

JVC

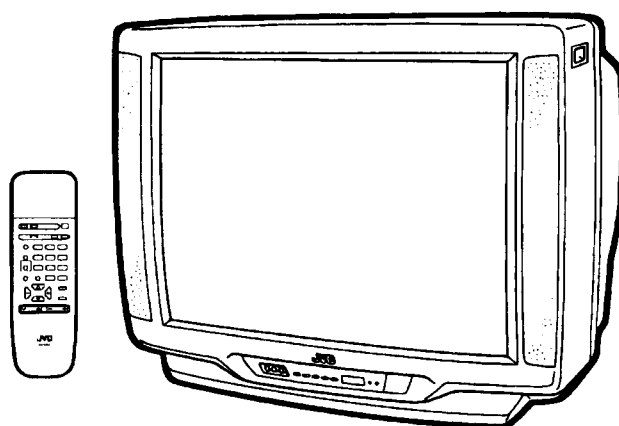
SERVICE MANUAL

COLOUR TELEVISION

AV-2550TEE

BASIC CHASSIS

CM



CONTENTS

■ SPECIFICATIONS	2
★ OPERATING INSTRUCTIONS (APPENDED)	1-1
■ SAFETY PRECAUTIONS	3
■ FEATURES	4
■ SPECIFIC SERVICE INSTRUCTIONS	6
■ SERVICE ADJUSTMENTS	11
★ STANDARD CIRCUIT DIAGRAM (APPENDED)	2-1
■ PARTS LIST	29

SPECIFICATIONS

Item	Content
Dimensions(W × H × D) Mass	66.3cm × 51.7cm × 49.5cm 28kg
TV RF System Colour System Stereo System Teletext System	CCIR B / G, I, D / K, K1 / M PAL / SECAM / NTSC 3.58 / NTSC 4.43 PLAYBACK ONLY Fastext(United Kingdom System) WST(Standard System)
Receiving Frequency VHF (VL) VHF (VH) UHF CATV	46.25MHz~168.25MHz 175.25MHz~463.25MHz 471.25MHz~863.25MHz ● Cable TVs of Mid (X-Z, S1-S10) Super (S11-S20) & Hyper (S21-S41) bands receivable
Intermediate Frequency VIF Carrier SIF Carrier Colour Sub Carrier Frequency	38.0MHz 32.5MHz (5.5MHz), 31.5MHz (6.5MHz) 33.5MHz (4.5MHz), 32.0MHz (6.0MHz) PAL (4.43MHz), SECAM (4.40625MHz, 4.25MHz) NTSC (3.58MHz, 4.43MHz)
Aerial Input Terminal Power Input Rated Voltage Operating Voltage Power Consumption	75Ω Unbalanced AC120~240V, 50 / 60Hz AC90~260V, 50 / 60Hz 125W (Max.) / 88W (Avg.)
Picture Tube High Voltage	Visible size : 59cm measured diagonally 28kV ± 1kV(at zero beam current)
Speaker Audio Output	5cm × 12cm Oval type × 2 5W + 5W
S / Video-1, Video-2&3, Input Video Audio (L/R) S-Video	1Vp-p, 75Ω 500mVrms (-4dBs), High impedance Y : 1Vp-p Positive (negative sync provided, when terminated with 75Ω) C : 0.286Vp-p (burst signal, when terminated with 75Ω)
Line Out Video Audio (L/R)	1Vp-p, 75Ω 500mVrms (-4dBs), Low impedance
Remote Control Unit	RM-C637-1H (Battery size : AA/R06/UM-3 × 2)

Design & specification are subject to change without notice.

**Model: AV-K21MS
AV-K25MS
AV-2550TEE**

JVC

Note

If your TV is an AV-K21MS, AV-K25MS or AV-2550TEE, indications provided by the POWER lamp on the front panel change as follows depending on the TV's operation status.
(Refer to "Turning your TV on" in the "PREPARATION" chapter in the INSTRUCTIONS).

When the main power is ON and the TV is OFF (When the TV is in the standby mode):

The POWER lamp lights dimmer.

When the TV is ON:

The POWER lamp lights brighter.

When the main power is OFF:

The POWER lamp does not light.

Примечание

Для телевизоров марки AV-K21MS, AV-K25MS и AV-2550TEE индикация, обеспечиваемая лампочкой POWER на передней панели, меняется следующим образом в зависимости от рабочего состояния телевизора.
(См. "Включение Вашего телевизора" в главе "ПОДГОТОВИТЕЛЬНЫЕ ОПЕРАЦИИ" в ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ).

При ВКЛЮЧЕНИИ в сеть и выключенном OFF телевизоре (Когда телевизор находится в режиме готовности):

Лампочка POWER горит более тускло.

При ВКЛЮЧЕНИИ в сеть:

Лампочка POWER горит ярче.

При ВЫКЛЮЧЕНИИ из сети:

Лампочка POWER не горит.

JVC
VICTOR COMPANY OF JAPAN, LIMITED



OPERATING INSTRUCTIONS [AV-2950TEE / AV-2550TEE]

JVC

COLOUR TELEVISION

AV-2550TEE
AV-2950TEE

INSTRUCTIONS

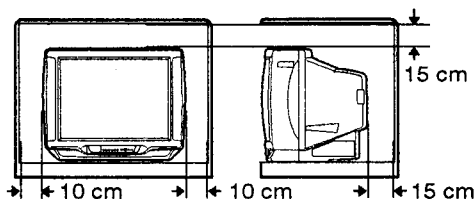
Thank you for purchasing this JVC colour television.
To ensure your complete understanding, please read this manual thoroughly before operation.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

- TO ENSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS TV.
- Operate only from the power source specified on the TV.
- Avoid damaging the power plug and power cord.
- Avoid improper installation and never position this TV where good ventilation is unattainable. When installing this TV distance recommendations must be maintained between the floor and wall, as well as installment in a tightly enclosed area or piece of furniture. Adhere to the minimum distance guidelines shown for safe operation.
- Do not allow objects or liquid into the cabinet openings.
- In the event of a fault, unplug this TV and call a service technician. Do not attempt to repair it yourself or remove the rear cover.
- When you don't use this TV for a long period of time, be sure to disconnect the power plug from the AC outlet.

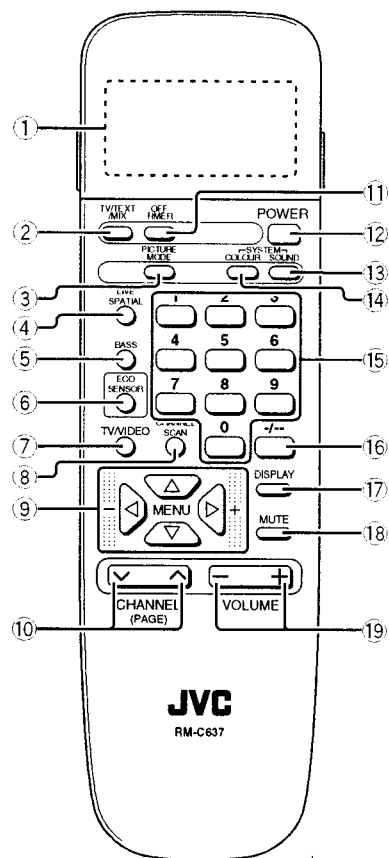


CONTENTS

LOCATIONS	2
PREPARATION	4
VIEWING A TELEVISION PROGRAMME	14
VIEWING IMAGES FROM AN EXTERNAL DEVICE	16
SOUND AND PICTURE	17
OTHER FEATURES	20
VIEWING A TELETEXT PROGRAMME	23
TELETEXT FUNCTIONS	24
TROUBLESHOOTING	26
SPECIFICATIONS	27

LOCATIONS

Locations of remote control buttons



① Teletext buttons	p.23
② TV/TEXT/MIX button	p.23
③ PICTURE MODE button	p.18
④ LIVE SPATIAL button	p.18
⑤ BASS button	p.18
⑥ ECO SENSOR button	p.20
⑦ TV/VIDEO button	p.16
⑧ CHANNEL SCAN button	p.15
⑨ MENU buttons	
• MENU ▲/▼ buttons	
• MENU +/- buttons	
⑩ CHANNEL V/∧ buttons	p.14
⑪ OFF TIMER button	p.20
⑫ POWER button	p.7,14
⑬ SOUND SYSTEM button	p.17
⑭ COLOUR SYSTEM button	p.17
⑮ Number buttons	p.14
⑯ -/-- button	p.14
⑰ DISPLAY button	p.20
⑱ MUTE button	p.15
⑲ VOLUME +/- buttons	p.15

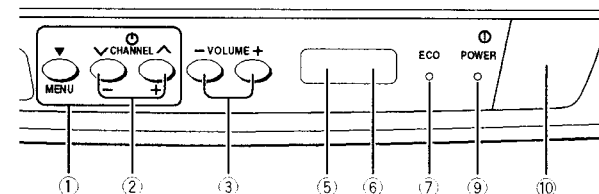
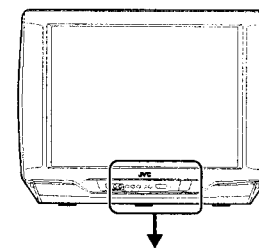
LOCATIONS

Locations of front panel buttons and lamps

① MENU buttons	p.22
• MENU button	
• MENU +/- buttons	
② CHANNEL V/∧ buttons	p.15

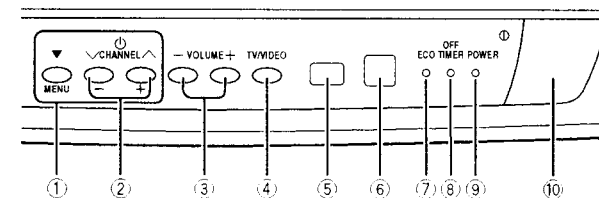
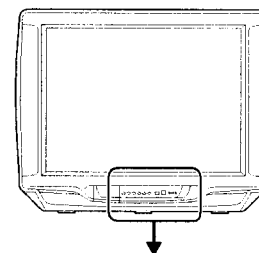
③ VOLUME +/- buttons	p.15
④ TV/VIDEO button	p.16
⑤ ECO sensor	
⑥ Remote control sensor	
⑦ ECO lamp	p.20
⑧ OFF TIMER lamp	p.20
⑨ POWER lamp	p.7,14,15
⑩ Main power button	p.7,14,15

<AV-2550TEE>



Note:
 • If you want to select the VIDEO mode using the front control buttons on AV-2550TEE, see page 17.

<AV-2950TEE>



PREPARATION

1. Connecting the aerial and external devices

Notes:

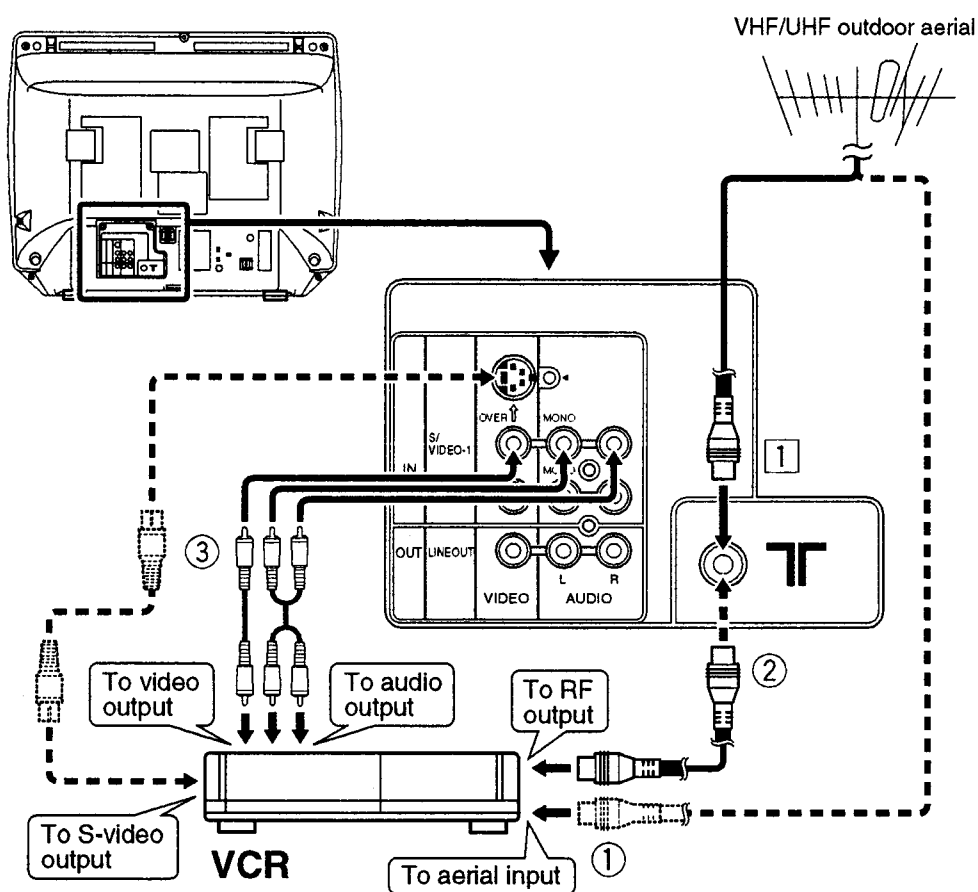
- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.
- When connecting monaural audio to the TV, use the L/MONO jack.
- The sound and picture that you are watching are output from LINE OUT jacks on the rear panel.

■ Connecting the aerial and VCR

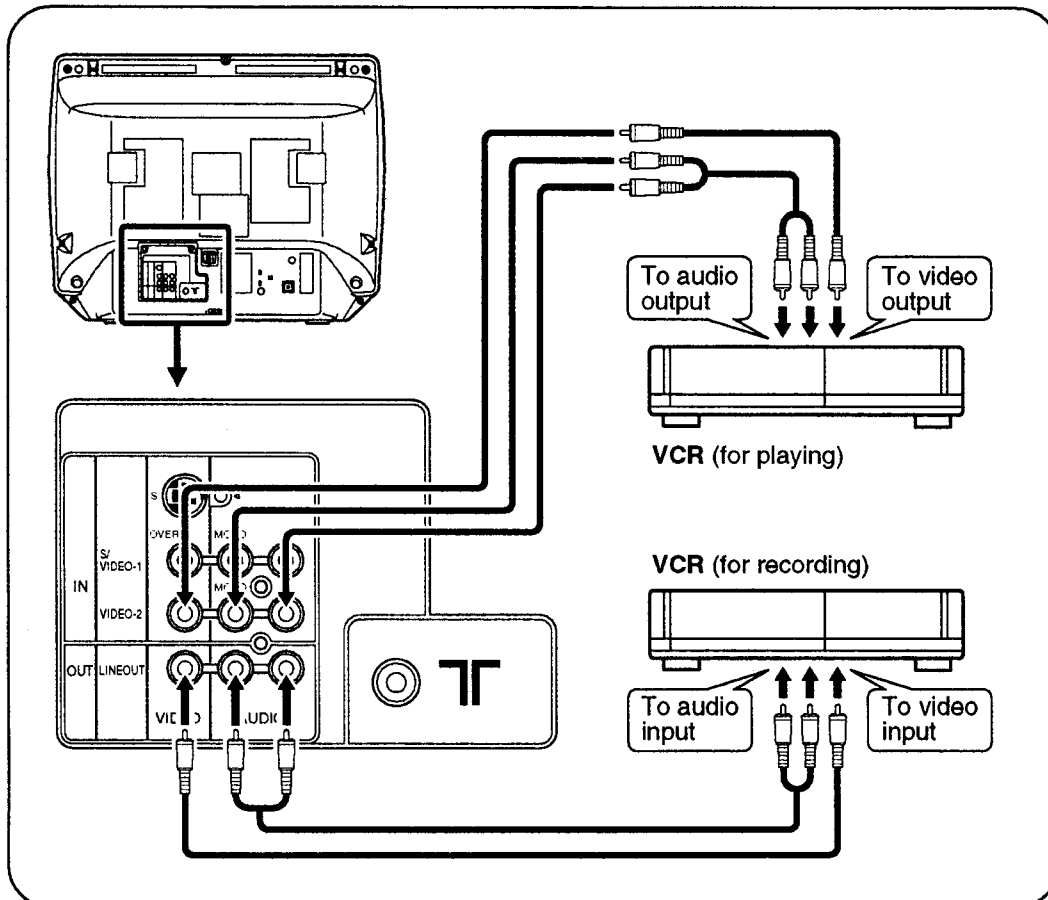
If not connecting a VCR (video cassette recorder), do ①.

If connecting a VCR, proceed ① → ② → ③.

- You can view images from the VCR without doing ③. For details, see "To view images from a VCR connected to the TV with only an aerial cable" on page 16.

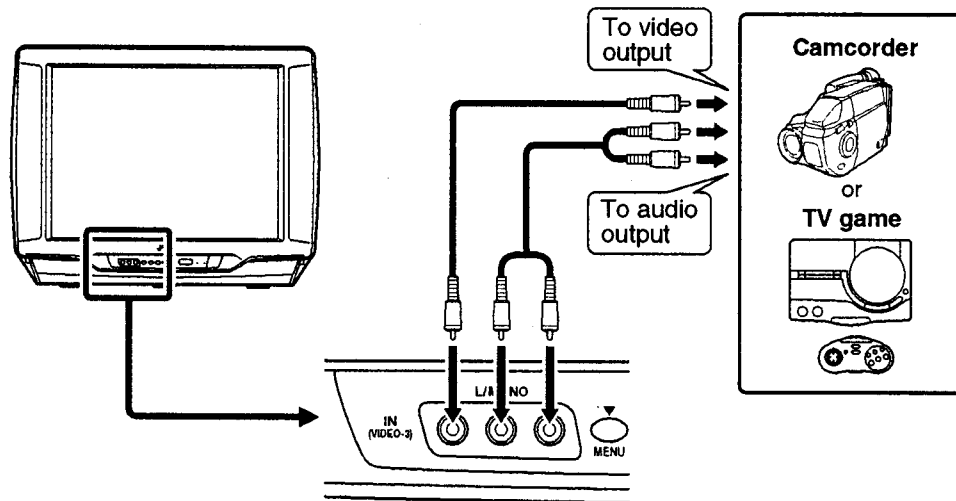


■ **Connecting other external devices**

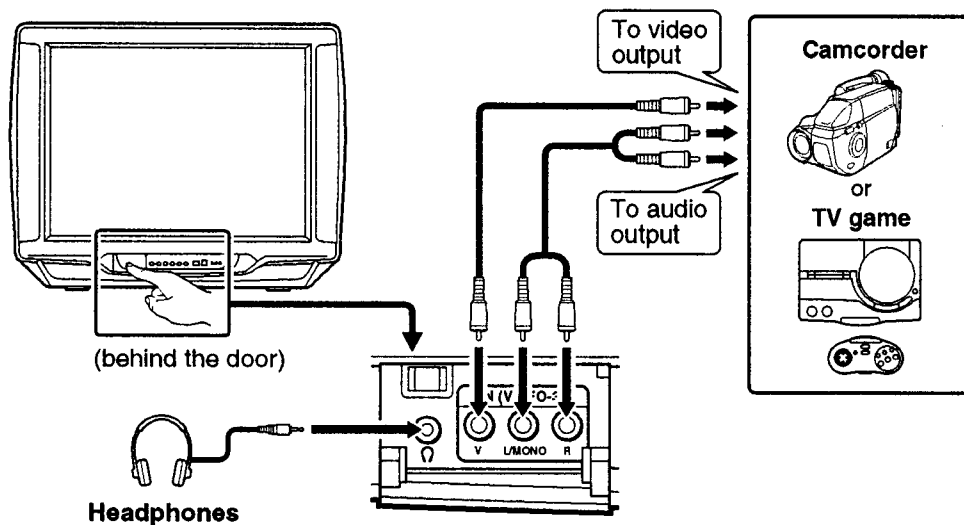


PREPARATION

<AV-2550TEE>



<AV-2950TEE>



Note:

- Use headphones with a stereo mini jack (dia. 3.5 mm). When using headphones, the speaker sound output is disabled.

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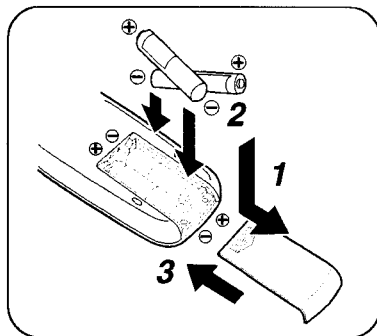
PREPARATION

2. Connecting the power cord

Insert the Power plug into an AC outlet.

3. Inserting batteries into the remote control

Correctly insert two batteries, observing the \oplus and \ominus polarities, inserting the \ominus end first.



CAUTION:

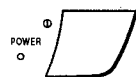
- Follow the cautions printed on the batteries.

Notes:

- Use AA/R6/UM-3 dry cell batteries.
- Battery life is approximately six months to one year depending on frequency of use.
- If the remote control operates erratically, replace the batteries.
- We recommend that you use the supplied batteries initially and replace them as soon as operation becomes erratic. The supplied batteries are for testing, not regular use.

4. Turning your TV on

1. Press the Main power button on the TV to turn the main power on.



For AV-2950TEE:

The POWER lamp lights red (main power on), then green (TV on).

For AV-2550TEE:

The POWER lamp lights red.

If image does not appear:

Your TV is in the standby mode. Press the POWER button on the remote control to turn your TV on.

- You can also turn on your TV by pressing the CHANNEL \vee/\wedge button on your TV.

To turn your TV off:

Press the POWER button on the remote control. Your TV enters the standby mode.

To turn the main power off:

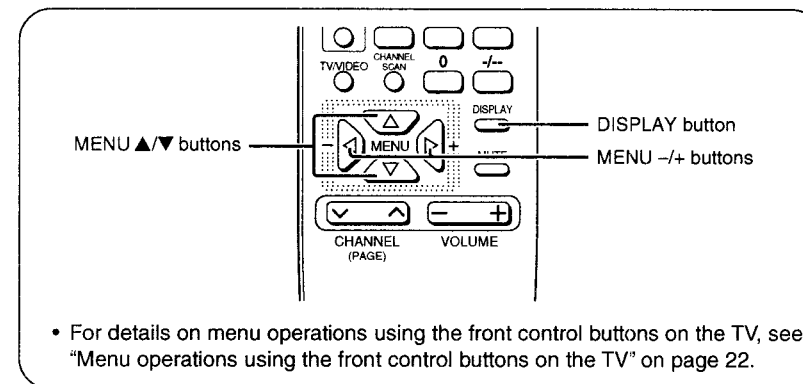
Press the Main power button on the TV. The POWER lamp goes off.

PREPARATION

5. Selecting the on-screen language

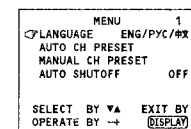
You can select one of three languages for the on-screen display. The displayed menus on the screen are described in the selected language.

In this manual, on-screen descriptions are given in English. Select ENG (English).

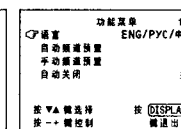


1. Press MENU $\blacktriangle/\blacktriangledown$ to display the following menu.

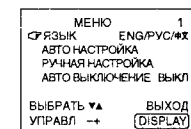
The following menu is displayed in one of three languages.



English



Chinese



Russian

Note:

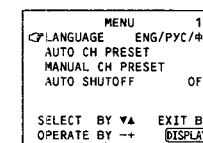
- If a different menu is displayed, repeatedly press the MENU $\blacktriangle/\blacktriangledown$ button until this menu is displayed.
- If the menu appears in English, the TV's on-screen language is already set to English, so you can skip steps 2 and 3.

2. Make sure that the topmost function in the menu is selected.

- If a different function is selected, press the MENU \blacktriangle button to select the topmost item.

3. Press MENU $-/+$ to select ENG (English).

The menu is displayed in English.



4. Proceed to "6. Presetting TV stations" on the following page.

- If you want to complete operations at this stage, press the DISPLAY button to turn the menu display off.

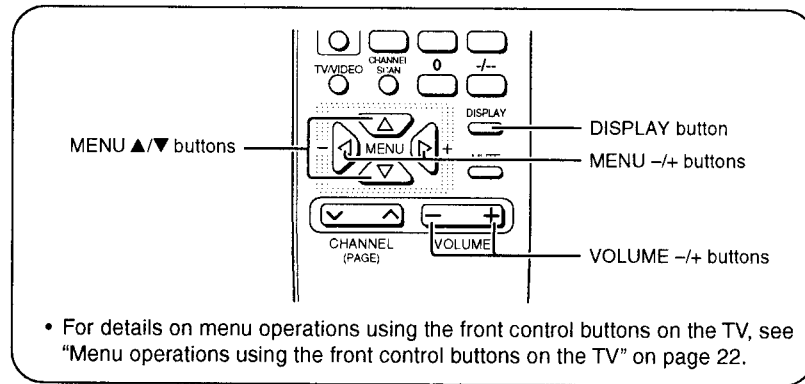
PREPARATION

6. Presetting TV stations

To view a TV programme, you must first preset TV stations to channels on the TV. This TV has 120 channels (channel 1 to 119 and channel AV). You can choose between two functions, AUTO CH PRESET and MANUAL CH PRESET and preset TV stations to channels on TV.

Note:

- After you have finished presetting, you can set undesired channels to be skipped over (see "SKIP" on page 12.



- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 22.

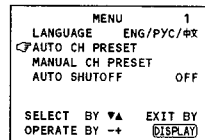
AUTO CH PRESET

You can automatically preset all TV stations that can be received on your TV to channels in a simple operation.

Note:

- When you use this function, no station is preset to the channel AV. Channel AV is offered for viewing images from a VCR connected to your TV with only an aerial cable. For more details, see "To view images from a VCR connected to the TV with only an aerial cable" on page 16.

- Press MENU ▲/▼ to select AUTO CH PRESET in the "MENU 1" menu.



To display this menu:

Repeatedly press MENU ▲/▼ button until it is displayed.

- Press MENU -/+ to start the AUTO CH PRESET function. " >>> ON SEARCH" is displayed on the screen.

(Continued on next page)

PREPARATION

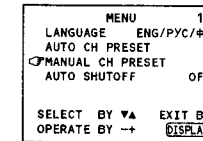
When you have finished presetting all TV channels that can be received on your TV, the display will go out and the AUTO CH PRESET function will end.

- To stop AUTO CH PRESET, press the MENU -/+ button.

MANUAL CH PRESET

You can manually preset the desired TV stations to the desired channels.

- Press MENU ▲/▼ to select MANUAL CH PRESET in the "MENU 1" menu.

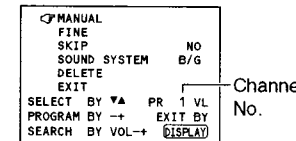


To display this menu:

Repeatedly press the MENU ▲/▼ button until it is displayed.

- Press MENU -/+.

The sub-menu is displayed.



- The channel No. is displayed as a PR No. For example, channel 1 will be displayed as PR 1. However, channel AV will be displayed as AV.

- Press MENU -/+ to select the channel No. to be preset.

- Press VOLUME -/+ to start selection of the TV station. " >>> " or " <<< " is displayed on the screen.

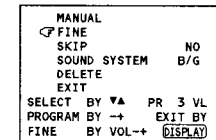
When a TV station is received, the " >>> " or " <<< " display goes out, and the TV station is preset to the currently selected channel No.

- If you have selected the wrong TV station for preset, repeatedly press the VOLUME -/+ button until the desired TV station is selected.
- To stop MANUAL CH PRESET, press any button other than the VOLUME -/+ button.

If the picture is not clear:

Use the FINE function to fine-tune the TV station.

