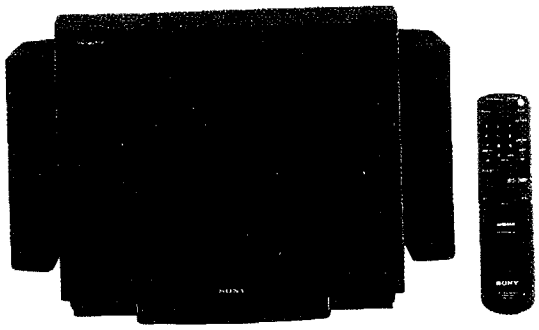
KV-27XBR96S/32XBR96S

RM-Y114A

SERVICE MANUAL



US Model

KV-27XBR96S

Chassis No. SCC-F16M-A

KV-32XBR96S

Chassis No. SCC-F16N-A

Canadian Model

KV-27XBR96S

Chassis No. SCC-F17M-A

KV-32XBR96S

Chassis No. SCC-F17N-A

FN CHASSIS

996495101

MODELS OF THE SAME SERIES	
KV-27XBR96S/32XBR96S	KV-27XBR95S/32XBR95S
KV-27XBR25/32XBR25	KV-32XBR90S
KV-27XBR35/32XBR35	KV-32XBR91S

SPECIFICATIONS

Television system: American TV standards

Channel coverage: VHF: 2-13
UHF: 14-69
CABLE TV: 1-125

Picture tube: Microblack™ Trinitron® tube
27-inch picture measured diagonally
29-inch picture tube measured diagonally (KV-27XBR96S)
32-inch picture measured diagonally
34-inch picture tube measured diagonally (KV-32XBR96S)

Antenna: 75 ohm external antenna terminal for VHF/UHF

Input jacks: VIDEO IN 1, 2 and 3
- S VIDEO IN (4-pin mini DIN)
  - Y : 1 Vp-p, 75-ohms unbalanced, sync negative
  - C : 0.286 Vp-p (Burst signal) 75-ohms
- Video (phono jacks) : 1 Vp-p, 75-ohms unbalanced, sync negative
- Audio (phono jacks) : 500 mVrms (100% modulation) Impedance : 47 kilo-ohms
- SIRCS (mini jack) 5 Vp-p

Output jacks: MONITOR OUT
- S VIDEO MONITOR OUT (4-pin mini DIN)
  - Y : 1 Vp-p, 75-ohms unbalanced, sync negative
- Video (phono jacks) : 1 Vp-p, 75-ohms unbalanced, sync negative
- Audio (phono jacks) : 500 mVrms (100% modulation) Impedance : 10 kilo-ohms
- SIRCS (mini jack) 5 Vp-p

AUDIO OUT (VARIABLE) (phono jacks) More than 900 mVrms (100% modulation) at the maximum volume setting (variable) Impedance : 5 kilo-ohms

AUDIO OUT (phono jacks) 900 mVrms (100% modulation) Impedance : 5 kilo-ohms

- Continued on next page -

MICROFILM

TRINITRON® COLOR TV

SONY®

Speaker output	FRONT : 13W×2 (8 ohms) REAR : 6.5W×2 (8 ohms)
Speaker size	Tweeter 57 mm (2 1/4 in.)× 2 units (FRONT) Tweeter 57 mm (2 1/4 in.)× 2 units (SIDE) Woofer 130 mm (5 1/8 in.)× 2 units
Audio frequency response	Tweeter 250Hz-20kHz Woofer 40Hz-250Hz
Power requirements	120 V AC, 60 Hz
Power consumption	270W
Dimensions (w/h/d)	(KV-27XBR96S) w/speakers : 894×560×532 mm (35 1/4×22 1/8×21 inches) w/o speakers : 684×560×532 mm (26 7/8×22 1/8×21 inches) (KV-32XBR96S) w/speakers : 1000×663.5×586 mm (39 3/8×26 1/8×23 1/8 inches) w/o speakers : 794×663.5×586 mm (31 3/8×26 1/8×23 1/8 inches) Speaker (1) : 100×480×305 mm (4×19×12 1/8 inches)
Weight	(KV-27XBR96S) w/speakers : 62.6 kg (138 lb 1/8 oz) w/o speakers ; 52 kg (114 lb 11 oz) (KV-32XBR96S) w/speakers : 86.2 kg (190 lb 1 oz) w/o speakers : 75.6 kg (166 lb 11 oz) Speaker (1) : 5 kg (11 lb 1 oz)
Supplied accessories	Remote Commander RM-Y114A (1) with 2 size AA (R6) EVEREADY batteries Detachable speaker parts — Speaker boxes (L/R) — Speaker box brackets (L/R) — Protective pads (8) — Bolts (rubber padded) (8) — Bolts (non-rubber padded) (8) — Speaker cords (2)
Optional accessories	U/V mixer EAC-66 Connecting cable RK-74A VMC-810S/820S YC-15V/30V

Design and specifications are subject to change without notice.

(CAUTION)

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

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.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURTCIRCUITER 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 CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DÉPANNAGE.
LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDE A L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS ÁLA SECURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

TABLE OF CONTENTS

SAFETY CHECK-OUT

(US model only)

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 0.5mA (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 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 0.75V, 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)

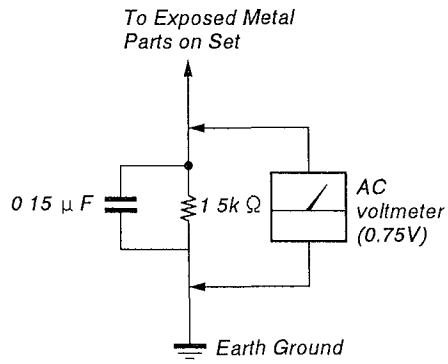


Fig A Using an AC voltmeter to check AC leakage.

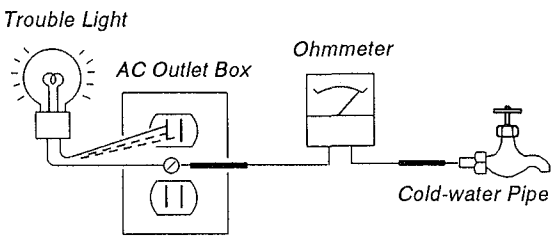


Fig B. Checking for earth ground.

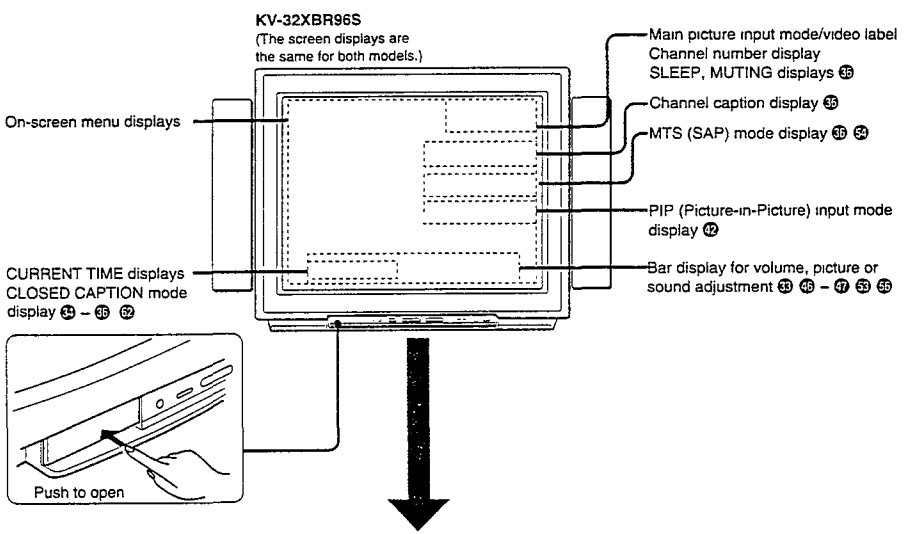
SECTION 1
GENERAL

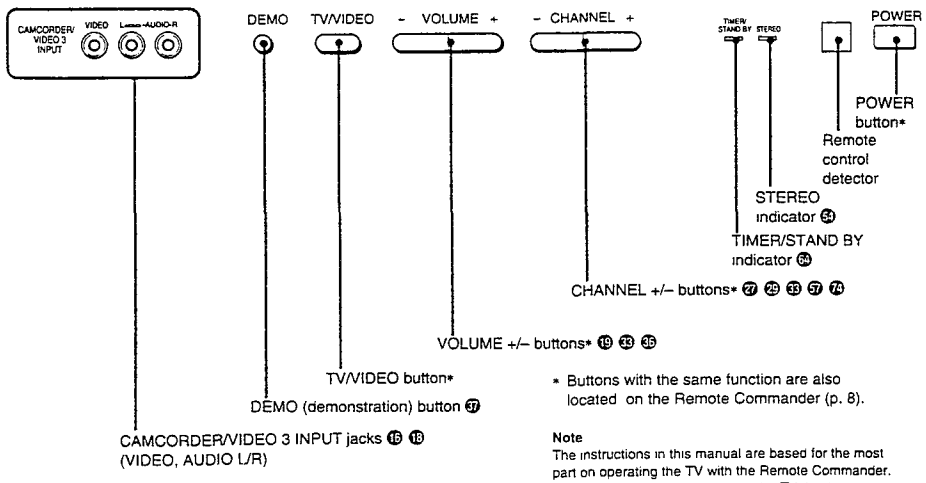
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

Locating Controls and Connectors

For details, see the pages indicated by the numbered black circles ●.

Front

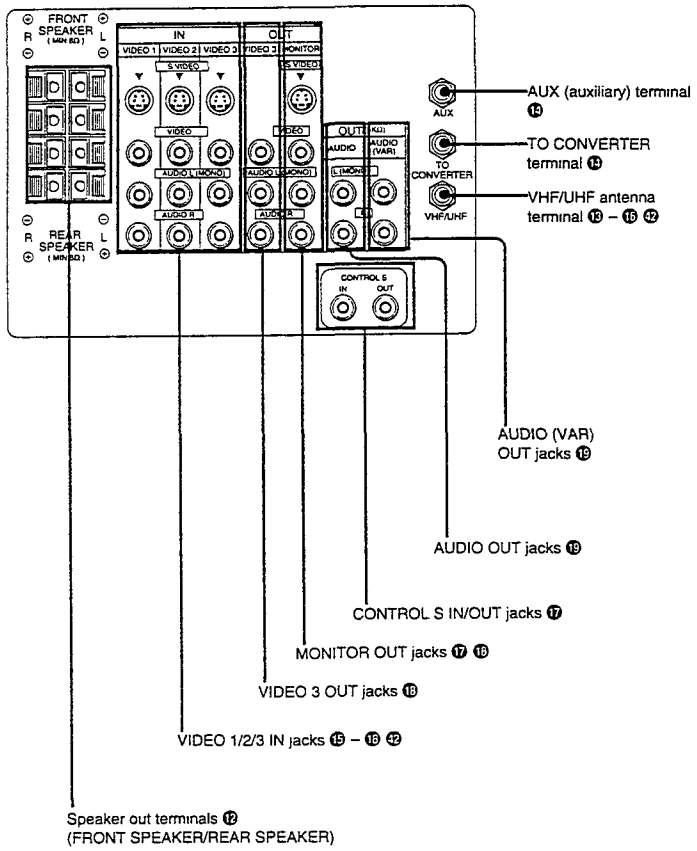




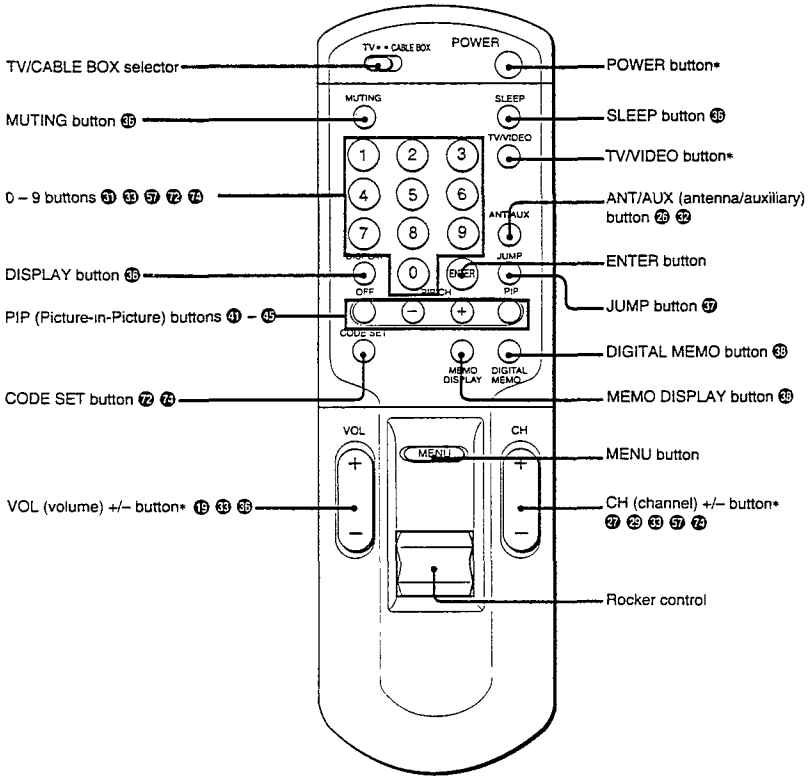
* Buttons with the same function are also located on the Remote Commander (p. 8).

Note
The instructions in this manual are based for the most part on operating the TV with the Remote Commander. You can also use the buttons on the TV that have the same function.

Rear



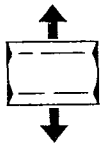
Remote Commander RM-Y114A (Outer panel controls)



Using the rocker control

Use the rocker control to make on-screen menu selections (see p. 22).

Press the control up or down to make a selection.



Click the control to execute the selection.

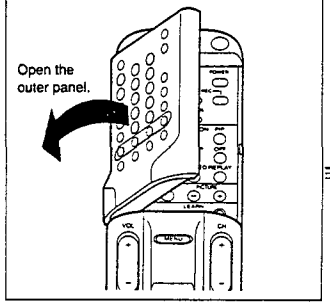
* Buttons with the same function are also located on the TV (p. 6).

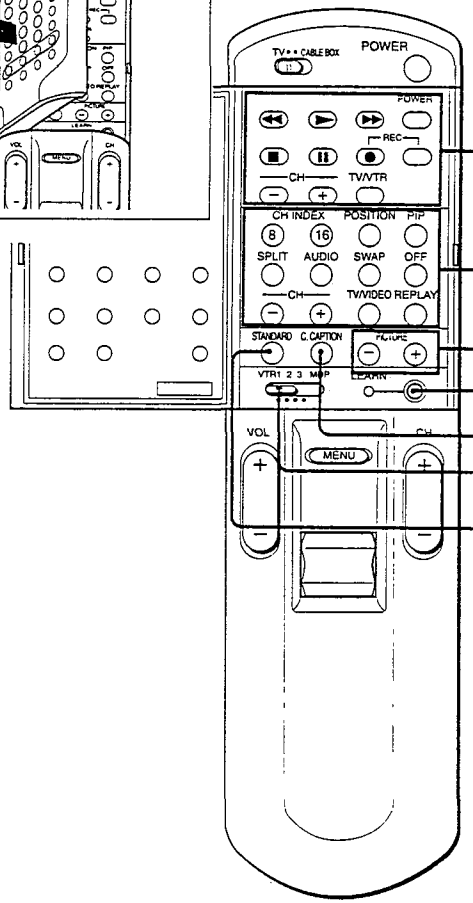
Note

If the TV/CABLE BOX selector is set to CABLE BOX, the Remote Commander is able to control a connected cable box, not the TV (p. 74). Set the selector to TV to control the TV with the Remote Commander.

Remote Commander (Inner panel controls)

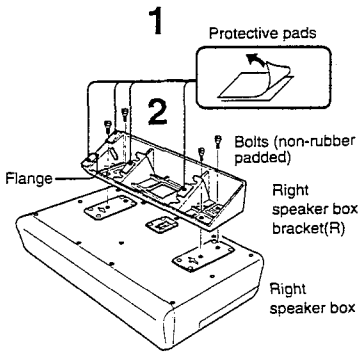
Opening to the inner panel





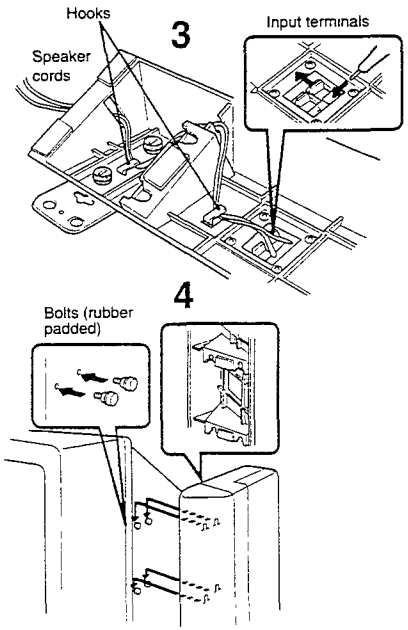
Installing the Detachable Speakers

Follow these instructions to assemble and install the detachable speakers (left and right sides) to the TV. Other installation examples appear on the next page. After installing the speakers, make sure SPEAKER is set to "ON" (p. 55).



1 To install the right speaker box, remove the backing from four protective pads, and attach the pads to the right speaker box bracket (R) as shown.

2 Place the right speaker box bracket on the right speaker box as shown, with the bracket flange on the bottom, and the four holes aligned; then insert and tighten the four bolts (non-rubber padded).



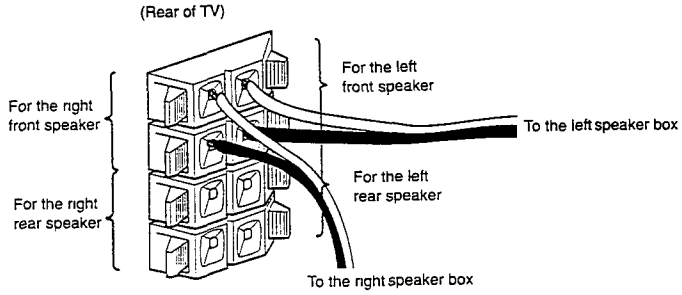
3 Attach the speaker cords to the input terminals on the speaker box, matching the cord and terminal colors. Then insert the cords under the hooks.

4 Attach the supplied bolts (rubber padded), then install the speaker box to the right side of the TV.

5 Repeat steps 1 – 4 to assemble and install the left speaker box; then follow the instructions on the next page to connect the speaker cords to the TV.

Note
The speaker grill cover are not removal.

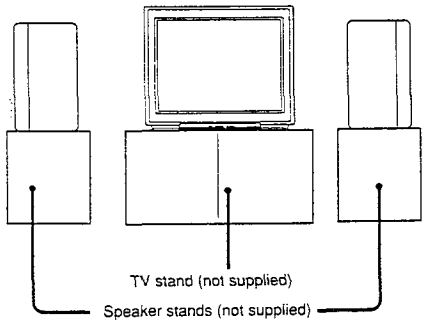
Connecting the speaker cords to the TV



Caution
Always match the speaker cord and terminal colors when making the connection.

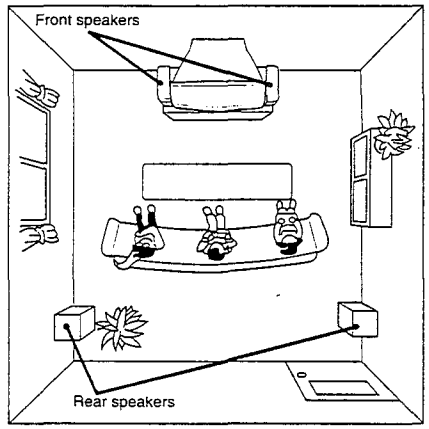
Using the speakers detached from the TV

You can place the speakers on speaker stands (not supplied) rather than attaching them to the TV. Be sure to position the speaker boxes as shown.



Connecting optional speakers

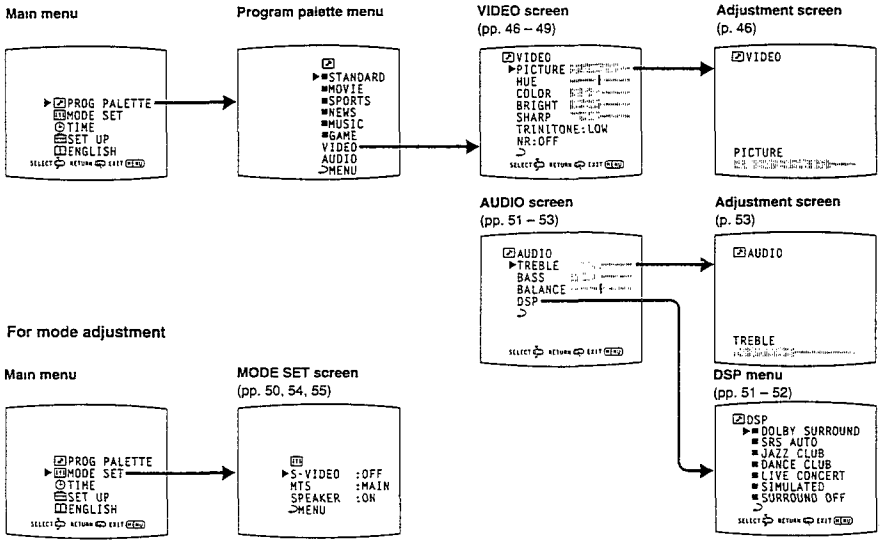
You can connect optional speakers mounted to a rear wall to create a surround effect. After connecting the rear speakers, set REAR SPEAKER to "YES" (p. 56).



Using the On-Screen Menus

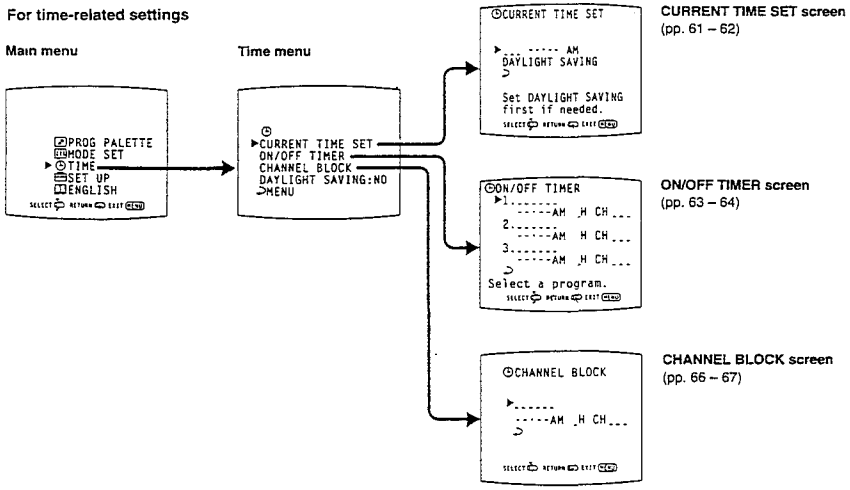
The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.

For picture and sound quality adjustment

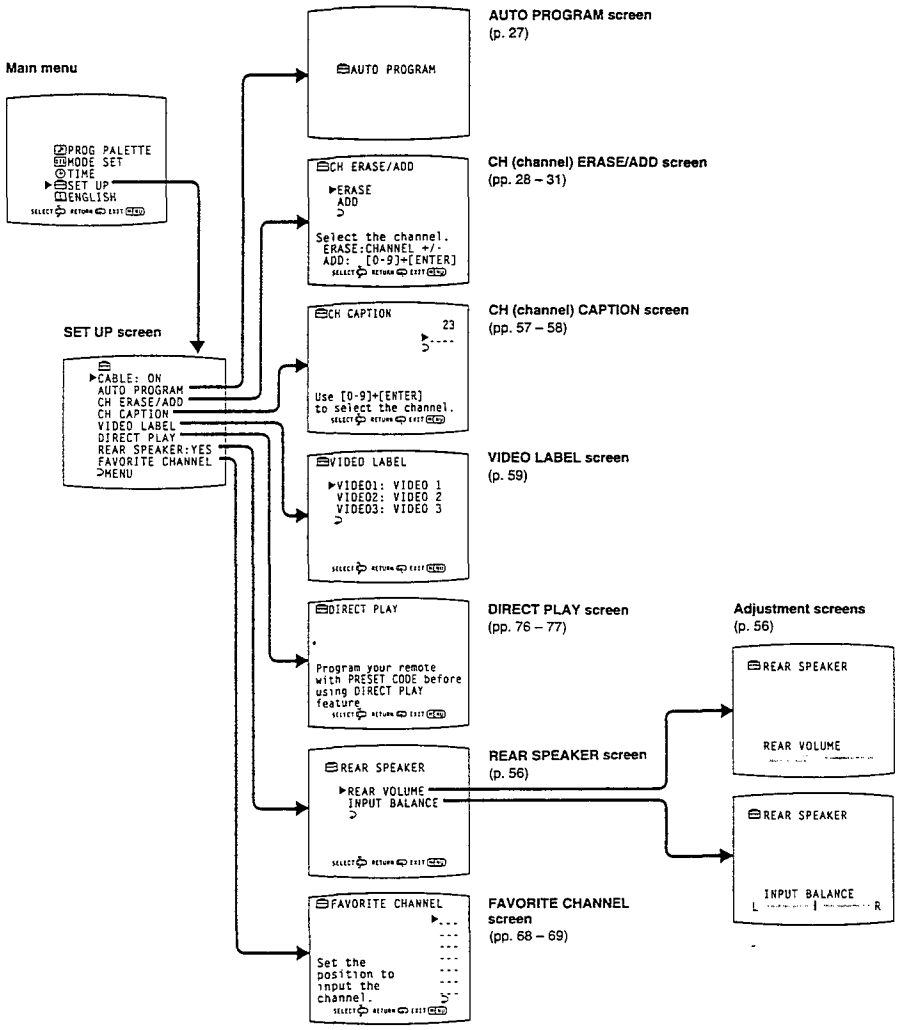


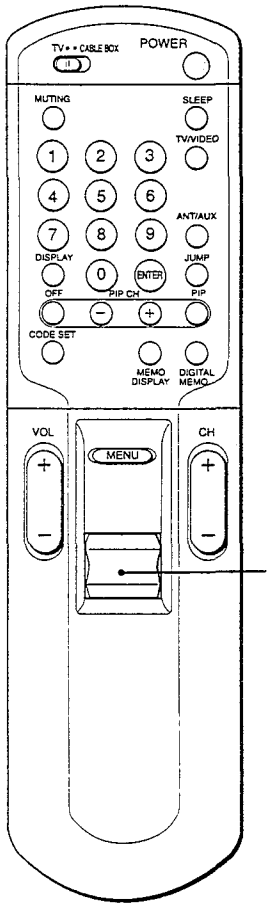
For mode adjustment

For time-related settings



For presetting and other functions





Navigating through the menus

To display the main menu
Press MENU.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

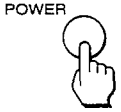
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

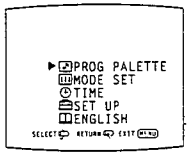
Changing the menu language

The menu language is factory-set to ENGLISH. Follow these instructions to change the menu language to Spanish or French, or back to English.

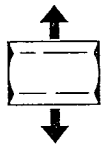
1 Press POWER to turn on the TV.
The TIMER/STAND BY indicator flashes until the picture appears.

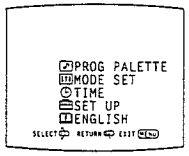


2 Press MENU.
The main menu appears.

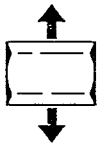


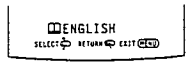
3 Press the rocker control up or down until the cursor points to "ENGLISH."
Then click the rocker control.
The language display turns red.





4 Press the rocker control up or down to select the language.
Each time you press the rocker control up or down, the "ESPAÑOL," "FRANÇAIS" and "ENGLISH" menus appear.





Note
Certain parts of the "ESPAÑOL" and "FRANÇAIS" menus remain in English.

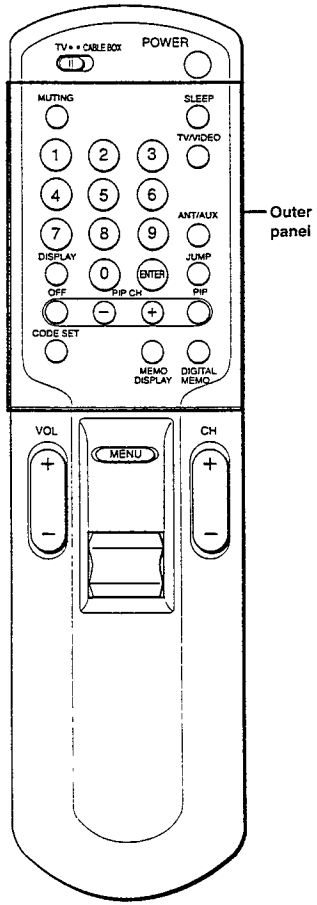
5 Click the rocker control.
The language is selected.

Spanish menu

To return to the normal screen.
Press MENU on the Remote Commander.

Notes concerning menus
- During PIP (Picture-in-Picture) mode, the on-screen menus may overlap the window picture.
- The menus disappear automatically, if you do not press a button within 90 seconds.

Setting CABLE ON or OFF

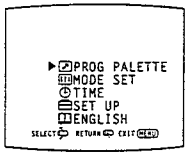


Outer panel

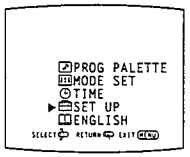
If you have cable connected to the TV, follow the steps below to set the cable connection on or off. Set CABLE OFF to preset or watch VHF or UHF channels, and set CABLE ON to preset or watch cable TV channels.

Note
If the TV is in video mode, the "CABLE" display is shaded and cannot be selected. Press TV/VIDEO to change to TV mode.

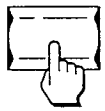
1 Press MENU.
The main menu appears.

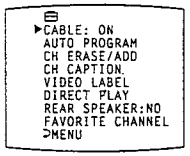


2 Press the rocker control up or down until the cursor points to "SET UP."

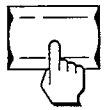


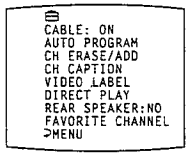
3 Click the rocker control.
The set up menu appears, and the cursor points to "CABLE."



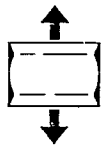


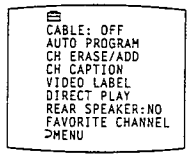
4 Click the rocker control again.
The mode display turns red.



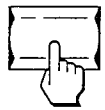


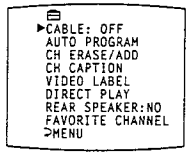
5 Press the rocker control up or down to select "ON" or "OFF."





6 Click the rocker control.
The setting is complete.





To return to the previous menu
Press the rocker control up or down until the cursor points to "⊃ MENU." Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

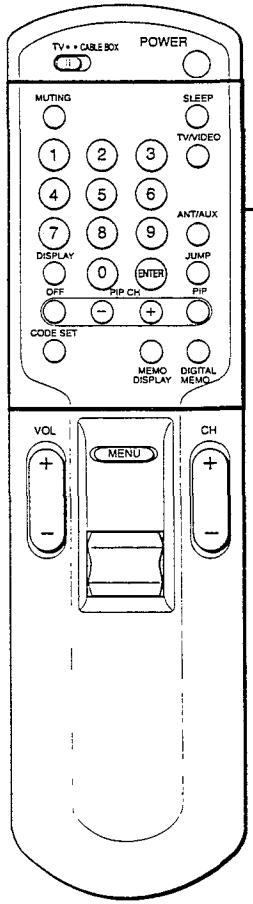
Cable TV channel chart*
Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this TV	Corresponding CATV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
•	•
•	•
•	•
•	•
•	•
93	W+57
94	W+58
95	A–5
96	A–4
97	A–3
98	A–2
99	A–1
100	W+59
101	W+60
102	W+61
•	•
•	•
•	•
•	•
•	•
123	W+82
124	W+83
125	W+84

Check with your local cable TV company for more complete information on the available channels.
* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

Presetting TV Channels

By presetting TV channels to the TV, you can select channels by pressing CH (CHANNEL) +/–
(You can select VHF channels 2 – 13 without presetting.)



Outer panel

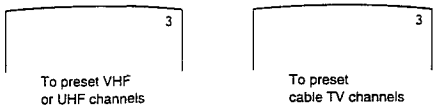
Presetting all receivable channels automatically

Follow these instructions to preset all the receivable VHF, UHF or cable TV channels to the TV.

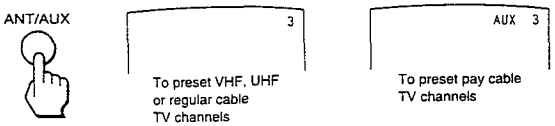
Notes

- If the TV is in video mode, the "AUTO PROGRAM" display is shaded and cannot be selected. Press TV/VIDEO to change to TV mode.
- Perform auto programming during the day rather than late at night, when some channels may not be broadcasting.

1 Set the cable connection on or off (pp. 24 – 25) to select the type of channel you want to preset, VHF/UHF or cable TV.



Press ANT/AUX to select the type of channel you want to preset, VHF/UHF/ regular cable TV, or pay cable TV connected to the AUX (auxiliary) terminal.



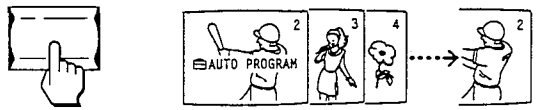
2 Press MENU.
The main menu appears.

3 Press the rocker control up or down until the cursor points to "SET UP."

4 Click the rocker control.
The set up menu appears.

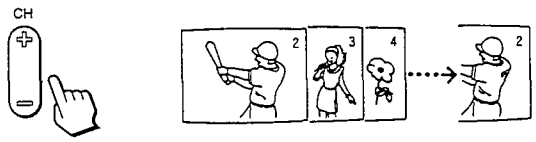
5 Press the rocker control up or down until the cursor points to "AUTO PROGRAM."

6 Click the rocker control.



"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the TV's memory.
When no more channels are found, auto programming stops and the screen returns automatically to the set up menu.

7 Press CH +/– to check or view the preset channels.



Receivable channels for this TV
VHF: 2 – 13
UHF: 14 – 69
Cable: 1 – 125

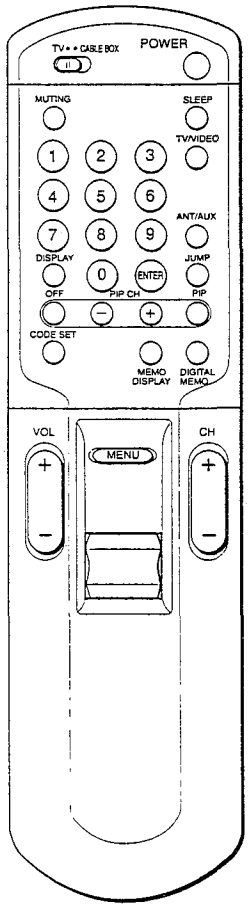
To select TV channels without presetting
Press the 0 – 9 buttons and ENTER.

To return to the previous menu
Press the rocker control up or down until the cursor points to "⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

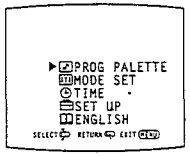
— 11 —



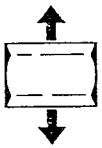
Erasing TV channels

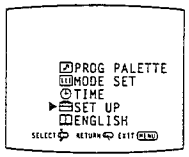
Follow these instructions to erase unnecessary TV channels, so that when you press CH +/–, the channel(s) are skipped.

1 Press MENU.
The main menu appears.

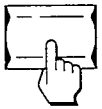


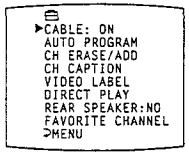
2 Press the rocker control up or down until the cursor points to "SET UP."



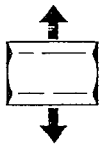


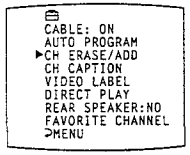
3 Click the rocker control.
The set up menu appears.



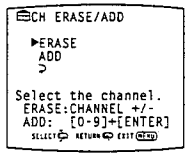


4 Press the rocker control up or down until the cursor points to "CH ERASE/ADD."

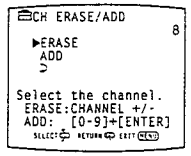




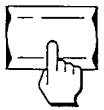
5 Click the rocker control.
The CH ERASE/ADD screen appears, and the cursor points to "ERASE."

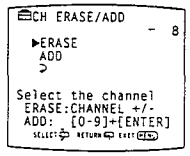


6 Press CH +/– to select the channel you want to erase.
The channel display appears.



7 Click the rocker control.
A "–" sign appears in front of the channel number display, indicating that the channel is erased; then the CH ERASE/ADD screen automatically reappears.





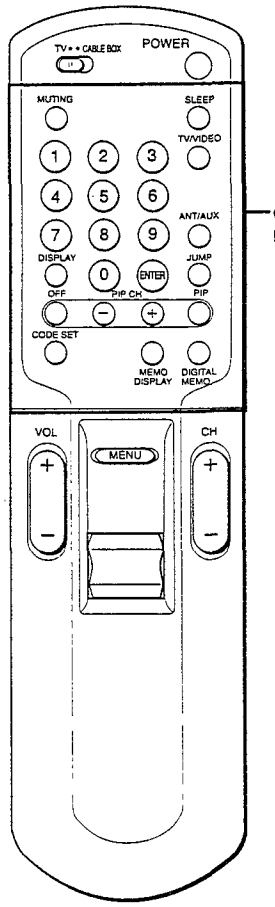
To erase another channel
Repeat steps 6 – 7.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

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



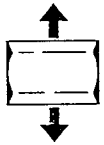
Outer panel

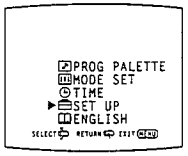
Adding TV channels

Follow these instructions to add TV channels one by one to the selection memory, or to replace a TV channel you previously erased (pp. 28 – 29).

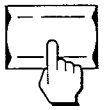
1 Press MENU.
The main menu appears.

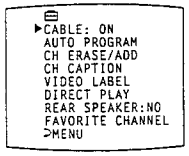
2 Press the rocker control up or down until the cursor points to "SET UP."



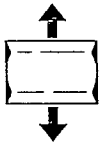


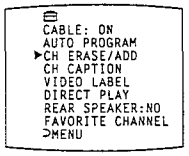
3 Click the rocker control.
The set up menu appears.



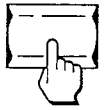


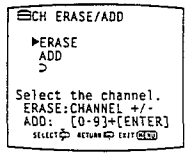
4 Press the rocker control up or down until the cursor points to "CH ERASE/ADD."



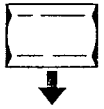


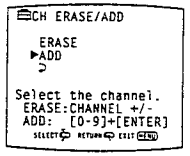
5 Click the rocker control.
The CH ERASE/ADD screen appears.



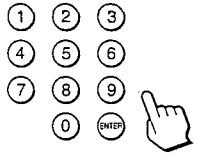


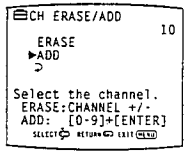
6 Press the rocker control down until the cursor points to "ADD."



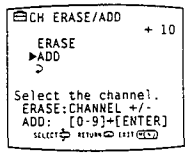


7 Press 0 – 9 and ENTER on the Remote Commander to select the channel you want to add.
The channel display appears.





8 Click the rocker control.
A "+" sign appears in front of the channel number display, indicating that the channel is added; then the CH ERASE/ADD screen automatically reappears.



To add another channel
Repeat steps 7 – 8.

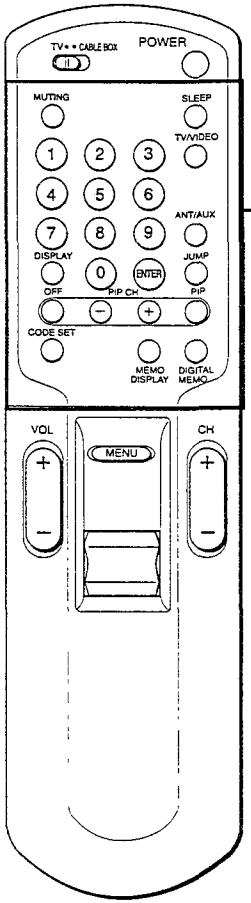
To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

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

Watching TV Programs



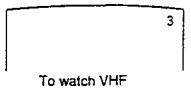
Outer panel

Make sure that the TV/CABLE BOX selector on the Remote Commander is set to TV, in order to control the TV with the Remote Commander.

