

KV-8AD10/8AD20

RM-759

SERVICE MANUAL

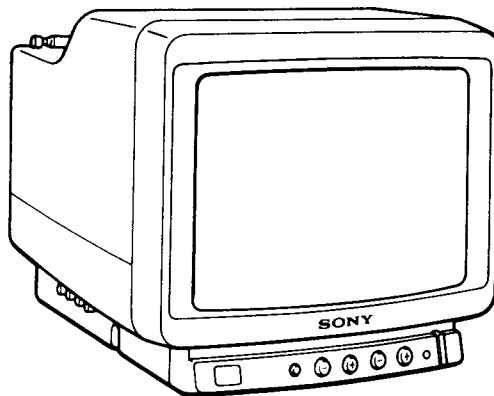
US Model

KV-8AD10

Chassis No. SCC-B79A-

KV-8AD20

Chassis No. SCC-B96A-



FILE COPY

Do not remove

MODELS OF THE SAME SERIES

KV-8AD10/8AD20	

SPECIFICATIONS

Television system
Channel coverage American TV standard
VHF channels 2-13
UHF channels 14-69

Picture tube Trinitron tube
8-inch picture measured diagonally
9-inch picture tube measured diagonally
70-degree deflection

Antenna
Inputs VHF/UHF telescopic antenna
VIDEO IN VIDEO: phono jack
1 Vp-p, 75 ohms
VIDEO IN AUDIO: phono jack
-5 dBs, 47 kohms
EXT ANT/CAMCORDER IN: minijack
75 ohms

Output HEADPHONES: minijack
R (remote): 5-pin DIN (KV-8AD20 only)

Power requirements 120 V AC, 60 Hz
12 V DC

Power consumption AC IN: 33 W max.
DC IN: 26 W max.

Dimensions Approx. 220 x 213 x 310 mm (w/h/d)
(8³/₄ x 8¹/₂ x 12¹/₄ inches)

Weight Approx. 4.5 kg (8 lb 13 oz)

Accessories supplied RM-759 Remote Commander with
2 size AA(R6) batteries (1)
AC power cord (1)
Antenna connector (1)
Car battery cord (1)
R (remote) connector (KV-8AD20 only) (1)
Connecting cord VMC-710M/720M
Car antenna VCA-3W, VCA-4

Optional accessories

Design and specifications are subject to change without notice.

2.16amp *2.16amp*
4000 mA = 1.85 A
2.16

MP 4000

4000MA (5HR) I MAY 8AUA



TRINITRON® COLOR TV
SONY®


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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.

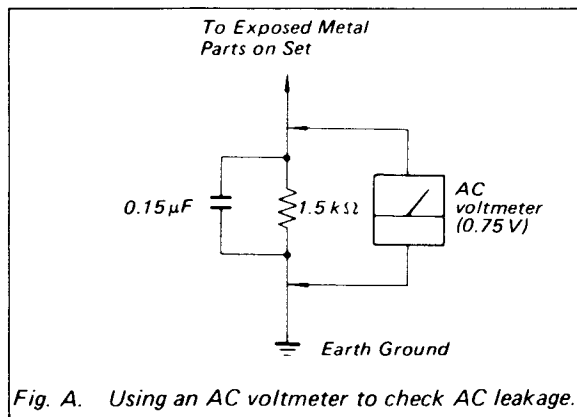
SAFETY-RELATED COMPONENT WARNING !!

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

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 poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-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, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.



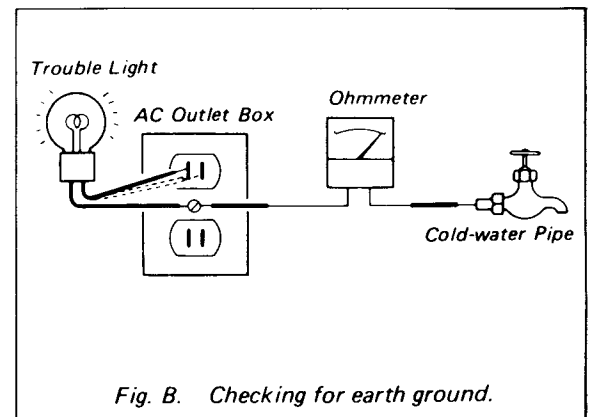
LEAKAGE TEST

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 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-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 battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-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

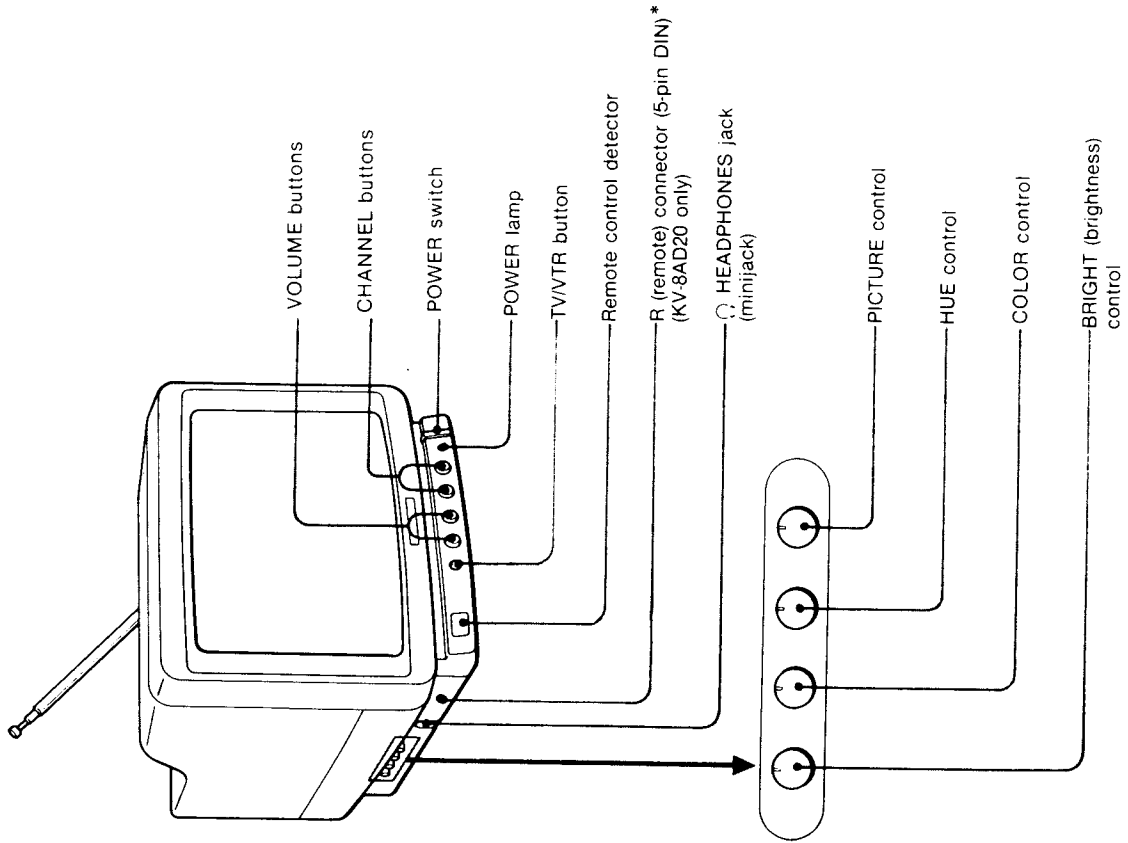
A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 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)



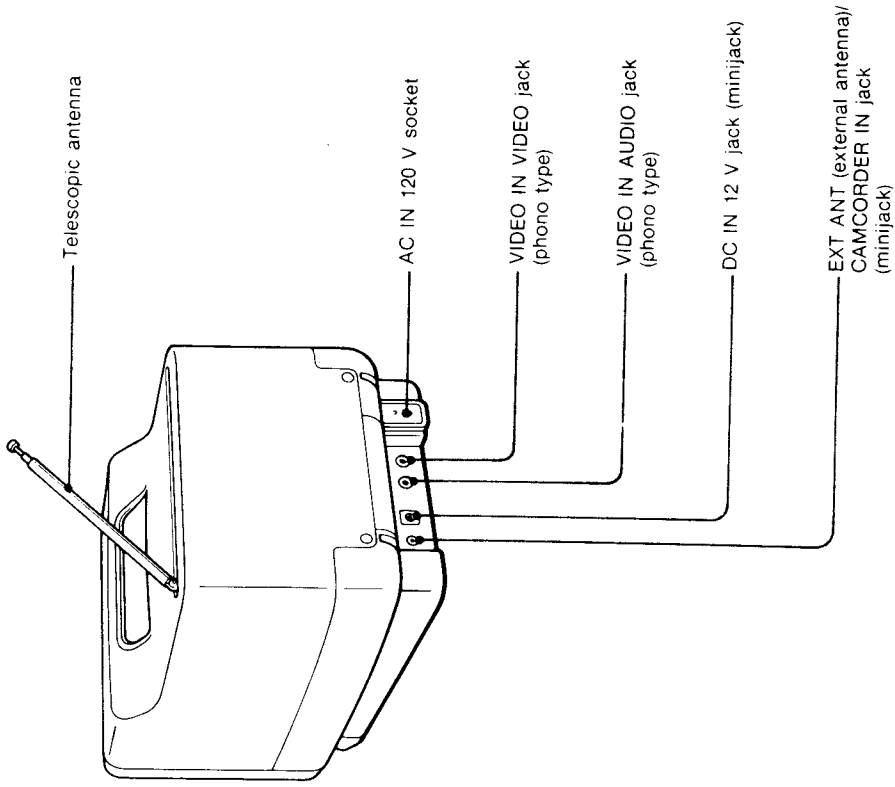
SECTION 1 GENERAL

1-1. NAME AND LOCATION OF CONTROLS

Front



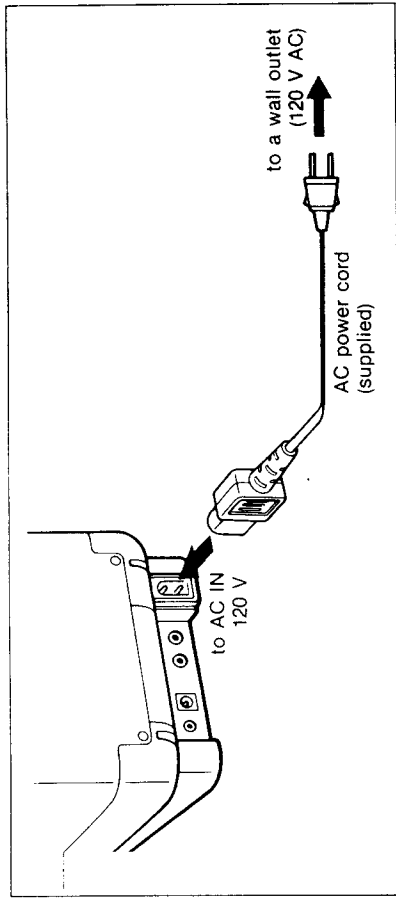
Rear



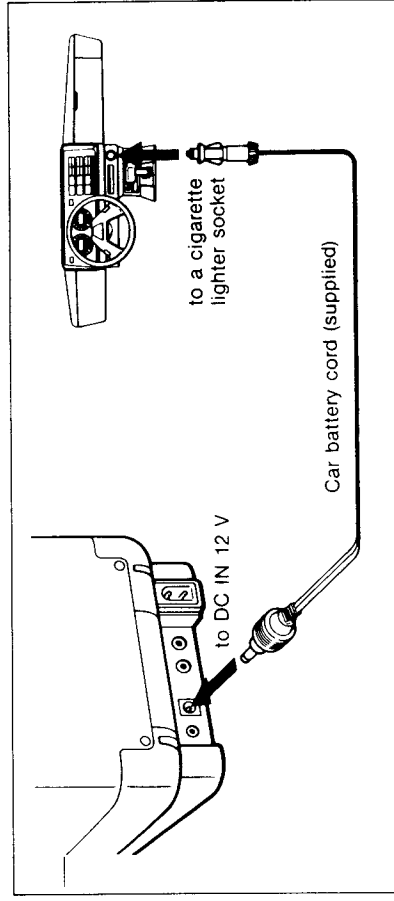
* Connect a wired remote controller to operate the TV by remote control. For a controller and its installation, contact your dealer.

1-2. FIRST CHOOSE YOUR POWER SOURCE

When using the house current

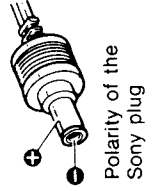


When using a car battery

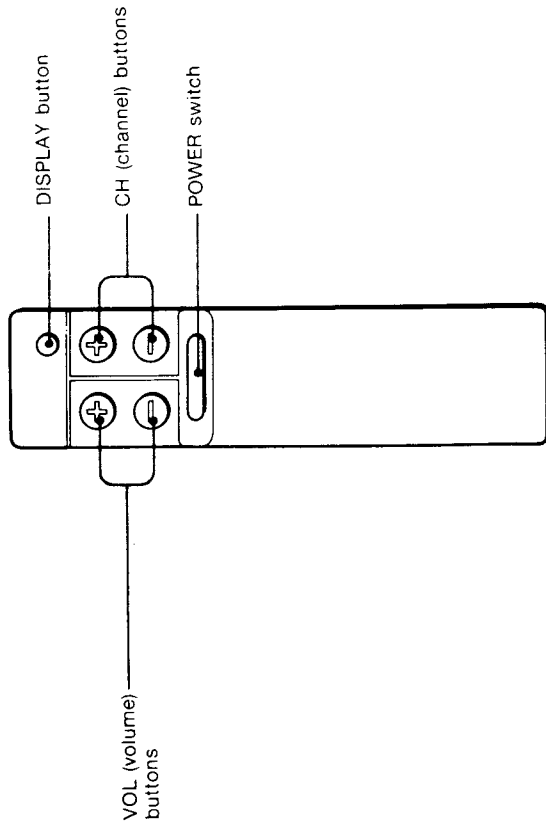


Notes

- The unit 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 manufacturers may be different.

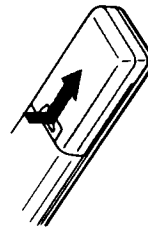


Remote Commander

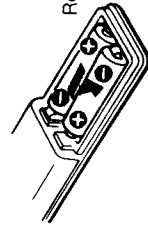


How to insert the batteries

1 Open the lid.



2 Insert two size AA (R6) batteries with correct polarity



Notes

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the Commander and the TV.
- Operable range is limited.
- If a Remote Commander not recommended is used to operate this TV, or if the supplied Remote Commander is used to operate another TV, the TV may not operate properly.

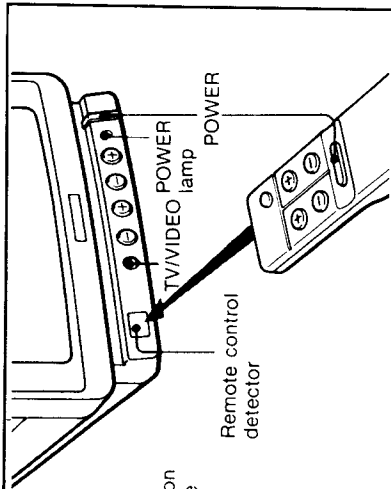
1-3. HOW TO WATCH THE TV

For each of the steps below, you can press either the buttons on the TV or the ones on the Remote Commander.

1 Turn on the TV.

Press POWER.
The power lamp lights.

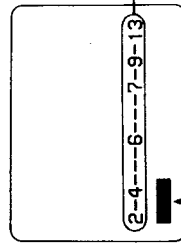
- If the "VIDEO" indication is displayed on the screen, press TV/VIDEO so that the indication disappears.



2 Select the desired channel.

Each time CHANNEL (or CH) + or - is pressed, the adjacent channel is automatically tuned in.

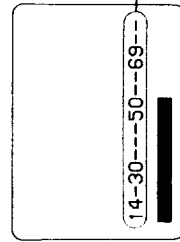
On-screen display while tuning



VHF channel numbers

indicates channel tuned in

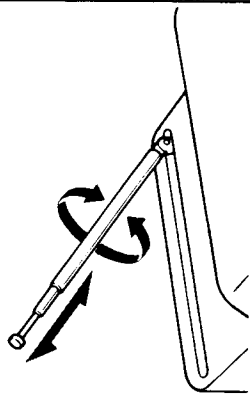
When no additional channel is received in the VHF band, the on-screen display changes.



UHF channel numbers

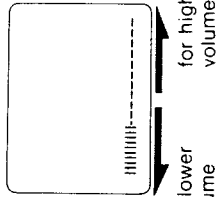
3 Adjust the antenna.