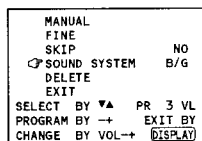
- Press MENU ▲/▼ to select FINE.



- Hold VOLUME -/+ down to fine-tune the TV station so that the best image is displayed on screen. " > " or " < " indicates that the TV station is being fine-tuned.

PREPARATION

5. Press MENU ▲/▼ to select **SOUND SYSTEM**.



6. Press VOLUME -/+ to select the appropriate sound system.

- For the sound systems in each country or region, refer to the table below.

The Broadcasting Systems of Each Country or Region

Area	Country or Region	System	
		Colour	Sound
Asia, Middle East	Bahrain, Kuwait, Oman, Qatar, United Arab Emirates, Yemen, etc.	PAL	B/G
	Indonesia, Malaysia, Singapore, Thailand, India, etc.	PAL	B/G
	China, Vietnam, etc.	PAL	D/K
	Hong Kong, etc.	PAL	I
	Islamic Republic of Iran, Lebanon, Saudi Arabia, etc.	SECAM	B/G
Europe	Philippine, Taiwan, Myanmar, etc.	NTSC	M
	Russia, etc.	SECAM	D/K
	Czech Republic, Poland, etc.	PAL	D/K
	Germany, Holland, Belgium, etc.	PAL	B/G
	UK, etc.	PAL	I
Oceania	Australia, New Zealand, etc.	PAL	B/G
Africa	Republic of South Africa, etc.	PAL	I
	Nigeria, etc.	PAL	B/G
	Egypt, Morocco, etc.	SECAM	B/G

7. Press MENU ▲/▼ to select **MANUAL**.

8. Repeat steps 3 to 7 if you want to preset another TV station to a channel.

9. Press DISPLAY to turn the display off.

PREPARATION

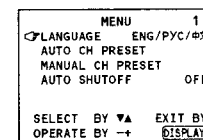
■ SKIP

You can set undesired channels to be skipped over.

Skip means that the channel cannot be selected by the CHANNEL V/Λ buttons nor the CHANNEL SCAN button.

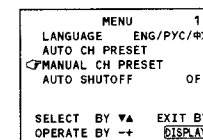
- Channels to which a station has not been preset are automatically set to skip.

1. Press MENU ▲/▼ to display the "MENU 1" menu.



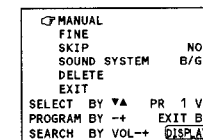
- If a different menu is displayed, repeatedly press the MENU ▲/▼ button until this menu is displayed.

2. Press MENU ▲/▼ to select **MANUAL CH PRESET**.

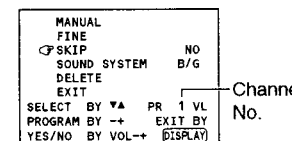


3. Press MENU -/+.

The sub-menu is displayed.



4. Press MENU ▲/▼ to select **SKIP**.

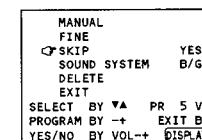


- The channel No. is displayed as a PR No. For example, channel 1 will be displayed as PR 1. However, channel AV will be displayed as AV.

5. Press MENU -/+ to select the channel you want to skip.

6. Press VOLUME -/+ to select **YES**.

The channel you selected is set to be skipped.



To cancel the channel skip: select NO.

7. Repeat steps 5 and 6 if you want to set another channel to skip.

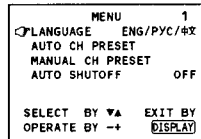
8. Press DISPLAY to turn the display off.

PREPARATION

■ DELETE

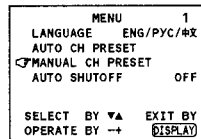
You can delete a TV station already preset to a channel.

1. Press MENU ▲/▼ to display the "MENU 1" menu.

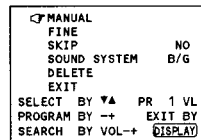


- If a different menu is displayed, repeatedly press the MENU ▲/▼ button until this menu is displayed.

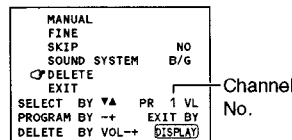
2. Press MENU ▲/▼ to select MANUAL CH PRESET.



3. Press MENU -/+. The sub-menu is displayed.



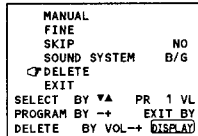
4. Press MENU ▲/▼ to select DELETE.



- The channel No. is displayed as a PR No. For example, channel 1 will be displayed as PR 1. However, channel AV will be displayed as AV.

5. Press MENU -/+ to select a channel of TV station you want to delete.

6. Press VOLUME -/+. The station preset to that channel is deleted. When you delete a station set to a channel, the channel number of every station after it moves forward by one.

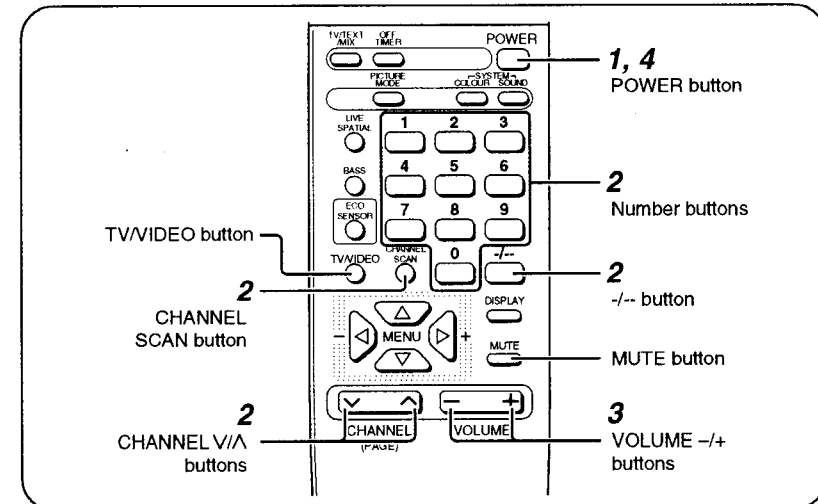


7. Repeat steps 5 and 6 if you want to delete another TV station.

8. Press DISPLAY to turn the display off.

VIEWING A TELEVISION PROGRAMME

Using the remote control



1. Press POWER to turn your TV on.

Notes:

- If your TV does not turn on, press the Main power button on the TV and press the POWER button again.
- You can also turn on your TV by pressing any of the following buttons;
 - the CHANNEL V/A buttons
 - the Number buttons
 - the TV/VIDEO button
- If your TV is AV-2950TEE, the POWER lamp changes from red to green.

- : 1-digit mode (example)

Channel 6 → Press 6.
Channel AV → Press 0.

-- : 2-digit mode (example)

Channel 6 → Press 0, 6.
Channel 16 → Press 1, 6.
Channel AV → Press 0, 0.

--- : 3-digit mode (example)

Channel 6 → Press 0, 0, 6.
Channel 16 → Press 0, 1, 6.
Channel 116 → Press 1, 1, 6.
Channel AV → Press 0, 0, 0.

2. Select a PR channel.

■ UP/ DOWN selection

Press CHANNEL V/Δ.

■ Direct selection

1. Repeatedly press the -/- button to select the desired mode then press the Number buttons.

VIEWING A TELEVISION PROGRAMME

■ CHANNEL SCAN selection

You can search for the channel you want to view while scanning all of the channels that can be viewed on this TV.

1. Press CHANNEL SCAN.

Channels will be scanned in channel No. order.

2. When the channel that you want to view has been scanned, press CHANNEL SCAN again before the next channel is scanned.

Note:

- UP/DOWN and CHANNEL SCAN selections cannot be selected for channels to which channel skip has been set to YES. (See "SKIP" on page 12.)

If the colour is abnormal:

Repeatedly press the COLOUR SYSTEM button to select the appropriate colour system. For details, see "COLOUR SYSTEM" on page 17.

3. Press VOLUME +/- to adjust the sound.

To temporarily render the sound inaudible:

Press the MUTE button.

- To return the sound, press the MUTE button again.

If the sound is abnormal:

Repeatedly press the SOUND SYSTEM button to select the appropriate sound system. For details, see "SOUND SYSTEM" on page 17.

4. To turn your TV off, press POWER.

Note:

- We recommend that you press the Main power button on the TV to turn the main power off if you do not plan to use your TV for a long time or if you wish to save energy.
- If your TV is AV-2950TEE, the POWER lamp changes from green to red.

Using the front panel buttons on the TV

1. Press CHANNEL V/∧ to turn your TV on.

Note:

- If your TV does not turn on, press the Main power button and then press the CHANNEL V/∧ button again.

2. Press CHANNEL V/∧ to select a channel.

3. Press VOLUME +/- to adjust the sound.

4. To turn your TV off, press the Main power button to turn the main power off.

The POWER lamp goes off.

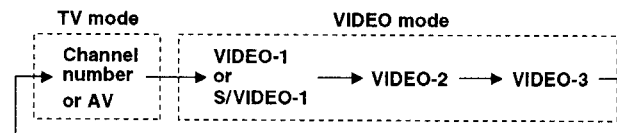
- If you press the Main power button again, your TV turns on immediately. Step 1 is no longer required.

VIEWING IMAGES FROM AN EXTERNAL DEVICE

You can view images from VCRs or other external devices connected to your TV.

1. Repeatedly press TV/VIDEO to select the VIDEO mode according to the jacks to which the external device you want to view is connected.

Each press of the TV/VIDEO button changes the mode as follows.



TV mode:

This mode is for viewing TV programmes. Repeatedly press the TV/VIDEO button, or press the CHANNEL V/∧ buttons, or press the number buttons to return to this mode.

When "S/VIDEO-1" is displayed:

The TV shows images from an external device connected to the S terminal.

Note:

- This TV has the AV STEREO function for external stereo devices connected to the TV. If stereo signals are input from a connected external device and TV is in a VIDEO mode, sound can be heard in stereo. (In TV mode, sound is always heard monaurally.)
- When VCRs or other external devices are connected to both the S terminal and the video input jack of VIDEO-1 terminal, the TV shows images from the VCR or other external devices connected to the S terminal.

To view images from a VCR connected to the TV with only an aerial cable:

Your VCR must be preset to the channel AV of this TV.

Thoroughly read the manual of your VCR, and preset your VCR to the channel AV using the MANUAL CH PRESET function on page 10.

As a result, you can view images from your VCR when you select the channel AV in the TV mode.

If the colour is abnormal:

Repeatedly press the COLOUR SYSTEM button to select the appropriate colour system. For details, see "COLOUR SYSTEM" on page 17.

VIEWING IMAGES FROM AN EXTERNAL DEVICE

To select the VIDEO mode using the front control buttons on AV-2550TEE:

When not using the remote control, you can select the VIDEO mode using the MENU buttons on the AV-2550TEE.

1. Repeatedly press the MENU button on the TV to select INPUT from "MENU 1".
2. Repeatedly press the MENU +/- button on the TV to select the VIDEO mode.

Note:

- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 22.

SOUND AND PICTURE

COLOUR SYSTEM

If the colour is abnormal, select the appropriate colour system. Each press of the COLOUR SYSTEM button changes the colour system as follows.

In TV mode (channel 1 to 119):

→ PAL → SECAM
NTSC4.43 ← NTSC3.58 ←

In TV mode (channel AV) or in VIDEO mode:

→ AUTO → PAL → SECAM
NTSC4.43 ← NTSC3.58 ←

AUTO:

Automatic colour system selection

Notes:

- For the colour systems in each country or region, see the table "The Broadcasting Systems of Each Country or Region" on page 11.
- If the colour is abnormal even though you selected AUTO, change the appropriate colour system manually.

SOUND SYSTEM

If the sound is abnormal, select the appropriate sound system. Each press of the SOUND SYSTEM button changes the sound system as follows.

→ B/G → I → D/K → M →

Notes:

- For the sound systems in each country or region, see the table "The Broadcasting Systems of Each Country or Region" on page 11.
- You cannot select any sound system when in VIDEO mode.

SOUND AND PICTURE

PICTURE MODE

You can select one of three picture adjustment modes.

Repeatedly press the PICTURE MODE button to select the desired mode.

BRIGHT:

Heightens contrast and sharpness.

STANDARD:

Standardises picture adjustments.

SOFT:

Softens contrast and sharpness.

BASS

You can enjoy a sound with enhanced bass by using the BASS function.

Press the BASS button.

To return to normal sound, press the BASS button again.

LIVE SPATIAL

You can enjoy Surround sound with a "live" effect by using the LIVE SPATIAL (LIVE SPATIAL SURROUND) function.

Repeatedly press the LIVE SPATIAL button to select the desired mode.

LIVE SPATIAL:

Live spatial allows you to enjoy normal stereo sound converting it into surround sound with added depth and ambience.

MONO SPATIAL:

Mono spatial allows you to enjoy normal monaural sound with converting it into a stereo-like sound.

OFF:

Returns to normal sound.

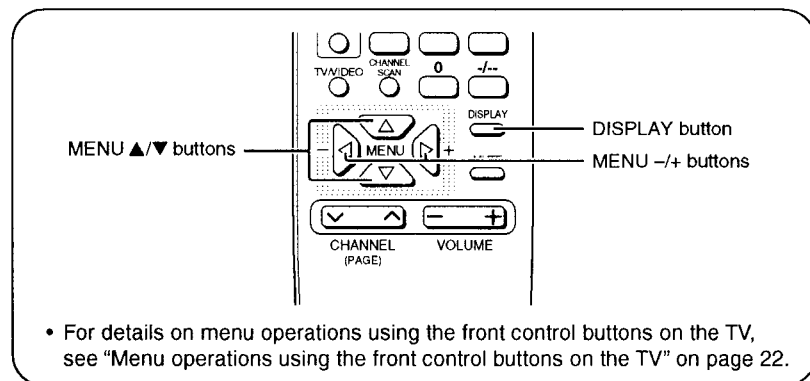
Notes:

- LIVE SPATIAL works properly only with stereo sound.
- MONO SPATIAL works properly only with monaural sound.
- The LIVE SPATIAL mode does not work correctly with headphones.
- LIVE SPATIAL is manufactured under license from Desper Products, Inc.

SOUND AND PICTURE

Picture/Sound Adjustment

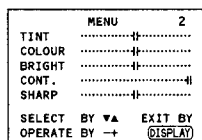
You can adjust the picture and sound as you like.



1. Press MENU ▲/▼ to display a menu.
2. Press MENU ▲/▼ repeatedly to display the desired menu.

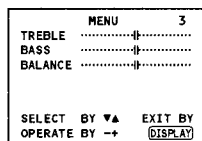
To adjust the picture:

Display the "MENU 2" menu.



To adjust the sound:

Display the "MENU 3" menu.



3. Press MENU ▲/▼ to select an item and press MENU +/- to adjust it.

-	Item	+
Reddish	TINT (tint)	Greenish
Lighter	COLOUR (colour depth)	Deeper
Darker	BRIGHT (brightness)	Brighter
Lower	CONT. (contrast)	Higher
Softer	SHARP (sharpness)	Sharper
Lower	TREBLE (high-frequency sound level)	Higher
Lower	BASS (low-frequency sound level)	Higher
Left	BALANCE (left/right speaker balance)	Right

Note:
 • TINT (tint) is displayed only when viewing images from NTSC3.58 or NTSC4.43 colour systems.

4. Press DISPLAY to turn the display off.

OTHER FEATURES

DISPLAY

You can continuously display the current channel number or VIDEO on the screen.

Press the DISPLAY button.

To turn the display off, press the DISPLAY button again.

Note:
 • When selecting a VIDEO mode with no input signal, indication of VIDEO mode becomes fixed on the screen.

OFF TIMER

You can set this TV to turn off automatically within a specified period of time.

Repeatedly press the OFF TIMER button to select the period of time.

- If your TV is AV-2950TEE, The OFF TIMER lamp on the TV lights when OFF TIMER is set.
- You can set the period of time a maximum of 120 minutes in 10 minute increments.
- 1 minute before the Off Timer turns off the TV, "GOOD NIGHT!" displays.

To display the remaining time:

Press the OFF TIMER button once.

To cancel the Off Timer:

Press the OFF TIMER button to return the period of time to 0.

Note:
 • The Off Timer does not turn off the main power.

ECO SENSOR

You can adjust this TV so that the screen automatically adjusts to the optimum contrast according to the brightness of your room. This function reduces eye strain and the power consumption of this TV.

Repeatedly press the ECO SENSOR button to select the desired mode.

ECO SENSOR DISPLAY:

The ECO SENSOR function will work. In this mode, the heart mark ♥ indicating the brightness of your room is displayed for several seconds each time the brightness changes. The number of heart marks displayed on screen increases as your room becomes darker. Up to six heart marks are displayed.

ECO SENSOR:

The ECO SENSOR function will work. However, in this mode, the heart mark ♥ will not be displayed even if the brightness of your room changes.

OFF:

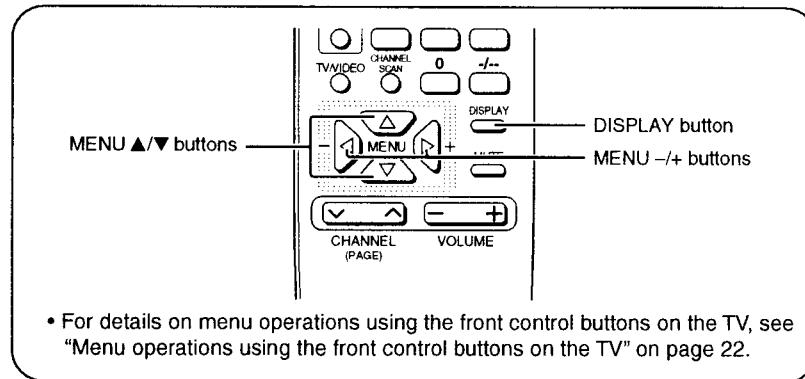
The ECO SENSOR function will not work.

- The ECO lamp will light when the ECO SENSOR function is working.

OTHER FEATURES

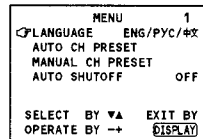
AUTO SHUTOFF

You can set your TV to turn off if no signals are received for about 30 minutes or longer after the end of a broadcast.



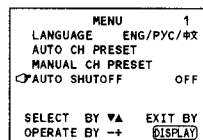
- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 22.

1. Press MENU ▲/▼ to display the "MENU 1" menu.

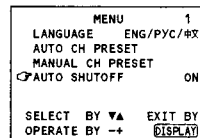


- If a different menu is displayed, repeatedly press the MENU ▲/▼ button until this menu is displayed.

2. Press MENU ▲/▼ to select AUTO SHUTOFF.



3. Press MENU -/+ to select ON. The Auto shutoff function is enabled.



To cancel the Auto shutoff function:
select OFF.

4. Press DISPLAY to turn the display off.

Notes:

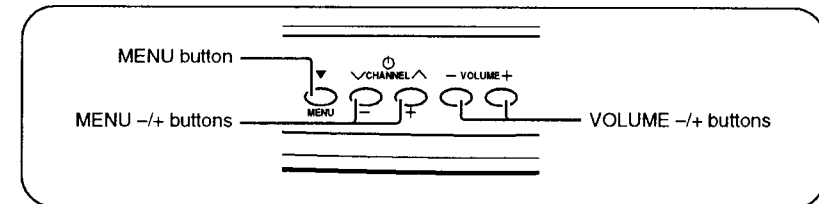
- Auto shutoff function does not turn off the main power.

.....

OTHER FEATURES

Menu operations using the front control buttons on the TV

You can operate functions in menus using the front control buttons on the TV without having to use the remote control.



1. Press MENU to display the menu.

If the desired menu is not displayed:

Repeatedly press the MENU button until the desired menu is displayed.

2. Repeatedly press MENU to select the desired function or item.

To select a function or item above the currently selected function or menu:

Repeatedly press the MENU button to proceed to another menu, and then repeatedly press the MENU button again to return to the original menu. Then select the function or item.

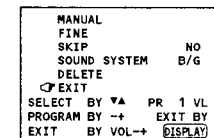
3. Press MENU -/+ or VOLUME -/+ to carry out the desired operation.

- For details, see the description for the respective function.

4. Press VOLUME -/+ to turn the menu display off.

If the sub-menu is displayed:
The sub-menu cannot be turned off by the VOLUME -/+ button when it is displayed. Follow the procedure below to turn the sub-menu display off.

1. Press MENU to select EXIT.



2. Press VOLUME -/+ to turn the sub-menu display off.

SPECIFICATIONS

Model	AV-2550TEE	AV-2950TEE
TV RF systems	B, G, I, D, K, K1, M	
Colour systems	PAL, SECAM, NTSC 3.58 / 4.43 MHz	
Channel and frequencies	VHF low channel (VL) = 46.25 to 168.25 MHz VHF high channel (VH) = 175.25 to 463.25 MHz UHF channel (U) = 471.25 to 863.25 MHz ■ Receives cable channels in mid band (X to Z, S1 to S10), super band (S11 to S20) and hyper band (S21 to S41).	
Teletext system	Fastext (United Kingdom system), WST (Standard system)	
Languages displayed by teletext	English, German, Estonian, Lithuanian, Russian, Czechoslovakian, Ukrainian	
Power input	AC120 to 240 V, 50 / 60 Hz (operating AC 90 to 260 V, 50 / 60 Hz)	
Power consumption	Maximum 125 W, Average 88 W	Maximum 180 W, Average 120 W
Screen size (measured diagonally)	Picture tube 63 cm Visible area 59 cm	Picture tube 73 cm Visible area 68 cm
Audio output (Rated power output)	5W + 5W	10W + 10W
Speakers	(5 × 12 cm) oval × 2	10 cm round × 2
External input / output	S/VIDEO-1: S-video input (4 pin mini DIN) VIDEO input (RCA) AUDIO L/R input (RCA)	
	VIDEO-2, VIDEO-3: VIDEO input (RCA) AUDIO L/R input (RCA)	
	LINE OUT: VIDEO out put (RCA) AUDIO L/R output (RCA)	
Headphone jack	—	stereo mini jack (dia. 3.5 mm)
Dimensions (W × H × D)	663 mm × 517 mm × 495 mm	734 mm × 583 mm × 521 mm
Weight	28 kg	40 kg
Accessories	• Remote control unit:RM-C637 × 1 • AA/ R06 / UM-3 dry cell battery × 2	

Design and specifications subject to change without notice.

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⌋) side GND and EARTH : (⊕) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
If above note will not be kept, a fuse or any parts will be broken.
5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. Isolation Check

(Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.

(... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

(2) Leakage Current Check

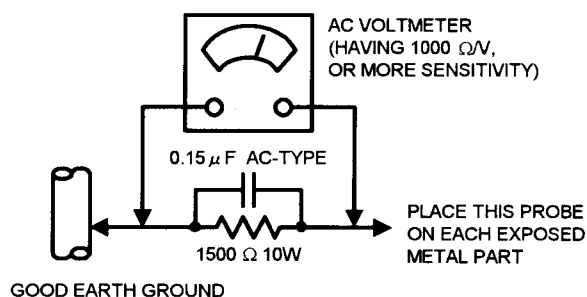
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

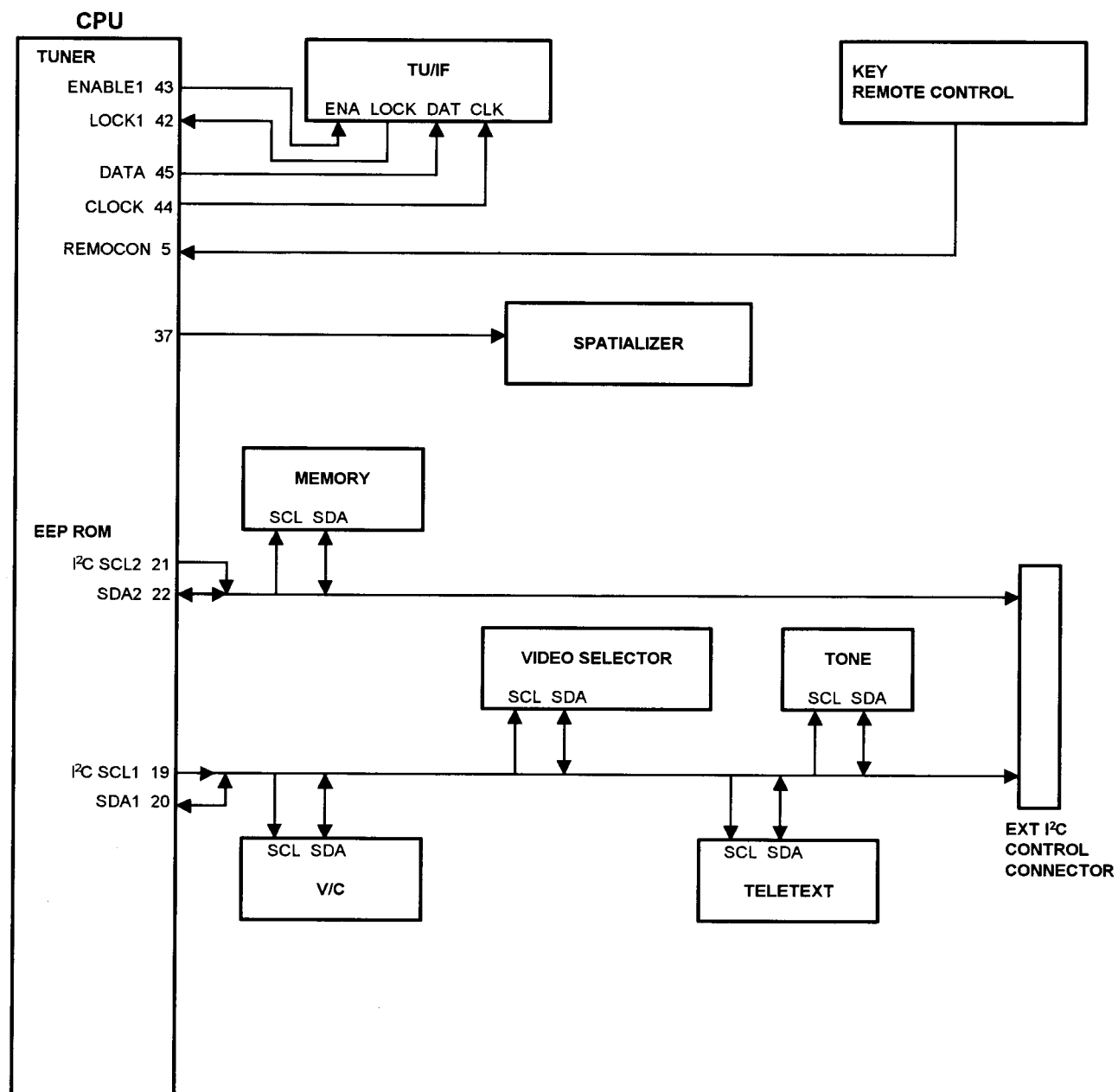
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



FEATURES

- The TELETEXT SYSTEM has a built-in FASTEXT and WST System.
- New chassis design enables use of an interactive on-screen control.
- Wide range voltage (90V~260V) AC power input.
- With AUDIO / VIDEO INPUT & OUTPUT terminal.
- MUTE button can reduce the audio level to zero instantly.
- Functional remote control to operate TV set (for channel select, volume control, power ON/OFF, etc.) from a distance.
- I²C bus control utilizes single chip ICs for IF, V/C and VSM.
- By means of AUTO PROGRAM, the TV stations can be selected automatically and the TV channels can also be rearranged automatically.
- Built-in ECO MODE (ECONOMY, ECOLOGY)
In accordance with the brightness in a room, the brightness and / of contrast of the picture can be adjusted automatically to make the optimum picture which is easy on the eye.

