

TOSHIBA

FILE NO. 020-200523

SERVICE MANUAL

Projection Television

56HM195
62HM195
72HM195

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SAFETY INSTRUCTIONS

SAFETY PRECAUTION

WARNING: Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. When replacing a chassis in the cabinet, always be certain that all the prospective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

(*1)

GREEN PRODUCT PROCUREMENT

The EC is actively promoting the WEEE & RoHS Directives that define standards for recycling and reuse of Waste Electrical and Electronic Equipment and for the Restriction of the use of certain Hazardous Substances. From July 1, 2006, the RoHS Directive will prohibit any marketing of new products containing lead.

Increasing attention is given to issues related to the global environmental. Toshiba Corporation recognizes environmental protection as a key management tasks, and is doing its utmost to enhance and improve the quality and scope of its environmental activities. In line with this, Toshiba proactively promotes Green Procurement, and seeks to purchase and use products, parts and materials that have low environmental impacts.

Green procurement of parts is not only confined to manufacture. The same green parts used in manufacture must also be used as replacement parts.

(*2)

LEAD-FREE SOLDER

This product is manufactured using lead-free solder as a part of a movement within the CE industry at large to be environmentally responsible. Lead-free solder must be used in the servicing and repair of this product.

WARNING

This product is manufactured using lead free solder.

DO NOT USE LEAD BASED SOLDER TO REPAIR THIS PRODUCT !

The melting temperature of lead-free solder is higher than that of leaded solder by 86°F to 104°F (30°C to 40°C). Use of a soldering iron designed for lead-based solders to repair product made with lead-free solder may result in damage to the component and or PCB being soldered. Great care should be made to ensure high-quality soldering when servicing this product — especially when soldering large components, through-hole pins, and on PCBs — as the level of heat required to melt lead-free solder is high.

SERVICE MODE

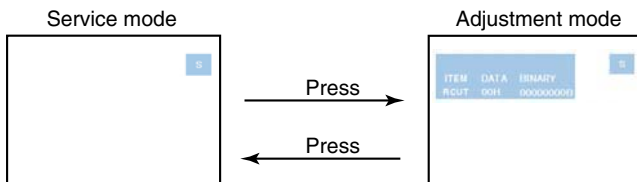
1. ENTERING SERVICE MODE

- 1) Press MUTE button twice on Remote Control.
- 2) Press MUTE button again and keep pressing.
- 3) While pressing the MUTE button, press MENU button on TV set.



2. DISPLAYING THE ADJUSTMENT MENU

- 1) Press MENU button on Remote Control.



3. SELECTING THE ADJUSTING ITEMS

- 1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-1 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 9)

4. ADJUSTING THE DATA

- 1) Pressing of VOLUME ▲ or ▼ button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

5. EXIT FROM SERVICE MODE

- 1) Pressing POWER button to turn off the TV once.

6. SELF DIAGNOSTIC FUNCTION

- 1) Press "9" button on Remote Control during display of adjustment menu in the service mode.
The diagnosis will begin to check if interface among IC's is executed properly.
- 2) During diagnosis, the following displays are shown.

Self check	
①	Firmware : HM195_1401
②	Time : 000014(Lamp:000014)
③	Bus line : OK
④	Bus cont : OK
⑤	Block : UV V1 V2 V3 V4 V5 V6 V7 PC
⑥	DLP : +42 +60

- ① Firmware :
Version information of microprocessor
In case of file name : HM195 and Version : 1401 indicates[HM195_1401].
- ② Time : Total brightness hour of the projection lamp. (Unit : H)
- ③ Bus line : --"OK" is normal
"SCL-GND"(Red indication) : SCL-GND short circuit
"SDA-GND"(Red indication) : SDA-GND short circuit
"SCL-SDA"(Red indication) : SCL-SDA short circuit
- ④ Bus cont : --- "OK" is normal.
NG is abnormal(Red indication), when type name of semiconductor indicates.
- ⑤ Block
UV : TV reception mode
V1 : VIDEO 1 input mode
V2 : VIDEO 2 input mode
V3 : VIDEO 3 input mode
V4 : ColorStream HD-1 IN
V5 : ColorStream HD-2 IN
V6 : HDMI IN 1
V7 : HDMI IN 2
- ⑥ DLP : Thermal sensor values information that indicates both of nearby the projection lamp and DMD microprocessor into the unit.

7. VERSION CHECK MODE

- 1) Press "9" button twice on Remote Control during display of adjustment menu in the service mode. The version of main MPU will begin to check.
- 2) During Version Check, the following displays are shown.

Version check	
① MAIN MPU	: HM195_1401(U15)
② EEPROM	: FF
③ SUB MPU	: 36
④ OPTION	: 74 00 01 00 00 00
⑤ HDMI ID	: 00000155
⑥ DMD	: 20
⑦ MALIBU	: 03 05
⑧ MALIBU STATUS	: FF 00 00 00

- ① MAIN MPU :
Version information of microprocessor
In case of file name : HM195, Version 1401 for Code Program Version and (U15) for OSD Version indicates [HM195_1401(U15)]
- ② EEPROM :
Version information of EEPROM : Display 1 byte data. ____
- ③ SUB MPU :
Version information of SUB MPU : Display 1 byte data.
- ④ OPTION :
Option information : Display six numbers of 1 byte data.
- ⑤ HDMI ID :
HDMI ID information : Display 4 byte data.
- ⑥ DMD :
Version information of DMD optical engine : Display 1 byte data.
- ⑦ MALIBU :
MALIBU information : Display two numbers of 1 byte data.
- ⑧ MALIBU STATUS :
MALIBU STATUS information : Display four numbers of 1 byte data.

8. STATUS CHECK MODE

- 1) Press "9" button thrice on Remote Control during display of adjustment menu in the service mode. The status of this model will begin to check.
- 2) During Status Check, the following displays are shown.

Status check		
①	MAIN	: HDMI1 DVI AUDIO
②	MAIN FORMAT	: 480i
③	MAIN PLL	: C6 06 B0 CE 01
④	SCREEN SIZE	: NATURAL
⑤	OTHER STATUS	: 0000 0000 0000

- ① MAIN :
Main source information :
Display RF position number (1 - 135) on the main screen, or Input Source (HDMI1/2, DVI, AUDIO etc.)
- ② MAIN FORMAT :
Display Video and PC format information
- ③ MAIN PLL :
Main PLL information : Display 1 byte data at five.
- ④ SCREEN SIZE :
Display the screen size as follows.

Theater Wide 1
Theater Wide 2
Theater Wide 3
FULL
NATURAL

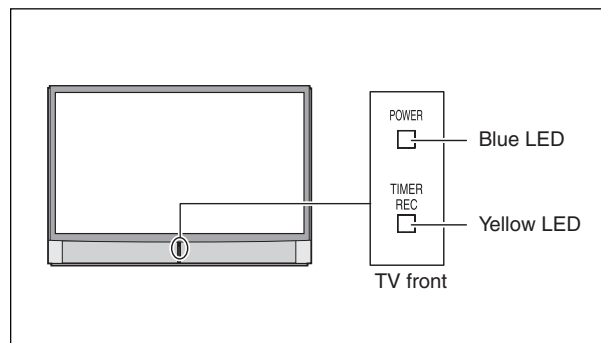
- ⑤ OTHER STATUS :
Other status information : Display three numbers of 2 byte data.

9. LED indications

The yellow and blue LED lights on the TV (at the bottom center of the TV) indicate the TV's status, as described below:

- Blue ON (solid) and Yellow OFF = The TV power cord is plugged in.
 - Yellow ON (solid) and Blue OFF = A recording is in progress while the TV is OFF.
 - Blue ON (solid) and Yellow ON (solid) = A recording is in progress while the TV is ON.
- Yellow and/or Blue blinking (see table below).

Note: If the TV loses A/C power (e.g., a power outage occurs or the power cord is unplugged), when power is restored, the yellow LED will blink while the TV is booting until the remote control is usable. This is normal and is not a sign of malfunction.



	LED	Condition	Solution
1	Yellow blinks continuously at 3-second intervals. Blue blinks continuously at 0.5-second intervals.	The lamp unit door is not seated properly.	Turn OFF the TV and unplug the power cord. Review "How to replace the lamp unit" on pages 10–12 to ensure that the lamp door is installed securely.
2	Yellow blinks continuously at 0.5-second intervals; Blue is ON (solid).	The lamp is not working properly.	The TV will automatically try to restart itself eight times (see item #3).
3	Yellow and Blue blink continuously at 1-second intervals.	The lamp is not working properly after the eighth automatic restart (see item #2).	Turn the TV OFF and then ON again. If the problem persists, replace the lamp unit (see pages 10–12).
4	Yellow is OFF; Blue blinks at 0.2-second intervals 4 times (repeat).	An abnormal temperature increase has occurred.	Turn OFF the TV. Check to make sure all slots and openings in the TV cabinet are not covered, blocked, or dusty. Turn ON the TV again. If the problem persists, contact a Toshiba Authorized Service Center.
5	Yellow is OFF; Blue blinks continuously at 0.5-second intervals.	Abnormal operation (including cooling fan stop).	Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV.
6	Yellow is OFF; Blue blinks continuously at 1-second intervals.	Abnormal operation of BUS line.	Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV.
7	Yellow is OFF; Blue blinks at 0.2-second intervals 3 times (repeat).	The color wheel has stopped.	Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV.

SETTING & ADJUSTING DATA

【SERVICE MODE】

ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:

Item	Name of adjustment	Preset	Data
RCUT	R CUT OFF	00H	←
GCUT	G CUTOFF	00H	←
BCUT	B CUT OFF	00H	←
GDRV	G DRIVE	80H	←
BDRV	B DRIVE	80H	←
RDRV	R DRIVE	80H	←
* BRTC	BRIGHTNESS CENTER	FDH	←
* COLC	COLOR CENTER	C8H	←
* UVTT	BASE BAND TINT	FEH	←
* CNTX	CONTRAST MAX	80H	←
CNTCG	G CONTRAST CENTER	64H	←
CNTCR	R CONTRAST CENTER	64H	←
CNTCB	B CONTRAST CENTER	64H	←
HPOS	H-POSITION	00H	←

Item	Name of adjustment	Preset	Data
VPOS	V-POSITION	00H	←
CWDH	COLOR WHEEL DELAY (HIGH)	00H	←
CWDL	COLOR WHEEL DELAY (LOW)	74H	←
DMDB	DMD BIAS	03H	←
OPT1	TV SET OPTION 1	74H	←
OPT2	TV SET OPTION 2	00H	←
OPT3	TV SET OPTION 3	01H	←
PLLW0	PLL WAIT TIME	14H	←
PLLW1	PLL WAIT TIME	03H	←
PLLW2	PLL WAIT TIME	0FH	←
PLLW3	PLL WAIT TIME	05H	←
PLLW4	PLL WAIT TIME	14H	←
PLLW5	PLL WAIT TIME	04H	←

Table-1

Note:

The image system data of * mark items are different by each image format.

The RF-Signal value is indicated in the table.

Retention the HPOS and VPOS data to EEPROM of Malibu.

Retention the CWDH and CWDL data to EEPROM of DMD.

LAMP UNIT REPLACEMENT

Cautions when replacing LAMP UNIT (E998Z; PJ-D95-LMP)

The light source for this TV is a mercury lamp with internal atmospheric pressure that increases during use. The lamp has a limited service life that varies depending on user settings. If you use the lamp beyond its service life:

- you may notice a reduction in the colors and/or brightness of the picture; and
- the strength of the quartz glass in the lamp will be reduced and the lamp may rupture (often making a loud noise when this happens). If the lamp ruptures, the TV will not operate until the lamp unit is replaced.

Note: The lamp unit is designed so broken lamp glass remains securely inside the lamp unit.



CAUTION: Always handle the lamp unit with care.

The lamp unit in this TV was designed for safe replacement by consumers; however, if the lamp unit is subjected to intentional abuse (such as excessive mechanical abuse or handling by children or pets), the unit may break, exposing edges or pinch points.

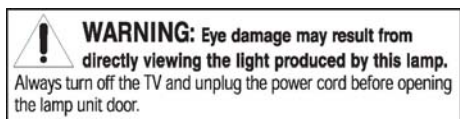
When to replace the lamp unit

You should replace the lamp unit:

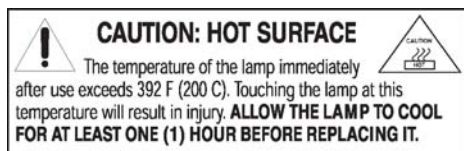
- if the picture darkens and/or colors fade;
- if the lamp does not light; or
- If you hear a loud noise and the picture goes black, which may indicate a lamp rupture (LED indication #8). See LED indications on page 6.

Note: Be sure wear the gloves before replacing the lamp unit.

1. Turn off the TV and unplug the power cord.

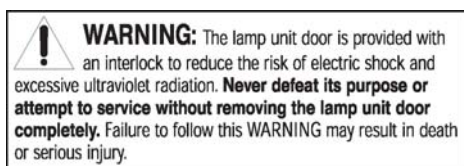
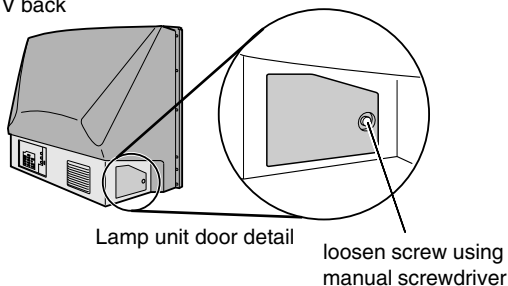


2. STOP! Allow the lamp to cool for at least one (1) hour before replacing it.

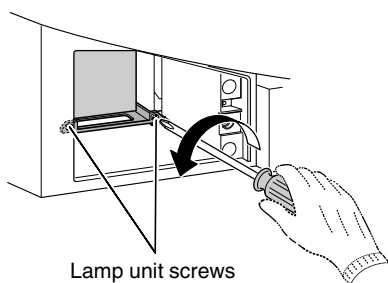


3. On the lamp unit door on the side of the TV, loosen the screw using a manual screw driver, and then remove the lamp unit door.

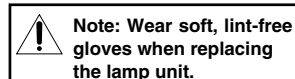
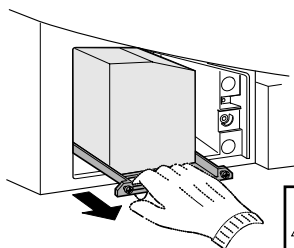
TV back



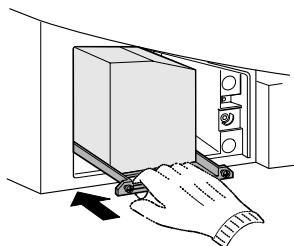
4. Using a manual screwdriver, loosen the two screws on the lamp unit.



5. Grasp the lamp unit handle and gently pull the lamp unit straight out of the TV. Set the old lamp unit aside.



6. Carefully insert the new lamp unit straight into the TV until it is fully seated.

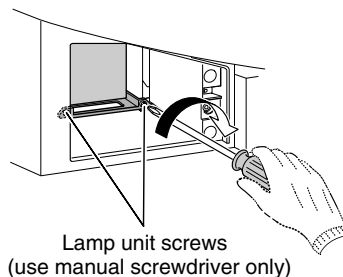


Note :

- Never subject the lamp unit to excessive shock.
- Never touch the lamp unit glass or otherwise get it dirty.
- Doing so may affect the image quality and reduce the service life of the lamp. See "Cleaning the lamp unit glass" below.

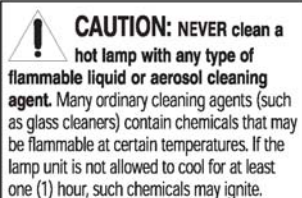
7. Using a manual screwdriver, tighten two lamp unit screws.

Note: Hand-tighten only. Do not use an electric screwdriver.



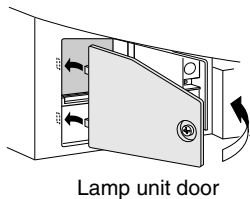
Cleaning the lamp unit glass

If you accidentally touch the lamp unit glass or otherwise get it dirty, wipe it with a lint-free lens cleaning cloth (such as a cloth for cleaning camera lenses or eyeglasses).

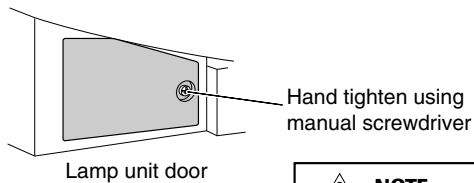


8. Reattach the lamp unit door, making sure to insert the hooks on the left side of the lamp unit door inside the opening in the TV cabinet.

Insert the hooks inside the TV cabinet opening.



9. Replace the screw and hand-tighten using a manual screwdriver.



NOTE : Make sure the lamp unit door is installed securely; otherwise, the TV may not turn on.

10. Plug in the power cord and turn on the TV. After the initial warmup period (which may take several seconds for full picture brightness), the TV should operate normally. If any of the following conditions exist, turn off the TV, unplug the power cord, and repeat steps 1-9 to ensure that the lamp unit and lamp unit door are installed correctly:
- No picture
 - Dark picture
 - TV will not turn on

LIGHT ENGINE REPLACEMENT

Cautions when replacing LIGHT ENGINE

LIGHT ENGINE UNIT:

A271 : LV-682 TB

(Including with E998Z, SK01 to SK04, SK06,SK08 and SK09.)

- LIGHT ENGINE is a heart of the TV and emits high heat. Make sure to replace it after turning off the TV and wait for sufficient cool down. (More than one hour is recommended.)
- Do not impact during replacement; otherwise, some parts may be damaged.
- Do not touch optical lens. Adhesion of dirt may deteriorate its performance.
- Do not loosen any screw other than those to be removed for adjustment or replacement.
- LIGHT ENGINE emits ultraviolet rays when the TV is ON. Make sure to be careful.

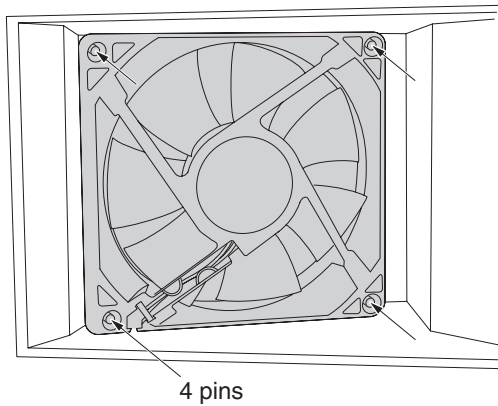
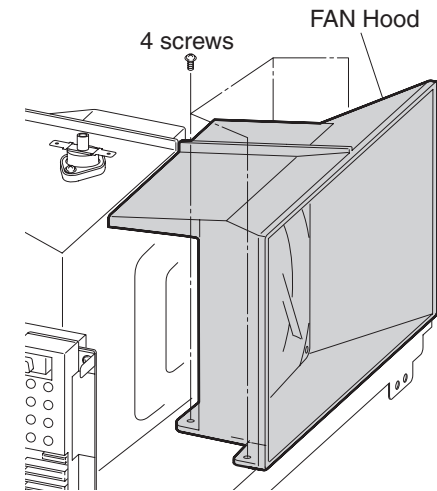
PARTS REPLACEMENT IN LIGHT ENGINE

1. Replacement of Lamp FAN (SK01)

- 1-1. Replace the FAN for cooling Lamp (SK01), remove the 4 screws on the FAN Hood, and remove the 4 pins by pressing toward allows using a screwdriver, and the remove the FAN for cooling Lamp.

NOTE:

Reinstalling the FAN for cooling Lamp, attach the 4 pins by using removed them after replace the FAN.