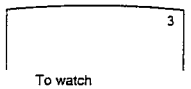
1 Press POWER to turn on the TV.
The TIMER/STAND BY indicator flashes until the picture appears.

POWER

2 Set the cable connection on or off (pp. 24 – 25) to select the type of channel you want to watch, VHF/UHF or cable TV.



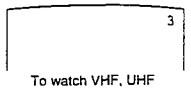
To watch VHF or UHF channels



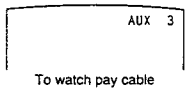
To watch cable TV channels

Press ANT/AUX to select the type of channel you want to watch, VHF/UHF/ regular cable TV, or pay cable TV connected to the AUX (auxiliary) terminal.

ANT/AUX



To watch VHF, UHF or regular cable TV channels



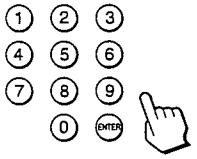
To watch pay cable TV channels

3 Select a channel in one of the following two ways:

To scan the preset channels in numerical sequence, press CH +/–

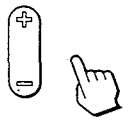
CH

To select a channel directly, press 0 – 9 and then ENTER.
For example, to select channel 10, press 1, 0 and ENTER.



4 Press VOL +/– to adjust the volume.

VOL



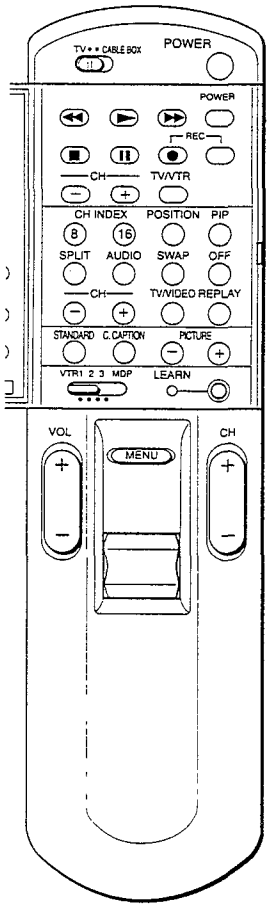
Press + to increase the volume.
Press – to decrease the volume.

If VIDEO 1, VIDEO 2 or VIDEO 3 appears on the screen
Press TV/VIDEO until a TV channel number appears.

To select channels more easily
Set FAVORITE CHANNEL (pp. 70 – 71).

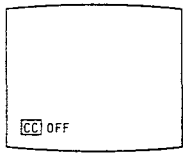
To turn off the TV
Press POWER.

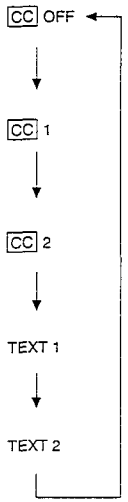
Using Closed Caption



1 Press C.CAPTION.

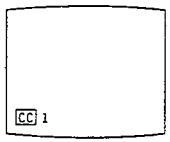
The closed caption mode appears. CC1, CC2, TEXT1, TEXT2 or CC OFF appears in sequence each time you press C.CAPTION.



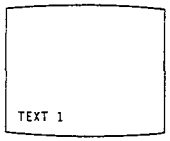


2 Press C.CAPTION repeatedly.

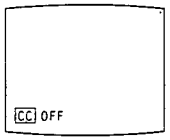
Select CC1 or CC2 to view Captions.
A Caption is a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.)



Select TEXT1 or TEXT2 to view Text.
Text is information that is presented using the half to full television screen. It is usually not related to the program.



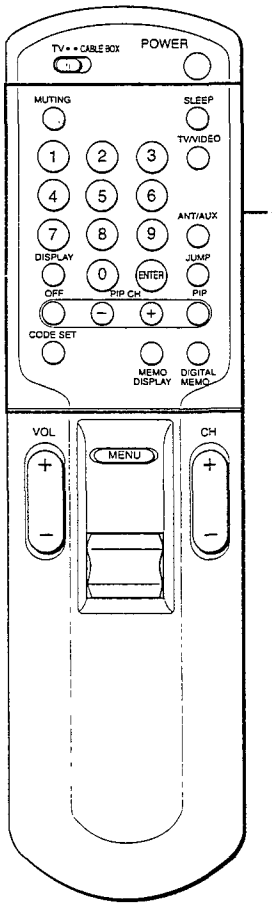
Select CC OFF if you don't want to view Closed Caption nor Text.



— 15 —

Using Convenient Features

Front of TV



Outer panel

Muting the sound — MUTING

Press MUTING.
"MUTING" appears on the screen.

MUTING

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

Keeping the displays on-screen — DISPLAY

Press DISPLAY.
All the existing displays appear: channel number, channel caption (if set), MTS mode ("SAP" only), window picture input mode, and the current time ("AM" or "PM" disappears after about three seconds).

DISPLAY

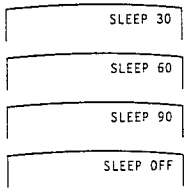
To turn off the displays
Press DISPLAY again.

Setting the sleep timer — SLEEP

The sleep timer turns off the TV automatically after the amount of time you select.

Press SLEEP
Each time you press SLEEP, the time increments "30," "60," "90" and "OFF" mode appear in sequence.

SLEEP



A red "SLEEP" display appears about one minute before the TV goes off.

To cancel the setting.
Press SLEEP until OFF mode appears.
A green "SLEEP OFF" display appears for about three seconds.
OR
Turn the TV off.
The sleep timer setting is cancelled.

Switching quickly between two channels — JUMP

Use this function to keep track of two programs alternately.

JUMP

To recall the channel you were watching previously
Press JUMP

To switch back to the first channel
Press JUMP again.

Note
The JUMP function also changes the mode to ANT (antenna) or AUX (auxiliary), depending on the mode of the channel you were watching previously.

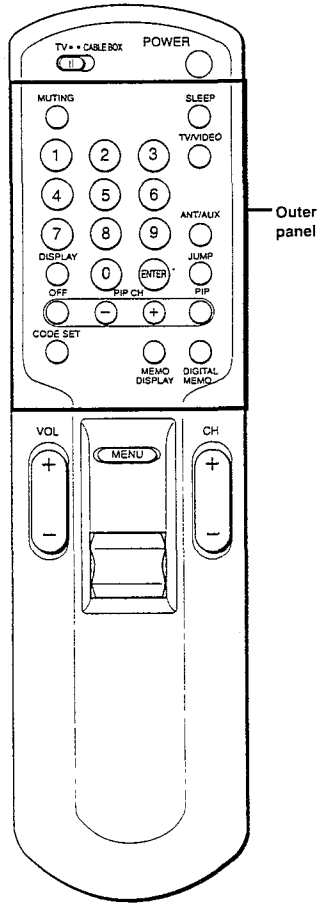
Previewing the features — DEMO

Press DEMO.
Functions and menus are displayed one by one.

DEMO

To restart DEMO from the beginning
Press DEMO again.

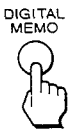
To stop DEMO
Press any button.



Storing an image in memory – DIGITAL MEMO

Use this feature to store and recall a recipe from a cooking program, a displayed address or phone number and so on.

1 Press DIGITAL MEMO.
The displayed image is stored in memory, and the image remains still on the screen.



2 Press MEMO DISPLAY.
The TV returns to normal viewing mode.

To recall the stored image

Press MEMO DISPLAY.

The stored picture is retained in memory until:
– you turn off the TV.
– you press OFF (in the PIP section) twice.
– you store a different image.

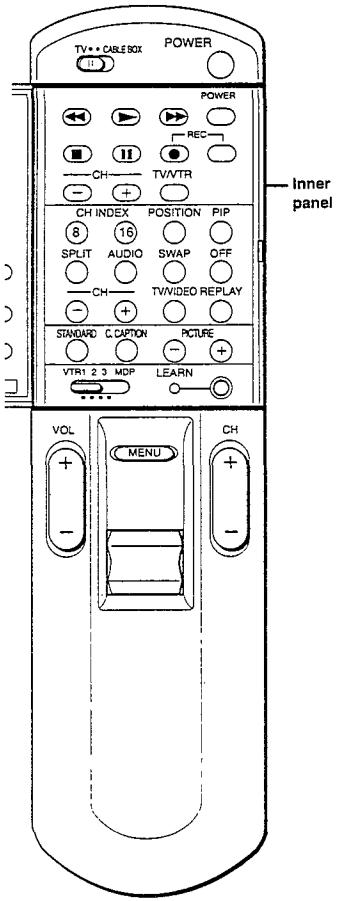
To return to the normal screen
Press MEMO DISPLAY again.

Note
You cannot display a window picture (pp. 41 – 45) while viewing a DIGITAL MEMO screen.

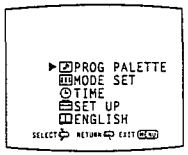
Selecting a Picture and Sound Mode

This TV features six modes (STANDARD, MOVIE, SPORTS, NEWS, MUSIC, GAME) that offer different picture and sound qualities. Choose the one that best suits the type of program that you want to watch.

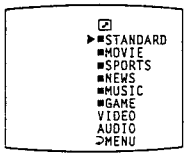
Example: Select MOVIE mode for picture and sound that gives you the sense of being in a movie theater.



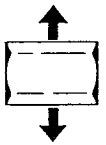
1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

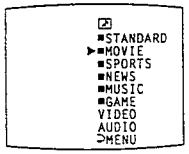


2 Click the rocker control.
The program palette menu appears.

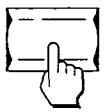


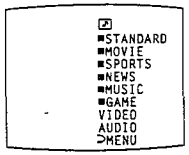
3 Press the rocker control up or down until the cursor points to "MOVIE."





4 Click the rocker control.
The "MOVIE" display turns green, indicating that MOVIE mode is selected.





To select a different mode
Repeat steps 3 – 4.

Selecting standard mode (without using the menus)

Follow these instructions to select standard mode without using the on-screen menus.

Press STANDARD.

STANDARD

When you select STANDARD mode
You receive standard picture and sound quality. Any video or audio adjustments you made ("Adjusting the Picture" pp. 46 – 50; "Adjusting the Sound" pp. 51 – 56) are cancelled and the original factory settings are restored.

When you select MOVIE mode
You receive a finely detailed picture, and a theatrical audio effect.
To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

When you select SPORTS mode
You receive a vivid, bright picture, and sound with a sports stadium effect.
To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

When you select NEWS mode
Picture noise is reduced, and you receive clear voice reproduction.
To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

When you select MUSIC mode
You receive a warmer picture, and live concert effect sound.
To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

When you select GAME mode
The picture is easier on your eyes, and sound has a surround effect.
To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

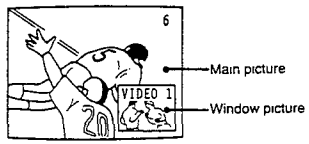
To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

Watching Two or More Pictures at Once (PIP)

You can watch both the main picture and one or more window pictures simultaneously, using the Picture-in-Picture (PIP) function.



Picture-in-Picture special features
When watching the main picture and a window picture, you can:

- Choose the sound from the main or window picture (AUDIO).
- Change the position of the window picture (POSITION).
- Swap the main and window pictures (SWAP).
- Replay the main picture as a window picture (REPLAY).
- Split the screen, with the main picture on one side and the window picture on the other side (SPLIT).
- Display 8 or 16 TV channels simultaneously (CH INDEX 8/16).

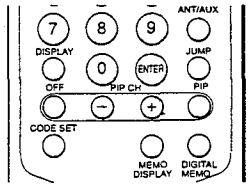
Notes

- You can also use the CH +/– buttons on the Remote Commander's inner panel.
- The video label and channel caption will not appear with the window picture even if you have set them.
- If you select a blocked channel in the window picture, the display "BLOCKED" appears with the window picture. (See "Setting CHANNEL BLOCK," pp. 66 – 67.)
- If you display a DIGITAL MEMO screen (p. 38), the window picture disappears.

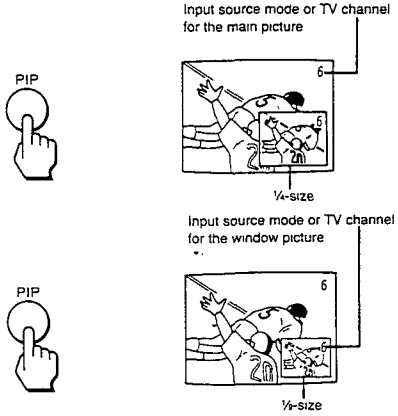
Displaying a window picture

To turn PIP mode on or off, or to change TV channels, you can use the PIP buttons on the Remote Commander's outer panel. For other PIP functions, use the inner panel controls, which also include the PIP, OFF and CH +/– buttons.

Remote Commander (Outer panel)



Press PIP to display a window picture



A window picture appears in the last mode you watched. Each time you press PIP, a 1/4 or 1/9 size window picture appears alternately.

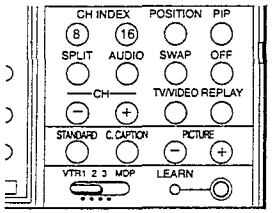
To turn PIP function off
Press OFF
The window picture disappears.

To change TV channels in the window picture
Press TV/VIDEO to select TV mode; then press CH +/– in the PIP control area.

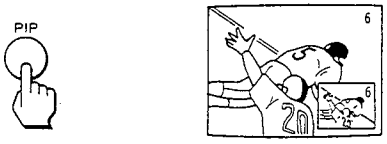
Changing the window picture input mode

Follow these instructions to select the input mode (TV/ VIDEO 1, VIDEO 2, VIDEO 3) for the window picture.

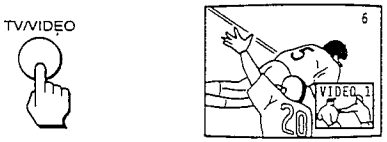
Remote Commander (Inner panel)



1 Press PIP to display a window picture.



2 Press TV/VIDEO to select the input mode.
Each time you press TV/VIDEO, "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.



To receive the window picture sound
Press AUDIO.

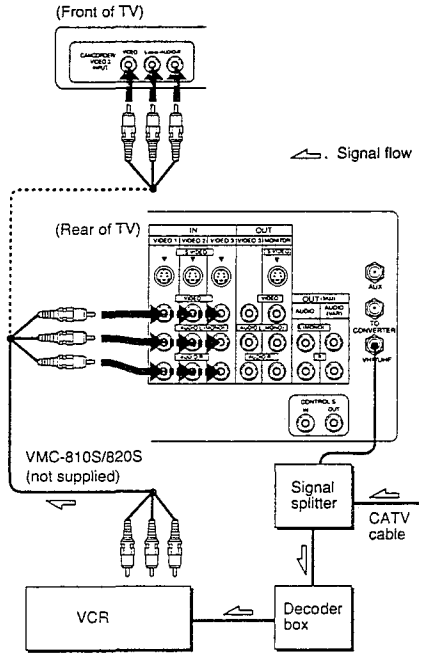
The ♪ display appears for a few seconds, indicating that the window picture sound is being received.

To restore the main picture sound
Press AUDIO again.

Note
The window picture sound is also output from the AUDIO (VAR) OUT jacks. The AUDIO OUT and MONITOR OUT jacks output the main picture sound only.

Displaying CATV input as a window picture

To use Picture-in-Picture with pay cable TV input, make the connections to your cable converter box as shown below.



After making the above connections, turn the cable connection on by following the steps on pp. 24 – 25; then continue with the steps below.

1–2 Follow steps 1 – 2 in "Changing the window picture input mode" on this page to select the video input mode for your connected VCR.

3 Put your VCR on an inactive channel (channel 3 or 4).

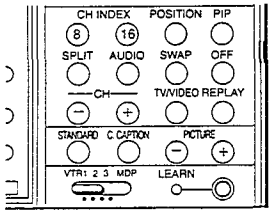
4 Change pay cable TV channels with the decoder box.

To control your cable converter box with the supplied Remote Commander
See p. 74.

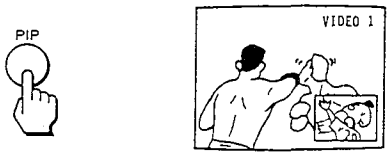
Changing the position of the window picture

Follow these instructions to change the position of the window picture on the screen.

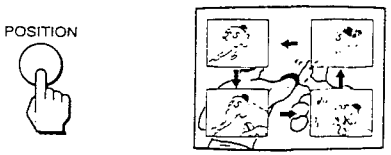
Remote Commander (Inner panel)



1 Press PIP to display a window picture.



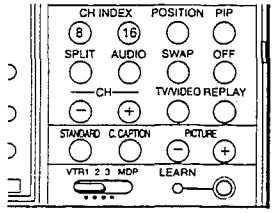
2 Press POSITION.
Each time you press POSITION, the window picture moves as illustrated.



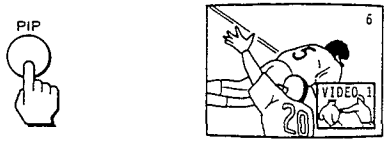
Swapping the main and window pictures

Follow these instructions to swap the input signals of the main and window pictures.

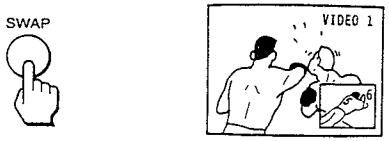
Remote Commander (Inner panel)



1 Press PIP to display a window picture.



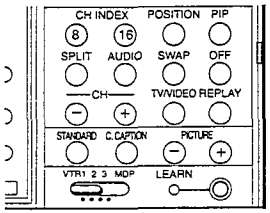
2 Press SWAP
Each time you press SWAP, the images from the main and window pictures switch places.



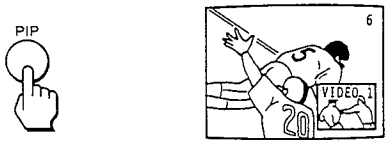
Displaying 8 TV channels at once – CH INDEX 8

Follow these instructions to display the main picture and 7 window pictures at once.

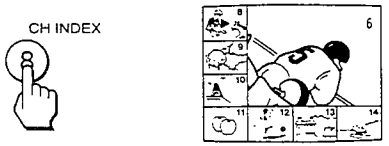
Remote Commander (Inner panel)



1 Press PIP to display a window picture.



2 Press CH INDEX 8 to display seven window pictures.
Seven TV channels appear in numerical sequence, as window pictures.



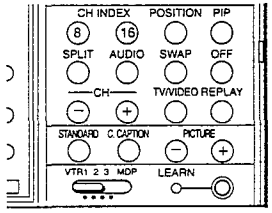
Each time you press CH INDEX 8, the next seven sequential channels appear (the main picture does not change).

To return to the normal screen
Press OFF

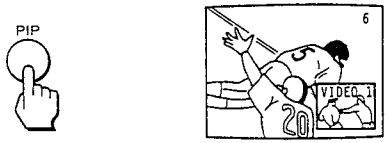
Displaying 16 TV channels at once – CH INDEX 16

Follow these instructions to display 16 window pictures at once.

Remote Commander (Inner panel)



1 Press PIP to display a window picture.



2 Press CH INDEX 16 to display 16 window pictures.
16 TV channels appear in numerical sequence, as window pictures.

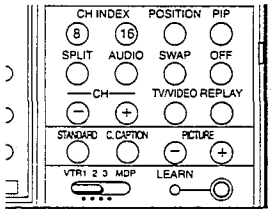
Each time you press CH INDEX 16, the next 16 sequential channels appear (the main picture does not change).

To return to the normal screen
Press OFF

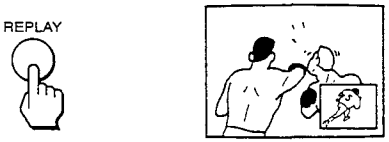
Replaying the main picture as a window picture

Follow these instructions to replay the image that appeared in the main picture two seconds before, as a window picture.

Remote Commander (Inner panel)



Press REPLAY.

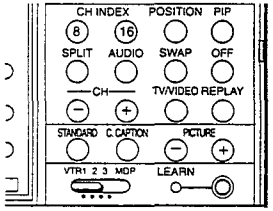


To return to the normal screen
Press OFF

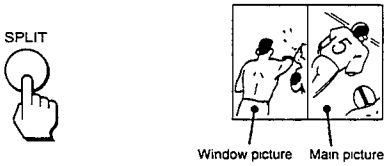
Splitting the screen

Follow these instructions to split the screen, with the window picture on the left, and the main picture on the right.

Remote Commander (Inner panel)



Press SPLIT.



To return to the normal screen
Press OFF

Note
When using SPLIT, vertical lines may appear elongated.

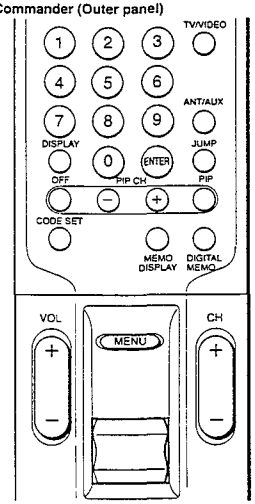
Adjusting the Picture

You can adjust the picture (and sound, pp. 51 – 54) for each input mode (TV, VIDEO 1, VIDEO 2, VIDEO 3) by pressing TV/VIDEO on the TV or on the Remote Commander to select the input mode, before making the adjustments. These adjustments are retained in memory even when you turn off the TV, but are cancelled after you change the adjustments, or select a picture and sound mode (pp. 39 – 40).

Adjusting picture quality

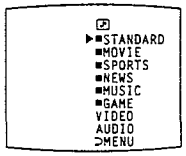
Follow these instructions to adjust PICTURE, HUE, COLOR, BRIGHT (brightness) and SHARP (sharpness).

Remote Commander (Outer panel)



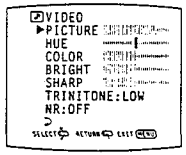
1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

2 Click the rocker control.
The program palette menu appears.



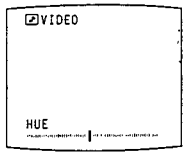
3 Press the rocker control up or down until the cursor points to "VIDEO."

4 Click the rocker control.
The VIDEO screen appears.



5 Press the rocker control up or down until the cursor points to the item you want to adjust.

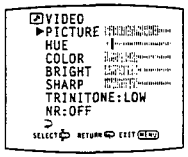
6 Click the rocker control.
The adjustment screen appears.



7 Press the rocker control up or down to make the adjustment.

Picture quality	Press the rocker control down	Press the rocker control up
PICTURE	For decreased picture contrast with soft color	For increased picture with vivid color
HUE	Skin tones become purplish	Skin tones become greenish
COLOR	For less color intensity	For more color intensity
BRIGHT	For less brightness	For more brightness
SHARP	For less sharpness	For more sharpness

8 Click the rocker control.
The adjustment is complete, and the VIDEO screen automatically reappears.

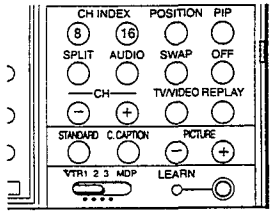


To adjust other items
Repeat steps 5 – 8.

To restore the factory settings for all the items
Select "STANDARD" on the program palette menu, and click the rocker control;
or, press STANDARD on the Remote Commander.
All the items, including TRINITONE (p. 48) and NR (p. 49) return to their original factory settings.

To adjust picture contrast
You can also adjust picture contrast with the PICTURE +/– buttons on the Remote Commander.

(Inner panel)



Press + to increase picture contrast with vivid color.
Press – to decrease picture contrast with soft color.
The picture adjustment screen appears.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

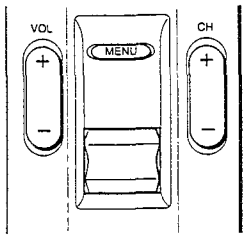
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

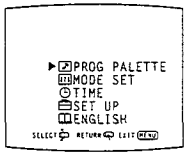
Setting the TRINITONE mode

Color picture tubes are usually manufactured with a fixed color temperature (tint) that determines the "warmth" (red tint) or "coolness" (blue tint) of the picture. Use the Sony Trinitone feature to adjust the picture color to your preference.

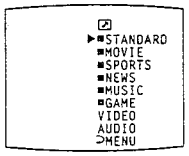
Remote Commander



1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

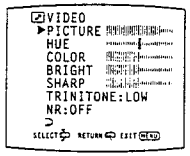


2 Click the rocker control.
The program palette menu appears.



3 Press the rocker control up or down until the cursor points to "VIDEO."

4 Click the rocker control.
The VIDEO screen appears.



5 Press the rocker control up or down until the cursor points to "TRINITONE."

6 Click the rocker control.
The mode display turns red.

7 Press the rocker control up or down to select "HIGH" or "LOW."

Select "HIGH" to make the picture cool (bluish).
Select "LOW" to make the picture warm (reddish).

8 Click the rocker control.
The setting is complete.

To return to the previous menu
Press the rocker control up or down until the cursor points to " MENU."
Then click the rocker control.

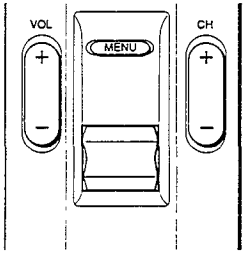
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

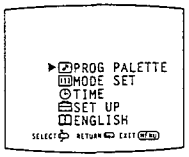
Setting NR (picture noise reduction) ON or OFF

Follow these instructions to reduce picture noise.

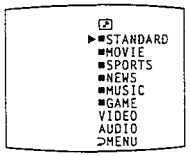
Remote Commander



1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

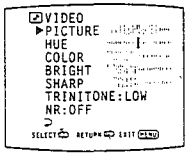


2 Click the rocker control.
The program palette menu appears.

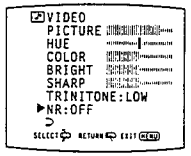


3 Press the rocker control up or down until the cursor points to "VIDEO."

4 Click the rocker control.
The VIDEO screen appears.



5 Press the rocker control up or down until the cursor points to "NR."



6 Click the rocker control.
The mode display turns red.

7 Press the rocker control up or down to select "ON" or "OFF."

Select "ON" to reduce picture noise.
Select "OFF" to restore the normal picture.

8 Click the rocker control.
The setting is complete.

To return to the previous menu
Press the rocker control up or down until the cursor points to " MENU."
Then click the rocker control.

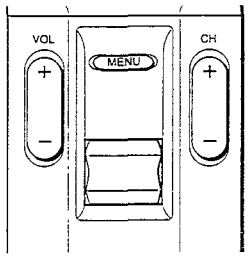
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

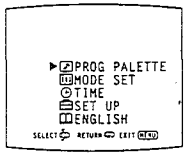
Setting S-VIDEO ON or OFF

Follow these instructions to set S-VIDEO on or off, depending on the kind of video equipment you have connected to the TV. For instructions on connecting video equipment, see pp. 15 – 18.

Remote Commander (Outer panel)

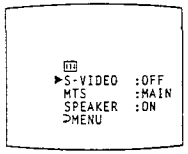


1 Press MENU.
The main menu appears.



2 Press the rocker control up or down until the cursor points to "MODE SET."

3 Click the rocker control.
The mode set menu appears, with the cursor pointing to "S-VIDEO."



4 Click the rocker control.
The mode display turns red.

5 Press the rocker control up or down to select "ON" or "OFF."

6 Click the rocker control.
The setting is complete.

To return to the previous menu
Press the rocker control up or down until the cursor points to "⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

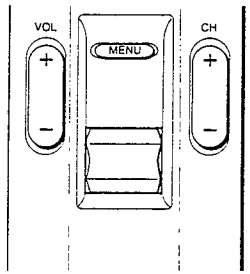
To return to the normal screen
Press MENU on the Remote Commander.

Selecting a sound mode

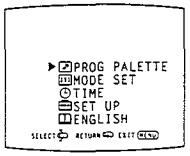
Use the DSP (Digital Sound Processor) menu to select the sound mode that best suits the type of sound you are listening to.

Example: Select JAZZ CLUB mode to enhance the effect when viewing a musical performance

Remote Commander

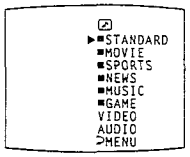


1 Press MENU.
The main menu appears



2 Press the rocker control up or down until the cursor points to "PROG PALETTE."

3 Click the rocker control.
The program palette menu appears.



4 Press the rocker control up or down until the cursor points to "AUDIO."

5 Click the rocker control.
The AUDIO screen appears.

6 Press the rocker control up or down until the cursor points to "DSP."

7 Click the rocker control
The DSP menu appears.

8 Press the rocker control up or down until the cursor points to "JAZZ CLUB."

9 Click the rocker control.
JAZZ CLUB mode is selected.

To select a different mode
Repeat steps 8 – 9. (See the next page for the different modes you can choose.)

To further adjust the sound
Follow the instructions on pp. 53 – 54.

To return to the previous menu
Press A/V WINDOW +/– until the cursor points to "⊃ MENU."
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

When you select DOLBY SURROUND* mode
You receive wraparound sound with three-dimensional** audio depth and presence when you connect main speakers and optional rear speakers.

Note
You must set REAR SPEAKER to "YES" (p. 56), or the display is blacked out and cannot be selected.
When using rear speakers, control the volume with the REAR VOLUME adjustment screen.

When you select SRS AUTO mode
You receive powerfully realistic sound that recaptures audio "clues" originally present but masked in the recording process, so that the action seems to happen all around you.

When you select JAZZ CLUB mode
You receive sound that gives a sense of space, with a touch of echo added.

When you select DANCE CLUB mode
You receive the sound effect of the hard floor and wall environment of a dance club.

When you select LIVE CONCERT mode
You receive sound that simulates the effect of being present at a live concert.

When you select SIMULATED mode
You receive monaural sound with a surround-like effect.

When you select SURROUND OFF mode
You receive sound without a surround effect.

To further adjust sound qualities
Follow the instructions on pp. 53 – 54.

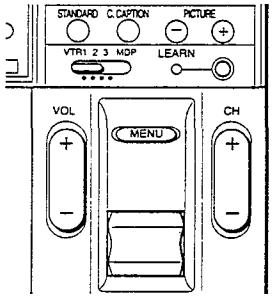
* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590; Canadian numbers 1,004,603 and 1,037,877. "Dolby" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

**Three-dimensional qualities apply to sound sources identified by the DOLBY SURROUND mark (DD).

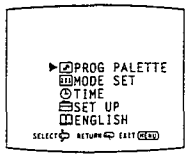
Adjusting sound quality

Follow these instructions to adjust the TREBLE, BASS and BALANCE.

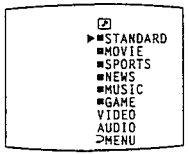
Remote Commander (inner panel)



1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."



2 Click the rocker control.
The program palette menu appears.



3 Press the rocker control up or down until the cursor points to "AUDIO."

4 Click the rocker control.
The AUDIO screen appears.

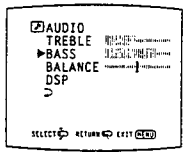
5 Press the rocker control up or down until the cursor points to the item you want to adjust.

6 Click the rocker control.
The adjustment screen appears.

7 Press the rocker control up or down to make the adjustment.

Sound quality	Press the rocker control down	Press the rocker control up
TREBLE	To decrease the treble response	To increase the treble response
BASS	To decrease the bass response	To increase the bass response
BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume

8 Click the rocker control.
The adjustment is complete, and the AUDIO screen automatically reappears.



To adjust other items
Repeat steps 5 – 9.

To restore the factory settings for all the items
Select "STANDARD" on the program palette menu, and click the rocker control; or, press STANDARD on the Remote Commander.
All the items return to their original factory settings.

To return to the previous menu
Press the rocker control up or down until the cursor points to "↩ MENU." Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Selecting an MTS (Multichannel TV Sound) mode

Follow these instructions to select an MTS mode.

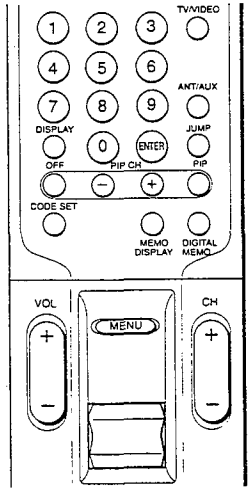
Select MAIN mode to listen to stereo sound.
The STEREO indicator on the TV lights up whenever a stereo broadcast is received.

Select SAP mode to listen to Second Audio Programs.

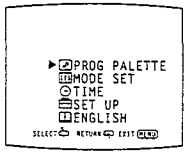
Select MONO mode to eliminate excessive noise during stereo broadcasts, caused by a weak incoming signal.

Note
If the TV is in video mode, the "MTS" display is shaded and cannot be selected.
Press TV/VIDEO on the TV or on the Remote Commander to change to TV mode.

Remote Commander (Outer panel)

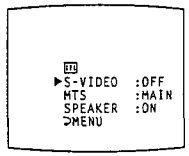


1 Press MENU.
The main menu appears.



2 Press the rocker control up or down until the cursor points to "MODE SET."

3 Click the rocker control.
The mode set menu appears.



4 Press the rocker control up or down until the cursor points to "MTS."

5 Click the rocker control.
The mode display turns red.

6 Press the rocker control up or down to select the mode you want.
Each time you press the rocker control up or down, "MAIN," "SAP" and "MONO" appear in sequence.

7 Click the rocker control.
The mode is selected.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU." Then click the rocker control.

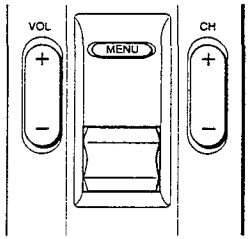
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

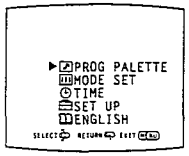
Setting SPEAKER ON or OFF

Follow these instructions to turn the TV speakers off when you connect an audio system (p.19), and on when you want to listen to the sound from the TV speakers.

Remote Commander

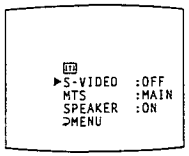


1 Press MENU.
The main menu appears.



2 Press the rocker control up or down until the cursor points to "MODE SET."

3 Click the rocker control.
The mode set menu appears.



4 Press the rocker control up or down until the cursor points to "SPEAKER."

5 Click the rocker control.
The mode display turns red.

6 Press the rocker control up or down to select "ON" or "OFF."

7 Click the rocker control.
The setting is complete.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

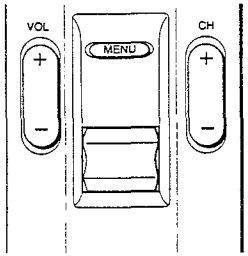
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Setting REAR SPEAKER

Set REAR SPEAKER to "YES" to use the detachable or optional speakers as rear speakers (pp. 11 – 12).

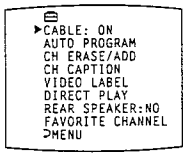
Remote Commander



1 Press MENU.
The main menu appears.

2 Press the rocker control up or down until the cursor points to "SET UP."

3 Click the rocker control.
The set up menu appears.



4 Press the rocker control up or down until the cursor points to "REAR SPEAKER."

5 Click the rocker control.
The mode display turns red.

6 Press the rocker control up to select "YES."

7 Click the rocker control.
The REAR SPEAKER screen appears.

8 Press the rocker control up or down until the cursor points to the item you want to adjust.

9 Click the rocker control.
The adjustment screen appears.

10 Use the rocker control to make the adjustment.

REAR VOLUME Press the rocker control down to decrease the rear speaker volume. Press the rocker control up to increase the rear speaker volume.
INPUT BALANCE (Use when you enjoy DOLBY SURROUND.) Press the rocker control down to improve the input balance. (Set to the lowest point for best input balance little or no sound is heard from the rear speakers.)

Notes

- Setting REAR SPEAKER to "NO" does not turn off the rear speaker sound. Control the rear speaker volume with the REAR VOLUME adjustment.
- While the INPUT BALANCE adjustment screen is displayed, the sound from the front speakers is cut off.

11 Click the rocker control.
The setting is complete.

To set REAR SPEAKER to "NO"
Repeat steps 1 – 11, and select "NO" in step 6.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU." Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

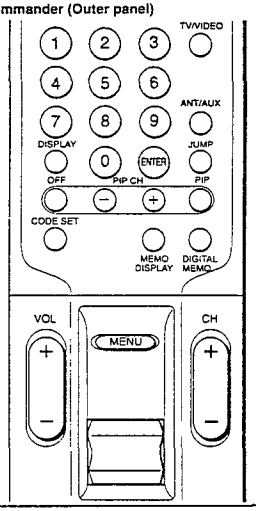
To return to the normal screen
Press MENU on the Remote Commander.

Setting channel captions — CH CAPTION

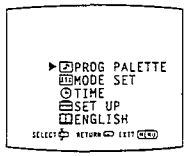
Follow these instructions to caption each channel number display with a name, for instance, the television station call letters. (You can set up to four letters or numbers).

Example: Caption channel 15 as "NBC."

Remote Commander (Outer panel)

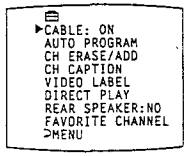


1 Press MENU.
The main menu appears.



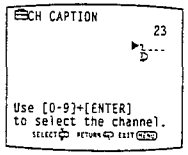
2 Press the rocker control up or down until the cursor points to "SET UP."

3 Click the rocker control.
The set up menu appears.

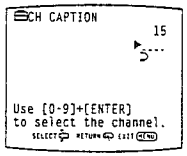


4 Press the rocker control up or down until the cursor points to "CH CAPTION."

5 Click the rocker control.
The CH CAPTION screen appears.

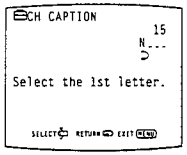


6 Press CH +/–, or press 1, 5 and ENTER to set channel "15."



7 Click the rocker control.
The first caption space turns red.

8 Press the rocker control up or down to select "N."
Each time you press the rocker control up or down, "0" – "9," "A" – "Z," "&," "/," "-" and "_" (blank space) appear in sequence.

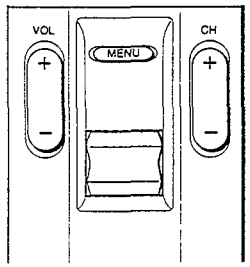


9 Click the rocker control.
The second caption space turns red.

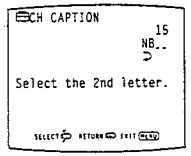
(Continued)

Setting channel captions – CH CAPTION
(Cont'd. from prev. page)

Remote Commander

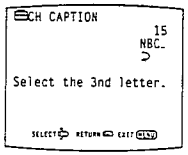


10 Press the rocker control up or down to select "B."



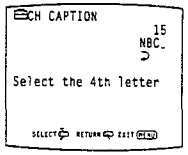
11 Click the rocker control.
The third caption space turns red.

12 Press the rocker control up or down to select "C."



13 Click the rocker control.
The fourth caption space turns red.

14 Press the rocker control up or down to select a blank space.



15 Click the rocker control.
The setting is complete.
When you select or display the channel number, the channel caption also appears.

To caption more channels
Repeat steps 6 – 15.

To erase unnecessary captions
Display the CH CAPTION screen, select the channel with the caption you want to erase, and select blank spaces for the channel caption; then click the rocker control.
The caption for that channel is erased.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

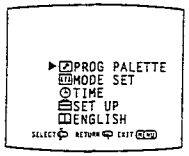
Note
You can set up to 32 channel captions. If the memory is full, "The memory is full, sorry" appears on the screen. Erase any unnecessary captions, and begin again.

Setting VIDEO LABEL

Follow these instructions to label each input mode, in order to identify the equipment connected to each input terminal.

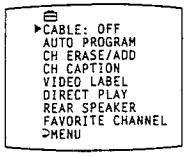
Example: Label VIDEO 1 IN as "VHS."

1 Press MENU.
The main menu appears.



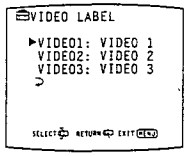
2 Press the rocker control up or down until the cursor points to "SET UP."

3 Click the rocker control.
The set up menu appears.



4 Press the rocker control up or down until the cursor points to "VIDEO LABEL."

5 Click the rocker control.
The VIDEO LABEL screen appears.



6 Press the rocker control up or down until the cursor points to the input mode you want to label. (In this case, the cursor is already pointing to "VIDEO 1.")

7 Click the rocker control.
The label display turns red.

8 Press the rocker control up or down to select "VHS."

Each time you press the rocker control up or down, the label changes:

VIDEO 1 → BETA → 8mm → VHS → LD → S-VIDEO →

9 Click the rocker control.
The setting is complete.
When you select or display the video mode, the video label appears.

To label other input modes
Repeat steps 6 – 9.

