

**TOSHIBA**

FILE NO. 010-200317

SERVICE MANUAL

# Color Television

F2DS Chassis

***29SH9UH***  
***34SH9UH***

# TABLE OF CONTENTS

## CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS .....	3
SET-UP ADJUSTMENT .....	4
SERVICE MODE .....	6
DESIGN MODE .....	9
ELECTRICAL ADJUSTMENTS .....	10
CIRCUIT CHECK.....	12

## CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA .....	13
LOCATION OF CONTROLS .....	14
PROGRAMMING CHANNEL MEMORY .....	16
CHASSIS AND CABINET REPLACEMENT PARTS LIST .....	18
PC BOARDS BOTTOM VIEW .....	33
TERMINAL VIEW OF TRANSISTORS .....	45
CIRCUIT BLOCK DIAGRAM .....	47
SPECIFICATIONS .....	END

### APPENDIX:

CIRCUIT DIAGRAM

## CHAPTER 1 GENERAL ADJUSTMENTS

### SAFETY INSTRUCTIONS

**WARNING:** BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” INSTRUCTIONS BELOW.

#### X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a (C) V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

Refer to table-1 for high voltage (A), (B) & AC voltage (C).  
(See SETTING & ADJUSTING DATA on page 13)

Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.

#### 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. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective 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, X-ray radiation or other hazards.

**WARNING:** BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF SERVICE MANUAL.

## SET-UP ADJUSTMENT (FOR FLAT TUBE)

■ The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows :

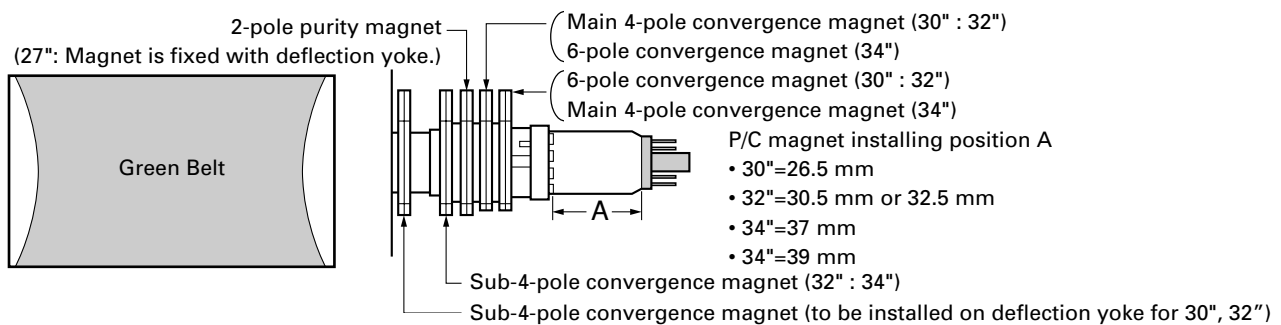
1. Color Purity
2. Convergence
3. White Balance

**Note:** The PURITY/CONVERGENCE MAGNET assembly and rubber wedges need mechanical positioning. Refer to figure 1.

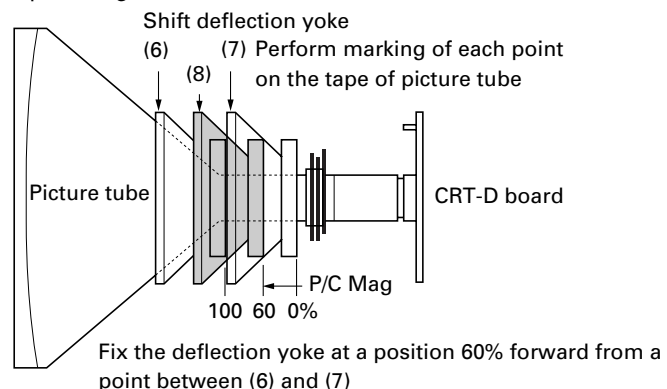
### COLOR PURITY ADJUSTMENT

- (1) Let the screen face in the installing direction or toward the east (when it is to be moved), bring up the service mode screen after demagnetizing (front, left, right, and top) with the degaussing coil, receive white signals by pressing the [TV/VIDEO] button, and then the receiver should be operated for more than 40 minutes.
- (2) Perform rough adjustment of the central convergence with the P/C magnet according to the adjustment item.
- (3) Receive built-in green signals, loosen set screws on the deflection yoke, remove rubber wedges, and shift the deflection yoke toward front.
- (4) Move alternately the two 2-pole magnets of the P/C magnets so that the green raster can come to the center of the screen.

Figure 1.



- (5) Receive built-in red and blue signals, check that there is no inclination of the single color raster toward one side, and if each color tilts to a great extent, make adjustment with the 2-pole magnet so that the 3 colors will come to the center evenly.
- (6) Receive the green raster, shift the deflection yoke from a foremost position (hitting against the picture tube) to a backward position horizontally, stop the deflection yoke at a position where it begins to become a green raster, and perform accurate marking on the picture tube.
- (7) Shift the deflection yoke further backward, and perform accurate marking at a position where the green raster begins to being luck.
- (8) Fix the deflection yoke at a position 60% forward within the range marked in items (6) and (7) above.



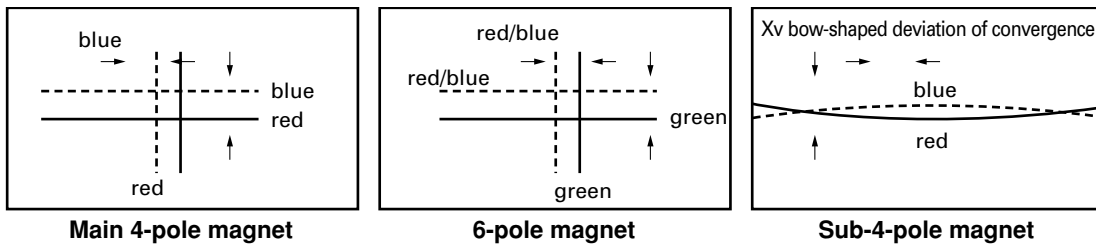
### CONVERGENCE ADJUSTMENTS

\* Adjust the convergence magnet to get vest convergence in the the order to (1) ~ (5).

#### ■ CENTER CONVERGENCE:

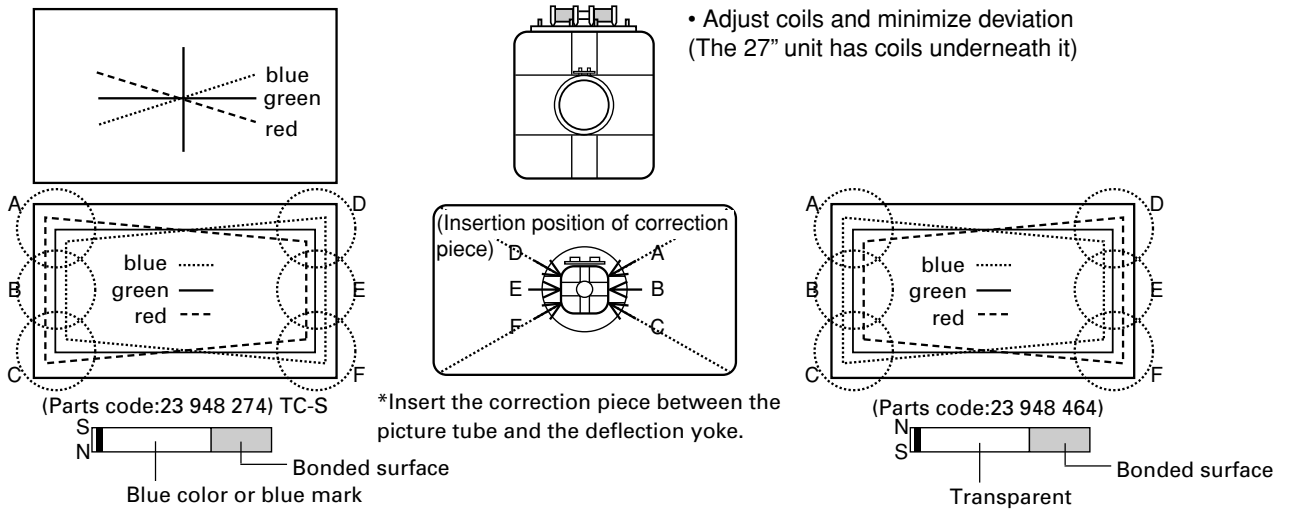
- (1) Receive the white crosshatch or dot pattern from the service signal generator.
- (2) Use the 2 pieces of main 4-pole magnets of P/C magnets, change the open angle, and align the red and blue vertical lines on the screen center.
- (3) Freeze the open angle of the main 4-pole magnets, turn them simultaneously, and align the horizontal lines.
- (4) Take the same steps for items (2) and (3) above and align red/blue with green on the screen center using two 6-pole magnets.

(5) Adjust the sub-4-pole magnets only in case there is any deviation of Xv bow-shaped convergence. (To be usually set at the initial position)  
Align both sides with the sub-4-pole magnets and minimize the deviation of blue and red with the main 4-pole magnets.

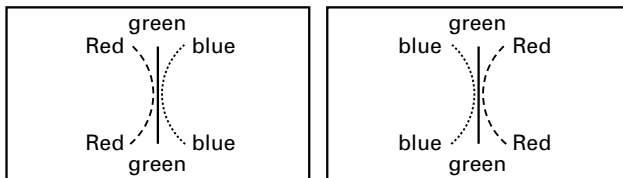


**■ CIRCUMFERENCE CONVERGENCE:**

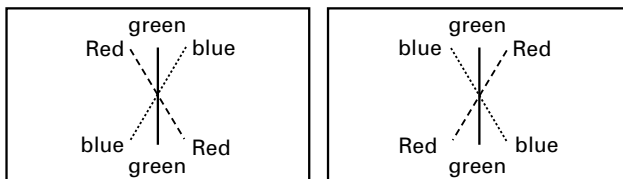
\* Perform correction in the following manner.



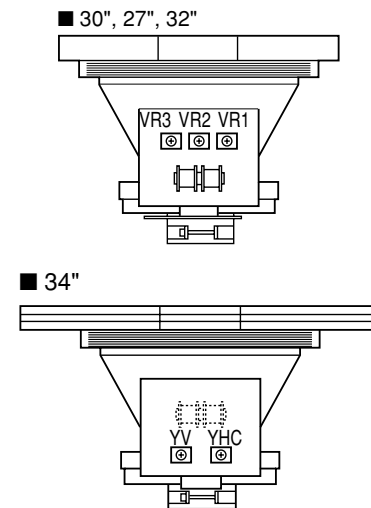
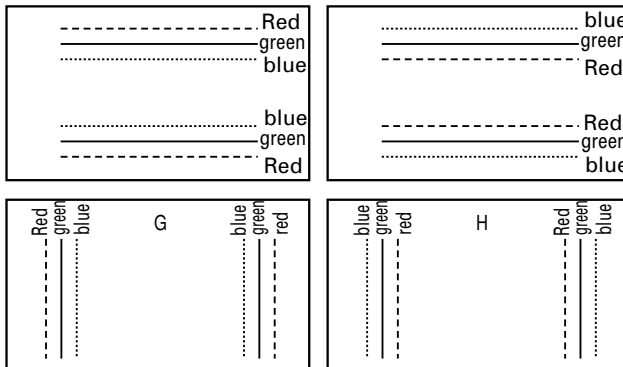
**Adjust VR 1 and minimize the deviation of YH. \*Only 27", 30" and 32".**



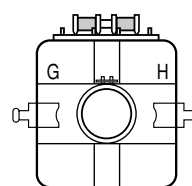
**Adjust VR 2 (YHC) and minimize the deviation of YH.**



**Adjust VR 3 (YV) and minimize the deviation of YV.**



- 27" (Part No. 23 947 371)
- 32", 30" (Part No. 23 947 121)
- 34" (Part No. 23 993 080)






Perform correction by inserting the correction piece into the clearance of terminal board coils of the deflection yoke.

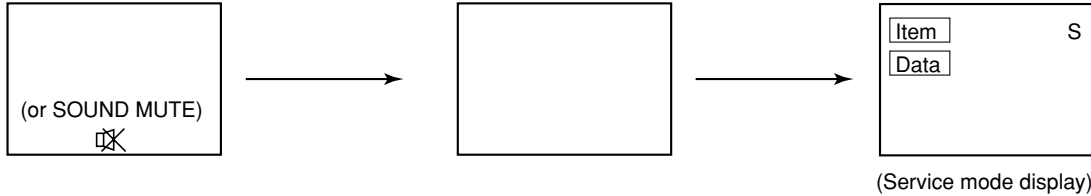
**Note:**

Perform insertion by turning the metal side to the terminal board side of the deflection yoke.

## SERVICE MODE

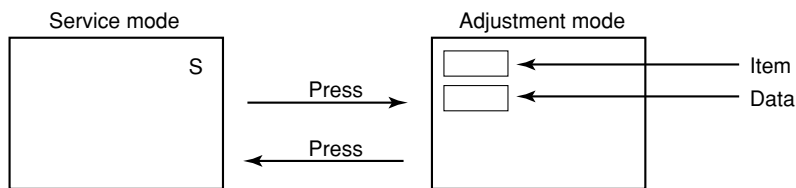
### 1. ENTERING TO SERVICE MODE

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










### 2. DISPLAYING THE ADJUSTMENT MENU

- 1) Press MENU button on TV.



### 3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

A single horizontal line ON/OFF :	- / - - button (on Remote) or  button (on TV)
Test signal selection :	 button (on Remote)
Selection of the adjustment items :	Channel  /  (on TV or Remote)
Change of the data value :	Volume  +/- (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	CALL + Channel button on TV (  )
Reset the count of operating protect circuit to "00":	CALL + Channel button on TV (  )
"RCUT" selection :	1 button
"GCUT" selection :	2 button
"BCUT" selection :	3 button
"CNTX" (or "SCNT") selection :	4 button
"COLC" selection :	5 button - - - - Color thickness correction
"TNTC" selection :	6 button
Test audio signal ON/OFF (1kHz) :	8 button
Self diagnostic display ON/OFF :	9 button

note: Displayed differently as shown below, depending on the setting of the receiving color system.  
 COLP (PAL)  
 COLC (NTSC)  
 COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

#### 4. 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-2 for preset data of adjustment mode.  
(See SETTING & ADJUSTING DATA on page 13)

#### 5. ADJUSTING THE DATA

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

#### 6. EXIT FROM SERVICE MODE

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

#### ■ INITIALIZATION OF MEMORY DATA OF QA02

After replacing QA02, the following initialization is required.


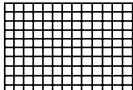
1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been completed.
3. Check the picture carefully. If necessary, adjust any adjustment item above.  
Perform "Auto search Memory" on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

#### 7. TEST SIGNAL SELECTION

- 1) Every pressing of -⊖ button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

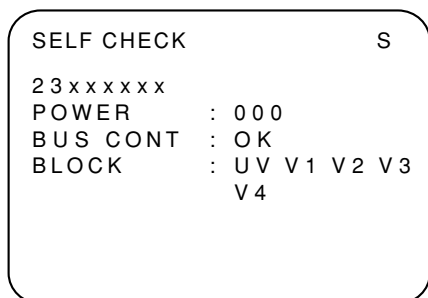
Signal off ———→ NTSC signals (5 patterns)  
 ↑ ——— PAL signals (5 patterns) ←——

Signals	Picture
<ul style="list-style-type: none"> <li>• Red raster</li> <li>• Green raster</li> <li>• Blue raster</li> <li>• All White</li> </ul>	
<ul style="list-style-type: none"> <li>• Black cross-hatch</li> </ul>	

\* The signals marked with ■ are not usable to display in the Test signal for some model.

## 8. 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 are executed properly.
- 2) During diagnosis, the following displays are shown.



Indicated color of mode now selected : Green and Red  
Indicated color of other modes : White

Green : Normal

Red : The microprocessor operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.

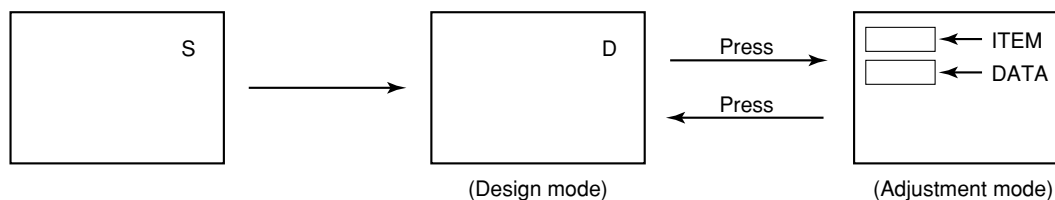
- ① Part number of microprocessor (QA01)
- ② Operation number of protecting circuit ----"00" is normal.  
When indication is other than "00", overcurrent apt to flow, and circuit parts may possibly be damaged.
- ③ BUS CONT ----"OK" is normal.  
When indication shows "Q○○○ NG", the device with the number may possibly be damaged.
- ④ BLOCK  
UV : TV reception mode  
V1 : VIDEO 1 input mode (←1)  
V2 : VIDEO 2 input mode (←2)  
V3 : VIDEO 3 input mode (←3)  
V4 : VIDEO 4 input mode (←4)



# DESIGN MODE

## 1. ENTERING TO DESIGN MODE

- 1) Select the Service mode.
- 2) While pressing  $\text{✕}$  (or CALL) button on Remote and press MENU button on TV.
- 3) Press MENU button on TV.



When QA02 is initialized, items "OPT0", "OPT1", "OPT2" and "OPT3" of DESIGN MODE are set to the data of the representative model of this chassis family.

Therefore, because ON-SCREEN specification remains in the state of the representative of model. This model is required to reset the data of items "OPT0", "OPT1", "OPT2" and "OPT3".

## 2. SELECTING THE ADJUSTING ITEMS

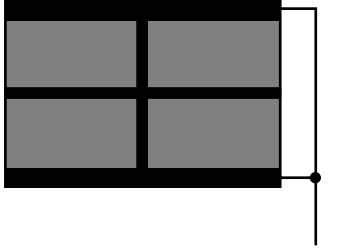
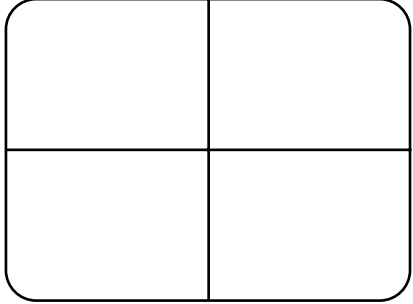
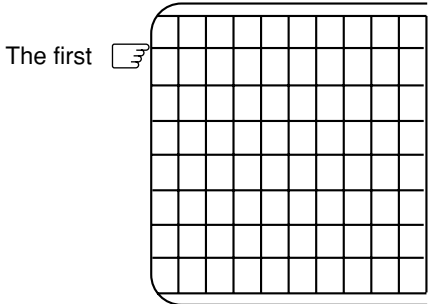
Every pressing of CHANNEL  $\blacktriangledown$  button in the design mode changes the adjustment items in the order of table-3. ( $\blacktriangle$  button for reverse order)

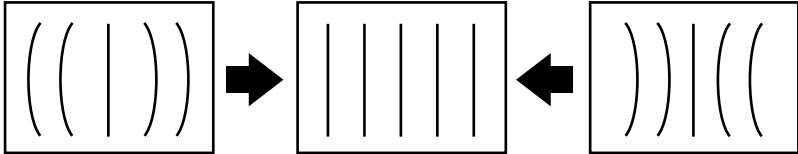
Refer to table-3 for data of design mode.  
(See SETTING & ADJUSTING DATA on page 13)

## 3. ADJUSTING THE DATA

Pressing of VOLUME  $\blacktriangle$  or  $\blacktriangledown$  button will change the value of data.

