

**TOSHIBA**

FILE NO. 010-200311

SERVICE MANUAL

LCD TELEVISION

**26HL83**

## TABLE OF CONTENTS

SERVICE SAFETY PRECAUTIONS .....	3
HANDLING THE LCD MODULE .....	5
LOCATION OF CONTROLS .....	7
LAYOUT OF MAJOR BOARDS .....	9
MECHANICAL DISASSEMBLY .....	10
PACKING DISASSEMBLY .....	26
WIRING CONNECTION DIAGRAM .....	27
CHASSIS AND CABINET REPLACEMENT PARTS LIST .....	31
PC BOARDS BOTTOM VIEW .....	41
CIRCUIT BLOCK DIAGRAM .....	48
SPECIFICATIONS .....	END
APPENDIX:	
CIRCUIT DIAGRAM	



## SERVICE SAFETY PRECAUTIONS

- The caution items shown here describe major safety issues and should always be observed.
- The meanings of the various indications are as follows.

<b>WARNING</b>	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users due to a product defect after the service operation is completed, could possibly be in danger of injury or even death in the event of operational error.
<b>CAUTION</b>	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users after the service operation is completed, could possibly be in danger of injury, or where there could be physical damage in the event of operational error.

\* Physical damage means major damage to a home, furnishings and other possessions.

### Examples of marks

<b>SHOCK HAZARD</b>	The $\Delta$ indicates caution (including danger and warning). The actual meaning of this caution is indicated inside the $\Delta$ or nearby illustrations or text. The example shown to the left indicates the danger of "electrical shock".
<b>PROHIBIT DISASSEMBLING</b>	The $\ominus$ indicates a forbidden action. The actual meaning of this caution is indicated inside the $\ominus$ or nearby illustrations or text. The example shown to the left indicates that disassembly is forbidden.
<b>UNPLUG</b>	The $\bullet$ indicates a forced action (an action that must be performed). The actual meaning of this forced action is indicated by $\bullet$ or nearby illustrations or text. The example shown to the left indicates that the power plug must be disconnected.

	 <b>WARNING</b>
 <b>KEEP CHILDREN AWAY</b>	<ul style="list-style-type: none"> <li>Always advise users to keep children away. There is danger of injury to children from tools, disassembled products, etc.</li> </ul>
 <b>UNPLUG</b>	<ul style="list-style-type: none"> <li>Always disconnect the power plug before starting work whenever power is not required. Failure to disconnect the power plug before starting work can result in electrical shock.</li> </ul>
 <b>SHOCK HAZARD</b>	<ul style="list-style-type: none"> <li>Depending on the model, use an insulation transformer or wear gloves when servicing with the power on, and disconnect the power plug to avoid electrical shock when replacing parts. In some cases, alternating current is also impressed in the chassis, so electrical shock is possible if the chassis is contacted with the power on.</li> </ul>
 <b>USE SPECIFIED PARTS</b>	<ul style="list-style-type: none"> <li>Always use the replacement parts specified for the particular model when making repairs. The parts used in products have the necessary safety characteristics such as inflammability, voltage resistance, etc.; therefore, use only replacement parts that have these same characteristics. Use only the specified parts when the  mark is included in a circuit diagram or parts list.</li> </ul>
 <b>CAUTION FOR WIRING</b>	<ul style="list-style-type: none"> <li>Parts mounting and routing of the wiring should be the same as that used originally. For safety purposes, insulating materials such as tubing or tape is sometimes used and printed circuit boards are sometimes mounted floating. Also make sure that wiring is routed and clamped to avoid parts that generate heat and which use high voltage. Always follow the original scheme.</li> </ul>
 <b>CAUTION FOR ASSEMBLING / WIRING</b>	<ul style="list-style-type: none"> <li>After a repair has been completed, reassemble all disassembled parts, and route and reconnect the wiring, in accordance with the original scheme. Do not allow internal wiring to be pinched by cabinets, panels, etc. Any error in reassembly or wiring can result in electrical leakage, flame, etc., and may be hazardous.</li> </ul>
 <b>CHECK INSULATION RESISTANCE</b>	<ul style="list-style-type: none"> <li>After completing the work, disconnect the power plug from the outlet, remove the antenna, turn on the power switch. Then, use a 500V insulation resistance meter to check the insulation resistance of the antenna terminal, other metallic parts and between the prongs of the power plug to make sure that the insulation resistance is <math>1M\ \Omega</math> or more. The set will require inspection and repair if the insulation resistance is below this value.</li> </ul>
 <b>PROHIBIT REMODELING</b>	<ul style="list-style-type: none"> <li>Never remodel the product in any way. Remodeling can result in improper operation, malfunction, or electrical leakage and flame, which may be hazardous</li> </ul>

# HANDLING THE LCD MODULE

## Safety Precautions

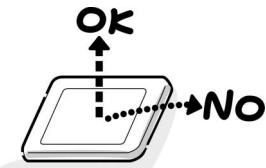
In the event that the screen is damaged or the liquid crystal (fluid) leaks, do not breathe in or drink this fluid. Also, never touch this fluid.

Such actions could cause toxicity or skin irritation. If this fluid should enter the mouth, rinse the mouth thoroughly with water. If the fluid should contact the skin or clothing, wipe off with alcohol, etc., and rinse thoroughly with water. If the fluid should enter the eyes, immediately rinse the eyes thoroughly with running water.

## Precautions for Handling the LCD Module

The LCD module can easily be damaged during disassembly or reassembly; therefore, always observe the following precautions when handling the module.

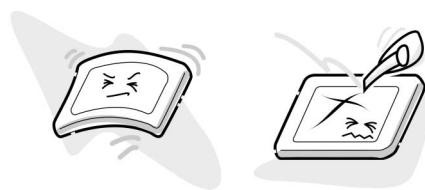
- When attaching the LCD module to the LCD cover, position it appropriately and fasten at the position where the display can be viewed most conveniently.



- Carefully align the holes at all four corners of the LCD module with the corresponding holes in the LCD cover and fasten with screws. Do not strongly push on the module because any impact can adversely affect the performance. Also use caution when handling the polarized screen because it can easily be damaged.

## CAUTION

The metal edges of the LCD module are sharp, so use caution to avoid injury.



- If the panel surface becomes soiled, wipe with cotton or a soft cloth. If this does not remove the soiling, breathe on the surface and then wipe again.

If the panel surface is extremely soiled, use a CRT cleaner as a cleaner. Wipe off the panel surface by drop the cleaner on the cloth. Do not drop the cleaner on the panel. Pay attention not to scratch the panel surface.



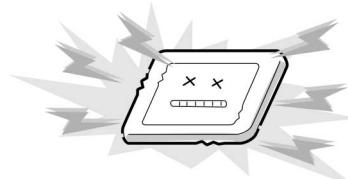
- Leaving water or other fluids on the panel screen for an extended period of time can result in discoloration or stripes. Immediately remove any type of fluid from the screen.



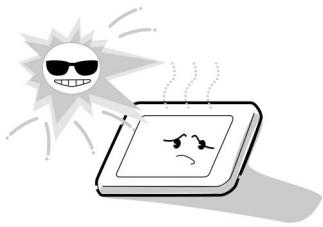
- Glass is used in the panel, so do not drop or strike with hard objects. Such actions can damage the panel.



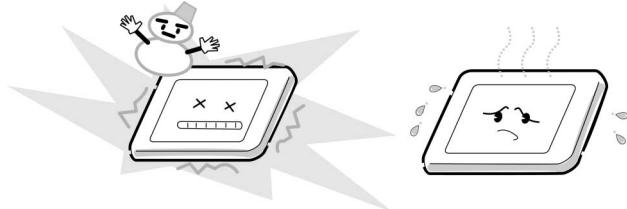
- CMOS-LSI circuitry is used in the LCD module, so avoid damage due to static electricity. When handling the module, use a wrist ground or anchor ground.



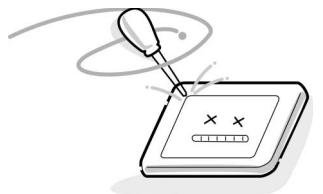
7. Do not expose the LCD module to direct sunlight or strong ultraviolet rays for an extended period of time.



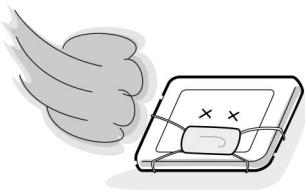
8. Do not store the LCD module below the temperature conditions described in the specifications. Failure to do so could result in freezing of the liquid crystal due to cold air or loss of resilience or other damage.



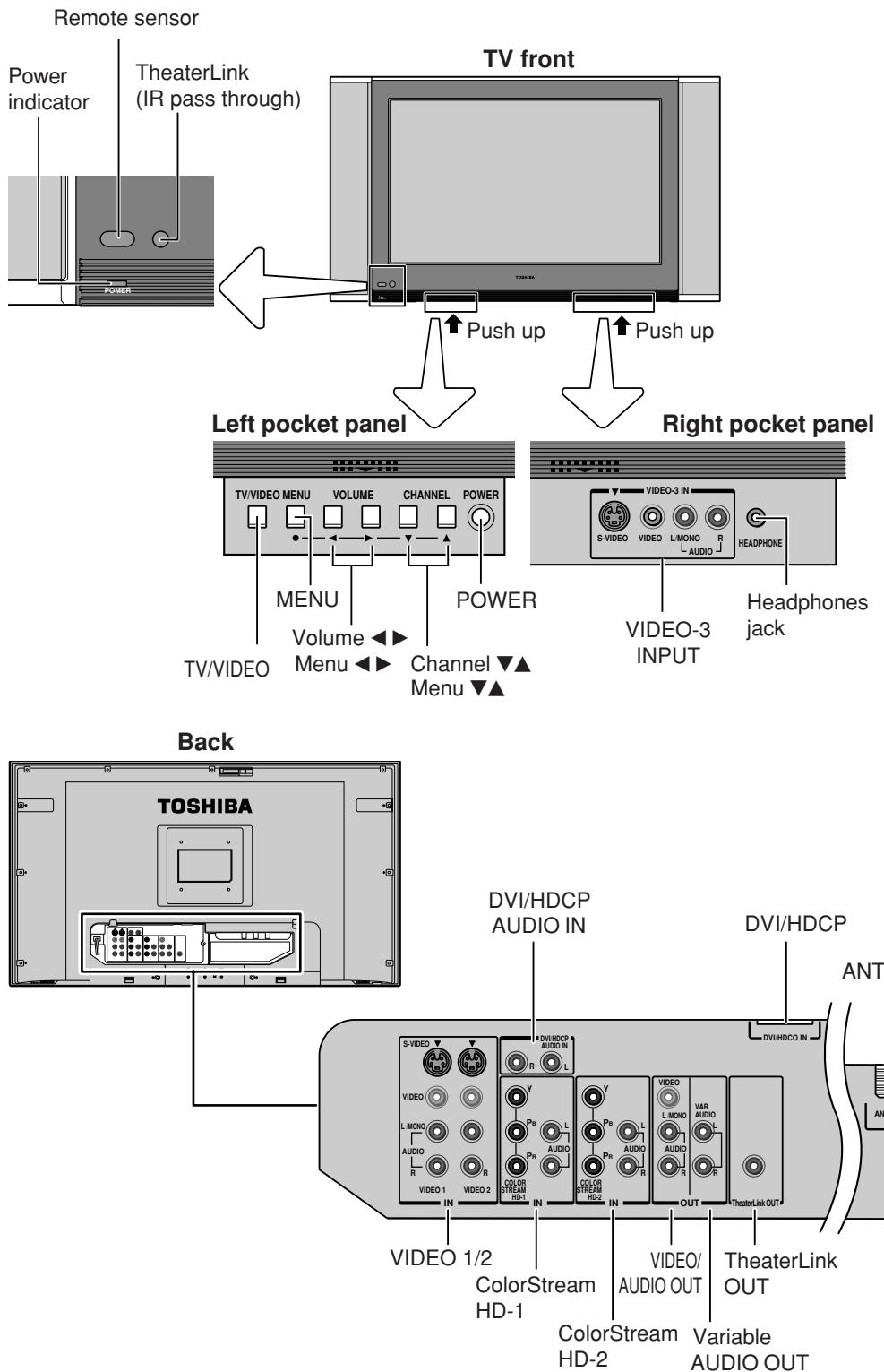
9. Do not disassemble the LCD module. Such actions could result in improper operation.



10. When transporting the LCD module, do not use packing containing epoxy resin (amine) or silicon resin (alcohol or oxime). The gas generated by these materials can cause loss of polarity.



## LOCATION OF CONTROLS



## Remote Control

**POWER** turns the TV on and off.

**SLEEP** allows access to the automatic TV shut-off function .

**LIGHT** The first press of the LIGHT button lights the keypad and turns on the Illumination mode. With the Illumination mode on, pressing any other key lights the keypad for 5 seconds (10 seconds if you're in programming mode).

Subsequent presses of the LIGHT button toggle between turning the Illumination mode on and off.

**Channel Numbers (0-9, 100)** allow direct access to channels.

**MODE** cycles through the six device modes: TV, CABLE/SAT, VCR, DVD, AUDIO1, and AUDIO2. The mode indicator light will remain lit for a few seconds.

**PIC SIZE** cycles through the five pictures sizes: Natural, Theater Wide 1, 2, 3, and Full.

**FAVORITE** allows access to the favorite channel search function

**MENU** allows access to on-screen programming menus.

**ENTER** sets programming menu information.

**▲▼◀▶** select or adjust programming menus.

**FAV ▲▼** cycles through favorite channels.

**CH ▲▼** cycles through programmed channels.

**VOL ▲▼** adjusts the volume level.

**EXIT** exits the programming menus.

**INPUT** selects the video input source.

**MUTE** mutes the sound.

**RECALL** displays on-screen information.

**CH RTN** returns to the last viewed channels.

**POP CH ▲▼** selects the POP (picture-out-picture) channel.

**SPLIT** turns the POP feature on and off.

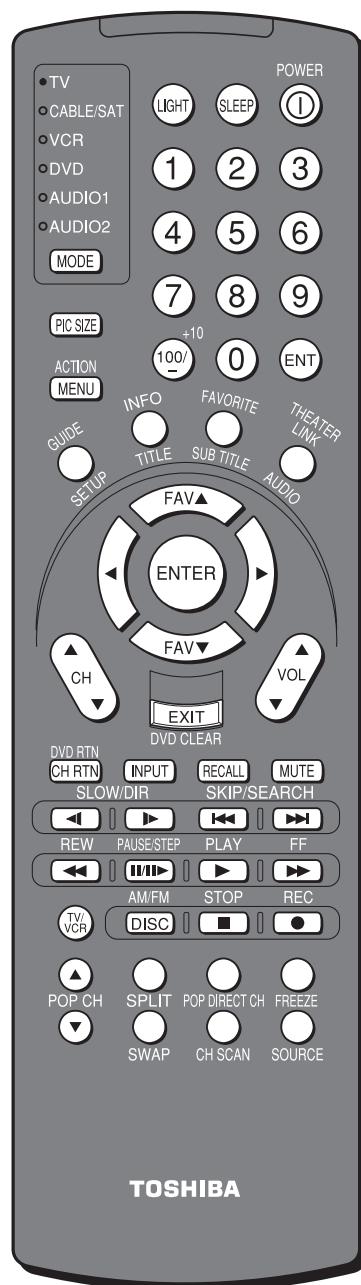
**CH SCAN** allows access to the programmed channel search function

**FREEZE** freezes the POP picture.

**SWAP** switches the main and POP pictures.

**POP DIRECT CH** allows direct access to POP channels

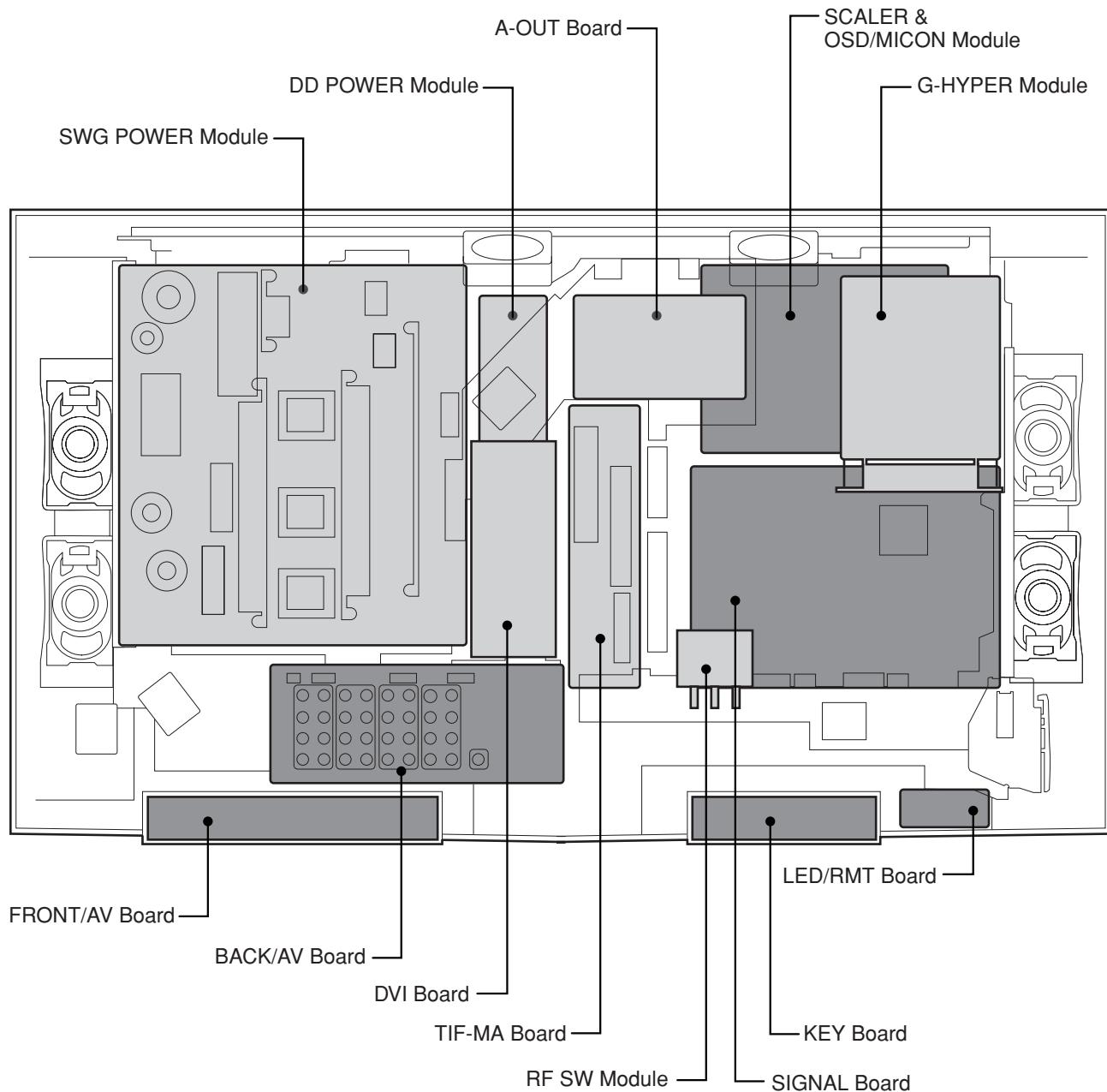
**SOURCE** selects the POP picture source.