To change a label
Same as above.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU." Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

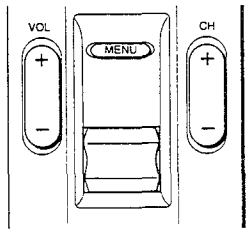
Setting DAYLIGHT SAVING

If you live in an area that uses daylight savings time, set DAYLIGHT SAVING to "YES" or "NO" depending on the season, before setting the current time. At the next daylight savings date, you will be able to automatically adjust all the time-related settings (CURRENT TIME, ON/OFF TIMER and CHANNEL BLOCK) simply by changing the DAYLIGHT SAVING setting.

When setting DAYLIGHT SAVING:

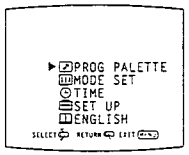
- **After the first Sunday in April (spring daylight savings)**
  Set to "YES" before setting the current time.
  Then, on the last Sunday in October (fall daylight savings), set to "NO."
  All the time-related settings automatically move one hour back.
- **After the last Sunday in October (fall daylight savings)**
  Set to "NO" before setting the current time.
  Then, on the first Sunday in April (spring daylight savings), set to "YES."
  All the time-related settings automatically move one hour ahead.

Remote Commander



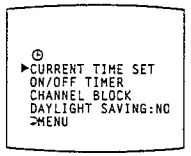
Follow these instructions to set DAYLIGHT SAVING to "YES" or "NO."

1 Press MENU.
The main menu appears.



2 Press the rocker control up or down until the cursor points to "TIME."

3 Click the rocker control.
The time menu appears.



4 Press the rocker control up or down until the cursor points to "DAYLIGHT SAVING."

5 Click the rocker control.
The mode display turns red.

6 Press the rocker control up or down to select "YES" or "NO."
The setting is complete.

7 Click the rocker control.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

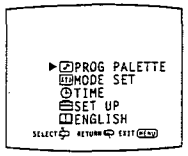
To return to the normal screen.
Press MENU on the Remote Commander.

Setting the clock — CURRENT TIME SET

Follow these instructions to set the current time. The correct current time must be set in order to use the other time-related functions (DAYLIGHT SAVING, ON/OFF TIMER, CHANNEL BLOCK).

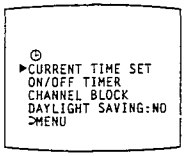
Example: Set the time to 3:15 PM, Monday.

1 Press MENU.
The main menu appears.



2 Press the rocker control up or down until the cursor points to "TIME."

3 Click the rocker control.
The time menu appears, and the cursor points to "CURRENT TIME SET."



4 Click the rocker control again.
The CURRENT TIME SET screen appears, with a reminder to set DAYLIGHT SAVING.

If you do not need to set DAYLIGHT SAVING, click the rocker control and continue from step 5.

To set daylight saving

a Press the rocker control up or down until the cursor points to "DAYLIGHT SAVING."

b Click the rocker control.
The time menu appears, and the cursor points to "DAYLIGHT SAVING."

c Click the rocker control.

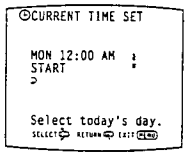
d Press the rocker control up or down to select "YES" or "NO."

e Click the rocker control.
The setting is complete.

To set the time
Press the rocker control up or down until the cursor points to "CURRENT TIME SET"; click the rocker control, then continue from step 5.

5 Click the rocker control.
The CURRENT TIME SET screen appears, and the "SUN" display appears (red).

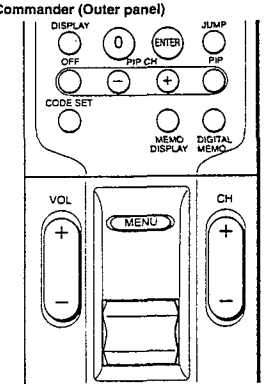
6 Press the rocker control up or down to select "MON."
Each time you press the rocker control up or down, the day changes consecutively.



(Continued)

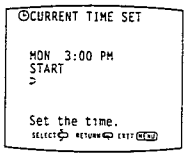
Setting the clock — CURRENT TIME SET
(Cont'd. from prev. page)

Remote Commander (Outer panel)



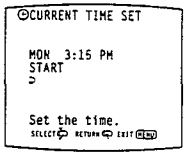
7 Click the rocker control.
The hour and am/pm displays turn red.

8 Press the rocker control up or down to set "3:00PM."
Each time you press the rocker control up or down, the hour changes in sequence beginning with "12:00AM."



9 Click the rocker control.
The minute display turns red.

10 Press the rocker control up or down to select "15" (minutes).
Each time you press the rocker control up or down, the minutes change in sequence.



11 Click the rocker control.
The cursor points to "START."

12 Check the actual time, and click the rocker control to start the clock.
The setting is complete.

To reset the time
Display the CURRENT TIME SET screen and repeat steps 5 – 12.

To display the current time
Press DISPLAY.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

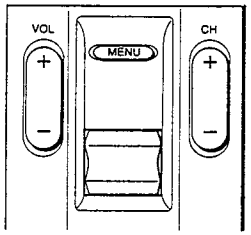
To return to the normal screen.
Press MENU on the Remote Commander.

Setting the ON/OFF TIMER

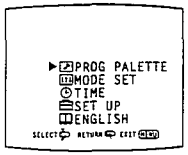
Follow these instructions to make the program of your choice appear on the screen at a specified time.

Example: Set the timer to turn on the TV every Monday through Friday at 1:30 AM for 3 hours, on channel 8, as PROGRAM 1. (You can set up to three programs.)

Remote Commander

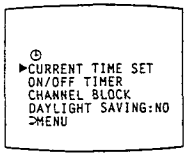


1 Press MENU.
The main menu appears.



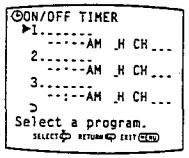
2 Press the rocker control up or down until the cursor points to "TIME."

3 Click the rocker control.
The time menu appears.



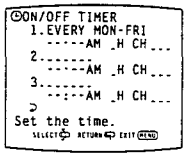
4 Press the rocker control up or down until the cursor points to "ON/OFF TIMER."

5 Click the rocker control.
The ON/OFF TIMER screen appears, and the cursor points to "1."

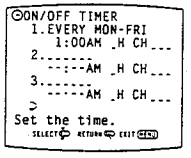


6 To set program 1, click the rocker control.
(To set program 2 or 3, press the rocker control up or down until the cursor points to that program; then click the rocker control.)
The day input space turns red.

7 Press the rocker control up or down to select "EVERY MON-FRI"; then click the rocker control.
Each time you press the rocker control up, the days of the week change as shown in Fig. 1 (p. 63).



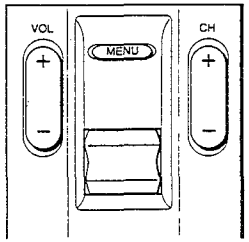
8 Press the rocker control up or down to select "1:00AM"; then click the rocker control.
Each time you press the rocker control up or down, the hour changes in sequence.



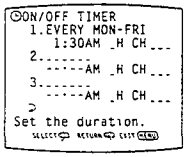
(Continued)

Setting the ON-OFF TIMER *(Cont'd from prev. page)*

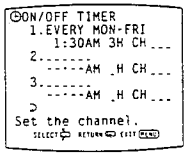
Remote Commander



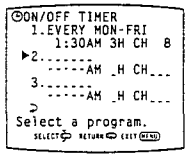
9 Press the rocker control up or down to select "30" (minutes);
Then click the rocker control.
Each time you press the rocker control up or down, the minutes change in sequence.



10 Press the rocker control up or down to select "3" (hour duration); then click the rocker control.
Each time you press the rocker control up or down, the duration changes from "1" – "6" in sequence.



11 Press the rocker control up or down to select "8" (channel); then click the rocker control.
The TIMER/STAND BY indicator lights, indicating that the setting is complete.
Each time you press the rocker control up or down, the channel number changes from 1 – 125 in sequence.



The display "TV WILL TURN OFF" appears on the screen one minute before the timer duration ends.

To set program 2 or 3.
Click the rocker control and repeat steps 6 – 11.

To erase an ON/OFF TIMER setting
Display the ON/OFF TIMER screen, select the setting you want to erase, and select the underlined spaces for the day setting.
The ON/OFF TIMER setting is erased.

To enter a new ON/OFF TIMER setting
Display the ON/OFF TIMER screen and repeat steps 6 – 11.

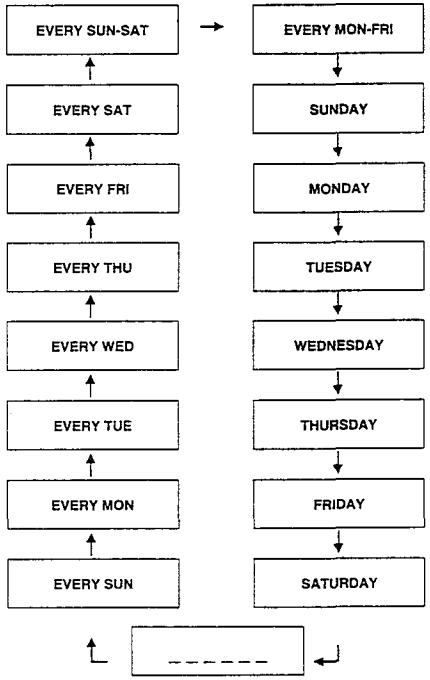
To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

Note
If you unplug the TV or a power failure occurs, both the clock and timer settings will be erased. Reset the current time; then set the timer.

Fig. 1
Selecting the day(s) of the week
When you press the rocker control up, the days of the week appear in the following order:

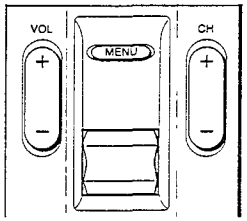


Setting CHANNEL BLOCK

Follow these instructions to prevent a channel from appearing on the screen during the time that you specify. You can use this function to prevent children from watching unsuitable programs.

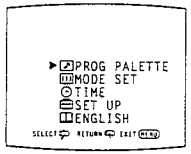
Example: Set CHANNEL-BLOCK every Saturday at 4:30 PM for 1 hour, on Channel 12.

Remote Commander



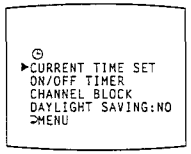
Note
If you have not set the current time, the "CHANNEL BLOCK" display is shaded and cannot be selected.

1 Press MENU.
The main menu appears.



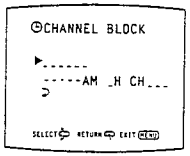
2 Press the rocker control up or down until the cursor points to "TIME."

3 Click the rocker control.
The time menu appears.

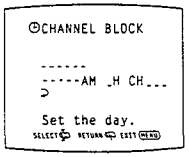


4 Press the rocker control up or down until the cursor points to "CHANNEL BLOCK."

5 Click the rocker control.
The CHANNEL BLOCK screen appears, and the cursor points to the day input space.

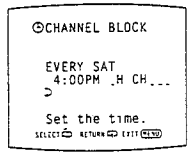


6 Click the rocker control.
The day input space turns red.

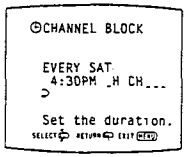


7 Press the rocker control up or down to select "EVERY SAT"; then click the rocker control.
Each time you press the rocker control up or down, the days of the week change as shown in Fig. 1 (p. 65).

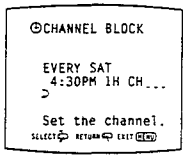
8 Press the rocker control up or down to select "4:00PM"; then click the rocker control.
Each time you press the rocker control up or down, the hour changes in sequence.



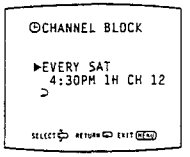
9 Press the rocker control up or down to select ":30" (minutes); then click the rocker control.
Each time you press the rocker control up or down, the minutes change in sequence.



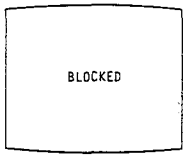
10 Press the rocker control up or down to select "1" (hour duration); then click the rocker control.
Each time you press the rocker control up or down, the duration changes from "1" – "6" in sequence.



11 Press the rocker control up or down to select "12" (channel); then click the rocker control.
The setting is complete.
Each time you press the rocker control up or down, the channel number changes from "1" – "125" in sequence.



At the specified time, "BLOCKED" appears in red on the screen, and the picture of the specified channel is blocked and the sound is muted.



To erase a CHANNEL BLOCK setting
Display the CHANNEL BLOCK screen and select the underlined spaces for the day setting.
The CHANNEL BLOCK setting is erased.

To enter a new CHANNEL BLOCK setting
Display the CHANNEL BLOCK screen and repeat steps 4 – 10. (You can only set one CHANNEL BLOCK at a time.)

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

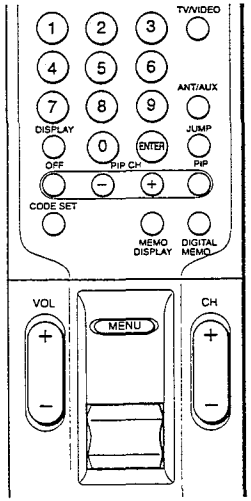
To return to the normal screen.
Press MENU on the Remote Commander.

Note
If the ON/OFF TIMER is set for an overlapping time (pp. 65 – 66), the later time setting takes precedence. For example, if CHANNEL BLOCK is set for 2:00 PM and ON/OFF TIMER is set for 3:00 PM, ON/OFF TIMER will take effect at 3:00 PM.

Setting FAVORITE CHANNEL

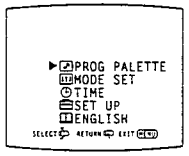
By setting FAVORITE CHANNEL, you can select the channels you use most frequently (up to seven channels) simply by clicking the rocker control on the Remote Commander.

Remote Commander (Outer panel)



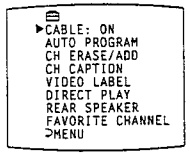
Follow these instructions to set the channels.

1 Press MENU.
The main menu appears.



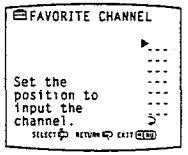
2 Press the rocker control up or down until the cursor points to "SET UP "

3 Click the rocker control.
The set up menu appears.



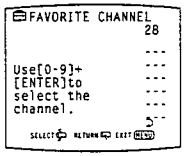
4 Press the rocker control up or down until the cursor points to "FAVORITE CHANNEL."

5 Click the rocker control.
The FAVORITE CHANNEL screen appears, and the cursor points to the first channel position.



6 Press the rocker control up or down to select the channel position; then click the rocker control.

7 Press 0 – 9 and ENTER to set the channel number.



8 Click the rocker control.
The setting is complete.

To set other channels
Repeat steps 6 – 8.

To erase a favorite channel setting
Press the rocker control up or down until the cursor points to the channel number you want to erase; click the rocker control, then press 0 and ENTER.

To reset a favorite channel setting
Display the FAVORITE CHANNEL screen and repeat steps 6 – 8.

To return to the previous menu
Press the rocker control up or down until the cursor points to " ⊃ MENU." Then click the rocker control.

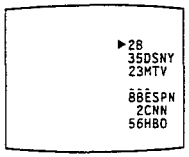
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

Selecting a favorite channel

After setting the channels, follow these instructions to select the channel you want to watch.

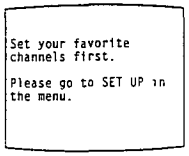
1 Click the rocker control.
The FAVORITE CHANNEL display appears.



Note
If you have set channel captions (pp. 57 – 58), the captions appear with the channel numbers.

2 Press the rocker control up or down to select the channel you want to watch; then click the rocker control.
The channel is selected.

If you click the rocker control on the Remote Commander before setting FAVORITE CHANNEL, this screen appears.



Follow steps 1 – 8 to set your favorite channels, and then make the selection.

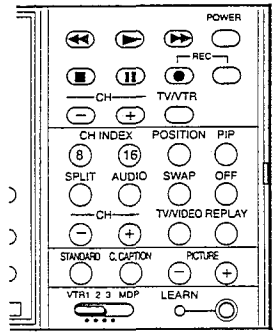
Using the Programmable Remote Commander

You can operate other video equipment (such as VCRs, video disc players and cable boxes) that have an infrared remote detector with this supplied Remote Commander.

Operating Sony video equipment

Follow these instructions to operate Sony video cassette recorders (Beta, 8 mm and VHS) and video disc players (including multi-disc players).

Remote Commander (Inner panel)



1 Set the VTR1-2-3 MDP selector according to the video equipment you want to operate.

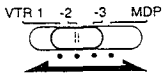


Fig. 2: Video equipment settings

If you want to operate a:	set to:
Beta, ED Beta VCR	VTR 1
8 mm VCR	VTR 2
VHS VCR	VTR 3
Video disc player	MDP

2 Use the video operating buttons to control the connected equipment.

Fig. 3: Operating a VCR (VTR1, 2, 3)	
To turn on or off	Press POWER.
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/–
To record	Press ● and REC simultaneously.
To play	Press ►
To stop	Press ■.
To fast forward	Press ►►
To rewind the tape	Press ◄◄.
To pause	Press ❚❚. *To resume normal playback, press again.*
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. *To resume normal playback, release the button.*
To change input mode	Press TV/VTR.

Fig. 4: Operating a Video Disc Player (MDP)	
To turn on or off	Press POWER.
To play	Press ►
To stop	Press ■.
To pause	Press ❚❚. *To resume normal playback, press again.* **Note** This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the TV goes off (standby mode) if you press ❚❚.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. *To resume normal playback, release the button.*

Notes

- If the video equipment does not have a certain function, the corresponding button on this Remote Commander will not operate.
- If you set another manufacturer's code to a VTR1-2-3 MDP selector position (pp. 72 – 73), you must also set the Sony code to operate Sony equipment.

Caution

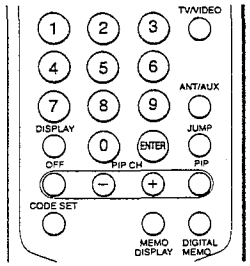
When you replace the batteries, do it within approximately 30 minutes. Otherwise the settings you made under the Pre-Programmed function (pp. 72 – 74) and Learning function (p. 75) may be erased.

Operating non-Sony or Sony video equipment

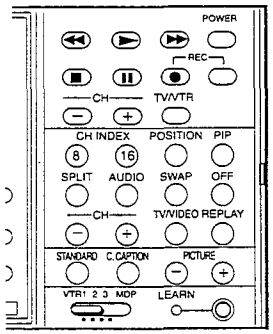
Follow these instructions to set the manufacturer's code, which will enable you to operate non-Sony and Sony video equipment with the pre-programmed Remote Commander.

Example: Operate an RCA video cassette recorder connected to the VIDEO 2 IN jacks.

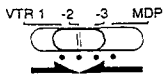
Remote Commander (Outer panel)



(Inner panel)



1 Set the VTR1-2-3 MDP selector to VTR2.



Note
To use another manufacturer's equipment besides a Sony VCR, set the selector to a position not being used for your Sony video equipment.

2 While pressing CODE SET, press 0, 7 and ENTER to set RCA's code number. (For manufacturer code numbers, see Figs. 5, 6 and 7 on p. 73.)

A long beep sounds, indicating that the code has been set.

Note
If you press a wrong code, or if the code has not been set, four short beeps sound. Repeat step 3 to set the code.

3 Use the video operating buttons to operate the connected equipment. (see Fig. 3 on p. 70 and Fig. 4 on p. 71.)

Fig. 5: VCR manufacturer code numbers

MANUFACTURER	CODE
SONY	01, 02, 03
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08, 36
JVC	16, 35
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05, 06
RCA	07, 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28, 29
TOSHIBA	20, 21
TOTE VISION	25
ZENITH	17

Fig. 6: MDP manufacturer code numbers

MANUFACTURER	CODE
SONY	04
KENWOOD	58
MAGNAVOX	52
MARANZ	54
MITSUBISHI	51
PANASONIC	55
PHILIPS	52
PIONEER	51
RCA	51
SANYO	57
SHARP	56
YAMAHA	53

Fig. 7: Sony equipment and code numbers

SONY EQUIPMENT	CODE
Beta, ED Beta VCR	01
8 mm VCR	02
VHS VCR	03
Video disc player	04

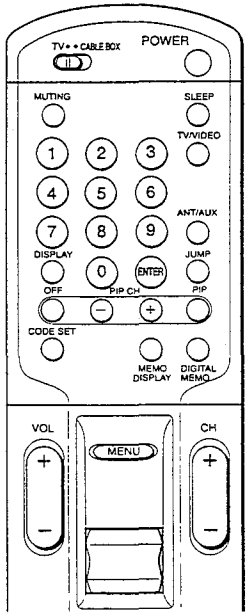
Note
In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

Operating a cable converter box

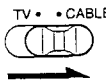
Follow these instructions to set the manufacturer's code, which will enable you to operate a connected cable converter box with the pre-programmed Remote Commander.

Example: Operate a connected Zenith cable converter box.

Remote Commander (Outer panel)



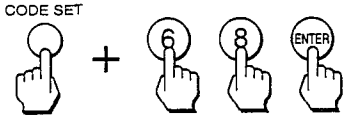
1 Set the TV/CABLE BOX selector to CABLE BOX.



Notes

- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this Remote Commander and you may not be able to operate your cable converter box with the supplied Remote Commander. In this case, use the equipment's own remote control unit.

2 While pressing CODE SET, press 6 and 8 (Zenith's code number — see Fig. 8) and ENTER.

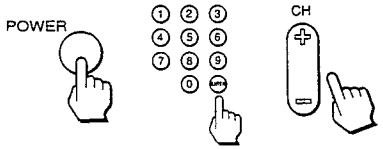


A long beep sounds, indicating that the code has been set.

Note

If you press a wrong code, or if the code has not been set, four short beeps sound. Repeat step 2 to set the code.

3 Use the TV control buttons (POWER, 0 – 9, ENTER and CH +/–) to operate the cable converter box.



To return to the normal screen

Set the TV/CABLE BOX selector to TV; then use the TV control buttons to control the TV.

For more details on operating the cable box

Refer to the operating instructions that come with the cable box.

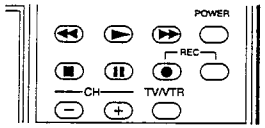
Fig. 8: Cable box manufacturer code numbers

MANUFACTURER	CODE
JERROLD	60, 61, 62, 63, 64, 65
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

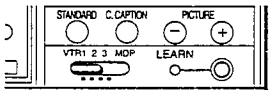
Operating non-Sony or Sony audio and video equipment (Learning function)

Follow these instructions to "teach" any of the programmable buttons to operate the function of another Remote Commander. Use Learning in order to operate non-Sony and Sony audio equipment, and a remote controlled cable converter box or video equipment whose manufacturer code is not listed (Fig. 5, Fig. 6 – p. 73; Fig. 8 – p. 74).

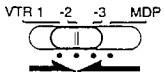
Remote Commander (Inner panel)
Programmable buttons



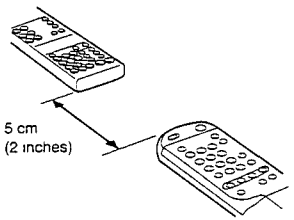
LEARN button and indicator lamp



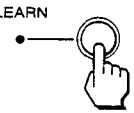
1 Set the VTR1-2-3 MDP selector to VTR3 or MDP (Learning will not work in VTR1 or VTR2 settings.)



2 Place the supplied Remote Commander head to head with equipment's remote commander, approximately 5 cm (2 inches) apart.



3 Press LEARN.
The LEARN indicator lights up (red).



4 Momentarily press the button of the supplied Remote Commander that you want to learn a function.
The LEARN indicator goes off and lights up again, and a short beep sounds, indicating that the Remote Commander is ready for learning.

The Remote Commander beeps repeatedly if an error has occurred. Repeat this step.

5 Press and hold down the button of the other remote commander, whose function you want to "teach," until the LEARN indicator turns red.
A long beep sounds and the LEARN indicator goes off and lights up again, indicating that learning is complete. If not, repeat steps 4 and 5. .

6 Repeat steps 4 and 5 to teach functions to other buttons.

7 Press LEARN.
The LEARN indicator lamp lights up (red), then goes off, indicating that learning is complete.

For accurate learning

Do not move the remote commanders during the learning process.

Notes

- If the memory is full, three short beeps sound and the LEARN indicator flashes off and on. Use learning to re-program a button whose learned function you do not use often; the previously learned function is erased.
- If the other remote commander's signal cannot be learned, a short beep sounds and the LEARN indicator flashes once.
- If you press a button that cannot be used for learning, four short beeps sound and the LEARN indicator flashes four times.

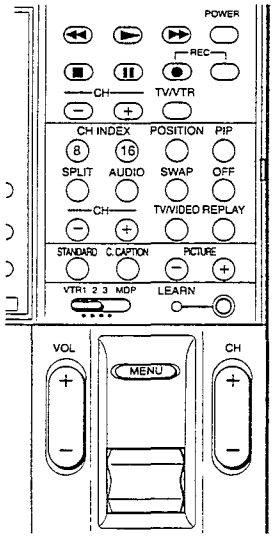
Selecting a VCR mode directly — DIRECT PLAY

Follow these instructions to switch from TV to VCR mode by simply pressing the ► (playback) button on the supplied Remote Commander.

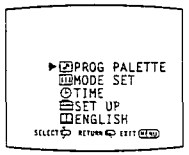
Example: Connect your VCR to the VIDEO 1 IN jacks, and set the VTR1-2-3 MDP selector to VTR2. When you press ►, the input mode changes to the VCR connected to the VIDEO 1 IN jacks.

After completing the steps below, the VTR selector position is retained in the TV's memory.

Remote Commander (Inner panel)

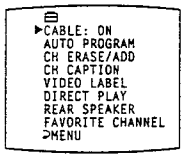


1 Press MENU.
The main menu appears.



2 Press the rocker control up or down until the cursor points to "SET UP."

3 Click the rocker control.
The set up menu appears.

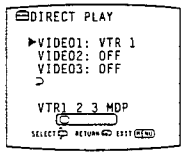


4 Press the rocker control up or down until the cursor points to "DIRECT PLAY."

5 Click the rocker control.
A message screen appears.

Note
This screen reminds you to set the manufacturer's code, if you have not already done so (pp. 72 – 73).

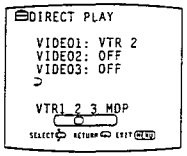
6 Click the rocker control again.
The DIRECT PLAY screen appears.



7 Press the rocker control up or down until the cursor points to the video input mode. (When the video equipment is connected to VIDEO 1 IN, select "VIDEO1.")

8 Click the rocker control.
The mode display turns red.

9 Press the rocker control up or down to select the VTR selector mode you have set on the Remote Commander. (When the VTR1-2-3 MDP selector is set to VTR2, select "VTR 2.")
Each time you press the rocker control up or down, "VTR 1," "VTR 2," "VTR 3," "MDP" and "OFF" appear in sequence.



10 Click the rocker control.
The direct play setting is complete.

To set direct play for other connected video equipment
Repeat steps 7 – 10.

To return to the previous menu
Press the rocker control up or down until the cursor points to "⊃ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

Appendix

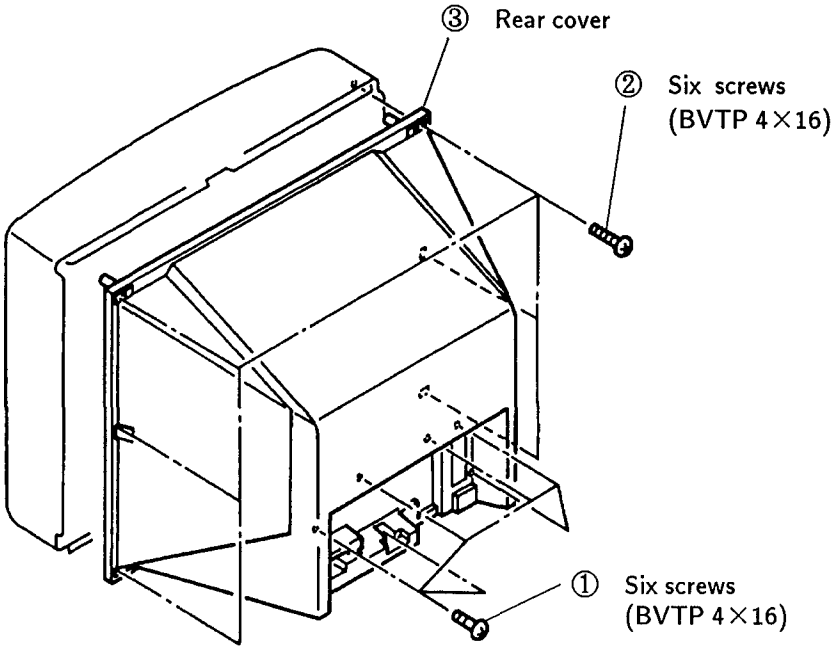
Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed here. If the problem still cannot be solved, contact your nearest service facility.

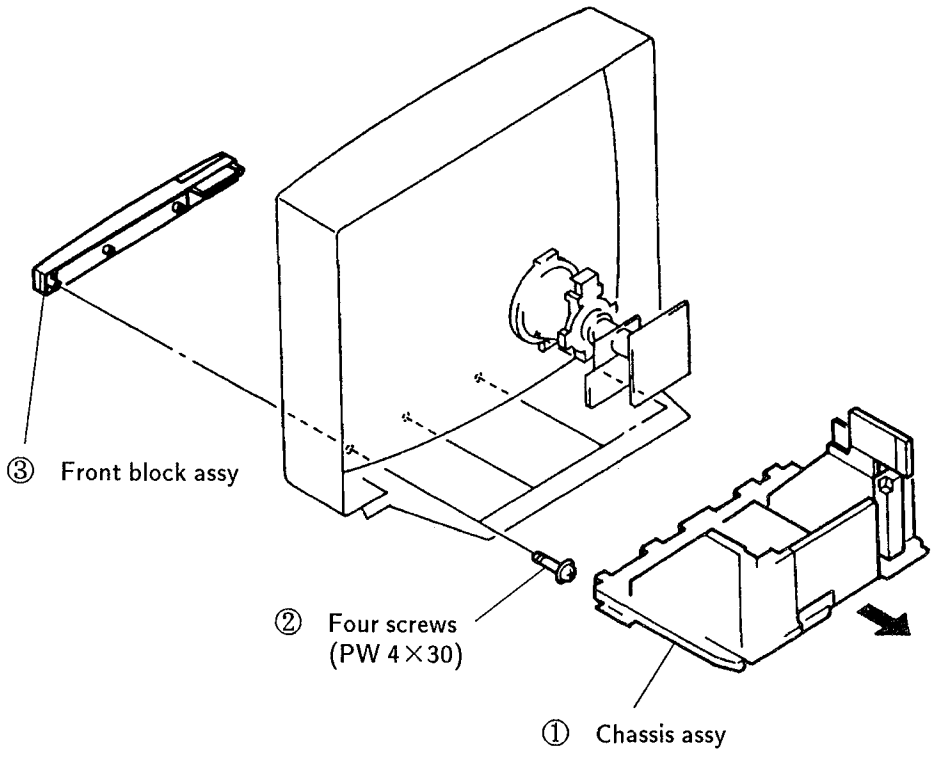
Symptom	Possible causes and remedies
No picture (screen not lit), no sound	• Make sure POWER is switched on. • Check the power cord connection. • Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly. • Make sure that the TV/CABLE BOX selector is set to TV.
Poor or no picture (screen not lit), good sound	• Adjust the picture using the VIDEO screen (pp. 46 – 49). • Check the antenna/cable connections.
Good picture, no sound	• Press VOLUME + on the TV or VOL + on the Remote Commander. • Press MUTING on the Remote Commander. • Check the MTS setting (p. 54). • Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly. • Make sure SPEAKER is set to ON (p. 55).
No color for color programs	• Check the HUE and COLOR settings (pp. 46 – 47).
Snow and noise only	• Check that it is an active or correct channel. • Check the cable setting. • Check the ANT/AUX button setting. • Check antenna/cable connections.
 Dotted lines or stripes	This is often caused by local interference (for example, cars, neon signs and hairdryers). Adjust the telescopic aerial for minimum interference.
 Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. Connecting a highly directional outdoor antenna or a CATV cable may improve the picture.
Try another channel. It could be station trouble.	

SECTION 2
DISASSEMBLY

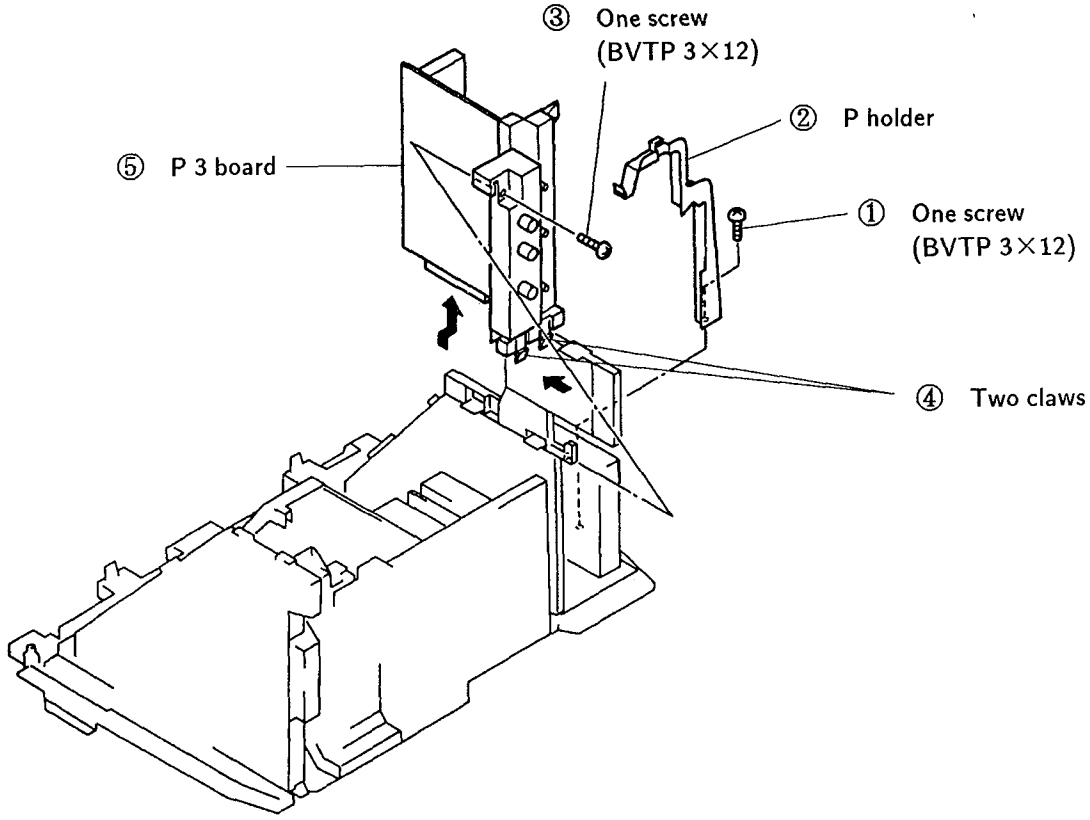
2-1. REAR COVER REMOVAL



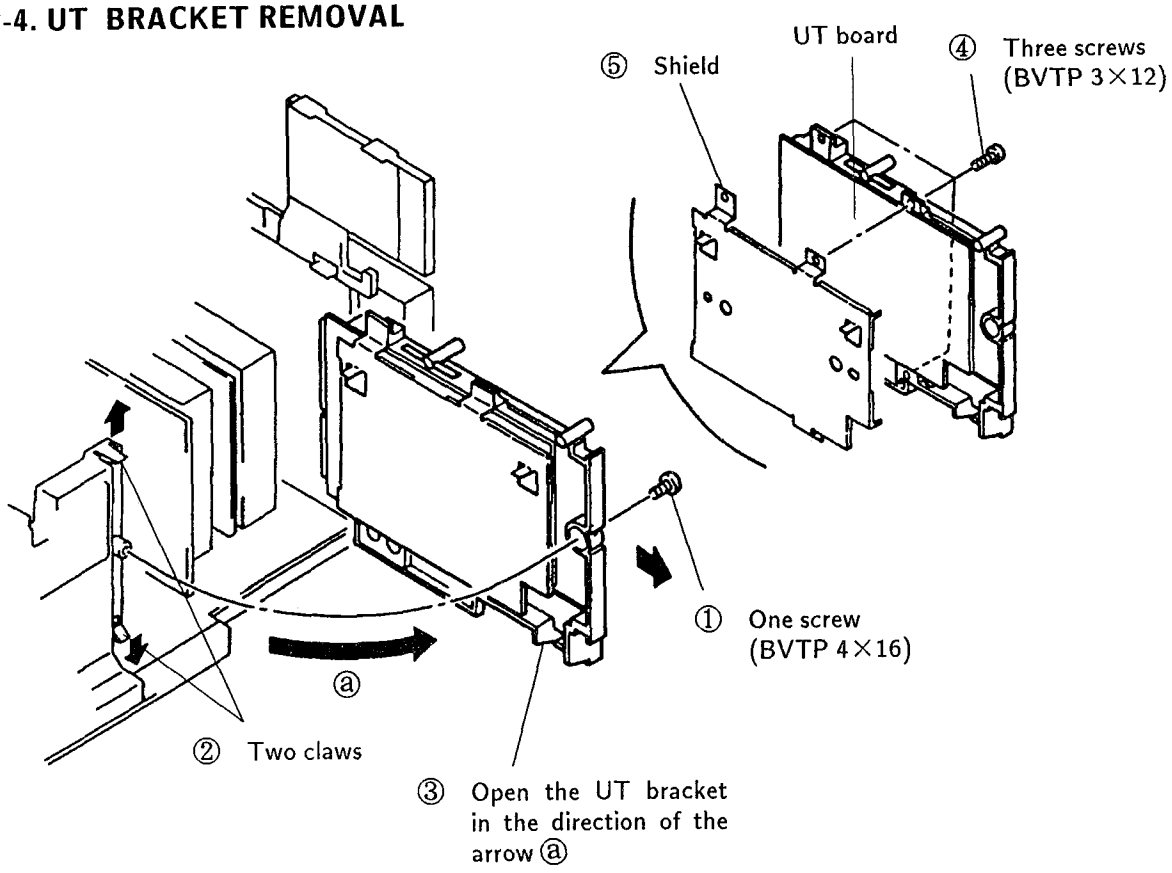
2-2. CHASSIS ASSY AND FRONT BLOCK ASSY REMOVAL