## ELECTRICAL ADJUSTMENTS

ITEM	ADJUSTMENT PROCEDURE
<p>FOCUS VR ADJ</p>	<ol style="list-style-type: none"> <li>1. Enter the service mode, then select any register item.</li> <li>2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern appears on the screen.</li> <li>3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen.</li> </ol>
<p>SUB-BRIGHTNESS (BRTC)</p> <p>Note: Constrict the picture height until the vertical retrace line appears adjusting the item HIT (HEIGHT).</p>	<ol style="list-style-type: none"> <li>1. Set CONTRAST to minimum, and BRIGHTNESS to center by adjusting user controls.</li> <li>2. Set the TV in service mode to get Black cross-bar of inside pattern.</li> <li>3. Select BRTC (brightness correction), and adjust the <math>\triangleleft</math> - /+ button to reduce the value so that white portion of inside pattern slightly light.</li> <li>4. Adjust <math>\triangleleft</math> - /+ button to increase the data value of BRTC, and set it just before the difference between the belt of vertical retrace and the border of black portion of inside pattern is visible. After that, return vertical height and contrast.</li> </ol> <div style="text-align: right;">  <p>Belt of vertical retrace</p> </div>
<p>HORIZONTAL POSITION ADJUSTMENT (HPOS)</p> <p>VERTICAL POSITION ADJUSTMENT (VPOS)</p>	<ol style="list-style-type: none"> <li>1. Set the TV in service mode, and get black cross-bar signal with VIDEO button on remote hand unit.</li> <li>2. Select either HPOS (Horizontal picture phase) or VPOS (Vertical picture phase) with CHANNEL <math>\blacktriangle</math>, <math>\blacktriangledown</math> buttons, and adjust horizontal or vertical picture position in the center of screen with VOLUME <math>\triangleleft</math> - /+ buttons.</li> </ol> <div style="text-align: right;">  </div>
<p>VERTICAL AMPLITUDE ADJUSTMENT (HIT)</p>	<ol style="list-style-type: none"> <li>1. Set the TV in service mode, and get black cross-hatch signal with VIDEO button on remote hand unit.</li> <li>2. Select HIT (Vertical amplitude) with CHANNEL <math>\blacktriangle</math>, <math>\blacktriangledown</math> buttons, and adjust vertical amplitude with VOLUME <math>\triangleleft</math> - /+ buttons so that vertical amplitude lacks a little.</li> <li>3. Adjust vertical amplitude with VOLUME <math>\triangleleft</math> - /+ buttons so that the first bar on cross-hatch signal touches edge of screen.</li> </ol> <div style="text-align: right;">  <p>The first</p> </div>

ITEM	ADJUSTMENT PROCEDURE
<p>WIDTH (WID)</p>	<ol style="list-style-type: none"> <li>1. Call up the adjustment mode display, then select the item <b>WID</b>.</li> <li>2. Press the <math>\triangleleft</math> - /+ button to get the picture so the left and right edges of raster begins to lack.</li> <li>3. Press the <math>\triangleleft</math> - /+ button to advance the data by 7 steps.</li> </ol> <p>Note : Check the horizontal picture position is correct.</p>
<p>E-W PARABOLA (PARA)</p>	<ol style="list-style-type: none"> <li>1. Call up the adjustment mode display, then select the item <b>PARA</b>.</li> <li>2. Press the <math>\ominus</math> button on Remote until the cross-hatch pattern appears on the screen.</li> <li>3. Press the <math>\triangleleft</math> - /+ button to make vertical lines straight as shown below.</li> </ol> <div style="text-align: center; margin: 20px 0;">  </div>
<p>WHITE BALANCE ADJUSTMENT</p> <ul style="list-style-type: none"> <li>● CUTOFF ADJUSTMENT (RCUT) (GCUT) (BCUT)</li> <li>● DRIVE ADJUSTMENT (GDRV) (BDRV)</li> </ul>	<ol style="list-style-type: none"> <li>1. Set Contrast to 40, and brightness to +20 by picture control.</li> <li>2. Receive the Black and White pattern.</li> <li>3. Select RCUT, GCUT and BCUT with CHANNEL <math>\blacktriangle</math>, <math>\blacktriangledown</math> buttons, to set individual values to Initial reference data, and to set GDRV and BDRV to Initial reference data with VOLUME <math>\triangleleft</math> - /+ buttons.</li> <li>4. Press <math>\overline{-/-}</math> button on the remote control and rotate Screen VR to get one slight horizontal line on screen. Note: Every pressing of <math>\overline{-/-}</math> button provides Horizontal line picture and Normal picture alternately.</li> <li>5. Press <math>\overline{-/-}</math> button to release horizontal line picture, and select the two other colors which did not light in the above step with CHANNEL <math>\blacktriangle</math>, <math>\blacktriangledown</math> buttons. Then tap VOLUME <math>\triangleleft</math> - /+ buttons so that three colors slightly light in the same level.</li> </ol> <ul style="list-style-type: none"> <li>※ To correct white balance in light area, select GDRV and BDRV with CHANNEL <math>\blacktriangle</math>, <math>\blacktriangledown</math> buttons to adjust.</li> <li>※ To correct white balance in dark area, perform fine adjustment of RCUT, GCUT and BCUT.</li> </ul> <div style="text-align: right; margin-top: 20px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; width: fit-content;"> <p style="text-align: center;">Light area check (to show white)</p> </div> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; width: fit-content; margin-top: 20px;"> <p style="text-align: center;">Dark area check (to show black)</p> </div> </div>

## CIRCUIT CHECK

### HIGH VOLTAGE CHECK

**CAUTION:** There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage must be measured below (B) kV.

Refer to table-1 for high voltage (B).  
(See SETTING & ADJUSTING DATA on page 13)

4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

## CHAPTER 2 SPECIFIC INFORMATIONS

### SETTING & ADJUSTING DATA

#### 【 SAFETY INSTRUCTIONS 】

		29"	34"
HIGH VOLTAGE AT ZERO BEAM:	(A)	32.8 kV	33.2 kV
MAX HIGH VOLTAGE:	(B)	33.0 kV	35.0 kV
AC VOLTAGE	(C)	110~240 V	110~240 V

Table-1

#### 【 SERVICE MODE 】

##### ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

Item	Name of adjustment	Preset	29"	34"	Item	Name of adjustment	Preset	29"	34"
RCUT	R CUTOFF (B/W)	40H	←	←	IDH	IGR THRESHOLD LEVEL	A0H	←	←
GCUT	G CUTOFF (B/W)	40H	←	←	EVOL	Volume out data on Woofer operation	03H	←	←
BCUT	B CUTOFF (B/W)	40H	←	←	HPOS	H-POSITION DFS/100	32H	34H	32H
GDRV	G DRIVE	35H	←	←	VPOS	V-POSITION DFS/100	80H	88H	80H
BDRV	B DRIVE	35H	←	←	HIT	PICTURE HEIGHT DFS/100	40H	48H	40H
CNTX	CONTRAST MAX	7FH	←	←	VLIN	V-LINEARITY DFS/100	12H	0AH	12H
BRTC	SUB BRIGHTNESS CEN	80H	←	←	VSC	V-S CORRECTION DFS/100	33H	←	←
COLC	COLOR CEN NTSC	1AH	←	←	VPS	V-BALANCE DFS/100	40H	←	←
TNTC	SUB TINT CEN	1FH	1CH	1CH	VCP	V-COMPENSATION DFS/100	02H	←	←
COLP	COLOR CEN PAL	FBH	←	←	WID	H-WIDTH DFS/100	59H	55H	59H
COLS	COLOR CEN SECAM	1AH	←	←	PARA	E-W PARABOLA DFS/100	1CH	17H	1CH
SCNT	SUB CONTRAST FOR TV	19H	←	←	CNR	E-W CORNER DFS/100	19H	17H	19H
VOLS	VOL SCART	75H	←	←	TRAP	TRAPEZIUM DFS/100	44H	46H	44H
FVOL	FM VOL PRE SCALE	15H	←	←	HCP	H-COMPENSATION DFS/100	03H	←	←
NVOL	NICAM VOL PRE SCALE	3CH	←	←	VFC	V-f CORRECTION DFS/100	08H	←	←
NICL	NICAM THRESHOLD LEVEL	03H	←	←	SRV	SECAM R-Y BLACK LEVEL	07H	←	←
NICH	NICAM THRESHOLD LEVEL	0AH	←	←	SBY	SECAM-B-Y BLACK LEVEL	04H	←	←
IDL	IGR THRESHOLD LEVEL	90H	←	←					

Table-2

#### 【 DESIGN MODE 】

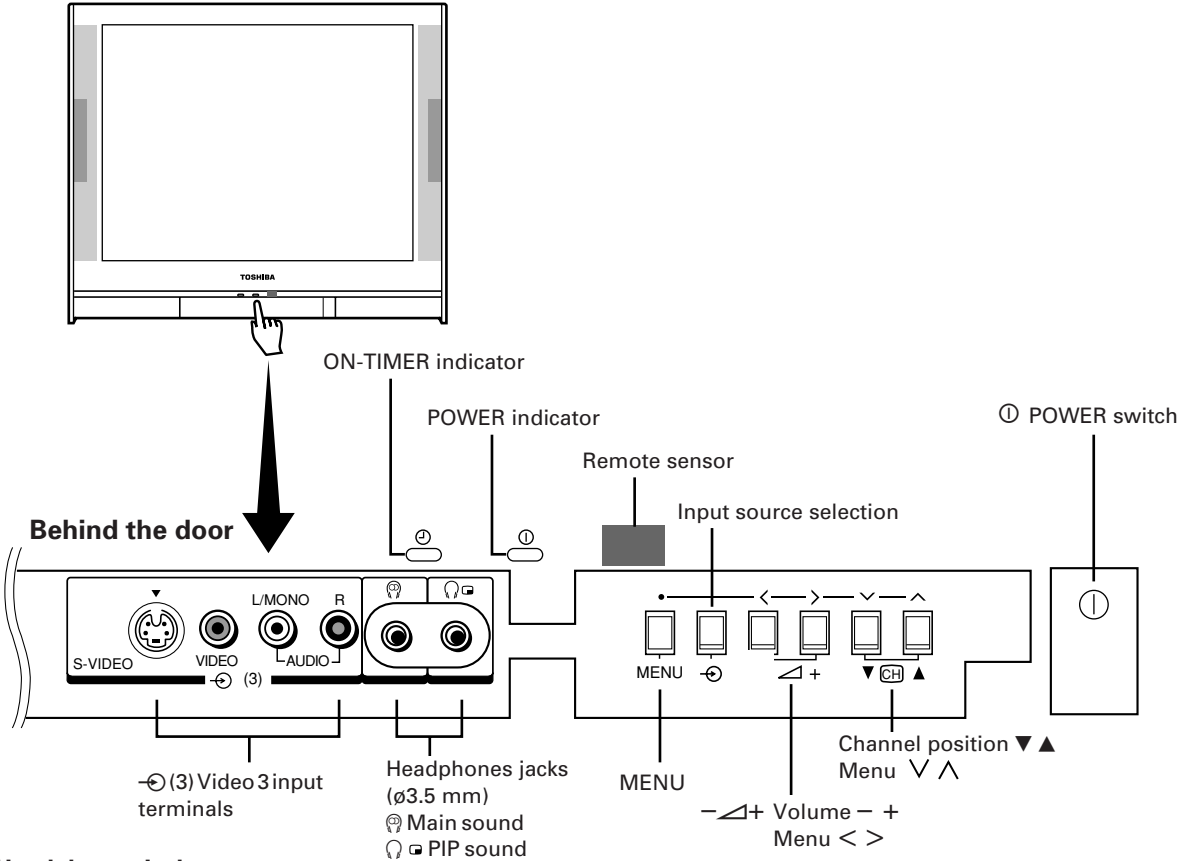
##### ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

Item	Name of adjustment	Preset Data	Data 29"	Data 34"
OPT0	OPTION 0	02H	←	←
OPT1	OPTION 1	42H	←	←
OPT2	OPTION 2	04H	←	←
OPT3	OPTION 3	FDH	DFH	DFH
OPT4	OPTION 4	62H	←	←
OPT5	OPTION 5	C8H	C0H	C0H

Table-3

# LOCATION OF CONTROLS

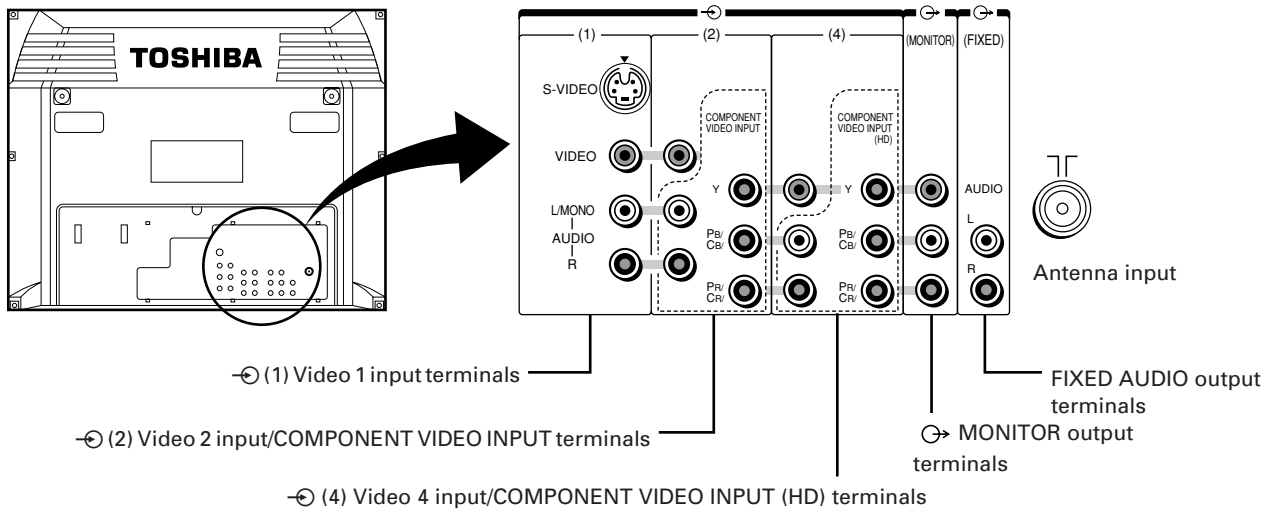
## Front



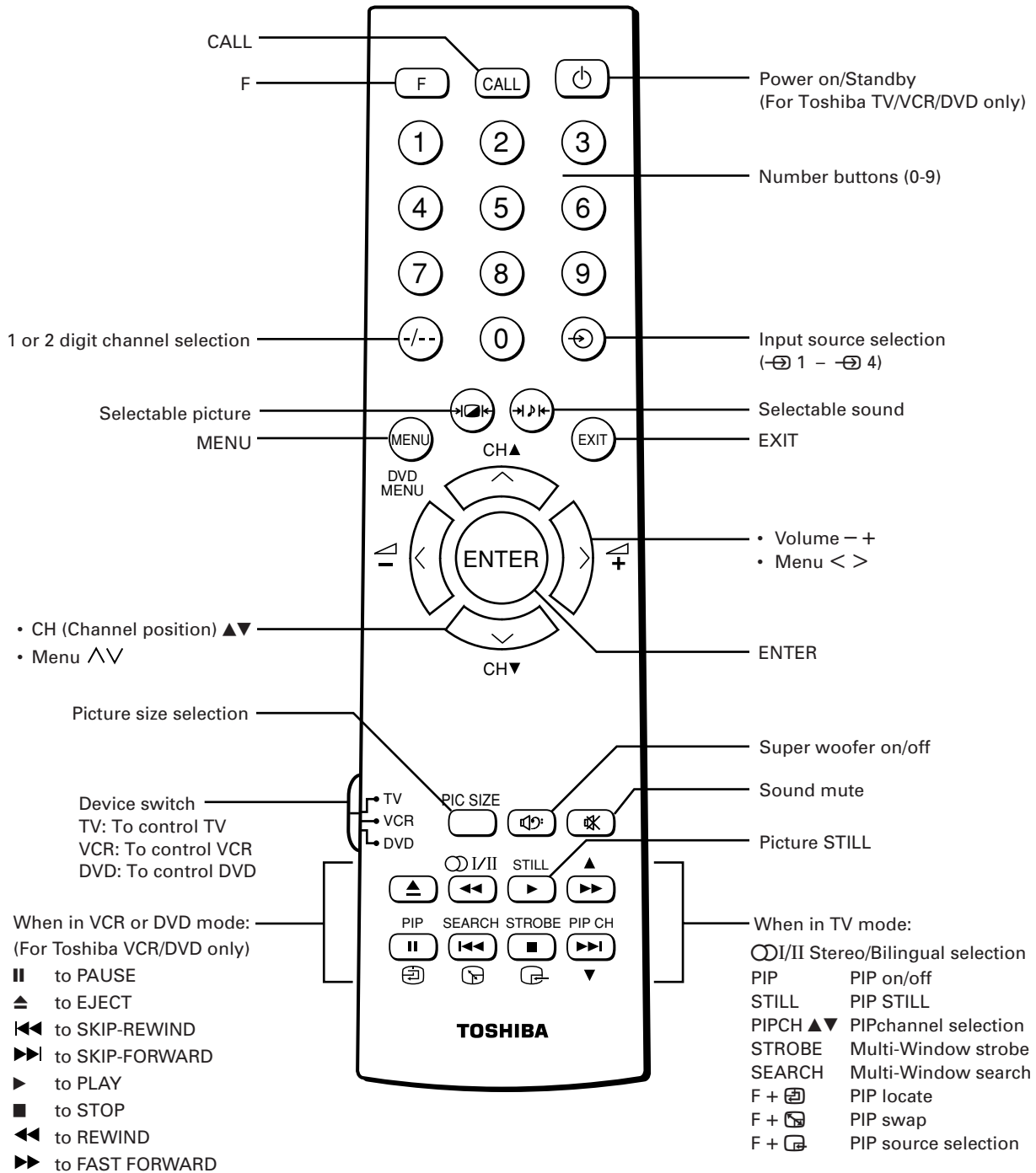
### Headphones jacks

- : For private listening, connect headphones. The sound from the speakers will be cut off automatically. To adjust the volume, press the  $-$   $\nabla$   $\blacktriangle$   $+$  buttons.
- : Use this jack when listening to the sound of the sub-picture (Picture-in-Picture).

## Back



## Remote Control



## PROGRAMMING CHANNEL MEMORY

- First, use the ASM (Automatic Search Memory) function to preset all the active channels in your area automatically. Then, arrange the preset channels with the SEARCH, SKIP functions, MFT (Manual Fine Tuning) so that you can tune into only desired channels.
- Use the SEARCH function if desired channels cannot be preset with the ASM or if you would like to preset channels to specific position numbers one by one.

### To preset channels (ASM, SEARCH)

#### ASM (Automatic Search Memory)

- 1** Select the first position number you want to start the ASM with the **CH ▲▼** or the **Number** buttons.
- 2** Press the **MENU** button, then press the < or > button to display the SET UP menu.
- 3** Confirm that “COLOR” is set to “AUTO” and “SOUND” is set to proper system.  
If not, press the √ button, then press the < or > button to select proper system.
- 4** Press the √ button to select ASM.
- 5** Press the > (+) button to start the ASM. All active channels will be preset automatically.  
When presetting is complete, the initial position number will reappear.

#### After presetting

- Check the preset channels by pressing the **CH ▲** or **▼** button.
- If the color of a certain channel is abnormal, the automatic color system selection (AUTO) may have malfunctioned, or sound system selection is wrong. In such a case, select another color and/or sound system.

#### SEARCH

- 1** Press the **MENU** button, then press the < or > button to display the SET UP menu.
- 2** Press the √ (or ^) button to select SEARCH.
- 3** Press the < or > button to start searching. The < button searches for lower-numbered channels; the > button for higher-numbered channels.  
Repeat this process until you can get the desired channel.
- 4** When the desired channel is shown, press the √ button to select POSITION.
- 5** Press the < or > button repeatedly until the position number to be preset.
- 6** Press the √ button to select MEMORY, then press the > (+) button to store the channel at the current position.
- 7** When you program other channels, repeat steps 2 to 6.



- After presetting the channels, you may skip unnecessary position numbers so that only the channels you want to watch are selected.

## To preset channels (SKIP, MFT)

### To skip unnecessary position number

- 1 Select the position number to be skipped with the **CH ▲▼** buttons or **Number** buttons.
- 2 Press the **MENU** button, then press the < or > button to display the SET UP menu.
- 3 Press the √ (or ^) button to select SKIP.
- 4 Press the < or > button to select ON.
- 5 Press the **EXIT** button to erase the menu display, then select the position number to be skipped with the **Number** buttons. "\*" mark appears to the left of the position number. The position number will then be skipped when you select channels with the **CH ▲▼** buttons.

### To restore a skipped position number

- 1 Select the position number you want to restore with the **Number** buttons.
- 2 Select OFF in step 4 above.

### MFT (Manual Fine Tuning)

The adjustments below are not necessary under normal receiving conditions. However, in areas of inferior broadcast conditions where adjustment is necessary for a better picture, perform the MFT.

- 1 Select the channel you want to fine-tune with the **CH ▲▼** buttons or **Number** buttons.
- 2 Press the **MENU** button, then press the < or > button to display the SET UP menu.
- 3 Press the √ (or ^) button to select MFT (on 2nd page).
- 4 Press the < or > button until the best possible picture and sound are obtained.

#### Note

When operating the MFT function, the AFT status is automatically set to OFF.

## To preset channels (AFT, ANT ATT)

### AFT (Automatic Fine Tuning)

The AFT function automatically corrects slight fluctuations when receiving signals.

- 1 Select the channel you want to fine-tune with the **CH ▲▼** buttons or **Number** buttons. While in the AFT OFF mode, "■" mark appears to the left of the position number.
- 2 Press the **MENU** button, then press the < or > button to display the SET UP menu.
- 3 Press the √ (or ^) button to select AFT (on 2nd page), then press < or > button to select ON.