### Note:

The error message "Not Available" will appear if you press a key for a function that is not available.

## LAYOUT OF MAJOR BOARDS

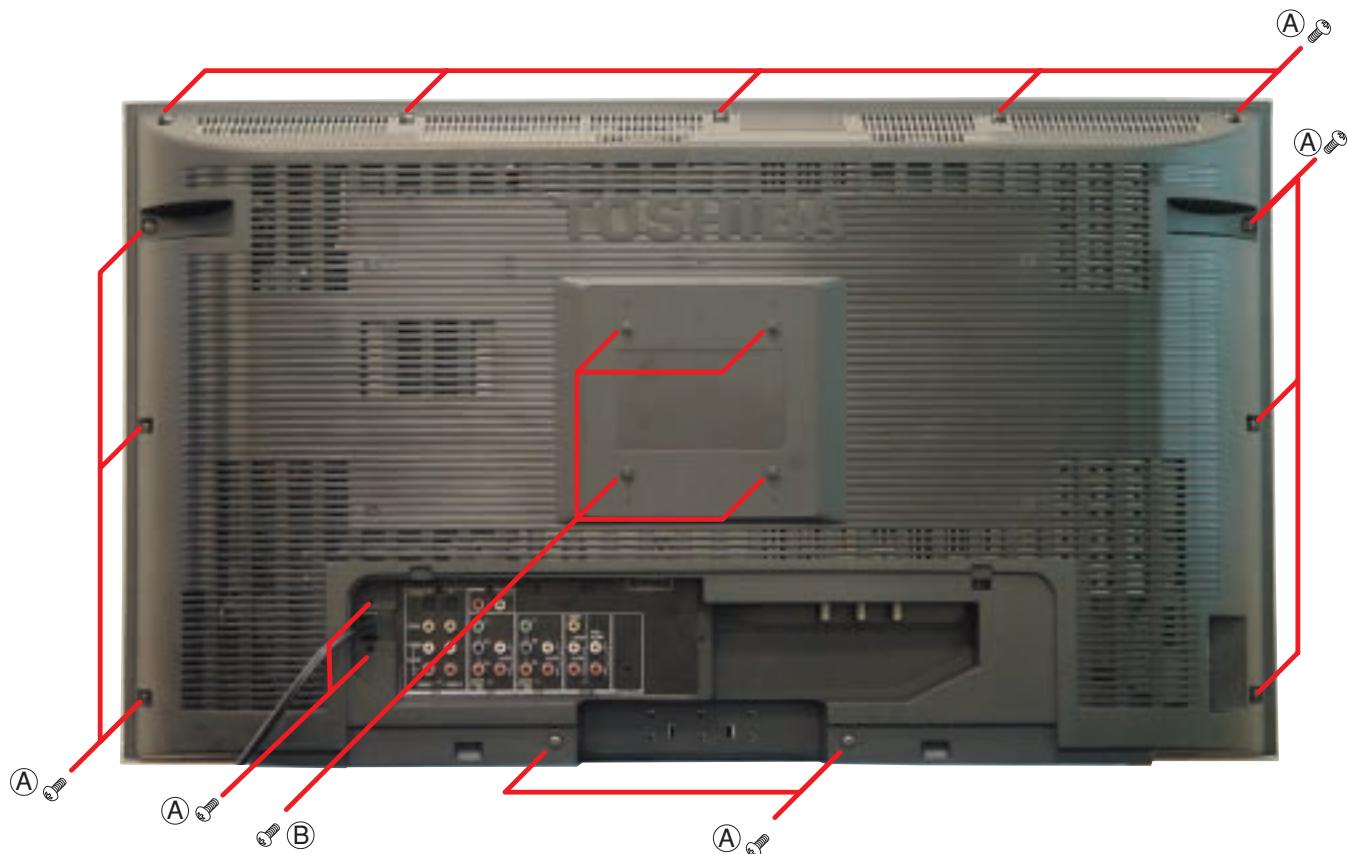


## MECHANICAL DISASSEMBLY

### ■ Removing the rear cover

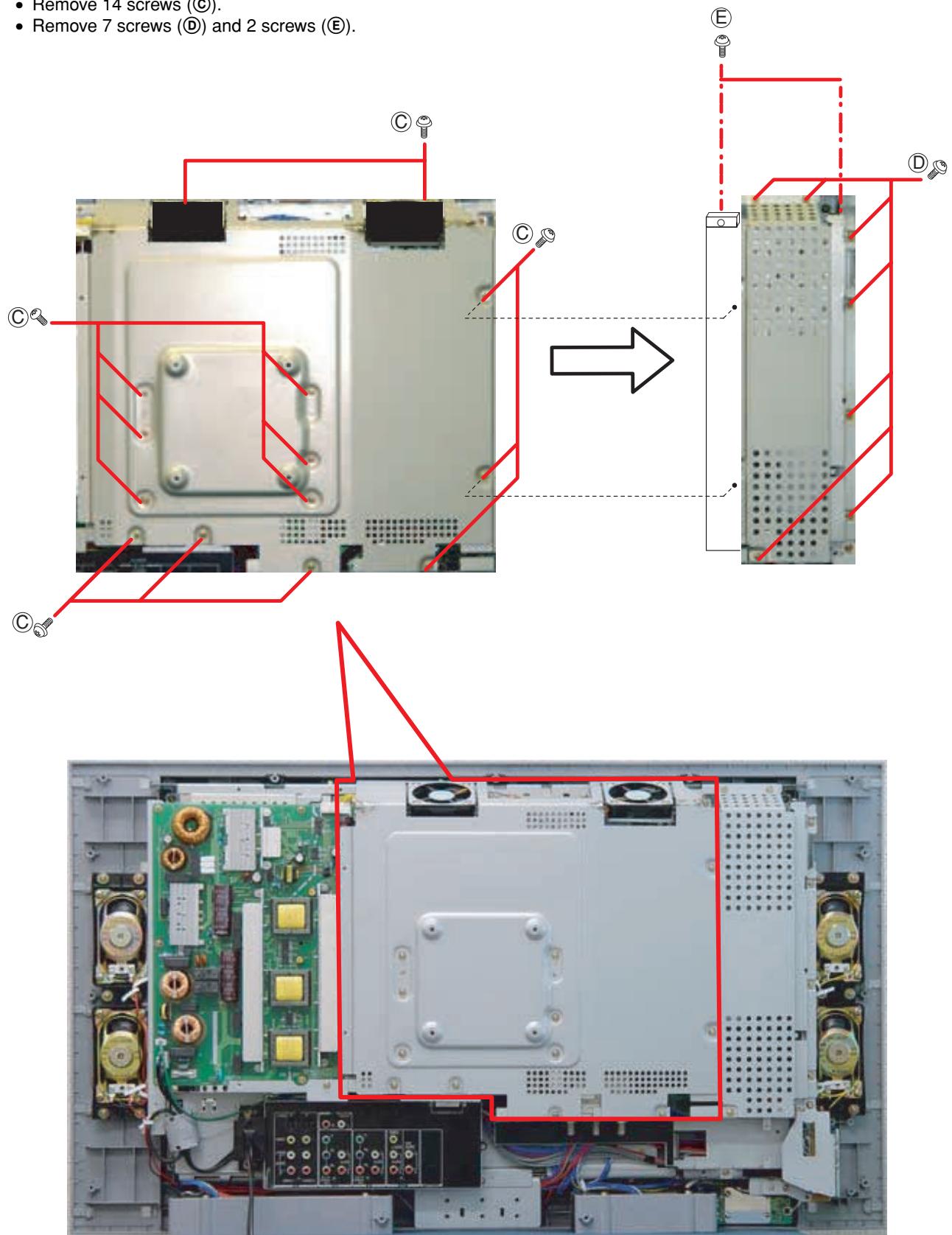
\* Note: Be sure to lay down the main body (by placing its screen downward) for disassembling.

- Remove 13 screws (Ⓐ).
- Remove 4 screws (Ⓑ).



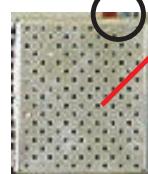
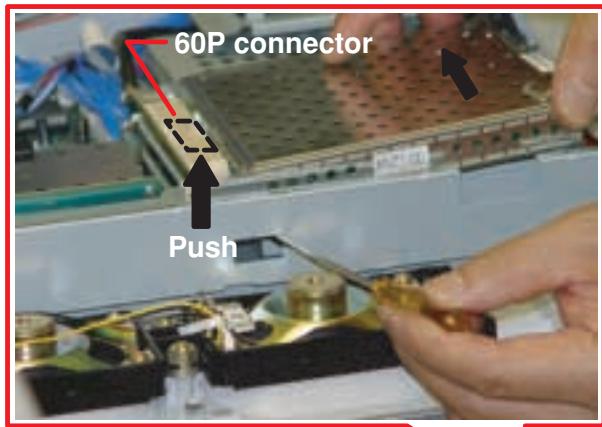
## ■ Removing the brackets

- Remove 14 screws (Ⓐ).
- Remove 7 screws (Ⓑ) and 2 screws (Ⓔ).

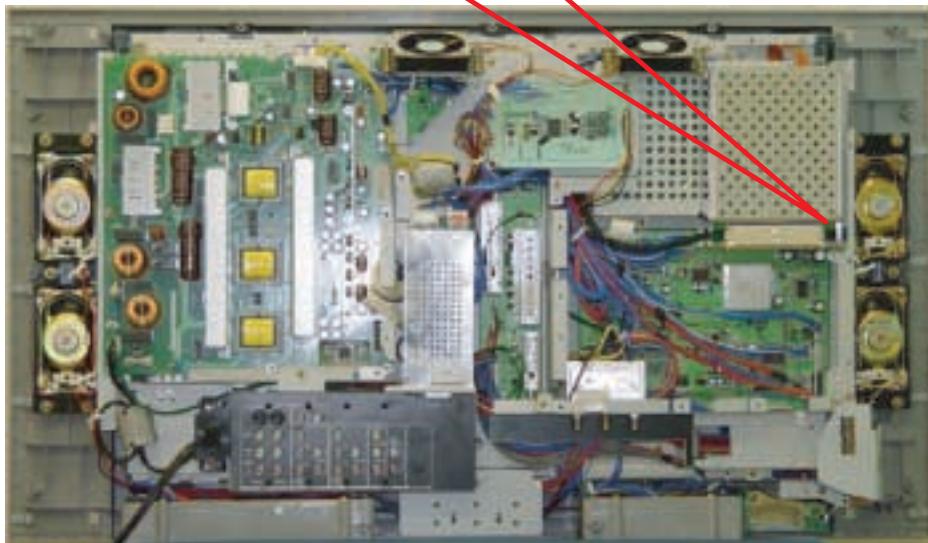


## ■ Removing the brackets

- Remove flexible wire.
- Disconnect the 60P connector.

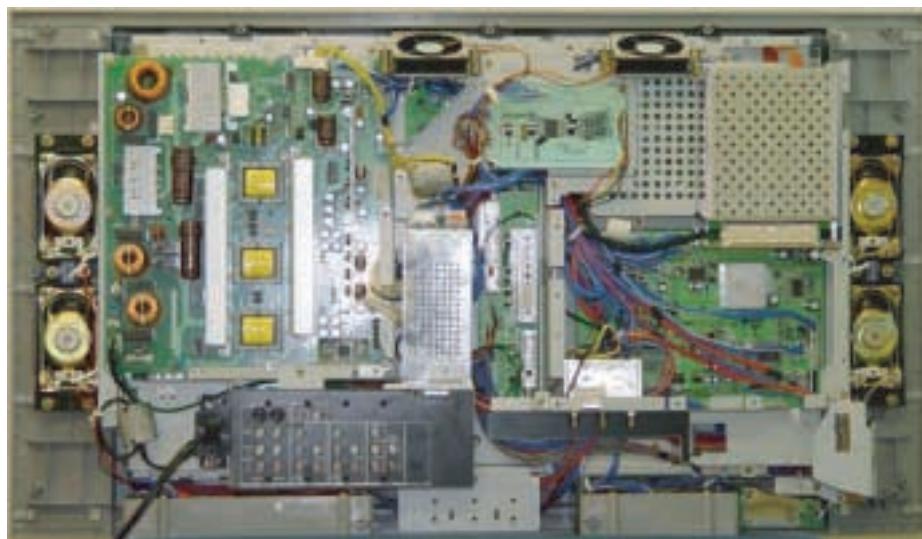
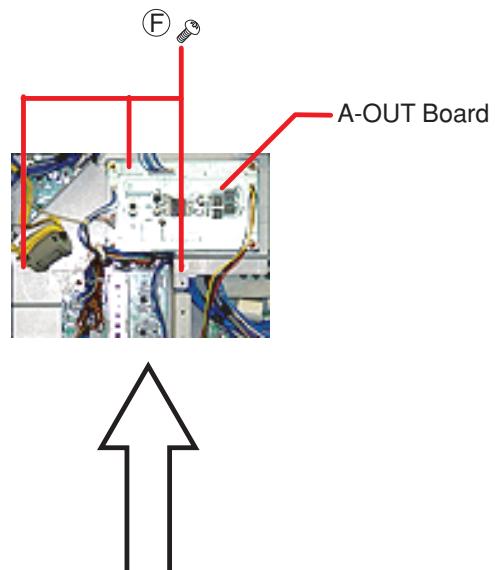


G-HYPER Module



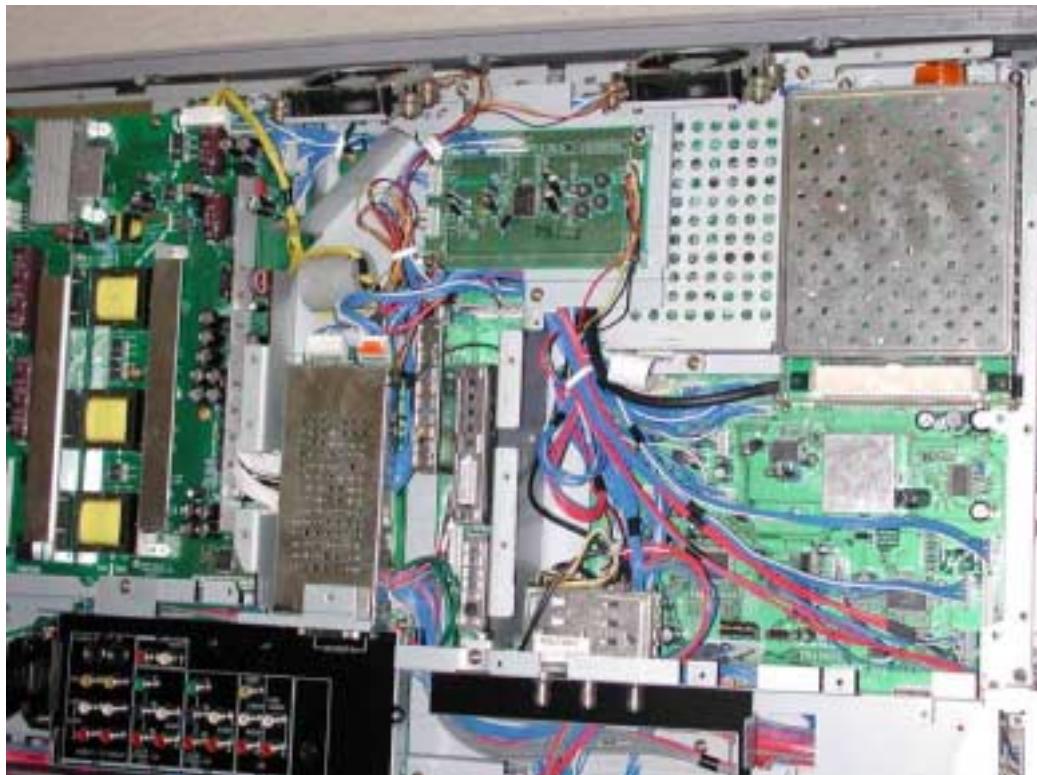
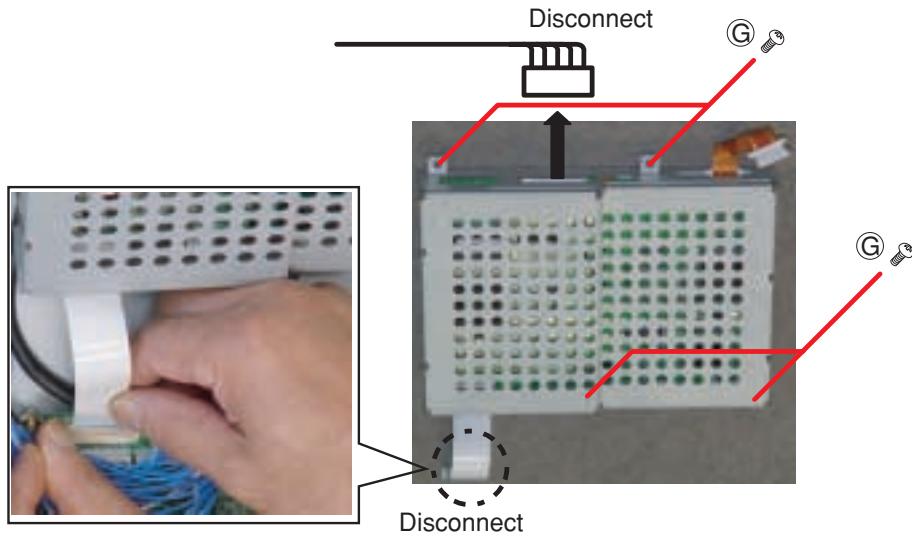
## ■ Removing the A-OUT board

- Remove 3 screws (F).



