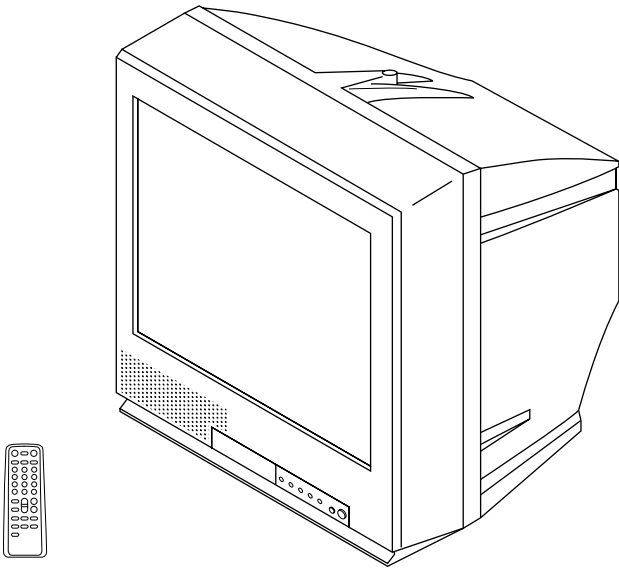


SERVICE MANUAL

BG-3S CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
KV-PF14Q40	RM-952	E	SCC-U13M-A				
KV-PF14P40	RM-952	Thailand	SCC-U18Q-A				
	Serial number = 1) 6,500,001~						
	2) 6,700,001~						
	3) 6,800,001~						



TRINITRON[®] COLOR TV
SONY[®]

SPECIFICATIONS

		Note
Power requirements	220-240V AC, 50/60Hz	KV-PF14P40
	110-240V AC	KV-PF14Q40
Power consumption (W)	Indicated on the rear of the TV	
Television system	B/G	
Color system	PAL, PAL60, NTSC4.43, NTSC3.58 (AV IN)	KV-PF14P40
	PAL, PAL60, SECAM, NTSC4.43	KV-PF14Q40
Bilingual language	Bilingual B/G	For Thailand only
Channel coverage	VHF : E2 to E12/UHF : E21 to E69/CATV : S01 to S03, S1 to S41	
ㄗ (Antenna)	75-ohm external terminal	
Audio output	3W	
Number of terminal		
Ⓜ (Video)	Input : 2 Output : 1 Phono jacks; 1 Vp-p, 75 ohms	
♪ (Audio)	Input : 2 Output : 1 Phono jacks; 500 mVrms	
□ (Earphone)	Output : 1	Minijack
Picture tube	14 inch	
Tube size (cm)	37	Measured diagonally
Screen size (cm)	34	Measured diagonally
Dimension (w/h/d, mm)	375 x 346 x 416	
Mass (kg)	13	

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

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SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.

The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

1. DIAGNOSTIC TEST INDICATORS

When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

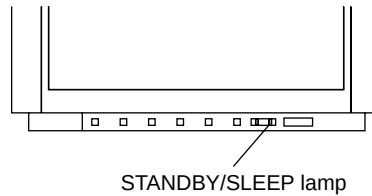
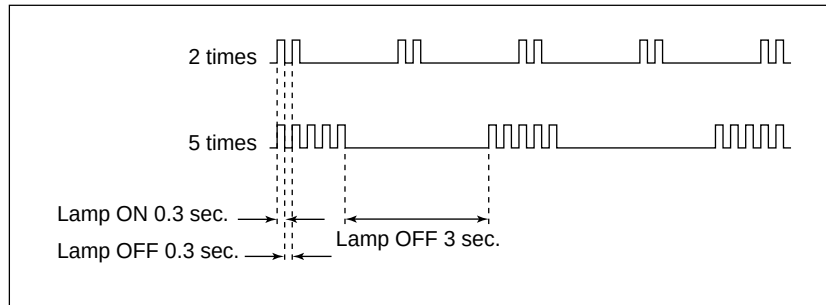
Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	• Power cord is not plugged in. • Fuse is burned out F4601 (F board)	• Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
• +B overcurrent (OCP) or overvoltage (OVP) • Vertical deflection stopped • Horizontal deflection overdrive	2 times	002:000 or 002:001~255 003:001~255 004:001~255 at the same time	• H.OUT Q511 is shorted. (A board) • -13V is not supplied. (A board) • IC 503 faulty (A board)	• Power does not come on. • Load on power line is shorted. • Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
• White balance failure (no PICTURE)	5 times	005:000 or 005:001~225	• G2 is improperly adjusted. (Note 2) • CRT problem. • IC301 is faulty. (A board) • No connection A board to C3 board.	• No raster is generated. • CRT cathode current detection reference pulse output is small.
• Micro reset	—	101:00 or 101:001~225	• Discharge CRT (C3 Board) • Static discharge • External noise	• Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

Note 1: If a + B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously.

The symptom that is diagnosed first by the microcontroller is displayed on the screen.

Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.

2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



<u>Diagnostic Item</u>	<u>Flash Count*</u>
+B overcurrent/overvoltage Vertical deflection stopped	2 times
White balance failure	5 times

* One flash count is not used for self-diagnostic.

3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure for confirmation on the screen:

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Note that this differs from entering the service mode (mode volume $\boxed{+}$).

SELF DIAGNOSTIC

002 : 000 ←

003 : 000

004 : 000

005 : 001 ←

101 : 000

Numeral "0" means that no fault has been detected.

Numeral "1" means a fault has been detected.

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to "0".

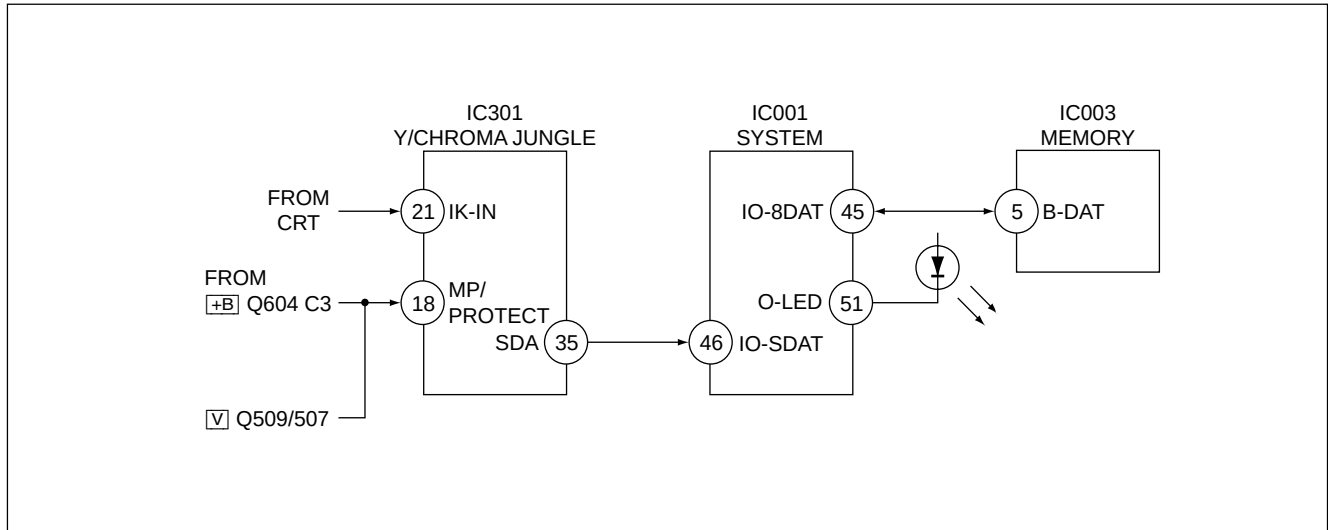
Unless the result display is cleared to "0", the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

To clear the result display to "0", press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel 8 ➡ 0

To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

6. SELF-DIAGNOSTIC CIRCUIT



+B overcurrent (OCP)

Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.

Vertical deflection stopped

Occurs when an absence of the vertical deflection pulse is detected by Q509 and IC001 shut down the power supply.

Vertical deflection overcurrent

Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001.

White balance failure

If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. TV will stay on, but there will be no picture.

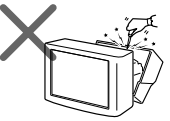
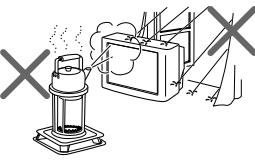
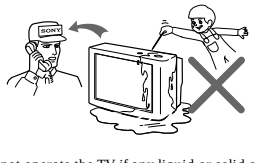
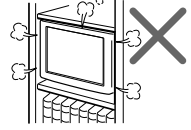
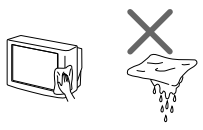
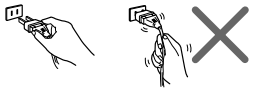
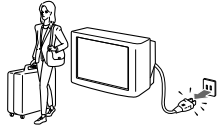
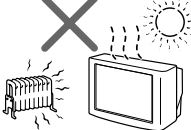
* (Refers to the RGB levels of the AKB detection Ref pulse that detects IK.)

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

SECTION 1 GENERAL

WARNING

- Dangerously high voltages are present inside the TV.
- TV operating voltage: 220 – 240 V AC (Thailand only), 110 – 240V AC others.

 Do not open the cabinet and the rear cover of the TV. Refer servicing to qualified personnel.	 Install the TV in a stable position. Do not allow children to climb onto it.
 To prevent fire or shock hazard, do not expose the TV to rain or moisture.	 Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.
 Do not install the TV in a confined space, such as a bookcase or built-in cabinet. Do not block the ventilation openings of the TV.	 Clean the TV with a dry and soft cloth. Do not use benzene, thinner, or any other chemicals to clean the TV. Do not scratch the picture tube.
 Do not pull the power cord to disconnect the TV. Pull it out by the plug.	 Do not plug in too many appliances to the same power socket. Do not damage the power cord.
 Disconnect the power cord if you are not going to use the TV for several days.	 Do not install the TV in hot, humid or excessively dusty places.

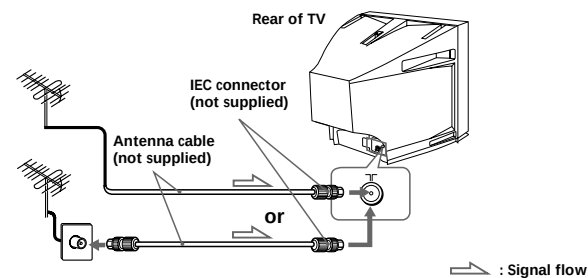
Using Your New TV

Getting Started

Step 1

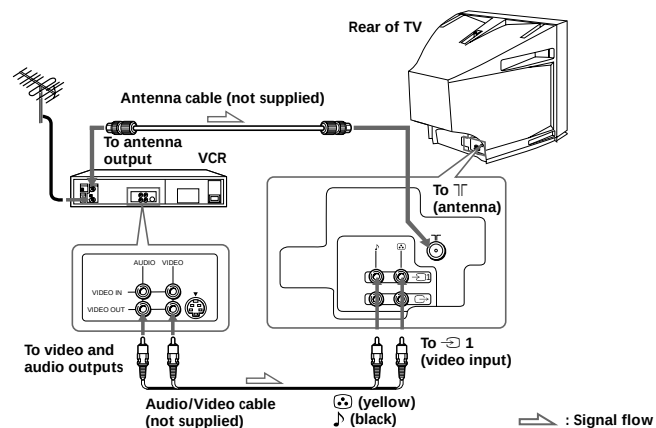
Connect the antenna

If you wish to connect a VCR, see the “Connecting a VCR” diagram below.



Connecting a VCR

To watch the video, press   (see page 12).



Notes

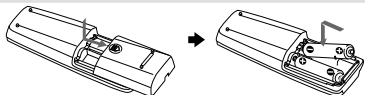
- If you connect a stereo VCR, connect the yellow plug to (the yellow jack) and the white plug to (the black jack).
- If you connect a VCR to the (antenna) terminal, preset the signal output from the VCR to the program number 0 on the TV.
- When no signal is input to the connected video equipment, the TV screen becomes blue.

CAUTION

Do not connect the power cord until you have completed making all other connections; otherwise a minimum leakage current might flow through the antenna and other terminals to ground.

Step 2

Insert the batteries into the remote

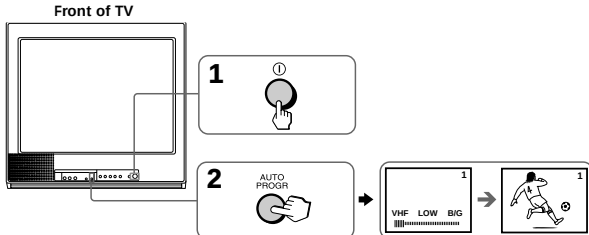


Note

- Do not use old batteries nor use different types of batteries together.

Step 3

Preset the channels automatically



Tips

- If you want to stop automatic channel presetting, press SELECT twice.
- If your TV has preset an unwanted channel or cannot preset a particular channel, then preset your TV manually (see page 9).

Now You Are Ready. . .

To watch your TV, see page 11.



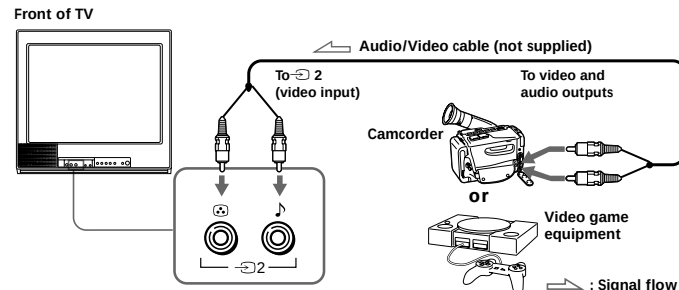
Using Your New TV

Connecting optional components

You can connect optional video components, such as a VCR, multi disc player, camcorder or video game.

To watch the picture of the connected equipment, press (see page 12).

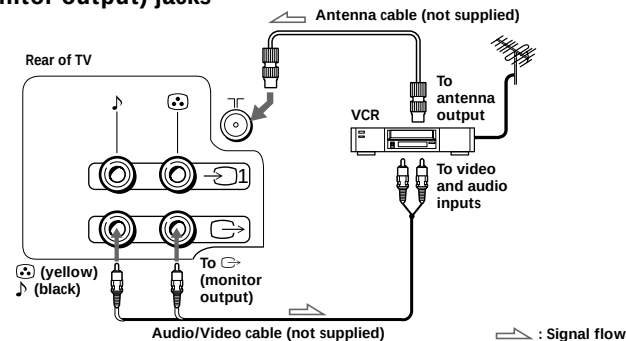
Connecting a camcorder/video game equipment using the (video input) jacks



Note

- You can also connect video equipment to the (video input) jacks at the rear of your TV.

Connecting video equipment using the (monitor output) jacks



Note

- When connecting a stereo VCR, connect the yellow plug to (the yellow jack) and the white plug to (the black jack).

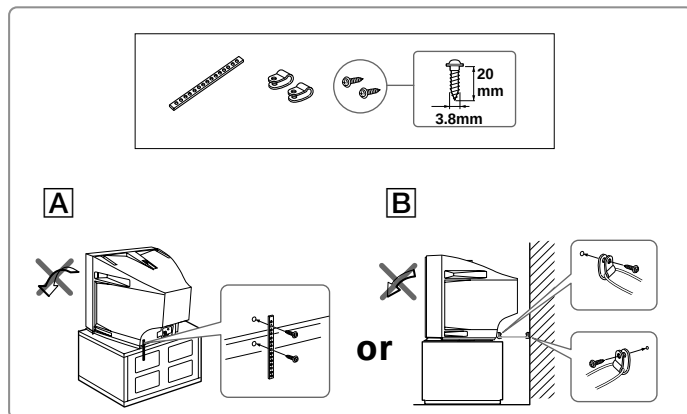
Securing the TV

To prevent the TV from falling, secure the TV using one of the following methods:

- A** With the supplied screws, attach the band to the TV stand and to the rear of the TV using the provided hole.

or

- B** Put the cord or chain through the clamps to secure the TV against a wall or pillar.



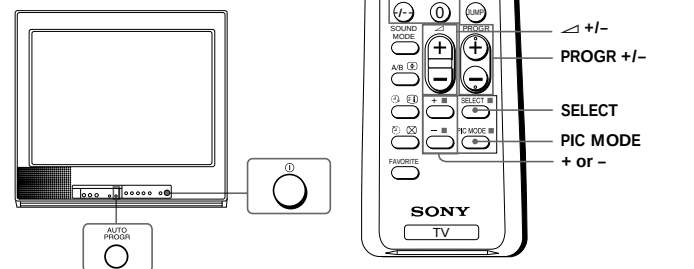
Note

- Use only the supplied screws. Use of other screws may damage the TV.

Using Your New TV

Presetting channels

You can preset up to 100 TV channels in numerical sequence from program number 1 using the remote and the buttons on your TV as well.



Presetting channels automatically

- 1** Press ① to turn on the TV.



- 2** Press AUTO PROGR.



VHF LOW B/G

To preset channels automatically from a specified program number

- Press SELECT until "AUTO PROGRAM" appears.
- Press + or -.
The on-screen display will start flashing.
- Press PROGR +/- or the number buttons until the desired program number appears.
- Press + or -.

Presetting channels manually

- 1 Press SELECT until "MANUAL PROGRAM" appears.
- 2 Press + or –.
- 3 Press PROGR +/- or the number buttons until the desired program number appears.
- 4 Press + or – until the desired channel picture appears.
- 5 Press SELECT.

Using Your New TV

To change the color system setting

If the color is abnormal when receiving programs through the ㄗ (antenna) terminal or the ㊤ (video input) jack

- (1) Press SELECT until "COL SYS" appears.

- (2) Press + or – to select the appropriate color system until the color is optimal.

Tip

- Normally set "COL SYS" to "AUTO".

Note

- The color system "SECAM" is not available for KV-PF14P40.
- The color system "NTSC3.58" is not available for KV-PF14P40.

continued

Using Your New TV | 9

Presetting channels (continued)

Skipping program numbers

- 1 Press PROGR +/- or the number buttons until the unused or unwanted program number appears.
- 2 Press SELECT until "MANUAL PROGRAM" appears.
- 3 Press + or –.
- 4 Press PIC MODE.
- 5 Press SELECT.

To preset the skipped program number again

Preset the channel automatically or manually.

Tip

- You can also use SELECT and ㄗ +/- on the TV to preset channels and skip program numbers.

To use the fine tuning (FINE) function

The fine tuning (FINE) function may help to reduce the following problems: double images and lines moving across the TV screen.

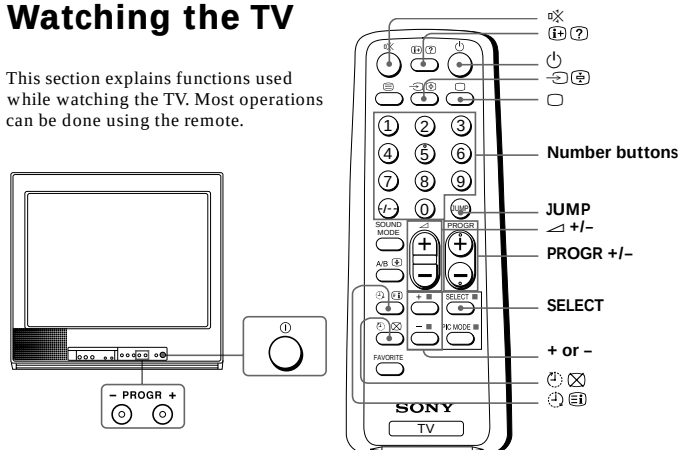
You can use the fine tuning function as below:

- (1) Select the program number you want to adjust.
- (2) Press SELECT until "MANUAL PROGRAM" appears on the screen.
- (3) Press + or – on the remote control once.
- (4) Press ㊤ ㊤ to display "FINE" on the screen.
- (5) Press + or – continuously until the above problems are minimized.
The + or – icon on the screen flashes while tuning.
- (6) Press SELECT to return to normal screen.

10 | Using Your New TV

Watching the TV

This section explains functions used while watching the TV. Most operations can be done using the remote.



Using Your New TV

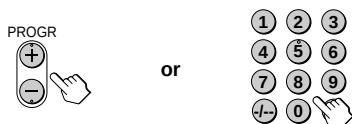
1 Press ① to turn on the TV.

When the TV is in the standby mode (the ① indicator on the TV is lit red), press ① on the remote or PROGR +/- on the TV.



2 Press PROGR +/- or the number buttons to select the TV program.

For double digit numbers, press +/-, then the number (e.g., for 25, press +/-, then 2 and 5).



3 Press +/- to adjust the volume.



Watching the TV (continued)

Additional tasks

To	Do this
Turn off temporarily	Press ①. The ① indicator on the TV lights up red.
Turn off completely	Press ① on the TV.
Mute the sound	Press ①.
Watch the video input (VCR, camcorder, etc.)	Press ⑤ to select "VIDEO 1" or "VIDEO 2". To return to the TV program, press ①.
Jump back to the previous channel	Press JUMP.
Display the on-screen information*	Press ①.
Adjust the volume of each TV program automatically	Press SELECT repeatedly until "INTELLIGENT VOL" appears, then press + or - to select "ON". To cancel, select "OFF".

* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about 3 seconds.

Changing the on-screen display language (KV-PF14P40 only)

1 Press SELECT until "LANGUAGE / ภาษา : ENGLISH" appears on the screen.



2 Press + or - to select "ไทย".



Tip

- You can also use SELECT and +/- on the TV to select the on-screen display language.

continued

Watching the TV (continued)

Additional tasks

To	Do this
Turn off temporarily	Press . The indicator on the TV lights up red.
Turn off completely	Press on the TV.
Mute the sound	Press .
Watch the video input (VCR, camcorder, etc.)	Press to select "VIDEO 1" or "VIDEO 2". To return to the TV program, press .
Jump back to the previous channel	Press JUMP.
Display the on-screen information*	Press .
Adjust the volume of each TV program automatically	Press SELECT repeatedly until "INTELLIGENT VOL" appears, then press + or - to select "ON". To cancel, select "OFF".

* The picture, sound, and either the program number or video mode are displayed. The on-screen display for the picture and sound information disappears after about 3 seconds.

Changing the on-screen display language (KV-PF14Q40 only)

1 Press SELECT until "LANGUAGE / 语言: ENGLISH" appears on the screen.



2 Press + or - to select "中文".

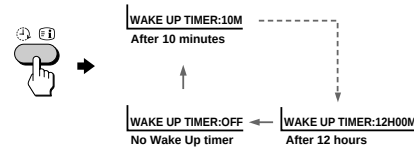


Tip

- You can also use SELECT and on the TV to select the on-screen display language.

Setting the Wake Up timer

1 Press until the desired period of time appears.



2 Select the TV program or video mode you want to display when you wake up.

3 Press or set the Sleep timer if you want the TV to turn off automatically.

The indicator on the TV lights up orange.

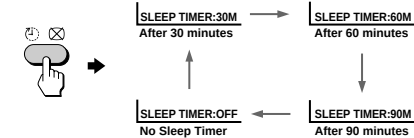
To cancel the Wake Up timer

Press until "WAKE UP TIMER: OFF" appears or turn off the TV's main power.

- Notes**
- The Wake Up timer starts immediately after the on-screen display disappears.
 - If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into the standby mode. To continue watching the TV, press any button or control on the TV or the remote.

Setting the Sleep timer

Press until the desired period of time appears.



To cancel the Sleep timer

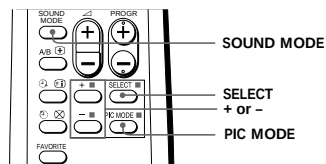
Press until "SLEEP TIMER: OFF" appears or turn the TV off.

Advanced Operations

Customizing the picture and sound

(KV-PF14P40 only)

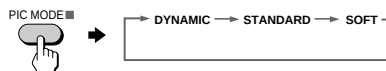
You can customize the picture and sound by selecting the picture and sound modes or by adjusting its settings.



Selecting the picture and sound modes

To select the picture mode

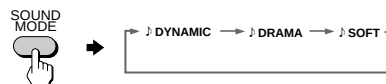
Press PIC MODE repeatedly until you get the desired picture mode.



Select	To
DYNAMIC	receive high contrast pictures.
STANDARD	receive normal contrast pictures.
SOFT	receive mild pictures.

To select the sound mode

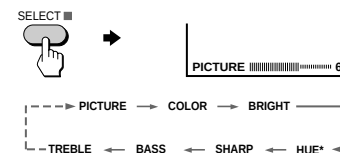
Press SOUND MODE repeatedly until you get the desired sound mode.