### To use the Antenna attenuator

When visual interference occurs, set the Antenna attenuator (ANT ATT) to ON.

- 1 Press the **MENU** button, then press the < or > button to display the SET UP menu.
- 2 Press the √ (or ^) to select ANT ATT (on 2nd page), then press < or > button to select ON.

#### Note

This setting is effective for the programme position you are now watching.

## CHASSIS AND CABINET REPLACEMENT PARTS LIST

**WARNING:** BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "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. 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 : 29SH9UH, 34SH9UH**

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
<b>CAPACITORS</b>		
C101	24796479	ELECTROLYTIC, 35V 4.7UF M
C102	24793221	ELECTROLYTIC, 10V 220UF M
C105	24109102	CERAMIC CHIP, 50V B 1000PF K
C106	24797100	ELECTROLYTIC, 50V 10UF M
C107	24794221	ELECTROLYTIC, 16V 220UF M
C109	24109103	CERAMIC CHIP, 50V B 0.01UF K
C115	24109103	CERAMIC CHIP, 50V B 0.01UF K
C190	24109103	CERAMIC CHIP, 50V B 0.01UF K
C201	24793471	ELECTROLYTIC, 10V 470UF M
C202	24109103	CERAMIC CHIP, 50V B 0.01UF K
C205	24797229	ELECTROLYTIC, 50V 2.2UF M
C206	24794220	ELECTROLYTIC, 16V 22UF M
C219	24105100	CERAMIC CHIP, 50V CH 10PF D
C220	24105100	CERAMIC CHIP, 50V CH 10PF D
C221	24105100	CERAMIC CHIP, 50V CH 10PF D
C302	24214471	CERAMIC DISC, 500V B 470PF K
C303	24214471	CERAMIC DISC, 500V B 470PF K
C305	24669222	ELECTROLYTIC, 50V 2200UF M 3A
C308	24797221	ELECTROLYTIC, 50V 220UF M
C309	24591102	PLASTIC FILM, 50V 1000PF J (34SH9UH)
C310	24669222	ELECTROLYTIC, 50V 2200UF M 3A
C313	24082057	PLASTIC FILM, 100V 0.22UF J
C315	24212102	CERAMIC DISC, 50V B 1000PF K (29SH9UH)
C316	24795471	ELECTROLYTIC, 25V 470UF M
C317	24214102	CERAMIC DISC, 500V B 1000PF K (34SH9UH)
C318	24794471	ELECTROLYTIC, 16V 470UF M
C320	24795471	ELECTROLYTIC, 25V 470UF M
C321	24503051	PLASTIC FILM, 63V 0.68UF J
C322	24617915	ELECTROLYTIC, 50V 1UF K 3A LI
C323	24503049	PLASTIC FILM, 63V 0.47UF J
C325	24590223	PLASTIC FILM, 50V 0.022UF J
C326	24797010	ELECTROLYTIC, 50V 1UF M (29SH9UH)
C327	24794471	ELECTROLYTIC, 16V 470UF M
C331	24503038	PLASTIC FILM, 63V 0.056UF J
C332	24212102	CERAMIC DISC, 50V B 1000PF K
C366	24082049	PLASTIC FILM, 100V 47000PF J
C370	24794100	ELECTROLYTIC, 16V 10UF M
C390	24591102	PLASTIC FILM, 50V 1000PF J
C391	24666100	ELECTROLYTIC, 10V 10UF M 3A (34SH9UH)
C392	24085981	ELEC. NONPOLAR CE04J 16V 10UF M 11L NP (34SH9UH)

Location No.	Parts No.	Description
C393	24666100	ELECTROLYTIC, 10V 10UF M 3A (34SH9UH)
C396	24503065	PLASTIC FILM, 1800VH 1800PF H (34SH9UH)
C410	24794471	ELECTROLYTIC, 16V 470UF M
C410	24829563	PLASTIC FILM, 400V 0.056UF J
C413	24214392	CERAMIC DISC, 500V B 3900PF K
C416	24676330	ELECTROLYTIC, 100V 33UF M 3A
C416	24591102	PLASTIC FILM, 50V 1000PF J
C417	24214391	CERAMIC DISC, 500V B 390PF K
C419	24212102	CERAMIC DISC, 50V B 1000PF K
C420	24666101	ELECTROLYTIC, 16V 100UF M 3A
C421	24539104	PLASTIC FILM, 50V 0.1UF J
C423	24503251	PLASTIC FILM, 400V 0.18UF J (29SH9UH)
C423	24503191	PLASTIC FILM, 400V 0.13UF J (34SH9UH)
C432	24073059	ELECTROLYTIC, 25V 3300UF M 3A
C432	24503041	PLASTIC FILM, 63V 0.1UF J
C433	24232103	CERAMIC DISC, 50V F 0.01UF Z
C433	24503195	PLASTIC FILM, 1800VH 5100PF H (29SH9UH)
C433	24503099	PLASTIC FILM, 1800VH 4700PF H (34SH9UH)
C434	24820103	PLASTIC FILM, 630V 0.01UF J
C436	24503041	PLASTIC FILM, 63V 0.1UF J
C437	24503346	PLASTIC FILM, 1800VH 3300PF H
C439	24829473	PLASTIC FILM, 400V 0.047UF J (29SH9UH)
C439	24503126	PLASTIC FILM, 400V 0.082UF J (34SH9UH)
C442	24503251	PLASTIC FILM, 400V 0.18UF J (29SH9UH)
C442	24503192	PLASTIC FILM, 400V 0.15UF J (34SH9UH)
C443	24503346	PLASTIC FILM, 1800VH 3300PF H (29SH9UH)
C443	24503067	PLASTIC FILM, 1800VH 2200PF (34SH9UH)
C444	24503346	PLASTIC FILM, 1800VH 3300PF H (29SH9UH)
C444	24503347	PLASTIC FILM, 1800VH 3600PF H (34SH9UH)
C445	24829473	PLASTIC FILM, 400V 0.047UF J
C446	24073120	ELECTROLYTIC, 250V 33UF, 250YXF33M
C448	24640962	ELECTROLYTIC, 200V 33UF M
C449	24667471	ELECTROLYTIC, 25V 470UF M 3A
C450	24092341	CERAMIC DISC, 2KV R 470PF K
C451	24092341	CERAMIC DISC, 2KV R 470PF K
C453	24503346	PLASTIC FILM, 1800VH 3300PF H
C454	24503195	PLASTIC FILM, 1800VH 5100PF H
C460	24591683	PLASTIC FILM, 50V 0.068UF J
C464	24503149	PLASTIC FILM, 250V 3.3UF
C465	24503253	PLASTIC FILM, 1250VH 0.01UF H
C467	24503253	PLASTIC FILM, 1250VH 0.01UF H
C470	24794101	ELECTROLYTIC, 16V 100UF M

Location No.	Parts No.	Description
C471	24539104	PLASTIC FILM, 50V 0.1UF J
C472	24539474	PLASTIC FILM, 50V 0.47UF J
C473	24073081	ELECTROLYTIC, 50V 1.0UF M 3A
C475	24214102	CERAMIC DISC, 500V B 1000PF K
C476	24082637	PLASTIC FILM, 400V 0.1UF J (29SH9UH)
C476	24829273	PLASTIC FILM, 400V 0.027UF J (34SH9UH)
C476	24794220	ELECTROLYTIC, 16V 22UF M
C477	24591182	PLASTIC FILM, 50V 1800PF J
C479	24214471	CERAMIC DISC, 500V B 470PF K
C481	24214121	CERAMIC DISC, 500V B 120PF K
C482	24591103	PLASTIC FILM, 50V 0.01UF J (29SH9UH)
C483	24591223	PLASTIC FILM, 50V 0.022UF J (29SH9UH)
C483	24591682	PLASTIC FILM, 50V 6800PF J (34SH9UH)
C486	24539104	PLASTIC FILM, 50V 0.1UF J
C487	24539104	PLASTIC FILM, 50V 0.1UF J
C489	24539103	PLASTIC FILM, 50V 0.01UF J (34SH9UH)
C491	24591223	PLASTIC FILM, 50V 0.022UF J
C492	24539474	PLASTIC FILM, 50V 0.47UF J
C493	24539104	PLASTIC FILM, 50V 0.1UF J (29SH9UH)
C493	24591683	PLASTIC FILM, 50V 0.068UF J (34SH9UH)
C493	24829243	PLASTIC FILM, 400V 0.024UF J
C494	24539104	PLASTIC FILM, 50V 0.1UF J
C496	24591103	PLASTIC FILM, 50V 0.01UF J
C497	24829333	PLASTIC FILM, 400V 0.033UF J (29SH9UH)
C497	24829273	PLASTIC FILM, 400V 0.027UF J (34SH9UH)
C498	24539104	PLASTIC FILM, 50V 0.1UF J (29SH9UH)
C498	24591473	PLASTIC FILM, 50V 0.047UF J (34SH9UH)
C510	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C513	24109103	CERAMIC CHIP, 50V B 0.01UF K
C514	24794101	ELECTROLYTIC, 16V 100UF M
C515	24085958	ELEC. NONPOLAR, 50V 1UF M
C516	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C517	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C518	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C520	24591334	PLASTIC FILM, 50V 0.33MF J
C530	24797010	ELECTROLYTIC, 50V 1UF M
C531	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C532	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C533	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C534	24797478	ELECTROLYTIC, 50V 0.47UF M
C535	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C536	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C537	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C538	24797010	ELECTROLYTIC, 50V 1UF M
C539	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C540	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C541	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C542	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C547	24109103	CERAMIC CHIP, 50V B 0.01UF K
C548	24794101	ELECTROLYTIC, 16V 100UF M
C563	24797478	ELECTROLYTIC, 50V 0.47UF M
C564	24797479	ELECTROLYTIC, 50V 4.7UF M
C586	24206100	ELECTROLYTIC, 50V 10UF M 7L 3A
C587	24109222	CERAMIC CHIP, 50V B 2200PF K
C588	24105561	CERAMIC CHIP, 50V CH 560PF J
C589	24109332	CERAMIC CHIP, 50V B 3300PF K
C601	24591102	PLASTIC FILM, 50V 1000PF J
C602	24591102	PLASTIC FILM, 50V 1000PF J
C603	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C604	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C605	24073052	ELECTROLYTIC, 25V 47UF M 3A
C606	24073052	ELECTROLYTIC, 25V 47UF M 3A
C607	24503042	PLASTIC FILM, 63V 0.12UF J
C608	24503042	PLASTIC FILM, 63V 0.12UF J
C609	24073094	ELECTROLYTIC, 50V 1000UF M 3A
C610	24073094	ELECTROLYTIC, 50V 1000UF M 3A
C611	24073053	ELECTROLYTIC, 25V 100UF M 3A

Location No.	Parts No.	Description
C612	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C613	24794471	ELECTROLYTIC, 16V 470UF M
C614	24797010	ELECTROLYTIC, 50V 1UF M
C615	24073094	ELECTROLYTIC, 50V 1000UF M 3A
C616	24503042	PLASTIC FILM, 63V 0.12UF J
C620	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C621	24567104	PLASTIC FILM, 50V 0.1UF J
C623	24797220	ELECTROLYTIC, 50V 22UF M
C626	24073094	ELECTROLYTIC, 50V 1000UF M 3A
C627	24797010	ELECTROLYTIC, 50V 1UF M
C628	24794470	ELECTROLYTIC, 16V 47UF M
C630	24073052	ELECTROLYTIC, 25V 47UF M 3A
C631	24073086	ELECTROLYTIC, 50V 10UF M 3A
C632	24073053	ELECTROLYTIC, 25V 100UF M 3A
C655	24794101	ELECTROLYTIC, 16V 100UF M
C656	24591273	PLASTIC FILM, 50V 0.027UF J
C657	24797330	ELECTROLYTIC, 50V 33UF M
C661	24797330	ELECTROLYTIC, 50V 33UF M
C662	24797330	ELECTROLYTIC, 50V 33UF M
C680	24073094	ELECTROLYTIC, 50V 1000UF M 3A
C681	24797010	ELECTROLYTIC, 50V 1UF M
C704	24591822	PLASTIC FILM, 50V 8200PF J
C705	24232103	CERAMIC DISC, 50V F 0.01UF Z
C707	24794470	ELECTROLYTIC, 16V 47UF M
C712	24666470	ELECTROLYTIC, 16V 47UF M 3A
C713	24709100	ELECTROLYTIC, 200V 10UF M
C714	24436101	CERAMIC DISC, 50V SL 100PF J
C715	24214472	CERAMIC DISC, 500V B 4700PF K
C716	24436101	CERAMIC DISC, 50V SL 100PF J
C717	24214472	CERAMIC DISC, 500V B 4700PF K
C718	24766470	ELECTROLYTIC, 50V 47UF M
C719	24435560	CERAMIC DISC, 500V SL 56PF J
C720	24709100	ELECTROLYTIC, 200V 10UF M
C721	24797470	ELECTROLYTIC, 50V 47UF M
C726	24212102	CERAMIC DISC, 50V B 1000PF K
△ C801	24503002	PLASTIC FILM, AC275V 0.22UF M
△ C802	24503057	PLASTIC FILM, AC275V 0.22UF M
C805	24092281	CERAMIC DISC, AC250V E 4700PF
C806	24092281	CERAMIC DISC, AC250V E 4700PF
C807	24539474	PLASTIC FILM, 50V 0.47UF J
C808	24796101	ELECTROLYTIC, 35V 100UF M
C809	24539474	PLASTIC FILM, 50V 0.47UF J
C810	24073106	400V680UF LLQ2G681MHSET
△ C811	24092567	CERAMIC DISC, AC250V E 1000PF M
△ C813	24092563	CERAMIC DISC, AC250V B 220PF K
△ C814	24092563	CERAMIC DISC, AC250V B 220PF K
△ C815	24092567	CERAMIC DISC, AC250V E 1000PF M
C816	24794470	ELECTROLYTIC, 16V 47UF M
C817	24092339	CERAMIC DISC, 2KV 330PF K
C818	24095931	PLASTIC FILM, 1250VH 2200PF J
C819	24676220	ELECTROLYTIC, 100V 22UF M 3A
C821	24214471	CERAMIC DISC, 500V B 470PF K
C823	24214471	CERAMIC DISC, 500V B 470PF K
C825	24539104	PLASTIC FILM, 50V 0.1UF J
C828	24797470	ELECTROLYTIC, 50V 47UF M
C829	24212271	CERAMIC DISC, 50V B 270PF K
C831	24665470	ELECTROLYTIC, 10V 47UF M 3A
C832	24665470	ELECTROLYTIC, 10V 47UF M 3A
C833	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C834	24669100	ELECTROLYTIC, 50V 10UF M 3A
C835	24666470	ELECTROLYTIC, 16V 47UF M 3A
C840	24762102	ELECTROLYTIC, 10V 1000UF M
C841	24669100	ELECTROLYTIC, 50V 10UF M 3A
C842	24669100	ELECTROLYTIC, 50V 10UF M 3A
C843	24539104	PLASTIC FILM, 50V 0.1UF J
C850	24214471	CERAMIC DISC, 500V B 470PF K
C851	24669471	ELECTROLYTIC, 50V 470UF M 3A

Location No.	Parts No.	Description
C853	24591563	PLASTIC FILM, 50V 0.056UF J
C855	24214222	CERAMIC DISC, 500V B 2200PF K
C856	24212102	CERAMIC DISC, 50V B 1000PF K
C858	24666470	ELECTROLYTIC, 16V 47UF M 3A
C859	24591103	PLASTIC FILM, 50V 0.01UF J
C861	24591104	PLASTIC FILM, 50V 0.1UF J
C863	24669222	ELECTROLYTIC, 50V 2200UF M 3A
C865	24669222	ELECTROLYTIC, 50V 2200UF M 3A
C866	24214331	CERAMIC DISC, 500V B 330PF K
C867	24214331	CERAMIC DISC, 500V B 330PF K
C868	24092281	CERAMIC DISC, AC250V E 4700PF
C869	24086937	ELECTROLYTIC, 450V 120UF M 22D
C870	24092281	CERAMIC DISC, AC250V E 4700PF
C871	24668470	ELECTROLYTIC, 35V 47UF M 3A
C872	24095939	PLASTIC FILM, 1250VH 1000PF J
C873	24212122	CERAMIC DISC, 50V B 1200PF K
C874	24503056	PLASTIC FILM, AC275V 0.1UF M
C875	24092563	CERAMIC DISC, AC250V B 220PF K
C876	24092563	CERAMIC DISC, AC250V B 220PF K
C877	24212221	CERAMIC DISC, 50V B 220PF K
C878	24092339	CERAMIC DISC, 2KV 330PF K
C880	24212101	CERAMIC DISC, 50V B 100PF K
C884	24086916	ELECTROLYTIC, 160V 330UF M 3D
C887	24214471	CERAMIC DISC, 500V B 470PF K
C891	24667472	ELECTROLYTIC, 25V 4700UF M 3A
C893	24092337	CERAMIC DISC, 2KV 220PF K
C895	24668221	ELECTROLYTIC, 35V 220UF M 3A
C896	24214471	CERAMIC DISC, 500V B 470PF K
C897	24667222	ELECTROLYTIC, 25V 2200UF M 3A
C898	24667222	ELECTROLYTIC, 25V 2200UF M 3A
C899	24214471	CERAMIC DISC, 500V B 470PF K
C902	24092345	CERAMIC DISC, 2KV 1000PF K
C903	24436221	CERAMIC DISC, 50V SL 220PF J
C905	24436221	CERAMIC DISC, 50V SL 220PF J
C907	24436221	CERAMIC DISC, 50V SL 220PF J
C909	24679470	ELECTROLYTIC, 250V 47UF M 3A
C911	24203100	ELECTROLYTIC, 16V 10UF M 7L 3A
C913	24763102	ELECTROLYTIC, 16V 1000UF M
C914	24092398	CERAMIC DISC, 25V 0.1UF Z, 24092398A NI TOOITSU
C918	24092398	CERAMIC DISC, 25V 0.1UF Z, 24092398A NI TOOITSU
C919	24092398	CERAMIC DISC, 25V 0.1UF Z, 24092398A NI TOOITSU
C920	24436221	CERAMIC DISC, 50V SL 220PF J
C921	24436221	CERAMIC DISC, 50V SL 220PF J
C922	24436221	CERAMIC DISC, 50V SL 220PF J
C931	24214101	CERAMIC DISC, 500V B 100PF K
C963	24436391	CERAMIC DISC, 50V SL 390PF J
C964	24436331	CERAMIC DISC, 50V SL 330PF J
C965	24436331	CERAMIC DISC, 50V SL 330PF J
C3110	24539104	PLASTIC FILM, 50V 0.1UF J
C4000	24591102	PLASTIC FILM, 50V 1000PF J
C4030	24591103	PLASTIC FILM, 50V 0.01UF J
C4201	24794101	ELECTROLYTIC, 16V 100UF M
C4202	24794101	ELECTROLYTIC, 16V 100UF M
C4300	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4311	24794221	ELECTROLYTIC, 16V 220UF M
C4401	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4402	24797010	ELECTROLYTIC, 50V 1UF M
C4403	24794331	ELECTROLYTIC, 16V 330UF M
C4404	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4405	24092730	CERAMIC CHIP, 16V B 0.1UF K
C4422	24085988	ELECTROLYTIC, NONPOLAR, 50V 1.0UF M 7L
C4461	24539474	PLASTIC FILM, 50V 0.47UF J
C4462	24085958	ELEC. NONPOLAR, 50V 1UF M