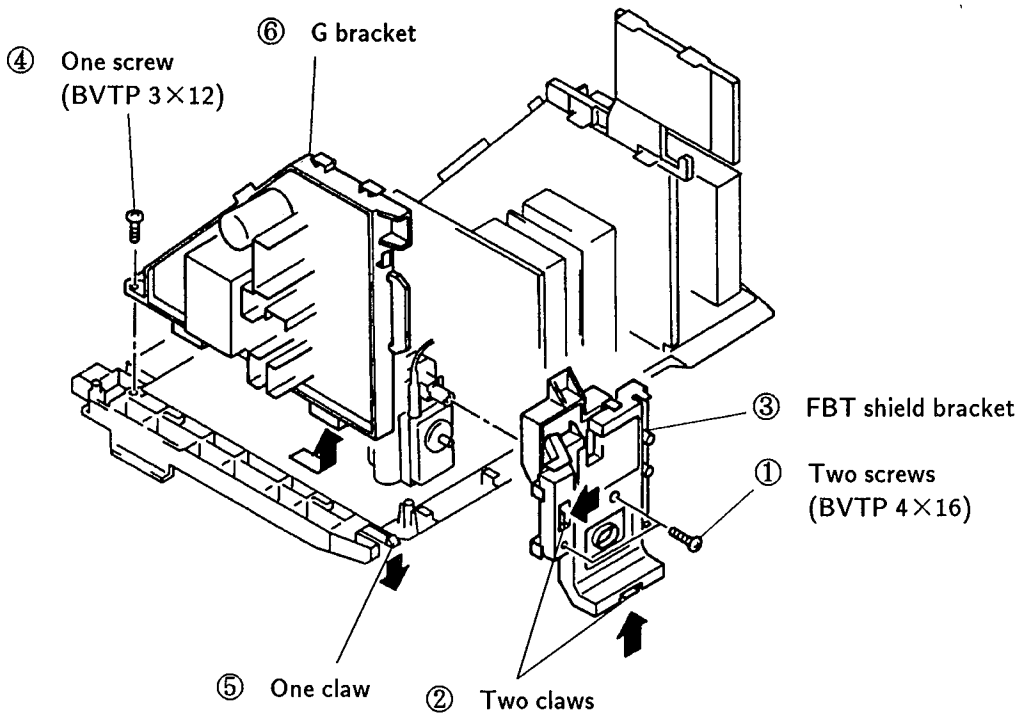
2-3. P3 BOARD REMOVAL



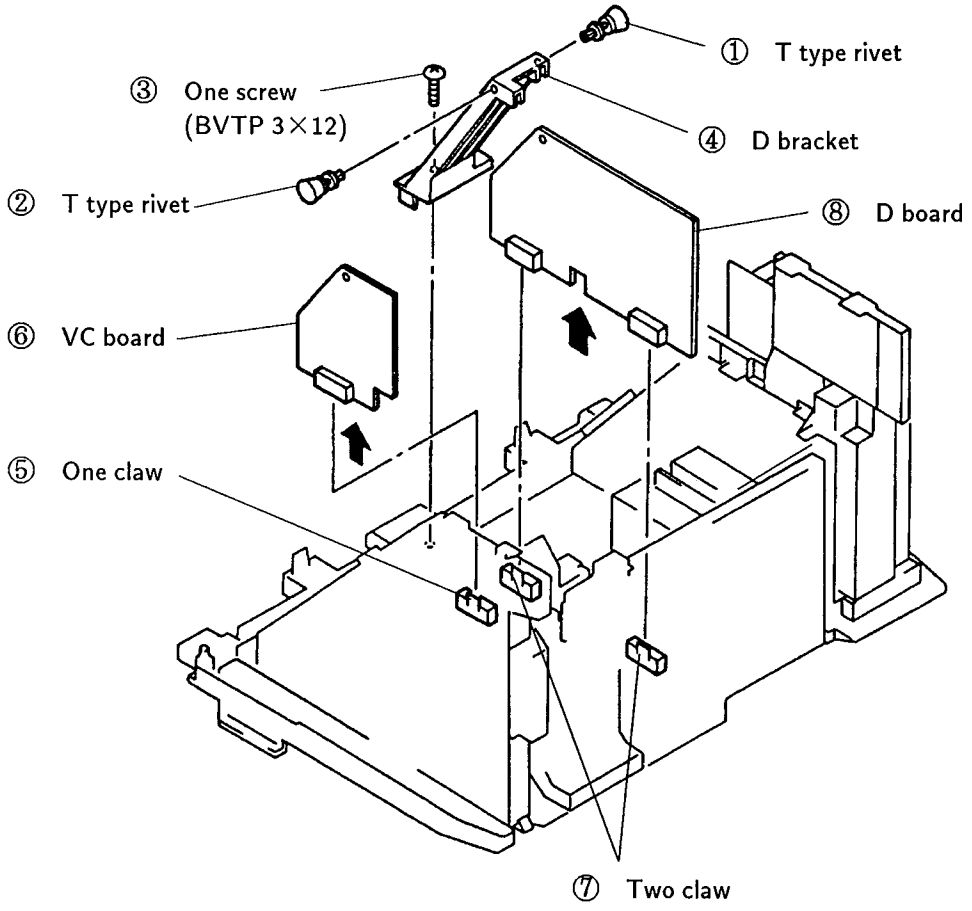
2-4. UT BRACKET REMOVAL



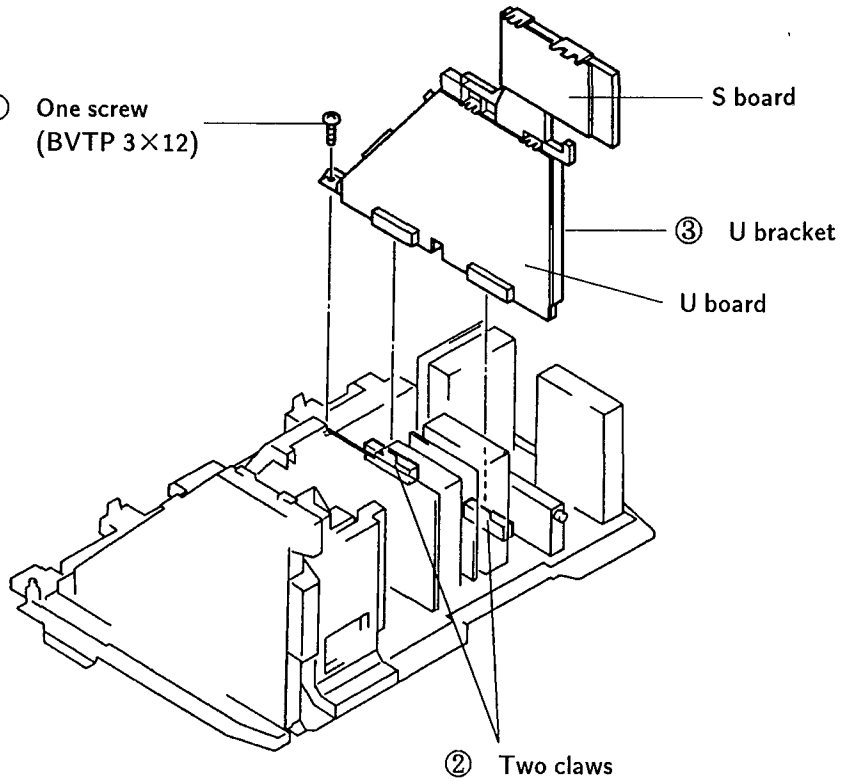
2-5. G BRACKET REMOVAL



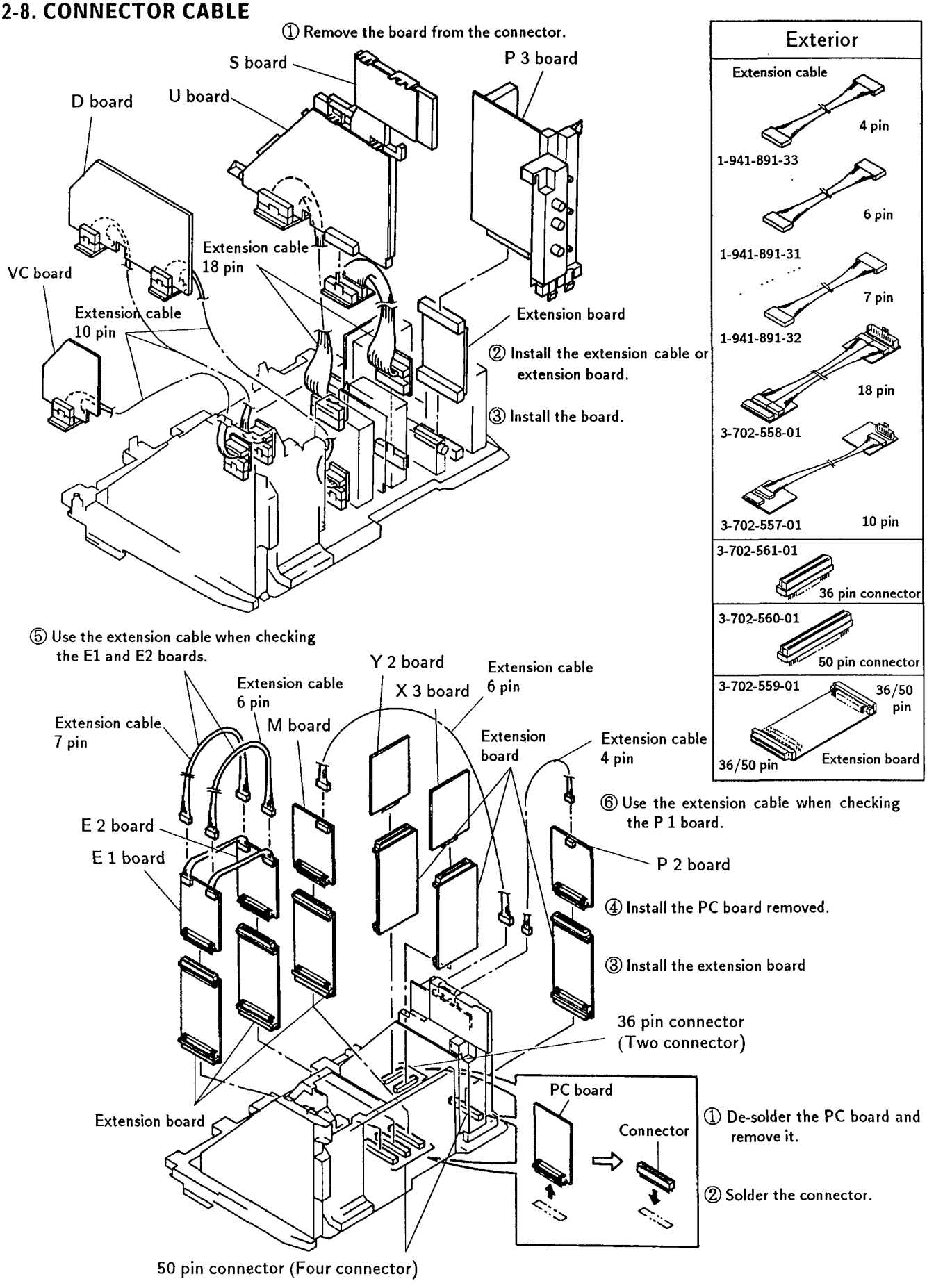
2-6. D BOARD REMOVAL



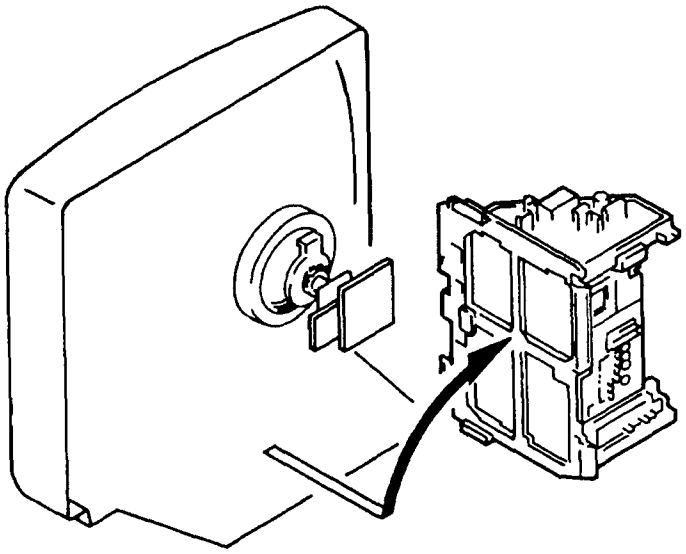
2-7. U BRACKET REMOVAL



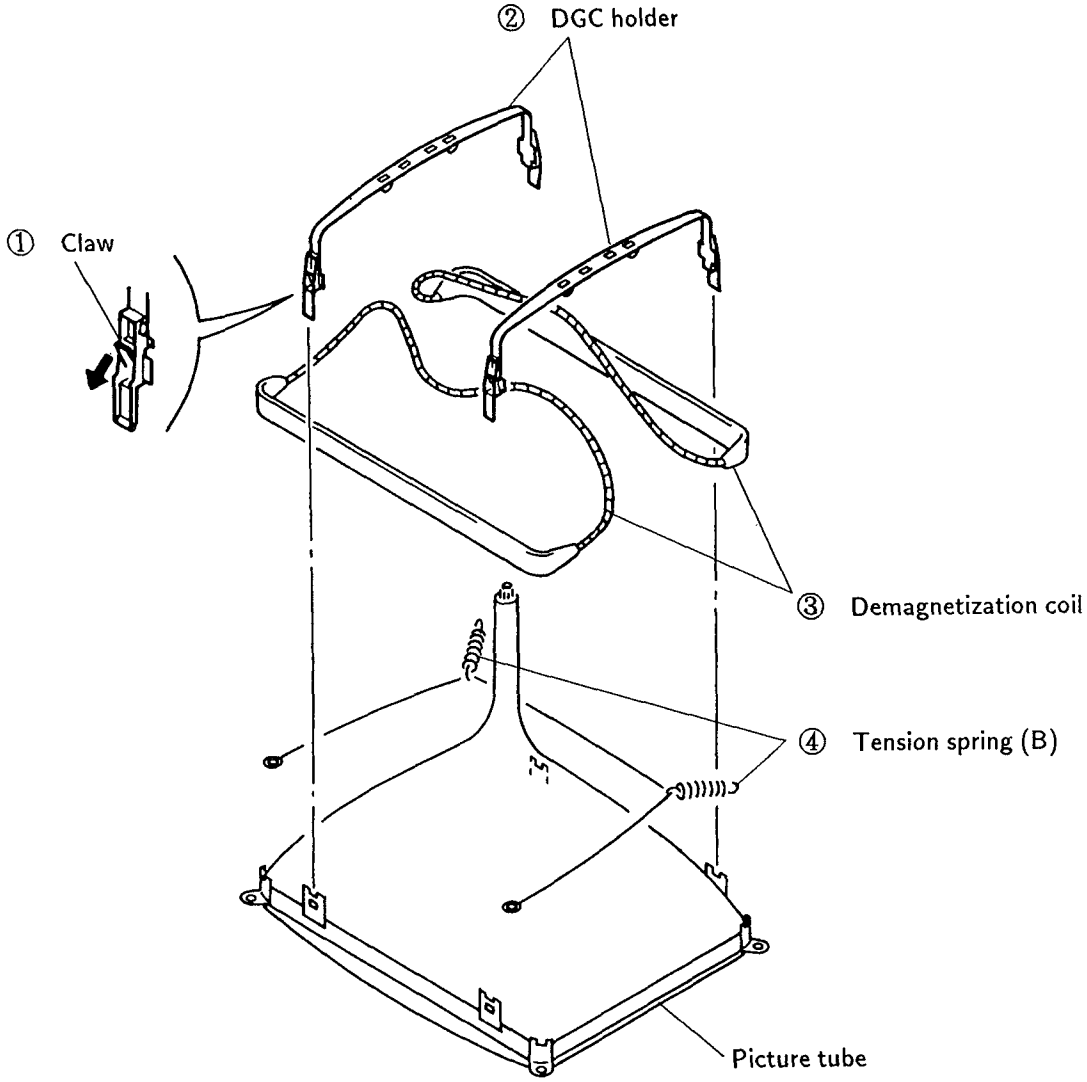
2-8. CONNECTOR CABLE



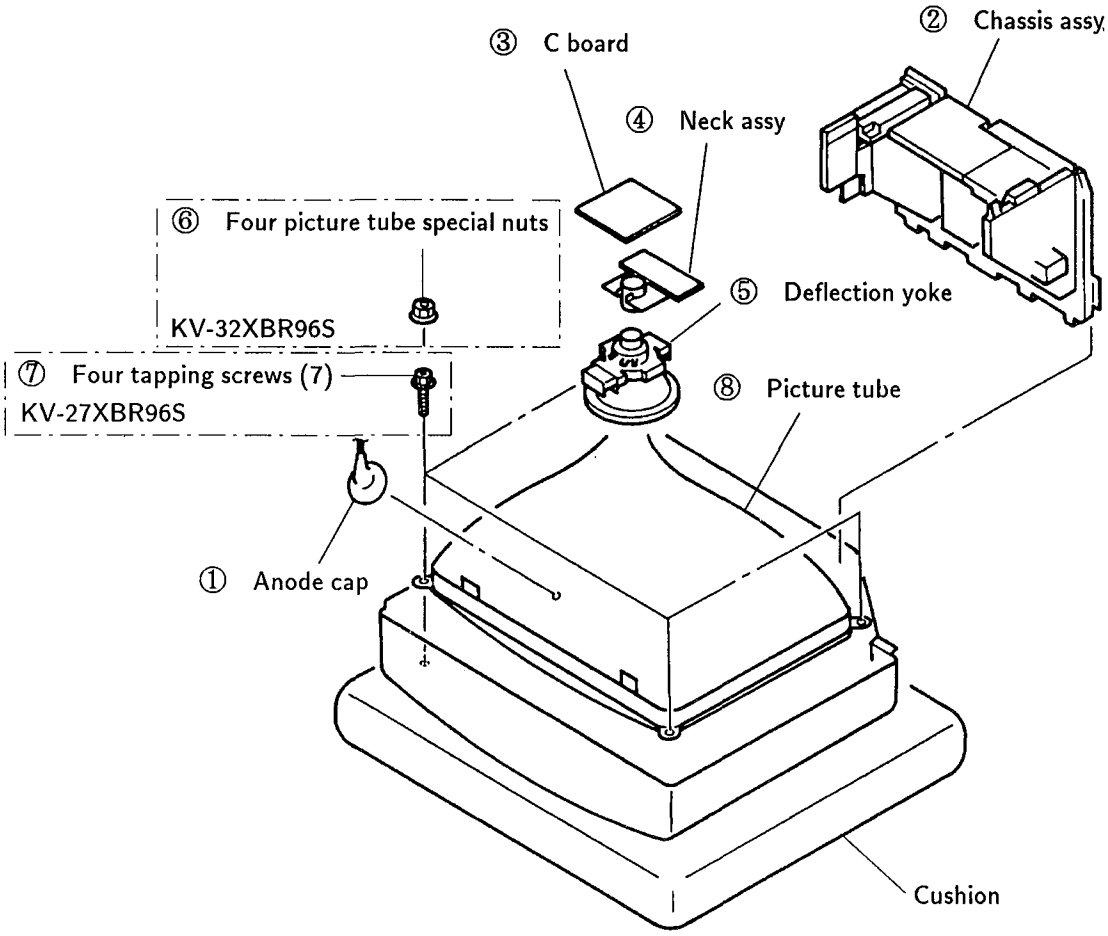
2-9. SERVICE POSITION



2-10. DEMAGNETIZATION COIL REMOVAL



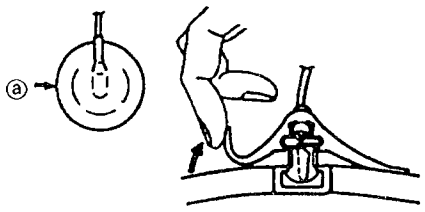
2-11. PICTURE TUBE REMOVAL



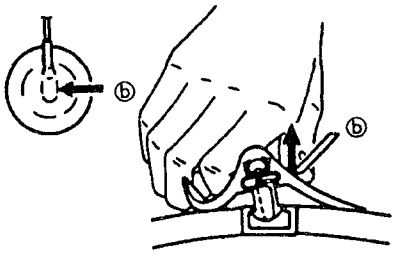
• REMOVAL OF ANODE-CAP

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

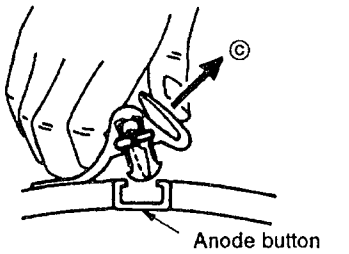
• REMOVING PROCEDURES



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 ⓑ.



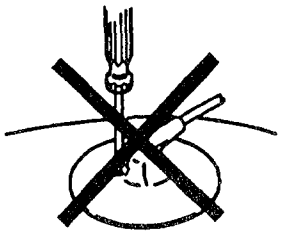
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

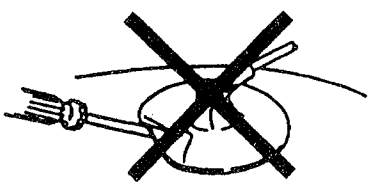
• HOW TO HANDLE AN ANODE-CAP

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

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

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

PICTURE control . . . . . RESET

BRIGHTNESS control . . . . . center

Preparations :

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

3-1. BEAM LANDING

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

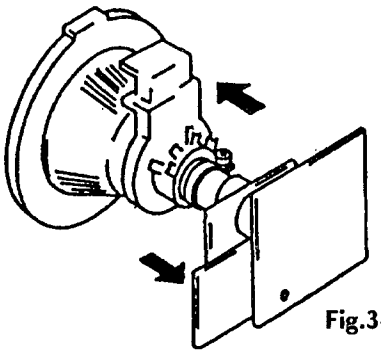


Fig.3-1

Perform the adjustments in order as follows :

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

Note : Test Equipment Required.

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

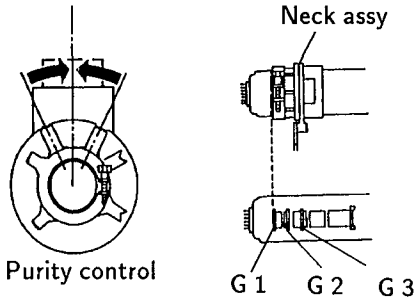


Fig.3-2

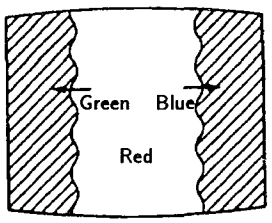


Fig.3-3

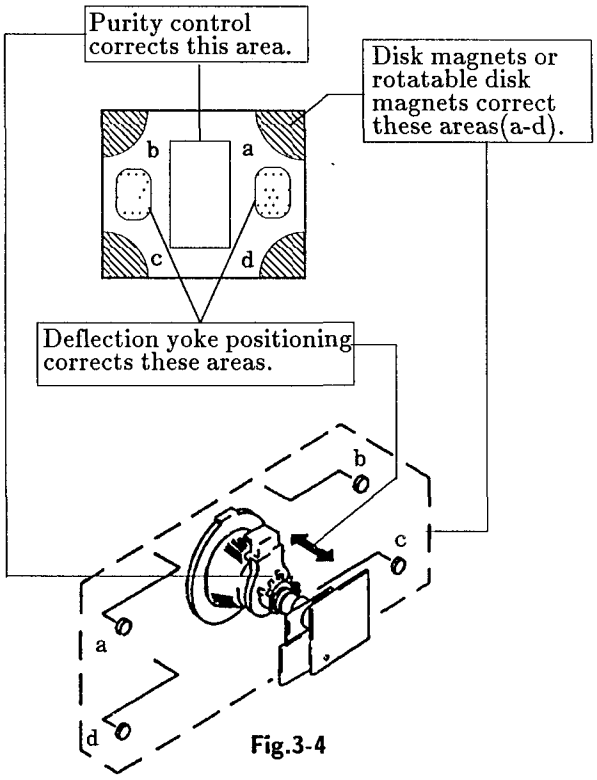


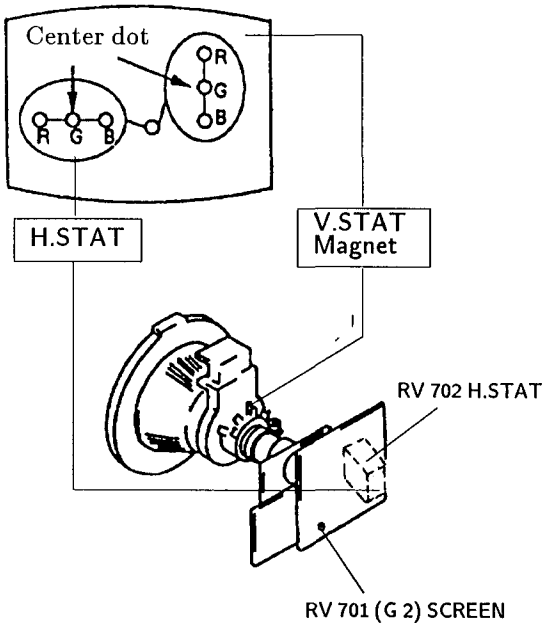
Fig.3-4

3-2. CONVERGENCE

Preparation :

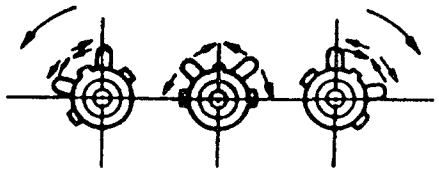
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

(1) **Horizontal and Vertical Static Convergence**

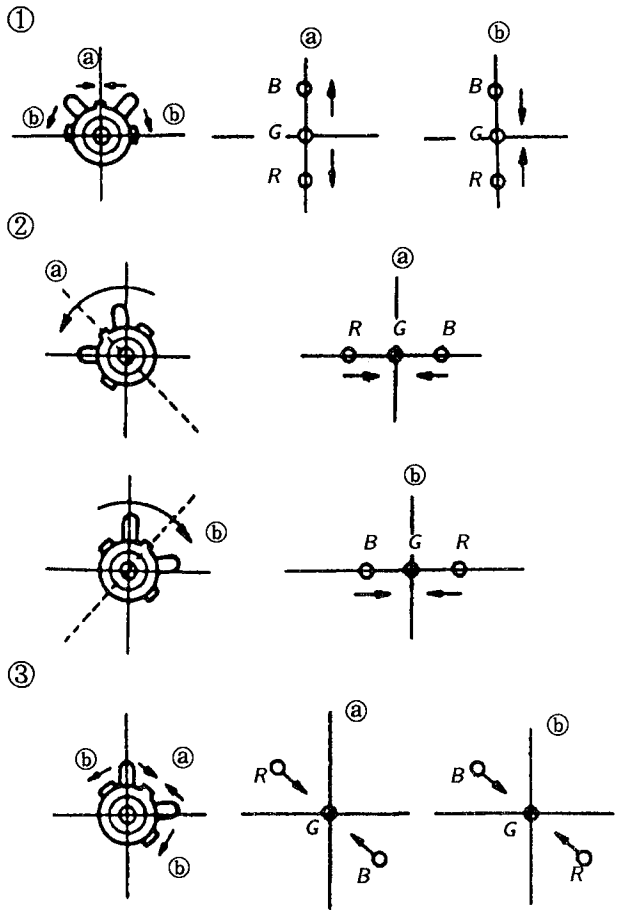


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

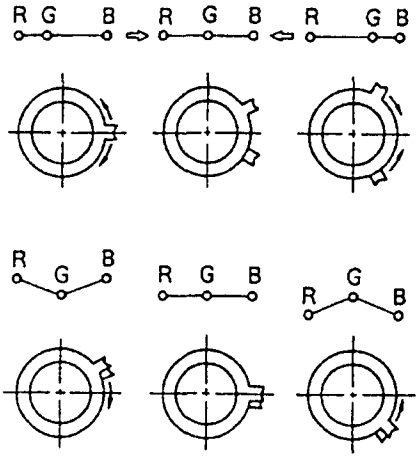
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



4. If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



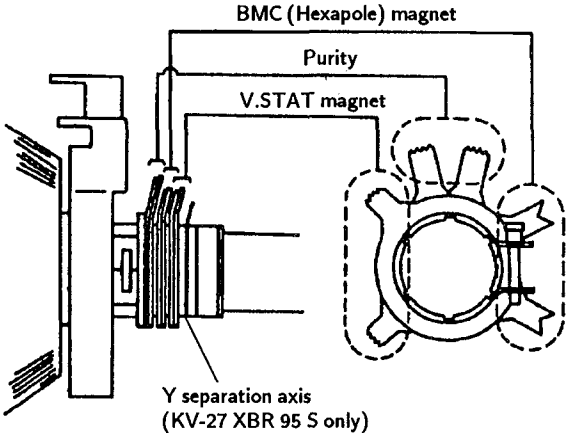
- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

(2) **Dynamic Convergence Adjustment**

Preparations :

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

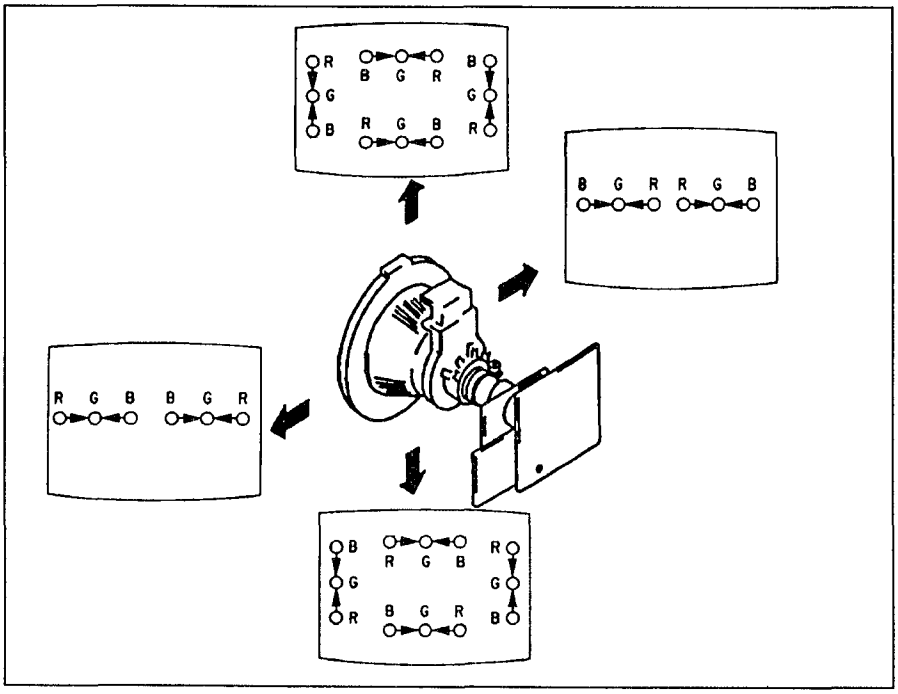
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.



• Y separation axis correction magnet adjustment

1. Receive the cross-hatch signal, and adjust [PIX] to "MIN" and [BRT] to "standard".
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.

3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the defelection yoke spacer.



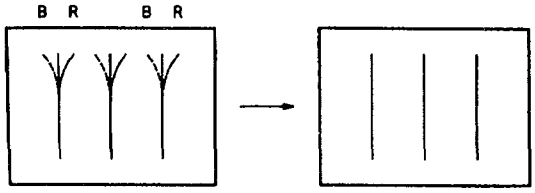
(3) Dynamic Convergence Circuit Adjustment

- Set to Service Mode.
- Input a cross-hatch signal.
- Press [1] and [4] serect an item of adjustments.
- Adjust [3] and [6] to the best picture.

ITEM	REFERENCE DATA	NAME REGISTER	
UYBO	39	VP	U. Y. BOW
LYBO	39	VP	L. Y. BOW
HAMP	26	VP	H. AMP
HTILT	36	VP	H. TILT
UCBO	20	VP	U. C. BOW
UTIL	44	VP	U. TILT
LCBO	31	VP	L. C. BOW
LTIL	63	VP	L. TILT
DCSH	19	VP	DC. SHIFT

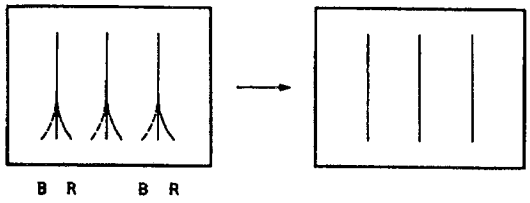
U. YBOW

Select UYBO with [1] and [4]



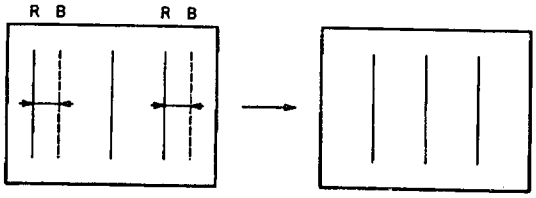
L. YBOW

Select LYBO with [1] and [4]



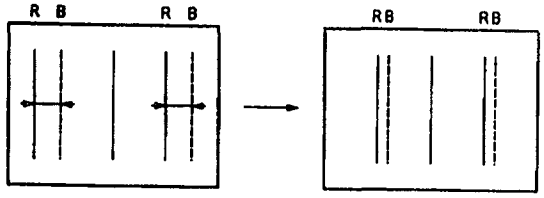
H. AMP

Select HAMP with [1] and [4]



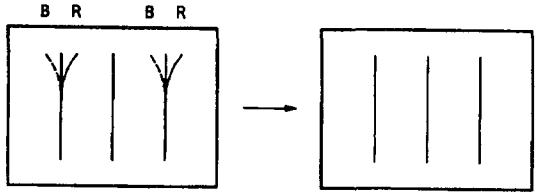
H. TILT

Select HTILT with [1] and [4]



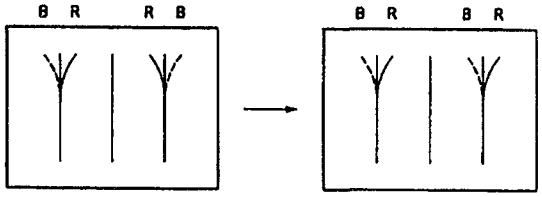
U. CBOW

Select UCBO with [1] and [4]



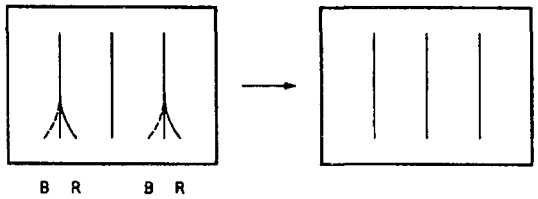
U. TILT

Select UTIL with [1] and [4]



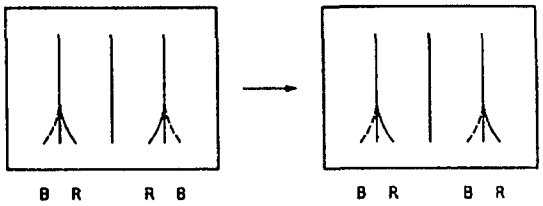
L. CBOW

Select LCBO with [1] and [4]

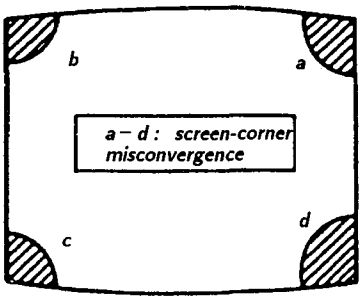


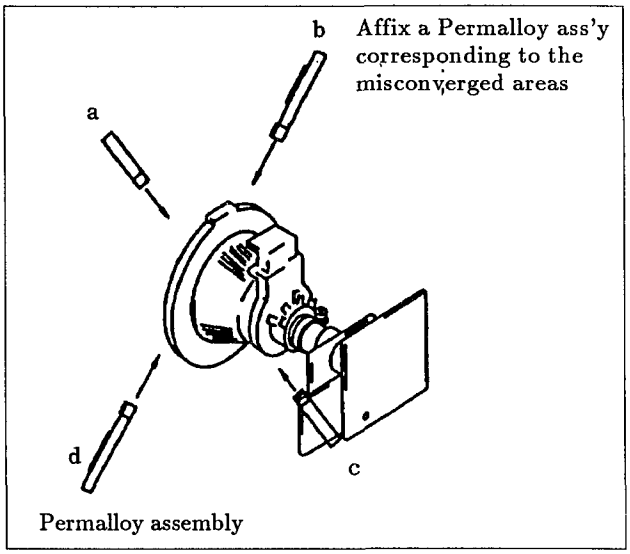
L. TILT

Select L. TIL with [1] and [4]



(4) Screen-corner Convergence

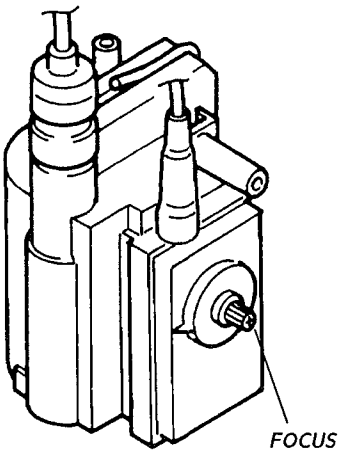




Permalloy assembly

3-3. FOCUS ADJUSTMENT

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



FLYBACK TRANSFORMER (T 501)

a. AN ITEM OF ADJUSTMENT

ITEM	REFERENCE DATA	NAME REGISTER	
GAMP	19	VP	GREEN AMP.
BAMP	9	VP	BLUE AMP.
GCUT	8	VP	GREEN CUT OFF.
BCUT	6	VP	BLUE CUT OFF
SBRT	40	VP	BRIGHT

b. METHOD OF CANCELLATION FROM SERVICE MODE

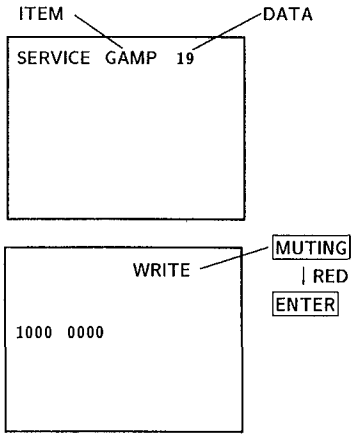
Set the standby condition (Press POWER button on the commander) in the next place, press POWER button again, hereupon it becomes TV mode.

c. METHOD OF WRITE FOR MEMORY

1) Set to Service Mode.
2) Press 1 (UP) and 4 (DOWN), select an item of adjustments.
3) Press MUTING button indicate WRITE (RED) on screen.
4) Press ENTER button to write for memory.

d. 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.



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

1. G 2 (SCREEN) ADJUSTMENT(RV 701)

1) Set the PICTURE and BRIGHTNESS to normal.
2) Confirm G 1 voltage is within 30.0±5 V.
3) Apply DC voltage of 180 V to the cathodes of R,G and B from DC stabilized power source.
4) While watching the picture, adjust the G2 control (RV 701) to the just the retrace line disappears.

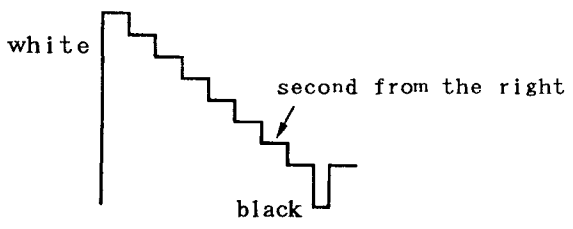
(Using the Remote Commander)

2. WHITE BALANCE ADJUSTMENTS

1) Set to service mode.
2) Press STANDARD to normal and if necessaries "TRINITONE" set to "LOW" by + or -.
3) Input an entire white signal.
4) Set the PICTURE to minimum.
5) Select S BRT with 1 and 4, and then set the level to minimum with 3 and 6.
6) Select G CUT and B CUT with 1 and 4. And adjust the level with 3 and 6 for the best white balance.
7) Set the PICTURE to maximum.
8) Select G AMP and B AMP with 1 and 4, and adjust the level with 3 and 6 for the best white balance.
9) Write into the memory by pressing MUTING → then ENTER.

3. SUB BRIGHT ADJUSTMENT

1) Set to service mode.
2) Input a staircase signal of black and white from the pattern generator.
3) BRIGHTNESS ··· RESET
   PICTURE ····· minimum
4) Select SBRT with 1 and 4 , and adjust SUB BRIGHT level with 3 and 6 so that the stripe second from the right is dimly lit.



SECTION 4
SAFETY RELATED ADJUSTMENTS

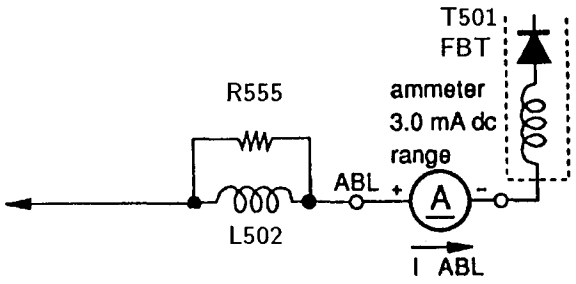
A BOARD

⊠ R565 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).
IC502,Q509,Q510,R565,R567,R568,R569

①

1. Preparation before confirmation
   1) Remove R651 on the G board and connect a variable resistor (RV1 : about 10kΩ) between pin ① of IC651 and B+ line.
   2) Supply 120±2.0V AC to with variable auto-transformer.
2. Hold-down operation confirmation
   1) Turn the POWER switch ON, and input an entirely white signals and adjust ABL current to 1910±50μA (27 in.) 1910±50μA (32 in.) with PICTURE and BRIGHT etc controls.
   2) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 147.0V DC (27 in.) 147.0V DC (32 in.) whereby the raster disappears during operation of hold-down circuit.
      NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
   3) Turn the POWER switch ON, and input a dot signals and adjust ABL current to 110±30μA (27 in.) 110±30μA (32 in.) with PICTURE and BRIGHT etc controls.
   4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is lower than 148.5V DC (27 in.) 148.5V DC (32 in.) whereby the raster disappears during operation 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 R565 (a component marked with ⊠).