Pull out the telescopic antenna and adjust its length and direction until the picture is clearest.



4 Adjust the volume.

For higher volume, press "+".
For lower volume, press "-".



To turn off the TV

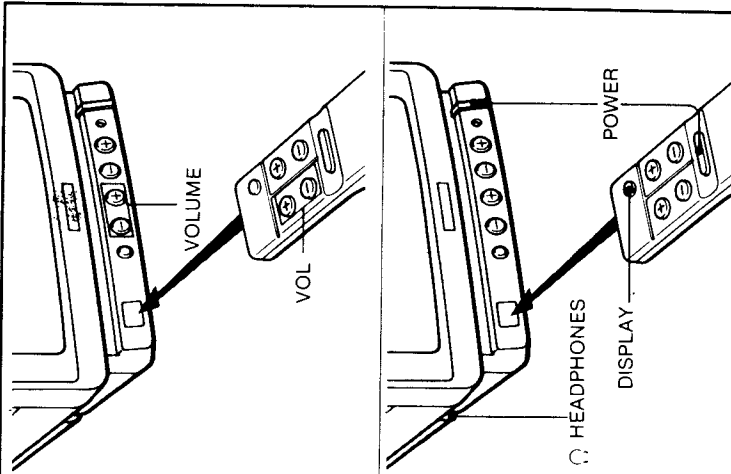
Press POWER again.

To make the channel numbers and a bar appear on the screen for 3 seconds

Press DISPLAY. If the unit is in video mode, the "VIDEO" indication will appear.

To listen with a pair of headphones*

Connect the optional headphones to the HEADPHONES jack. The sound is monaural.

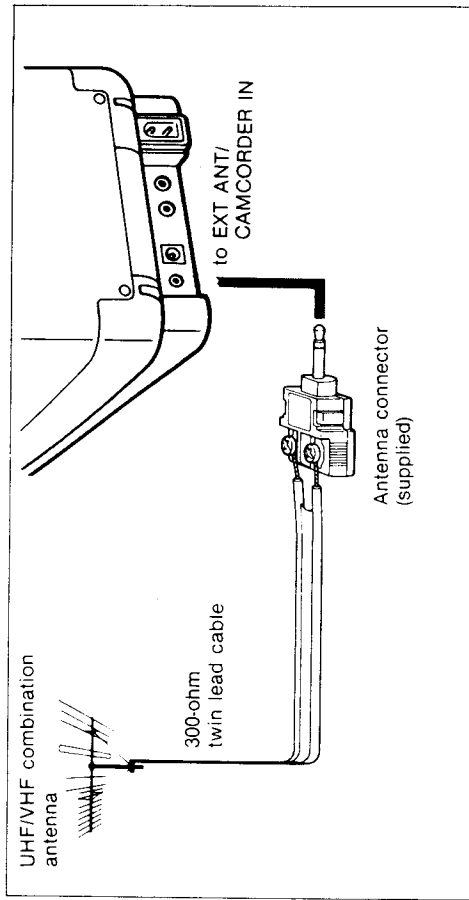


*The HEADPHONES jack is available to connect the optional speakers. (KV-8AD20 only)

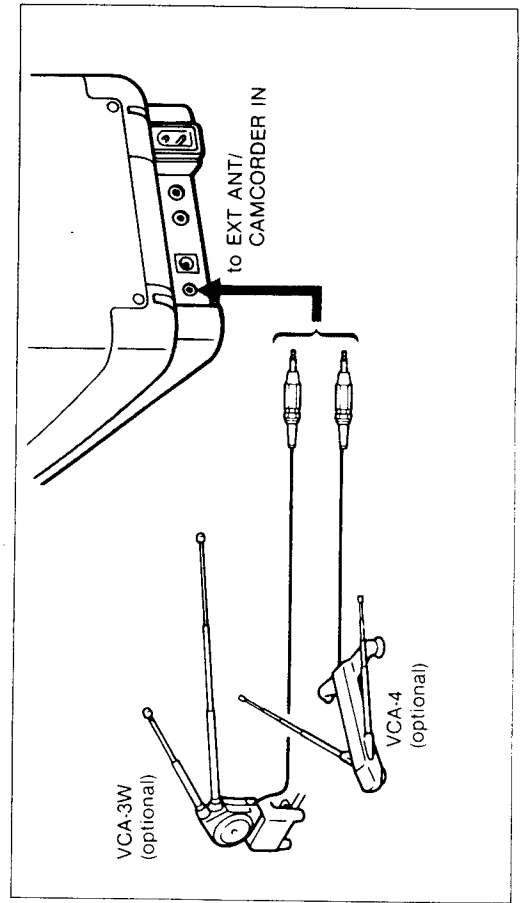
1-4. IF YOU WANT TO CONNECT AN EXTERNAL ANTENNA

When connecting an outdoor antenna

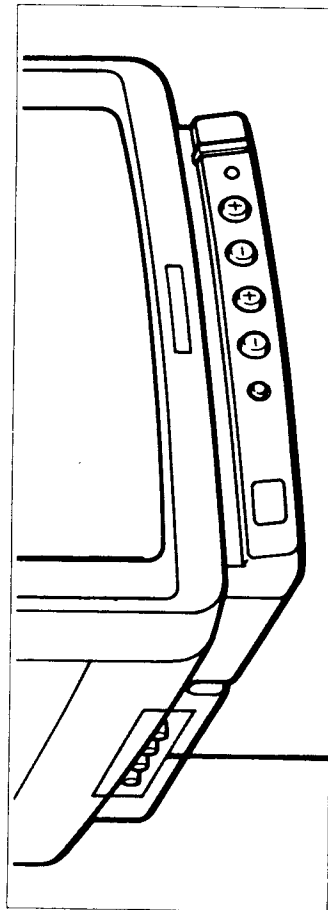
If you cannot obtain satisfactory reception with the telescopic antenna, use an external antenna.



When connecting a car antenna



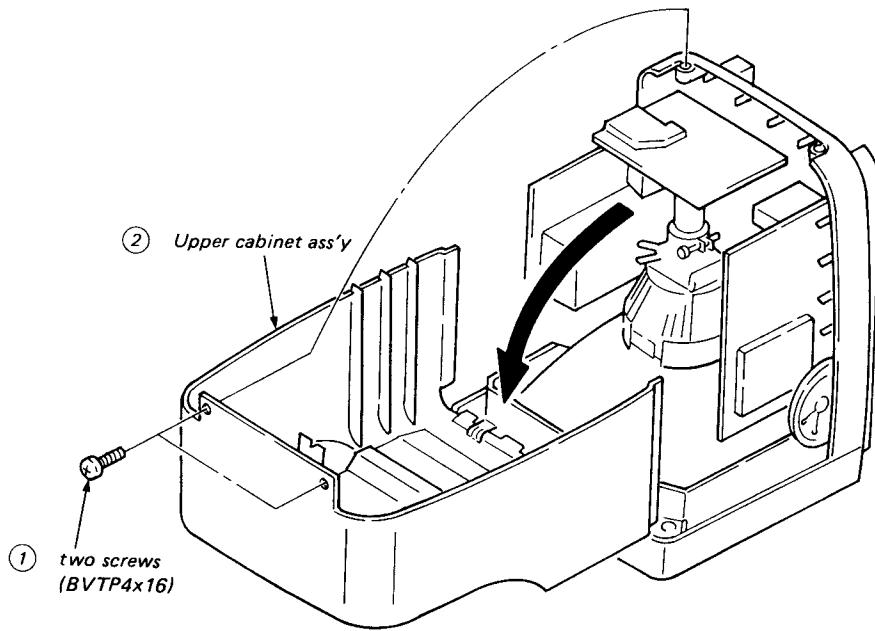
How to adjust the picture



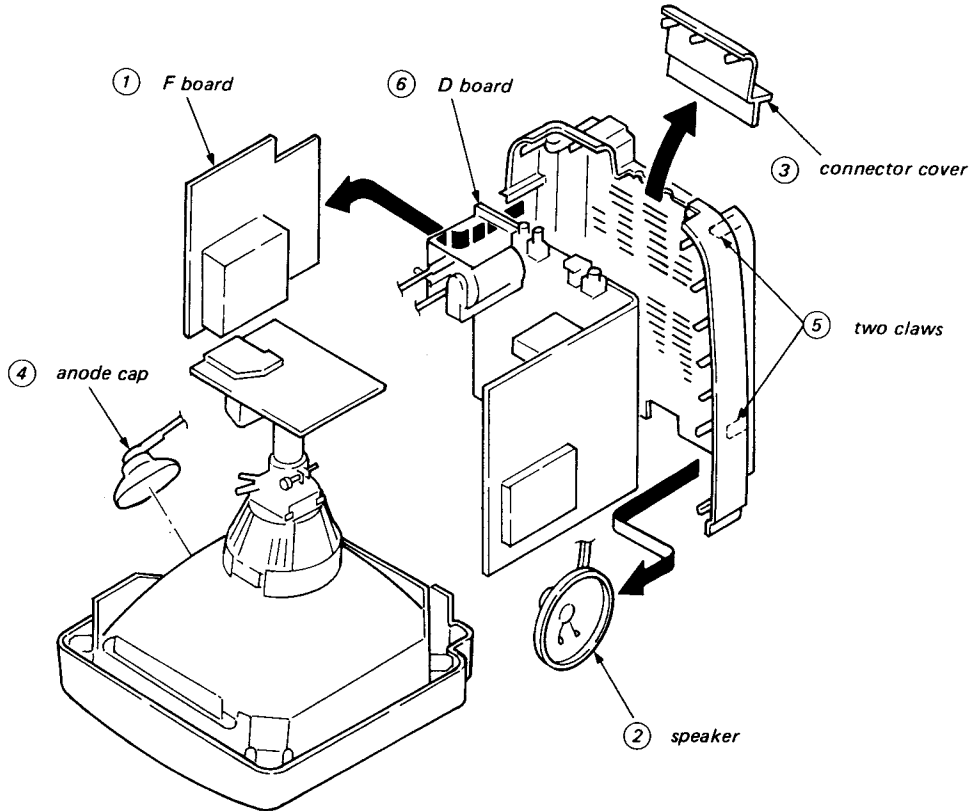
<p>for more brightness</p> <p>for less brightness</p> <p>BRIGHT</p>	<p>colors become dark</p> <p>colors become light</p> <p>COLOR</p>	<p>skin tones become greenish</p> <p>skin tones become purplish</p> <p>HUE</p>	<p>for more picture contrast</p> <p>for less picture contrast</p> <p>PICTURE</p>
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SECTION 2 DISASSEMBLY

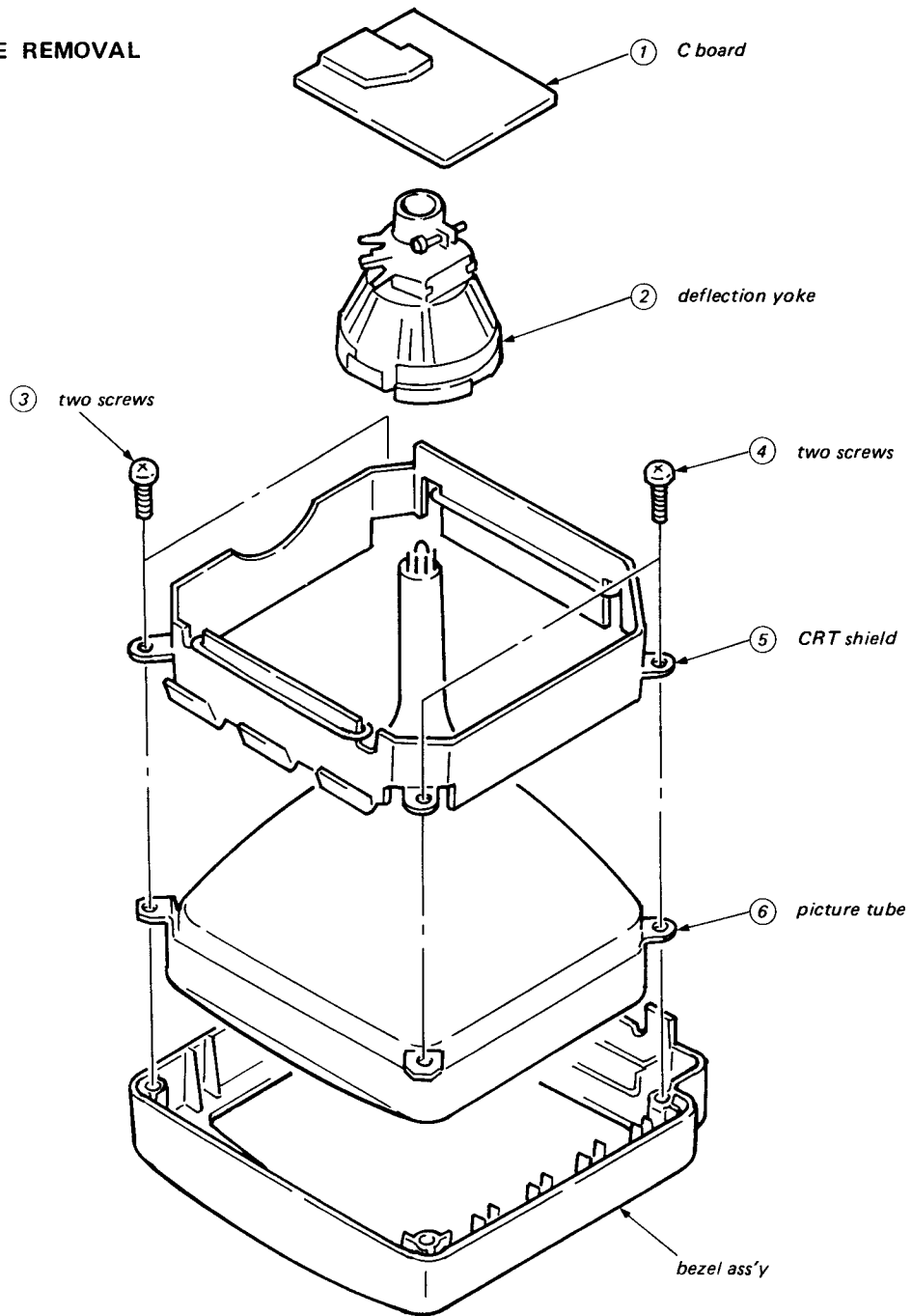
2-1. UPPER CABINET ASS'Y REMOVAL



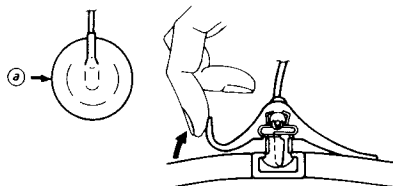
2-2. D BOARD REMOVAL



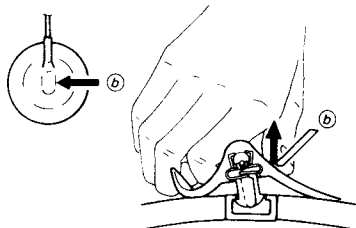
2-3. PICTURE TUBE REMOVAL



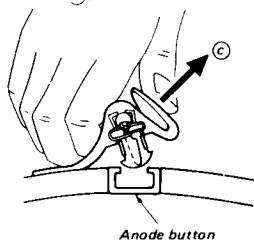
● REMOVAL OF ANODE CAP
Removing Procedures



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



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



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

SECTION 3 SET-UP ADJUSTMENTS

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

Perform the adjustments in order as follows :

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

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

- PICTURE control.....click position
BRIGHTNESS control.....click position

Note : Test Equipment Required.

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

3-1. BEAM LANDING

Preparation :

- Feed in the white pattern.
- Before starting, degauss the entire screen.

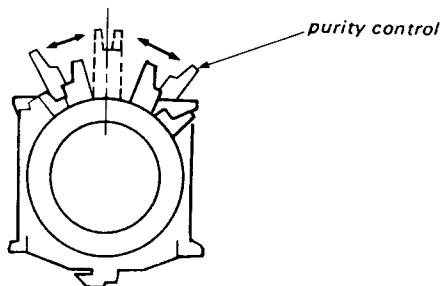


Fig. 3-1.

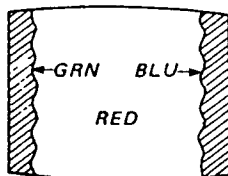


Fig. 3-2.