Location No.	Parts No.	Description
C4464	24797010	ELECTROLYTIC, 50V 1UF M
C5020	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C5030	24794101	ELECTROLYTIC, 16V 100UF M
CA09	24105101	CERAMIC CHIP, 50V CH 100PF J
CA10	24105101	CERAMIC CHIP, 50V CH 100PF J
CA14	24232103	CERAMIC DISC, 50V F 0.01UF Z
CA30	24105101	CERAMIC CHIP, 50V CH 100PF J
CA33	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA42	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA43	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA45	24105330	CERAMIC CHIP, 50V CH 33PF J
CA68	24794100	ELECTROLYTIC, 16V 10UF M
CA69	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA80	24794100	ELECTROLYTIC, 16V 10UF M
CA89	24105101	CERAMIC CHIP, 50V CH 100PF J
CA90	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA91	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA92	24666101	ELECTROLYTIC, 16V 100UF M 3A
CA93	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA95	24794220	ELECTROLYTIC, 16V 22UF M
CA96	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA99	24666100	ELECTROLYTIC, 10V 10UF M 3A
CB01	24744470	ELECTROLYTIC, 16V 47UF M
CB40	24092538	CERAMIC CHIP, 10V F 1UF Z
CB41	24109222	CERAMIC CHIP, 50V B 2200PF K
CB42	24105561	CERAMIC CHIP, 50V CH 560PF J
CB43	24109332	CERAMIC CHIP, 50V B 3300PF K
CB90	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CC01	24109102	CERAMIC CHIP, 50V B 1000PF K
CC02	24109102	CERAMIC CHIP, 50V B 1000PF K
CC03	24109102	CERAMIC CHIP, 50V B 1000PF K
CC04	24109102	CERAMIC CHIP, 50V B 1000PF K
CC05	24109102	CERAMIC CHIP, 50V B 1000PF K
CC06	24109102	CERAMIC CHIP, 50V B 1000PF K
CC07	24109102	CERAMIC CHIP, 50V B 1000PF K
CC08	24109102	CERAMIC CHIP, 50V B 1000PF K
CC09	24109102	CERAMIC CHIP, 50V B 1000PF K
CC10	24109102	CERAMIC CHIP, 50V B 1000PF K
CC11	24212102	CERAMIC DISC, 50V B 1000PF K
CC12	24212102	CERAMIC DISC, 50V B 1000PF K
CC13	24232103	CERAMIC DISC, 50V F 0.01UF Z
CC14	24232103	CERAMIC DISC, 50V F 0.01UF Z
CC15	24232103	CERAMIC DISC, 50V F 0.01UF Z
CC16	24590103	PLASTIC FILM, 50V 0.01UF J
CC25	24590223	PLASTIC FILM, 50V 0.022UF J
CC31	24353101	CERAMIC DISC, 50V CH 100PF J
CC32	24353101	CERAMIC DISC, 50V CH 100PF J
CD01	24797100	ELECTROLYTIC, 50V 10UF M
CD02	24797220	ELECTROLYTIC, 50V 22UF M
CD03	24503041	PLASTIC FILM, 63V 0.1UF J
CD04	24503041	PLASTIC FILM, 63V 0.1UF J
CD05	24590102	PLASTIC FILM, 50V 1000PF J
CD06	24503045	PLASTIC FILM, 63V 0.22UF J
CD07	24797229	ELECTROLYTIC, 50V 2.2UF M
CD08	24794221	ELECTROLYTIC, 16V 220UF M
CD09	24232103	CERAMIC DISC, 50V F 0.01UF Z
CD10	24797479	ELECTROLYTIC, 50V 4.7UF M
CD11	24797479	ELECTROLYTIC, 50V 4.7UF M
CD12	24797479	ELECTROLYTIC, 50V 4.7UF M
CD13	24797479	ELECTROLYTIC, 50V 4.7UF M
CD14	24797479	ELECTROLYTIC, 50V 4.7UF M
CD15	24797479	ELECTROLYTIC, 50V 4.7UF M
CD16	24797479	ELECTROLYTIC, 50V 4.7UF M
CD17	24503045	PLASTIC FILM, 63V 0.22UF J
CD18	24590102	PLASTIC FILM, 50V 1000PF J
CD19	24590103	PLASTIC FILM, 50V 0.01UF J
CD20	24590333	PLASTIC FILM, 50V 0.033UF J

Location No.	Parts No.	Description
CD21	24590393	PLASTIC FILM, 50V 0.039UF J
CD22	24797100	ELECTROLYTIC, 50V 10UF M
CD23	24797220	ELECTROLYTIC, 50V 22UF M
CD24	24590103	PLASTIC FILM, 50V 0.01UF J
CD25	24590103	PLASTIC FILM, 50V 0.01UF J
CD26	24590103	PLASTIC FILM, 50V 0.01UF J
CD41	24503041	PLASTIC FILM, 63V 0.1UF J
CD42	24590103	PLASTIC FILM, 50V 0.01UF J
CD43	24503041	PLASTIC FILM, 63V 0.1UF J
CD44	24503041	PLASTIC FILM, 63V 0.1UF J
CD45	24503044	PLASTIC FILM, 63V 0.18UF J
CD46	24503044	PLASTIC FILM, 63V 0.18UF J
CD47	24503047	PLASTIC FILM, 63V 0.33UF J
CD48	24503047	PLASTIC FILM, 63V 0.33UF J
CD49	24797010	ELECTROLYTIC, 50V 1UF M
CD60	24797100	ELECTROLYTIC, 50V 10UF M
CD61	24590333	PLASTIC FILM, 50V 0.033UF J
CD62	24590103	PLASTIC FILM, 50V 0.01UF J
CD63	24503049	PLASTIC FILM, 63V 0.47UF J
CD64	24539334	PLASTIC FILM, 50V 0.33UF J
CD65	24436221	CERAMIC DISC, 50V SL 220PF J
CD70	24794221	ELECTROLYTIC, 16V 220UF M
CD71	24232103	CERAMIC DISC, 50V F 0.01UF Z
CD73	24797100	ELECTROLYTIC, 50V 10UF M
CD74	24794221	ELECTROLYTIC, 16V 220UF M
CD75	24797100	ELECTROLYTIC, 50V 10UF M
CD76	24797100	ELECTROLYTIC, 50V 10UF M
CD77	24797100	ELECTROLYTIC, 50V 10UF M
CD81	24503041	PLASTIC FILM, 63V 0.1UF J
CD82	24503041	PLASTIC FILM, 63V 0.1UF J
CD83	24503041	PLASTIC FILM, 63V 0.1UF J
CD84	24503041	PLASTIC FILM, 63V 0.1UF J
CD89	24797100	ELECTROLYTIC, 50V 10UF M
CR12	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR13	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR14	24092730	CERAMIC CHIP, 16V B 0.1UF K
CS01	24797229	ELECTROLYTIC, 50V 2.2UF M
CS02	24797229	ELECTROLYTIC, 50V 2.2UF M
CS03	24797229	ELECTROLYTIC, 50V 2.2UF M
CS04	24797229	ELECTROLYTIC, 50V 2.2UF M
CS05	24797229	ELECTROLYTIC, 50V 2.2UF M
CS06	24797229	ELECTROLYTIC, 50V 2.2UF M
CS07	24797229	ELECTROLYTIC, 50V 2.2UF M
CS08	24797229	ELECTROLYTIC, 50V 2.2UF M
CS09	24797229	ELECTROLYTIC, 50V 2.2UF M
CS10	24797229	ELECTROLYTIC, 50V 2.2UF M
CS13	24794100	ELECTROLYTIC, 16V 10UF M
CS14	24794100	ELECTROLYTIC, 16V 10UF M
CS18	24794100	ELECTROLYTIC, 16V 10UF M
CS19	24794100	ELECTROLYTIC, 16V 10UF M
CS20	24797478	ELECTROLYTIC, 50V 0.47UF M
CS24	24797229	ELECTROLYTIC, 50V 2.2UF M
CV02	24092621	CERAMIC CHIP, 10V B 1UF K
CV03	24092621	CERAMIC CHIP, 10V B 1UF K
CV04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV06	24092621	CERAMIC CHIP, 10V B 1UF K
CV07	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV08	24794101	ELECTROLYTIC, 16V 100UF M
CV09	24092538	CERAMIC CHIP, 10V F 1UF Z
CV10	24794100	ELECTROLYTIC, 16V 10UF M
CV11	24092621	CERAMIC CHIP, 10V B 1UF K
CV12	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV14	24092538	CERAMIC CHIP, 10V F 1UF Z
CV15	24092538	CERAMIC CHIP, 10V F 1UF Z
CV23	24794101	ELECTROLYTIC, 16V 100UF M
CV24	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV30	24794100	ELECTROLYTIC, 16V 10UF M

Location No.	Parts No.	Description
CV31	24794100	ELECTROLYTIC, 16V 10UF M
CV32	24794101	ELECTROLYTIC, 16V 100UF M
CV33	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV36	24794470	ELECTROLYTIC, 16V 47UF M
CV37	24109102	CERAMIC CHIP, 50V B 1000PF K
CV38	24794470	ELECTROLYTIC, 16V 47UF M
CV39	24794101	ELECTROLYTIC, 16V 100UF M
CV40	24794470	ELECTROLYTIC, 16V 47UF M
CV41	24794470	ELECTROLYTIC, 16V 47UF M
CV42	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV43	24794470	ELECTROLYTIC, 16V 47UF M
CV44	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV45	24092621	CERAMIC CHIP, 10V B 1UF K
CV46	24092621	CERAMIC CHIP, 10V B 1UF K
CV47	24092621	CERAMIC CHIP, 10V B 1UF K
CV48	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV48	24212102	CERAMIC DISC, 50V B 1000PF K
CV49	24794470	ELECTROLYTIC, 16V 47UF M
CV50	24232103	CERAMIC DISC, 50V F 0.01UF Z
CV64	24794471	ELECTROLYTIC, 16V 470UF M
CV65	24794101	ELECTROLYTIC, 16V 100UF M
CV66	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CY103	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY104	24793101	ELECTROLYTIC, 10V 100UF M
CY109	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY110	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY111	24796479	ELECTROLYTIC, 35V 4.7UF M
CY112	24794101	ELECTROLYTIC, 16V 100UF M
CY117	24109102	CERAMIC CHIP, 50V B 1000PF K
CY601	24794101	ELECTROLYTIC, 16V 100UF M
CY602	24797479	ELECTROLYTIC, 50V 4.7UF M
CY603	24797479	ELECTROLYTIC, 50V 4.7UF M
CY604	24794102	ELECTROLYTIC, 16V 1000UF M
CY605	24797479	ELECTROLYTIC, 50V 4.7UF M
CY606	24797479	ELECTROLYTIC, 50V 4.7UF M
CY608	24744101	ELECTROLYTIC, 16V 100UF
CY610	24206478	ELECTROLYTIC, 50V 0.47UF M 7L 3A
<b>RESISTORS</b>		
R101	24382153	OXIDE METAL FILM, 1W 15K OHM J
R130	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
R131	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
R132	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
R205	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R206	24871561	CHIP, METAL FILM, 1/8W 560 OHM J
R213	24871681	CHIP, 1/8W 680 OHM J
R214	24871681	CHIP, 1/8W 680 OHM J
R215	24871681	CHIP, 1/8W 680 OHM J
R216	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R217	24366392	CARBON FILM, 1/6W 3.9K OHM J
R217	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R218	24366273	CARBON FILM, 1/6W 27K OHM J (29SH9UH)
R218	24366223	CARBON FILM, 1/6W 22K OHM J (34SH9UH)
R218	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R219	24366433	CARBON FILM, 1/6W 43K OHM J (29SH9UH)
R219	24366513	CARBON FILM, 1/6W 51K OHM J (34SH9UH)
R219	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R220	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R221	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R222	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R227	24366273	CARBON FILM, 1/6W 27K OHM J (29SH9UH)
R227	24366183	CARBON FILM, 1/6W 18K OHM J (34SH9UH)
R228	24366223	CARBON FILM, 1/6W 22K OHM J (29SH9UH)
R228	24366333	CARBON FILM, 1/6W 33K OHM J (34SH9UH)
R231	24366103	CARBON FILM, 1/6W 10K OHM J
R232	24366103	CARBON FILM, 1/6W 10K OHM J
R240	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
R245	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R299	24366103	CARBON FILM, 1/6W 10K OHM J
R303	24321109	OXIDE METAL FILM, 1/2W 1 OHM J
R305	24322109	OXIDE METAL FILM, 1W 1 OHM J (29SH9UH)
R305	24322828	OXIDE METAL FILM, 1W 0.82 OHM J (34SH9UH)
R307	24366101	CARBON FILM, 1/6W 100 OHM J
R311	24366911	CARBON FILM, 1/6W 910 OHM J (29SH9UH)
R313	24003924	METAL FILM, 1/4W 3.3K OHM J (29SH9UH)
R316	24366684	CARBON FILM, 1/6W 680K OHM J
R317	24366102	CARBON FILM, 1/6W 1K OHM J (29SH9UH)
R318	24366101	CARBON FILM, 1/6W 100 OHM J
R319	24366101	CARBON FILM, 1/6W 100 OHM J
R321	24000372	METAL FILM, 1/4W 3.9K OHM F (29SH9UH)
R322	24366102	CARBON FILM, 1/6W 1K OHM J
R323	24366103	CARBON FILM, 1/6W 10K OHM J
R324	24366681	CARBON FILM, 1/6W 680 OHM J (29SH9UH)
R325	24366103	CARBON FILM, 1/6W 10K OHM J (29SH9UH)
R326	24366222	CARBON FILM, 1/6W 2.2K OHM J (29SH9UH)
R326	24339109	METAL FILM, 2W 1 OHM J
R327	24339109	METAL FILM, 2W 1 OHM J
R328	24366102	CARBON FILM, 1/6W 1K OHM J (29SH9UH)
R329	24366102	CARBON FILM, 1/6W 1K OHM J (34SH9UH)
R330	24000633	METAL FILM, 1/4W 10K OHM F (29SH9UH)
R330	24366103	CARBON FILM, 1/6W 10K OHM J (34SH9UH)
R331	24366394	CARBON FILM, 1/6W 390K OHM J
R333	24000528	METAL FILM, 1/4W 6.2K OHM F (29SH9UH)
R335	24366153	CARBON FILM, 1/6W 15K OHM J
R336	24383221	OXIDE METAL FILM, 2W 220 OHM J
R338	24366183	CARBON FILM, 1/6W 18K OHM J (34SH9UH)
R341	24366681	CARBON FILM, 1/6W 680 OHM J
R343	24366103	CARBON FILM, 1/6W 10K OHM J
R353	24366471	CARBON FILM, 1/6W 470 OHM J (29SH9UH)
R360	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R364	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R365	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R366	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R370	24366822	CARBON FILM, 1/6W 8.2K OHM J
R371	24366103	CARBON FILM, 1/6W 10K OHM J
R376	24366331	CARBON FILM, 1/6W 330 OHM J (34SH9UH)
R377	24366132	CARBON FILM, 1/6W 1.3K OHM J (34SH9UH)
R378	24366242	CARBON FILM, 1/6W 2.4K OHM J (34SH9UH)
R379	24382103	OXIDE METAL FILM, 1W 10K OHM J (34SH9UH)
R380	24946226	CARBON COMPOSITION, 1/2W 22M OHM K (34SH9UH)
R381	24366822	CARBON FILM, 1/6W 8.2K OHM J (34SH9UH)
R382	24366102	CARBON FILM, 1/6W 1K OHM J (34SH9UH)
R385	24366752	CARBON FILM, 1/6W 7.5K OHM J (34SH9UH)
R386	24366103	CARBON FILM, 1/6W 10K OHM J (34SH9UH)
R387	24366103	CARBON FILM, 1/6W 10K OHM J (34SH9UH)
R388	24366183	CARBON FILM, 1/6W 18K OHM J (34SH9UH)
R392	24366394	CARBON FILM, 1/6W 390K OHM J
R393	24366223	CARBON FILM, 1/6W 22K OHM J
R399	24366220	CARBON FILM, 1/6W 22 OHM J
R400	24946561	CARBON COMPOSITION, 1/2W 560 OHM K (29SH9UH)
R405	24382472	OXIDE METAL FILM, 1W 4.7K OHM J
R411	24366180	CARBON FILM, 1/6W 18 OHM J
R412	24323228	OXIDE METAL FILM, 2W 0.22 OHM J
R414	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R415	24011752	CHIP, METAL FILM, 1/20W 7.5K OHM J
R415	24554271	OXIDE METAL FILM, 2W 270 OHM J
R416	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
R416	24381563	OXIDE METAL FILM, 1/2W 56K OHM J
R417	24383680	OXIDE METAL FILM, 2W 68 OHM J
R418	24366182	CARBON FILM, 1/6W 1.8K OHM J

Location No.	Parts No.	Description
R420	24366223	CARBON FILM, 1/6W 22K OHM J
R421	24366223	CARBON FILM, 1/6W 22K OHM J
R423	24366223	CARBON FILM, 1/6W 22K OHM J
R424	24366223	CARBON FILM, 1/6W 22K OHM J
R424	24366271	CARBON FILM, 1/6W 270 OHM J
R424	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R425	24366223	CARBON FILM, 1/6W 22K OHM J
R425	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R426	24366182	CARBON FILM, 1/6W 1.8K OHM J
R426	24552561	OXIDE METAL FILM, 1/2W 560 OHM J
R427	24366182	CARBON FILM, 1/6W 1.8K OHM J
R427	24367332	CARBON FILM, 1/6W 3.3K OHM G
R428	24366561	CARBON FILM, 1/6W 560 OHM J
R429	24553100	OXIDE METAL FILM, 1W 10 OHM J
R431	24366103	CARBON FILM, 1/6W 10K OHM J
R432	24366473	CARBON FILM, 1/6W 47K OHM J
R433	24366101	CARBON FILM, 1/6W 100 OHM J
R433	24366681	CARBON FILM, 1/6W 680 OHM J
R434	24366472	CARBON FILM, 1/6W 4.7K OHM J
R435	24366184	CARBON FILM, 1/6W 180K OHM J
R437	24366101	CARBON FILM, 1/6W 100 OHM J
R438	24366101	CARBON FILM, 1/6W 100 OHM J
R441	24383561	OXIDE METAL FILM, 2W 560 OHM J
R447	24382473	OXIDE METAL FILM, 1W 47K OHM J
R448	24321338	OXIDE METAL FILM, 1/2W 0.33 OHM J
R452	24061546	VARIABLE, METAL FILM, 1W 100 OHM M
R460	24366682	CARBON FILM, 1/6W 6.8K OHM J
R461	24366181	CARBON FILM, 1/6W 180 OHM J
R464	24366103	CARBON FILM, 1/6W 10K OHM J
R467	24327224	METAL FILM, 1/4W 220K OHM F
R470	24338568	OXIDE METAL FILM, 1W 0.56 OHM J
R471	24531271	FUSIBLE, 1/2W 270 OHM J
R472	24366101	CARBON FILM, 1/6W 100 OHM J
R473	24366183	CARBON FILM, 1/6W 18K OHM J
R474	24376393	CARBON FILM, 1/2W 39K OHM J
R474	24366225	CARBON FILM, 1/6W 2.2M OHM J
R476	24366471	CARBON FILM, 1/6W 470 OHM J
R476	24381333	OXIDE METAL FILM, 1/2W 33K OHM J
R477	24366154	CARBON FILM, 1/6W 150K OHM J
R477	24366102	CARBON FILM, 1/6W 1K OHM J
R478	24338688	OXIDE METAL FILM, 1W 0.68 OHM J
R479	24366154	CARBON FILM, 1/6W 150K OHM J
R479	24531680	FUSIBLE, 1/2W 68 OHM J
R481	24366223	CARBON FILM, 1/6W 22K OHM J
R482	24366223	CARBON FILM, 1/6W 22K OHM J
R483	24366101	CARBON FILM, 1/6W 100 OHM J
R488	24366123	CARBON FILM, 1/6W 12K OHM J
R489	24366101	CARBON FILM, 1/6W 100 OHM J
R489	24366563	CARBON FILM, 1/6W 56K OHM J
R490	24366182	CARBON FILM, 1/6W 1.8K OHM J
R490	24366101	CARBON FILM, 1/6W 100 OHM J
R490	24366102	CARBON FILM, 1/6W 1K OHM J
R491	24366122	CARBON FILM, 1/6W 1.2K OHM J
R491	24366101	CARBON FILM, 1/6W 100 OHM J
R491	24366153	CARBON FILM, 1/6W 15K OHM J
R492	24366122	CARBON FILM, 1/6W 1.2K OHM J
R492	24366472	CARBON FILM, 1/6W 4.7K OHM J
R493	24366101	CARBON FILM, 1/6W 100 OHM J
R493	24366123	CARBON FILM, 1/6W 12K OHM J
R494	24366434	CARBON FILM, 1/6W 430K OHM J (29SH9UH)
R494	24366105	CARBON FILM, 1/6W 1M OHM J (34SH9UH)
R496	24382104	OXIDE METAL FILM, 1W 100K OHM J
R497	24366124	CARBON FILM, 1/6W 120K OHM J (29SH9UH)
R497	24366122	CARBON FILM, 1/6W 1.2K OHM J
R497	24366563	CARBON FILM, 1/6W 56K OHM J (34SH9UH)
R498	24366103	CARBON FILM, 1/6W 10K OHM J
R498	24382104	OXIDE METAL FILM, 1W 100K OHM J