Select	To
DYNAMIC	listen to dynamic and clear sound that emphasizes the low and high sound.
DRAMA	listen to sound that emphasizes vocals and background music.
SOFT	receive soft sound.

Adjusting the picture and sound settings

- 1 Press SELECT until the desired setting appears.



Each time you press SELECT, the setting item will change as follows:

- 2 Press + or - to adjust the item.



- 3 To adjust other items, repeat steps 1 to 2.

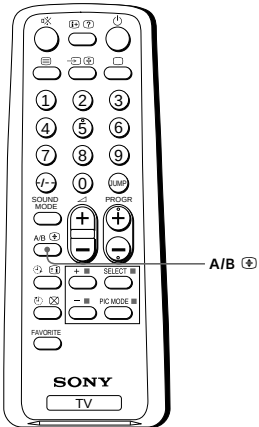
* "HUE" can be adjusted for the NTSC system only.

Notes

- When you select a picture or sound mode, the adjusted settings will be reset according to the selected mode.
- You can also use SELECT and $\triangle$ + / - on the TV to adjust the picture and sound settings.

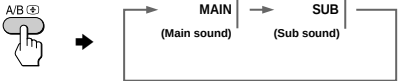
Enjoying bilingual programs (KV-PF14P40 only)

You can choose the sound of programs which are broadcast with the bilingual system.



Viewing a bilingual program

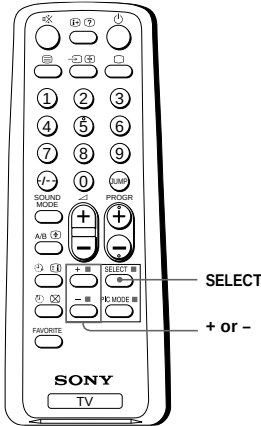
Press A/B repeatedly until you receive the sound you want.



- Note**
- When viewing a non-bilingual program, select the main sound. Otherwise, you may hear some noise or abnormal sound.

Blocking the channels (CHILD LOCK)

You can prevent a child from watching certain channels by using the buttons on the remote control.



- 1 Select the channel you want to lock.
- 2 Press SELECT until "CHILD LOCK" appears on the screen.



- 3 Press + or - to select "ON".

The **i** symbol appears on the screen.
To unlock the channel, press + or - to select "OFF". The **i** symbol disappears from the screen.



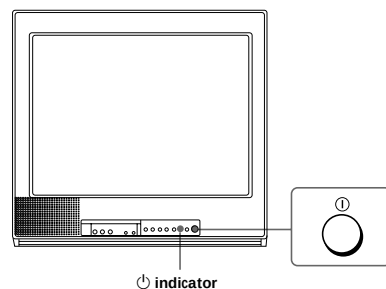
- Note**
- If you preset a locked channel, that particular channel will be unlocked automatically.

Additional Information

Self-diagnosis
function

Your TV is equipped with a self-diagnosis function. If there is a problem with your TV, the  indicator flashes red. The number of times the  indicator flashes indicates the possible causes.

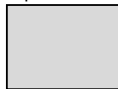
Front of TV



- 1** Check that the  indicator flashes red a number of times between 3-second intervals.
- 2** Count the number of times the  indicator flashes.
- 3** Press  (main power) to turn off your TV.
- 4** Inform your nearest Sony service center about the number of times the  indicator flashes.
Be sure to note the model name and serial number located on the rear of your TV.

Troubleshooting

If you find any problem while viewing your TV, please check the following guide. If any problem persists, contact your Sony dealer .

Symptom	Solutions	Possible cause
Snowy picture 	- Check the antenna cable and connection on the TV, VCR and on the wall. (page 4) - Press SELECT until "MANUAL PROGRAM" appears on the screen then preset the channel again. (page 9)	- Connection is loose or the cable is damaged. - Channel presetting is inappropriate or incomplete.
Noisy sound 	- Check the antenna type (VHF/UHF). Contact a Sony dealer for advice. - Adjust the antenna direction. Contact a Sony dealer for advice. - Try using a booster.	- The antenna type is inappropriate. - The antenna direction is inappropriate. - Signal transmission is low.
Distorted picture 	Turn off or disconnect the booster if it is in use.	Broadcast signals are too strong.
Noisy sound 	- Check the antenna type (VHF/UHF). Contact a Sony dealer for advice. - Adjust the antenna direction. Contact a Sony dealer for advice. - Try using a booster.	- The antenna type is inappropriate. - The antenna direction is inappropriate. - Signal transmission is low.
Good picture 	- If the sound of all the channels are noisy, check the TV system (TV SYS) setting (page 10), then press AUTO PROGR to preset the channels again (page 8). - If the sound of some channels are noisy, select the channel, then select the appropriate TV system (TV SYS). (page 10)	The TV system setting or channel presetting is inappropriate or incomplete.
No picture 	- Check the power cord, antenna and the VCR connections. - Press  (power). - Press  (main power) on the TV to turn off the TV for about five seconds, then turn it on again.	- The power cord, antenna or VCR is not connected. - The TV is not turned on.
No sound 		

Troubleshooting (continued)

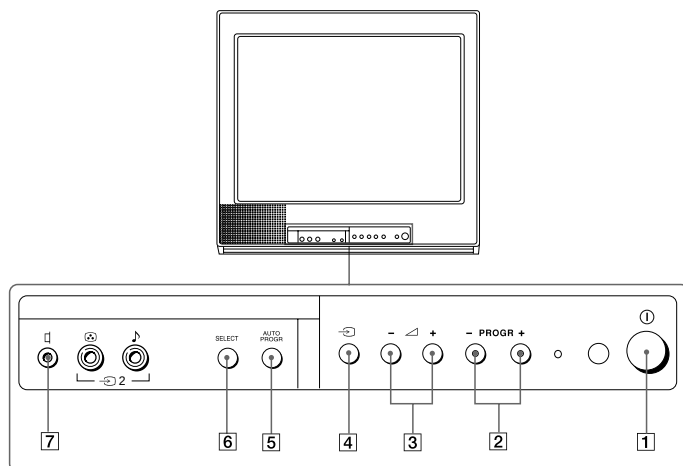
Symptom	Solutions	Possible cause
Good picture 	- Press $\triangleleft$ + to increase the volume level. - Press $\times$ to cancel the muting. - Press A/B (Ⓢ) until a good sound is heard. (page 16) (KV-PF14P40 only)	- The volume level is too low. - The sound is muted. - Broadcast signal has a transmission problem.
No sound 		
Dotted lines or stripes 	- Do not use a hair dryer or other equipment near the TV. - Adjust the antenna direction for minimum interference. Contact a Sony dealer for advice.	There is local interference from cars, neon signs, hair dryers, power generators, etc.
Double images or "ghosts" 	- Use a highly directional antenna. - Use the fine tuning (FINE) function. (page 10) - Adjust the antenna direction. Contact a Sony dealer for advice. - Turn off or disconnect the booster if it is in use.	- Broadcast signals are reflected by nearby mountains or buildings. - The antenna direction is inappropriate. - Use of a booster is inappropriate.
NO color 	- Press SELECT until "COLOR" appears on the screen, then press + or - to adjust the color level. (page 15) - Press SELECT until "COL SYS" appears on the screen, then check the color system setting (usually set this to "AUTO"). (page 9). - Adjust the antenna direction. Contact a Sony dealer for advice.	- The color level setting is too low. - The color system setting is inappropriate. - The antenna direction is inappropriate.
Abnormal color patches 	Keep external speakers or other electrical equipment away from the TV. Do not move the TV while the TV is turned on. Press $\odot$ (main power) on the TV to turn off the TV for about five minutes, then turn it on again.	The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.

Symptom	Solutions	Possible cause
Lines moving across the TV screen.	Use the fine tuning (FINE) function. (page 10)	There is interference from external sources, e.g., heavy machineries, nearby broadcast station.
The $\odot$ indicator on your TV flashes red a number of times between 3-second intervals.	Contact your nearest Sony service center. (page 18)	Your TV may need service.
TV cabinet creaks.	—	Changes in room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.
A "boom" sound is heard when the TV is turned on.	—	The TV's demagnetizing function is working. This does not indicate a malfunction.

Identifying parts and controls

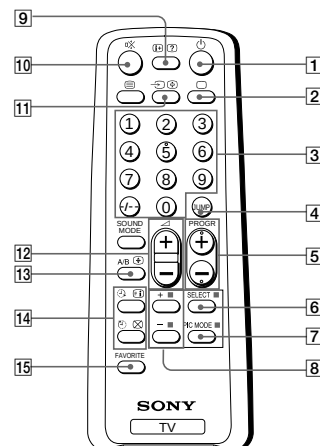
Refer to the pages indicated in parentheses () for details.

Front panel

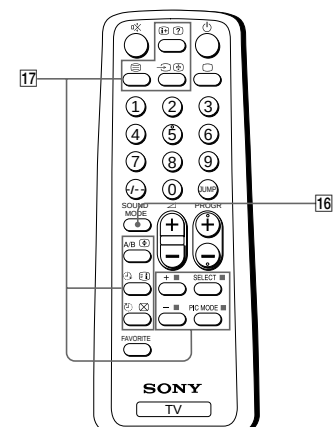


- 1 ① (main power) button (5)
- 2 PROGR +/- (program) buttons (11)
- 3 $\triangle$ +/- (volume) buttons (11)
- 4 $\rightarrow$ (TV/video) button (12)
- 5 AUTO PROGR (program) button (5)
- 6 SELECT button (9)
- 7 $\square$ (earphone) jack

Remote Control



- 1 ⏻ (power) button (11)
- 2 TV button (12)
- 3 Number buttons (11)
- 4 JUMP button (12)
- 5 PROGR +/- buttons (11)
- 6 SELECT button (9)
- 7 PIC MODE button (14)
- 8 + or - buttons (9)
- 9 Ⓢ (display) button (12)
- 10 Ⓜ (muting) button (12)
- 11 $\rightarrow$ (TV/video) button (12)
- 12 $\triangle$ +/- (volume) buttons (11)
- 13 A/B button (16) (KV-PF14P40 only)
- 14 Timer setting buttons (13)
 - ⌚ (wake up timer)
 - ⌚ (sleep timer)
- 15 FAVORITE button (not used for this models)



- 16 SOUND MODE button (14)
- 17 Teletext operation buttons (not used for this models)
 - Ⓢ (text) Ⓢ (enlarge)
 - Ⓢ (reveal) Ⓢ (hold)
 - Ⓢ (index) Ⓢ (text clear)
 - ■ (FASTEXT: red, green, yellow, blue)

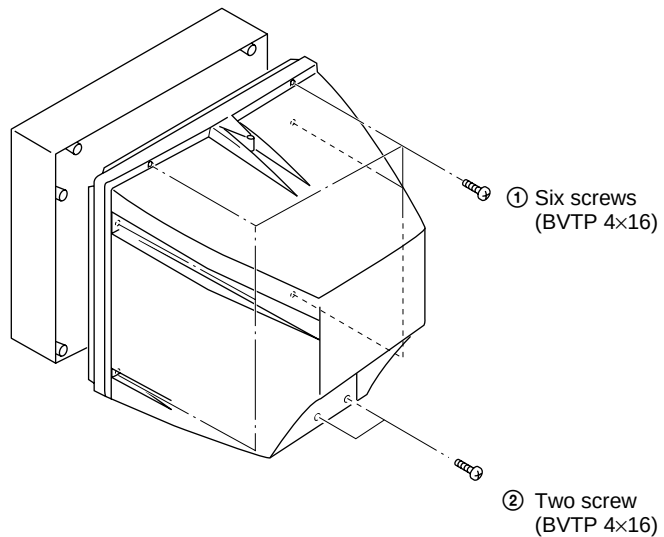
Names / symbols of buttons on the remote are indicated in different colors to represent the available functions.

Label color	Button function
White	For general TV operations
Green	For Teletext operations

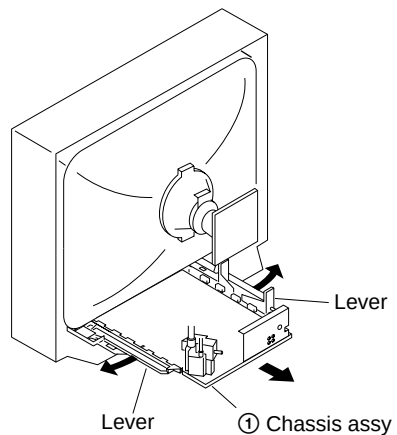
SECTION 2

DISASSEMBLY

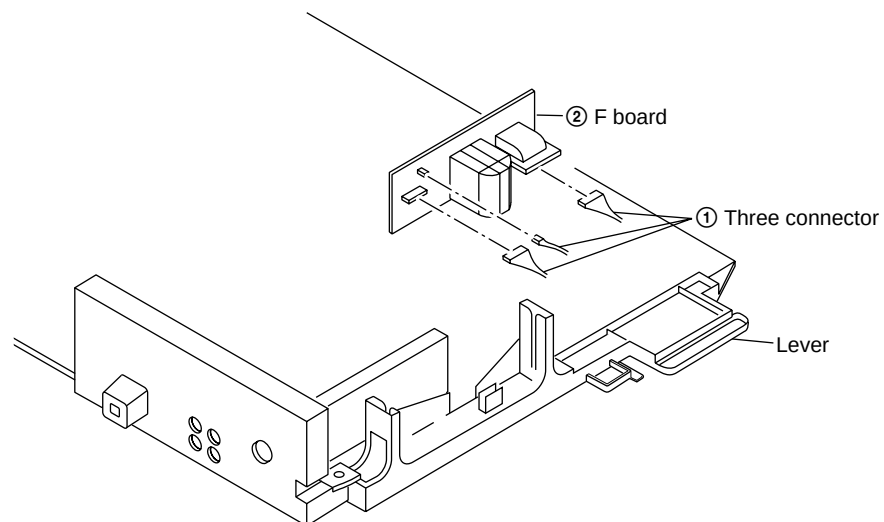
2-1. REAR COVER REMOVAL



2-2. CHASSIS ASSY REMOVAL

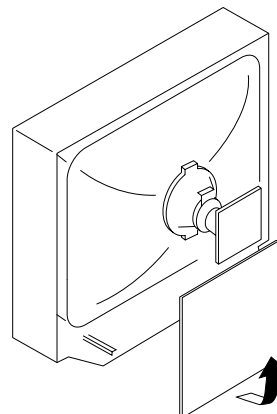


2-3. F BRACKET REMOVAL



2-4. SERVICE POSITION

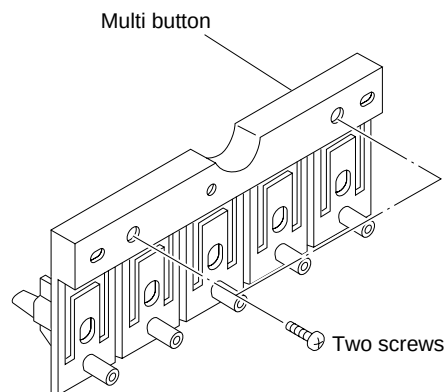
(Note: Remove F Bracket first.)



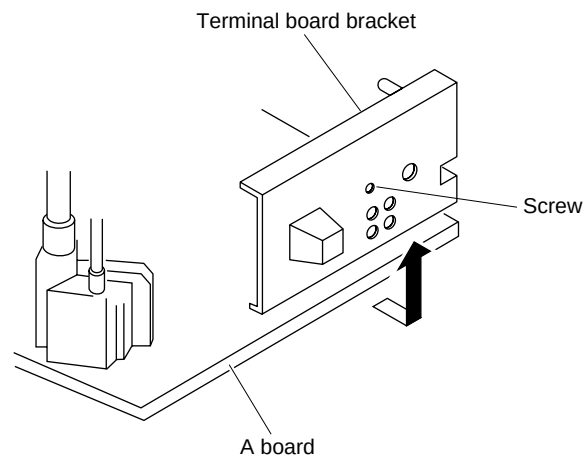
2-5. REPLACEMENT OF PARTS

For replacement of the Multi Button and Bar Optical, unscrew to exchange with the new parts, and fix them with screws (+BVTP) respectively.

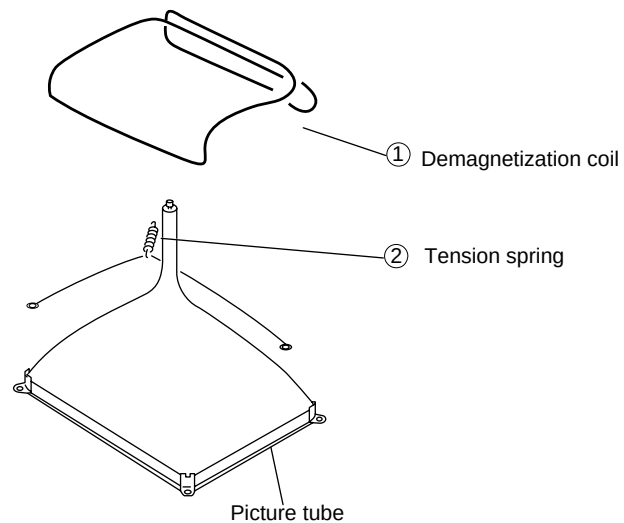
2-5-1. REPLACEMENT OF MULTI BUTTON



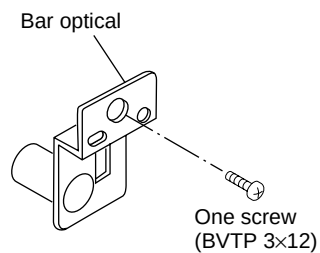
2-6. TERMINAL BRACKET REMOVAL



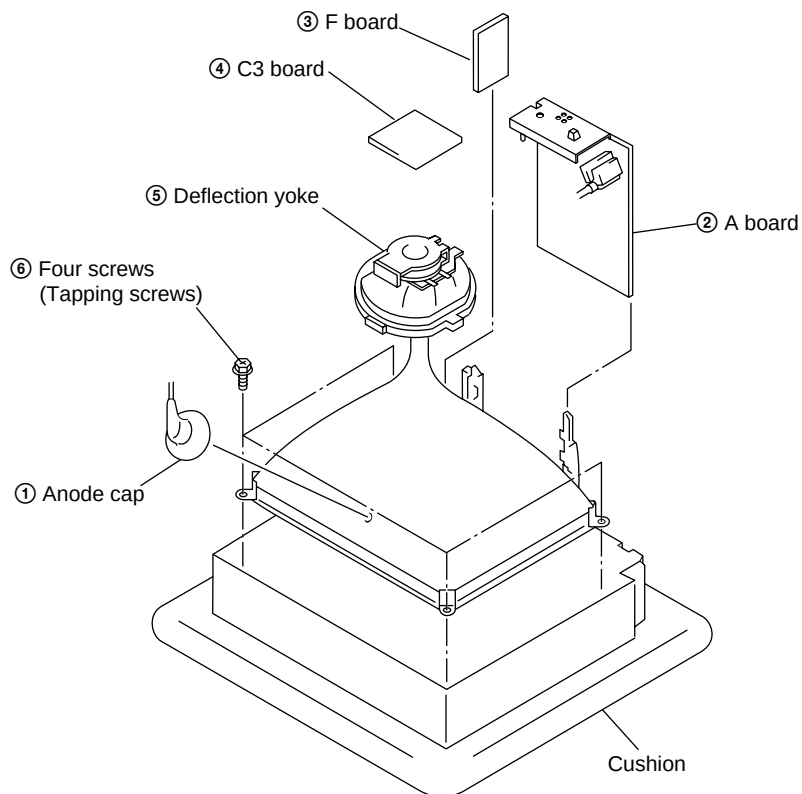
2-7. DEGAUSS COIL REMOVAL



2-5-2. REPLACEMENT OF BAR OPTICAL



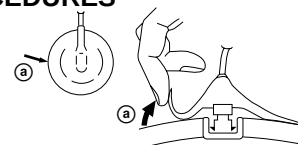
2-8. PICTURE TUBE REMOVAL



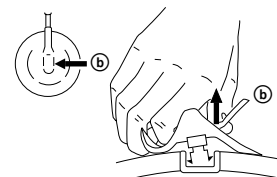
•REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

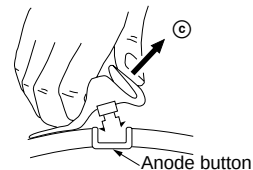
•REMOVING PROCEDURES



- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①.



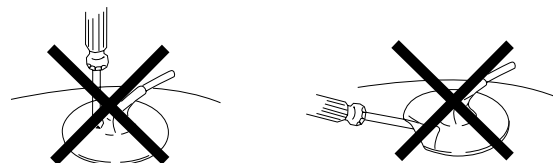
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.



- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ③.

• HOW TO HANDLE AN ANODE-CAP

- ① Do not damage the surface of anode-caps with sharp shaped objects.
- ② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
- ③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:

PICTURE control normal

BRIGHTNESS control normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.

Contrast } normal
Brightness }

2. Set the pattern generator raster signal to a green raster.
3. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
(See Figures 3-1 through 3-3.)
4. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-1.)
5. Switch the raster signal to blue, then to red and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it.
(See Figure 3-4.)

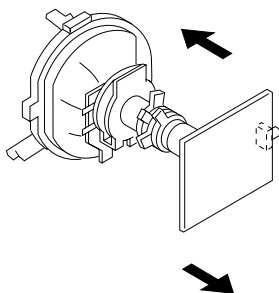


Fig. 3-1

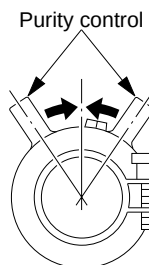


Fig. 3-2

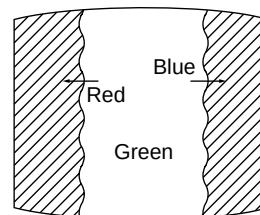


Fig. 3-3

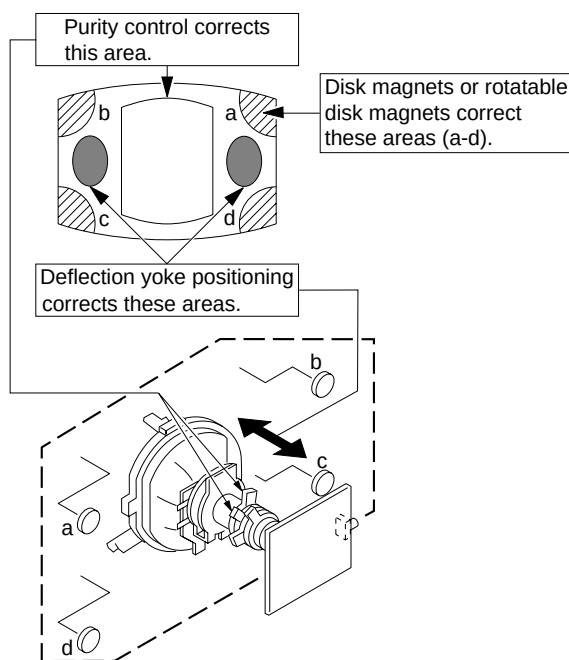


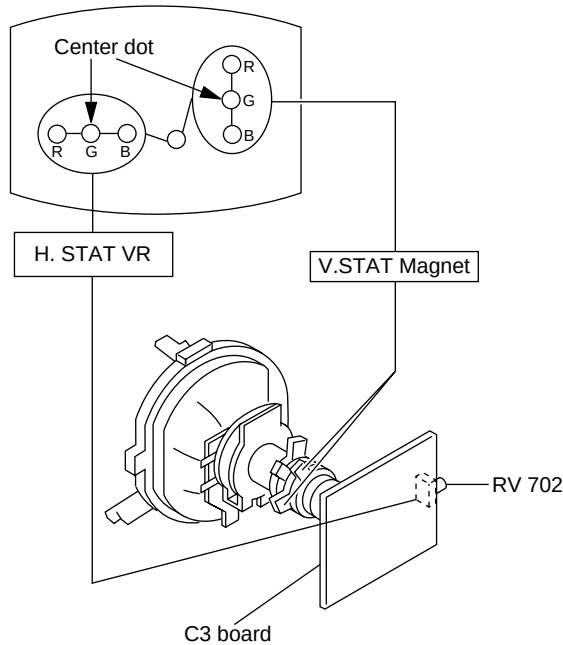
Fig. 3-4

3-2. CONVERGENCE

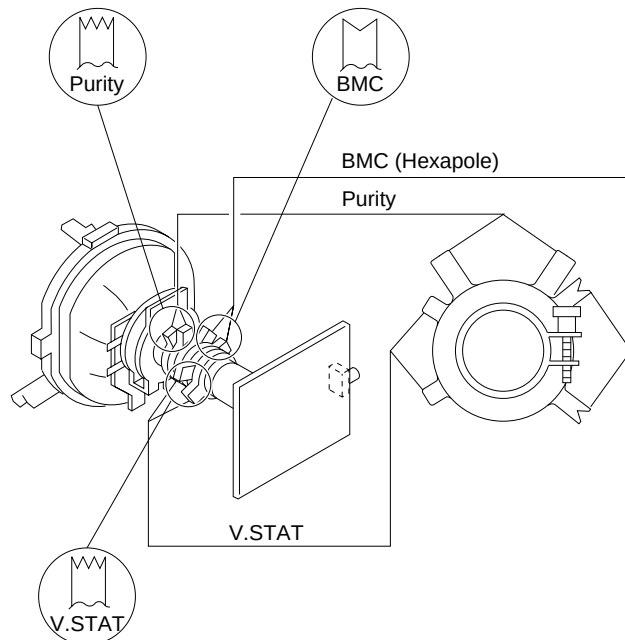
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

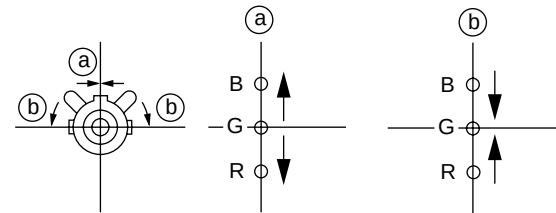
(1) Horizontal and Vertical Static Convergence



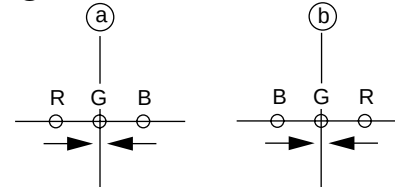
(Moving vertically), adjust the V. STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.



