	303 392 5015	CERAMIC 22U M 6.3V
	303 401 2219	ELECT 100U M 6.3V	C587	403 467 0911	CERAMIC 0.1U K 25V
	403 458 7219	ELECT 100U M 6.3V	C588	403 467 0911	CERAMIC 0.1U K 25V
C5637	303 409 3426	CERAMIC 0.1U K 16V	C596	403 467 0911	CERAMIC 0.1U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C597	303 437 4614	CERAMIC 10U K 25V
	303 453 8917	CERAMIC 0.1U K 16V	C598	403 467 0911	CERAMIC 0.1U K 25V
C564	303 409 3426	CERAMIC 0.1U K 16V	C599	303 437 4614	CERAMIC 10U K 25V
	303 453 8610	CERAMIC 0.1U K 16V	C6801	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C5667	403 455 1012	CERAMIC 1U K 10V		303 453 8917	CERAMIC 0.1U K 16V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
C6802	303 409 3426	CERAMIC 0.1U K 16V	C8013	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C6803	303 409 3426	CERAMIC 0.1U K 16V	C8014	403 460 5517	CERAMIC 8P D 50V
	303 453 8610	CERAMIC 0.1U K 16V		403 460 5418	CERAMIC 8P D 50V
	303 453 8917	CERAMIC 0.1U K 16V	C8016	403 460 5517	CERAMIC 8P D 50V
C6844	303 372 7510	CERAMIC 2.2U K 6.3V		403 460 5418	CERAMIC 8P D 50V
C6845	303 372 7510	CERAMIC 2.2U K 6.3V	C8017	303 409 3426	CERAMIC 0.1U K 16V
C6847	303 372 7510	CERAMIC 2.2U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
C6848	303 372 7510	CERAMIC 2.2U K 6.3V		303 453 8917	CERAMIC 0.1U K 16V
C7083	303 394 1312	ELECT 100U M 6.3V	C8018	303 409 3426	CERAMIC 0.1U K 16V
C7812	303 437 4614	CERAMIC 10U K 25V		303 453 8610	CERAMIC 0.1U K 16V
C7813	303 437 4614	CERAMIC 10U K 25V		303 453 8917	CERAMIC 0.1U K 16V
C7814	303 397 8219	CERAMIC 2.2U K 25V	C8019	303 409 3426	CERAMIC 0.1U K 16V
C7815	303 275 3015	CERAMIC 0.047U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C7816	303 305 8812	CERAMIC 47P J 50V		303 453 8917	CERAMIC 0.1U K 16V
	303 454 1610	CERAMIC 47P J 50V	C8021	303 409 3426	CERAMIC 0.1U K 16V
	303 453 7217	CERAMIC 47P J 50V		303 453 8610	CERAMIC 0.1U K 16V
C7817	303 441 9810	CERAMIC 0.01U K 50V		303 453 8917	CERAMIC 0.1U K 16V
C7821	303 376 6311	CERAMIC 0.47U K 10V	C8022	303 409 3426	CERAMIC 0.1U K 16V
C7822	303 376 6311	CERAMIC 0.47U K 10V		303 453 8610	CERAMIC 0.1U K 16V
C7825	303 397 8219	CERAMIC 2.2U K 25V		303 453 8917	CERAMIC 0.1U K 16V
C7827	303 381 5613	ELECT 220U M 16V	C8023	303 409 3426	CERAMIC 0.1U K 16V
C7831	303 275 3015	CERAMIC 0.047U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C7832	303 305 8812	CERAMIC 47P J 50V		303 453 8917	CERAMIC 0.1U K 16V
	303 454 1610	CERAMIC 47P J 50V	C8024	303 370 0018	CERAMIC 10U K 6.3V
	303 453 7217	CERAMIC 47P J 50V		303 368 7319	CERAMIC 10U K 6.3V
C7833	303 381 5613	ELECT 220U M 16V		303 358 3215	CERAMIC 10U K 6.3V
C7837	303 441 9810	CERAMIC 0.01U K 50V	C8026	303 370 0018	CERAMIC 10U K 6.3V
C7839	303 394 5815	CERAMIC 4.7U K 16V		303 368 7319	CERAMIC 10U K 6.3V
C7841	303 437 4614	CERAMIC 10U K 25V		303 358 3215	CERAMIC 10U K 6.3V
C7842	403 467 0911	CERAMIC 0.1U K 25V	C8027	303 370 0018	CERAMIC 10U K 6.3V
C7843	303 376 3112	ELECT 100U M 25V		303 368 7319	CERAMIC 10U K 6.3V
C7844	403 467 0911	CERAMIC 0.1U K 25V		303 358 3215	CERAMIC 10U K 6.3V
C8001	303 370 0018	CERAMIC 10U K 6.3V	C8028	303 409 3426	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 358 3215	CERAMIC 10U K 6.3V		303 453 8917	CERAMIC 0.1U K 16V
C8002	303 409 3426	CERAMIC 0.1U K 16V	C8029	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8003	303 409 3426	CERAMIC 0.1U K 16V	C8031	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8004	303 409 3426	CERAMIC 0.1U K 16V	C8032	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8006	303 409 3426	CERAMIC 0.1U K 16V	C8033	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8007	303 409 3426	CERAMIC 0.1U K 16V	C8034	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8008	303 370 0018	CERAMIC 10U K 6.3V	C8036	303 409 3426	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 358 3215	CERAMIC 10U K 6.3V		303 453 8917	CERAMIC 0.1U K 16V
C8009	303 370 0018	CERAMIC 10U K 6.3V	C8037	303 409 3426	CERAMIC 0.1U K 16V
	303 368 7319	CERAMIC 10U K 6.3V		303 453 8610	CERAMIC 0.1U K 16V
	303 358 3215	CERAMIC 10U K 6.3V		303 453 8917	CERAMIC 0.1U K 16V
C801	303 409 3426	CERAMIC 0.1U K 16V	C8038	303 370 0018	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8917	CERAMIC 0.1U K 16V		303 358 3215	CERAMIC 10U K 6.3V
C8011	303 409 3426	CERAMIC 0.1U K 16V	C8081	303 370 0018	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8917	CERAMIC 0.1U K 16V		303 358 3215	CERAMIC 10U K 6.3V
C8012	303 370 0018	CERAMIC 10U K 6.3V	C8093	303 379 0217	POS-SOLID 68U M 6.3V
	303 368 7319	CERAMIC 10U K 6.3V	C8096	303 370 0018	CERAMIC 10U K 6.3V
	303 358 3215	CERAMIC 10U K 6.3V		303 368 7319	CERAMIC 10U K 6.3V

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 358 3215	CERAMIC 10U K 6.3V	C8235	303 276 3113	CERAMIC 33P J 50V
C8097	303 383 5215	CERAMIC 4.7U K 6.3V	C8236	303 409 3426	CERAMIC 0.1U K 16V
C8098	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C8237	403 455 1012	CERAMIC 1U K 10V
C8104	303 376 6311	CERAMIC 0.47U K 10V		303 433 1112	CERAMIC 1U K 10V
C8201	303 409 3426	CERAMIC 0.1U K 16V	C8238	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8202	303 442 0519	CERAMIC 0.068U K 16V	C8239	303 409 3426	CERAMIC 0.1U K 16V
C8203	303 442 0519	CERAMIC 0.068U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8204	303 442 0519	CERAMIC 0.068U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8206	303 409 3426	CERAMIC 0.1U K 16V	C8301	303 370 0018	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8917	CERAMIC 0.1U K 16V		303 358 3215	CERAMIC 10U K 6.3V
C8207	303 409 3426	CERAMIC 0.1U K 16V	C8302	303 370 0018	CERAMIC 10U K 6.3V
	303 453 8610	CERAMIC 0.1U K 16V		303 368 7319	CERAMIC 10U K 6.3V
	303 453 8917	CERAMIC 0.1U K 16V		303 358 3215	CERAMIC 10U K 6.3V
C8208	303 409 3426	CERAMIC 0.1U K 16V	C8303	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8209	303 409 3426	CERAMIC 0.1U K 16V	C8801	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8211	303 442 0519	CERAMIC 0.068U K 16V	C8802	403 455 1012	CERAMIC 1U K 10V
C8212	303 442 0519	CERAMIC 0.068U K 16V		303 433 1112	CERAMIC 1U K 10V
C8213	303 409 3426	CERAMIC 0.1U K 16V	C8806	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8214	303 442 0519	CERAMIC 0.068U K 16V	C8807	303 276 3113	CERAMIC 33P J 50V
C8215	303 409 3426	CERAMIC 0.1U K 16V		303 453 7019	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 9617	CERAMIC 33P J 50V
	303 453 8917	CERAMIC 0.1U K 16V	C8808	303 276 3113	CERAMIC 33P J 50V
C8216	303 409 3426	CERAMIC 0.1U K 16V		303 453 7019	CERAMIC 33P J 50V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 9617	CERAMIC 33P J 50V
	303 453 8917	CERAMIC 0.1U K 16V	C8809	303 409 3426	CERAMIC 0.1U K 16V
C8217	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C8810	303 409 3426	CERAMIC 0.1U K 16V
C8218	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C8811	303 409 3426	CERAMIC 0.1U K 16V