1. Turn on set power supply and receive an all-white signal.
2. Evenly degauss the entire screen.
3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig. 3-1.
4. Set BKG VR **F** to maximum and set **B** and **G** to minimum.
5. Move the deflection yoke back, and adjust the purity control so that **F** is in the center and **G** and **B** are at the sides, evenly. (Fig. 3-2.)
6. Move the deflection yoke forward so that the entire screen is red.
- *If the deflection yoke is pushed all the way to the CRT then moved slightly forward, landing adjustment is easier.
7. Substitute **G**, then **B** for **F** in step 4 and check landing.
8. Rotate **B**, **G** and **B** once each and check landing.
9. When landing is not right, adjust the purity control and use magnets as shown in Fig. 3-3 then repeat steps 7 and 8.
10. When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.

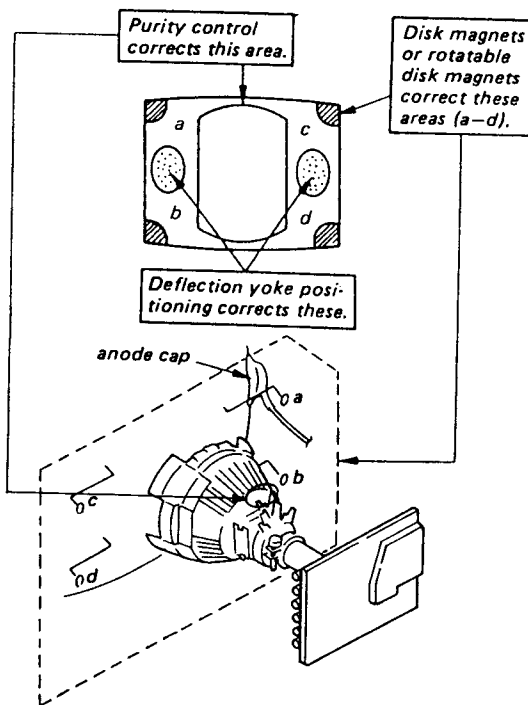
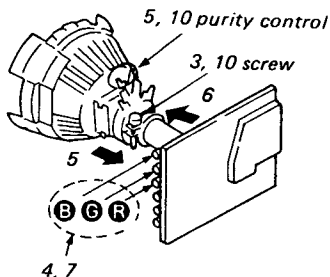


Fig. 3-3.



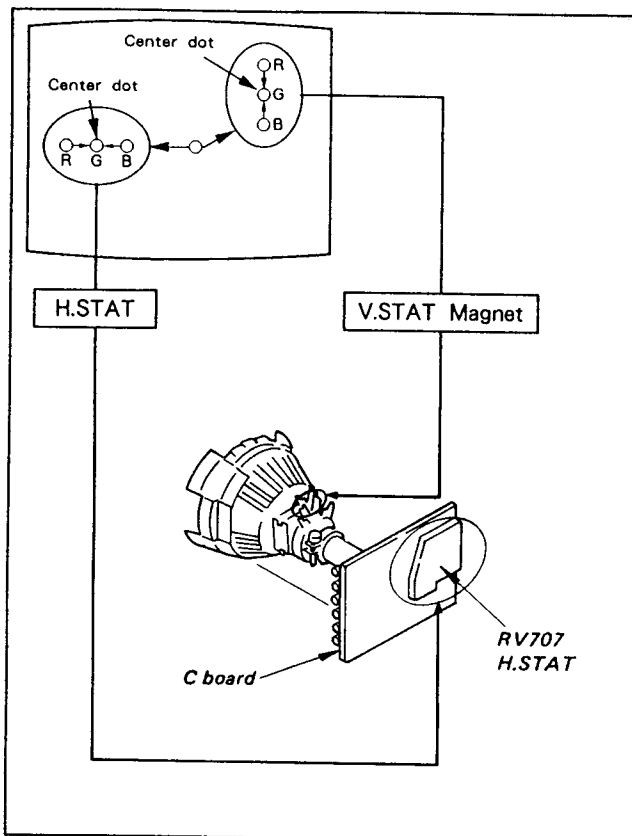
Note; The numbers (3-10) show above steps.

3-2. CONVERGENCE

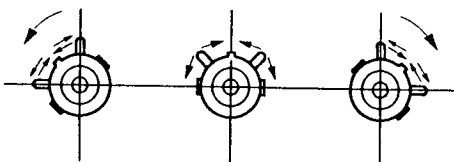
Preparation :

- Before starting, perform FOCUS, H.SIZE, V.SIZE and V.LIN adjustments.
- Turn BRIGHTNESS control to fully counterclockwise and PICTURE control to click position.
- Feed in the dot pattern.

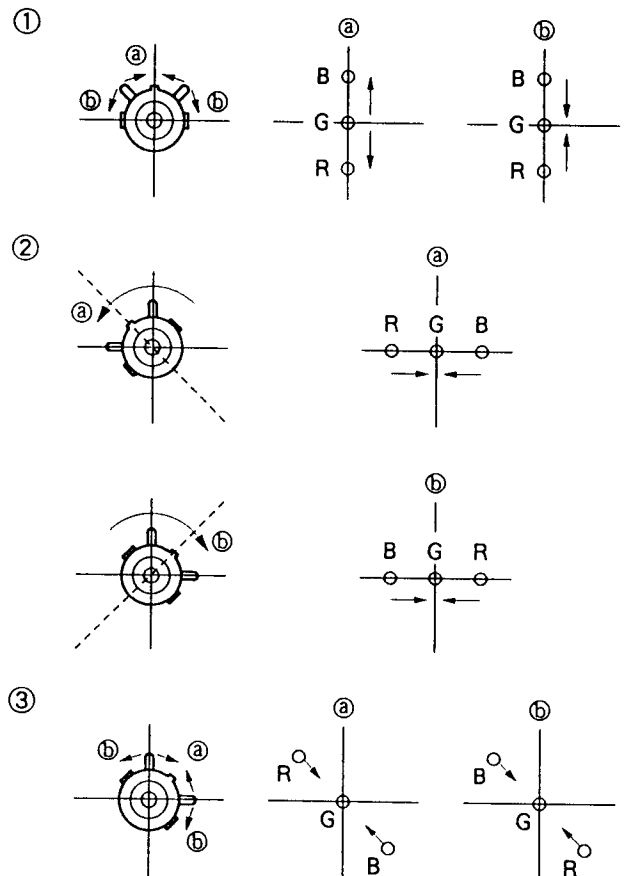
(1) Horizontal and Vertical Static Convergence



1. Adjust H.STAT VR to coincide red, green and blue dots on the center of screen (Horizontal movement)
 2. Adjust V.STAT magnet to coincide red, green and blue dots on the center of screen (Vertical movement)
 3. If the red, green and blue dots do not coincide on the center of screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)
- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4. When the V.STAT magnet is moved in the direction of arrow (a) and (b), Red, Green and Blue dots move as shown below.

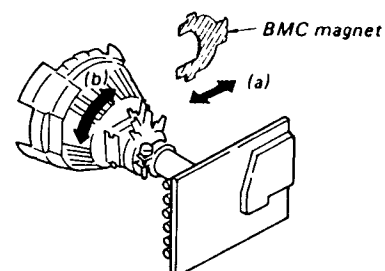


If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H.static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

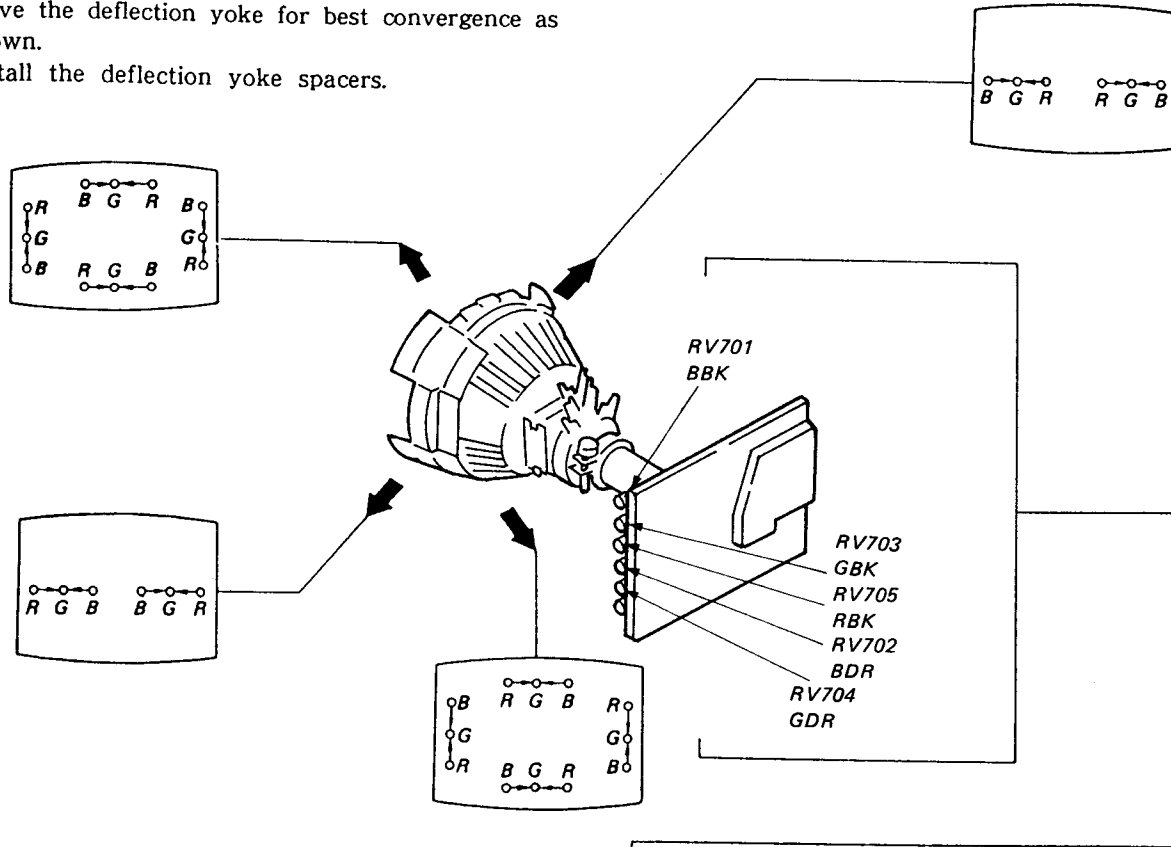


(2) Dynamic Convergence Adjustment

Preparation :

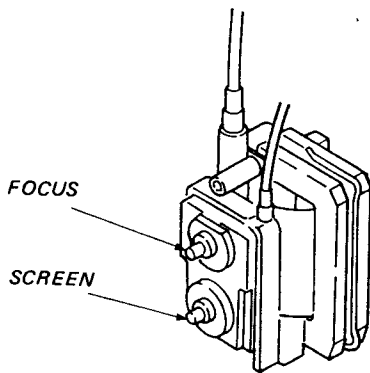
• Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

1. Remove deflection yoke spacers.
2. Move the deflection yoke for best convergence as shown.
3. Install the deflection yoke spacers.



3-3. FOCUS

- (1) Input monoscope signal.
 PICTURE control 80 %
 BRIGHT control 50 %
- (2) Adjust FOCUS control for a best picture at the center and both sides of the screen.

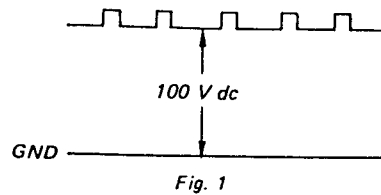


3-4. WHITE BALANCE

- Input dot signal from pattern generator.
- PICTURE control click position
- BRIGHTNESS control click position

[SCREEN (G2)]

1. Adjust BKG VRs (RV701, RV703, and RV705) so that voltages on the red, green and blue cathodes are 100Vdc with an oscilloscope as shown in Fig.1.



2. Observe the screen and adjust Screen control to obtain the faintly visible background of dot signal. Note the color that first becomes visible by turning SCREEN control.
Do not turn a BKG control for this color.

[WHITE BALANCE]

1. Input entirely white signal from pattern generator.
2. Set the PICTURE control to obtain the faintly visible raster on the screen.
3. Observe the screen and adjust the other two BKG VRs for best white balance.
4. Set the PICTURE control at maximum.
5. Observe the screen and adjust the DRIVE VRs (RV702, RV704) for best white balance.
6. Repeat steps 2 through 5 several times.



Wh
on
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IC2
R8C
(1)
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SECTION 4

SAFETY RELATED ADJUSTMENTS

☒ R821, R822 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

When replacing the following components (marked with ☒ on the schematic diagram), always perform the adjustment as follows :

IC201, D501, D806, C506, C510, C810, R505, R506, R508, R806, R807, R808, R821, R822, T802 (FBT)

(1) Preparation before confirmation

1. Turn the POWER switch ON, and receive entirely color-bar signals and set the PICTURE and BRIGHTNESS controls to center click.
2. Confirm that the voltage of TP86 is more than 30.5V when the set is operating normally with 120V AC supply.

(2) Hold-down operation confirmation

1. Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS controls to center click.
2. Apply DC voltage of over 42.4V gradually to TP86 via 1T40 from the DC stabilized power source. Confirm that the minimum voltage is less than 42.5V DC whereby the raster disappears during of hold-down circuit.

NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

(3) Hold-down readjustment

When step (2) is not satisfied, readjustment should be performed by altering the resistance value of R821, 822 (a component marked with ☒).

(4) Confirmation of hold-down erroneous operation

1. Turn the POWER switch ON, and receive dot signals and set the PICTURE and BRIGHTNESS controls to minimum.
2. Confirm that the hold-down circuit does not operate by turning the POWER switch ON and OFF repeatedly several times.

NOTE : If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.

3. Turn the POWER switch ON, and receive dot signals and entirely white signals, and set the PICTURE and BRIGHTNESS controls to maximum.
4. Confirm that the hold-down circuit does not operate by performing switchover of the channels of the dot signals and entirely white signals several times.

NOTE : If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.

5. If the above-mentioned steps 1 to 4 are not satisfied reconfirm steps (2) to (4) by altering the R821, 822 smaller resistance value (a component marked with ☒).

CONFIRMATION WHEN REPLACING T802 (FLY-BACK TRANSFORMER)

The following adjustments should always be performed with reference to whether an X-ray radiation control circuit is connected or not, when replacing H.V.R. (High-Voltage Registor)

*This check is to be performed when H.V.R. only is replaced, and has no relation to the hold-down circuit readjustment for replacement of parts marked ☒.

(1) Connection confirmation

1. Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS controls to maximum.
2. When the set is operating normally with 120V AC supply, confirm that the voltage of TP86 is over 32.0 ± 1.5V DC.

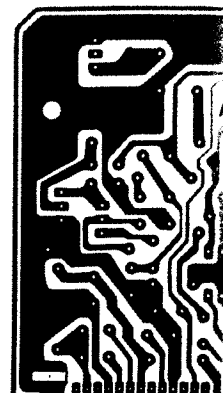
+B MAX VOLTAGE CONFIRMATION (☒ R663, R665)

When replacing the following components (marked with ☒ on the schematic diagram), perform the adjustment as follows :

IC651, Q651, D651, R655, R658, R659, R660, R662, R663, R664, R665, R667, L651, RV601

1. Supply 130± $\frac{3}{4}$ V AC to with variable auto-transformer.
2. Receive color-bar signals.
3. Set the PICTURE and BRIGHTNESS controls to center click.
4. Adjust RV601 (30V ADJ) so as to become maximum.
5. Confirm the voltage of TP91 is less than 33.0V DC.

*Use a digital multimeter whose input impedance over 100M Ω when confirming the voltage of the protector terminal of H.V.R.