A BOARD

⊠ R566 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).
IC502,IC651,Q509,Q510,D502,C531,R554,R566,R567,R568,R569,R651,R1506,T501

②

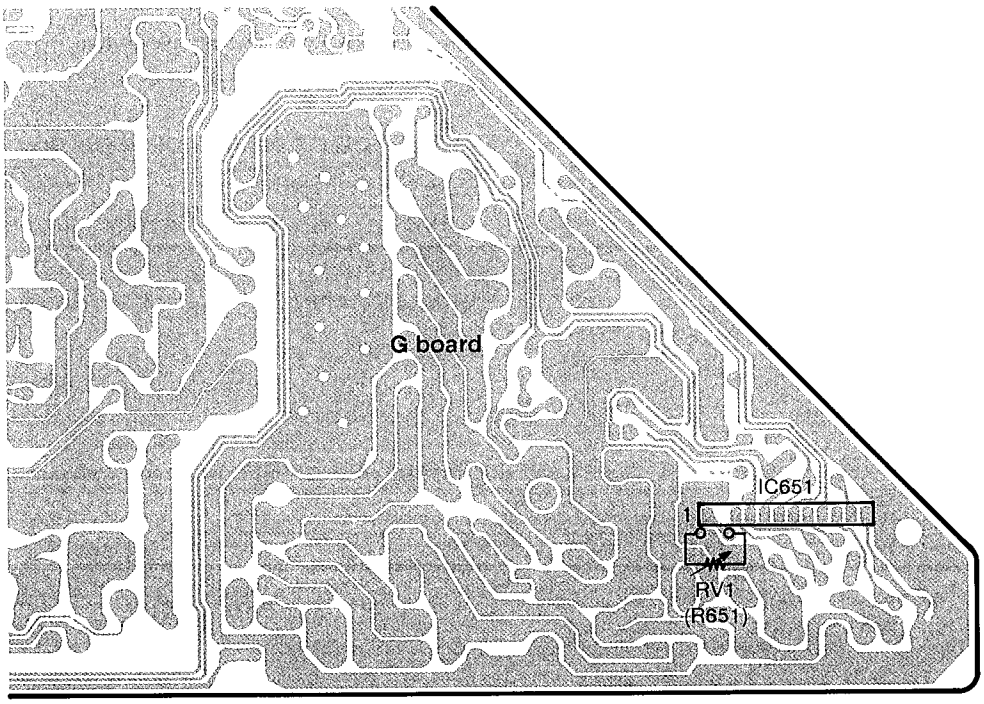
1. Preparation before confirmation
   1) Turn the POWER switch ON, and input an entirely white signals and set the PICTURE and BRIGHT controls to maximum.
   2) Confirm that voltage of the check terminal of pin② of A-0 connector is more than 127.0V DC (27 in.) 127.0V DC (32 in.) when the set is operating normally with 120.0±2.0V AC supply.
2. Hold-down operation confirmation
   1) Turn the POWER switch ON, and input an entirely white signals and set the PICTURE and BRIGHT controls to maximum.
   2) Apply DC voltage of over 130±2.0V DC gradually to the check terminal of pin ② of A-0 connector via 1SS119 from the DC stabilized power source.
      Confirm that the minimum voltage is lower than 149.0V DC (27 in.) 149.0V DC (32 in.) whereby the raster disappears during operation 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 R566 CARBON 1/4W (a component marked with ⊠).

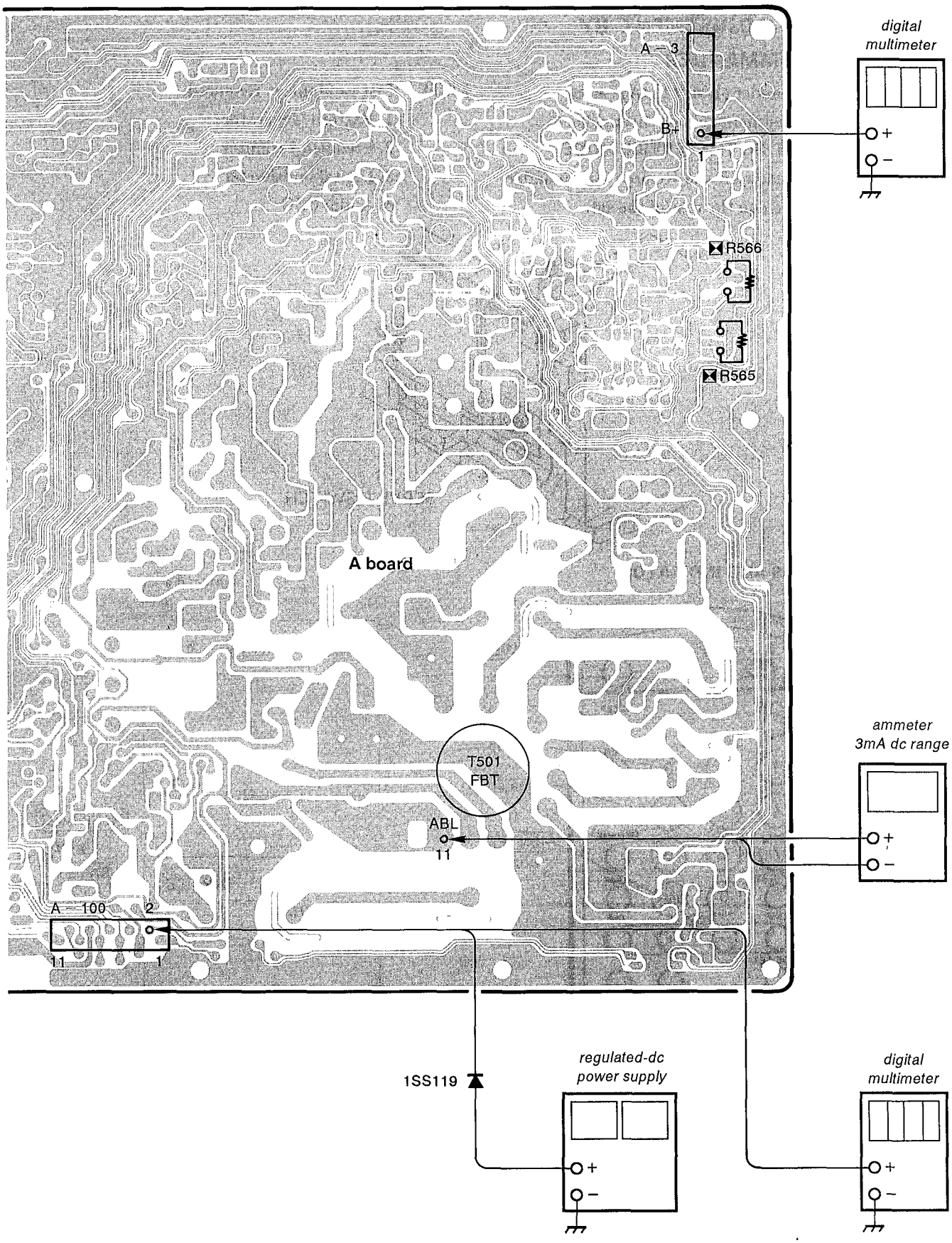
G BOARD

B+ VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC651 and R651.

1) Supply 130±3%V AC to with variable autotransformer.
2) Input an entirely monoscope signal.
3) Set the PICTURE control and the BRIGHT controls in to initial reset.
4) Confirm the voltage of A BOARD ① pin A-3 connecter is less than 136.5V DC.
5) If step 4) is not satisfied, replace IC651 and R651 repeat above steps.




digital
multimeter
A
3
B+
1
+
−
R566
R565
A board
T501
FBT
ABL
11
ammeter
3mA dc range
A
100
2
11
1
1SS119
regulated-dc
power supply
digital
multimeter

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

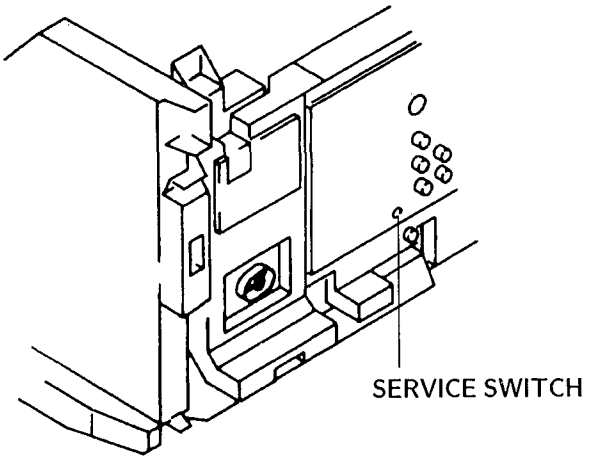
Use of Remote Commander (RM-Y114A) can be performed circuit adjustments about this model.

1. METHOD OF SETTING THE SERVICE MODE

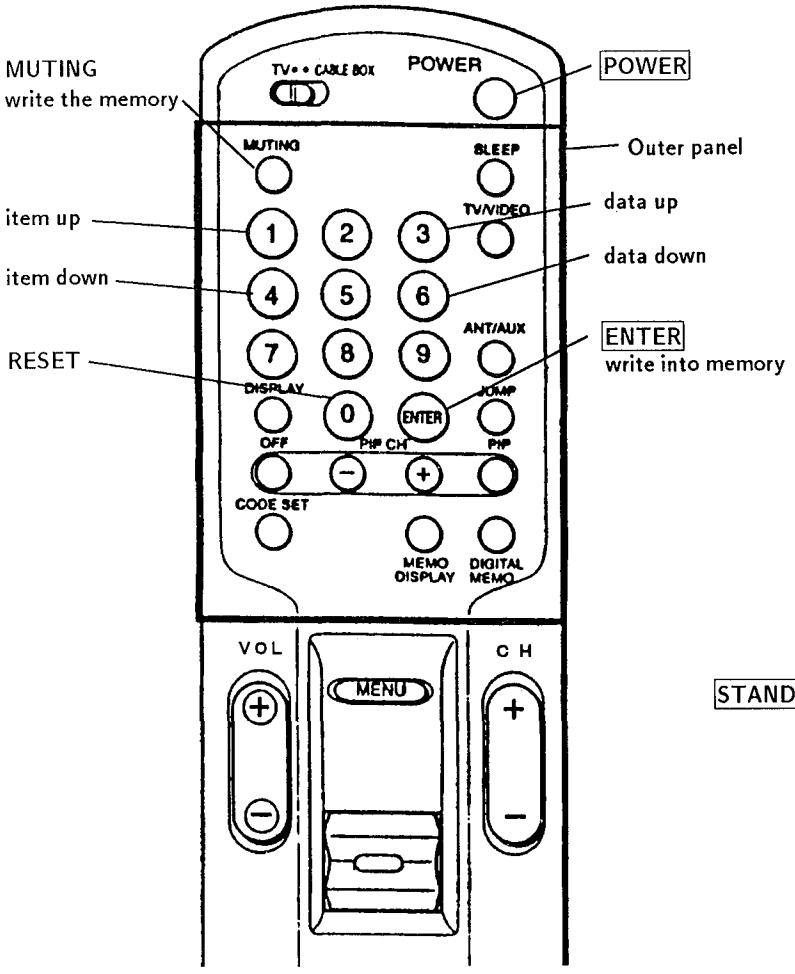
1) Press [POWER] button on the Remote Commander while pressing switch on the rear of the set.

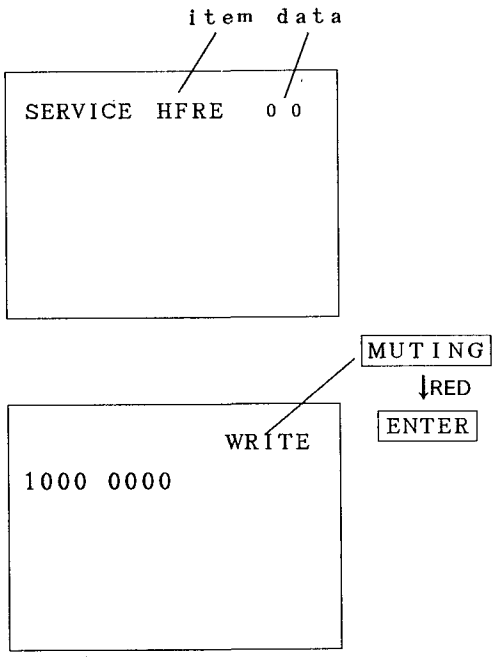
NOTE : Test Equipment Required.

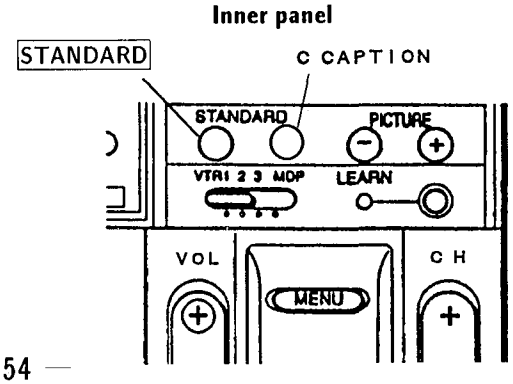
1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC



2. ADJUST BUTTONS AND INDICATOR







3. AN ITEM OF ADJUSTMENT

ITEM	REFERENCE DATA	NAME REGISTER	
AFC	1	VP	AFC 1.0
HFRE	93	VP	H. FREQUENCE
VFRE	15	VP	V. FREQUENCE
VPOS	19	VP	V. SHIFT
VSIZ	32	VP	V. SIZE
VLIN	2	VP	V. LINEARITY
VSCO	3	VP	VS. CORRECTION
HPOS	9	VP	H. PHASE
HSIZ	25	VP	H. SIZE
PAMP	17	VP	PIN. AMP.
CPIN	4	VP	CORNER PIN
PPHA	8	VP	PIN. PHASE
VCOM	2	VP	V. COMP
GAMP	19	VP	GREEN AMP.
BAMP	9	VP	BLUE AMP.
GCUT	8	VP	GREEN CUT OFF.
BCUT	6	VP	BLUE CUT OFF
SPIX	40	VP	PICTURE
SHUE	29	VP	HUE
SCOL	30	VP	COLOR
SBRT	40	VP	BRIGHT
RGBP	28	VP	RGB PICTURE
SHAP	7		SHARPNESS
DISP	35		OUTPUT
VSMO	0	VP	VSMO
REF	2	VP	REF 1.0
ROFF	1	VP	OFF NR
GOFF	1	VP	OFF NG
BOFF	1	VP	OFF NB
ABLM	0	VP	ABLM
DRGB	1	VP	D RGB
YBOW	31	DE	Y BOW
VANG	35	DE	V. ANGLE
HTAP	31	DE	H. TRAP
TEST	0	AP	T
MPX	7	AP	ATT
FILO	31	AP	I 1
DEEM	7	AP	I 2
STEV	31	AP	OSC 1
SAPV	31	AP	OSC 2
PILO	7	AP	PILOT
SEP	31	AP	WIDE BAND
VD	7	AP	SPECTRAL
LVOL	0	AP	VOLUME-L
RVOL	0	AP	VOLUME-R
BASS	7	AP	BASS
TRE	7	AP	TREBLE
UYBO	39	DC	U.Y. BOW
LYBO	39	DC	L.Y. BOW
HAMP	26	DC	H.AMP
HTIL	36	DC	H TILT
UCBO	20	DC	U.C. BOW
UTIL	44	DC	U.TILT
LCBO	31	DC	L.C. BOW
LTIL	63	DC	L.TILT
DCSH	19	DC	DC. SHIFT
PHPO	34	PI	READ DELAY H
PVPO	8	PI	READ DELAY V
PLEV	14	PI	PICTURE LEVEL
PFCO	11	PI	FRAME COLOR
NRLE	30		NR LEVEL
DSPP	31		

Nothing change for KV-27XBR96S/32XBR96S

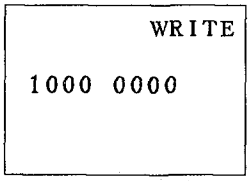
4. METHOD OF CANCELLATION FROM SERVICE MODE

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

5. METHOD OF WRITE FOR MEMORY

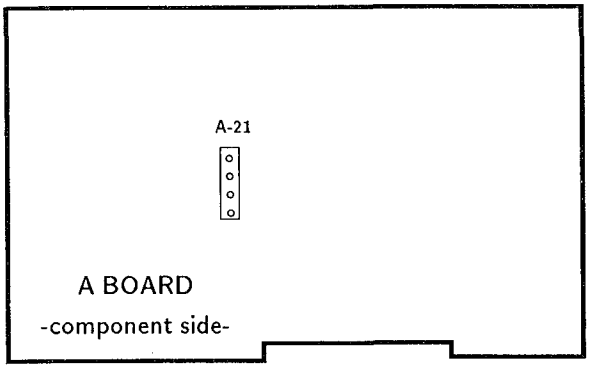
1) Set to Service Mode.
2) Press 1 (UP) and 4 (DOWN), select an item of adjustments.
3) Press MUTING button indicate WRITE (RED) on screen.
4) Press ENTER button to write for memory.

6. 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.

5-2. A BOARD ADJUSTMENTS



RF AGC ADJUSTMENT(IF BLOCK VR)

1) Input a color-bar signal.
2) Adjust AGC VR of TU 101 so that snow noise and cross-modulation disappear from the picture.
3) Confirm them at every channel.

H.FREQUENCY ADJUSTMENT (HFRE)

1) Set to Service Mode.
2) Input a color-bar signal.
3) Connect a frequency counter to base of Q 507.
4) Call the item of AFC, set to 3 level (free run).
5) Select HFRE with 1 and 4.
6) Adjust 3 and 6 to the 15735± 60 Hz level.
7) Call the item of AFC again, adjust the level" 01 ".
8) Write into the memory by pressing MUTING → then ENTER.

V.FREQUENCY ADJUSTMENT (VFRE)

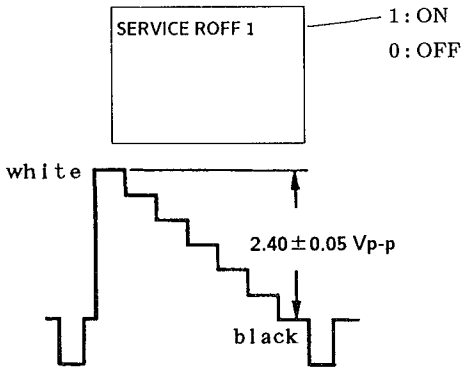
1) Set the Service Mode.
2) Input an off-air signal (VIDEO IN → no signal).
3) Connect the frequency counter across connector VDY − ⊕ of DY-1 connector and ground.
4) Select VFRE with 1 and 4.
5) Adjust 3 and 6 to the 56 ±0.5 Hz.
6) Write the memory by pressing MUTING → then ENTER .

SUB CONTRAST ADJUSTMENT (SPIX)

1) Set to Service Mode.
2) Input a color-bar signal. (75 IRE)
3) Set the conditions as follows.

PICTURE	·····	MAX
COLOR	·····	MIN
BRIGHT	·····	MIN
R OFF	·····	ON
G OFF	·····	OFF
B OFF	·····	OFF

Press MENU and select VIDEO MENU → - (L) (It becomes minimum).
Select 3 (ON) and 6 (OFF) with 1 and 4.

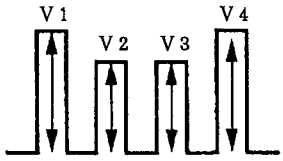


4) Connect an oscilloscope to TP 49 B of C board and ground.
5) Adjust 3 and 6 to the 2.40± 0.05 Vp-p level by select-ing SPIX with 1 and 4.
6) Write the memory by pressing MUTING → then ENTER .
7) Return the following back to normal after adjustment.

G OFF	·····	ON
B OFF	·····	ON
COLOR	·····	CENTER
BRIGHT	·····	CENTER
PICTURE	·····	80%

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

1) Input a color-bar signal.
2) Press STANDARD to normal.
3) Set to Service Mode.
4) Connect an oscilloscope to TR 49 R of C board and ground.
5) Adjust 3 and 4 to the V1=V4 and V2=V3 by select to SHUE and SCOL with 1 and 4.

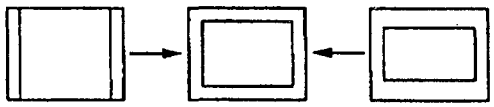


6) Write into the memory by pressing MUTING →then ENTER .

V.SIZE ADJUSTMENT (VSIZ)

1) Set to Service Mode.
2) Press STANDARD to normal.
3) Input a cross-hatch signal.
4) Adjust 3 and 6 to the best vertical size by selecting VSIZ with 1 and 4 .
5) Write into the memory by pressing MUTING →then ENTER .

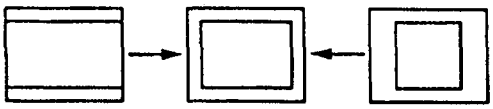
V SIZE (VSIZ)



H.SIZE ADJUSTMENT (HSIZ)

1) Input a cross-hatch signal.
2) Press STANDARD to normal.
3) Set to Service Mode.
4) Adjust 3 and 6 to best horizontal size by selecting HSIZ with 1 and 4.
5) Write into the memory by pressing MUTING →then ENTER .

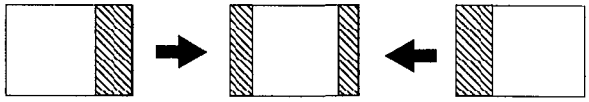
H SIZE (HSIZ)



H.CENTER ADJUSTMENT (H POS)

Note: Perform this adjustment after H.FREQUENCY ADJUSTMENT (HFRE) .

1) Input a color bar signal.
2) Set the Service mode.
3) Select HSIZ with 1 and 4 .
4) Press 6 so that the Horizontal size set to min.
5) Adjust A-21 conector position so that both-size branking width of the Raster should be same on the Scrnne.
6) Unplug Set then plug in Set.
7) Set to Service mode.
8) Select HPOS with 1 and 4 .
9) Adjust 3 and 6 so that the color bars center should be set to the CRT Screen center position.
10) White into the memory by the pressing MUTING → then ENTER .

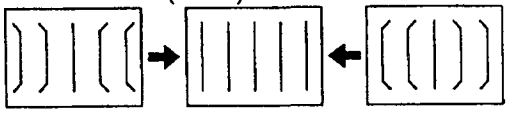


PIN AMP (PAMP) , CORNER PIN (CPIN) PIN PHASE (PPHA), H TRAPIZOID (HTRA) V LINEARITY (VLIN), V ANGLE (VANG), VS CORRECTION (VSCO), Y BOW (YBOW), V SHIFT (VPOS), AND V COMP (VCOM) ADJUSTMENTS

1) Input a cross-hatch signal.
2) Press STANDARD to normal.
3) Set to Service Mode.
4) Select PAMP, CPIN, PPHA, H TRA, VPOS, VCOM, LVIN, VANG, VSCO and YBOW with 1 and 4.
5) Adjust 3 and 6 to the best picture.
6) Write the memory by MUTING → ENTER.

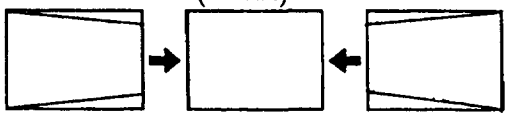
PIN AMP (PAMP)

CORNER PIN (CPIN)

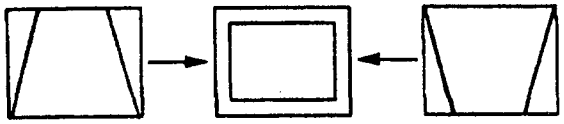


PIN PHASE (PPHA)

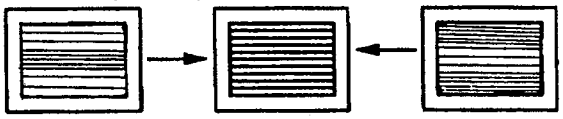
H TRAPIZOIDO (HTRA)



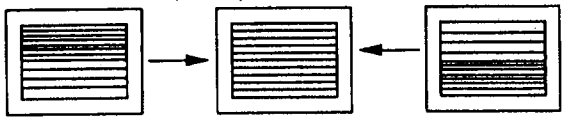
V-SHIFT (VPOS)



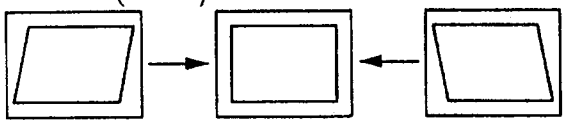
V COMP (VCOM)



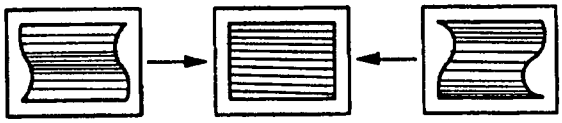
V LINEARITY (VLIN)



V ANGLE (VANG)



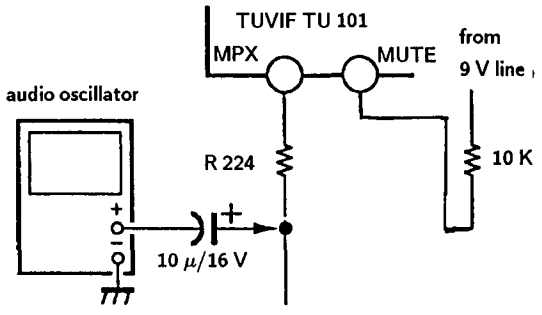
VS CORRECTION (VSCO)



Y BOW (Y BOW)

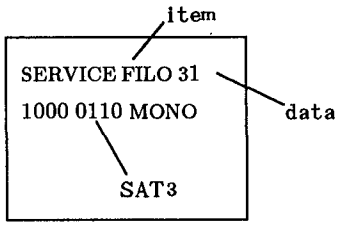
FILTER ADJUSTMENT (MPX, FILO)

1) Set to Service Mode.
2) Select to TEST with 1 and 4, set the data to "1". Then select MPX and change data to "08" .
3) Connect an audio oscillator to R224 using a capacitor (10μ F/16V), set frequency to 62.936 kHz±0.1 kHz.
   And then, through the 10kΩ resistor, feed 9.0V into the mute of TUVIF TU 101.



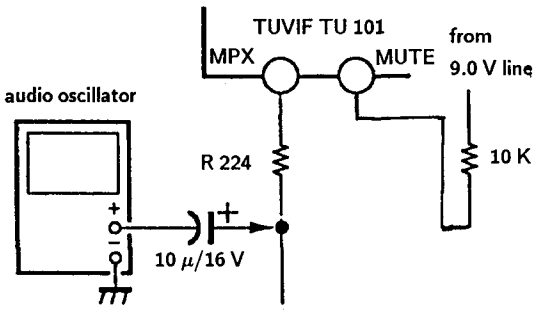
V 4 fh : SINE-WAVE 62.936 KHz±0.1 KHz
LEVEL 3.0 Vp-p

4) Make the data "00" by selecting FILO with 1 and 4 And then, send up the data gradually by pressing 6 . Set the data to D1 before SAT3 changing to 1 from 0.
5) Send up the data gradually. Set data D2 when SAT3 changes 0 from 1.
6) Adjust the data of FILO to $\frac{D1+D2}{2}$.
7) Write into the memory by pressing MUTING → then ENTER .



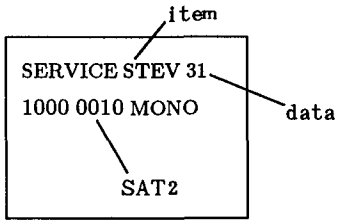
ST VCO ADJUSTMENT (MPX, STEV)

1) Set to Service Mode.
2) Select TEST with 1 and 4 , set the data to "1". And then press MTS to MONO.
3) Select MPX, set the data "8" .
4) Connect an audio oscillator to R 224 using electrolytic capacitor (10μ F/16V) and appply the frequency Vst. Then, apply DC voltage to mute of TUVIF TU 101 using 10kΩ connect to 9.0 V line.



Vfh : SINE-WAVE 15.734 KHz±0.1 KHz
LEVEL 0.28 Vp-p

5) Select STEV with 1 and 4, set the data to "00" with 6. And then, send up the data gradually. Set the data to D1 before SAT2 changes from 0 to 1.
6) Send up data gradually, set the data to D2 when SAT2 changes 1 from 0.
7) Adjust the data of STEV to
8) Write into the memory by pressing MUTING → then ENTER .



MPX IN LEVEL ADJUSTMENT (MPX)

1) Set to Service Mode.
2) Select TEST with 1 and 4, set the data to "0" with 6. And then press MTS to MONO.
3) Select MPX with 1 and 4, set the data to "08" with 3 and 6.
4) Write into the memory by pressing MUTING → then ENTER .

PILOT CANCEL ADJUSTMENT (PILO)

1) Set to the Service Mode.
2) Select PILO with 1 and 4, set the data to "08" with 3 and 6.
3) Write into the memory by pressing MUTING → then ENTER .

SAP VCO f_0 ADJUSTMENT (SAPV)

1) Set to Service Mode.
2) Input a stereo broadcast signal with SAP.
3) Select TEST with 1 and 4, set the data to "0" . And then, press MTS to MAIN.
4) Connect a digital multimeter to TP-1(DBX). This voltage reading will equal V 1.
5) Press MTS to SAP and this voltage will equal V 2.
6) Select SAPV with 1 and 4, adjust 3 and 6 so that V 2=V 1±0.03 VDC.
7) Write the memory by MUTING → ENTER .

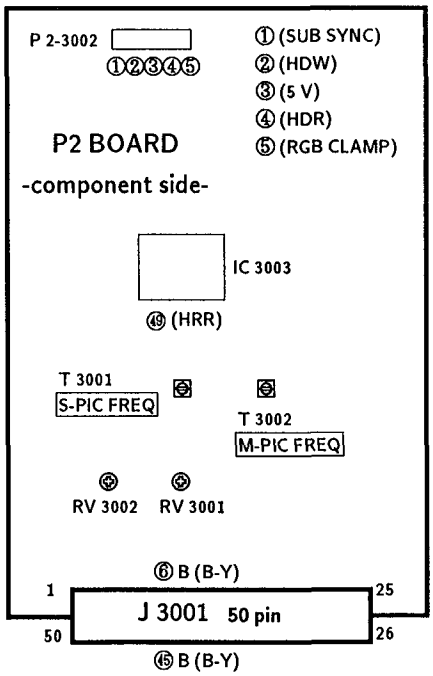
SEPARATION ADJUSTMENT (SEP)

1) Set to Service Mode.
2) Press MTS to MAIN and receive a monoral broad -cast signal.

In the next step, receive a stereo broadcast signal.

3) Select SEP and VD with 1 and 4, adjust 3 and 6 so that a clear stereo sound is effected.

5-3. P2 BOARD ADJUSTMENTS



MAIN-PICTURE FREQUENCY (T 3002)

1) Set PIP mode.
2) Connect a frequency counten to Pin ⑪ (HDW) of J3001.
3) Connect a frequency counten to Pin ㊾ or ㊿ (HRR) of IC3003 or Pin ⑤ (RGB CLAMP) of P2-3002.
4) Short the circuit between Pin ④ (HDR) of P2-3002 and Pin ③ (5V) of P2-3002.
5) Turn T3002 CLK (P) for the following frequency at Pin ㊾ or ㊿ (HRR) of IC3003 or at Pin ⑤ (RGB CLAMP) of P2-3002.

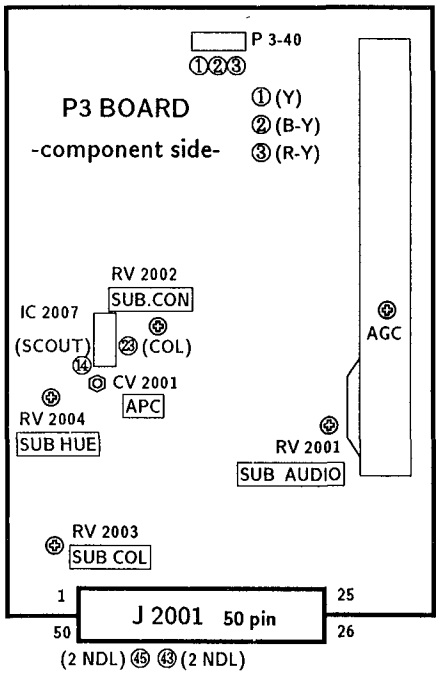
15.734 kHz ± 10 Hz

SUB-PICTURE FREQUENCY (T 3001)

1) Set PIP mode.
2) Connect a frequency counten to Pin ⑪ (HDW) of J 3001.
3) Connect a frequency counten to Pin ㊾ or ㊿ (HRR) of IC 3003 or Pin ⑤ (RGB CLAMP) of P 2-3002.
4) Short the circuit between Pin ① (SUB SYNC) of P 2-3002 and Pin ③ (5 V) of P 2-3002.
5) Turn T 3001 CLK (C) for the following frequency at Pin ② (HDW) of P 2-3002.

15.734 kHz ± 10 Hz

5-4. P3 BOARD ADJUSTMENTS



RF AGC ADJUSTMENT(IF BLOCK VR)

1) Input a color-bar signal.
2) Set to PICTURE IN PICTURE mode.
3) Adjust AGC VR of TU 2001 so that snow noise and cross-modulation disappear from the picture.
4) Confirm them at every channel.

SUB PICTURE SOUND VOLUME LEVEL (SUB AUDIO) ADJUSTMENT(RV2001)

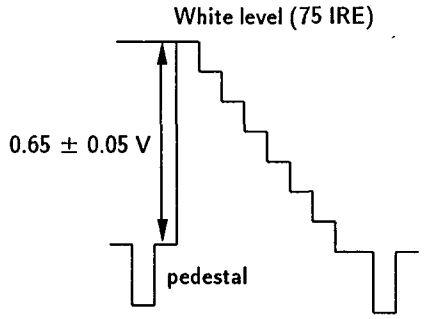
1) Receine an audio signal of 400 Hz. (100% mod.)
2) Adjust RV 2001 for the following level at Pin ㊸ (2 NDR) or Pin ㊺ (2 NDL) of J 2001.

500 mVrms ± 2 dB

SUB CONT ADJUSTMENT (RV 2002)

1) Obtain the color bar signal on the sub-screen.
2) Obsene at Pin ① (Y OUT) of P 3-42 on an oscilloscope.
   Odjust RV 2002 for the following lenel between the white level and pedestal one.

0.65 ± 0.05 Vp-p



SUB COLOR ADJUSTMENT(RV 2003)

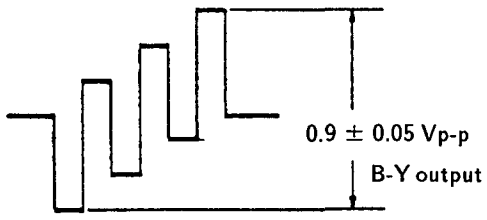
1) Obtain the color bar signal on the sub-screen in the mode of PIP size 1/4.
2) Reset color.
3) Adjust RV 2003 for the following level, obseruing an oscilloscope connectod to Pin ② (B-Y) of P3-40 (Fig. 1)

0.9 ± 0.05 Vp-p (B-Y)

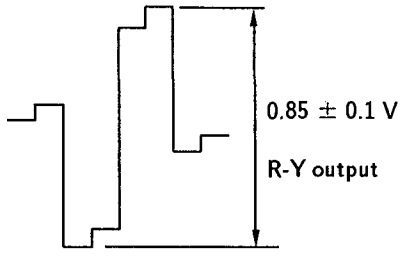
4) Adjust RV 2003 for the following level, obseruing an oscilloscope connectod to Pin ③ (R-Y) of P3-40 (Fig. 2)

0.85 ± 0.1 Vp-p (R-Y)

5) Adjust traxking between sub color and sub hue.



(Fig. 1)



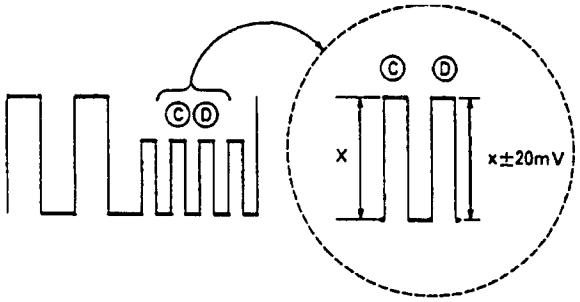
(Fig. 2)

5-5. VC BOARD ADJUSTMENT

SUB HUE ADJUSTMENT(RV 2004)

1) Obtain the color bar signal on the sub-screen in the mode of PIP size 1/4.
2) Reset hue.
3) Obserne the signal at Pin ⑥ or Pin ㊺ of J 3001 on P 2 board on an oscilloscope and make adjustment to obtain the following level.

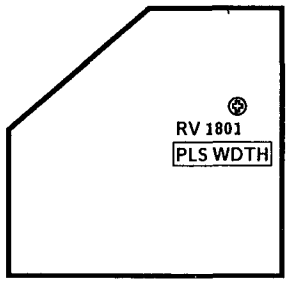
D : X ± 20 mV



APC ADJUSTMENT(CV 2001)

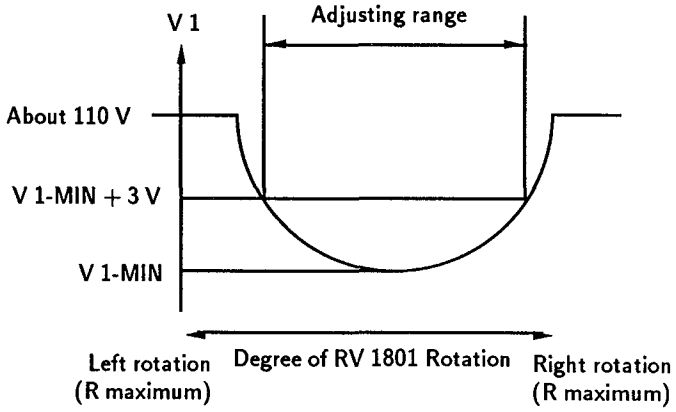
Connect Pin ㉓ (COL) of IC 2007 fo ground and connect a frequency cound fo Pin ⑭ (SCOUT) fo obtain the following level.

3579545 ± 40 Hz



DRIVE PULSE PHASE ADJUSTMENT(RV 1801)

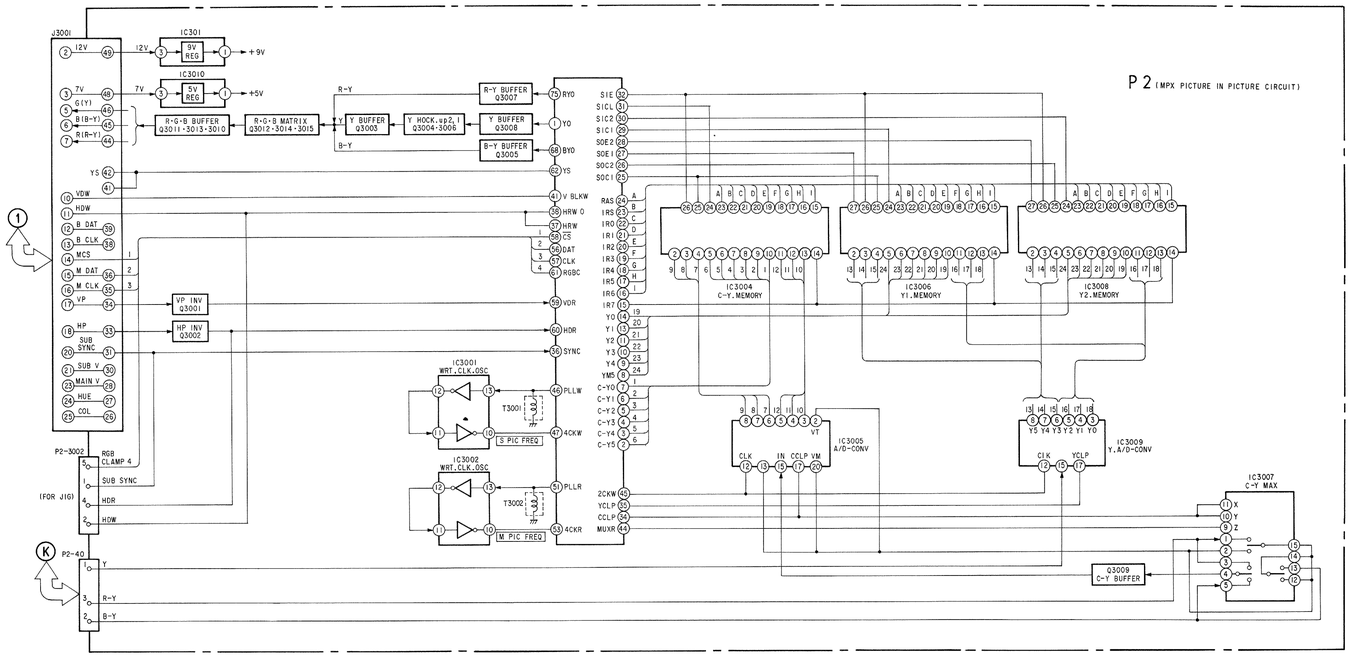
1) While measuring the voltage V 1 at both edges of C 1809, rotate RV 1801 so that it becomes minimum. The adjusting range is from (the voltage at which V 1 becomes minimum) V 1 MIN to 3 V, which means, adjust to between V 1 MIN to V 1 MIN + 3 V.