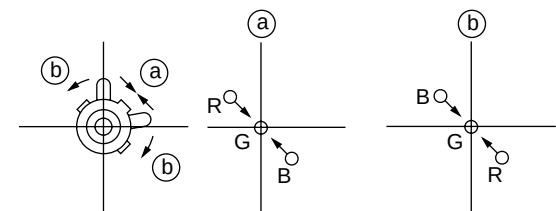
① V. STAT



② H. STAT VR

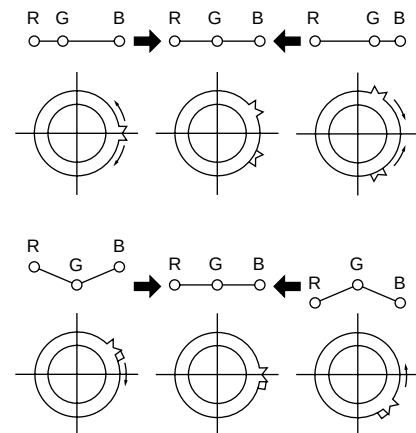


③



④ BMC (Hexapole) Magnet.

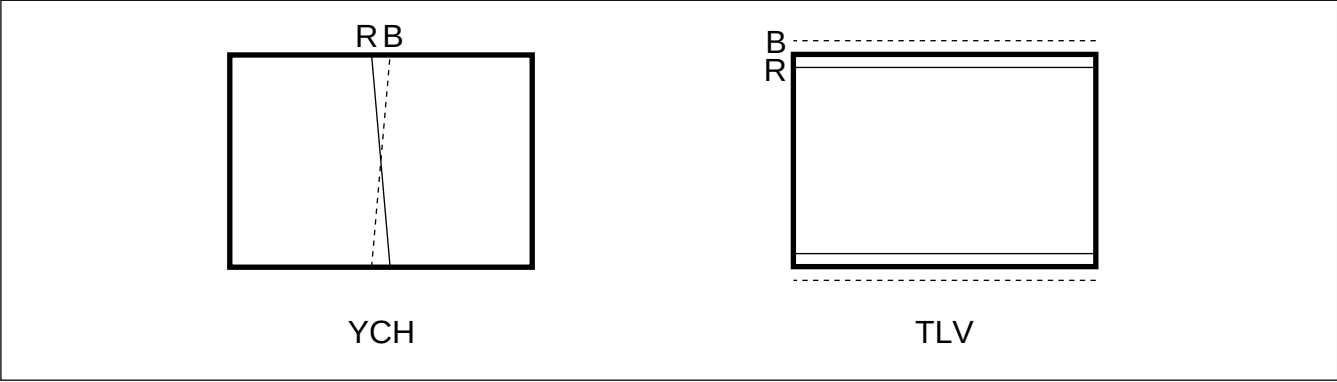
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



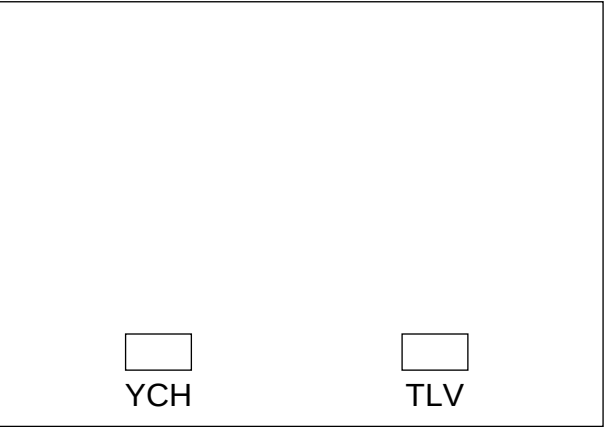
(2) Dynamic Convergence Adjustment

Preparation:

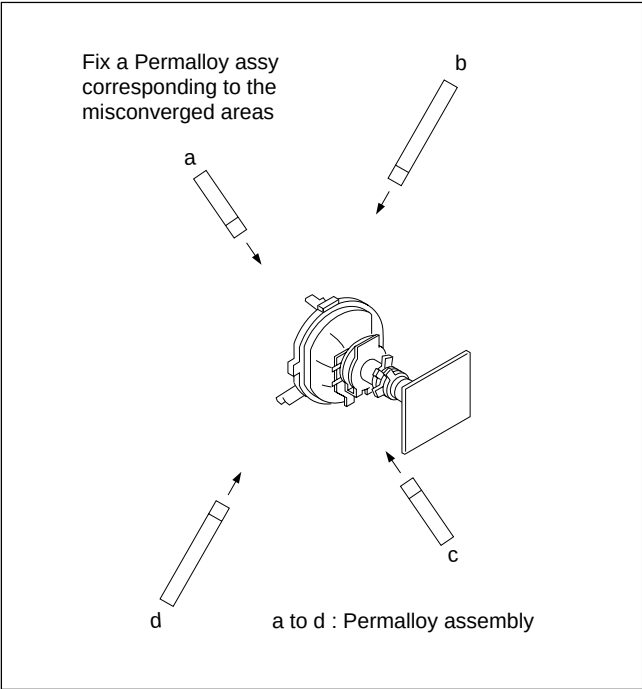
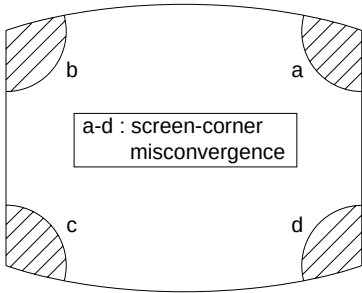
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence



on DY

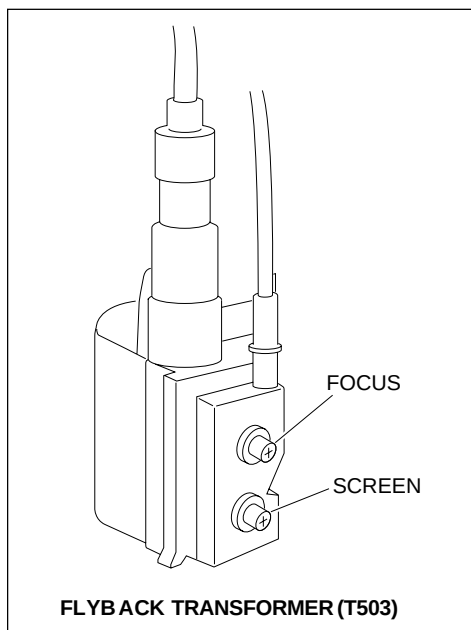


(3) Screen-corner Convergence



3-3. FOCUS ADJUSTMENT

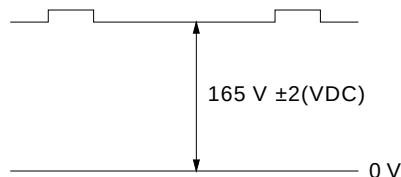
Adjust FOCUS control on the flyback transformer for the best focus.



3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT

- 1) Set the PICTURE to normal.
- 2) Put to VIDEO input mode without signals.
- 3) Connect R, G and B of the C3 board cathode to the oscilloscope.
- 4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
- 5) Adjust G2 (Screen) on FBT until picture shows the point before cut-off.

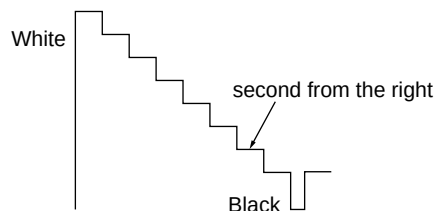


2. WHITE BALANCE ADJUSTMENT

- 1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
- 2) Input white raster signal.
- 3) Set the PICTURE to minimum.
- 4) Select GCT (WHB 4) and BCT (WHB 5) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
- 5) Set the PICTURE to maximum.
- 6) Select GDR (WHB 1) and BDR (WHB 2) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
- 7) Write into the memory by pressing [MUTING] then [0].

3. SUB BRIGHT ADJUSTMENT

- 1) Set to service mode.
- 2) Input a staircase signal of black to white from the pattern generator.
- 3) BRIGHTNESS 50%.
PICTURE MINIMUM
- 4) Select SBR (WHB7) with [1] and [4], and adjust SBR (WHB7) level with [3] and [6] so that the second stripe from the right is dimly lit.

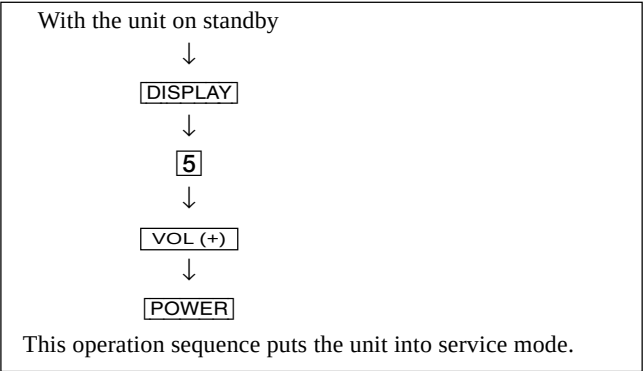


SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-952 that comes with this unit.

a. ENTERING SERVICE MODE



b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press **POWER** button on the commander), then press **POWER** button again, hereupon it becomes TV mode.

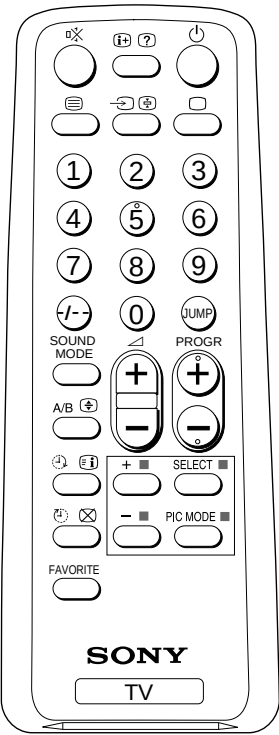
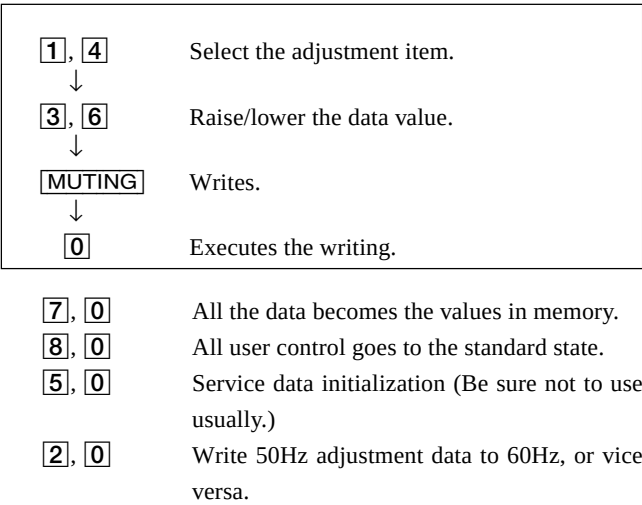
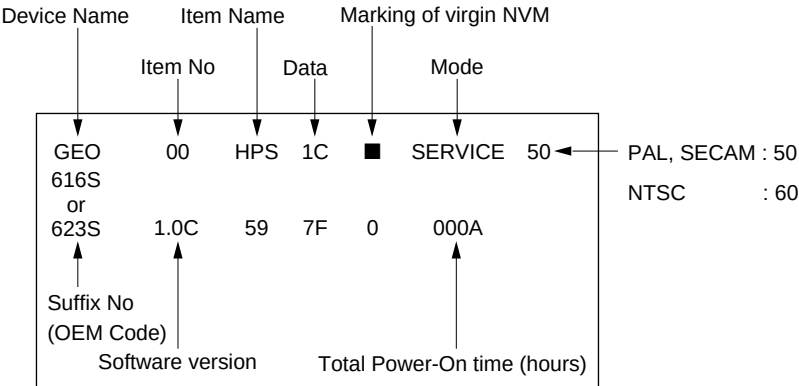
c. METHOD OF WRITE INTO MEMORY

- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN), select an item of adjustment.
- 3) Press **MUTING** button and it will indicate WRITE on the screen.
- 4) Press **0** button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

- 1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again to confirm adjustments were made.

The screen display is :



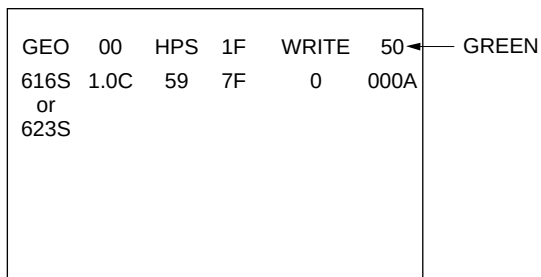
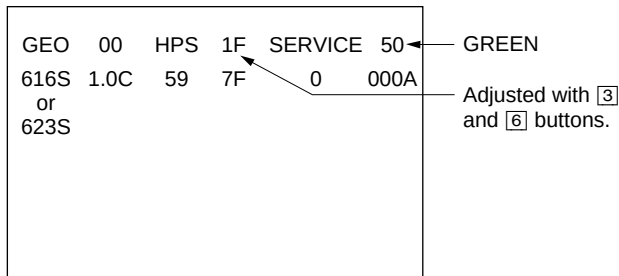
RM-952

4-2. ADJUSTMENT METHOD

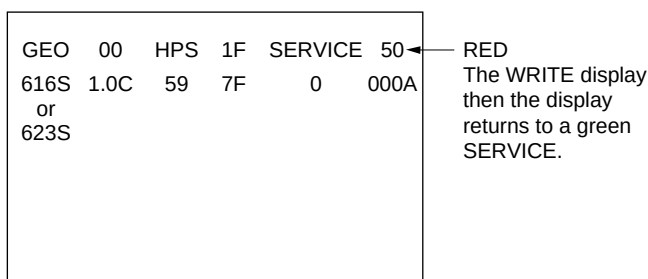
Item Number 00 of device GEO

This explanation uses H-Position as an example.

1. Select "GEO 00 HPS" with the **[1]** and **[4]** buttons.
2. Raise/lower the data with the **[3]** and **[6]** buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the **[MUTING]** button. (The display changes to WRITE.)
5. Execute the writing with the **[0]** button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)



Written with **[MUTING]**



Write executed with **[0]**

Use the same method for all Items. Use **[1]** and **[4]** to select the adjustment item, use **[3]** and **[6]** to adjust, write with **[MUTING]**, then execute the write with **[0]**.

- Note :**
1. In **[WRITE]**, the data for all items are written into memory together.
 2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.

Adjustment Item Table (KV-PF14Q40 (E))

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
GEO	0	HPS	1E/16	3F	H Position	50/60HZ	12 (7-2)	CXA2130S(88H)	82 (7-2)
	1	HSZ	1F	3F	H Size	50/60HZ	11 (7-2)		81 (7-2)
	2	PAP	1F	3F	Pin Amp	50/60HZ	13 (7-2)		83 (7-2)
	3	TLT	7	0F	Trapezium	50/60HZ	15 (7-4)		85 (7-4)
	4	VPS	1F	3F	V Position	50/60HZ	0F (7-2)		7F (7-2)
	5	VSZ	1F	3F	V Size	50/60HZ	0E (7-2)		7E (7-2)
	6	SCO	7	0F	S Correction	50/60HZ	10 (7-4)		80 (7-4)
	7	VLN	7	0F	V Linearity	50/60HZ	10 (3-0)		80 (3-0)
	8	BOW	7	0F	AFC Bow	50/60HZ	16 (7-4)		86 (7-4)
	9	AGL	7	0F	AFC-Angle	50/60HZ	16 (3-0)		86 (3-0)
	10	UPN	1F	3F	Upper Pin	50/60HZ	14 (7-2)		84 (7-2)
	11	LPN	2F	3F	Lower Pin	50/60HZ	18 (7-2)		88 (7-2)
	12	HBL	1	1	H Blanking on/off		18 (1)		67 (1)
	13	LBL	0F/0F	0F	Left H Blanking	50/60HZ	17 (7-4)		87 (7-4)
	14	RBL	0F/0F	0F	Right H Blanking	50/60HZ	17 (3-0)		87 (3-0)
WHB	0	RDR	25/2A	3F	R Drive	DYNAMIC/others	09 (7-2)	CXA2130S(88H)	8F (7-2)
	1	GDR	2A	3F	G Drive	DYNAMIC/others	0A (7-2)		90 (7-2)
	2	BDR	2A	3F	B Drive	DYNAMIC/others	0B (7-2)		91 (7-2)
	3	RCT	07/07	0F	R Cutoff	SECAM/others	07 (3-0)		93 (3-0)
	4	GCT	7	0F	G Cutoff	SECAM/others	08 (7-4)		94 (7-4)
	5	BCT	7	0F	B Cutoff	SECAM/others	08 (3-0)		94 (3-0)
	6	BMN	15	1F	Brightness Minimum Data				97
SAJ	7	SBR	28	3F	Sub Brightness Control				98
	0	PMX	37	3F	Picture Maximum Data			CXA2130S(88H)	96
	1	SHU	8	0F	Sub Hue Control	TV/Video			99
	2	SSH	*	0F	Sub Sharpness Control	TV/Video			9A
	3	SCL	1F	3F	Sub Color Control	NTSC/others			9B
VP	0	EHT	07/07	0F	EHT Comp	50/60HZ	15 (3-0)	CXA2130S(88H)	85 (3-0)
	1	GMA	*	03	Gamma Correction	Refer NVM Map A4	0B (1-0)		1A3 (1-0)
	2	YDL	08/09/08	0F	Y Delay	PAL/SECAM/NTSC	0C (3-0)		8C (3-0)
	3	SST	1	03	SECAM ID Start Position		1B (1-0)		6A (1-0)
	4	SSP	1	03	SECAM ID Stop Position		1B (3-2)		6A (3-2)
	5	SLV	2	03	SECAM ID Level		1C (1-0)		6B (1-0)
	6	SBF	22	3F	SECAM BELL f0		1C (7-2)		6B (7-2)
	7	DYC	1	1	Dynamic Color on/off		0A (1)		59 (1)
	8	ABL	1	1	ABL Mode Switching	STANDARD ALWAYS 0	09 (1)		58 (1)
	9	VTH	1	1	ABL Detection Vth Switching		09 (0)		58 (0)
	10	SFO	01/01	1	FO Switching for Sharpness	NTSC/others	05 (1)		198 (1)
	11	DCX	1	1	DC Trans. Ratio Switching		06 (1)		55 (1)
	12	SHT	01/01	1	Pre-/Overshoot ratio Switch	NTSC/others	06 (0)		199 (0)

Adjustment Item Table

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)	
	No	Name								
VP	13	HDW	0	1	H Drive Pulse Width Switch	TV/Video/Text	00 (6)		4F (6)	
	14	AFC	01/00/01	03	AFC Gain Control		0F (1-0)		8D (1-0)	
	15	HOS	7	0F	H Oscillation		0C (7-4)		5B (7-4)	
	16	HSS	0	1	Slice Level of H Sync Sep.		0D (1)		5C (1)	
	17	VSS	0	1	Slice Level of V Sync Sep.	50/60Hz	0D (0)		5C (0)	
	18	HMS	01/01	1	Macro Vision C/m off/on		0E (0)		7E (0)	
	19	YUV	1	1	YUV Switch Control		01 (0)		50 (0)	
	20	CDV	1	3	CD mode for Video		0D (5-4)		1A1 (5-4)	
	21	RON	1	1	R ON	Video only not memorized	01 (3)		50 (3)	
	22	GON	1	1	G ON	not memorized	01 (2)		50 (2)	
	23	BON	1	1	B ON	not memorized	01 (1)		50 (1)	
	24	PON	1	1	P ON	not memorized	00 (7)		4F (7)	
	25	BLK	0	1	BLK Off		12 (0)		61 (0)	
	26	VMC	*	1	VM Off		13 (0)		62 (0)	
AP	0	INF	5	3F	Input Attenuation When surround off		00 (5-0)	TDA7429	19F (5-0)	
	1	INS	A	3F	Input Attenuation When surround on		02		1A0 (5-0)	
	2	PH1	3	3	Phase 1 Register Selection				76 (1-0)	
	3	PH2	0	3	Phase 2 Register Selection				76 (3-2)	
	4	PH3	0	3	Phase 3 Register Selection		#4 (3-0)		76 (5-4)	
	5	PH4	0	3	Phase 4 Register Selection				76 (7-6)	
	6	BCS	*	3	Bass Center Shift				1A8 (1-0)	
	7	TCS	*	3	Treble Center Shift		#5 (3-0)		1A9 (1-0)	
8	TRF	*	3	RF Treble Offset	#5 (3-0)	1A9 (5-4)				
MSP	0	WST	15	FF	W/G Stereo Threshold			MSP3415D (84H)	157 (7-0)	
	1	WBT	EC	FF	W/G Bilingual Threshold				158 (7-0)	
	2	WLL	5	FF	W/G Monaural Threshold				159 (7-0)	
	3	WAC	1	0F	W/G Agreement Count				15A (3-0)	
	4	WDL	30	FF	W/G Search Delay				15B (7-0)	
	5	NDL	20	FF	NICAM Search Delay				15C (7-0)	
	6	SDL	10	FF	Stereo status Read Delay				15D (7-0)	
	7	AGC	1	1	AGC Switch Auto/Constant		BB (7)		108 (7)	
	8	REL	28	3F	AGC Gain at Constant Mode		BB (6-1)		108 (6-1)	
	9	CRM	0	1	Carrier muting on/off		BB (9)		107 (1)	
	10	ACO	1	1	Audio Clock out on/off		83 (5)		10C (5)	
	11	FP	1B	7F	FM Prescale for non-M system		0E (7-0)		16C (6-0)	
	12	FPM	32	7F	FM Prescale for M system		0E (7-0)		16D (6-0)	
	13	FH	36	7F	FM Prescale for HDEV		0E (7-0)		16E (6-0)	
	14	FHM	65	7F	FM Prescale for HDEV and M		0E (7-0)		16F (6-0)	
	15	WGP	2A	7F	W/G Prescale		0E (7-0)		170 (6-0)	
	16	NIP	6D	7F	NICAM Prescale		10 (7-0)		138 (6-0)	
	17	ERR	50	FF	Auto FM switch Threshold		21 (10-3)		166 (7-0)	
18	VOL	6D	FF	Loud Speaker gain 7000h to 7f0h	0000 (15-4)	1A7 (7-0)				

Adjustment Item Table

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
TXT	0	TXH	1	3	Teletext Horizontal Position			(58H)	18D (1-0)
	1	TXV	0	3	Teletext Vertical Position				18D (6-4)
OPM	0	OSH	0A	3F	OSD H Position	Option-Misc.			AC (7-2)
	1	COM	*	03	Comb Selection				A5 (7-6)
	2	APC	1	1	APC Switch				A4 (5)
	3	TSY	0	03	TV Sys at Auto TV Sys				A4 (4-3)
	4	MUT	0	1	No Signal Mute				A4 (0)
	5	AFM	1	1	Auto FM switch				A4 (1)
	6	RFB	0	3	C-BPF Control				A5 (5-4)
	7	TV0	*	7	Tilt to V-Angle offset				A5 (2-0)
	8	DBL	0	1	Disable Blueback Function				A4 (2)
OPB	0	OP1	#	FF	Optional Bits 1 (see below)	Option-Bits			45
	1	OP2	#	FF	Optional Bits 2 (see below)				46
	2	OP3	#	FF	Optional Bits 3 (see below)				47