TS

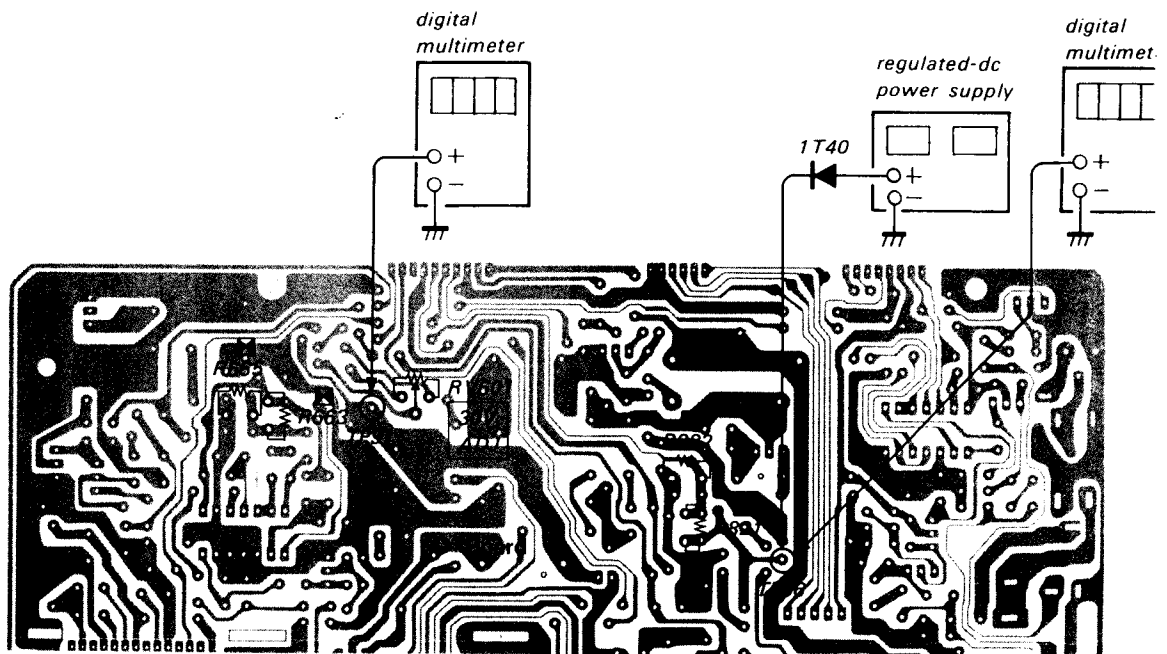
WHEN REPLACING T802 (FLY-MER)

ments should always be performed with an X-ray radiation control circuit is when replacing H.V.R. (High-Voltage) be performed when H.V.R. only is no relation to the hold-down circuit placement of parts marked \square .
 mation
 R switch ON, and receive entirely set the PICTURE and BRIGHTNESS num.
 operating normally with 120V AC that the voltage of TP86 is over 32.0

CONFIRMATION

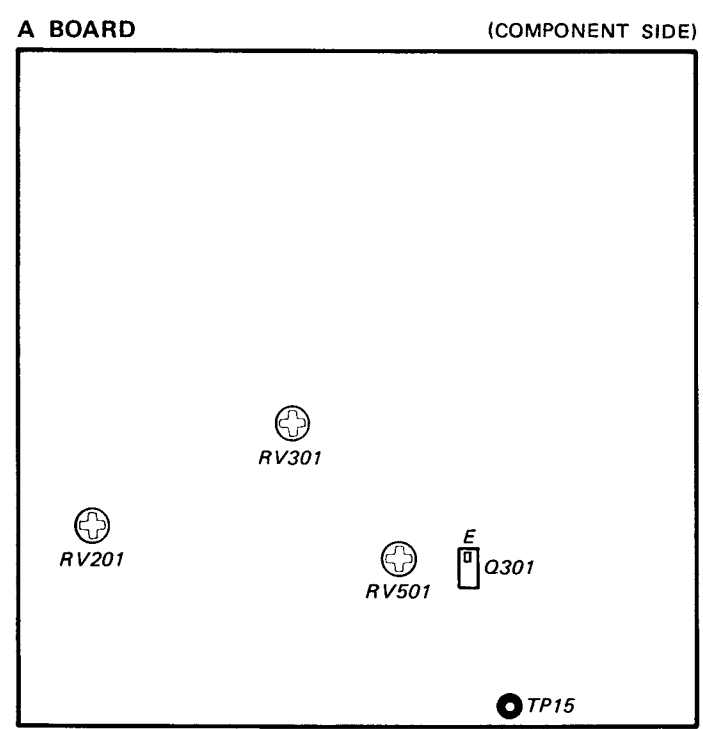
Following components (marked with \square gram), perform the adjustment as
 555, R658, R659, R660, R662, R663, 51, RV601
 to with variable auto-transformer. gnals.
 and BRIGHTNESS controls to center
 ADJ) so as to become maximum.
 e of TP91 is less than 33.0V DC.

meter whose input impedance over
 ning the voltage of the protector



SECTION 5 CIRCUIT ADJUSTMENT

5-1. A BOARD ADJUSTMENTS



TUNER AGC ADJUSTMENT (RV201)

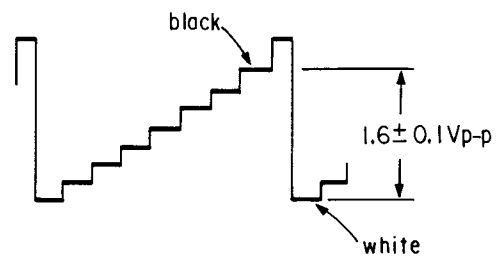
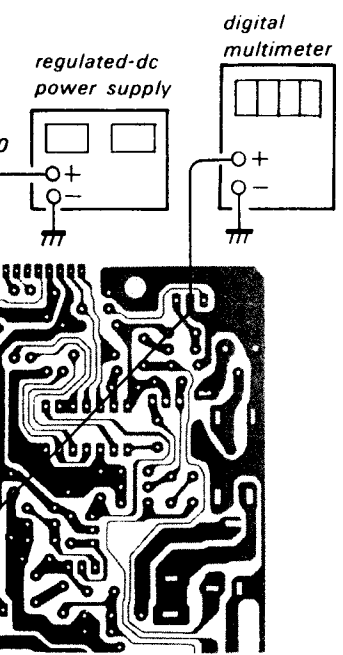
1. Receive a color-bar signal.
2. Connect the digital multimeter across TP15 and ground.
3. Adjust RV201 so that voltage is $6.0 \pm 0.3V$ DC.

H.SIFT ADJUSTMENT (RV501)

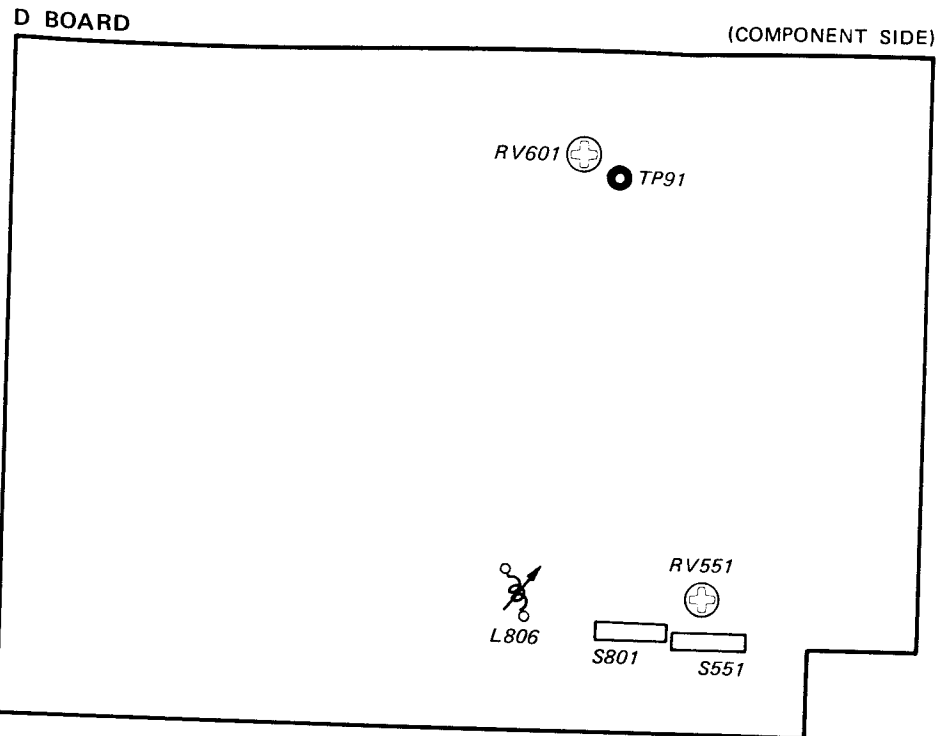
1. Set the V.CENT (S551) and H.CENT (S801) of D board to the best position.
2. Set the RV501 to center.
3. Adjust S801 for best picture.
4. If it is impossible with S801, adjust RV501.

SUB CONTRAST ADJUSTMENT (RV301)

1. Receive a color-bar signal.
2. PICTURE.....center click
3. Observe the Q301 emitter waveform on the oscilloscope.
4. Adjust RV301 until the black and white signal level becomes $1.6 \pm 0.1V_{p-p}$.



5.2. D BOARD ADJUSTMETNS



IT (RV501)

V.SIZE ADJUSTMENT (RV551)

1) and H.CENT (S801) on the
position.
center.
t picture.
with S801, adjust RV501.

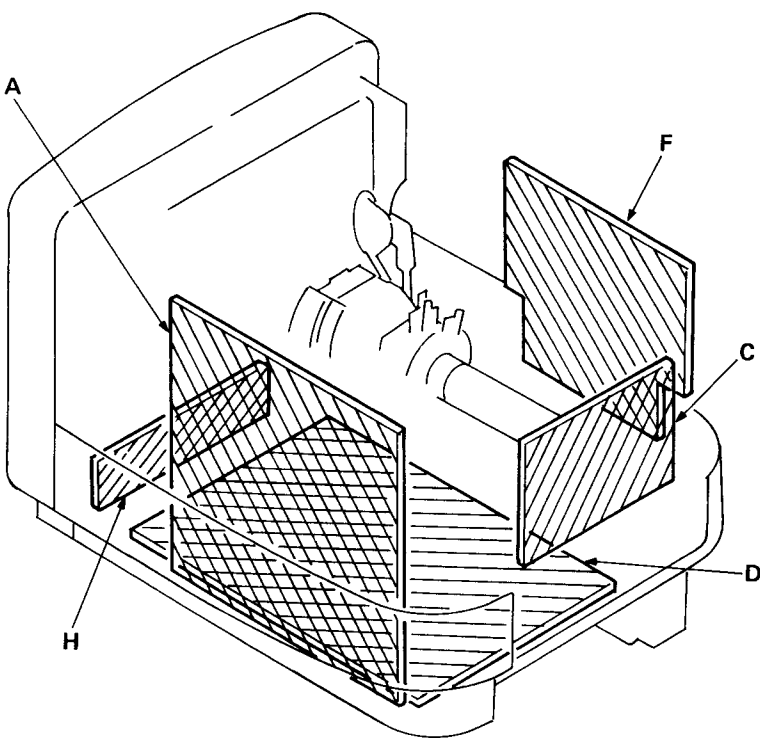
1. Receive a cross-hatch signal.
2. PICTURE.....center click
BRIGHTcenter
3. Adjust RV551 for best picture.

H.SIZE ADJUSTMENT (L806)

1. Receive a cross-hatch signal.
2. PICTURE.....center click
BRIGHTcenter
3. Adjust L806 for best picture.

SECTION 6


6-1. CIRCUIT BOARDS LOCATION DIAGRAMS









1



A
B
C
D
E
F
G
H
I
J



6-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

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

Note:

- All capacitors are in μF unless otherwise noted. $\text{p}\mu\text{F}$ 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
 $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- All resistors are in ohms, 1/4W unless otherwise noted.
 $\text{k}\Omega : 1000\Omega$, $\text{M}\Omega : 1000\text{k}\Omega$.
-  : nonflamable resistor.
-  : internal component.
-  : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- 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.
- When replacing components identified by  mark 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 R821, R822, R663 and R665 adjustment on page 14, 15.)
- When replacing the part in below table, be sure to perform the related adjustment.

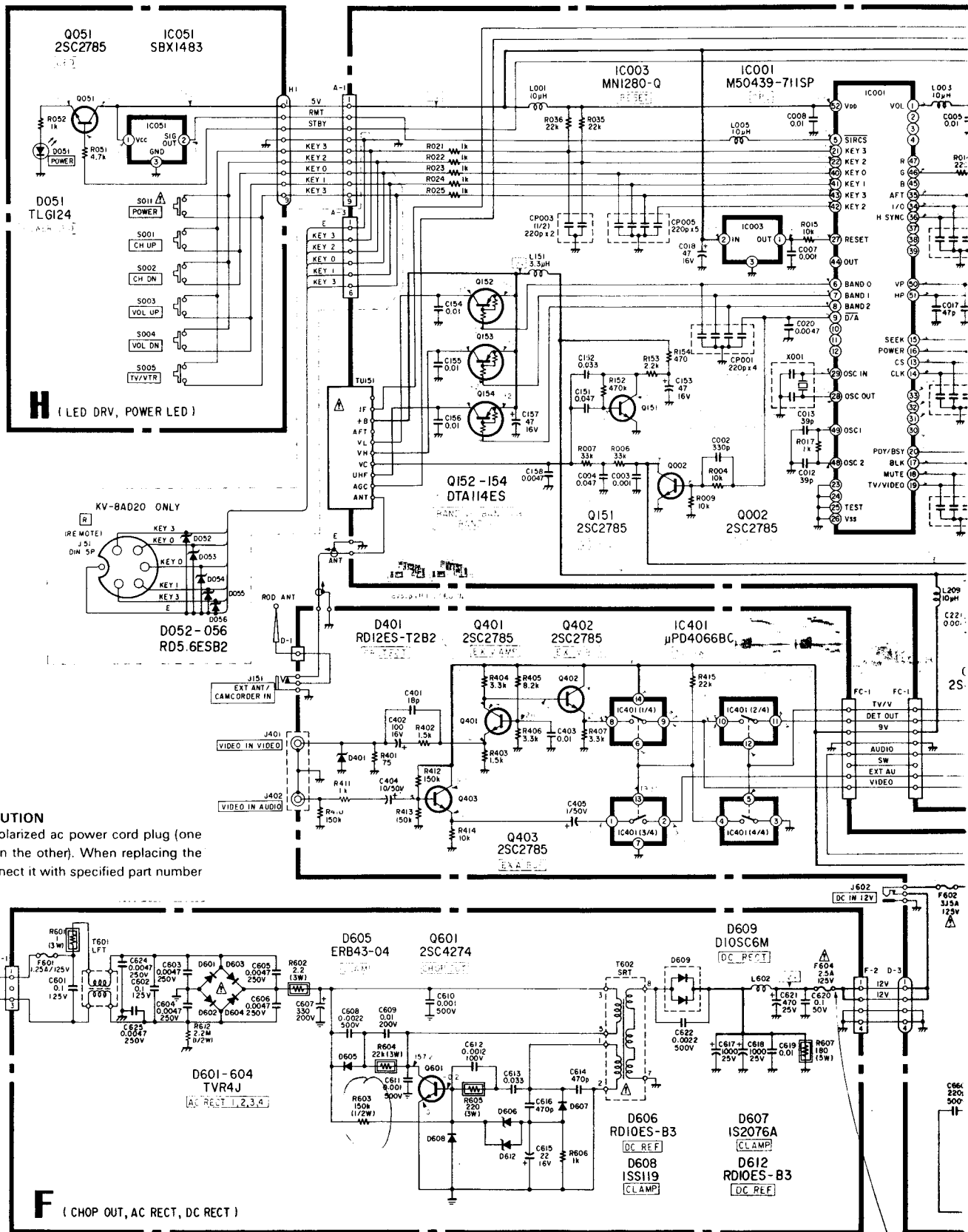
Part replaced ()	Adjustment ()
IC201, D501, D806, C506, C510, C810, R505, R506, R508, R806, R807, R808, R821, R822, T802 (FBT)	R821, R822 (HV HOLD DOWN)
IC651, Q651, D651, R655, R658, R659, R660, R662, R663, R664, R665, R667, L651, RV601	R663, R665 (+B MAX)

- Readings are taken with a color-bar signal input.
- no mark : VHF IN
- () : VIDEO IN
- Readings are taken with a $10\text{M}\Omega$ 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.
-  : Can not be measured.
- Circled numbers are waveform references.
- : B + bus.
- - - : B - bus.
- : signal path.
-  : adjustment for repair or semiconductor function.

This set is equipped with a power blade of the plug ac power cord, as shown in the diagram.