■SYSTEM BLOCK DIAGRAM



SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the 7 screws marked **A** as shown in figure.
3. Withdraw the rear cover toward you.

REMOVING THE CHASSIS

- After removing the rear cover.
1. Slightly raise the both sides of the chassis by hand and remove the 2 claws under the both sides of the chassis from the front cabinet.
 2. Withdraw the chassis backward.
(If necessary, take off the wire clamp, connectors etc.)

REMOVING THE AV TERMI. BOARD

- After removing the rear cover.
1. Remove the 2 screws marked **B** as shown in figure.
 2. While raising the claw marked **C**, remove the top of the AV TERMI. board.
 3. Pressing the claws marked **D**, remove the AV TERMI. board toward you marked **E** as shown in Fig. 1.

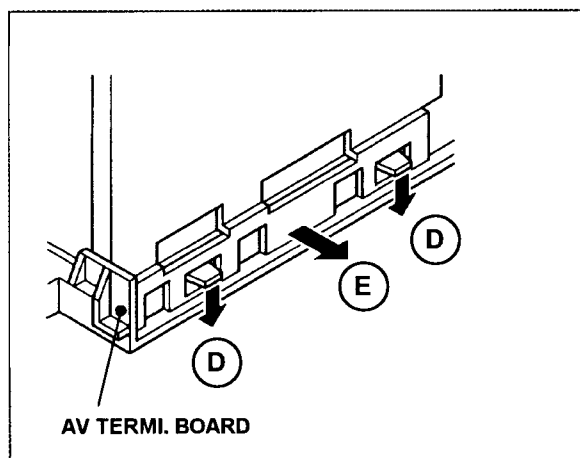


Fig.1

REMOVING THE CONTROL BASE

- After removing the rear cover & the chassis.
1. While pushing down the claws marked **E**, remove the CONTROL BASE in the arrow direction marked **F** as shown in Fig. 2.
(If necessary, take off the wire clamp, connectors etc.)

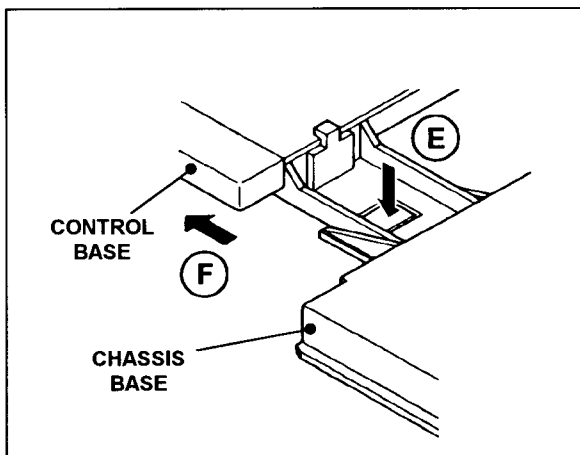


Fig.2

REMOVING THE SPEAKER

- After removing the rear cover.
1. Remove the 4 screws marked **G** as shown in figure.
 2. Follow the same steps when removing the other hand speaker.

CHECKING THE PW BOARD

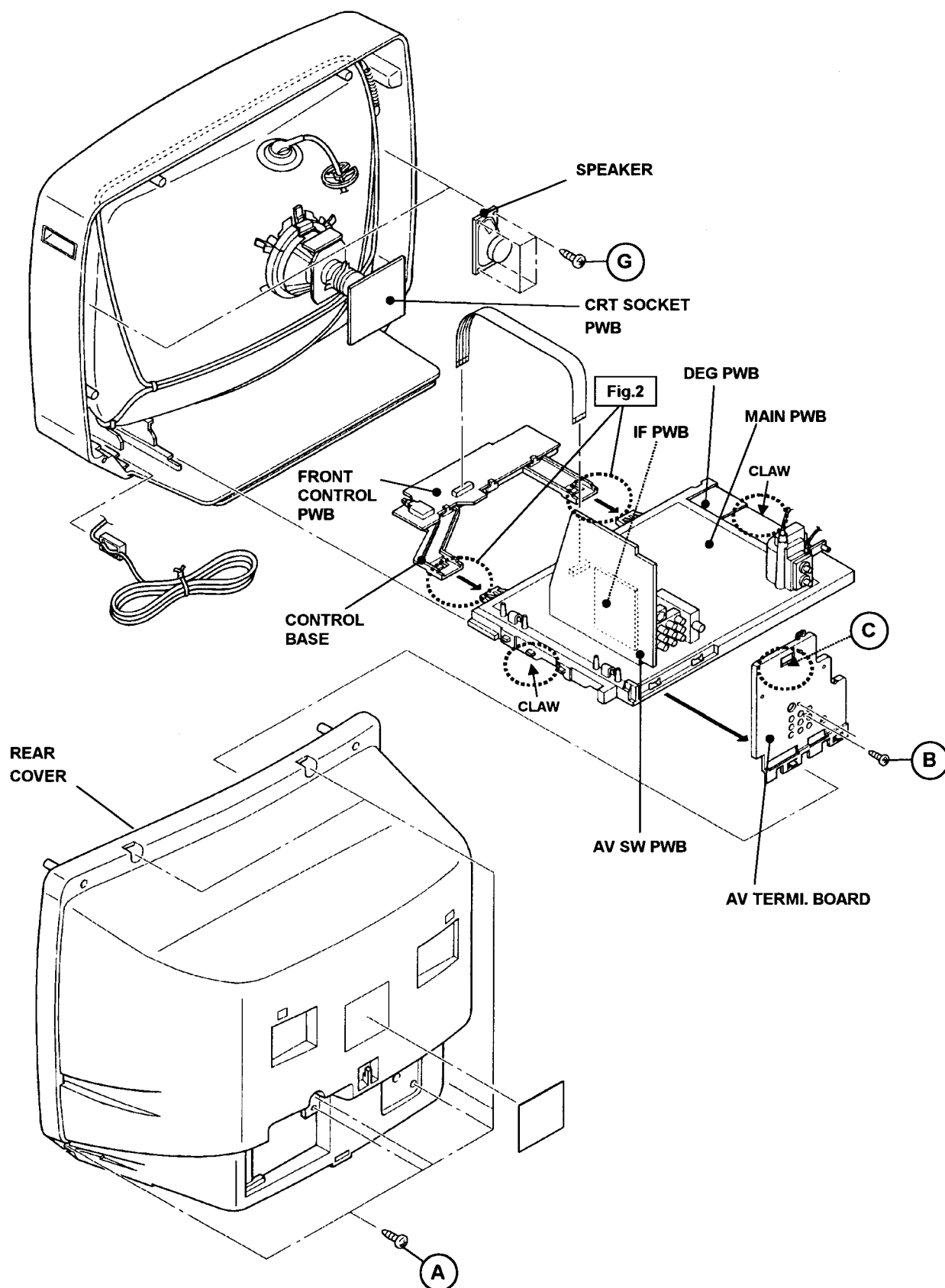
1. To check the back side of the PW Board.
 - 1) Pull out the chassis. (Refer to REMOVING THE CHASSIS)
 - 2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the CRT earth wire and other connectors are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.



REPLACEMENT OF MEMORY ICs

1. MEMORY ICs

This TV uses memory ICs. In the memory ICs are memorized data for correctly operating the video and deflection circuits. When replacing memory ICs, be sure to use ICs written with the initial values of data.

2. PROCEDURE FOR REPLACING MEMORY ICs

(1) Power off

Switch the power off and unplug the power code from the wall outlet.

(2) Replace ICs

Be sure to use memory ICs written with the initial data values.

(3) Power on

Plug the power code into the wall outlet and switch the power on.

(4) Check and set SYSTEM CONSTANT SET:

- 1) Press the DISPLAY key and the PICTURE MODE key of the REMOTE CONTROL UNIT simultaneously.
- 2) The SERVICE MENU screen of Fig. 1 will be displayed.
- 3) While the SERVICE MENU on display, press the DISPLAY key and PICTURE MODE key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed
- 4) Check the setting value of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the MENU ∇/Δ key, and set the correct value with the MENU - / + key.
- 5) Press the DISPLAY key twice, and return to the normal screen.

(5) Receive channel of setting

Refer to the **OPERATING INSTRUCTIONS** and set the receive channels (channels preset) as described

(6) User Setting

Check the user setting value of Table 2, and if setting value is different, set the correct value.

For setting, refer to the **OPERATING INSTRUCTIONS**.

(7) Setting of SERVICE MENU

Verify the setting items of the SERVICE MENU of Table 3, and reset where necessary.

For setting, refer to the **SERVICE ADJUSTMENTS**.

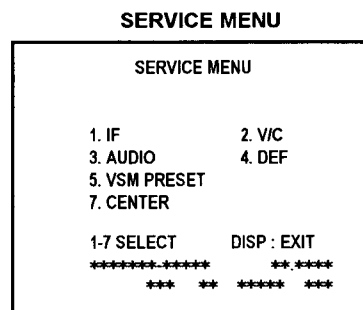


Fig. 1

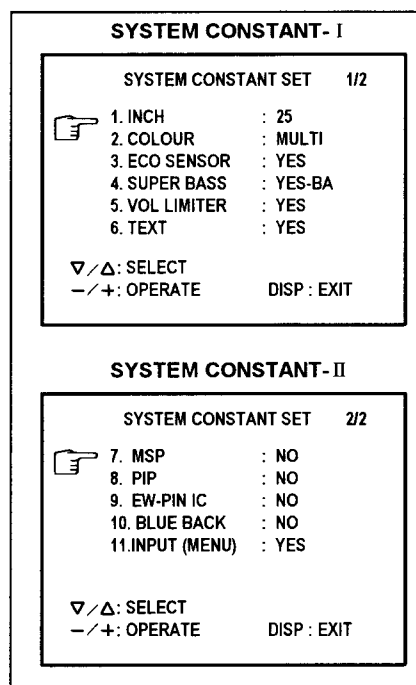


Fig. 2

SETTING OF SYSTEM CONSTANT SET

Setting item	Setting content	Setting value
1. INCH	21 → 25 → 29	25
2. COLOUR	MULTI → TRIPLE → PAL	MULTI
3. ECO SENSOR	YES → NO	YES
4. SUPER BASS	YES-SB → YES-BA → NO-ON → NO-OFF	YES-BA
5. VOL LIMITER	YES → NO	YES
6. TEXT	YES → NO	YES
7. MSP	YES → NO	NO
8. PIP	YES → NO	NO
9. EW-PIN IC	YES → NO	NO
10. BLUE BACK	YES → NO	NO
11. INPUT (MENU)	YES → NO	YES

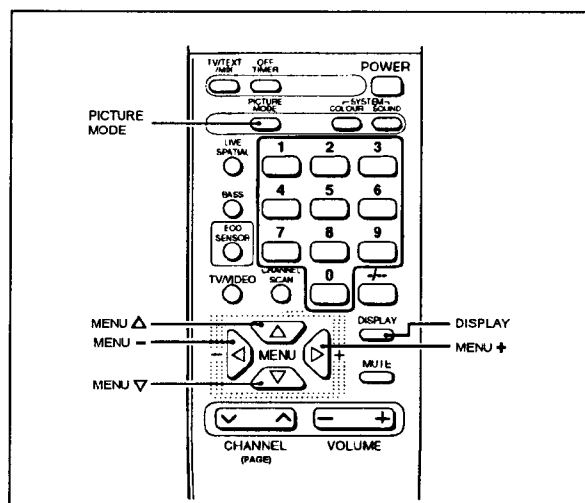
Table 1

USER SETTING VALUES

Setting item	Setting value	Setting item	Setting value
SUB POWER	ON	OFF TIMER	OFF
CHANNEL	1 POSITION	PICTURE MODE (VSM)	BRIGHT
CHANNEL PRESET	Refer to OPERATING INSTRUCTION	ECO SENSOR	OFF
VOLUME	Appropriate sound volume	TREBLE	CENTER
TV/VIDEO	TV	BASS	CENTER
ON SCREEN DISPLAY	POSITION NUMBER DISPLAY	BALANCE	CENTER
COLOUR SYSTEM	PAL	BASS	ON
SOUND SYSTEM	B / G	AUTO SHUTOFF	OFF
LIVE SPATIAL	OFF		

Table 2

REMOTE CONTROL KEY NAME



SERVICE MENU SETTING ITEMS

Service menu	Setting item	Service menu	Setting item
1. IF	1. VCO 2. DELAY POINT	3. AUDIO (Do not adjust)	1. CONC LIMIT 2. A2 ID THR 3. SOUND SYSTEM
2. V/C	1. CUTOFF(R/G/B) 2. DRIVE(R/B) 3. BRIGHT 4. CONT 5. COLOUR 6. TINT 7. BLACK OFFSET(R-Y/B-Y) 8. SHARP 9. TEXT(RGB)CONT 10. BS.OFF 11. BS.POINT 12. DC TRAN RATE 13. APA-CON FO/SW 14. VSM PHASE 15. VSM GAIN 16. CLL SW 17. CLL LEVEL 18. ABL POINT 19. ABL GAIN 20. Y-DL 21. P.ACL SW 22. WPL SW. 23. Y GAMMA	4. DEF	2. V-SHIFT (Fixed) 3. V-SIZE 4. H-CENT 7. V-S.CR 10. V-LINE
		5. VSM PRESET (BRIGHT/STD/SOFT)	1. TINT 2. COLOUR 3. BRIGHT 4. CONT 5. SHARP
		7. CENTER ADJUST (Do not adjust)	TREBLE BASS

Table 3

SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. There are 2 way of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.
2. The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
3. Turn on the power of the TV and measuring equipment for warming up for at least 30 minutes before starting adjustment.
4. Make sure that connection is correctly made to AC power source.
5. If the receive or input signal is not specified, use the most appropriate signal for adjustment.
6. Never touch parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.
7. Preparation for adjustment (presetting):
Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

PICTURE MODE (VSM)	BRIGHT
ECO SENSOR	OFF
LIVE SPATIAL	OFF
TREBLE/BASS/BALANCE	CENTER
BASS	ON

MEASUREMENT INSTRUMENT AND FIXTURES

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [PAL / SECAM / NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

Adjustment item	Adjustment item
B1 POWER SUPPLY	DEFLECTION circuit adjustment
FOCUS adjustment	VSM PRESET adjustment
IF circuit adjustment	AUDIO adjustment
VIDEO/CHROMA circuit adjustment	CENTER adjustment

BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

With the SERVICE MENU, various settings (adjustments) can be made, and they are broadly classified in the following items of settings :

- 1. IF For entering/adjusting the setting values (adjustment values) of the IF circuit.
- 2. V/C For entering/adjusting the setting values (adjustment values) of the VIDEO/CHROMA circuit.
- 3. AUDIO For entering / adjusting the setting values (adjustment values) of the multiplicity sound circuit.
- 4. DEF For entering / adjusting the setting values (adjustment values) of the DEFLECTION circuit.
- 5. VSM PRESET For setting the values of STANDARD, SOFT and BRIGHT.
(VSM : video status memory)
- 7. CENTER For setting the CENTER ADJUST values of TREBLE and BASS.

3. BASIC OPERATION OF SERVICE MENU

(1) How to enter SERVICE MENU

Press the DISPLAY key and the PICTURE MODE key of the REMOTE CONTROL UNIT simultaneously.

The SERVICE MENU screen of Fig. 1 will be displayed.

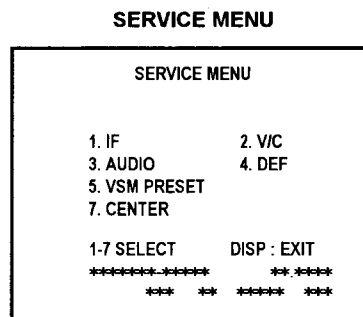


Fig. 1

(2) Selection of SUB MENU SCREEN

Press one of the keys 1 ~ 7 of the REMOTE CONTROL UNIT, and select the SUB MENU SCREEN (See Fig.2) from the SERVICE MENU.

SERVICE MENU → SUB MENU

- 1. IF
- 2. V / C
- 3. AUDIO
- 4. DEF
- 5. VSM PRESET
- 7. CENTER

(3) Method of Setting

- * Once the setting values are set, they are memorized automatically.
- * It must not adjust without signal.

1) 1. IF

[1. VCO]

- ① 1 Key Select 1. IF.
- ② 1 Key Select 1. VCO.(CW)
- ③ The VCO(CW) screen will be displayed in yellow when the AFC voltage is at a certain level and in blue when it is at other levels.
- ④ DISPLAY Key When this is pressed twice, you will return to the SERVICE MENU.

[2. DELAY POINT]

- ① 1 Key Select 1. IF.
- ② 2 Key Select 2. DELAY POINT.
- ③ MENU - / + Key Set (adjust) the setting values of the setting items.
- ④ DISPLAY Key When this is pressed twice, you will return to the SERVICE MENU.

2) 2. V/C / 3. AUDIO / 4.DEF / 5.VSM PRESET and 7.CENTER

- ① 2~7 Keys Select one from 2. V/C, 3.AUDIO, 4.DEF, 5.VSM PRESET and 7.CENTER
- ② MENU Δ / ▽ key Select setting items.
- ③ MENU - / + Key Set (adjust) the setting values of the setting items. (Use the number keys of the REMOTE CONTROL UNIT for setting of WHITE BALANCE AND BLACK OFFSET. For the setting, refer to each item concerned.)
- ④ DISPLAY Key When this is pressed , you will return to the SERVICE MENU.

(4) Release of SERVICE MENU

After completing the setting, return to the SERVICE MENU, then again press the DISPLAY key.

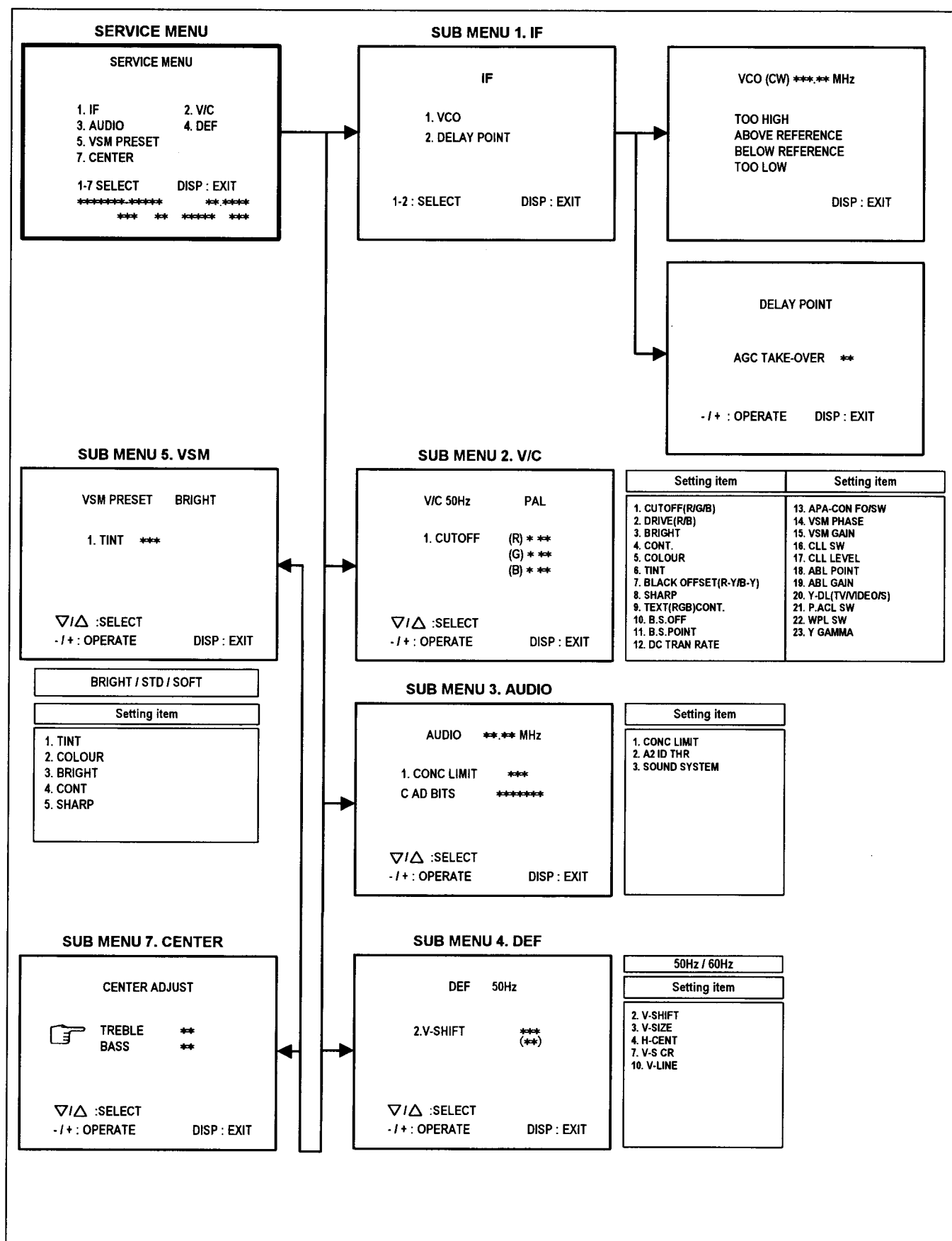
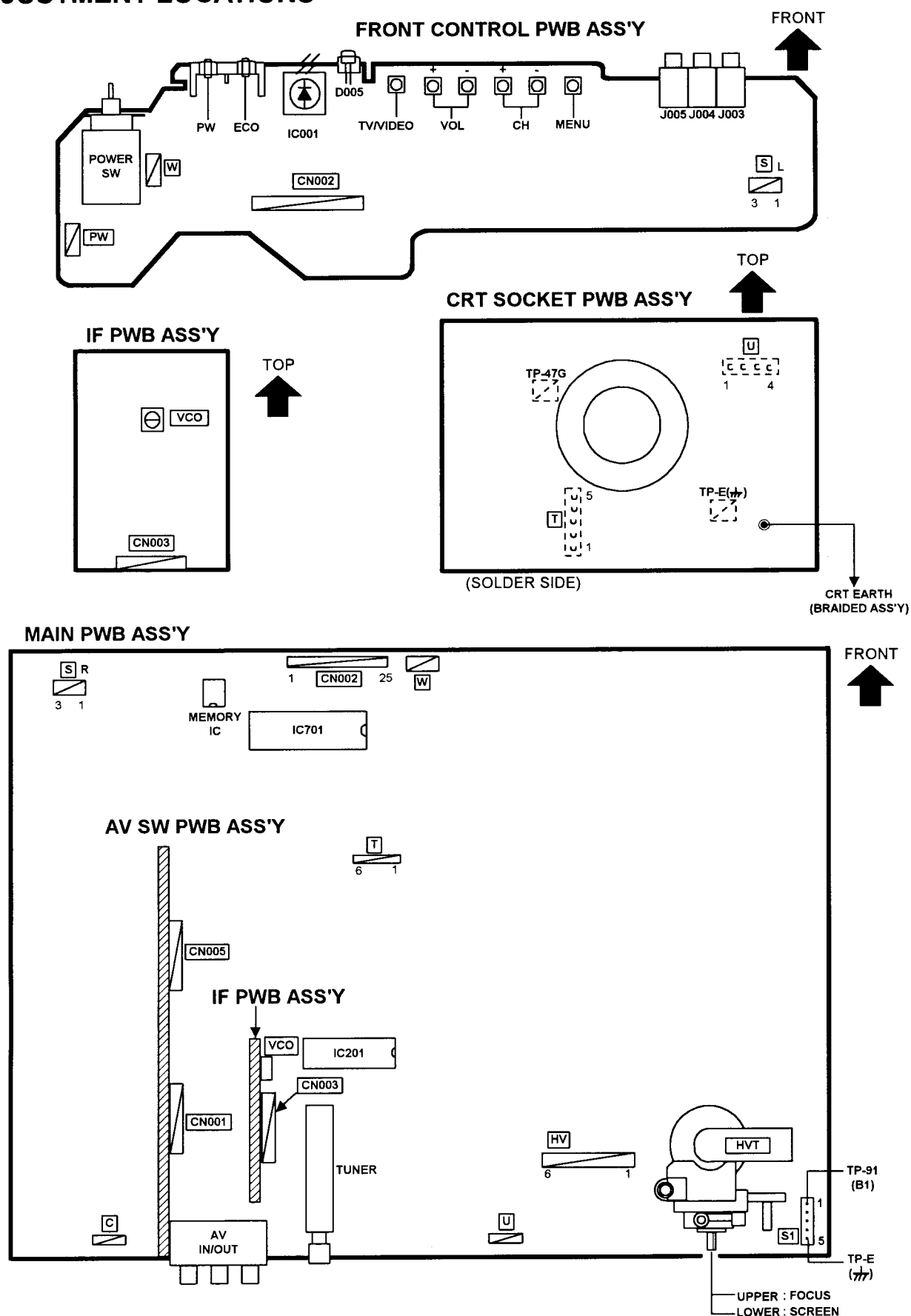


Fig.2

ADJUSTMENT LOCATIONS



ADJUSTMENTS

B1 POWER SUPPLY

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 POWER SUPPLY	Signal generator DC Volt-meter	TP-91 (B1) TP-E (↗)		<ol style="list-style-type: none"> 1. Receive a whole black signal. 2. Connect a DC voltmeter to TP-91(B1) and TP-E (↗). 3. Make sure that the voltage is $DC114.5V \pm 1V$.

FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of FOCUS	Signal generator		FOCUS VR [In HVT]	<ol style="list-style-type: none"> 1. Receive a cross-hatch signal. 2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 3. Make sure that when the screen is darkened, the lines remain in good focus.

IF CIRCUIT ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of VCO(CW)	Remote control unit		VCO(CW) TRANSF. [On IF PWB]	<ul style="list-style-type: none"> Do not make any adjustment unless the adjustment is out of way and you cannot get correct PICTURE. <ol style="list-style-type: none"> 1. Select 1. IF from the SERVICE MENU. 2. Press the 1 key and select 1. VCO. 3. Select a receivable broadcast channel with the CHANNEL key. 4. Turn the core of VCO TRANSF. on IF PWB until the colour of the characters TOO HIGH displayed on the screen changes from blue to yellow. (Step 1) 5. Then slowly turn the core of VCO TRANSF. counter-clockwise until the colour of the characters BELOW REFERENCE changes from blue to yellow. (Step 3) 6. Press the display key three times to return to normal screen. 7. Perform CHANNEL PRESET again, and make sure that each broadcast is being received properly.
<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 60%;"> <p>VCO (CW) ***.*** MHz ← fv</p> <p>TOO HIGH ABOVE REFERENCE BELOW REFERENCE TOO LOW ← YELLOW</p> <p>DISP : EXIT</p> </div>				
Screen display	Step			
	1	2	3	
TOO HIGH	Yellow	→ Blue	→ Blue	
ABOVE REFERENCE	Blue	→ Yellow	→ Blue	
BELOW REFERENCE	Blue	→ Blue	→ Yellow	
TOO LOW	Blue	→	Blue	

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of DELAY POINT (AGC)	Remote control unit		DELAY POINT (AGC TAKE-OVER)	1. Receive a black and white signal (colour off). 2. Select 1. IF from the SERVICE MENU. 3. Select 2. DELAY POINT by pressing the 2 key on the remote control. 4. Adjust the MENU - or + key until video noise disappears. 5. Press the DISPLAY key three times to return to normal screen. 6. Turn to other channels and make sure that there are not irregularities.
Setting (adjustment) item		Variable range	Initial setting value	
DELAY POINT (AGC TAKE-OVER)		0~63	24	

V / C CIRCUIT ADJUSTMENT

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
 The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

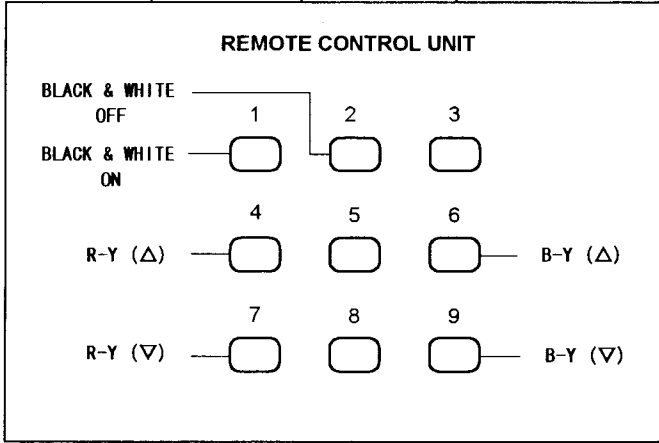
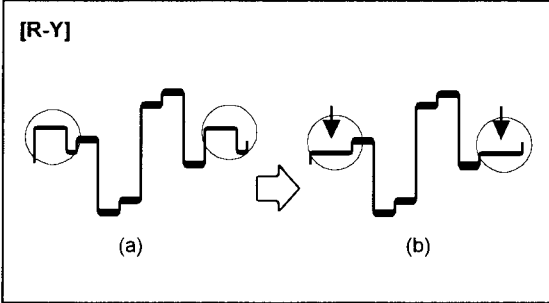
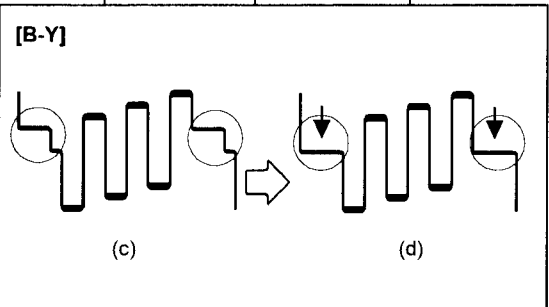
- Do not change the initial setting values of the setting (adjustment) items not listed in "ADJUSTMENT".