NOTE

- shaded items are fixed data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.
In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

Adjustment Item Table (KV-PF14P40 (Thailand))

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
GEO	0	HPS	7	3F	H Position	50/60HZ	12 (7-2)	CXA2130S(88H)	82 (7-2)
	1	HSZ	1F	3F	H Size	50/60HZ	11 (7-2)		81 (7-2)
	2	PAP	1F	3F	Pin Amp	50/60HZ	13 (7-2)		83 (7-2)
	3	TLT	7	0F	Trapezium	50/60HZ	15 (7-4)		85 (7-4)
	4	VPS	1F	3F	V Position	50/60HZ	0F (7-2)		7F (7-2)
	5	VSZ	1F	3F	V Size	50/60HZ	0E (7-2)		7E (7-2)
	6	SCO	7	0F	S Correction	50/60HZ	10 (7-4)		80 (7-4)
	7	VLN	7	0F	V Linearity	50/60HZ	10 (3-0)		80 (3-0)
	8	BOW	7	0F	AFC Bow	50/60HZ	16 (7-4)		86 (7-4)
	9	AGL	7	0F	AFC-Angle	50/60HZ	16 (3-0)		86 (3-0)
	10	UPN	1F	3F	Upper Pin	50/60HZ	14 (7-2)		84 (7-2)
	11	LPN	1F	3F	Lower Pin	50/60HZ	18 (7-2)		88 (7-2)
	12	HBL	0	1	H Blanking on/off		18 (1)		67 (1)
	13	LBL	0F	0F	Left H Blanking	50/60HZ	17 (7-4)		87 (7-4)
	14	RBL	00	0F	Right H Blanking	50/60HZ	17 (3-0)		87 (3-0)
WHB	0	RDR	25	3F	R Drive	DYNAMIC/others	09 (7-2)	CXA2130S(88H)	8F (7-2)
	1	GDR	2A	3F	G Drive	DYNAMIC/others	0A (7-2)		90 (7-2)
	2	BDR	2A	3F	B Drive	DYNAMIC/others	0B (7-2)		91 (7-2)
	3	RCT	7	0F	R Cutoff	SECAM/others	07 (3-0)		93 (3-0)
	4	GCT	7	0F	G Cutoff	SECAM/others	08 (7-4)		94 (7-4)
	5	BCT	7	0F	B Cutoff	SECAM/others	08 (3-0)		94 (3-0)
	6	BMN	15	1F	Brightness Minimum Data				97
SAJ	7	SBR	28	3F	Sub Brightness Control			CXA2130S(88H)	98
	0	PMX	33	3F	Picture Maximum Data				96
	1	SHU	8	0F	Sub Hue Control	TV/Video			99
	2	SSH	3	0F	Sub Sharpness Control	TV/Video			9A
VP	3	SCL	1F	3F	Sub Color Control	NTSC/others		CXA2130S(88H)	9B
	0	EHT	07	0F	EHT Comp	50/60HZ	15 (3-0)		85 (3-0)
	1	GMA	2	03	Gamma Correction	Refer NVM Map A4	0B (1-0)		1A3 (1-0)
	2	YDL	6	0F	Y Delay	PAL/SECAM/NTSC	0C (3-0)		8C (3-0)
	3	SST	1	03	SECAM ID Start Position		1B (1-0)		6A (1-0)
	4	SSP	1	03	SECAM ID Stop Position		1B (3-2)		6A (3-2)
	5	SLV	2	03	SECAM ID Level		1C (1-0)		6B (1-0)
	6	SBF	22	3F	SECAM BELL f0		1C (7-2)		6B (7-2)
	7	DYC	0	1	Dynamic Color on/off		0A (1)		59 (1)
	8	ABL	1	1	ABL Mode Switching	STANDARD ALWAYS 0	09 (1)		58 (1)
	9	VTH	1	1	ABL Detection Vth Switching		09 (0)		58 (0)
	10	SFO	1	1	FO Switching for Sharpness	NTSC/others	05 (1)		198 (1)
	11	DCX	1	1	DC Trans. Ratio Switching		06 (1)		55 (1)
	12	SHT	1	1	Pre-/Overshoot ratio Switch	NTSC/others	06 (0)		199 (0)

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)	
	No	Name								
VP	13	HDW	0	1	H Drive Pulse Width Switch	TV/Video/Text	00 (6)		4F (6)	
	14	AFC	1	03	AFC Gain Control		0F (1-0)		8D (1-0)	
	15	HOS	7	0F	H Oscillation		0C (7-4)		5B (7-4)	
	16	HSS	0	1	Slice Level of H Sync Sep.		0D (1)		5C (1)	
	17	VSS	0	1	Slice Level of V Sync Sep.	50/60Hz	0D (0)		5C (0)	
	18	HMS	0	1	Macro Vision C/m off/on		0E (0)		7E (0)	
	19	YUV	0	1	YUV Switch Control		01 (0)		50 (0)	
	20	CDV	1	3	CD mode for Video		0D (5-4)		1A1 (5-4)	
	21	RON	1	1	R ON	not memorized	01 (3)		50 (3)	
	22	GON	1	1	G ON	not memorized	01 (2)		50 (2)	
	23	BON	1	1	B ON	not memorized	01 (1)		50 (1)	
	24	PON	1	1	P ON	not memorized	00 (7)		4F (7)	
	25	BLK	0	1	BLK Off		12 (0)		61 (0)	
	26	VMC	0	1	VM Off		13 (0)		62 (0)	
AP	0	INF	5	3F	Input Attenuation When surround off		00 (5-0)	TDA7429	19F (5-0)	
	1	INS	0A	3F	Input Attenuation When surround on		02		1A0 (5-0)	
	2	PH1	3	3	Phase 1 Register Selection				76 (1-0)	
	3	PH2	0	3	Phase 2 Register Selection				76 (3-2)	
	4	PH3	0	3	Phase 3 Register Selection				76 (5-4)	
	5	PH4	0	3	Phase 4 Register Selection		76 (7-6)			
	6	BCS	2	3	Bass Center Shift		#4 (3-0)		1A8 (1-0)	
	7	TCS	2	3	Treble Center Shift		#5 (3-0)		1A9 (1-0)	
	8	TRF	2	3	RF Treble Offset		#5 (3-0)		1A9 (5-4)	
MSP	0	WST	15	FF	W/G Stereo Threshold			MSP3415D (84H)	157 (7-0)	
	1	WBT	EC	FF	W/G Bilingual Threshold				158 (7-0)	
	2	WLL	5	FF	W/G Monaural Threshold				159 (7-0)	
	3	WAC	1	0F	W/G Agreement Count				15A (3-0)	
	4	WDL	30	FF	W/G Search Delay				15B (7-0)	
	5	NDL	20	FF	NICAM Search Delay				15C (7-0)	
	6	SDL	10	FF	Stereo status Read Delay				15D (7-0)	
	7	AGC	1	1	AGC Switch Auto/Constant				BB (7)	108 (7)
	8	REL	28	3F	AGC Gain at Constant Mode				BB (6-1)	108 (6-1)
	9	CRM	0	1	Carrier muting on/off				BB (9)	107 (1)
	10	ACO	1	1	Audio Clock out on/off				83 (5)	10C (5)
	11	FP	1B	7F	FM Prescale for non-M system				0E (7-0)	16C (6-0)
	12	FPM	32	7F	FM Prescale for M system				0E (7-0)	16D (6-0)
	13	FH	36	7F	FM Prescale for HDEV				0E (7-0)	16E (6-0)
	14	FHM	65	7F	FM Prescale for HDEV and M				0E (7-0)	16F (6-0)
	15	WGP	2A	7F	W/G Prescale				0E (7-0)	170 (6-0)
	16	NIP	6D	7F	NICAM Prescale				10 (7-0)	138 (6-0)
	17	ERR	50	FF	Auto FM switch Threshold				21 (10-3)	166 (7-0)
	18	VOL	6D	FF	Loud Speaker gain 7000h to 7ffoh	0000 (15-4)	1A7 (7-0)			

Adjustment Item Table

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
TXT	0	TXH	1	3	Teletext Horizontal Position			(58H)	18D (1-0)
	1	TXV	0	3	Teletext Vertical Position				18D (6-4)
OPM	0	OSH	0A	3F	OSD H Position	Option-Misc.			AC (7-2)
	1	COM	0	03	Comb Selection				A5 (7-6)
	2	APC	1	1	APC Switch				A4 (5)
	3	TSY	0	03	TV Sys at Auto TV Sys				A4 (4-3)
	4	MUT	0	1	No Signal Mute				A4 (0)
	5	AFM	0	1	Auto FM switch				A4 (1)
	6	RFB	0	3	C-BPF Control				A5 (5-4)
	7	TV0	0	7	Tilt to V-Angle offset				A5 (2-0)
	8	DBL	0	1	Disable Blueback Function				A4 (2)
OPB	0	OP1	0	FF	Optional Bits 1 (see below)	Option-Bits			45
	1	OP2	0	FF	Optional Bits 2 (see below)				46
	2	OP3	0	FF	Optional Bits 3 (see below)				47

- NOTE**
- shaded items are fixed data.
 - Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
 - Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.
In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

KV-PF14P40/PF14Q40
RM-952

ITEM INFORMATION.

No. OPB0 OP1

Item	XTAL 4.43	XTAL 3.58	SECAM	2nd. Lang	B/G	I	D/K	M
KV-PF14P40	1	1	0	1	1	0	0	0
KV-PF14Q40	1	0	1	1	1	0	0	0

No. OPB1 OP2

Item	TOP	NICAM	HDEV	Thai Bil	Dis Fav.	DVD Input	AV Input	
KV-PF14P40	0	0	0	1	0	0	0	1
KV-PF14Q40	0	0	0	1	0	0	0	1

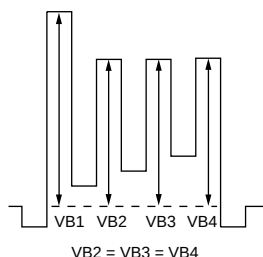
No. OPB2 OP3

Item	Pic Rot	2199 Cune	Auto PIC	Auto TV sys	US ST	AV Mono	11 KEY	Color SW
KV-PF14P40	0	0	0	0	0	1	0	0
KV-PF14Q40	0	0	0	0	0	1	0	0

4-3. PICTURE QUALITY ADJUSTMENTS

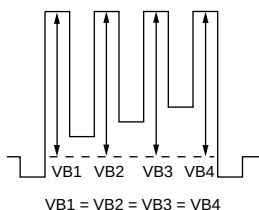
SUB COLOR ADJUSTMENT

1. Input a PAL color-bar.
2. Set to the following condition:
PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
3. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
4. Set to Service Mode and select SAJ 3 'SCL' with [1] and [4] of the commander then adjust to VB2=VB3=VB4 with [3] and [6].
5. Press [MUTING] → [0] of the commander to write the data.
6. Adjust SAJ 3 'SCL' as step 2 to 5 when receiving NTSC color-bar.



SUB HUE ADJUSTMENT

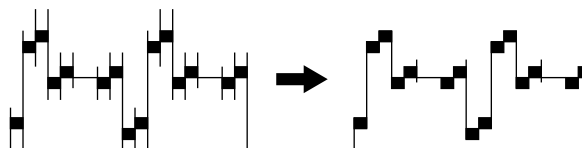
1. Select Video 1.
2. Input a NTSC color-bar, video into Video 1.
3. Set the following condition:
PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 'SHU' with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].



6. Press [MUTING] → [0] of the commander to write the data.

BELL FILTER ADJUSTMENT

1. Input SECAM color-bar signal.
2. Connect the dual-trace oscilloscope to the pin ⑨ (R-Y) of CN303 (not mounted).
3. Adjust SERVICE MODE, ITEMS 'SBF' as shown below.



4-4. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

IC001 (μ-CON): CXP86449-616S (KV-PF14P40 (Thailand))
CXP86449-623S (KV-PF14Q40)

1. Enter to Service Mode.
2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.
3. Call each item number and check if the respective screen shows the normal picture.
In cases where items are not well adjusted, rectify the items with fine adjustment.
Write the data per each item number ([MUTING] + [0]).
4. Select item numbers "OPB0" (OP1), "OPB1" (OP2) and "OPB2" (OP3) and respectively set the bit per model with command buttons [3] and [6].
5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
(This will also cancel Service Mode.)

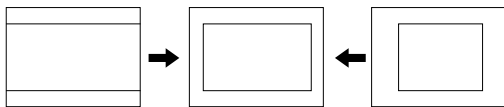
4-5. PICTURE DISTORTION ADJUSTMENT

Item Number 00 – 0B

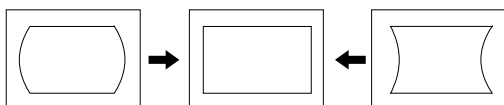
GEO 0 HSH (H POSITION)



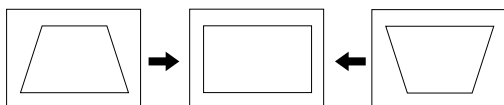
GEO 1 HSZ (H SIZE)



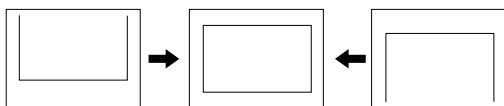
GEO 2 PAP (PIN AMP)



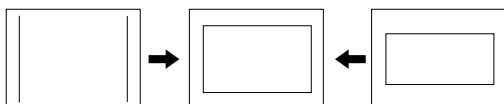
GEO 3 TILT (TRAPEZIUM)



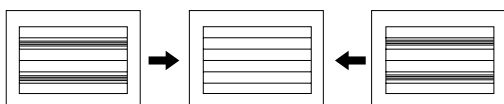
GEO 4 VSH (V POSITION)



GEO 5 VSZ (V SIZE)



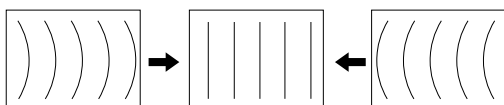
GEO 6 SCR (VERTICAL S-Correction)



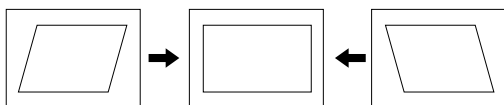
GEO 7 VLN (V LINEARITY)



GEO 8 VBOW (AFC.BOW)

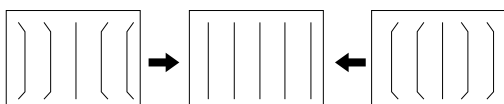


GEO 9 AGL (AFC.ANGLE)

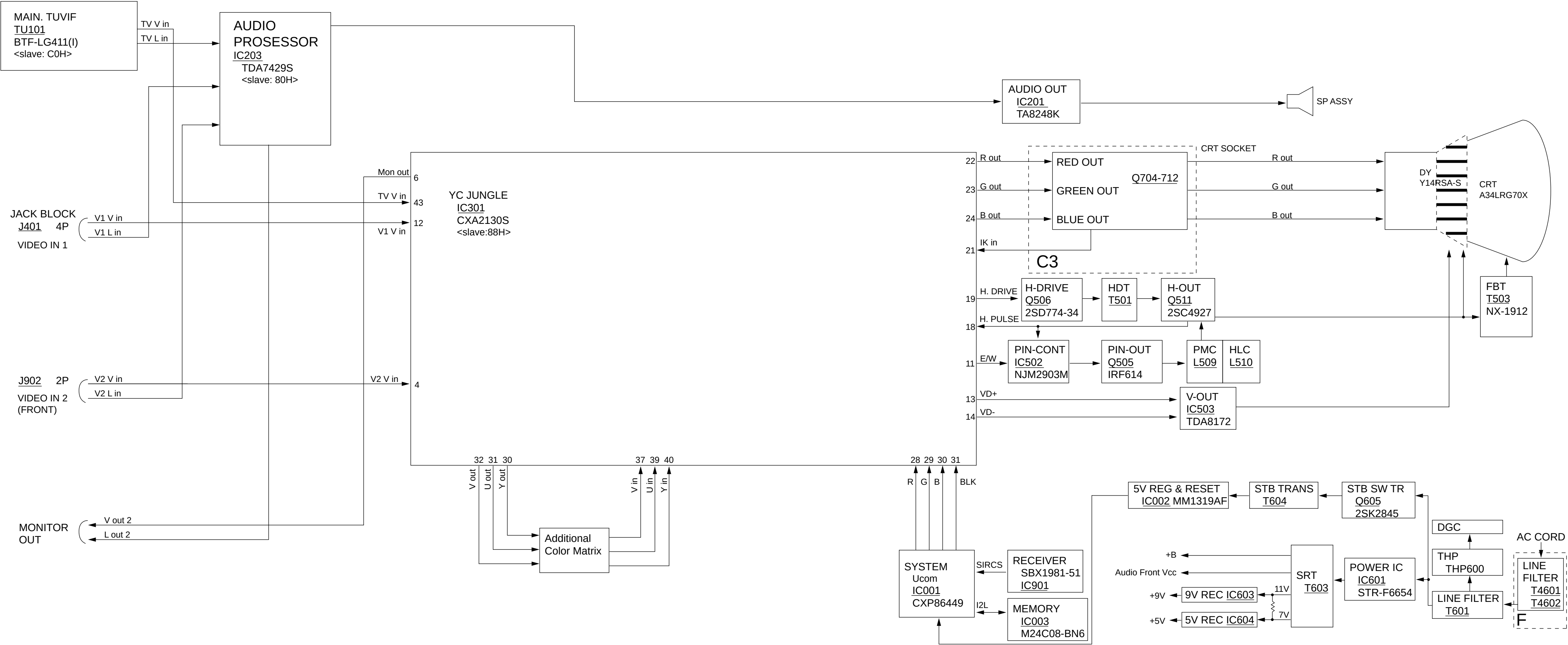


GEO 0A UCP (UPPER CORNER PIN)

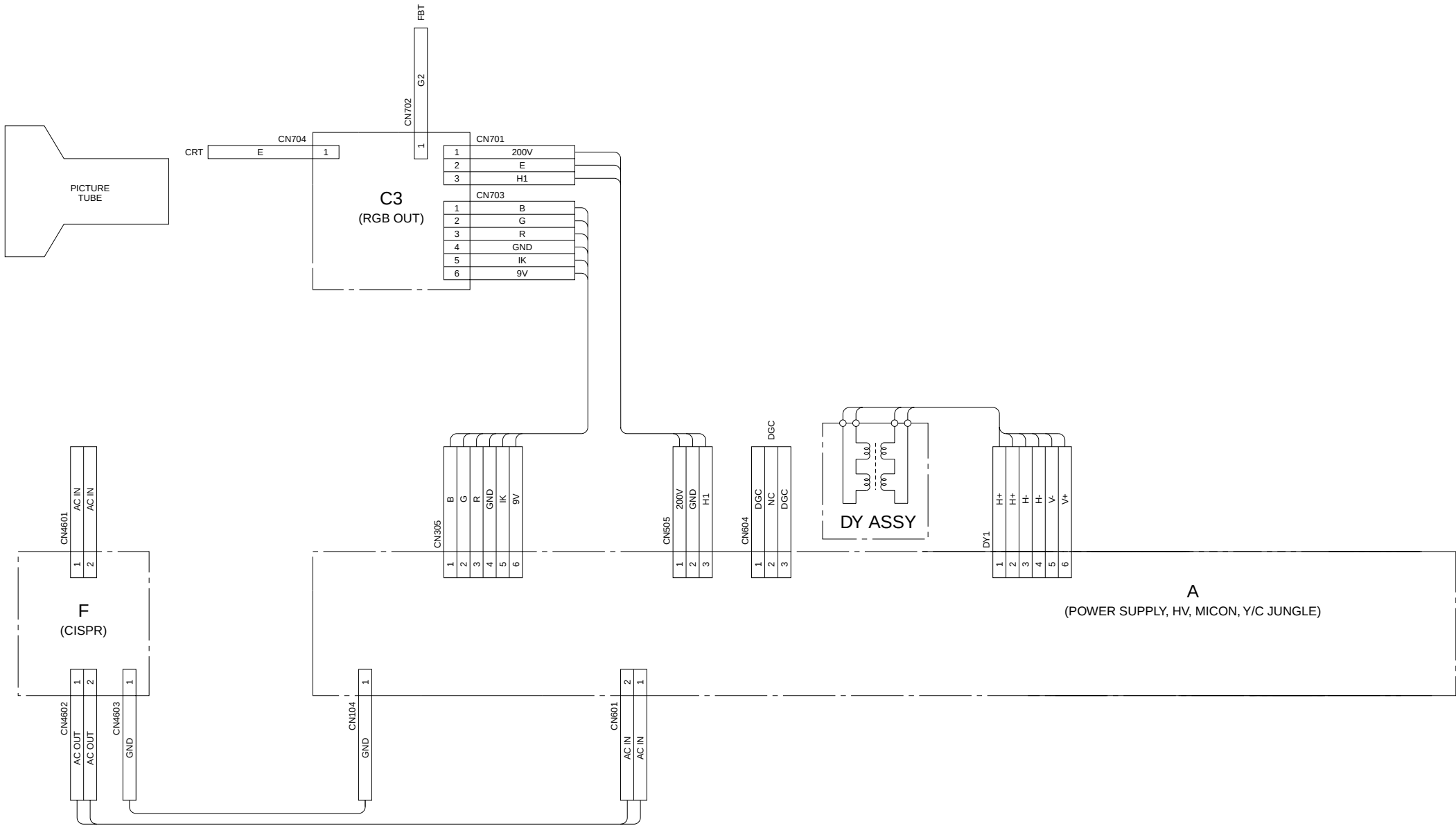
GEO 0B LCP (LOWER CORNER PIN)



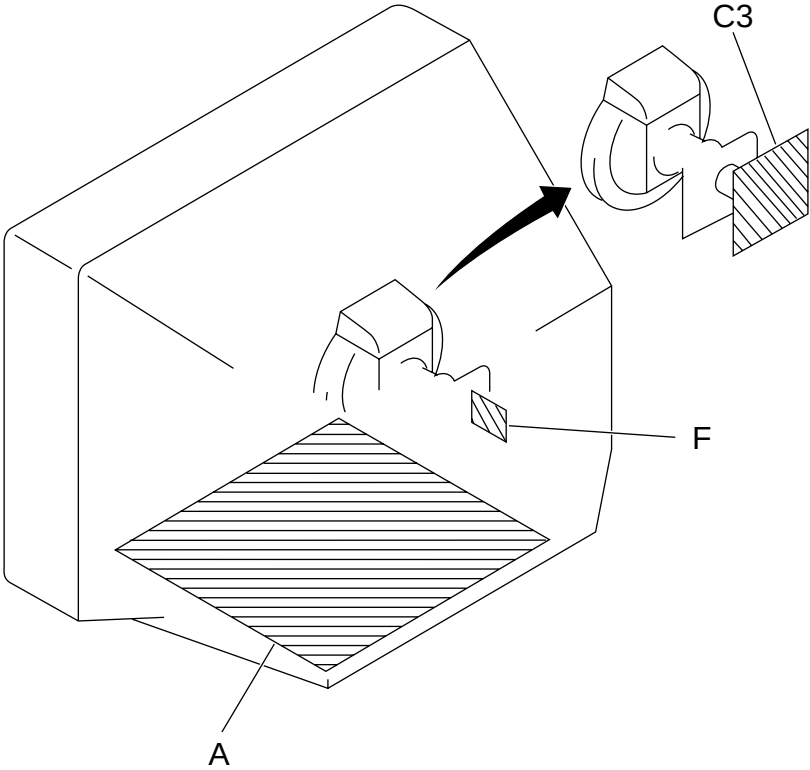
5-1. BLOCK DIAGRAM



5-2. FRAME SCHEMATIC DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

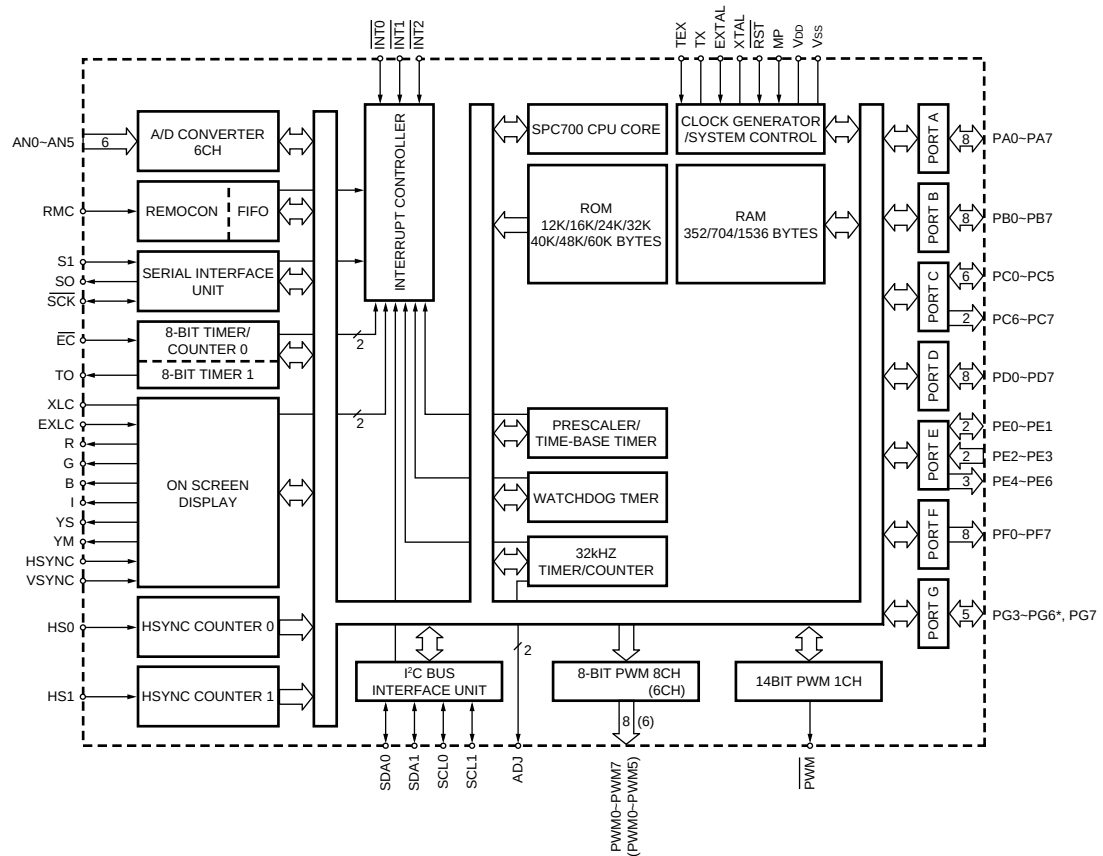
- Note:**
- All capacitors are in μF unless otherwise noted.
 - All electrolytic capacitors are rated at 50V unless otherwise noted.
 - All resistors are in ohms.
 $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
 - Indication of resistance which does not have rating electrical power is as follows.
- Pitch: 5 mm
Rating electrical power 1/4W (CHIP: 1/10W)
- : nonflammable resistor.
 - : internal component.
 - : panel designation or adjustment for repair.
 - All variable and adjustable resistors have characteristic curve B unless otherwise noted.
 - **Readings are taken with a color-bar signal input.**
no mark : PAL
() : SECAM
[] : NTSC 3.58
« » : NTSC 4.43
 - **Readings are taken with a 10 $\text{M}\Omega$ digital multimeter.**
 - **Voltage are dc with respect to ground unless otherwise noted.**
 - **Voltage variations may be noted due to normal production tolerances.**
 - **All voltages are in V.**
 - * : Cannot be measured.
 - **Circled numbers are waveform references.**
 - : B + bus.
 - : B – bus.
 - : signal path.