MEMO

SECTION 6
DIAGRAMS

6-1.BLOCK DIAGRAM (1)



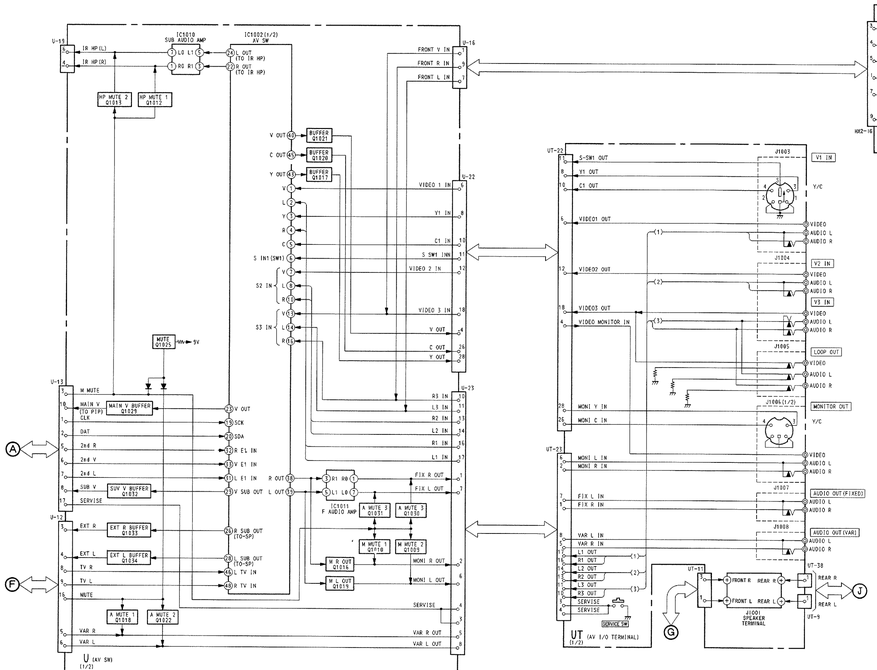
KV-27XBR96S/32XBR96S KV-27XBR96S/32XBR96S
RM-Y114A RM-Y114A

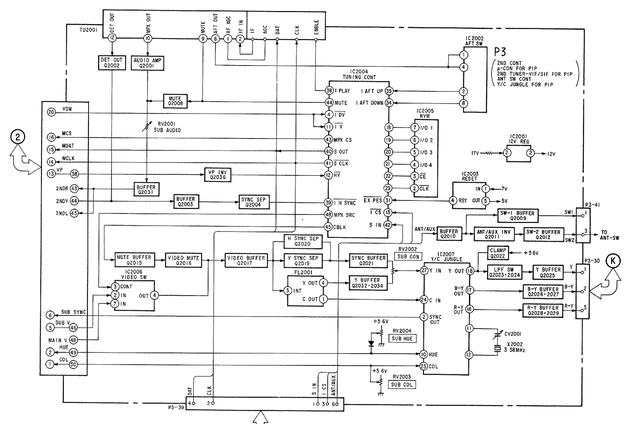
KV-27XBR96S/32XBR96S
RM-Y114A

KV-27XBR96S/32XBR96S KV-27XBR96S/32XBR96S
RM-Y114A RM-Y114A

KV-27XBR96S/32XBR96S KV-27XBR96S/32XBR96S
RM-Y114A RM-Y114A

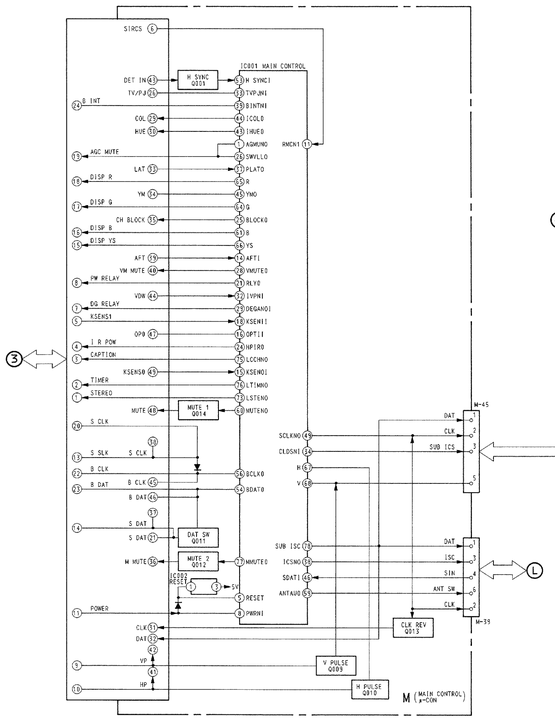
6-2.BLOCK DIAGRAM (2)

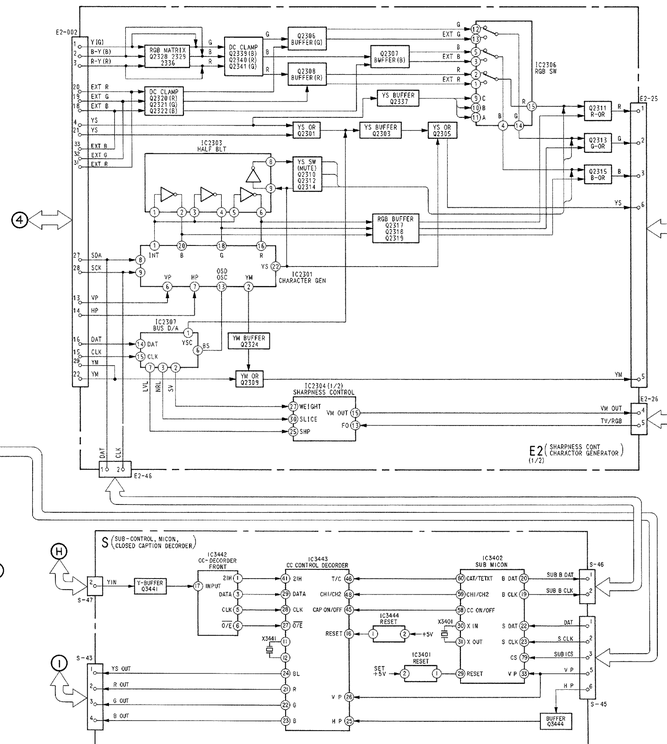


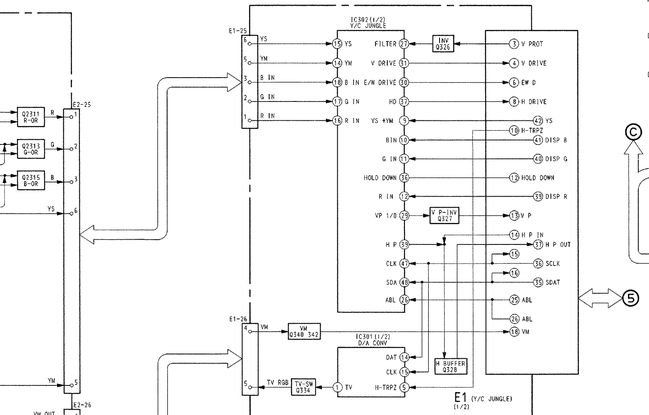


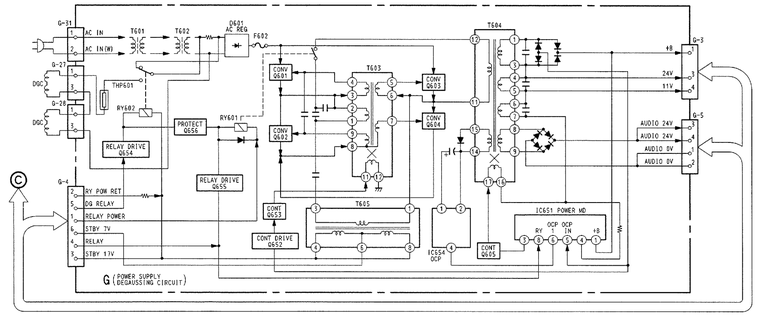
KV-27XBR96S/32XBR96S KV-27XBR96S/32XBR96S
RM-Y114A RM-Y114A

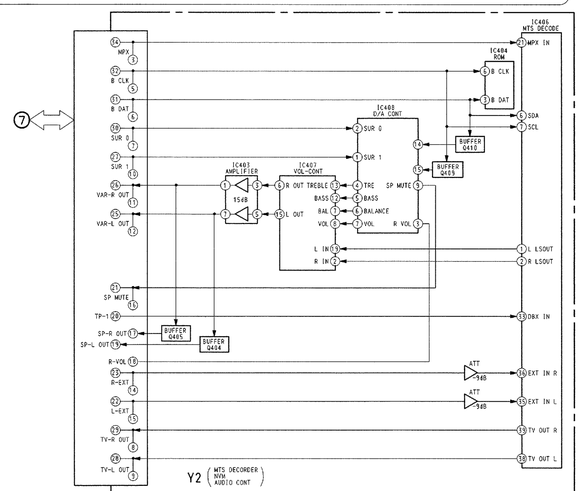
6-3.BLOCK DIAGRAM (3)





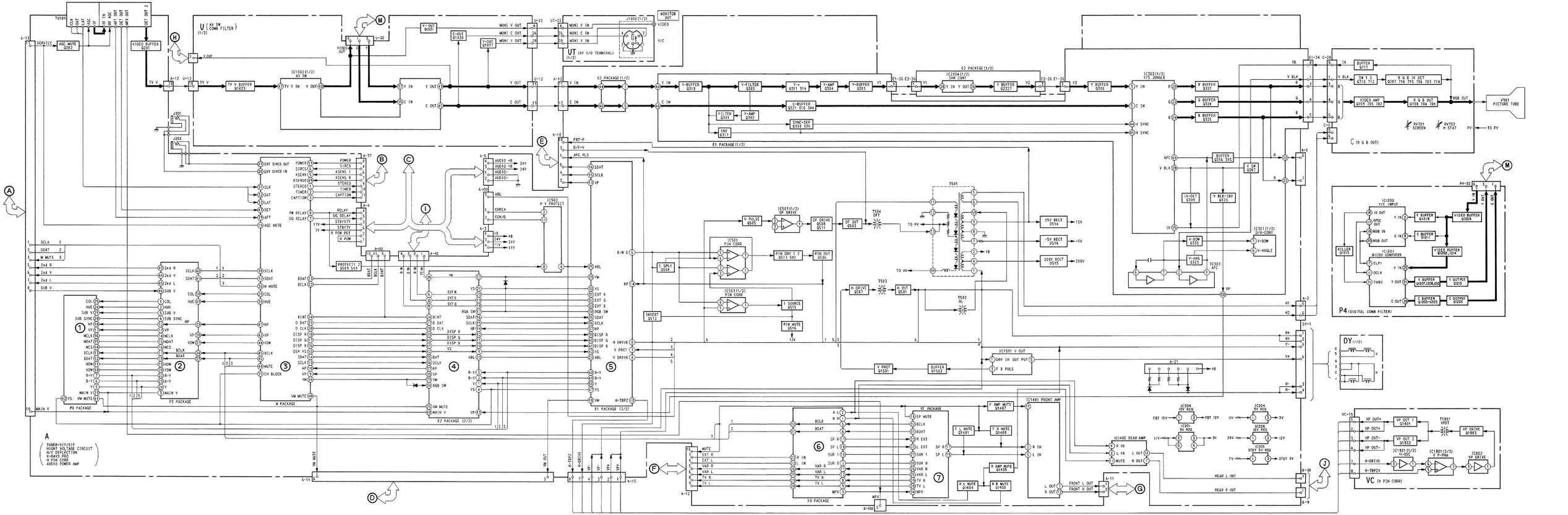




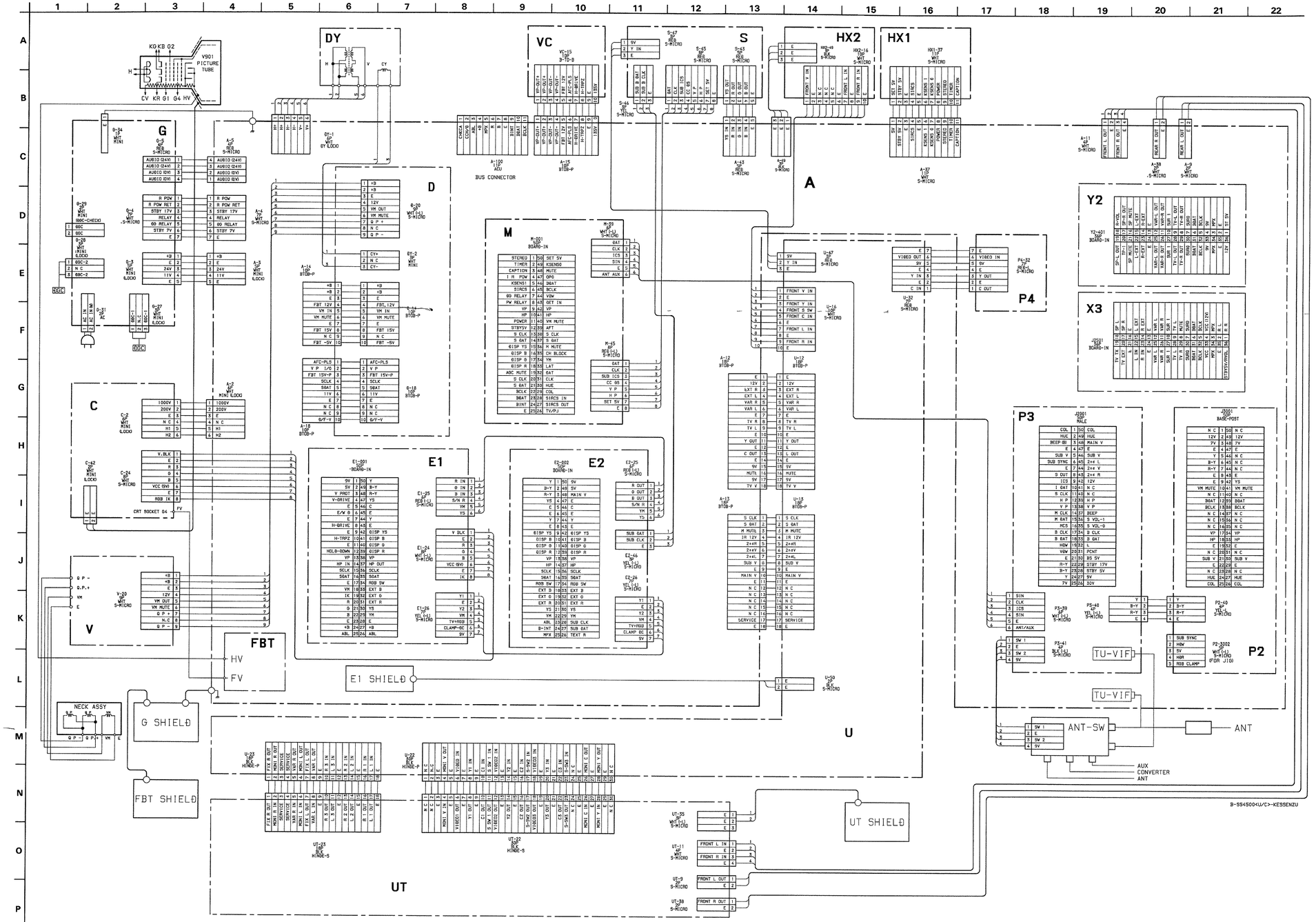


KV-27XBR96S/32XBR96S RM-Y114A KV-27XBR96S/32XBR96S RM-Y114A

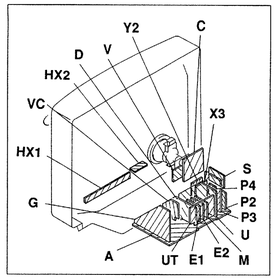
6-4.BLOCK DIAGRAM (4)



6-5.FRAME SHEMATIC DIAGRAM



6-6.CIRCUIT BOARDS LOCATION



6-7.SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

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

  Pitch 5 mm
  Rating electrical power 1/4W
- Chips resistors are 1/10W
- nonflammable resistor
- internal component
- panel designation, and adjustment for repair
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted
- earth-ground
- earth-chassis
- earth-chassis
- 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 R565 and R566 on page 51-53 in the Service Manual)
- When replacing the part in below table be sure to perform the related adjustment

Part replaced (◪)	Adjustment (⋈)
IC502, Q509, Q510, R565, R567, R568, R569 ..... A BOARD	R565 (HOLD-DOWN)
IC502, Q509, Q510, D502, C531, R554, R566, R567, R568, R569, R1506, T501 ..... A BOARD	R566 (HOLD-DOWN)
IC651, R651 · G BOARD	

- Readings are taken with a color bar signal input
- Readings are taken with a 10 MΩ digital multimeter
- Voltage are dc with respect to ground unless otherwise noted
- Voltage variations may be noted due to normal production tolerance
- All voltages are in V
- B+ bus
- B- bus
- signal path

Reference information

RESISTOR	. RN	METAL FILM
	· RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	FUSE	NONFLAMMABLE FUSIBLE
	. RW	NONFLAMMABLEWIREWOUND
	. RS	NONFLAMMABLEMETALOXIDE
	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

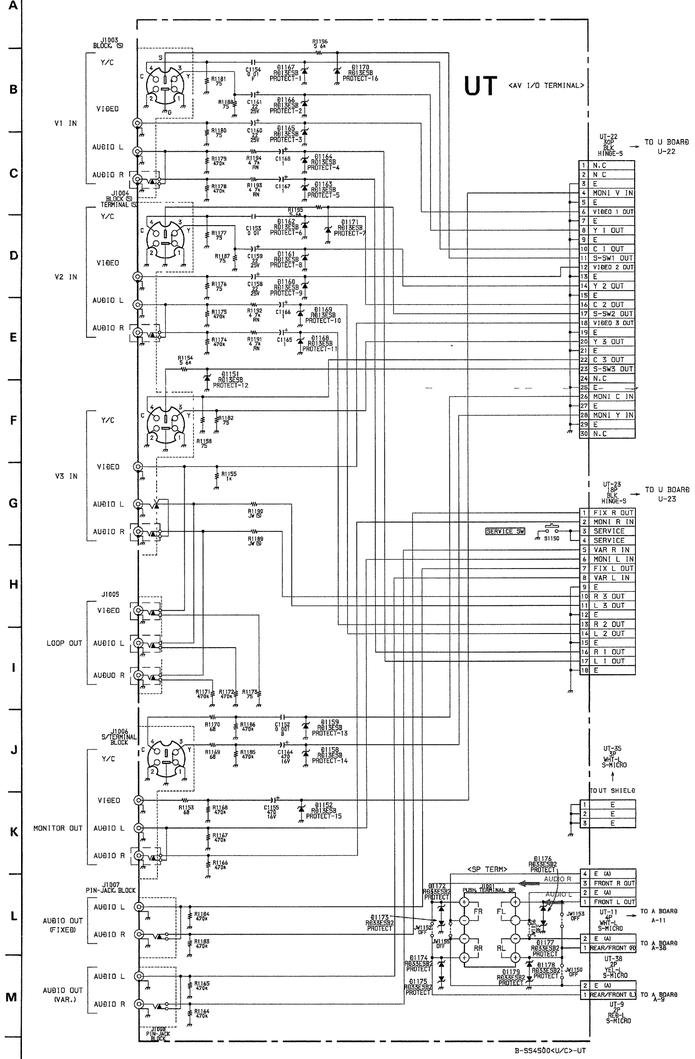
Note The symbol ⊣⊢ display is on the component side

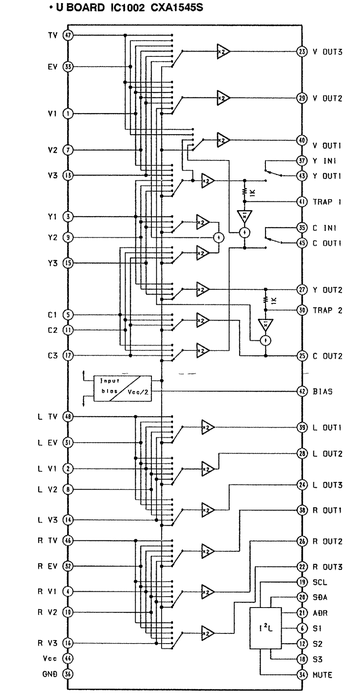
The components identified by shading and mark ⚠ are critical for safety Replace only with part number specified

The symbol ⊣⊢ indicate fast operating fuse
Replace only with fuse of same rating as marked

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

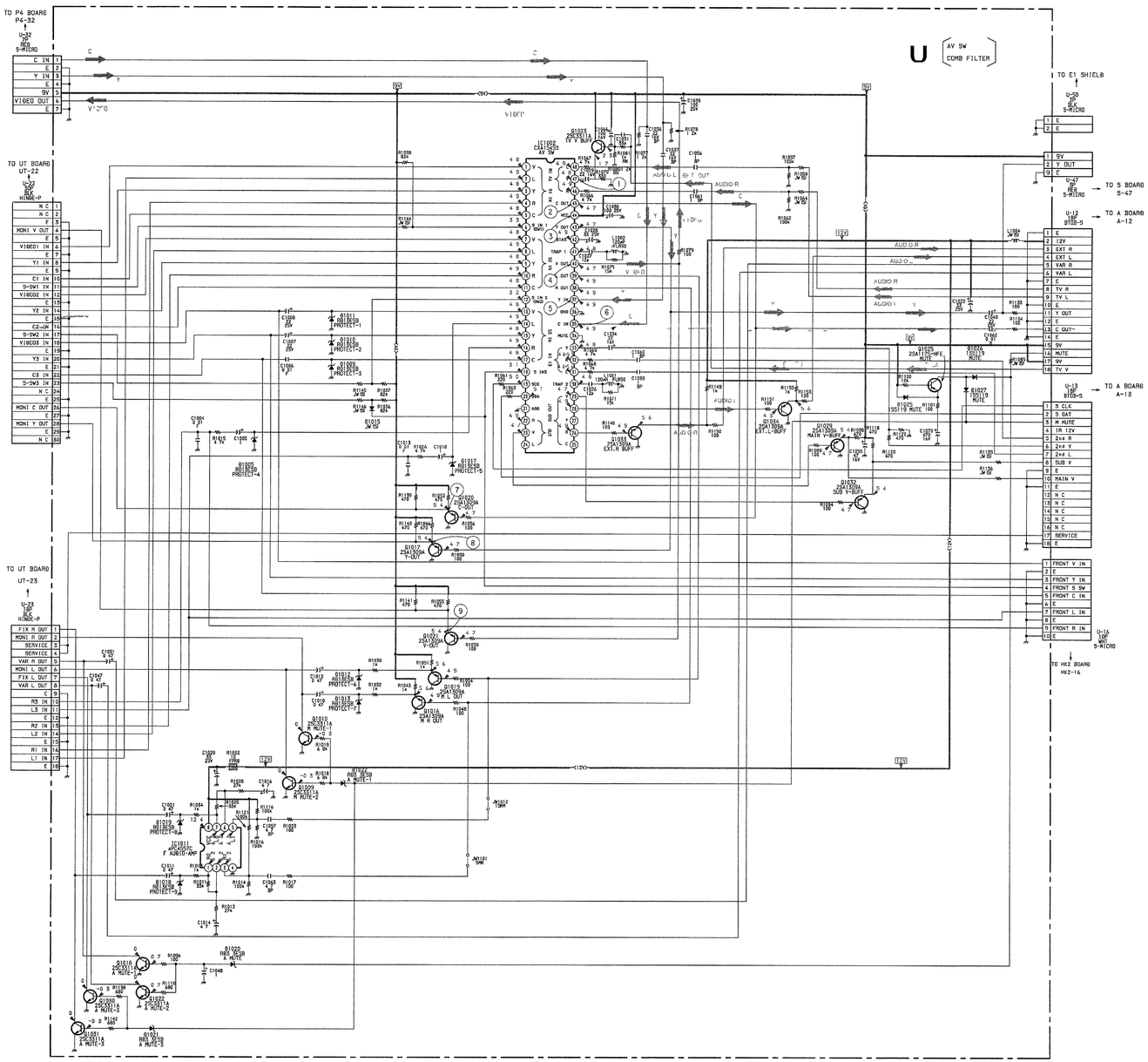
Le symbole ⊣⊢ indique une fusible a action rapide Dort etre remplacee par une fusible de meme valeur, comme maque





• U BOARD WAVEFORMS

① 2.2Vp-p (H)	② 2 Vp-p (H)	③ 2.2 Vp-p (H)
④ 2.2Vp-p (H)	⑤ 2.2 Vp-p (H)	⑥ 2 Vp-p (H)
⑦ 2 Vp-p (H)	⑧ 2 Vp-p (H)	⑨ 2.2 Vp-p (H)

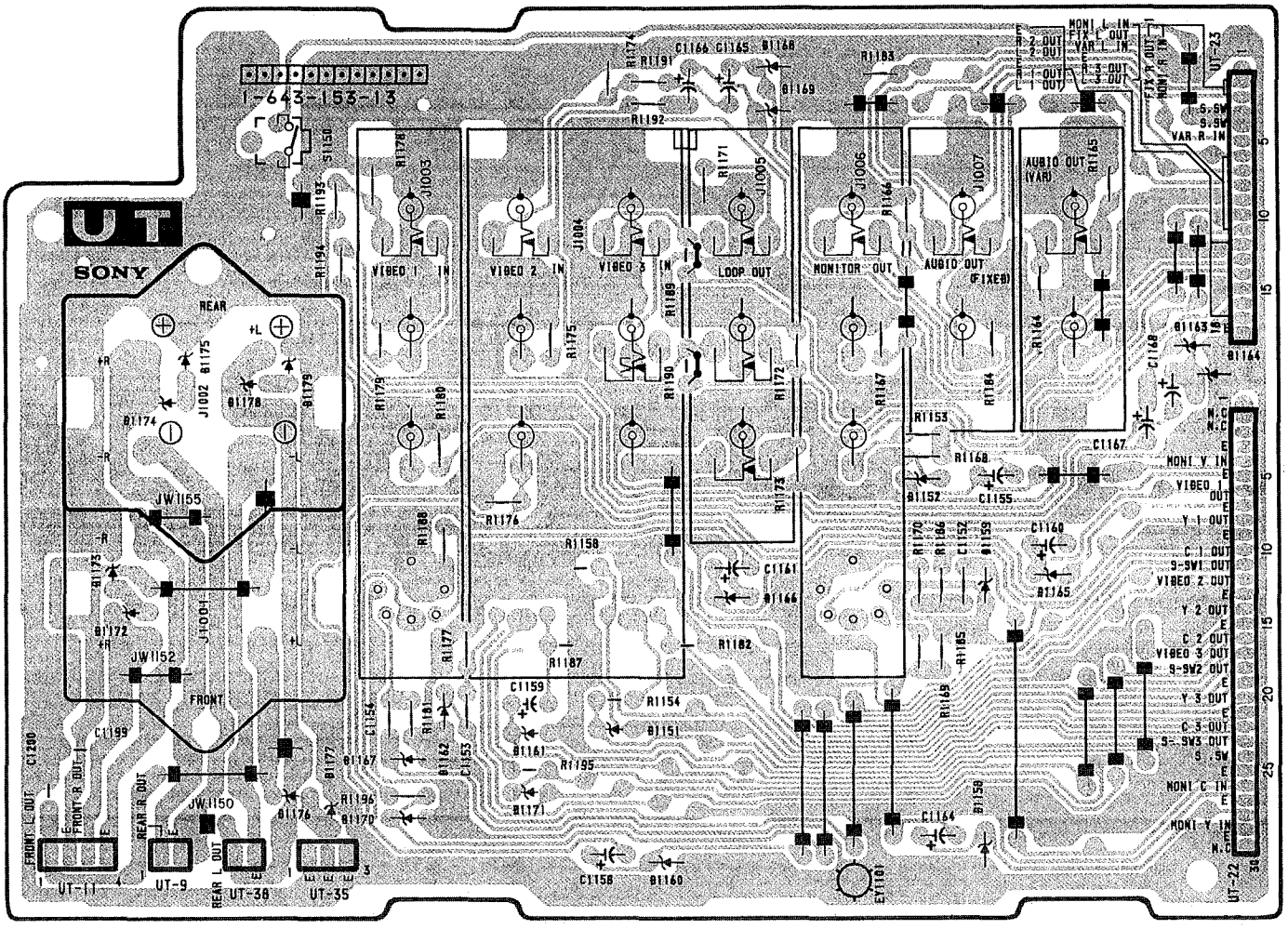


Schematic diagrams

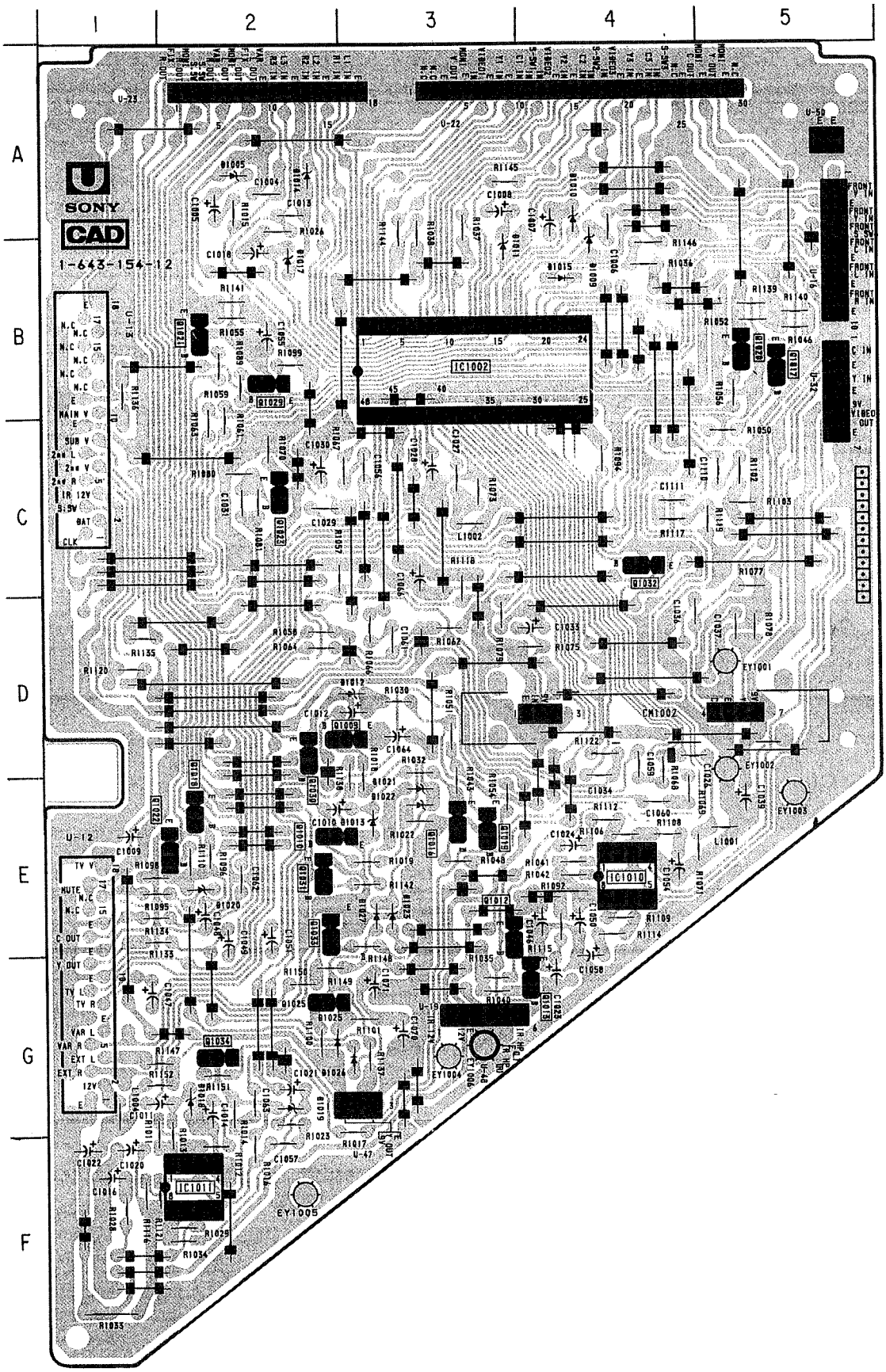
UT V boards ➡

UT [AV I/O TERMINAL] U [AV SW, COMB FILTER]

– UT BOARD –



– U BOARD –


1
2
3
4
5
A
B
C
D
E
G
F
SONY
CAD
1-643-154-12
IC1002
IC1010
IC1011
CN1002
EY1001
EY1002
EY1003
EY1004
EY1005

IC	
IC1002	B – 3
IC1010	E – 4
IC1011	F – 2

TRANSISTOR	
Q1009	D – 2
Q1010	E – 2
Q1012	G – 3
Q1013	G – 4
Q1016	E – 3
Q1017	B – 5
Q1018	E – 2
Q1019	E – 3
Q1020	B – 5
Q1021	B – 2
Q1022	E – 1
Q1023	C – 2
Q1025	G – 2
Q1029	B – 2
Q1030	D – 2
Q1031	E – 2
Q1032	C – 4
Q1033	E – 2
Q1034	G – 2

DIODE	
D1005	A – 2
D1009	B – 4
D1010	A – 4
D1011	B – 3
D1012	D – 3
D1013	E – 3
D1014	A – 2
D1015	B – 4
D1017	B – 2
D1018	G – 2
D1019	G – 2
D1020	E – 2
D1021	E – 3
D1022	E – 3
D1023	E – 3
D1025	G – 2
D1026	G – 2
D1027	E – 3

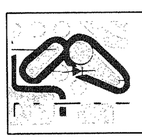
KV-27XBR96S/32XBR96S
RM-Y114A

KV-27XBR96S/32XBR96S
RM-Y114A

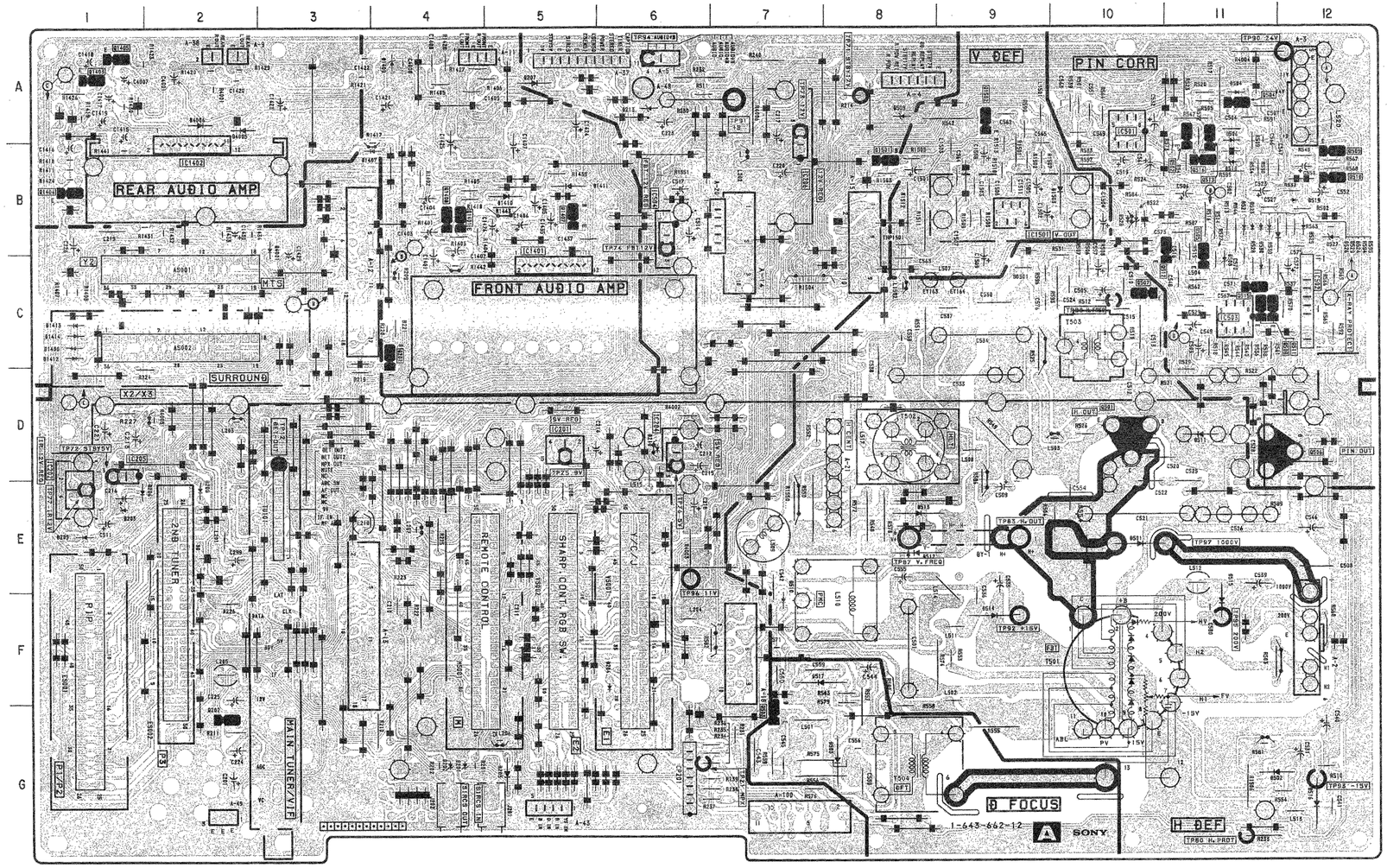
A [TUNER – VIF/SIF, HIGH VOLTAGE CIRCUIT, H/V DEFLECTION, X – RAYS. PROT, H. PIN CORR, AUDIO POWER AMP.]