20V
60V

1 2 3 4 5 6 7 8 9



H (LED DRV, POWER LED)

D052-056
RD5.6ESB2

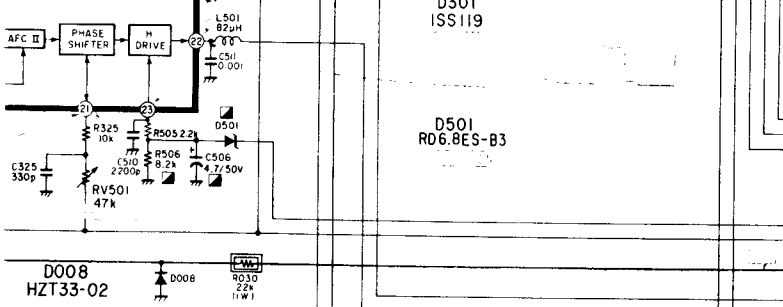
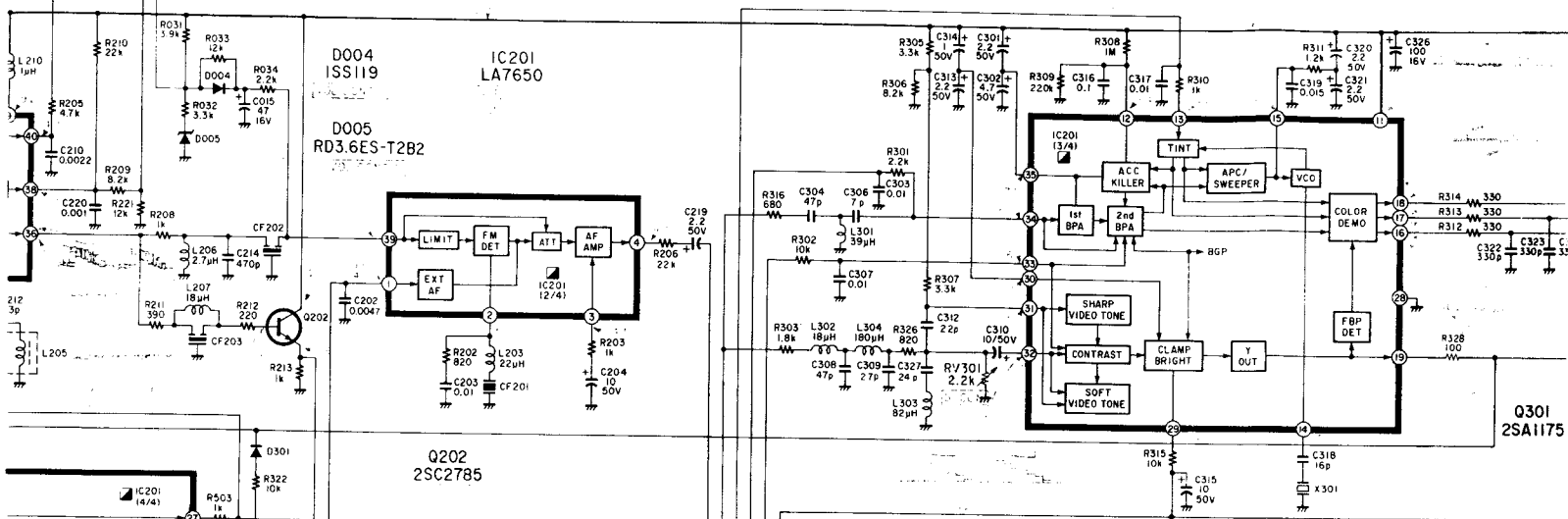
CAUTION

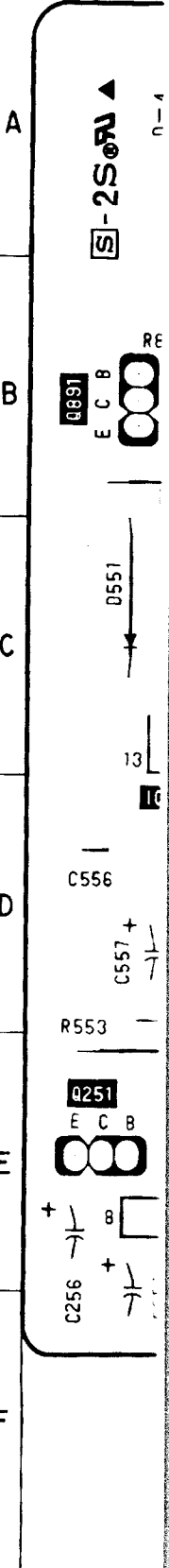
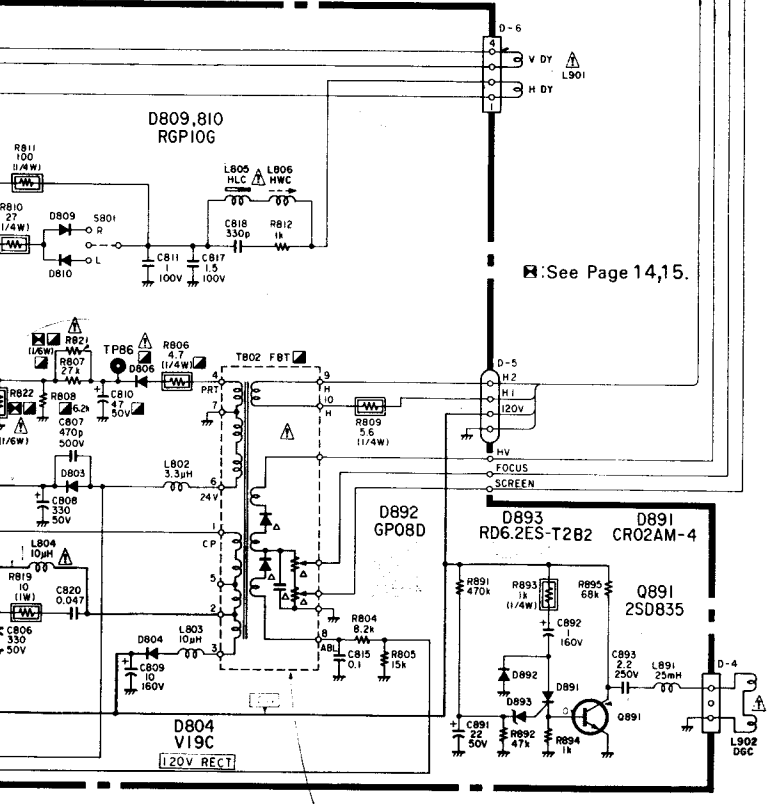
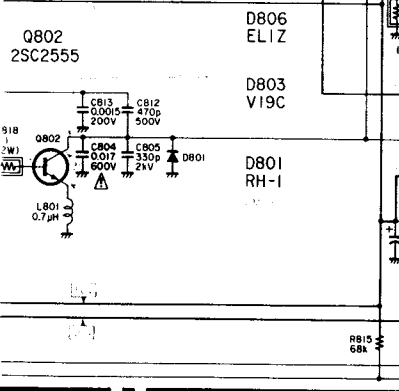
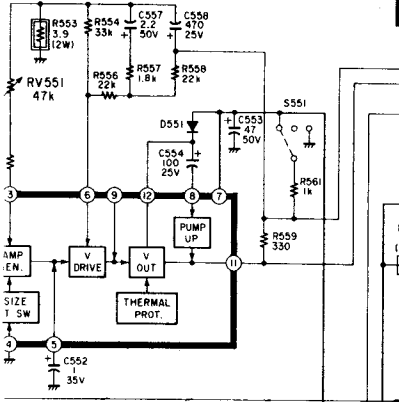
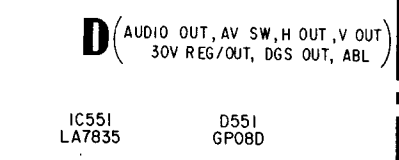
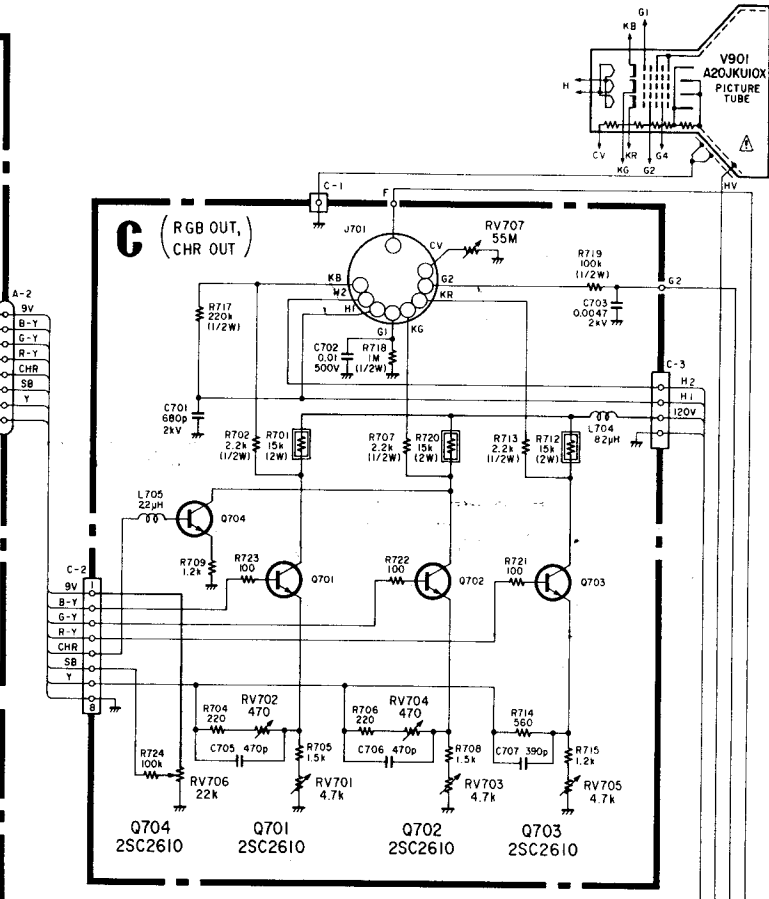
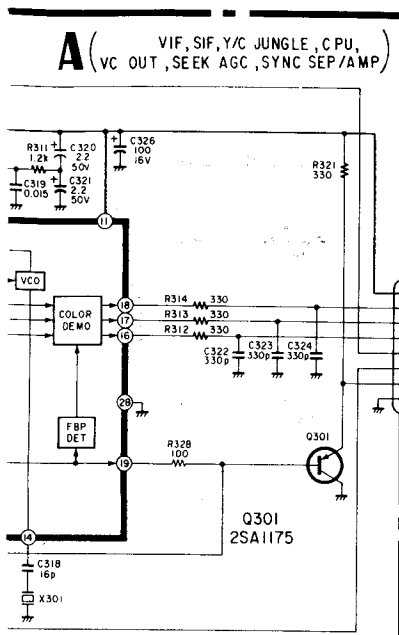
This set is equipped with a polarized ac power cord plug (one blade of the plug is wider than the other). When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.

F (CHOP OUT, AC RECT, DC RECT)

CAUTION
When taking a broken fuse (F604) off, disc avoid shock hazard.

A VIF, SIF, Y/C JUNGL
VC OUT, SEEK AGC, SYNC

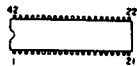




CAUTION
When replacing T802, be sure to check the point voltage value (TP86). Refer to the Safety Adjustment Section.

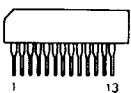
6-3. SEMICONDUCTORS

LA7650

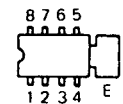


(Top view)

LA7835



MSM16911RS



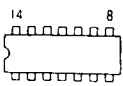
(Top view)

M50439-711SP



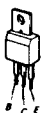
TOP VIEW

μPC1394C
μPD4066



(Top view)

BUZ71



DTA114ES
DTC144ES



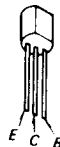
2SC2120



2SC2555N



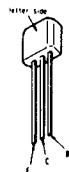
2SC2610



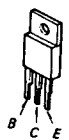
2SC2688



2SC2785



2SC4274
2SD1266
2SD835



2SD773



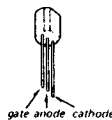
1SS119
GP08D
HZT33-02
RD3.6ESB2
RD5.6ESB2
RD6.2ESB2
RD6.8ESL3
RD10ESB2
RD10ESB3
RD12ESB2



1S2076A
EL1Z
ERB43-04
RGP10G



CR02AM-4



ERC81-004
RH-1

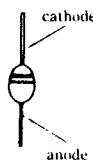


HZT33-02

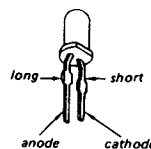
TVR4J



V19C

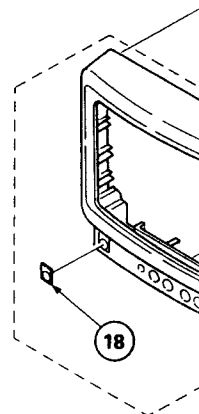
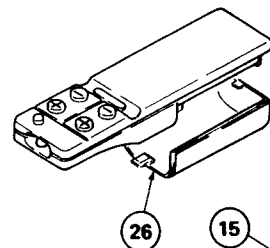
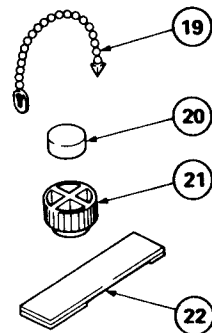


TLG124A



NOTE:

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



No.	Part No.	Description
1	X-4390-303-1	CABINET ASSY (WHITE)
	X-4390-303-2	CABINET ASSY (BLACK)
2	1-501-286-00	ANTENNA, TELESCOPIC
3	Δ 1-426-382-11	COIL, DEMAGNETIZATION
4	*A-1245-432-A	F BOARD, COMPLETE
5	*A-1296-462-A	A BOARD, COMPLETE (KV-
	*A-1296-505-A	A BOARD, COMPLETE (KV-
6	*A-1330-884-A	C BOARD, COMPLETE
7	*A-1345-786-A	D BOARD, COMPLETE (KV-
	*A-1345-809-A	D BOARD, COMPLETE (KV-
8	X-4390-302-1	BEZEL ASSY (WHITE) (KV-
	X-4390-302-2	BEZEL ASSY (BLACK) (KV-
9	Δ 1-451-265-11	DEFLECTION YOKE (SY-16
10	Δ 1-540-032-11	INLET 2P
11	1-544-011-11	SPEAKER
12	4-309-369-00	SPACER, DEFLECTION YOK
13	4-390-307-01	COVER, CONNECTOR (WHIT
	4-390-307-11	COVER, CONNECTOR (BLAC

**SECTION 7
EXPLODED VIEW**



**SECTION
ELECTRICAL PA**

• 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 Δ are critical for safety. Replace only with part number specified.

NOTE:

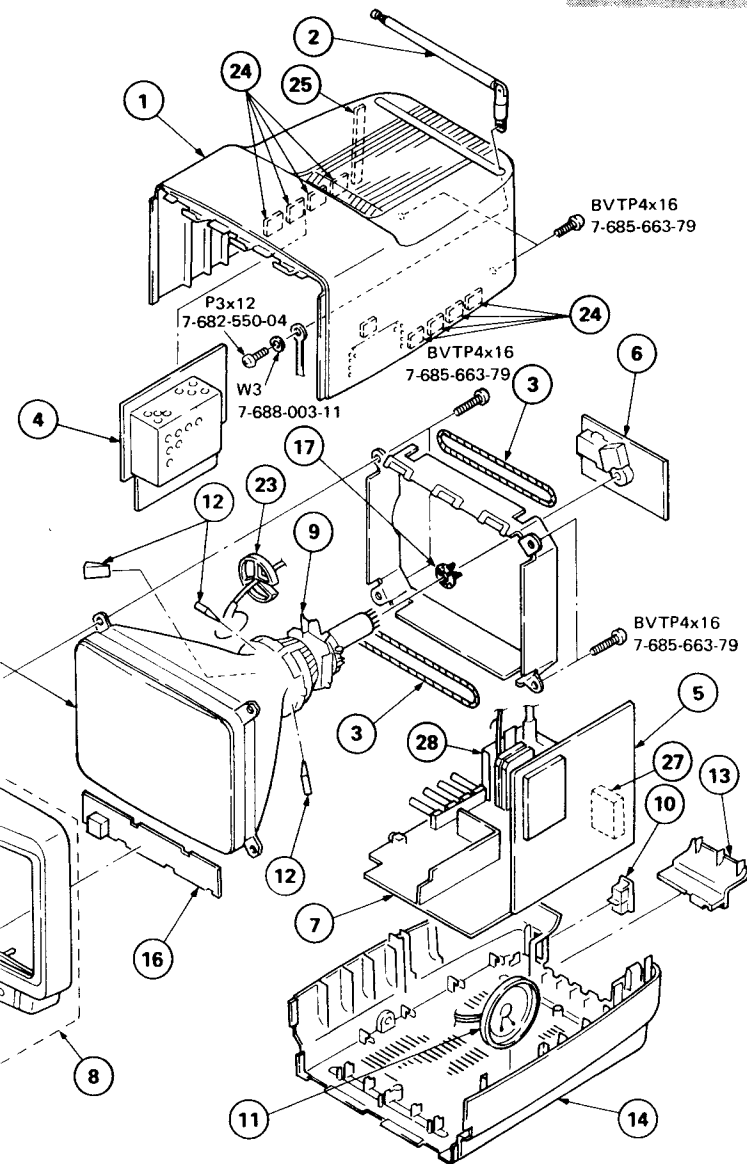
The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