2. Replacement of Ballast FAN (SK03)

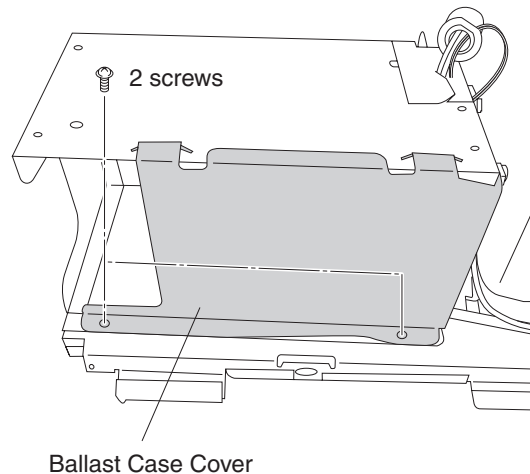
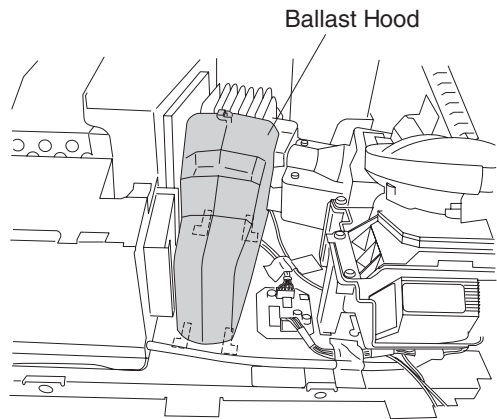
- 2-1. Replace the FAN for cooling Ballast Power Unit (SK03), remove the Ballast Hood, and remove the 2 screws on the Ballast Case Cover.

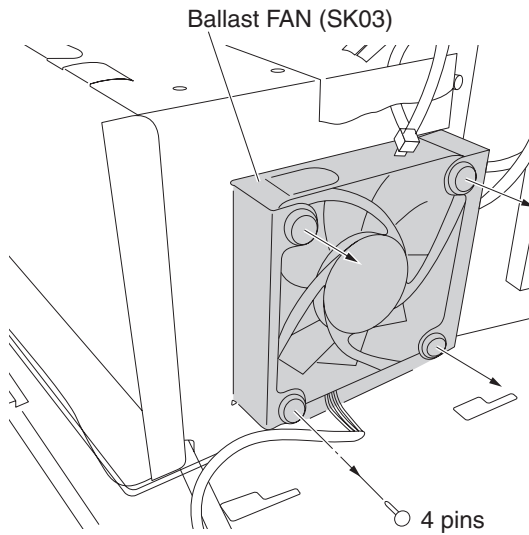
- 2-2. Remove the 4 pins by pressing toward inside of the FAN using a screwdriver, and then remove the 4 pins toward allows as figure.

Remove the FAN for cooling Ballast Power Unit.

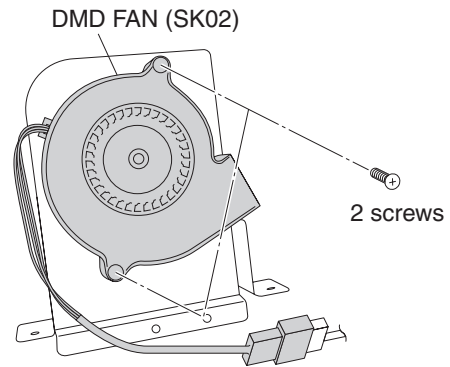
NOTE:

Reinstalling the FAN for cooling Ballast Power Unit, attach the 4 pins by using removed them after replacing the FAN.



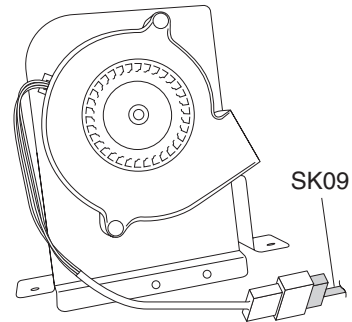
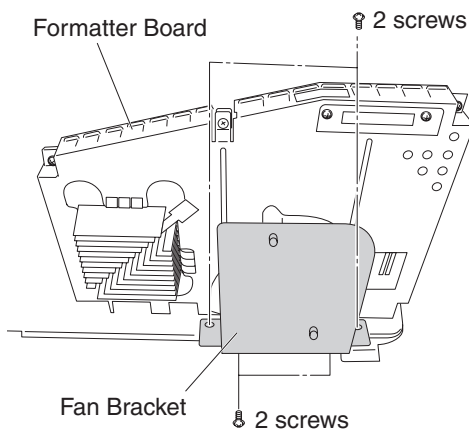


- 3-2. Remove the 2 screws from the bracket, and then remove the FAN for cooling Formatter Board (SK02).
- 3-3. Disconnect and replace the FAN transfer cable between Ballast and Formatter Boards (SK09).



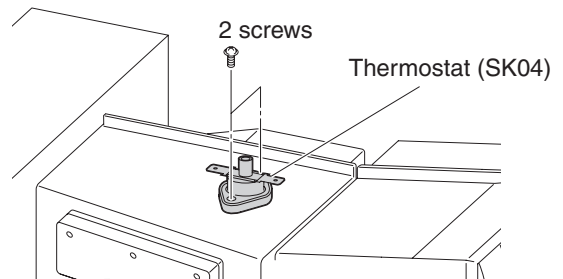
3. Replacement of DMD FAN (SK02) and FAN Transfer Cable (SK09)

- 3-1. Replace the FAN for cooling Formatter Board, detach the Fan Bracket with DMD FAN by removing the 4 screws on the bracket.



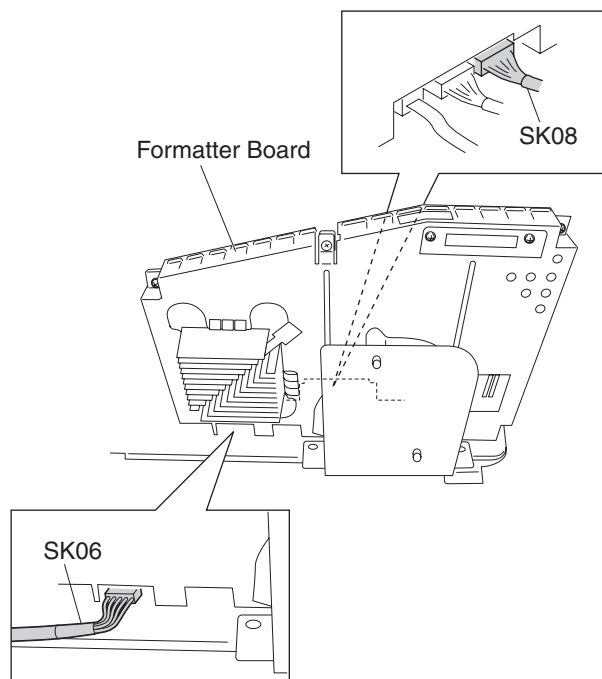
4. Replacement of Thermostat (Lamp Sensor) (SK04)

- 4-1. Replace the Thermostat (Lamp Sensor) (SK04), remove 2 screws on the Thermostat.



5. Replacement of Ballast to Formatter Board Cables (SK06 and SK08)

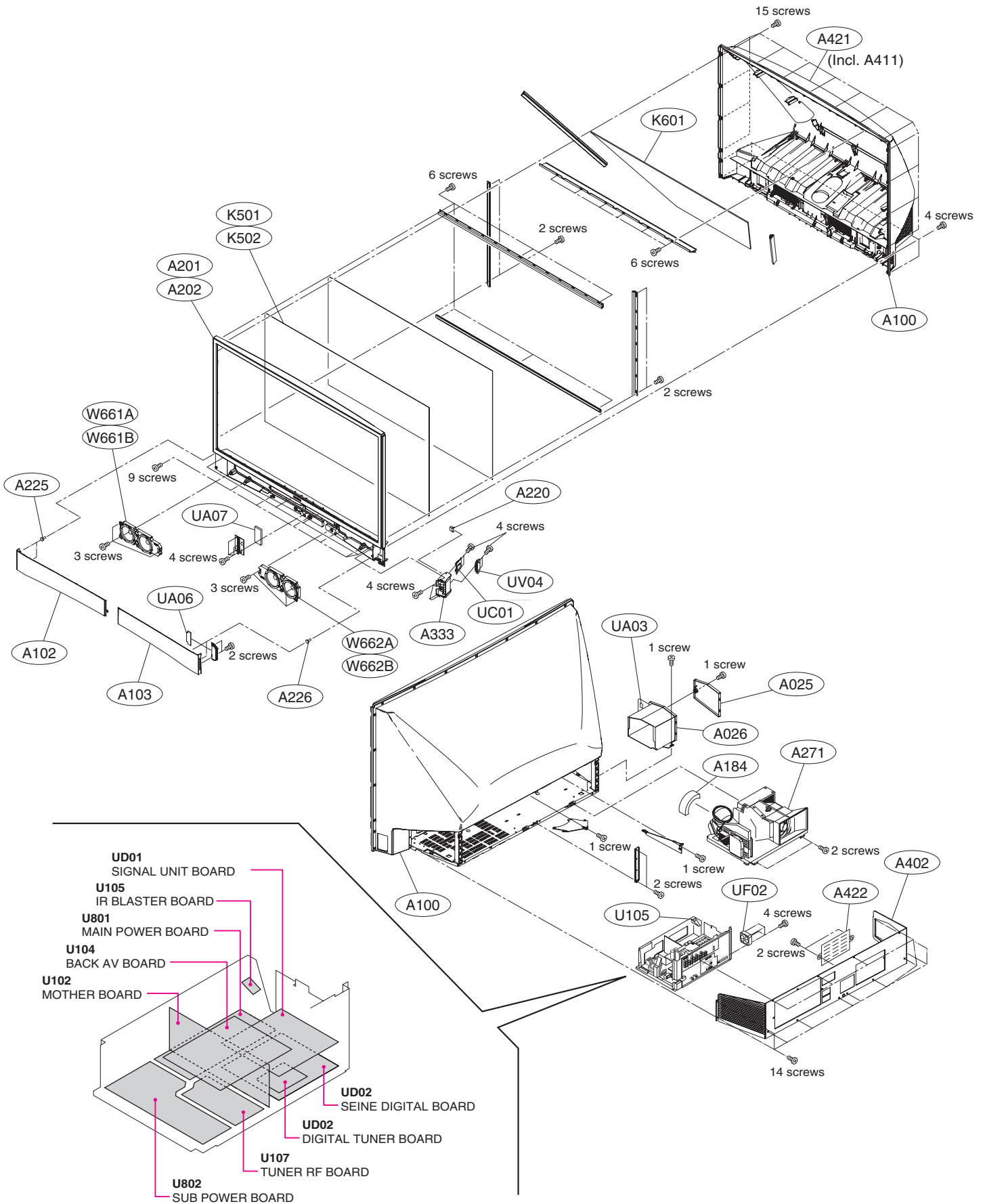
- 5-1. Disconnect and replace the cable between Ballast and Formatter Boards (SK06).
- 5-2. Disconnect and replace the cable between Smooth Picture and Formatter Boards (SK08).



6. LIGHT ENGINE UNIT

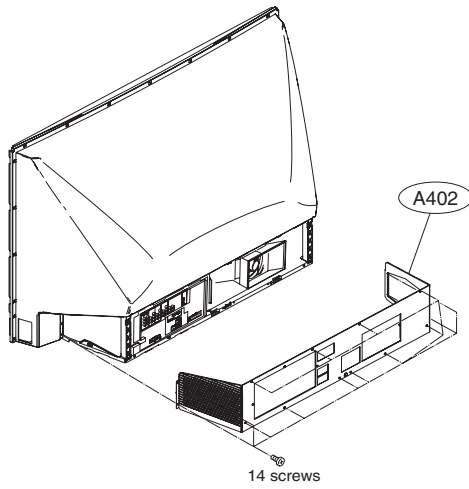
Location No.	Parts No.	Description
△ A271	23405480	OPTICAL ENGINE LV-682 TB 0C 56HM195 (Incl. E998Z, SK01-SK04, SK06,SK08,SK09)
△	23405481	OPTICAL ENGINE LV-682 TB 0D 62HM195 (Incl. E998Z, SK01-SK04, SK06,SK08,SK09)
	23405482	OPTICAL ENGINE LV-682 TB 0E 72HM195 (Incl. E998Z, SK01-SK04, SK06,SK08,SK09)
E998Z	23311153	EXCHANGE LAMP, PJ-D95-LMP
SK01	23587525	SERVICE KIT, LAMP FAN
SK02	23587526	SERVICE KIT, DMD FAN
SK03	23587527	SERVICE KIT, BALLAST FAN
SK04	23587528	SERVICE KIT, THERMOSTAT
SK06	23587536	SERVICE KIT, B TO F CABLE
SK08	23587538	SERVICE KIT, S TO F CABLE
SK09	23587539	SERVICE KIT, FAN TRANSFER CABLE

EXPLODED VIEW

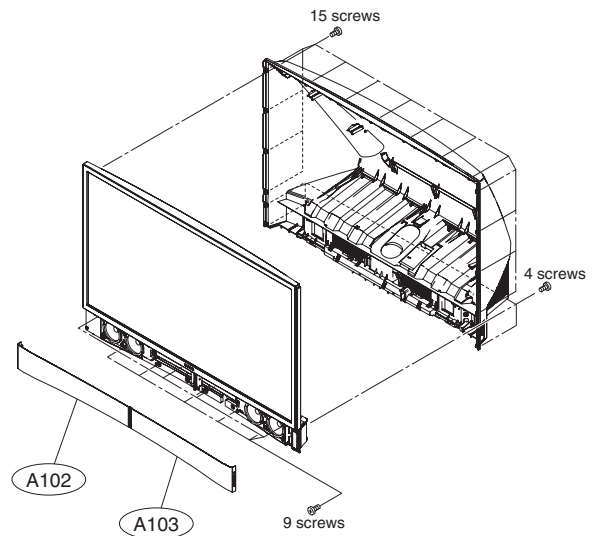


MECHANICAL DISASSEMBLY

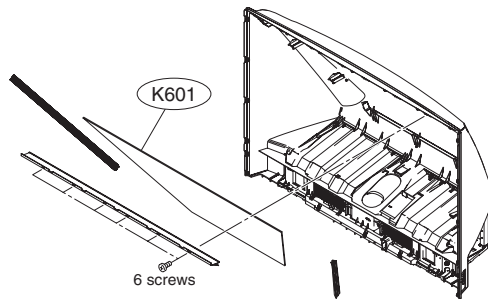
1. Rear Cover Removal



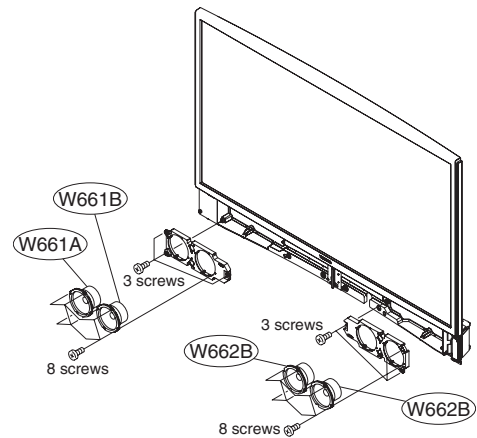
2. Touchpad & Bezel Ass'y Removal



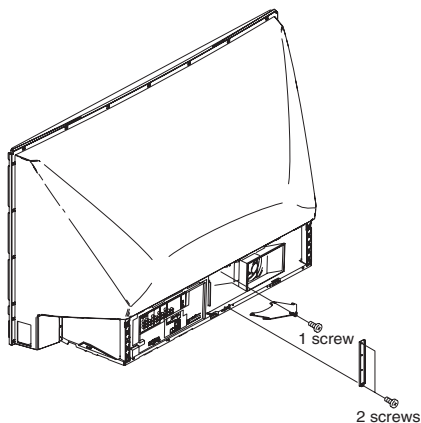
3. Mirror Removal



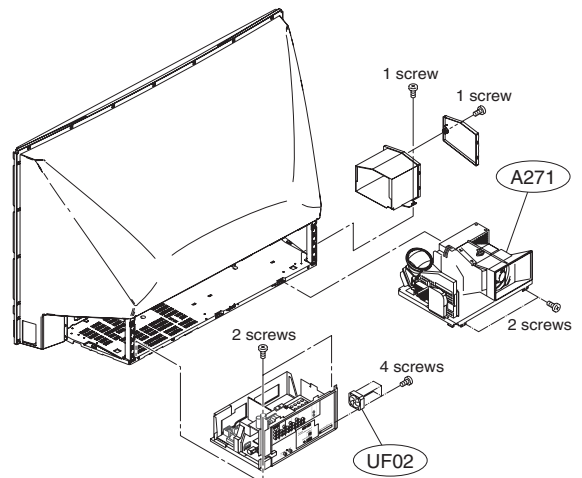
4. Speaker Removal



5. Bracket Removal



6. Optical Engine Removal



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.

The PC board assembly with * mark is no longer available after the end of the production.