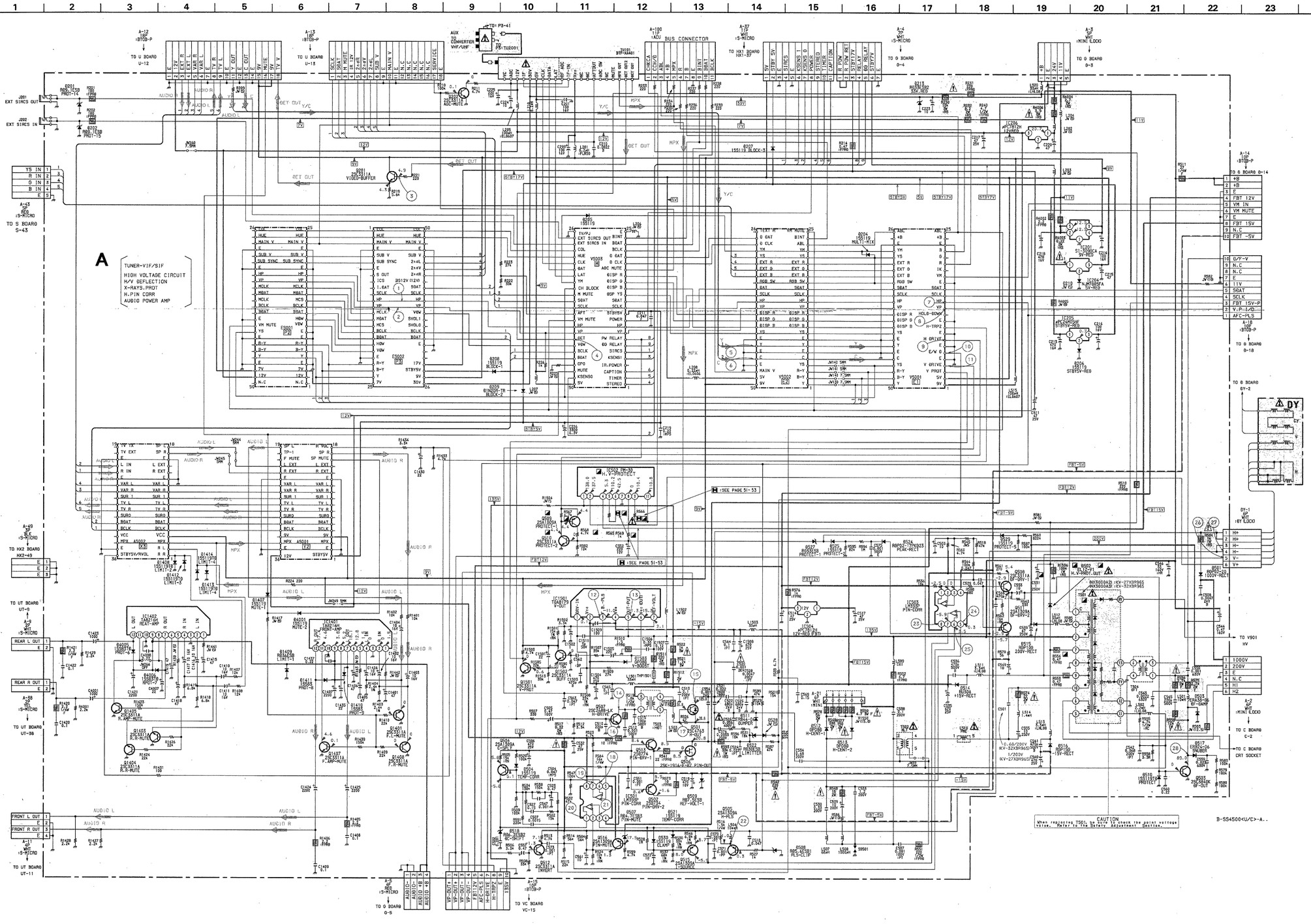
– A BOARD –

IC	
IC201	D – 5
IC202	D – 1
IC204	D – 6
IC205	D – 1
IC206	B – 7
IC501	A – 10
IC502	C – 12
IC503	C – 11
IC504	B – 6
IC1401	C – 5
IC1501	B – 9
TRANSISTOR	
Q201	C – 4
Q202	G – 2
Q501	D – 10
Q502	A – 11
Q503	G – 7
Q504	A – 11
Q505	B – 11
Q506	D – 12
Q507	C – 10
Q508	C – 11
Q509	B – 12
Q510	B – 12
Q511	C – 11
Q512	B – 10
Q513	A – 11
Q515	C – 11
Q516	B – 11
Q1401	B – 4
Q1407	B – 5
Q1408	B – 4
Q1501	B – 8
Q1502	A – 9
DIODE	
D205	G – 5
D206	E – 1
D207	A – 5
D208	E – 2
D209	E – 1
D213	A – 6
D501	E – 10
D502	G – 11
D503	G – 8
D504	A – 11
D506	A – 11
D508	C – 11
D509	A – 8
D510	F – 7
D511	D – 11
D512	E – 8
D513	E – 8
D514	F – 9
D515	F – 11
D516	G – 12
D517	F – 7
D518	B – 11
D521	B – 11
D522	B – 10
D524	B – 11
D525	B – 12
D527	B – 12
D529	B – 11
D530	B – 11
D1407	B – 3
D1408	C – 1
D1409	A – 4
D1410	B – 5
D1411	B – 5
D1412	C – 1
D1413	C – 1
D1414	C – 1
D1503	B – 10
D4001	B – 3



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.

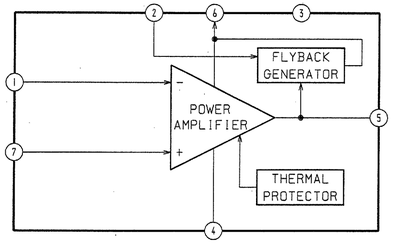




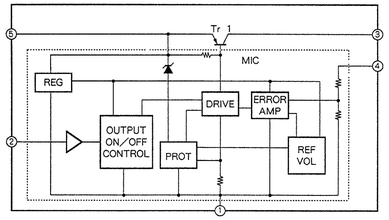
• A BOARD WAVEFORMS

① 5 Vp-p (H)	② 4 Vp-p (V)	③ 2.4 Vp-p (H)
④ 2.4 Vp-p (H)	⑤ 2.4Vp-p(H)	⑥ 2.4 Vp-p(H)
⑦ 88 Vp-p (H)	⑧ 4.4Vp-p (V)	⑨ 4.2 Vp-p (H)
⑩ 2 Vp-p (V)	⑪ 0.6Vp-p (V)	⑫ 30.1Vp-p(V)
⑬ 60 Vp-p(V)	⑭ 160Vp-p (H)	⑮ 1000Vp-p (H)
⑯ 3.5Vp-p (H)	⑰ 150Vp-p (H)	⑱ 9 Vp-p (H)
⑲ 20 Vp-p (H)	⑳ 9.6Vp-p (H)	㉑ 9 Vp-p (H)
㉒ 6 Vp-p (H)	㉓ 10 Vp-p (H)	㉔ 6.4Vp-p(H)
㉕ 18 Vp-p (H)	㉖ 2.8Vp-p (V)	㉗ 150Vp-p (H)
㉘ 290Vp-p (V)		

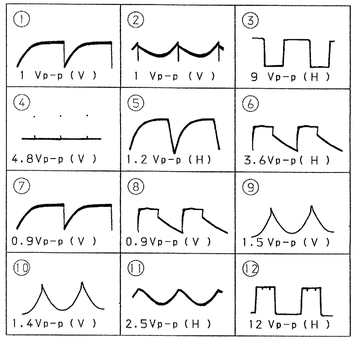
• A BOARD IC1501 TDA8179



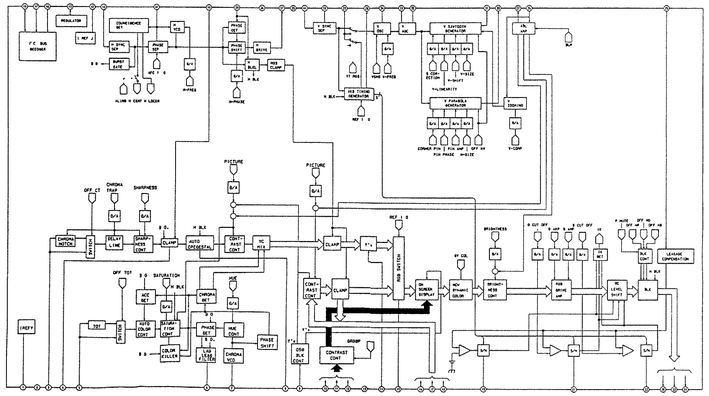
• D BOARD IC801 SI-3090CA



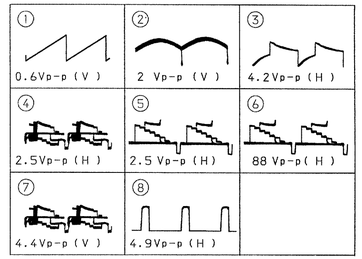
• D BOARD WAVEFORMS

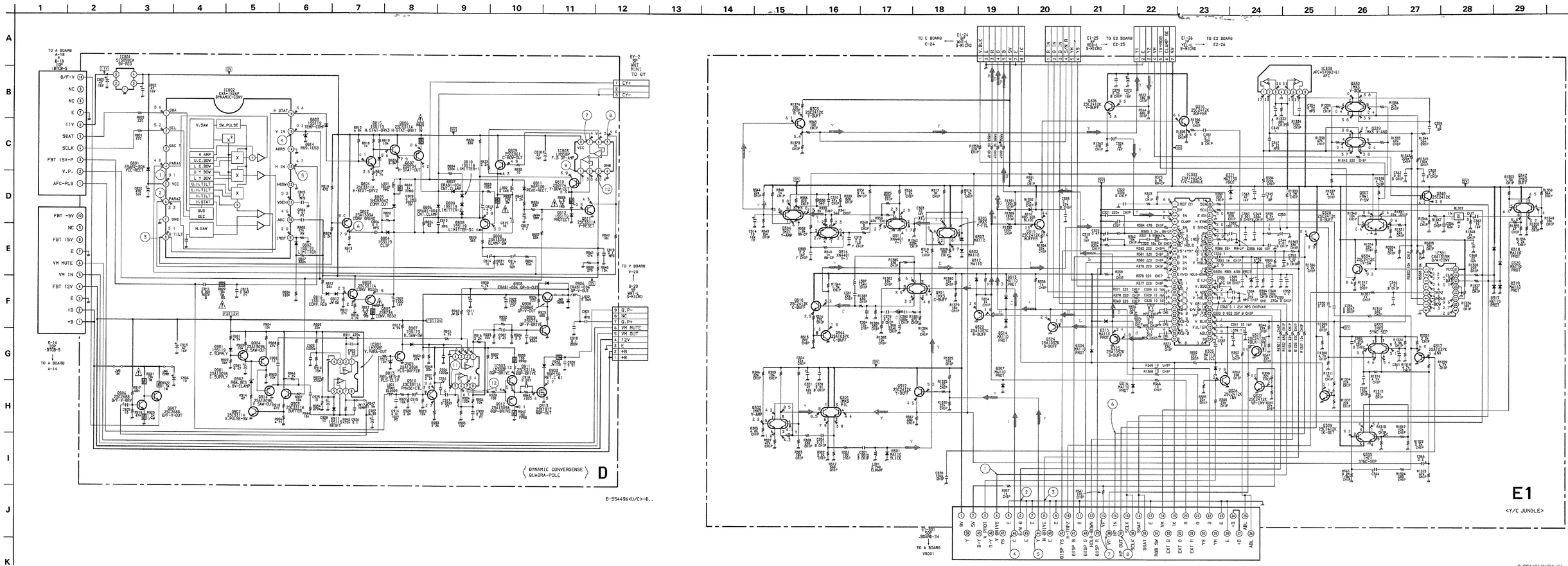


• E1 BOARD IC302 CXA1465AS



• E1 BOARD WAVEFORMS

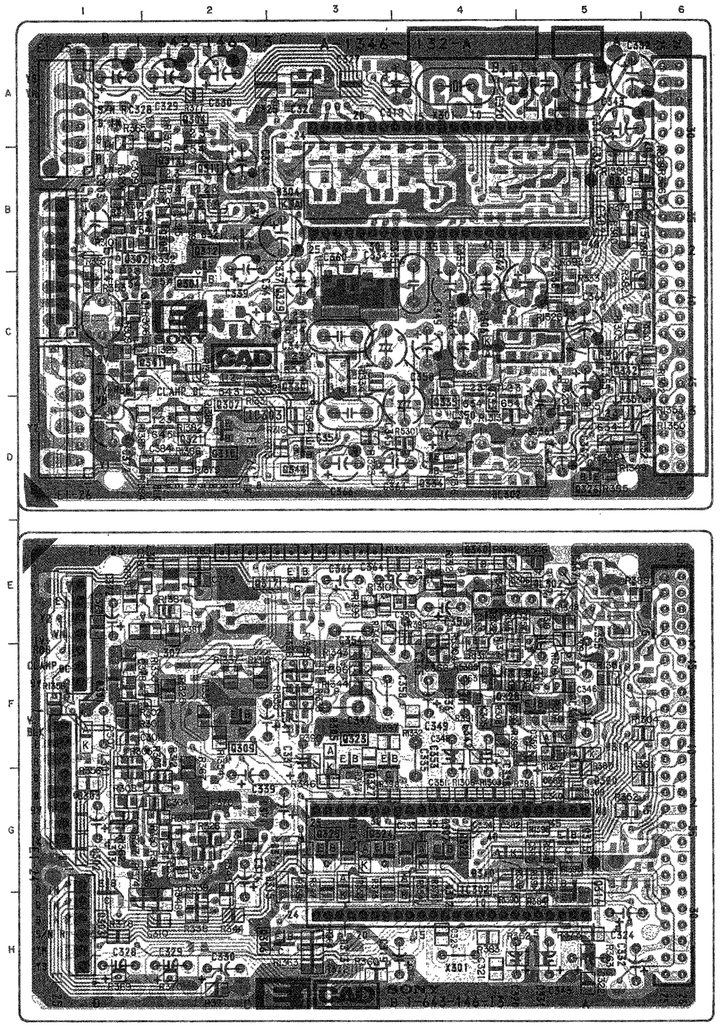




KV-27XBR96S/32XBR96S
RM-Y114A
KV-27XBR96S/32XBR96S
RM-Y114A

E1 [Y/C JUNGLE] **D** [DYNAMIC CONVERGENSE / QUADRA – POLE]

– E1 BOARD –

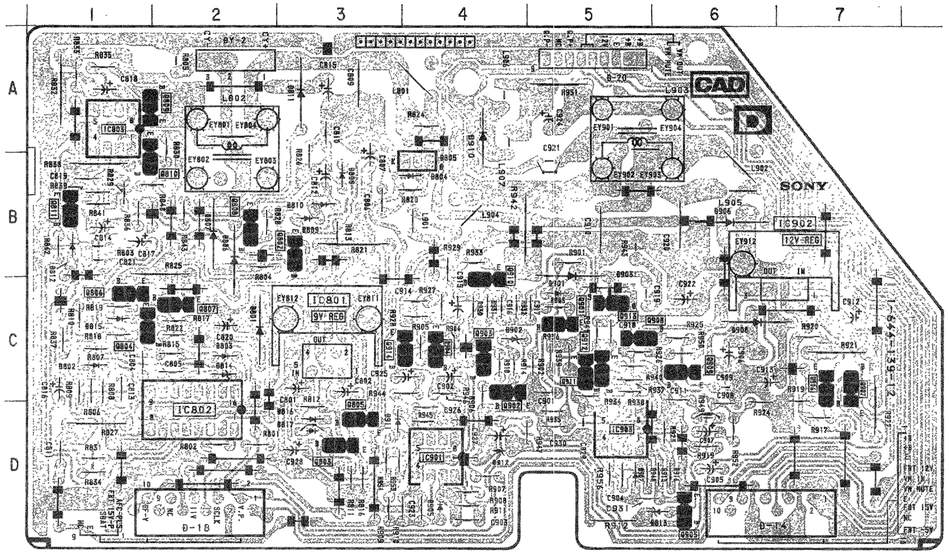


IC		DIODE	
IC301	C – 5	D301	F – 1
IC302	B – 4, G – 4	D302	G – 1
IC303	C – 3	D303	G – 1
TRANSISTOR		D304	B – 3
Q301	C – 2	D305	F – 3
Q302	C – 1	D306	C – 4
Q303	G – 1	D307	G – 4
Q304	A – 2	D310	G – 4
Q305	B – 1	D312	G – 4
Q306	H – 3	D313	G – 3
Q307	C – 2	D314	G – 3
Q309	F – 2	D315	G – 2
Q310	D – 2	D316	G – 3
Q311	B – 2	D317	B – 5
Q312	B – 2	D318	F – 5
Q314	B – 2	D319	B – 5
Q315	G – 5	D320	G – 5
Q316	G – 5	D321	B – 2
Q317	E – 3		
Q321	D – 2		
Q322	G – 4		
Q323	F – 3		
Q324	G – 3		
Q325	G – 3		
Q326	D – 5		
Q327	G – 3		
Q328	F – 5		
Q329	C – 3		
Q330	C – 3		
Q333	D – 4		
Q334	D – 4		
Q335	D – 4		
Q340	E – 4		
Q342	D – 5		
Q344	D – 3		

Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

– D BOARD –



IC		DIODE	
IC801	C – 3	D801	C – 2
IC802	D – 2	D802	C – 1
IC803	A – 1	D803	C – 2
IC901	D – 4	D804	B – 4
IC903	D – 5	D805	B – 4
TRANSISTOR		D806	B – 2
Q802	B – 3	D807	B – 2
Q803	D – 4	D808	B – 3
Q804	C – 1	D809	B – 3
Q805	D – 3	D810	B – 3
Q806	C – 1	D811	A – 3
Q807	C – 2	D812	B – 1
Q808	B – 2	D813	D – 6
Q809	A – 1	D814	C – 2
Q810	B – 2	D815	C – 1
Q811	B – 1	D816	D – 3
Q901	C – 5	D901	C – 5
Q902	C – 4	D902	C – 4
Q903	C – 4	D903	B – 5
Q904	C – 4	D906	B – 6
Q905	D – 6	D907	D – 5
Q906	C – 7	D908	C – 6
Q907	C – 7	D911	D – 3
Q908	C – 5		
Q909	C – 6		
Q910	B – 4		
Q911	C – 5		
Q912	C – 5		
Q913	C – 5		
Q914	C – 3		

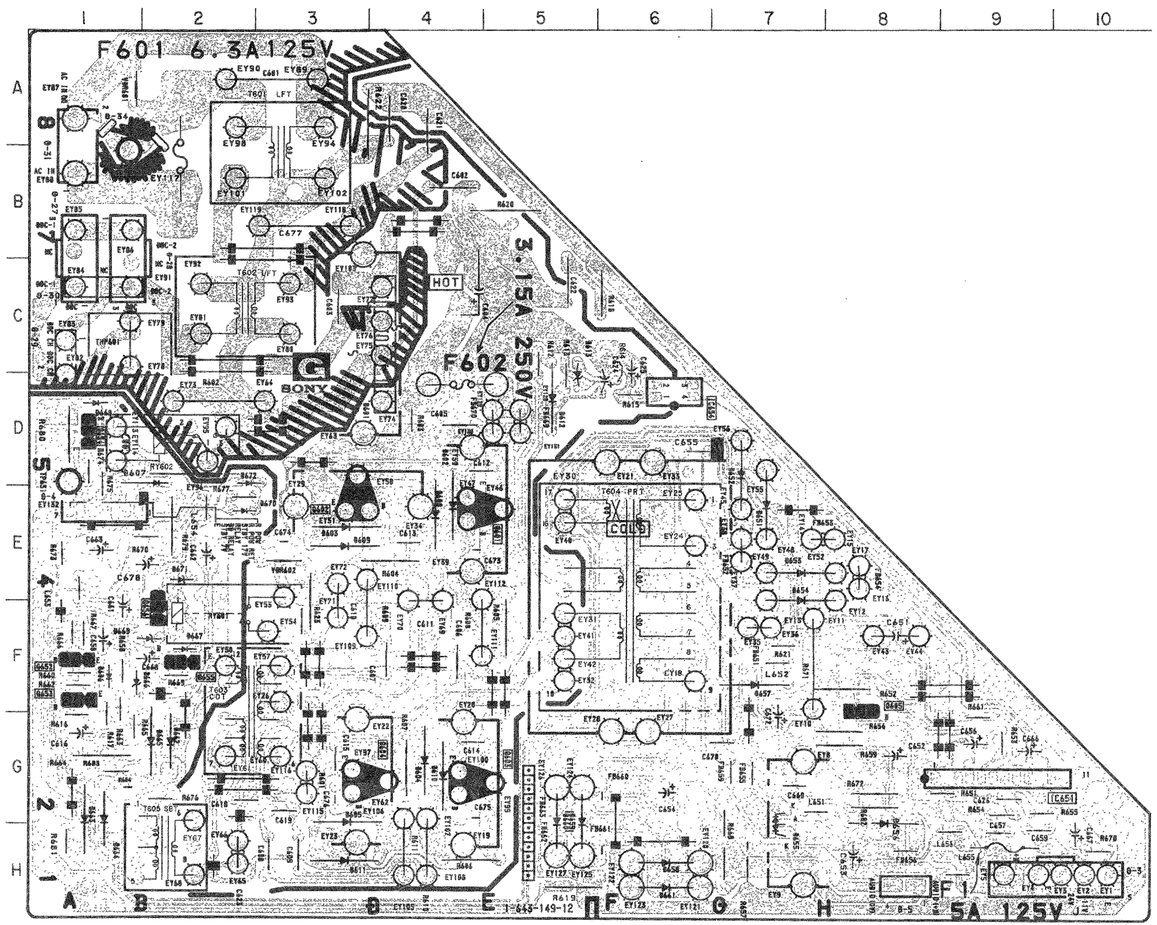
KV-27XBR96S/32XBR96S
RM-Y114A

KV-27XBR96S/32XBR96S
RM-Y114A

G [POWER SUPPLY, DEGAUSSING CIRCUIT] **E2** [SHARPNESS CONT, CHARACTOR GENERATER]

– G BOARD –

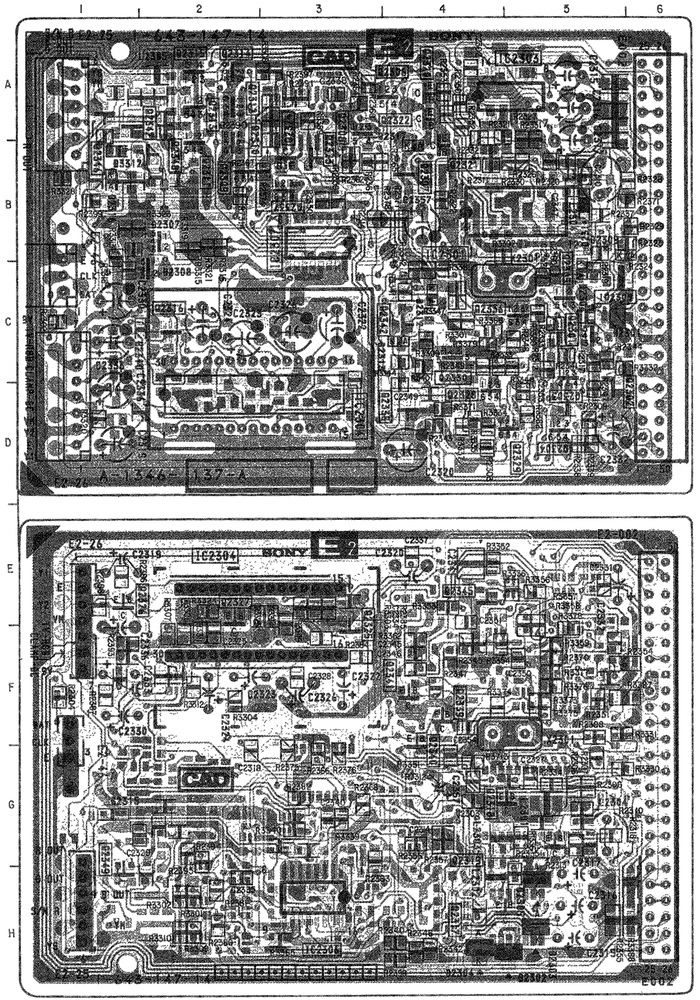
IC	
IIC651	G – 9
IC654	D – 6
TRANSISTOR	
Q601	E – 5
Q602	E – 3
Q603	G – 5
Q604	G – 4
Q605	F – 8
Q652	F – 1
Q653	F – 1
Q654	D – 1
Q655	F – 2
Q656	F – 2
DIODE	
D601	C – 4
D602	E – 4
D603	E – 3
D604	G – 4
D605	G – 3
D606	F – 1
D607	D – 2
D608	E – 4
D609	E – 3
D610	G – 4
D611	H – 3
D612	D – 5
D613	D – 5
D651	E – 7
D652	D – 7
D653	E – 7
D654	F – 7
D655	H – 7
D656	H – 8
D657	F – 7
D658	H – 6
D659	G – 5
D660	G – 5
D661	H – 6
D663	G – 1
D665	G – 2
D666	F – 1
D667	F – 2
D668	D – 1
D669	F – 2
D670	E – 2
D671	E – 2
D672	D – 2

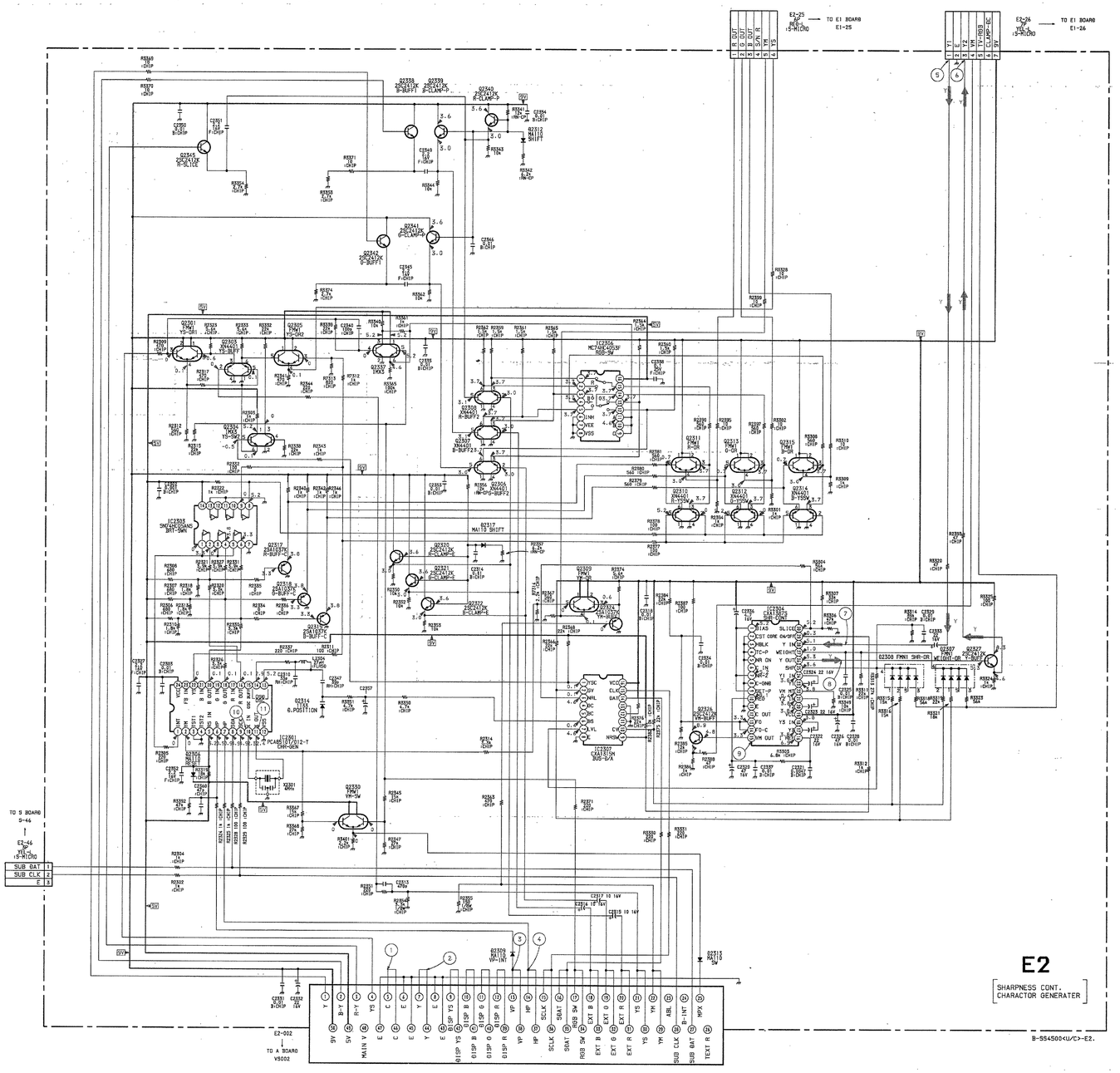


– E2 BOARD –

Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

IC	
IC2031	B – 4
IC2303	A – 5
IC2304	D – 3, E – 2
IC2306	H – 3
IC2307	B – 3
TRANSISTOR	
Q2301	C – 5
Q2303	C – 5
Q2304	D – 5
Q2305	C – 5
Q2306	A – 3
Q2307	B – 4
Q2308	A – 3
Q2309	B – 2
Q2310	A – 2
Q2311	A – 2
Q2312	A – 2
Q2313	A – 2
Q2314	A – 2
Q2315	A – 2
Q2317	H – 4
Q2318	G – 4
Q2319	G – 5
Q2320	A – 4
Q2321	A – 4
Q2322	A – 4
Q2324	B – 3
Q2326	E – 1
Q2327	E – 2
Q2328	D – 4
Q2329	D – 4
Q2330	C – 4
Q2336	C – 5
Q2337	B – 3
Q2339	F – 4
Q2340	F – 4
Q2341	F – 4
DIODE	
D2306	C – 5
D2307	B – 2
D2308	B – 2
D2309	B – 2
D2312	C – 4
D2313	C – 4
D2314	B – 5
D2317	A – 4

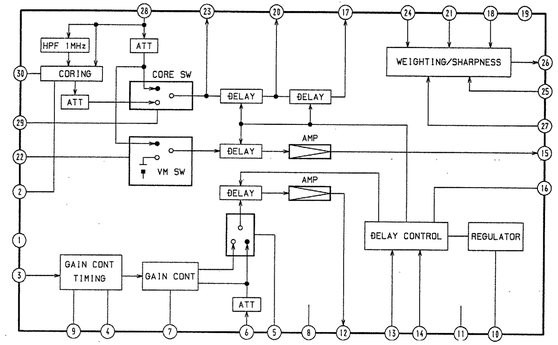


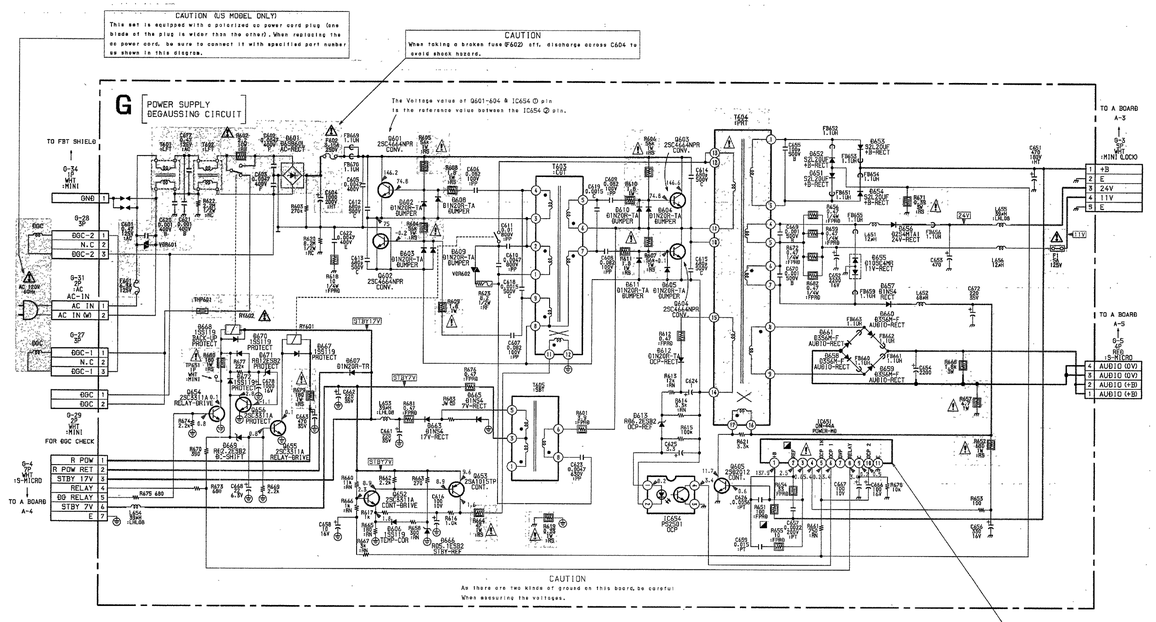


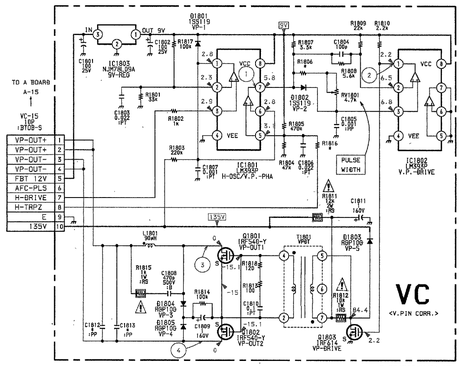
• E2 BOARD WAVEFORMS

① 2.4Vp-p (H)	② 2.4Vp-p (H)	③ 4.2Vp-p (V)
④ 5 Vp-p (H)	⑤ 3.7 Vp-p (H)	⑥ 3.2Vp-p (H)
⑦ 2.9Vp-p (H)	⑧ 2.9Vp-p (H)	⑨ 2.6 Vp-p (H)
⑩ 4.4Vp-p (4MHZ)	⑪ 5.5Vp-p (4MHZ)	

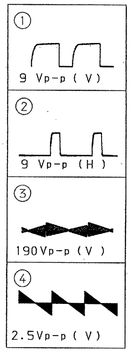
• E2 BOARD IC2304 CXA1387S





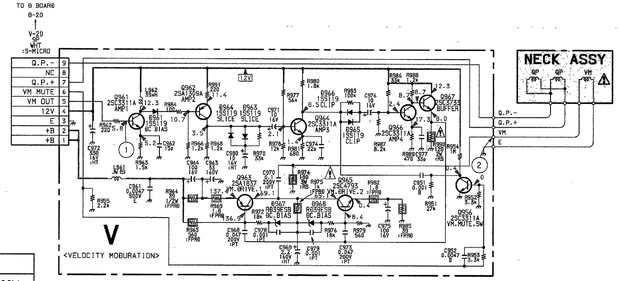


• VC BOARD WAVEFORMS

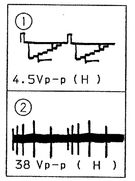


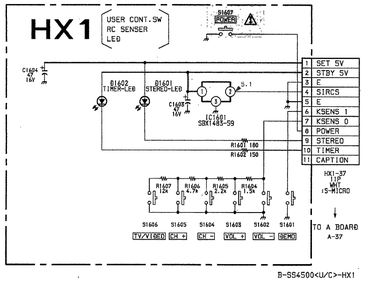
• VC BOARD ＊MARK

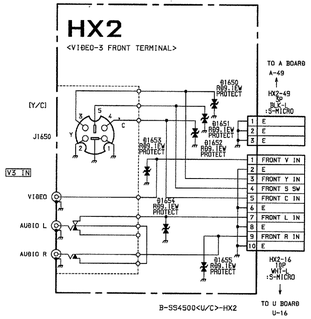
Ref. No.	27INCH		32INCH	
C1812	0.16	200V	0.24	200V
C1813	0.047	200V	Not mounted	
R1806	6.8K	1/4W	8.2K	1/4W
R1816	27K	1/4W	47K	1/4W

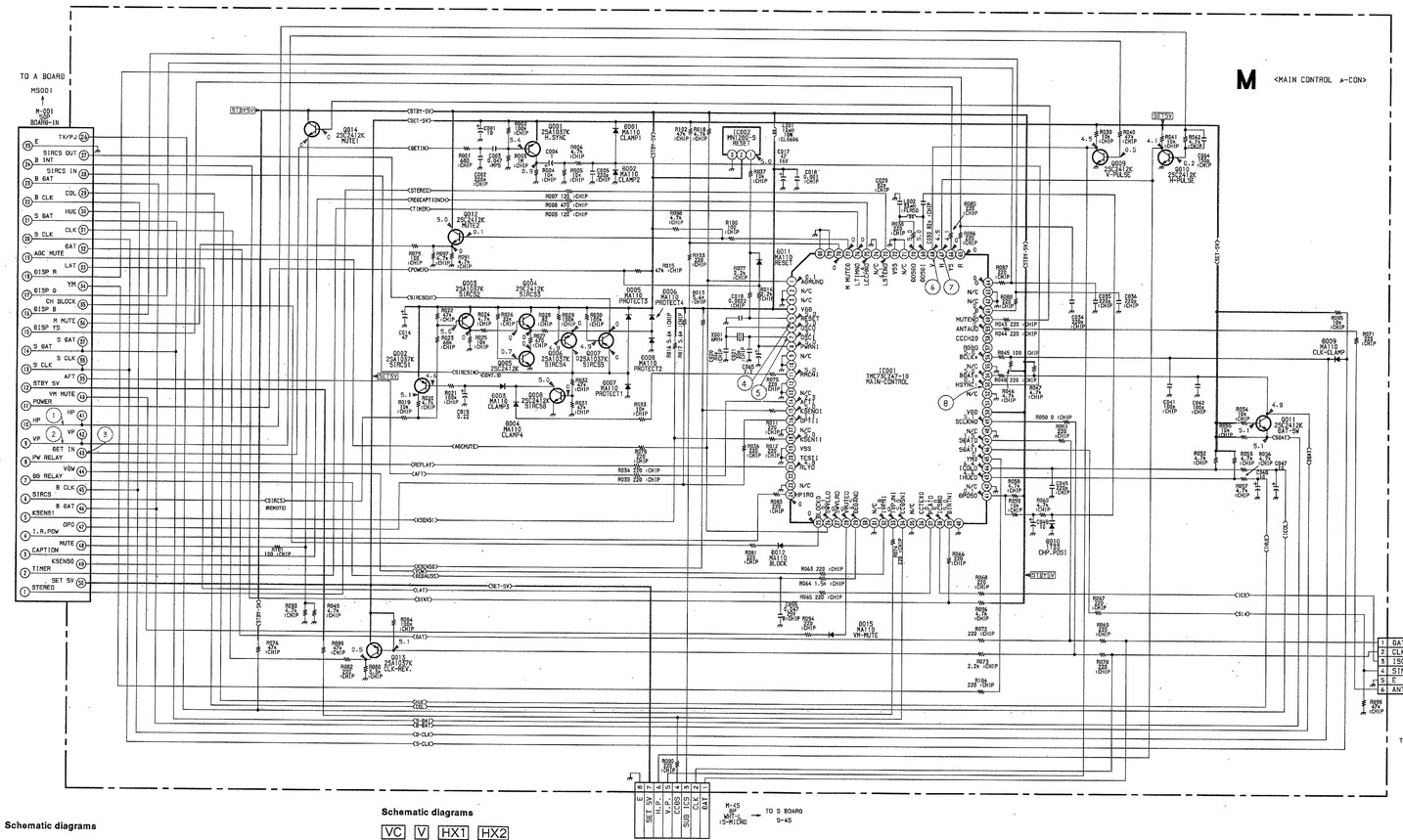


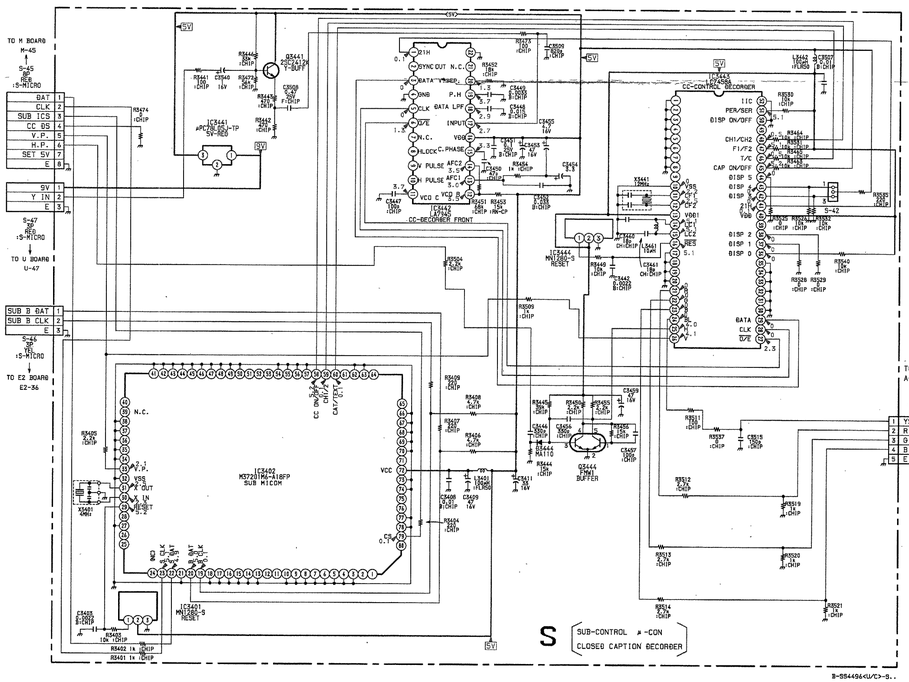
• V BOARD WAVEFORMS



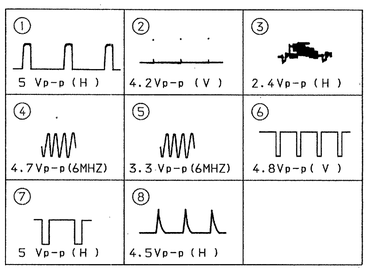




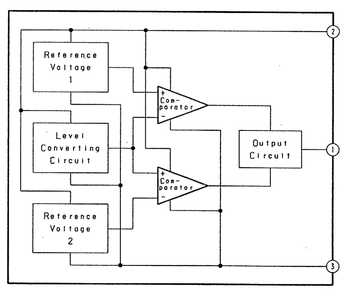




• M BOARD WAVEFORMS



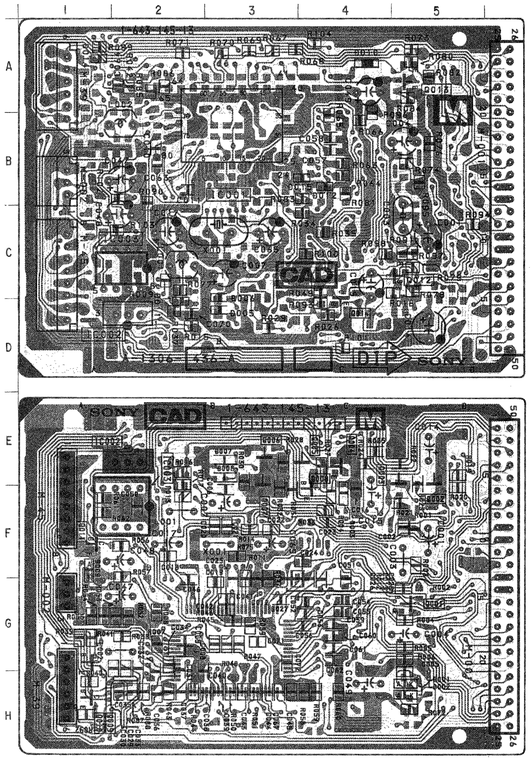
• M BOARD IC002 MN1280-S



KV-27XBR96S/32XBR96S RM-Y114A KV-27XBR96S/32XBR96S RM-Y114A

M [MAIN CONTROL, μ – CON] **S** [SUB – CONTROL, μ – CON, CLOSED CAPTION DECORDER] **HX1** [USER CONTROL SW, RC SENSE, LED] **HX2** [VIDEO – 3 FRONT TERMINAL] **V** [VELOCITY MODURATION] **VC** [V. PIN CORR]