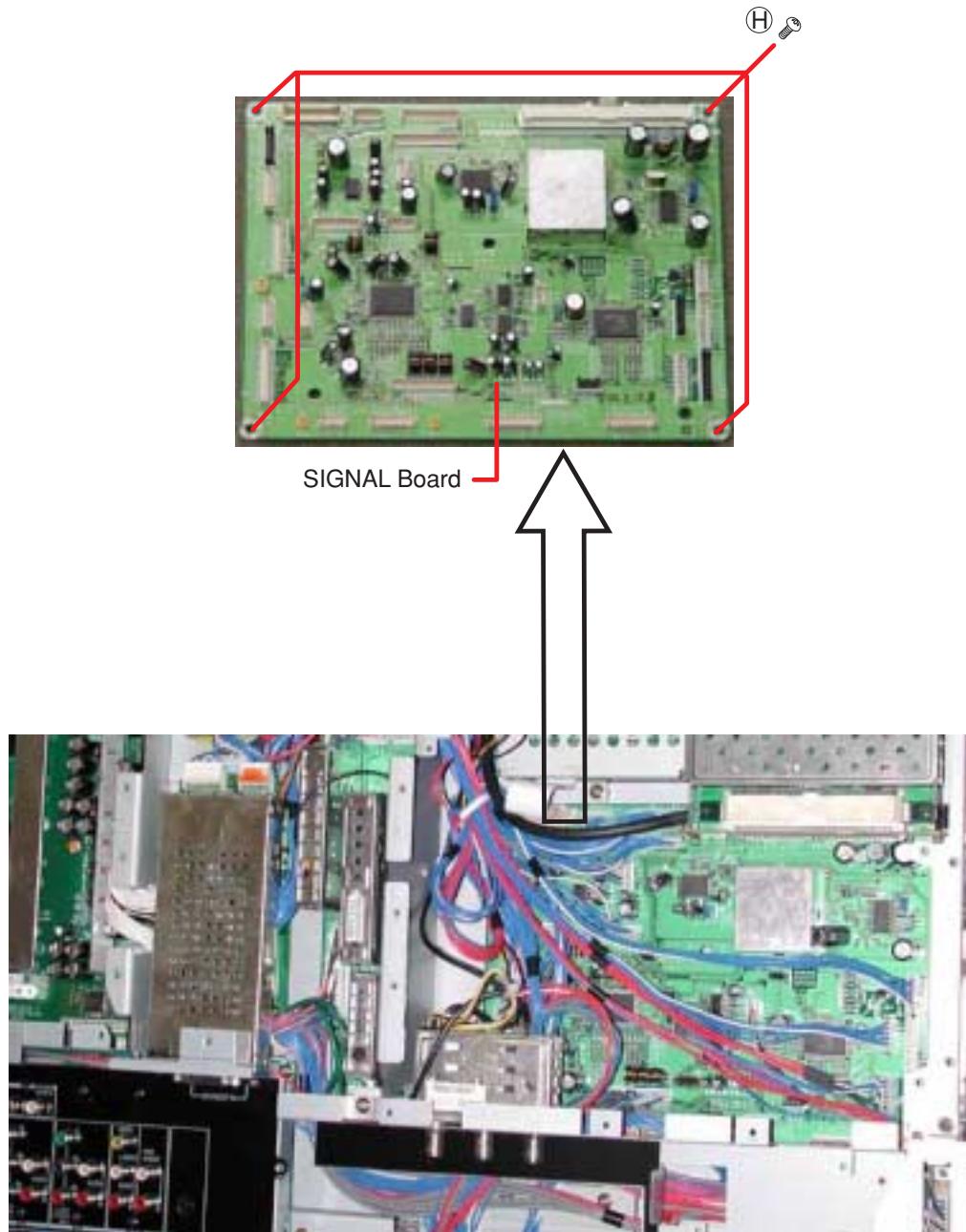
## ■ Removing the SCALER & OSD/MICON module

- Remove 4 screws (Ⓐ).
- Remove 3 connectors.



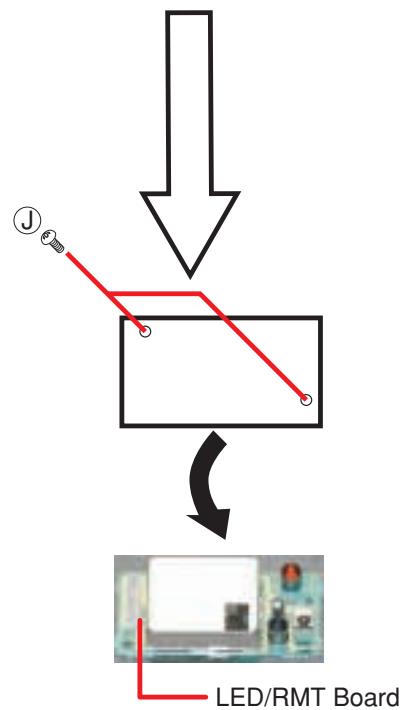
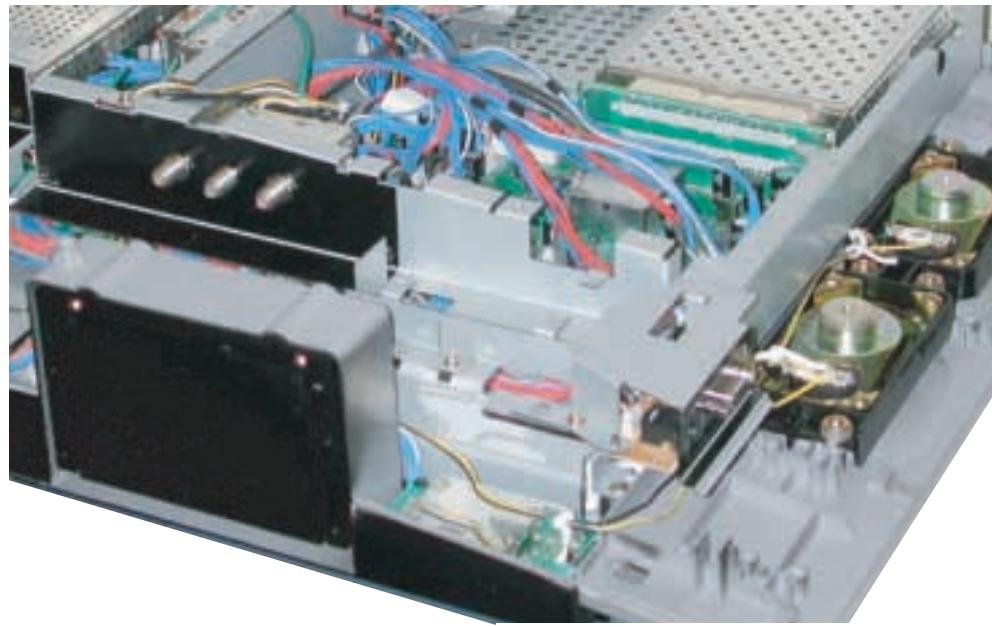
## ■ Removing the SIGNAL board

- Remove 4 screws (H) on the SIGNAL board.



## ■ Removing the LED/RMT board & POW SW board

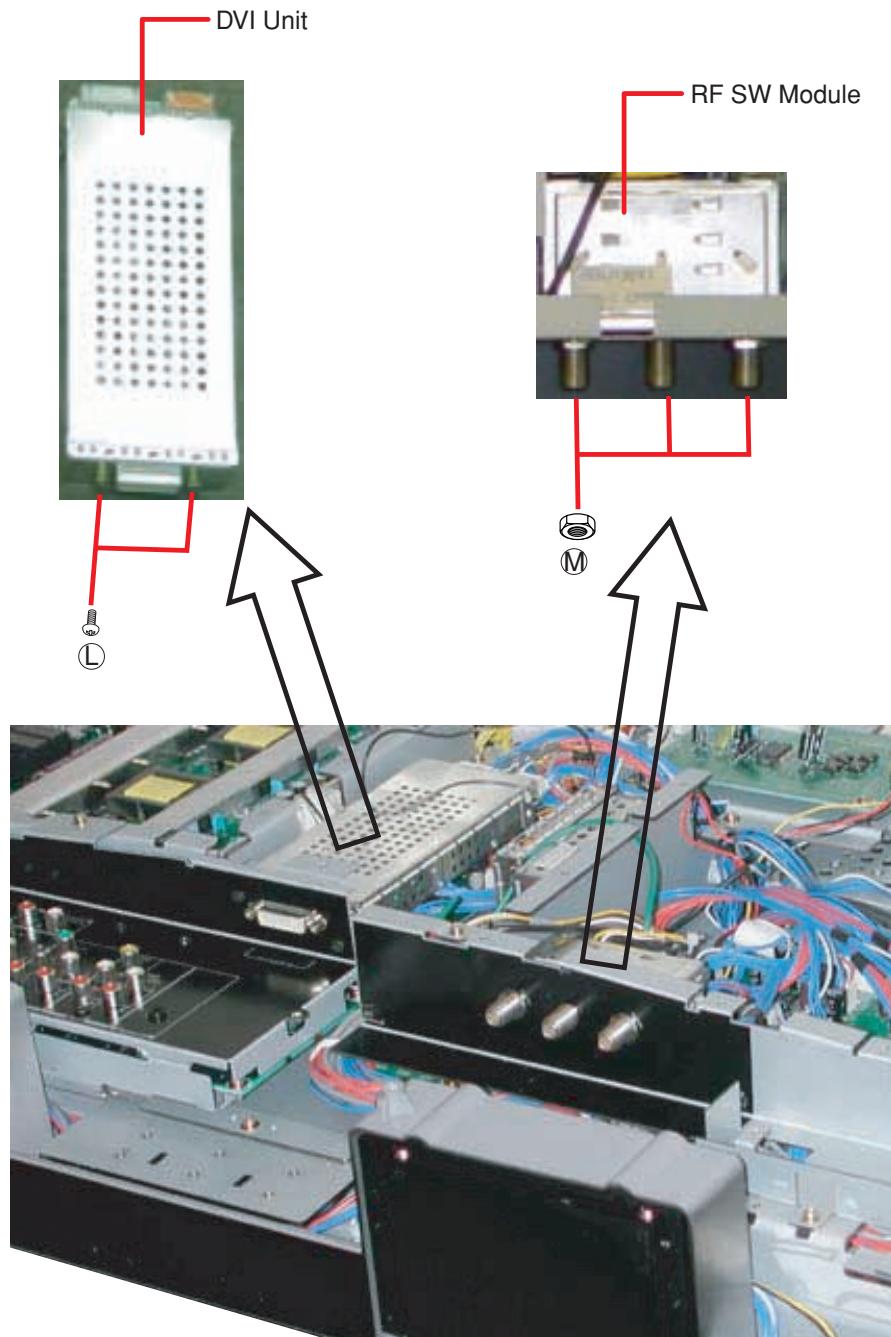
- Remove 2 screws (J) on the LED/RMT board.
- Remove 4 screws (K) on the POW SW board.



LED/RMT Board

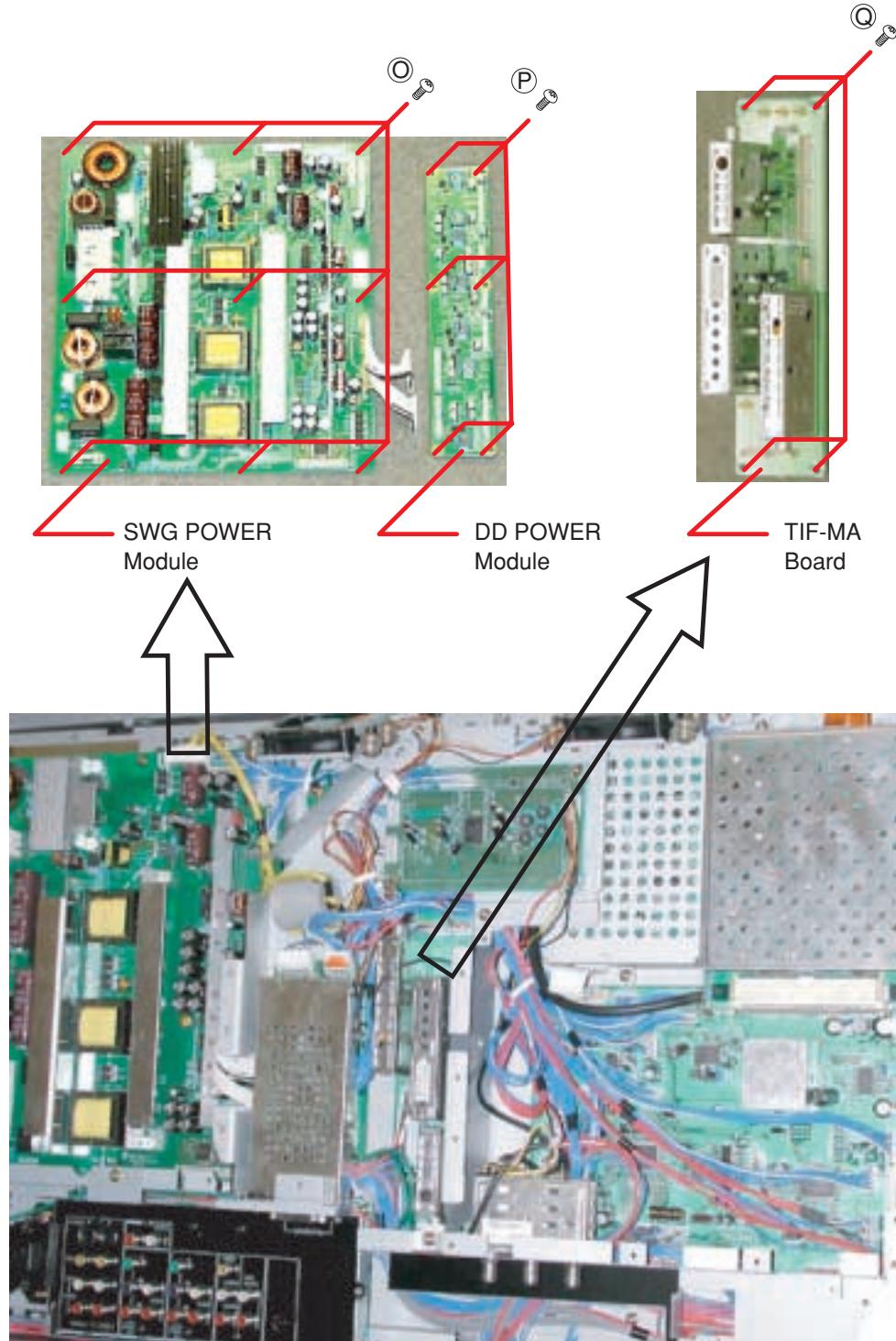
## ■ Removing the DVI unit & RF SW module

- Remove 2 screws (L) to detach the DVI unit.
- Remove 3 nuts (M) fixing the RF SW module.



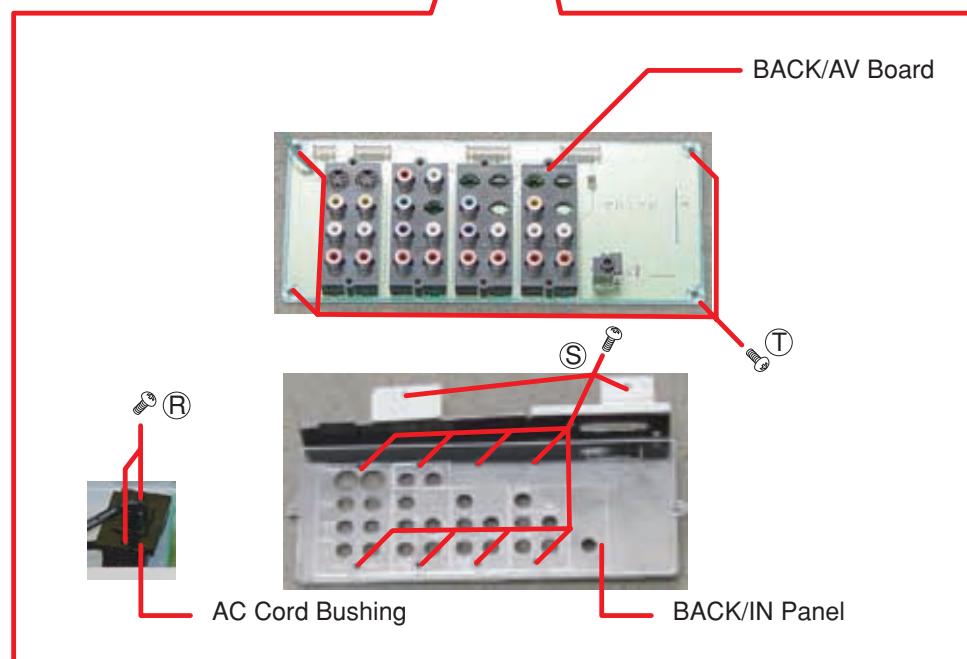
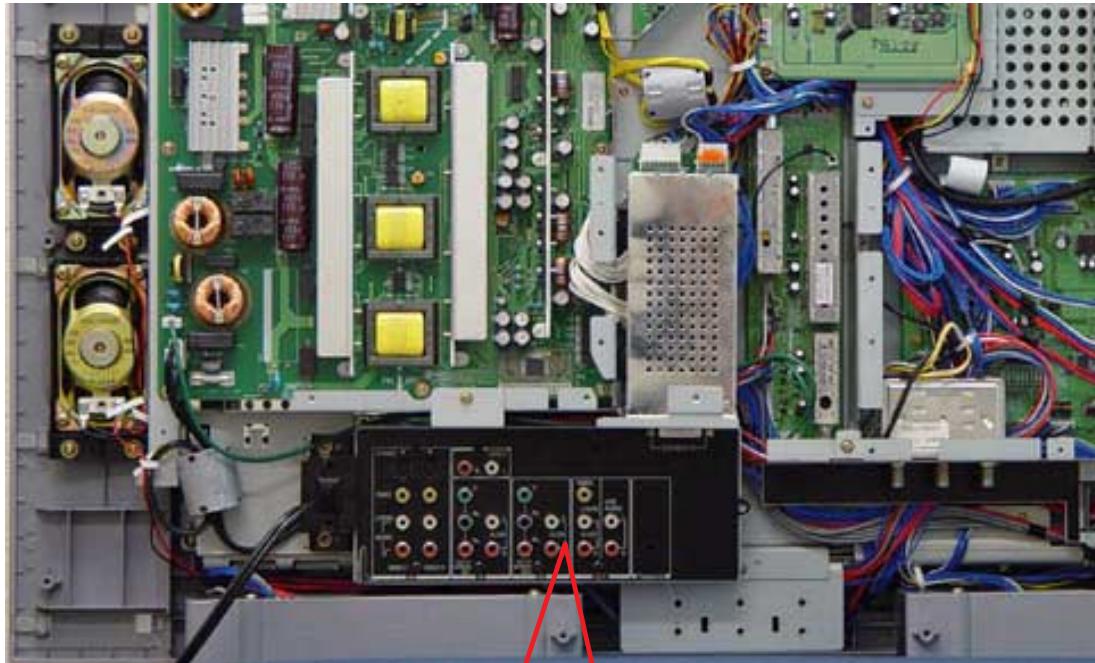
## ■ Removing the SWG POWER/DD POWER module & TIF-MA board

- Remove 9 screws (Ⓐ) ON THE SWG POWER module.
- Remove 6 screws (Ⓑ) on the DD POWER module.
- Remove 4 screws (Ⓒ) on the TIF-MA board.