Model : 56/62/72HM195

Capacitors CD : Ceramic Disk PF : Plastic Film EL : Electrolytic
Resistors CF : Carbon Film CC : Carbon Composition MF : Metal Film
 OMF : Oxide Metal Film VR : Variable Resistor FR : Fusible Resistor
(All CD and PF capacitors are $\pm 5\%$, 50V and all resistors, $\pm 5\%$, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
#1 : [56HM195]		
#2 : [62HM195]		
#3 : [72HM195]		
CAPACITORS		
C001	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C002	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C003	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C004	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C005	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C006	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C007	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C008	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C009	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C010	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C011	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C012	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C013	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C014	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C015	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C016	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C017	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C018	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C019	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C020	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C021	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C022	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C023	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C024	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C025	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C026	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C027	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C028	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C029	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C030	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C031	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C032	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C033	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C034	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C035	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C036	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C037	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C038	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C039	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C040	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C041	76100104	CERAMIC CHIP, 25V F 0.1UF Z

Location No.	Parts No.	Description
C042	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C043	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C044	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C045	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C046	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C047	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C048	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C049	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C050	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C051	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C102	76665221	ELECTROLYTIC, 10V 220UF M 3A
C103	76109102	CERAMIC CHIP, 50V B 1000PF K
C104	76073084	ELECTROLYTIC, 50V 4.7UF M 3A
C120	76092730	CERAMIC CHIP, 16V B 0.1UF K
C151	76109102	CERAMIC CHIP, 50V B 1000PF K
C152	76109102	CERAMIC CHIP, 50V B 1000PF K
C161	76109102	CERAMIC CHIP, 50V B 1000PF K
C162	76105101	CERAMIC CHIP, 50V CH 100PF J
C164	76092730	CERAMIC CHIP, 16V B 0.1UF K
C601	76109391	CERAMIC CHIP, 50V B 390PF K
C602	76109391	CERAMIC CHIP, 50V B 390PF K
C603	76797100	ELECTROLYTIC, 50V 10UF M
C604	76797100	ELECTROLYTIC, 50V 10UF M
C605	76073084	ELECTROLYTIC, 50V 4.7UF M 3A
C606	76073084	ELECTROLYTIC, 50V 4.7UF M 3A
C607	76073052	ELECTROLYTIC, 25V 47UF M 3A
C608	76073052	ELECTROLYTIC, 25V 47UF M 3A
C609	76073068	ELECTROLYTIC, 35V 100UF M 3A
C610	76073086	ELECTROLYTIC, 50V 10UF M 3A
C612	76073039	ELECTROLYTIC, 16V 220UF M 3A
C613	76503042	PLASTIC FILM, 63V 0.12UF J
C614	76503042	PLASTIC FILM, 63V 0.12UF J
C615	76073095	ELECTROLYTIC, 50V 2200UF M 3A
C616	76073095	ELECTROLYTIC, 50V 2200UF M 3A
C661	76766479	ELECTROLYTIC, 50V 4.7UF M
C662	76797100	ELECTROLYTIC, 50V 10UF M
C663	76797100	ELECTROLYTIC, 50V 10UF M
C664	76108560	CERAMIC CHIP, 50V SL 56PF J
C665	76567103	PLASTIC FILM, 50V 0.01UF J
C666	76766479	ELECTROLYTIC, 50V 4.7UF M
C667	76794100	ELECTROLYTIC, 16V 10UF M
C668	76108560	CERAMIC CHIP, 50V SL 56PF J
C680	76073094	ELECTROLYTIC, 50V 1000UF M 3A
C681	76109103	CERAMIC CHIP, 50V B 0.01UF K
C687	76796101	ELECTROLYTIC, 35V 100UF M
C688	76795470	ELECTROLYTIC, 25V 47UF M

Location No.	Parts No.	Description
△ C801	76503004	PLASTIC FILM, AC275V 0.47UF M
△ C803	76503002	PLASTIC FILM, AC275V 0.22UF M
C805	76092281	CERAMIC DISC, AC250V E 4700PF
C808	76095634	PLASTIC FILM, 630V 0.01UF H
C809	76086067	CHEMICON 200V 102M LGQ2D102MESHTL
C810	76086067	CHEMICON 200V 102M LGQ2D102MESHTL
△ C811	76092567	CERAMIC DISC, AC250V E 1000PF M
△ C812	76092567	CERAMIC DISC, AC250V E 1000PF M
C815	76285104	CERAMIC CHIP, 50V B 0.1UF K
C816	76669470	ELECTROLYTIC, 50V 47UF M
C817	76092179	CERAMIC CHIP, 25V B 0.22UF K
C818	76285104	CERAMIC CHIP, 50V B 0.1UF K
C819	76214102	CERAMIC DISC, 500V B 1000PF K
C820	76092463	CERAMIC CHIP, 16V B 0.22UF K
C821	76092343	CERAMIC DISC, 2KV 680PF K
C822	76092344	CERAMIC DISC, 2KV 820PF K
C823	76092337	CERAMIC DISC, 2KV 220PF K
C824	76109472	CERAMIC CHIP, 50V B 4700PF K
△ C825	76503117	PLASTIC FILM CQ92 T 800V 33000PF J
C826	76092338	CERAMIC DISC, 2KV R 270PF K
C827	76503053	PLASTIC FILM, 63V 1UF J
C828	76214103	CERAMIC DISC, 500V B 0.01UF K
C829	76678229	ELECTROLYTIC, 200V 2.2UF M
C840	76092730	CERAMIC CHIP, 16V B 0.1UF K
C855	76073157	ELECTROLYTIC, 16V 1500UF M 3A
C856	76073157	ELECTROLYTIC, 16V 1500UF M 3A
C857	76073172	ELECTROLYTIC, 25V 1000UF M 3A
C860	76073205	ELECTROLYTIC CE04P 50V 470UF M 3A
C870	76092178	CERAMIC CHIP, 25V B 0.1UF K
C898	76092178	CERAMIC CHIP, 25V B 0.1UF K
△ C899	76092567	CERAMIC DISC, AC250V E 1000PF M
C8905	76666221	ELECTROLYTIC, 16V 220UF M
C8910	76092738	CERAMIC CHIP, 25V B 0.47UF K
C8911	76073151	ELECTROLYTIC, 16V 120UF M 3A
C8920	76073053	ELECTROLYTIC, 25V 100UF M 3A
C8921	76092738	CERAMIC CHIP, 25V B 0.47UF K
C8922	76667470	ELECTROLYTIC, 25V 47UF M 3A
C8923	76666331	ELECTROLYTIC, 16V 330UF M
C8924	76092730	CERAMIC CHIP, 16V B 0.1UF K
C8931	76092738	CERAMIC CHIP, 25V B 0.47UF K
C8932	76667470	ELECTROLYTIC, 25V 47UF M 3A
C8933	76666331	ELECTROLYTIC, 16V 330UF M
C8934	76092730	CERAMIC CHIP, 16V B 0.1UF K
C8960	76092616	CERAMIC CHIP, 16V B 0.33UF K
C8961	76092730	CERAMIC CHIP, 16V B 0.1UF K
CB01	76794470	ELECTROLYTIC, 16V 47UF M
CB51	76590103	PLASTIC FILM, 50V 0.01UF J
CB52	76794470	ELECTROLYTIC, 16V 47UF M
CB53	76503041	PLASTIC FILM , 63V 0.1UF J
CB54	76436221	CERAMIC DISC, 50V SL 220PF J
CB55	76797010	ELECTROLYTIC, 50V 1UF M
CB56	76794470	ELECTROLYTIC, 16V 47UF M
CB58	76794470	ELECTROLYTIC, 16V 47UF M
CB59	76590103	PLASTIC FILM, 50V 0.01UF J
CB60	76794100	ELECTROLYTIC, 16V 10UF M
CB61	76503041	PLASTIC FILM , 63V 0.1UF J
CB82	76567474	PLASTIC FILM, 50V 0.47UF J
CB503	76092730	CERAMIC CHIP, 16V B 0.1UF K
CB504	76794100	ELECTROLYTIC, 16V 10UF M
CB505	76092730	CERAMIC CHIP, 16V B 0.1UF K
CB506	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CB507	76092730	CERAMIC CHIP, 16V B 0.1UF K
CB508	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CB509	76794101	ELECTROLYTIC, 16V 100UF M
CB510	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CC01	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC02	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC03	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC04	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76619100	ELECTROLYTIC CHIP, 16V 10UF M @UC01
CC05	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC06	76109102	CERAMIC CHIP, 50V B 1000PF K @U104

Location No.	Parts No.	Description
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC07	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76619100	ELECTROLYTIC CHIP, 16V 10UF M @UC01
CC08	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC09	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC10	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC11	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76619100	ELECTROLYTIC CHIP, 16V 10UF M @UC01
CC12	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092538	CERAMIC CHIP, 10V F 1UF Z @UC01
CC13	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC14	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC15	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76619100	ELECTROLYTIC CHIP, 16V 10UF M @UC01
CC16	76109102	CERAMIC CHIP, 50V B 1000PF K @U104
	76092730	CERAMIC CHIP, 16V B 0.1UF K @UC01
CC17	76619100	ELECTROLYTIC CHIP, 16V 10UF M
CC18	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC19	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC20	76619100	ELECTROLYTIC CHIP, 16V 10UF M
CC21	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC22	76092538	CERAMIC CHIP, 10V F 1UF Z
CC24	76092538	CERAMIC CHIP, 10V F 1UF Z
CC25	76092538	CERAMIC CHIP, 10V F 1UF Z
CC26	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC27	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC28	76619102	ELECTROLYTIC CHIP, 16V 47UF M
CC30	76619100	ELECTROLYTIC CHIP, 16V 10UF M
CC31	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC33	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC34	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC36	76619100	ELECTROLYTIC CHIP, 16V 10UF M
CC40	76092538	CERAMIC CHIP, 10V F 1UF Z
CC41	76092730	CERAMIC CHIP, 16V B 0.1UF K
CC42	76109103	CERAMIC CHIP, 50V B 0.01UF K
△ CE01	76503002	PLASTIC FILM, AC275V 0.22UF M
CE04	76092281	CERAMIC DISC, AC250V E 4700PF
CE05	76092281	CERAMIC DISC, AC250V E 4700PF
△ CE08	76503253	PLASTIC FILM, 1250VH 0.01UF H
CE09	76092337	CERAMIC DISC, 2KV 220PF K
CE10	76073217	ELECTROLYTIC, 200V 560UF M
△ CE11	76092565	CERAMIC DISC, AC250V B 470PF K
△ CE12	76092565	CERAMIC DISC, AC250V B 470PF K
△ CE13	76092565	CERAMIC DISC, AC250V B 470PF K
CE19	76073019	ELECTROLYTIC, 10V 470UF M 3A
CE30	76073183	ELECTROLYTIC, 35V 220UF M
CE31	76092730	CERAMIC CHIP, 16V B 0.1UF K
CE32	76073153	ELECTROLYTIC, 16V 470UF M 3A
CE33	76092730	CERAMIC CHIP, 16V B 0.1UF K
CE34	76109103	CERAMIC CHIP, 50V B 0.01UF K
CE35	76073168	ELECTROLYTIC CE04P 25V 330UF M 3A
CE36	76092730	CERAMIC CHIP, 16V B 0.1UF K
CE37	76073153	ELECTROLYTIC, 16V 470UF M 3A
CE38	76092730	CERAMIC CHIP, 16V B 0.1UF K
CE39	76109103	CERAMIC CHIP, 50V B 0.01UF K
CE40	76666470	ELECTORLYTIC, 16V 47UF M 3A
CE41	76092616	CERAMIC CHIP, 16V B 0.33UF K
CE42	76073137	ELECTROLYTIC CE04P 10V 100UF M 3A
CE48	76073168	ELECTROLYTIC CE04P 25V 330UF M 3A
CE49	76073183	ELECTROLYTIC, 35V 220UF M
CE50	76667470	ELECTROLYTIC, 25V 47UF M 3A
CE51	76092738	CERAMIC CHIP, 25V B 0.47UF K
CE52	76073151	ELECTROLYTIC, 16V 120UF M 3A
CE53	76666470	ELECTORLYTIC, 16V 47UF M 3A
CE54	76092616	CERAMIC CHIP, 16V B 0.33UF K
CE55	76073137	ELECTROLYTIC CE04P 10V 100UF M 3A
CE57	76667470	ELECTROLYTIC, 25V 47UF M 3A
CE58	76092738	CERAMIC CHIP, 25V B 0.47UF K
CE59	76073151	ELECTROLYTIC, 16V 120UF M 3A
CE61	76092339	CERAMIC DISC, 2KV 330PF K
CE62	76503049	PLASTIC FILM, 63V 0.47UF J

Location No.	Parts No.	Description
CE63	76669339	ELECTROLYTIC, 50V 3.3UF M
CE64	76503041	PLASTIC FILM , 63V 0.1UF J
CE65	76214221	CERAMIC DISC, 500V B 220PF K
CE68	76073180	ELECTROLYTIC CE04P 35V 33UF M 3A
CE72	76591471	PLASTIC FILM, 50V 470PF J
CE81	76214331	CERAMIC DISC, 500V B 330PF K
CE82	76214331	CERAMIC DISC, 500V B 330PF K
CE83	76214331	CERAMIC DISC, 500V B 330PF K
CE85	76073159	ELECTROLYTIC CE04P 16V 2700UF M 3A
CE86	76073174	ELECTROLYTIC, 25V 1500UF M 3A
CE87	76073189	ELECTROLYTIC, 35V 1000UF M
CE88	76676470	ELECTROLYTIC, 100V 47UF M 3A
CE89	76503041	PLASTIC FILM , 63V 0.1UF J
CE90	76073152	ELECTROLYTIC, 16V 330UF M 3A
CE91	76214102	CERAMIC DISC, 500V B 1000PF K
CE92	76109103	CERAMIC CHIP, 50V B 0.01UF K
CE93	76109103	CERAMIC CHIP, 50V B 0.01UF K
CE94	76109103	CERAMIC CHIP, 50V B 0.01UF K
CE95	76109103	CERAMIC CHIP, 50V B 0.01UF K
CF09	76073154	ELECTROLYTIC CE04P 16V 680UF M 3A
CF10	76073154	ELECTROLYTIC CE04P 16V 680UF M 3A
CF11	76092730	CERAMIC CHIP, 16V B 0.1UF K
CF12	76073154	ELECTROLYTIC CE04P 16V 680UF M 3A
CF13	76105471	CERAMIC CHIP, 50V CH 470PF J
CF14	76092731	CERAMIC CHIP, 16V B 1UF K
CF15	76109332	CERAMIC CHIP, 50V B 3300PF K
CF16	76109472	CERAMIC CHIP, 50V B 4700PF K
CF17	76815473	CERAMIC CHIP, 50V B 0.047UF K
CF18	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CF19	76073126	ELECTROLYTIC CE04P 6.3V 330UF M 3A
CF20	76092789	CERAMIC CHIP, 6.3V B 1UF K
CF21	76092789	CERAMIC CHIP, 6.3V B 1UF K
CF22	76073126	ELECTROLYTIC CE04P 6.3V 330UF M 3A
CF23	76092789	CERAMIC CHIP, 6.3V B 1UF K
CF24	76092789	CERAMIC CHIP, 6.3V B 1UF K
CF25	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CF26	76109103	CERAMIC CHIP, 50V B 0.01UF K
CF27	76109102	CERAMIC CHIP, 50V B 1000PF K
CF28	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CF29	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CF30	76073153	ELECTROLYTIC, 16V 470UF M 3A
CF31	76092731	CERAMIC CHIP, 16V B 1UF K
CF32	76073126	ELECTROLYTIC CE04P 6.3V 330UF M 3A
CF33	76092789	CERAMIC CHIP, 6.3V B 1UF K
CF34	76092730	CERAMIC CHIP, 16V B 0.1UF K
CF35	76092731	CERAMIC CHIP, 16V B 1UF K
CF36	76092789	CERAMIC CHIP, 6.3V B 1UF K
CF37	76073126	ELECTROLYTIC CE04P 6.3V 330UF M 3A
CF38	76073126	ELECTROLYTIC CE04P 6.3V 330UF M 3A
CF90	76667101	ELECTROLYTIC, 25V 100UF M
CF91	76073168	ELECTROLYTIC CE04P 25V 330UF M 3A
CF92	76092730	CERAMIC CHIP, 16V B 0.1UF K
CS01	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS02	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS03	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS04	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS05	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS06	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS07	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS08	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS09	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS10	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS11	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS12	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS13	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS14	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS15	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS16	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS17	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS18	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS19	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS20	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS21	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS22	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CS23	76109103	CERAMIC CHIP, 50V B 0.01UF K
CS24	76794101	ELECTROLYTIC, 16V 100UF M

Location No.	Parts No.	Description
CS25	76794220	ELECTROLYTIC, 16V 22UF M
CS31	76794100	ELECTROLYTIC, 16V 10UF M
CS32	76794100	ELECTROLYTIC, 16V 10UF M
CS33	76797229	ELECTROLYTIC, 50V 2.2UF M
CV13	76794100	ELECTROLYTIC, 16V 10UF M
CV14	76232103	CERAMIC DISC, 50V F 0.01UF Z
CV15	76232103	CERAMIC DISC, 50V F 0.01UF Z
CV40	76793101	ELECTROLYTIC, 10V 100UF M
CV41	76109103	CERAMIC CHIP, 50V B 0.01UF K
CV43	76105330	CERAMIC CHIP, 50V CH 33PF J
CV44	76105270	CERAMIC CHIP, 50V CH 27PF J
CV45	76105220	CERAMIC CHIP, 50V CH 22PF J
CV61	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CV62	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CV63	76794100	ELECTROLYTIC, 16V 10UF M
CV64	76794471	ELECTROLYTIC, 16V 470UF M
CV65	76794101	ELECTROLYTIC, 16V 100UF M
CV66	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV67	76092795	CERAMIC CHIP, 6.3V B 2.2UF K
CV71	76794100	ELECTROLYTIC, 16V 10UF M
CV72	76794100	ELECTROLYTIC, 16V 10UF M
CV74	76794100	ELECTROLYTIC, 16V 10UF M
CV75	76794100	ELECTROLYTIC, 16V 10UF M
CV76	76794100	ELECTROLYTIC, 16V 10UF M
CV77	76794100	ELECTROLYTIC, 16V 10UF M
CV78	76109103	CERAMIC CHIP, 50V B 0.01UF K
CV80	76793471	ELECTROLYTIC, 10V 470UF M
CV87	76109103	CERAMIC CHIP, 50V B 0.01UF K
CV200	76794100	ELECTROLYTIC, 16V 10UF M
CV201	76794100	ELECTROLYTIC, 16V 10UF M
CV202	76085981	ELECTROLYTIC, NP, 16V 10UF M 11L
CV203	76109103	CERAMIC CHIP, 50V B 0.01UF K
RESISTORS		
R103	76011101	CHIP, 1/20W 100 OHM J
R104	76011103	CHIP, 1/20W 10K OHM J
R105	76011273	CHIP, 1/20W 27K OHM J
R107	76000445	CHIP JUMPER, 1608TYPE
R108	76000445	CHIP JUMPER, 1608TYPE
R110	76011682	CHIP, 1/20W 6.8K OHM J
R114	76000445	CHIP JUMPER, 1608TYPE
R161	76011102	CHIP, 1/20W 1K OHM J
R165	76011392	CHIP, 1/20W 3.9K OHM J
R166	76011472	CHIP, 1/20W 4.7K OHM J
R167	76011101	CHIP, 1/20W 100 OHM J
R168	76011101	CHIP, 1/20W 100 OHM J
R601	76011272	CHIP, 1/20W 2.7K OHM J
R602	76011272	CHIP, 1/20W 2.7K OHM J
R603	76011152	CHIP, 1/20W 1.5K OHM J
R604	76011152	CHIP, 1/20W 1.5K OHM J
R609	76366229	CARBON FILM, 1/6W 2.2 OHM J
R610	76366229	CARBON FILM, 1/6W 2.2 OHM J
R611	76011103	CHIP, 1/20W 10K OHM J
R612	76011222	CHIP, 1/20W 2.2K OHM J
R613	76011223	CHIP, 1/20W 22K OHM J
R614	76011223	CHIP, 1/20W 22K OHM J
R661	76011102	CHIP, 1/20W 1K OHM J
R662	76011562	CHIP, 1/20W 5.6K OHM J
R663	76011822	CHIP, 1/20W 8.2K OHM J
R665	76011223	CHIP, 1/20W 22K OHM J
R666	76011473	CHIP, 1/20W 47K OHM J
R667	76011223	CHIP, 1/20W 22K OHM J
R668	76011473	CHIP, 1/20W 47K OHM J
R671	76011102	CHIP, 1/20W 1K OHM J
R672	76011562	CHIP, 1/20W 5.6K OHM J
R673	76011822	CHIP, 1/20W 8.2K OHM J
R674	76011472	CHIP, 1/20W 4.7K OHM J
R676	76011104	CHIP, 1/20W 100K OHM J
R677	76011104	CHIP, 1/20W 100K OHM J
R683	76011223	CHIP, 1/20W 22K OHM J
R684	76011223	CHIP, 1/20W 22K OHM J
R687	76011103	CHIP, 1/20W 10K OHM J
R688	76011224	CHIP, 1/20W 220K OHM J
R697	76553152	OXIDE METAL FILM, 1W 1.5K OHM J
R698	76011103	CHIP, 1/20W 10K OHM J
R699	76011103	CHIP, 1/20W 10K OHM J