• 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



Ref.No.	Part No.	Description	Remark	Ref.N
	*A-1245-432-A	F BOARD, COMPLETE *****		
	*4-381-724-01	HOLDER, IC		
CAPACITOR				
C601	Δ 1-130-680-51	FILM	0.1MF 20%	125V
C602	Δ 1-130-680-51	FILM	0.1MF 20%	125V
C603	Δ 1-161-964-51	CERAMIC	0.0047MF	250V
C604	Δ 1-161-964-51	CERAMIC	0.0047MF	250V
C605	Δ 1-161-964-51	CERAMIC	0.0047MF	250V
C606	Δ 1-161-964-51	CERAMIC	0.0047MF	250V
C607	1-124-959-11	ELECT	330MF 20%	200V
C608	1-101-821-00	CERAMIC	0.0022MF	500V
C609	1-108-692-81	MYLAR	0.01MF 10%	200V
C610	1-102-038-00	CERAMIC	0.001MF	500V
C611	1-102-038-00	CERAMIC	0.001MF	500V
C612	1-108-615-91	MYLAR	0.0012MF 10%	100V
C613	1-108-843-11	MYLAR	0.033MF 10%	50V
C614	1-102-114-00	CERAMIC	470PF 10%	50V
C615	1-124-646-00	ELECT	22MF 20%	16V
C616	1-102-114-00	CERAMIC	470PF 10%	50V
C617	1-124-557-11	ELECT	1000MF 20%	25V
C618	1-124-557-11	ELECT	1000MF 20%	25V
C619	1-130-483-00	MYLAR	0.01MF 10%	50V
C620	1-136-165-00	FILM	0.1MF 5%	50V
C621	1-124-480-11	ELECT	470MF 20%	25V
C622	1-101-821-00	CERAMIC	0.0022MF	500V
C624	Δ 1-161-964-51	CERAMIC	0.0047MF 20%	250V
C625	Δ 1-161-964-51	CERAMIC	0.0047MF 20%	250V
DIODE				
D601	Δ 8-719-801-70	DIODE TVR4J		A1
D602	Δ 8-719-801-70	DIODE TVR4J		A3
D603	Δ 8-719-801-70	DIODE TVR4J		FC1
D604	Δ 8-719-801-70	DIODE TVR4J		FC2
D605	1-806-549-41	DIODE ERB43-08		FC3
D606	8-719-110-18	DIODE RD10ES-B3		
D607	8-719-815-85	DIODE 1S1585		C001
D608	8-719-911-19	DIODE 1S1119		C002
D609	8-719-510-09	DIODE D10SC6M		C003
D612	8-719-110-18	DIODE RD10ES-B3		C004
				C005
CONNECTOR				
F1	*1-508-765-00	3P PLUG (M)		C007
F2	*1-564-507-11	PLUG, CONNECTOR 4P		C008
				C012
				C013
				C015
FUSE				
F601	Δ 1-532-741-11	FUSE, GLASS TUBE 1.25A/125V		C016
F604	Δ 1-532-744-11	FUSE, GLASS TUBE 2.5A/125V		C017
				C018
				C019
				C020

Remark	No.	Part No.	Description	Remark
(KV-8AD10 ONLY)	14	4-390-310-01	CABINET, LOWER (WHITE) (KV-8AD10 ONLY)	
		4-390-310-11	CABINET, LOWER (BLACK) (KV-8AD10 ONLY)	
		4-390-310-41	CABINET, LOWER (KV-8AD20 ONLY)	
	15	Δ 8-737-151-05	PICTURE TUBE (A20JKU10X)	
	16	*1-626-865-11	H BOARD	
(8AD10 ONLY)	17	2-152-292-00	BASE, STEM	
(8AD20 ONLY)	18	4-390-302-01	FILTER	
(8AD10 ONLY)	19	4-308-807-00	CRIP, LEAD WIRE	
(8AD20 ONLY)	20	1-452-032-00	MAGNET, DISK; 10MMo	
(8AD10 ONLY)	21	1-452-094-00	MAGNET, ROTATABLE DISK; 15MMo	
	18	22	X-4306-312-0	PARMALLOY ASSY, CONVERGENCE
	18	23	*3-704-372-01	HOLDER, HV CABLE
		24	3-831-441-XX	CUSHION
		25	9-911-835-XX	CUSHION, F
		26	4-390-314-01	COVER, BATTERY (BLACK)
			4-390-314-11	COVER, BATTERY (WHITE) (KV-8AD10 ONLY)
(KV-8AD10 ONLY)	27	Δ 1-465-045-11	TUNER UNIT (TUSOF3U-291)	
	28	Δ 1-439-436-11	TRANSFORMER ASSY, FLYBACK	



SECTION 8 ELECTRICAL PARTS LIST

NOTE:

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

• 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

• MF : μ F, PF : μ MF

COILS

• MMH : mH, UH : μ H

• The components identified by **M** 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.

Ref.No.	Part No.	De
C151	1-108-845-00	MY
C152	1-108-843-11	MY
C153	1-124-477-11	EL
C154	1-101-004-00	CE
C155	1-101-004-00	CE

C156	1-101-004-00	CE
C157	1-124-477-11	EL
C158	1-101-003-00	CE
C159	1-101-003-00	CE
C201	1-102-121-00	CE
C202	1-101-003-00	CE

C203	1-101-004-00	CE
C204	1-123-875-11	EL
C205	1-101-004-00	CE
C206	1-124-925-11	EL

C208	1-101-004-00	CE
C209	1-101-886-00	CE
C210	1-102-121-00	CE
C212	1-102-963-00	CE
C213	1-101-886-00	CE

C214	1-102-114-00	CE
C215	1-124-902-00	EL
C216	1-106-355-12	MY
C218	1-124-120-11	EL
C219	1-124-925-11	EL

C220	1-102-074-00	CE
C221	1-102-074-00	CE
C301	1-124-925-11	EL
C302	1-123-382-00	EL
C303	1-101-004-00	CE

C304	1-101-880-00	CE
C306	1-102-506-00	CE
C307	1-101-004-00	CE
C308	1-101-880-00	CE
C309	1-102-961-00	CE

C310	1-123-875-11	EL
C312	1-102-959-00	CE
C313	1-124-925-11	EL
C314	1-124-499-11	EL
C315	1-123-875-11	EL

C316	1-136-165-00	FI
C317	1-101-004-00	CE
C318	1-102-512-00	CE
C319	1-108-839-00	MY
C320	1-124-925-11	EL

C321	1-124-925-11	EL
C322	1-102-112-00	CE
C323	1-102-112-00	CE
C324	1-102-112-00	CE
C325	1-102-112-00	CE
C326	1-126-101-11	EL
C327	1-102-960-00	CE
C501	1-124-499-11	EL

C502	1-102-115-00	CE
C503	1-124-925-11	EL
C504	1-108-843-11	MY
C506	1-124-927-11	EL
C507	1-126-101-11	EL
C510	1-102-121-00	CE
C511	1-102-074-00	CE

FILTER

CF201	1-404-816-11	D1
CF202	1-527-943-00	F1
CF203	1-409-332-00	CF
SF201	1-404-227-51	S1

Ref.No.	Part No.	Description	Remark
*A-1245-432-A	F BOARD, COMPLETE	*****	
*4-381-724-01	HOLDER, IC		
CAPACITOR			
C601	A 1-130-680-51	FILM 0.1MF 20% 125V	
C602	A 1-130-680-51	FILM 0.1MF 20% 125V	
C603	A 1-161-964-51	CERAMIC 0.0047MF 250V	
C604	A 1-161-964-51	CERAMIC 0.0047MF 250V	
C605	A 1-161-964-51	CERAMIC 0.0047MF 250V	
C606	A 1-161-964-51	CERAMIC 0.0047MF 250V	
C607	1-124-959-11	ELECT 330MF 20% 200V	
C608	1-101-821-00	CERAMIC 0.0022MF 500V	
C609	1-108-692-81	MYLAR 0.01MF 10% 200V	
C610	1-102-038-00	CERAMIC 0.001MF 500V	
C611	1-102-038-00	CERAMIC 0.001MF 500V	
C612	1-108-615-91	MYLAR 0.0012MF 10% 100V	
C613	1-108-843-11	MYLAR 0.033MF 10% 50V	
C614	1-102-114-00	CERAMIC 470PF 10% 50V	
C615	1-124-646-00	ELECT 22MF 20% 16V	
C616	1-102-114-00	CERAMIC 470PF 10% 50V	
C617	1-124-557-11	ELECT 1000MF 20% 25V	
C618	1-124-557-11	ELECT 1000MF 20% 25V	
C619	1-130-483-00	MYLAR 0.01MF 10% 50V	
C620	1-136-165-00	FILM 0.1MF 5% 50V	
C621	1-124-480-11	ELECT 470MF 20% 25V	
C622	1-101-821-00	CERAMIC 0.0022MF 500V	
C624	A 1-161-964-51	CERAMIC 0.0047MF 20% 250V	
C625	A 1-161-964-51	CERAMIC 0.0047MF 20% 250V	

DIODE

D601	A 8-719-801-70	DIODE TVR4J
D602	A 8-719-801-70	DIODE TVR4J
D603	A 8-719-801-70	DIODE TVR4J
D604	A 8-719-801-70	DIODE TVR4J
D605	1-806-549-41	DIODE ERB43-08
D606	8-719-110-18	DIODE RD10ES-83
D607	8-719-815-85	DIODE 1S1585
D608	8-719-911-19	DIODE 1S5119
D609	8-719-510-09	DIODE D10SC6M
D612	8-719-110-18	DIODE RD10ES-83

CONNECTOR

F1	*1-508-765-00	3P PLUG (M)
F2	*1-564-507-11	PLUG, CONNECTOR 4P

FUSE

F601	A 1-532-741-11	FUSE, GLASS TUBE 1.25A/125V
F604	A 1-532-744-11	FUSE, GLASS TUBE 2.5A/125V


Ref.No.	Part No.	Description	Remark
*1-533-189-11	HOLDER, FUSE; F604		
COIL			
L602	1-407-365-00	COIL, CHOKE	
TRANSISTOR			
Q601	8-729-920-90	TRANSISTOR 2SC4274-02	
	*4-363-146-00	HEAT SINK, V.OUT; Q601	
RESISTOR			
R601	A 1-216-389-51	METAL OXIDE 1 5% 3W F	
R602	A 1-216-393-51	METAL OXIDE 2.2 5% 3W F	
R603	1-244-925-00	CARBON 150K 5% 1/2W	
R604	1-215-925-11	METAL OXIDE 22K 5% 3W F	
R605	1-215-913-11	METAL OXIDE 220 5% 3W F	
R606	1-249-417-11	CARBON 1K 5% 1/4W	
R607	1-205-892-11	WIREWOUND 180 5% 5W F	
R612	1-202-723-00	SOLID 2.2M 10% 1/2W	
TRANSFORMER			
T601	A 1-424-120-11	TRANSFORMER, LINE FILTER	
T602	A 1-449-391-11	TRANSFORMER, SWITCHNG REGULATOR	

	*A-1296-462-A	A BOARD, COMPLETE (KV-8AD10 ONLY)	
	*A-1296-505-A	A BOARD, COMPLETE (KV-8AD20 ONLY)	

CONNECTOR			
A1	*1-564-512-11	PLUG, CONNECTOR 9P	
A3	*1-564-509-11	PLUG, CONNECTOR 6P (KV-8AD20 ONLY)	
FC1	1-564-098-00	CONNECTOR, BOARD TO BOARD 8P	
FC2	1-506-978-11	CONNECTOR, BOARD TO BOARD 6P	
FC3	1-564-610-11	CONNECTOR, BOARD TO BOARD	
CAPACITOR			
C001	1-124-477-11	ELECT 47MF 20% 16V	
C002	1-102-112-00	CERAMIC 330PF 10% 50V	
C003	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C004	1-108-845-00	MYLAR 0.047MF 10% 50V	
C005	1-102-074-00	CERAMIC 0.001MF 50V	
C007	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C008	1-101-004-00	CERAMIC 0.01MF 50V	
C012	1-102-965-00	CERAMIC 39PF 5% 50V	
C013	1-102-965-00	CERAMIC 39PF 5% 50V	
C015	1-124-477-11	ELECT 47MF 20% 16V	
C016	1-101-880-00	CERAMIC 47PF 5% 50V	
C017	1-101-880-00	CERAMIC 47PF 5% 50V	
C018	1-124-477-11	ELECT 47MF 20% 16V	
C019	1-101-003-00	CERAMIC 0.0047MF 50V	
C020	1-101-003-00	CERAMIC 0.0047MF 50V	

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ing parts by refer-
please include
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COILS
μF * MMH : nH, UH : μH
Identified by  in this manual
only factory-selected for each set in
regulations regarding X-ray radiation.
ent be required, replace only with
ly used.

ion
FUZE; F604

HOKE

TOR 2SC4274-02
NK, V.OUT; Q601

KIDE 1 5% 3W F
KIDE 2.2 5% 3W F
150K 5% 1/2W
KIDE 22K 5% 3W F
KIDE 220 5% 3W F
1K 5% 1/4W
ND 180 5% 5W F
2.2M 10% 1/2W

RMER, LINE FILTER
RMER, SWITCHNG REGULATOR

COMPLETE (KV-8AD10 ONLY)
COMPLETE (KV-8AD20 ONLY)

CONNECTOR 9P
CONNECTOR 6P (KV-8AD20 ONLY)
OR, BOARD TO BOARD 8P
OR, BOARD TO BOARD 6P
OR, BOARD TO BOARD

47MF 20% 16V
330PF 10% 50V
0.001MF 10% 50V
0.047MF 10% 50V
0.001MF 50V

0.001MF 10% 50V
0.01MF 50V
39PF 5% 50V
39PF 5% 50V
47MF 20% 16V
47PF 5% 50V
47PF 5% 50V
47MF 20% 16V
0.0047MF 50V
0.0047MF 50V

Ref.No.	Part No.	Description	Remark
C151	1-108-845-00	MYLAR 0.047MF	10% 50V
C152	1-108-843-11	MYLAR 0.033MF	10% 50V
C153	1-124-477-11	ELECT 47MF	20% 16V
C154	1-101-004-00	CERAMIC 0.01MF	50V
C155	1-101-004-00	CERAMIC 0.01MF	50V
C156	1-101-004-00	CERAMIC 0.01MF	50V
C157	1-124-477-11	ELECT 47MF	20% 16V
C158	1-101-003-00	CERAMIC 0.0047MF	50V
C159	1-101-003-00	CERAMIC 0.0047MF	50V
C201	1-102-121-00	CERAMIC 0.0022MF	10% 50V
C202	1-101-003-00	CERAMIC 0.0047MF	50V
C203	1-101-004-00	CERAMIC 0.01MF	50V
C204	1-123-875-11	ELECT 10MF	20% 50V
C205	1-101-004-00	CERAMIC 0.01MF	50V
C206	1-124-925-11	ELECT 2.2MF	20% 50V
C208	1-101-004-00	CERAMIC 0.01MF	50V
C209	1-101-886-00	CERAMIC 62PF	5% 50V
C210	1-102-121-00	CERAMIC 0.0022MF	10% 50V
C212	1-102-963-00	CERAMIC 33PF	5% 50V
C213	1-101-886-00	CERAMIC 62PF	5% 50V
C214	1-102-114-00	CERAMIC 470PF	10% 50V
C215	1-124-902-00	ELECT 0.47MF	20% 50V
C216	1-106-355-12	MYLAR 0.0033MF	10% 50V
C218	1-124-120-11	ELECT 220MF	20% 16V
C219	1-124-925-11	ELECT 2.2MF	20% 50V
C220	1-102-074-00	CERAMIC 0.001MF	10% 50V
C221	1-102-074-00	CERAMIC 0.001MF	10% 50V
C301	1-124-925-11	ELECT 2.2MF	20% 50V
C302	1-123-382-00	ELECT 3.3MF	20% 50V
C303	1-101-004-00	CERAMIC 0.01MF	50V
C304	1-101-880-00	CERAMIC 47PF	5% 50V
C306	1-102-506-00	CERAMIC 7PF	0.5PF 50V
C307	1-101-004-00	CERAMIC 0.01MF	50V
C308	1-101-880-00	CERAMIC 47PF	5% 50V
C309	1-102-961-00	CERAMIC 27PF	5% 50V
C310	1-123-875-11	ELECT 10MF	20% 50V
C312	1-102-959-00	CERAMIC 22PF	5% 50V
C313	1-124-925-11	ELECT 2.2MF	20% 50V
C314	1-124-499-11	ELECT 1MF	20% 50V
C315	1-123-875-11	ELECT 10MF	20% 50V
C316	1-136-165-00	FILM 0.1MF	5% 50V
C317	1-101-004-00	CERAMIC 0.01MF	50V
C318	1-102-512-00	CERAMIC 16PF	5% 50V
C319	1-108-839-00	MYLAR 0.015MF	10% 50V
C320	1-124-925-11	ELECT 2.2MF	20% 50V
C321	1-124-925-11	ELECT 2.2MF	20% 50V
C322	1-102-112-00	CERAMIC 330PF	10% 50V
C323	1-102-112-00	CERAMIC 330PF	10% 50V
C324	1-102-112-00	CERAMIC 330PF	10% 50V
C325	1-102-112-00	CERAMIC 330PF	10% 50V
C326	1-126-101-11	ELECT 100MF	20% 16V
C327	1-102-960-00	CERAMIC 24PF	5% 50V
C501	1-124-499-11	ELECT 1MF	20% 50V
C502	1-102-115-00	CERAMIC 560PF	10% 50V
C503	1-124-925-11	ELECT 2.2MF	20% 50V
C504	1-108-843-11	MYLAR 0.033MF	10% 50V
C506	1-124-927-11	ELECT 4.7MF	20% 50V
C507	1-126-101-11	ELECT 100MF	20% 16V
C510	1-102-121-00	CERAMIC 0.0022MF	10% 50V
C511	1-102-074-00	CERAMIC 0.001MF	10% 50V