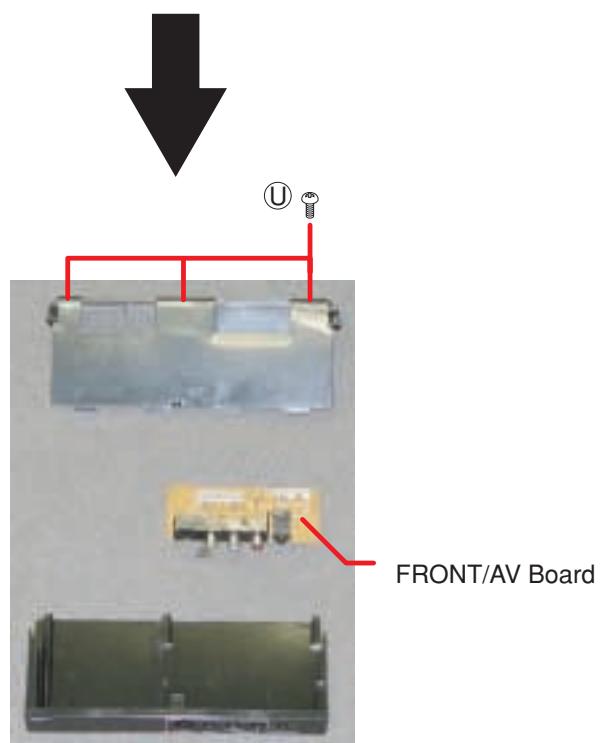
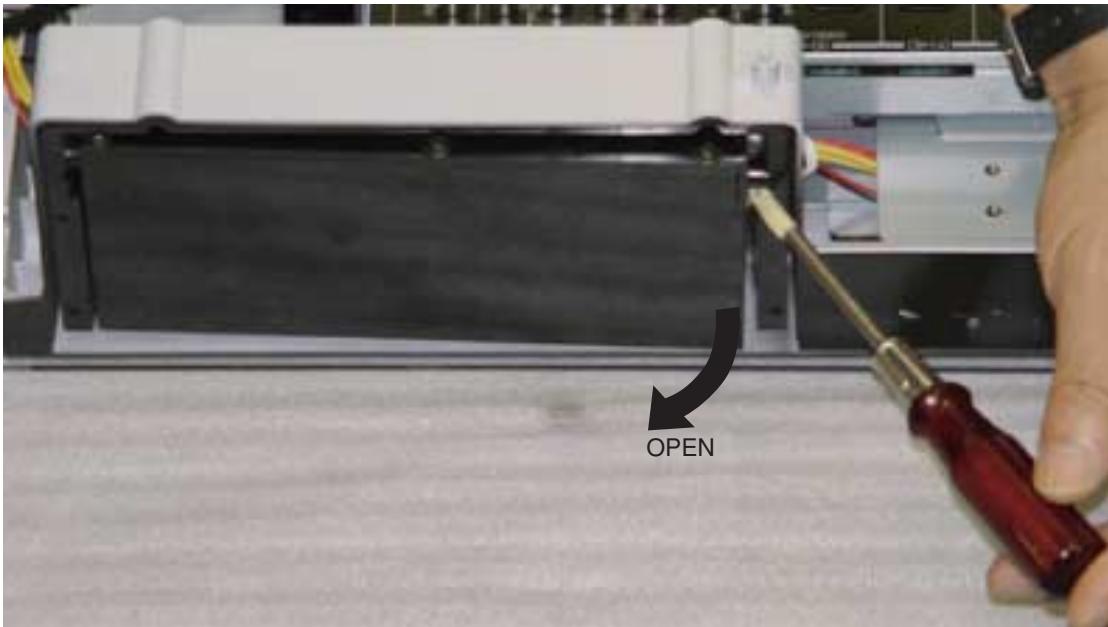
## ■ Removing the BACK/AV board

- Remove 2 screws (Ⓐ) fixing the AC cord bushing.
- Remove 10 screws (Ⓑ) on the BACK/AV panel.
- Remove 4 screws (Ⓒ) on the BACK/AV board.



■ Removing the FRONT/AV board

- Open the FRONT/AV board holder.
- Remove 3 screws (U).

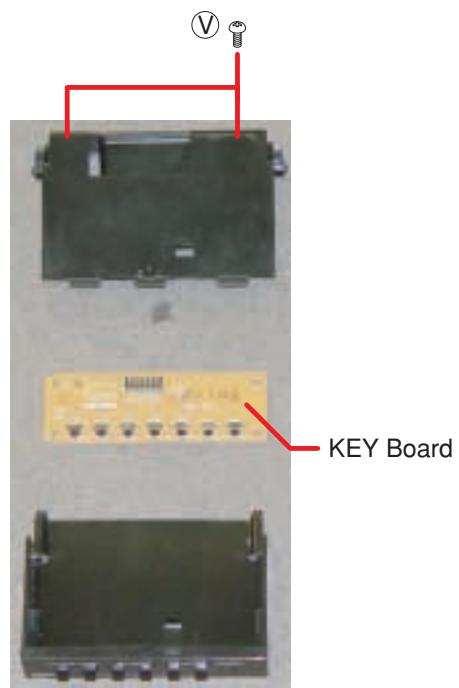
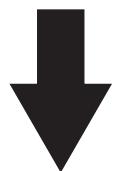


## ■ Removing the KEY board

- Open the KEY board holder.
- Remove 2 screws (V).

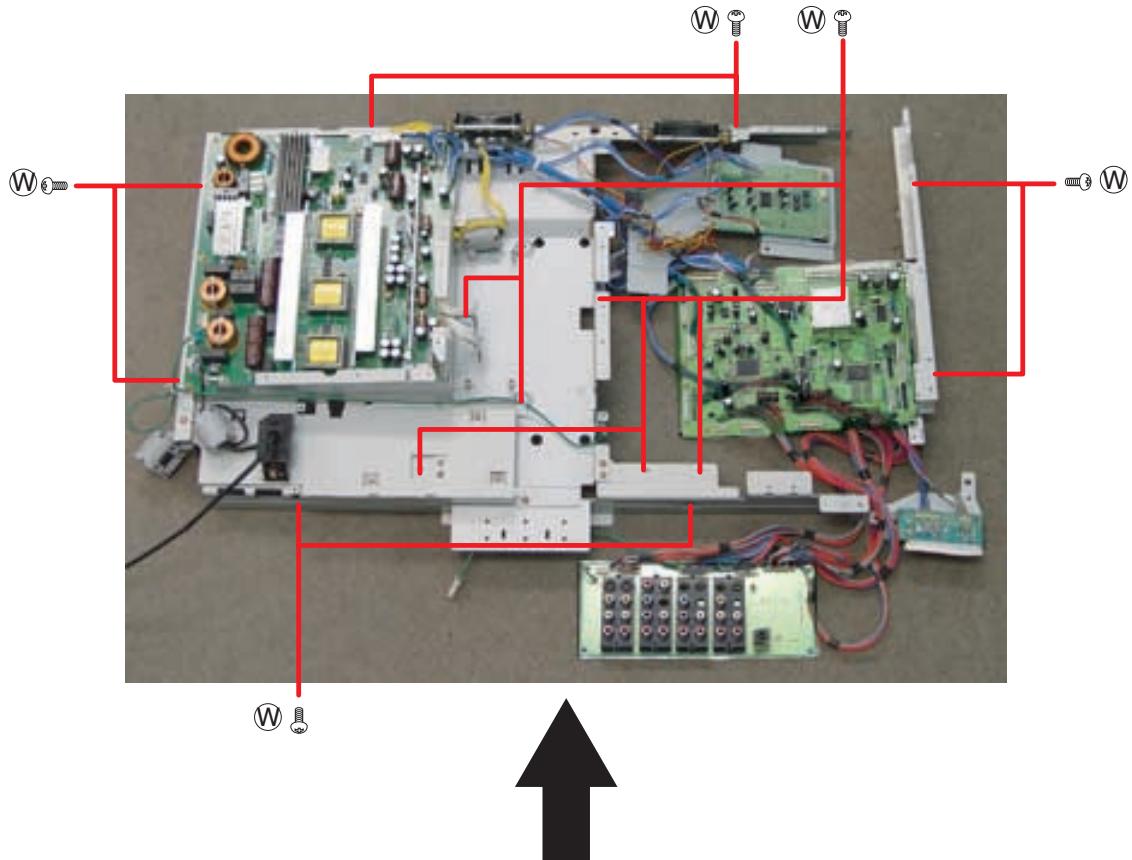


OPEN



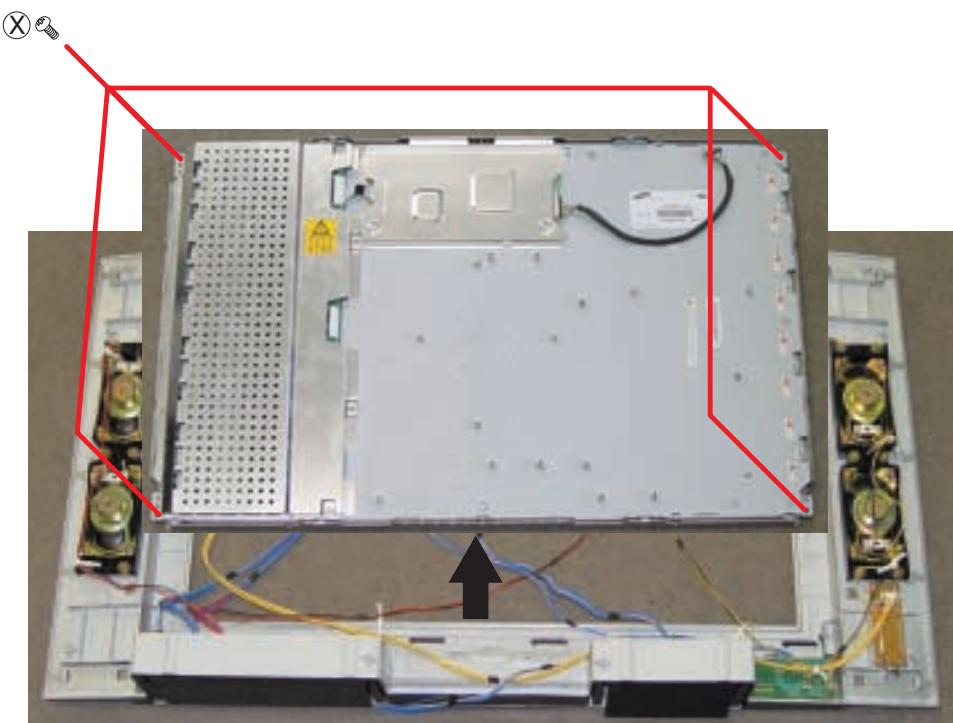
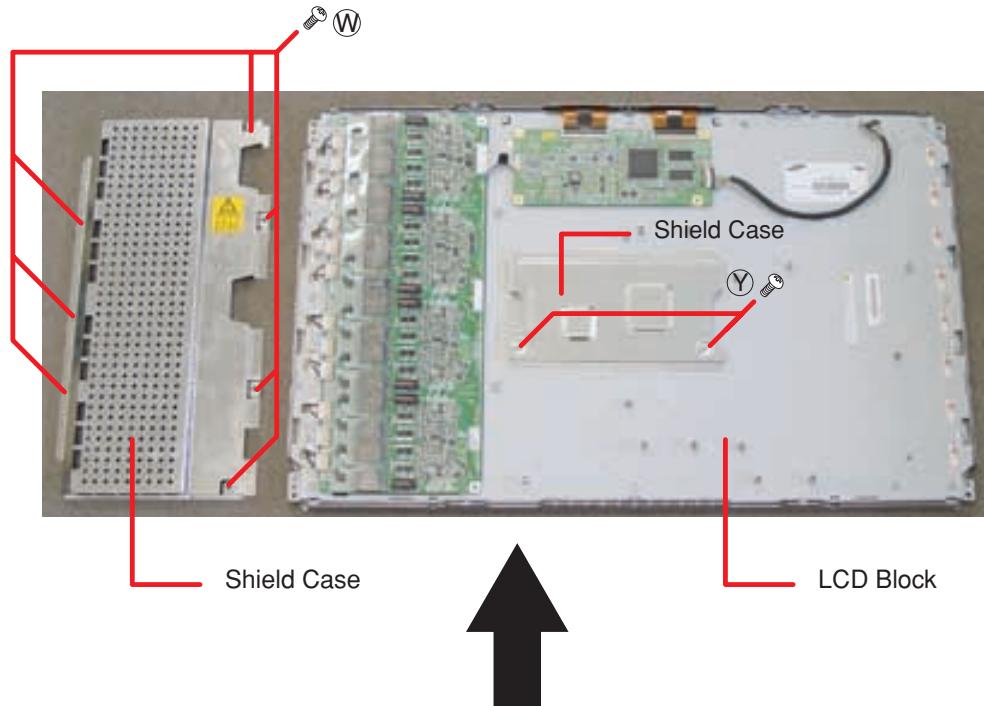
## ■ Removing the chassis block

- Remove 15 screws (Ⓐ).



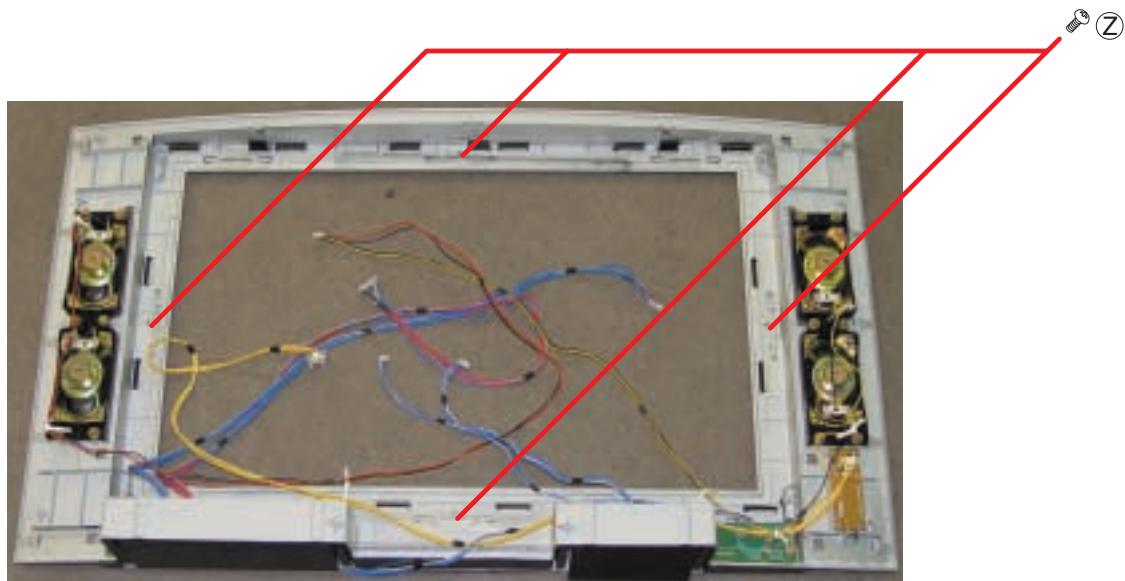
## ■ Removing the LCD block

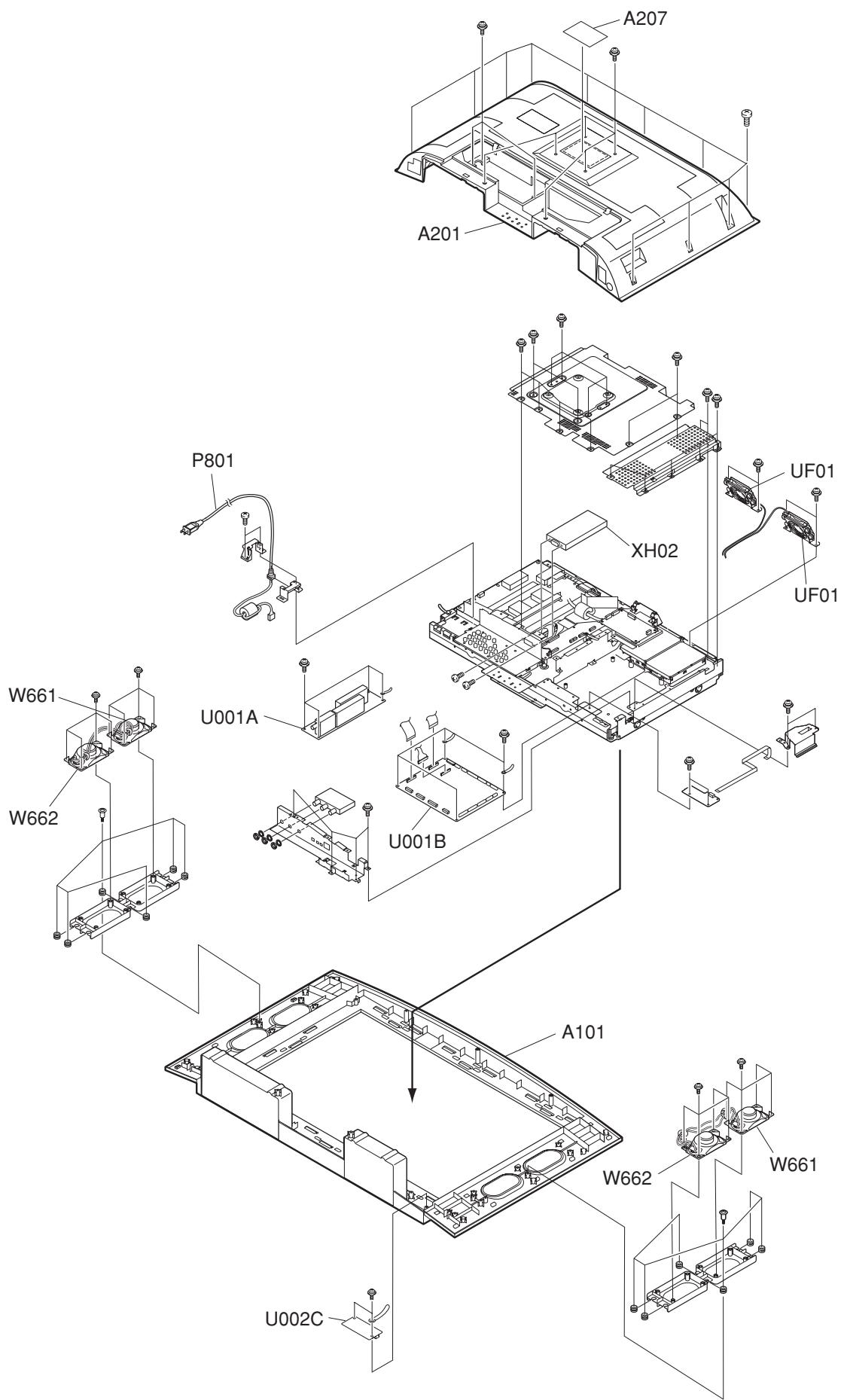
- Remove 4 screws (X).