Location No.	Parts No.	Description
R803	76011333	CHIP, 1/20W 33K OHM J
R805	76120001	CEMENT RES 141C 2.1W 1R8 K
R807	76011223	CHIP, 1/20W 22K OHM J
R808	76552470	OXIDE METAL FILM, 1/2W 47 OHM J
R809	76321689	OXIDE METAL FILM, 1/2W 6.8 OHM J
R810	76382150	OXIDE METAL FILM, 1W 15 OHM J
R811	76552820	OXIDE METAL FILM, 1/2W 82 OHM J
R812	76552390	OXIDE METAL FILM, 1/2W 39 OHM J
R813	76366150	CARBON FILM, 1/6W 15 OHM J
R814	76871473	CHIP, 1/8W 47K OHM J
R815	76552100	OXIDE METAL FILM, 1/2W 10 OHM J
R816	76011102	CHIP, 1/20W 1K OHM J
R817	76871473	CHIP, 1/8W 47K OHM J
R818	76871473	CHIP, 1/8W 47K OHM J
R819	76871473	CHIP, 1/8W 47K OHM J
R820	76871473	CHIP, 1/8W 47K OHM J
R821	76871105	CHIP, 1/8W 1M OHM J
R822	76871105	CHIP, 1/8W 1M OHM J
R823	76871105	CHIP, 1/8W 1M OHM J
R824	76871105	CHIP, 1/8W 1M OHM J
R825	76011104	CHIP, 1/20W 100K OHM J
R826	76011473	CHIP, 1/20W 47K OHM J
R827	76383473	OXIDE METAL FILM, 2W 47K OHM J
R828	76011104	CHIP, 1/20W 100K OHM J
R829	76011822	CHIP, 1/20W 8.2K OHM J
R830	76011822	CHIP, 1/20W 8.2K OHM J
R840	76552470	OXIDE METAL FILM, 1/2W 47 OHM J
R841	76011103	CHIP, 1/20W 10K OHM J
R843	76011333	CHIP, 1/20W 33K OHM J
R844	76011103	CHIP, 1/20W 10K OHM J
R845	76011332	CHIP, 1/20W 3.3K OHM J
R846	76011103	CHIP, 1/20W 10K OHM J
R847	76011153	CHIP, 1/20W 15K OHM J
R848	76011332	CHIP, 1/20W 3.3K OHM J
R849	76011103	CHIP, 1/20W 10K OHM J
R850	76011472	CHIP, 1/20W 4.7K OHM J
R851	76011333	CHIP, 1/20W 33K OHM J
R852	76011102	CHIP, 1/20W 1K OHM J
R871	76998332	CHIP, 1/16W 3.3K OHM
R872	76998103	CHIP, 1/16W 10K OHM
R873	76011100	CHIP, 1/20W 10 OHM J
R874	76011102	CHIP, 1/20W 1K OHM J
R875	76011471	CHIP, 1/20W 470 OHM J
R876	76011102	CHIP, 1/20W 1K OHM J
R877	76011471	CHIP, 1/20W 470 OHM J
R880	76552102	OXIDE METAL FILM, 1/2W 1K OHM J
△ R899	76005014	METAL FILM, 1W 8.2M OHM J
R8910	76998563	CHIP, 1/16W 56K OHM
R8911	76998562	CHIP, 1/16W 5.6K OHM
R8912	76998102	CHIP, 1/16W 1K OHM
R8921	76011123	CHIP, 1/20W 12K OHM J
R8922	76011182	CHIP, 1/20W 1.8K OHM J
R8923	76011472	CHIP, 1/20W 4.7K OHM J
R8924	76011103	CHIP, 1/20W 10K OHM J
R8931	76011123	CHIP, 1/20W 12K OHM J
R8932	76011182	CHIP, 1/20W 1.8K OHM J
R8933	76011472	CHIP, 1/20W 4.7K OHM J
R8934	76011103	CHIP, 1/20W 10K OHM J
R8950	76011821	CHIP, 1/20W 820 OHM J
R8951	76011473	CHIP, 1/20W 47K OHM J
R8952	76011102	CHIP, 1/20W 1K OHM J
R8953	76011333	CHIP, 1/20W 33K OHM J
R8954	76011333	CHIP, 1/20W 33K OHM J
R8955	76011472	CHIP, 1/20W 4.7K OHM J
R8956	76011681	CHIP, 1/20W 680 OHM J
R8960	76011334	CHIP, 1/20W 330K OHM J
R8961	76011223	CHIP, 1/20W 22K OHM J
R8962	76011223	CHIP, 1/20W 22K OHM J
R8963	76011102	CHIP, 1/20W 1K OHM J
R8964	76011103	CHIP, 1/20W 10K OHM J
RA71	76011103	CHIP, 1/20W 10K OHM J
RA72	76011223	CHIP, 1/20W 22K OHM J
RA73	76011683	CHIP, 1/20W 68K OHM J
RA75	76011103	CHIP, 1/20W 10K OHM J
RA76	76011223	CHIP, 1/20W 22K OHM J
RB15	76366471	CARBON FILM, 1/6W 470 OHM J

Location No.	Parts No.	Description
RB19	76366470	CARBON FILM, 1/6W 47 OHM J
RB51	76366224	CARBON FILM, 1/6W 220K OHM J
RB52	76366123	CARBON FILM, 1/6W 12K OHM J
RB53	76366123	CARBON FILM, 1/6W 12K OHM J
RB54	76366123	CARBON FILM, 1/6W 12K OHM J
RB55	76366224	CARBON FILM, 1/6W 220K OHM J
RB56	76366151	CARBON FILM, 1/6W 150 OHM J
RB57	76366103	CARBON FILM, 1/6W 10K OHM J
RB58	76366103	CARBON FILM, 1/6W 10K OHM J
RB59	76366122	CARBON FILM, 1/6W 1.2K OHM J
RB60	76366224	CARBON FILM, 1/6W 220K OHM J
RB61	76366100	CARBON FILM, 1/6W 10 OHM J
RB62	76366272	CARBON FILM, 1/6W 2.7K OHM J
RB63	76366271	CARBON FILM, 1/6W 270 OHM J
RB67	76366221	CARBON FILM, 1/6W 220 OHM J
RB69	76366272	CARBON FILM, 1/6W 2.7K OHM J
RB70	76366331	CARBON FILM, 1/6W 330 OHM J
RB81	76011473	CHIP, 1/20W 47K OHM J @U104
	#1 76011681	CHIP, 1/20W 680 OHM J @UA07
	#2 76011331	CHIP, 1/20W 330 OHM J @UA07
	#3 76011681	CHIP, 1/20W 680 OHM J @UA07
RB82	#1 76011152	CHIP, 1/20W 1.5K OHM J
	#2 76011391	CHIP, 1/20W 390 OHM J
	#3 76011152	CHIP, 1/20W 1.5K OHM J
RB83	76011102	CHIP, 1/20W 1K OHM J
RB84	76011473	CHIP, 1/20W 47K OHM J
RB92	76011473	CHIP, 1/20W 47K OHM J
RB93	76011102	CHIP, 1/20W 1K OHM J
RB502	76011332	CHIP, 1/20W 3.3K OHM J
RB503	76011332	CHIP, 1/20W 3.3K OHM J
RB504	76366104	CARBON FILM, 1/6W 100K OHM J
RB505	76366101	CARBON FILM, 1/6W 100 OHM J
RB506	76366390	CARBON FILM, 1/6W 39 OHM J
RB516	76011472	CHIP, 1/20W 4.7K OHM J
RB517	76011472	CHIP, 1/20W 4.7K OHM J
RB518	76011101	CHIP, 1/20W 100 OHM J
RB519	76011472	CHIP, 1/20W 4.7K OHM J
RB520	76011472	CHIP, 1/20W 4.7K OHM J
RB521	76011472	CHIP, 1/20W 4.7K OHM J
RB522	76011472	CHIP, 1/20W 4.7K OHM J
RB523	76011472	CHIP, 1/20W 4.7K OHM J
RB524	76011472	CHIP, 1/20W 4.7K OHM J
RB525	76011102	CHIP, 1/20W 1K OHM J
RB526	76011103	CHIP, 1/20W 10K OHM J
RB527	76011103	CHIP, 1/20W 10K OHM J
RB528	76011472	CHIP, 1/20W 4.7K OHM J
RB529	76011472	CHIP, 1/20W 4.7K OHM J
RB554	76011101	CHIP, 1/20W 100 OHM J
RB555	76011103	CHIP, 1/20W 10K OHM J
RB556	76011101	CHIP, 1/20W 100 OHM J
RB557	76011103	CHIP, 1/20W 10K OHM J
RB558	76366223	CARBON FILM, 1/6W 22K OHM J
RB559	76366223	CARBON FILM, 1/6W 22K OHM J
RB560	76011101	CHIP, 1/20W 100 OHM J
RB561	76011472	CHIP, 1/20W 4.7K OHM J
RB562	76366104	CARBON FILM, 1/6W 100K OHM J
RB563	76366390	CARBON FILM, 1/6W 39 OHM J
RB565	76366101	CARBON FILM, 1/6W 100 OHM J
RB566	76011102	CHIP, 1/20W 1K OHM J
RB567	76366223	CARBON FILM, 1/6W 22K OHM J
RB576	76011153	CHIP, 1/20W 15K OHM J
RC01	76011101	CHIP, 1/20W 100 OHM J @U104
	76011223	CHIP, 1/20W 22K OHM J @UC01
RC02	76011101	CHIP, 1/20W 100 OHM J @U104
	76011220	CHIP, 1/20W 22 OHM J @UC01
RC03	76011101	CHIP, 1/20W 100 OHM J @U104
	76011220	CHIP, 1/20W 22 OHM J @UC01
RC04	76011101	CHIP, 1/20W 100 OHM J @U104
	76011220	CHIP, 1/20W 22 OHM J @UC01
RC05	76011101	CHIP, 1/20W 100 OHM J @U104
	76011220	CHIP, 1/20W 22 OHM J @UC01
RC06	76011101	CHIP, 1/20W 100 OHM J @U104
	76011220	CHIP, 1/20W 22 OHM J @UC01
RC07	76011101	CHIP, 1/20W 100 OHM J @U104
	76011220	CHIP, 1/20W 22 OHM J @UC01
RC08	76011101	CHIP, 1/20W 100 OHM J @U104

Location No.	Parts No.	Description
RC09	76011220	CHIP, 1/20W 22 OHM J @UC01
	76011101	CHIP, 1/20W 100 OHM J @U104
	76011270	CHIP, 1/20W 27 OHM J @UC01
RC10	76011101	CHIP, 1/20W 100 OHM J @U104
	76011270	CHIP, 1/20W 27 OHM J @UC01
RC11	76011101	CHIP, 1/20W 100 OHM J @U104
	76011334	CHIP, 1/20W 330K OHM J @UC01
RC12	76011101	CHIP, 1/20W 100 OHM J @U104
	76011103	CHIP, 1/20W 10K OHM J @UC01
RC13	76011101	CHIP, 1/20W 100 OHM J @U104
	76000824	CHIP JUMPER, 2125TYPE @UC01
RC14	76011101	CHIP, 1/20W 100 OHM J @U104
	76000824	CHIP JUMPER, 2125TYPE @UC01
RC15	76000824	CHIP JUMPER, 2125TYPE
RC16	76011103	CHIP, 1/20W 10K OHM J
RC17	76000824	CHIP JUMPER, 2125TYPE
RC18	76000824	CHIP JUMPER, 2125TYPE
RC19	76000824	CHIP JUMPER, 2125TYPE
RC20	76000824	CHIP JUMPER, 2125TYPE
RC21	76011103	CHIP, 1/20W 10K OHM J
RC22	76011103	CHIP, 1/20W 10K OHM J
RC23	76011103	CHIP, 1/20W 10K OHM J
RC24	76011103	CHIP, 1/20W 10K OHM J
RC25	76011103	CHIP, 1/20W 10K OHM J
RC26	76011103	CHIP, 1/20W 10K OHM J
RC27	76011103	CHIP, 1/20W 10K OHM J
RC28	76011103	CHIP, 1/20W 10K OHM J
RC32	76011331	CHIP, 1/20W 330 OHM J
RC33	76011103	CHIP, 1/20W 10K OHM J
RC34	76011331	CHIP, 1/20W 330 OHM J
RC35	76011103	CHIP, 1/20W 10K OHM J
RC36	76011331	CHIP, 1/20W 330 OHM J
RC37	76011103	CHIP, 1/20W 10K OHM J
RC38	76011331	CHIP, 1/20W 330 OHM J
RC39	76011103	CHIP, 1/20W 10K OHM J
RC40	76011102	CHIP, 1/20W 1K OHM J
RC41	76011105	CHIP, 1/20W 1M OHM J
RC49	76011103	CHIP, 1/20W 10K OHM J
RC50	76011123	CHIP, 1/20W 12K OHM J
RC51	76011103	CHIP, 1/20W 10K OHM J
RC52	76011103	CHIP, 1/20W 10K OHM J
RC53	76011103	CHIP, 1/20W 10K OHM J
RC54	76011220	CHIP, 1/20W 22 OHM J
RC55	76011103	CHIP, 1/20W 10K OHM J
RC61	76011564	CHIP, 1/20W 560K OHM J
RC62	76011103	CHIP, 1/20W 10K OHM J
RE08	76554683	OXIDE RES 2W 68K J
RE14	76011472	CHIP, 1/20W 4.7K OHM J
RE15	76011102	CHIP, 1/20W 1K OHM J
RE16	76382221	OXIDE METAL FILM, 1W 220 OHM J
RE17	76011103	CHIP, 1/20W 10K OHM J
RE19	76011183	CHIP, 1/20W 18K OHM J
RE20	76011333	CHIP, 1/20W 33K OHM J
RE21	76011103	CHIP, 1/20W 10K OHM J
RE22	76011103	CHIP, 1/20W 10K OHM J
RE23	76011473	CHIP, 1/20W 47K OHM J
RE24	76011103	CHIP, 1/20W 10K OHM J
RE25	76011333	CHIP, 1/20W 33K OHM J
RE26	76011103	CHIP, 1/20W 10K OHM J
RE27	76011103	CHIP, 1/20W 10K OHM J
RE28	76011473	CHIP, 1/20W 47K OHM J
RE29	76011103	CHIP, 1/20W 10K OHM J
RE30	76998102	CHIP, 1/16W 1K OHM
RE31	76998152	CHIP, 1/16W 1.5K OHM D
RE32	76998181	CHIP, 1/16W 180 OHM
RE33	76011102	CHIP, 1/20W 1K OHM J
RE34	76011473	CHIP, 1/20W 47K OHM J
RE35	76011103	CHIP, 1/20W 10K OHM J
RE36	76011103	CHIP, 1/20W 10K OHM J
RE37	76011333	CHIP, 1/20W 33K OHM J
RE38	76998102	CHIP, 1/16W 1K OHM
RE39	76998152	CHIP, 1/16W 1.5K OHM D
RE40	76998273	CHIP, 1/16W 27K OHM
RE41	76998823	CHIP, 1/16W 82K OHM
RE42	76011103	CHIP, 1/20W 10K OHM J
RE43	76011223	CHIP, 1/20W 22K OHM J

Location No.	Parts No.	Description
RE44	76011103	CHIP, 1/20W 10K OHM J
RE45	76011223	CHIP, 1/20W 22K OHM J
RE47	76998333	CHIP, 1/16W 33K OHM
RE48	76998104	CHIP, 1/16W 100K OHM D
RE49	76998102	CHIP, 1/16W 1K OHM
RE50	76998181	CHIP, 1/16W 180 OHM
RE51	76011102	CHIP, 1/20W 1K OHM J
RE52	76011333	CHIP, 1/20W 33K OHM J
RE53	76011103	CHIP, 1/20W 10K OHM J
RE54	76011103	CHIP, 1/20W 10K OHM J
RE55	76011333	CHIP, 1/20W 33K OHM J
RE56	76998153	CHIP, 1/16W 15K OHM
RE57	76998823	CHIP, 1/16W 82K OHM
RE58	76998123	CHIP, 1/16W 12K OHM
RE59	76011332	CHIP, 1/20W 3.3K OHM J
RE61	76382473	OXIDE METAL FILM, 1W 47K OHM J
RE62	76322688	OXIDE METAL FILM, 1W 0.68 OHM J
RE63	76322688	OXIDE METAL FILM, 1W 0.68 OHM J
RE64	76381221	OXIDE METAL FILM, 1/2W 220 OHM J
RE65	76366102	CARBON FILM, 1/6W 1K OHM J
RE66	76366102	CARBON FILM, 1/6W 1K OHM J
RE71	76310829	OXIDE METAL FILM, 1/2W 8.2 OHM J
RE72	76552222	OXIDE METAL FILM, 1/2W 2.2K OHM J
RE73	76366102	CARBON FILM, 1/6W 1K OHM J
RE81	76998821	CHIP, 1/16W 820 OHM
RE82	76998103	CHIP, 1/16W 10K OHM
RE83	76998682	CHIP, 1/16W 6.8K OHM D
RE84	76011471	CHIP, 1/20W 470 OHM J
RE85	76011222	CHIP, 1/20W 2.2K OHM J
RE86	76011102	CHIP, 1/20W 1K OHM J
RE89	76011223	CHIP, 1/20W 22K OHM J
RE90	76011103	CHIP, 1/20W 10K OHM J
RE91	76011333	CHIP, 1/20W 33K OHM J
RE92	76011104	CHIP, 1/20W 100K OHM J
RE93	76011223	CHIP, 1/20W 22K OHM J
RE94	76011103	CHIP, 1/20W 10K OHM J
RE95	76382222	OXIDE METAL FILM, 1W 2.2K OHM J
RE96	76011102	CHIP, 1/20W 1K OHM J
RE97	76382101	OXIDE METAL FILM, 1W 100 OHM J
RE98	76011103	CHIP, 1/20W 10K OHM J
RE99	76011472	CHIP, 1/20W 4.7K OHM J
RF07	76011122	CHIP, 1/20W 1.2K OHM J
RF08	76011153	CHIP, 1/20W 15K OHM J
RF09	76011103	CHIP, 1/20W 10K OHM J
RF10	76998153	CHIP, 1/16W 15K OHM
RF11	76998104	CHIP, 1/16W 100K OHM D
RF12	76998473	CHIP, 1/16W 47K OHM
RF13	76011152	CHIP, 1/20W 1.5K OHM J
RF14	76011474	CHIP, 1/20W 470K OHM J
RF15	76011682	CHIP, 1/20W 6.8K OHM J
RF18	76998103	CHIP, 1/16W 10K OHM
RF19	76998682	CHIP, 1/16W 6.8K OHM D
RF20	76998822	CHIP, 1/16W 8.2K OHM
RF21	76998683	CHIP, 1/16W 68K OHM D
RF22	76998473	CHIP, 1/16W 47K OHM
RF23	76011474	CHIP, 1/20W 470K OHM J
RF24	76998103	CHIP, 1/16W 10K OHM
RF25	76998153	CHIP, 1/16W 15K OHM
RF26	76011682	CHIP, 1/20W 6.8K OHM J
RF27	76011332	CHIP, 1/20W 3.3K OHM J
RF29	76011332	CHIP, 1/20W 3.3K OHM J
RF30	76998272	CHIP, 1/16W 2.7K OHM
RF31	76998221	CHIP, 1/16W 220 OHM
RF32	76998182	CHIP, 1/16W 1.8K OHM
RF33	76011220	CHIP, 1/20W 22 OHM J
RF34	76011220	CHIP, 1/20W 22 OHM J
RF35	76011684	CHIP, 1/20W 680K OHM J
RF90	76382330	OXIDE METAL FILM, 1W 33 OHM J
RS01	76011562	CHIP, 1/20W 5.6K OHM J
RS02	76011562	CHIP, 1/20W 5.6K OHM J
RS03	76011562	CHIP, 1/20W 5.6K OHM J
RS04	76011562	CHIP, 1/20W 5.6K OHM J
RS05	76011562	CHIP, 1/20W 5.6K OHM J
RS06	76011562	CHIP, 1/20W 5.6K OHM J
RS07	76011562	CHIP, 1/20W 5.6K OHM J
RS08	76011562	CHIP, 1/20W 5.6K OHM J