Location No.	Parts No.	Description
R499	24322109	OXIDE METAL FILM, 1W 1 OHM J
R513	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R514	24000445	CHIP JUMPER, 1608TYPE
R516	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R517	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R552	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R554	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R555	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R561	24552181	OXIDE METAL FILM, 1/2W 180 OHM J
R601	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R602	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R603	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R604	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R609	24366229	CARBON FILM, 1/6W 2.2 OHM J
R610	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R611	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R612	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R615	24366229	CARBON FILM, 1/6W 2.2 OHM J
R618	24366229	CARBON FILM, 1/6W 2.2 OHM J
R620	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R621	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R624	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R625	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R626	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R660	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R661	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R661	24552271	OXIDE METAL FILM, 1/2W 270 OHM J
R662	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R662	24552271	OXIDE METAL FILM, 1/2W 270 OHM J
R663	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R664	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R665	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R668	24366223	CARBON FILM, 1/6W 22K OHM J
R669	24366223	CARBON FILM, 1/6W 22K OHM J
R680	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R681	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R683	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R684	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R702	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R709	24366563	CARBON FILM, 1/6W 56K OHM J
R713	24366393	CARBON FILM, 1/6W 39K OHM J
R715	24366273	CARBON FILM, 1/6W 27K OHM J
R716	24366273	CARBON FILM, 1/6W 27K OHM J
R717	24366333	CARBON FILM, 1/6W 33K OHM J
R718	24366222	CARBON FILM, 1/6W 2.2K OHM J
R719	24366101	CARBON FILM, 1/6W 100 OHM J
R720	24366102	CARBON FILM, 1/6W 1K OHM J
R721	24366101	CARBON FILM, 1/6W 100 OHM J
R722	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R723	24366101	CARBON FILM, 1/6W 100 OHM J
R724	24366151	CARBON FILM, 1/6W 150 OHM J
R725	24366182	CARBON FILM, 1/6W 1.8K OHM J
R730	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R731	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R732	24366330	CARBON FILM, 1/6W 33 OHM J
R733	24366683	CARBON FILM, 1/6W 68K OHM J
R734	24366330	CARBON FILM, 1/6W 33 OHM J
R735	24366683	CARBON FILM, 1/6W 68K OHM J
R736	24553470	OXIDE METAL FILM, 1W 47 OHM J
R737	24366681	CARBON FILM, 1/6W 680 OHM J
R738	24366102	CARBON FILM, 1/6W 1K OHM J
R739	24366681	CARBON FILM, 1/6W 680 OHM J
R740	24553470	OXIDE METAL FILM, 1W 47 OHM J
R741	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R742	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R743	24554181	OXIDE METAL FILM, 2W 180 OHM J
R744	24366122	CARBON FILM, 1/6W 1.2K OHM J

Location No.	Parts No.	Description
R745	24366122	CARBON FILM, 1/6W 1.2K OHM J
△ R801	24009954	METAL FILM, 1/2W 2.2M OHM J
R803	24553683	OXIDE METAL FILM, 1W 68K OHM J
R805	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R806	24381223	OXIDE METAL FILM, 1/2W 22K OHM J
R808	24366104	CARBON FILM, 1/6W 100K OHM J
△ R808	24019484	THERMISTOR, PTC, AC265 4R5A
R811	24366225	CARBON FILM, 1/6W 2.2M OHM J
R812	24568479	CERAMIC COVERED, 7W 4.7 OHM J
R813	24007061	CERAMIC COVERED, 2W 1.8 OHM K
R814	24366152	CARBON FILM, 1/6W 1.5K OHM J
R815	24552102	OXIDE METAL FILM, 1/2W 1K OHM J
R818	24019460	METAL PLATE, 2W 0.1 OHM J
R819	24310829	OXIDE METAL FILM, 1/2W 8.2 OHM J
R821	24366101	CARBON FILM, 1/6W 100 OHM J
R822	24552103	OXIDE METAL FILM, 1/2W 10K OHM J
R823	24381123	OXIDE METAL FILM, 1/2W 12K OHM J
R824	24569689	CERAMIC COVERED, 10W 6.8 OHM J
R825	24552182	OXIDE METAL FILM, 1/2W 1.8K OHM J
R826	24552182	OXIDE METAL FILM, 1/2W 1.8K OHM J
R827	24366472	CARBON FILM, 1/6W 4.7K OHM J
R828	24366222	CARBON FILM, 1/6W 2.2K OHM J
R829	24321338	OXIDE METAL FILM, 1/2W 0.33 OHM J
R830	24366471	CARBON FILM, 1/6W 470 OHM J
R831	24366471	CARBON FILM, 1/6W 470 OHM J
R832	24366472	CARBON FILM, 1/6W 4.7K OHM J
R833	24366222	CARBON FILM, 1/6W 2.2K OHM J
R841	24531120	FUSIBLE, 1/2W 12 OHM J
R842	24552392	OXIDE METAL FILM, 1/2W 3.9K OHM J
R843	24366103	CARBON FILM, 1/6W 10K OHM J
R843	24366331	CARBON FILM, 1/6W 330 OHM J
R844	24366102	CARBON FILM, 1/6W 1K OHM J
R844	24366332	CARBON FILM, 1/6W 3.3K OHM J
R845	24366472	CARBON FILM, 1/6W 4.7K OHM J
R848	24366472	CARBON FILM, 1/6W 4.7K OHM J
R857	24366472	CARBON FILM, 1/6W 4.7K OHM J
R858	24366472	CARBON FILM, 1/6W 4.7K OHM J
R860	24366102	CARBON FILM, 1/6W 1K OHM J
R861	24367273	CARBON FILM, 1/6W 27K OHM G
R862	24367562	CARBON FILM, 1/6W 5.6K OHM G
R864	24381820	OXIDE METAL FILM, 1/2W 82 OHM J
R865	24552102	OXIDE METAL FILM, 1/2W 1K OHM J
R866	24366102	CARBON FILM, 1/6W 1K OHM J
R869	24322228	OXIDE METAL FILM, 1W 0.22 OHM J
R871	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R872	24382683	OXIDE METAL FILM, 1W 68K OHM J
R873	24366224	CARBON FILM, 1/6W 220K OHM J
R873	24568229	CERAMIC COVERED, 7W 2.2 OHM J
R875	24366332	CARBON FILM, 1/6W 3.3K OHM J
R876	24366562	CARBON FILM, 1/6W 5.6K OHM J
R877	24366682	CARBON FILM, 1/6W 6.8K OHM J
R878	24366822	CARBON FILM, 1/6W 8.2K OHM J
R880	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R881	24552561	OXIDE METAL FILM, 1/2W 560 OHM J
R895	24366333	CARBON FILM, 1/6W 33K OHM J
R896	24366562	CARBON FILM, 1/6W 5.6K OHM J
R897	24366683	CARBON FILM, 1/6W 68K OHM J
△ R899	24005015	METAL GLAZE, 1W 8.2M OHM J
R901	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R902	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R903	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R904	24366472	CARBON FILM, 1/6W 4.7K OHM J
R905	24366150	CARBON FILM, 1/6W 15 OHM J
R907	24366560	CARBON FILM, 1/6W 56 OHM J
R913	24366560	CARBON FILM, 1/6W 56 OHM J
R914	24366471	CARBON FILM, 1/6W 470 OHM J
R915	24366120	CARBON FILM, 1/6W 12 OHM J

Location No.	Parts No.	Description
R916	24366270	CARBON FILM, 1/6W 27 OHM J
R917	24366271	CARBON FILM, 1/6W 270 OHM J
R918	24366330	CARBON FILM, 1/6W 33 OHM J
R920	24000907	FUSIBLE, 1W 3.9 OHM J
R921	24366471	CARBON FILM, 1/6W 470 OHM J
R922	24366120	CARBON FILM, 1/6W 12 OHM J
R924	24366330	CARBON FILM, 1/6W 33 OHM J
R925	24366271	CARBON FILM, 1/6W 270 OHM J
R928	24366471	CARBON FILM, 1/6W 470 OHM J
R929	24366120	CARBON FILM, 1/6W 12 OHM J
R930	24366330	CARBON FILM, 1/6W 33 OHM J
R932	24366332	CARBON FILM, 1/6W 3.3K OHM J
R934	24366471	CARBON FILM, 1/6W 470 OHM J
R935	24366122	CARBON FILM, 1/6W 1.2K OHM J
R937	24366271	CARBON FILM, 1/6W 270 OHM J
R940	24366560	CARBON FILM, 1/6W 56 OHM J
R942	24366222	CARBON FILM, 1/6W 2.2K OHM J
R943	24366222	CARBON FILM, 1/6W 2.2K OHM J
R944	24366222	CARBON FILM, 1/6W 2.2K OHM J
R945	24366270	CARBON FILM, 1/6W 27 OHM J
R946	24366270	CARBON FILM, 1/6W 27 OHM J
R950	24060356	VARIABLE, METAL 16B 0.6W 20M OHM M
R952	24366102	CARBON FILM, 1/6W 1K OHM J
R953	24366102	CARBON FILM, 1/6W 1K OHM J
R954	24366102	CARBON FILM, 1/6W 1K OHM J
R958	24366101	CARBON FILM, 1/6W 100 OHM J
R961	24568472	CERAMIC COVERED, 7W 4.7K OHM J
R962	24568472	CERAMIC COVERED, 7W 4.7K OHM J
R964	24568472	CERAMIC COVERED, 7W 4.7K OHM J
R965	24568472	CERAMIC COVERED, 7W 4.7K OHM J
R966	24366331	CARBON FILM, 1/6W 330 OHM J
R977	24366681	CARBON FILM, 1/6W 680 OHM J
R978	24568472	CERAMIC COVERED, 7W 4.7K OHM J
R979	24568472	CERAMIC COVERED, 7W 4.7K OHM J
R980	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R981	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R982	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R992	24366150	CARBON FILM, 1/6W 15 OHM J
R1063	24000445	CHIP JUMPER, 1608TYPE
R1065	24000445	CHIP JUMPER, 1608TYPE
R2104	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R3105	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R3106	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R4202	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4203	24011511	CHIP, 1/20W 510 OHM J
R4204	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R4205	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R4206	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4207	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4208	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4209	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4310	24366183	CARBON FILM, 1/6W 18K OHM J
R4408	24011361	CHIP, 1/20W 360 OHM J
R4410	24366823	CARBON FILM, 1/6W 82K OHM J
R4410	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4411	24366101	CARBON FILM, 1/6W 100 OHM J
R4422	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4424	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4425	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R4430	24011622	CHIP, METAL FILM, 1/20W 6.2K OHM J
R4460	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4461	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R4462	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J (29SH9UH)
R4462	24011512	CHIP, METAL FILM, 1/20W 5.1K OHM J (34SH9UH)
R4463	24011272	CHIP, 1/20W 2.7K OHM J

Location No.	Parts No.	Description
R4463	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4464	24011302	CHIP, METAL FILM, 1/20W 3K OHM J
R4465	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R4472	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4473	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4474	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4771	24366103	CARBON FILM, 1/6W 10K OHM J
R9180	24366330	CARBON FILM, 1/6W 33 OHM J
R9240	24366470	CARBON FILM, 1/6W 47 OHM J
R9300	24366470	CARBON FILM, 1/6W 47 OHM J
RA01	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA02	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA03	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA08	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA10	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA11	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RA12	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RA13	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA14	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA15	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA16	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA17	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA18	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA19	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA20	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA21	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA23	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA24	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA25	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA26	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA27	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA29	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA30	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA31	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA32	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA33	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA34	24366103	CARBON FILM, 1/6W 10K OHM J
RA34	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA35	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA36	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA37	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA38	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA45	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RA51	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA59	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA60	24011470	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA68	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA70	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA71	24366683	CARBON FILM, 1/6W 68K OHM J
RA71	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA72	24366223	CARBON FILM, 1/6W 22K OHM J
RA72	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA73	24366103	CARBON FILM, 1/6W 10K OHM J
RA74	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA75	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA76	24366103	CARBON FILM, 1/6W 10K OHM J
RA76	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA78	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA79	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA81	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA82	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA83	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RA84	24011102	CHIP, METAL FILM, 1/20W 1K OHM J



Location No.	Parts No.	Description
RA85	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RA86	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
RA87	24366223	CARBON FILM, 1/6W 22K OHM J
RA87	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA88	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA89	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA90	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA91	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA92	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA93	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA95	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RA99	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA100	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA122	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RA123	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RA124	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RA125	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RA141	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA241	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA251	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RA501	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA531	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RB01	24366271	CARBON FILM, 1/6W 270 OHM J
RB02	24366221	CARBON FILM, 1/6W 220 OHM J
RB03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RB04	24366223	CARBON FILM, 1/6W 22K OHM J
RB09	24366470	CARBON FILM, 1/6W 47 OHM J
RB10	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RB11	24366103	CARBON FILM, 1/6W 10K OHM J
RB11	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB20	24366103	CARBON FILM, 1/6W 10K OHM J
RB21	24366104	CARBON FILM, 1/6W 100K OHM J
RB30	24366682	CARBON FILM, 1/6W 6.8K OHM J
RB32	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RB33	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB34	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB35	24011392	CHIP, METAL FILM, 1/20W 3.9K 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	24011153	CHIP, METAL FILM, 1/20W 15K OHM J
RB44	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB45	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RB46	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB49	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB81	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RB82	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB83	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB84	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RB90	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB91	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RB92	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB93	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB94	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB95	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB96	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB97	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB98	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC01	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC02	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC03	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC06	24011102	CHIP, METAL FILM, 1/20W 1K OHM J

Location No.	Parts No.	Description
RC07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC08	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC10	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC11	24366102	CARBON FILM, 1/6W 1K OHM J
RC12	24366102	CARBON FILM, 1/6W 1K OHM J
RD01	24366472	CARBON FILM, 1/6W 4.7K OHM J
RD02	24366223	CARBON FILM, 1/6W 22K OHM J
RD03	24366101	CARBON FILM, 1/6W 100 OHM J
RD04	24366101	CARBON FILM, 1/6W 100 OHM J
RD05	24366101	CARBON FILM, 1/6W 100 OHM J
RD06	24366472	CARBON FILM, 1/6W 4.7K OHM J
RD07	24366332	CARBON FILM, 1/6W 3.3K OHM J
RD09	24366104	CARBON FILM, 1/6W 100K OHM J
RD11	24366104	CARBON FILM, 1/6W 100K OHM J
RD12	24366101	CARBON FILM, 1/6W 100 OHM J
RD13	23316672	DIODE, ZENER, MTZJ5.6B
RD14	24366221	CARBON FILM, 1/6W 220 OHM J
RD15	23316672	DIODE, ZENER, MTZJ5.6B
RD16	24366123	CARBON FILM, 1/6W 12K OHM J
RD17	24366101	CARBON FILM, 1/6W 100 OHM J
RD18	24366223	CARBON FILM, 1/6W 22K OHM J
RD19	24366472	CARBON FILM, 1/6W 4.7K OHM J
RD21	24366332	CARBON FILM, 1/6W 3.3K OHM J
RD41	24366103	CARBON FILM, 1/6W 10K OHM J
RD42	24366223	CARBON FILM, 1/6W 22K OHM J
RD43	24366182	CARBON FILM, 1/6W 1.8K OHM J
RD44	24366123	CARBON FILM, 1/6W 12K OHM J
RD45	24366333	CARBON FILM, 1/6W 33K OHM J
RD46	24366272	CARBON FILM, 1/6W 2.7K OHM J
RD47	24366104	CARBON FILM, 1/6W 100K OHM J
RD48	24366682	CARBON FILM, 1/6W 6.8K OHM J
RD49	24366392	CARBON FILM, 1/6W 3.9K OHM J
RD60	24366392	CARBON FILM, 1/6W 3.9K OHM J
RD61	24366272	CARBON FILM, 1/6W 2.7K OHM J
RD62	24366272	CARBON FILM, 1/6W 2.7K OHM J
RD63	24366104	CARBON FILM, 1/6W 100K OHM J
RD72	24366101	CARBON FILM, 1/6W 100 OHM J
RD73	24366101	CARBON FILM, 1/6W 100 OHM J
RD74	24366101	CARBON FILM, 1/6W 100 OHM J
RD75	24366393	CARBON FILM, 1/6W 39K OHM J
RD76	24366182	CARBON FILM, 1/6W 1.8K OHM J
RD77	24366393	CARBON FILM, 1/6W 39K OHM J
RD78	24366182	CARBON FILM, 1/6W 1.8K OHM J
RD79	24366183	CARBON FILM, 1/6W 18K OHM J
RD81	24366183	CARBON FILM, 1/6W 18K OHM J
RD83	24366103	CARBON FILM, 1/6W 10K OHM J
RD85	24366223	CARBON FILM, 1/6W 22K OHM J
RD86	24366223	CARBON FILM, 1/6W 22K OHM J
RD87	24366223	CARBON FILM, 1/6W 22K OHM J
RD88	24366223	CARBON FILM, 1/6W 22K OHM J
RJ01	24366103	CARBON FILM, 1/6W 10K OHM J
RJ02	24366102	CARBON FILM, 1/6W 1K OHM J
RJ04	24366102	CARBON FILM, 1/6W 1K OHM J
RJ05	24323479	METAL FILM, 2W 4.7 OHM J
RJ06	24366103	CARBON FILM, 1/6W 10K OHM J
RJ10	24000445	CHIP JUMPER, 1608TYPE
RJ13	24000445	CHIP JUMPER, 1608TYPE
RJ14	24000445	CHIP JUMPER, 1608TYPE
RJ15	24000445	CHIP JUMPER, 1608TYPE
RJ16	24000445	CHIP JUMPER, 1608TYPE
RJ17	24000445	CHIP JUMPER, 1608TYPE
RJ18	24000445	CHIP JUMPER, 1608TYPE
RS01	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
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

Location No.	Parts No.	Description
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	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS14	24011102	CHIP, METAL FILM, 1/20W 1K 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	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS26	24011104	CHIP, METAL FILM, 1/20W 100K 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	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS34	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS40	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS41	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS42	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS43	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS49	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS50	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS53	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS54	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS55	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS56	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS58	24011272	CHIP, 1/20W 2.7K OHM J
RV03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV04	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV05	24011222	CHIP, METAL FILM, 1/20W 2.2K 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	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RV13	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RV14	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV15	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV19	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV20	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV21	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV22	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV24	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RV25	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
RV26	24011272	CHIP, 1/20W 2.7K OHM J
RV27	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV28	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV31	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV32	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV33	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV35	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV37	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV39	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV40	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV41	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV46	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV47	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV48	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV49	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
RV50	24011821	CHIP, METAL FILM, 1/20W 820 OHM J
RV51	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV52	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV53	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV54	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV55	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV60	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV65	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV66	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV67	24366331	CARBON FILM, 1/6W 330 OHM J
RV68	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV81	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV85	24366750	CARBON FILM, 1/6W 75 OHM J
RV87	24366750	CARBON FILM, 1/6W 75 OHM J
RV87	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV88	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV89	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV90	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RV91	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
RY02	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY03	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY04	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY126	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
RY127	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RY604	24366102	CARBON FILM, 1/6W 1K OHM J
RY605	24366104	CARBON FILM, 1/6W 100K OHM J
RY606	24366393	CARBON FILM, 1/6W 39K OHM J
RY607	24366153	CARBON FILM, 1/6W 15K OHM J
RY608	24366152	CARBON FILM, 1/6W 1.5K OHM J
RY609	24366391	CARBON FILM, 1/6W 390 OHM J
RY610	24553560	OXIDE METAL FILM, 1W 56 OHM J
RY613	24553820	OXIDE METAL FILM, 1W 82 OHM J
RY614	24366103	CARBON FILM, 1/6W 10K OHM J
RY615	24366223	CARBON FILM, 1/6W 22K OHM J
RY616	24366104	CARBON FILM, 1/6W 100K OHM J
RY631	24366100	CARBON FILM, 1/6W 10 OHM J
RY632	24366100	CARBON FILM, 1/6W 10 OHM J

COILS & TRANSFORMERS		
L101	23248296	COIL, CHOKE, TLN3278GH
L102	23238506	COIL, PEAKING, TRF4229AJ
L103	23238506	COIL, PEAKING, TRF4229AJ
L301	23103894	FILTER, FERRITE BEAD, TEM2011AW
L302	23289846	COIL, PEAKING, TRF4101AT
L390	23103859	FILTER, FERRITE CHOKE, TEM2011 (34SH9UH)
L400	23289100	COIL, PEAKING, TRF4100AF
L401	23289101	COIL, PEAKING, TRF4101AF
L404	23103894	FILTER, FERRITE BEAD, TEM2011AW
L409	23248306	COIL, CHOKE, TLN3351GH
L410	23248183	COIL, CHOKE, TLN3343AD
L441	23233039	COIL, HORIZ LINEARITY, TLN2158AT (29SH9UH)
L441	23233982	COIL, HORIZ LINEARITY, TLN2158AG (34SH9UH)
L442	23248302	COIL, CHOKE, TLN3521GH (29SH9UH)
L442	23248196	COIL, CHOKE, TLN3457AD (34SH9UH)
L447	23248332	COIL, CHOKE 17X28H 15MMH, TLN3450AD
L448	23248332	COIL, CHOKE 17X28H 15MMH, TLN3450AD
L460	23103894	FILTER, FERRITE BEAD, TEM2011AW
L461	23248310	COIL, CHOKE, TLN3500GH
L462	23231360	COIL, DEFLECTION YOKE, TDY8296A (29SH9UH)
L462	23231365	COIL, DEFLECTION YOKE, TDY-634GK (34SH9UH)
L462A	23948535	SHEET, MAGNETIC FERRITE, TC-U(PLUS)
L462B	23948536	SHEET, MAGNETIC FERRITE, TC-V(MINUS)