Reference information		
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	:	ADJUSTMENT RESISTOR
	: LF-8L	MICRO INDUCTOR
	: TA	TANTALUM
COIL CAPACITOR	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

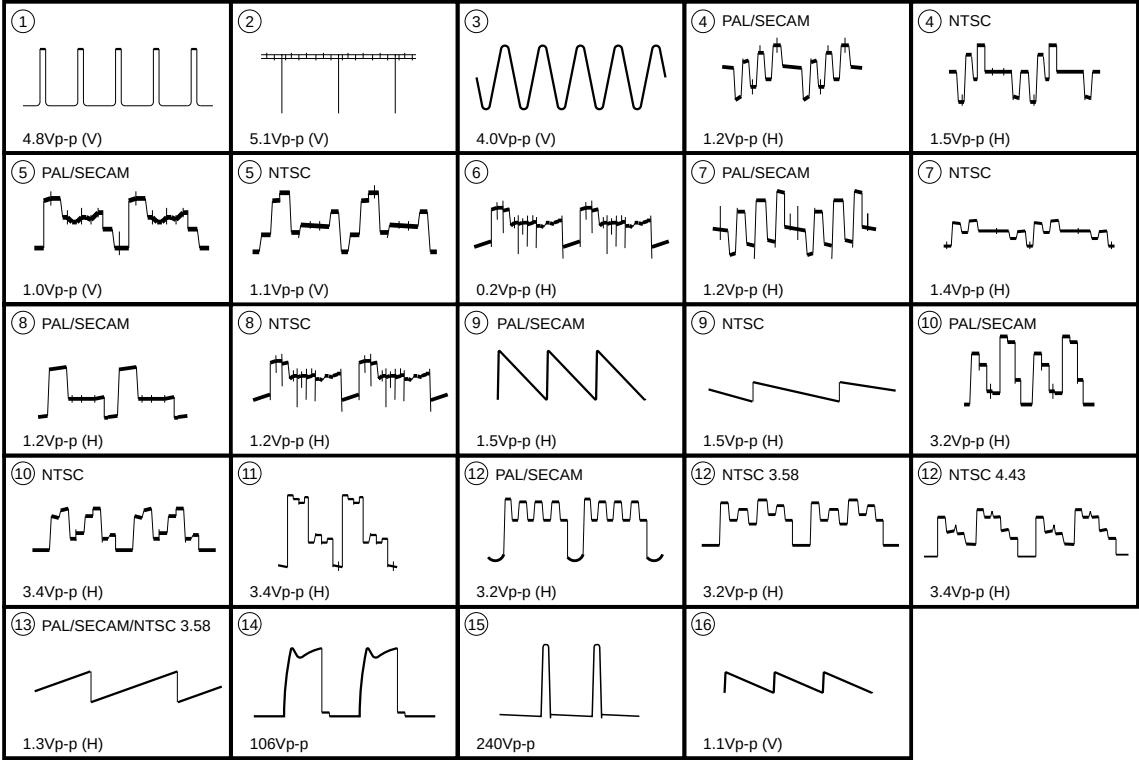
Note: The component identified by shading and mark are critical for safety. Replace only with part number specified.

A BOARD IC001 CXP86449-616S (KV-PF14P40 (Thailand))

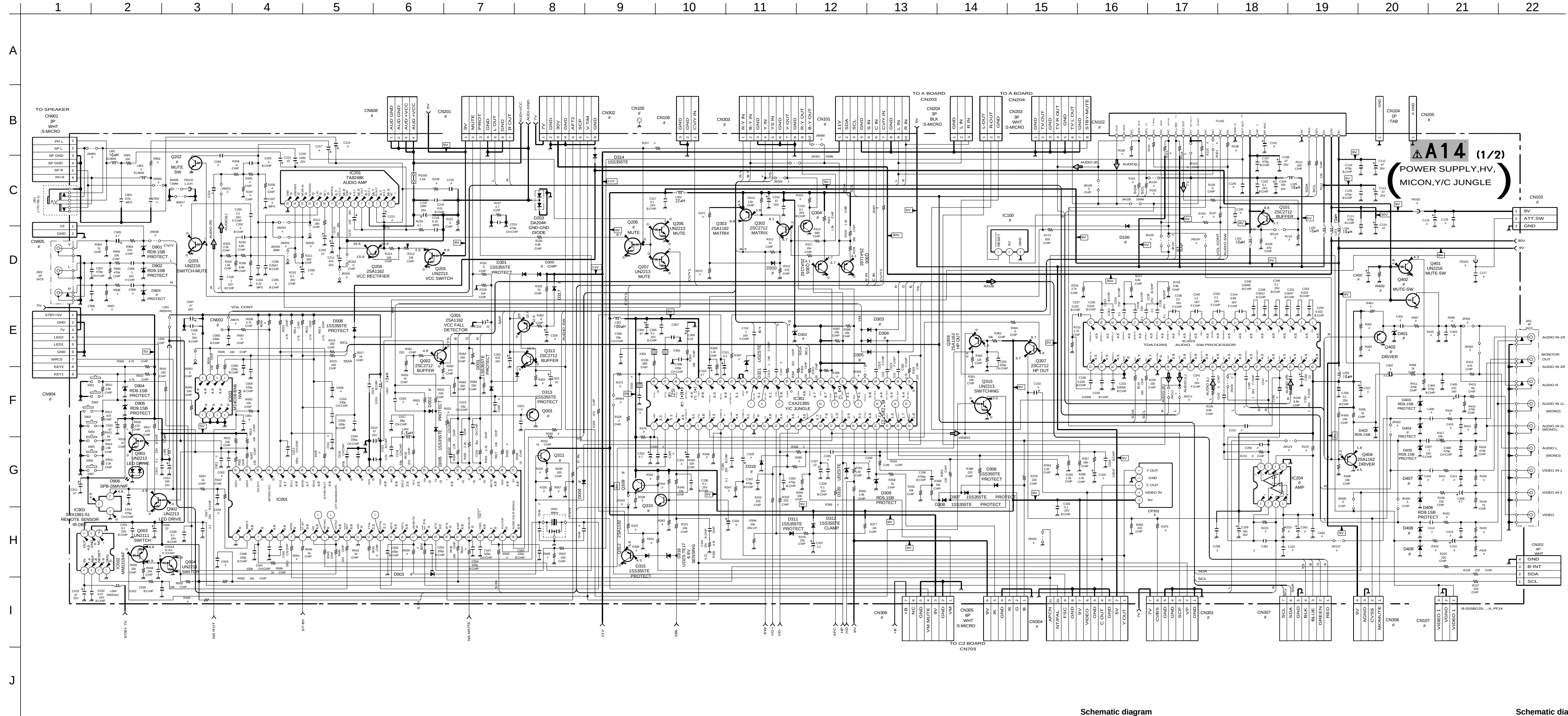
A BOARD IC001 CXP86449-623S (KV-PF14Q40)



A BOARD WAVEFORMS



(1) Schematic Diagram of A (1/2) Board



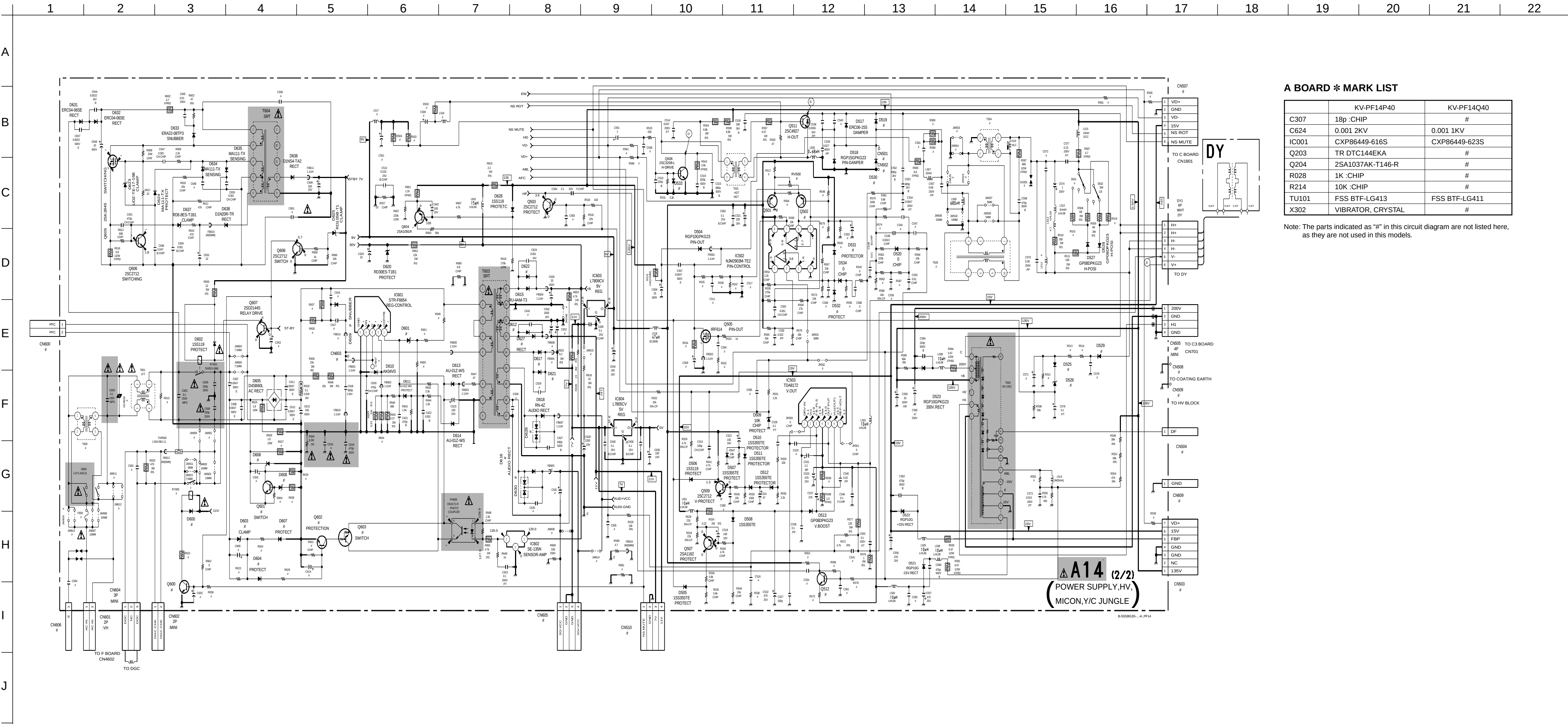
Schematic diagram

← **A** (1/2) board

Schematic diagram

A (2/2) board ➡

(2) Schematic Diagram of A (2/2) Board



A BOARD * MARK LIST

	KV-PF14P40	KV-PF14Q40
C307	18p :CHIP	#
C624	0.001 2KV	0.001 1KV
IC001	CXP86449-616S	CXP86449-623S
Q203	TR DTC144EKA	#
Q204	2SA1037AK-T146-R	#
R028	1K :CHIP	#
R214	10K :CHIP	#
TU101	FSS BTF-LG413	FSS BTF-LG411
X302	VIBRATOR, CRYSTAL	#

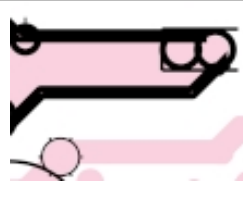
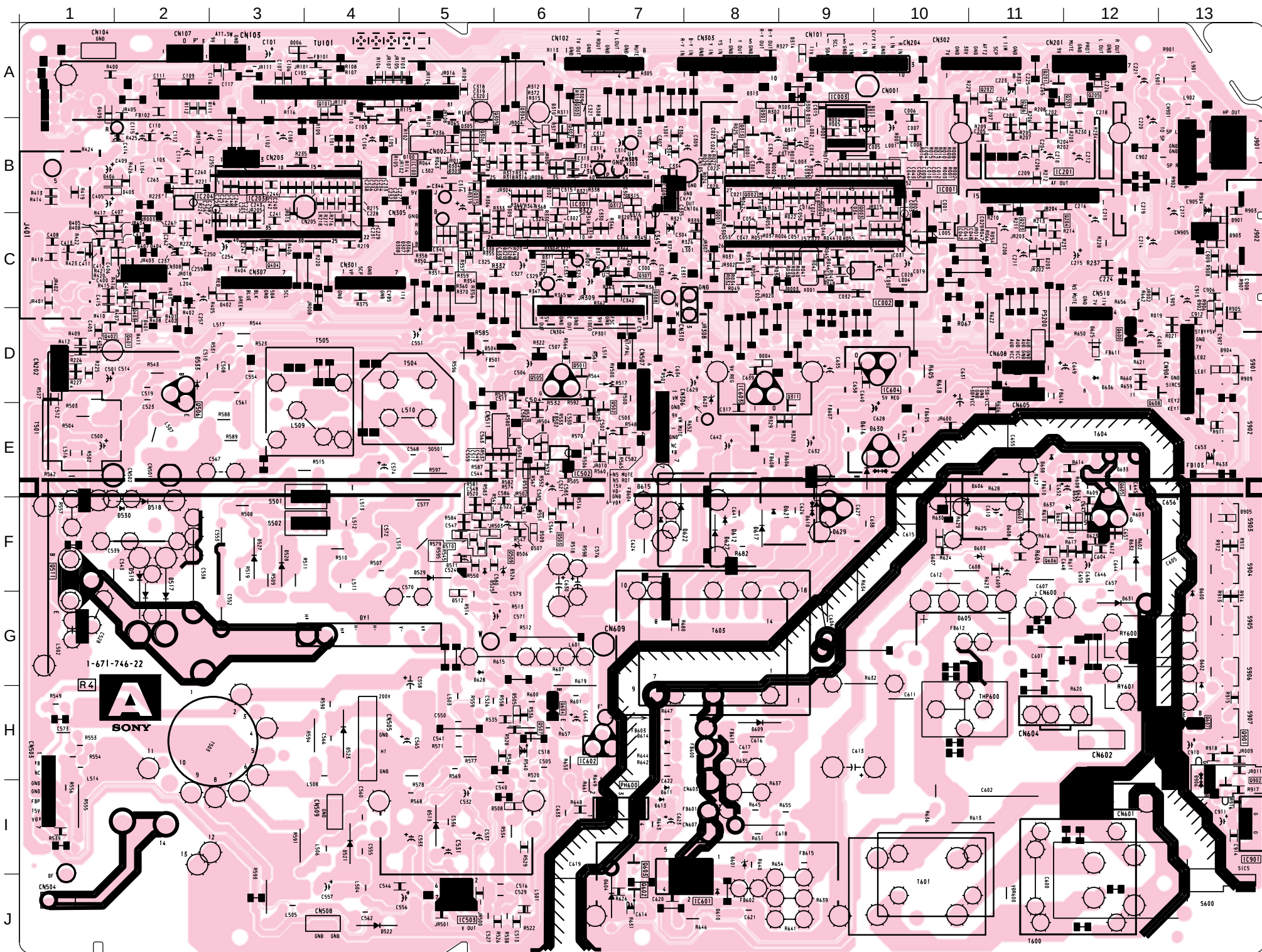
Note: The parts indicated as "*" in this circuit diagram are not listed here, as they are not used in this models.

A BOARD

IC	DIODE	D533	D-2
IC001 B-10	D001 B-8	D534 E-6	
IC002 C-10	D002 B-8	D600 G-13	
IC003 A-9	D003 C-8	D601 I-8	
IC100 B-5		D602 G-13	
IC201 B-11	D004 D-9	D603 F-11	
IC203 B-3	D005 B-8	D604 J-7	
IC204 B-2	D006 A-3	D605 G-10	
IC301 B-6	D100 B-5	D606 E-11	
IC502 E-6	D203 C-11	D607 F-10	
IC503 J-5	D300 A-9	D608 F-11	
IC601 I-8	D301 B-9	D609 H-8	
IC602 H-7	D302 B-6	D610 J-8	
IC603 D-8	D303 B-5	D611 I-7	
IC604 D-10	D304 B-5	D612 F-8	
IC901 I-13		D613 I-7	
PH600 H-7		D305 B-5	D614 H-7
		D306 C-5	D615 E-7
		D307 C-5	D616 E-9
		D308 B-5	D617 F-8
		D309 B-6	D618 F-9
		D310 A-6	D620 D-8
		D311 C-6	D621 F-9
		D312 C-6	D622 F-8
		D313 A-8	D623 F-12
		D315 B-7	D624 F-12
		D316 C-7	D625 D-12
		D317 B-9	D627 F-8
		D319 C-9	D628 G-5
		D320 C-6	D629 F-9
		D321 B-6	D630 E-10
		D322 B-6	D631 G-12
		D401 D-2	D632 F-12
		D402 C-3	D633 E-12
		D403 B-2	D634 F-11
		D404 C-2	D635 F-12
		D405 C-1	D636 D-12
		D406 B-1	D637 F-11
		D407 C-2	D638 E-11
		D408 C-1	D901 C-13
		D409 A-1	D902 C-13
		D504 D-5	D903 C-13
		D505 H-6	D904 D-13
		D506 F-6	D905 F-13
		D507 F-6	D906 I-13
		D508 I-5	
		D509 F-6	
		D510 F-5	
		D511 F-5	
		D512 G-5	
		D513 I-5	
		D517 F-2	
		D518 F-2	
		D519 F-2	
		D520 E-5	
		D521 I-4	
		D522 J-4	
		D523 H-4	
		D524 J-4	
		D525 F-5	
		D526 F-6	
		D527 F-3	
		D528 F-3	
		D529 F-5	
		D530 F-2	
		D531 E-6	
		D532 E-6	

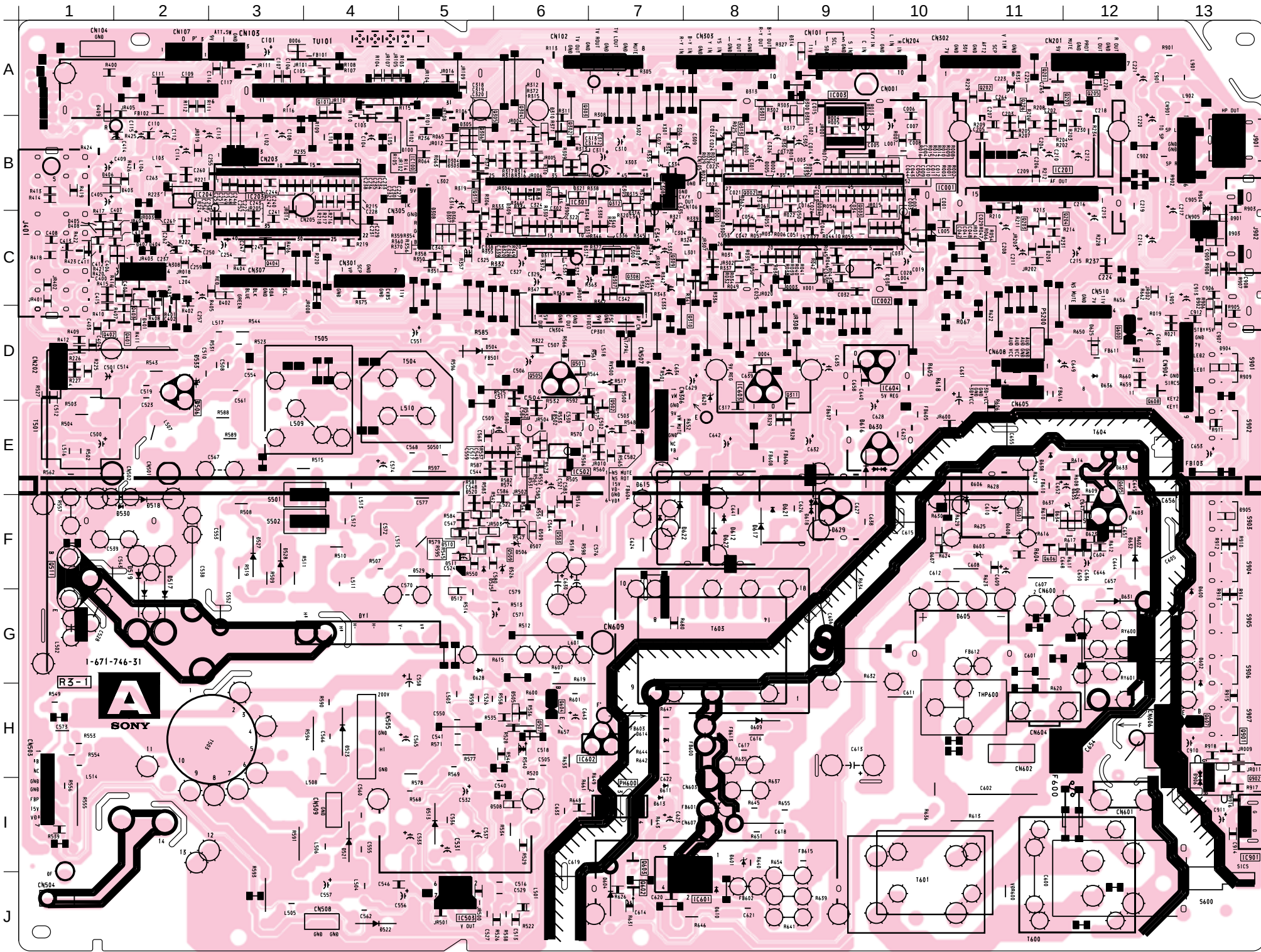
PRINTED WIRING BOARD

- A Board (KV-PF14Q40) -



NOTE:
The circuit indicated above contains high voltage of over 600 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