Colour system Setting item		Variable range	Initial setting value			
			PAL	SECAM	NTSC 3.58	NTSC 4.43
1. CUT OFF (R / G / B)		-128~+127	0	←	←	←
2. DRIVE (R / B)		-128~+127	0	←	←	←
3. BRIGHT		-128~+128	+2	←	←	←
4. CONT.		-59~+27	-4	←	←	←
5. COLOUR		-60~+68	+7	+3	+14	-2
6. TINT	TV / VIDEO	-66~+61	—	—	+11 / -4	-4 / -4
7. BLACK OFFSET (R-Y / B-Y)		-8~+7	—	+3 / -1	—	—
8. SHARP	TV / VIDEO	-32~+31	-10 / -5	←	←	←
9. TEXT (RGB) CONT.		-128~+77	+30	←	←	←
10. B.S.OFF		0~+1	0	←	←	←
11. B.S.POINT		0~+7	+6	←	←	←
12. DC TRAN RATE		0~+7	+6	←	←	←
13. APA-CON FO/SW		0~+3	+2	←	←	←
14. VSM PHASE		0~+3	+2	←	←	←
15. VSM GAIN		0~+3	+2	←	←	←
16. CLL SW		0~+1	0	←	←	←
17. CLL LEVEL		0~+3	+2	←	←	←
18. ABL POINT		0~+7	+3	←	←	←
19. ABL GAIN		0~+7	+1	←	←	←
20. Y-DL(TV / VIDEO / S)		0~+7	+2 / +4 / +2	+3 / +3 / +4	+4 / +4 / +2	←
21. P.ACL SW		0~+1	+1	←	←	←
22. WPL SW		0~+1	0	←	←	←
23. Y GAMMA		0~+1	0	←	←	←

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE (Low light)	<ul style="list-style-type: none"> Signal generator Remote control unit 		1. CUT OFF (R) CUT OFF (G) CUT OFF (B) SCREEN VR (IN HVT)	<ol style="list-style-type: none"> Receive a black and white signal (colour off). Select 2. V/C from the SERVICE MENU. Select 1. CUT OFF (R), (G) and (B) with MENU ∇/Δ, and set each value to 0 with MENU - / +. Press the 1 key of the remote control unit to produce a single horizontal line. Turn the SCREEN VR fully counter-clockwise, then slowly turn it clockwise to where a red, blue and green colour is faintly visible. Use keys 4~9 of the remote control unit and adjust the other 2 colours to where the single horizontal line appears white. Turn the SCREEN VR to where the single horizontal line glows faintly. Press the 2 key to return to 1. CUT OFF screen. Press the DISPLAY key twice to return to the normal screen.
<div style="text-align: center;"> <p>V/C 50Hz PAL</p> <p>1. CUTOFF (R) *** (G) *** (B) ***</p> <p>∇/Δ :SELECT - / + : OPERATE DISP : EXIT</p> </div>				
<div style="text-align: center;"> <p>REMOTE CONTROL UNIT</p> </div>				
Adjustment of WHITE BALANCE (High light)	<ul style="list-style-type: none"> Signal generator Remote control unit 		2. DRIVE (R) DRIVE (B)	<ol style="list-style-type: none"> Receive a black and white signal (colour off). Select 2. V/C from the SERVICE MENU. Select 2. DRIVE (R) / (B) with MENU ∇/Δ, and set each value to 0 with MENU - / +. Use the keys 4 and 7 or 6 and 9 to produce a white screen. Press the DISPLAY key twice to return to the normal screen.
<div style="text-align: center;"> <p>V/C 50Hz PAL</p> <p>2. DRIVE (R) *** (B) ***</p> <p>∇/Δ :SELECT - / + : OPERATE DISP : EXIT</p> </div>				

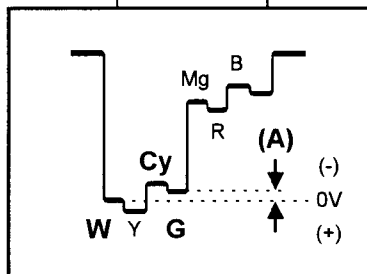
Setting (Adjustment) item	Variable range	Initial setting value
1. CUT OFF	R	-128~+127
	G	-128~+127
	B	-128~+127

Setting (Adjustment) item	Variable range	Initial setting value
2. DRIVE	R	-128~+127
	B	-128~+127

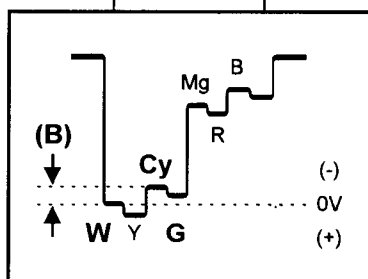
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of BLACK OFFSET- I (SECAM)	● Remote control unit		7. BLACK OFFSET (R-Y) (B-Y)	<p>[Method of adjustment without measuring instrument]</p> <ol style="list-style-type: none"> 1. Receive a SECAM broadcast. 2. Select 2. V/C from SERVICE MENU. 3. Select 7. BLACK OFFSET with the MENU ▽ / △ key. 4. Set the initial setting value for BLACK OFFSET (R-Y) and (B-Y) with 4 and 7 or 6 and 9 keys of the remote control. 5. If the picture is not the best with the initial setting value, make fine adjustment until you get the best picture. 6. Press the DISPLAY key twice to return to the normal screen.
				<p>REMOTE CONTROL UNIT</p> 
Adjustment of BLACK OFFSET- II (SECAM)	● Signal generator ● Oscilloscope ● Remote control unit	35 PIN (R-Y) 36 PIN (B-Y) IC 201 OF MAIN PWB	7. BLACK OFFSET (R-Y) (B-Y)	<p>[Method of adjustment using measuring instrument]</p> <ol style="list-style-type: none"> 1. Receive a SECAM COLOUR bar signal (full field colour bar 75% white). 2. Select 2. V/C from SERVICE MENU. 3. Select 7. BLACK OFFSET with the ▽ / △ key. 4. Connect the oscilloscope between 35 pin of IC 201 and TP-E. 5. By using 4 and 7 keys of the remote control, adjust the BLACK OFFSET (R-Y) so that it becomes the waveform changes from (a) to (b) shown in the figure. 6. Connect the oscilloscope between 36 pin of IC 201 and TP-E. 7. By using 6 and 9 keys of the remote control, adjust the BLACK OFFSET (B-Y) so that it becomes the waveform changes from (c) to (d) shown in the figure. 8. If the picture is not the best with the adjusted picture, make fine adjustment until you get the best picture. 9. Press the DISPLAY key twice to return to the normal screen.
				<p>[R-Y]</p>  <p>[B-Y]</p> 

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB BRIGHT	● Remote control unit		3. BRIGHT	<ol style="list-style-type: none"> 1. Receive any broadcast. 2. Select 2. V/C from SERVICE MENU. 3. Select 3. BRIGHT with the MENU ▽ / △ key. 4. Set the initial setting value with the MENU - or + key. 5. If the brightness is not the best with the initial set value, make fine adjustment until you get the best brightness. 6. Press the DISPLAY key twice to return to the normal screen.
Adjustment of SUB CONT.	● Remote control unit		4. CONT.	<ol style="list-style-type: none"> 1. Receive any broadcast. 2. Select 2. V/C from SERVICE MENU. 3. Select 4. CONT. with the MENU ▽ / △ key. 4. Set the initial setting value with the MENU - or + key. 5. If the contrast is not the best with the initial set value, make fine adjustment until you get the best contrast. 6. Press the DISPLAY key twice to return to the normal screen.
Adjustment of SUB COLOUR I	● Remote control unit		5. COLOUR	[Method of adjustment without measuring instrmnt]
			PAL COLOUR	(PAL COLOUR) <ol style="list-style-type: none"> 1. Receive a PAL broadcast. 2. Select 2. V/C from the SERVICE MENU. 3. Select 5. COLOUR with the MENU △ / ▽ key. 4. Set the initial setting value for PAL COLOUR with the MENU - or + key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. 6. Press the DISPLAY key twice to return to the normal screen.
			SECAM COLOUR	(SECAM COLOUR) <ol style="list-style-type: none"> 1. Receive a SECAM broadcast. Make fine adjustment of SECAM COLOUR as previously.
			NTSC 3.58 COLOUR	(NTSC 3.58 COLOUR) <ol style="list-style-type: none"> 1. Receive a NTSC 3.58MHz broadcast. 2. Make similar fine adjustment of NTSC 3.58 COLOUR as previously.
				(NTSC 4.43 COLOUR) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR- II	<ul style="list-style-type: none"> ● Signal generator ● Oscilloscope ● Remote control unit 	TP-47G TP-E (↗) [CRT SOCKET PWB]	5. COLOUR	[Method of adjustment using measuring instrument]
			PAL COLOUR	(PAL COLOUR) 1. Receive a PAL full field colour bar signal (75% white). 2. Select 2. V/C from SERVICE MENU. 3. Select 5. COLOUR with the MENU ▽ / △ key. 4. Set the initial setting value of PAL COLOUR with the MENU - or + key. 5. Connect the oscilloscope between TP-47G and TP-E. 6. Adjust PAL COLOUR and bring the value of (A) in the illustration to +8V (W & G).
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM full field colour bar signal (75% white). 2. Set the initial setting value of SECAM COLOUR with the MENU - or + key. 3. Adjust SECAM COLOUR and bring the value of (A) in the illustration to +7V (W & G).
			NTSC 3.58 COLOUR	(NTSC 3.58 COLOUR) 1. Receive a NTSC 3.58 full field colour bar signal (75% white). 2. Set the initial setting value of NTSC 3.58 COLOUR with the MENU - or + key. 3. Adjust NTSC 3.58 COLOUR and bring the value of (A) in the illustration to +13V (W & G).
				(NTSC 4.43 COLOUR) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB TINT- I	● Remote control unit		6. TINT	[Method of adjustment without measuring instrument]
			NTSC 3.58 TINT	(NTSC 3.58 TINT) 1. Receive a NTSC 3.58 full field colour bar signal (75% white). 2. Select 2. V/C from SERVICE MENU. 3. Select 6. TINT with the MENU ▽ / △ key. 4. Set the initial setting value of NTSC 3.58 with the MENU - or + key. 5. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint. 6. Press the DISPLAY key twice to return to the normal screen.
				(NTSC 4.43 COLOUR) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.
Adjustment of SUB TINT- II	● Signal generator ● Oscilloscope ● Remote control unit	TP-47G TP-E (⚡) [CRT SOCKET PWB]	6. TINT	[Method of adjustment using measuring instrument]
			NTSC 3.58 TINT	(NTSC 3.58 TINT) 1. Receive a NTSC 3.58 full field colour bar signal (75% white). 2. Select 2. V/C from SERVICE MENU. 3. Select 6. TINT with the MENU ▽ / △ key. 4. Set the initial setting value of NTSC 3.58 with the MENU - or + key. 5. Connect the oscilloscope between TP-47G and TP-E. 6. Adjust NTSC 3.58 TINT to bring the value of (B) in the illustration to +11V (W & Cy).
				(NTSC 4.43 TINT) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



DEFLECTION CIRCUIT ADJUSTMENT

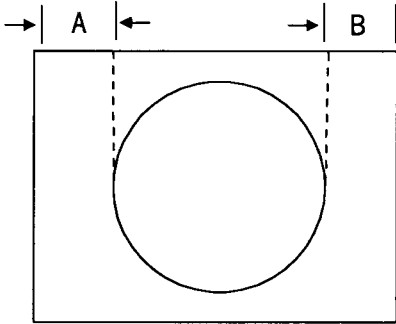
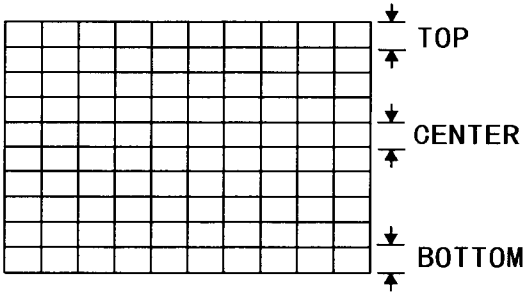
- There are 2 modes of adjustment ----- ① 50Hz mode and ② 60Hz mode ----- depending upon the kind of signals (VERTICAL FREQUENCY 50Hz / 60Hz).
- When adjusted in mode ①, mode ② will be automatically set.

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

Setting item	Adjustment name	Variable range	Initial setting value	
			① 50Hz	② 60Hz
2. V-SHIFT [Fixed]	Vertical center	-32 ~ +31	0 [Fixed]	0 [Fixed]
3. V-SIZE	Vertical hight	-64 ~ +63	-16	-3
4. H-CENT	Horizontal center	-16 ~ +15	-9	-6
7. V-S.CR	Vertical hight correction	-64 ~ +63	-16	-17
10.V-LIN	Vertical linearity	-16 ~ +15	+2	-3

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of V-SIZE			3.V-SIZE	<p>[① 50Hz mode]</p> <ol style="list-style-type: none"> Receive a cross-hatch signal. Select 4. DEF from SERVICE MENU. Select 3. V-SIZE with the MENU ∇ / Δ key. Set the initial setting value of 3. V-SIZE with the MENU - / + key. Adjust 3. V-SIZE and make the vertical screen size 92% of the picture size.

The diagram illustrates the adjustment of V-SIZE. It shows a 10x10 grid of squares. A dashed rectangle outlines the entire grid, labeled 'Picture size 100%'. Inside this, a solid rectangle covers 92% of the grid's height and width, labeled 'Screen size 92%'. Arrows indicate the vertical and horizontal dimensions for both the screen and the picture area.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of H-CENTER			4.H-CENT	<p>6. Receive a circle pattern signal</p> <p>7. Select 4. H- CENT with the MENU Δ / ∇ key.</p> <p>8. Set the initial setting value of 4. H- CENT with the MENU - / + key.</p> <p>9. Adjust 4. H- CENT to make A=B with the MENU - / + key.</p>
				
Adjustment of V-S.CR & V.LINE			7.V-S.CR 10.V.LINE	<ul style="list-style-type: none"> When the vertical linearity has been deteriorated remarkably. <p>10. Receive a cross-hatch signal.</p> <p>11. Select 7. V-S.CR with the MENU ∇ / Δ key.</p> <p>12. Set the initial setting value of 7. V-S.CR with the MENU - / + key.</p> <p>13. Select 10. V. LINE. with the MENU ∇ / Δ key.</p> <p>14. Set the initial setting value of 10. V. LINE. with the MENU - / + key.</p> <p>15. Adjust 7. V-S.CR and 10. V.LINE so that the spaces of each line on TOP, CENTER, and BOTTOM become uniform.</p>
				
				<p>16. Make sure that the adjustment is properly done on the screen of ② 60Hz mode.</p> <ul style="list-style-type: none"> When adjust in ② 60Hz mode, only 60Hz mode is adjust.

VSM PRESET ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description																								
Setting of VSM PRESET	● Remote control unit		1. TINT 2. COLOUR 3. BRIGHT 4. CONT. 5. SHARP	(VSM PRESET) 1. Select 5. VSM PRESET from the SERVICE MENU. 2. Select BRIGHT with the PICTURE MODE key. 3. Adjust the MENU Δ / ∇ and MENU - or + key to bring the set values of 1. TINT ~ 5. SHARP to the values shown in the table. 4. Respectively select the VSM PRESET mode for SOFT, and STANDARD, and make similar adjustment as in 3 above.																								
SUB MENU 5. VSM																												
<div><div>VSM PRESET BRIGHT</div><div>1. TINT ***</div><div>∇ / Δ :SELECT - / + : OPERATE DISP : EXIT</div></div>				<table><tr><th>VSM preset mode VSM Setting item</th><th>BRIGHT</th><th>STANDARD</th><th>SOFT</th></tr><tr><td>1. TINT SETTING VALUE</td><td>0</td><td>0</td><td>0</td></tr><tr><td>2. COLOUR SETTING VALUE</td><td>0</td><td>0</td><td>0</td></tr><tr><td>3. BRIGHT SETTING VALUE</td><td>0</td><td>0</td><td>0</td></tr><tr><td>4. CONT. SETTING VALUE</td><td>+15</td><td>+4</td><td>-4</td></tr><tr><td>5. SHARP SETTING VALUE</td><td>0</td><td>0</td><td>-3</td></tr></table>	VSM preset mode VSM Setting item	BRIGHT	STANDARD	SOFT	1. TINT SETTING VALUE	0	0	0	2. COLOUR SETTING VALUE	0	0	0	3. BRIGHT SETTING VALUE	0	0	0	4. CONT. SETTING VALUE	+15	+4	-4	5. SHARP SETTING VALUE	0	0	-3
VSM preset mode VSM Setting item	BRIGHT	STANDARD	SOFT																									
1. TINT SETTING VALUE	0	0	0																									
2. COLOUR SETTING VALUE	0	0	0																									
3. BRIGHT SETTING VALUE	0	0	0																									
4. CONT. SETTING VALUE	+15	+4	-4																									
5. SHARP SETTING VALUE	0	0	-3																									
				SETTING VALUE OF VSM PRESET																								

AUDIO ADJUSTMENT

- Do not touch 3.AUDIO(1. CONC LIMIT, 2. A2 ID THR, 3. SOUND SYSTEM) of the SERVICE MENU as it requires no adjustment.

3. AUDIO

Setting (adjustment) item	Variable range	Initial setting value (fixed)
1. CONC LIMIT <i>(Do not adjust)</i>	00H~FFH	0AH
2. A2 ID THR <i>(Do not adjust)</i>	00H~FFH	14H
3. SOUND SYSTEM <i>(Do not adjust)</i>	—	—

CENTER ADJUSTMENT

- Do not touch 7.CENTER(TREBLE, BASS) of the SERVICE MENU as it requires no adjustment.

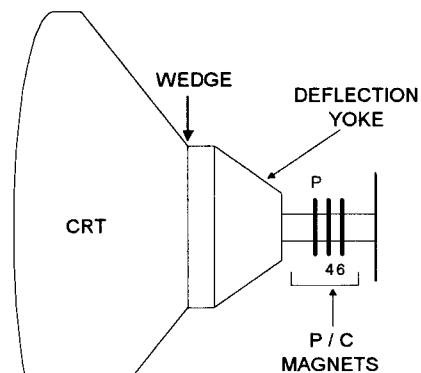
7. CENTER

Setting (adjustment) item	Initial setting value (fixed)
TREBLE <i>(Do not adjust)</i>	0
BASS <i>(Do not adjust)</i>	0

PURITY, CONVERGENCE

PURITY ADJUSTMENT

1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a crosshatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• P/C MAGNETS

P : PURITY MAGNET
 4 : 4 POLES (convergence magnets)
 6 : 6 POLES (convergence magnets)

Fig.1

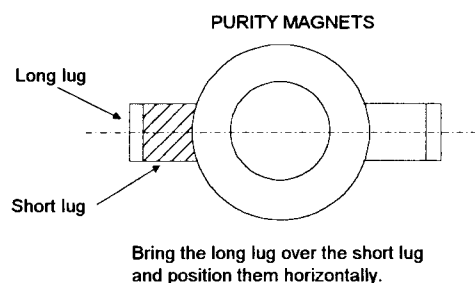


Fig.2

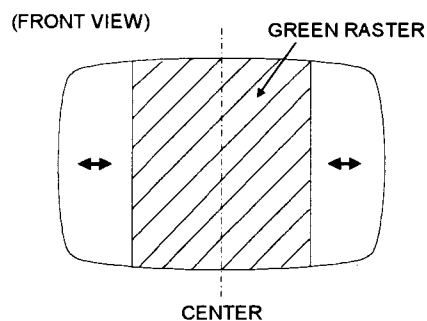
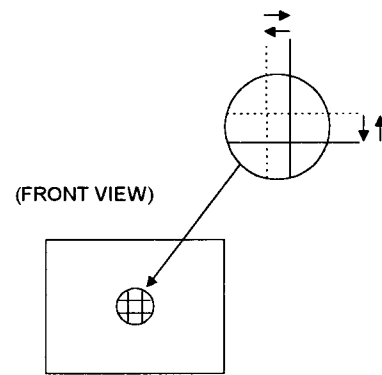


Fig.3

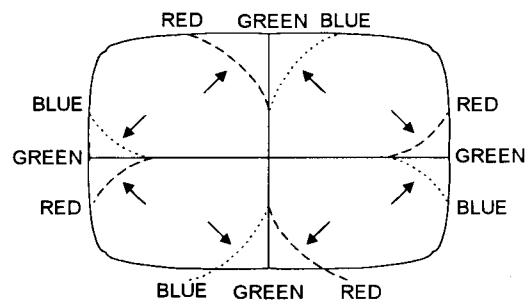
STATIC CONVERGENCE ADJUSTMENT

1. Input a crosshatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta (red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

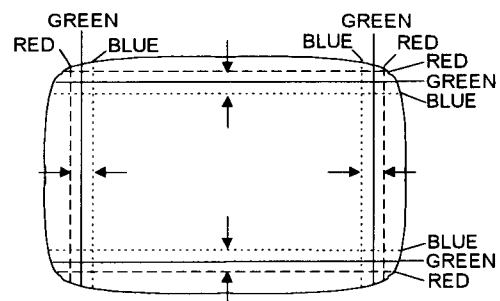
**Fig.1****DYNAMIC CONVERGENCE ADJUSTMENT**

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
3. Repeat 1 and 2 above, and make best convergence.

(FRONT VIEW)

**Fig.2**

(FRONT VIEW)

**Fig.3**

- After adjustment, fix the wedge at the original position.
Fasten the retainer screw of the deflection yoke.
Fix the 6 magnets with glue.

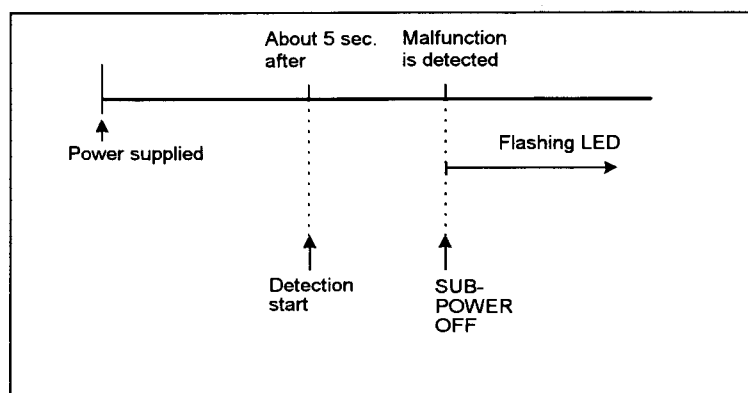
SELF CHECK FUNCTIONS

1. Outline

This model has self check functions for over-current and CRT NECK protection. When an abnormality has been detected, the SUB POWER is turned off and the ECO LED turns on and off to inform of the failure. An abnormality is detected by the signal input state of the control line connected to the main microcomputer.

2. Self check indicating function

When an abnormality has been detected at about five seconds after the power is turned on, the SUB POWER is turned off immediately and the ECO LED turns on and off.



[Indication by ECO LED]

Item	LED ON / OFF intervals	Priority detection
① Over-current protection	Turning on and off 0.2 -second intervals	1
② CRT NECK protection	Turning on and off 1 -second intervals	2

NOTE : In case of ① + ②, the item ① is indicated.

3. Self check items

Check item	Details of detection	Method of detection	State of abnormality
Over-current protection	An over-current on the low B line is detected.	The main microcomputer detects the possible abnormality at 30-msec. intervals and judges the results in every 16 time. Of the 16 times, if NG is detected more than 9 times, it is judged that there is an abnormality	When an abnormality has been detected, the SUB-POWER is turned off. While the SUB-POWER is being turned off, the power key of the remote controller is not operational until the power code is taken out and put in again.
CRT NECK protection	Operation of CRT NECK protection circuit.	DITTO	DITTO

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

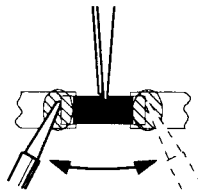
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

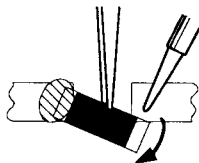
1. How to remove Chip parts

◆ Resistors, capacitors, etc.

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

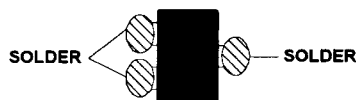


- (2) Shift with tweezers and remove the chip part.

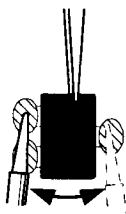


◆ Transistors, diodes, variable resistors, etc.

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

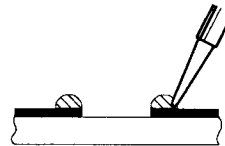


Note : After removing the part, remove remaining solder from the pattern.

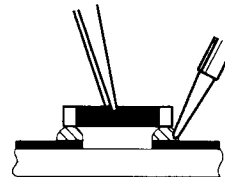
2. How to install Chip parts

◆ Resistors, capacitors, etc.

- (1) Apply solder to the pattern as indicated in the figure.

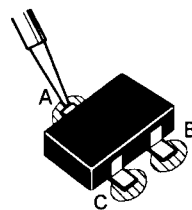


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

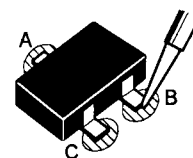


◆ Transistors, diodes, variable resistors, etc.

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead A as indicated in the figure.



- (4) Then solder leads B and C.