Location No.	Parts No.	Description
L462C	23199746	CONVER CONTROL BOARD, XH (29SH9UH)
L462C	23993080	METAL SHEET, CONVER REVISION, TCCMXH01K (34SH9UH)
L462D	23993696	BOARD, CORRECTION (29SH9UH)
L462E	23993076	CONVER, CONV (29SH9UH)
L463	23103894	FILTER, FERRITE BEAD, TEM2011AW
L499	23103894	FILTER, FERRITE BEAD, TEM2011AW
L501	23289844	COIL, PEAKING, TRF4470AT
L502	23289844	COIL, PEAKING, TRF4470AT
L661	23103894	FILTER, FERRITE BEAD, TEM2011AW
L662	23103894	FILTER, FERRITE BEAD, TEM2011AW
L663	23103894	FILTER, FERRITE BEAD, TEM2011AW
L702	23261974	COIL, FERRITE BEAD, HC5-035
L704	23103894	FILTER, FERRITE BEAD, TEM2011AW
L705	23103894	FILTER, FERRITE BEAD, TEM2011AW
L706	23237987	COIL, PEAKING, TRF4100AC
L811	23103894	FILTER, FERRITE BEAD, TEM2011AW
L815	23103894	FILTER, FERRITE BEAD, TEM2011AW
L817	23103937	FILTER, EM2004
L818	23280016	COIL, PEAKING, TRF4100AZ
L819	23280016	COIL, PEAKING, TRF4100AZ
L820	23103894	FILTER, FERRITE BEAD, TEM2011AW
L821	23103894	FILTER, FERRITE BEAD, TEM2011AW
L824	23103894	FILTER, FERRITE BEAD, TEM2011AW
L825	23289840	COIL, PEAKING, TRF4100AT
L840	23248288	COIL, CHOKE, TLN3299GH
L841	23248087	COIL, CHOKE, TLN3312D
L850	23103894	FILTER, FERRITE BEAD, TEM2011AW
L851	23289840	COIL, PEAKING, TRF4100AT
L871	23103894	FILTER, FERRITE BEAD, TEM2011AW
L883	23221111	COIL, CHOKE, TRF9253GH
L885	23248288	COIL, CHOKE, TLN3299GH
L891	23103894	FILTER, FERRITE BEAD, TEM2011AW
L892	23103894	FILTER, FERRITE BEAD, TEM2011AW
L893	23280016	COIL, PEAKING, TRF4100AZ
L896	23103894	FILTER, FERRITE BEAD, TEM2011AW
L897	23248087	COIL, CHOKE, TLN3312D
△ L901	23200386	COIL, DG, TSB-2389AC, 40CU48T-8TYPE (29SH9UH)
△ L901	23200373	COIL, DG0.50CU 50T-2LOOP, TSB-2386AC (34SH9UH)
L901	23289838	COIL, PEAKING, TRF44R7AT
L902	23289689	COIL, PEAKING, TRF46R8AF
L903	23289689	COIL, PEAKING, TRF46R8AF
L904	23289689	COIL, PEAKING, TRF46R8AF
L905	23289837	COIL, PEAKING 3.30MMHJ, TRF43R3AT
L906	23289837	COIL, PEAKING 3.30MMHJ, TRF43R3AT
L907	23289837	COIL, PEAKING 3.30MMHJ, TRF43R3AT
L908	23237987	COIL, PEAKING, TRF4100AC
L911	23289840	COIL, PEAKING, TRF4100AT
L916	23289838	COIL, PEAKING, TRF44R7AT
L924	23289838	COIL, PEAKING, TRF44R7AT
LA01	23289840	COIL, PEAKING, TRF4100AT
LC01	23261959	COIL, CHOKE, TRF9240
LC02	23261959	COIL, CHOKE, TRF9240
LC31	23103775	COIL, FERRITE CHOKE, TEM2014
LJ901	23200321	COIL, DG, TSB-2377AC, 60T 8.0R 3.16L
LR01	23103146	EMI FILTER, TEM2030AA
LR02	23103146	EMI FILTER, TEM2030AA
LR21	23103146	EMI FILTER, TEM2030AA
LR22	23103146	EMI FILTER, TEM2030AA
LR22	23103146	EMI FILTER, TEM2030AA
LR23	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LR23	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LR24	23103146	EMI FILTER, TEM2030AA

Location No.	Parts No.	Description
LR24	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LR25	23103146	EMI FILTER, TEM2030AA
LR26	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LR27	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
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
LV09	23289840	COIL, PEAKING, TRF4100AT
LV10	23289840	COIL, PEAKING, TRF4100AT
LV11	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV12	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV42	23289840	COIL, PEAKING, TRF4100AT
LY101	23248312	COIL, CHOKE 9.3X8.5H 330MMH, TLN3040GH
LY102	23238506	COIL, PEAKING, TRF4229AJ
LY103	23238506	COIL, PEAKING, TRF4229AJ
LY104	23238506	COIL, PEAKING, TRF4229AJ
T400	23224386	TRANSFORMER, FOCUS, TLN2220AH
T401	23224384	TRANSFORMER, DRIVE, TLN1080AL
△ T461Z	23236769	TRANSFORMER, HORIZ OUTPUT, SERVICE, TFB4185ZD (29SH9UH)
T461Z	23236779	TRANSFORMER, HORIZ OUTPUT, SERVICE, TFB4196ZD (34SH9UH)
△ T801	23211713	COIL, LINE FILTER, TRF3197AQ
T802	23211742	COIL, LINE FILTER, TRF3209BT
T803	23211713	COIL, LINE FILTER, TRF3197AQ
T804	23217582	TRANSFORMER, CONVERTER, TPW3510AS
T806	23211738	COIL, LINE FILTER, TRF3228AL
△ T862	23217581	TRANSFORMER, CONVERTER, TPW3509AS
<b>SEMICONDUCTORS</b>		
Q201	23114433	TRANSISTOR, 2SC1815-Y
Q202	23314163	TRANSISTOR, 2SA1162-Y
Q203	23314163	TRANSISTOR, 2SA1162-Y
Q204	23314163	TRANSISTOR, 2SA1162-Y
Q205	23314163	TRANSISTOR, 2SA1162-Y
Q206	23314163	TRANSISTOR, 2SA1162-Y
Q207	23314163	TRANSISTOR, 2SA1162-Y
Q208	23314163	TRANSISTOR, 2SA1162-Y
Q220	23114756	TRANSISTOR, 2SC2482
Q301	23905610	IC, LA7846N (29SH9UH)
Q301	23319787	IC, LA7833S (34SH9UH)
Q301B	70391356	SCREW, BITTB3X10 SZN
Q302	23000711	IC, TA1317AN
Q303	23114425	TRANSISTOR, 2SA1015-Y(TE
Q304	23114433	TRANSISTOR, 2SC1815-Y (29SH9UH)
Q3103	23314163	TRANSISTOR, 2SA1162-Y
Q341	23114433	TRANSISTOR, 2SC1815-Y
Q360	23314204	TRANSISTOR, 2SC2412K,Q
Q370	23114462	TRANSISTOR, RN1202
Q371	23114462	TRANSISTOR, RN1202
Q390	23318187	IC, TA75558S (34SH9UH)
Q391	23205079	TRANSISTOR, 2SC4686A (34SH9UH)
Q402	23114577	TRANSISTOR, 2SC22350 (FA-1
Q404	23205149	TRANSISTOR, 2SC5859(FA)
Q404B	23850638	INSULATOR, TRANSISTOR, AC263
Q404D	72471082	SCREW, 3X10MM
Q407	23114463	TRANSISTOR, RN1201
Q408	23114463	TRANSISTOR, RN1201
Q409	23114462	TRANSISTOR, RN1202

Location No.	Parts No.	Description
Q411	23314204	TRANSISTOR, 2SC2412K,Q
Q418	23314141	TRANSISTOR, 2SC3852
Q418B	70391356	SCREW, BITTB3X10 SZN
Q420	23114433	TRANSISTOR, 2SC1815-Y
Q420	23314141	TRANSISTOR, 2SC3852
Q4200	23000370	IC, TA1318N
Q4201	23114497	TRANSISTOR, RN1406
Q4202	23114499	TRANSISTOR, RN1404
Q4203	23114497	TRANSISTOR, RN1406
Q4204	23114499	TRANSISTOR, RN1404
Q420B	70391356	SCREW, BITTB3X10 SZN
Q421	23114433	TRANSISTOR, 2SC1815-Y
Q421	23114433	TRANSISTOR, 2SC1815-Y
Q430	23314141	TRANSISTOR, 2SC3852
Q430B	70391356	SCREW, BITTB3X10 SZN
Q432	23114433	TRANSISTOR, 2SC1815-Y
Q434	23205077	TRANSISTOR, FET, 2SK2679
Q438	23205173	TRANSISTOR, FET VDSS=900V, 2SK2700
Q439	23205173	TRANSISTOR, FET VDSS=900V, 2SK2700
Q4460	23314204	TRANSISTOR, 2SC2412K,Q
Q4461	23314204	TRANSISTOR, 2SC2412K,Q
Q460	23314938	TRANSISTOR, 2SD2493(P)
Q460B	72471082	SCREW, 3X10MM
Q461	23114425	TRANSISTOR, 2SA1015-Y(TE)
Q470	23114541	TRANSISTOR, 2SA1320
Q470	23114433	TRANSISTOR, 2SC1815-Y
Q471	23114433	TRANSISTOR, 2SC1815-Y
Q472	23114433	TRANSISTOR, 2SC1815-Y
Q473	23114425	TRANSISTOR, 2SA1015-Y(TE)
Q476	23114459	TRANSISTOR, RN1205
Q477	23114459	TRANSISTOR, RN1205
Q490	23114462	TRANSISTOR, RN1202
Q491	23114458	TRANSISTOR, RN1206
Q492	23118952	IC, PHOTO COUPLER, TLP521-1 (FA)
Q493	23205077	TRANSISTOR, FET, 2SK2679
Q495	23118952	IC, PHOTO COUPLER, TLP521-1 (FA)
Q498	23114458	TRANSISTOR, RN1206
Q510	23009287	IC, TA1360ANG
Q601	23000269	IC, TA8216H
Q601B	70391356	SCREW, BITTB3X10 SZN
Q602	23000269	IC, TA8216H
Q602B	70391356	SCREW, BITTB3X10 SZN
Q611	23314289	TRANSISTOR, 2SA1586-Y
Q616	23314289	TRANSISTOR, 2SA1586-Y
Q631	70114396	TRANSISTOR, 2SC3326B
Q651	23906596	IC, BA4558
Q681	70114396	TRANSISTOR, 2SC3326B
Q682	70114396	TRANSISTOR, 2SC3326B
Q705	23114433	TRANSISTOR, 2SC1815-Y
Q706	23114433	TRANSISTOR, 2SC1815-Y
Q707	23114437	TRANSISTOR, 2SC752GTM-Y
Q709	23114433	TRANSISTOR, 2SC1815-Y
Q710	23114425	TRANSISTOR, 2SA1015-Y(TE)
Q711	23314909	TRANSISTOR, 2SA1837
Q712	23314912	TRANSISTOR, 2SC4793
Q719	23114433	TRANSISTOR, 2SC1815-Y
Q720	23114433	TRANSISTOR, 2SC1815-Y
Q801	23135026	IC, STR-X6469
Q801B	72471082	SCREW, 3X10MM
Q801D	23960136	ADHESIVE, SILICONE, TSE3843-W
Q802	23314141	TRANSISTOR, 2SC3852
Q803	23135036	IC, STRW6853
Q803B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q804	23114433	TRANSISTOR, 2SC1815-Y
Q805	23114433	TRANSISTOR, 2SC1815-Y
△ Q806	23009270	IC, PHOTO COUPLER, PS2581L1(D)

Location No.	Parts No.	Description
Q807	23114433	TRANSISTOR, 2SC1815-Y
Q820	23314141	TRANSISTOR, 2SC3852
Q820B	70391356	SCREW, BITTB3X10 SZN
Q821	23114433	TRANSISTOR, 2SC1815-Y
△ Q826	23009270	IC, PHOTO COUPLER, PS2581L1(D)
Q827	23000352	IC, SE125N, LF4
Q830	23314141	TRANSISTOR, 2SC3852
Q830B	70391356	SCREW, BITTB3X10 SZN
Q831	23314141	TRANSISTOR, 2SC3852
Q831B	70391356	SCREW, BITTB3X10 SZN
Q832	23009239	IC, NJM2396F09
Q832B	70391356	SCREW, BITTB3X10 SZN
Q840	23318299	IC, L78MR05-FA
Q840B	70391356	SCREW, BITTB3X10 SZN
Q841	23114433	TRANSISTOR, 2SC1815-Y
Q842	23114433	TRANSISTOR, 2SC1815-Y
Q855	23114433	TRANSISTOR, 2SC1815-Y
Q880	23114425	TRANSISTOR, 2SA1015-Y(TE)
Q901	23205159	TRANSISTOR, 2SC3942
Q902	23205165	TRANSISTOR, 2SC3950E
Q903	23205159	TRANSISTOR, 2SC3942
Q904	23205165	TRANSISTOR, 2SC3950E
Q905	23205159	TRANSISTOR, 2SC3942
Q906	23205165	TRANSISTOR, 2SC3950E
Q907	23114735	TRANSISTOR, 2SA102-Y(C)
Q930	23205158	TRANSISTOR, 2SC3790E
Q931	23205156	TRANSISTOR, 2SA1480E
Q933	23205158	TRANSISTOR, 2SC3790E
Q934	23205156	TRANSISTOR, 2SA1480E
Q936	23205158	TRANSISTOR, 2SC3790E
Q937	23205156	TRANSISTOR, 2SA1480E
Q961	23114433	TRANSISTOR, 2SC1815-Y
QA01	23009681	IC, 8BIT MICRO COMPUTER 64PIN, CXP750010-316S
QA02	23009649	IC, AT24C64A-10PI
QA03	23906946	IC, CM0016AD
QA05	23114437	TRANSISTOR, 2SC752GTM-Y
QA10	23314163	TRANSISTOR, 2SA1162-Y
QA14	23114425	TRANSISTOR, 2SA1015-Y(TE)
QB02	23114425	TRANSISTOR, 2SA1015-Y(TE)
QB03	23114459	TRANSISTOR, RN1205
QB06	23314289	TRANSISTOR, 2SA1586-Y
QB30	23114433	TRANSISTOR, 2SC1815-Y
QB42	23314289	TRANSISTOR, 2SA1586-Y
QB43	23314292	TRANSISTOR, 2SC4116-Y
QB44	23314163	TRANSISTOR, 2SA1162-Y
QB45	23314204	TRANSISTOR, 2SC2412K,Q
QB81	70114396	TRANSISTOR, 2SC3326B
QB82	70114396	TRANSISTOR, 2SC3326B
QB83	23314994	TRANSISTOR, 2SA1576A106
QB92	23314993	TRANSISTOR, 2SC4081 Q
QB93	23314994	TRANSISTOR, 2SA1576A106
QB94	23314994	TRANSISTOR, 2SA1576A106
QB95	23314994	TRANSISTOR, 2SA1576A106
QB96	23314994	TRANSISTOR, 2SA1576A106
QD01	23009142	IC, NJM1136D
QD41	23000725	IC, NJM2700L
QD42	23314085	TRANSISTOR, FET, 2SK372 V
QD43	23314085	TRANSISTOR, FET, 2SK372 V
QD44	23114460	TRANSISTOR, RN1204
QD45	23114460	TRANSISTOR, RN1204
QD81	23114466	TRANSISTOR, RN2204
QD82	23114623	TRANSISTOR, 2SC2878-A(TEM)
QD83	23114623	TRANSISTOR, 2SC2878-A(TEM)
QJ02	23114433	TRANSISTOR, 2SC1815-Y
QJ03	23314912	TRANSISTOR, 2SC4793
QJ04	23114433	TRANSISTOR, 2SC1815-Y

Location No.	Parts No.	Description
QS01	23314993	TRANSISTOR, 2SC4081 Q
QS02	23314993	TRANSISTOR, 2SC4081 Q
QS03	23314993	TRANSISTOR, 2SC4081 Q
QS04	23314993	TRANSISTOR, 2SC4081 Q
QS05	70114396	TRANSISTOR, 2SC3326B
QS06	70114396	TRANSISTOR, 2SC3326B
QS07	70114396	TRANSISTOR, 2SC3326B
QS08	70114396	TRANSISTOR, 2SC3326B
QS09	23114493	TRANSISTOR, RN2404
QV01	23906887	IC, CXA2069Q
QV02	23905590	IC, M52055FP
QV03	23000359	IC, MM1111XF
QV04	23314204	TRANSISTOR, 2SC2412K,Q
QV06	23314163	TRANSISTOR, 2SA1162-Y
QV07	23314292	TRANSISTOR, 2SC4116-Y
QV09	23314163	TRANSISTOR, 2SA1162-Y
QV12	23114433	TRANSISTOR, 2SC1815-Y
QV13	23314163	TRANSISTOR, 2SA1162-Y
QV14	23314163	TRANSISTOR, 2SA1162-Y
QV15	23314163	TRANSISTOR, 2SA1162-Y
QV20	23314163	TRANSISTOR, 2SA1162-Y
QV21	23314163	TRANSISTOR, 2SA1162-Y
QY10	23314994	TRANSISTOR, 2SA1576A106
QY180	23114499	TRANSISTOR, RN1404
QY185	23114499	TRANSISTOR, RN1404
QY601	23318255	IC, UPC1406HA
QY602	23114433	TRANSISTOR, 2SC1815-Y
QY604	23114623	TRANSISTOR, 2SC2878-A(TEM
QY605	23114425	TRANSISTOR, 2SA1015-Y(TE
QY606	23114478	TRANSISTOR, RN2004 (29SH9UH)
D101	23316755	DIODE, ZENER, MTZJ33C
D120	23316675	DIODE, ZENER, MTZJ6.2B
D240	23118859	DIODE, 1SS133
D301	23118095	DIODE, ERB44-06
D302	23118094	DIODE, EU2A
D303	23316794	DIODE, SC570A
D304	23118094	DIODE, EU2A
D307	23316672	DIODE, ZENER, MTZJ5.6B
D327	23316717	DIODE, ZENER, MTZJ11C
D328	23316717	DIODE, ZENER, MTZJ11C
D329	23316688	DIODE, ZENER, MTZJ9.1C
D336	23316672	DIODE, ZENER, MTZJ5.6B
D337	23316672	DIODE, ZENER, MTZJ5.6B
D373	23316685	DIODE, ZENER, MTZJ8.2C
D374	23118859	DIODE, 1SS133
D375	23118522	DIODE, ZENER, RD7.5ES-B3 (34SH9UH)
D390	23118527	DIODE, ZENER, RD6.8ES B1 (34SH9UH)
D404	23224366	DIODE, FMQ-3GU
D406	23118094	DIODE, EU2A
D408	23118094	DIODE, EU2A
D410	23118094	DIODE, EU2A
D412	23118094	DIODE, EU2A
D413	23118859	DIODE, 1SS133
D414	23118859	DIODE, 1SS133
D415	23316472	DIODE, RGP10J
D419	23316716	DIODE, ZENER, MTZJ11B
D421	23316680	DIODE, ZENER, MTZJ7.5A
D422	23316720	DIODE, ZENER, MTZJ12C
D431	23316670	DIODE, ZENER, MTZJ5.1C
D432	23316671	DIODE, ZENER, MTZJ5.6A
D436	23118859	DIODE, 1SS133
D441	23316688	DIODE, ZENER, MTZJ9.1C
D462	23118859	DIODE, 1SS133
D467	23118094	DIODE, EU2A
D470	23316719	DIODE, ZENER, MTZJ12B
D470	23316720	DIODE, ZENER, MTZJ12C
D490	23118859	DIODE, 1SS133