C8219	303 442 0519	CERAMIC 0.068U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8221	303 442 0519	CERAMIC 0.068U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8222	303 409 3426	CERAMIC 0.1U K 16V	C8812	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8223	303 409 3426	CERAMIC 0.1U K 16V	C8813	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8224	303 442 0519	CERAMIC 0.068U K 16V	C8814	303 409 3426	CERAMIC 0.1U K 16V
C8226	303 442 0519	CERAMIC 0.068U K 16V		303 453 8610	CERAMIC 0.1U K 16V
C8227	303 442 0519	CERAMIC 0.068U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8228	303 409 3426	CERAMIC 0.1U K 16V	C8815	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8229	303 409 3426	CERAMIC 0.1U K 16V	C8817	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8230	303 409 3426	CERAMIC 0.1U K 16V	C8818	303 409 3426	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
C8231	303 442 0519	CERAMIC 0.068U K 16V	C8819	303 409 3426	CERAMIC 0.1U K 16V
C8232	303 409 3426	CERAMIC 0.1U K 16V		303 453 8610	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V		303 453 8917	CERAMIC 0.1U K 16V
	303 453 8917	CERAMIC 0.1U K 16V	C8820	303 409 3426	CERAMIC 0.1U K 16V
C8233	303 276 3113	CERAMIC 33P J 50V		303 453 8610	CERAMIC 0.1U K 16V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
C8821	303 453 8917	CERAMIC 0.1U K 16V	R1002	301 224 8814	MT-GLAZE 100 JA 1/16W
	303 409 3426	CERAMIC 0.1U K 16V	R1003	301 225 8110	MT-GLAZE 10 JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1004	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1011	301 260 4115	MT-GLAZE 75 JA 1/3W
C8823	303 409 3426	CERAMIC 0.1U K 16V	R1012	301 224 8814	MT-GLAZE 100 JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1021	301 260 4115	MT-GLAZE 75 JA 1/3W
	303 453 8917	CERAMIC 0.1U K 16V	R1022	301 224 8814	MT-GLAZE 100 JA 1/16W
C9007	303 409 3426	CERAMIC 0.1U K 16V	R1025	301 260 4214	MT-GLAZE 82 JA 1/3W
	303 453 8610	CERAMIC 0.1U K 16V	R1026	301 260 4214	MT-GLAZE 82 JA 1/3W
	303 453 8917	CERAMIC 0.1U K 16V	R1028	301 260 4214	MT-GLAZE 82 JA 1/3W
C9011	303 392 1215	ELECT 47U M 6.3V	R1029	301 225 2019	MT-GLAZE 680 JA 1/16W
C9012	303 409 3426	CERAMIC 0.1U K 16V	R1030	301 225 1418	MT-GLAZE 47K JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1035	301 225 8110	MT-GLAZE 10 JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1036	301 225 8110	MT-GLAZE 10 JA 1/16W
C9013	303 409 3426	CERAMIC 0.1U K 16V	R1037	301 225 8110	MT-GLAZE 10 JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1038	301 224 8814	MT-GLAZE 100 JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1039	301 225 8110	MT-GLAZE 10 JA 1/16W
C9014	303 409 3426	CERAMIC 0.1U K 16V	R1040	301 224 9316	MT-GLAZE 1K JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1041	301 225 1418	MT-GLAZE 47K JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1043	301 224 9019	MT-GLAZE 10K JA 1/16W
C9015	303 409 3426	CERAMIC 0.1U K 16V	R1044	301 224 9019	MT-GLAZE 10K JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1048	301 224 8814	MT-GLAZE 100 JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1050	301 224 9316	MT-GLAZE 1K JA 1/16W
C9016	303 409 3426	CERAMIC 0.1U K 16V	R1052	301 263 7420	MT-GLAZE 75 JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1056	301 225 1210	MT-GLAZE 4.7K JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1057	301 225 1210	MT-GLAZE 4.7K JA 1/16W
C9017	303 392 1215	ELECT 47U M 6.3V	R1060	301 224 9316	MT-GLAZE 1K JA 1/16W
C9019	303 409 3426	CERAMIC 0.1U K 16V	R1062	301 263 7420	MT-GLAZE 75 JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1063	301 225 2019	MT-GLAZE 680 JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1064	301 225 2019	MT-GLAZE 680 JA 1/16W
C9021	303 305 8515	CERAMIC 15P J 50V	R1065	301 224 9316	MT-GLAZE 1K JA 1/16W
	403 455 5218	CERAMIC 15P J 50V	R1066	301 240 5613	MT-GLAZE 3K JA 1/16W
	403 455 5713	CERAMIC 15P J 50V	R1069	301 240 5613	MT-GLAZE 3K JA 1/16W
C9022	303 305 8515	CERAMIC 15P J 50V	R1072	301 263 7420	MT-GLAZE 75 JA 1/16W
	403 455 5218	CERAMIC 15P J 50V	R1081	301 225 1418	MT-GLAZE 47K JA 1/16W
	403 455 5713	CERAMIC 15P J 50V	R1083	301 225 8110	MT-GLAZE 10 JA 1/16W
C9631	403 455 1012	CERAMIC 1U K 10V	R1084	301 224 9316	MT-GLAZE 1K JA 1/16W
	303 433 1112	CERAMIC 1U K 10V	R1085	301 225 1814	MT-GLAZE 47 JA 1/16W
C9878	303 324 6417	CERAMIC 0.022U K 16V	R1088	301 224 9316	MT-GLAZE 1K JA 1/16W
C9880	303 305 8812	CERAMIC 47P J 50V	R1091	301 225 1418	MT-GLAZE 47K JA 1/16W
C9882	303 409 3426	CERAMIC 0.1U K 16V	R1105	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1130	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
	303 453 8917	CERAMIC 0.1U K 16V	R1134	301 225 8110	MT-GLAZE 10 JA 1/16W
C9883	303 392 1215	ELECT 47U M 6.3V	R1141	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
C9884	303 409 3426	CERAMIC 0.1U K 16V	R1181	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
	303 453 8610	CERAMIC 0.1U K 16V	R1191	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
	303 453 8917	CERAMIC 0.1U K 16V	R1301	301 338 8113	MT-GLAZE 1.2K FA 1/16W
C9886	303 409 3426	CERAMIC 0.1U K 16V	R1302	301 338 8113	MT-GLAZE 1.2K FA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1331	301 224 9415	MT-GLAZE 1M JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R1332	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
C9887	303 409 3426	CERAMIC 0.1U K 16V	R1341	301 224 9316	MT-GLAZE 1K JA 1/16W
	303 453 8610	CERAMIC 0.1U K 16V	R1358	301 339 9614	MT-GLAZE 23.2K FA 1/10W
	303 453 8917	CERAMIC 0.1U K 16V	R2006	301 037 5116	MT-GLAZE 10 JA 1/10W
C9889	303 409 3426	CERAMIC 0.1U K 16V	R2007	301 037 5116	MT-GLAZE 10 JA 1/10W
	303 453 8610	CERAMIC 0.1U K 16V	R2011	301 224 8814	MT-GLAZE 100 JA 1/16W
	303 453 8917	CERAMIC 0.1U K 16V	R2016	301 225 3818	MT-GLAZE 1.5K JA 1/16W
<b>RESISTOR</b>			R2021	301 224 8814	MT-GLAZE 100 JA 1/16W
R008	301 276 4710	MT-GLAZE 0.000 ZA 1/3W	R2029	301 225 3818	MT-GLAZE 1.5K JA 1/16W
R009	301 301 3817	MT-GLAZE 820 FA 1/16W	R2034	301 224 8814	MT-GLAZE 100 JA 1/16W
R011	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2036	301 225 3818	MT-GLAZE 1.5K JA 1/16W
R012	301 276 4710	MT-GLAZE 0.000 ZA 1/3W	R2043	301 225 8110	MT-GLAZE 10 JA 1/16W
R013	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R2053	301 225 8110	MT-GLAZE 10 JA 1/16W
R015	301 265 2611	MT-GLAZE 5.1K FA 1/10W	R2201	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R016	301 265 1713	MT-GLAZE 4.7K FA 1/10W	R2202	301 225 8110	MT-GLAZE 10 JA 1/16W
R021	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R2204	301 225 8110	MT-GLAZE 10 JA 1/16W
R1001	301 260 4115	MT-GLAZE 75 JA 1/3W	R2206	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
			R2208	301 225 0213	MT-GLAZE 3.3K JA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R2211	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R3505	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R2212	301 263 7420	MT-GLAZE 75 JA 1/16W	R3506	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R2215	301 225 1814	MT-GLAZE 47 JA 1/16W	R3511	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R2216	301 225 1814	MT-GLAZE 47 JA 1/16W	R352	301 224 9019	MT-GLAZE 10K JA 1/16W
R2217	301 263 7420	MT-GLAZE 75 JA 1/16W	R353	301 225 1814	MT-GLAZE 47 JA 1/16W
R2218	301 225 1814	MT-GLAZE 47 JA 1/16W	R3532	301 225 1418	MT-GLAZE 47K JA 1/16W
R2219	301 225 8110	MT-GLAZE 10 JA 1/16W	R355	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R2220	301 225 8110	MT-GLAZE 10 JA 1/16W	R356	301 224 9019	MT-GLAZE 10K JA 1/16W
R2221	301 225 1814	MT-GLAZE 47 JA 1/16W	R3562	301 225 1418	MT-GLAZE 47K JA 1/16W
R2222	301 225 1814	MT-GLAZE 47 JA 1/16W	R358	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R2223	301 225 1814	MT-GLAZE 47 JA 1/16W	R3580	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
R2234	301 225 0312	MT-GLAZE 33 JA 1/16W	R3583	301 224 9019	MT-GLAZE 10K JA 1/16W
R2238	301 225 0312	MT-GLAZE 33 JA 1/16W	R3587	301 224 9316	MT-GLAZE 1K JA 1/16W
R2241	301 225 0312	MT-GLAZE 33 JA 1/16W	R3588	301 224 9019	MT-GLAZE 10K JA 1/16W
R2892	301 224 8814	MT-GLAZE 100 JA 1/16W	R359	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R3001	301 224 8913	MT-GLAZE 100K JA 1/16W	R3602	301 225 2118	MT-GLAZE 12K JA 1/16W
R3002	301 224 8814	MT-GLAZE 100 JA 1/16W	R3606	301 225 8110	MT-GLAZE 10 JA 1/16W
R301	301 225 8110	MT-GLAZE 10 JA 1/16W	R3620	301 190 1710	MT-GLAZE 0.000 ZA 1W
R3011	301 224 8913	MT-GLAZE 100K JA 1/16W	R3621	301 224 9019	MT-GLAZE 10K JA 1/16W
R3012	301 224 8814	MT-GLAZE 100 JA 1/16W	R3622	301 224 9019	MT-GLAZE 10K JA 1/16W
R302	301 338 1015	MT-GLAZE 49.9 DA 1/16W	R3623	301 224 9019	MT-GLAZE 10K JA 1/16W
R3021	301 224 8913	MT-GLAZE 100K JA 1/16W	R3626	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R303	301 338 1015	MT-GLAZE 49.9 DA 1/16W	R3627	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R3031	301 224 8913	MT-GLAZE 100K JA 1/16W	R3628	301 224 9019	MT-GLAZE 10K JA 1/16W
R3036	301 224 8814	MT-GLAZE 100 JA 1/16W	R363	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R305	301 224 9019	MT-GLAZE 10K JA 1/16W	R3636	301 225 2118	MT-GLAZE 12K JA 1/16W
R3051	301 224 8913	MT-GLAZE 100K JA 1/16W	R3637	301 224 9019	MT-GLAZE 10K JA 1/16W
R3053	301 224 8913	MT-GLAZE 100K JA 1/16W	R3638	301 224 9019	MT-GLAZE 10K JA 1/16W
R3054	301 224 8913	MT-GLAZE 100K JA 1/16W	R364	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R3056	301 224 9415	MT-GLAZE 1M JA 1/16W	R368	301 225 8110	MT-GLAZE 10 JA 1/16W
R3057	301 287 2227	MT-GLAZE 22K FA 1/16W	R369	301 225 8110	MT-GLAZE 10 JA 1/16W
R3061	301 224 8814	MT-GLAZE 100 JA 1/16W	R371	301 225 1814	MT-GLAZE 47 JA 1/16W
R3063	301 224 8913	MT-GLAZE 100K JA 1/16W	R3801	301 225 8110	MT-GLAZE 10 JA 1/16W
R3064	301 224 8814	MT-GLAZE 100 JA 1/16W	R3803	301 225 8110	MT-GLAZE 10 JA 1/16W
R308	301 225 8011	MT-GLAZE 330 JA 1/16W	R3804	301 225 8110	MT-GLAZE 10 JA 1/16W
R309	301 263 7420	MT-GLAZE 75 JA 1/16W	R3805	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R310	301 263 7420	MT-GLAZE 75 JA 1/16W	R3809	301 224 9316	MT-GLAZE 1K JA 1/16W
R312	301 225 1814	MT-GLAZE 47 JA 1/16W	R3812	301 225 8110	MT-GLAZE 10 JA 1/16W
R313	301 225 1814	MT-GLAZE 47 JA 1/16W	R3816	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R314	301 225 1814	MT-GLAZE 47 JA 1/16W	R3856	301 224 9019	MT-GLAZE 10K JA 1/16W
R315	301 225 8110	MT-GLAZE 10 JA 1/16W	R3857	301 224 9019	MT-GLAZE 10K JA 1/16W
R316	301 225 1814	MT-GLAZE 47 JA 1/16W	R388	301 224 9019	MT-GLAZE 10K JA 1/16W
R317	301 225 1814	MT-GLAZE 47 JA 1/16W	R389	301 224 9019	MT-GLAZE 10K JA 1/16W
R318	301 225 1814	MT-GLAZE 47 JA 1/16W	R399	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R319	301 225 1814	MT-GLAZE 47 JA 1/16W	R4001	301 224 8814	MT-GLAZE 100 JA 1/16W
R321	301 225 1814	MT-GLAZE 47 JA 1/16W	R4014	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R322	301 225 1814	MT-GLAZE 47 JA 1/16W	R4016	301 224 9514	MT-GLAZE 2.2K JA 1/16W
R323	301 225 1814	MT-GLAZE 47 JA 1/16W	R4017	301 224 9514	MT-GLAZE 2.2K JA 1/16W
R324	301 298 5511	MT-GLAZE 8.2K FA 1/16W	R4023	301 224 9019	MT-GLAZE 10K JA 1/16W
R326	301 224 9019	MT-GLAZE 10K JA 1/16W	R4024	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R327	301 224 9019	MT-GLAZE 10K JA 1/16W	R404	301 224 9019	MT-GLAZE 10K JA 1/16W
R328	301 224 9019	MT-GLAZE 10K JA 1/16W	R4072	301 224 8814	MT-GLAZE 100 JA 1/16W
R331	301 224 9019	MT-GLAZE 10K JA 1/16W	R4077	301 224 8814	MT-GLAZE 100 JA 1/16W
R332	301 263 7420	MT-GLAZE 75 JA 1/16W	R409	301 224 8814	MT-GLAZE 100 JA 1/16W
R333	301 224 9019	MT-GLAZE 10K JA 1/16W	R411	301 224 8814	MT-GLAZE 100 JA 1/16W
R336	301 224 9019	MT-GLAZE 10K JA 1/16W	R412	301 225 1814	MT-GLAZE 47 JA 1/16W
R337	301 224 9019	MT-GLAZE 10K JA 1/16W	R414	301 225 1814	MT-GLAZE 47 JA 1/16W
R338	301 224 9019	MT-GLAZE 10K JA 1/16W	R415	301 224 8814	MT-GLAZE 100 JA 1/16W
R339	301 224 9019	MT-GLAZE 10K JA 1/16W	R416	301 225 1814	MT-GLAZE 47 JA 1/16W
R341	301 224 9019	MT-GLAZE 10K JA 1/16W	R418	301 225 1814	MT-GLAZE 47 JA 1/16W
R342	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R419	301 225 1814	MT-GLAZE 47 JA 1/16W
R343	301 224 9019	MT-GLAZE 10K JA 1/16W	R422	301 225 1814	MT-GLAZE 47 JA 1/16W
R344	301 225 1814	MT-GLAZE 47 JA 1/16W	R423	301 225 1814	MT-GLAZE 47 JA 1/16W
R347	301 225 1814	MT-GLAZE 47 JA 1/16W	R424	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R349	301 263 7420	MT-GLAZE 75 JA 1/16W	R472	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R3502	301 225 1418	MT-GLAZE 47K JA 1/16W	R4830	301 225 3818	MT-GLAZE 1.5K JA 1/16W
R3504	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R4841	301 226 1516	MT-GLAZE 0.000 ZA 1/16W

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R4842	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5213	301 224 8814	MT-GLAZE 100 JA 1/16W
R4862	301 225 1616	MT-GLAZE 390 JA 1/16W	R5215	301 224 8814	MT-GLAZE 100 JA 1/16W
R4863	301 225 1616	MT-GLAZE 390 JA 1/16W	R5220	301 224 8814	MT-GLAZE 100 JA 1/16W
R4864	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5223	301 224 8814	MT-GLAZE 100 JA 1/16W
R4868	301 224 8814	MT-GLAZE 100 JA 1/16W	R530	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5001	301 287 2227	MT-GLAZE 22K FA 1/16W	R531	301 224 8814	MT-GLAZE 100 JA 1/16W
R5002	301 287 2227	MT-GLAZE 22K FA 1/16W	R5317	301 225 1814	MT-GLAZE 47 JA 1/16W
R5003	301 287 2227	MT-GLAZE 22K FA 1/16W	R5318	301 225 0619	MT-GLAZE 5.6K JA 1/16W
R5004	301 287 2227	MT-GLAZE 22K FA 1/16W	R5331	301 240 9710	MT-GLAZE 820K JA 1/16W
R5005	301 299 4810	MT-GLAZE 2.7K FA 1/16W	R5332	301 224 9316	MT-GLAZE 1K JA 1/16W
R5006	301 294 2811	MT-GLAZE 2.2K FA 1/16W	R5333	301 224 9316	MT-GLAZE 1K JA 1/16W
R5007	301 225 2019	MT-GLAZE 680 JA 1/16W	R5334	301 224 9019	MT-GLAZE 10K JA 1/16W
R501	301 224 8814	MT-GLAZE 100 JA 1/16W	R5336	301 224 9316	MT-GLAZE 1K JA 1/16W
R5010	301 299 4810	MT-GLAZE 2.7K FA 1/16W	R5337	301 224 9316	MT-GLAZE 1K JA 1/16W
R5011	301 294 2811	MT-GLAZE 2.2K FA 1/16W	R5338	301 226 2414	MT-GLAZE 560 JA 1/16W
R5012	301 225 2019	MT-GLAZE 680 JA 1/16W	R5342	301 225 0718	MT-GLAZE 56K JA 1/16W
R5013	301 224 9910	MT-GLAZE 22K JA 1/16W	R5343	301 224 9316	MT-GLAZE 1K JA 1/16W
R5014	301 224 9910	MT-GLAZE 22K JA 1/16W	R541	301 224 8814	MT-GLAZE 100 JA 1/16W
R5017	301 224 9316	MT-GLAZE 1K JA 1/16W	R542	301 224 8814	MT-GLAZE 100 JA 1/16W
R5018	301 224 9316	MT-GLAZE 1K JA 1/16W	R543	301 224 8814	MT-GLAZE 100 JA 1/16W
R5019	301 225 8110	MT-GLAZE 10 JA 1/16W	R546	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5020	301 162 2219	MT-GLAZE 10 JA 1/10W	R560	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R5021	301 150 5819	MT-GLAZE 100K JA 1/10W	R5606	301 162 2219	MT-GLAZE 10 JA 1/10W
R5022	301 225 8011	MT-GLAZE 330 JA 1/16W	R561	301 224 8814	MT-GLAZE 100 JA 1/16W
R5023	301 150 5819	MT-GLAZE 100K JA 1/10W	R5611	301 224 8814	MT-GLAZE 100 JA 1/16W
R5024	301 294 4112	MT-GLAZE 30K FA 1/16W	R5613	301 225 2118	MT-GLAZE 12K JA 1/16W
R5025	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5615	301 224 9019	MT-GLAZE 10K JA 1/16W
R5026	301 294 3313	MT-GLAZE 15K FA 1/16W	R5616	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5027	301 294 3313	MT-GLAZE 15K FA 1/16W	R5617	301 225 3818	MT-GLAZE 1.5K JA 1/16W
R5028	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5627	301 190 1710	MT-GLAZE 0.000 ZA 1W
R5029	301 294 4112	MT-GLAZE 30K FA 1/16W	R5637	301 234 9917	MT-GLAZE 6.8K JA 1/16W
R5030	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5668	301 224 8814	MT-GLAZE 100 JA 1/16W
R5033	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R5701	301 259 7823	MT-GLAZE 20K JA 1/16W
R5034	301 224 9316	MT-GLAZE 1K JA 1/16W	R5702	301 225 0718	MT-GLAZE 56K JA 1/16W
R5035	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R5703	301 224 9019	MT-GLAZE 10K JA 1/16W
R5036	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R5705	301 224 9019	MT-GLAZE 10K JA 1/16W
R5037	301 224 9316	MT-GLAZE 1K JA 1/16W	R5706	301 224 9019	MT-GLAZE 10K JA 1/16W
R5039	301 224 8814	MT-GLAZE 100 JA 1/16W	R5707	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5040	301 224 8814	MT-GLAZE 100 JA 1/16W	R571	301 224 8814	MT-GLAZE 100 JA 1/16W
R5041	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R5712	301 253 3712	MT-GLAZE 0.000 ZA 1/4W
R5042	301 224 9019	MT-GLAZE 10K JA 1/16W	R572	301 224 8814	MT-GLAZE 100 JA 1/16W
R5043	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R573	301 224 8814	MT-GLAZE 100 JA 1/16W
R5044	301 224 9019	MT-GLAZE 10K JA 1/16W	R5755	301 224 9019	MT-GLAZE 10K JA 1/16W
R5046	301 224 9019	MT-GLAZE 10K JA 1/16W	R5757	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5047	301 299 4810	MT-GLAZE 2.7K FA 1/16W	R5758	301 224 9019	MT-GLAZE 10K JA 1/16W
R5048	301 224 9316	MT-GLAZE 1K JA 1/16W	R5759	301 224 9316	MT-GLAZE 1K JA 1/16W
R5049	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R5823	301 294 2613	MT-GLAZE 4.7K FA 1/16W
R5050	301 225 0114	MT-GLAZE 27K JA 1/16W	R5824	301 294 3511	MT-GLAZE 27K FA 1/16W
R5055	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R5825	301 294 3016	MT-GLAZE 10K FA 1/16W
R5056	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R5851	301 224 9019	MT-GLAZE 10K JA 1/16W
R5057	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R5852	301 294 3214	MT-GLAZE 47K FA 1/16W
R5060	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R5853	401 343 0512	MT-GLAZE 7.5K FA 1/16W
R5061	301 224 8814	MT-GLAZE 100 JA 1/16W	R5854	301 287 2227	MT-GLAZE 22K FA 1/16W
R5062	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R5863	301 265 5711	MT-GLAZE 8.2K FA 1/10W
R5063	301 224 9316	MT-GLAZE 1K JA 1/16W	R5864	301 265 5711	MT-GLAZE 8.2K FA 1/10W
R5064	301 224 8814	MT-GLAZE 100 JA 1/16W	R5865	301 264 6511	MT-GLAZE 2.2K FA 1/10W
R5066	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R5867	301 225 1418	MT-GLAZE 47K JA 1/16W
R5067	301 224 9316	MT-GLAZE 1K JA 1/16W	R595	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R5069	301 150 6014	MT-GLAZE 0.000 ZA 1/10W	R596	301 294 3016	MT-GLAZE 10K FA 1/16W
R507	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R597	301 294 4419	MT-GLAZE 1.8K FA 1/16W
R5070	301 225 8011	MT-GLAZE 330 JA 1/16W	R598	301 301 0410	MT-GLAZE 240 FA 1/16W
R5073	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R599	301 224 9316	MT-GLAZE 1K JA 1/16W
R5075	301 224 9514	MT-GLAZE 2.2K JA 1/16W	R6801	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R509	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	R6803	301 224 9019	MT-GLAZE 10K JA 1/16W
R511	301 224 8814	MT-GLAZE 100 JA 1/16W	R6804	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R512	301 224 8814	MT-GLAZE 100 JA 1/16W	R6806	301 224 9217	MT-GLAZE 15K JA 1/16W
R513	301 224 8814	MT-GLAZE 100 JA 1/16W	R6807	301 234 9917	MT-GLAZE 6.8K JA 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R6808	301 225 1517	MT-GLAZE 3.9K JA 1/16W	R8016	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R6809	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R8018	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R6811	301 225 1517	MT-GLAZE 3.9K JA 1/16W	R8020	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R6812	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R8022	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R6813	301 224 9019	MT-GLAZE 10K JA 1/16W	R8023	301 264 5316	MT-GLAZE 2.2 JA 1/10W
R6822	301 224 9316	MT-GLAZE 1K JA 1/16W	R8024	301 225 0312	MT-GLAZE 33 JA 1/16W
R6823	301 224 9019	MT-GLAZE 10K JA 1/16W	R8026	301 225 0312	MT-GLAZE 33 JA 1/16W
R6841	301 224 8814	MT-GLAZE 100 JA 1/16W	R8027	301 225 0312	MT-GLAZE 33 JA 1/16W
R6844	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8028	301 225 0312	MT-GLAZE 33 JA 1/16W
R6845	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8029	301 225 0312	MT-GLAZE 33 JA 1/16W
R6846	301 224 9019	MT-GLAZE 10K JA 1/16W	R8031	301 225 0312	MT-GLAZE 33 JA 1/16W
R6847	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8032	301 225 0312	MT-GLAZE 33 JA 1/16W
R6848	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8033	301 225 0312	MT-GLAZE 33 JA 1/16W
R6849	301 263 7420	MT-GLAZE 75 JA 1/16W	R8034	301 225 0312	MT-GLAZE 33 JA 1/16W
R6851	301 224 9019	MT-GLAZE 10K JA 1/16W	R8036	301 225 0312	MT-GLAZE 33 JA 1/16W
R6853	301 229 3913	MT-GLAZE 180 JA 1/16W	R8037	301 225 0312	MT-GLAZE 33 JA 1/16W
R6854	301 224 9019	MT-GLAZE 10K JA 1/16W	R8039	301 341 0616	MT-GLAZE 49.9 FA 1/16W
R6858	301 263 7420	MT-GLAZE 75 JA 1/16W	R804	301 224 9019	MT-GLAZE 10K JA 1/16W
R6883	301 224 9019	MT-GLAZE 10K JA 1/16W	R8042	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7801	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8043	301 225 1418	MT-GLAZE 47K JA 1/16W
R7803	301 276 3010	MT-GLAZE 75K JA 1/16W	R8044	301 225 1418	MT-GLAZE 47K JA 1/16W