- A Board (KV-PF14P40) -



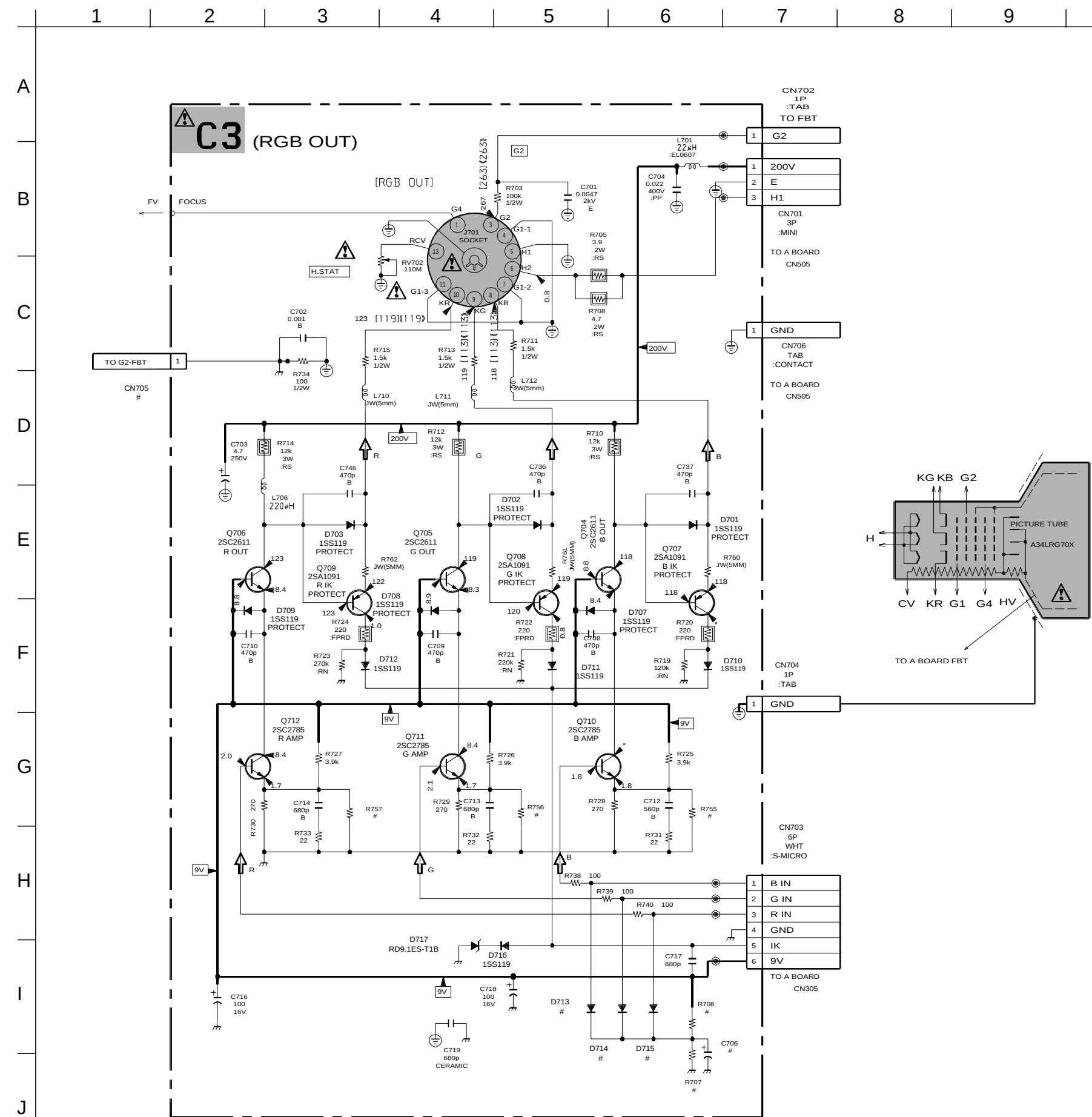
A BOARD

IC	D004	D-8	D614	H-7
IC001 B-10	D005 B-8	D615 E-7		
IC002 C-9	D006 A-3	D616 E-9		
IC003 A-9	D203 C-11	D617 F-8		
IC100 B-5	D300 A-9	D618 F-9		
IC201 B-11	D301 B-9	D620 D-8		
IC203 C-3	D302 B-6	D621 F-8		
IC204 B-2	D303 B-5	D622 F-7		
IC301 B-6	D304 B-5	D623 F-12		
IC502 E-6	D305 B-5	D624 F-12		
IC503 J-5	D306 C-5	D625 D-12		
IC601 I-8	D307 C-5	D627 F-8		
IC602 H-6	D308 B-5	D628 G-5		
IC603 D-8	D309 B-6	D629 F-9		
IC604 D-10	D310 A-6	D630 E-9		
IC901 I-13	D311 C-6	D631 G-12		
PH600 H-7	D312 C-6	D632 F-12		
	D313 A-8	D633 E-12		
	D315 B-7	D634 F-11		
	D316 C-7	D635 F-12		
	D317 B-9	D636 D-12		
	D314 A-9	D637 F-11		
	D319 C-6	D638 E-11		
	D320 C-6	D901 C-13		
	D321 B-6	D902 D-13		
	D401 D-2	D903 C-13		
	D402 C-3	D904 D-13		
	D403 B-1	D905 F-13		
	D404 C-2	D906 I-13		
	D405 C-1			
	D406 B-1			
	D407 C-2			
	D408 C-1			
	D409 A-1			
	D504 D-5			
	D505 H-6			
	D506 F-6			
	D507 F-6			
	D508 I-5			
	D509 E-6			
	D510 F-5			
	D511 F-5			
	D512 G-5			
	D513 I-5			
	D517 F-2			
	D518 F-2			
	D519 F-2			
	D520 E-5			
	D521 I-4			
	D522 J-4			
	D523 F-5			
	D524 F-6			
	D525 F-3			
	D526 F-3			
	D527 F-3			
	D528 F-3			
	D529 F-5			
	D530 F-2			
	D531 E-6			
	D532 E-6			
	D533 D-2			
	D534 E-6			
	D600 G-13			
	D601 I-8			
	D602 G-13			
	D603 F-11			
	D604 J-7			
	D605 G-10			
	D606 E-11			
	D607 F-10			
	D608 E-11			
	D609 H-8			
	D610 J-8			
	D611 I-7			
	D612 F-8			
	D613 I-7			

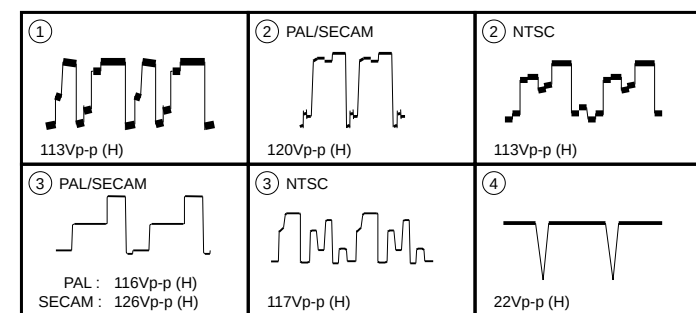
DIODE

D001 B-8	D610 J-8
D002 C-8	D611 I-7
D003 C-9	D612 F-8
	D613 I-7

(3) Schematic Diagrams of C3 and F boards



C3 BOARD WAVEFORMS

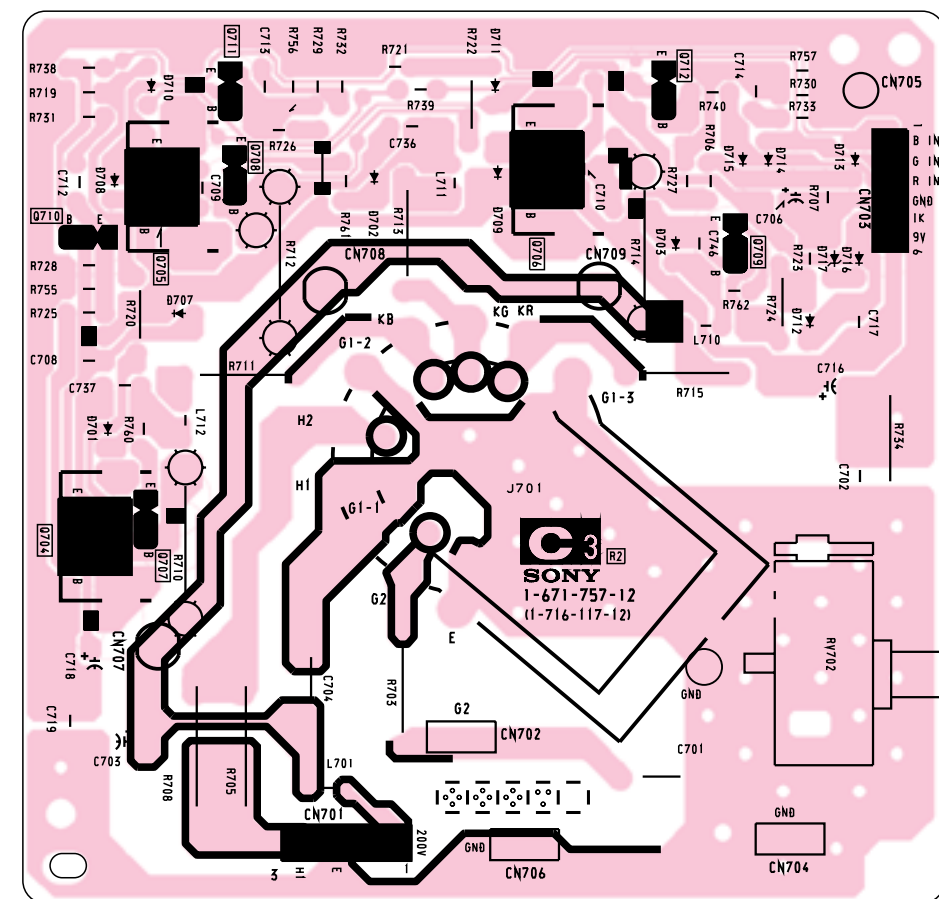


C3 [RGB OUT]

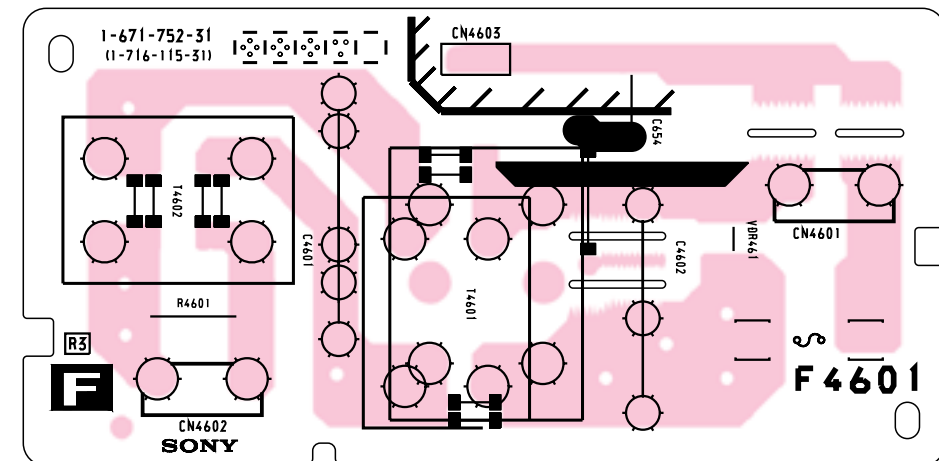
F [CISPR]

PRINTED WIRING BOARDS

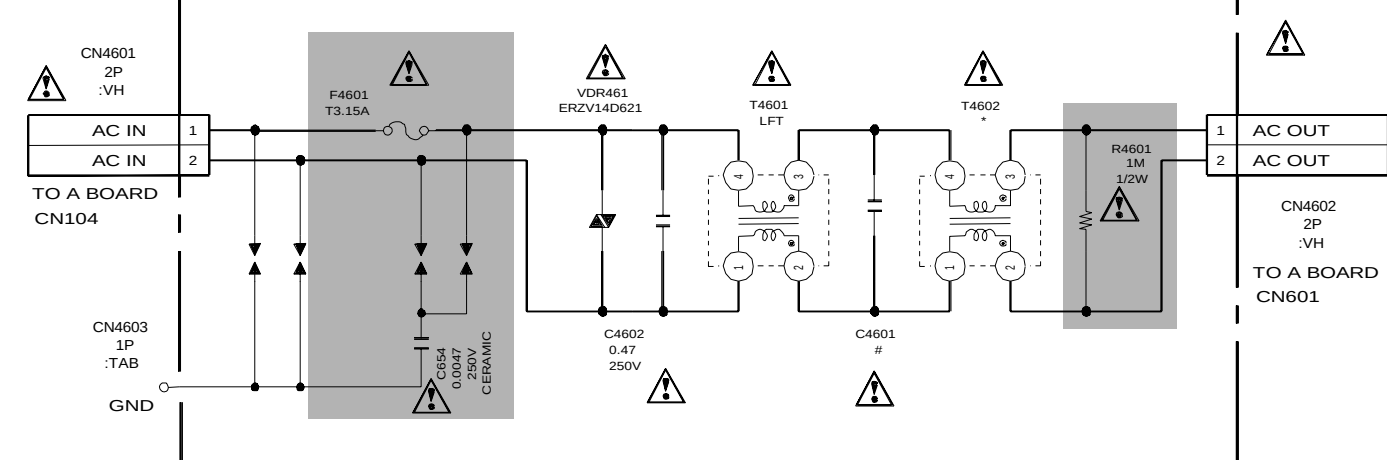
– C3 Board –



- F Board -



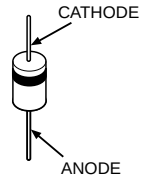
F (C I SPR)



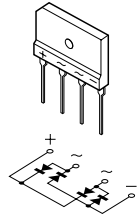
5-5. SEMICONDUCTORS

DIODE

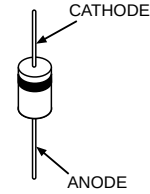
AK04V0
AU-01Z-V1
EGP20G
EL1Z
EU2A
GP08D
10ELS2N-TB5



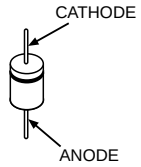
D3SB60F3
D4SB60L



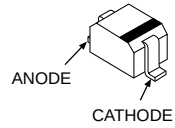
ERC04-06SE
ERC06-15S
RN4Z
RU4AM-T3



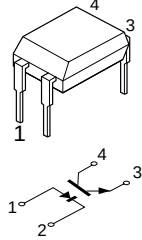
ERA22-08



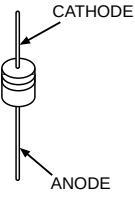
MA111-(K8).S0
1SS355TE-17



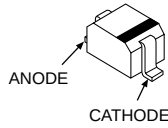
ON3171-R



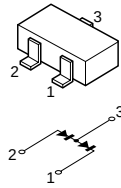
D1NS4
D1N20R
RD30ESB2
RD6.8ES-B1
RD9.1ES-L2
1SS119-25



DTZ-TT11-15B
RD10S-B
RD5.1SB-T2
RD9.1S-B
UDZS-TE17-9.1B

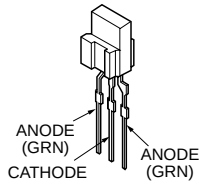


DA204K



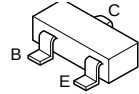
LED

SPB-26MVWF

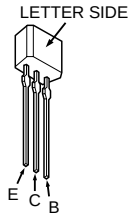


TRANSISTOR

TRDTC144EKA
UN2111
UN2211
UN2213
UN2216
2SA1037AK-T146-R
2SA1162-G
2SC1623-L5L6
2SC2712-YG



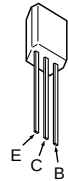
2SC2785-HFE



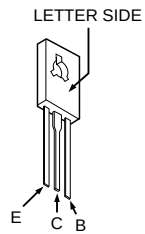
2SA1091-0



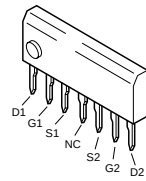
2SD2144S-UVW



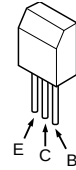
2SC2611



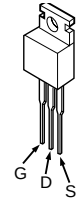
2SC4927-01



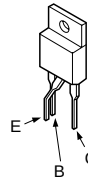
2SD774-34



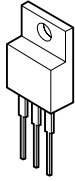
IRF614



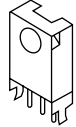
2SK2845-LB102



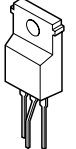
NJM78M09FA
TA7805S



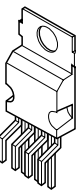
SBX1981-51P



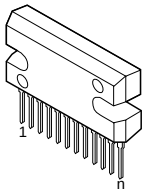
SE-135N



TDA8172

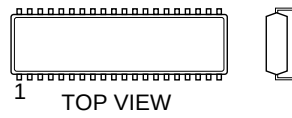


TA8248K



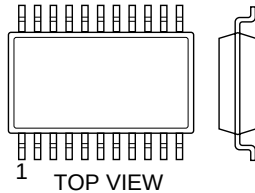
IC

CXA2130S (64PIN)
CXA2139S (48PIN)
CXP86449-616S (64PIN)
CXP86449-623S (64PIN)
CXP86449-626S (64PIN)
M24C08-BN6 (8PIN)
ST24C08FB6 (8PIN)
TDA7429S (42PIN)



Dual In-line Package
Pin 6~98

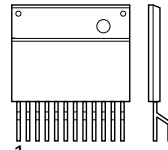
MM1319AFBE (7PIN)
NJM2903M (8PIN)



Single In-line Package
Pin 6~98

STR-F6653

MARKING SIDE VIEW



Zig-zag In-line Package
Pin 6~99

SECTION 6

EXPLODED VIEW

KV-PF14P40/PF14Q40
RM-952

KV-PF14P40/PF14Q40
RM-952

NOTE:

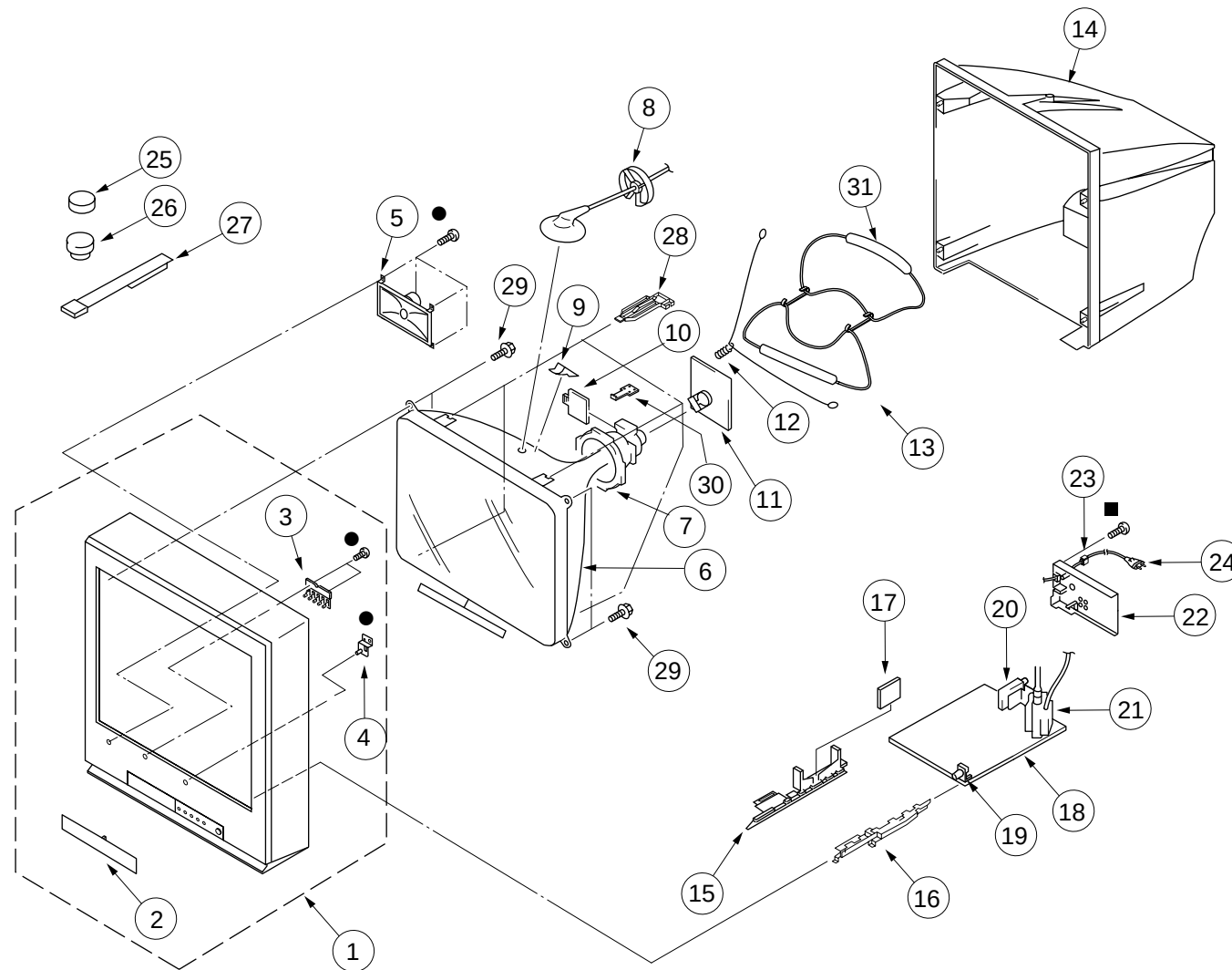
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark $\triangle$ are critical for safety.
Replace only with part number specified.