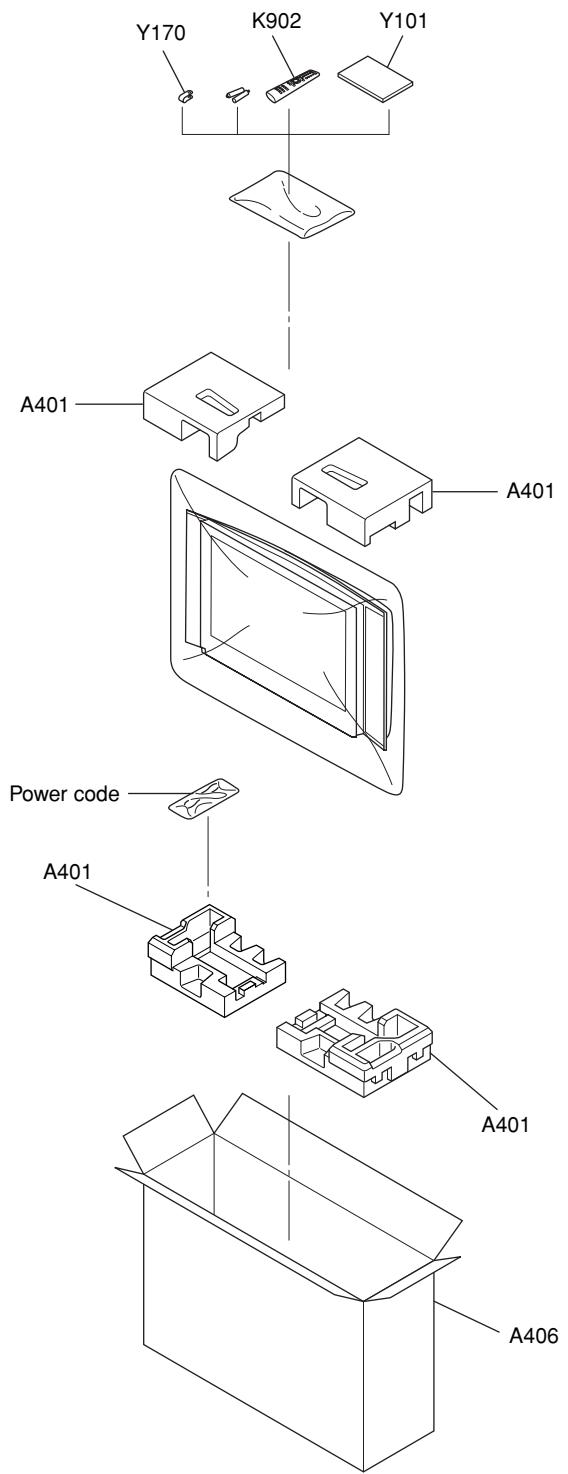
■ Removing the front panel

- Remove 4 screws (Ⓐ).

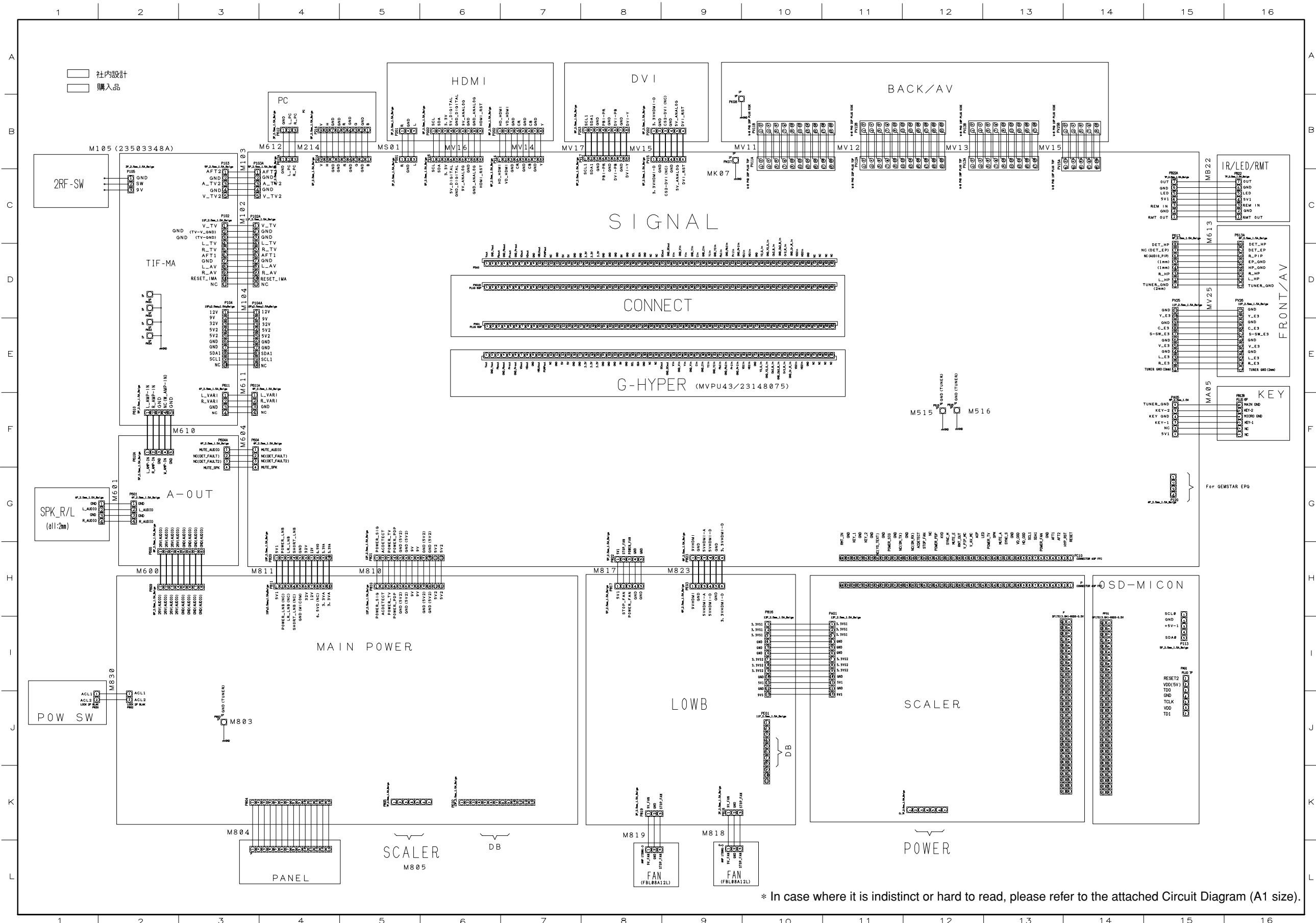




## PACKING DISASSEMBLY



# WIRING CONNECTION DIAGRAM



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# CHASSIS AND CABINET REPLACEMENT PARTS LIST

**WARNING:** BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRE-CAUTION" 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 : 26HL83**

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 ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
<b>CAPACITORS</b>		
C102	24793221	ELECTROLYTIC, 10V 220UF M
C103	24109102	CERAMIC CHIP, 50V B 1000PF K
C104	24797479	ELECTROLYTIC, 50V 4.7UF M
C105	24763221	ELECTROLYTIC, 16V 220UF M
C108	24793221	ELECTROLYTIC, 10V 220UF M
C122	24092730	CERAMIC CHIP, 16V B 0.1UF K
C124	24109471	CERAMIC CHIP, 50V B 470PF K
C126	24109471	CERAMIC CHIP, 50V B 470PF K
C127	24763101	ELECTROLYTIC, 16V 100UF M
C131	24793221	ELECTROLYTIC, 10V 220UF M
C132	24763101	ELECTROLYTIC, 16V 100UF M
C133	24109102	CERAMIC CHIP, 50V B 1000PF K
C161	24109472	CERAMIC CHIP, 50V B 4700PF K
C162	24109472	CERAMIC CHIP, 50V B 4700PF K
C172	24669339	ELECTROLYTIC, 50V 3.3UF M
C522	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C523	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C524	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C601	24092730	CERAMIC CHIP, 16V B 0.1UF K
C602	24109331	CERAMIC CHIP, 50V B 330PF K
C603	24092730	CERAMIC CHIP, 16V B 0.1UF K
C604	24092611	CERAMIC CHIP, 6.3V B 2.2UF K
C605	24109102	CERAMIC CHIP, 50V B 1000PF K
C606	24109102	CERAMIC CHIP, 50V B 1000PF K
C608	24092730	CERAMIC CHIP, 16V B 0.1UF K
C610	24797010	ELECTROLYTIC, 50V 1UF M
C611	24092730	CERAMIC CHIP, 16V B 0.1UF K
C612	24761102	ELECTROLYTIC, 6.3V 1000UF M
C613	24797010	ELECTROLYTIC, 50V 1UF M
C614	24092730	CERAMIC CHIP, 16V B 0.1UF K
C615	24763101	ELECTROLYTIC, 16V 100UF M
C620	24092463	CERAMIC CHIP, 16V B 0.22UF K
C621	24092730	CERAMIC CHIP, 16V B 0.1UF K
C622	24092463	CERAMIC CHIP, 16V B 0.22UF K
C623	24092463	CERAMIC CHIP, 16V B 0.22UF K
C624	24092730	CERAMIC CHIP, 16V B 0.1UF K
C625	24092463	CERAMIC CHIP, 16V B 0.22UF K
C627	24092730	CERAMIC CHIP, 16V B 0.1UF K

Location No.	Parts No.	Description
C629	24797010	ELECTROLYTIC, 50V 1UF M
C630	24092730	CERAMIC CHIP, 16V B 0.1UF K
C631	24092463	CERAMIC CHIP, 16V B 0.22UF K
C632	24092463	CERAMIC CHIP, 16V B 0.22UF K
C635	24763221	ELECTROLYTIC, 16V 220UF M
C636	24763221	ELECTROLYTIC, 16V 220UF M
C640	24794102	ELECTROLYTIC, 16V 1000UF M
C641	24794470	ELECTROLYTIC, 16V 47UF M
C642	24794470	ELECTROLYTIC, 16V 47UF M
C645	24815103	CERAMIC CHIP, 50V B 10000PF K
C646	24092738	CERAMIC CHIP, 25V B 0.47UF K
C647	24092738	CERAMIC CHIP, 25V B 0.47UF K
C648	24285104	CERAMIC CHIP, 50V B 0.1UF K
C649	24285104	CERAMIC CHIP, 50V B 0.1UF K
C653	24797010	ELECTROLYTIC, 50V 1UF M
C659	24591102	PLASTIC FILM, 50V 1000PF J
C661	24109102	CERAMIC CHIP, 50V B 1000PF K
C662	24109102	CERAMIC CHIP, 50V B 1000PF K
C663	24206108	ELECTROLYTIC, 50V 0.1UF M 7L 3A
C665	24797339	ELECTROLYTIC, 50V 3.3UF M
C666	24797339	ELECTROLYTIC, 50V 3.3UF M
C667	24797478	ELECTROLYTIC, 50V 0.47UF M
C668	24797478	ELECTROLYTIC, 50V 0.47UF M
C669	24105221	CERAMIC CHIP, 50V CH 220PF J
C672	24797229	ELECTROLYTIC, 50V 2.2UF M
C673	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C677	24109681	CERAMIC CHIP, 50V B 680PF K
C678	24109681	CERAMIC CHIP, 50V B 680PF K
C679	24105221	CERAMIC CHIP, 50V CH 220PF J
C691	24109103	CERAMIC CHIP, 50V B 0.01UF K
C692	24109103	CERAMIC CHIP, 50V B 0.01UF K
C693	24109103	CERAMIC CHIP, 50V B 0.01UF K
C694	24109103	CERAMIC CHIP, 50V B 0.01UF K
C927	24092730	CERAMIC CHIP, 16V B 0.1UF K
C3301	24092538	CERAMIC CHIP, 10V F 1UF Z
C3302	24105102	CERAMIC CHIP, 25V CH 1000PF J
C3303	24092730	CERAMIC CHIP, 16V B 0.1UF K
C3304	24105471	CERAMIC CHIP, 50V CH 470PF J
C4702	24109223	CERAMIC CHIP, 25V B 0.022UF K

Location No.	Parts No.	Description	Location No.	Parts No.	Description
C4703	24073082	ELECTROLYTIC, 50V 2.2UF M 3A	CS15	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
C4704	24092753	CERAMIC CHIP, 10V B 0.22UF K	CS16	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
C4705	24073082	ELECTROLYTIC, 50V 2.2UF M 3A	CS20	24669478	ELECTROLYTIC, 50V 0.47UF M 3A
C4706	24109221	CERAMIC CHIP, 50V B 220PF K	CS21	24797479	ELECTROLYTIC, 50V 4.7UF M
C4707	24092730	CERAMIC CHIP, 16V B 0.1UF K	CS22	24797479	ELECTROLYTIC, 50V 4.7UF M
C4708	24073041	ELECTROLYTIC, 16V 470UF M 3A	CS23	24092538	CERAMIC CHIP, 10V F 1UF Z
C4709	24109103	CERAMIC CHIP, 50V B 0.01UF K	CS24	24092538	CERAMIC CHIP, 10V F 1UF Z
C4710	24109103	CERAMIC CHIP, 50V B 0.01UF K	CS25	24763101	ELECTROLYTIC, 16V 100UF M
C4711	24109103	CERAMIC CHIP, 50V B 0.01UF K	CS26	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
C4712	24109103	CERAMIC CHIP, 50V B 0.01UF K	CS27	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
C4713	24109103	CERAMIC CHIP, 50V B 0.01UF K	CS30	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
C4714	24109103	CERAMIC CHIP, 50V B 0.01UF K	CS31	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
C4715	24109103	CERAMIC CHIP, 50V B 0.01UF K	CS34	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
C4716	24092730	CERAMIC CHIP, 16V B 0.1UF K	CS35	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
C4717	24073038	ELECTROLYTIC, 16V 100UF M 3A	CS39	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CB01	24794470	ELECTROLYTIC, 16V 47UF M	CS51	24203100	ELECTROLYTIC, 16V 10UF M 7L 3A
CB40	24092538	CERAMIC CHIP, 10V F 1UF Z	CS501	24092731	CERAMIC CHIP, 16V B 1UF K
CB41	24109222	CERAMIC CHIP, 50V B 2200PF K	CS502	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
CB42	24105561	CERAMIC CHIP, 50V CH 560PF J	CS503	24092731	CERAMIC CHIP, 16V B 1UF K
CB43	24109332	CERAMIC CHIP, 50V B 3300PF K	CS504	24105101	CERAMIC CHIP, 50V CH 100PF J
CB45	24092538	CERAMIC CHIP, 10V F 1UF Z	CS505	24105101	CERAMIC CHIP, 50V CH 100PF J
CB46	24109222	CERAMIC CHIP, 50V B 2200PF K	CS510	24092542	CERAMIC CHIP CK733 B 16V 1.0UF K
CB47	24105561	CERAMIC CHIP, 50V CH 560PF J	CV01	24092621	CERAMIC CHIP, 10V B 1UF K
CB51	24590103	PLASTIC FILM, 50V 0.01UF J	CV02	24092621	CERAMIC CHIP, 10V B 1UF K
CB52	24794470	ELECTROLYTIC, 16V 47UF M	CV03	24092621	CERAMIC CHIP, 10V B 1UF K
CB53	24503041	PLASTIC FILM, 63V 0.1UF J	CV04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CB54	24109221	CERAMIC CHIP, 50V B 220PF K	CV05	24092621	CERAMIC CHIP, 10V B 1UF K
CB55	24797010	ELECTROLYTIC, 50V 1UF M	CV06	24092621	CERAMIC CHIP, 10V B 1UF K
CB56	24794470	ELECTROLYTIC, 16V 47UF M	CV07	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CB59	24590103	PLASTIC FILM, 50V 0.01UF J	CV08	24794102	ELECTROLYTIC, 16V 1000UF M
CB60	24794100	ELECTROLYTIC, 16V 10UF M	CV09	24092621	CERAMIC CHIP, 10V B 1UF K
CB61	24503041	PLASTIC FILM, 63V 0.1UF J	CV10	24794100	ELECTROLYTIC, 16V 10UF M
CC01	24109102	CERAMIC CHIP, 50V B 1000PF K	CV11	24092621	CERAMIC CHIP, 10V B 1UF K
CC02	24109102	CERAMIC CHIP, 50V B 1000PF K	CV12	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC03	24109102	CERAMIC CHIP, 50V B 1000PF K	CV13	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC04	24109102	CERAMIC CHIP, 50V B 1000PF K	CV14	24092621	CERAMIC CHIP, 10V B 1UF K
CC05	24109102	CERAMIC CHIP, 50V B 1000PF K	CV15	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC06	24109102	CERAMIC CHIP, 50V B 1000PF K	CV23	24794101	ELECTROLYTIC, 16V 100UF M
CC07	24109102	CERAMIC CHIP, 50V B 1000PF K	CV24	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC08	24109102	CERAMIC CHIP, 50V B 1000PF K	CV38	24109102	CERAMIC CHIP, 50V B 1000PF K
CC09	24109102	CERAMIC CHIP, 50V B 1000PF K	CV39	24109102	CERAMIC CHIP, 50V B 1000PF K
CC10	24109102	CERAMIC CHIP, 50V B 1000PF K	CV40	24794101	ELECTROLYTIC, 16V 100UF M
CC11	24109102	CERAMIC CHIP, 50V B 1000PF K	CV42	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC12	24109102	CERAMIC CHIP, 50V B 1000PF K	CV45	24092621	CERAMIC CHIP, 10V B 1UF K
CC14	24109102	CERAMIC CHIP, 50V B 1000PF K	CV46	24092621	CERAMIC CHIP, 10V B 1UF K
CC15	24109102	CERAMIC CHIP, 50V B 1000PF K	CV47	24092621	CERAMIC CHIP, 10V B 1UF K
CC18	24109102	CERAMIC CHIP, 50V B 1000PF K	CV48	24109332	CERAMIC CHIP, 50V B 3300PF K
CC19	24109102	CERAMIC CHIP, 50V B 1000PF K	CV64	24794471	ELECTROLYTIC, 16V 470UF M
CC77	24105101	CERAMIC CHIP, 50V CH 100PF J	CV65	24794101	ELECTROLYTIC, 16V 100UF M
CC78	24105101	CERAMIC CHIP, 50V CH 100PF J	CV66	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC99	24591102	PLASTIC FILM, 50V 1000PF J	CV67	24794100	ELECTROLYTIC, 16V 10UF M
CS01	24092538	CERAMIC CHIP, 10V F 1UF Z	CV68	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CS02	24092538	CERAMIC CHIP, 10V F 1UF Z	CV73	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CS03	24092538	CERAMIC CHIP, 10V F 1UF Z	CV79	24794102	ELECTROLYTIC, 16V 1000UF M
CS04	24092538	CERAMIC CHIP, 10V F 1UF Z	CV80	24793222	ELECTROLYTIC, 10V 2200UF M
CS05	24092538	CERAMIC CHIP, 10V F 1UF Z	CV121	24109103	CERAMIC CHIP, 50V B 0.01UF K
CS06	24092538	CERAMIC CHIP, 10V F 1UF Z	CV201	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CS07	24092538	CERAMIC CHIP, 10V F 1UF Z	CV202	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CS08	24092538	CERAMIC CHIP, 10V F 1UF Z	CV203	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CS09	24092538	CERAMIC CHIP, 10V F 1UF Z	CV204	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CS10	24092538	CERAMIC CHIP, 10V F 1UF Z	CV205	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CS11	24092538	CERAMIC CHIP, 10V F 1UF Z	CV237	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CS12	24092538	CERAMIC CHIP, 10V F 1UF Z	CV238	24109103	CERAMIC CHIP, 50V B 0.01UF K
CS13	24794100	ELECTROLYTIC, 16V 10UF M	CV239	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CS14	24794100	ELECTROLYTIC, 16V 10UF M	CV243	24203100	ELECTROLYTIC, 16V 10UF M 7L 3A