Location No.	Parts No.	Description
RS09	76011562	CHIP, 1/20W 5.6K OHM J
RS10	76011562	CHIP, 1/20W 5.6K OHM J
RS11	76011562	CHIP, 1/20W 5.6K OHM J
RS12	76011562	CHIP, 1/20W 5.6K OHM J
RS13	76011562	CHIP, 1/20W 5.6K OHM J
RS14	76011562	CHIP, 1/20W 5.6K OHM J
RS15	76011562	CHIP, 1/20W 5.6K OHM J
RS16	76011562	CHIP, 1/20W 5.6K OHM J
RS17	76011562	CHIP, 1/20W 5.6K OHM J
RS18	76011562	CHIP, 1/20W 5.6K OHM J
RS19	76011562	CHIP, 1/20W 5.6K OHM J
RS20	76011562	CHIP, 1/20W 5.6K OHM J
RS21	76011562	CHIP, 1/20W 5.6K OHM J
RS22	76011562	CHIP, 1/20W 5.6K OHM J
RS23	76011101	CHIP, 1/20W 100 OHM J
RS24	76011101	CHIP, 1/20W 100 OHM J
RS25	76011101	CHIP, 1/20W 100 OHM J
RS26	76011101	CHIP, 1/20W 100 OHM J
RS27	76011101	CHIP, 1/20W 100 OHM J
RS28	76011101	CHIP, 1/20W 100 OHM J
RS29	76011682	CHIP, 1/20W 6.8K OHM J
RS30	76011182	CHIP, 1/20W 1.8K OHM J
RS31	76011100	CHIP, 1/20W 10 OHM J
RS32	76011221	CHIP, 1/20W 220 OHM J
RS33	76011222	CHIP, 1/20W 2.2K OHM J
RS34	76011221	CHIP, 1/20W 220 OHM J
RS35	76011222	CHIP, 1/20W 2.2K OHM J
RS37	76011101	CHIP, 1/20W 100 OHM J
RS38	76011101	CHIP, 1/20W 100 OHM J
RS41	76011821	CHIP, 1/20W 820 OHM J
RS42	76011821	CHIP, 1/20W 820 OHM J
RS43	76011223	CHIP, 1/20W 22K OHM J
RS44	76011223	CHIP, 1/20W 22K OHM J
RS45	76011104	CHIP, 1/20W 100K OHM J
RS46	76011104	CHIP, 1/20W 100K OHM J
RS47	76011222	CHIP, 1/20W 2.2K OHM J
RV10	76011222	CHIP, 1/20W 2.2K OHM J
RV11	76011222	CHIP, 1/20W 2.2K OHM J
RV12	76011222	CHIP, 1/20W 2.2K OHM J
RV20	76366750	CARBON FILM, 1/6W 75 OHM J
RV21	76366750	CARBON FILM, 1/6W 75 OHM J
RV22	76366750	CARBON FILM, 1/6W 75 OHM J
RV23	76366101	CARBON FILM, 1/6W 100 OHM J
RV33	76011750	CHIP, 1/20W 75 OHM J
RV34	76011750	CHIP, 1/20W 75 OHM J
RV35	76011750	CHIP, 1/20W 75 OHM J
RV36	76011750	CHIP, 1/20W 75 OHM J
RV37	76011750	CHIP, 1/20W 75 OHM J
RV40	76011750	CHIP, 1/20W 75 OHM J
RV41	76011391	CHIP, 1/20W 390 OHM J
RV42	76011331	CHIP, 1/20W 330 OHM J
RV44	76011332	CHIP, 1/20W 3.3K OHM J
RV45	76000445	CHIP JUMPER, 1608TYPE
RV46	76011100	CHIP, 1/20W 10 OHM J
RV47	76011100	CHIP, 1/20W 10 OHM J
RV51	76011750	CHIP, 1/20W 75 OHM J
RV52	76011750	CHIP, 1/20W 75 OHM J
RV53	76011750	CHIP, 1/20W 75 OHM J
RV54	76011750	CHIP, 1/20W 75 OHM J
RV55	76011750	CHIP, 1/20W 75 OHM J
RV56	76011750	CHIP, 1/20W 75 OHM J
RV61	76011101	CHIP, 1/20W 100 OHM J
RV62	76011101	CHIP, 1/20W 100 OHM J
RV63	76011101	CHIP, 1/20W 100 OHM J
RV64	76011101	CHIP, 1/20W 100 OHM J
RV65	76011101	CHIP, 1/20W 100 OHM J
RV66	76011750	CHIP, 1/20W 75 OHM J
RV160	76011101	CHIP, 1/20W 100 OHM J
RV161	76011101	CHIP, 1/20W 100 OHM J
RV162	76011101	CHIP, 1/20W 100 OHM J
RV163	76011101	CHIP, 1/20W 100 OHM J
RV164	76011101	CHIP, 1/20W 100 OHM J
RV165	76011101	CHIP, 1/20W 100 OHM J
RV166	76011681	CHIP, 1/20W 680 OHM J
RV167	76011681	CHIP, 1/20W 680 OHM J
RV168	76011681	CHIP, 1/20W 680 OHM J

Location No.	Parts No.	Description
RV169	76011101	CHIP, 1/20W 100 OHM J
RV200	76011101	CHIP, 1/20W 100 OHM J
RV201	76011101	CHIP, 1/20W 100 OHM J
RV202	76011102	CHIP, 1/20W 1K OHM J
GR02	76000445	CHIP JUMPER, 1608TYPE
GR003	76000576	CHIP JUMPER, 3216TYPE
GR03	76000445	CHIP JUMPER, 1608TYPE
GR004	76000576	CHIP JUMPER, 3216TYPE
GR04	76000445	CHIP JUMPER, 1608TYPE
GR10	76000445	CHIP JUMPER, 1608TYPE
GR11	76000445	CHIP JUMPER, 1608TYPE
GR12	76000445	CHIP JUMPER, 1608TYPE
GR25	76000445	CHIP JUMPER, 1608TYPE
GR26	76000445	CHIP JUMPER, 1608TYPE
GR27	76000445	CHIP JUMPER, 1608TYPE
GR28	76000445	CHIP JUMPER, 1608TYPE
GR30	76000445	CHIP JUMPER, 1608TYPE
GR112	76000445	CHIP JUMPER, 1608TYPE
GR113	76000445	CHIP JUMPER, 1608TYPE
GR120	76000445	CHIP JUMPER, 1608TYPE
GR121	76000445	CHIP JUMPER, 1608TYPE
GR122	76000445	CHIP JUMPER, 1608TYPE
GR123	76000445	CHIP JUMPER, 1608TYPE
GR603	76000445	CHIP JUMPER, 1608TYPE
GR604	76000445	CHIP JUMPER, 1608TYPE
GR612	76000445	CHIP JUMPER, 1608TYPE
GR613	76000445	CHIP JUMPER, 1608TYPE
GRS02	76000445	CHIP JUMPER, 1608TYPE
ZC01	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC02	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC03	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC04	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC05	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC06	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC07	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC08	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC09	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC10	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC11	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC12	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC13	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC16	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC18	76019479	CHIP BLOCK, 1/32W 22 OHM J, P-8
ZC19	76019404	CHIP BLOCK, 1/16W 10K OHM J, P-8
ZC21	76019404	CHIP BLOCK, 1/16W 10K OHM J, P-8
ZC22	76019404	CHIP BLOCK, 1/16W 10K OHM J, P-8
ZC23	76019404	CHIP BLOCK, 1/16W 10K OHM J, P-8
COILS & TRANSFORMERS		
L001	23103885	INDUCTOR, CHIP BEAD 3A 22OHM
L002	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
L003	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
L101	23248398	COIL, CHOKE, TLN3278D
L102	23103828	INDUCTOR, BEAD, TEM2121M
L103	23103828	INDUCTOR, BEAD, TEM2121M
L151	23103828	INDUCTOR, BEAD, TEM2121M
L152	23103828	INDUCTOR, BEAD, TEM2121M
L803	23103302	FERRITE CHOKE, TEM2011AH
L804	23103302	FERRITE CHOKE, TEM2011AH
L805	23103302	FERRITE CHOKE, TEM2011AH
L820	23103307	FERRITE CHOKE, TEM2014AA
L821	23103307	FERRITE CHOKE, TEM2014AA
L855	23103302	FERRITE CHOKE, TEM2011AH
L856	23103302	FERRITE CHOKE, TEM2011AH
L857	23103302	FERRITE CHOKE, TEM2011AH
L858	23103302	FERRITE CHOKE, TEM2011AH
L859	23103302	FERRITE CHOKE, TEM2011AH
L860	23103302	FERRITE CHOKE, TEM2011AH
L861	23248442	COIL, CHOKE, TLN3515AH
L862	23248442	COIL, CHOKE, TLN3515AH
L864	23248442	COIL, CHOKE, TLN3515AH
L8920	23289996	COIL, PEAKING, TRF4220AF
L8921	23289996	COIL, PEAKING, TRF4220AF
L8930	23289996	COIL, PEAKING, TRF4220AF
L8931	23289996	COIL, PEAKING, TRF4220AF
L8960	23103828	INDUCTOR, BEAD, TEM2121M

Location No.	Parts No.	Description
L8961	23103828	INDUCTOR, BEAD, TEM2121M
LB19	23103828	INDUCTOR, BEAD, TEM2121M
LB51	23289972	COIL, PEAKING, TRF4100AC
LC02	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
LC03	23103271	FILTER, EMI 2012 2010HM 0.35A TEM2033AD
LC04	23103271	FILTER, EMI 2012 2010HM 0.35A TEM2033AD
LC05	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
LC06	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
LE08	23103302	FERRITE CHOKE, TEM2011AH
LE30	23289979	COIL, PEAKING, TRF4100AZ
LE31	23246919	COIL, CHOKE 13X8H 33MMH M TLN3586AH
LE32	23246934	COIL, CHOKE 4.5X3.5H 1.0MMHM TLN3601AH
LE33	23103888	INDUCTOR, CHIP BEAD, TEM2131AM
LE34	23289979	COIL, PEAKING, TRF4100AZ
LE35	23246919	COIL, CHOKE 13X8H 33MMH M TLN3586AH
LE36	23246934	COIL, CHOKE 4.5X3.5H 1.0MMHM TLN3601AH
LE37	23103888	INDUCTOR, CHIP BEAD, TEM2131AM
LE38	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
LE40	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
LE59	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
LE61	23103302	FERRITE CHOKE, TEM2011AH
LE64	23103302	FERRITE CHOKE, TEM2011AH
LE81	23103302	FERRITE CHOKE, TEM2011AH
LE82	23103302	FERRITE CHOKE, TEM2011AH
LE83	23103302	FERRITE CHOKE, TEM2011AH
LE84	23103302	FERRITE CHOKE, TEM2011AH
LE85	23248432	COIL, CHOKE, TLN3499AH
LE86	23248432	COIL, CHOKE, TLN3499AH
LE87	23248432	COIL, CHOKE, TLN3499AH
LE88	23248445	COIL, CHOKE, TLN3441AH
LE91	23103265	FILTER, CHIP BEAD INDUCTOR TEM2160AM
LE92	23103888	INDUCTOR, CHIP BEAD, TEM2131AM
LE93	23103888	INDUCTOR, CHIP BEAD, TEM2131AM
LE94	23103888	INDUCTOR, CHIP BEAD, TEM2131AM
LE95	23103888	INDUCTOR, CHIP BEAD, TEM2131AM
LF10	23103885	INDUCTOR, CHIP BEAD 3A 22OHM
LF11	23246911	COIL, CHOKE 13X8H 5.6MMH N TLN3578AH
LF13	23103885	INDUCTOR, CHIP BEAD 3A 22OHM
LF14	23248489	COIL, CHOKE COIL 1.5MMH 8A TLN3639AH
LF21	23246911	COIL, CHOKE 13X8H 5.6MMH N TLN3578AH
LF23	23103885	INDUCTOR, CHIP BEAD 3A 22OHM
LF24	23248489	COIL, CHOKE COIL 1.5MMH 8A TLN3639AH
LF30	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
LF31	23246895	COIL, CHOKE 13X4.6H 33MMH M TLN3561AH
LF32	23246934	COIL, CHOKE 4.5X3.5H 1.0MMHM TLN3601AH
LF33	23103888	INDUCTOR, CHIP BEAD, TEM2131AM
LF90	23289983	COIL, PEAKING, TRF4101AZ
LF91	23289983	COIL, PEAKING, TRF4101AZ
LV02	23103314	COIL, FILTER, TEM2028AH
LV03	23103314	COIL, FILTER, TEM2028AH
LV13	23289022	COIL, PEAKING, TRF4100AT
LV17	23289022	COIL, PEAKING, TRF4100AT
LV20	23221156	COIL, PEAKING, TRF4560AJ
LV41	23289024	COIL, PEAKING, TRF4220AT
△ T801	23211839	COIL, LINE FILTER, TRF3209AH
△ T802	23211836	COIL, LINE FILTER, TRF3197AH
△ T862	23217780	TRANSFORMER, CONVERTER TPW3570AS
△ TE01	23211905	COIL, LINE FILTER 26X31H 11MH TRF3228AH
TE62	23217781	TRANSFORMER, CONVERTER TPW3571AS
GR605	23103887	INDUCTOR, CHIP BEAD, TEM2130AM
SEMICONDUCTORS		
Q101	23205506	TRANSISTOR, 2SC4081 Q
Q161	23205506	TRANSISTOR, 2SC4081 Q
Q601	23085839	IC, TV SOUND OUT CPP 12PIN TA8216HQ(5)
Q612	23205346	TRANSISTOR, KTA2014Y/P
Q613	23205506	TRANSISTOR, 2SC4081 Q
Q661	23205424	TRANSISTOR, KTC2875B/P
Q662	23205424	TRANSISTOR, KTC2875B/P
Q663	23085575	IC, OP AMP, BA4558
Q664	23205325	TRANSISTOR, RN2404(F)
Q681	23205424	TRANSISTOR, KTC2875B/P
Q682	23205424	TRANSISTOR, KTC2875B/P
Q801	23135080	IC, STRZ4267
Q815	23205347	TRANSISTOR, KTC4075Y/P
Q846	23205347	TRANSISTOR, KTC4075Y/P

Location No.	Parts No.	Description
Q847	23205347	TRANSISTOR, KTC4075Y/P
Q848	23205347	TRANSISTOR, KTC4075Y/P
Q849	23205346	TRANSISTOR, KTA2014Y/P
Q850	23205347	TRANSISTOR, KTC4075Y/P
Q851	23205346	TRANSISTOR, KTA2014Y/P
△ Q862	23000823	IC, PHOTO COUPLER, TLP421F(GR)
△ Q866	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q870	23085389	IC, NJM431L
Q891	23085821	IC, ADJ REG. VO=1.5V-16.0V BA7810T-V5
Q892	23009998	IC, BA00JC5WT-V5
Q893	23009998	IC, BA00JC5WT-V5
Q894	23085869	IC, OPE AMP, TA75358PG(5)
Q8950	23205347	TRANSISTOR, KTC4075Y/P
Q8951	23205347	TRANSISTOR, KTC4075Y/P
Q8952	23205346	TRANSISTOR, KTA2014Y/P
Q8960	23205347	TRANSISTOR, KTC4075Y/P
Q8961	23205347	TRANSISTOR, KTC4075Y/P
QB51	23085527	IC, OPE AMP, M5218AP
QB52	23205499	TRANSISTOR, KTC3198 Y/P
QB53	23205497	TRANSISTOR, KTA1266 Y/P
QB80	23085600	IC, PST9129
QB81	23205446	TRANSISTOR, 2SC2412K, Q T146
QB84	23205446	TRANSISTOR, 2SC2412K, Q T146
QB501	23085951	IC, BLASTER IC S3C80F9BKZ-SO77
QB502	23205307	TRANSISTOR, 2SA562TM-Y(F)
QB504	23205506	TRANSISTOR, 2SC4081 Q
QB505	23205506	TRANSISTOR, 2SC4081 Q
QB508	23205307	TRANSISTOR, 2SA562TM-Y(F)
QB509	23205337	TRANSISTOR, 2SC2878-A(TEM)
QB510	23205317	TRANSISTOR, RN1204(F)
QB511	23205317	TRANSISTOR, RN1204(F)
QB512	23205337	TRANSISTOR, 2SC2878-A(TEM)
QB513	23205317	TRANSISTOR, RN1204(F)
QB514	23085507	IC, TC4S66F(F)
QB515	23085507	IC, TC4S66F(F)
QB516	23009976	IC, BH33FB1WG-TR
QB517	23205317	TRANSISTOR, RN1204(F)
QC01	23085879	IC, USB2224-NU-05
QC02	23085121	IC, TC7SH04FU(TE85L,F)
QC03	23205578	TRANSISTOR, RTQ035P02
QC04	23205578	TRANSISTOR, RTQ035P02
QC05	23205578	TRANSISTOR, RTQ035P02
QC06	23205578	TRANSISTOR, RTQ035P02
QC07	23085774	IC, REG PQ033EZ01ZPH
QE01	23135089	IC, HYBRID 650V STR-W6756
QE21	23205346	TRANSISTOR, KTA2014Y/P
QE22	23205347	TRANSISTOR, KTC4075Y/P
QE30	23085454	IC, PQ1CY1032Z
QE31	23205347	TRANSISTOR, KTC4075Y/P
QE32	23205347	TRANSISTOR, KTC4075Y/P
QE33	23085454	IC, PQ1CY1032Z
QE34	23205347	TRANSISTOR, KTC4075Y/P
QE35	23205347	TRANSISTOR, KTC4075Y/P
QE40	23000903	IC, REGULATOR ADJ TO252-5 BA00BC0WFP-E2
QE50	23000903	IC, REGULATOR ADJ TO252-5 BA00BC0WFP-E2
QE51	23205347	TRANSISTOR, KTC4075Y/P
QE52	23205347	TRANSISTOR, KTC4075Y/P
QE53	23000903	IC, REGULATOR ADJ TO252-5 BA00BC0WFP-E2
QE54	23205347	TRANSISTOR, KTC4075Y/P
QE55	23205347	TRANSISTOR, KTC4075Y/P
QE59	23085028	IC, BA90BC0FP-E2
△ QE62	23000823	IC, PHOTO COUPLER, TLP421F(GR)
QE81	23085389	IC, NJM431L
QE93	23205301	TRANSISTOR, 2SA1887(FA,F)
QE94	23205446	TRANSISTOR, 2SC2412K, Q T146
QE95	23205446	TRANSISTOR, 2SC2412K, Q T146
QE96	23205301	TRANSISTOR, 2SA1887(FA,F)
QE97	23205446	TRANSISTOR, 2SC2412K, Q T146
QE98	23085415	IC, BD4746G
QE99	23205347	TRANSISTOR, KTC4075Y/P
QF05	23085415	IC, BD4746G
QF10	23085807	IC, HTSSOP B20 CONTROL BD9851EFV-E2
QF12	23205582	TRANSISTOR, FET RSS090P03 RSS090P03TB
QF22	23205582	TRANSISTOR, FET RSS090P03 RSS090P03TB
QF30	23135095	IC, CHOPPER REG PQ1CX12H2ZPQ T
QS01	23009916	IC, MM1631AJBE