6-1. CHASSIS

- : 7-685-648-79 SCREW BVTP 3 × 12
- : 7-685-663-71 SCREW BVTP 4 × 16



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4037-159-1	BEZNET ASSY	
2	X-4037-161-1	DOOR ASSY, CONTROL	
3	4-070-290-01	BUTTON, MULTI	
4	* 4-070-292-01	BAR, OPTICAL	
5	1-505-547-11	SPEAKER (5X9CM)	
6	$\triangle$ 8-735-570-05	PICTURE TUBE (A34LRG70X)	
7	8-451-401-11	DEFLECTION YOKE (Y14RSA-S)	
8	* 3-704-372-11	HOLDER, HV CABLE	
9	3-704-495-01	SPACER, DY	
10	2-163-920-01	PLATE, TLH CORRECTION	
11	* A-1331-968-A	C3 BOARD MOUNTED	
12	4-369-318-61	SPRING, TENSION	
13	$\triangle$ 1-419-185-21	COIL, DEGAUSSING	
14	$\triangle$ 4-070-377-01	COVER, REAR	
15	* 4-070-375-01	PWB (L), GUIDE	
16	* 4-070-376-01	PWB (R), GUIDE	
17	* A-1241-401-A	F BOARD MOUNTED	
18	* A-1299-064-A	A BOARD COMPLETE (KV-PF14Q40)	
19	* A-1299-086-A	A BOARD COMPLETE (KV-PF14P40)	
20	4-070-291-01	BUTTON, POWER	
21	8-598-447-10	TUNER, FSS BTF-LG411 (KV-PF14Q40)	
22	8-598-448-10	TUNER, FSS BTF-LG413 (KV-PF14P40)	
23	$\triangle$ 1-453-313-11	TRANSFORMER ASSY, FLYBACK (NX1912/M3A4)	
24	4-067-167-21	BRACKET, TERMINAL	
25	$\triangle$ 4-022-115-00	HOLDER, AC CORD	
26	$\triangle$ 1-574-062-11	CORD, POWER (WITH CONNECTOR) 2.5A/250V	
27	1-452-032-00	MAGNET, DISC	
28	1-452-094-00	CIRCULAR DISC MAGNET B	
29	4-051-736-41	PIECE A(90), CONV, CORRECT	
30	4-069-972-01	CLIP (14RSN), DGC	
31	4-057-862-01	SCREW, TAPPING 5+CROWN WASHER	
32	4-034-272-41	PLATE, CORRECTION, TLV	
33	* 4-072-857-01	CUSHION, DGC	

SECTION 7

ELECTRICAL PARTS LIST

A

NOTE:

The components identified by shading and mark $\triangle$ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All resistors are in ohms
- F : nonflammable
- CAPACITORS
- MF : μ F, PF : μ F
- COILS
- MMH : mH, UH : μ H

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	* A-1299-064-A	A BOARD COMPLETE (KV-PF14Q40)		C104	1-104-665-11	ELECT 100MF	20% 10V
	* A-1299-086-A	A BOARD COMPLETE (KV-PF14P40)		C107	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
		*****		C108	1-104-664-11	ELECT 47MF	20% 16V
	* 4-055-304-01	HOLDER, LED		C109	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
	4-070-202-01	HOLDER, FBT		C110	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
	4-352-844-01	PIN, LEAD, COATING		C111	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
	4-382-854-11	SCREW (M3X10), P, SW (+)		C112	1-104-664-11	ELECT 47MF	20% 16V
	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3		C113	1-104-664-11	ELECT 47MF	20% 25V
				C114	1-126-967-11	ELECT 47MF	20% 50V
				C204	1-136-169-00	MYLAR 0.22MF	5% 50V
		<CAPACITOR>		C206	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C004	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C209	1-126-965-11	ELECT 22MF	20% 50V
C005	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C210	1-126-933-11	ELECT 100MF	20% 16V
C006	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C211	1-126-941-11	ELECT 470MF	20% 25V
C007	1-104-664-11	ELECT 47MF	20% 16V	C212	1-126-933-11	ELECT 100MF	20% 16V
C008	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C215	1-126-942-61	ELECT 1000MF	20% 25V
C010	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C216	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C012	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C218	1-136-167-00	MYLAR 0.15MF	5% 50V
C013	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C220	1-126-942-61	ELECT 1000MF	20% 25V
C014	1-104-664-11	ELECT 47MF	20% 25V	C221	1-126-964-11	ELECT 10MF	20% 50V
C015	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C223	1-126-965-11	ELECT 22MF	20% 50V
C016	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	C224	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C017	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	C226	1-109-982-11	CERAMIC CHIP 1MF	10% 10V
C019	1-104-664-11	ELECT 47MF	20% 25V	C227	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C022	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C228	1-163-024-00	CERAMIC CHIP 0.018MF	10% 50V
C023	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C229	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V
C024	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C230	1-163-024-00	CERAMIC CHIP 0.018MF	10% 50V
C026	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C231	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V
C027	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C232	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C028	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C233	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C030	1-126-965-11	ELECT 22MF	20% 50V	C234	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C031	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C235	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C032	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V	C236	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C034	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C238	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C041	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C240	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C042	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C241	1-164-346-11	CERAMIC CHIP 1MF	16V
C043	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C243	1-216-295-91	SHORT 0	
C044	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C245	1-164-346-11	CERAMIC CHIP 1MF	16V
C047	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C252	1-164-346-11	CERAMIC CHIP 1MF	16V
C048	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C254	1-126-965-11	ELECT 22MF	20% 50V
C050	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C256	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C051	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C259	1-126-933-11	ELECT 100MF	20% 16V
C053	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C265	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C054	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C301	1-126-935-11	ELECT 470MF	20% 16V
C055	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C302	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C103	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C303	1-126-964-11	ELECT 10MF	20% 50V
				C304	1-126-967-11	ELECT 47MF	20% 50V

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The components identified by shading
and mark $\triangle$ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK		
C305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C306	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C307	1-163-233-11	CERAMIC CHIP (KV-PF14P40 ONLY)	18PF	5%	50V
C308	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C309	1-126-957-11	ELECT	0.22MF	20%	50V
C310	1-126-963-11	ELECT	4.7MF	20%	50V
C311	1-126-962-11	ELECT	3.3MF	20%	50V
C312	1-164-346-11	CERAMIC CHIP	1MF		16V
C313	1-164-346-11	CERAMIC CHIP	1MF		16V
C315	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C316	1-104-664-11	ELECT	47MF	20%	25V
C317	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C318	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C319	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C320	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C322	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C324	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C325	1-126-960-11	ELECT	1MF	20%	50V
C327	1-126-965-11	ELECT	22MF	20%	50V
C328	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C330	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C332	1-126-963-11	ELECT	4.7MF	20%	50V
C335	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C336	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C337	1-126-961-11	ELECT	2.2MF	20%	50V
C338	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C341	1-115-340-11	CERAMIC CHIP	0.22MF	10%	25V
C342	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C402	1-164-346-11	CERAMIC CHIP	1MF		16V
C404	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C405	1-126-935-11	ELECT	470MF	20%	16V
C407	1-164-346-11	CERAMIC CHIP	1MF		16V
C408	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C409	1-126-963-11	ELECT	4.7MF	20%	50V
C502	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C506	1-107-638-11	ELECT	33MF	20%	160V
C507	1-161-830-00	CERAMIC	0.0047MF		500V
C510	1-102-112-00	CERAMIC	330PF	10%	50V
C512	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C513	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C514	1-106-383-00	MYLAR	0.047MF	10%	200V
C518	1-104-665-11	ELECT	100MF	20%	10V
C519	1-102-212-00	CERAMIC	820PF	10%	500V
C521	1-126-934-11	ELECT	220MF	20%	16V
C522	1-126-933-11	ELECT	100MF	20%	16V
C523	1-102-002-00	CERAMIC	680PF	10%	500V
C524	1-126-967-11	ELECT	47MF	20%	50V
C526	1-130-495-00	MYLAR	0.1MF	5%	50V
C527	1-102-820-00	CERAMIC	330PF	5%	50V
C528	1-162-115-00	CERAMIC	330PF	10%	2KV
C530	1-137-372-11	MYLAR	0.022MF	5%	50V
C531	1-126-961-11	ELECT	2.2MF	20%	50V
C532	1-126-941-11	ELECT	470MF	20%	25V
C533	1-126-941-11	ELECT	470MF	20%	25V
C536	1-136-165-00	MYLAR	0.1MF	5%	50V
C537	1-126-969-11	ELECT	220MF	20%	50V

REF. NO.	PART NO.	DESCRIPTION	REMARK		
C538	1-104-492-11	FILM	0.0056MF	3%	2KV
C539	1-129-744-61	FILM	0.027MF	5%	400V
C540	1-136-171-00	MYLAR	0.33MF	5%	50V
C546	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C548	1-164-690-91	CERAMIC CHIP	0.0022MF	5%	50V
C549	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C550	1-106-220-00	MYLAR	0.1MF	10%	100V
C551	1-126-960-11	ELECT	1MF	20%	50V
C552	1-162-116-00	CERAMIC	680PF	10%	2KV
C553	1-162-116-00	CERAMIC	680PF	10%	2KV
C554	1-137-417-11	MYLAR	0.0047MF	10%	200V
C556	1-126-941-11	ELECT	470MF	20%	25V
C557	1-126-941-11	ELECT	470MF	20%	25V
C558	1-123-024-21	ELECT	33MF		160V
C560	1-102-228-00	CERAMIC	470PF	10%	500V
C562	1-102-228-00	CERAMIC	470PF	10%	500V
C563	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C564	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C565	1-107-655-11	ELECT	47MF	20%	250V
C566	1-102-244-00	CERAMIC	220PF	10%	500V
C567	1-115-520-11	FILM	0.68MF	5%	250V
C568	1-102-228-00	CERAMIC	470PF	10%	500V
C570	1-115-517-11	FILM	0.39MF	5%	250V
C573	1-137-350-11	MYLAR	0.015MF	10%	100V
C574	1-107-957-11	ELECT	1MF	20%	250V
C576	1-130-495-00	MYLAR	0.1MF	5%	50V
C577	1-106-395-00	MYLAR	0.15MF	10%	200V
C582	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C586	1-216-295-91	SHORT	0		
C600 $\triangle$	1-104-705-11	MYLAR	0.1MF	20%	250V
C602 $\triangle$	1-104-705-11	MYLAR	0.1MF	20%	250V
C603	1-104-664-11	ELECT	47MF	20%	25V
C604	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C605 $\triangle$	1-127-942-51	CERAMIC	330PF	10%	250V
C606 $\triangle$	1-127-942-51	CERAMIC	330PF	10%	250V
C607	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C608	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C611	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C612	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C613	1-117-752-11	ELECT(BLOCK)	330MF	20%	450V
C618	1-125-893-11	FILM	680PF	3%	1.5KV
C619 $\triangle$	1-119-886-51	CERAMIC	470PF	10%	250V
C620	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C621	1-102-114-00	CERAMIC	470PF	10%	50V
C622	1-102-074-00	CERAMIC	0.001MF	10%	50V
C623	1-104-665-11	ELECT	100MF	20%	25V
C624	1-164-143-11	CERAMIC (KV-PF14Q40)	0.001MF	10%	1KV
C624	1-117-214-11	CERAMIC (KV-PF14P40)	0.001MF	10%	2KV
C627	1-102-002-00	CERAMIC	680PF	10%	500V
C628	1-126-943-11	ELECT	2200MF	20%	25V
C629	1-126-964-11	ELECT	10MF	20%	50V
C630	1-123-024-21	ELECT	33MF		160V
C633	1-104-999-11	MYLAR	0.1MF	10%	200V
C634	1-126-933-11	ELECT	100MF	20%	16V



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C635	1-104-665-11	ELECT	100MF 20% 10V	D321	8-719-069-60	DIODE UDZS-TE17-9.1B	
C636	1-104-760-11	CERAMIC CHIP	0.047MF 10% 50V	D402	8-719-158-35	DIODE RD9.1SB	
C639	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D403	8-719-158-35	DIODE RD9.1SB	
C640	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D405	8-719-158-35	DIODE RD9.1SB	
C642	1-126-767-11	ELECT	1000MF 20% 16V	D406	8-719-158-35	DIODE RD9.1SB	
C643	1-104-665-11	ELECT	100MF 20% 10V	D504	8-719-302-43	DIODE EL1Z	
C644	1-104-331-11	CERAMIC	0.0022MF 10% 1KV	D505	8-719-988-61	DIODE 1SS355TE-17	
C645	1-137-605-11	MYLAR	0.01MF 10% 250V	D506	8-719-911-19	DIODE 1SS119-25	
C646	1-107-679-91	ELECT	10MF 20% 450V	D507	8-719-988-61	DIODE 1SS355TE-17	
C647	1-163-275-11	CERAMIC CHIP	0.001MF 5% 50V	D508	8-719-988-61	DIODE 1SS355TE-17	
C649	1-126-940-11	ELECT	330MF 20% 25V	D509	1-216-073-00	RES,CHIP 10K 5% 1/10W	
C650	1-163-275-11	CERAMIC CHIP	0.001MF 5% 50V	D510	8-719-988-61	DIODE 1SS355TE-17	
C651	1-163-133-00	CERAMIC CHIP	470PF 5% 50V	D511	8-719-988-61	DIODE 1SS355TE-17	
C652	1-126-965-11	ELECT	22MF 20% 50V	D512	8-719-988-61	DIODE 1SS355TE-17	
C657	1-101-821-00	CERAMIC	0.0022MF 500V	D513	8-719-908-03	DIODE GP08D	
C658	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D517	8-719-945-80	DIODE ERC06-15S	
C901	1-136-153-00	MYLAR	0.01MF 5% 50V	D518	8-719-979-85	DIODE EGP20G	
C905	1-126-963-11	ELECT	4.7MF 20% 50V	D520	1-216-295-91	SHORT 0	
C906	1-164-346-11	CERAMIC CHIP	1MF 16V	D521	8-719-302-43	DIODE EL1Z	
C907	1-163-133-00	CERAMIC CHIP	470PF 5% 50V	D522	8-719-302-43	DIODE EL1Z	
C910	1-126-967-11	ELECT	47MF 20% 50V	D523	8-719-302-43	DIODE EL1Z	
C911	1-126-967-11	ELECT	47MF 20% 50V	D527	8-719-908-03	DIODE GP08D	
C912	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	D528	8-719-908-03	DIODE GP08D	
C913	1-104-665-11	ELECT	100MF 20% 10V	D534	1-216-295-91	SHORT 0	
C914	1-163-133-00	CERAMIC CHIP	470PF 5% 50V	D602	8-719-911-19	DIODE 1SS119-25	
<CONNECTOR>				D605	8-719-077-77	DIODE D3SB60F3	
CN104	1-695-915-11	TAB (CONTACT)		D605	8-719-510-53	DIODE D4SB60L	
CN202 *	1-785-608-11	PIN, CONNECTOR 4P		D610	8-719-043-76	DIODE AK04V0	
CN203 *	1-564-506-11	PLUG, CONNECTOR 3P		D611	8-719-046-74	DIODE AU-01Z-V1	
CN204 *	1-564-506-11	PLUG, CONNECTOR 3P		D613	8-719-046-74	DIODE AU-01Z-V1	
CN305 *	1-564-509-11	PLUG, CONNECTOR 6P		D614	8-719-046-74	DIODE AU-01Z-V1	
CN505 *	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P		D615	8-719-312-10	DIODE RU4AM-T3	
CN601 *	1-580-843-11	PIN, CONNECTOR (POWER)		D618	8-719-067-18	DIODE RN4Z	
CN602 *	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		D620	8-719-110-72	DIODE RD30ESB2	
CN604 *	1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P		D623	8-719-978-65	DIODE DTZ-TT11-15B	
CN901 *	1-564-506-11	PLUG, CONNECTOR 3P		D624	8-719-073-01	DIODE MA111-(K8).S0	
<DIODE>				D625	8-719-158-39	DIODE RD10SB	
D001	8-719-988-61	DIODE 1SS355TE-17		D628	8-719-911-19	DIODE 1SS119-25	
D005	8-719-988-61	DIODE 1SS355TE-17		D631	8-719-068-00	DIODE ERC04-06SE	
D006	8-719-988-61	DIODE 1SS355TE-17		D632	8-719-068-00	DIODE ERC04-06SE	
D203	8-719-914-42	DIODE DA204K		D633	8-719-948-45	DIODE ERA22-08	
D300	1-216-295-91	SHORT 0		D634	8-719-073-01	DIODE MA111-(K8).S0	
D301	8-719-988-61	DIODE 1SS355TE-17		D635	8-719-073-01	DIODE MA111-(K8).S0	
D306	8-719-988-61	DIODE 1SS355TE-17		D636	8-719-510-02	DIODE D1NS4	
D307	8-719-988-61	DIODE 1SS355TE-17		D637	8-719-109-96	DIODE RD6.8ESB1	
D308	8-719-988-61	DIODE 1SS355TE-17		D638	8-719-510-48	DIODE D1N20R	
D309	8-719-159-10	DIODE RD5.1SB-T2		D901	8-719-158-35	DIODE RD9.1SB	
D311	8-719-988-61	DIODE 1SS355TE-17		D902	8-719-158-35	DIODE RD9.1SB	
D312	8-719-988-61	DIODE 1SS355TE-17		D904	8-719-158-35	DIODE RD9.1SB	
D313	8-719-988-61	DIODE 1SS355TE-17		D905	8-719-158-35	DIODE RD9.1SB	
D314	8-719-988-61	DIODE 1SS355TE-17		D906	8-719-045-19	DIODE SPB-26MVWF	
D315	8-719-988-61	DIODE 1SS355TE-17		<CONNECTOR>			
D316	8-719-069-60	DIODE UDZS-TE17-9.1B		DY1	* 1-580-798-11	CONNECTOR PIN (DY) 6P	
D320	8-719-069-60	DIODE UDZS-TE17-9.1B					

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The components identified by shading
and mark $\triangle$ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<FERRITE BEAD>				JR102	1-216-295-91	SHORT	0
FB103	1-410-397-21	FERRITE	1.1UH	JR109	1-216-295-91	SHORT	0
FB501	1-410-397-21	FERRITE	1.1UH	JR202	1-216-295-91	SHORT	0
FB502	1-410-397-21	FERRITE	1.1UH	JR204	1-216-295-91	SHORT	0
FB600	1-410-397-21	FERRITE	1.1UH	JR309	1-216-295-91	SHORT	0
FB601	1-410-397-21	FERRITE	1.1UH	JR404	1-216-295-91	SHORT	0
FB602	1-410-397-21	FERRITE	1.1UH	JR405	1-216-295-91	SHORT	0
FB603	1-410-397-21	FERRITE	1.1UH	JR500	1-216-295-91	SHORT	0
FB604	1-412-911-31	FERRITE	0UH	JR501	1-216-295-91	SHORT	0
FB607	1-410-397-21	FERRITE	1.1UH	JR503	1-216-295-91	SHORT	0
FB611	1-410-397-21	FERRITE	1.1UH	JR600	1-216-295-91	SHORT	0
FB615	1-410-397-21	FERRITE	1.1UH	<COIL>			
<IC>				L002	1-414-856-11	INDUCTOR	10UH
IC001	8-752-905-22	IC CXP86449-616S (KV-PF14P40)		L003	1-414-180-11	INDUCTOR	3.3UH
IC001	8-752-906-21	IC CXP86449-623S (KV-PF14Q40)		L005	1-414-233-22	INDUCTOR CHIP	0UH
IC002	8-759-371-21	IC MM1319AFBE		L101	1-414-856-11	INDUCTOR	10UH
IC003	8-759-527-71	IC M24C08-BN6		L102	1-414-856-11	INDUCTOR	10UH
IC201	8-759-339-60	IC TA8248K		L103	1-414-856-11	INDUCTOR	10UH
IC203	8-759-642-61	IC TDA7429L		L104	1-414-856-11	INDUCTOR	10UH
IC301	8-752-090-41	IC CXA2139S		L105	1-414-856-11	INDUCTOR	10UH
IC502	8-759-700-07	IC NJM2903M		L204	1-414-856-11	INDUCTOR	10UH
IC503	8-759-980-58	IC TDA8172		L301	1-414-189-31	INDUCTOR	100UH
IC601	8-749-016-43	IC STR-F6653-LF1351		L302	1-414-185-41	INDUCTOR	22UH
IC602	8-749-920-61	IC SE-135N		L501	1-412-525-31	INDUCTOR	10UH
IC603	8-759-701-59	IC NJM78M09FA		L502	1-422-613-11	COIL, AIR CORE	
IC604	8-759-231-53	IC TA7805S		L503	1-412-525-31	INDUCTOR	10UH
IC901	8-742-134-00	HYB IC SBX1981-51P		L504	1-412-525-31	INDUCTOR	10UH
<JACK>				L505	1-412-525-31	INDUCTOR	10UH
J401	1-779-849-11	JACK BLOCK, PIN 4P		L506	1-412-525-31	INDUCTOR	10UH
J901	1-770-785-11	JACK		L507	1-459-111-00	INDUCTOR	10MMH
J902	1-779-205-11	JACK, PIN 2P		L508	1-412-525-31	INDUCTOR	10UH
<CHIP CONDUCTOR>				L509	1-406-982-11	INDUCTOR	680UH
JR001	1-216-295-91	SHORT	0	L510	1-419-301-21	COIL, HORIZONTAL LINEARITY	
JR002	1-216-295-91	SHORT	0	L512	1-414-493-41	INDUCTOR	4.7MMH
JR003	1-216-295-91	SHORT	0	L515	1-459-104-00	COIL, WITH CORE	
JR004	1-216-295-91	SHORT	0	L518	1-414-187-11	INDUCTOR	47UH
JR005	1-216-295-91	SHORT	0	L601	1-412-527-11	INDUCTOR	15UH
JR006	1-216-295-91	SHORT	0	L901	1-408-603-31	INDUCTOR	10UH
JR007	1-216-295-91	SHORT	0	L905	1-414-856-11	INDUCTOR	10UH
JR008	1-216-295-91	SHORT	0	<PHOTO COUPLER>			
JR009	1-216-295-91	SHORT	0	PH600 $\triangle$	8-749-924-35	PHOTO COUPLER ON3171-R	
JR010	1-216-295-91	SHORT	0	<IC LINK>			
JR011	1-216-295-91	SHORT	0	PS200	1-532-675-21	LINK, IC 1.5A/150V	
JR012	1-216-295-91	SHORT	0	<TRANSISTOR>			
JR013	1-216-295-91	SHORT	0	Q002	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR014	1-216-295-91	SHORT	0	Q003	8-729-424-08	TRANSISTOR UN2111	
JR015	1-216-295-91	SHORT	0	Q004	8-729-421-22	TRANSISTOR UN2211	
JR016	1-216-295-91	SHORT	0	Q101	8-729-230-49	TRANSISTOR 2SC2712-YG	
JR018	1-216-295-91	SHORT	0	Q201	8-729-424-67	TRANSISTOR UN2216	
JR019	1-216-295-91	SHORT	0				

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q203	1-801-806-11	TRANSISTOR DTC144EKA-T146 (KV-PF14P40 ONLY)		R029	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q204	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R (KV-PF14P40 ONLY)		R031	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q206	8-729-421-19	TRANSISTOR UN2213		R035	1-216-025-91	RES,CHIP 100	5% 1/10W
Q207	8-729-421-19	TRANSISTOR UN2213		R036	1-216-025-91	RES,CHIP 100	5% 1/10W
Q301	8-729-216-22	TRANSISTOR 2SA1162-G		R037	1-216-025-91	RES,CHIP 100	5% 1/10W
				R040	1-216-025-91	RES,CHIP 100	5% 1/10W
Q302	8-729-230-49	TRANSISTOR 2SC2712-YG		R041	1-216-025-91	RES,CHIP 100	5% 1/10W
Q303	8-729-216-22	TRANSISTOR 2SA1162-G		R042	1-216-295-91	SHORT 0	
Q305	8-729-216-22	TRANSISTOR 2SA1162-G		R043	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q306	8-729-216-22	TRANSISTOR 2SA1162-G		R044	1-216-025-91	RES,CHIP 100	5% 1/10W
Q307	8-729-230-49	TRANSISTOR 2SC2712-YG		R045	1-414-233-22	INDUCTOR CHIP 0UH	
				R046	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q308	8-729-216-22	TRANSISTOR 2SA1162-G					
Q312	8-729-216-22	TRANSISTOR 2SA1162-G		R047	1-414-233-22	INDUCTOR CHIP 0UH	
Q313	8-729-230-49	TRANSISTOR 2SC2712-YG		R048	1-216-073-00	RES,CHIP 10K	5% 1/10W
Q315	8-729-421-19	TRANSISTOR UN2213		R050	1-216-073-00	RES,CHIP 10K	5% 1/10W
Q401	8-729-424-67	TRANSISTOR UN2216		R053	1-216-049-91	RES,CHIP 1K	5% 1/10W
				R055	1-216-073-00	RES,CHIP 10K	5% 1/10W
Q404	8-729-216-22	TRANSISTOR 2SA1162-G					
Q503	8-729-230-49	TRANSISTOR 2SC2712-YG		R056	1-216-073-00	RES,CHIP 10K	5% 1/10W
Q505	8-729-931-45	TRANSISTOR IRF614		R061	1-216-033-00	RES,CHIP 220	5% 1/10W
Q506	8-729-140-96	TRANSISTOR 2SD774-34		R062	1-216-041-00	RES,CHIP 470	5% 1/10W
Q507	8-729-216-22	TRANSISTOR 2SA1162-G		R063	1-216-037-00	RES,CHIP 330	5% 1/10W
				R064	1-216-037-00	RES,CHIP 330	5% 1/10W
Q509	8-729-230-49	TRANSISTOR 2SC2712-YG					
Q511	8-729-016-32	TRANSISTOR 2SC4927-01		R065	1-216-037-00	RES,CHIP 330	5% 1/10W
Q604	8-729-200-17	TRANSISTOR 2SA1091-O		R066	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q605	8-729-044-30	TRANSISTOR 2SK2845-LB102		R067	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q606	8-729-230-49	TRANSISTOR 2SC2712-YG		R105	1-216-295-91	SHORT 0	
				R109	1-216-041-00	RES,CHIP 470	5% 1/10W
Q607	8-729-922-37	TRANSISTOR 2SD2144S-UVW					
Q608	8-729-230-49	TRANSISTOR 2SC2712-YG		R111	1-216-025-91	RES,CHIP 100	5% 1/10W
Q901	8-729-421-19	TRANSISTOR UN2213		R112	1-216-025-91	RES,CHIP 100	5% 1/10W
Q902	8-729-421-19	TRANSISTOR UN2213		R113	1-216-047-91	RES,CHIP 820	5% 1/10W
				R202	1-216-053-00	RES,CHIP 1.5K	5% 1/10W
				R203	1-216-057-00	RES,CHIP 2.2K	5% 1/10W
		<RESISTOR>					
R001	1-414-233-22	INDUCTOR CHIP 0UH		R204	1-216-069-00	RES,CHIP 6.8K	5% 1/10W
R002	1-216-025-91	RES,CHIP 100	5% 1/10W	R208	1-216-069-00	RES,CHIP 6.8K	5% 1/10W
R003	1-216-073-00	RES,CHIP 10K	5% 1/10W	R210	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R004	1-216-025-91	RES,CHIP 100	5% 1/10W	R211	1-216-043-91	RES,CHIP 560	5% 1/10W
R005	1-216-025-91	RES,CHIP 100	5% 1/10W	R212	1-216-031-00	RES,CHIP 180	5% 1/10W
R007	1-216-295-91	SHORT 0		R214	1-216-073-00	RES,CHIP 10K	5% 1/10W
R008	1-216-065-91	RES,CHIP 4.7K	5% 1/10W			(KV-PF14P40 ONLY)	
R010	1-216-065-91	RES,CHIP 4.7K	5% 1/10W	R215	1-216-059-00	RES,CHIP 2.7K	5% 1/10W
R011	1-216-065-91	RES,CHIP 4.7K	5% 1/10W	R216	1-216-059-00	RES,CHIP 2.7K	5% 1/10W
R012	1-216-065-91	RES,CHIP 4.7K	5% 1/10W	R217	1-216-067-00	RES,CHIP 5.6K	5% 1/10W
				R218	1-216-067-00	RES,CHIP 5.6K	5% 1/10W
R013	1-216-065-91	RES,CHIP 4.7K	5% 1/10W				
R014	1-216-025-91	RES,CHIP 100	5% 1/10W	R219	1-216-025-91	RES,CHIP 100	5% 1/10W
R015	1-216-025-91	RES,CHIP 100	5% 1/10W	R220	1-216-025-91	RES,CHIP 100	5% 1/10W
R017	1-216-049-91	RES,CHIP 1K	5% 1/10W	R221	1-216-295-91	SHORT 0	
R018	1-216-033-00	RES,CHIP 220	5% 1/10W	R225	1-216-033-00	RES,CHIP 220	5% 1/10W
				R226	1-216-033-00	RES,CHIP 220	5% 1/10W
R019	1-216-073-00	RES,CHIP 10K	5% 1/10W				
R021	1-216-073-00	RES,CHIP 10K	5% 1/10W	R227	1-216-033-00	RES,CHIP 220	5% 1/10W
R022	1-216-033-00	RES,CHIP 220	5% 1/10W	R229	1-216-073-00	RES,CHIP 10K	5% 1/10W
R024	1-216-057-00	RES,CHIP 2.2K	5% 1/10W	R231	1-216-295-91	SHORT 0	
R025	1-216-057-00	RES,CHIP 2.2K	5% 1/10W	R234	1-249-389-11	CARBON 4.7	5% 1/4W
				R235	1-216-069-00	RES,CHIP 6.8K	5% 1/10W
R026	1-216-057-00	RES,CHIP 2.2K	5% 1/10W				
R027	1-216-073-00	RES,CHIP 10K	5% 1/10W	R236	1-216-069-00	RES,CHIP 6.8K	5% 1/10W
R028	1-216-049-91	RES,CHIP 1K	5% 1/10W	R237	1-216-308-00	RES,CHIP 4.7	5% 1/10W
		(KV-PF14P40 ONLY)		R301	1-216-073-00	RES,CHIP 10K	5% 1/10W
				R302	1-216-295-91	SHORT 0	
				R303	1-216-049-91	RES,CHIP 1K	5% 1/10W