Location No.	Parts No.	Description
CV244	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV245	24092441	CERAMIC CHIP, 16V F 1UF Z
CV246	24092441	CERAMIC CHIP, 16V F 1UF Z
CV247	24092441	CERAMIC CHIP, 16V F 1UF Z
CV248	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV249	24092441	CERAMIC CHIP, 16V F 1UF Z
CV250	24092441	CERAMIC CHIP, 16V F 1UF Z
CV251	24092441	CERAMIC CHIP, 16V F 1UF Z
CV252	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV253	24092441	CERAMIC CHIP, 16V F 1UF Z
CV254	24092441	CERAMIC CHIP, 16V F 1UF Z
CV255	24092441	CERAMIC CHIP, 16V F 1UF Z
CV256	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV257	24203100	ELECTROLYTIC, 16V 10UF M 7L 3A
CV258	24794102	ELECTROLYTIC, 16V 1000UF M
CV259	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV261	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV263	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY101	24092441	CERAMIC CHIP, 16V F 1UF Z
CY102	24794101	ELECTROLYTIC, 16V 1000UF M
CY103	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CY104	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY105	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY106	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY107	24794100	ELECTROLYTIC, 16V 10UF M
CY108	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CY109	24105101	CERAMIC CHIP, 50V CH 100PF J
CY111	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY112	24105181	CERAMIC CHIP, 50V CH 180PF J
CY113	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY114	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY115	24105390	CERAMIC CHIP, 50V CH 39PF J
CY116	24105470	CERAMIC CHIP, 50V CH 47PF J
CY117	24105180	CERAMIC CHIP, 50V CH 18PF J
CY501	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY502	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY504	24109222	CERAMIC CHIP, 50V B 2200PF K
CY505	24105120	CERAMIC CHIP, 50V CH 12PF J
CY506	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY508	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY512	24092463	CERAMIC CHIP, 16V B 0.22UF K
CY513	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY514	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY515	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY516	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY517	24092731	CERAMIC CHIP, 16V B 1UF K
CY524	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY525	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY526	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY538	24794102	ELECTROLYTIC, 16V 1000UF M
CY539	24794102	ELECTROLYTIC, 16V 1000UF M
CY582	24105101	CERAMIC CHIP, 50V CH 100PF J
CY650	24591102	PLASTIC FILM, 50V 1000PF J
CY651	24591102	PLASTIC FILM, 50V 1000PF J
CY652	24591102	PLASTIC FILM, 50V 1000PF J

#### RESISTORS

R102	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R103	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R104	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R110	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R120	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R121	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R131	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R132	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
R133	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R134	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R135	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R150	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R151	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R152	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R264	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R265	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R266	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R286	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R287	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R288	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
R563	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R601	24554470	OXIDE METAL FILM, 2W 47 OHM J
R604	24000606	CHIP, METAL FILM, 1/16W 8.2K OHM F
R609	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R610	24011124	CHIP, METAL FILM, 1/20W 120K OHM J
R611	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R612	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R613	24011124	CHIP, METAL FILM, 1/20W 120K OHM J
R614	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R615	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R616	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R617	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R618	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R619	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R620	24871100	CHIP, METAL FILM, 1/8W 10 OHM J
R623	24871100	CHIP, METAL FILM, 1/8W 10 OHM J
R630	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R631	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R640	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R641	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R642	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R645	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R646	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R650	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R652	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R655	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R660	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
R661	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R662	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R667	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R670	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R671	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R672	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R673	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R674	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
R676	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R677	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R678	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R679	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R686	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R687	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R688	24366151	CARBON FILM, 1/6W 150 OHM J
R690	24366151	CARBON FILM, 1/6W 150 OHM J
R929	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R3301	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R3302	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R3303	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R3304	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R3305	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R3306	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R3307	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R3308	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4701	24011361	CHIP, METAL FILM, 1/20W 360 OHM J

Location No.	Parts No.	Description
R4702	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R4704	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4705	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
R4708	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4709	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R4710	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4711	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4712	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4714	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4715	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4716	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4717	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA71	24366273	CARBON FILM, 1/6W 27K OHM J
RA72	24366153	CARBON FILM, 1/6W 15K OHM J
RA73	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA75	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA76	24366153	CARBON FILM, 1/6W 15K OHM J
RB01	24011391	CHIP, METAL FILM, 1/20W 390 OHM J
RB04	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RB05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB15	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RB19	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
RB37	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB38	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RB39	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB40	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB41	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB42	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB43	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB44	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RB45	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB46	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB47	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB48	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB51	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RB52	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB53	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB54	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB55	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RB56	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RB57	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB58	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB59	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RB60	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RB62	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RB63	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB67	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RB69	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RB70	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB71	24019112	CHIP, METAL FILM, 1/8W 1 OHM F
RB72	24011220	CHIP, METAL FILM, 1/20W 22 OHM J
RB73	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
RC01	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC02	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC03	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC04	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC05	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC06	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC07	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC08	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC11	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC12	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC15	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RC16	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RS01	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J

Location No.	Parts No.	Description
RS02	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS03	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS04	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS05	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS06	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS07	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS08	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS09	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS10	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS12	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS13	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS14	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RS15	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS16	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS18	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS19	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS20	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS21	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS22	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS25	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS26	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS27	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS28	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS29	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS30	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS31	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS32	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS33	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS34	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS35	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS36	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS37	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS38	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS39	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS40	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS41	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS42	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS44	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS45	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS46	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS47	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS48	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS49	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS50	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS51	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RS52	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RS53	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS54	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS55	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS56	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS57	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS58	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS59	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS60	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS61	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS62	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS63	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS64	24011393	CHIP, METAL FILM, 1/20W 39K OHM J
RS65	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS66	24011393	CHIP, METAL FILM, 1/20W 39K OHM J
RS67	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS74	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS75	24011224	CHIP, METAL FILM, 1/20W 220K OHM J

Location No.	Parts No.	Description
RS76	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS79	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS80	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS103	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS112	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS116	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS500	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS501	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS504	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS505	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS506	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS507	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS515	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RS516	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS517	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RV01	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV06	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV08	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV09	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV10	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV12	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV14	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV15	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV19	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV20	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV21	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV26	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
RV27	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV29	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV30	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV33	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV34	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV35	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV36	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV37	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV40	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV41	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV60	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV61	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV62	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV66	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV70	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV71	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV72	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV73	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV74	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV75	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV76	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RV77	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV78	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV79	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RV89	24000445	CHIP JUMPER, 1608TYPE
RV90	24000445	CHIP JUMPER, 1608TYPE
RV91	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV92	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV93	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
RV94	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV98	24000445	CHIP JUMPER, 1608TYPE
RV99	24000445	CHIP JUMPER, 1608TYPE
RV100	24000445	CHIP JUMPER, 1608TYPE
RV101	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
RV120	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV121	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV122	24871750	CHIP, METAL FILM, 1/8W 75 OHM J
RV129	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV250	24011153	CHIP, METAL FILM, 1/20W 15K OHM J
RV251	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV252	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV253	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV254	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV255	24871561	CHIP, METAL FILM, 1/8W 560 OHM J
RV256	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV257	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV258	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV259	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV260	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV261	24871561	CHIP, METAL FILM, 1/8W 560 OHM J
RV262	24011153	CHIP, METAL FILM, 1/20W 15K OHM J
RV263	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV264	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV265	24871681	CHIP, METAL FILM, 1/8W 680 OHM J
RV266	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV267	24871681	CHIP, METAL FILM, 1/8W 680 OHM J
RV323	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RV324	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RV325	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RV330	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV331	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV332	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV337	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV338	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV346	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV347	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV348	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV351	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV352	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV353	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV354	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV355	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV356	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV357	24000445	CHIP JUMPER, 1608TYPE
RV358	24000445	CHIP JUMPER, 1608TYPE
RV359	24000445	CHIP JUMPER, 1608TYPE
RV368	24000445	CHIP JUMPER, 1608TYPE
RV369	24000445	CHIP JUMPER, 1608TYPE
RV370	24000445	CHIP JUMPER, 1608TYPE
RV371	24000445	CHIP JUMPER, 1608TYPE
RV372	24000445	CHIP JUMPER, 1608TYPE
RV373	24000445	CHIP JUMPER, 1608TYPE
RV374	24000445	CHIP JUMPER, 1608TYPE
RV375	24000445	CHIP JUMPER, 1608TYPE
RY101	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY102	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RY103	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY104	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY105	24011821	CHIP, METAL FILM, 1/20W 820 OHM J
RY106	24000445	CHIP JUMPER, 1608TYPE
RY107	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY109	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY110	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY501	24011303	CHIP, METAL FILM, 1/20W 30K OHM J
RY502	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY503	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RY504	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY505	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RY507	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J

Location No.	Parts No.	Description
RY508	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY509	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY510	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY511	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY512	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY513	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY516	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY517	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY518	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY519	24000445	CHIP JUMPER, 1608TYPE
RY520	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY521	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY523	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY524	24011821	CHIP, METAL FILM, 1/20W 820 OHM J
RY525	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY526	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY527	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY528	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY529	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY530	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY531	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY532	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY533	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY534	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY539	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RY540	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RY541	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RY542	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RY543	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY545	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY548	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY550	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY551	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RY552	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY553	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RY554	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RY555	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RY560	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY561	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RY562	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY573	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY575	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY576	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RY585	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY590	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY591	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY592	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

#### COILS & TRANSFORMERS

L101	23289845	COIL, PEAKING, TRF4680AT
L134	23289845	COIL, PEAKING, TRF4680AT
L289	23248073	COIL, CHOKE, TLN3299D
L620	23246406	COIL, CHOKE 8X8X3.4 100MMH, TLN3528AF
L622	23246406	COIL, CHOKE 8X8X3.4 100MMH, TLN3528AF
L623	23246406	COIL, CHOKE 8X8X3.4 100MMH, TLN3528AF
L625	23246406	COIL, CHOKE 8X8X3.4 100MMH, TLN3528AF
L640	23289109	COIL, PEAKING, TRF41R0AF
L645	23103238	INDUCTOR, BEAD, TEM2142AD
L655	23103233	INDUCTOR, BEAD, TEM2137AD
L4702	23103827	INDUCTOR, BEAD, TEM2120M
LB51	23246004	COIL, CHIP-INDUCTER-R10MMHJ, TRF4R10CC
LC01	23103828	INDUCTOR, BEAD, TEM2121M
LC02	23103828	INDUCTOR, BEAD, TEM2121M
LC03	23103828	INDUCTOR, BEAD, TEM2121M

Location No.	Parts No.	Description
LC04	23103828	INDUCTOR, BEAD, TEM2121M
LV01	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV02	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV03	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV04	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV09	23289840	COIL, PEAKING, TRF4100AT
LV13	23289840	COIL, PEAKING, TRF4100AT
LV42	23289840	COIL, PEAKING, TRF4100AT
LV72	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV201	23289844	COIL, PEAKING, TRF4470AT
LV251	23103852	COIL, FILTER, TEM2028AH
LV252	23103852	COIL, FILTER, TEM2028AH
LV253	23103852	COIL, FILTER, TEM2028AH
LV270	23289840	COIL, PEAKING, TRF4100AT
LV271	23103146	EMI FILTER, TEM2030AA
LY012	23246398	COIL, CHIP INDUCTOR 10MMH K, COLTRF4100CV
LY100	23246405	COIL, CHIP INDUCTOR 33MMH J, COLTRF4330CW
LY101	23103827	INDUCTOR, BEAD, TEM2120M
LY102	23103827	INDUCTOR, BEAD, TEM2120M
LY103	23103230	INDUCTOR, BEAD, TEM2134AD
LY104	23246404	COIL, CHIP INDUCTOR 15MMH J, COLTRF4150CW
LY105	23246222	COIL, CHIP INDUCTOR, TRF4270CG
LY112	23103230	INDUCTOR, BEAD, TEM2134AD
LY501	23246398	COIL, CHIP INDUCTOR 10MMH K, COLTRF4100CV

#### SEMICONDUCTORS

Q131	23314204	TRANSISTOR, 2SC2412K,Q
Q151	23314994	TRANSISTOR, 2SA1576A106
Q152	23314993	TRANSISTOR, 2SC4081 Q
Q610	23009368	IC, TA2024(T)
Q612	23314163	TRANSISTOR, 2SA1162-Y
Q615	23114493	TRANSISTOR, RN2404
Q620	23314475	TRANSISTOR, 2SC2712-Y
Q630	23009042	IC, LA4526
Q671	70114396	TRANSISTOR, 2SC3326B
Q672	70114396	TRANSISTOR, 2SC3326B
Q675	70114396	TRANSISTOR, 2SC3326B
Q676	70114396	TRANSISTOR, 2SC3326B
Q677	23114493	TRANSISTOR, RN2404
Q678	23314475	TRANSISTOR, 2SC2712-Y
Q679	23314475	TRANSISTOR, 2SC2712-Y
Q680	23314475	TRANSISTOR, 2SC2712-Y
Q922	70129444	IC, PST994D
Q3301	23906164	IC, TA75S393F
Q3302	23205014	TRANSISTOR, 2SC4667-O
Q4701	23906335	IC, TA1270AF(J)
Q4702	23314289	TRANSISTOR, 2SA1586-Y
Q4703	23314289	TRANSISTOR, 2SA1586-Y
QB01	23314475	TRANSISTOR, 2SC2712-Y
QB44	23205112	TRANSISTOR, 2SA1980UF-Y(
QB45	23314993	TRANSISTOR, 2SC4081 Q
QB46	23205112	TRANSISTOR, 2SA1980UF-Y(
QB47	23314993	TRANSISTOR, 2SC4081 Q
QB51	23319808	IC, M5218AP
QB52	23314475	TRANSISTOR, 2SC2712-Y
QB53	23314994	TRANSISTOR, 2SA1576A106

Location No.	Parts No.	Description
QB54	23314994	TRANSISTOR, 2SA1576A106
QS03	23314993	TRANSISTOR, 2SC4081 Q
QS04	23314993	TRANSISTOR, 2SC4081 Q
QS05	23009613	IC, CMOS DUAL 4CH MULTI/DEMULTI, CD4052BNSR
QS06	23009613	IC, CMOS DUAL 4CH MULTI/DEMULTI, CD4052BNSR
QS07	70114396	TRANSISTOR, 2SC3326B
QS08	70114396	TRANSISTOR, 2SC3326B
QS09	23114493	TRANSISTOR, RN2404
QS10	23904896	IC, JLC1562BF
QS11	23114499	TRANSISTOR, RN1404
QS12	23114499	TRANSISTOR, RN1404
QS13	23114499	TRANSISTOR, RN1404
QS14	23114499	TRANSISTOR, RN1404
QS15	23314993	TRANSISTOR, 2SC4081 Q
QS16	23114493	TRANSISTOR, RN2404
QS17	70114396	TRANSISTOR, 2SC3326B
QS18	70114396	TRANSISTOR, 2SC3326B
QS102	23318820	IC, OPE AMP, BA10358F
QV01	23906887	IC, CXA2069Q
QV04	23314993	TRANSISTOR, 2SC4081 Q
QV06	23314994	TRANSISTOR, 2SA1576A106
QV09	23314994	TRANSISTOR, 2SA1576A106
QV12	23009418	IC, 2IN-1OUTSW DRIVER, MM1505XNRE
QV13	23314993	TRANSISTOR, 2SC4081 Q
QV70	23314993	TRANSISTOR, 2SC4081 Q
QV71	23314993	TRANSISTOR, 2SC4081 Q
QV72	23314994	TRANSISTOR, 2SA1576A106
QV73	23314994	TRANSISTOR, 2SA1576A106
QV201	23314475	TRANSISTOR, 2SC2712-Y
QV202	23314475	TRANSISTOR, 2SC2712-Y
QV246	23205045	TRANSISTOR, 2SA1037AKQ
QV247	23314475	TRANSISTOR, 2SC2712-Y
QV248	23205045	TRANSISTOR, 2SA1037AKQ
QV249	23314475	TRANSISTOR, 2SC2712-Y
QV254	23000360	IC, MM1519XQ
QY100	23906515	IC, TC90A45F
QY101	23314993	TRANSISTOR, 2SC4081 Q
QY102	23314993	TRANSISTOR, 2SC4081 Q
QY103	23314994	TRANSISTOR, 2SA1576A106
QY501	23000812	IC, TA1340F
QY502	23205014	TRANSISTOR, 2SC4667-O
QY503	23314994	TRANSISTOR, 2SA1576A106
QY504	23314994	TRANSISTOR, 2SA1576A106
QY507	23314993	TRANSISTOR, 2SC4081 Q
QY508	23314993	TRANSISTOR, 2SC4081 Q
QY509	23314993	TRANSISTOR, 2SC4081 Q
QY511	23314994	TRANSISTOR, 2SA1576A106
QY512	23314994	TRANSISTOR, 2SA1576A106
QY513	23314994	TRANSISTOR, 2SA1576A106
QY514	23314994	TRANSISTOR, 2SA1576A106
QY515	23314994	TRANSISTOR, 2SA1576A106
QY516	23314994	TRANSISTOR, 2SA1576A106
QY518	23314993	TRANSISTOR, 2SC4081 Q
QY520	23314993	TRANSISTOR, 2SC4081 Q
D608	23316591	DIODE, ZENER, MA8100-M
D611	23316231	DIODE, 1SS355
D612	23316231	DIODE, 1SS355
D613	23316231	DIODE, 1SS355
D614	23316231	DIODE, 1SS355
D615	23316231	DIODE, 1SS355
D616	23316231	DIODE, 1SS355
D617	23316231	DIODE, 1SS355
D620	23316231	DIODE, 1SS355