Location No.	Parts No.	Description
D497	23316648	DIODE, ZENER, MTZJ2.2A
D501	23118041	DIODE, MA111
D502	23118041	DIODE, MA111
D512	23316567	DIODE, ZENER, MA8051-L
D513	23118041	DIODE, MA111
D520	23316647	DIODE, ZENER, MTZJ2.0B
D601	23118041	DIODE, MA111
D602	23118041	DIODE, MA111
D603	23118041	DIODE, MA111
D604	23118041	DIODE, MA111
D608	23118041	DIODE, MA111
D609	23118041	DIODE, MA111
D611	23118041	DIODE, MA111
D612	23118041	DIODE, MA111
D613	23118041	DIODE, MA111
D617	23118041	DIODE, MA111
D618	23118041	DIODE, MA111
D619	23118041	DIODE, MA111
D631	23118041	DIODE, MA111
D704	23118859	DIODE, 1SS133
D705	23118859	DIODE, 1SS133
D715	23118859	DIODE, 1SS133
D721	23118859	DIODE, 1SS133
D801	23357041	DIODE, LN6SB60-F05
D801A	23476068	HEAT SINK, ASSEM D801
D801B	72471082	SCREW, 3X10MM
D803	23316672	DIODE, ZENER, MTZJ5.6B
D804	23316725	DIODE, ZENER, MTZJ15B
D805	23357012	DIODE, 1SS244
D806	23316472	DIODE, RGP10J
D807	23316746	DIODE, ZENER, MTZJ27B
D810	23316738	DIODE, ZENER, MTZJ22B
D811	23118859	DIODE, 1SS133
D815	23316754	DIODE, ZENER, MTZJ33B
D818	23316738	DIODE, ZENER, MTZJ22B
D820	23316732	DIODE, ZENER, MTZJ18C
D821	23118859	DIODE, 1SS133
D821	23316721	DIODE, ZENER, MTZJ13A
D822	23118859	DIODE, 1SS133
D828	23118859	DIODE, 1SS133
D830	23316714	DIODE, RL2Z
D831	23316714	DIODE, RL2Z
D832	23316672	DIODE, ZENER, MTZJ5.6B
D835	23118859	DIODE, 1SS133
D836	23316472	DIODE, RGP10J
D837	23118859	DIODE, 1SS133
D839	23316672	DIODE, ZENER, MTZJ5.6B
D840	23316391	DIODE, D3SB60(4103)
D841	23118859	DIODE, 1SS133
D842	23316724	DIODE, ZENER, MTZJ15A
D848	23316675	DIODE, ZENER, MTZJ6.2B
D849	23316686	DIODE, ZENER, MTZJ9.1A
D850	23316472	DIODE, RGP10J
D854	23118859	DIODE, 1SS133
D855	23316675	DIODE, ZENER, MTZJ6.2B
D872	23316754	DIODE, ZENER, MTZJ33B
D883	23316803	DIODE, FMU-G16S
D891	23316184	DIODE, FML-G12S
D892	23316184	DIODE, FML-G12S
D892	23316673	DIODE, ZENER, MTZJ5.6C
D893	23316672	DIODE, ZENER, MTZJ5.6B
D896	23316472	DIODE, RGP10J
D899	24000656	VARIATOR, TNR15G471K
D904	23118859	DIODE, 1SS133
D905	23118859	DIODE, 1SS133
D906	23118859	DIODE, 1SS133
D907	23118859	DIODE, 1SS133

Location No.	Parts No.	Description
D908	23118859	DIODE, 1SS133
D909	23118859	DIODE, 1SS133
D911	23115337	DIODE, 1S1834
D916	23357012	DIODE, 1SS244
D917	23357012	DIODE, 1SS244
D918	23357012	DIODE, 1SS244
D919	23357012	DIODE, 1SS244
D921	23115337	DIODE, 1S1834
D926	23357012	DIODE, 1SS244
D927	23357012	DIODE, 1SS244
D928	23357012	DIODE, 1SS244
D929	23357012	DIODE, 1SS244
D949	23357012	DIODE, 1SS244
D950	23357012	DIODE, 1SS244
D951	23357012	DIODE, 1SS244
D952	23357012	DIODE, 1SS244
DA05	23118041	DIODE, MA111
D4201	23118041	DIODE, MA111
D4202	23118041	DIODE, MA111
D4203	23316538	DIODE, ZENER, MA8033-L, TX
D4204	23316538	DIODE, ZENER, MA8033-L, TX
D4410	23118859	DIODE, 1SS133
D4411	23118859	DIODE, 1SS133
D4412	23118859	DIODE, 1SS133
DA42	23316673	DIODE, ZENER, MTZJ5.6C
DB01	23358564	DIODE, LED, SLR-56VC3FPQ
DB02	23358563	DIODE, LED, SLR-56MC3FPQR
DB30	23118859	DIODE, 1SS133
DD81	23118859	DIODE, 1SS133
DD82	23118859	DIODE, 1SS133
DD83	23118859	DIODE, 1SS133
DJ01	23118859	DIODE, 1SS133
DJ02	23316726	DIODE, ZENER, MTZJ15C
DY601	23118859	DIODE, 1SS133
DY602	23118859	DIODE, 1SS133
<b>MISCELLANEOUS</b>		
B102	23974994	BAND, KESSOKU
B207	23037312	SCREW, BTBW3X12SZN
B212	23845859	HOLDER, WIRE, PVC-COAT, L=70MM
BB05A	23713201	CONNECTOR, PLUG B-B 16P
BB05B	23713202	CONNECTOR, SOCKET B-B 16P
BB06A	23368517	CONNECTOR, PLUG, B-B 6P
BB06B	23902749	CONNECTOR, SOCKET, B-B 6P
BB07A	23713201	CONNECTOR, PLUG B-B 16P
BB07B	23713202	CONNECTOR, SOCKET B-B 16P
BB15B	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB16A	23368517	CONNECTOR, PLUG, B-B 6P
BB16B	23902749	CONNECTOR, SOCKET, B-B 6P
BB17A	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
E912	23528016	RUBBER, WEDGE, MEDIUM W10H15L50, TRWMED01T (34SH9UH)
E922	23845564	CLAMPER, ANODE CLAMPERP17CD39 (29SH9UH)
E940	23965900	TAPE, GLASS-CLOTH, W/ADHESIVE W=18 T=0.18 (34SH9UH)
E947	23965900	TAPE, GLASS-CLOTH, W/ADHESIVE W=18 T=0.18 (29SH9UH)
E963	23974994	BAND, KESSOKU (29SH9UH)
E963	23845564	CLAMPER, ANODE CLAMPERP17CD39 (34SH9UH)
E964	23845511	BAND (29SH9UH)
E966	23974994	BAND, KESSOKU (34SH9UH)
△ F470	23144872	FUSE, 250V 1.25A
F470A	23165433	FUSE HOLDER, 5.2 SOC
△ F801	23144458	FUSE, 5.0A 250V
F801A	23165433	FUSE HOLDER, 5.2 SOC

Location No.	Parts No.	Description
△ F802	23144508	FUSE, CARTRIDGE 5.2X20, 250V 4.0A
F802A	23165433	FUSE HOLDER, 5.2 SOC
△ F803	23144650	FUSE, CARTRIDGE 5X20, 250V 2.0A
F803A	23165433	FUSE HOLDER, 5.2 SOC
G306	24366562	CARBON FILM, 1/6W 5.6K OHM J (29SH9UH)
G337	24366432	CARBON FILM, 1/6W 4.3K OHM J (29SH9UH)
G337	24000639	METAL FILM, 1/4W 22K OHM F (34SH9UH)
G430	23118094	DIODE, EU2A
G461	24003898	METAL FILM, 1/4W 3.3K OHM J
G615	23238714	COIL, PEAKING, TRF4100AJ
G616	23238714	COIL, PEAKING, TRF4100AJ
G802	23289840	COIL, PEAKING, TRF4100AT
G812	23103894	FILTER, FERRITE BEAD, TEM2011AW
G891	23248297	COIL, CHOKE, TLN3481GH
G908	24366560	CARBON FILM, 1/6W 56 OHM J
G914	23118859	DIODE, 1SS133
G915	23118859	DIODE, 1SS133
G923	24366560	CARBON FILM, 1/6W 56 OHM J
G924	23118859	DIODE, 1SS133
G925	23118859	DIODE, 1SS133
G941	24366560	CARBON FILM, 1/6W 56 OHM J
G947	23118859	DIODE, 1SS133
G948	23118859	DIODE, 1SS133
G951	24366102	CARBON FILM, 1/6W 1K OHM J
G966	24366102	CARBON FILM, 1/6W 1K OHM J
G4000	23289840	COIL, PEAKING, TRF4100AT
G9880	24366102	CARBON FILM, 1/6W 1K OHM J
GCD86	24797100	ELECTROLYTIC, 50V 10UF M
GCD88	24797100	ELECTROLYTIC, 50V 10UF M
GCD90	24797100	ELECTROLYTIC, 50V 10UF M
GCD91	24797100	ELECTROLYTIC, 50V 10UF M
GJ20	24000445	CHIP JUMPER, 1608TYPE
GJ21	24000445	CHIP JUMPER, 1608TYPE
GJ22	24000445	CHIP JUMPER, 1608TYPE
GJ23	24000445	CHIP JUMPER, 1608TYPE
GJ24	24000445	CHIP JUMPER, 1608TYPE
GJ25	24000445	CHIP JUMPER, 1608TYPE
GJ26	24000445	CHIP JUMPER, 1608TYPE
GJ27	24000445	CHIP JUMPER, 1608TYPE
GJ28	24000445	CHIP JUMPER, 1608TYPE
GJ29	24000445	CHIP JUMPER, 1608TYPE
GJ30	24000445	CHIP JUMPER, 1608TYPE
GJ31	24000445	CHIP JUMPER, 1608TYPE
GJ32	24000445	CHIP JUMPER, 1608TYPE
GJ33	24000445	CHIP JUMPER, 1608TYPE
GJ34	24000445	CHIP JUMPER, 1608TYPE
GJ50	24000445	CHIP JUMPER, 1608TYPE
GJ71	24000445	CHIP JUMPER, 1608TYPE
GJ101	24000445	CHIP JUMPER, 1608TYPE
GJ400	24000445	CHIP JUMPER, 1608TYPE
GJ401	24000445	CHIP JUMPER, 1608TYPE
GJ404	24000445	CHIP JUMPER, 1608TYPE
GJ501	24000445	CHIP JUMPER, 1608TYPE
GJ502	24000445	CHIP JUMPER, 1608TYPE
GJ503	24000445	CHIP JUMPER, 1608TYPE
GJ504	24000445	CHIP JUMPER, 1608TYPE
GJ603	24000445	CHIP JUMPER, 1608TYPE
GJ604	24000445	CHIP JUMPER, 1608TYPE
GJ605	24000445	CHIP JUMPER, 1608TYPE
GJ606	24000445	CHIP JUMPER, 1608TYPE
GRD80	24366103	CARBON FILM, 1/6W 10K OHM J
GRD82	24366103	CARBON FILM, 1/6W 10K OHM J
HY01A	23379844	CABLE, PHONO PLUG 2C-2V
HY02	23148327	MODULE, MVCM13, MULTI MONO, MVCM13(PIP)
JP601	24000445	CHIP JUMPER, 1608TYPE
JP602	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
KB01	23000852	IC, REMOTE PHOTO RECEIVER, PIC-37043TE2
KB02	23358522	DIODE, LED, SIR-56SB3F
M461A	23192957	ANODE CAP ASSY, TCC5602AT (34SH9UH)
M461A	23192963	CABLE, TCC 60D 560LD 50KVVJE LI (29SH9UH)
M461B	23504203	CABLE, FOCUS
M461C	23504204	CABLE, SCREEN
N724	23965900	TAPE, GLASS-CLOTH, W/ADHESIVE W=18 T=0.18
N728	23960101	SILICONE RUBBER, TSE-382 RTV
P104	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
P402A	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P402B	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P404A	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
P404B	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
P503A	23903024	CONNECTOR, SOCKET, B-B 20P 1.5MM JST-R20LB-10-1
P503B	23368633	CONNECTOR, PLUG, B-B 1.5MM 20P JST-JDV-PS20LB-10-1
P504A	23903024	CONNECTOR, SOCKET, B-B 20P 1.5MM JST-R20LB-10-1
P504B	23368633	CONNECTOR, PLUG, B-B 1.5MM 20P JST-JDV-PS20LB-10-1
P512A	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P512B	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P611	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P613A	23368580	CONNECTOR, PLUG 6P, 2.5MM G JST-EH, B6B-EH-F1-TV4
P613B	23368580	CONNECTOR, PLUG 6P, 2.5MM G JST-EH, B6B-EH-F1-TV4
P661	23365500	EARPHON JACK
P703B	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
P704A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P704B	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
P800	23368013	CONNECTOR, PLUG, 2P 11.88MM W VT-JST
△ P801	23372168	POWER CORD, UK-HK VO 6A F13A
P803A	23164729	CONNECTOR, PLUG, 3P 5MM B JALCO YKF21-0027
P803B	23164729	CONNECTOR, PLUG, 3P 5MM B JALCO YKF21-0027
P804A	23164729	CONNECTOR, PLUG, 3P 5MM B JALCO YKF21-0027
P902A	23368587	CONNECTOR, PLUG, 8P 2.5MM W EH-JST, S8B-EH
P902B	23367068	CONNECTOR, PLUG 8P, 2.5MM G JST-EH, B8B-EH-F1-TV4
P904A	23367069	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A
P904B	23367069	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A
P910	23164725	CONNECTOR, PLUG 2P
PA01	23368579	CONNECTOR, PLUG 5P, 2.5MM G JST-EH, B5B-EH-F1-TV4
PA02A	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4

Location No.	Parts No.	Description
PA02B	23368577	CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4
PA03A	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
PA03B	23367071	CONNECTOR, PLUG, NP 2.5MM G JST-EH, B11B-EH-F1A
PB01A	23902062	CONNECTOR, SOCKET, B-B
PB01B	23368004	CONNECTOR, PLUG B-B 5P 2.5MM JST
PU01	23902655	CONNECTOR, B-B 15P
PU02	23902655	CONNECTOR, B-B 15P
PU03	23902852	CONNECTOR, SOCKET, B-B 7P
PV01	23365238	CONNECTOR, JACK, 1S:SW+P(1E+1E:F+2R:F+2L:F)
PV02	23023040	CONNECTOR, JACK, PIN 6P
PV03	23023021	CONNECTOR, JACK, PIN 8P
PV11A	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
PV11B	23368578	CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4
PY630	23365500	EARPHON JACK
△ S801	23344481	SWITCH, POWER, AAPY2211
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
SJ01	23146958	RELAY, 2C 1A DC12V OMRON
SR42	23146558	RELAY, DC12V SILENT, DJ12D1-O(M)-Q
SR43	23146558	RELAY, DC12V SILENT, DJ12D1-O(M)-Q
△ SR81	23146573	RELAY, DC12V 0.53W, OMR G5PA-1-M
SR82	23146573	RELAY, DC12V 0.53W, OMR G5PA-1-M
SR83	23146570	RELAY, DC12V, 2M OMR, G5PA-2 DC12
UX01	23148069	MODULE, VIDEO 3D PIP B31, MVPC05A
UX02	23148027	SCAN CONVERTER MODULE, MDFS03
V901B	23102456	FUKA MAGNET, CHEVRON TAKECHI, MAG4006 (29SH9UH)
V901D	23528016	RUBBER, WEDGE, MEDIUM W10H15L50, TRWMED01T (29SH9UH)
V901E	23960101	SILICONE RUBBER, TSE-382 RTV (34SH9UH)
V901M	23102465	CONVERGENCE MAGNET, 32.5D4 LEAD, MAG-1108 (34SH9UH)
V901M	23102523	MAGNET, PC, MAG-1122 (29SH9UH)
W661	23351145	SPEAKER, SPK1402, 80X120 8-OHM 12W
W662	23351145	SPEAKER, SPK1402, 80X120 8-OHM 12W
W663	23351194	SPEAKER, SPK1392B0
X4010	23153721	CERAMIC RESONATOR, 503KHZ
X4402	23153721	CERAMIC RESONATOR, 503KHZ
XA01	23153497	CERAMIC RESONATER, TCR1080AM
Z301	23110850	RECTI BLOCK, TPA6032CH (34SH9UH)
Z420	23144539	PROTECTOR, 491SERIES, 125V 2A
Z430	23144536	PROTECTOR, 491SERIES, 125V 1A
Z463	23144536	PROTECTOR, 491SERIES, 125V 1A
Z601	23107714	EMI FILTER, TEM1014T
Z602	23107714	EMI FILTER, TEM1014T
Z889	23144543	PROTECTOR, 491SERIES, 125V 5A
Z890	23144543	PROTECTOR, 491SERIES, 125V 5A
Z891	23144543	PROTECTOR, 491SERIES, 125V 5A
Z892	23144543	PROTECTOR, 491SERIES, 125V 5A
Z893	23144539	PROTECTOR, 491SERIES, 125V 2A
Z896	23144539	PROTECTOR, 491SERIES, 125V 2A
Z897	23144539	PROTECTOR, 491SERIES, 125V 2A
<b>PC BOARD ASSEMBLIES</b>		
* U101	75000617	SIGNAL BOARD, PD0777H1 (29SH9UH)
* U101	75000634	SIGNAL BOARD, PD0777J1 (34SH9UH)
* U102	75000305	BEP BOARD, PD0783A