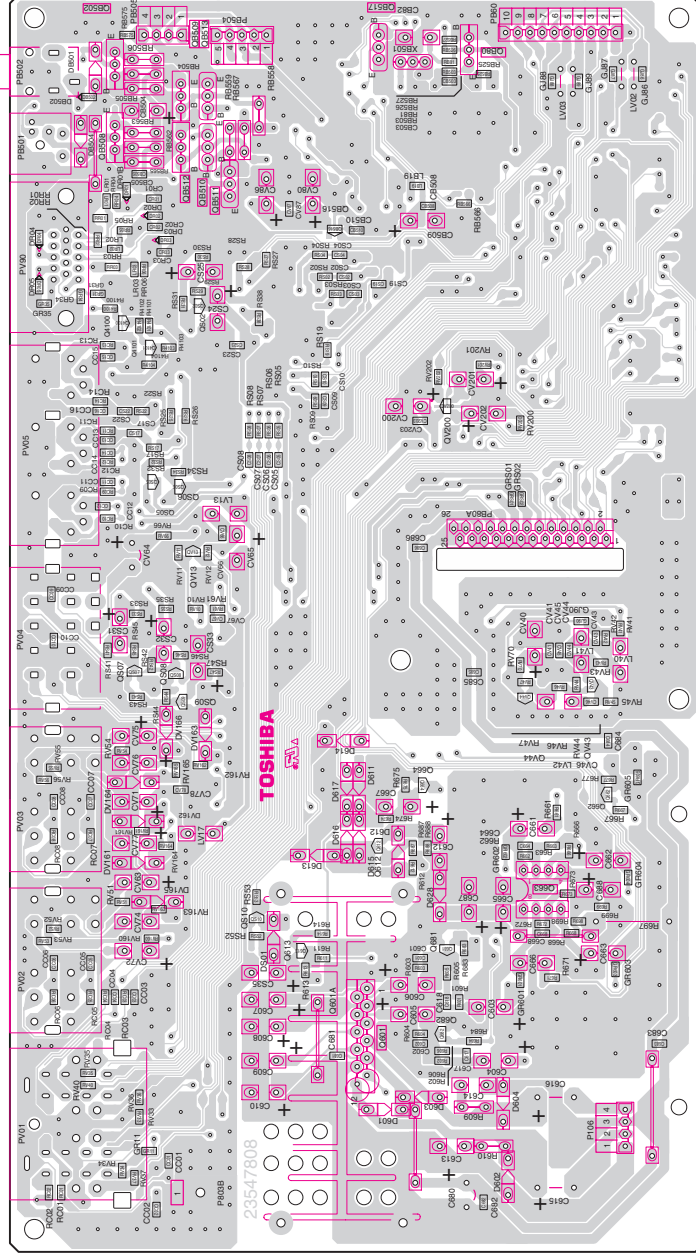
Location No.	Parts No.	Description
QS02	23205347	TRANSISTOR, KTC4075Y/P
QS05	23205347	TRANSISTOR, KTC4075Y/P
QS06	23205347	TRANSISTOR, KTC4075Y/P
QS07	23205424	TRANSISTOR, KTC2875B/P
QS08	23205424	TRANSISTOR, KTC2875B/P
QS09	23205325	TRANSISTOR, RN2404(F)
QV12	23085806	IC, 3 IN 1 OUT 75OHM DRIVER MM1228XFBF
QV13	23205346	TRANSISTOR, KTA2014Y/P
QV30	23085352	IC, M52055FP
QV43	23205346	TRANSISTOR, KTA2014Y/P
QV44	23205346	TRANSISTOR, KTA2014Y/P
QV200	23085393	IC, MM1502XN
D601	23357697	DIODE, 1SS133
D602	23357697	DIODE, 1SS133
D603	23357697	DIODE, 1SS133
D604	23357697	DIODE, 1SS133
D611	23357697	DIODE, 1SS133
D612	23357697	DIODE, 1SS133
D613	23357697	DIODE, 1SS133
D614	23357697	DIODE, 1SS133
D615	23357697	DIODE, 1SS133
D616	23357697	DIODE, 1SS133
D617	23357697	DIODE, 1SS133
D628	23357865	DIODE, ZENER, MTZJ12B
D801	23357712	DIODE, D5SB60, 4009 F05
D805	23357850	DIODE, ZENER, MTZJ9.1A
D806	23357893	DIODE, ZENER, MTZJ27C
D809	23357905	DIODE, ZENER, MTZJ36C
D810	23357893	DIODE, ZENER, MTZJ27C
D811	23357511	DIODE, AG01A
D812	23357852	DIODE, ZENER, MTZJ9.1C
D813	23357512	DIODE, AL01Z
D815	23357748	DIODE, ZENER, MA8062-M
D840	23357703	DIODE, 1SS355
D841	23357703	DIODE, 1SS355
D842	23357748	DIODE, ZENER, MA8062-M
D843	23362216	DIODE, CHIP VRM=80V IO=50MA DAN202UT106
D855	23362233	DIODE, VRRM=40V IO=10A YG802C04RF119
D857	23362136	DIODE, YG801C04RF119
D859	23362210	DIODE, SCHOTTKY VRM90V 6A RB095T-90
D870	23357703	DIODE, 1SS355
△ D899	76019485	VARISTOR, TNR10V431K
D8950	23362216	DIODE, CHIP VRM=80V IO=50MA DAN202UT106
D8951	23357745	DIODE, ZENER, MA8056-M
D8960	23357506	DIODE, DAP202U
D8961	23357745	DIODE, ZENER, MA8056-M
DB51	23358616	PHOTO DIODE, PIN 900NM HPI-2FER4
DB52	23357697	DIODE, 1SS133
DB54	23357697	DIODE, 1SS133
DB55	23357697	DIODE, 1SS133
DB56	23357697	DIODE, 1SS133
DB81	23358619	LED, LAMP BLUE 21P1XEL SLA580BCT
DB82	23311148	LAMP, LAMP YELLOW SLI-580YT
DB501	23357697	DIODE, 1SS133
DB504	23357697	DIODE, 1SS133
DC01	23362231	DIODE, NNCD6.8MG-T1
DC02	23362231	DIODE, NNCD6.8MG-T1
DC03	23362231	DIODE, NNCD6.8MG-T1
DC04	23362231	DIODE, NNCD6.8MG-T1
DC05	23362194	DIODE, HIGH SPEED SWITCHING 1SS193(TE85L,F)
DE01	23357711	DIODE, D3SB60, 4109 F05
DE08	23357709	DIODE, RU1P
DE19	23357703	DIODE, 1SS355
DE30	23362215	DIODE, SCHOTTKY VRM45V 6A RB095B-40TL
DE31	23357739	DIODE, ZENER, MA8047-M
DE32	23362211	DIODE, SCHOTTKY VRM35V 6A RB095B-30TL
DE33	23357739	DIODE, ZENER, MA8047-M
DE62	23357900	DIODE, ZENER, MTZJ33B
DE63	23357892	DIODE, ZENER, MTZJ27B
DE64	23357366	DIODE, FR105-B5
DE66	23357842	DIODE, ZENER, MTZJ6.8B
DE71	23357697	DIODE, 1SS133
DE72	23357697	DIODE, 1SS133
DE81	23362208	DIODE, SCHOTTKY VRM45V 6A RB095T-40
DE82	23362209	DIODE, SCHOTTKY VRM60V 6A RB095T-60
DE83	23362210	DIODE, SCHOTTKY VRM90V 6A RB095T-90

Location No.	Parts No.	Description
DE84	23357366	DIODE, FR105-B5
DE91	23357874	DIODE, ZENER, MTZJ16B
DE92	23357874	DIODE, ZENER, MTZJ16B
DE98	23357703	DIODE, 1SS355
DE99	23357703	DIODE, 1SS355
DF10	23362211	DIODE, SCHOTTKY VRM35V 6A RB095B-30TL
DF11	23362054	DIODE, RB521S-30
DF12	23362230	DIODE, ZENER VZ=4.7-5.2 PMDS PTZ4.7B TE25
DF20	23362211	DIODE, SCHOTTKY VRM35V 6A RB095B-30TL
DF21	23362054	DIODE, RB521S-30
DF22	23362230	DIODE, ZENER VZ=4.7-5.2 PMDS PTZ4.7B TE25
DF30	23362214	DIODE, SCHOTTKY VRM30 IO3.0 RSX301L-30 TE25
DF31	23357703	DIODE, 1SS355
DF32	23357739	DIODE, ZENER, MA8047-M
DV161	23357854	DIODE, ZENER, MTZJ10B
DV162	23357854	DIODE, ZENER, MTZJ10B
DV163	23357854	DIODE, ZENER, MTZJ10B
DV164	23357854	DIODE, ZENER, MTZJ10B
DV165	23357854	DIODE, ZENER, MTZJ10B
DV166	23357854	DIODE, ZENER, MTZJ10B
KB01	23000852	IC, REMOCON RECEIVER, PIC-37043TE2
MISCELLANEOUS		
A306	23717198	SCREW, THUMB SCREW RETAINER
A512	23717192	SCREW, AV BOARD
A513	23717192	SCREW, AV BOARD
A621	23717192	SCREW, AV BOARD
A622	23717192	SCREW, AV BOARD
B230	23738088	SCREW, BTBW3X12ECO
B231	23738088	SCREW, BTBW3X12ECO
B233	23738088	SCREW, BTBW3X12ECO
B235	23738088	SCREW, BTBW3X12ECO
B237	23845859	HOLDER, WIRE, PVC-COAT, L=70MM
B244	23738088	SCREW, BTBW3X12ECO
B245	23845859	HOLDER, WIRE, PVC-COAT, L=70MM
B898	23165495	TERMINAL, EARTH PH13 MET31-0332
B899	23165495	TERMINAL, EARTH PH13 MET31-0332
BB01A	23713974	CONNECTOR, BB 100P PLUG 1-5175473-0
BB02A	23713974	CONNECTOR, BB 100P PLUG 1-5175473-0
BB20	23713014	PLUG, B-B 16P 1.5
BB21	23713013	SOCKET, B-B 16P 1.5
BB30	23713014	PLUG, B-B 16P 1.5
BB31	23713013	SOCKET, B-B 16P 1.5
BB41	23713822	SOCKET, B-B 2MM 56P
BB42	23713801	PLUG, B-B 56P 2MM
D855B	23717241	SCREW, BITTB3X8ECO
D857B	23717241	SCREW, BITTB3X8ECO
D859B	23717241	SCREW, BITTB3X8ECO
DE81B	23717241	SCREW, BITTB3X8ECO
DE82B	23717241	SCREW, BITTB3X8ECO
DE83B	23717241	SCREW, BITTB3X8ECO
△ F801	23144319	FUSE, CARTRIDGE, 125V 8A, 5.2X20
F801A	23165433	FUSE HOLDER, 5.2
△ F820	23144378	FUSE, RADIAL LEAD SUB-MINIATUR 250V 2A
△ F855	23144715	FUSE, CARTRIDGE 5.2X20, 125V 5A
△ F857	23144715	FUSE, CARTRIDGE 5.2X20, 125V 5A
△ F859	23144714	FUSE, AXIAL 125V 4.0A
△ F899	23144326	FUSE, CARTRIDGE, 250V 2A, 5.2X20
F899A	23165433	FUSE HOLDER, 5.2
△ FE01	23144710	FUSE, CARTRIDGE 5.2X20, 125V 2A
△ FE30	23144709	FUSE, AXIAL 125V 1.5A
△ FE31	23144709	FUSE, AXIAL 125V 1.5A
△ FE32	23144709	FUSE, AXIAL 125V 1.5A
△ FE33	23144710	FUSE, CARTRIDGE 5.2X20, 125V 2A
△ FE81	23144714	FUSE, AXIAL 125V 4.0A
△ FE82	23144714	FUSE, AXIAL 125V 4.0A
△ FE83	23144714	FUSE, AXIAL 125V 4.0A
△ FE84	23144707	FUSE, AXIAL 125V 630MA
△ FF34	23144709	FUSE, AXIAL 125V 1.5A
H003	23344525	SWITCH, 2130 BUNPAI US DIG RSU143
M601C #1	23103840	FERRITE CORE, TFE1013
#3	23103840	FERRITE CORE, TFE1013
M811A #1	23103778	FERRITE CORE, TFE1008
#3	23103778	FERRITE CORE, TFE1008
M811B #1	23103778	FERRITE CORE, TFE1008
#3	23103778	FERRITE CORE, TFE1008

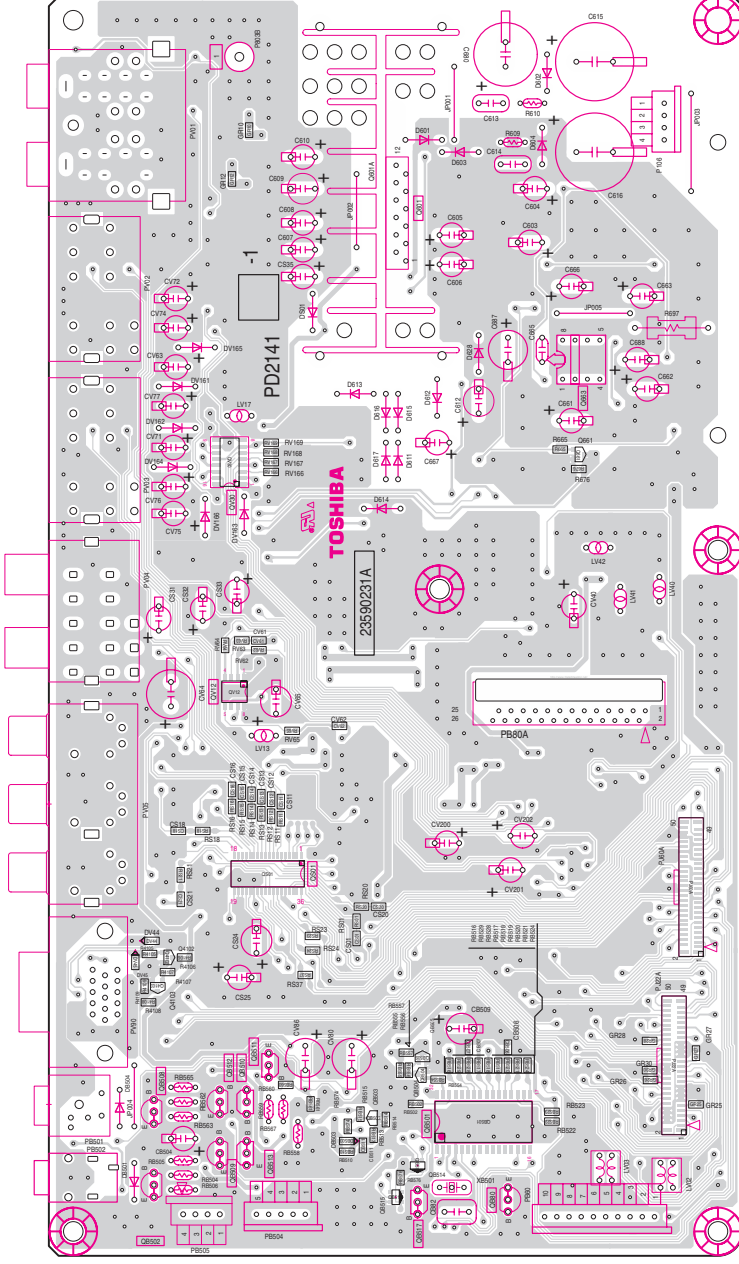
Location No.	Parts No.	Description
M902A #1	23103840	FERRITE CORE, TFE1013
#3	23103840	FERRITE CORE, TFE1013
M906A #1	23103778	FERRITE CORE, TFE1008
#3	23103778	FERRITE CORE, TFE1008
M906B #1	23103778	FERRITE CORE, TFE1008
#3	23103778	FERRITE CORE, TFE1008
MB91A #1	23103839	FERRITE CORE, TFE1012
#3	23103839	FERRITE CORE, TFE1012
MC01A #1	23103840	FERRITE CORE, TFE1013
#3	23103840	FERRITE CORE, TFE1013
MC01E #1	23103840	FERRITE CORE, TFE1013
#3	23103840	FERRITE CORE, TFE1013
MJ22	23389360	FFC, P0.5-50P-L80(GOLD)
MJ60	23389360	FFC, P0.5-50P-L80(GOLD)
MT201	23368929	CABLE, PHONO 2C-VV 240MM C4-0769ALI
MT202	23368929	CABLE, PHONO 2C-VV 240MM C4-0769ALI
MV01A #1	23103839	FERRITE CORE, TFE1012
#3	23103839	FERRITE CORE, TFE1012
△ P800	23713702	PLUG, 2P 11.88MM W VT
△ P801	23372117	POWER CORD, U/C 125V10A HSV 5 CMC-02P 5
P801A #1	23103840	FERRITE CORE, TFE1013
#3	23103840	FERRITE CORE, TFE1013
P805	23164965	PLUG, 4P, W-P3504-#02
P811A	23713713	PLUG, 2P 3.96MM VH
P891	23713761	PLUG, NP 2.5MM G, B10B-EH-F1A
P892	23713763	PLUG, NP 2.5MM G, B12B-EH-F1A
P901	23713754	PLUG, 3P 2.5MM G, B3B-EH-F1-TV4
P902A	23164563	PLUG, 3P
P903	23713755	PLUG, 4P 2.5MM G, B4B-EH-F1-TV4
P905	23713756	PLUG, 5P 2.5MM G, B5B-EH-F1-TV4
PB22	23713756	PLUG, 5P 2.5MM G, B5B-EH-F1-TV4
PB60	23367070	PLUG, 10P 2.5MM G, JST-EH B10B-EH-F1A
PB80A	23713976	CONNECTOR, BB 26P SOCKET 2-917362-6
PB80B	23713975	CONNECTOR, BB 26P PLUG 2-917360-6
PB92	23713755	PLUG, 4P 2.5MM G, B4B-EH-F1-TV4
PB501	23023218	JACK, FH13.5 2P STERE SMK LGA6502-0101
PB504	23713756	PLUG, 5P 2.5MM G, B5B-EH-F1-TV4
PB505	23713755	PLUG, 4P 2.5MM G, B4B-EH-F1-TV4
PC01	23713622	CONNECTOR, 2MM 5P SMD B5B-PH-SM4-TBT
PC02	23903251	SOCKET, CFH050-C7-1180
PC02A	23903257	SOCKET, CFHEJT-90-0000
PC03	23903250	SOCKET, CLE9042-0101F
PJ22A	23757180	CONNECTOR, FH12-50S-0.5SV(55)
PJ60A	23757180	CONNECTOR, FH12-50S-0.5SV(55)
PV01	23023094	JACK, PIN 1S6P SMK LAP5120-0205FC
PV02	23365949	JACK, 5P, 1E:OFF+2R:OFF+2L:OFF, JALC @U104
	23023184	JACK, 1S3P, LAP5100-1502F @UV04
PV03	23365949	JACK, 5P, 1E:OFF+2R:OFF+2L:OFF, JALC
PV04	23365920	JACK, 1E:OFF+2R:OFF+2L:OFF JALC JACK 5P
PV05	23023439	JACK, PIN 4/4P JALCO YKC21-4672N
PV60	23713761	PLUG, NP 2.5MM G, B10B-EH-F1A
PZ01	23713951	CONNECTOR, CONNECT S9B-PH-K-S(LF)
Q601B	23717241	SCREW, BITTB3X8ECO
Q891B	23717241	SCREW, BITTB3X8ECO
△ S810	23344522	SWITCH, SPVF11
SA1	23344507	SWITCH, PUSH, SKHHLMA010
SA2	23344507	SWITCH, PUSH, SKHHLMA010
SA3	23344507	SWITCH, PUSH, SKHHLMA010
SA4	23344507	SWITCH, PUSH, SKHHLMA010
SA5	23344507	SWITCH, PUSH, SKHHLMA010
SA6	23344507	SWITCH, PUSH, SKHHLMA010
SA7	23344507	SWITCH, PUSH, SKHHLMA010
SA8	23344507	SWITCH, PUSH, SKHHLMA010
△ SR81	23146590	RELAY, DLS5D1-O(M)0.25W
△ SR82	23146584	RELAY, DC12V, TV5, DG-3
△ UF02	23125950	DC FAN, 2806KL-04W-B39-B01
W661A #1	23351333	SPEAKER, 120X120 8-OHM 20W SPK-1479AO
#2	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO
#3	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO
W661B #2	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO
#3	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO
W662A #1	23351333	SPEAKER, 120X120 8-OHM 20W SPK-1479AO
#2	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO
#3	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO
W662B #2	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO
#3	23351334	SPEAKER, 120X120 16-OHM 10W SPK-1480AO

Location No.	Parts No.	Description
XB501	23153504	CERAMIC RESONATOR, 8.00MHZ 250HM
XC01	23153589	CRYSTAL RESONATOR, XTAL 12MHZ
PC BOARD ASSEMBLIES		
* U102	23764394	PC BOARD ASSY, MOTHER PU PD2140B
* U104	23764260	PC BOARD ASSY, BACK AV PU PD2141A-1
* U105	23764261	PC BOARD ASSY, IR BLASTER PU PD2141A-2
* U107	23764265	PC BOARD ASSY, TUNER-RF PU PD2147A
* U801	23764388	PC BOARD ASSY, MAIN POWER PU PD2139B-1
* U802	23764389	PC BOARD ASSY, SUB POWER PU PD2139B-2
* UA03	23764390	PC BOARD ASSY, DOOR SW PU PD2139B-3
* UA06	23764392	PC BOARD ASSY, FRONT KEY PU PD2139B-5
* UA07	23764393	PC BOARD ASSY, LED PU PD2139B-6
* UC01	23764254	PC BOARD ASSY, MULTI CARD PU PD2142A
* UD01	23148444	MODULE, SIGNAL DSB-SUM070C1
* UD02	23148435	MODULE, SEINE DSB-SHU154A-
* UV04	23764391	PC BOARD ASSY, FRONT AV PU PD2139B-4
TUNER		
△ H001	23321536	TUNER, TIF US HOR IIC PH 864M ENG36A36GF
ACCESSORIES		
A701 #1	23015123	CARTON
#2	23015081	CARTON
#3	23015126	CARTON
A703 #1	23580013	PACKING, TOP PACKING
#2	23946999	PACKING, TOP PACKING
#3	23580015	PACKING, TOP PACKING
A708 #1	23580012	PACKING, BOTTOM PACKING
#2	23946998	PACKING, BOTTOM PACKING
#3	23580014	PACKING, BOTTOM PACKING
A709 #2	23015080	CARTON, BASE TRAY
A710 #1	23946774	PACKING, SUPPORT POST
#2	23918406	CARTON, SUPPORT POST
#3	23946775	PACKING, SUPPORT POST
△ K912	23306627	REMOCON HAND UNIT, CT-90233
K913	23306614	REMOCON HAND UNIT, 57H93
△ Y101	23566691	OWNERS MANUAL, ENGLISH/FRE
Y101F #1	23566692	OWNERS MANUAL, FRENCH
Y102	23589650	SHEET, IMPORTANT NOTES
CABINET PARTS		
△ A025	23940403	PIECE, 05 LAMP TUNNEL ASSY
△ A026	23940409	PIECE, 05 LAMP DOOR ASSY
△ A100	23533624	COVER, BASE, PURCHASE ASSY
△ A102 #1	23527387	GRILLE, SPK GRILL ASY LEFT
#2	23527388	GRILLE, SPK GRILL ASY LEFT
#3	23527389	GRILLE, SPK GRILL ASY LEFT
△ A103 #1	23527378	GRILLE, SPEAKER GRILL ASY RT
#2	23527381	GRILLE, SPEAKER GRILL ASY
#3	23527384	GRILLE, SPEAKER GRILL ASY RT
A184	23469392	INSULATOR, 05_LENS_GASKET
△ A201 #1	23533445	COVER, BEZEL ASM
#2	23533440	COVER, BEZEL ASM
#3	23533447	COVER, BEZEL ASM
A202 #1	23433352	DECORATIVE, BEZEL DECO ASM
#2	23533442	COVER, BEZEL DECO ASM
#3	23433354	DECORATIVE, BEZEL DECO ASM
A220	23451976	PUSH CATCH, CLICK
A225	23940084	PIECE, STRIKER
A226	23940084	PIECE, STRIKER
△ A271 #1	23405480	OPTICAL ENGINE, LV-682 TB 0C
#2	23405481	OPTICAL ENGINE, LV-682 TB 0D
#3	23405482	OPTICAL ENGINE, LV-682 TB 0E
A333	23450868	PANEL, AV MOUNT ASY
A402	23533434	COVER, REAR COVER PURCHASE
△ A411 #1	23429384	CABINET, BACK COVER
#2	23533305	COVER, BACK COVER PROPER
A421 #1	23533969	COVER, BACK COVER ASSY
#2	23533427	COVER, REAR
#3	23533971	COVER, BACK COVER ASSY
#3	23533427	COVER, REAR
A422	23084862	BRACKET, REAR VENT
E998Z	23311153	EXCHANGE LAMP, PJ-D95-LMP
K501 #1	23311151	SCREEN, 56K5NL SCREEN56K5NL

BACK AV BOARD PD2141A-1 (U104)
BOTTOM (FOIL) SIDE

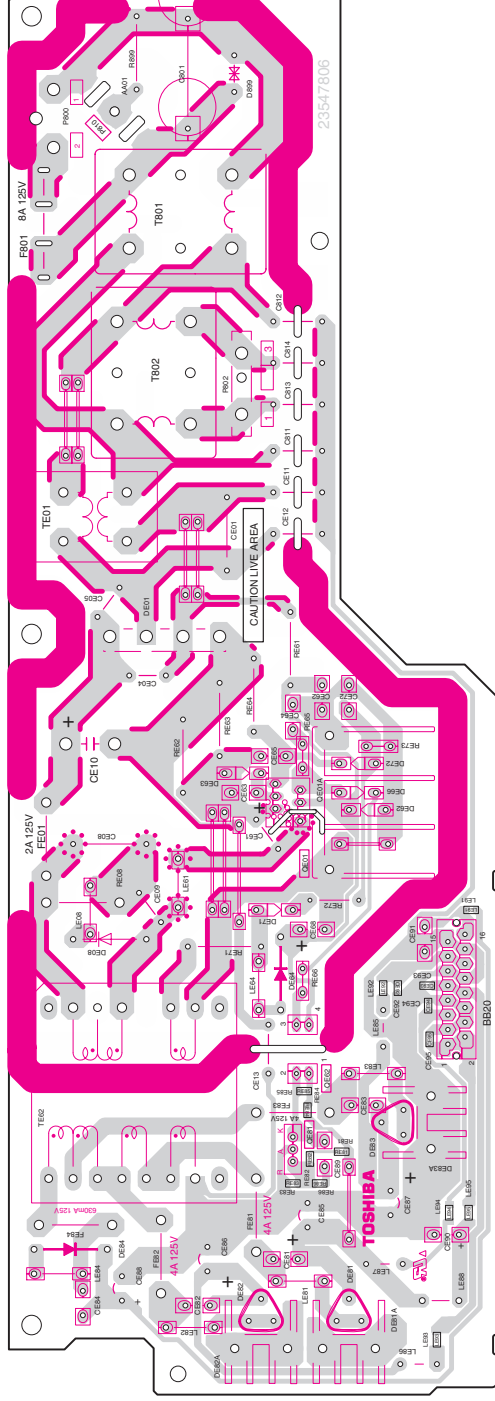


BACK AV BOARD PD2141A-1 (U104)
TOP (COMPONENT) SIDE

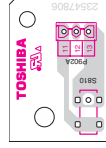


The image shows a detailed technical drawing of a printed circuit board (PCB) layout. The board is populated with numerous electronic components, including integrated circuits (ICs), capacitors, resistors, and diodes. The layout is complex, with many components labeled with part numbers and values. The board is divided into several functional areas, with a "CAUTION LIVE AREA" marked on the right side. The Toshiba logo and part number "23547806" are visible on the right edge.

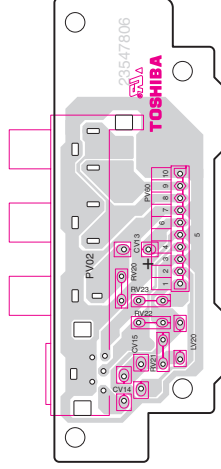
SUB POWER BOARD PD2139B-2 (U802)
BOTTOM (FOIL) SIDE



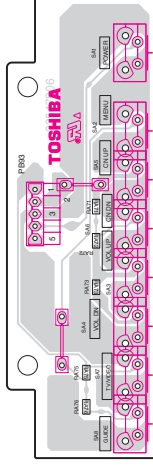
DOOR SW BOARD PD2139B-3 (UA03)
BOTTOM (FOIL) SIDE



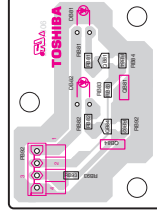
FRONT AV BOARD PD2139B-4 (UV04)
BOTTOM (FOIL) SIDE



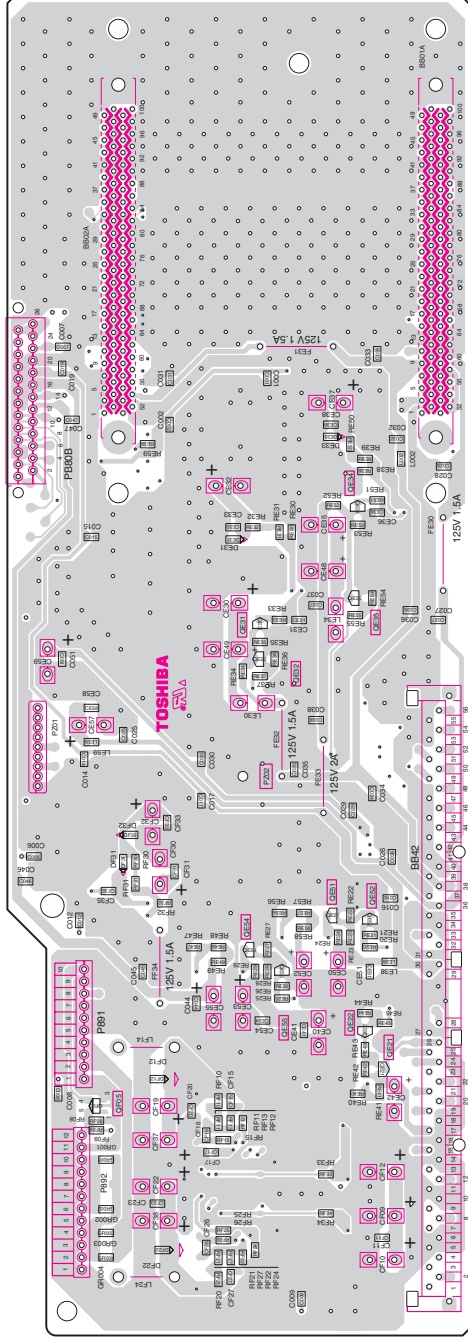
FRONT KEY BOARD PD2139B-5 (UA06)
BOTTOM (FOIL) SIDE



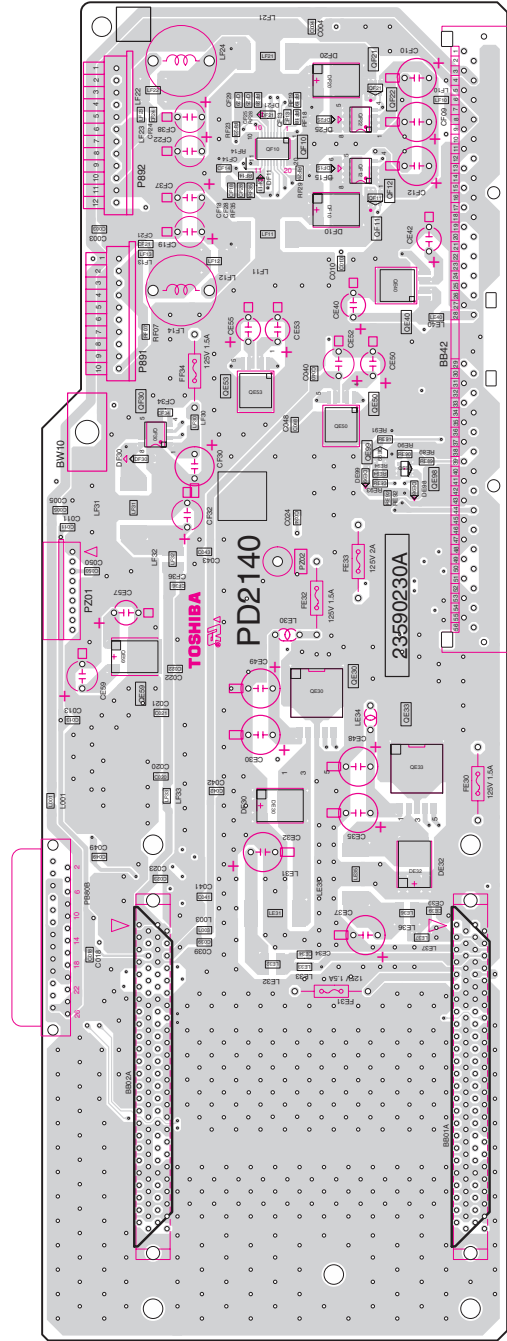
LED BOARD PD2139B-6 (UA07)
BOTTOM (FOIL) SIDE



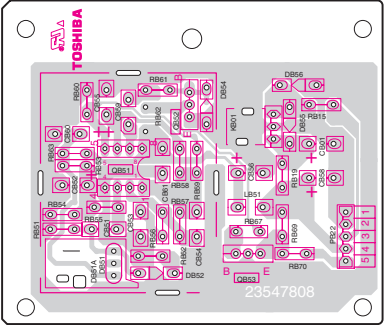
MOTHER BOARD PD2140B (U102)
BOTTOM (FOIL) SIDE



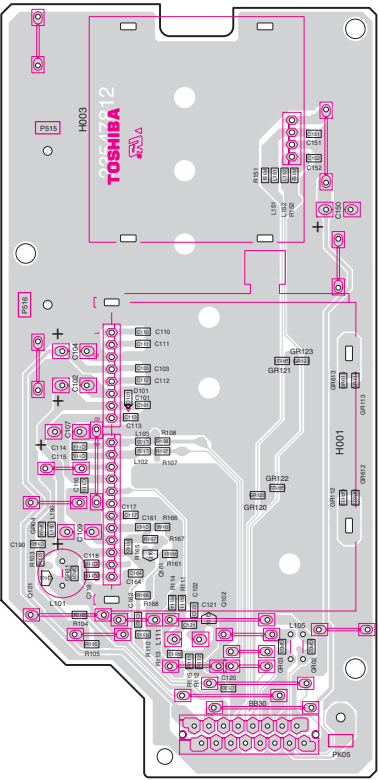
MOTHER BOARD PD2140B (U102)
TOP (COMPONENT) SIDE



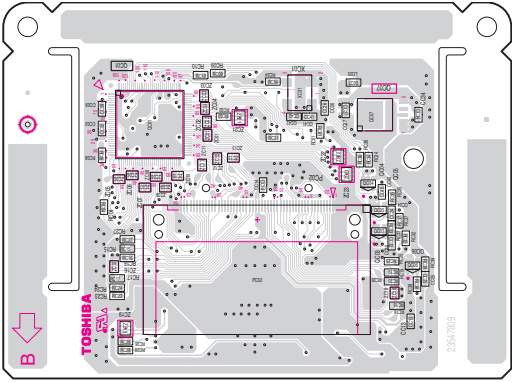
IR BLASTER BOARD PD2141A-2 (U105)
BOTTOM (FOIL) SIDE



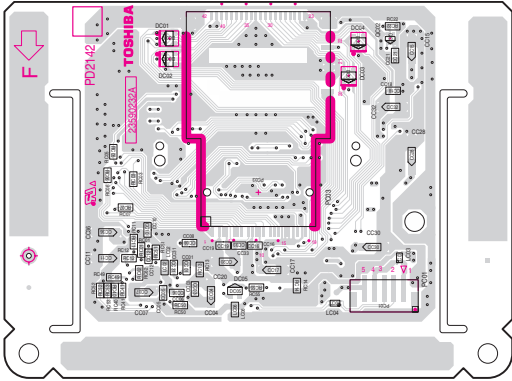
TUNER-RF BOARD PD2147A (U107)
BOTTOM (FOIL) SIDE



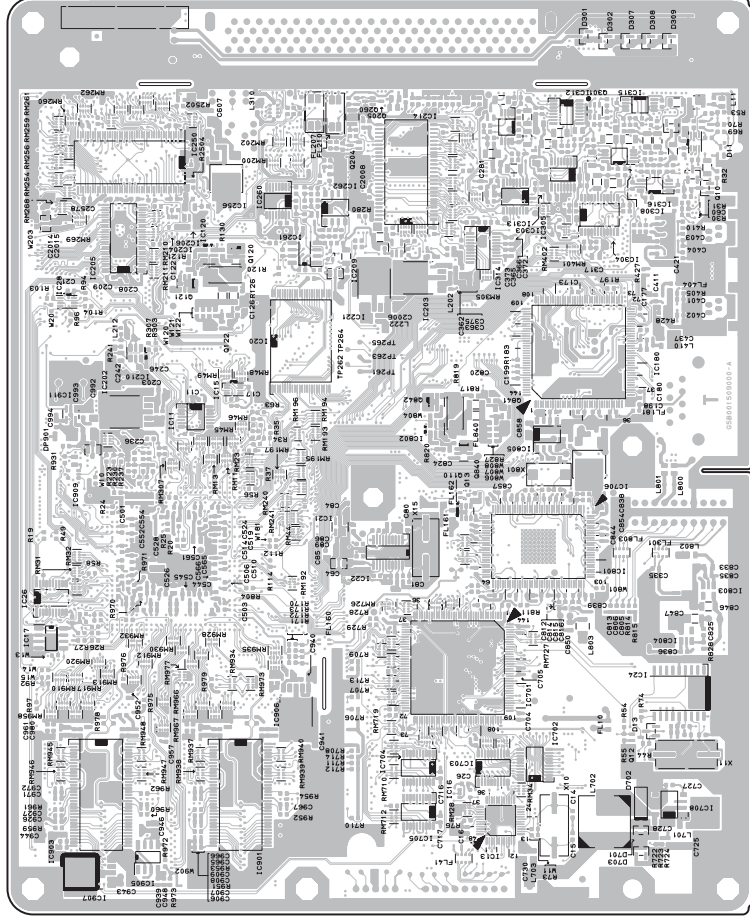
MULT CARD BOARD PD2142A (UC01)
BOTTOM (FOIL) SIDE



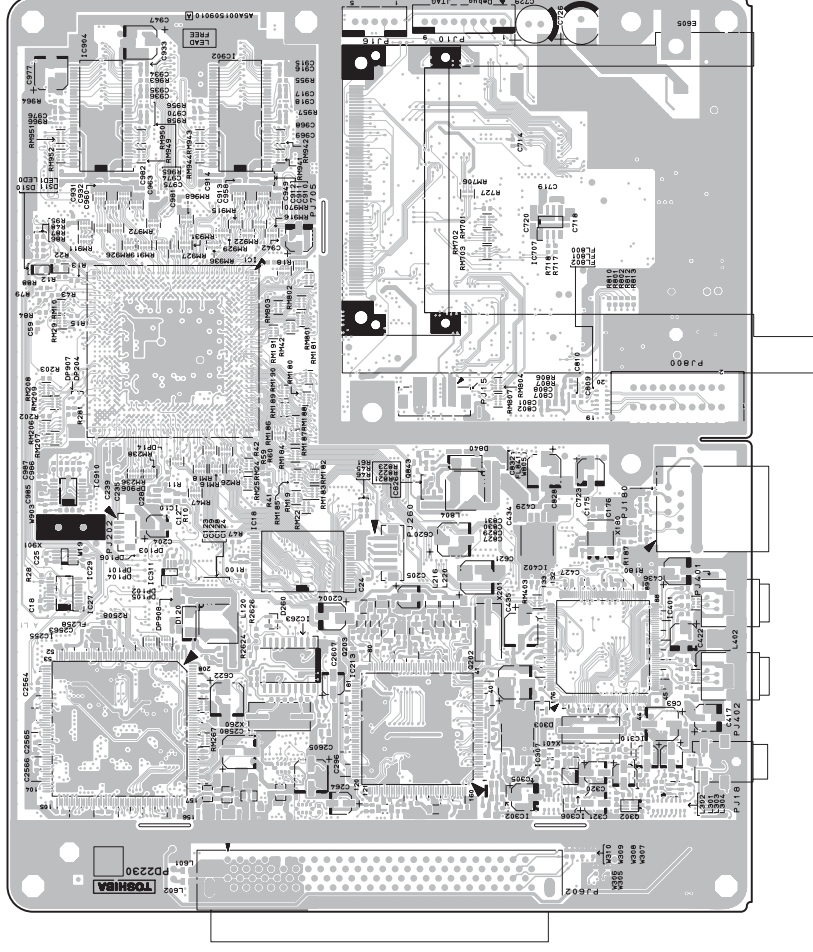
MULT CARD BOARD PD2142A (UC01)
TOP (COMPONENT) SIDE



SEINE DIGITAL BOARD PD2230 (UD02)
BOTTOM (FOIL) SIDE

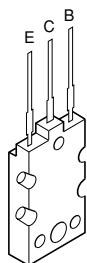


SEINE DIGITAL BOARD PD2230 (UD02)
TOP (COMPONENT) SIDE

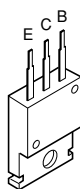


TERMINAL VIEW OF TRANSISTORS

① 2SC5144
2SC5859



② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



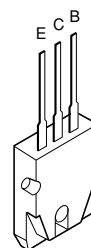
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



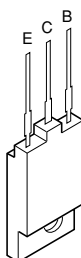
⑤ 2SA1788



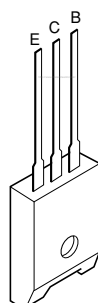
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SD2553
2SC5143



⑧ ON4409



SCHEMATIC DIAGRAM

MODEL : 56/62/72HM195

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols " $\triangle$ " in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon composition of 1/2 watt
1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
K = $\pm 10\%$ G = $\pm 2\%$ F = $\pm 1\%$
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in pF, and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.
 Electrolytic capacitor  Mylar capacitor
3. The parts indicated with " $\triangle$ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassis ground, using a color bar signal with all controls at normal, line voltage at 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary $\pm 20\%$ except H.V.