AV-2550TEE STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the Δ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1) Input signal : PAL Colour bar signal
 - (2) Setting positions of each knob/button and variable resistor : Original setting position when shipped
 - (3) Internal resistance of tester : DC 20k Ω /V
 - (4) Oscilloscope sweeping time : H \Rightarrow 20 μ S/div
: V \Rightarrow 5mS/div
: Others \Rightarrow Sweeping time is specified
 - (5) Voltage values : All DC voltage values
- * Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3. INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209 \rightarrow R209

4. INDICATIONS ON THE CIRCUIT DIAGRAM

(1) Resistors

● Resistance value

- No unit : [Ω]
- K : [K Ω]
- M : [M Ω]

● Rated allowable power

- No indication : 1/6[W]
- Others : As specified

● Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflamable resistor
- FR : Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2) Capacitors

● Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

● Withstand voltage

- No indication : DC50[V]
- Others : DC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]: Capacitance value [μ F]/withstand voltage[V]




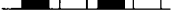
● Type

- No indication : Ceramic capacitor
- MY : Mylar capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3) Coils



- No unit : [μ H]
- Others : As specified

(4) Power Supply



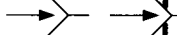
-  : B1
-  : B2(12V)
-  : 9V
-  : 5V

* Respective voltage values are indicated





(5) Test point

-  : Test point
-  : Only test point display

(6) Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

(7) Ground symbol

-  : LIVE side ground
-  : ISOLATED(NEUTRAL) side ground
-  : EARTH ground
-  : DIGITAL ground

5. NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (\perp) side GND and the ISOLATED(NEUTRAL) : (\perp) side GND. Therefore, care must be taken for the following points.

- (1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

CONTENTS

SEMICONDUCTOR SHAPES 2-2

BLOCK DIAGRAM 2-3

CIRCUIT DIAGRAMS

MAIN PWB & DEG PWB CIRCUIT DIAGRAM 2-5

AV SW PWB CIRCUIT DIAGRAM 2-7

IF PWB CIRCUIT DIAGRAM 2-9

FRONT CONTROL PWB CIRCUIT DIAGRAM 2-11

CRT SOCKET PWB CIRCUIT DIAGRAM 2-12

PATTERN DIAGRAMS

MAIN PWB PATTERN [SCM-1009A-H2] 2-13

AV SW PWB PATTERN [SCM0Y006A-H2] 2-15

FRONT CONTROL PWB PATTERN [SCM-8003A-H2] 2-17

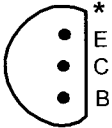

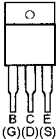
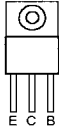

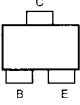
CRT SOCKET PWB PATTERN [SCM-3005A-H2] 2-18

IF PWB PATTERN [SCM0F002A-H2] 2-19

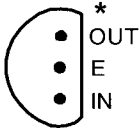
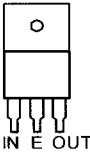
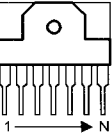
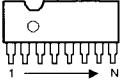
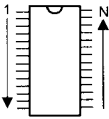
DEG PWB PATTERN [SCM-9501A-H2] 2-20

SEMICONDUCTOR SHAPES

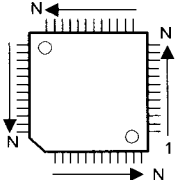
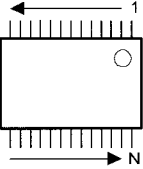
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					

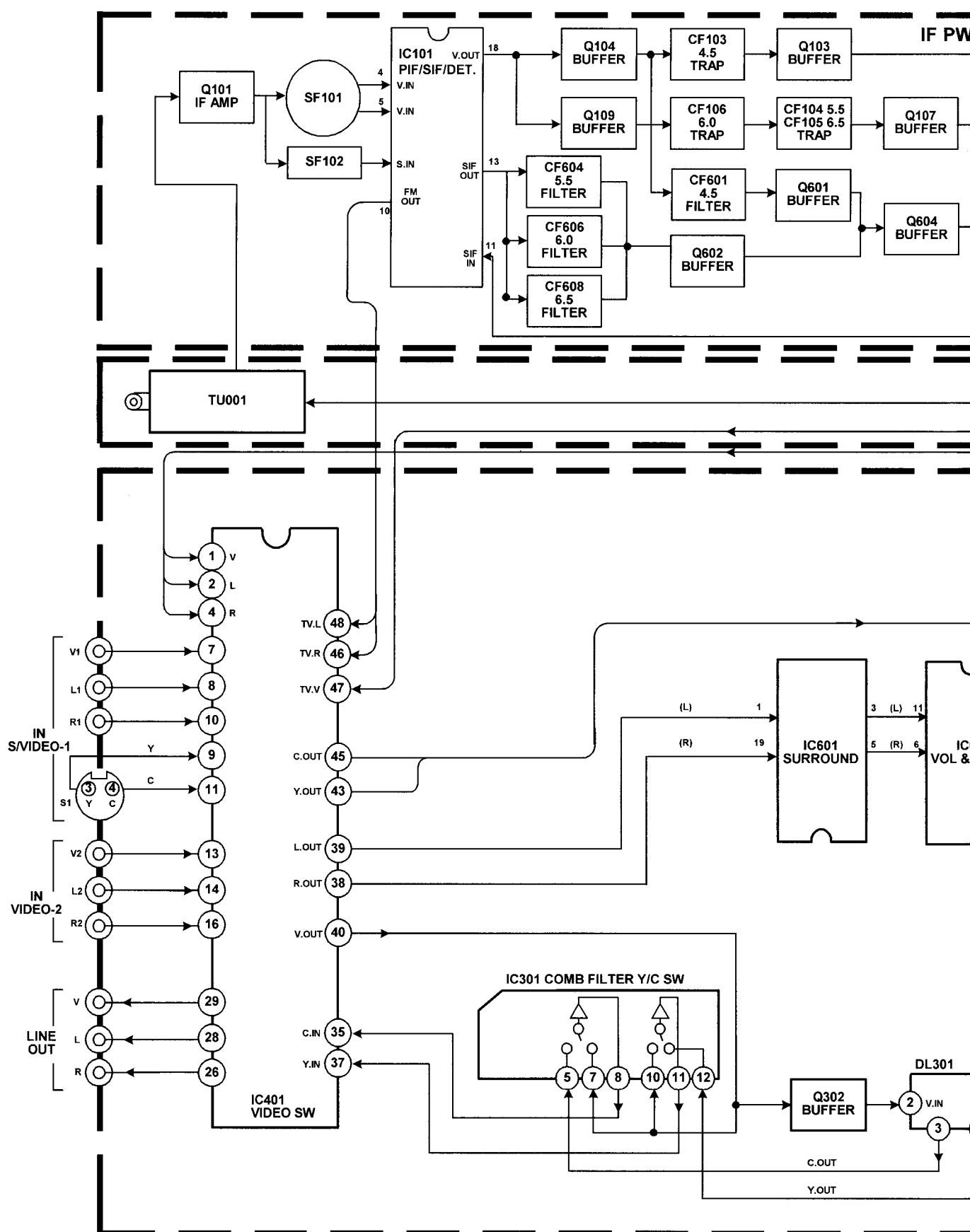
IC

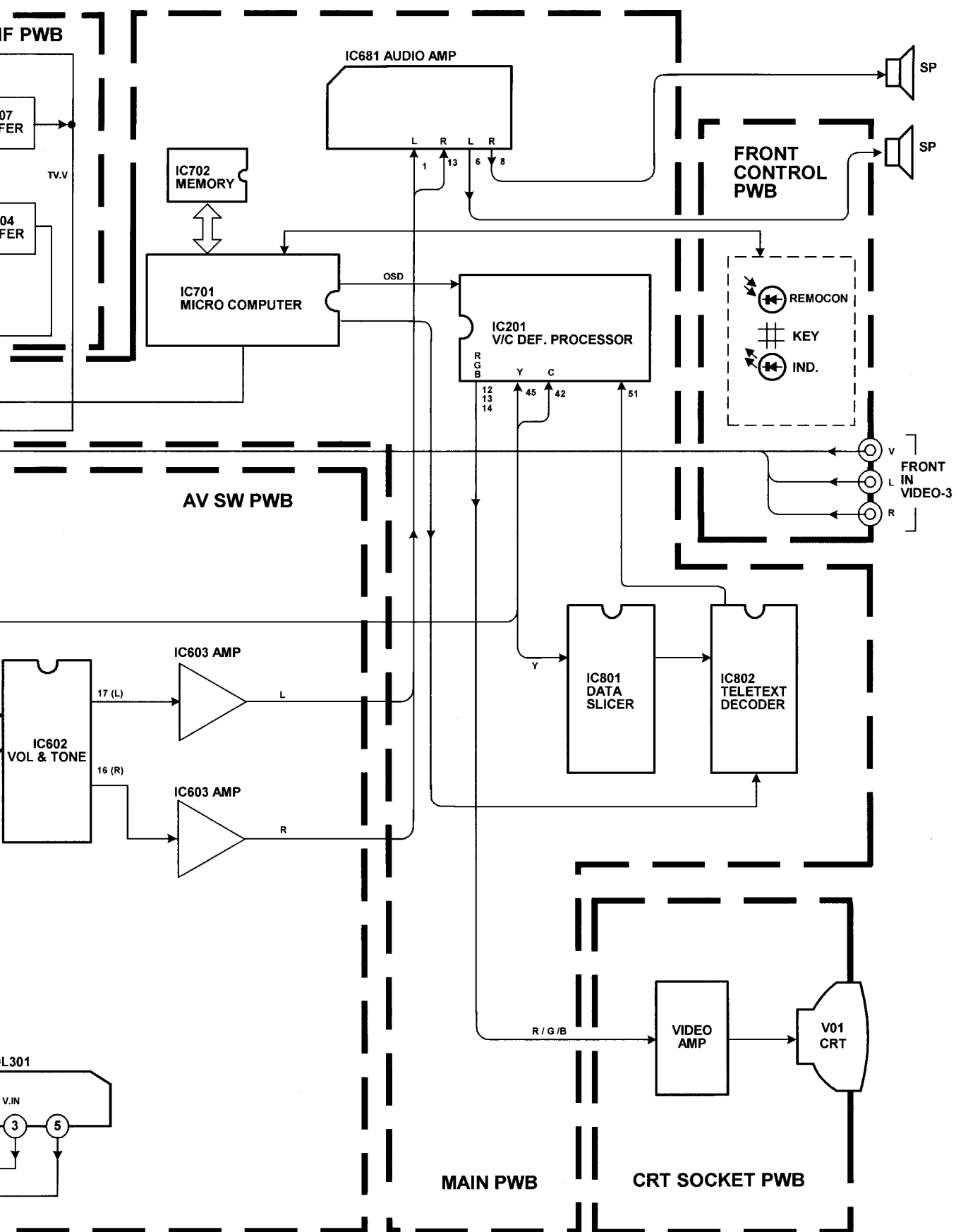
BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

TOP VIEW		
		

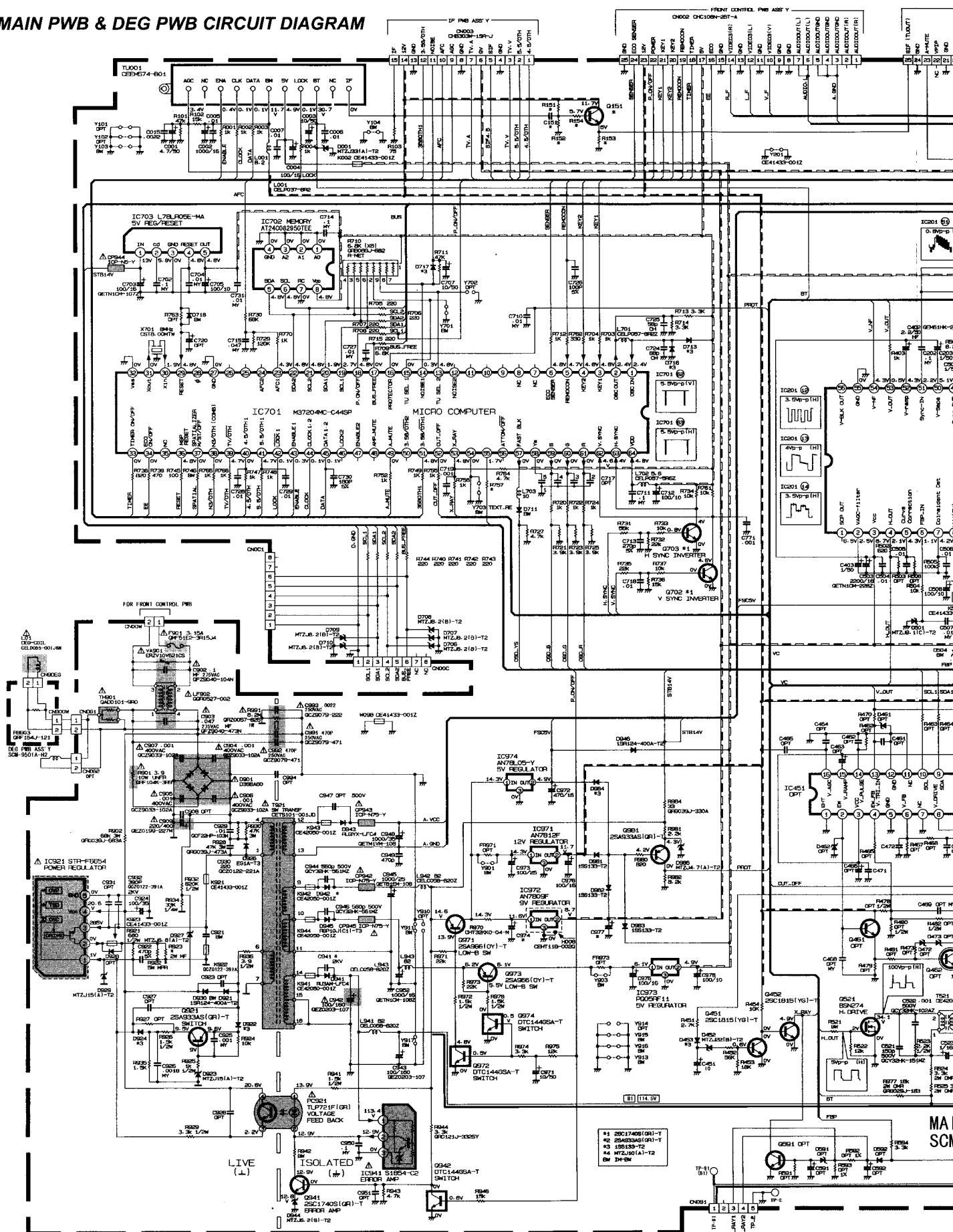
BLOCK DIAGRAM





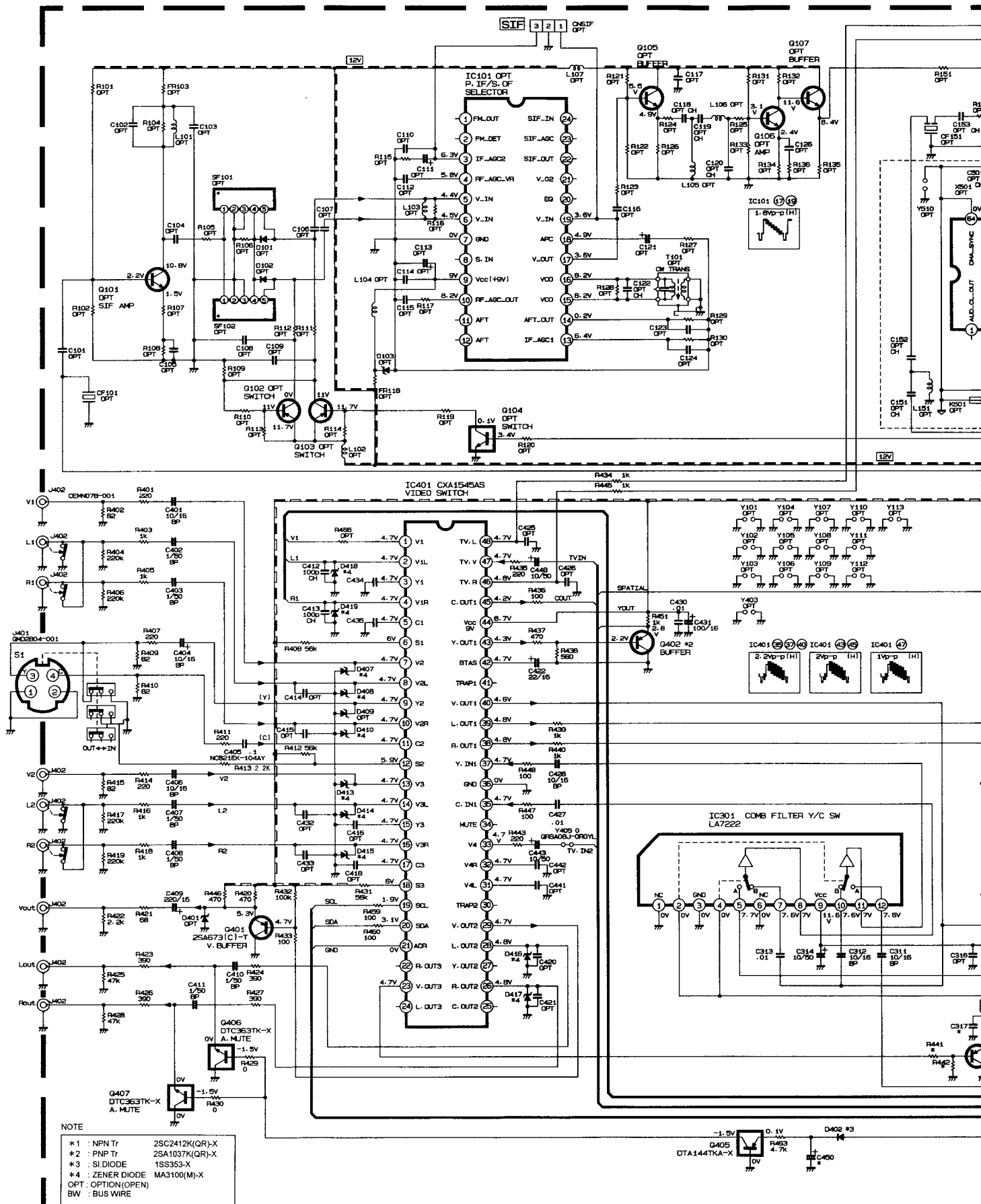
CIRCUIT DIAGRAMS AND PATTERN DIAGRAM

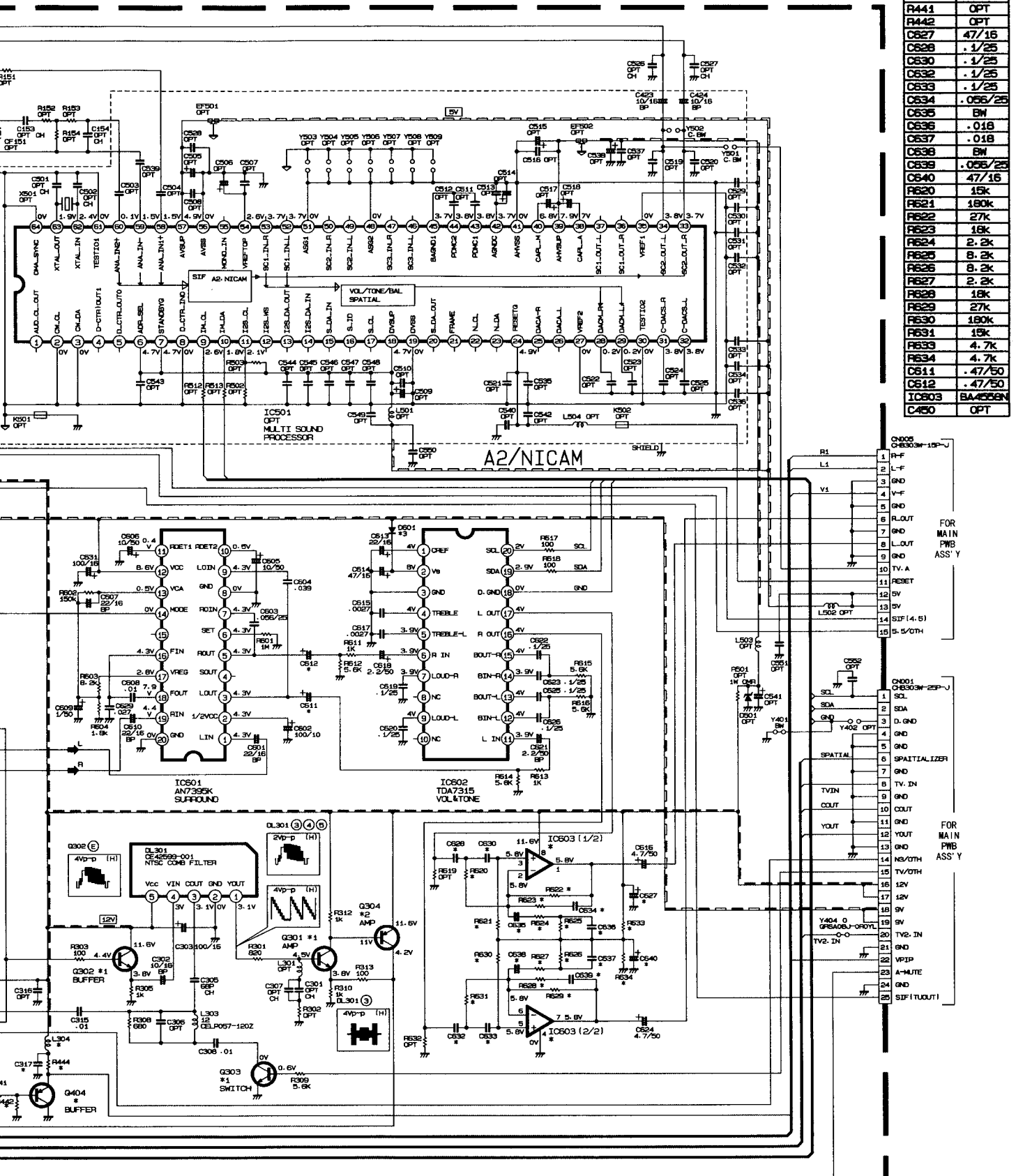
MAIN PWB & DEG PWB CIRCUIT DIAGRAM



* Q151	* SCM-1008A-H2	* IC801	* SCM-1008A-H2
Q151	OPT	IC801	CF 72301
Q151	OPT	IC802	CF 72301
R11	OPT	Q801	1
R152	OPT	Q802	1
R153	OPT	Q801	47/16
R154	OPT	Q802	330p/5
R433	4.7 1/2W	Q803	.01
L522	CS 1009 -005	Q904	270P/5
L551	CS 1009 -048.6	Q905	15P/3
Y522	QF20125 -004	Q907	100/10
Q523	QF20125 -121	Q909	OPT
R527	QF20125 -121	Q811	100/10
R562	1.5K	Q811	.01
R562	5.2K	Q813	.01
R563	12K	Q815	.01
Q524	QF20117 -200.4	Q815	1 M
Q565	QF20117 -200.4	Q816	.01
Q527	QF20119 -200.4	Q817	.01
Q528	1.7/250	Q818	.01
C313	1/50	Q801	470
C314	1/50	Q803	3.9K
C315	1/50	Q804	10K
C317	47p/5K	Q805	1K
R314	10K	Q806	1.5K
R315	10K	R307	33K
R316	100	R308	1.6K
R317	100	R309	180
R318	1K	R310	1.2K
R319	33K	R311	180
Y305	OPT	R312	1.6K
Y943	5W	R313	180
R322	QF20125 -122	R314	1.2K
R322	QF20125 -122	R315	560
R323	QF20125 -122	R316	1.2K
R444	1.5K 1/2W	R317	1.2K
R445	1.5K 1/2W	X801	DE4143 -0012
R757	1K	X802	DE4143 -0012
C971	QF20122 -391U	Y801	5W
R524	QF20125 -122	X801	DE4143 -0012
R525	QF20125 -122		
Q926	CS 1013 -005		
C977	QF20122 -391U		
C974	100/25		
C207	100/25		
C208	100/16		
D942	RLJ50Y		

AV SW PWB CIRCUIT DIAGRAM





AV SW PWB ASS'Y
SCM0Y006A-H2

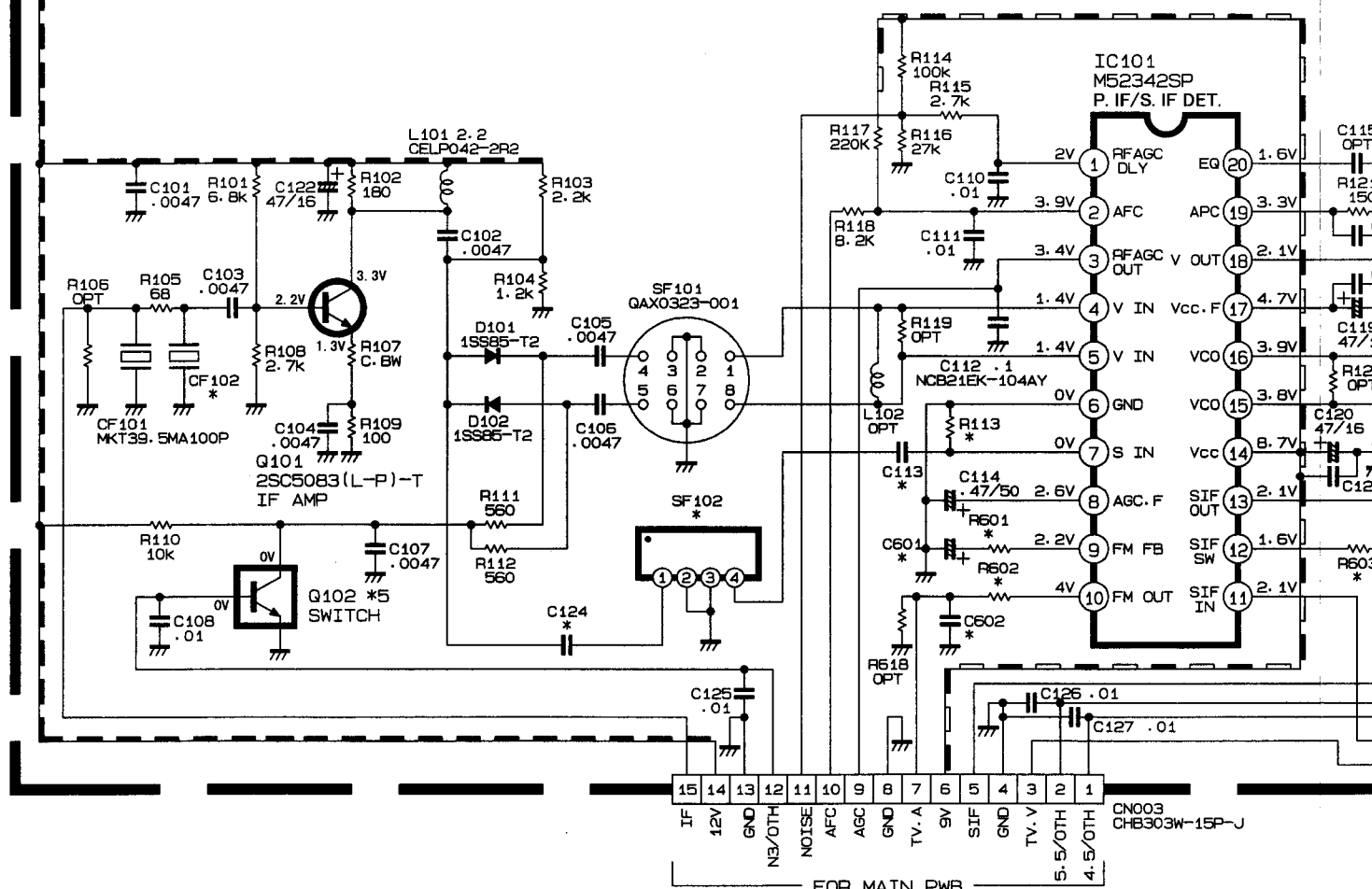
SCM	0Y006A-H2
L304	OPT
C317	OPT
R444	OPT
Q404	OPT
R441	OPT
R442	OPT
C627	47/16
C628	1/25
C630	1/25
C632	1/25
C633	1/25
C634	.056/25
C635	BW
C636	.018
C637	.018
C638	BW
C639	.056/25
C640	47/16
R620	15k
R621	180k
R622	27k
R623	18k
R624	2.2k
R625	8.2k
R626	8.2k
R627	2.2k
R628	18k
R629	27k
R630	180k
R631	18k
R633	4.7k
R634	4.7k
C611	.47/50
C612	.47/50
IC603	BA4558N
C450	OPT

IF PWB CIRCUIT DIAGRAM

REFERENCE LIST (*PARTS)

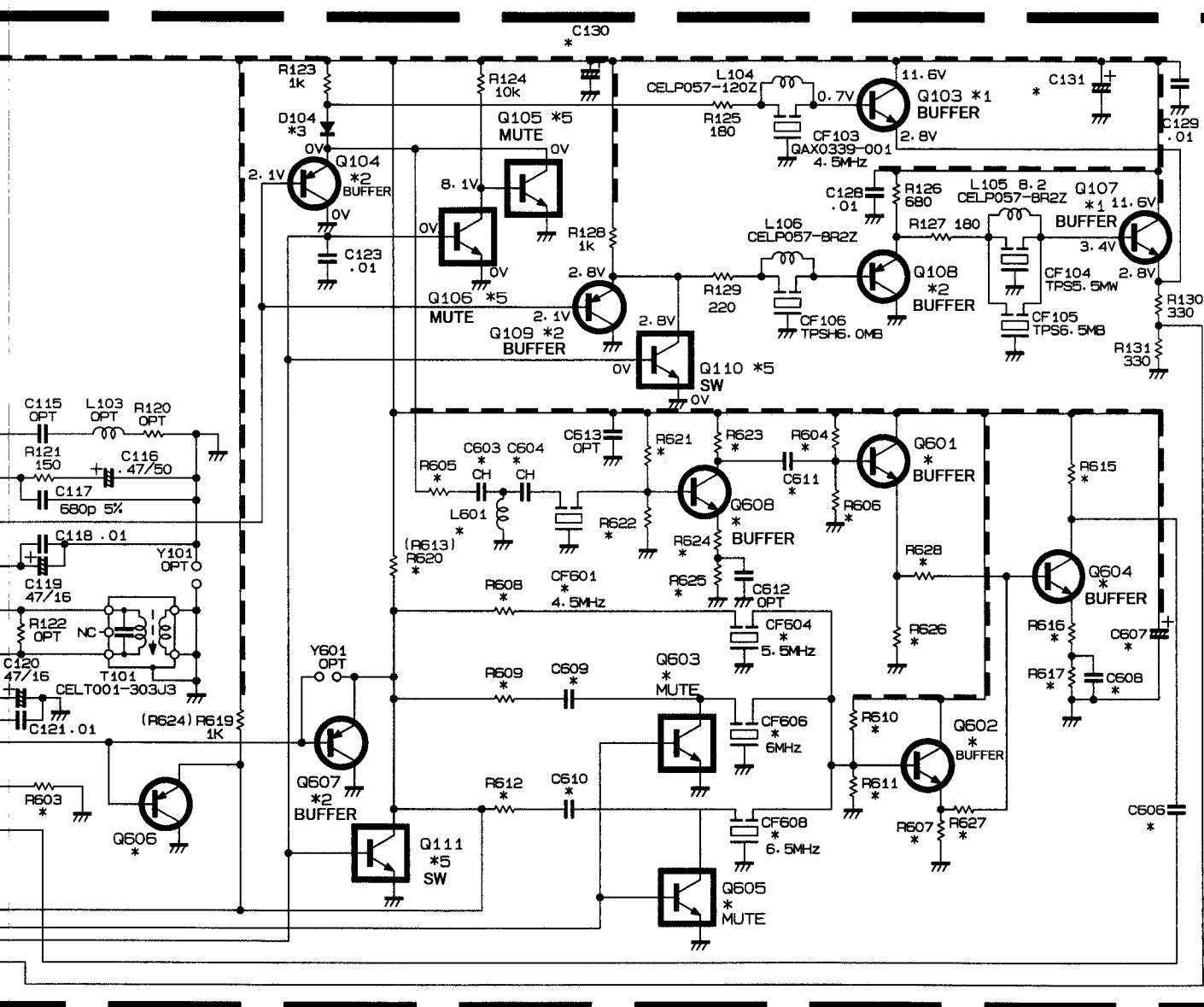
SCM OF002A-H2	SCM OF002A-H2	SCM OF002A-H2	SCM OF002A-H2
C113 .01	CF601 SFS4.5	R601 2.2k	R621 39k
C124 .01	MOB	R602 3.3k	R622 10k
CF102 GAX0358	GAX0336	R603 10k	R623 390
-001	-001	R604 2.2k	R624 100
Q111 *5	CF606 GAX0337	R605 220	R625 560
R113 OPT	-001	R606 1.5k	R626 1.8k
SF102 GAX0325	CF608 GAX0338	R607 1.8k	R627 560
-001	-001	R608 560	R628 560
C601 10/50	L601 CELP057	R609 470	C130 100/16
C602 .022	-120Z	R610 2.2k	C131 100/16
C603 47p	Q601 *1	R611 1.5k	
C604 47p	Q602 *1	R612 470	
C606 .01	Q603 *5	R615 180	
C607 100/16	Q604 *1	R616 22	
C608 .01	Q605 *5	R617 820	
C609 .01	Q606 OPT	R619 OPT	
C610 .01	Q608 *1	R620 1k	
C611 .01			
C612 .01			

IF PWB ASS'Y
SCM0F002A-H2

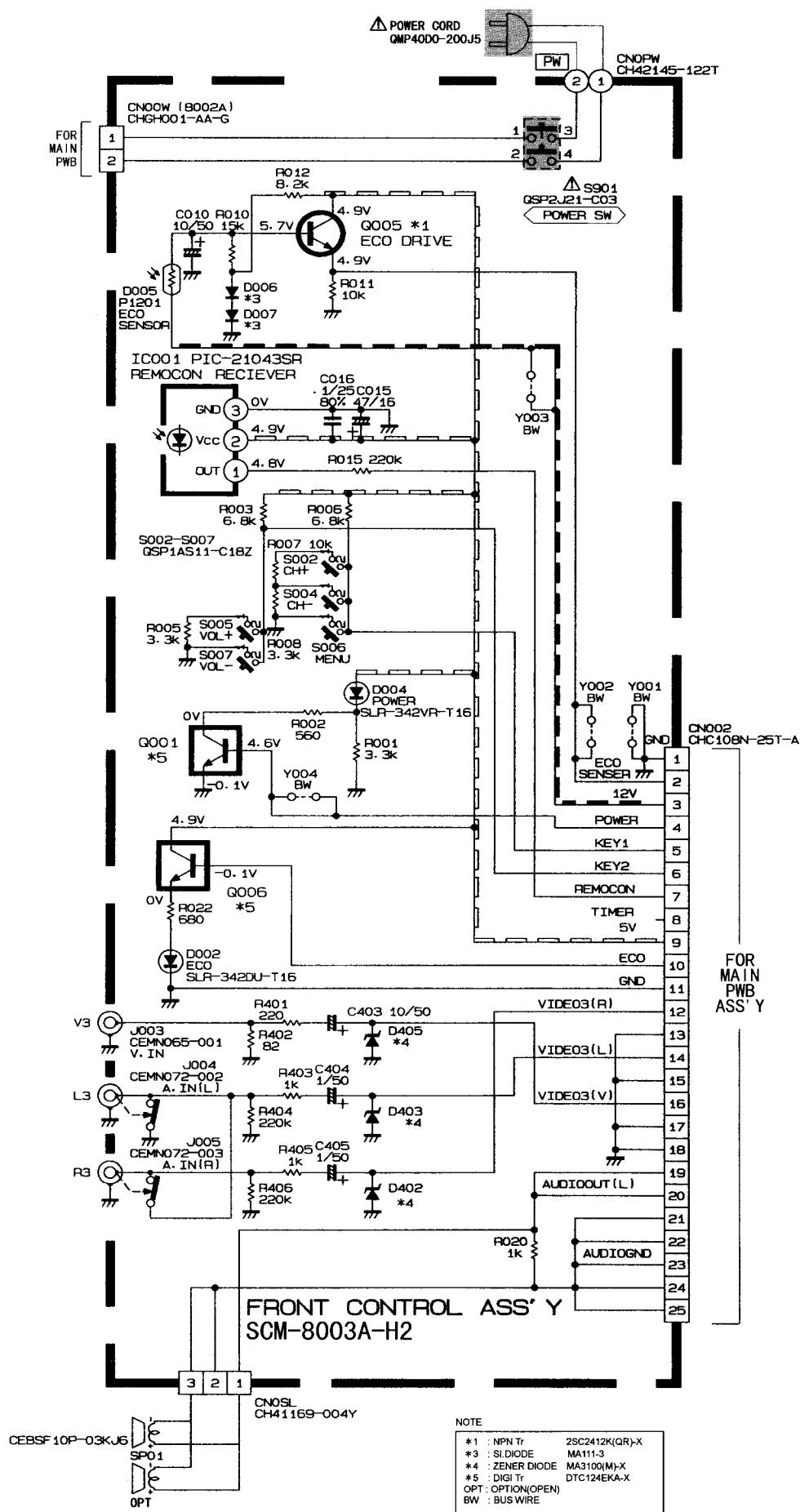


NOTE

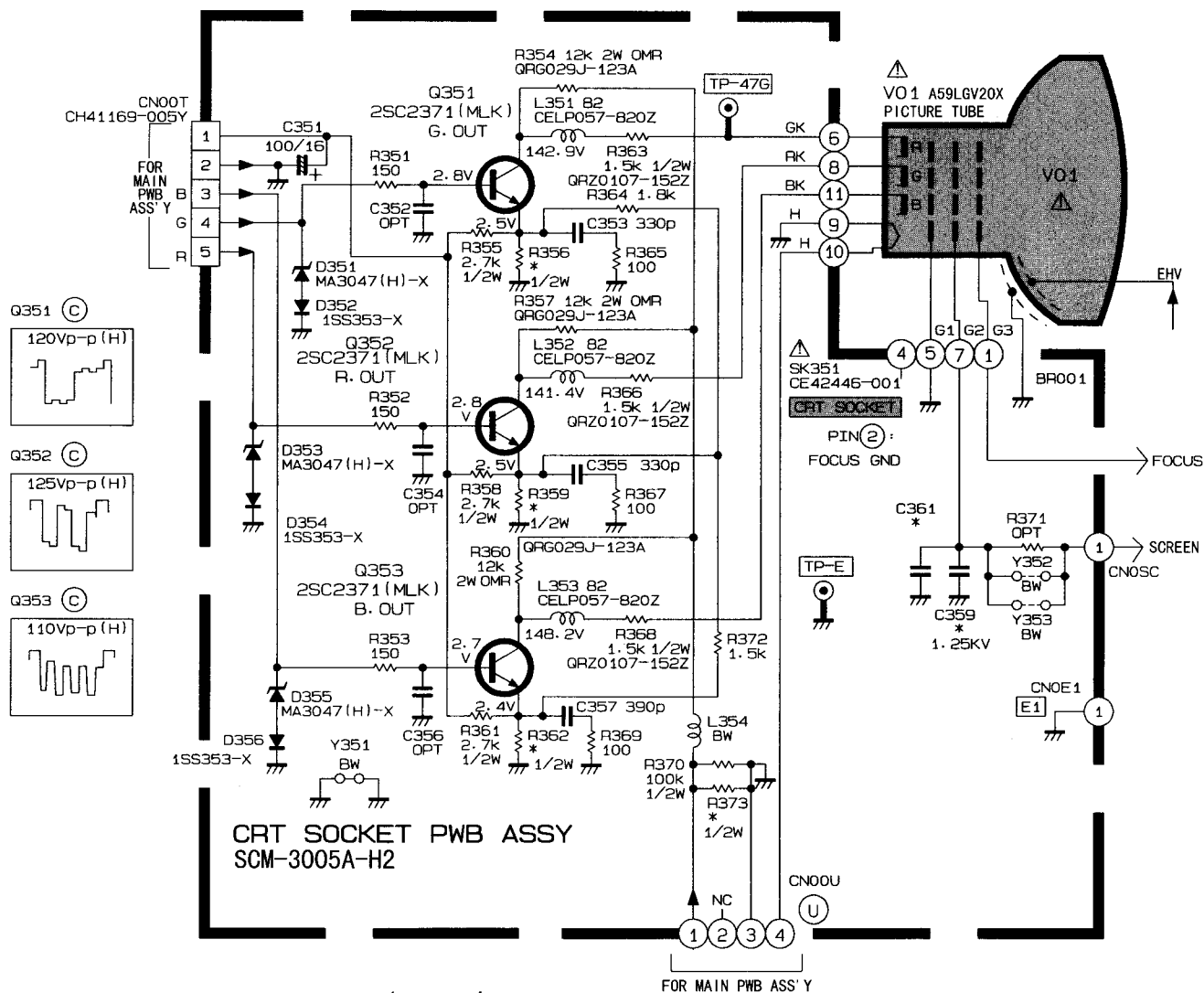
*1	: NPN Tr	2SC2412K(QR)-X
*2	: PNP Tr	2SA1037K(QR)-X
*3	: SI.DIODE	MA111-X
*5	: DIGI Tr	DTC124EKA-X
OPT : OPTION(OPEN)		
BW : BUS WIRE		



FRONT CONTROL PWB CIRCUIT DIAGRAM



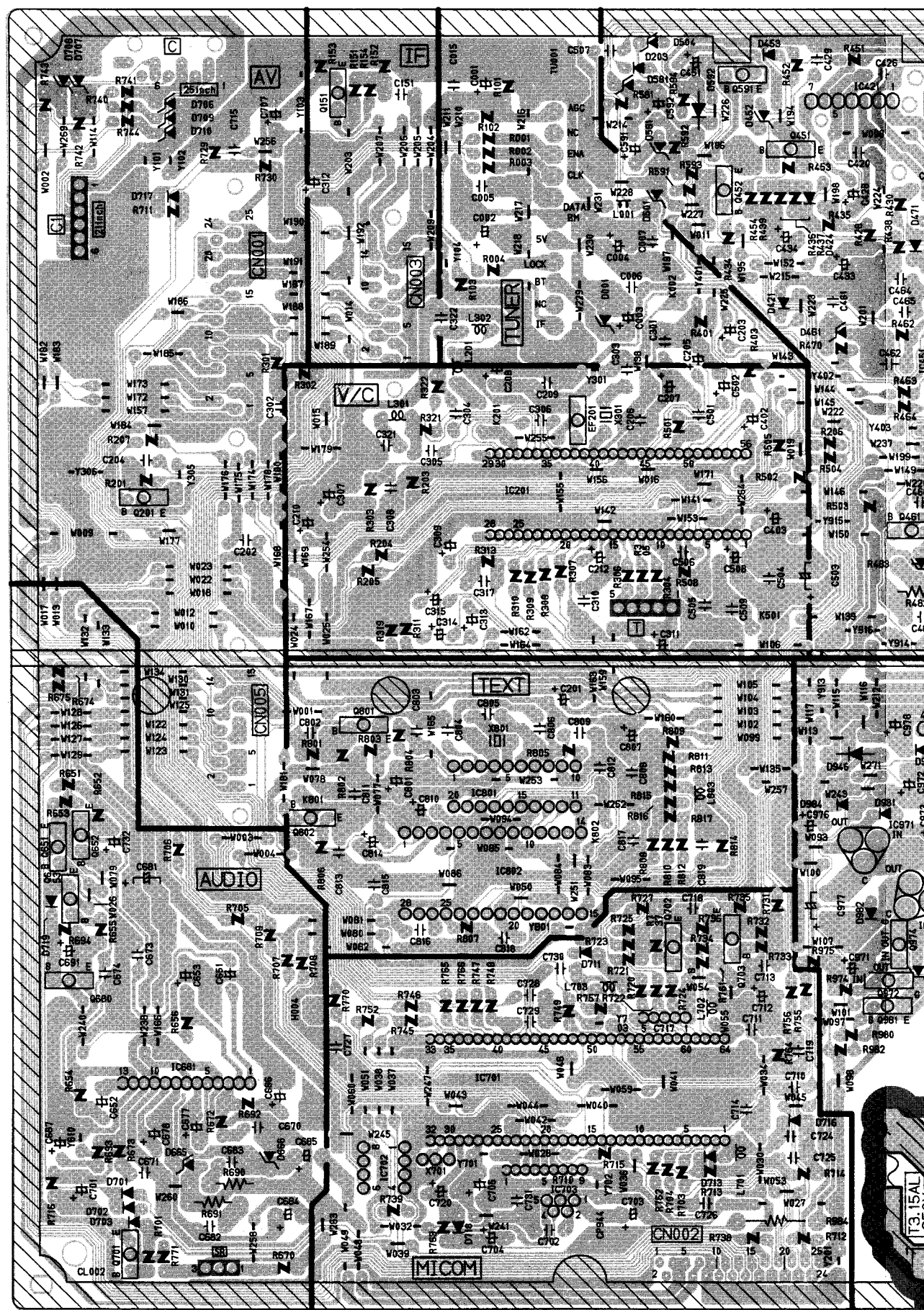
CRT SOCKET PWB CIRCUIT DIAGRAM

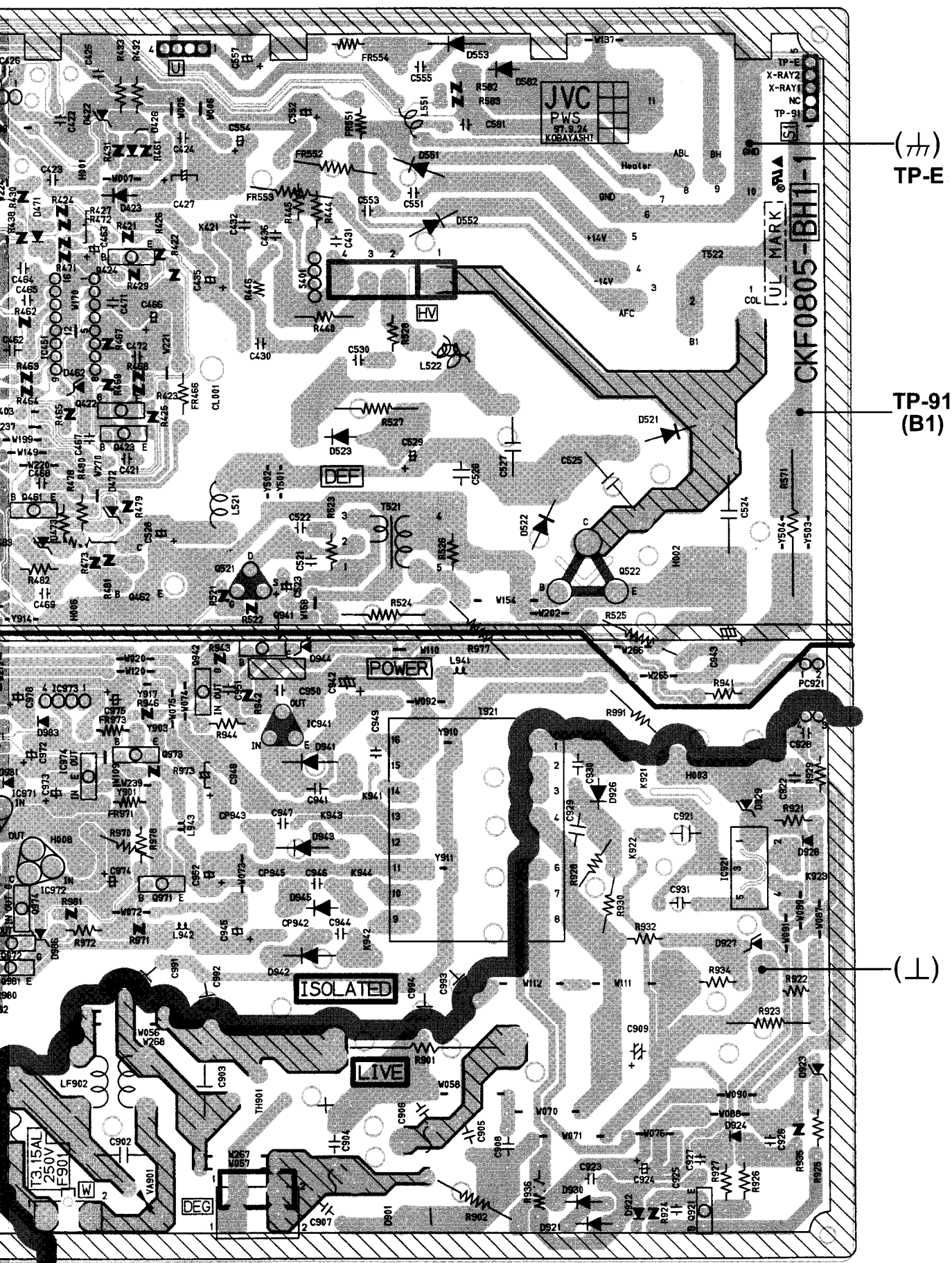


PATTERN DIAGRAM

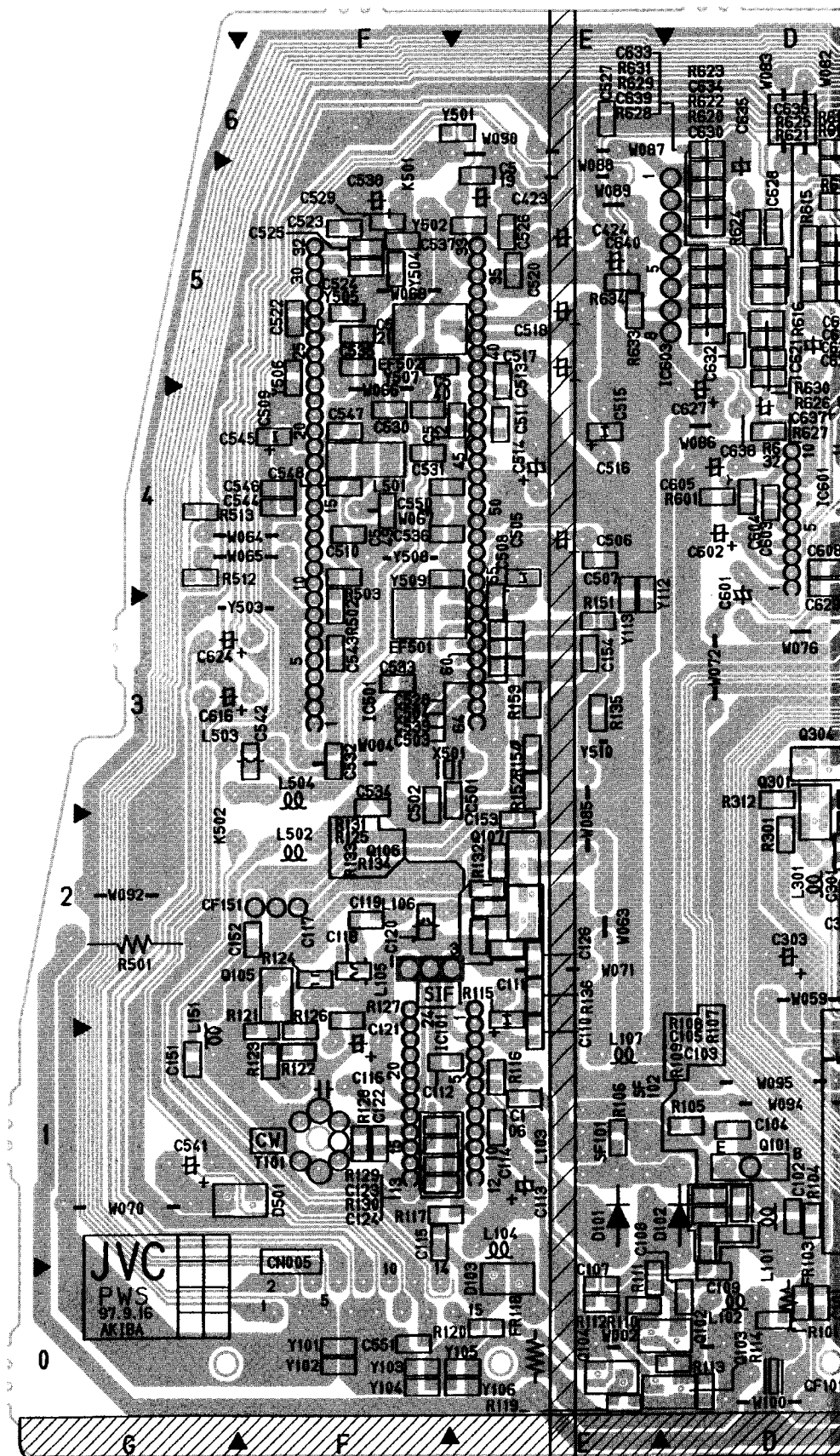
MAIN PWB PATTERN

↓ FRONT

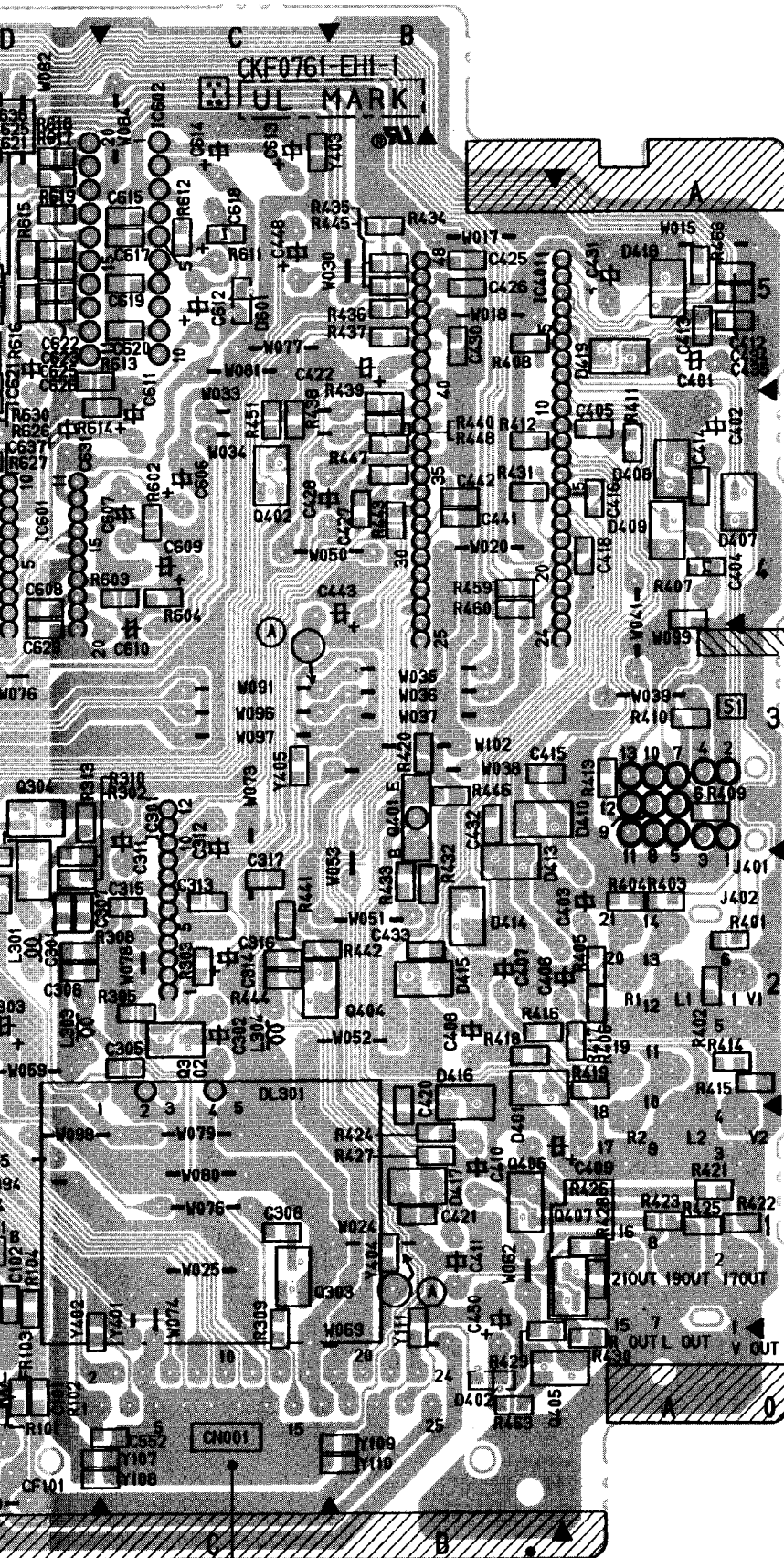




AV SW PWB PATTERN

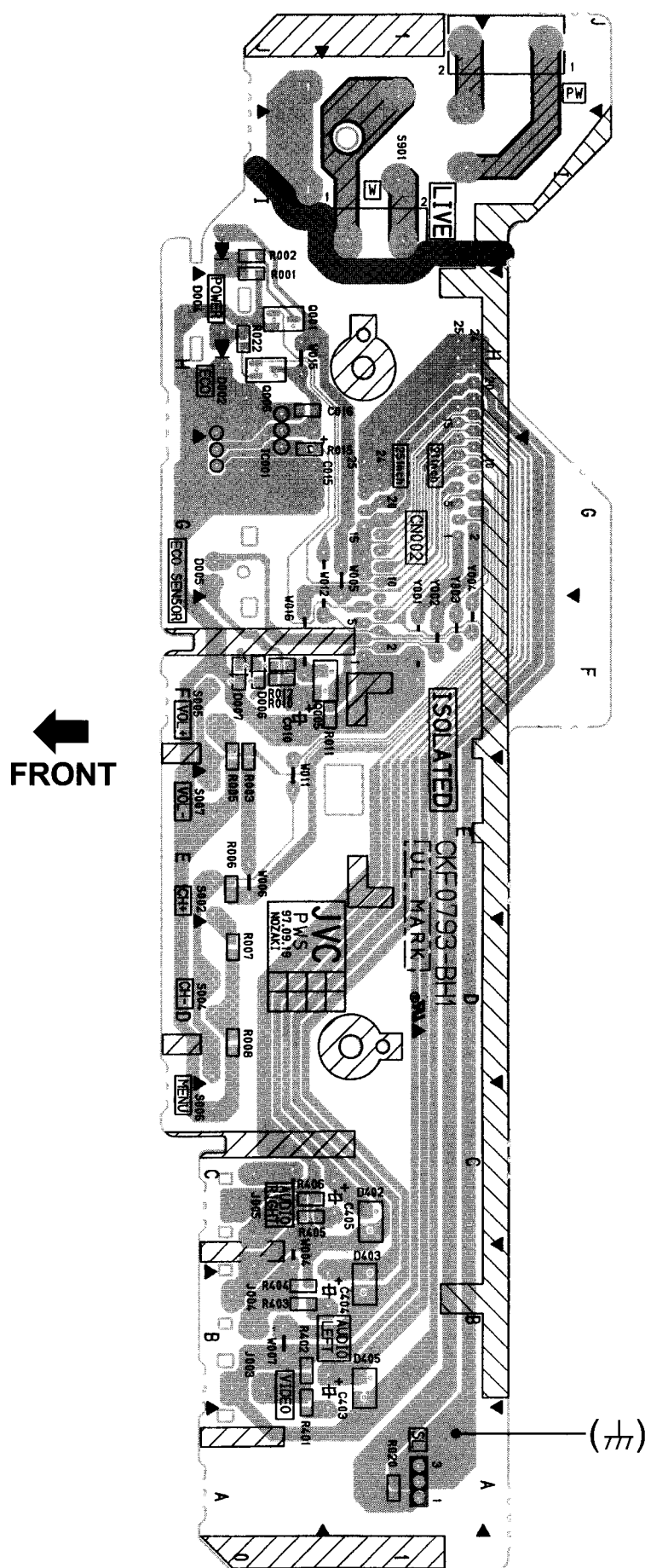


TOP



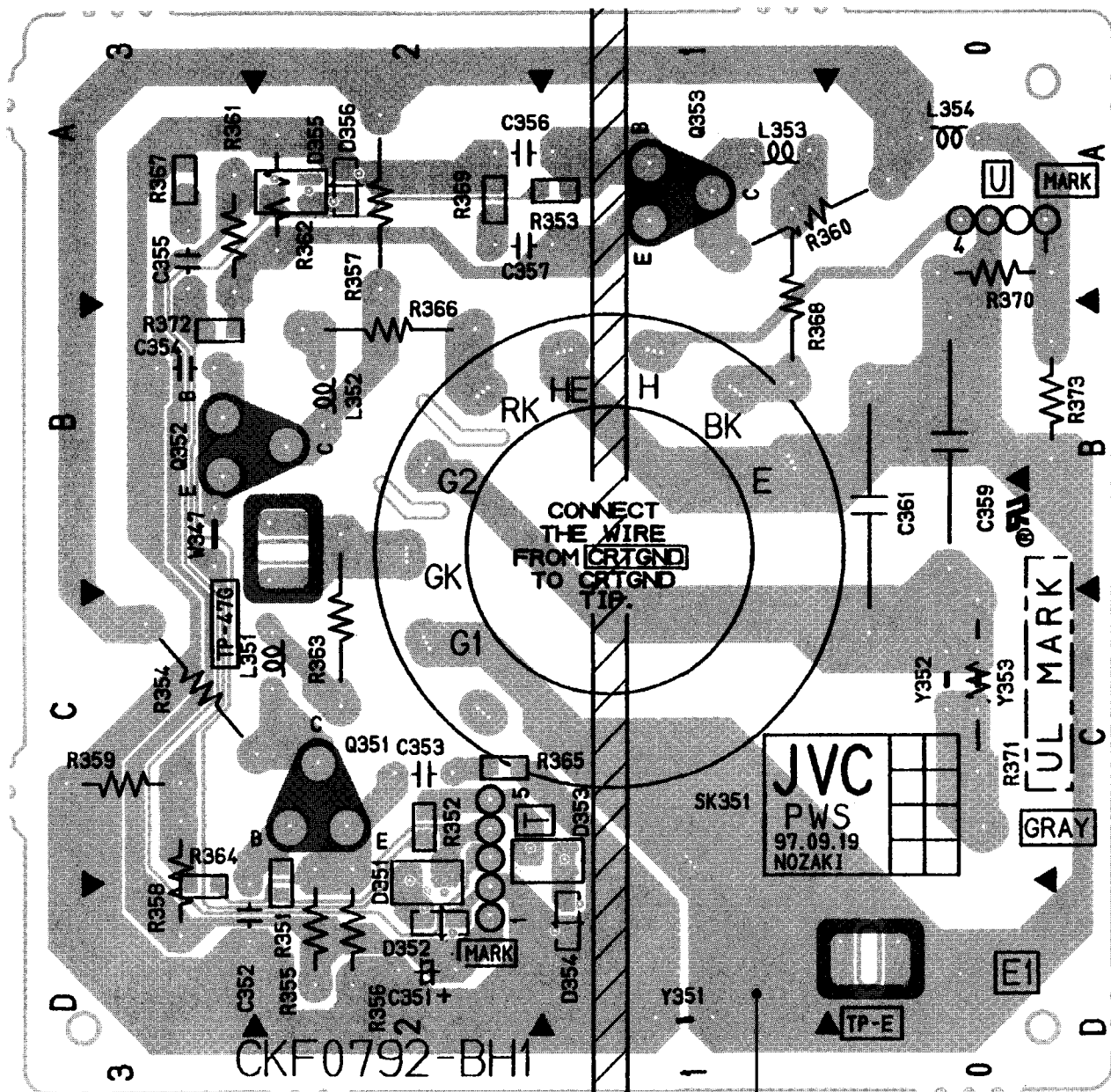
(77)

FRONT CONTROL PWB PATTERN

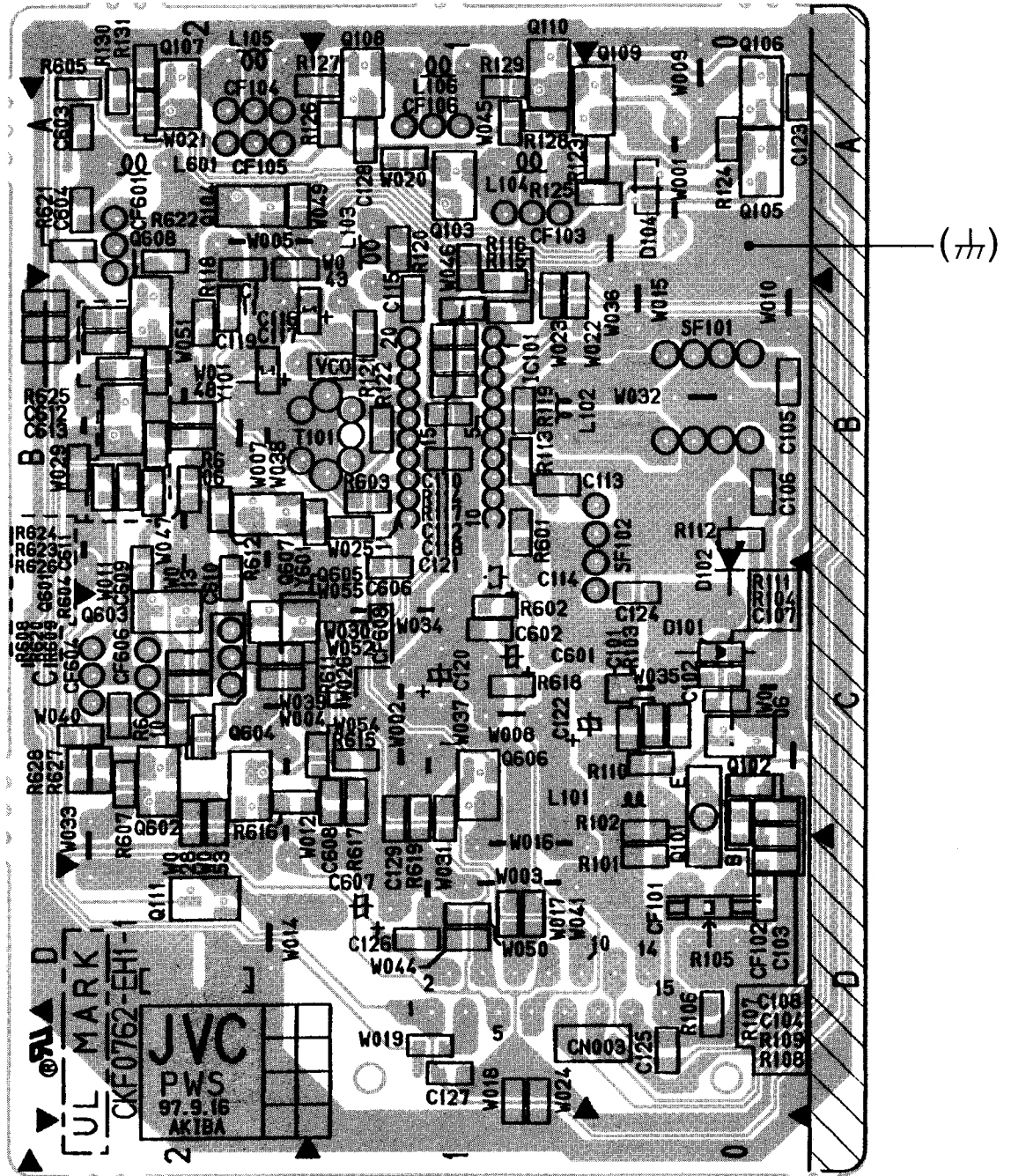


No.51328

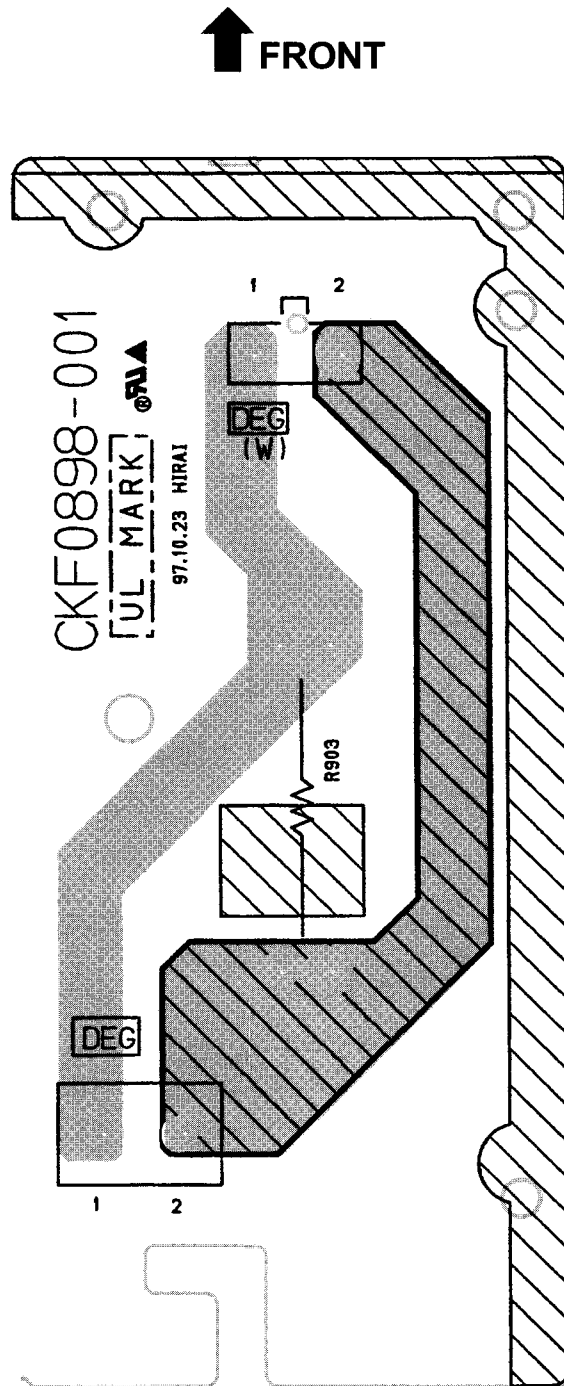
CRT SOCKET PWB PATTERN



IF PWB PATTERN



DEG PWB PATTERN



PARTS LIST

CAUTION

- The parts identified by the \triangle symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines — in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.
- As a rule, the resistors and capacitors which are indicated as shown in "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board.

When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS".

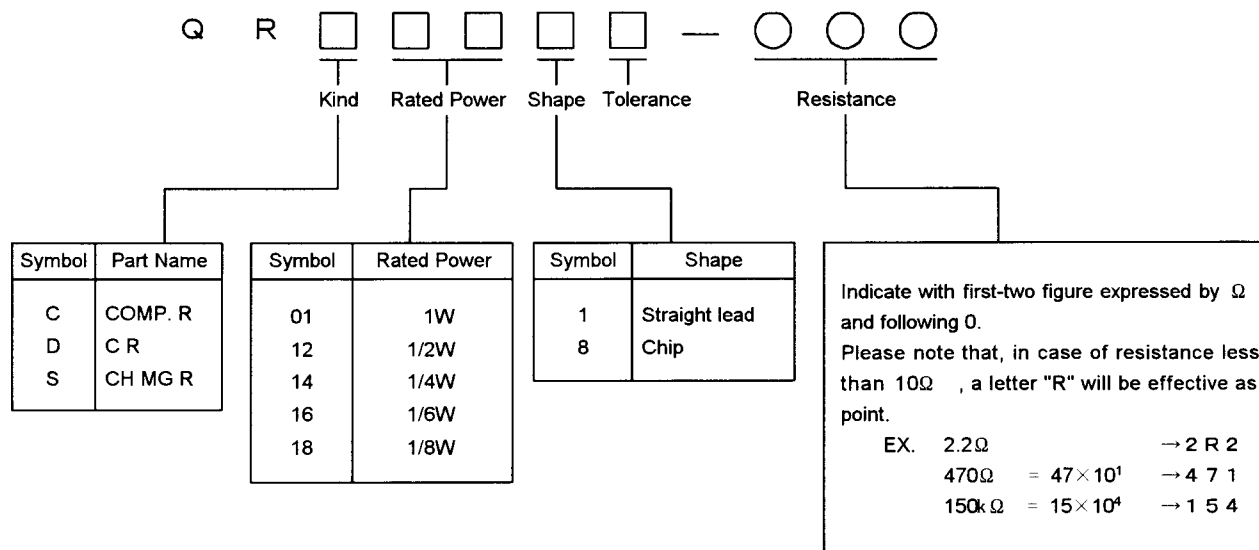
ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

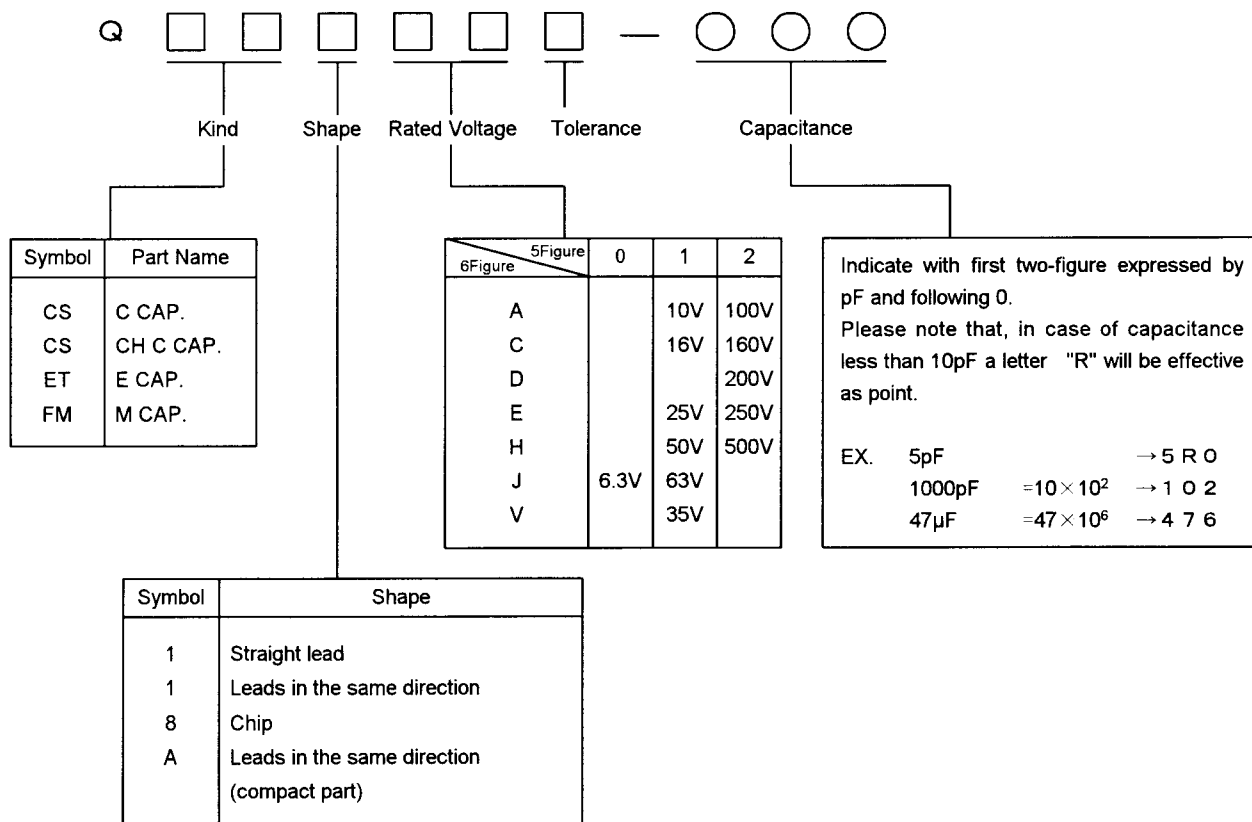
TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

■ RESISTOR



■ CAPACITOR



CONTENTS

■ USING P.W. BOARD & REMOTE CONTROL UNIT	31
■ REMOTE CONTROL UNIT PARTS LIST	31
■ EXPLODED VIEW PARTS LIST	32
■ EXPLODED VIEW	32
■ PRINTED WIRING BOARD PARTS LIST	
● MAIN PW BOARD ASS'Y	34
● CRT SOCKET PW BOARD ASS'Y	37
● FRONT CONTROL PW BOARD ASS'Y	37
● DEG PW BOARD ASS'Y	38
● IF PW BOARD ASS'Y	38
● AV SW PW BOARD ASS'Y	39
■ PACKING	40
■ PACKING PARTS LIST	40

USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y \ Model	AV-2550TEE
MAIN P.W.B	SCM-1009A-H2
CRT SOCKET P.W.B	SCM-3005A-H2
FRONT CONTROL P.W.B	SCM-8003A-H2
DEG P.W.B	SCM-9501A-H2
IF PWB	SCM0F002A-H2
AV SW PWB	SCM0Y006A-H2
REMOTE CONTROL UNIT	RM-C637-1H

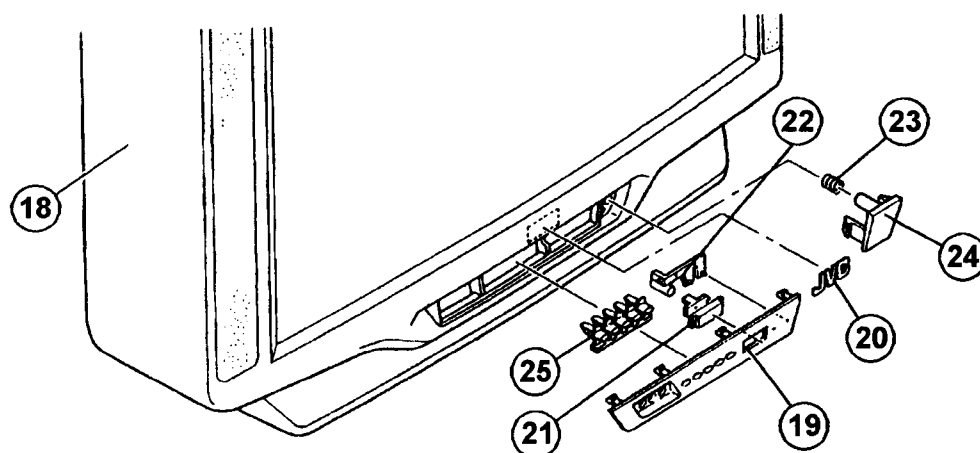
REMOTE CONTROL UNIT PARTS LIST (RM-637-1H)

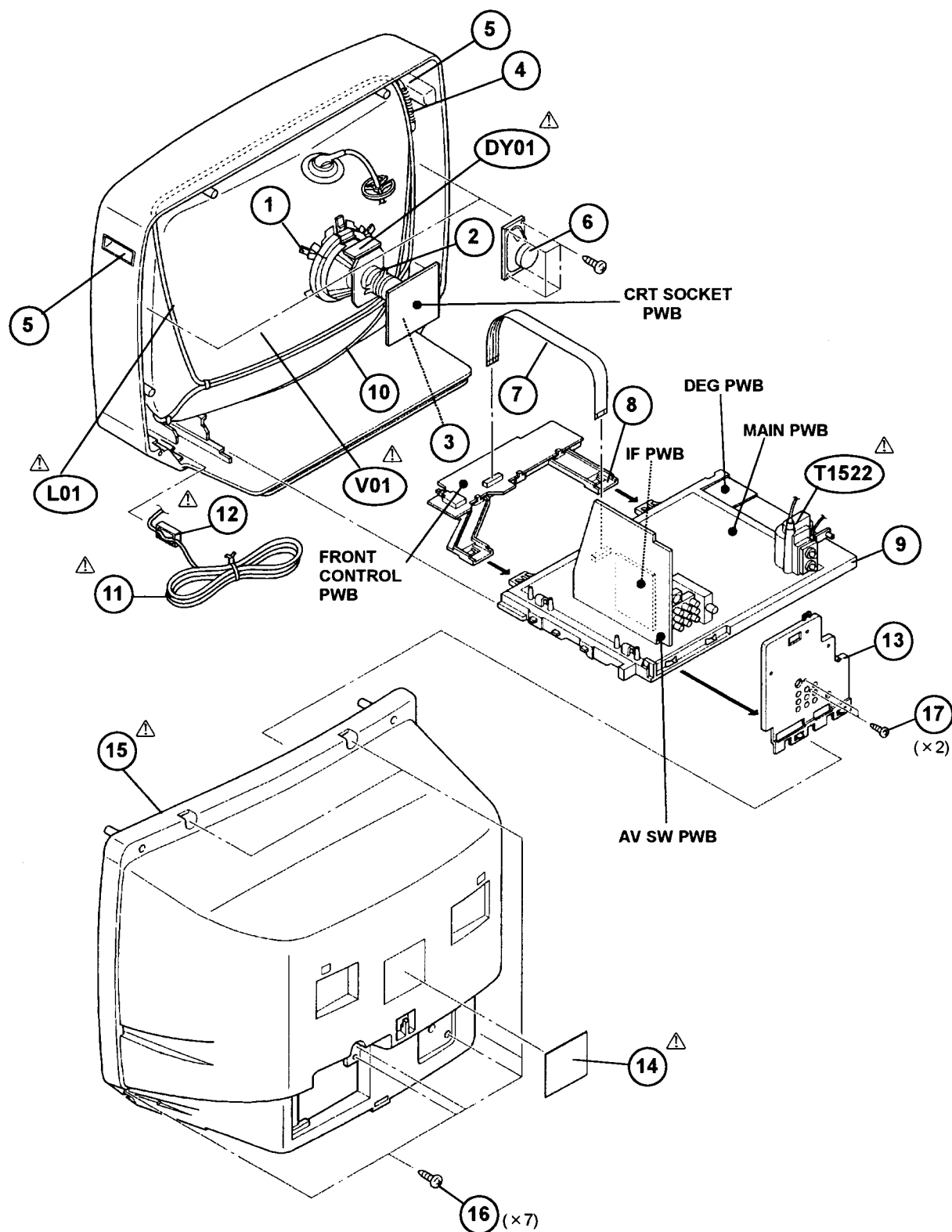
△ Ref. No.	Part No.	Part Name	Description	Local
	UR52EC1001B	BATTERY COVER		

EXPLODED VIEW PARTS LIST

△ Ref. No.	Part No.	Part Name	Description	Local
△ V01	A59LGV20X	PICTURE TUBE (C)		
△ DY01	CE20333-00A	DEF YOKE		
△ L01	CELD055-001J6N	DEG. COIL		
△ T1522	QQH0023-001	HV. TRANSF.		
1	CE40764-00A	WEDGE ASSY	(× 4)	
2	CE42378-00B	P. C. MAGNET		
3	CHGB0016-0C-FH	BRAIDED WIRE (SUB)		
4	A48457-3-H	SPRING		
5	CM23142-B01-H	HAND INSULATOR	(× 2)	
6	CEBSS12D-04KJ2	SPEAKER	(× 2) SP01	
7	CHFB125-14BD	FFC WIRE		
8	CM12965-B01-H	CONTROL BASE		
9	CM12669-A04-VH	CHASSIS BASE		
10	CHGB0020-AA	BRAIDED WIRE		
△ 11	QMP40D0-200J5	POWER CORD		
△ 12	CM47005-A01-H	CORD CLAMP		
13	CM12977-001-H	TERMINAL BOARD		
△ 14	CM22925-006	RATING LABEL		
△ 15	CM12808-E01-VH	REAR COVER		
16	GBSF4016Z-H	TAPPING SCREW	(× 7)	
17	SBSF3012M-H	TAPPING SCREW	(× 2)	
18	CM12964-B03-H	FRONT CABINET		
19	CM12957-003-H	CONTROL WINDOW		
20	CM48147-001-H	JVC MARK		
21	CM36637-D01-H	CDS WINDOW		
22	CM36599-B01-H	LED/RM LENS		
23	CM35235-003-H	SPRING		
24	CM36600-B01-H	POWER KNOB		
25	CM36598-B01-H	CONTROL KNOB		

EXPLODED VIEW





PRINTED WIRING BOARD PARTS LIST

MAIN PW BOARD ASS'Y (SCM-1009A-H2)

△ Symbol No.	Part No.	Part Name	Description	Local
R E S I S T O R				
R1440	QRG019J-221S	OM R	220 Ω 1W	J
R1446	QRD12CJ-1R0SX	C R	1.0 Ω 1/2W	J
R1524	QRG029J-222	OM R	2.2kΩ 2W	J
R1525	QRG029J-182	OM R	1.8kΩ 2W	J
R1527	QRG029J-123	OM R	12kΩ 2W	J
R1710	QRB089J-682	NETW. R	6.8kΩ	
△ R1901	QRF104K-3R9	UNF R	3.9 Ω 10W	K
R1902	QRG039J-683A	OM R	68kΩ 3W	J
R1922	QRM059J-R22	MP R	0.22 Ω 5W	J
R1923	QRX029J-2R2	MF R	2.2 Ω 2W	J
R1928	QRG039J-473A	OM R	47kΩ 3W	J
R1930	QRG039J-473A	OM R	47kΩ 3W	J
R1936	QRD129J-3R9S	C R	3.9 Ω 1/2W	J
R1977	QRG029J-183	OM R	18kΩ 2W	J
R1984	QRG039J-330A	OM R	33 Ω 3W	J
△ R1991	QRZ0057-825	C R	8.2MΩ 1W	J
C A P A C I T O R				
C1202	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1204	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1206	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V	J
C1212	QETN1HM-106Z	E CAP.	10 μF 50V	M
C1301	QFLC1HJ-823MZ	M CAP.	0.082 μF 50V	J
C1303	QCT25CH-120AZ	C CAP.	12 pF 50V	J
C1304-06	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1308	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V	J
C1402	QEM61HK-225MZ	E CAP.	2.2 μF 50V	K
C1420	QFN31HJ-182ZJ1	M CAP.	1800 pF 50V	J
C1421	QFN31HJ-102ZJ1	M CAP.	1000 pF 50V	J
C1423	QFLC2AJ-393MZ	M CAP.	0.039 μF 100V	J
C1427	QETM1VM-107	E CAP.	100 μF 35V	M
C1428	QETC1VM-107Z	E CAP.	100 μF 35V	M
C1430	QFN32AJ-102ZJ1	M CAP.	1000 pF 100V	J
C1435	QETB1EM-108	E CAP.	1000 μF 25V	M
C1436	QFV71HJ-334MZ	TF CAP.	0.33 μF 50V	J
C1503	QETN1CM-228Z	E CAP.	2200 μF 16V	M
C1507	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V	J
C1523	QEH2CM-105MZ	E CAP.	1 μF 160V	M
△ C1524	QFZ0117-8301L	MPP CAP.	8300 pF 1.5kVH ±2.5%	
△ C1525	QFZ0117-2001L	MPP CAP.	2000 pF 1.5kVH ±2.5%	
△ C1527	QFZ0119-514L	MPP CAP.	0.51 μF 200V ±3%	
C1529	QETC2EM-475Z	E CAP.	4.7 μF 250V	M
C1557	QETC2EM-475Z	E CAP.	4.7 μF 250V	M
C1581	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1651-52	QENC1EM-106Z	BP E CAP.	10 μF 25V	M
C1670-71	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1681	QETM1EM-228	E CAP.	2200 μF 25V	M
C1682-83	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1684-85	QETB1EM-108	E CAP.	1000 μF 25V	M
C1702	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1704	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V	J
C1710	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V	J
C1711	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1714	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1715	QFLC1HJ-473MZ	M CAP.	0.047 μF 50V	J
C1724	QCT25CH-680AZ	C CAP.	68 pF 50V	J
C1725	QCT25CH-560AZ	C CAP.	56 pF 50V	J
C1727	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V	J
C1731	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V	J
C1732	QETN1HM-106Z	E CAP.	10 μF 50V	M
C1805-06	QCT25CH-150AZ	C CAP.	15 pF 50V	J
C1812	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
C1815	QFLC1HJ-104MZ	M CAP.	0.1 μF 50V	J
△ C1902	QFZ9040-104N	MF CAP.	0.1 μF FAC275V	M
△ C1903	QFZ9040-473N	MF CAP.	0.047 μF FAC275V	M
△ C1904	QCZ9033-102A	C CAP.	1000 pF FAC400V	K

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
△ C1905	QCZ9033-102A	C CAP.	1000 p FAC400V	K
△ C1906	QCZ9033-102A	C CAP.	1000 p FAC400V	K
△ C1907	QCZ9033-102A	C CAP.	1000 p FAC400V	K
△ C1909	QE20199-227M	E CAP.	220 μ F 400V ±3%	
C1924	QETC1VM-107Z	E CAP.	100 μ F 35V	M
C1925	QFN31HJ-102ZJ1	M CAP.	1000 p F 50V	J
C1926	QFN31HJ-222ZJ1	M CAP.	2200 p F 50V	J
C1929	QCF22HP-103M	CH C CAP.	0.01 μ F 500V	P
C1930	QCZ0122-221A	C CAP.	220 p F 2kV	K
C1932	QCZ0122-391U	C CAP.	390 p F 2kV	K
C1941	QCZ0122-391U	C CAP.	390 p F 2kV	K
△ C1942	QE20203-107	E CAP.	100 μ F 160V	M
C1943	QE20203-107	E CAP.	100 μ F 160V	M
C1945	QETB1EM-108	E CAP.	1000 μ F 25V	M
C1948	QETM1VM-108	E CAP.	1000 μ F 35V	M
C1950	QFLC1HJ-104MZ	M CAP.	0.1 μ F 50V	J
C1952	QETN1CM-108Z	E CAP.	1000 μ F 16V	M
C1973	QETN1EM-107Z	E CAP.	100 μ F 25V	M
C1975	QETN1CM-107Z	E CAP.	100 μ F 16V	M
△ C1991	QCZ9079-471	C CAP.	470 p FAC250V	K
△ C1992	QCZ9079-471	C CAP.	470 p FAC250V	K
△ C1993	QCZ9079-222	C CAP.	2200 p FAC250V	K
TRANSFORMER				
T1521	CE42034-001	H. DRIVE TRANSF.		
△ T1522	QOH0023-001	H. V. TRANSF.		
△ T1921	CETS101-001JD	SW TRANSF.		
COIL				
L1001	CELP037-8R2	PEAKING COIL	8.2 μ H	
L1201	CE41433-001Z	BEADS CORE		
L1301-02	CELP057-470Z	PEAKING COIL	47 μ H	
L1522	CELL009-002	LINEARITY COIL		
L1551	CELC901-048J6	HEATER CHOKE		
L1701	CELP057-8R2Z	PEAKING COIL	8.2 μ H	
L1702	CELP057-5R6Z	PEAKING COIL	5.6 μ H	
L1703	CELP057-100Z	PEAKING COIL	10 μ H	
L1941-43	CELC058-820Z	CHOKE COIL		
DIODE				
D1001	MTZJ33 (A)-T2	ZENER DIODE		
D1203	1SS133-T2	SI. DIODE		
D1421	1SS133-T2	SI. DIODE		
D1422	MTZJ75-T2	ZENER DIODE		
D1423	1SR124-400A-T2	SI. DIODE		
D1427	MTZJ75-T2	ZENER DIODE		
D1428	MTZJ6.8 (A)-T2	ZENER DIODE		
D1452	MTZJ22 (B)-T2	ZENER DIODE		
D1453	1SS133-T2	SI. DIODE		
D1501	MTZJ9.1 (C)-T2	ZENER DIODE		
D1523	RGP10J (C1)-T3	SI. DIODE		
D1551	RU3AM-LFC4	SI. DIODE		
D1553	RH1S-T3	SI. DIODE		
D1582	RGP10J (C1)-T3	SI. DIODE		
D1701-03	1SS133-T2	SI. DIODE		
D1706-10	MTZJ8.2 (B)-T2	ZENER DIODE		
D1713	1SS133-T2	SI. DIODE		
D1716-17	1SS133-T2	SI. DIODE		
△ D1901	D3SBA60	DIODE BRIDGE		
D1921	1SR124-400A-T2	SI. DIODE		
D1922	1SS133-T2	SI. DIODE		
D1923	MTZJ15 (A)-T2	ZENER DIODE		
D1924	1SS133-T2	SI. DIODE		
D1926	EG1A-T3	SI. DIODE		
D1927	MTZJ6.8 (A)-T2	ZENER DIODE		
D1928	1SS133-T2	SI. DIODE		
D1929	MTZJ15 (A)-T2	ZENER DIODE		
D1941	RU3AM-LFC4	SI. DIODE		
D1942	RU30Y-C1	SI. DIODE		
D1943	RU3YX-LFC4	SI. DIODE		
D1944	MTZJ6.2 (B)-T2	ZENER DIODE		
D1945	RGP10J (C1)-T3	SI. DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local
D I O D E				
D1946	1SR124-400A-T2	SI. DIODE		
D1981-84	1SS133-T2	SI. DIODE		
D1986	MTZJ4. 7 (A)-T2	ZENER DIODE		
T R A N S I S T O R				
Q1201	2SA933AS (QR)-T	SI. TRANSISTOR		
Q1422-24	2SC1740S (QR)-T	SI. TRANSISTOR		
Q1451-52	2SC1815 (YG)-T	SI. TRANSISTOR		
Q1521	BSN274	F. E. T.		
△ Q1522	2SD1878-YD	SI. TRANSISTOR	H. OUT	
Q1651-52	DTC323TS-T	DIGI. TRANSISTOR		
Q1653	2SA933AS (QR)-T	SI. TRANSISTOR		
Q1701	2SA933AS (QR)-T	SI. TRANSISTOR		
Q1702-03	2SC1740S (QR)-T	SI. TRANSISTOR		
Q1801-02	2SC1740S (QR)-T	SI. TRANSISTOR		
Q1921	2SA933AS (QR)-T	SI. TRANSISTOR		
Q1941	2SC1740S (QR)-T	SI. TRANSISTOR		
Q1942	DTC144GSA-T	DIGI. TRANSISTOR		
Q1971	2SA966 (OY)-T	SI. TRANSISTOR		
Q1972	DTC144GSA-T	DIGI. TRANSISTOR		
Q1973	2SA966 (OY)-T	SI. TRANSISTOR		
Q1974	DTC144GSA-T	DIGI. TRANSISTOR		
Q1981	2SA933AS (QR)-T	SI. TRANSISTOR		
I C				
IC1201	TB1227BN	I C		
IC1421	LA7840	I. C. (MONO-ANA)		
IC1681	LA4446	I. C. (MONO-ANA)		
IC1701	M37204MC-C44SP	I. C. (MICRO-COMP)		
IC1702	AT24C082950TEE	I. C.	(SERVICE)	
IC1703	L78LR05E-MA	I. C. (MONO-ANA)		
IC1801	CF72306	I. C. (DIGI-MOS)		
IC1802	CF70211	I. C. (DIGI-MOS)		
△ IC1921	STR-F6654	I. C. (HYBRID)		
△ IC1941	S1854-C2	I. C. (MONO-ANA)		
IC1971	AN7812F	I. C. (MONO-ANA)		
IC1972	AN7809F	I. C. (MONO-ANA)		
IC1973	PQ05RF11	I. C. (HYBRID)		
IC1974	AN78L05-Y	I. C. (MONO-ANA)		
O T H E R S				
△ CN1002	CEMG002-001Z	FUSE CLIP		
△ CP1942	CHC108N-25T-A	FFC CONNECTOR		
△ CP1943	ICP-N75-Y	I. C. PROTECT		
△ CP1944	ICP-N75-Y	I. C. PROTECT		
△ CP1945	ICP-N5-Y	I. C. PROTECT		
EF1201	CE42142-222Z	EMI FILTER		
△ F1901	QMF51E2-3R15J4	FUSE	3. 15A	
△ FR1551	QRZ0054-4R7M	F R	4. 7 Ω 1/4W J	
△ FR1552	QRH017J-1ROM	F R	1. 0 Ω 1W J	
△ FR1554	QRZ0054-15OM	F R	15 Ω 1/4W J	
K1002	CE41433-001Z	BEADS CORE		
K1201	CELP037-4R7Z	PEAKING COIL	4. 7 μ H	
K1421	CE41433-001Z	BEADS CORE		
K1501	CE41433-001Z	BEADS CORE		
K1801-02	CE41433-001Z	BEADS CORE		
K1921	CE41433-001Z	BEADS CORE		
K1922	QCZ0122-391U	C CAP.	390pF 2kV K	
K1923	CE41433-001Z	BEADS CORE		
K1941-44	CE42050-001Z	CORE		
△ LF1902	QQR0527-002	LINE FILTER		
△ PC1921	TLP721F (GR)	I. C. (PH. COUPLER)		
S1401	QSL4A13-C02	LEVER SWITCH		
△ TH1901	QAD0101-9R0	P. THERMISTOR		
TU1001	CEEM574-B01	TUNER		
△ VA1901	ERZV10V621CS	VARISTOR		
W1098	CE41433-001Z	BEADS CORE		
X1301	QAX0354-001	CRYSTAL		
X1701	CST8. 00MTW	CER. RESONATOR		
X1801	CE41257-001Z	CRYSTAL		
Y1201	CE41433-001Z	BEADS CORE		

CRT SOCKET PW BOARD ASS'Y (SCM-3005A-H2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R3354	QRG029J-123A	OM R	12k Ω 2W J	
R3357	QRG029J-123A	OM R	12k Ω 2W J	
R3360	QRG029J-123A	OM R	12k Ω 2W J	
R3363	QRZ0107-152Z	C R	1.5k Ω 1/2W K	
R3366	QRZ0107-152Z	C R	1.5k Ω 1/2W K	
R3368	QRZ0107-152Z	C R	1.5k Ω 1/2W K	
CAPACITOR				
C3359	QFZ0097-103M	MM CAP.	0.01 μ FAC250V K	
C3361	QFZ0097-103M	MM CAP.	0.01 μ FAC250V K	
COIL				
L3351-53	CELP057-820Z	PEAKING COIL	82 μ H	
DIODE				
D3351	MA3047 (H)-X	ZENER DIODE		
D3352	1SS353-X	SI. DIODE		
D3353	MA3047 (H)-X	ZENER DIODE		
D3354	1SS353-X	SI. DIODE		
D3355	MA3047 (H)-X	ZENER DIODE		
D3356	1SS353-X	SI. DIODE		
TRANSISTOR				
Q3351-53	2SC2371 (MLK)	SI. TRANSISTOR		
OTHERS				
△ SK3351	CE42446-001	CRT SOCKET		

FRONT CONTROL PW BOARD ASS'Y (SCM-8003A-H2)

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C8016	NCF21EZ-104AY	CER. CAPACITOR-M	0.1 μ F 250V Z	
DIODE				
D8002	SLR-342DU-T16	L. E. D. (ORG)		
D8004	SLR-342VR-T16	L. E. D.		
D8005	P1201	C. D. S.		
D8006-07	MA1111-X	SI. DIODE		
D8402-03	MA3100 (M)-X	ZENER DIODE		
D8405	MA3100 (M)-X	ZENER DIODE		
TRANSISTOR				
Q8001	DTC124EKA-X	DIGI. TRANSISTOR		
Q8005	2SC2412K (QR)-X	SI. TRANSISTOR		
Q8006	DTC124EKA-X	DIGI. TRANSISTOR		
IC				
IC8001	PIC-21043SR	IFR DETECT UNIT		
OTHERS				
	CM35921-A04-H	CDS HOLDER		
	LC30114-001C-H	LED HOLDER		
CN8002	CHC108N-25T-A	FFC CONNECTOR		
J8003	CEMNO65-001	PIN JACK		
J8004	CEMNO72-002	PIN JACK		
J8005	CEMNO72-003	PIN JACK		
S8002	QSP1A11-C18Z	PUSH SWITCH	CH+	
S8004	QSP1A11-C18Z	PUSH SWITCH	CH-	
S8005	QSP1A11-C18Z	PUSH SWITCH	VOL+	
S8006	QSP1A11-C18Z	PUSH SWITCH	MENU	
S8007	QSP1A11-C18Z	PUSH SWITCH	VOL-	
△ S8901	QSP2J21-C03	PUSH SWITCH	POWER SW	

DEG PW BOARD ASS'Y (SCM-9501A-H2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R9903	QRF154J-121	UNF R	120 Ω 15W J	

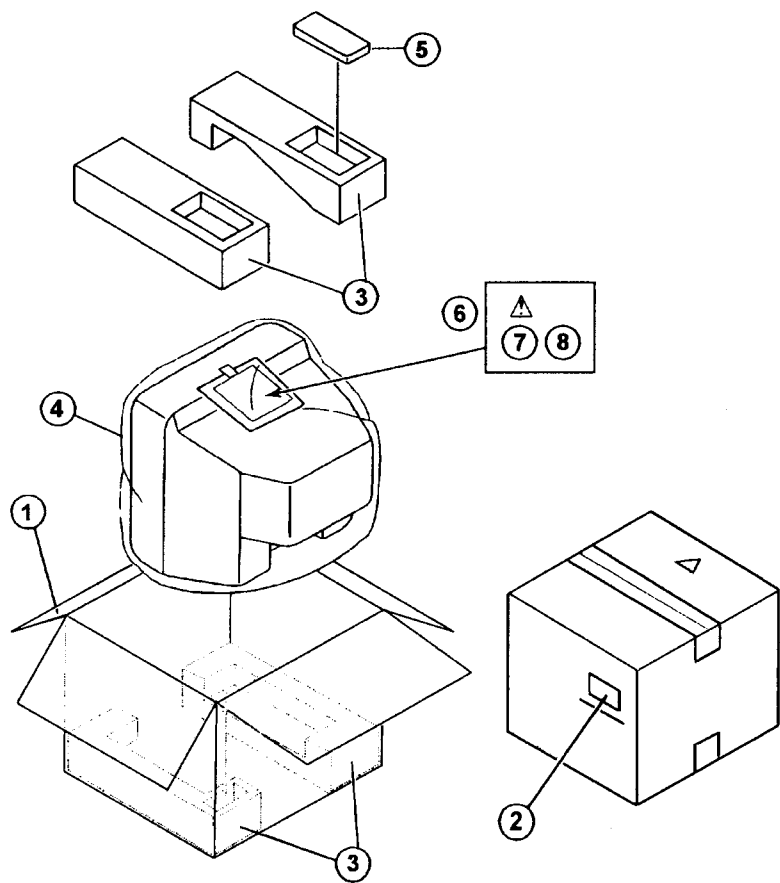
IF PW BOARD ASS'Y (SCM0F002A-H2)

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0101-07	NCB21HK-472AY	CHIP CAP.	4700 pF 50V K	
C0108	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C0110-11	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C0112	NCB21EK-104AY	CHIP CAP.	0.1 μF 25V K	
C0113	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C0117	NCS21HJ-681AY	CER. CAPACITOR-M	680 pF 50V J	
C0118	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C0121	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C0123-29	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C0602	NCB21HK-223AY	CHIP CAP.	0.022 μF 50V K	
C0603-04	NCT03CH-470AY	CHIP CAP.	47 pF 50V J	
C0606	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C0608-12	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
TRANSFORMER				
T0101	CELT001-303J3	C. WAVE TRANSF.		
COIL				
L0101	CELP042-2R2	PEAKING COIL	2.2 μH	
L0104	CELP057-120Z	PEAKING COIL	12 μH	
L0105-06	CELP057-8R2Z	PEAKING COIL	8.2 μH	
L0601	CELP057-120Z	PEAKING COIL	12 μH	
DIODE				
D0101-02	1SS85-T2	SI. DIODE		
D0104	MA111-X	SI. DIODE		
TRANSISTOR				
Q0101	2SC5083 (L-P) -T	SI. TRANSISTOR		
Q0102	DTC124EKA-X	DIGI. TRANSISTOR		
Q0103	2SC2412K (QR) -X	SI. TRANSISTOR		
Q0104	2SA1037K (QR) -X	SI. TRANSISTOR		
Q0105-06	DTC124EKA-X	DIGI. TRANSISTOR		
Q0107	2SC2412K (QR) -X	SI. TRANSISTOR		
Q0108-09	2SA1037K (QR) -X	SI. TRANSISTOR		
Q0110-11	DTC124EKA-X	DIGI. TRANSISTOR		
Q0601-02	2SC2412K (QR) -X	SI. TRANSISTOR		
Q0603	DTC124EKA-X	DIGI. TRANSISTOR		
Q0604	2SC2412K (QR) -X	SI. TRANSISTOR		
Q0605	DTC124EKA-X	DIGI. TRANSISTOR		
Q0607	2SA1037K (QR) -X	SI. TRANSISTOR		
Q0608	2SC2412K (QR) -X	SI. TRANSISTOR		
I C				
IC0101	M52342SP	I. C. (MONO-ANA)		
OTHERS				
CF0101	MKT39.5MA100P	CERAMIC FILTER		
CF0102	QAX0358-001	CERAMIC FILTER		
CF0103	QAX0339-001	CERAMIC FILTER		
CF0104	TPS5.5MW	CERAMIC FILTER		
CF0105	TPS6.5MB	CERAMIC FILTER		
CF0106	TPSH6.0MB	CERAMIC FILTER		
CF0601	SFSH4.5MCB	CERAMIC FILTER		
CF0604	QAX0336-001	CERAMIC FILTER		
CF0606	QAX0337-001	CERAMIC FILTER		
CF0608	QAX0338-001	CERAMIC FILTER		
SF0101	QAX0323-001	SAW FILTER		
SF0102	QAX0325-001	SAW FILTER		

AV SW PW BOARD ASS'Y (SCM0Y006A-H2)

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0302	QEN61CM-106Z	BP E CAP.	10 μ F 16V	M
C0305	NCT03CH-680AY	CHIP CAP.	68 p F 50V	J
C0308	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K
C0311-12	QEN61CM-106Z	BP E CAP.	10 μ F 16V	M
C0313	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K
C0315	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K
C0401	QEN61CM-106Z	BP E CAP.	10 μ F 16V	M
C0402-03	QEN61HM-105Z	BP E CAP.	1 μ F 50V	M
C0404	QEN61CM-106Z	BP E CAP.	10 μ F 16V	M
C0405	NCB21EK-104AY	CHIP CAP.	0.1 μ F 25V	K
C0406	QEN61CM-106Z	BP E CAP.	10 μ F 16V	M
C0407-08	QEN61HM-105Z	BP E CAP.	1 μ F 50V	M
C0410-11	QEN61HM-105Z	BP E CAP.	1 μ F 50V	M
C0412-13	NCT03CH-101AY	CHIP CAP.	100 p F 50V	J
C0423-24	QEN61CM-106Z	BP E CAP.	10 μ F 16V	M
C0427	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K
C0428	QEN61CM-106Z	BP E CAP.	10 μ F 16V	M
C0430	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K
C0601	QEN61CM-226Z	BP E CAP.	22 μ F 16V	M
C0603	NCB21EK-563AY	CHIP CAP.	0.056 μ F 25V	K
C0604	NCB21HK-393AY	CHIP CAP.	0.039 μ F 50V	K
C0607	QEN61CM-226Z	BP E CAP.	22 μ F 16V	M
C0608	NCB21HK-103AY	CHIP CAP.	0.01 μ F 50V	K
C0610	QEN61CM-226Z	BP E CAP.	22 μ F 16V	M
C0615	NCB21HK-272AY	CHIP CAP.	2700 p F 50V	K
C0617	NCB21HK-272AY	CHIP CAP.	2700 p F 50V	K
C0619-20	NCB21EK-104AY	CHIP CAP.	0.1 μ F 25V	K
C0621	QEN61HM-225Z	BP E CAP.	2.2 μ F 50V	M
C0622-23	NCB21EK-104AY	CHIP CAP.	0.1 μ F 25V	K
C0625-26	NCB21EK-104AY	CHIP CAP.	0.1 μ F 25V	K
C0628	NCB21EK-104AY	CHIP CAP.	0.1 μ F 25V	K
C0629	NCB21HK-273AY	CHIP CAP.	0.027 μ F 50V	K
C0630	NCB21EK-104AY	CHIP CAP.	0.1 μ F 25V	K
C0632-33	NCB21EK-104AY	CHIP CAP.	0.1 μ F 25V	K
C0634	NCB21EK-563AY	CHIP CAP.	0.056 μ F 25V	K
C0636-37	NCB21HK-183AY	CHIP CAP.	0.018 μ F 50V	K
C0639	NCB21EK-563AY	CHIP CAP.	0.056 μ F 25V	K
COIL				
L0303	CELP057-120Z	PEAKING COIL	12 μ H	
DIODE				
D0402	1SS353-X	SI. DIODE		
D0407-08	MA3100 (M)-X	ZENER DIODE		
D0410	MA3100 (M)-X	ZENER DIODE		
D0413-19	MA3100 (M)-X	ZENER DIODE		
D0601	1SS353-X	SI. DIODE		
TRANSISTOR				
Q0301-03	2SC2412K (QR)-X	SI. TRANSISTOR		
Q0304	2SA1037K (QR)-X	SI. TRANSISTOR		
Q0401	2SA673 (C)-T	SI. TRANSISTOR		
Q0402	2SA1037K (QR)-X	SI. TRANSISTOR		
Q0405	DTA144TKA-X	DIGI. TRANSISTOR		
Q0406-07	DTC363TK-X	DIGI. TRANSISTOR		
I C				
IC0301	LA7222	I. C. (MONO-ANA)		
IC0401	CXA1545AS	I. C. (MONO-ANA)		
IC0601	AN7395K	I. C. (MONO-ANA)		
IC0602	TDA7315	I. C. (DIGI-OTHER)		
IC0603	BA4558N	I. C. (MONO-ANA)		
OTHERS				
DL0301	CE42599-001	COMB FILTER		
J0401	QMD2B04-001	MINI CONNECTOR		
J0402	CEMN078-001	PIN JACK		

PACKING



PACKING PARTS LIST

△ Ref. No.	Part No.	Part Name	Description	Local
1	CP11613-045-H	PACKING CASE		
2	CM47385-00B-H	POS/SERIAL LABEL		
3	CP11650-A0B-H	CUSHION ASSY	4pcs in 1set	
4	CP30697-006-H	POLY BAG		
5	RM-C637-1H	REMOCON UNIT		
6	QPGA025-03505H	POLY BAG		
△ 7	LCT0086-001A-H	INST. BOOK		
8	LCT0160-001A-H	INST SHEET		

JVC

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