R7805	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8045	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7813	301 224 8913	MT-GLAZE 100K JA 1/16W	R8046	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7816	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8047	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7817	301 224 9019	MT-GLAZE 10K JA 1/16W	R8048	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7818	301 299 4810	MT-GLAZE 2.7K FA 1/16W	R8049	301 341 0616	MT-GLAZE 49.9 FA 1/16W
R7819	301 264 6115	MT-GLAZE 20K FA 1/10W	R8051	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7820	301 225 8110	MT-GLAZE 10 JA 1/16W	R8052	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7821	301 294 2910	MT-GLAZE 560 FA 1/16W	R8053	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7824	301 301 8010	MT-GLAZE 1.5K FA 1/16W	R8054	301 240 9116	MT-GLAZE 5.6 JA 1/16W
R7827	301 225 8110	MT-GLAZE 10 JA 1/16W	R8056	301 225 1418	MT-GLAZE 47K JA 1/16W
R7828	301 224 9019	MT-GLAZE 10K JA 1/16W	R8057	301 225 1418	MT-GLAZE 47K JA 1/16W
R7829	301 224 9316	MT-GLAZE 1K JA 1/16W	R8059	301 341 0616	MT-GLAZE 49.9 FA 1/16W
R7830	301 224 9019	MT-GLAZE 10K JA 1/16W	R806	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7831	301 224 9316	MT-GLAZE 1K JA 1/16W	R8064	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
R7832	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R8069	301 341 0616	MT-GLAZE 49.9 FA 1/16W
R7833	301 224 9514	MT-GLAZE 2.2K JA 1/16W	R807	301 224 9019	MT-GLAZE 10K JA 1/16W
R7836	301 225 1517	MT-GLAZE 3.9K JA 1/16W	R808	301 224 9019	MT-GLAZE 10K JA 1/16W
R7839	301 225 1517	MT-GLAZE 3.9K JA 1/16W	R8084	301 224 9316	MT-GLAZE 1K JA 1/16W
R7840	301 225 1517	MT-GLAZE 3.9K JA 1/16W	R8088	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
R7841	301 336 8818	MT-GLAZE 6.8K FA 1/16W	R809	301 294 4419	MT-GLAZE 1.8K FA 1/16W
R7842	301 294 2811	MT-GLAZE 2.2K FA 1/16W	R8091	301 224 9019	MT-GLAZE 10K JA 1/16W
R7843	301 225 1616	MT-GLAZE 390 JA 1/16W	R8101	301 225 1814	MT-GLAZE 47 JA 1/16W
R7844	301 224 9316	MT-GLAZE 1K JA 1/16W	R8102	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7845	301 224 9316	MT-GLAZE 1K JA 1/16W	R8103	301 225 1814	MT-GLAZE 47 JA 1/16W
R7846	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R812	301 225 0213	MT-GLAZE 3.3K JA 1/16W
R7847	301 286 4717	MT-GLAZE 30K JA 1/16W	R8201	301 225 1814	MT-GLAZE 47 JA 1/16W
R7848	301 224 9019	MT-GLAZE 10K JA 1/16W	R8202	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R7863	301 224 9316	MT-GLAZE 1K JA 1/16W	R8204	301 225 1814	MT-GLAZE 47 JA 1/16W
R7865	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8206	301 263 7420	MT-GLAZE 75 JA 1/16W
R7871	301 301 8010	MT-GLAZE 1.5K FA 1/16W	R8207	301 263 7420	MT-GLAZE 75 JA 1/16W
R7872	301 294 2910	MT-GLAZE 560 FA 1/16W	R8208	301 226 5514	MT-GLAZE 120 JA 1/16W
R7873	301 264 6115	MT-GLAZE 20K FA 1/10W	R8209	301 226 5514	MT-GLAZE 120 JA 1/16W
R7874	301 299 4810	MT-GLAZE 2.7K FA 1/16W	R8211	301 226 5514	MT-GLAZE 120 JA 1/16W
R7878	301 224 9019	MT-GLAZE 10K JA 1/16W	R8243	301 225 0015	MT-GLAZE 270 JA 1/16W
R7879	301 224 9316	MT-GLAZE 1K JA 1/16W	R8244	301 225 0015	MT-GLAZE 270 JA 1/16W
R7881	301 224 9316	MT-GLAZE 1K JA 1/16W	R8245	301 225 0015	MT-GLAZE 270 JA 1/16W
R7882	301 225 0213	MT-GLAZE 3.3K JA 1/16W	R8311	301 224 9712	MT-GLAZE 22 JA 1/16W
R7883	301 224 9514	MT-GLAZE 2.2K JA 1/16W	R8312	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8001	301 264 5316	MT-GLAZE 2.2 JA 1/10W	R8313	301 224 9712	MT-GLAZE 22 JA 1/16W
R8002	301 264 5316	MT-GLAZE 2.2 JA 1/10W	R8314	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8003	301 226 2414	MT-GLAZE 560 JA 1/16W	R8316	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8004	301 224 9415	MT-GLAZE 1M JA 1/16W	R8801	301 224 9316	MT-GLAZE 1K JA 1/16W
R8008	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8802	301 226 1516	MT-GLAZE 0.000 ZA 1/16W
R8009	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8804	301 225 1210	MT-GLAZE 4.7K JA 1/16W
R801	301 224 9019	MT-GLAZE 10K JA 1/16W	R8805	301 224 9316	MT-GLAZE 1K JA 1/16W
R8014	301 225 1210	MT-GLAZE 4.7K JA 1/16W	R8807	301 226 1516	MT-GLAZE 0.000 ZA 1/16W

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
R8808	301 226 1516	MT-GLAZE 0.000 ZA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R8812	301 225 8110	MT-GLAZE 10 JA 1/16W	RB2203	945 036 0986	R-NETWORK 47X4 1/32W
R8814	301 224 9415	MT-GLAZE 1M JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R8816	301 264 6511	MT-GLAZE 2.2K FA 1/10W	RB2206	945 036 0986	R-NETWORK 47X4 1/32W
R8821	301 225 8110	MT-GLAZE 10 JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R8833	301 229 3913	MT-GLAZE 180 JA 1/16W	RB2208	945 036 0986	R-NETWORK 47X4 1/32W
R8837	301 226 1516	MT-GLAZE 0.000 ZA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R8838	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	RB2211	945 036 0986	R-NETWORK 47X4 1/32W
R8839	301 229 3913	MT-GLAZE 180 JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R8840	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	RB2213	945 036 0986	R-NETWORK 47X4 1/32W
R8841	301 224 9019	MT-GLAZE 10K JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R8843	301 224 9019	MT-GLAZE 10K JA 1/16W	RB301	945 018 8931	R-NETWORK 47X4 1/16W
R8844	301 224 9019	MT-GLAZE 10K JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R8846	301 224 8913	MT-GLAZE 100K JA 1/16W	RB302	945 018 8931	R-NETWORK 47X4 1/16W
R8850	301 253 3712	MT-GLAZE 0.000 ZA 1/4W		945 037 0671	R-NETWORK 47X4 0.063W
R8861	301 225 8110	MT-GLAZE 10 JA 1/16W	RB303	945 018 8931	R-NETWORK 47X4 1/16W
R8864	301 225 8110	MT-GLAZE 10 JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R8881	301 224 9019	MT-GLAZE 10K JA 1/16W	RB304	945 018 8931	R-NETWORK 47X4 1/16W
R9004	301 226 1516	MT-GLAZE 0.000 ZA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9005	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	RB306	945 018 8931	R-NETWORK 47X4 1/16W
R9006	301 226 1516	MT-GLAZE 0.000 ZA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9007	301 224 9316	MT-GLAZE 1K JA 1/16W	RB307	945 018 8931	R-NETWORK 47X4 1/16W
R9008	301 224 8814	MT-GLAZE 100 JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9009	301 224 8814	MT-GLAZE 100 JA 1/16W	RB308	945 018 8931	R-NETWORK 47X4 1/16W
R9010	301 224 8814	MT-GLAZE 100 JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9014	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	RB309	945 018 8931	R-NETWORK 47X4 1/16W
R9021	301 226 1516	MT-GLAZE 0.000 ZA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9022	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	RB311	945 018 8931	R-NETWORK 47X4 1/16W
R9023	301 226 1516	MT-GLAZE 0.000 ZA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9028	301 224 9415	MT-GLAZE 1M JA 1/16W	RB312	945 018 8931	R-NETWORK 47X4 1/16W
R9029	301 224 9514	MT-GLAZE 2.2K JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9035	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	RB313	945 018 8931	R-NETWORK 47X4 1/16W
R9305	301 225 8110	MT-GLAZE 10 JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9312	301 224 8913	MT-GLAZE 100K JA 1/16W	RB316	945 018 8931	R-NETWORK 47X4 1/16W
R9317	301 225 8110	MT-GLAZE 10 JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9318	301 225 8110	MT-GLAZE 10 JA 1/16W	RB317	945 018 8931	R-NETWORK 47X4 1/16W
R9319	301 225 8110	MT-GLAZE 10 JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9330	301 224 9019	MT-GLAZE 10K JA 1/16W	RB318	945 028 5982	R-NETWORK 10X4 1/16W
R9611	301 225 0213	MT-GLAZE 3.3K JA 1/16W		945 037 3108	R-NETWORK 10X4 0.063W
R9612	301 225 0213	MT-GLAZE 3.3K JA 1/16W	RB321	945 018 8931	R-NETWORK 47X4 1/16W
R9613	301 225 0213	MT-GLAZE 3.3K JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9631	301 224 9316	MT-GLAZE 1K JA 1/16W	RB322	945 018 8931	R-NETWORK 47X4 1/16W
R9632	301 224 9019	MT-GLAZE 10K JA 1/16W		945 037 0671	R-NETWORK 47X4 0.063W
R9633	301 225 1210	MT-GLAZE 4.7K JA 1/16W	RB331	945 036 0986	R-NETWORK 47X4 1/32W
R9634	301 225 3818	MT-GLAZE 1.5K JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R9869	301 225 8110	MT-GLAZE 10 JA 1/16W	RB332	945 036 0986	R-NETWORK 47X4 1/32W
R9873	301 255 7312	MT-GLAZE 510K JA 1/10W		945 037 0831	R-NETWORK 47X4 1/16W
R9876	301 225 8110	MT-GLAZE 10 JA 1/16W	RB333	945 036 0986	R-NETWORK 47X4 1/32W
R9878	301 225 3818	MT-GLAZE 1.5K JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R9882	301 225 8110	MT-GLAZE 10 JA 1/16W	RB334	945 036 0986	R-NETWORK 47X4 1/32W
R9884	301 225 8110	MT-GLAZE 10 JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R9888	301 224 9316	MT-GLAZE 1K JA 1/16W	RB336	945 036 0986	R-NETWORK 47X4 1/32W
R9889	301 225 8110	MT-GLAZE 10 JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R9890	301 225 8110	MT-GLAZE 10 JA 1/16W	RB337	945 036 0986	R-NETWORK 47X4 1/32W
R9892	301 224 9019	MT-GLAZE 10K JA 1/16W		945 037 0831	R-NETWORK 47X4 1/16W
R9893	301 224 9019	MT-GLAZE 10K JA 1/16W	RB411	945 037 0831	R-NETWORK 47X4 1/16W
R9894	301 224 9019	MT-GLAZE 10K JA 1/16W	RB412	945 037 0831	R-NETWORK 47X4 1/16W
R9899	301 224 9712	MT-GLAZE 22 JA 1/16W	RB413	945 037 0831	R-NETWORK 47X4 1/16W
R9907	301 224 8814	MT-GLAZE 100 JA 1/16W	RB414	945 037 0831	R-NETWORK 47X4 1/16W
R9908	301 224 8814	MT-GLAZE 100 JA 1/16W	RB416	945 037 0831	R-NETWORK 47X4 1/16W
R9914	301 224 9019	MT-GLAZE 10K JA 1/16W	RB417	945 037 0831	R-NETWORK 47X4 1/16W
R9915	301 224 9019	MT-GLAZE 10K JA 1/16W	RB418	945 037 0831	R-NETWORK 47X4 1/16W
R9916	301 224 9019	MT-GLAZE 10K JA 1/16W	RB419	945 037 0831	R-NETWORK 47X4 1/16W
R9927	301 226 1516	MT-GLAZE 0.000 ZA 1/16W	RB421	945 037 0831	R-NETWORK 47X4 1/16W
R9928	301 224 9019	MT-GLAZE 10K JA 1/16W	RB422	945 037 0831	R-NETWORK 47X4 1/16W
R9929	301 225 0213	MT-GLAZE 3.3K JA 1/16W	RB423	945 037 0831	R-NETWORK 47X4 1/16W
RB2201	945 036 0986	R-NETWORK 47X4 1/32W	RB424	945 037 0831	R-NETWORK 47X4 1/16W

Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
RB426	945 037 0831	R-NETWORK 47X4 1/16W	L2895	945 086 6037	IMPEDANCE,330 OHM P
RB427	945 037 0831	R-NETWORK 47X4 1/16W	L2896	945 086 6037	IMPEDANCE,330 OHM P
RB428	945 037 0831	R-NETWORK 47X4 1/16W	L2897	945 086 6037	IMPEDANCE,330 OHM P
RB429	945 037 0831	R-NETWORK 47X4 1/16W	L2898	945 086 6037	IMPEDANCE,330 OHM P
RB431	945 037 0831	R-NETWORK 47X4 1/16W	L2899	652 002 8685	INDUCTOR 1000OHM, P
RB432	945 037 0831	R-NETWORK 47X4 1/16W	L301	945 050 8449	IMPEDANCE,1000 OHM P
RB433	945 037 0831	R-NETWORK 47X4 1/16W	L302	945 050 8449	IMPEDANCE,1000 OHM P
RB434	945 037 0831	R-NETWORK 47X4 1/16W	L303	945 050 8449	IMPEDANCE,1000 OHM P
RB436	945 037 0831	R-NETWORK 47X4 1/16W	L304	945 050 8449	IMPEDANCE,1000 OHM P
RB437	945 037 0831	R-NETWORK 47X4 1/16W	L305	945 050 8449	IMPEDANCE,1000 OHM P
RB501	945 036 3529	R-NETWORK 0X4 1/32W	L306	945 050 8449	IMPEDANCE,1000 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L307	945 050 8449	IMPEDANCE,1000 OHM P
RB503	945 036 3529	R-NETWORK 0X4 1/32W	L308	945 050 8449	IMPEDANCE,1000 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L309	945 050 8449	IMPEDANCE,1000 OHM P
RB504	945 036 3529	R-NETWORK 0X4 1/32W	L310	301 150 6014	MT-GLAZE 0.000 ZA 1/10W
	945 037 0817	R-NETWORK 0X4 1/16W	L311	945 050 8449	IMPEDANCE,1000 OHM P
RB506	945 036 3529	R-NETWORK 0X4 1/32W	L312	945 050 8449	IMPEDANCE,1000 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L313	945 050 8449	IMPEDANCE,1000 OHM P
RB531	945 036 3529	R-NETWORK 0X4 1/32W	L314	945 050 8449	IMPEDANCE,1000 OHM P
	945 037 0817	R-NETWORK 0X4 1/16W	L3501	652 002 8500	INDUCTOR 330OHM, P
RB533	945 036 3529	R-NETWORK 0X4 1/32W	L3531	652 002 8500	INDUCTOR 330OHM, P
	945 037 0817	R-NETWORK 0X4 1/16W	L3534	945 041 2210	INDUCTOR,0.12U K
RB534	945 036 3529	R-NETWORK 0X4 1/32W	L3561	652 002 8500	INDUCTOR 330OHM, P
	945 037 0817	R-NETWORK 0X4 1/16W	L3620	652 002 8524	INDUCTOR 220OHM, P
RB536	945 036 3529	R-NETWORK 0X4 1/32W	L3621	652 002 8524	INDUCTOR 220OHM, P
	945 037 0817	R-NETWORK 0X4 1/16W	L3622	652 002 8524	INDUCTOR 220OHM, P
RB561	945 036 3529	R-NETWORK 0X4 1/32W	L3624	652 002 8524	INDUCTOR 220OHM, P
	945 037 0817	R-NETWORK 0X4 1/16W	L3626	652 002 8524	INDUCTOR 220OHM, P
RB563	945 036 3529	R-NETWORK 0X4 1/32W	L3627	652 002 8524	INDUCTOR 220OHM, P
	945 037 0817	R-NETWORK 0X4 1/16W	L3630	652 002 8524	INDUCTOR 220OHM, P
RB564	945 036 3529	R-NETWORK 0X4 1/32W	L3631	652 002 8524	INDUCTOR 220OHM, P
	945 037 0817	R-NETWORK 0X4 1/16W	L3632	652 002 8524	INDUCTOR 220OHM, P
RB566	945 036 3529	R-NETWORK 0X4 1/32W	L3633	652 002 8524	INDUCTOR 220OHM, P
	945 037 0817	R-NETWORK 0X4 1/16W	L3634	652 002 8524	INDUCTOR 220OHM, P
RB8001	645 049 0675	R-NETWORK 33X4 1/32W	L3635	652 002 8524	INDUCTOR 220OHM, P
	945 049 0690	R-NETWORK 33X4 1/16W	L3636	652 002 8524	INDUCTOR 220OHM, P
RB8002	645 049 0675	R-NETWORK 33X4 1/32W	L3637	652 002 8524	INDUCTOR 220OHM, P
	945 049 0690	R-NETWORK 33X4 1/16W	L402	652 002 8500	INDUCTOR 330OHM, P
RB8003	645 049 0675	R-NETWORK 33X4 1/32W	L4809	652 002 8685	INDUCTOR 1000OHM, P
	945 049 0690	R-NETWORK 33X4 1/16W	L4810	652 002 8685	INDUCTOR 1000OHM, P
RB8004	645 049 0675	R-NETWORK 33X4 1/32W	L4811	652 002 8685	INDUCTOR 1000OHM, P
	945 049 0690	R-NETWORK 33X4 1/16W	L4812	652 002 8524	INDUCTOR 220OHM, P
RB8006	645 049 0675	R-NETWORK 33X4 1/32W	L4813	652 002 8685	INDUCTOR 1000OHM, P
	945 049 0690	R-NETWORK 33X4 1/16W	L4814	652 002 8685	INDUCTOR 1000OHM, P
RB8007	645 049 0675	R-NETWORK 33X4 1/32W	L501	652 002 8500	INDUCTOR 330OHM, P
	945 049 0690	R-NETWORK 33X4 1/16W	L502	652 002 8500	INDUCTOR 330OHM, P
RB8008	945 049 0690	R-NETWORK 33X4 1/16W	L5031	652 002 8524	INDUCTOR 220OHM, P
RB9881	945 028 0697	R-NETWORK 100X4 1/16W	L5032	652 002 8524	INDUCTOR 220OHM, P
			L531	652 002 8500	INDUCTOR 330OHM, P
			L532	652 002 8500	INDUCTOR 330OHM, P
			L5331	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
			L5332	945 032 8344	INDUCTOR,39U J
			L5602	945 040 6455	INDUCTOR,4.7U M
			L5606	652 002 8500	INDUCTOR 330OHM, P
			L5608	652 002 8500	INDUCTOR 330OHM, P
			L5609	652 002 8500	INDUCTOR 330OHM, P
			L561	652 002 8500	INDUCTOR 330OHM, P
			L5611	652 002 8500	INDUCTOR 330OHM, P
			L562	652 002 8500	INDUCTOR 330OHM, P
			L5701	652 002 8500	INDUCTOR 330OHM, P
			L5703	652 002 8500	INDUCTOR 330OHM, P
			L5721	652 002 8524	INDUCTOR 220OHM, P
			L5802	652 002 8500	INDUCTOR 330OHM, P
			L5821	645 101 6683	INDUCTOR,4.7U M
			L5822	652 002 8500	INDUCTOR 330OHM, P
			L5825	652 002 8500	INDUCTOR 330OHM, P
			L5826	652 002 8500	INDUCTOR 330OHM, P
<b>COIL</b>					
L001	652 002 8500	INDUCTOR 330OHM, P			
L011	945 062 2855	INDUCTOR,33U M			
L012	945 062 2855	INDUCTOR,33U M			
L1002	945 086 7577	FILTER,EMI 400MHZ			
L1012	945 086 7577	FILTER,EMI 400MHZ			
L1022	945 086 7577	FILTER,EMI 400MHZ			
L1051	945 086 7577	FILTER,EMI 400MHZ			
L1061	945 086 7577	FILTER,EMI 400MHZ			
L1071	945 086 7577	FILTER,EMI 400MHZ			
L2210	945 036 3895	INDUCTOR,220 OHM			
L2220	945 036 3895	INDUCTOR,220 OHM			
L2221	945 036 3895	INDUCTOR,220 OHM			
L2222	945 036 3895	INDUCTOR,220 OHM			
L2303	945 086 6600	IMPEDANCE,220 OHM P			
L2891	652 002 8524	INDUCTOR 220OHM, P			
L2892	652 002 8685	INDUCTOR 1000OHM, P			
L2893	652 002 8685	INDUCTOR 1000OHM, P			

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
L5828	652 002 8500	INDUCTOR 330OHM, P	D3623	307 210 1923	DIODE 1SS400 TE-61
L5832	652 002 8500	INDUCTOR 330OHM, P		307 235 0816	DIODE 1SS387 TPL3
L5842	652 002 8500	INDUCTOR 330OHM, P	D3626	307 210 1923	DIODE 1SS400 TE-61
L5851	652 002 8500	INDUCTOR 330OHM, P		307 235 0816	DIODE 1SS387 TPL3
L5861	645 101 6683	INDUCTOR,4.7U M	D3627	307 210 1923	DIODE 1SS400 TE-61
L5862	652 002 8500	INDUCTOR 330OHM, P		307 235 0816	DIODE 1SS387 TPL3
L5863	652 002 8500	INDUCTOR 330OHM, P	D3636	307 210 1923	DIODE 1SS400 TE-61
L5865	652 002 8500	INDUCTOR 330OHM, P		307 235 0816	DIODE 1SS387 TPL3
L5868	652 002 8500	INDUCTOR 330OHM, P	D3637	307 210 1923	DIODE 1SS400 TE-61
L7811	645 104 1159	INDUCTOR,15U M		307 235 0816	DIODE 1SS387 TPL3
L7861	645 104 1159	INDUCTOR,15U M	D3802	307 210 5416	DIODE RB551V-30-TE-17
L8001	945 086 6600	IMPEDANCE,220 OHM P	D4802	307 210 1923	DIODE 1SS400 TE-61
L8002	945 086 6600	IMPEDANCE,220 OHM P		307 235 0816	DIODE 1SS387 TPL3
L8003	945 086 6600	IMPEDANCE,220 OHM P	D4811	307 209 1214	ZD UDZS-TE-176.2B
L8004	945 086 6600	IMPEDANCE,220 OHM P		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L8006	945 086 6600	IMPEDANCE,220 OHM P		408 063 7507	ZENER DIODE MM3Z6V2B
L8007	945 086 6600	IMPEDANCE,220 OHM P	D4812	307 209 1214	ZD UDZS-TE-176.2B
L8010	652 003 6499	INDUCTOR ,90 OHM		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	645 092 3494	IMPEDANCE,90 OHM P		408 063 7507	ZENER DIODE MM3Z6V2B
L8011	652 003 6499	INDUCTOR ,90 OHM	D4813	307 209 1214	ZD UDZS-TE-176.2B
	645 092 3494	IMPEDANCE,90 OHM P		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
L8013	652 003 6499	INDUCTOR ,90 OHM		408 063 7507	ZENER DIODE MM3Z6V2B
	645 092 3494	IMPEDANCE,90 OHM P	D4816	307 209 1214	ZD UDZS-TE-176.2B
L8014	652 003 6499	INDUCTOR ,90 OHM		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	645 092 3494	IMPEDANCE,90 OHM P		408 063 7507	ZENER DIODE MM3Z6V2B
L8801	945 068 8318	FILTER,EMI 100MHZ	D5021	307 210 1923	DIODE 1SS400 TE-61
L8806	652 002 8500	INDUCTOR 330OHM, P		307 235 0816	DIODE 1SS387 TPL3
L8835	645 100 9340	IMPEDANCE,120 OHM P	D5061	307 210 1923	DIODE 1SS400 TE-61
L8836	645 100 9340	IMPEDANCE,120 OHM P		307 235 0816	DIODE 1SS387 TPL3
<b>DIODE</b>			D5062	307 210 1923	DIODE 1SS400 TE-61
D011	307 247 8827	DIODE RF101L2S		307 235 0816	DIODE 1SS387 TPL3
D013	307 247 8827	DIODE RF101L2S	D5602	307 210 5416	DIODE RB551V-30-TE-17
D1041	307 209 1214	ZD UDZS-TE-176.2B	D5603	307 210 5416	DIODE RB551V-30-TE-17
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	D5622	307 210 1923	DIODE 1SS400 TE-61
	408 063 7507	ZENER DIODE MM3Z6V2B		307 235 0816	DIODE 1SS387 TPL3
D1042	307 209 1214	ZD UDZS-TE-176.2B	D5623	307 210 1923	DIODE 1SS400 TE-61
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		307 235 0816	DIODE 1SS387 TPL3
	408 063 7507	ZENER DIODE MM3Z6V2B	D5624	307 210 1923	DIODE 1SS400 TE-61
D1091	307 205 5216	DIODE RB521S-30-TE61		307 235 0816	DIODE 1SS387 TPL3
D1092	307 205 5216	DIODE RB521S-30-TE61	D591	307 210 1923	DIODE 1SS400 TE-61
D2891	307 209 1214	ZD UDZS-TE-176.2B		307 235 0816	DIODE 1SS387 TPL3
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3	D592	307 210 1923	DIODE 1SS400 TE-61
	408 063 7507	ZENER DIODE MM3Z6V2B		307 235 0816	DIODE 1SS387 TPL3
D2892	307 209 1214	ZD UDZS-TE-176.2B	D6801	307 209 1214	ZD UDZS-TE-176.2B
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	408 063 7507	ZENER DIODE MM3Z6V2B		408 063 7507	ZENER DIODE MM3Z6V2B
D2893	307 209 1214	ZD UDZS-TE-176.2B	D6802	307 209 1214	ZD UDZS-TE-176.2B
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	408 063 7507	ZENER DIODE MM3Z6V2B		408 063 7507	ZENER DIODE MM3Z6V2B
D2894	307 209 1214	ZD UDZS-TE-176.2B	D6803	307 209 1214	ZD UDZS-TE-176.2B
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	408 063 7507	ZENER DIODE MM3Z6V2B		408 063 7507	ZENER DIODE MM3Z6V2B
D3051	307 210 1923	DIODE 1SS400 TE-61	D6831	408 068 5508	LED KPT-2012YC
	307 235 0816	DIODE 1SS387 TPL3	D6832	408 071 8503	LED KPT-2012SRC-PRV
D3601	307 210 1923	DIODE 1SS400 TE-61	D6833	408 068 5201	LED KPTB-1612ESGC
	307 235 0816	DIODE 1SS387 TPL3	D6841	307 209 1214	ZD UDZS-TE-176.2B
D3613	307 210 1923	DIODE 1SS400 TE-61		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 235 0816	DIODE 1SS387 TPL3		408 063 7507	ZENER DIODE MM3Z6V2B
D3614	307 210 1923	DIODE 1SS400 TE-61	D6842	307 209 1214	ZD UDZS-TE-176.2B
	307 235 0816	DIODE 1SS387 TPL3		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
D3617	307 210 1923	DIODE 1SS400 TE-61		408 063 7507	ZENER DIODE MM3Z6V2B
	307 235 0816	DIODE 1SS387 TPL3	D6843	307 209 1214	ZD UDZS-TE-176.2B
D3621	307 210 1923	DIODE 1SS400 TE-61		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 235 0816	DIODE 1SS387 TPL3		408 063 7507	ZENER DIODE MM3Z6V2B
D3622	307 210 1923	DIODE 1SS400 TE-61	D6844	307 209 1214	ZD UDZS-TE-176.2B
	307 235 0816	DIODE 1SS387 TPL3		307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
				408 063 7507	ZENER DIODE MM3Z6V2B

**Electrical Parts List**

Key No. Part No. Description			Key No. Part No. Description		
D6850	307 210 1923	DIODE 1SS400 TE-61	SW6806	952 001 8830	SWITCH,PUSH 1P-1TX1
	307 235 0816	DIODE 1SS387 TPL3		945 026 2792	SWITCH,PUSH 1P-1TX1
D6852	307 210 1923	DIODE 1SS400 TE-61	SW6807	952 001 8830	SWITCH,PUSH 1P-1TX1
	307 235 0816	DIODE 1SS387 TPL3		945 026 2792	SWITCH,PUSH 1P-1TX1
D6853	307 210 1923	DIODE 1SS400 TE-61	SW6808	952 001 8830	SWITCH,PUSH 1P-1TX1
	307 235 0816	DIODE 1SS387 TPL3		945 026 2792	SWITCH,PUSH 1P-1TX1
D6854	307 210 1923	DIODE 1SS400 TE-61	SW6810	952 001 8830	SWITCH,PUSH 1P-1TX1
	307 235 0816	DIODE 1SS387 TPL3		945 026 2792	SWITCH,PUSH 1P-1TX1
D6855	307 210 1923	DIODE 1SS400 TE-61	SW6811	952 001 8830	SWITCH,PUSH 1P-1TX1
	307 235 0816	DIODE 1SS387 TPL3		945 026 2792	SWITCH,PUSH 1P-1TX1
D6856	307 210 1923	DIODE 1SS400 TE-61	X1331	645 102 6934	OSC,CRYSTAL 27.000MHZ
	307 235 0816	DIODE 1SS387 TPL3	X2202	945 076 2407	OSC,CRYSTAL 25.000MHZ
D7812	407 272 1415	DIODE SS3P4-M3/84A	X5001	645 103 8722	OSC,CRYSTAL 12.288MHZ
D7862	407 272 1415	DIODE SS3P4-M3/84A	X8001	645 102 6934	OSC,CRYSTAL 27.000MHZ
D8091	407 272 1415	DIODE SS3P4-M3/84A	X8802	945 083 7556	OSC,CRYSTAL 25.0MHZ
D8092	307 210 1923	DIODE 1SS400 TE-61	X9001	645 103 6254	OSC,CRYSTAL 16.0MHZ
	307 235 0816	DIODE 1SS387 TPL3	X9885	945 060 9900	OSC,CERAMIC 8.00MHZ
D8093	307 210 1923	DIODE 1SS400 TE-61			
	307 235 0816	DIODE 1SS387 TPL3			
D8094	307 210 1923	DIODE 1SS400 TE-61			
	307 235 0816	DIODE 1SS387 TPL3			
D9881	307 209 1214	ZD UDZS-TE-176.2B			
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3			
	408 063 7507	ZENER DIODE MM3Z6V2B			
D9882	307 209 1214	ZD UDZS-TE-176.2B			
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3			
	408 063 7507	ZENER DIODE MM3Z6V2B			
D9883	307 209 1214	ZD UDZS-TE-176.2B			
	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3			
	408 063 7507	ZENER DIODE MM3Z6V2B			
<b>MISCELLANEOUS</b>			<b>A1001 655 004 4228 ASSY,PWB,AV KC2AC</b>		
FB3620	945 086 6037	IMPEDANCE,330 OHM P	<b>CAPACITOR</b>		
FB3621	945 086 6037	IMPEDANCE,330 OHM P	C2051	303 294 6110	CERAMIC 100P J 50V
FB3622	945 086 6037	IMPEDANCE,330 OHM P		303 454 0910	CERAMIC 100P J 50V
FB3624	945 086 6037	IMPEDANCE,330 OHM P		303 453 6319	CERAMIC 100P J 50V
FB3626	945 086 6037	IMPEDANCE,330 OHM P	C2052	303 294 6110	CERAMIC 100P J 50V
FB3627	945 086 6037	IMPEDANCE,330 OHM P		303 454 0910	CERAMIC 100P J 50V
FB3633	945 086 6037	IMPEDANCE,330 OHM P		303 453 6319	CERAMIC 100P J 50V
K10A	652 003 4945	SOCKET,HDMI 19P	<b>RESISTOR</b>		
K10B	652 003 3856	SOCKET,D-SUB 15P	R2001	301 260 4115	MT-GLAZE 75 JA 1/3W
K10C	652 003 3863	SOCKET,D-SUB 15P	R2015	301 260 4115	MT-GLAZE 75 JA 1/3W
K30B	652 002 6704	JACK,PHONE D3.6	R2025	301 260 4115	MT-GLAZE 75 JA 1/3W
K9602	645 093 6760	TRANS,PULSE	R2051	301 224 8913	MT-GLAZE 100K JA 1/16W
	652 003 2743	TRANS,PULSE	R2052	301 224 8913	MT-GLAZE 100K JA 1/16W
SC1031	945 076 3503	SURGE-ABSORBER	<b>MISCELLANEOUS</b>		
SC1041	945 076 3503	SURGE-ABSORBER	K20A	652 002 8135	PLUG,D-SUB 9P
SC1081	945 076 3503	SURGE-ABSORBER	K20B	645 089 9041	SOCKET,DIN 4P
SC1091	945 076 3503	SURGE-ABSORBER		952 001 4740	SOCKET,DIN 4P
SC3001	945 076 3503	SURGE-ABSORBER	K50A	945 068 3740	JACK,RCA-3
SC3011	945 076 3503	SURGE-ABSORBER	SC2001	945 076 3503	SURGE-ABSORBER
SC3021	945 076 3503	SURGE-ABSORBER	SC2011	945 076 3503	SURGE-ABSORBER
SC3031	945 076 3503	SURGE-ABSORBER	SC2021	945 076 3503	SURGE-ABSORBER
SC3051	945 076 3503	SURGE-ABSORBER	SC2051	945 076 3503	SURGE-ABSORBER
SC3061	945 076 3503	SURGE-ABSORBER	SC2052	945 076 3503	SURGE-ABSORBER
SC5031	945 076 3503	SURGE-ABSORBER	SC2061	945 076 3503	SURGE-ABSORBER
SC5032	945 076 3503	SURGE-ABSORBER	SC2062	945 076 3503	SURGE-ABSORBER
SC8001	945 076 3503	SURGE-ABSORBER			
SC8002	945 076 3503	SURGE-ABSORBER			
SW6801	952 001 8830	SWITCH,PUSH 1P-1TX1	<b>A1002 655 004 4235 ASSY,PWB,RC KC2AC</b>		
	945 026 2792	SWITCH,PUSH 1P-1TX1	<b>INTEGRATED CIRCUIT</b>		
SW6802	952 001 8830	SWITCH,PUSH 1P-1TX1	IC8811	410 654 4802	IC ADT75BRMZ-REEL
	945 026 2792	SWITCH,PUSH 1P-1TX1	<b>CAPACITOR</b>		
SW6803	952 001 8830	SWITCH,PUSH 1P-1TX1	C2901	403 455 1012	CERAMIC 1U K 10V
	945 026 2792	SWITCH,PUSH 1P-1TX1		303 433 1112	CERAMIC 1U K 10V
SW6804	952 001 8830	SWITCH,PUSH 1P-1TX1	C2902	303 282 5118	CERAMIC 470P K 50V
	945 026 2792	SWITCH,PUSH 1P-1TX1		303 453 9211	CERAMIC 470P K 50V
				303 453 8719	CERAMIC 470P K 50V
			C2903	303 370 0018	CERAMIC 10U K 6.3V
				303 368 7319	CERAMIC 10U K 6.3V
				303 358 3215	CERAMIC 10U K 6.3V
			C8836	303 409 3426	CERAMIC 0.1U K 16V
				303 453 8610	CERAMIC 0.1U K 16V

## Electrical Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
	303 453 8917	CERAMIC 0.1U K 16V	R7851	301 162 3612	MT-GLAZE 470 JA 1/10W
<b>RESISTOR</b>			R7853	301 150 6212	MT-GLAZE 1K JA 1/10W
R2901	301 225 1814	MT-GLAZE 47 JA 1/16W	R7855	301 150 5918	MT-GLAZE 10K JA 1/10W
R2903	301 224 8814	MT-GLAZE 100 JA 1/16W	R7856	301 256 2613	MT-GLAZE 2.4K JA 1/10W
R8847	301 225 8110	MT-GLAZE 10 JA 1/16W	<b>DIODE</b>		
R8848	301 225 8110	MT-GLAZE 10 JA 1/16W	D7801	307 224 6515	ZD UDZS4.7B-TE-17
<b>MISCELLANEOUS</b>			D7802	307 224 6515	ZD UDZS4.7B-TE-17
A2901	645 102 3773	UNIT,REMOCON RECEIVER	D7803	307 210 5416	DIODE RB551V-30-TE-17
			D7804	307 210 1111	ZENER DIODE UDZS7.5BTE-17
<b>A1003 655 004 4242 ASSY,PWB,ID CONNECT KC2AC</b>					
<b>RESISTOR</b>					
R8738	301 226 1516	MT-GLAZE 0.000 ZA 1/16W			
COIL					
L8731	945 086 6037	IMPEDANCE,330 OHM P			
L8732	945 086 6037	IMPEDANCE,330 OHM P			
L8733	945 086 6037	IMPEDANCE,330 OHM P			
L8734	945 086 6037	IMPEDANCE,330 OHM P			
L8737	945 086 6037	IMPEDANCE,330 OHM P			
<b>A2200 655 004 3313 ASSY,PWB,SUB POWER KA2AC</b>					
<b>TRANSISTOR</b>					
Q7803	305 002 8327	TR 2SA1203-Y-TE12L			
Q7804	305 002 8327	TR 2SA1203-Y-TE12L			
Q7805	305 015 8727	TR 2SC2812-L6-TB			
	305 015 8925	TR 2SC2812-L7-TB			
	305 163 1615	TR 2SC2812N-L6-TB0			
	305 173 9816	TR 2SC3928A1R			
	305 173 9915	TR 2SC3928A1S			
Q7806	305 015 8727	TR 2SC2812-L6-TB			
	305 015 8925	TR 2SC2812-L7-TB			
	305 163 1615	TR 2SC2812N-L6-TB0			
	305 173 9816	TR 2SC3928A1R			
	305 173 9915	TR 2SC3928A1S			
Q7807	305 015 8727	TR 2SC2812-L6-TB			
	305 015 8925	TR 2SC2812-L7-TB			
	305 163 1615	TR 2SC2812N-L6-TB0			
	305 173 9816	TR 2SC3928A1R			
	305 173 9915	TR 2SC3928A1S			
Q7811	305 128 9618	TR 2SC2411K-T146-Q			
Q7812	305 128 9618	TR 2SC2411K-T146-Q			
<b>CAPACITOR</b>					
C7801	403 485 9910	DL-ELECT 3.3F M 2.5V			
C7802	403 485 9910	DL-ELECT 3.3F M 2.5V			
C7803	403 485 9910	DL-ELECT 3.3F M 2.5V			
C7804	403 485 9910	DL-ELECT 3.3F M 2.5V			
C7805	303 396 9613	CERAMIC 1U K 25V			
	303 397 7618	CERAMIC 1U K 25V			
<b>RESISTOR</b>					
R7802	301 104 6015	MT-GLAZE 100 JA 1W			
R7804	301 102 7519	MT-GLAZE 22 JA 1W			
R7806	301 150 5918	MT-GLAZE 10K JA 1/10W			
R7807	301 150 5918	MT-GLAZE 10K JA 1/10W			
R7808	301 150 5918	MT-GLAZE 10K JA 1/10W			
R7809	301 150 5918	MT-GLAZE 10K JA 1/10W			
R7810	301 162 3711	MT-GLAZE 4.7K JA 1/10W			
R7811	301 150 5918	MT-GLAZE 10K JA 1/10W			
R7812	301 256 2613	MT-GLAZE 2.4K JA 1/10W			
R7814	301 256 2613	MT-GLAZE 2.4K JA 1/10W			
R7815	301 256 2613	MT-GLAZE 2.4K JA 1/10W			

**Electrical Parts List**

<b>Key No. Part No. Description</b>	<b>Key No. Part No. Description</b>

# **EIKI**

**A-key to better communications**