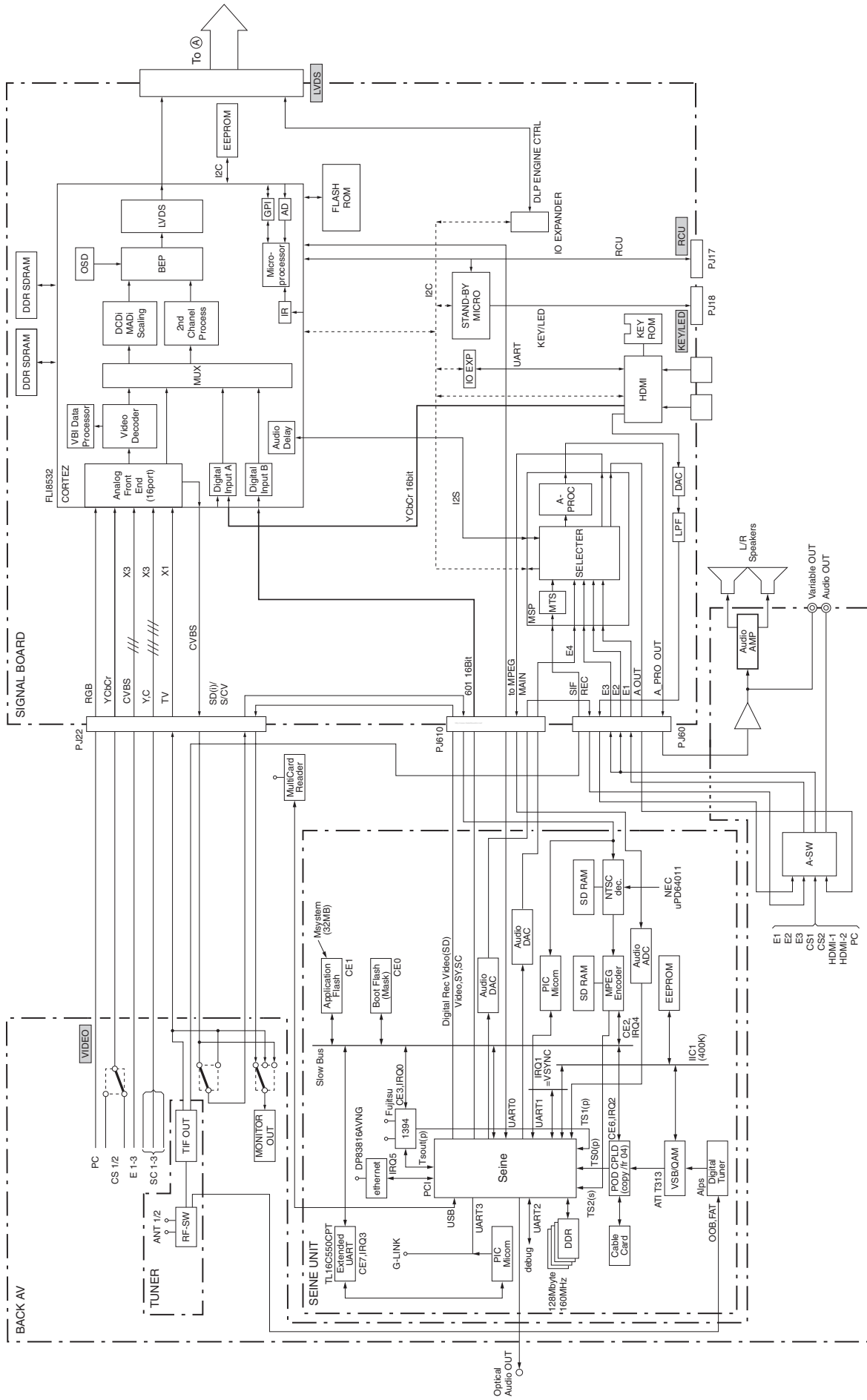
■ SCHEMATIC DIAGRAM STRUCTURE:

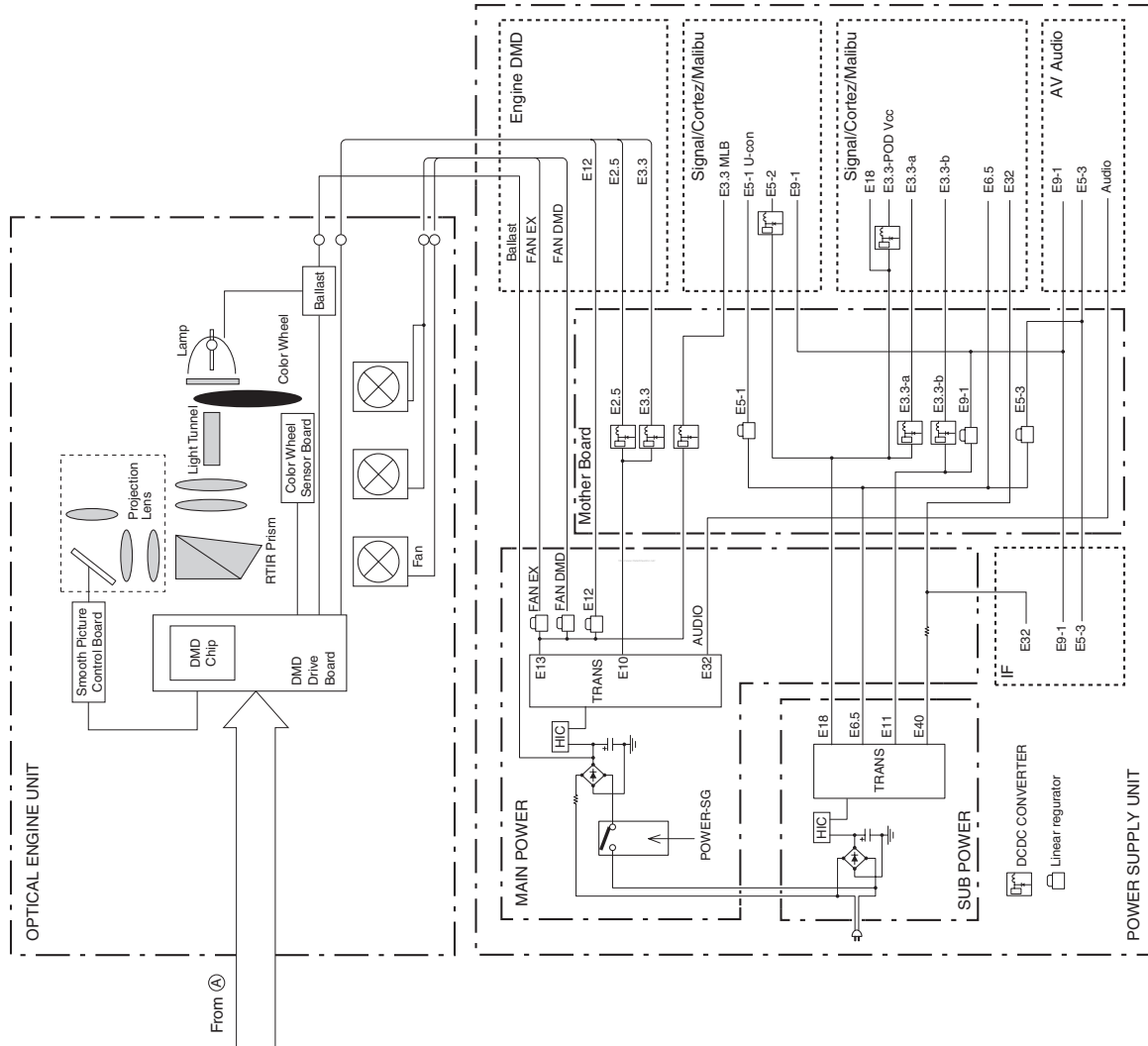
BACK_AV Circuit	CONNECTORS	[SHEET-1/6]	1/146
	AV Jacks	[SHEET-2/6]	2/146
	CS-SW	[SHEET-3/6]	3/146
	Audio Select	[SHEET-4/6]	4/146
	IR	[SHEET-5/6]	5/146
	Audio OUT	[SHEET-6/6]	6/146
FRONT_AV Circuit			7/146
FRONT_KEY Circuit	TOUCH_CONTROL_PANEL		8/146
RF_SW/TIF Circuit			9/146
IR_BRASTER Circuit			10/146
MAIN_POWER Circuit		[SHEET-1/3]	11/146
	REG & PROTECT & SW	[SHEET-2/3]	12/146
	CONNECTOR	[SHEET-3/3]	13/146
MOTHER Circuit	CONNECTOR	[SHEET-1/2]	14/146
	REG	[SHEET-2/2]	15/146
SUB POWER Circuit			16/146
MULTI_CARD Circuit	(1/4)	[SHEET-1/4]	17/146
	(2/4)	[SHEET-2/4]	18/146
	(3/4)	[SHEET-3/4]	19/146
	(4/4)	[SHEET-4/4]	20/146
SIGNAL Circuit	FLI8532 ANALOG_IN		21/146
	TC90101FG	[SHEET-205]	22/146
	COLOR-DEC-REG	[SHEET-206]	23/146
	FLI8532 DIGITAL_IN_A	[SHEET-300]	24/146
	FLI8532 DIGITAL_IN_B	[SHEET-301]	25/146
	HDMI# 1 (Link, I2C)	[SHEET-302]	26/146
	HDMI# 2 (Video/ Audio)	[SHEET-303]	27/146
	HDMI# 3 (POWER)	[SHEET-304]	28/146
	HDMI AUDIO_ PLL	[SHEET-305]	29/146
	HDMI AUDIO_ DAC	[SHEET-306]	30/146
	HDMI AUDIO_ OUT	[SHEET-307]	31/146
	HDMI CONTROLLER	[SHEET-308]	32/146
	HDMI EEPROM2	[SHEET-309]	33/146
	FLI8532 MICRO I/O	[SHEET-400]	34/146
	FLI8532 OCM MEMORY I/F	[SHEET-401]	35/146
	FLASH MEMORY	[SHEET-402]	36/146
	SYNC SEPA	[SHEET-403]	37/146
	I/O_ EXPANDER/E2P ROM	[SHEET-404]	38/146
	STD-BY MICOR	[SHEET-405]	39/146
	CORTEZ REG 1	[SHEET-406]	40/146
	CORTEZ REG 2	[SHEET-407]	41/146
	CORTEZ REG 3	[SHEET-408]	42/146
	I2C Switch	[SHEET-409]	43/146
	SERVICE CONNECTOR	[SHEET-410]	44/146
	ML POWER	[SHEET-501]	45/146
	ML ANALOG INPUT	[SHEET-502]	46/146
	ML DIGITAL INPUT	[SHEET-503]	47/146
	ML DPORT ODD	[SHEET-504]	48/146

	- ML DPORT EVEN1	[SHEET-505]	49/146
	- ML DPORT EVEN2	[SHEET-506]	50/146
	- ML DDR INTERFACE	[SHEET-507]	51/146
	- ML DDR SDRAM	[SHEET-508]	52/146
	- ML DDR TERMINATION	[SHEET-509]	53/146
	- ML OCM PORT	[SHEET-510]	54/146
	- ML FLASH	[SHEET-511]	55/146
	- ML SYSTEM CLK	[SHEET-512]	56/146
	- ML POWER & GND	[SHEET-513]	57/146
	- ML DVI Tx	[SHEET-514]	58/146
	- AUDIO CONNECTOR	[SHEET-600]	59/146
	- AUDIO_MSP	[SHEET-601]	60/146
	- AUDIO_DELAY	[SHEET-602]	61/146
	- FLI8532 POWER_1	[SHEET-700]	62/146
	- FLI8532 POWER_2	[SHEET-701]	63/146
	- FLI8532 DDR I/F	[SHEET-702]	64/146
	- DDR SDRAM	[SHEET-703]	65/146
	- DDR TERMINATION	[SHEET-704]	66/146
	- POWER I/F	[SHEET-800]	67/146
	- DIGITAL CONNECTOR	[SHEET-801]	68/146
	- DC/DC_CONVERTER	[SHEET-802]	69/146
	- FLI8532 LVDS_OUT	[SHEET-900]	70/146
	- MDR CONNECTOR	[SHEET-901]	71/146
	- RMT IR & KEY LED Connector	[SHEET-903]	72/146
	- CORTEZ Selector	[SHEET-904]	73/146
	- SEINE Selector	[SHEET-905]	74/146
SEINE_DIGITAL	- RESET_CLOCK_TIMER_IRC	[SHEET-1]	75/146
	- SLOW_BUS	[SHEET-2]	76/146
	- SLOW_BUS_ADDRESS_REGISTER	[SHEET-3]	77/146
	- IIC/UART	[SHEET-4]	78/146
	- PIO	[SHEET-5]	79/146
	- ROM/FLASH	[SHEET-6]	80/146
	- M-SYSTEM_NAND_FLASHROM	[SHEET-7]	81/146
	- IR	[SHEET-8]	82/146
	- GLINK_IR-OUT	[SHEET-9]	83/146
	- CLOCK_GENERATOR	[SHEET-10]	84/146
	- USB_I/F	[SHEET-11]	85/146
	- UARTO_INTERFACE	[SHEET-12]	86/146
	- EJTAG_CONNECTOR	[SHEET-13]	87/146
	- SEINE_PCI_BUS	[SHEET-14]	88/146
	- MPU_POWER	[SHEET-16]	89/146
	- Ext_UART	[SHEET-17]	90/146
	- MACPHYTER_1	[SHEET-20]	91/146
	- MACPHYTER_1	[SHEET-21]	92/146
	- RJ45	[SHEET-22]	93/146
	- TUNER_CONNECTOR	[SHEET-100]	94/146
	- T313 (Signal)	[SHEET-101]	95/146
	- 1.1V Regulator	[SHEET-102]	96/146

- T313 (POWER)	[SHEET-103]	97/146
- SEINE_TS_I/F	[SHEET-150]	98/146
- SEINE_CAPTURE_IN	[SHEET-200]	99/146
- VIDEO_POWER	[SHEET-210]	100/146
- SEINE_DIGITAL_OUT	[SHEET-220]	101/146
- SEINE_BEP_IF	[SHEET-221]	102/146
- DAC_OUT	[SHEET-225]	103/146
- DOWN_CON_OUT_DRIVER	[SHEET-226]	104/146
- HD_OUT_LPF	[SHEET-227]	105/146
- MACRO_VCD	[SHEET-240]	106/146
- MACRO_VCD	[SHEET-241]	107/146
- VIDEO_LPF	[SHEET-242]	108/146
- MPEG_Enc. (CLK_SDRAM)	[SHEET-250]	109/146
- MPEG_Enc. (AV_I/F)	[SHEET-251]	110/146
- MPEG_Enc. (STREAM_I/F)	[SHEET-252]	111/146
- MPEG_Enc. (POWER)	[SHEET-253]	112/146
- LPF_Slicer	[SHEET-260]	113/146
- H/V_Sync_Sep.	[SHEET-261]	114/146
- AUDIO_POWER	[SHEET-300]	115/146
- SEINE_AUDIO_I/F	[SHEET-301]	116/146
- AUDIO_DAC	[SHEET-302]	117/146
- AUDIO_PLL/DAC	[SHEET-303]	118/146
- AUDIO_VTR_OUT	[SHEET-304]	119/146
- AUDIO_SP_OUT	[SHEET-305]	120/146
- MPEG_AUDIO_TV_IN	[SHEET-306]	121/146
- MPEG_AUDIO_ADC	[SHEET-307]	122/146
- MPEG_AUDIO_PLL	[SHEET-308]	123/146
- AUDIO_DAC_0.1CH	[SHEET-309]	124/146
- AUDIO_VTR_OUT	[SHEET-310]	125/146
- MB86619	[SHEET-400]	126/146
- MB86619 (POWER)	[SHEET-401]	127/146
- CPLD_XILINX	[SHEET-700]	128/146
- SLOWBUS	[SHEET-701]	129/146
- PODVPP	[SHEET-702]	130/146
- POD_I/F	[SHEET-703]	131/146
- PODVCC	[SHEET-704]	132/146
- DDR_SDRAM_I/F	[SHEET-901]	133/146
- DDR_1	[SHEET-902]	134/146
- DDR_2	[SHEET-903]	135/146
- DDR_3	[SHEET-904]	136/146
- DDR_4	[SHEET-905]	137/146
- DDR_POWER	[SHEET-906]	138/146
- TERMINATOR	[SHEET-907]	139/146
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- SEINE_VDD/VSS	[SHEET-950]	141/146
- Signal_filter	[SHEET-964]	142/146
- CONNECTOR	[SHEET-965]	143/146
- TUNER_CONNECTOR (TUNER)	[SHEET-104]	144/146
- OOB_FDC	[SHEET-105]	145/146
- FAT_TUNER	[SHEET-106]	146/146

CIRCUIT BLOCK DIAGRAM





TOSHIBA CORPORATION

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