FILTER

Ref.No.	Part No.	Description
CF201	1-404-816-11	DISCRIMINATOR, CERAMIC
CF202	1-527-943-00	FILTER, CERAMIC
CF203	1-409-332-00	CERAMIC TRAP (4.5MHZ)
SWF201	1-404-227-51	SAWF 45MHZ

Ref.No.	Part No.	Description	Remark
DIODE			
D001	8-719-109-89	DIODE RD5.6ES-B2	
D002	8-719-911-19	DIODE 1SS119	
D003	8-719-109-89	DIODE RD5.6ES-B2	
D004	8-719-911-19	DIODE 1SS119	
D005	8-719-109-69	DIODE RD3.6ES-B2	
D006	8-719-911-19	DIODE 1SS119	
D007	8-719-109-89	DIODE RD5.6ES-B2	
D008	8-759-157-40	IC UPC574J	
D202	8-719-911-19	DIODE 1SS119	
D301	8-719-911-19	DIODE 1SS119	
D501	8-719-109-98	DIODE RD6.8ES-B3	
IC			
IC001	8-759-631-22	IC M50439-711SP	
IC002	8-759-947-18	IC MSM16911RS	
IC003	8-759-403-42	IC MN1280-Q	
IC201	8-759-820-93	IC LA7650	
COIL			
L001	1-408-409-00	INDUCTOR 10UH	
L002	1-410-328-11	INDUCTOR 10UH	
L003	1-410-509-11	INDUCTOR 10UH	
L004	1-410-515-11	INDUCTOR 33UH	
L005	1-410-509-11	INDUCTOR 10UH	
L006	1-410-509-11	INDUCTOR 10UH	
L151	1-408-403-00	INDUCTOR 3.3UH	
L201	1-410-360-11	INDUCTOR 0.82UH	
L202	1-410-316-11	INDUCTOR 1UH	
L203	1-408-413-00	INDUCTOR 22UH	
L204	1-404-744-11	COIL, IF	
L205	1-404-744-11	COIL, IF	
L206	1-408-402-00	INDUCTOR 2.7UH	
L207	1-408-412-00	INDUCTOR 18UH	
L208	1-410-093-11	INDUCTOR 33MMH	
L209	1-408-409-00	INDUCTOR 10UH	
L210	1-410-316-11	INDUCTOR 1UH	
L301	1-410-516-11	INDUCTOR 39UH	
L302	1-410-512-11	INDUCTOR 18UH	
L303	1-410-520-11	INDUCTOR 82UH	
L304	1-410-524-41	INDUCTOR 180UH	
L501	1-408-614-41	INDUCTOR 82UH	
TRANSISTOR			
Q001	8-729-212-02	TRANSISTOR 2SC2120-Y	
Q002	8-729-178-54	TRANSISTOR 2SC2785	
Q003	8-729-900-89	TRANSISTOR DTC144ES	
Q004	8-729-900-89	TRANSISTOR DTC144ES	
Q006	8-729-178-54	TRANSISTOR 2SC2785	
Q007	8-729-900-89	TRANSISTOR DTC144ES	
Q151	8-729-178-54	TRANSISTOR 2SC2785	
Q152	8-729-900-61	TRANSISTOR DTA114ES	
Q153	8-729-900-61	TRANSISTOR DTA114ES	
Q154	8-729-900-61	TRANSISTOR DTA114ES	
Q202	8-729-178-54	TRANSISTOR 2SC2785	
Q203	8-729-178-54	TRANSISTOR 2SC2785	
Q204	8-729-178-54	TRANSISTOR 2SC2785	
Q205	8-729-900-89	TRANSISTOR DTC144ES	
Q301	8-729-117-54	TRANSISTOR 2SA1175	
RESISTOR			
R001	1-249-421-11	CARBON 2.2K 5% 1/4W	
R002	1-247-715-11	CARBON 1.5K 5% 1/4W	
R004	1-249-429-11	CARBON 10K 5% 1/4W	
R006	1-249-435-11	CARBON 33K 5% 1/4W	
R007	1-249-435-11	CARBON 33K 5% 1/4W	

A C

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

The component shading and mark **A** are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description	10K	5%	1/4W	Remark
R009	1-249-429-11	CARBON	10K	5%	1/4W	
R010	1-249-441-11	CARBON	100K	5%	1/4W	
R011	1-249-429-11	CARBON	10K	5%	1/4W	
R015	1-249-429-11	CARBON	10K	5%	1/4W	
R016	1-249-409-11	CARBON	220	5%	1/4W	
R017	1-215-421-00	METAL	1K	1%	1/6W	
R021	1-249-417-11	CARBON	1K	5%	1/4W	
R022	1-249-417-11	CARBON	1K	5%	1/4W	
R023	1-249-417-11	CARBON	1K	5%	1/4W	
R024	1-249-417-11	CARBON	1K	5%	1/4W	
R025	1-249-417-11	CARBON	1K	5%	1/4W	
R026	1-249-410-11	CARBON	270	5%	1/4W	
R027	1-249-420-11	CARBON	1.8K	5%	1/4W	
R028	1-249-435-11	CARBON	33K	5%	1/4W	
R029	1-249-428-11	CARBON	8.2K	5%	1/4W	
R030	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R031	1-249-424-11	CARBON	3.9K	5%	1/4W	
R032	1-249-423-11	CARBON	3.3K	5%	1/4W	
R033	1-249-430-11	CARBON	12K	5%	1/4W	
R034	1-249-421-11	CARBON	2.2K	5%	1/4W	
R035	1-249-433-11	CARBON	22K	5%	1/4W	
R036	1-249-433-11	CARBON	22K	5%	1/4W	
R037	1-249-433-11	CARBON	22K	5%	1/4W	
R152	1-247-895-00	CARBON	470K	5%	1/4W	
R153	1-249-421-11	CARBON	2.2K	5%	1/4W	
R154	1-249-413-11	CARBON	470	5%	1/4W	
R155	1-249-435-11	CARBON	33K	5%	1/4W	
R201	1-249-421-11	CARBON	2.2K	5%	1/4W	
R202	1-249-416-11	CARBON	820	5%	1/4W	
R203	1-249-417-11	CARBON	1K	5%	1/4W	
R204	1-249-441-11	CARBON	100K	5%	1/4W	
R205	1-249-425-11	CARBON	4.7K	5%	1/4W	
R206	1-249-433-11	CARBON	22K	5%	1/4W	
R208	1-249-417-11	CARBON	1K	5%	1/4W	
R209	1-249-428-11	CARBON	8.2K	5%	1/4W	
R210	1-249-433-11	CARBON	22K	5%	1/4W	
R211	1-249-412-11	CARBON	390	5%	1/4W	
R212	1-249-409-11	CARBON	220	5%	1/4W	
R213	1-249-417-11	CARBON	1K	5%	1/4W	
R214	1-249-411-11	CARBON	330	5%	1/4W	
R215	1-249-429-11	CARBON	10K	5%	1/4W	
R216	1-249-423-11	CARBON	3.3K	5%	1/4W	
R217	1-249-429-11	CARBON	10K	5%	1/4W	
R219	1-249-427-11	CARBON	6.8K	5%	1/4W	
R220	1-249-429-11	CARBON	10K	5%	1/4W	
R221	1-249-430-11	CARBON	12K	5%	1/4W	
R222	1-249-433-11	CARBON	22K	5%	1/4W	
R223	1-249-415-11	CARBON	680	5%	1/4W	
R224	1-249-423-11	CARBON	3.3K	5%	1/4W	
R301	1-249-421-11	CARBON	2.2K	5%	1/4W	
R302	1-249-429-11	CARBON	10K	5%	1/4W	
R303	1-249-420-11	CARBON	1.8K	5%	1/4W	
R305	1-249-423-11	CARBON	3.3K	5%	1/4W	
R306	1-249-428-11	CARBON	8.2K	5%	1/4W	
R307	1-249-423-11	CARBON	3.3K	5%	1/4W	
R308	1-247-903-00	CARBON	1M	5%	1/4W	
R309	1-247-887-00	CARBON	220K	5%	1/4W	
R310	1-249-417-11	CARBON	1K	5%	1/4W	
R311	1-249-418-11	CARBON	1.2K	5%	1/4W	
R312	1-249-411-11	CARBON	330	5%	1/4W	
R313	1-249-411-11	CARBON	330	5%	1/4W	
R314	1-249-411-11	CARBON	330	5%	1/4W	
R315	1-249-429-11	CARBON	10K	5%	1/4W	
R316	1-249-415-11	CARBON	680	5%	1/4W	
R321	1-249-411-11	CARBON	330	5%	1/4W	

Ref.No.	Part No.	Description	10K	5%	1/4W	Remark
R322	1-249-429-11	CARBON	10K	5%	1/4W	
R325	1-249-429-11	CARBON	10K	5%	1/4W	
R326	1-249-416-11	CARBON	820	5%	1/4W	
R328	1-249-405-11	CARBON	100	5%	1/4W	
R501	1-249-414-11	CARBON	560	5%	1/4W	
R502	1-247-891-00	CARBON	330K	5%	1/4W	
R503	1-249-417-11	CARBON	1K	5%	1/4W	
R504	1-249-421-11	CARBON	2.2K	5%	1/4W	
R505	1-247-717-11	CARBON	2.2K	5%	1/4W	
R506	1-215-443-00	METAL	8.2K	1%	1/6W	
R508	1-247-700-11	CARBON	100	5%	1/4W	F
VARIABLE RESISTOR						
RV201	1-238-016-11	RES, ADJ, CARBON 10K				
RV301	1-238-013-11	RES, ADJ, CARBON 2.2K				
RV501	1-238-019-21	RES, ADJ, CARBON 47K				
TUNER						
TU151A	1-465-045-11	TUNER UNIT (TUSOF3U-291)				
CRYSTAL						
X001	1-577-082-11	VIBRATOR, CERAMIC				
X301	1-567-505-11	OSCILLATOR, CRYSTAL				
X501	1-577-155-11	VIBLATOR, CERAMIC				

*A-1330-884-A	C BOARD, COMPLETE					

*4-376-132-11	COVER (REAR LID), CV VOL					
*4-376-133-11	COVER (MAIN), CV VOL					
CONNECTOR						
C1	*1-508-784-00	1P PLUG				
C2	*1-564-523-11	PLUG, CONNECTOR 8P				
C3	*1-564-508-11	PLUG, CONNECTOR 5P				
CAPACITOR						
C701	1-102-249-00	CERAMIC	680PF	20%	2KV	
C702	1-102-050-00	CERAMIC	0.01MF		500V	
C703	1-162-114-00	CERAMIC	0.0047MF		2KV	
C705	1-102-114-00	CERAMIC	470PF	10%	50V	
C706	1-102-114-00	CERAMIC	470PF	10%	50V	
C707	1-102-113-00	CERAMIC	390PF	10%	50V	
JACK						
J701	1-562-869-41	SOCKET, PICTURE TUBE				
COIL						
L704	1-408-614-41	INDUCTOR	82UH			
L705	1-408-413-00	INDUCTOR	22UH			
TRANSISTOR						
Q701	8-729-301-46	TRANSISTOR 2SC2610				
Q702	8-729-301-46	TRANSISTOR 2SC2610				
Q703	8-729-301-46	TRANSISTOR 2SC2610				

Ref.No.	Part No.
Q704	8-729-301-46
R701	1-215-877-11
R702	1-202-877-11
R704	1-249-424-11
R705	1-249-424-11
R706	1-249-424-11
R707	1-202-877-11
R708	1-249-424-11
R709	1-249-424-11
R712	1-215-877-11
R713	1-202-877-11
R714	1-249-424-11
R715	1-249-424-11
R717	1-202-877-11
R718	1-202-717-11
R719	1-202-877-11
R720	1-215-877-11
R721	1-249-424-11
R722	1-249-424-11
R723	1-249-424-11
R724	1-249-424-11
RV701	1-230-717-11
RV702	1-230-717-11
RV703	1-230-717-11
RV704	1-230-717-11
RV705	1-230-717-11
RV706	1-230-424-11
RV707	1-230-117-11

*A-1345-117-11	
*A-1345-117-11	
*1-533-117-11	
*4-341-717-11	
4-365-217-11	
*4-381-717-11	
C251	1-124-117-11
C252	1-101-117-11
C253	1-124-117-11
C254	1-124-117-11
C255	1-126-117-11
C256	1-126-117-11
C258	1-124-117-11
C401	1-102-117-11
C402	1-126-117-11
C403	1-101-117-11
C404	1-123-117-11
C405	1-124-117-11
C551	1-123-117-11
C552	1-131-117-11
C553	1-124-117-11
C554	1-124-117-11
C557	1-124-117-11
C558	1-124-117-11
C651	1-124-117-11



The components identified by shading and mark **A** are critical for safety.

Replace only with part number specified.