Location No.	Parts No.	Description
D621	23316231	DIODE, 1SS355
D622	23316231	DIODE, 1SS355
D623	23316231	DIODE, 1SS355
D624	23316231	DIODE, 1SS355
D625	23316231	DIODE, 1SS355
D626	23316231	DIODE, 1SS355
D627	23316231	DIODE, 1SS355
D628	23316231	DIODE, 1SS355
D629	23316231	DIODE, 1SS355
D640	23316231	DIODE, 1SS355
D641	23316231	DIODE, 1SS355
D642	23316231	DIODE, 1SS355
D643	23316231	DIODE, 1SS355
D646	23316231	DIODE, 1SS355
D656	23316604	DIODE, ZENER CHIP 14.60-15.35V, MA8100-M, TX
D657	23316573	DIODE, ZENER, MA8062-L
D672	23316231	DIODE, 1SS355
D673	23316231	DIODE, 1SS355
DB01	23358564	DIODE, LED, SLR-56VC3FPQ
DB01A	23528275	HOLDER, LED PWR 14LS10
DB03	23358522	DIODE, LED, SIR-56SB3F
DB03A	23528275	HOLDER, LED PWR 14LS10
DB51	23358573	PHOTO DIODE, PIN 940NM, HPI-2FER4
DB52	23118041	DIODE, MA111
DB54	23118041	DIODE, MA111
DB76	23118041	DIODE, MA111
DE99	23118096	DIODE, RK34
DS102	23316571	DIODE, ZENER CHIP VZ5.48-5.76V, MA8056-M
DV02	23316587	DIODE, ZENER, MA8091-L
DV03	23316587	DIODE, ZENER, MA8091-L
DV05	23316587	DIODE, ZENER, MA8091-L
DV07	23316577	DIODE, ZENER, MA8068-M
DV10	23316587	DIODE, ZENER, MA8091-L
DV11	23316587	DIODE, ZENER, MA8091-L
DV14	23316577	DIODE, ZENER, MA8068-M
DV19	23316587	DIODE, ZENER, MA8091-L
DV21	23316577	DIODE, ZENER, MA8068-M
DV241	23316587	DIODE, ZENER, MA8091-L
DV242	23316587	DIODE, ZENER, MA8091-L
DV243	23316587	DIODE, ZENER, MA8091-L
DV244	23316587	DIODE, ZENER, MA8091-L
DV249	23316587	DIODE, ZENER, MA8091-L
DV250	23316587	DIODE, ZENER, MA8091-L
DV251	23316577	DIODE, ZENER, MA8068-M
DV252	23316577	DIODE, ZENER, MA8068-M
DV256	23316587	DIODE, ZENER, MA8091-L
DV257	23316587	DIODE, ZENER, MA8091-L
DV258	23316587	DIODE, ZENER, MA8091-L
<b>MISCELLANEOUS</b>		
△ B001	23301536	LCD MODULE, LTA260W1-L01
GJ113	24000445	CHIP JUMPER, 1608TYPE
GJ128	24000445	CHIP JUMPER, 1608TYPE
GJ471	24000445	CHIP JUMPER, 1608TYPE
GJ472	24000445	CHIP JUMPER, 1608TYPE
GR01	24000445	CHIP JUMPER, 1608TYPE
GR02	24000445	CHIP JUMPER, 1608TYPE
GR03	24000445	CHIP JUMPER, 1608TYPE
GR04	24000445	CHIP JUMPER, 1608TYPE
GR24	24000445	CHIP JUMPER, 1608TYPE
GR25	24000445	CHIP JUMPER, 1608TYPE
GR26	24000445	CHIP JUMPER, 1608TYPE
GR91	24000445	CHIP JUMPER, 1608TYPE
GR96	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
GR105	24000445	CHIP JUMPER, 1608TYPE
GR602	24000445	CHIP JUMPER, 1608TYPE
GR605	24000445	CHIP JUMPER, 1608TYPE
GR621	24000445	CHIP JUMPER, 1608TYPE
GR622	24000445	CHIP JUMPER, 1608TYPE
GR623	24000445	CHIP JUMPER, 1608TYPE
GRS05	24000445	CHIP JUMPER, 1608TYPE
GRS06	24000445	CHIP JUMPER, 1608TYPE
GRV12	24000445	CHIP JUMPER, 1608TYPE
GRV13	24000445	CHIP JUMPER, 1608TYPE
GRV14	24000445	CHIP JUMPER, 1608TYPE
GRV15	24000445	CHIP JUMPER, 1608TYPE
GRV24	24000445	CHIP JUMPER, 1608TYPE
GRV25	24000445	CHIP JUMPER, 1608TYPE
GRV26	24000445	CHIP JUMPER, 1608TYPE
GRV27	24000445	CHIP JUMPER, 1608TYPE
GRV28	24000445	CHIP JUMPER, 1608TYPE
GRV29	24000445	CHIP JUMPER, 1608TYPE
GRV30	24000445	CHIP JUMPER, 1608TYPE
GRV31	24000445	CHIP JUMPER, 1608TYPE
GV12	23103828	INDUCTOR, BEAD, TEM2121M
GV13	23103828	INDUCTOR, BEAD, TEM2121M
H002	23148043	IF MODULE, US WOW MSP3441G VDS, MVUS52
△ H003	23124083	ANTENNA SWITCH, 2I3O DW US, RSU135
△ H003	23124087	ANTENNA SWITCH, RSU135X1, 2I3O BUNPAI US
H003A	23740989	NUT, F-CONNECTOR 2H BS
KB01	23000852	IC, REMOTE PHOTO RECEIVER, PIC-37043TE2
MZ01	23368844	CABLE, LVDS 31P 250MM, 23368844
N005	23969946	TAPE
P102A	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
P102B	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
P103A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P103B	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P104A	23367070	PLUG , NP 2.5MM G JST-EH, B10B-EH-F1A
P104B	23367070	PLUG , NP 2.5MM G JST-EH, B10B-EH-F1A
P105	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
P601	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P604A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P604B	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P610A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P610B	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P611A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P611B	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P612A	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
P613A	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P613B	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P661	23365500	CONNECTOR, EARPHON JACK

Location No.	Parts No.	Description
△ P801	23372252	POWER CORD, UL 7A 2.2M, VM0298-VM3073 2.2M
P809A	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P810A	23367072	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B12B-EH-F1A
P811A	23367070	PLUG , NP 2.5MM G JST-EH, B10B-EH-F1A
P817A	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
P823A	23368580	CONNECTOR, PLUG 6P, 2.5MM G JST-EH, B6B-EH-F1-TV4
PB22A	23368581	CONNECTOR, PLUG 7P, 2.5MM G JST-EH, B7B-EH-F1-TV4
PB22A	23368581	CONNECTOR, PLUG 7P, 2.5MM G JST-EH, B7B-EH-F1-TV4
PP02	23974994	BAND, KESSOKU
PP03	23845859	HOLDER, WIRE, PVC-C0AT, L=70MM
PR80	23365432	EARPHONE JACK
△ PV01	23023132	JACK, PIN 256P SMK, LAP5030-0111GC
△ PV02	23023087	JACK, PIN 7P SMK, LAP5030-0203G
△ PV03	23023024	JACK, PIN 5P SMK, LAP5030-0201G
△ PV05	23023133	JACK, PIN 5P SMK, LAP50300206GC
PV17	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
PV25A	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
PV25B	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
△ PV60	23365819	JACK, 1S3P
PX01	23903176	SOCKET, SOCKET 60P TKD 136901160W4
PX01A	23903176	SOCKET, SOCKET 60P TKD 136901160W4
PY02	23148075	SCAN CONVERTER MODUL, G.HYPER, MVPU43
SA01	23145430	SWITCH, PUSH, SKHHLMA010
SA02	23145430	SWITCH, PUSH, SKHHLMA010
SA03	23145430	SWITCH, PUSH, SKHHLMA010
SA04	23145430	SWITCH, PUSH, SKHHLMA010
SA05	23145430	SWITCH, PUSH, SKHHLMA010
SA06	23145430	SWITCH, PUSH, SKHHLMA010
SA07	23145430	SWITCH, PUSH, SKHHLMA010
△ UF01	23125908	FAN, DC 12V 60MM, D06R-12SL
W661	23351219	SPEAKER, SPK1441AO, 50X90 16-OHM 5W
W662	23351223	SPEAKER, SPK1443AO, WF 50X90 16-OHM 5W
X4701	23153721	CERAMIC RESONATOR, 503KHZ
XH01	23072526	SCALER BLOCK, 94TBG, DSB-SUF010L-
XH02	23148090	MODULE, 03DVI MODULE, DVI PD0647C
XY501	23153961	CRYSTAL, 3.58MHZ
XY502	23153721	CERAMIC RESONATOR, 503KHZ
△ ZA01	23103778	FERRITE CORE, TFE1008
△ ZA03	23103840	FERRITE CORE, TFE1013
<b>PC BOARD ASSEMBLIES</b>		
* U001A	75000535	TN/IMA BOARD, PD1362A1
* U001B	75000536	SIGNAL BOARD, PD1362A2
* U002A	75000537	AV TERMINAL BOARD, PD1363A1
* U002B	75000538	AUDIO BOARD, PD1363A2
* U002C	75000539	IR/LED BOARD, PD1363A3
* U003A	75000540	FRONT BOARD, PD1364A1
* U003B	75000541	KEY SW BOARD, PD1364A2
* U003C	75000542	PC-IN BOARD, PD1364A3
* U003D	75000543	POWER SW BOARD, PD1364A4
* U003E	75000544	CON G-HYPER BOARD, PD1364A5
* U800	23122440	POWER BOARD, SWITCHING, MPF3602-1
* U801	23122441	POWER BOARD, DCDC, MPF3602-2

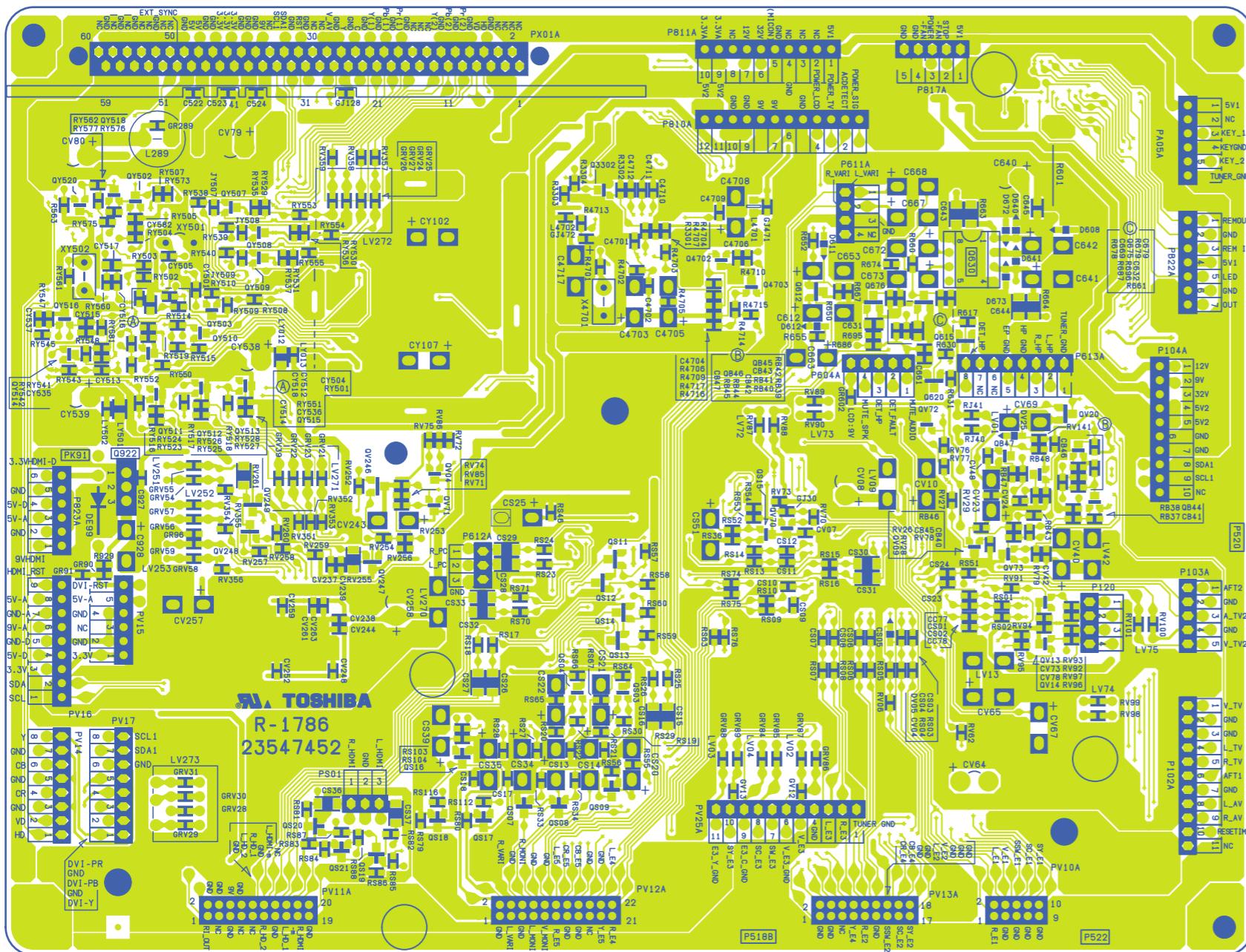
Location No.	Parts No.	Description
<b>TUNER</b>		
△ H001	23321460	TUNER, US181CH IIC FONO 5V, ELA52LX2
△ HY01	23321445	TUNER, TIF US IIC PH 181CH MONO, EL973L
<b>ACCESSORIES</b>		
K902	23306504	REMOCON HAND UNIT IR, CTVUSA, CT-90164
K903	23306465	REMOCON HAND UNIT, IR BLAST VTR CONT
Y101	23566134	OWNER'S MANUAL, ENG/FRE/SPA, 26HL83
Y109	23945015	BAG, POLYETHYLENE COVER 250X400
Y170	23845800	WIRE HOLDER, NYLON66 D6.8
<b>CABINET PARTS</b>		
△ A101	23450723	FRONT PANEL
A101I	70391685	SCREW, PBI3X12SBZ
A102	70391356	SCREW, BITTB3X10 SZN
A106	23035412	SCREW, BTB4X12 SZN
A107	23929028	PIECE, CONTROL BOX KEY REAR
A108	23929067	PIECE, CONT BOX KEY FRONT ASSY
A109	23929044	PIECE, CONT BOX KEY COVER ASSY
A110	23929031	PIECE, CONTROL BOX AV REAR
A111	23929068	PIECE, CONT BOX AV FRONT ASSY
A112	23929046	PIECE, CONT BOX AV COVER ASSY
A113	23035412	SCREW, BTB4X12 SZN
A114	70391356	SCREW, BITTB3X10 SZN
△ A201	23532168	BACK COVER
A207	23950113	LABEL, SERIAL NUMBER, TTX3
A301	23035412	SCREW, BTB4X12 SZN
A321	70391439	SCREW, BITTB3X8SBZ
A331	23035004	SCREW, PBI4X12 SBN
A334	72471025	SCREW, PB3X12BNI
A340	23845800	WIRE HOLDER, NYLON66 D6.8
A341	23774412	SCREW , PB4X12 SBN
A342	72471064	SCREW, BIDT2 3x10BZ
A401	23946590	PACKING, SET
A406	23067405	CARTON BOX
A407	23945190	BAG, SET

Location No.	Parts No.	Description

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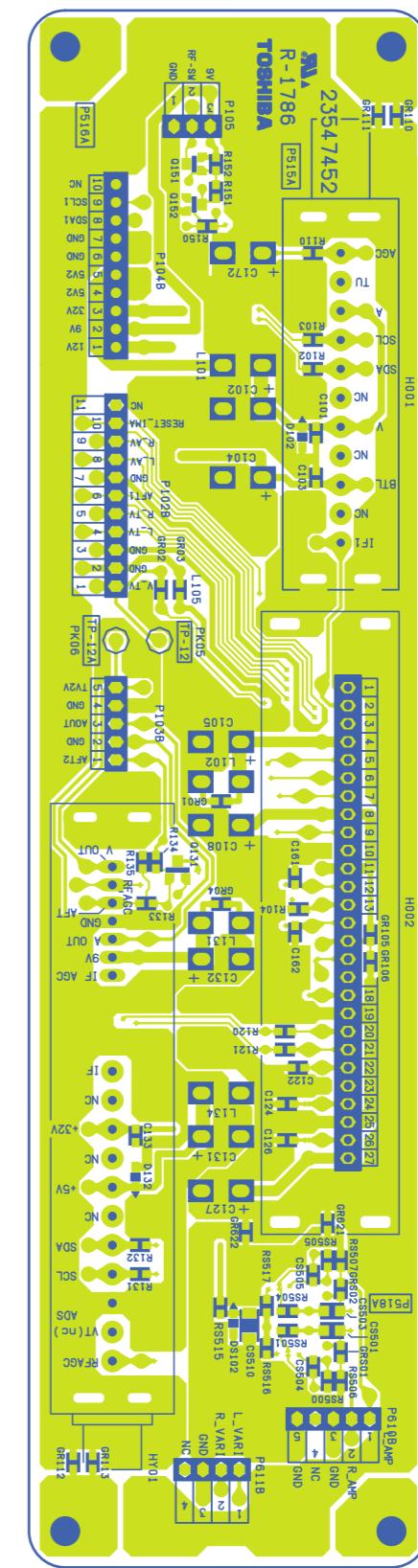
SIGNAL BOARD PD1362A-2

**BOTTOM (FOIL) SIDE**



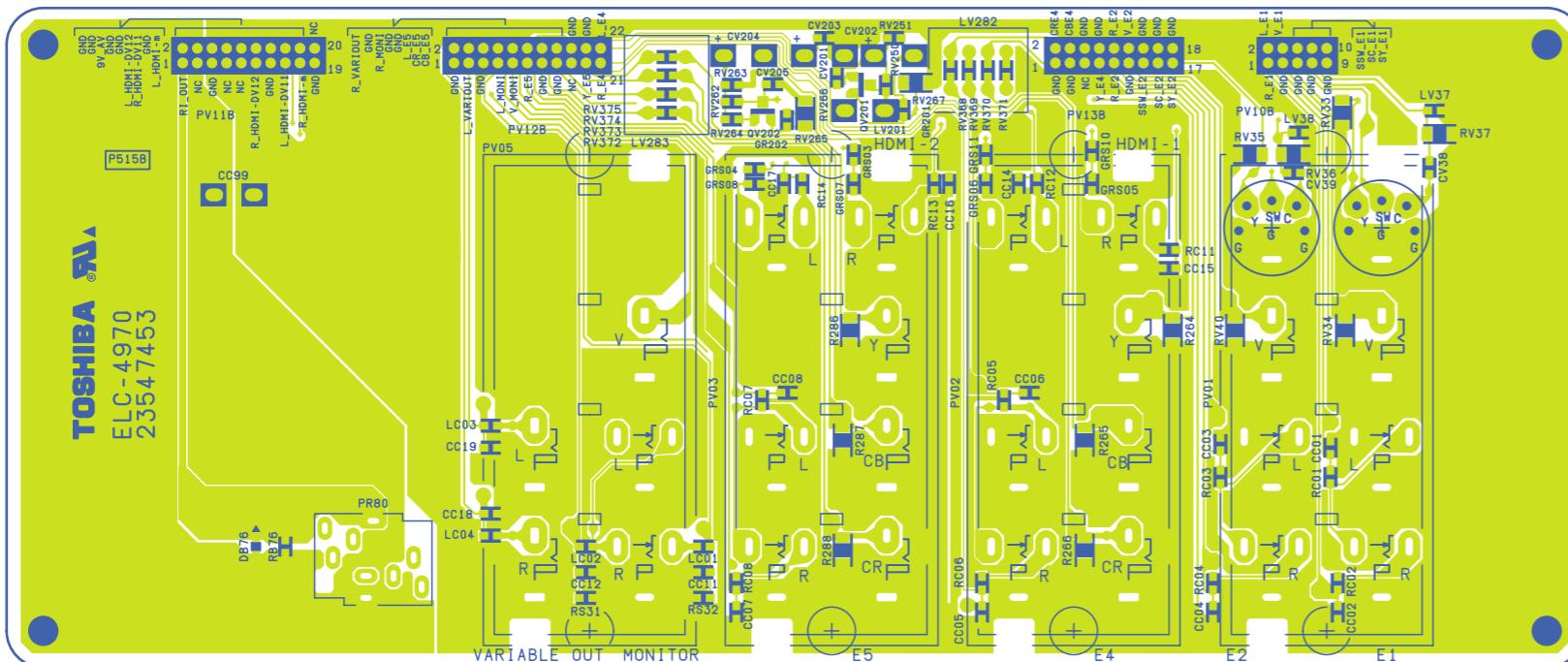
TN/IMA BOARD PD1362A-1

BOTTOM (FOIL) SIDE



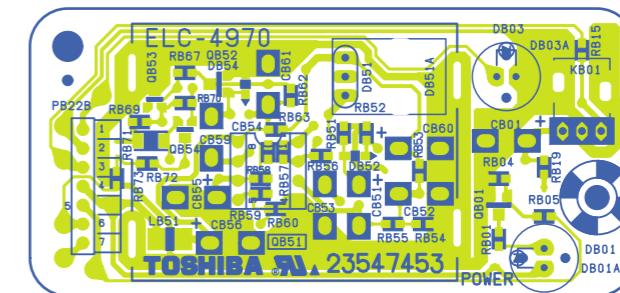
### AV TERMINAL BOARD PD1363A-1

BOTTOM (FOIL) SIDE



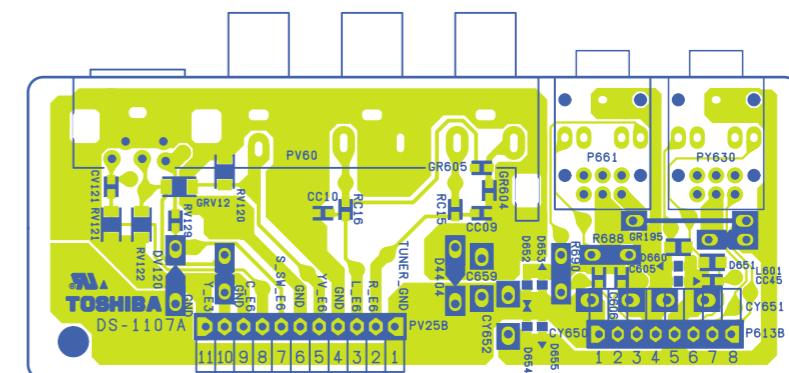
### IR/LED BOARD PD1363A-3

BOTTOM (FOIL) SIDE



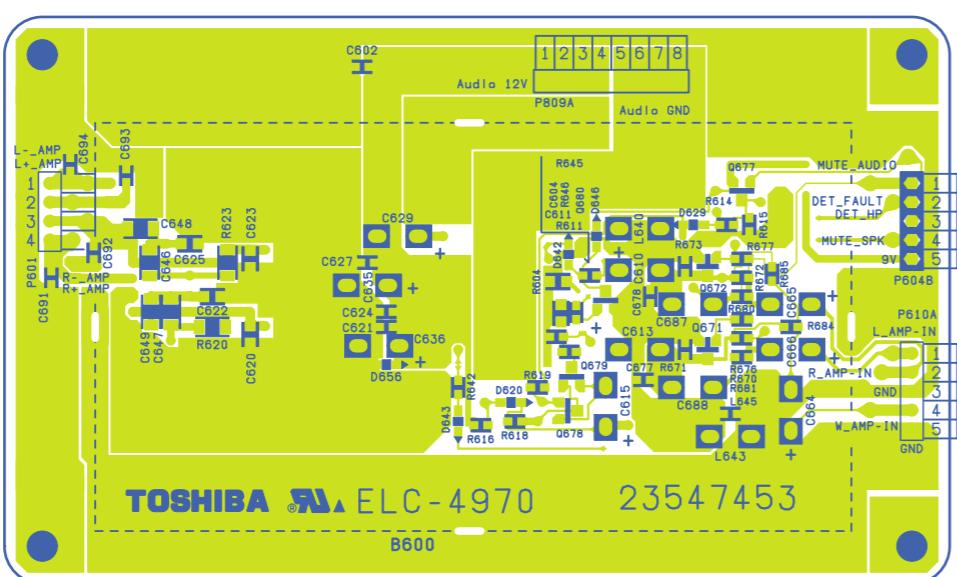
### FRONT BOARD PD1364A-1

BOTTOM (FOIL) SIDE



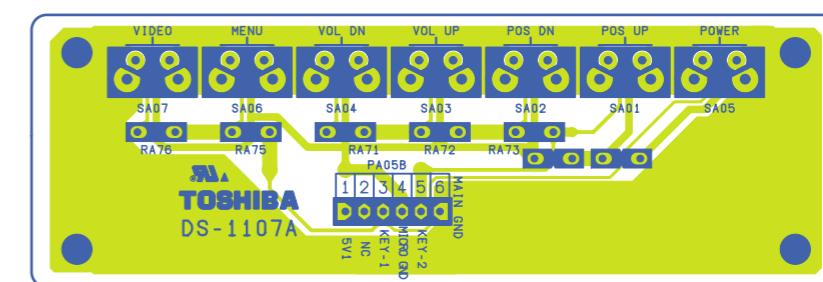
### AUDIO BOARD PD1363A-2

BOTTOM (FOIL) SIDE

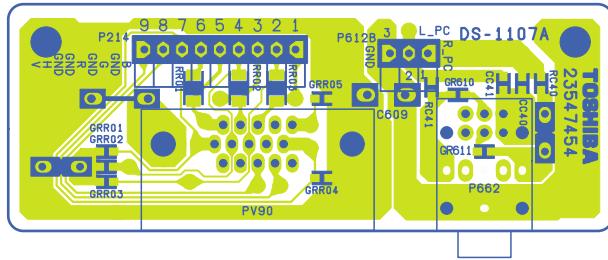


### KEY SW BOARD PD1364A-2

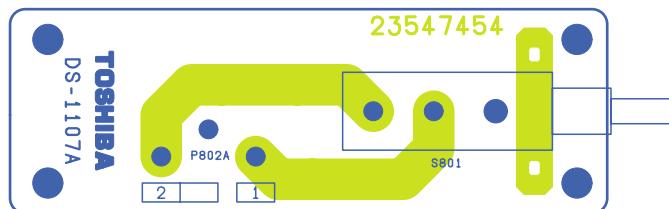
BOTTOM (FOIL) SIDE



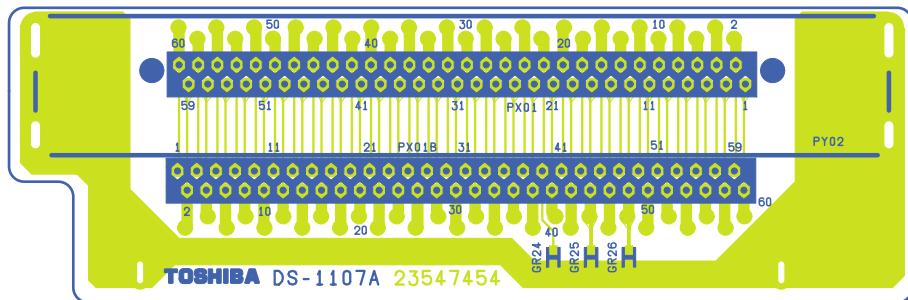
**PC-IN BOARD PD1364A-3**  
BOTTOM (FOIL) SIDE



**POWER SW BOARD PD1364A-4**  
BOTTOM (FOIL) SIDE



**CON G-HYPER BOARD PD1364A-5**  
BOTTOM (FOIL) SIDE



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# SCHEMATIC DIAGRAM

## MODEL : 26HL83

**WARNING:** BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

**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.

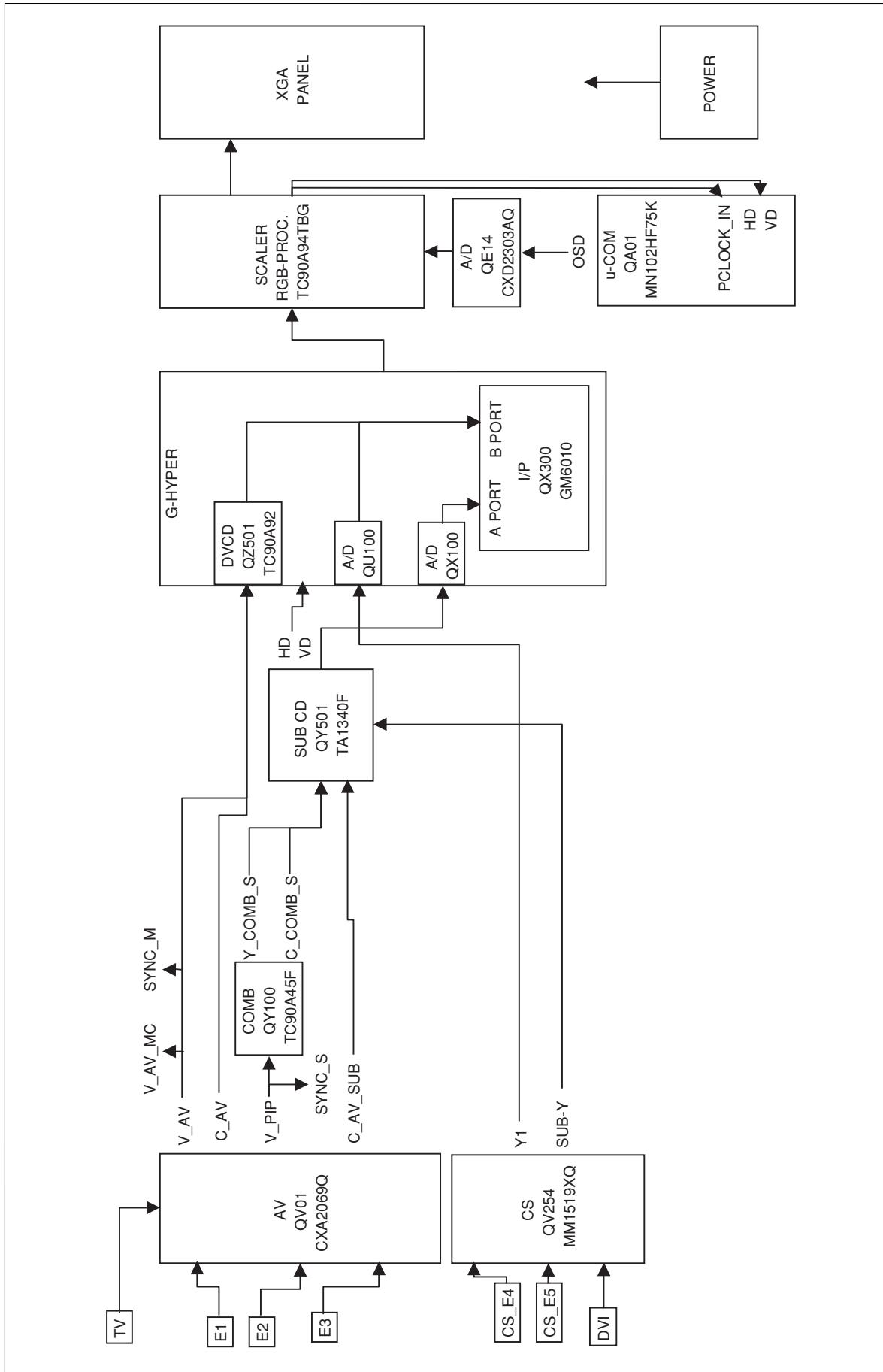
### NOTE:

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  $\mu F$ , 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 120 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:

SIGNAL	( 1/8 )	[ SHEET - 1 ] .....	1/21
	AV-1	[ SHEET - 2 ] .....	2/21
	vs.AV	[ SHEET - 4 ] .....	3/21
	AV-2	[ SHEET - 6 ] .....	4/21
	AV-3	[ SHEET - 7 ] .....	5/21
	VARI-OUTPUT / HDMI-Mute	[ SHEET - 8 ] .....	6/21
	SYNC OUT	[ SHEET - 9 ] .....	7/21
	HP-AMP&MUTE	[ SHEET - 10 ] .....	8/21
BACK AV	BACK-AV1	[ SHEET - 1 ] .....	9/21
	BACK-AV3	[ SHEET - 2 ] .....	10/21
2TN-IMA	2TN-IMA	[ SHEET - 1 ] .....	11/21
	AUDIO GAIN COMPENSATION	[ SHEET - 2 ] .....	12/21
FRONT AV			13/21
KEY			14/21
PC INPUT			15/21
POWER SW			16/21
G-HYPER			17/21
A-OUT	( 1/2 )	[ SHEET - 1/2 ] .....	18/21
	( 2/2 )	[ SHEET - 2/2 ] .....	19/21
IR-PASSTHROUGH			20/21
WIRING CONNECTION DIAGRAM			21/21

## CIRCUIT BLOCK DIAGRAM



## SPECIFICATIONS

Television System NTSC standard	TheaterLink OUTPUT: 3 V(p-p), 10k ohm
Channel Coverage VHF: 2 through 13 UHF: 14 through 69 Cable TV: Mid band (A-8 through A-1, A through I) Super band (J through W) Hyper band (AA through ZZ, AAA, BBB) Ultra band (65 through 94, 100 through 125)	Dimensions Width : 32-9/32 inches (820 mm) Height : 18-37/64 inches (472 mm) Depth : 5-25/64 inches (137 mm)
Power Source 110-240 V AC, 50/60 Hz	Mass (weight) 47.8 lbs (21.7 kg)
Power Consumption 150 W (average)	Operating condition Temperature: 32°F – 95°F (0°C – 35°C) Humidity: 20 – 80% (No moisture condensation)
Audio Power 10 W + 10 W	*E-EDID = Enhanced-Extended Display Identification
Speaker Type Four 2 x 3-1/2 inches (50 x 90 mm)	
Video/Audio Terminals	
S-VIDEO INPUT Y : 1 V(p-p), 75 ohm, negative sync. C : 0.286 V(p-p) (burst signal), 75 ohm	
VIDEO/AUDIO INPUT VIDEO: 1 V(p-p), 75 ohm, negative sync. AUDIO: 150 mV(rms) (30% modulation equivalent, 47k ohm)	
ColorStream® (component video) INPUT Y : 1V(p-p), 75 ohm Pr: 0.7 V(p-p), 75 ohm Pb: 0.7 V(p-p), 75 ohm AUDIO: 150 mV(rms), 47k ohm	
VIDEO/AUDIO OUTPUT VIDEO: 1 V(p-p), 75 ohm, negative sync. AUDIO: 150 mV(rms) (30% modulation equivalent, 4.7k ohm)	
VARIABLE AUDIO OUTPUT 0–300 mV(rms) (30% modulation equivalent, 4.7k ohm)	
DVI/HDCP INPUT HDCP compliant E-EDID* 1.3 compliant DVI-D uncompressed, high-speed, digital single-link connection Suggested input scan rates: 1080i, 720p, 480p, 480i	
Headphones jack 3.5 mm stereo	

- \* Please refer to owner's manual in detail.
- Design and specifications are subject to change without notice.

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