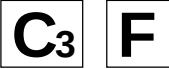
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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R304	1-216-073-00	RES,CHIP	10K 5% 1/10W	R419	1-216-022-00	RES,CHIP	75 5% 1/10W
R305	1-216-051-00	RES,CHIP	1.2K 5% 1/10W	R426	1-216-033-00	RES,CHIP	220 5% 1/10W
R306	1-216-077-91	RES,CHIP	15K 5% 1/10W	R505	1-216-107-00	RES,CHIP	270K 5% 1/10W
R308	1-216-025-91	RES,CHIP	100 5% 1/10W	R506	1-216-083-00	RES,CHIP	27K 5% 1/10W
R309	1-216-025-91	RES,CHIP	100 5% 1/10W	R507	1-249-389-11	CARBON	4.7 5% 1/4W F
R310	1-216-025-91	RES,CHIP	100 5% 1/10W	R508	1-215-885-00	METAL OXIDE	68 5% 2W F
R311	1-216-017-91	RES,CHIP	47 5% 1/10W	R509	1-215-887-00	METAL OXIDE	150 5% 2W F
R312	1-216-041-00	RES,CHIP	470 5% 1/10W	R510	1-215-886-11	METAL OXIDE	100 5% 2W F
R313	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R511	1-215-911-11	METAL OXIDE	100 5% 3W F
R314	1-216-045-00	RES,CHIP	680 5% 1/10W	R516	1-216-081-00	RES,CHIP	22K 5% 1/10W
R316	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R518	1-247-807-31	CARBON	100 5% 1/4W
R317	1-216-077-91	RES,CHIP	15K 5% 1/10W	R520	1-215-445-00	METAL	10K 1% 1/4W
R318	1-216-051-00	RES,CHIP	1.2K 5% 1/10W	R522	1-208-806-11	METAL CHIP	10K 0.50% 1/10W
R319	1-216-025-91	RES,CHIP	100 5% 1/10W	R523	1-249-411-11	CARBON	330 5% 1/4W
R320	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R526	1-208-798-11	METAL CHIP	4.7K 0.50% 1/10W
R321	1-216-073-00	RES,CHIP	10K 5% 1/10W	R527	1-216-001-00	RES,CHIP	10 5% 1/10W
R322	1-216-033-00	RES,CHIP	220 5% 1/10W	R528	1-208-814-91	METAL CHIP	22K 0.50% 1/10W
R331	1-216-295-91	SHORT	0	R529	1-208-766-11	METAL CHIP	220 0.50% 1/10W
R332	1-216-033-00	RES,CHIP	220 5% 1/10W	R531	1-247-843-11	CARBON	3.3K 5% 1/4W
R333	1-216-073-00	RES,CHIP	10K 5% 1/10W	R533	1-247-831-91	CARBON	1K 5% 1/4W
R334	1-216-129-00	RES,CHIP	2.2M 5% 1/10W	R534	1-216-361-00	METAL OXIDE	0.22 5% 2W F
R335	1-216-045-00	RES,CHIP	680 5% 1/10W	R535	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
R338	1-216-041-00	RES,CHIP	470 5% 1/10W	R536	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
R340	1-216-025-91	RES,CHIP	100 5% 1/10W	R540	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R345	1-216-081-00	RES,CHIP	22K 5% 1/10W	R541	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R348	1-208-806-11	METAL CHIP	10K 0.50% 1/10W	R542	1-216-295-91	SHORT	0
R349	1-216-073-00	RES,CHIP	10K 5% 1/10W	R543	1-249-426-11	CARBON	5.6K 5% 1/4W F
R350	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R544	1-215-922-11	METAL OXIDE	6.8K 5% 3W F
R351	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R545	1-216-077-91	RES,CHIP	15K 5% 1/10W
R354	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R546	1-216-077-91	RES,CHIP	15K 5% 1/10W
R355	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R547	1-216-085-00	RES,CHIP	33K 5% 1/10W
R356	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R549	1-215-459-00	METAL	39K 1% 1/4W
R357	1-216-079-00	RES,CHIP	18K 5% 1/10W	R550	1-216-097-91	RES,CHIP	100K 5% 1/10W
R358	1-216-049-91	RES,CHIP	1K 5% 1/10W	R551	1-249-421-11	CARBON	2.2K 5% 1/4W
R359	1-216-033-00	RES,CHIP	220 5% 1/10W	R552	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R360	1-216-033-00	RES,CHIP	220 5% 1/10W	R553	1-215-459-00	METAL	39K 1% 1/4W
R361	1-216-073-00	RES,CHIP	10K 5% 1/10W	R554	1-215-461-00	METAL	47K 1% 1/4W
R362	1-216-075-00	RES,CHIP	12K 5% 1/10W	R556	1-215-437-00	METAL	4.7K 1% 1/4W
R363	1-216-079-00	RES,CHIP	18K 5% 1/10W	R557	1-216-345-11	METAL OXIDE	0.47 5% 1W F
R364	1-216-295-91	SHORT	0	R558	1-249-421-11	CARBON	2.2K 5% 1/4W
R365	1-216-033-00	RES,CHIP	220 5% 1/10W	R559	1-249-429-11	CARBON	10K 5% 1/4W
R366	1-216-073-00	RES,CHIP	10K 5% 1/10W	R560	1-216-073-00	RES,CHIP	10K 5% 1/10W
R367	1-216-073-00	RES,CHIP	10K 5% 1/10W	R562	1-249-401-11	CARBON	47 5% 1/4W
R370	1-216-033-00	RES,CHIP	220 5% 1/10W	R565	1-216-085-00	RES,CHIP	33K 5% 1/10W
R376	1-216-081-00	RES,CHIP	22K 5% 1/10W	R567	1-216-085-00	RES,CHIP	33K 5% 1/10W
R377	1-216-121-91	RES,CHIP	1M 5% 1/10W	R568	1-249-383-11	CARBON	1.5 5% 1/4W F
R378	1-216-031-00	RES,CHIP	180 5% 1/10W	R570	1-216-079-00	RES,CHIP	18K 5% 1/10W
R404	1-216-073-00	RES,CHIP	10K 5% 1/10W	R571	1-215-437-00	METAL	4.7K 1% 1/4W
R405	1-216-049-91	RES,CHIP	1K 5% 1/10W	R573	1-216-073-00	RES,CHIP	10K 5% 1/10W
R406	1-216-073-00	RES,CHIP	10K 5% 1/10W	R577	1-215-913-11	METAL OXIDE	220 5% 3W F
R408	1-216-049-91	RES,CHIP	1K 5% 1/10W	R578	1-216-369-00	METAL OXIDE	1 5% 2W F
R411	1-216-113-00	RES,CHIP	470K 5% 1/10W	R579	1-216-097-91	RES,CHIP	100K 5% 1/10W
R412	1-216-041-00	RES,CHIP	470 5% 1/10W	R580	1-216-675-91	METAL CHIP	10K 0.50% 1/10W
R413	1-216-021-00	RES,CHIP	68 5% 1/10W	R581	1-208-800-11	METAL CHIP	5.6K 0.50% 1/10W
R414	1-216-113-00	RES,CHIP	470K 5% 1/10W	R583	1-216-105-91	RES,CHIP	220K 5% 1/10W
R417	1-216-077-91	RES,CHIP	15K 5% 1/10W	R584	1-216-073-00	RES,CHIP	10K 5% 1/10W
R418	1-216-113-00	RES,CHIP	470K 5% 1/10W	R585	1-249-391-11	CARBON	6.8 5% 1/4W F
				R590	1-215-465-00	METAL	68K 1% 1/4W

The components identified by shading
and mark Δ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R591	1-260-288-11	CARBON	0.47 5% 1/2W F	R911	1-216-067-00	RES,CHIP	5.6K 5% 1/10W
R593	1-260-288-11	CARBON	0.47 5% 1/2W F	R912	1-216-041-00	RES,CHIP	470 5% 1/10W
R594	1-260-288-11	CARBON	0.47 5% 1/2W F	R913	1-216-049-91	RES,CHIP	1K 5% 1/10W
R596	1-215-922-11	METAL OXIDE	6.8K 5% 3W F	R914	1-216-055-00	RES,CHIP	1.8K 5% 1/10W
R597	1-247-750-11	CARBON	680 5% 1/2W F	R915	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R598	1-249-438-11	CARBON	56K 5% 1/4W	R916	1-216-017-91	RES,CHIP	47 5% 1/10W
R599	1-249-389-11	CARBON	4.7 5% 1/4W	R917	1-216-041-00	RES,CHIP	470 5% 1/10W
R600	1-249-438-11	CARBON	56K 5% 1/4W	R918	1-216-041-00	RES,CHIP	470 5% 1/10W
R601	1-249-418-11	CARBON	1.2K 5% 1/4W F	<RELAY>			
R602	1-249-389-11	CARBON	4.7 5% 1/4W F	R9601 Δ	1-755-299-11	RELAY	
R603	1-215-485-00	METAL	470K 1% 1/4W	<SWITCH>			
R605	1-215-906-11	METAL OXIDE	15 5% 3W F	S502	1-572-707-11	SWITCH, LEVER	
R607	1-249-425-11	CARBON	4.7K 5% 1/4W	S600 Δ	1-571-433-21	SWITCH, PUSH (AC POWER)	
R608	1-240-205-91	CARBON	22M 5% 1/2W	S901	1-692-431-21	SWITCH, TACTILE	
R609	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	S902	1-692-431-21	SWITCH, TACTILE	
R610	1-216-073-00	RES,CHIP	10K 5% 1/10W	S903	1-692-431-21	SWITCH, TACTILE	
R611	1-216-089-91	RES,CHIP	47K 5% 1/10W	S904	1-692-431-21	SWITCH, TACTILE	
R612	1-216-045-00	RES,CHIP	680 5% 1/10W	S905	1-692-431-21	SWITCH, TACTILE	
R614	1-216-041-00	RES,CHIP	470 5% 1/10W	S906	1-692-431-21	SWITCH, TACTILE	
R615	1-216-353-00	METAL OXIDE	2.2 5% 1W F	S907	1-692-431-21	SWITCH, TACTILE	
R616	1-260-302-51	CARBON	6.8 5% 1/2W F	<TRANSFORMER>			
R617	1-247-791-91	CARBON	22 5% 1/4W	T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
R618	1-215-906-11	METAL OXIDE	15 5% 3W F	T503 Δ	1-453-313-11	FBT ASSY NX-1912/M3A4	
R619	1-260-128-11	CARBON	270K 5% 1/2W	T601	1-424-682-11	TRANSFORMER, LINE FILTER	
R620	1-215-915-11	METAL OXIDE	470 5% 3W F	T603 Δ	1-433-512-41	TRANSFORMER, CONVERTER (SRT)	
R622	1-216-400-11	METAL OXIDE	8.2 5% 3W F	T604 Δ	1-431-852-11	TRANSFORMER, CONVERTER (SRT)	
R625	1-202-961-11	CEMENTED	1.8 5% 10W	<THERMISTOR>			
R628	1-202-961-11	CEMENTED	1.8 5% 10W	THP600	1-810-961-11	THERMISTOR, POSITIVE	
R632	1-202-933-61	FUSIBLE	0.1 10% 1/2W F	<TUNER>			
R634 Δ	1-218-265-11	METAL	8.2M 5% 1W	TU101	8-598-447-10	TUNER, FSS BTF-LG411 (KV-PF14Q40)	
R636	1-215-924-00	METAL OXIDE	15K 5% 3W F	TU101	8-598-448-10	TUNER, FSS BTF-LG413 (KV-PF14P40)	
R639	1-216-363-00	METAL OXIDE	0.33 5% 2W F	<CRYSTAL>			
R640	1-249-415-11	CARBON	680 5% 1/4W	X001	1-579-125-11	VIBRATOR, CERAMIC	
R641	1-216-362-11	METAL OXIDE	0.27 5% 2W F	X301	1-781-134-21	VIBRATOR, CRYSTAL	
R642	1-249-419-11	CARBON	1.5K 5% 1/4W	X302	1-781-132-21	VIBRATOR, CRYSTAL (KV-PF14P40 ONLY)	
R643	1-247-843-11	CARBON	3.3K 5% 1/4W	*****			
R644	1-249-419-11	CARBON	1.5K 5% 1/4W	* A-1331-968-A C3 BOARD MOUNTED			
R646	1-215-924-00	METAL OXIDE	15K 5% 3W F	*****			
R647	1-249-401-11	CARBON	47 5% 1/4W	4-382-854-11 SCREW (M3X10), P, SW (+)			
R648	1-216-057-00	RES,CHIP	2.2K 5% 1/10W				
R649	1-247-831-91	CARBON	1K 5% 1/4W				
R650	1-215-882-00	METAL OXIDE	22 5% 2W F				
R652	1-215-900-11	METAL OXIDE	22K 5% 2W F				
R653	1-215-873-00	METAL OXIDE	4.7K 5% 1W F				
R657	1-260-127-11	CARBON	220K 5% 1/2W				
R659	1-216-049-91	RES,CHIP	1K 5% 1/10W				
R660	1-216-073-00	RES,CHIP	10K 5% 1/10W				
R661	1-215-873-00	METAL OXIDE	4.7K 5% 1W F				
R662	1-216-295-91	SHORT	0				
R680	1-216-311-00	RES,CHIP	6.8 5% 1/10W				
R901	1-249-411-11	CARBON	330 5% 1/4W				
R903	1-216-022-00	RES,CHIP	75 5% 1/10W				
R904	1-216-033-00	RES,CHIP	220 5% 1/10W				
R905	1-216-113-00	RES,CHIP	470K 5% 1/10W				
R906	1-216-077-91	RES,CHIP	15K 5% 1/10W				
R909	1-216-065-91	RES,CHIP	4.7K 5% 1/10W				
R910	1-216-065-91	RES,CHIP	4.7K 5% 1/10W				



The components identified by shading
and mark Δ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK		
<CAPACITOR>					
C701	1-162-114-00	CERAMIC	0.0047MF		2KV
C702	1-102-074-00	CERAMIC	0.001MF	10%	50V
C703	1-107-651-11	ELECT	4.7MF	20%	250V
C704	1-130-202-00	FILM	0.022MF	5%	400V
C708	1-102-114-00	CERAMIC	470PF	10%	50V
C709	1-102-114-00	CERAMIC	470PF	10%	50V
C710	1-102-114-00	CERAMIC	470PF	10%	50V
C712	1-102-116-00	CERAMIC	680PF	10%	50V
C713	1-102-117-00	CERAMIC	820PF	10%	50V
C714	1-102-116-00	CERAMIC	680PF	10%	50V
C716	1-126-933-11	ELECT	100MF	20%	16V
C717	1-102-106-00	CERAMIC	100PF	10%	50V
C718	1-126-933-11	ELECT	100MF	20%	16V
C719	1-102-116-00	CERAMIC	680PF	10%	50V
C736	1-102-114-00	CERAMIC	470PF	10%	50V
C737	1-102-114-00	CERAMIC	470PF	10%	50V
C746	1-102-114-00	CERAMIC	470PF	10%	50V
<CONNECTOR>					
CN701	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			
CN702	1-695-915-11	TAB (CONTACT)			
CN703	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN704	1-695-915-11	TAB (CONTACT)			
CN706	1-695-915-11	TAB (CONTACT)			
<DIODE>					
D701	8-719-911-19	DIODE 1SS119-25			
D702	8-719-911-19	DIODE 1SS119-25			
D703	8-719-911-19	DIODE 1SS119-25			
D707	8-719-911-19	DIODE 1SS119-25			
D708	8-719-911-19	DIODE 1SS119-25			
D709	8-719-911-19	DIODE 1SS119-25			
D710	8-719-911-19	DIODE 1SS119-25			
D711	8-719-911-19	DIODE 1SS119-25			
D712	8-719-911-19	DIODE 1SS119-25			
D716	8-719-911-19	DIODE 1SS119-25			
D717	8-719-121-26	DIODE RD9.1ESL2			
<JACK>					
J701	 1-540-071-22	SOCKET, CRT			
<COIL>					
L701	1-410-667-31	INDUCTOR	22UH		
L706	1-408-619-31	INDUCTOR	220UH		
<TRANSISTOR>					
Q704	8-729-326-11	TRANSISTOR 2SC2611			
Q705	8-729-326-11	TRANSISTOR 2SC2611			
Q706	8-729-326-11	TRANSISTOR 2SC2611			
Q707	8-729-200-17	TRANSISTOR 2SA1091-O			
Q708	8-729-200-17	TRANSISTOR 2SA1091-O			

REF. NO.	PART NO.	DESCRIPTION			REMARK	
Q709	8-729-200-17	TRANSISTOR 2SA1091-O				
Q710	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q711	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q712	8-729-119-78	TRANSISTOR 2SC2785-HFE				
<RESISTOR>						
R703	1-249-496-11	CARBON	100K	5%	1/2W	
R705	1-216-376-00	METAL OXIDE	3.9	5%	2W	F
R708	1-216-377-11	METAL OXIDE	4.7	5%	2W	F
R710	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R711	1-260-101-11	CARBON	1.5K	5%	1/2W	
R712	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R713	1-260-101-11	CARBON	1.5K	5%	1/2W	
R714	1-216-486-00	METAL OXIDE	8.2K	5%	3W	F
R715	1-260-101-11	CARBON	1.5K	5%	1/2W	
R719	1-215-471-00	METAL	120K	1%	1/4W	
R720	1-247-704-11	CARBON	220	5%	1/4W	F
R721	1-215-477-00	METAL	220K	1%	1/4W	
R722	1-247-704-11	CARBON	220	5%	1/4W	F
R723	1-215-479-00	METAL	270K	1%	1/4W	
R724	1-247-704-11	CARBON	220	5%	1/4W	F
R725	1-249-424-11	CARBON	3.9K	5%	1/4W	
R726	1-249-424-11	CARBON	3.9K	5%	1/4W	
R727	1-249-424-11	CARBON	3.9K	5%	1/4W	
R728	1-249-408-11	CARBON	180	5%	1/4W	
R729	1-249-408-11	CARBON	180	5%	1/4W	
R730	1-249-408-11	CARBON	180	5%	1/4W	
R731	1-247-791-91	CARBON	22	5%	1/4W	
R732	1-247-791-91	CARBON	22	5%	1/4W	
R733	1-247-791-91	CARBON	22	5%	1/4W	
R734	1-247-739-11	CARBON	100	5%	1/2W	
R738	1-247-807-31	CARBON	100	5%	1/4W	
R739	1-247-807-31	CARBON	100	5%	1/4W	
R740	1-247-807-31	CARBON	100	5%	1/4W	
<VARIABLE RESISTOR>						
RV702	1-241-656-21	RES, ADJ, METAL FILM 110M				

* A-1241-401-A		F BOARD MOUNTED				

1-533-223-11		CLIP, FUSE				
* 4-374-846-01		COVER, CAPACITOR, CAP TYPE				
<CAPACITOR>						
C654	△ 1-117-703-11	CERAMIC	0.0047MF	99%	250V	
C4602	△ 1-104-708-11	MYLAR	0.47MF	20%	250V	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
CN4601*	1-580-843-11	PIN, CONNECTOR (POWER)	
CN4602*	1-580-843-11	PIN, CONNECTOR (POWER)	
CN4603	1-695-915-11	TAB (CONTACT)	
		<FUSE>	
F4601 $\triangle$	1-532-237-00	FUSE, TIME-LAG (BET) 3.15A/250V	
		<RESISTOR>	
R4601 $\triangle$	1-202-719-00	SOLID 1M 10% 1/2W	
		<TRANSFORMER>	
T4601	1-424-682-11	TRANSFORMER, LINE FILTER	
		<VARISTOR>	
VDR461	1-803-830-31	VARISTOR (ERZV14D621)	

MISCELLANEOUS

1-417-151-21	MATCHING TRANSFORMER, ANTENNA
$\triangle$ 1-419-185-21	COIL, DEGAUSSING
1-452-094-00	CIRCULAR DISC MAGNET B
1-452-032-00	MAGNET, DISC
1-501-730-41	ANTENNA, TELESCOPIC
1-505-547-11	SPEAKER (5X9CM)
1-540-005-31	CAP ASSY, HIGH VOLTAGE
1-569-008-21	ADAPTOR, CONVERSION 2P
$\triangle$ 1-574-062-11	CORD, POWER (WITH CONNECTOR) 2.5A/250V
8-451-401-11	DEFLECTION YOKE (Y14RSA-S)
$\triangle$ 8-735-570-05	PICURE TUBE (A34LRG70X)

REF. NO.	PART NO.	DESCRIPTION	REMARK
		ACCESSORIES AND PACKING MATERIALS	

	1-417-151-21	MATCHING TRANSFORMER, ANTENNA	
	1-569-008-21	ADAPTOR, CONVERSION 2P	
	3-867-184-12	MANUAL, INSTRUCTION (KV-PF14Q40)	
	3-867-760-11	MANUAL, INSTRUCTION (KV-PF14P40)	
	1-501-372-81	ANTENNA, TELESCOPIC	
*	4-377-015-01	BAG, PROTECTION	
*	4-070-925-02	INDIVIDUAL CARTON	
*	4-070-926-01	CUSHION(UPPER)(ASS'Y)	
*	4-070-929-01	CUSHION(LOWER)(ASS'Y)	

		REMOTE COMMANDER	

	1-418-163-11	REMOTE COMMANDER (RM-952)	
	9-939-697-01	BATTERY COVER, REMOTE COMMANDER	