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Ref.No.	Part No.	Description	Remark
Q704	8-729-301-46	TRANSISTOR 2SC2610	
RESISTOR			
R701	1-215-899-11	METAL OXIDE 15K 5% 2W	F
R702	1-202-822-00	SOLID 2.2K 10% 1/2W	
R704	1-249-409-11	CARBON 220 5% 1/4W	
R705	1-249-419-11	CARBON 1.5K 5% 1/4W	
R706	1-249-409-11	CARBON 220 5% 1/4W	
R707	1-202-822-00	SOLID 2.2K 10% 1/2W	
R708	1-249-419-11	CARBON 1.5K 5% 1/4W	
R709	1-249-418-11	CARBON 1.2K 5% 1/4W	
R712	1-215-899-11	METAL OXIDE 15K 5% 2W	F
R713	1-202-822-00	SOLID 2.2K 10% 1/2W	
R714	1-249-414-11	CARBON 560 5% 1/4W	
R715	1-249-418-11	CARBON 1.2K 5% 1/4W	
R717	1-202-842-11	SOLID 220K 10% 1/2W	
R718	1-202-719-00	SOLID 1M 10% 1/2W	
R719	1-202-838-00	SOLID 100K 10% 1/2W	
R720	1-215-899-11	METAL OXIDE 15K 5% 2W	F
R721	1-249-405-11	CARBON 100 5% 1/4W	
R722	1-249-405-11	CARBON 100 5% 1/4W	
R723	1-249-405-11	CARBON 100 5% 1/4W	
R724	1-249-441-11	CARBON 100K 5% 1/4W	
VARIABLE RESISTOR			
RV701	1-230-720-11	RES, ADJ, CARBON 4.7K	
RV702	1-230-717-11	RES, ADJ, CARBON 470	
RV703	1-230-720-11	RES, ADJ, CARBON 4.7K	
RV704	1-230-717-11	RES, ADJ, CARBON 470	
RV705	1-230-720-11	RES, ADJ, CARBON 4.7K	
RV706	1-230-497-11	RES, ADJ, CARBON 22K	
RV707	1-230-164-21	RES, ADJ, METAL GLAZE 55M	

*A-1345-786-A	D BOARD, COMPLETE (KV-8AD10 ONLY)		
*A-1345-809-A	D BOARD, COMPLETE (KV-8AD20 ONLY)		

*1-533-189-11	HOLDER, FUSE		
*4-341-751-01	EYELET		
4-365-216-00	SPACER, MICA		
*4-381-724-01	HOLDER, IC		
CAPACITOR			
C251	1-124-120-11	ELECT 220MF 20%	16V
C252	1-101-004-00	CERAMIC 0.01MF	50V
C253	1-124-925-11	ELECT 2.2MF 20%	50V
C254	1-124-477-11	ELECT 47MF 20%	16V
C255	1-126-103-11	ELECT 470MF 20%	16V
C256	1-126-101-11	ELECT 100MF 20%	16V
C258	1-124-902-00	ELECT 0.47MF 20%	50V
C401	1-102-953-00	CERAMIC 18PF 5%	50V
C402	1-126-101-11	ELECT 100MF 20%	16V
C403	1-101-004-00	CERAMIC 0.01MF	50V
C404	1-123-875-11	ELECT 10MF 20%	50V
C405	1-124-499-11	ELECT 1MF 20%	50V
C551	1-123-875-11	ELECT 10MF 20%	50V
C552	1-131-347-00	TANTALUM 1MF 10%	35V
C553	1-124-910-11	ELECT 47MF 20%	50V
C554	1-124-478-11	ELECT 100MF 20%	25V
C557	1-124-925-11	ELECT 2.2MF 20%	50V
C558	1-124-480-11	ELECT 470MF 20%	25V
C651	1-124-480-11	ELECT 470MF 20%	25V

Ref.No.	Part No.	Description	Remark
C652	1-102-121-00	CERAMIC 0.0022MF 10%	50V
C653	1-102-121-00	CERAMIC 0.0022MF 10%	50V
C654	1-124-607-11	ELECT 2200MF 20%	50V
C655	1-102-074-00	CERAMIC 0.001MF 10%	50V
C656	1-123-875-11	ELECT 10MF 20%	50V
C657	1-108-796-11	MYLAR 0.0022MF 5%	50V
C658	1-126-233-11	ELECT 22MF 20%	50V
C659	1-136-165-00	FILM 0.1MF 5%	50V
C660	1-102-244-00	CERAMIC 220PF 10%	500V
C661	1-108-627-11	MYLAR 0.012MF 10%	100V
C662	1-123-875-11	ELECT 10MF 20%	50V
C663	1-102-114-00	CERAMIC 470PF 10%	50V
C664	1-126-101-11	ELECT 100MF 20%	16V
C665	1-124-120-11	ELECT 220MF 20%	16V
C666	1-101-004-00	CERAMIC 0.01MF	50V
C802	1-108-800-91	MYLAR 0.0047MF 5%	50V
C803	1-102-125-00	CERAMIC 0.0047MF 10%	50V
C804	1-136-182-11	FILM 0.017MF 3%	600V
C805	1-162-115-00	CERAMIC 330PF 10%	2KV
C806	1-124-912-11	ELECT 330MF 20%	50V
C807	1-102-228-00	CERAMIC 470PF 10%	500V
C808	1-124-912-11	ELECT 330MF 20%	50V
C809	1-123-933-00	ELECT 10MF 20%	160V
C810	1-124-910-11	ELECT 47MF 20%	50V
C811	1-130-789-00	FILM 1MF 10%	100V
C812	1-102-228-00	CERAMIC 470PF 10%	500V
C813	1-108-682-00	MYLAR 0.0015MF 10%	200V
C815	1-136-165-00	FILM 0.1MF 5%	50V
C817	1-130-983-00	FILM 1.5MF 10%	100V
C818	1-102-112-00	CERAMIC 330PF 10%	50V
C820	1-108-812-11	MYLAR 0.047MF 5%	50V
C821	1-124-499-11	ELECT 1MF 20%	50V
C891	1-126-233-11	ELECT 22MF 20%	50V
C892	1-123-929-00	ELECT 1MF 20%	160V
C893	1-130-800-00	FILM 2.2MF 10%	250V
CONNECTOR			
D1	*1-508-784-00	1P PLUG	
D4	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
D6	*1-508-766-00	4P PLUG (M)	
D7	*1-564-505-11	PLUG, CONNECTOR 2P	
DIODE			
D252	8-719-911-55	DIODE U05G	
D401	8-719-110-31	DIODE RD12ES-B2	
D551	8-719-911-55	DIODE U05G	
D552	8-719-110-31	DIODE RD12ES-B2	
D651	8-719-981-00	DIODE ERC81-004	
D652	8-719-911-19	DIODE 1SS119	
D653	8-719-911-55	DIODE U05G	
D654	8-719-110-17	DIODE RD10ES-B2	
D801	8-719-300-76	DIODE RH1A	
D803	8-719-918-77	DIODE V19G	
D804	8-719-918-77	DIODE V19G	
D806	8-719-302-43	DIODE EL1Z	
D809	8-719-924-06	DIODE ERC24-06S	
D810	8-719-924-06	DIODE ERC24-06S	
D891	8-719-000-28	THYRISTOR CRO2AM-8	
D892	8-719-911-55	DIODE U05G	
D893	8-719-109-93	DIODE RD6.2ES-B2	

• 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.

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

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

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.
FUSE									
F602	△ 1-532-745-11	FUSE, GLASS TUBE 3.15A/125V		R403	1-249-419-11	CARBON	1.5K 5% 1/4W		
F603	△ 1-532-961-11	FUSE, MICRO 1.6A/125V		R404	1-249-423-11	CARBON	3.3K 5% 1/4W		
IC									
IC251	8-759-101-77	IC UPC1241H		R405	1-249-428-11	CARBON	8.2K 5% 1/4W		
IC401	8-759-140-66	IC UPD4066BC		R406	1-249-423-11	CARBON	3.3K 5% 1/4W		
IC551	8-759-820-92	IC LA7835		R407	1-249-423-11	CARBON	3.3K 5% 1/4W		
IC651	8-759-100-75	IC UPC1394C		R410	1-247-883-00	CARBON	150K 5% 1/4W		
JACK									
J151	1-507-814-00	JACK, ANTENNA		R411	1-249-417-11	CARBON	1K 5% 1/4W		
J251	1-507-969-11	JACK		R412	1-247-883-00	CARBON	150K 5% 1/4W		
J401	1-563-500-21	JACK BLOCK, PIN (L TYPE) 2P		R413	1-247-883-00	CARBON	150K 5% 1/4W		
J402	1-563-500-21	JACK BLOCK, PIN (L TYPE) 2P		R414	1-249-429-11	CARBON	10K 5% 1/4W		
J602	1-507-563-00	JACK, DC		R415	1-249-433-11	CARBON	22K 5% 1/4W		
COIL									
L651	1-424-119-11	COIL, CHOKE 480UH		R551	1-249-433-11	CARBON	22K 5% 1/4W		
L652	1-407-365-00	COIL, CHOKE		R552	1-249-423-11	CARBON	3.3K 5% 1/4W		
L653	1-408-425-00	INDUCTOR 220UH		R553	1-216-376-00	METAL OXIDE	3.9 5% 2W F		
L801	1-407-365-00	COIL, CHOKE		R554	1-249-435-11	CARBON	33K 5% 1/4W		
L802	1-408-403-00	INDUCTOR 3.3UH		R555	1-249-433-11	CARBON	22K 5% 1/4W		
L803	1-410-328-11	INDUCTOR 10UH		R557	1-249-420-11	CARBON	1.8K 5% 1/4W		
L804	△ 1-421-329-31	COIL, CHOKE		R558	1-249-433-11	CARBON	22K 5% 1/4W		
L805	△ 1-459-370-12	COIL, FERRITE (HLC)		R559	1-249-411-11	CARBON	330 5% 1/4W		
L806	△ 1-459-597-11	COIL, VARIABLE		R561	1-249-417-11	CARBON	1K 5% 1/4W		
L891	1-459-109-00	COIL, DUST CORE		R563	1-249-435-11	CARBON	33K 5% 1/4W		
TRANSISTOR									
Q251	8-729-177-33	TRANSISTOR 2SD773-4		R651	1-247-700-11	CARBON	100 5% 1/4W F		
Q401	8-729-178-54	TRANSISTOR 2SC2785		R652	1-247-700-11	CARBON	100 5% 1/4W F		
Q402	8-729-178-54	TRANSISTOR 2SC2785		R653	1-215-870-11	METAL OXIDE	1.5K 5% 1W F		
Q403	8-729-178-54	TRANSISTOR 2SC2785		R654	1-249-421-11	CARBON	2.2K 5% 1/4W		
Q651	8-729-903-80	TRANSISTOR BU271		R655	1-216-434-11	METAL OXIDE	1.8K 5% 1W F		
Q652	8-729-178-54	TRANSISTOR 2SC2785		R656	1-249-436-11	CARBON	39K 5% 1/4W		
Q653	8-729-178-54	TRANSISTOR 2SC2785		R657	1-249-428-11	CARBON	8.2K 5% 1/4W		
Q654	8-729-400-81	TRANSISTOR 2SD1266-Q		R658	1-214-753-00	METAL	10K 1% 1/4W		
Q801	8-729-168-82	TRANSISTOR 2SC2688		R659	1-215-421-00	METAL	1K 1% 1/6W		
Q802	8-729-201-62	TRANSISTOR 2SC2555		R660	1-249-401-11	CARBON	47 5% 1/4W		
Q803	8-729-178-54	TRANSISTOR 2SC2785		R661	1-249-438-11	CARBON	56K 5% 1/4W		
Q891	8-729-906-24	TRANSISTOR 2SD835		R662	1-215-437-00	METAL	4.7K 1% 1/6W		
RESISTOR									
R251	1-249-417-11	CARBON	1K 5% 1/4W	☒ R663	△ 1-215-435-00	CARBON			
R252	1-249-421-11	CARBON	2.2K 5% 1/4W	R664	1-215-435-00	METAL	3.9K 1% 1/6W		
R253	1-249-421-11	CARBON	2.2K 5% 1/4W	☒ R665	△ 1-249-441-11	CARBON			
R254	1-249-447-11	CARBON	1 5% 1/4W	R666	1-249-441-11	CARBON	100K 5% 1/4W		
R256	1-249-407-11	CARBON	150 5% 1/4W	R667	1-249-430-11	CARBON	12K 5% 1/4W		
			(KV-8AD10 ONLY)	R668	1-249-417-11	CARBON	1K 5% 1/4W		
R257	1-249-397-11	CARBON	22 5% 1/4W	R669	1-249-405-11	CARBON	100 5% 1/4W		
			(KV-8AD10 ONLY)	R670	1-249-425-11	CARBON	4.7K 5% 1/4W		
R257	1-249-397-11	CARBON	22 5% 1/4W	R671	1-249-417-11	CARBON	1K 5% 1/4W		
R351	1-247-883-00	CARBON	150K 5% 1/4W	R672	1-247-700-11	CARBON	100 5% 1/4W		
R352	1-247-883-00	CARBON	150K 5% 1/4W	R801	1-249-411-11	CARBON	330 5% 1/4W		
R355	1-249-438-11	CARBON	56K 5% 1/4W	R802	1-249-414-11	CARBON	560 5% 1/4W		
R356	1-249-432-11	CARBON	18K 5% 1/4W	R804	1-249-428-11	CARBON	8.2K 5% 1/4W		
R357	1-249-436-11	CARBON	39K 5% 1/4W	R805	1-249-431-11	CARBON	15K 5% 1/4W		
R358	1-249-430-11	CARBON	12K 5% 1/4W	R806	1-249-389-11	CARBON	4.7 5% 1/4W F		
R359	1-249-431-11	CARBON	15K 5% 1/4W	R807	1-215-455-00	METAL	27K 1% 1/6W		
R360	1-249-430-11	CARBON	12K 5% 1/4W	R808	1-215-440-00	METAL	6.2K 1% 1/6W		
R401	1-247-804-11	CARBON	75 5% 1/4W	R809	1-249-456-11	CARBON	5.6 5% 1/4W F		
R402	1-249-419-11	CARBON	1.5K 5% 1/4W	R810	1-247-693-91	CARBON	27 5% 1/4W F		
				R811	1-247-700-11	CARBON	100 5% 1/4W F		
				R812	1-249-417-11	CARBON	1K 5% 1/4W		
				R815	1-249-439-11	CARBON	68K 5% 1/4W		
				R818	1-216-369-00	METAL OXIDE	1 5% 2W F		
				R819	1-215-857-11	METAL OXIDE	10 5% 1W F		
				R820	1-215-890-11	METAL OXIDE	470 5% 2W F		
				☒ R821	△ METAL		1/6W		
				☒ R822	△ METAL		1/6W		
				R891	1-247-895-00	CARBON	470K 5% 1/4W		
				R892	1-249-437-11	CARBON	47K 5% 1/4W		
				R893	1-247-713-11	CARBON	1K 5% 1/4W F		
				R894	1-249-417-11	CARBON	1K 5% 1/4W		
				R895	1-249-439-11	CARBON	68K 5% 1/4W		

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Replace only with part number specified.



Ref.No.	Part No.	Description	Remark
<u>VARIABLE RESISTOR</u>			
RV351	1-237-209-11	RES, VAR, CARBON 20KX4	
RV352	1-237-209-11	RES, VAR, CARBON 20KX4	
RV353	1-237-209-11	RES, VAR, CARBON 20KX4	
RV354	1-237-209-11	RES, VAR, CARBON 20KX4	
RV551	1-238-019-21	RES, ADJ, CARBON 47K	
RV601	1-238-009-11	RES, ADJ, CARBON 220	
<u>RELAY</u>			
RY651	1-515-684-11	RELAY	
<u>SWITCH</u>			
S551	1-554-186-00	SWITCH, LEVER	
S801	1-554-186-00	SWITCH, LEVER	
<u>TRANSFORMER</u>			
T801	1-437-082-00	HDT	
T802	1-439-436-11	TRANSFORMER ASSY, FLYBACK	

	*1-626-865-11	H BOARD	*****
<u>DIODE</u>			
D051	8-719-812-43	DIODE TLG124A	
<u>IC</u>			
IC051	8-749-901-43	IC SBX1483-51	
<u>TRANSISTOR</u>			
Q051	8-729-178-54	TRANSISTOR 2SC2785	
<u>RESISTOR</u>			
R051	1-249-425-11	CARBON 4.7K 5% 1/4W	
R052	1-249-417-11	CARBON 1K 5% 1/4W	
<u>SWITCH</u>			
S001	1-554-303-21	SWITCH, KEY BOARD	
S002	1-554-303-21	SWITCH, KEY BOARD	
S003	1-554-303-21	SWITCH, KEY BOARD	
S004	1-554-303-21	SWITCH, KEY BOARD	
S005	1-554-303-21	SWITCH, KEY BOARD	
S011	1-554-303-11	SWITCH, KEY BOARD (POWER)	

<u>MISCELLANEOUS</u>			

	1-501-286-00	ANTENNA, TELESCOPIC	
	1-540-032-11	INLET 2P	
L901	1-451-265-11	DEFLECTION YOKE (SY-167)	
L902	1-426-382-11	COIL, DEMAGNETIZATION	
SP251	1-544-011-11	SPEAKER	
V901	8-737-151-05	PICTURE TUBE (A20JKU10X)	

ACCESSORIES AND PACKING MATERIALS

Part No.	Description	Remark
1-417-160-11	CONNECTOR, ANTENNA (KV-8AD10 ONLY)	
1-417-161-11	CONNECTOR, ANTENNA (KV-8AD20 ONLY)	
1-465-070-11	REMOTE COMMANDER (RM-759) (BLACK)	
1-465-070-21	REMOTE COMMANDER (RM-759) (WHITE)	(KV-8AD10 ONLY)
1-508-157-12	CONNECTOR PLUG 5P (KV-8AD20 ONLY)	
1-551-802-21	CORD, CAR BATTERY	
1-558-834-11	CORD, POWER	
*3-704-295-01	BAG (STANDARD), PROTECTION	
3-786-241-21	MANUAL, INSTRUCTION	
*4-390-321-01	INDIVIDUAL CARTON (FOR BLACK)	(KV-8AD10 ONLY)
*4-390-322-01	INDIVIDUAL CARTON (FOR WHITE)	(KV-8AD10 ONLY)
*4-390-323-01	SPACER	
*4-390-328-01	CUSHION (UPPER) (ASSY)	
*4-390-329-01	CUSHION (LOWER) (ASSY)	
*4-390-331-01	INDIVIDUAL CARTON (KV-8AD20 ONLY)	