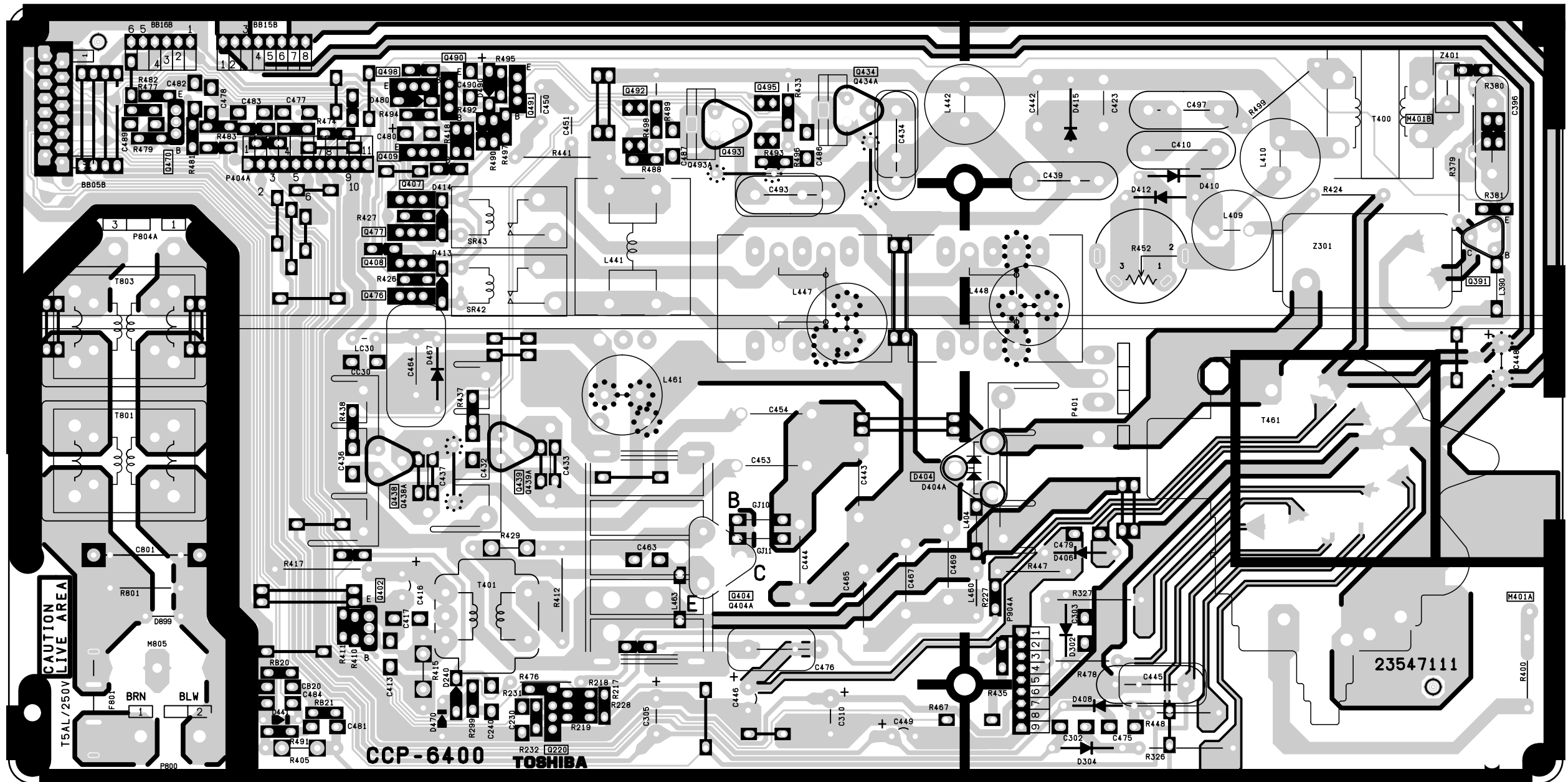








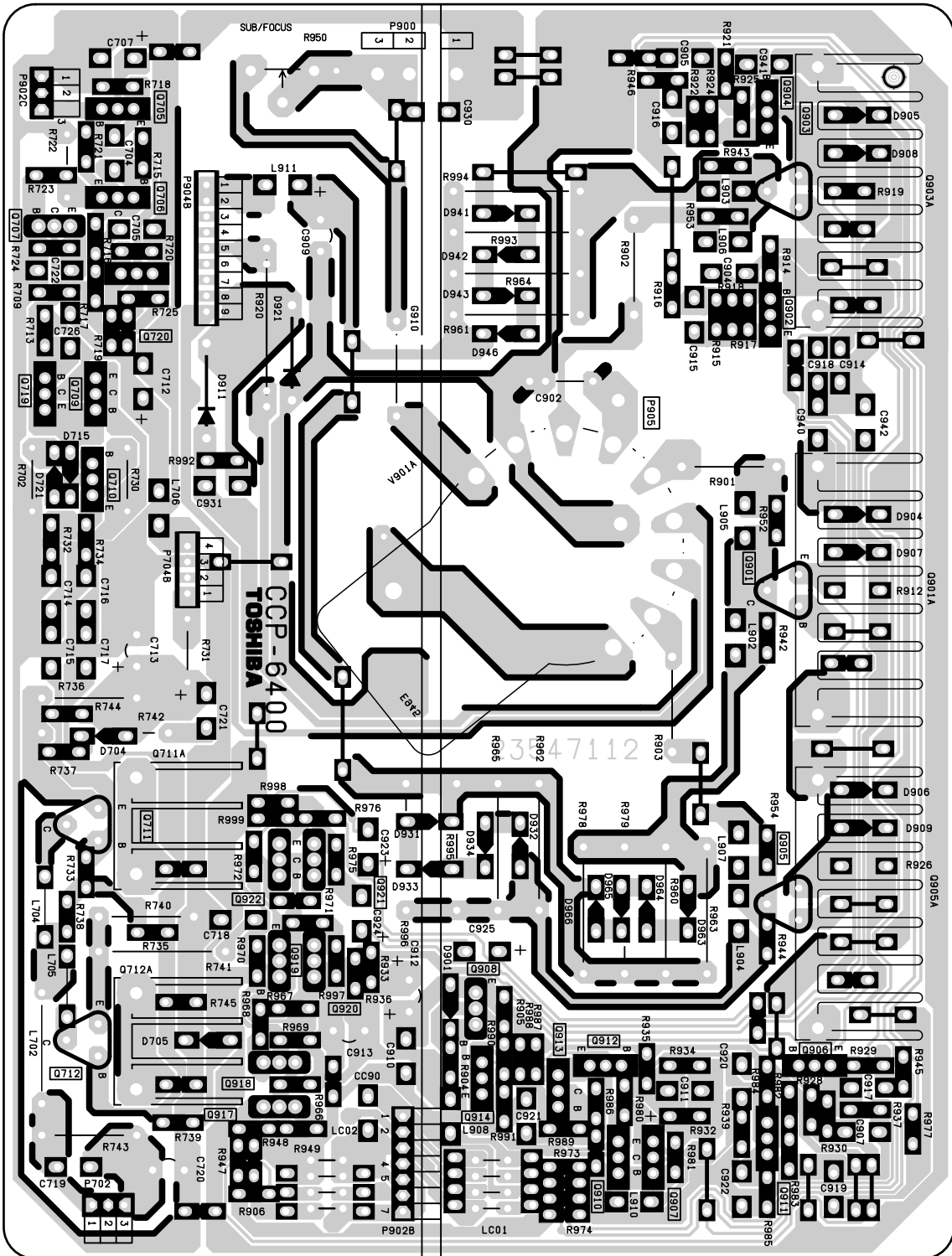
DEF BOARD PD0781  
BOTTOM (FOIL) SIDE



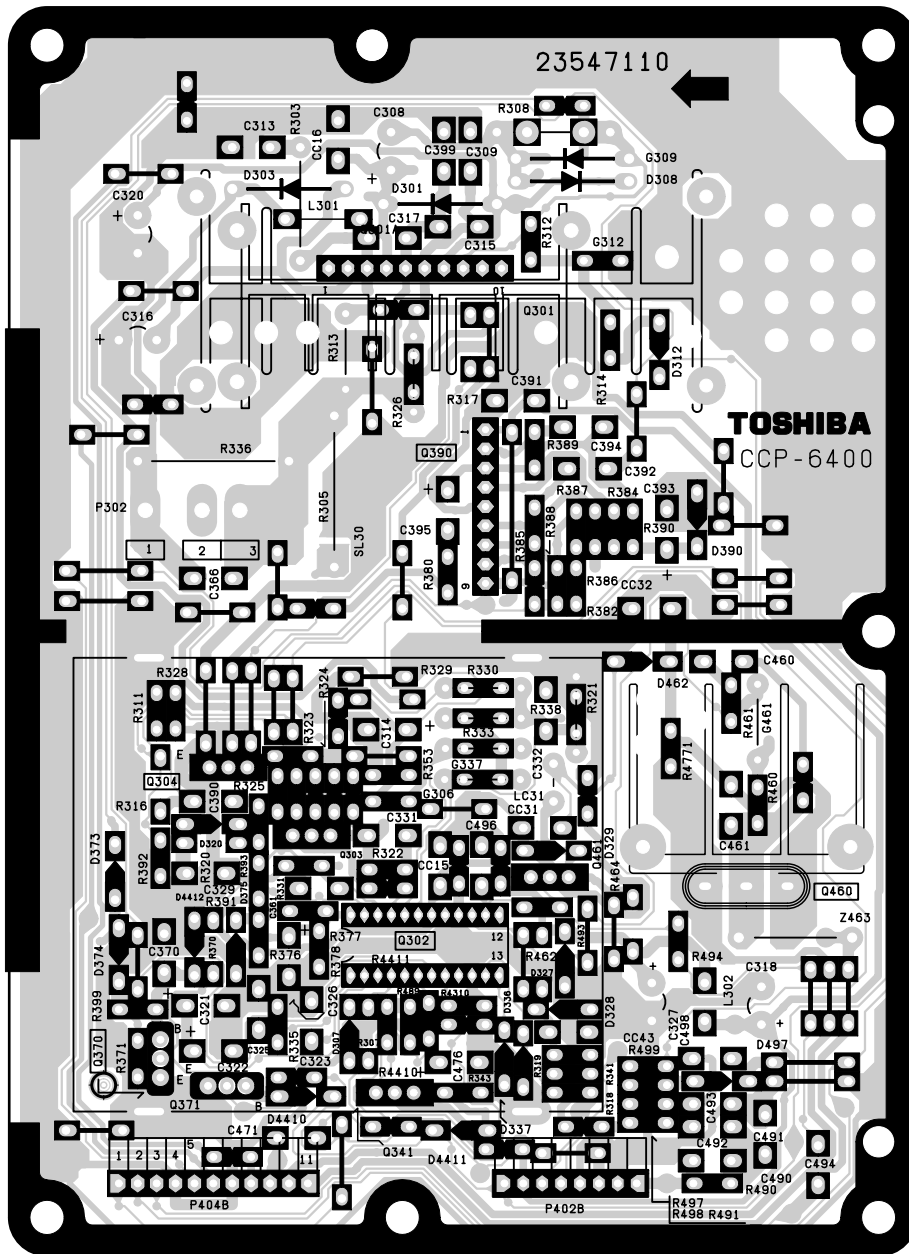


# CRTD/VM BOARD PD1451

## BOTTOM (FOIL) SIDE



E&W/V OUT BOARD PD0780  
BOTTOM (FOIL) SIDE



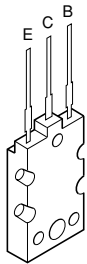


**THIS PAGE IS  
INTENTIONALLY LEFT  
BLANK.**

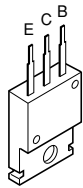


# TERMINAL VIEW OF TRANSISTORS

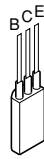
- ① 2SD2253  
(old)  
2SC5243



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



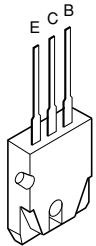
- ③ 2SC752GTM  
2SC2482  
2SC2655  
2SC4721P



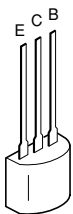
- ④ 2SC752  
2SA562TM  
2SA1015  
2SC1815  
2SC2878  
2SC1740S  
2SC2120  
2SA9335



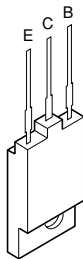
- ⑤ 2SA1788



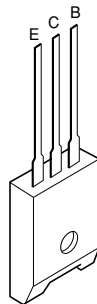
- ⑥ RN2203  
RN2201  
RN2004  
RN1203  
RN1204  
RN2204  
RN1205  
RN1202  
RN1201



- ⑦ 2SD1554  
2SD2253  
2SD1556  
2SC5143  
2SD2553  
2SC5570

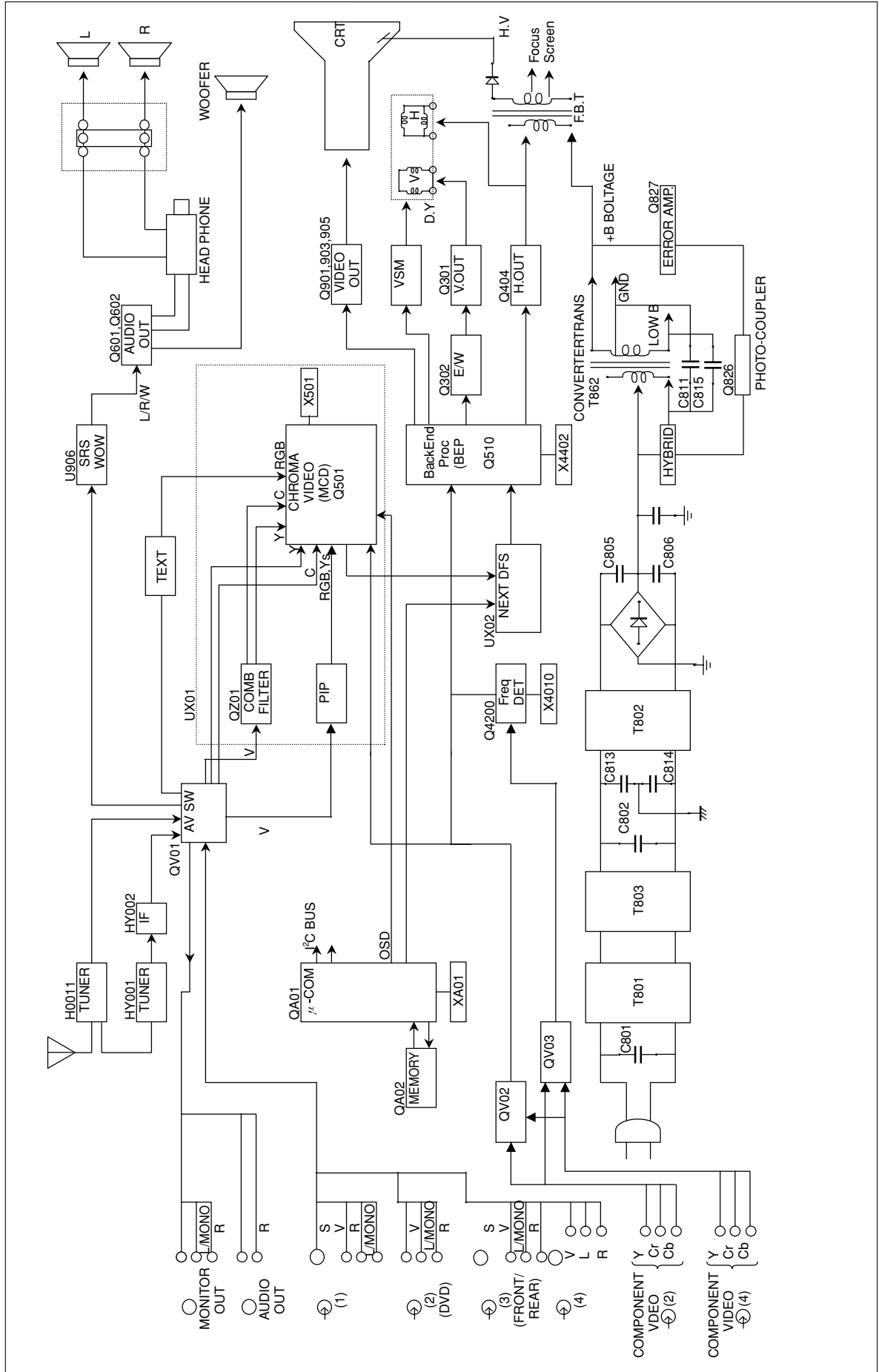


- ⑧ ON4409

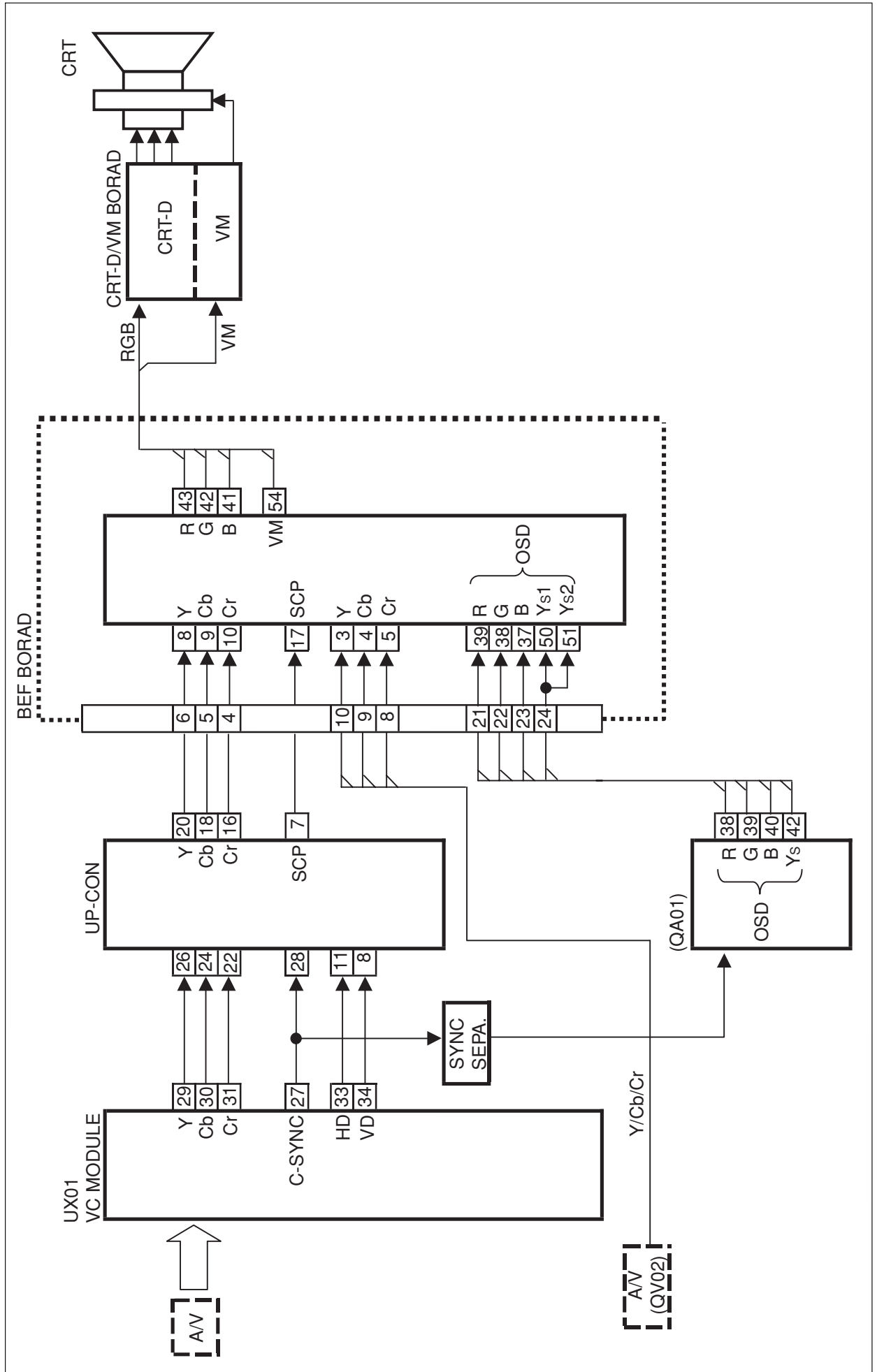




# CIRCUIT BLOCK DIAGRAM



# VIDEO PROCESSING CIRCUIT BLOCK DIAGRAM



## SPECIFICATIONS

MODEL		29SH9UH	34SH9UH																																	
Rated voltage		~ 110 – 240 V, 50/60 Hz																																		
Power consumption (at ~ 220 V, 50 Hz)		220 W	220 W																																	
Dimensions (Width Depth Height)		733 mm x 493 mm x 601 mm	829 mm x 556 mm x 689 mm																																	
Mass		48.0 kg	72.8 kg																																	
Picture tube		Type 29, flat finer pitch picture tube 72 cm (dia.) overall picture tube 68 cm (dia.) viewable picture area 104° deflection	Type 34, flat finer pitch picture tube 85 cm (dia.) overall picture tube 80 cm (dia.) viewable picture area 104° deflection																																	
Television system (Antenna input)	Channel coverage	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">System</th> <th style="text-align: left;">VHF</th> <th style="text-align: left;">UHF</th> <th style="text-align: left;">CABLE (Channels)</th> </tr> </thead> <tbody> <tr> <td>PAL B/G (CCIR)</td> <td>2 – 12</td> <td>21 – 69</td> <td>X ~ Z+2, S1 ~ S41</td> </tr> <tr> <td>PAL I (UK)</td> <td>—</td> <td>21 – 69</td> <td>—</td> </tr> <tr> <td>PAL D/K (CHINA)</td> <td>1 – 12</td> <td>13 – 57</td> <td>Z-1 ~ Z-38</td> </tr> <tr> <td>SECAM B/G (CCIR)</td> <td>2 – 12</td> <td>21 – 69</td> <td>X ~ Z+2, S1 ~ S41</td> </tr> <tr> <td>SECAM D/K (OIRT)</td> <td>1 – 12</td> <td>21 – 69</td> <td>X1 ~ X19</td> </tr> <tr> <td>NTSC M (US)</td> <td>2 – 13</td> <td>14 – 69</td> <td>A-6 ~ A-1, A ~ W, AA ~ ZZ, AAA, BBB</td> </tr> <tr> <td>NTSC M (JAPAN)</td> <td>1 – 12</td> <td>13 – 62</td> <td>M1 ~ M10, S1 ~ S41</td> </tr> </tbody> </table>			System	VHF	UHF	CABLE (Channels)	PAL B/G (CCIR)	2 – 12	21 – 69	X ~ Z+2, S1 ~ S41	PAL I (UK)	—	21 – 69	—	PAL D/K (CHINA)	1 – 12	13 – 57	Z-1 ~ Z-38	SECAM B/G (CCIR)	2 – 12	21 – 69	X ~ Z+2, S1 ~ S41	SECAM D/K (OIRT)	1 – 12	21 – 69	X1 ~ X19	NTSC M (US)	2 – 13	14 – 69	A-6 ~ A-1, A ~ W, AA ~ ZZ, AAA, BBB	NTSC M (JAPAN)	1 – 12	13 – 62	M1 ~ M10, S1 ~ S41
	System	VHF	UHF	CABLE (Channels)																																
PAL B/G (CCIR)	2 – 12	21 – 69	X ~ Z+2, S1 ~ S41																																	
PAL I (UK)	—	21 – 69	—																																	
PAL D/K (CHINA)	1 – 12	13 – 57	Z-1 ~ Z-38																																	
SECAM B/G (CCIR)	2 – 12	21 – 69	X ~ Z+2, S1 ~ S41																																	
SECAM D/K (OIRT)	1 – 12	21 – 69	X1 ~ X19																																	
NTSC M (US)	2 – 13	14 – 69	A-6 ~ A-1, A ~ W, AA ~ ZZ, AAA, BBB																																	
NTSC M (JAPAN)	1 – 12	13 – 62	M1 ~ M10, S1 ~ S41																																	
Special RF signal	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Color system</th> <th style="text-align: left;">Sound system</th> </tr> </thead> <tbody> <tr> <td>NTSC4.43</td> <td>5.5/6.0/6.5 MHz</td> </tr> <tr> <td>PAL 60Hz</td> <td>5.5/6.0/6.5 MHz</td> </tr> </tbody> </table>	Color system	Sound system	NTSC4.43	5.5/6.0/6.5 MHz	PAL 60Hz	5.5/6.0/6.5 MHz																													
Color system	Sound system																																			
NTSC4.43	5.5/6.0/6.5 MHz																																			
PAL 60Hz	5.5/6.0/6.5 MHz																																			
Color system		PAL/SECAM/NTSC4.43/NTSC3.58																																		
Sound output		MAIN: 12W + 12W (10% THD) SUPER WOOFER: 16W (10% THD)																																		
Accessories		<ul style="list-style-type: none"> <li>• Remote control            1    • Owner's manual    1</li> <li>• Batteries (R03, AAA)    2</li> </ul>																																		

\* Please refer to owner's manual in details.

**TOSHIBA CORPORATION**  
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN