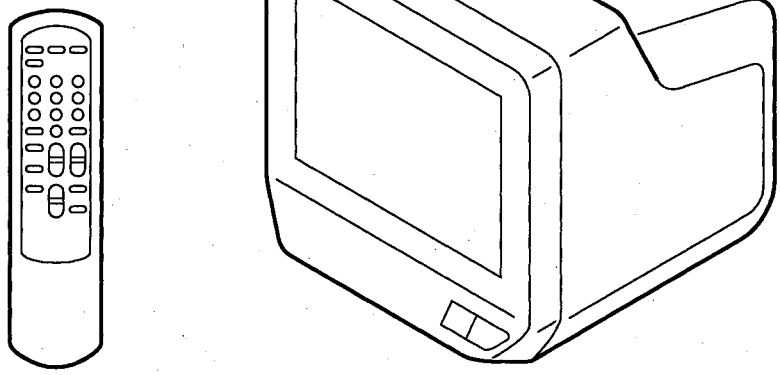
SERVICE MANUAL

BN-1 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-9PT50	RM-Y116	US	SCC-J58A-A
KV-9PT50	RM-Y116	CND	SCC-J59A-A
KV-9PT60	RM-Y116	US	SCC-J58B-A
KV-9PT60	RM-Y116	CND	SCC-J59B-A

MODEL	COMMANDER	DEST.	CHASSIS NO.



MICROFILM

* Please file according to model size. .....▨

9

TRINITRON® COLOR TV

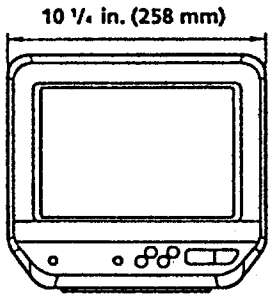
SONY®

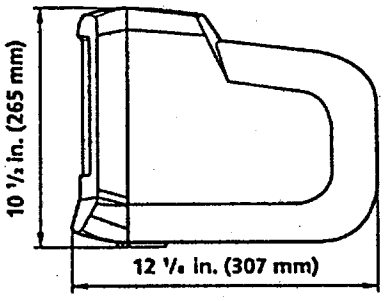
SPECIFICATIONS

Television system
American TV standard, NTSC color
Channel coverage
VHF: 2-13/UHF: 14-69/CATV: 1-125
Screen size
9-inch picture measured diagonally
Antenna
VHF/UHF telescopic antenna
Speaker
77 mm round (3 1/8 inches), 1 W
Inputs
VIDEO: RCA phono-type 1 Vp-p, 75 ohms
AUDIO: RCA phono-type monaural
VHF/UHF (Combined CATV/VHF/UHF 75-ohm, F-type)
Output
Headphone jack (monaural)
Dimensions

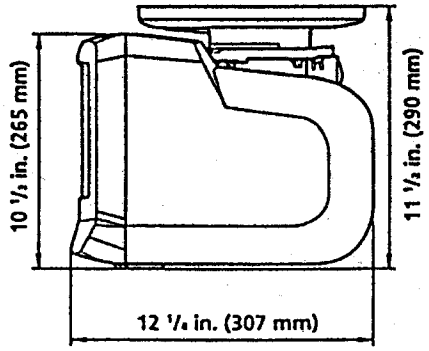
Power requirements
KV-9PT50: 120 V AC, 60 Hz
KV-9PT60: 120 V AC, 60 Hz, 12 V DC
Power consumption
KV-9PT50: AC IN 53 W max.
KV-9PT60: AC IN 53 W max.
DC IN 53 W max.
Mass
KV-9PT50: 5.5 kg (12 lb 2 oz)
KV-9PT60: 5.7 kg (12 lb 9 oz)
Supplied accessories
Remote commander RM-Y116
Size AA batteries (2)
Telescopic antenna (1)
KV-9PT50 only: Dual mode swivel bracket (1), Attachment parts (1), Paper pattern (1)
KV-9PT60 only: AC power cord (1), Car battery cord DCC-22AW (1)

Design and specifications are subject to change without notice.





When the bracket is attached to the upper part of the TV



When the bracket is attached to the lower part of the TV

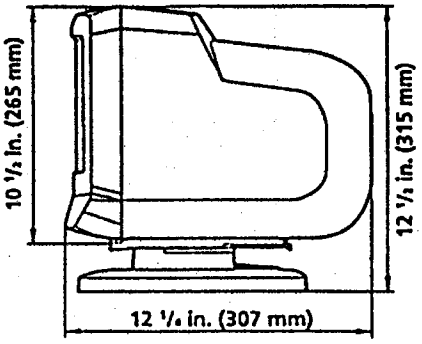


TABLE OF CONTENTS

Section	Title	Page
1. GENERAL		
	Setting up the KV-9PT50	5
	Setting up the KV-9PT60	8
	Connections	9
	Setting up the Remote Commander	10
	Setting cable TV on or off	10
	Presetting Channels	11
	Functions	12
	Adjustment the Picture	13
	Customizing the Channels Number Buttons	14
	Blocking out a Channel (CHANNEL BLOCK)	15
	Troubleshooting	16
2. DISASSEMBLY		
	2-1. Chassis Assy Removal	17
	2-2. Service Position	17
	2-3. A Board Removal	17
	2-4. F Board Removal	17
	2-5. Picture Tube Removal	18
3. SET-UP ADJUSTMENTS		
	BEAM LANDING	19
	CONVERGENCE	20
	(1) Horizontal and Vertical Static Convergence Adjustment	20
	(2) Dynamic Convergence Adjustment	22
	(3) Screen-corner Convergence Adjustment	22
	FOCUS	22
	METHOD OF SETTING THE SERVICE ADJUSTMENT	23
	SCREEN (G2)	23
	WHITE BALANCE ADJUSTMENTS	23
4. CIRCUIT ADJUSTMENTS		
	ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER	24
	1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE	24
	2. MEMORY WRITE CONFIRMATION METHOD	24
	3. ADJUST BUTTONS AND INDICATOR	25
	4. AN ITEM OF ADJUSTMENTS	25
	H. FREQUENCY ADJUSTMENT (H FRE)	26
	V. FREQUENCY ADJUSTMENT (V FRE)	26
	CHROMA TRAP (CROM)	26
	SUB PICTURE (SPIX)	27
	SUB HUE, SUB COLOR (SHUE, SCOL)	27
	V. CENTER (VPOS)	28
	H. CENTER (HPOS)	28
	V. LINE (VLIN), V. CORRECTION (VSCO)	28
5. SAFETY RELATED ADJUSTMENTS		29
6. DIAGRAMS		
	6-1. Block Diagrams (1)	31
	Block Diagrams (2)	33
	6-2. Circuit Boards Location	36
	6-3. Printed Wiring Board and Schamatic Diagrams	36
	• A Board	39
	• C Board	43
	• F Board	43
	6-4. Semiconductions	45
7. EXPLODED VIEWS		
	7-1. Chassis	46
8. ELECTRICAL PARTS LIST		47

(CAUTION)

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

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

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

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ! SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

1. Check the area of your repair for unsoldered or poorlyü]soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are ügpinched" or contact highü]wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate;be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, ügmetallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WTü]540A. Follow the manufacturers' instructions to use these instruments.
2. A batteryü]operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or batteryü]operated AC voltmeter. The üglimit" indication is 0.75V, so analog meters must have an accurate lowü]voltage scale. The Simpson 250 and Sanwa SHü]63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A coldü]water pipe is guaranteed earth ground;the coverü]plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earthü]ground, verify that it is at ground by measuring the resistance between it and a coldü]water pipe with an ohmmeter. The reading should be zero ohms. If a coldü]water pipe is not accessible, connect a 60ü]100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

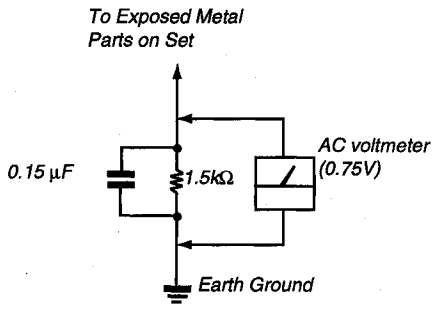


Fig. A. Using an AC voltmeter to check AC leakage.

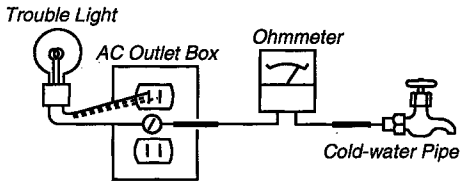
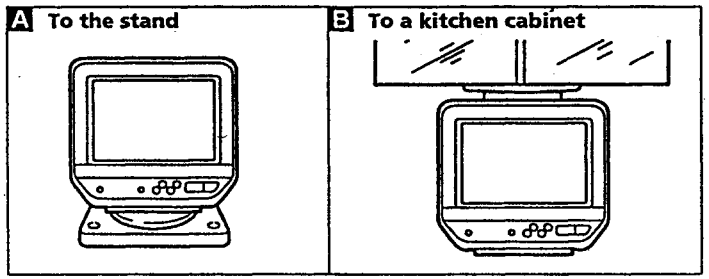


Fig. B. Checking for earth ground.

Setting up the KV-9PT50

Attaching the TV

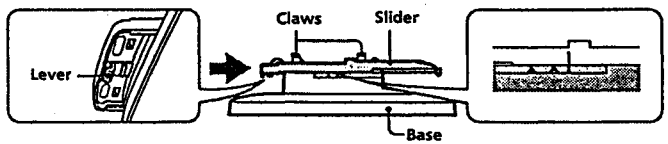
You can install the TV to the stand (bracket) in two ways with the supplied dual mode swivel bracket.



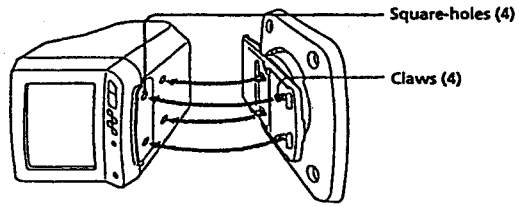
Caution
Do not install the TV with wet hands, or touch the TV and bracket with wet hands.

A To attach the TV to the stand

1 While holding up the lever, push the slider in the direction of the arrow.



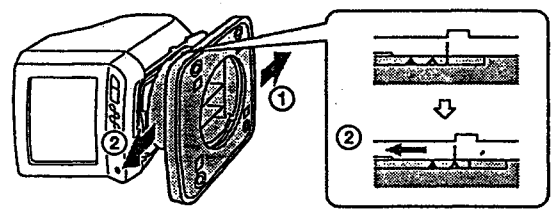
2 Turn the TV sideways, attach the stand to the TV so that the four claws of the slider fit in the square-holes on the bottom of the TV.



(continue)

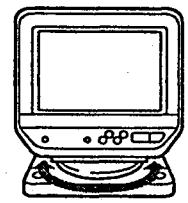
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

3 ① Push the base in the direction of the arrow ① until the two rear claws on the slider touch the back of the square-holes on the bottom of the TV.



② To lock the bracket and the TV, pull the slider in the direction of the arrow ② while holding up the lever without moving the base.

4 You can rotate the TV about 60° in either direction.



B To attach the TV to a kitchen cabinet

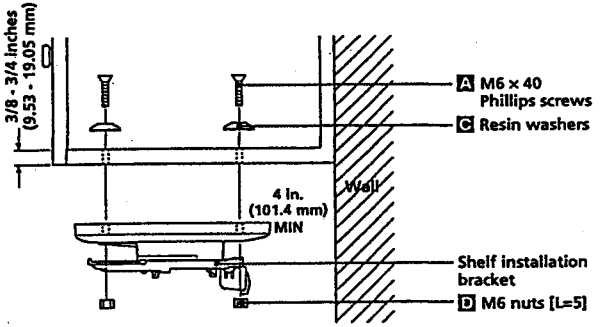
To install the TV to a kitchen cabinet, attach the supplied shelf installation bracket using the attachment parts shown below. The bracket attachment instructions differ depending on the cabinet type (flush or overhanging). Follow the instructions that match your cabinet type.

Attachment parts (supplied)

A  M6 × 40 Phillips screws (4)	B  M6 × 70 Phillips screws (4)	C  Resin washers (4)
D  M6 nuts [L=5] (4)	E  Spacers [L=30] (4)	F  Stopper (1)

Lay the supplied paper pattern on the base of the cabinet (inside or outside), to ensure the proper 4 inches (101.4 mm) distance between the wall and the bracket. Drill 4 holes (diameter: 9/32 inches, 7 mm) where indicated on the pattern. Attach the shelf installation bracket as shown on the following pages.

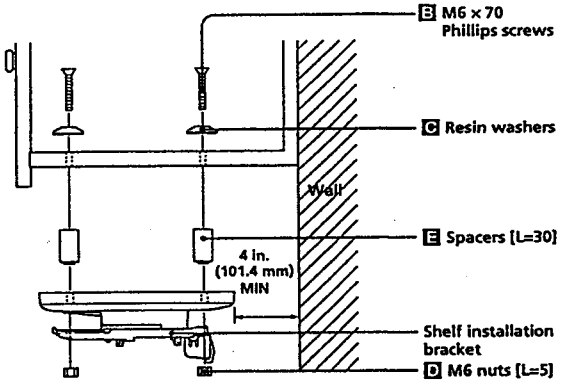
Attaching to a flush type cabinet



Notes

- You cannot attach the shelf installation bracket to a cabinet with a base thickness of less than 3/8 inches (9.53 mm).
- If the cabinet base thickness is over 3/4 inches (19.05 mm), purchase longer screws (#10-32) and nuts at a hardware supply store.

Attaching to an overhanging type cabinet



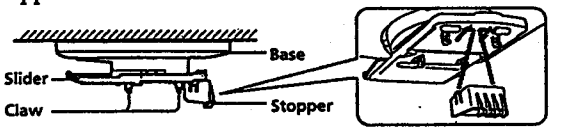
Notes

- The spacer is not needed for the cabinet with an overhang of 0 – 1 inch (0 – 25.4 mm).
- The spacer is needed for the cabinet with an overhang of 1 – 2 inches (25.4 – 51 mm).
- You cannot attach the shelf installation bracket to cabinet with an overhang of over 2 1/8 inches (51 mm).

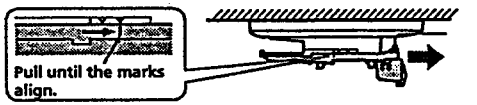
Cautions

- When using the shelf installation bracket to attach the TV to a kitchen shelf or cabinet, be sure that the bracket is attached level to the shelf or cabinet base. If the TV is installed to a bracket that is not level, it may fall from the bracket.
- To reduce the risk of fire, do not place any heating or cooking appliance beneath TV.

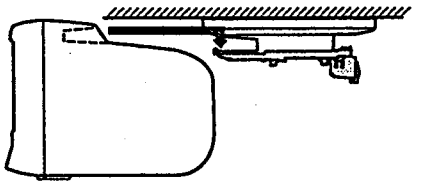
1 Attach the stopper to the slider.



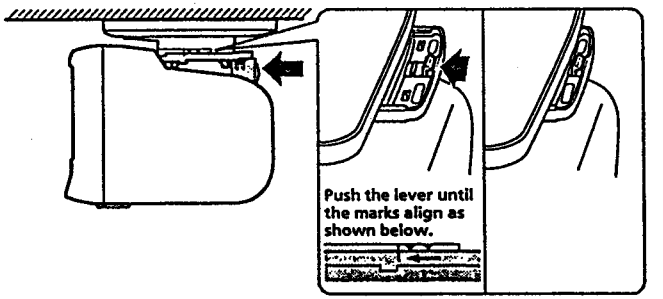
2 While holding down the lever, pull the slider in the direction of the arrow.



3 Attach the TV temporarily to the slider so that two claws of the bracket base fit in the square-holes located inside of the TV's knob.

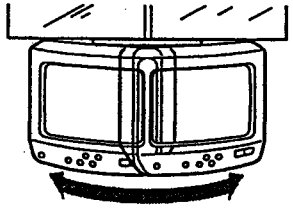


4 While holding down the lever, push the slider in the direction of the arrow so that the claws of the stopper fit in the ventilation hole of the TV' cabinet.



Make sure that the bracket and the TV are locked completely.

5 You can rotate the TV about 60° in either direction. Be sure to rotate the TV slowly and gently.



Caution

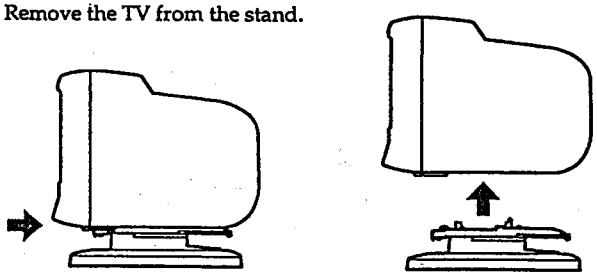
- Take care that a child does not hang on the TV or pull it forcibly.

Removing the TV

A To remove the TV from the stand

1 While holding up the lever, push the slider in the direction of the arrow to unlock the bracket and the TV.

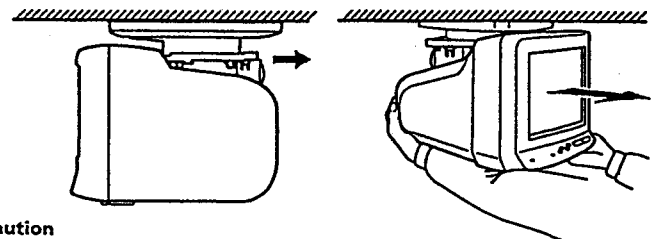
2 Remove the TV from the stand.



B To remove the TV from the bracket

1 While holding down the lever, pull the slider in the direction of the arrow to unlock the bracket and the TV.

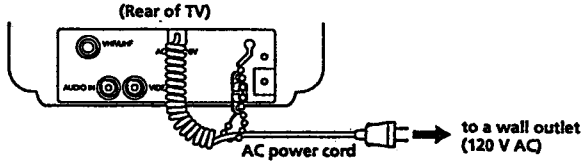
2 Pull the TV toward you to remove the TV from the bracket.



Caution

- If you do not support the TV as illustrated, the TV may fall when it separates from the bracket.

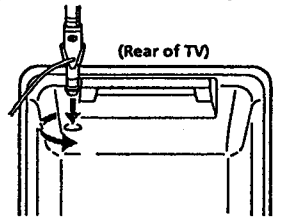
Using house current



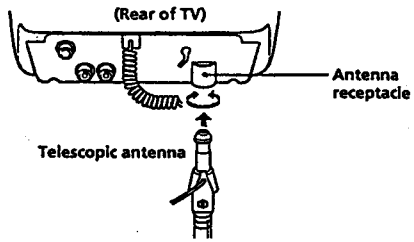
Connecting the supplied telescopic antenna

1 Insert the antenna into the receptacle on the TV, and twist to ensure a secure fit.

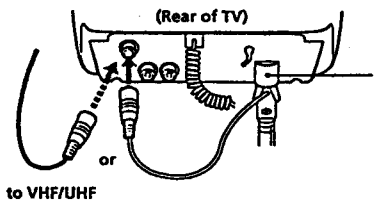
When attaching the TV to the stand (table use)



When attaching the TV to the kitchen cabinet

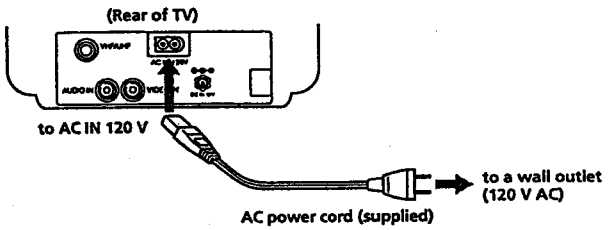


2 Attach the antenna connector to the VHF/UHF terminal.

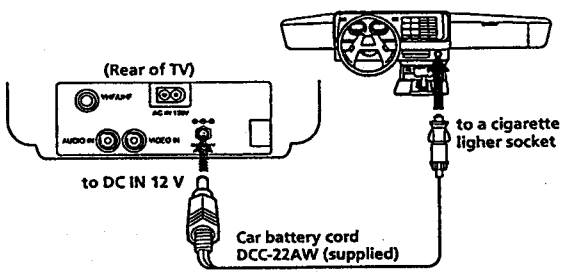


Setting up the KV-9PT60

Using house current

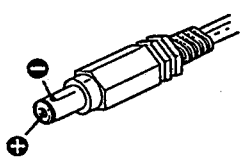


Using a car battery



Notes

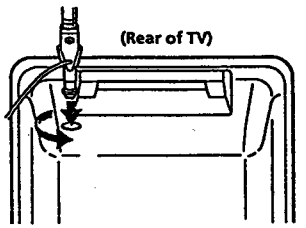
- For car use, the TV is designed for negative ground 12 V DC operation only.
- Use only the supplied car battery cord manufactured by Sony. Polarity of the plugs of other manufactures may be different.



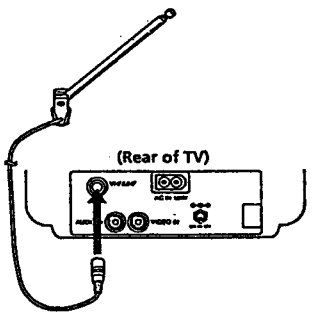
- When you aren't using the TV, remove the car battery cord from the cigarette lighter socket.

Connecting the supplied telescopic antenna

1 Insert the antenna into the receptacle on the TV, and twist to ensure a secure fit.



2 Attach the antenna connector to the VHF/UHF terminal.



Connections

Select one of the two ways to connect the TV to the antenna and/or cable system. It is recommended to connect an outdoor antenna or a cable TV system for better picture quality.

Connecting to outdoor antenna

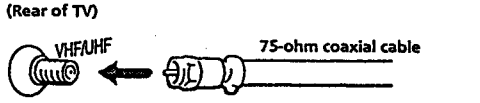
Connect the antenna cable to the VHF-UHF antenna terminal. If the antenna cable cannot be connected directly to the jack, follow one of the diagrams below, depending on the type of cable you have.

Notes

- Do not use tools to attach the cable to the VHF/UHF terminal. Doing so may damage the terminal.
- Most VHF/UHF combination antennas have a signal splitter. Remove the splitter before attaching the appropriate connector.
- If the U/V mixer is used, snow and noise may appear in the picture when viewing cable TV channels over 37.

A

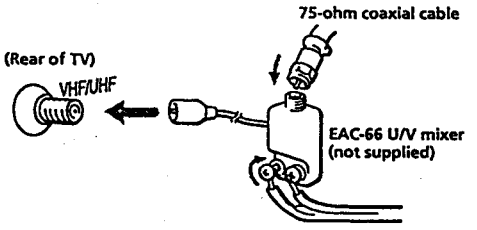
- VHF only
  or
- VHF/UHF



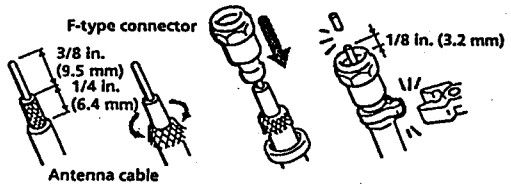
To attach an F-type connector, see "Attaching an F-type connector to the antenna cable."

B

- VHF
  and
- UHF



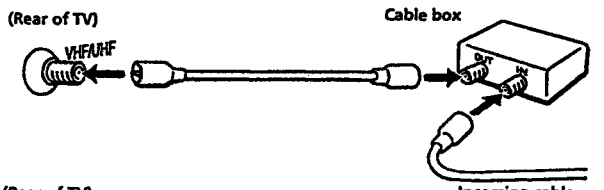
Attaching an F-type connector to the antenna cable



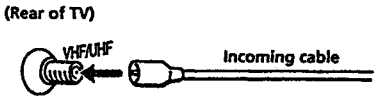
Connecting to cable TV system

If your cable company requires you to connect a cable box, follow example **A**. If not, follow example **B**.

A



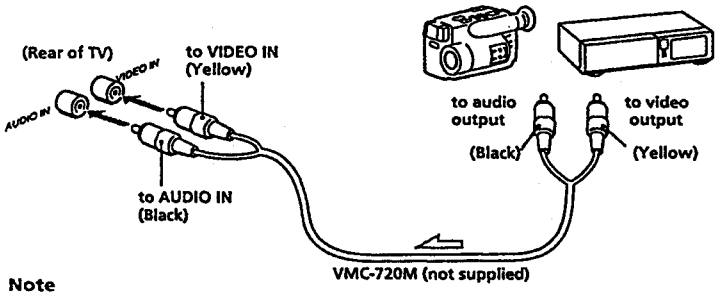
B



Connecting video equipment

Before connecting, turn off the power on all equipment.

Connecting a VCR or 8mm video camera



Note

When connecting stereo equipment, use the VMC-920MS (not supplied) connecting cable (stereo ⟷ monaural).

Watching a VCR picture

1 Turn on the TV.

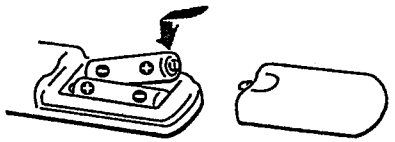
2 Press TV/VIDEO so that "VIDEO" appears on the screen.

To return to TV mode

Press TV/VIDEO so that a channel number appears on the screen.

Setting up the remote commander

Install two size AA batteries (supplied) as shown.



Notes

- Match the + and – on the batteries to the diagram inside the battery compartment.
- If you do not use the remote commander for an extended period of time, remove the batteries to avoid possible damage from battery leakage.
- Do not handle the remote commander roughly. Do not drop it, step on it or let it get wet.
- Do not place the remote commander in direct sunlight, near a heater, or where the humidity is high.

Instructions in this manual are based on the remote commander. You can also use the controls on the TV if they have the same name as those on the remote commander.

Setting cable TV on or off

If the TV is connected to a cable TV system, then the factory setting CABLE ON is correct. If the TV is not connected, set CABLE to OFF.

Note

If more than 90 seconds elapse after you press a button, the menu disappears automatically.

1 Press MENU.
The main menu appears.



2 Press △+ or ▽– on the remote commander to move the cursor (▸) on the screen to SET UP. To select that function, press RETURN.
The SET UP menu appears.



Note

If CABLE appears in black, the TV is set to video input and CABLE cannot be selected. Press TV/VIDEO so that a channel number appears.

3 Set CABLE to ON or OFF.

(1) If the cursor is not beside CABLE, press △+ or ▽– to move the cursor and press RETURN.

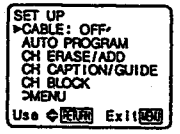


(2) Press Δ+ or ∇– to select ON or OFF.



(3) Press RETURN.





4 Press MENU to return to the original screen.



Presetting channels

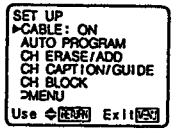
TV channels can be preset easily; first, store all the receivable channels automatically by following the procedure below. Next, erase unwanted channels or add additional channels. Preset channels during the day rather than late at night, when some channels may not be broadcasting.

1 Press MENU.

2 Press Δ+ or ∇– on the remote commander to move the cursor (▶) on the screen to SET UP and press RETURN.
The SET UP menu appears.

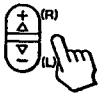


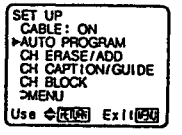




Note
If AUTO PROGRAM appears in black, the TV is set to video input and AUTO PROGRAM cannot be selected. Press TV/VIDEO so that a channel number appears.

3 Select AUTO PROGRAM.
(1) Press Δ+ or ∇– to move the cursor (▶) to AUTO PROGRAM.





(2) Press RETURN.





"AUTO PROGRAM" appears on the screen and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.

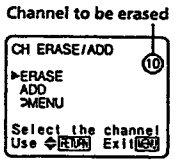
Erasing or adding channels

1 Press MENU.

2 Press Δ+ or ∇– to select SET UP and press RETURN.

3 Press Δ+ or ∇– to select CH ERASE/ADD and press RETURN.

4 To erase an unwanted channel:
(1) Press CH +/– to select the channel you want to erase.
(2) Make sure the cursor (►) is beside ERASE.



(3) Press RETURN.
The indication "–" appears beside the channel number, showing that the channel is erased from the preset memory.

Note
You can select the erased channel using the 0-9 buttons.

To add a channel that you want:
(1) Press 0-9 buttons to select the channel you want to add and press ENTER.
(2) Press Δ+ or ∇– to select ADD.



(3) Press RETURN.
The indication "+" appears beside the channel number, showing that the channel is added to the preset memory.

5 To erase and/or add other channels, repeat step 4.

6 When finished, press MENU.

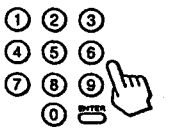
Note
If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and vice versa.

Functions

Note
If "VIDEO" appears on the screen, press TV/VIDEO so that a channel number appears.

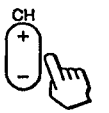
Selecting a channel directly

Press the 0-9 buttons to select a channel. Or press ENTER after entering the channel for immediate selection.



To scan through channels

Press CH +/– until the channel you want appears.



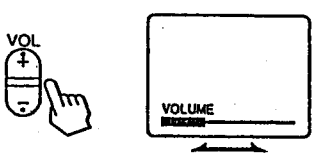
Switching quickly between two channels

Press JUMP.
The channel you watched previously appears. Pressing JUMP again switches back to the original channel.



Adjusting the volume

Press VOL +/– to adjust the volume.



Muting the sound

Press MUTING.
"MUTING" appears on the screen.



To restore the sound, press MUTING again, or press VOL +.

Displaying on-screen information

Use this feature to check your channels.
Press DISPLAY.



To cancel the display, press DISPLAY again.

Setting the Sleep Timer

The TV stays on for the length of time specified and then shuts off automatically.
Press SLEEP repeatedly u.....l the time (minutes) wanted appears. Each time you press SLEEP, the time changes as follows: 30 → 60 → 90 → OFF.
"SLEEP" appears on the screen one minute before the TV power is shut off.



To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP OFF" appears, or turn the TV off.

Listening with headphones

Plug the headphones into the headphone jack.
The sound from the speaker is shut off and the monaural sound will be heard from the headphones. To adjust the headphones volume, press VOL +/–.



Adjusting the picture

When watching TV programs, the quality of the picture can be adjusted to suit your taste.

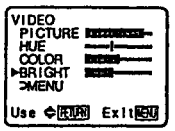
1 Press MENU.

2 Make sure the cursor (▶) is beside VIDEO and press RETURN.



3 Select the item to adjust. See chart on following page for details on results of adjustments. For example:
To adjust brightness, press △+ or ▽– to select BRIGHT and press RETURN.









4 Adjust the level:
(1) Press △+ or ▽– to adjust the level.





(2) Press RETURN.
The new setting appears in the VIDEO menu.

5 To adjust other items, repeat steps 3 and 4 above.

Description of adjustable items

Item	Adjustment	
	Press △+ to	Press ▽– to
PICTURE	Increase picture contrast for vivid color	Decrease picture contrast for soft color
HUE	Make skin tones become greenish	Make skin tones become purplish
COLOR	Increase color intensity	Decrease color intensity
BRIGHT	Brighten the picture	Darken the picture

To restore the factory settings

Press RESET while the VIDEO menu is displayed. All the settings except PICTURE are restored to factory settings.

Adjusting the picture when watching video tapes

You can adjust the picture of the video input as well. These settings are stored separately from those for the TV picture.

To adjust the video picture, first press TV/VIDEO to set to video input, then follow the procedure on the previous page.

Customizing the channel number buttons

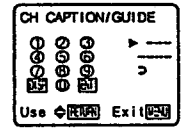
Up to 12 channels can be captioned and assigned to a specific channel number button for each channel. This feature allows the easy selection of your favorite channels by name. For example, select channel 17 "ESPN," and assign the channel number 2 button to it.

Setting captions to a favorite channel

1 Press MENU.

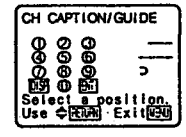
2 Press △+ or ▽– to select SET UP and press RETURN.

3 Press △+ or ▽– to select CH CAPTION/GUIDE and press RETURN.

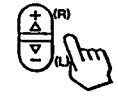


4 Press RETURN again.

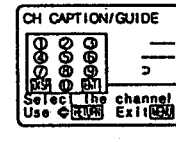




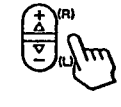
5 Press △+ or ▽– to select a channel guide number (chosen number will appear in red) and press RETURN.
For example, select 2 as the channel guide number.
Numbers 0–9, DISPLAY and ENTER buttons are available for use as a channel guide number. The channel number button you select will be the one you press to call up your favorite channel.



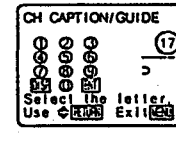




6 Press △+ or ▽– to select the channel that you want to caption and press RETURN. For example, select channel 17.





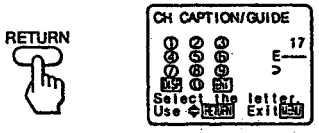


7 Enter the letters (up to four) to caption the channel:
(1) Press Δ+ or ∇– to select the first letter.
Each time you press Δ+ or ∇–, the letter changes as shown below.

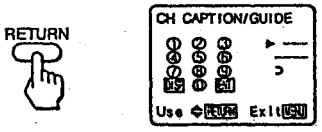
0↔1↔...↔9↔A↔B↔...↔Z↔&↔/↔ - ↔ _ (blank space)



(2) Press RETURN.



(3) Repeat steps (1) and (2) to select the remaining letters and press RETURN.



8 Repeat step **4** to **7** to caption other channels.

To cancel a setting

Select the channel you want to cancel in step **5**, then press RESET.

Selecting a captioned channel

1 Press CH GUIDE.
The CHANNEL GUIDE menu appears showing channel captions and the corresponding channel number buttons.

2 Press a channel number button, the DISPLAY or ENTER button to select the channel you want.

To cancel the CHANNEL GUIDE menu

Press CH GUIDE again.

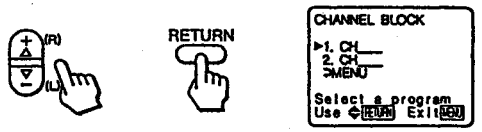
Blocking out a channel (CHANNEL BLOCK)

This feature allows you to prevent children from watching unsuitable programs.

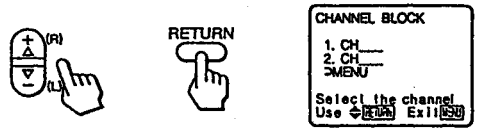
1 Press MENU.

2 Press Δ+ or ∇– to select SET UP and press RETURN.

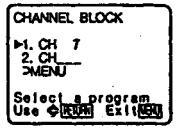
3 Press Δ+ or ∇– to select CH BLOCK and press RETURN.



4 Select the channel you want to block.
(1) Press Δ+ or ∇– to select program 1 or 2 and press RETURN.
The selected channel indication turns red.



(2) Press Δ+ or ∇– to select the channel you want to block and press RETURN.



5 Repeat step **4** to **5** to block other channels.

If you select the blocked channel when watching the TV, "BLOCKED" appears and the picture is blocked and the sound is muted.

To cancel a channel block

Press RESET in step **3**.

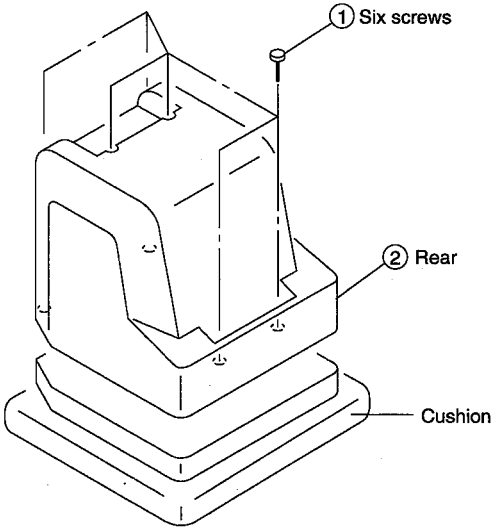
Troubleshooting

If trying the remedies below, the problem is not corrected, contact your nearest Sony dealer.

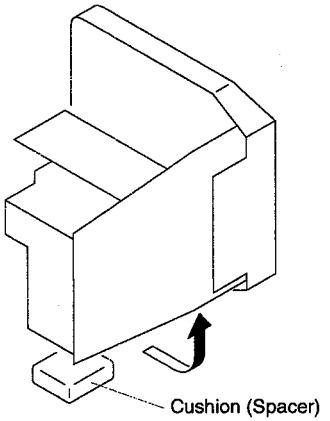
Problem	Adjustment
Poor or no picture (screen lit), good sound	• Adjust PICTURE in the VIDEO menu. • Adjust BRIGHT in the VIDEO menu. • Check antenna/cable connections.
No picture (screen not lit), no sound	• Make sure the power cord is connected securely. • Check to see if the TV/VIDEO setting is correct. When watching TV, set to TV, and when watching video tapes, set to VIDEO or the channel you use for watching video. • Try another channel. It could be station trouble.
No color	• Adjust COLOR in the VIDEO menu. • Black and white programs cannot be seen in color.
Only snow and noise appear on the screen	• Check the CABLE setting in the SET UP menu. • Check the antenna/cable connection. • Make sure the channel is broadcasting programs.
Dotted lines or stripes	• Adjust the antenna. • Move the TV away from noise sources such as cars, neon signs, and hair-dryers.
Double images or ghosts	• Use a highly directional outdoor antenna or a cable TV cable (when the problem is caused by reflections from nearby mountains or tall buildings).
The picture is distorted (DC operation)	• When the car battery voltage drops too low, the picture may be distorted. Use the TV with the engine running.
Cannot operate menu	• The menu disappears automatically when 90 seconds elapse after you press a button. • If the menu items appear in black, the TV is set to video input and you cannot operate the menu. Press TV/VIDEO until a channel number appears.
The remote commander does not operate	• Insert the batteries in the remote commander with the correct polarity. • Replace the batteries with new ones if they are weak. • If there is a fluorescent light close to the TV, move it at least 3-4 feet away from the TV.
The TV needs to be cleaned.	• Clean the TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.

SECTION 2
DISASSEMBRY

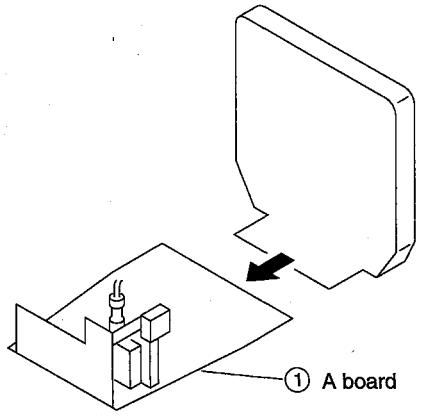
2-1. CHASSIS ASSY REMOVAL



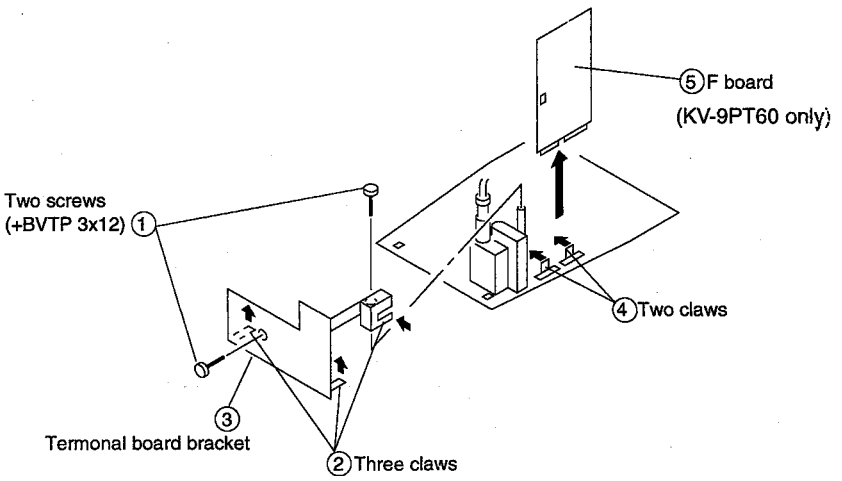
2-2. SERVICE POSITION



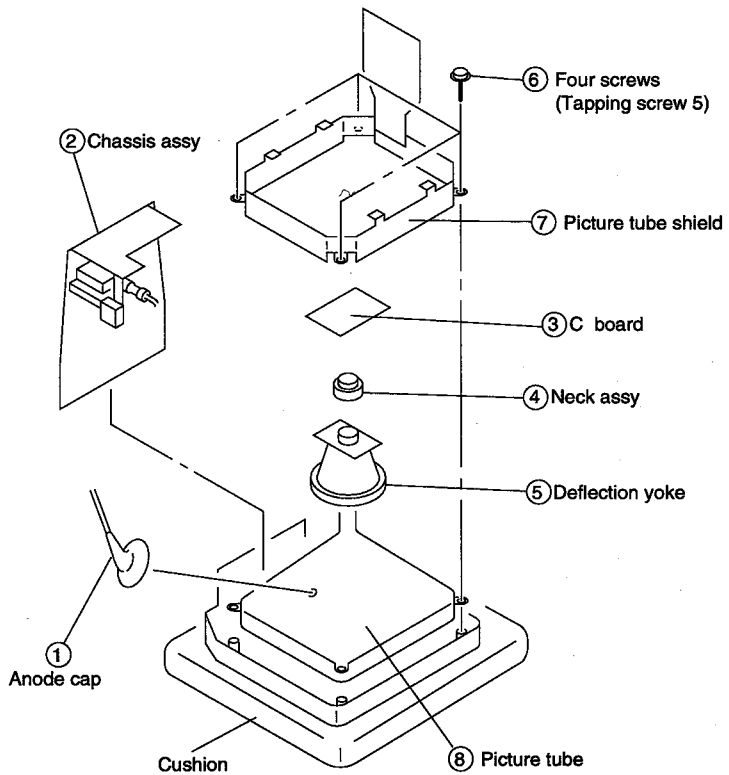
2-3. A BOARD REMOVAL



2-4. F BOARD REMOVAL



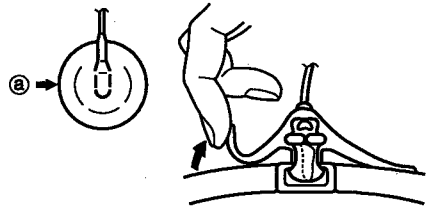
2-5. PICTURE TUBE REMOVAL



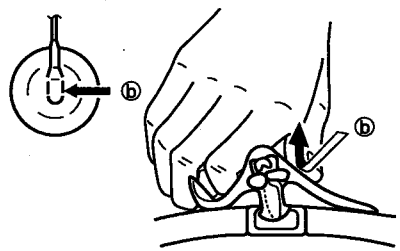
• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis. CRT chield or carbon painted on the CRT, after removing the anode.

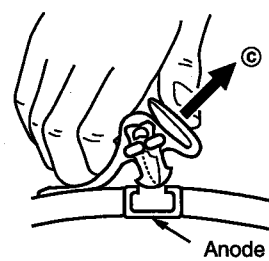
•REMOVING PROCEDURES



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



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



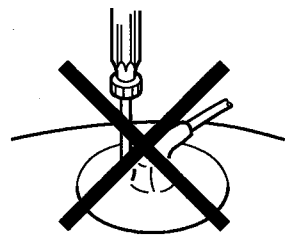
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be romoved by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

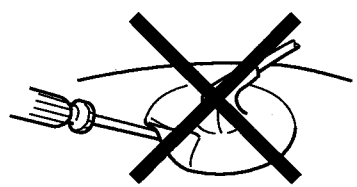
•HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

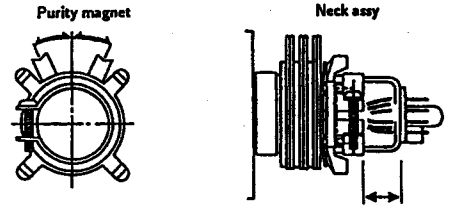
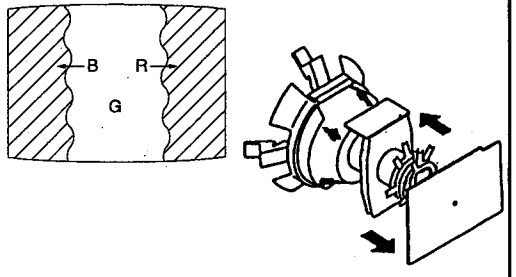
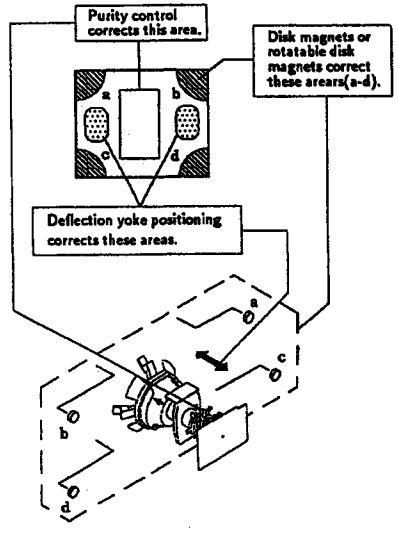
② Don't press the rubber hardly not to hurt inside of anode-caps! A material fitting called as shatter-hook terminal is built in the rubber.

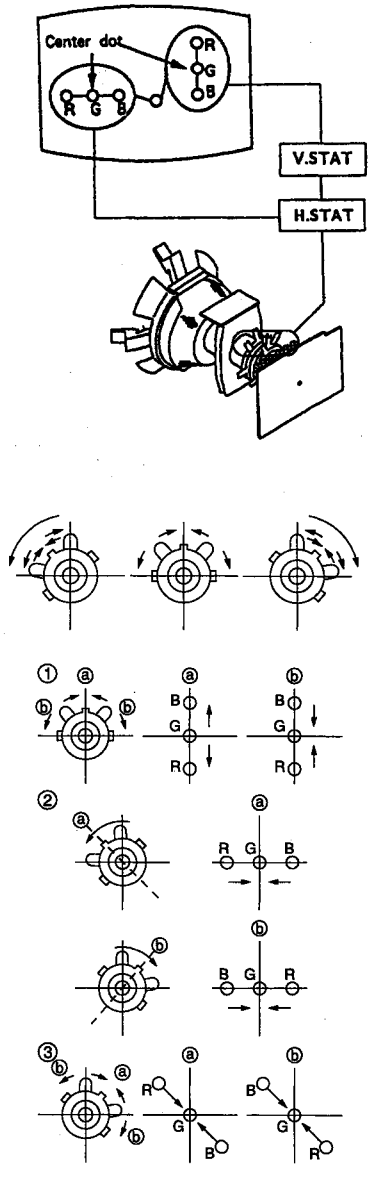
③ Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.

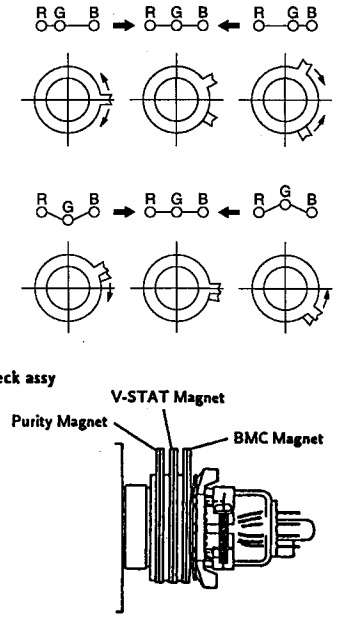


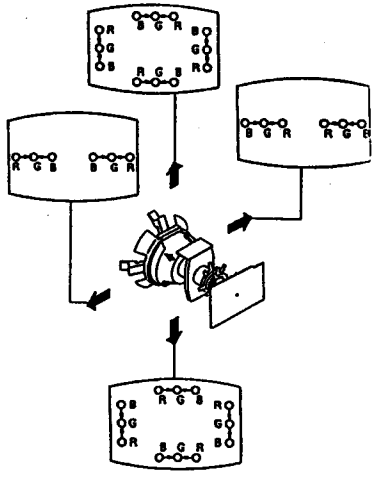
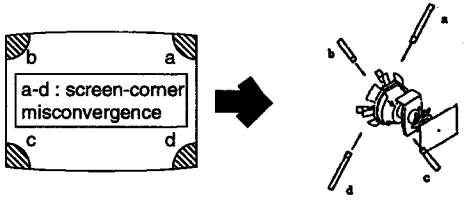
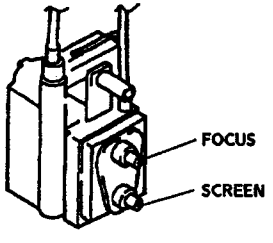


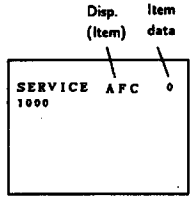
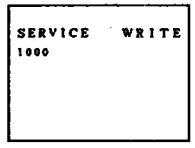
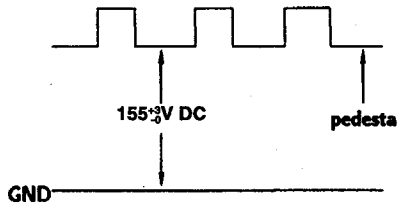
SECTION 3
SET-UP ADJUSTMENTS

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
● The following adjustments should be made when a complete realignment is required or a new picture tube is installed. ● These adjustments should be performed with rated power supply voltage unless otherwise noted. The controls and switch should be set as follows unless otherwise noted : PICTURE control ..... normal BRIGHTNESS control ..... normal **Preparation:** ● In order to reduce the influence of geomagnetism on the set's picture tube face it east or west. ● Switch on the set's power and degauss with the degausser.				 
BEAM LANDING 1. Input a white pattern signal with the pattern generator. 2. Position neck ass'y as shown in Fig. 3. Loosen the deflection yoke mounting screw, and set the purity control to the center. 4. Turn the green pattern signal of the pattern generator to green. 5. Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are at the sides evenly. 6. Move the deflection yoke forward, and adjust so that the entire screen becomes green. 7. Switch over the raster signal to red and blue and confirm the condition. 8. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw. 9. When landing at the corner is not right, adjust by using the disk magnets.	White Pattern Green Pattern		Purity Control Deflection Yoke Disk Magnets	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
CONVERGENCE **Preparation:** ● Before starting, perform FOCUS, V. LIN and V. SIZE adjustments. ● Set BRIGHTNESS control to minimum. ● Feed in dot pattern signal. **(1) Horizontal and Vertical Static Convergence Adjustment** 1. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen. 2. (Moving horizontally), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen. • Tilt the V.STAT magnet and adjust static convergence by opening or closing the V.STAT magnet. 3. When the V-static magnet is moved in the direction of arrow ⓐ and ⓑ, red, green and blue dots move as shown below.	Dot Pattern		V. STAT Magnet V. STAT Magnet	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
● Operation of BMC Magnet ● The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the V-static tabs to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction). ● Y separation axis correction magnet adjustment 1. Receive a cross hatch signal, and adjust PICTURE and BRIGHTNESS. 2. Adjust the deflection yoke to the upright condition when it hits the CRT. 3. Adjust so that the Y separation Axis correction magnet on the neck assembly is symmetrical at the top and bottom (open state). 4. Return the deflection yoke to its original position.			BMC Magnet	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
(2) Dynamic Convergence Adjustment **Preparation:** ● Before starting perform Horizontal and Vertical static convergence Adjustment. 1. Slightly loosen deflection yoke screw. 2. Remove deflection yoke spacers. 3. Move the deflection yoke for best convergence as shown below. 4. Tighten the deflection yoke screw. 5. Install the deflection yoke spacers.			Deflection Yoke	
(3) Screen-corner Convergence Adjustment a–b : screen-corner misconvergence Affix a Permalloy ass'y corresponding to the misconverged areas			Permalloy Ass'y	 Permalloy assembly
FOCUS 1. Receive the broadcasting picture and adjust the picture quarity with the menu. 2. Adjust FOCUS control(FBT) for best picture.			FOCUS control	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
METHOD OF SETTING THE SERVICE ADJUSTMENT **SERVICE MODE PROCEDURE** 1. Standby mode. (Power off) 2. [DISPLAY] → [5] → [VOL (+)] → [POWER] on the *Remote Commander. Press each button within a second. 3. The CRT display the item Being adjusted. 4. Press [1] or [4] on the Remote Commander to select the item. 5. Press [3] or [6] on the Remoto Commander to change the data. 6. Press [MUTING] then [ENTER] to write into memory. 7. Press [8] then [ENTER] on the Remote Commander to initialize. 8. Turn set off and on to exit.				SERVICE ADJUSTMENT MODE IN  SERVICE ADJUSTMENT MODE MEMORY  [MUTING] Green ↓ [ENTER] Red
SCREEN (G2) 1. Input a dot pattern signal. 2. Adjust PICTURE, BRIGHTNESS controls. 3. Connect R, G and B of the C board cathode to the oscilloscope. 4. Adjust G2 (FBT) volume to the value below. 5. Press [MUTING] and [ENTER] to write the data in the memory.	Dot pattern Oscilloscope	cathodes	PICTURE ..... normal BRIGHTNESS ..... normal S BRT G CUT B CUT RV702 SCREEN (G2)	
WHITE BALANCE ADJUSTMENTS 1. Input a entire white signal. 2. Set to service adjustment mode. 3. Set the PICTURE , BRIGHTNESS controls. 4. Adjust with S BRT if necessary. 5. Select G CUT and B CUT with [1] and [4] . 6. Adjust with [3] and [6] for the best white balance. 7. Set the PICTURE and BRIGHTNESS to maximum. 8. Select G AMP and B AMP with [1] and [4] . 9. Adjust with [3] and [6] for the best white balance. 10. Write into the memory by pressing [MUTING] then [ENTER] .	Entire White Pattern		PICTURE ..... minimum BRIGHTNESS ..... normal S BRT G CUT B CUT PICTURE ..... maximum BRIGHTNESS ..... maximum G AMP B AMP	

SECTION 3
CIRCUIT ADJUSTMENTS

ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

Use of Remote Commander (RM-Y116) can be performed circuit adjustments about this model.

NOTE : Test Equipment Required.

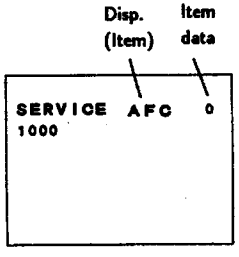
1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

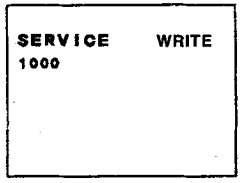
1. Standby mode. (Power off)
2. [DISPLAY] → [5] → [VOL (+)] → [POWER] on the Remote Commander. (Press each button within a second.)

SERVICE ADJUSTMENT MODE IN



3. The CRT displays the item Being adjusted.
4. Press [1] or [4] on the Remote Commander to select the item.
5. Press [3] or [6] on the Remote Commander to change the data.
6. If you want to recover the latest values press [0] then [ENTER] to lead the memory.
7. Press [MUTING] then [ENTER] to write into memory.

SERVICE ADJUSTMENT MODE MEMORY

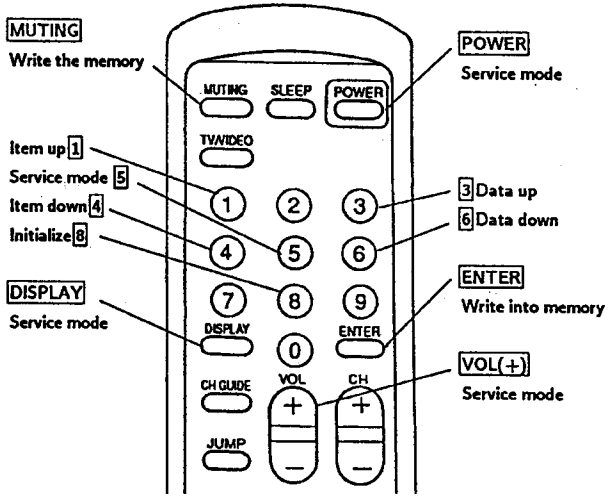


[MUTING] Green
↓
[ENTER] Red

2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again, confirm they were adjusted.

3. ADJUST BUTTONS AND INDICATOR



RM-Y116

4. AN ITEM OF ADJUSTMENTS

VP

No.	Disp.	Item	Data range	Ave. data
00	AFC	AFC Loop Gain 0 : M 1 : S 2 : L 3 : OFF	0 ~ 3	0
01	HFRE	H. Frequency	0 ~ 7F	57
02	VFRE	V. Frequency	0 ~ 1F	15
03	VPOS	V. Shift	0 ~ 1F	20
04	VSIZ	V. Size	0 ~ 3F	38
05	VLIN	V.Liniaruty	0 ~ 0F	7
06	VSCO	V. Correction	0 ~ 0F	4
07	HPOS	H. PHASE	0 ~ 0F	9
* 08	HSIZ	H. Size	0 ~ 1F	15
* 09	PAMP	Pin Amp	0 ~ 1F	15
* 10	CPIN	Corner Pin	0 ~ 7	4
* 11	PPHA	Pin Phase	0 ~ 0F	7
12	VCOM	V. Compensation	0 ~ 7	2
13	GAMP	Green Amp	0 ~ 1F	15
14	BAMP	Blue Amp	0 ~ 1F	15
15	GCUT	Green Cut Off	0 ~ 0F	7
16	BCUT	Blue Cut Off	0 ~ 0F	7
17	CROM	Chroma Trap	0 ~ 3F	32
18	SPIX	Picture	0 ~ 3F	20
19	SHUE	Sub Hue	0 ~ 3F	25
20	SCOL	Sub Color	0 ~ 3F	28
21	SBRT	Sub Bright	0 ~ 3F	29
* 22	RGBP	RGB Picture	0 ~ 3F	31
23	SHAP	Sharpness	0 ~ 0F	7
24	VSMO	V Pull in Range 0 : normal, 1 : wide	0, 1	0
25	REF	Refference line	0 ~ 3	1
26	ROFF	Red Out 0 : OFF, 1 : ON	0, 1	1
27	GOFF	Green Out 0 : OFF, 1 : ON	0, 1	1
28	BOFF	Blue Out 0 : OFF, 1 : ON	0, 1	1
29	ABLM	ABL Mode 0 : pic+brt, 1 : pic	0, 1	0
30	NOTC	Notch filter 0 : chrtrap, 1 : OFF	0, 1	0
31	DRGB	OSD intensity 0 : 0db, 1 : -3db	0, 1	0

Note

* Mark : Don't adjust the Service Manu.

OP

No.	Disp.	Item	Data range	Ave. data
1	DISP	PWN output	0 ~ 3F	4
2	SPOT	Spot killer	0 ~ 0F	8
3	PBLK	Pic blanking	0 ~ 1F	13

5. +B ADJUSTMENTS

ADJUSTMENT ITEM AND PROCEDURE

A BOARD

+B ADJUSTMENT (40V ADJ)

1. Set the power source at 130 $^{+2.0}_{-0}$ VAC.
2. Input a color-bar signal.
3. Connect a digital voltmeter to the pin ⑨ of CN606.
4. Adjust RV601 for 40 ± 0.1VDC on the digital voltmeter.

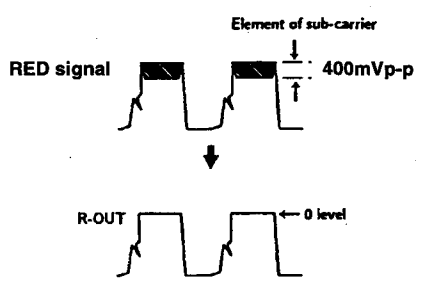
F BOARD (KV9PT60 only)

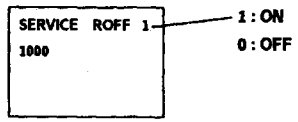
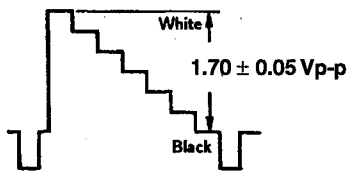
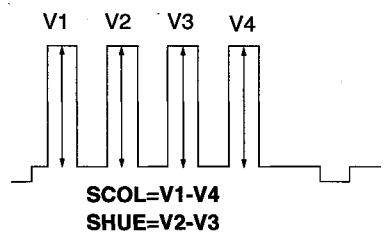
+B ADJUSTMENT (40V ADJ)

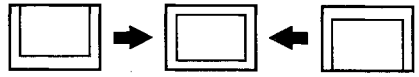
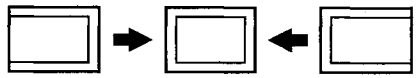
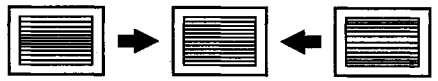
1. Set the power source at 12 ± 0.5 VDC.
2. Input a color-bar signal.
3. Connect a disital voltmeter to the pin ⑨of CN606.
4. Adjust RV652 for 40 ± 0.1VDC on the digital voltmeter.

+B ADJUSTMENT (9.8V ADJ)

1. Set the power source at 12 ± 0.5VDC.
2. Input a color-bar signal.
3. Connect a digital voltmeter to the pin ⑤ of CN 606.
4. Adjust RV 651 for 9.8 ± 0.1VDC on the digital voltmeter.

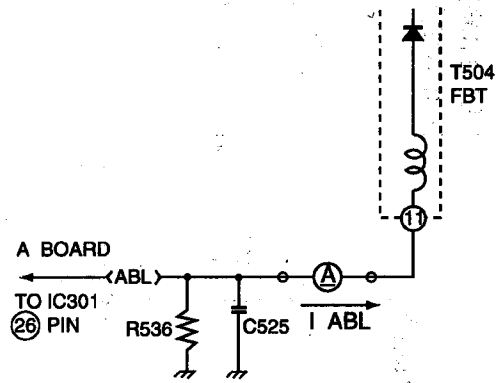
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
H. FREQUENCY ADJUSTMENT (HFRE) 1. Input a monoscope signal. 2. Set to Service adjustment Mode. 3. Connect a frequency counter to JL24. 4. Call the item of AFC, set to 3 level (free run). 5. Select HFRE with [1] and [4]. 6. Adjust with [3] and [6] so that the frequency counter is 15734±60Hz. 7. Call to item of AFC again, adjust the level "0". 8. Write into the memory by pressing [MUTING] then [ENTER] .	Monoscope Pattern Frequency counter	JL24 (Base of Q550)	AFC HFRE	15734±60Hz
V. FREQUENCY ADJUSTMENT (VFRE) 1. Select video 1 with no connecting the signal. 2. Set to Service adjustment Mode. 3. Connect a frequency counter across CN501 ④pin connector and ground. 4. Select VFRE with [1] and [4]. 5. Adjust with [3] and [6] so that the frequency counter is 56±0.5 Hz. 6. Write into the memory by pressing [MUTING] then [ENTER] .	Frequency counter	CN501 ④pin (VDY +)	VFRE	56±0.5 Hz
CROMA TRAP ADJUSTMENT (CTRP) 1. Input the red pattern signal, and adjust PICTURE, BRIGHTNESS and COLOR. 2. Set to Service adjustment Mode. 3. Connect an oscilloscope between the A board connector CN301 ①pin and ground. 4. Select CTRP with [1] and [4]. 5. Adjust with [3] and [6] for the "0" level. 6. Write into the memory by pressing [MUTING] then [ENTER] .	Red pattern Oscilloscope	CN301 ①pin R-OUT (A board)	PICTURE ..... maximum BRIGHTNESS ..... center COLOR ..... minimum CTRP	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
SUB PICTURE ADJUSTMENT (SPIX) 1. Input the color bar signal, and adjust PICTURE, BRIGHTNESS and COLOR. 2. Set to Service adjustment Mode.	Color-Bar Pattern Oscilloscope		PICTURE ..... maximum COLOR ..... minimum BRIGHTNESS ..... center R OFF : ON (1) G OFF : OFF (0) B OFF : OFF (0)	
3. Connect an oscilloscope between the A board connector CN301 ① pin and ground. 4. Call to item of G OFF and B OFF, set to 0 evel. 5. Select SPIX with [1] and [4] . 6. Adjust with [3] and [6], so that the wave form level is 1.70±0.05Vp-p. 7. Call to item of G OFF and B OFF, set to 1 evel. 8. Write the memory by pressing [MUTING] then [ENTER] .		CN301 ① pin R-OUT (A board)		
SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL) 1. Input a color bar signal, and adjust PICTURE, BRIGHTNESS and COLOR. 2. Connect an oscilloscope between the A board connector CN301 ③ pin and ground. 3. Set to service adjustment mode. 4. Select SCOL with [1] and [4] . 5. Adjust with [3] and [6] for the V1=V4 ± 0.1V. 6. Select SHUE with [1] and [4] . 7. Adjust with [3] and [6] for the V2=V3 ± 0.1V. 8. Write into the memory by pressing [MUTING] then [ENTER] .	Color-Bar Pattern Oscilloscope	CN301 ③ pin B-OUT (A board)	PICTURE ..... maximum COLOR ..... center BRIGHTNESS ..... center SCOL SHUE	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
V. CENTER ADJUSTMENT (VPOS) 1. Input a cross hatch signal. 2. Set to Service adjustment Mode. 3. Select VPOS with [1] and [4]. 4. Adjust with [3] and [6] for the best vertical center. 5. Write into the memory by pressing [MUTING] then [ENTER].	Cross-hatch pattern		VPOS	V. SHIFT(VPOS) 
H. CENTER ADJUSTMENT (HPOS) NOTE : Perform this adjustment after H. FREQUENCY ADJUSTMENT (HFRE). 1. Input a cross hatch signal. 2. Set to Service adjustment Mode. 3. Select HPOS with [1] and [4]. 4. Adjust with [3] and [6] for the best horizontal center. 5. Write into the memory by pressing [MUTING] then [ENTER].	Cross-hatch pattern		HPOS	H. CENTER(HPOS) 
V. LINEARITY(V LIN), V CORRECTION (VSCO) ADJUSTMENT 1. Input a cross hatch signal. 2. Set to Service adjustment Mode. 3. Select VLIN and VSCO with [1] and [4]. 4. Adjust with [3] and [6] for the best picture. 5. Write into the memory by pressing [MUTING] then [ENTER].	Cross-hatch pattern		VLIN VSCO	V. LINEARITY(VLIN)  V. CORRECTION(VSCO) 

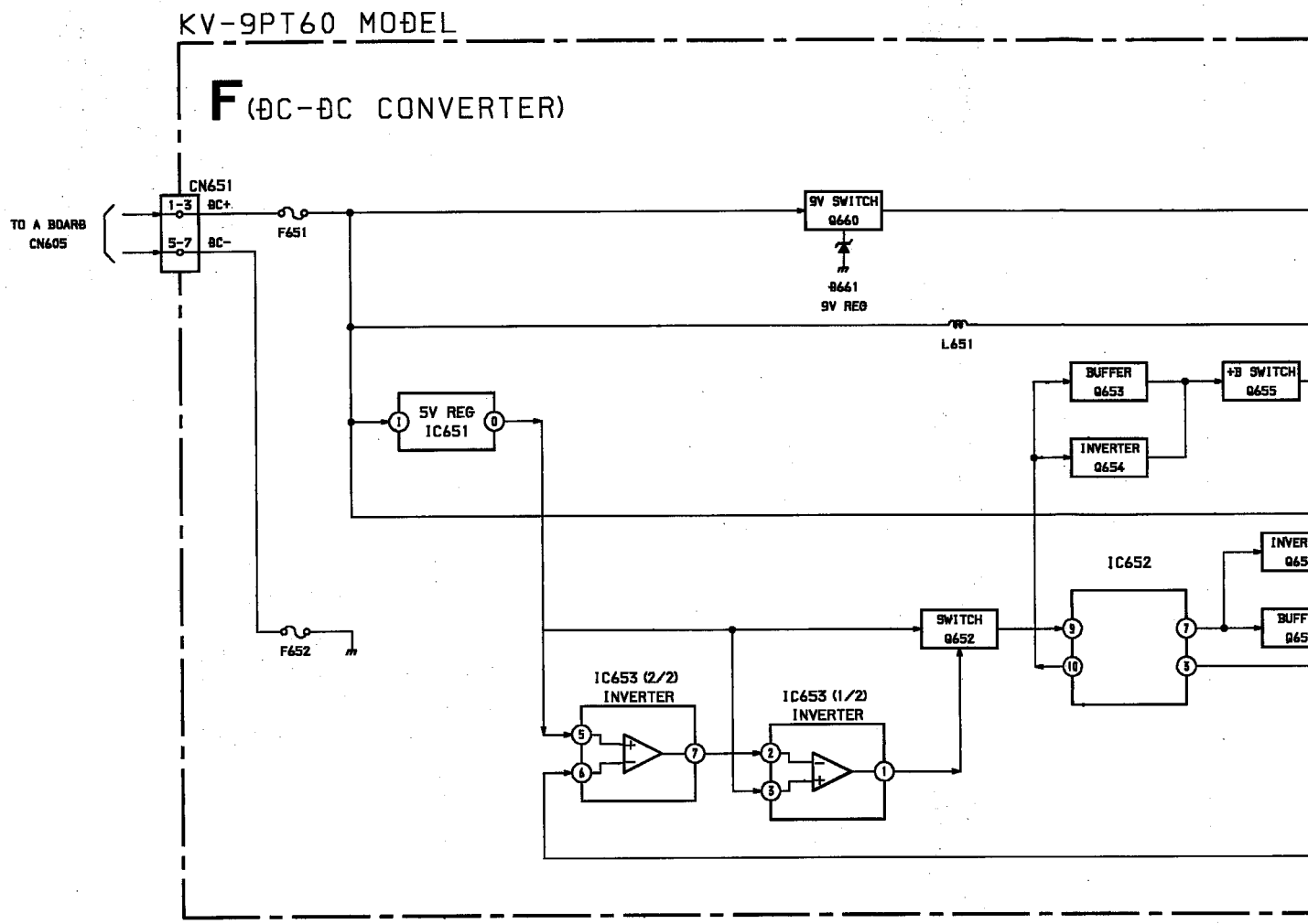
SECTION 5
SAFETY RELATED ADJUSTMENTS

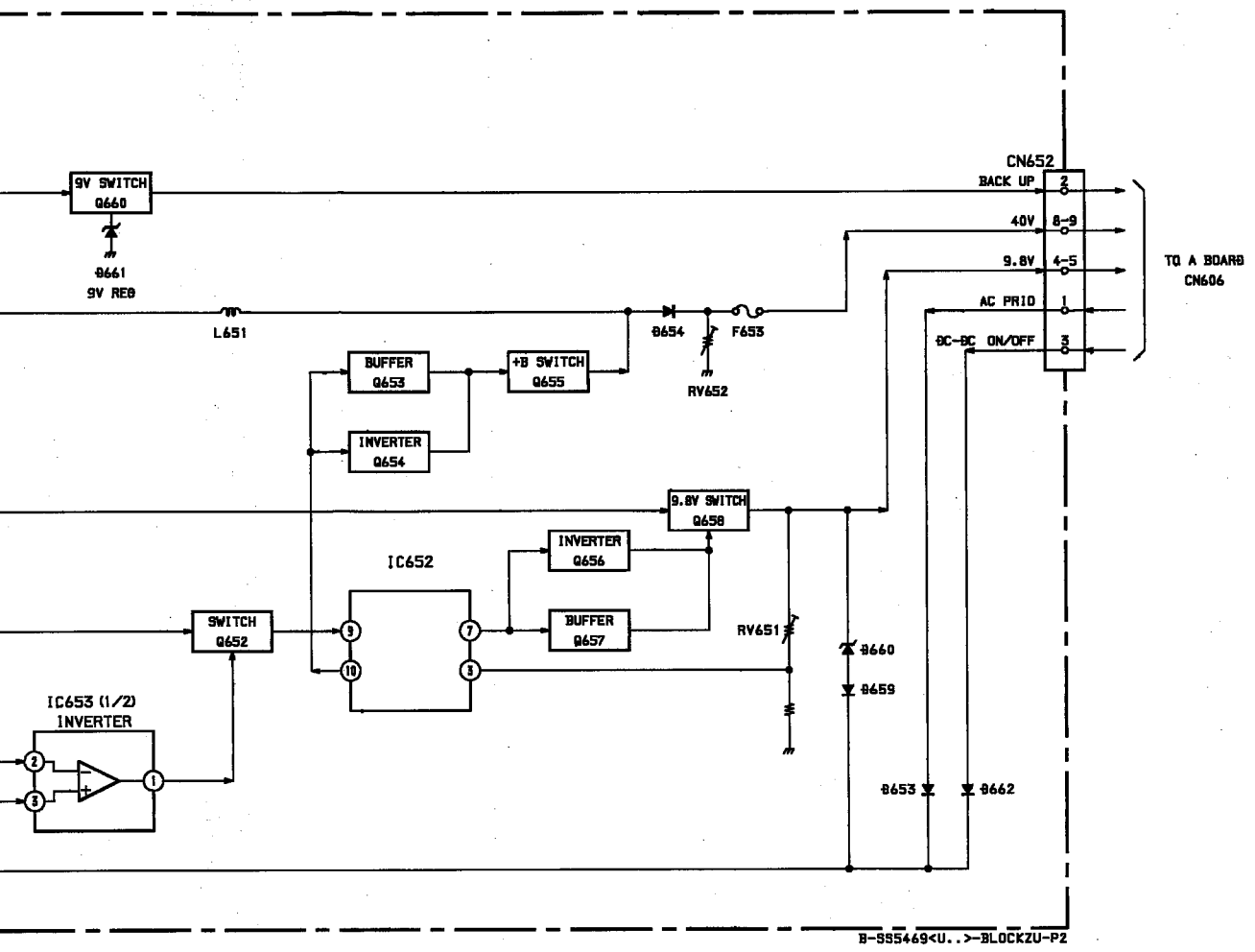
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
[A BOARD] **⊠ RV601,R069 B+ MAXIMUM VOLTAG CONFIRMATION AND ADJUSTMENT.** The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram). 1. Set the power source at 130 $^{+20}_{-00}$ VAC. 2. Receive Monoscope signal. 3. Set the PICTURE and BRIGHTNESS at the initial reset. 4. Adujst RV601 (40VADJ) to maximum. 5. Confirm is the voltage of the checked terminal of pin ⑨ (JL7) of CN606 connector is less than 43.0VDC. 6. After confirmation, Readjust RV 601 to obtain 40±0.1VDC.	Monoscope signal	◪ marked parts IC601, R627, R629, R069, L601 CN 606 pin ⑨	⊠ RV601,R069 PICTURE ..... maximum BRIGHTNESS ..... center	Connector CN 606 pin ⑨ less than 43.0 VDC.
[F BOARD] (KV-9PT60) **⊠ RV652,R670 B+ MAXIMUM VOLTAG CONFIRMATION AND ADJUSTMENT.** The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram). 1. Set the power source at 15.0 $^{+1.0}_{-00}$ VDC. 2. Receive Monoscope signal. 3. Set the PICTURE and BRIGHTNESS at the initial reset. 4. Adujst RV652 (40VADJ) to maximum. 5. Confirm is the voltage of the checked terminal of pin ⑨ (JL7) of CN606 connector is less than 43.0VDC. 6. After confirmation, Readjust RV 652 to obtain 40±0.1VDC.	Monoscope signal	◪ marked parts F653, IC652, L654, R667, R668, R670 CN 606 pin ⑨	⊠ RV652,R670 PICTURE ..... maximum BRIGHTNESS ..... center	Connector CN 606 pin ⑨ less than 43.0 VDC.

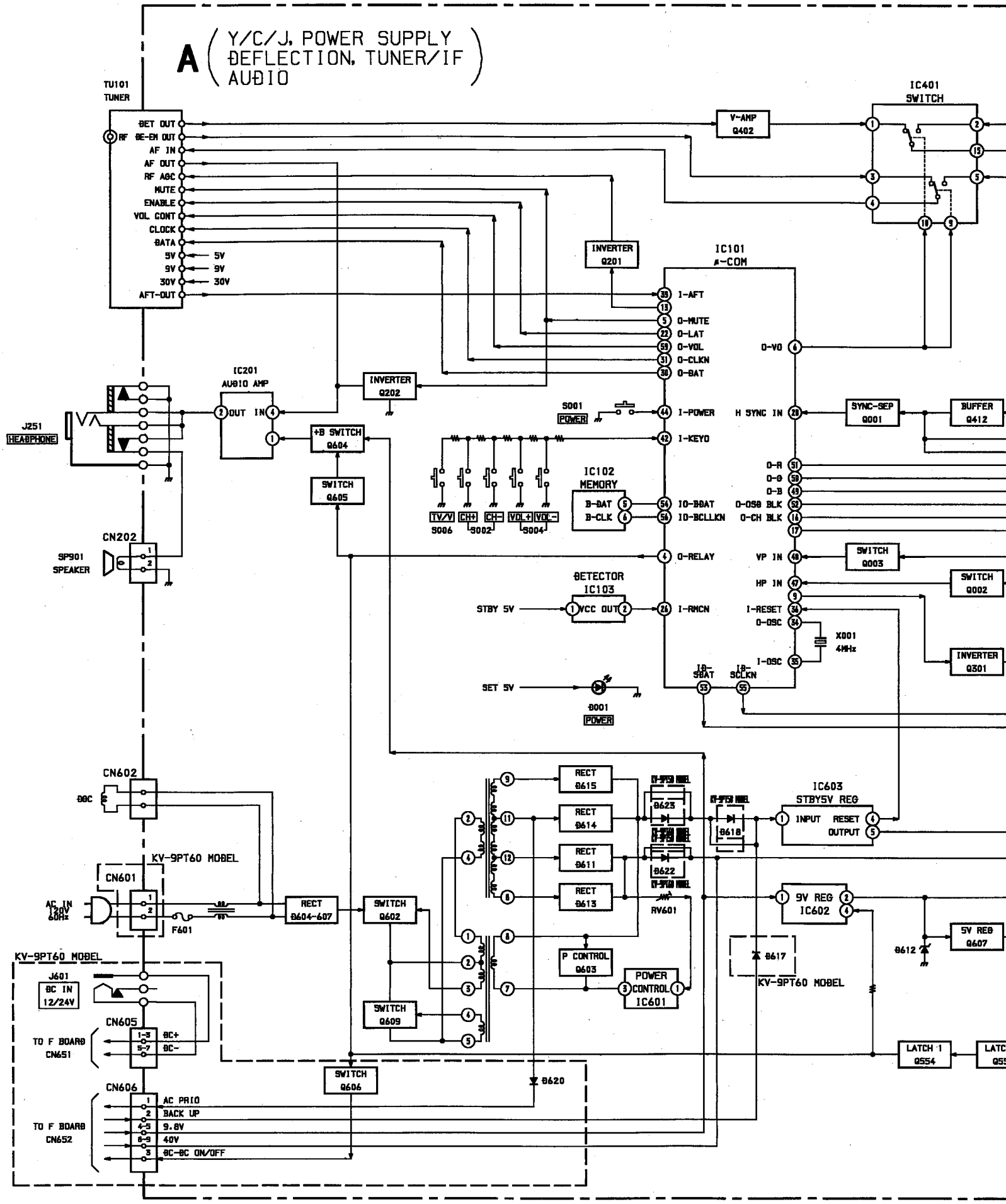
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
• Preparation fore confirmation. 1. Set the power source to 120 ± 1.0 VAC. 2. Receive Monoscope signal. 3. Set the PICTURE and BRIGHTNESS at the reset position. 4. Confirm if the voltage between JL46 (H.PROT) and ground is more than DC 85V. 5. When inputting 12 ± 1.0 VDC at the DC power supply input terminal do the same adjust process 3. and 4. above. (KV-9PT60 ONLY)	Monoscope signal		PICTURE ..... maximum BRIGHTNESS ..... center	
HOLD DOWN OPERATION CONFIRMATION . 1. Set the power source to 120 ± 1.0 VAC. 2. Receive all white signal. 3. Using an external DC power supply, apply voltage to JL46 (H.PROT) and ground. 4. Gradually increase the voltage and confirm if the hold-down circuit works (Raster disappears) at less than 113.0VDC. 5. Confirm if ABL current is within 660 ± 50µA.	All white signal	◪ marked parts C511, C513, C528, C531, D505, D506, D507, D510, L505, IC502, IC602, Q554, Q555, R511, R519, R520, R523, R525, R527, R557, R558, R559, R560, R639, R640, T504, DY.	⊠ RV601,R069	 Connector a Ammeter to the location of R504 space. After the current measurement, put back the 2 resistors. ABL current KV-9PT50/9PT60 : 660 ± 50µA KV-9PT60 : 70 ± 50µA
(KV-9PT60) **HOLD DOWN OPERATION CONFIRMATION .** 1. Set the power source to 12 ± 1.0 VDC. 2. Receive a dot signal. 3. Using an external DC power supply, apply voltage to JL46 (H.PROT) and ground. 4. Gradually increase the voltage and confirm if the hold-down circuit works (Raster disappears) at less than 113.0VDC. 5. Confirm if ABL current is within 70 ± 50µA.	Dot signal			

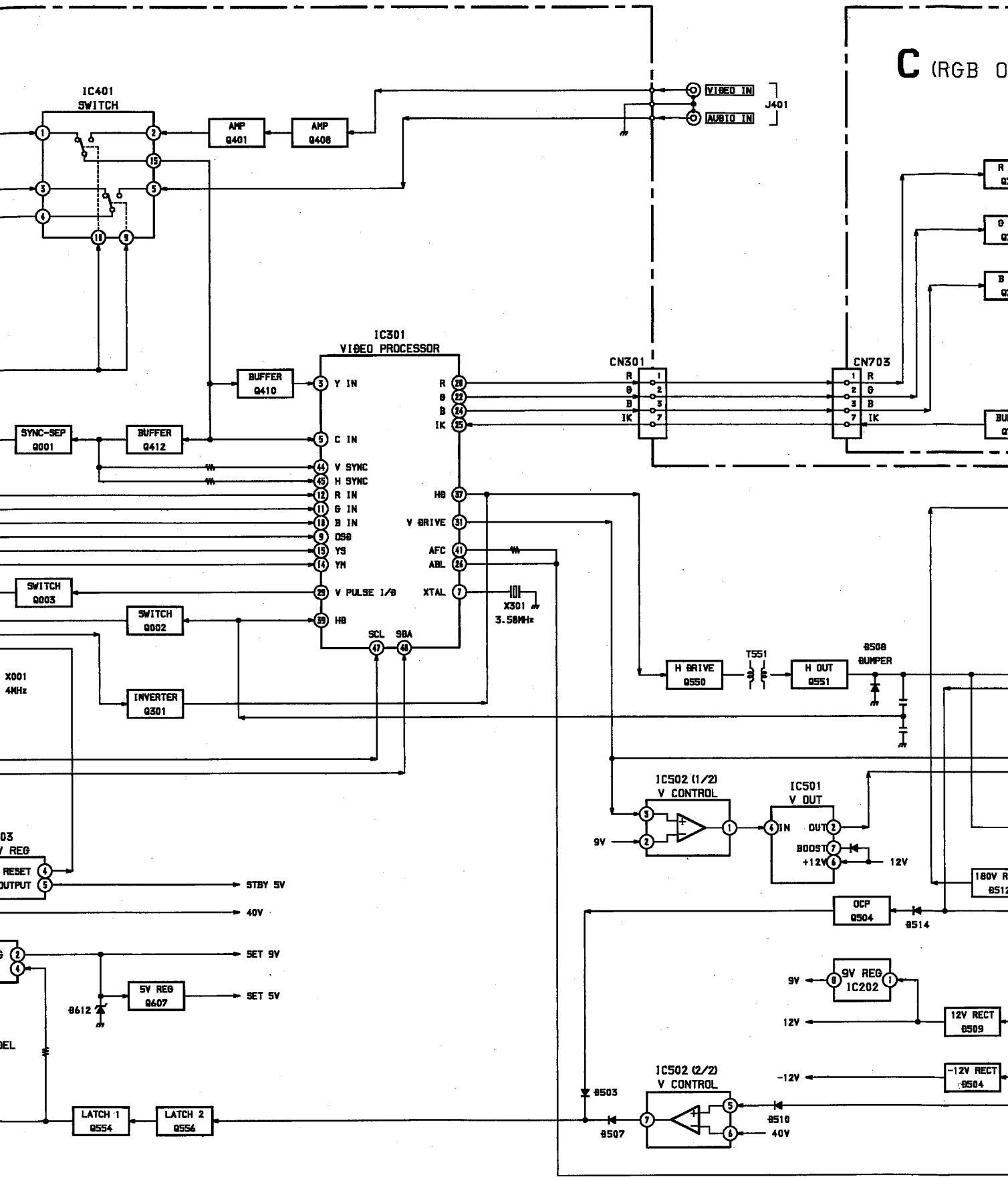
SECTION 6
DIAGRAMS

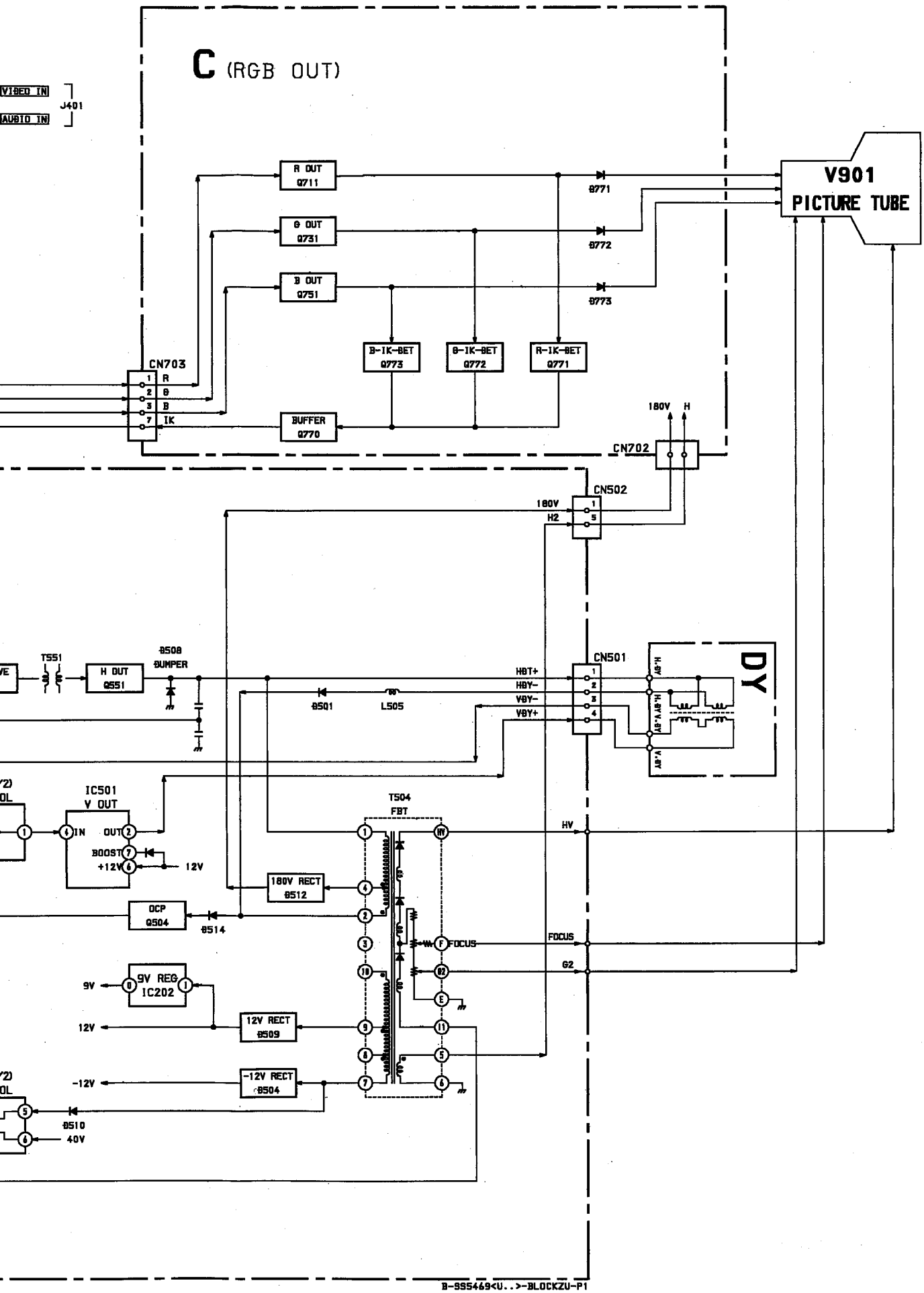
6-1. BLOCK DIAGRAMS (1)



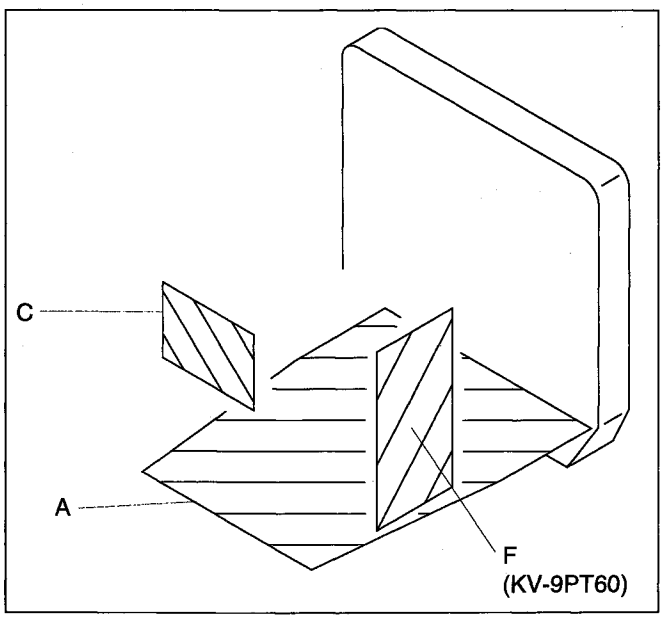

9V SWITCH
Q660
D661
9V REG
L651
BUFFER
Q653
+B SWITCH
Q655
INVERTER
Q654
D654
F653
RV652
9.8V SWITCH
Q658
IC652
INVERTER
Q656
BUFFER
Q657
SWITCH
Q652
RV651
D660
D659
D653
D662
IC653 (1/2)
INVERTER
CN652
BACK UP
40V
9.8V
AC PRID
BC-BC ON/OFF
TO A BOARD
CN606
B-SS5469<U..>-BLOCKZU-P2


A (Y/C/J, POWER SUPPLY
DEFLECTION, TUNER/IF
AUDIO)
TU101
TUNER
DET OUT
RF
DE-EM OUT
AF IN
AF OUT
RF AGC
MUTE
ENABLE
VOL CONT
CLOCK
DATA
5V
9V
30V
AFT-OUT
V-AMP
Q402
IC401
SWITCH
INVERTER
Q201
IC101
μ-COM
I-AFT
O-MUTE
O-LAT
O-VOL
O-CLKN
O-DAT
O-VO
IC201
AUDIO AMP
OUT
IN
INVERTER
Q202
J251
HEADPHONE
+B SWITCH
Q604
SWITCH
Q605
S001
POWER
I-POWER
I-KEY0
H SYNC IN
SYNC-SEP
Q001
BUFFER
Q412
IC102
MEMORY
B-DAT
B-CLK
IO-BDAT
IO-BCLKN
O-R
O-G
O-B
O-OSD BLK
O-CH BLK
TV/V
CH+
CH-
VOL+
VOL-
S006
S002
S004
CN202
SP901
SPEAKER
O-RELAY
VP IN
SWITCH
Q003
DETECTOR
IC103
STBY 5V
VCC OUT
I-RMCN
HP IN
SWITCH
Q002
I-RESET
O-OSC
X001
4MHz
I-OSC
INVERTER
Q301
IO-SDAT
IO-SCLKN
SET 5V
D001
POWER
CN602
DC
KV-9PT60 MODEL
CN601
AC IN
120V
60Hz
F601
RECT
D604-607
SWITCH
Q602
RECT
D615
RECT
D614
RECT
D611
RECT
D613
D623
D622
D618
RV601
IC603
STBY5V REG
INPUT
RESET
OUTPUT
9V REG
IC602
5V REG
Q607
D612
P CONTROL
Q603
POWER
CONTROL
IC601
D617
KV-9PT60 MODEL
SWITCH
Q609
J601
DC IN
12/24V
CN605
TO F BOARD
CN651
DC+
DC-
SWITCH
Q606
D620
CN606
AC PRIO
BACK UP
9.8V
40V
DC-DC ON/OFF
TO F BOARD
CN652
LATCH 1
Q554


C (RGB O
IC401
SWITCH
AMP
Q401
AMP
Q408
VIDEO IN
AUDIO IN
J401
IC301
VIDEO PROCESSOR
BUFFER
Q410
BUFFER
Q412
SYNC-SEP
Q001
Y IN
C IN
V SYNC
H SYNC
R IN
G IN
B IN
OSD
YS
YM
V PULSE I/O
HD
R
G
B
IK
HD
V DRIVE
AFC
ABL
XTAL
SCL
SDA
X301
3.58MHz
CN301
CN703
SWITCH
Q003
SWITCH
Q002
INVERTER
Q301
X001
4MHz
H DRIVE
Q550
T551
H OUT
Q551
D508
BUMPER
IC502 (1/2)
V CONTROL
IC501
V OUT
9V
IN
OUT
BOOST
+12V
12V
OCP
Q504
D514
STBY 5V
40V
SET 9V
SET 5V
5V REG
Q607
D612
9V REG
IC202
12V RECT
D509
-12V RECT
D504
IC502 (2/2)
V CONTROL
D503
D507
D510
40V
LATCH 1
Q554
LATCH 2
Q556


C (RGB OUT)
VIDEO IN
AUDIO IN
J401
R OUT
Q711
G OUT
Q731
B OUT
Q751
D771
D772
D773
V901
PICTURE TUBE
B-IK-DET
Q773
G-IK-DET
Q772
R-IK-DET
Q771
CN703
1 R
2 G
3 B
7 IK
BUFFER
Q770
180V
H
CN702
CN502
180V
H2
CN501
HBT+
HBY-
VBY-
VBY+
DY
T551
H OUT
Q551
D508
BUMPER
D501
L505
IC501
V OUT
IN
OUT
BOOST
+12V
12V
T504
FBT
HV
180V RECT
D512
OCP
Q504
D514
FOCUS
G2
9V REG
IC202
9V
12V
12V RECT
D509
-12V
-12V RECT
D504
D510
40V
B-SS5469<U..>-BLOCKZU-P1

6-2. CIRCUIT BOARDS LOCATION



Part replaced (◪)	Adjustment (⧓)
C511, C513, C528, C531, D505, D506, D507, D510, IC502, IC602, L505, Q554, Q555, R511, R519, R520, R523, R525, R527, R557, R558, R559, R560, R639, R640, T504, DY ..... A BOARD	HOLD-DOWN
IC601, L601, R069, R627, RV601 ..... A BOARD	RV601, R069 (B+ MAX)
F653, IC652, L654, R667, R670, RV652 ..... F BOARD	RV652, R670 (B+ MAX)

- ▬▬ V : B+line.
- ▬ ▬ V : B-line.

  (Actual measured value may be different).
- ⇨ : signal path. (RF)
- Circled numbers are waveform references.

Reference information

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

6-3. PRINTED WRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms.
  kΩ=1000Ω, MΩ=1000kΩ
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch : 5mm
Rating electrical power : 1/4 W

- 1/4 W in resistance, 1/10 W and 1/8 W in chip resistance.
- ⊣▭⊢ : nonflammable resistor.
- ⊣▭⊢ : fusible resistor.
- △ : internal component.
- ▭ : panel designation and adjustment for repair.
- # : not mounted.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⏚ : earth-ground.
- ⏚ : earth-chassis.
- The components identified by ⧓ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⧓ and repeat the adjustment until the specified value is achieved. (Refer to R069, R670, RV601, RV652 adjustment on Page 29-30.)
- When replacing the part in below table, be sure to perform the related adjustment.
- Readings are taken with a color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
  S : Measurement impossibility.

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

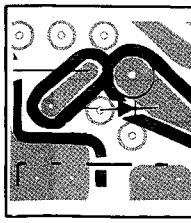
Note: The symbol ⊣▭⊢ display is on the component side.

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

The symbol ⊣▭⊢ indicate fast operating fuse. Replace only with fuse of same rating as maked.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Le symbole ⊣▭⊢ indique une fusible a action rapide. Doit etre remplacee par une fusible de meme yaleur, comme maque.



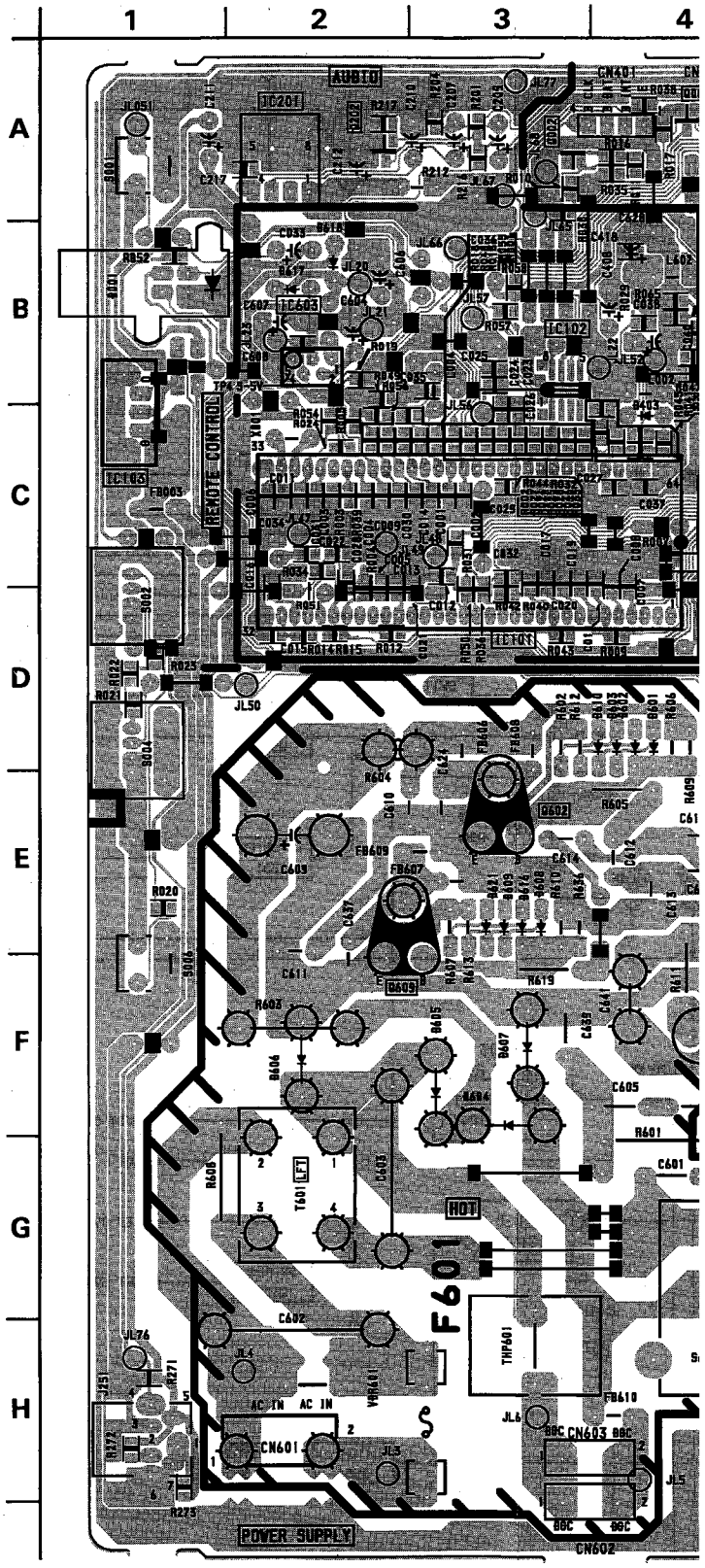
A Y/C/J, POWER SUPPLY, DEFLECTION, TUNER/IF, AUDIO

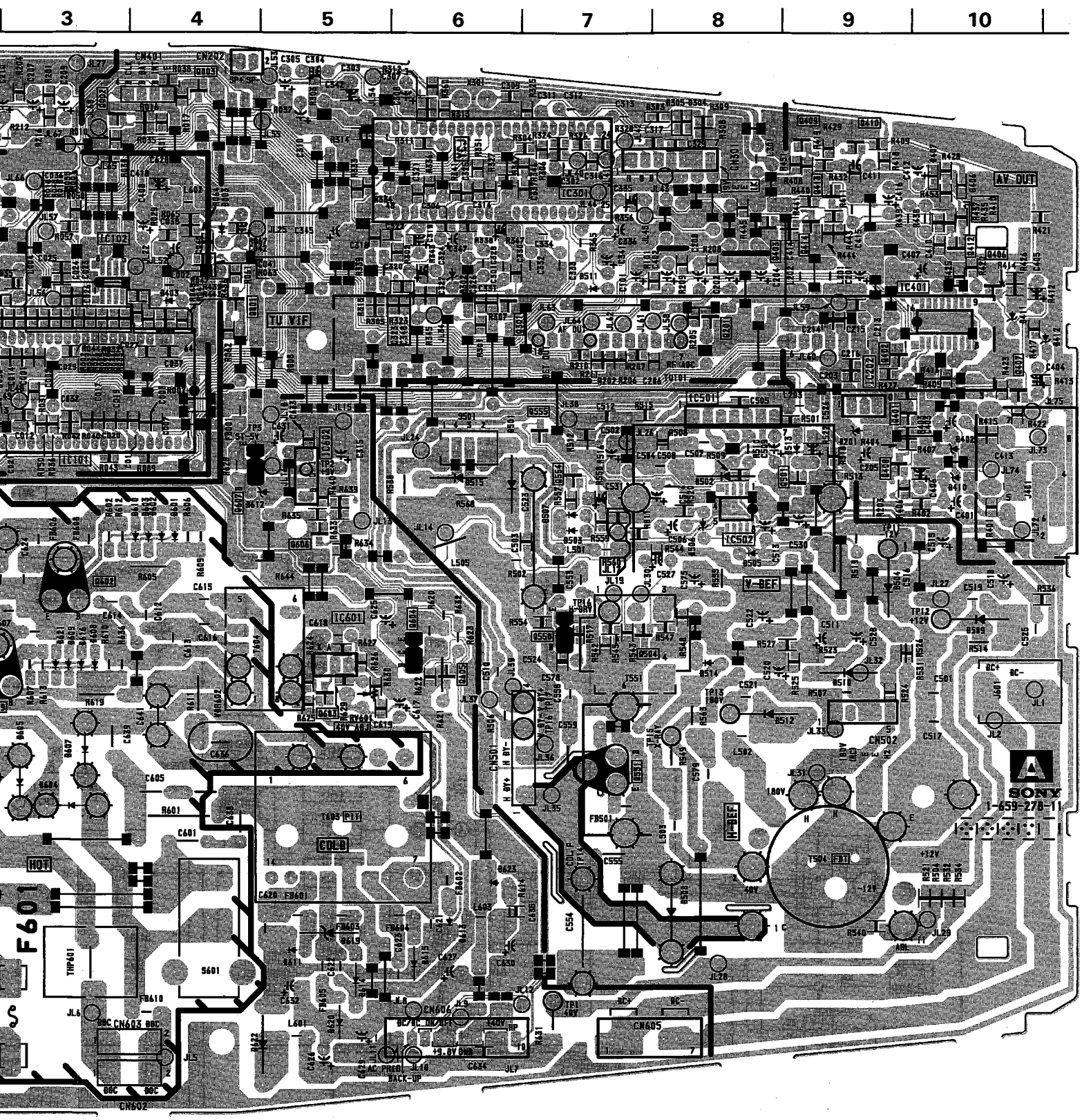
– A BOARD –

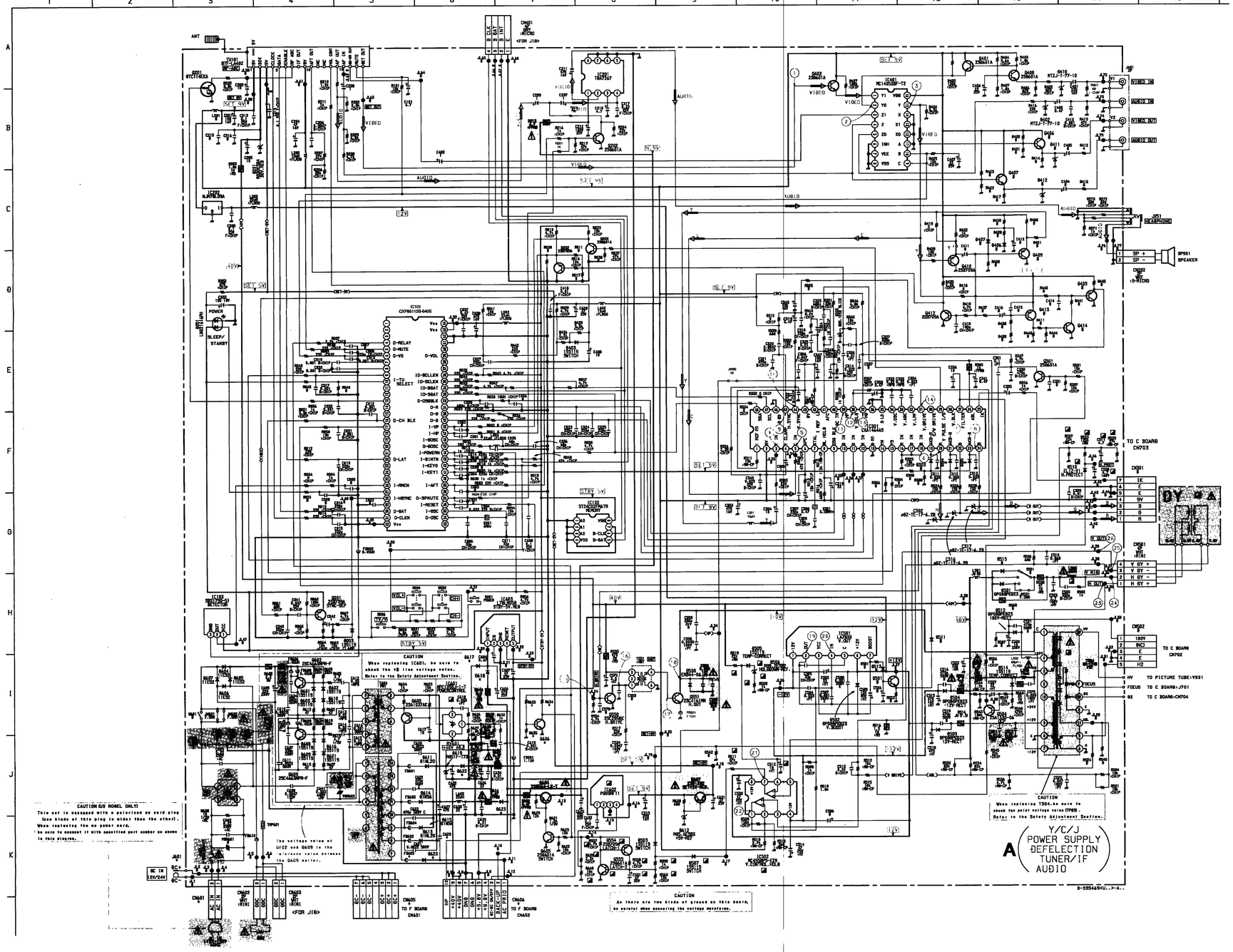
A BOARD LOCATION

IC		D402	D-10
IC101	C-3	D403	C-4
IC102	B-3	D410	D-10
IC103	C-1	D501	D-6
IC201	A-2	D502	D-8
IC202	C-9	D503	D-7
IC301	B-6	D504	E-9
IC401	C-10	D505	D-8
IC501	C-8	D506	D-8
IC502	D-8	D507	D-7
IC601	E-5	D508	G-7
IC602	D-5	D509	E-10
IC603	B-2	D510	E-9
TRANSISTOR		D512	F-8
Q001	C-4	D514	E-8
Q002	A-3	D601	D-4
Q003	A-4	D602	D-4
Q201	C-8	D603	D-3
Q202	A-2	D604	F-3
Q301	C-6	D605	F-2
Q401	C-9	D606	F-2
Q402	C-9	D607	F-3
Q408	D-9	D608	E-3
Q410	A-9	D609	E-3
Q412	B-10	D610	D-3
Q504	E-7	D611	H-5
Q550	E-7	D612	D-4
Q551	F-7	D613	G-6
Q554	D-7	D614	H-5
Q555	D-6	D615	H-5
Q602	E-3	D616	E-3
Q603	F-5	D617	B-2
Q604	E-5	D618	B-2
Q605	E-6	D619	G-5
Q606	D-5	D620	H-5
Q607	D-4	D621	E-3
Q609	E-2	D622	H-4
DIODE		D623	G-6
D001	B-1	VARIABLE RESISTOR	
D003	B-4		
D201	D-9	RV601	F-5
D302	B-6		

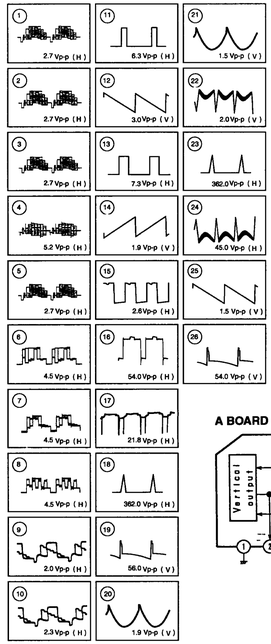
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



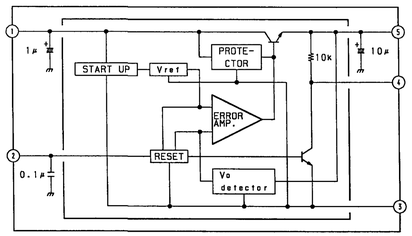

3
4
5
6
7
8
9
10
F601
HOT
TU VIF
AV OUT
V-DEF
H-DEF
CDL-B
SONY
1-659-278-11



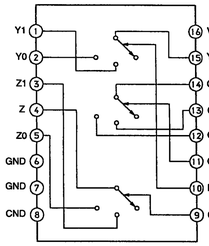
• A BOARD WAVEFORMS



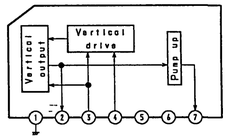
A BOARD IC603 L78LR05D



A BOARD IC401 MC14053BF-T2



A BOARD IC501 LA7830



A BOARD VOLTAGE LIST

IC101	4	4.8	IC103	1	5.0	42	3.9
	5	0		2	5.0	43	7.8
	6	5.1		3	E	44	2.0
	7	0	IC201	1	9.8	45	2.0
	8	0		2	4.9	46	E
	9	0		3	5.3	47	5.0
	10	0		4	0.9	48	5.0
	13	0		5	E	IC401 1	3.9
	16	0		6	E	2	9.0
	17	0		7	E	3	2.6
	22	0.2		8	E	4	2.6
	26	5.0	IC202	1	13.0	5	0.3
	27	5.0		2	E	6	E
	28	0		3	9.3	7	E
	29	0	IC301	1	6.5	8	E
	30	0		2	9.0	9	5.2
	31	0		3	4.9	10	5.2
	32	E		4	5.8	11	E
	34	2.5		5	3.7	12	E
	35	2.2		6	5.0	13	E
	36	5.0		7	2.4	14	E
	37	0		8	4.0	15	3.7
	39	2.3		9	0	16	9.0
	40	0		10	0	IC501 1	-12.5
	41	5.0		11	0	2	0.2
	42	5.0		12	0	3	12.5
	43	5.0		13	E	4	-11.6
	44	5.0		14	0.3	5	-11.8
	45	2.9		15	0	6	13.0
	46	2.9		16	2.0	7	-10.9
	47	0.9		17	2.0	IC502 1	-10.0
	48	0.2		18	2.0	2	1.6
	49	0		19	6.2	3	1.6
	50	0		20	2.0	4	12.5
	51	0		21	6.0	5	8.9
	52	0		22	2.1	6	10.6
	53	5.0		23	6.2	7	-11.3
	54	5.0		24	2.0	8	13.0
	55	5.0		25	3.3	IC601 1	8.9
	56	5.0		26	1.7	2	E
	59	0.3		27	7.5	3	2.6
	61	E		29	3.0	IC602 1	10.0
	62	E		31	3.0	2	9.1
	63	5.0		32	4.2	IC603 1	9.3
	64	5.0		33	4.5	2	7.4
IC102	1	E		34	4.2	IC603 1	9.3
	2	E		35	E	2	7.4
	3	E		36	E	3	E
	4	E		37	3.8	4	5.0
	5	5.0		38	2.8	5	5.0
	6	5.0		39	3.0		
	7	E		40	3.0		
	8	5.0		41	2.9		

All voltages are in V.
Pin numbers which are not described are not used.

A BOARD VOLTAGE LIST

	B	C	E
Q001	5.0	0.7	5.0
Q002	0.3	E	0.9
Q003	0.7	0.1	E
Q201	0	3.4	E
Q202	0	0	E
Q301	0	3.8	E
Q401	5.7	9.0	8.9
Q402	4.5	9.0	3.8
Q406	3.7	9.0	3.1
Q407	2.6	9.0	2.0
Q408	2.2	5.7	1.6
Q410	3.7	E	4.4
Q412	3.7	E	4.4
Q504	39.5	-2.2	39.7
Q550	-0.6	26.5	E
Q551	-0.1	39.9	E
Q554	3.2	0	3.2
Q555	0	3.2	E
Q602	64.5	130.0	66.6
Q603	10.9	E	8.9
Q604	9.2	9.9	9.9
Q605	0.8	0	E
Q606	0.7	0	E
Q607	5.9	9.0	5.3
Q609	-2.1	66.6	0

All voltages are in V.

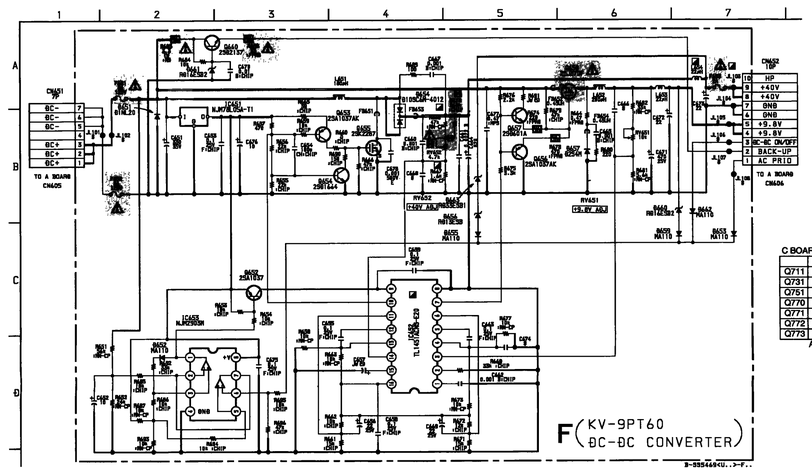
A BOARD • MARK

	KV-9PT50	KV-9PT60
C629	-	1
CN601	-	2P
CN605	-	7P
CN606	-	10P
D617	-	1SS119
D618	JW (5.0)	1SS119
D620	-	D1NS4
D622	JW (15.0)	20E2H
D623	JW (5.0)	11ES2
FB605	-	○
J601	-	○
Q606	-	2SD601A
R633	-	10K
R634	-	10K
R635	-	10K

-: NOT MOUNT

A BOARD

IC101	μ COMPUTER
IC201	AUDIO OUT
IC202	9V REG
IC301	VIDEO PROCESSOR
IC401	SWITCH
IC602	SET 9V REG
Q002	INVERTER
Q003	INVERTER
Q201	INVERTER
Q202	MUTE
Q301	INVERTER
Q401	V-BUFFER
Q402	BUFFER
Q406	V-BUFFER
Q407	S-BUFFER
Q408	V-BUFFER
Q410	INVERTER
Q412	INVERTER
Q602	SWITCH
Q603	SOFT START
Q604	9.8V SWITCH
Q606	DC-DC ON/OFF SWITCH
Q609	SWITCH
D402	PROTECT
D410	PROTECT
D411	PROTECT
D412	PROTECT
D501	H-CENT
D508	DAMPER
D601	CLAMP
D602	CLAMP
D603	CLAMP
D608	CLAMP
D609	CLAMP
D610	CLAMP
D611	40V RECT
D613	40V RECT
D614	9.8V RECT
D615	9.8V RECT
D616	CLAMP
D617	SWITCH
D618	SWITCH
D619	40V RECT
D620	RECT
D621	CLAMP
D622	SWITCH
D623	SWITCH

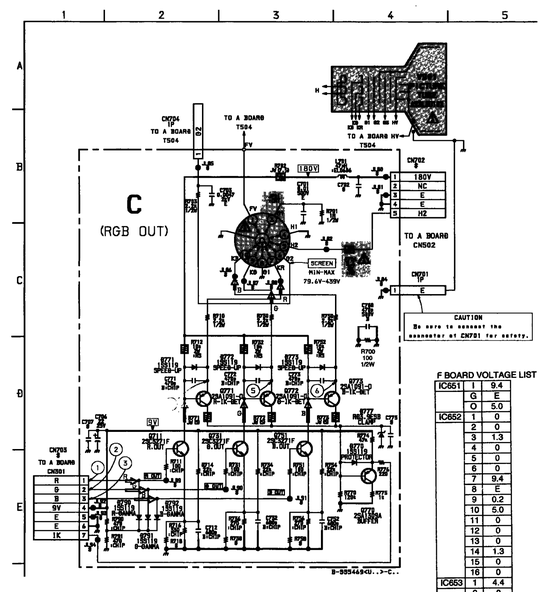


C BOARD VOLTAGE LIST

	B	C	E
Q711	2.0	137.0	1.6
Q731	2.1	124.8	1.6
Q751	2.0	127.6	1.6
Q770	2.1	0.2	2.6
Q771	137.0	2.1	133.5
Q772	124.8	2.1	121.6
Q773	127.6	2.1	124.1

All voltages are in V.

F [DC-DC CONVERTER] C [R. G. B. OUT]

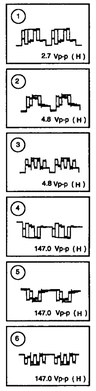


F BOARD VOLTAGE LIST

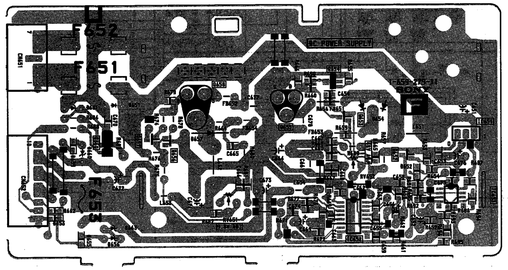
IC651	I	9.4
	G	E
	O	5.0
IC652	1	0
	2	0
	3	1.3
	4	0
	5	0
	6	0
	7	9.4
	8	E
	9	0.2
	10	5.0
	11	0
	12	0
	13	0
	14	1.3
	15	0
	16	0
IC653	1	4.4
	2	0
	3	3.0
	4	E
	5	2.7
	6	9.0
	7	0
	8	5.0

All voltages are in V.

• C BOARD WAVEFORMS



– F BOARD –

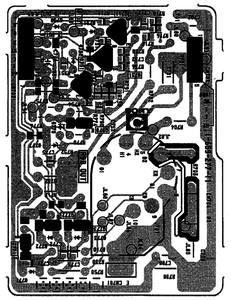


F BOARD VOLTAGE LIST

	B	C	E
Q652	4.8	0.2	5.0
Q653	5.0	0	5.0
Q654	0.6	0	E
Q656	9.4	E	9.4
Q657	9.4	9.4	9.4
Q660	9.4	9.4	9.1
	0	S	G
Q655	0	E	9.4
Q658	9.3	9.3	10.0

All voltages are in V.

– C BOARD –



Schematic diagrams

A board

Schematic diagrams

C F board

6-4. SEMICONDUCTORS

CXA1464AS



CXP85112B-638S



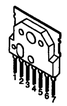
HD14053BFP
MC14053BF



LA78LR05D-MA



LA7830



LM2903M
RC4558PS
ST24C02FM6TR



NJM78L05A
NJM78L09A
TA78L09S



PQ09RA1



TDA7267



TL1451ACNS



μPC1093J-T



2SA1091-O



2SA1037AK-T-146-R
2SA1037AK-T-146-QR
2SA1162G
2SA1330-O6
2SB564-LK-T
2SB709A-QRS-TX
2SD601A-Q



2SA1175-HFE
2SA1309A-QRS



2SB733-34
2SC2958
2SD2137-OP



2SC2611
2SC3271F-N



2SC4161MN-RA11



2SC4663NPR-F



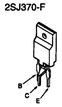
2SD1292-R-T103



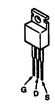
2SD1664-QR



2SJ370-F



2SK2237-F09



D1NL20
EL1Z
ERB44-06
GP08D
RGP10GPKG3
RD51E-B
20E2H



D1NS4
MTZJ-T-77-10
RD10ES-B2
RD13ES-B2
RD16ES-B2
RD30ES-B2
RD33ES-B1
RD3.9ES-B2
RD5.1ES-B1
RD5.6ES-B3
RD8.2ES-B2
1SS119-25
11ES2



D2S4M
D2S4MF



MA110



RU-3AM



LN021616PH



SECTION 7
EXPLODED VIEWS

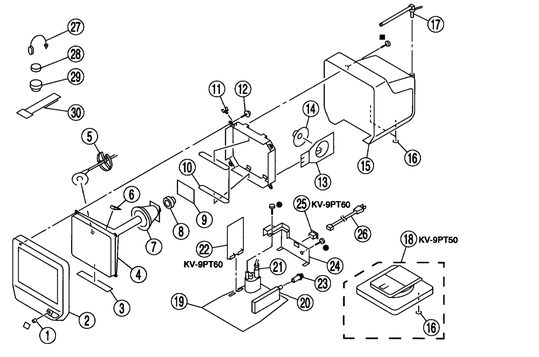
NOTE :
- Items with on part number and on description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-1. CHASSIS

★: 7-685-648-79 +BVTP 3x12
■: 7-685-663-79 +BVTP 4x16



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-374-987-01	GUIDE, LIGHT	
2	X-4033-318-1	BEZNET ASSY (KV-9PT60)	
	X-4033-321-1	BEZNET ASSY (KV-9PT50)	
3	4-052-215-01	SHEET, BLOTTING	
4	8-735-822-05	CRT 1 OSL (SD-270) (A23LDU10X)	
5	4-034-856-01	HOLDER, HIGH-VOLTAGE CABLE	
6	3-704-495-02	SPACER, DY	
7	8-451-450-11	DY Y1 OSLA	
8	1-452-760-11	NECK ASSEMBLY (NA221)	
9	A-1331-511-A	C BOARD COMPLETE	
10	1-411-754-11	COIL, DEMAGNETIC	
11	4-395-824-02	HOLDER, DEGAUSSING COIL	
12	4-356-808-01	SCREW(S), TAPPING	
13	4-052-076-01	HOLDER, SPEAKER	
14	1-505-226-11	SPEAKER (8CM)	
15	4-052-045-31	COVER, REAR (KV-9PT60)	
	4-052-045-21	COVER, REAR(KV-9PT50)	
16	4-052-214-01	FOOT	
17	1-501-813-11	ANTENNA, TELESCOPIC (KV-9PT60)	
	1-501-813-21	ANTENNA, TELESCOPIC (KV-9PT50)	
18	X-4033-201-1	BRACKET ASSY (KV-9PT50)	16
19	A-1297-879-A	A BOARD COMPLETE (KV-9PT60)	
	A-1297-680-A	A BOARD COMPLETE (KV-9PT50)	
20	8-598-339-00	TUNER BTF-LA402	
21	1-453-206-11	TRANSFORMER ASSY, FLYBACK NX-1745 / X4F4	
22	A-1245-582-A	F BOARD COMPLETE (KV-9PT60)	
23	1-766-374-11	PLUG, F-PIN	
24	4-052-006-31	BRACKET, TERMINAL BOARD (KV-9PT60(US))	
	4-052-006-01	BRACKET, TERMINAL BOARD (KV-9PT50(CND) / 9PT60(CND))	
	4-052-006-21	BRACKET, TERMINAL BOARD (KV9PT50(US))	
25	1-540-032-11	INLET 2P (KV-9PT60)	
26	1-574-085-21	CORD, POWER (KV-9PT60)	
	1-776-846-11	CORD, POWER (KV-9PT50)	
27	4-306-870-00	CLIP, LEAD WIRE	
28	1-452-032-00	MAGNET, DISK; 10MMØ	
29	1-452-094-00	MAGNET, ROTATABLE DISK; 15MMØ	
30	X-4308-815-9	PERMALLOY ASSY, CONVERGENCE	

SECTION 8
ELECTRICAL PARTS LIST

F

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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

- The components identified by ⊠ in this manual have been carefully factory- selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

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

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1245-582-A	F BOARD, COMPLETE (KV-9PT60) **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C651	1-111-087-11	ELECT	330MF	20%	35V
C652	1-126-964-11	ELECT	10MF	20%	50V
C653	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C654	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C655	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C656	1-128-551-11	ELECT	22MF	20%	25V
C658	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C659	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C660	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C661	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C662	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C663	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C664	1-111-125-51	ELECT	820MF	20%	50V
C665	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C667	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C669	1-128-551-11	ELECT	22MF	20%	25V
C670	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C671	1-111-063-11	ELECT	470MF	20%	25V
C672	1-126-965-11	ELECT	22MF	20%	50V
C673	1-126-965-11	ELECT	22MF	20%	50V
C675	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C676	1-107-929-11	ELECT	10MF	20%	50V
C677	1-136-173-00	FILM	0.47MF	5%	50V
C678	1-102-038-00	CERAMIC	0.001MF		500V
		<CONNECTOR>			
CN651	* 1-774-812-11	CONNECTOR, BOARD TO BOARD 7P			
CN652	1-766-924-11	CONNECTOR, BOARD TO BOARD 10P			
		<DIODE>			
D651	8-719-510-26	DIODE D1NL20			
D652	8-719-404-46	DIODE MA110			
D653	8-719-404-46	DIODE MA110			
D654	8-719-057-96	DIODE D10SC6M-4012			
D655	8-719-404-46	DIODE MA110			
D656	8-719-110-36	DIODE RD13ESB2			
D657	8-719-022-97	DIODE D2S4MF			
D659	8-719-404-46	DIODE MA110			
D660	8-719-110-46	DIODE RD16ESB3			
D661	8-719-110-46	DIODE RD16ESB3			
D662	8-719-404-46	DIODE MA110			
D663	8-719-110-76	DIODE RD33ESB1			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<FUSE>			
F651	⚠ 1-533-311-11	FUSE,GLASS CYLINDRICAL(DIA.5)8A/125V			
	1-533-223-11	HOLDER, FUSE; F651			
F652	⚠ 1-533-311-11	FUSE,GLASS CYLINDRICAL(DIA.5)8A/125V			
	1-533-223-11	HOLDER, FUSE; F652			
F653	⚠ 1-532-779-21	FUSE, MICRO (SECONDARY) 2A/125V			
		<FERRITE BEAD>			
FB651	1-414-411-21	INDUCTOR, BEAD			
FB652	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH			
FB653	1-414-411-21	INDUCTOR, BEAD			
FB654	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH			
		<IC>			
IC651	8-759-708-05	IC NJM78L05A			
IC652	8-759-937-36	IC TL1451ACNS			
IC653	8-759-981-65	IC LM2903M			
		<COIL>			
L651	1-411-763-11	COIL, CHOKE 200UH			
L652	1-412-049-11	COIL, CHOKE 200UH			
L653	1-412-529-11	INDUCTOR 22UH			
L654	1-412-529-11	INDUCTOR 22UH			
		<TRANSISTOR>			
Q652	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q653	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q654	8-729-920-85	TRANSISTOR 2SD1664-QR			
Q655	8-729-034-86	TRANSISTOR 2SK2287-F09			
Q656	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q657	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q658	⚠ 8-729-035-38	TRANSISTOR 2SJ370-F			
Q660	8-729-423-XX	TRANSISTOR 2SD2137-OP			
		<RESISTOR>			
R651	1-208-824-11	METAL CHIP	56K	0.50%	1/10W
R652	1-216-684-91	METAL CHIP	24K	0.50%	1/10W
R653	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R654	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R655	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R656	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R657	1-249-413-11	CARBON	470	5%	1/4W
R658	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R659	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R660	1-216-295-91	CONDUCTOR, CHIP			
R661	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R662	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R663	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R664	1-249-377-11	CARBON	0.47	5%	1/4W F
R665	1-216-015-00	METAL GLAZE	39	5%	1/10W

F A

• The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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

REF. NO.	PART NO.	DESCRIPTION			REMARK
R666	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R667	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R668	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R669	1-216-085-00	METAL GLAZE	33K	5%	1/10W
⋈R670 ⚠	1-216-115-00	METAL GLAZE	560K	5%	1/10W
R671	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R672	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R673	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R674	1-249-409-11	CARBON	220	5%	1/4W F
R675	1-249-423-11	CARBON	3.3K	5%	1/4W
R676	1-249-421-11	CARBON	2.2K	5%	1/4W
R677	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R678	1-249-413-11	CARBON	470	5%	1/4W F
R679	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R680	1-247-815-91	CARBON	220	5%	1/4W
R681	1-208-800-11	METAL CHIP	5.6K	0.50%	1/10W
R682	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R683 ⚠	1-216-355-71	METAL OXIDE	3.3	5%	1W F
R684	1-249-429-11	CARBON	10K	5%	1/4W
R685	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R686	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R687	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R688 ⚠	1-249-399-91	CARBON	33	5%	1/4W F
R689	1-247-807-31	CARBON	100	5%	1/4W
R690	1-216-029-00	METAL GLAZE	150	5%	1/10W
R692	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R693	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R694	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R695	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R696	1-216-089-91	METAL GLAZE	47K	5%	1/10W
		<VARIABLE RESISTOR>			
RV651	1-241-764-11	RES, ADJ, CERMET 10K			
⋈RV652 ⚠	1-241-773-21	RES, ADJ, CERMET 4.7K			

****

* A-1297-679-A A BOARD, COMPLETE (KV-9PT60)
****

* A-1297-680-A A BOARD, COMPLETE (KV-9PT50)
****

1-923-507-59 WIRE UL1007 AWG24 30MM BLK
1-923-507-60 WIRE UL1007 AWG24 60MM BLK
4-053-413-01 CASE (LOWER), A SHIELD
4-053-414-01 CASE (UPPER), A SHIELD

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C004	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C006	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C008	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C010	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C011	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C012	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C013	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C014	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C015	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C016	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C017	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C019	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C020	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C021	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C023	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C024	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C025	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C027	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C029	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C030	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C032	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C033	1-126-933-11	ELECT	100MF	20%	10V
C034	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C035	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C036	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C037	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C038	1-126-935-11	ELECT	470MF	20%	16V
C040	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C041	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C042	1-124-903-11	ELECT	1MF	20%	50V
C043	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C047	1-102-110-00	CERAMIC	220PF	10%	50V
C048	1-102-110-00	CERAMIC	220PF	10%	50V
C101	1-126-963-11	ELECT	4.7MF	20%	50V
C201	1-126-933-11	ELECT	100MF	20%	16V
C202	1-126-964-11	ELECT	10MF	20%	50V
C203	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C204	1-126-967-11	ELECT	47MF	20%	16V
C205	1-126-964-11	ELECT	10MF	20%	50V
C206	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C207	1-124-903-11	ELECT	1MF	20%	50V
C208	1-124-903-11	ELECT	1MF	20%	50V
C209	1-124-903-11	ELECT	1MF	20%	50V
C210	1-126-963-11	ELECT	4.7MF	20%	50V
C211	1-126-935-11	ELECT	470MF	20%	16V
C212	1-126-942-61	ELECT	1000MF	20%	25V
C213	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C214	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C217	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C301	1-137-399-11	FILM	0.1MF	5%	50V
C303	1-126-935-11	ELECT	470MF	20%	16V
C304	1-126-964-11	ELECT	10MF	20%	50V
C305	1-124-903-11	ELECT	1MF	20%	50V
C306	1-163-035-00	CERAMIC CHIP	0.047MF	50V	
C307	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C308	1-124-902-00	ELECT	0.47MF	20%	50V
C309	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C310	1-126-965-11	ELECT	22MF	20%	50V
C311	1-130-489-00	FILM	0.033MF	5%	50V
C312	1-130-489-00	FILM	0.033MF	5%	50V
C313	1-130-489-00	FILM	0.033MF	5%	50V
C314	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C315	1-126-934-11	ELECT	220MF	20%	16V
C318	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C319	1-124-902-00	ELECT	0.47MF	20%	50V
C320	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C321	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C322	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C323	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C324	1-124-903-11	ELECT	1MF	20%	50V
C325	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C326	1-137-370-11	FILM	0.01MF	5%	50V
C327	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C328	1-124-902-00	ELECT	0.47MF	20%	50V
C329	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C330	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C332	1-136-169-00	FILM	0.22MF	5%	50V
C333	1-136-169-00	FILM	0.22MF	5%	50V
C334	1-137-372-11	FILM	0.022MF	5%	50V
C335	1-124-903-11	ELECT	1MF	20%	50V
C336	1-126-964-11	ELECT	10MF	20%	50V
C341	1-124-902-00	ELECT	0.47MF	20%	50V
C342	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C345	1-126-933-11	ELECT	100MF	20%	16V
C347	1-126-933-11	ELECT	100MF	20%	16V
C348	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C401	1-126-934-11	ELECT	220MF	20%	16V
C402	1-124-903-11	ELECT	1MF	20%	50V
C403	1-124-902-00	ELECT	0.47MF	20%	50V
C406	1-128-551-11	ELECT	22MF	20%	25V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C407	1-128-551-11	ELECT	22MF	20%	25V
C408	1-126-964-11	ELECT	10MF	20%	50V
C410	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C413	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C418	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C501	⚠ 1-108-421-91	MYLAR	0.01MF	10%	200V
C502	1-104-799-11	ELECT	22MF	20%	50V
C503	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C504	1-130-489-00	FILM	0.033MF	5%	50V
C505	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C507	1-102-038-00	CERAMIC	0.001MF		500V
C508	1-102-038-00	CERAMIC	0.001MF		500V
C509	1-126-804-11	ELECT	100MF	20%	35V
C510	1-137-375-11	FILM	0.068MF	5%	50V
C511	1-126-963-11	ELECT	4.7MF	20%	50V
C512	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C513	1-107-929-11	ELECT	10MF	20%	50V
C514	1-104-664-11	ELECT	47MF	20%	25V
C515	1-128-528-11	ELECT	470MF	20%	16V
C516	1-102-228-00	CERAMIC	470PF	10%	500V
C517	⚠ 1-108-421-91	MYLAR	0.01MF	10%	200V
C518	1-107-913-11	ELECT	470MF	20%	50V
C519	1-102-228-00	CERAMIC	470PF	10%	500V
C520	1-107-652-11	ELECT	10MF	20%	250V
C521	1-102-228-00	CERAMIC	470PF	10%	500V
C522	1-111-119-11	ELECT	330MF	20%	50V
C523	1-104-493-11	FILM	2.7MF	3%	100V
C524	1-106-359-00	MYLAR	0.0047MF	10%	100V
C525	1-106-383-00	MYLAR	0.047MF	10%	100V
C527	1-104-799-11	ELECT	22MF	20%	50V
C528	1-107-635-11	ELECT	4.7MF	20%	160V
C530	1-104-664-11	ELECT	47MF	20%	25V
C531	1-104-664-11	ELECT	47MF	20%	25V
C554	⚠ 1-115-405-11	FILM	0.039MF	3%	1KV
C555	⚠ 1-162-116-91	CERAMIC	680PF	10%	2KV
C558	1-106-355-12	MYLAR	0.0033MF	10%	100V
C559	1-162-115-00	CERAMIC	330PF	10%	2KV
C575	1-107-904-11	ELECT	3.3MF	20%	50V
C579	1-106-379-12	MYLAR	0.033MF	10%	100V
C601	⚠ 1-113-937-91	ELECT	0.0022MF		125V
C602	1-104-706-11	FILM	0.22MF	20%	250V
C603	1-104-706-11	FILM	0.22MF	20%	250V
C604	1-124-902-00	ELECT	0.47MF	20%	50V
C605	⚠ 1-113-937-91	ELECT	0.0022MF		125V
C606	1-126-941-11	ELECT	470MF	20%	25V
C607	1-104-664-11	ELECT	47MF	20%	25V
C608	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C609	1-115-434-11	ELECT	220MF	20%	200V
C610	1-164-646-11	CERAMIC	2200PF	10%	500V
C611	1-164-646-11	CERAMIC	2200PF	10%	500V
C612	1-136-171-00	FILM	0.33MF	5%	50V
C613	1-136-169-00	FILM	0.22MF	5%	50V
C614	1-136-171-00	FILM	0.33MF	5%	50V
C615	1-136-169-00	FILM	0.22MF	5%	50V
C616	1-164-645-11	CERAMIC	1000PF	10%	500V
C617	1-126-964-11	ELECT	10MF	20%	50V
C618	1-130-489-00	FILM	0.033MF	5%	50V
C619	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C620	1-164-646-11	CERAMIC	2200PF	10%	500V
C621	1-164-646-11	CERAMIC	2200PF	10%	500V
C622	1-165-127-11	CERAMIC	470PF	10%	500V
C623	1-165-127-11	CERAMIC	470PF	10%	500V
C624	1-164-644-11	CERAMIC	330PF	10%	500V
C625	1-126-940-11	ELECT	330MF	20%	25V
C626	1-126-965-11	ELECT	22MF	20%	50V
C627	1-126-971-11	ELECT	470MF	20%	50V
C628	1-104-664-11	ELECT	47MF	20%	25V
C629	1-137-399-11	FILM	0.1MF	5%	50V (KV-9PT60)
C630	1-126-965-11	ELECT	22MF	20%	50V
C631	1-104-664-11	ELECT	47MF	20%	25V
C632	1-126-971-11	ELECT	470MF	20%	50V
C633	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C634	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C635	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C636	⚠ 1-113-937-91	ELECT	0.0022MF		125V
C637	1-164-644-11	CERAMIC	330PF	10%	500V
C638	⚠ 1-113-937-91	ELECT	0.0022MF		125V
C639	1-113-941-11	ELECT	0.0047MF		125V
C641	1-129-718-00	FILM	0.022MF	5%	630V

<CONNECTOR>

CN202	1-564-505-11	PLUG, CONNECTOR 2P
CN401	* 1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P
CN501	* 1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P
CN601	* 1-580-843-11	PIN, CONNECTOR (POWER) (KV-9PT60)
CN602	1-508-786-00	PIN, CONNECTOR (5mm PITCH) 2P
CN603	1-508-786-00	PIN, CONNECTOR (5mm PITCH) 2P
CN605	* 1-774-813-11	CONNECTOR, BOARD TO BOARD 7P (KV-9PT60)
CN606	1-766-921-11	CONNECTOR, BOARD TO BOARD 10P (KV-9PT60)

<DIODE>

D001	8-719-045-18	DIODE LN021616PH
D003	8-719-911-19	DIODE 1SS119-25
D201	8-719-110-72	DIODE RD30ESB2
D302	8-719-109-84	DIODE RD5.1ESB1
D303	8-719-105-99	DIODE RD6.2M-B1
D304	8-719-105-99	DIODE RD6.2M-B1
D305	8-719-105-99	DIODE RD6.2M-B1
D402	8-719-110-17	DIODE RD10ESB2
D403	8-719-911-19	DIODE 1SS119-25
D410	8-719-110-17	DIODE RD10ESB2
D501	8-719-908-03	DIODE GP08D
D502	8-719-908-03	DIODE GP08D
D503	8-719-911-19	DIODE 1SS119-25
D504	8-719-302-43	DIODE EL1Z
D505	8-719-911-19	DIODE 1SS119-25
D506	8-719-110-08	DIODE RD8.2ESB2
D507	8-719-911-19	DIODE 1SS119-25
D508	8-719-300-33	DIODE RU-3AM
D509	8-719-302-43	DIODE EL1Z
D510	8-719-302-43	DIODE EL1Z
D512	8-719-302-43	DIODE EL1Z
D514	8-719-911-19	DIODE 1SS119-25
D601	8-719-911-19	DIODE 1SS119-25
D602	8-719-911-19	DIODE 1SS119-25
D603	8-719-911-19	DIODE 1SS119-25
D604	8-719-200-82	DIODE 11ES2
D605	8-719-200-82	DIODE 11ES2
D606	8-719-200-82	DIODE 11ES2
D607	8-719-200-82	DIODE 11ES2
D608	8-719-911-19	DIODE 1SS119-25
D609	8-719-911-19	DIODE 1SS119-25
D610	8-719-911-19	DIODE 1SS119-25
D611	8-719-058-90	DIODE D1NL20-TR2
D612	8-719-109-90	DIODE RD5.6ESB3
D613	8-719-058-90	DIODE D1NL20-TR2
D614	8-719-032-12	DIODE D1NS6
D615	8-719-032-12	DIODE D1NS6
D616	8-719-911-19	DIODE 1SS119-25
D617	8-719-911-19	DIODE 1SS119-25 (KV-9PT60)
D618	8-719-911-19	DIODE 1SS119-25 (KV-9PT60)
D619	8-719-058-08	DIODE RD51F-T7B
D620	8-719-510-02	DIODE D1NS4 (KV-9PT60)
D621	8-719-911-19	DIODE 1SS119-25
D622	8-719-200-62	DIODE 20E2H (KV-9PT60)

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REF. NO.	PART NO.	DESCRIPTION	REMARK
D623	8-719-058-90	DIODE D1NL20-TR2 (KV-9PT60)	
		<FUSE>	
F601	⚠ 1-533-420-11	FUSE GLASS CYLINDRICAL(DIA 5)5A/125V	
	1-533-223-11	HOLDER, FUSE; F601	
		<FERRITE BEAD>	
FB001	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB003	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB501	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB601	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB602	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB603	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB604	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB605	1-412-911-11	INDUCTOR, FERRITE BEAD (KV-9PT60)	
FB606	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB607	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB609	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB610	1-412-911-11	INDUCTOR, FERRITE BEAD	
		<IC>	
IC101	8-752-871-83	IC CXP85112B-638S	
IC102	8-759-354-28	IC ST24C02FM6TR	
IC103	8-747-905-11	RAY CATCHER ELEMENT SBX1790-51	
IC201	8-759-365-39	IC TDA7267	
IC202	8-759-168-20	IC TA78L09S	
IC301	8-752-057-68	IC CXA1464AS	
IC401	8-759-300-71	IC HD14053BFP	
IC501	8-759-801-98	IC LA7830	
IC502	8-759-252-53	IC RC4558PS-E20	
IC601	8-759-198-31	IC uPC1093J-1-T	
IC602	8-759-054-12	IC PQ09RA1	
IC603	8-759-805-37	IC L78LR05D-MA	
		<JACK>	
J251	1-568-267-21	JACK	
J401	1-695-239-11	JACK BLOCK, PIN 2P	
J601	1-750-523-11	JACK, DC (KV-9PT60)	
		<COIL>	
L002	1-408-413-00	INDUCTOR 22UH	
L004	1-408-413-00	INDUCTOR 22UH	
L202	1-410-470-11	INDUCTOR 10UH	
L203	1-408-413-00	INDUCTOR 22UH	
L301	1-410-478-11	INDUCTOR 47UH	
L502	1-408-419-00	INDUCTOR 68UH	
L503	⚠ 1-412-525-61	INDUCTOR 10UH	
L505	⚠ 1-411-764-11	COIL, VAR FERRITE (HWC)	
L601	⚠ 1-412-529-21	INDUCTOR 22UH	
L602	1-410-470-11	INDUCTOR 10UH	
L603	1-412-529-11	INDUCTOR 22UH	
		<TRANSISTOR>	
Q001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q003	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q201	8-729-900-53	TRANSISTOR DTC114EK	
Q202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q301	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q401	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q402	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q408	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q410	8-729-216-22	TRANSISTOR 2SA1162-G	
Q412	8-729-216-22	TRANSISTOR 2SA1162-G	
Q504	8-729-105-08	TRANSISTOR 2SA1330-O6	
Q550	8-729-195-82	TRANSISTOR 2SC2958	
Q551	8-729-034-87	TRANSISTOR 2SC4161MN-RA11	
Q554	8-729-216-22	TRANSISTOR 2SA1162-G	
Q555	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q602	8-729-025-77	TRANSISTOR 2SC4663NPR-F	
Q603	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q604	⚠ 8-729-024-63	TRANSISTOR 2SB733-34	
Q605	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q606	8-729-422-27	TRANSISTOR 2SD601A-Q (KV-9PT60)	
Q607	⚠ 8-729-926-17	TRANSISTOR 2SD1292-R-T103	
Q609	8-729-025-77	TRANSISTOR 2SC4663NPR-F	
		<RESISTOR>	
R001	1-216-295-91	CONDUCTOR, CHIP	
R002	1-216-295-91	CONDUCTOR, CHIP	
R003	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R004	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R005	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R007	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R008	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R009	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R010	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R012	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R013	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R014	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R015	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R016	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R018	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R019	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R020	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R021	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R022	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R023	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R024	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R025	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R026	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R027	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R028	1-412-006-31	INDUCTOR CHIP 10UH	
R029	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R031	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R032	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R033	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R034	1-216-295-91	CONDUCTOR, CHIP	
R035	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R036	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R037	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R039	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R041	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R042	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R044	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R045	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R046	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R047	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R048	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R049	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R050	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R052	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R054	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R055	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R056	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R057	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R058	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R061	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R062	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R063	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R064	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

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A

REF. NO.	PART NO.	DESCRIPTION			REMARK
R065	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R067	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
⋈ R069	⚠ 1-216-107-00	METAL GLAZE	270K	5%	1/10W
R101	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R201	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R202	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R203	1-216-434-11	METAL OXIDE	1.8K	5%	1W F
R204	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R205	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R206	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R207	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R208	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R209	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R210	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R211	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R212	⚠ 1-249-389-91	CARBON	4.7	5%	1/4W F
R213	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R216	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R217	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R271	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R272	1-216-037-00	METAL GLAZE	330	5%	1/10W
R273	1-216-037-00	METAL GLAZE	330	5%	1/10W
R301	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R302	1-216-025-91	METAL GLAZE	100	5%	1/10W
R303	1-216-033-00	METAL GLAZE	220	5%	1/10W
R304	1-216-295-91	CONDUCTOR, CHIP			
R307	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R311	1-216-678-11	METAL CHIP	13K	0.50%	1/10W
R312	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R313	1-208-784-11	METAL CHIP	1.2K	0.50%	1/10W
R314	1-216-117-00	METAL GLAZE	680K	5%	1/10W
R315	1-216-295-91	CONDUCTOR, CHIP			
R323	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R324	1-216-029-00	METAL GLAZE	150	5%	1/10W
R325	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R326	1-216-029-00	METAL GLAZE	150	5%	1/10W
R327	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R328	1-216-029-00	METAL GLAZE	150	5%	1/10W
R333	1-216-295-91	CONDUCTOR, CHIP			
R334	1-216-295-91	CONDUCTOR, CHIP			
R336	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R338	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R339	1-249-415-11	CARBON	680	5%	1/4W
R341	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R343	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R345	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R346	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R347	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R351	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R356	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R360	1-216-041-00	METAL GLAZE	470	5%	1/10W
R365	1-249-417-11	CARBON	1K	5%	1/4W F
R367	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R401	1-216-022-00	METAL GLAZE	75	5%	1/10W
R402	1-216-047-91	METAL GLAZE	820	5%	1/10W
R403	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R404	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R405	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R406	1-216-047-91	METAL GLAZE	820	5%	1/10W
R407	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R409	1-216-025-91	METAL GLAZE	100	5%	1/10W
R410	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R415	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R416	1-216-033-00	METAL GLAZE	220	5%	1/10W
R418	1-216-295-91	CONDUCTOR, CHIP			
R419	1-216-295-91	CONDUCTOR, CHIP			
R422	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R423	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R425	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R426	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R427	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R430	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R432	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R435	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R436	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R442	1-216-033-00	METAL GLAZE	220	5%	1/10W
R502	1-249-417-11	CARBON	1K	5%	1/4W
R504	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R506	1-249-415-11	CARBON	680	5%	1/4W
R508	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R509	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R510	1-249-420-11	CARBON	1.8K	5%	1/4W
R511	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R512	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R513	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R515	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R516	1-216-351-00	METAL OXIDE	1.5	5%	1W F
R517	1-216-033-00	METAL GLAZE	220	5%	1/10W
R518	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R519	1-215-453-00	METAL	22K	1%	1/4W
R520	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R521	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R523	1-215-471-00	METAL	120K	1%	1/4W
R525	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R526	1-216-295-91	CONDUCTOR, CHIP			
R527	1-208-814-11	METAL CHIP	22K	0.50%	1/10W
R531	⚠ 1-216-353-71	METAL OXIDE	2.2	5%	1W F
R532	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R534	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R536	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R538	1-215-861-00	METAL OXIDE	47	5%	1W F
R543	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R544	1-208-784-11	METAL CHIP	1.2K	0.50%	1/10W
R545	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R547	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R548	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R549	⚠ 1-216-365-71	METAL OXIDE	0.47	5%	2W F
R554	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R555	1-215-890-11	METAL OXIDE	470	5%	2W F
R557	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R558	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R559	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R560	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R563	1-215-860-11	METAL OXIDE	33	5%	1W F
R601	⚠ 1-219-238-91	SOLID	4.7M	20%	1/2W
R602	1-249-401-11	CARBON	47	5%	1/4W
R603	1-219-785-11	WIREWOUND	2.2	5%	5W
R604	⚠ 1-260-288-71	CARBON	0.47	5%	1/2W
R605	1-260-072-11	CARBON	4.7	5%	1/2W
R606	1-247-891-00	CARBON	330K	5%	1/4W
R607	1-249-401-11	CARBON	47	5%	1/4W
R608	1-202-719-00	SOLID	1M	20%	1/2W
R609	1-247-891-00	CARBON	330K	5%	1/4W
R610	1-247-891-00	CARBON	330K	5%	1/4W
R611	⚠ 1-212-849-61	FUSIBLE	4.7	5%	1/4W F
R612	1-249-401-11	CARBON	47	5%	1/4W
R613	1-249-401-11	CARBON	47	5%	1/4W
R614	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W F
R619	1-260-072-11	CARBON	4.7	5%	1/2W
R620	1-249-430-11	CARBON	12K	5%	1/4W
R621	1-260-099-11	CARBON	1K	5%	1/2W
R622	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R623	1-249-429-11	CARBON	10K	5%	1/4W
R624	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R625	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R626	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R627	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R628	1-249-415-11	CARBON	680	5%	1/4W
R629		METAL CHIP	24K		1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R630	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R631	⚠ 1-216-345-71	METAL OXIDE	0.47	5%	1W F
R632	⚠ 1-249-377-91	CARBON	0.47	5%	1/4W F
R633	1-216-073-00	METAL GLAZE	10K	5%	1/10W (KV-9PT60)
R634	1-216-073-00	METAL GLAZE	10K	5%	1/10W (KV-9PT60)
R635	1-216-073-00	METAL GLAZE	10K	5%	1/10W (KV-9PT60)
R636	1-247-891-00	CARBON	330K	5%	1/4W
R639	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R640	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R644	⚠ 1-216-355-71	METAL OXIDE	3.3	5%	1W F
		<VARIABLE RESISTOR>			
⊠RV601	⚠ 1-241-773-21	RES, ADJ, CERMET 4.7K			
		<SWITCH>			
S001	1-692-431-21	SWITCH, TACTILE			
S002	1-570-577-11	SWITCH, PUSH			
S004	1-570-577-11	SWITCH, PUSH			
S006	1-692-431-21	SWITCH, TACTILE			
		<TRANSFORMER>			
T504	⚠ 1-453-206-11	FBT ASSY, NX-1745//X4F4			
T551	1-429-411-11	TRANSFORMER, HORIZONTAL DRIVE			
T601	⚠ 1-409-995-11	FILTER, LINE			
T603	⚠ 1-429-433-11	TRANSFORMER, CONVERTER (PIT)			
T604	⚠ 1-427-864-12	TRANSFORMER, CONVERTER (PRT)			
		<THERMISTOR>			
THP601	1-800-686-31	THERMISTOR (POSITIVE)			
		<TUNER>			
TU101	8-598-339-00	TUNER BTF-LA402			
		<VARISTOR>			
VDR602	1-810-053-11	VARISTOR			
		<CRYSTAL>			
X001	1-567-192-11	OSCILLATOR, CERAMIC			
X301	1-760-190-41	VIBRATOR, CRYSTAL			
**********					
	* A-1331-511-A	C BOARD, COMPLETE **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C701	1-102-050-00	CERAMIC	0.01MF		500V
C703	1-162-114-00	CERAMIC	0.0047MF		2KV
C706	1-128-551-11	ELECT	22MF	20%	25V
C708	1-102-228-00	CERAMIC	470PF	10%	500V
C712	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C732	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C752	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C771	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C772	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C773	1-163-005-11	CERAMIC CHIP	470PF	10%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<CONNECTOR>			
CN701	1-695-915-11	TAB (CONTACT)			
CN704	1-695-915-11	TAB (CONTACT)			
		<DIODE>			
D770	8-719-911-19	DIODE 1SS119-25			
D771	8-719-911-19	DIODE 1SS119-25			
D772	8-719-911-19	DIODE 1SS119-25			
D773	8-719-911-19	DIODE 1SS119-25			
D777	8-719-109-72	DIODE RD3.9ESB2			
D790	8-719-911-19	DIODE 1SS119-25			
D791	8-719-911-19	DIODE 1SS119-25			
D792	8-719-911-19	DIODE 1SS119-25			
		<JACK>			
J701	1-526-958-71	SOCKET, PICTURE TUBE			
		<COIL>			
L701	1-410-478-11	INDUCTOR 47UH			
		<TRANSISTOR>			
Q711	8-729-326-11	TRANSISTOR 2SC2611			
Q731	8-729-326-11	TRANSISTOR 2SC2611			
Q751	8-729-326-11	TRANSISTOR 2SC2611			
Q770	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q771	8-729-200-17	TRANSISTOR 2SA1091-O			
Q772	8-729-200-17	TRANSISTOR 2SA1091-O			
Q773	8-729-200-17	TRANSISTOR 2SA1091-O			
		<RESISTOR>			
R700	1-260-087-11	CARBON	100	5%	1/2W
R701	1-260-135-11	CARBON	1M	5%	1/2W
R703	1-260-103-11	CARBON	2.2K	5%	1/2W
R704	⚠ 1-216-398-71	METAL OXIDE	5.6	5%	3W F
R710	1-260-103-11	CARBON	2.2K	5%	1/2W
R711	1-216-025-91	METAL GLAZE	100	5%	1/10W
R712	1-215-898-11	METAL OXIDE	10K	5%	2W F
R714	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R716	1-216-037-00	METAL GLAZE	330	5%	1/10W
R730	1-260-103-11	CARBON	2.2K	5%	1/2W
R731	1-216-025-91	METAL GLAZE	100	5%	1/10W
R732	1-215-898-11	METAL OXIDE	10K	5%	2W F
R734	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R736	1-216-035-00	METAL GLAZE	270	5%	1/10W
R750	1-260-103-11	CARBON	2.2K	5%	1/2W
R751	1-216-025-91	METAL GLAZE	100	5%	1/10W
R752	1-215-898-11	METAL OXIDE	10K	5%	2W F
R754	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R756	1-216-035-00	METAL GLAZE	270	5%	1/10W
R770	1-247-881-00	CARBON	120K	5%	1/4W
R774	1-249-437-11	CARBON	47K	5%	1/4W
R775	1-249-417-11	CARBON	1K	5%	1/4W
R776	1-247-815-91	CARBON	220	5%	1/4W
R790	1-216-041-00	METAL GLAZE	470	5%	1/10W
R791	1-216-041-00	METAL GLAZE	470	5%	1/10W
**********					
		MISCELLANEOUS **********			
	⚠ 1-411-754-11	COIL, DEMAGNETIC			
	1-452-760-11	NECK ASSEMBLY (NA221)			
	1-505-226-11	SPEAKER (8CM)			
	⚠ 1-526-985-11	INLET 2P (KV-9PT60)			

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REF. NO.	PART NO.	DESCRIPTION	REMARK
	1-766-374-11	PLUG, F-PIN	
	1-900-217-43	READ ASSY, FOCUS	
	1-900-217-44	READ ASSY, SCREEN	
⚠	8-451-450-11	DEFLECTION YOKE Y10SLA	
⚠	8-735-822-05	PICTURE TUBE 10SL (A23LDU10X)	

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ACCESSORIES AND PACKING MATERIALS
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	X-4033-201-1	BRACKET ASSY (KV-9PT50)	
	1-501-813-11	ANTENNA, TELESCOPIC (KV-9PT60)	
	1-501-813-21	ANTENNA, TELESCOPIC (KV-9PT50)	
	1-574-085-11	CORD, POWER (KV-9PT60)	
	1-751-198-21	CORD, CAR BATTERY (KV-9PT60)	
	1-776-846-11	CORD, POWER (KV-9PT50)	
	3-701-627-00	BAG, POLYETHYLENE	
	3-810-578-11	MANUAL, INSTRUCTION	
	3-810-578-21	MANUAL, INSTRUCTION (Canadian Model)	
*	4-046-206-01	BAG, POLYETHYLENE	
*	4-052-136-01	INDIVIDUAL CARTON (KV-9PT50)	
*	4-052-137-01	TRAY (KV-9PT50)	
*	4-052-138-01	INDIVIDUAL CARTON (KV-9PT60)	
*	4-052-140-01	CUSHION (UPPER) (ASSY)	
*	4-052-141-01	CUSHION (LOWER) (ASSY)	
*	4-052-146-01	BAG, PROTECTION	
	4-052-214-01	FOOT (KV-9PT50)	
	4-052-216-01	SCREW (L) (M6X70) (KV-9PT50)	
	4-052-217-01	SCREW (S) (M6X40) (KV-9PT50)	
	4-052-218-01	NUT, M6 (KV-9PT50)	
	4-052-586-01	SPACER (KV-9PT50)	
	4-052-587-01	WASHER (KV-9PT50)	
*	4-053-148-01	BAG, POLYETHYLENE (KV-9PT50)	
	4-053-225-01	PALLET (KV-9PT60)	
	4-053-227-01	PALLET (KV-9PT50)	
	7-651-303-43	TAPE, PP (T=90U) (75MMX500M)	
	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	(KV-9PT50)

REMOTE COMMANDER
****

	1-466-966-11	REMOTE COMMANDER (RM-Y116)	(KV-9PT60)
	9-903-826-01	POCKET, COVER (FOR RM-Y116)	(KV-9PT60)
	1-466-966-41	REMOTE COMMANDER (RM-Y116)	(KV-9PT50)
	9-903-826-01	POCKET, COVER (FOR RM-Y116)	(KV-9PT50)

Sony Corporation
Consumer A&V Products Company
TV & Display Products Div.

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