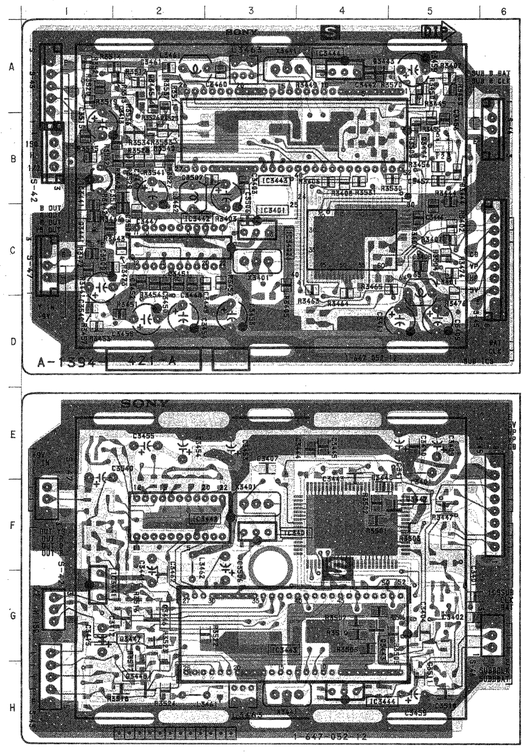
– M BOARD –



IC	
IC001	C – 1
IC002	D – 2, E – 2
TRANSISTOR	
Q001	G – 5
Q009	G – 1
Q010	H – 1
Q011	F – 1
Q012	C – 5
Q013	A – 5
Q014	C – 4
DIODE	
D001	H – 5
D002	H – 5
D009	F – 1
D010	A – 4
D011	D – 2
D012	B – 4
D014	A – 1
D015	B – 4

Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

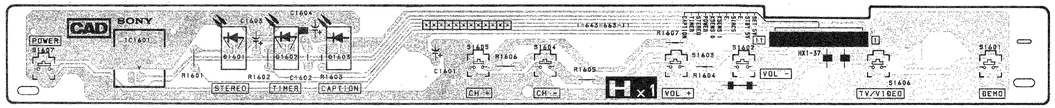
– S BOARD –



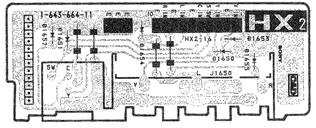
IC	
IC3401	C – 3, F – 3
IC3402	C – 4
IC3441	B – 1, G – 1
IC3442	C – 2, F – 2
IC3443	B – 3, G – 3
IC3444	A – 4, H – 4
TRANSISTOR	
C3441	C – 1
C3444	B – 5
DIODE	
D3444	B – 5

Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

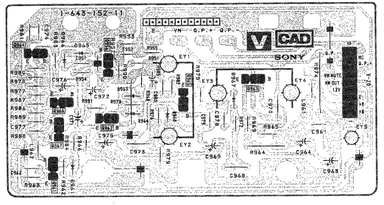
– HX1 BOARD –



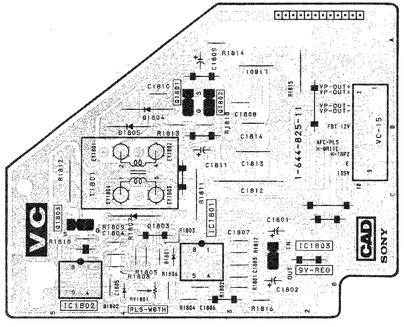
– HX2 BOARD –



– V BOARD –

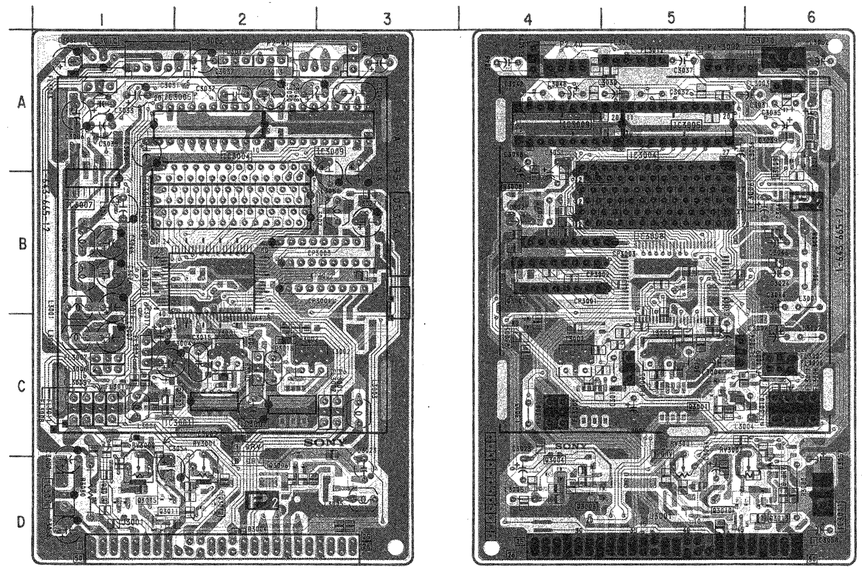


– VC BOARD –



P2 [MPX PICTURE IN PICTURE CIRCUIT] **P3** [2ND CONT, μ-CON FOR PIP, 2ND TUNER-VIF/SIF FOR PIP, LY/C JUNGLE FOR PIP, ANT SW CONT] **P4** [DIGITAL COMB FILTER]

– P2 BOARD –

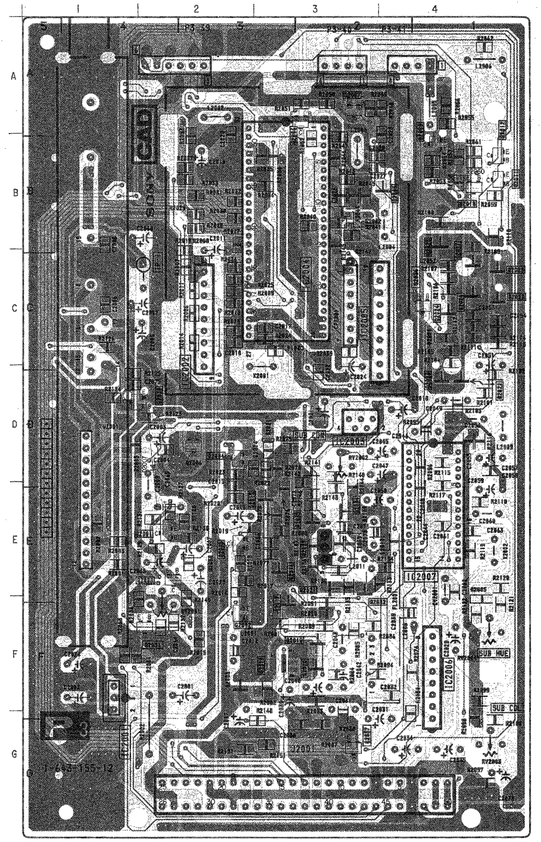


IC	
IC3001	C-2
IC3002	C-2
IC3003	B-2
IC3004	A-2, B-5
IC3005	A-2, A-5
IC3006	B-2, B-5
IC3007	B-1
IC3008	B-2, B-5
IC3009	A-3, A-4
IC3010	A-1, A-6
IC3011	D-1, D-6
TRANSISTOR	
Q3001	C-5
Q3002	C-1
Q3003	D-4
Q3004	D-4
Q3005	C-4
Q3006	D-2
Q3007	B-4
Q3008	B-4
Q3009	A-6
Q3010	D-5
Q3011	D-1
Q3012	D-2
Q3013	D-6
Q3014	D-1
Q3015	D-1
DIODE	
D3002	C-2
D3003	C-2
D3004	D-2
VARIABLE RESISTOR	
RV3001	D-2, D-5
RV3002	D-1, D-6

Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

IC	
IC2001	F-1
IC2002	C-2
IC2003	D-3
IC2004	C-2
IC2005	C-3
TRANSISTOR	
Q2001	E-1
Q2002	F-2
Q2003	E-3
Q2004	D-3
Q2005	B-3
Q2006	A-3
Q2007	A-3
Q2008	E-1
Q2009	A-9
Q2010	B-4
Q2011	B-4
Q2012	B-4
Q2030	D-1
Q2031	F-1
Q2036	C-4
Q2037	G-3
DIODE	
D2006	D-2
D2007	D-1
VARIABLE RESISTOR	
RV2001	F-1

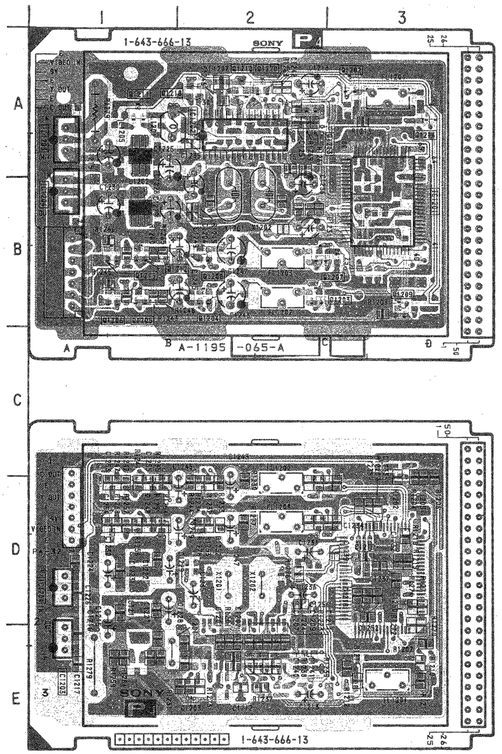
– P3 BOARD –



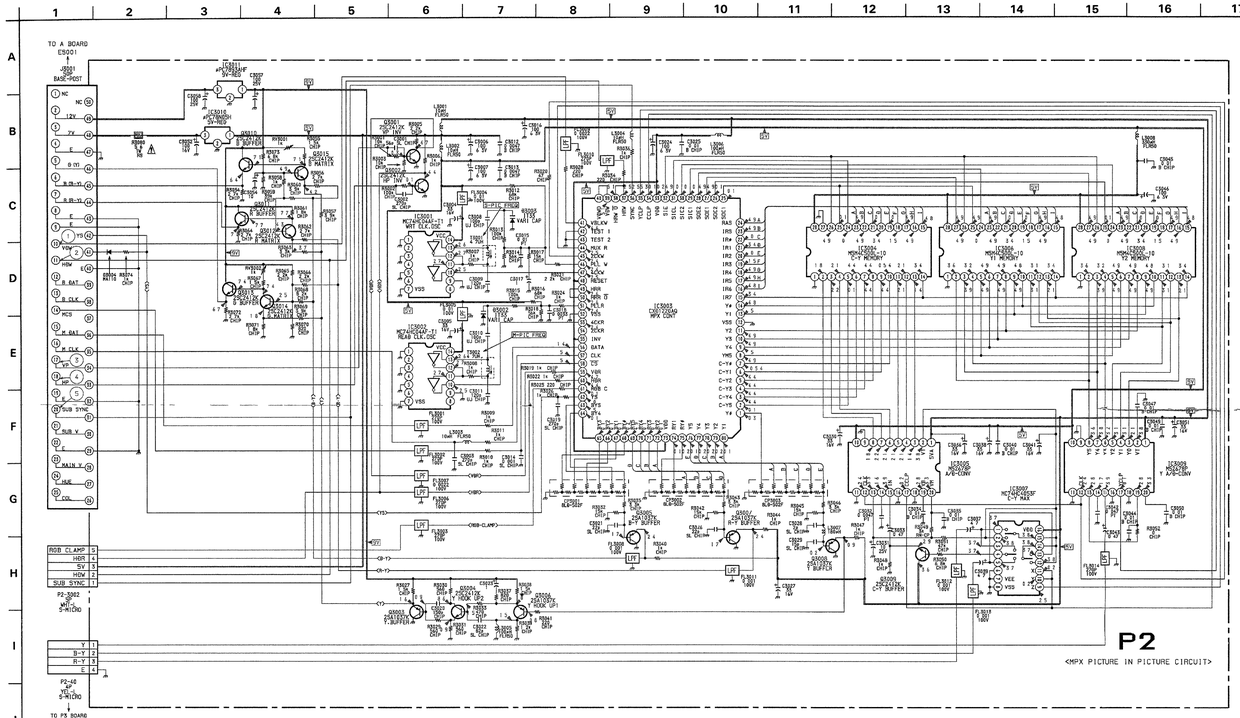
Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

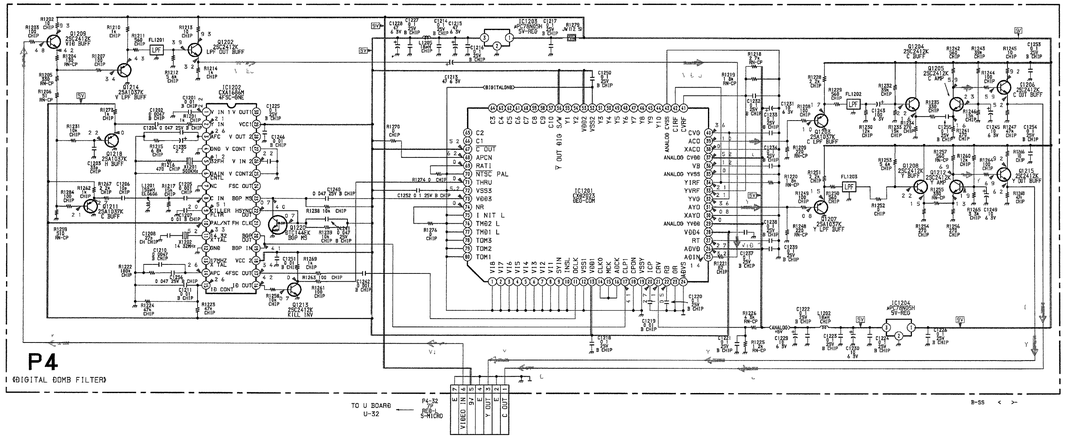
IC	
IC1201	B-3
IC1202	A-2
IC1203	A-1, E-1
IC1204	B-1, D-1
TRANSISTOR	
Q1202	A-3
Q1203	B-2
Q1204	B-2
Q1205	B-1
Q1206	B-1
Q1207	B-2
Q1208	B-2
Q1209	B-3
Q1211	A-1
Q1212	B-1
Q1213	A-2
Q1214	A-3
Q1215	B-1
Q1218	A-2
Q1220	A-2

– P4 BOARD –

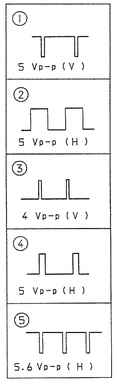


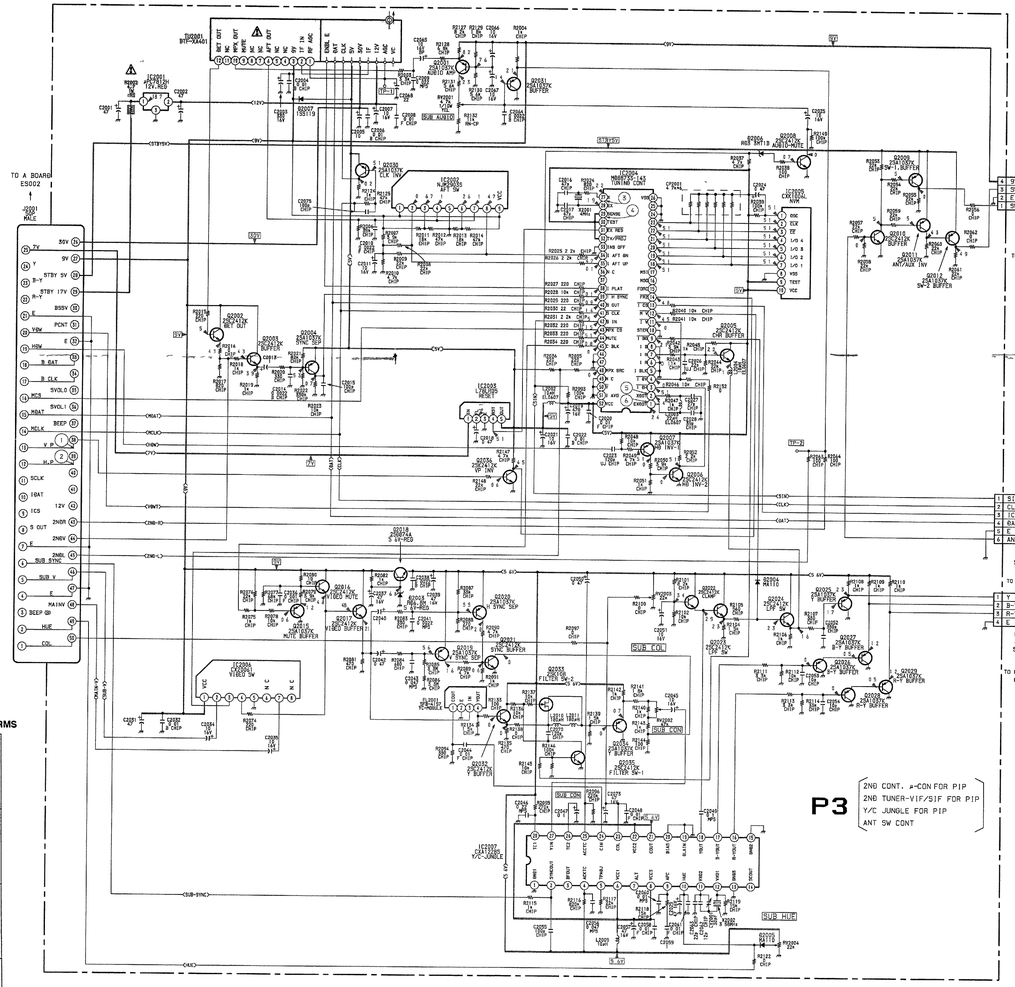
Note :
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



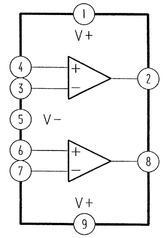


• P2 BOARD WAVEFORMS

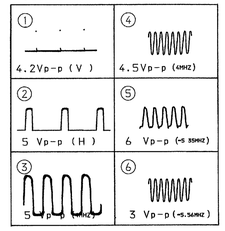




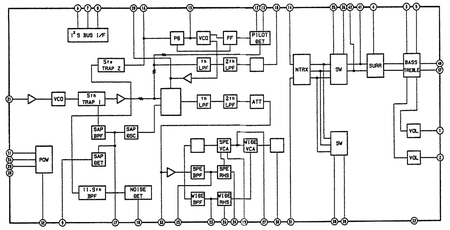
• P3 BOARD IC2002 NJM2903S



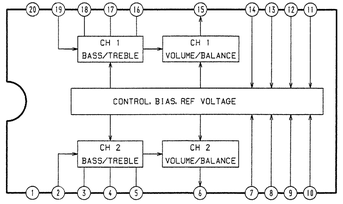
• P3 BOARD WAVEFORMS



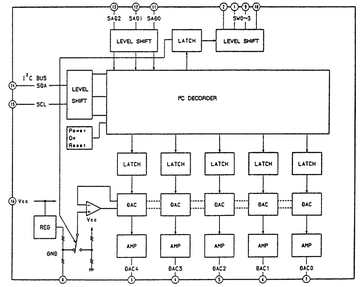
• Y2 BOARD IC406 CXA1264AS

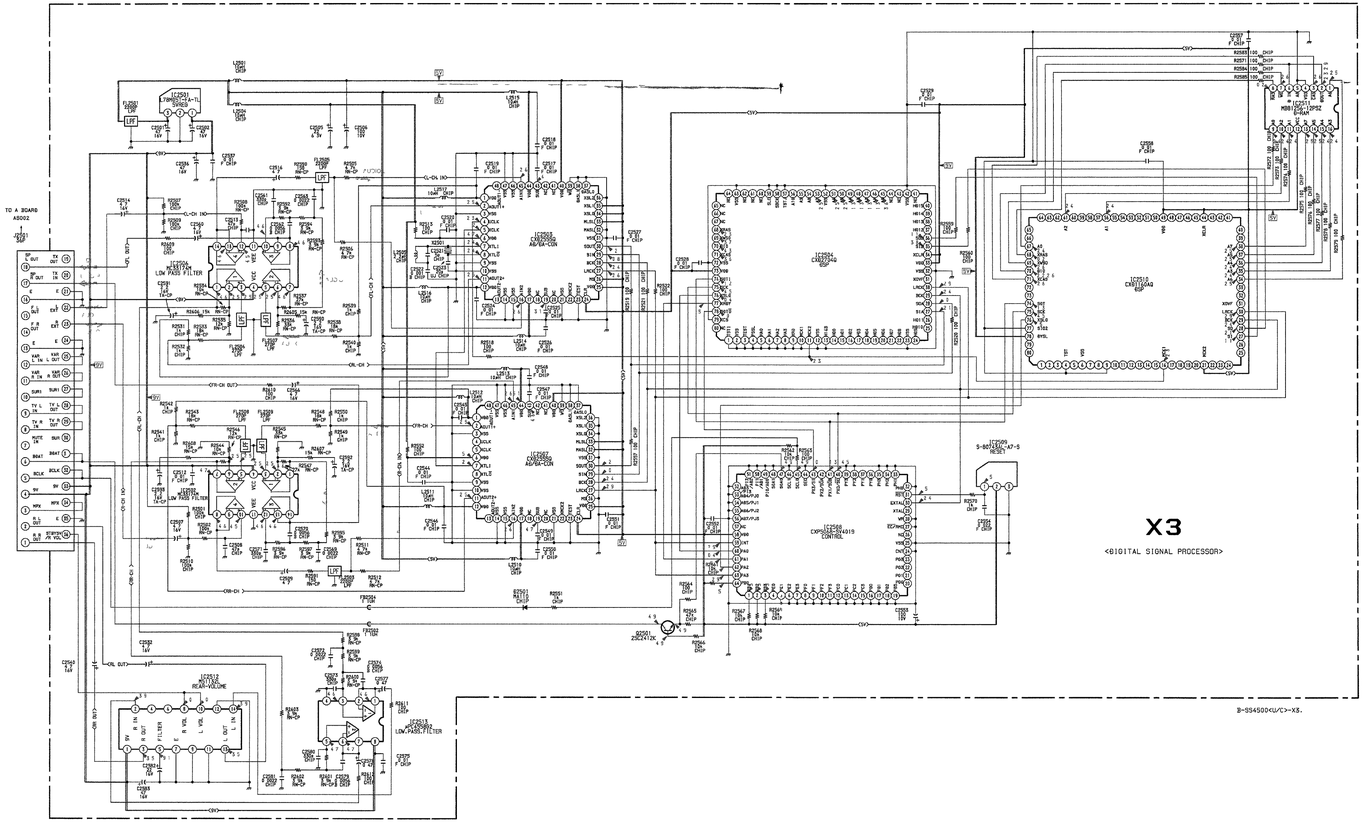


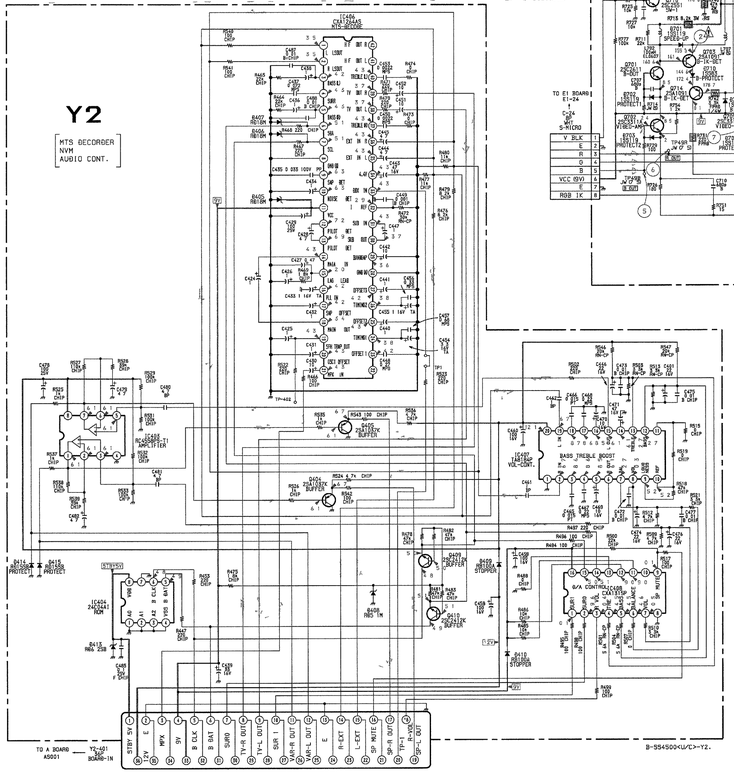
• Y2 BOARD IC407 TA8184P

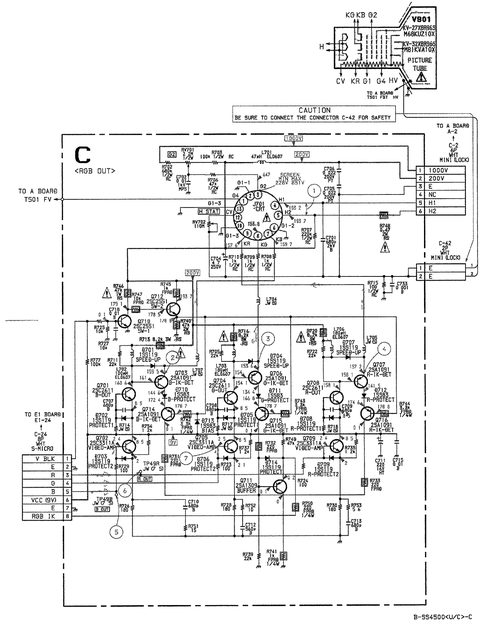


• Y2 BOARD IC408 CXA1315P









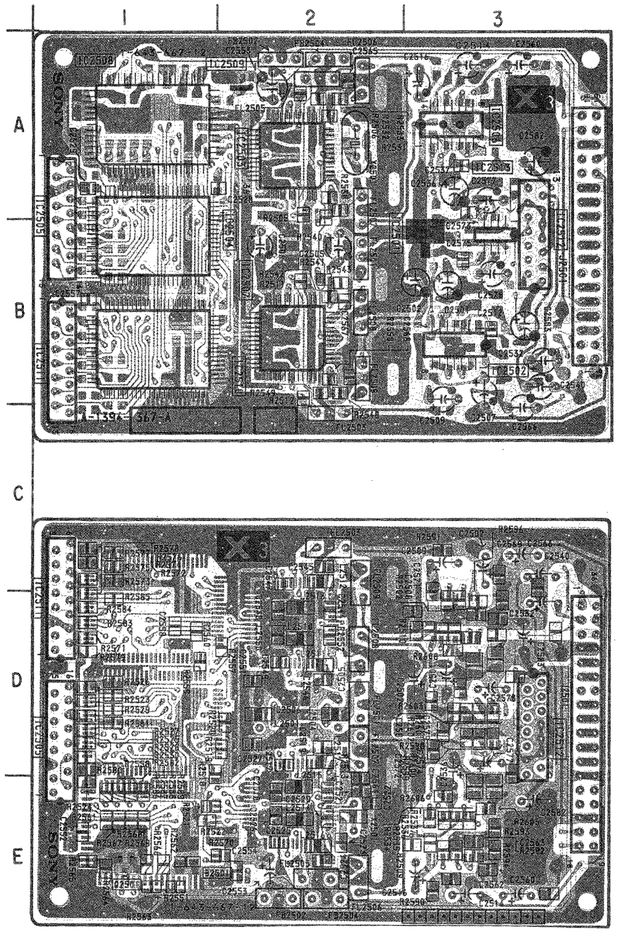
• C BOARD WAVEFORMS

① 22 Vp-p (H)	② 110Vp-p (H)	③ 130Vp-p (H)
④ 130Vp-p (H)	⑤ 4 Vp-p (H)	⑥ 4 Vp-p(H)
⑦ 4 Vp-p (H)		

KV-27XBR96S/32XBR96S
RM-Y114A

X3 [DIGITAL SIGNAL PROCESSOR] **Y2** [MTS DECORDER, NVM, AUDIO CONT.] **C** [R G B OUT]

– X3 BOARD –



IC	
IC2501	B – 3
IC2502	B – 3
IC2503	A – 2
IC2504	B – 1
IC2506	A – 3
IC2507	B – 2
IC2508	A – 1
IC2509	A – 2
IC2510	B – 1
IC2511	B – 1, D – 1
IC2512	B – 3, D – 3
IC2513	B – 3

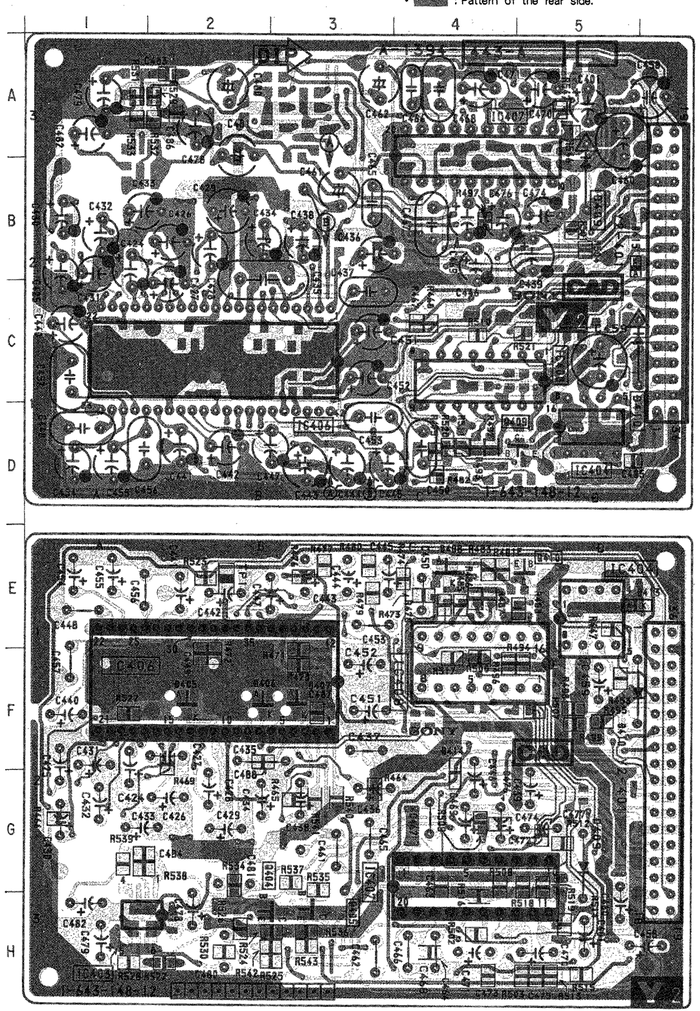
TRANSISTOR	
Q2501	E – 1

DIODE	
D2501	E – 1

Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

– Y2 BOARD –



Note :

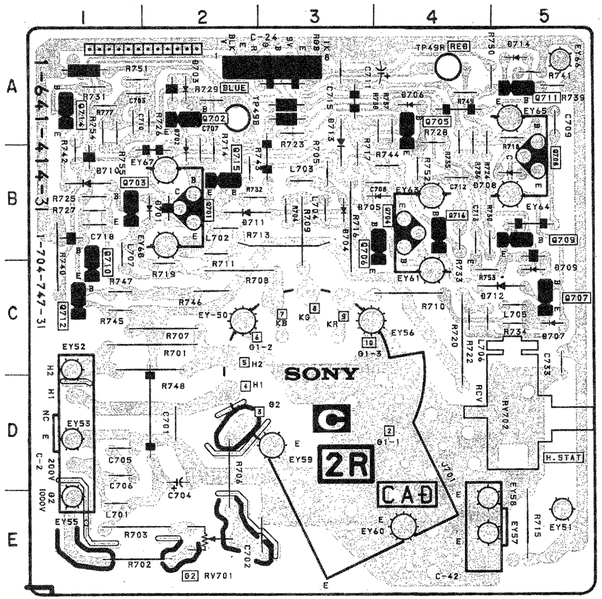
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

IC	
IIC403	H – 1
IC404	D – 5, E – 5
IC406	C – 2, F – 2
IC407	A – 4, G – 4
IC408	C – 4, F – 4

TRANSISTOR	
Q404	H – 3
Q405	H – 3
Q409	D – 5
Q410	E – 5

DIODE	
D405	F – 2
D406	F – 2
D407	F – 3
D408	E – 4
D409	A – 5
D410	C – 5, F – 5
D413	E – 6
D141	F – 4
D415	B – 5

– C BOARD –



Note :

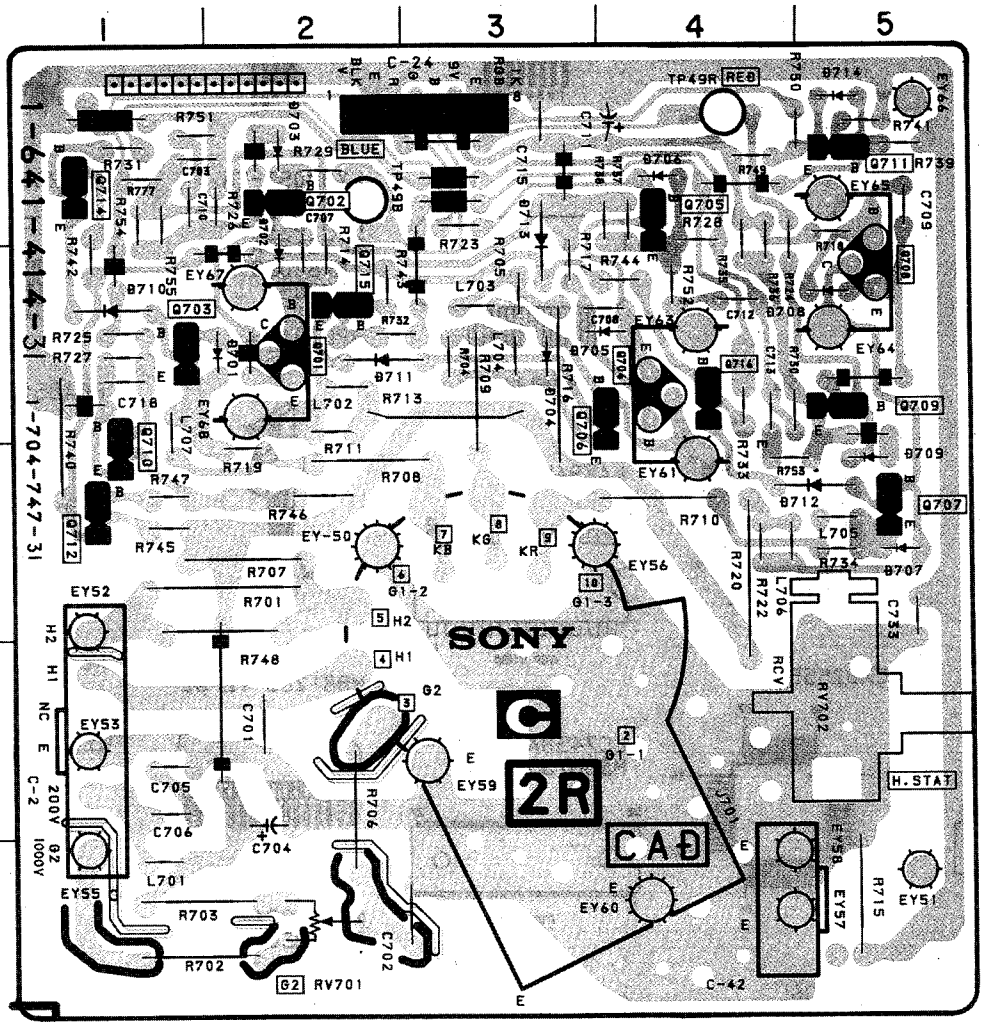
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

TRANSISTOR	
Q701	B – 2
Q702	A – 2
Q703	B – 1
Q704	B – 4
Q705	A – 4
Q706	B – 3
Q707	C – 5
Q708	B – 5
Q709	B – 5
Q710	B – 1
Q711	A – 5
Q712	C – 1
Q714	A – 1
Q715	B – 2
Q716	B – 4

DIODE	
D701	B – 2
D702	B – 2
D703	A – 2
D704	B – 3
D705	B – 3
D706	A – 4
D707	C – 5
D708	B – 5
D709	C – 5
D710	B – 1
D711	B – 2
D712	C – 5
D713	A – 3
D714	A – 5

VARIABLE RESISTOR	
RV701	E – 2
RV702	D – 5

– C BOARD –



Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

TRANSISTOR	
Q701	B – 2
Q702	A – 2
Q703	B – 1
Q704	B – 4
Q705	A – 4
Q706	B – 3
Q707	C – 5
Q708	B – 5
Q709	B – 5
Q710	B – 1
Q711	A – 5
Q712	C – 1
Q714	A – 1
Q715	B – 2
Q716	B – 4

DIODE	
D701	B – 2
D702	B – 2
D703	A – 2
D704	B – 3
D705	B – 3
D706	A – 4
D707	C – 5
D708	B – 5
D709	C – 5
D710	B – 1
D711	B – 2
D712	C – 5
D713	A – 3
D714	A – 5

VARIABLE RESISTOR	
RV701	E – 2
RV702	D – 5

6-8.SEMICONDUCTORS

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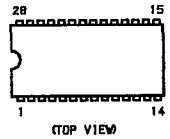

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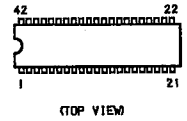

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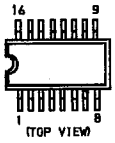

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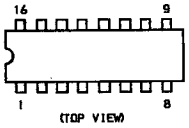

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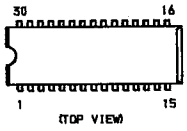

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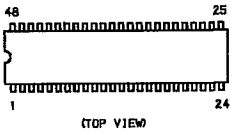

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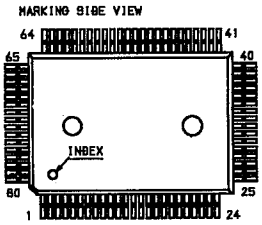

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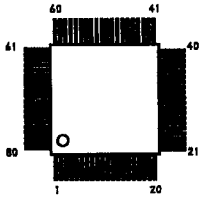

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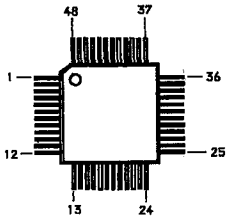

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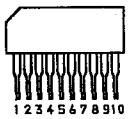

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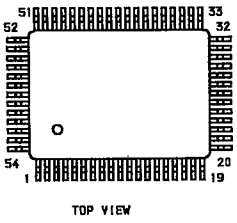

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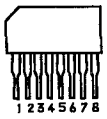

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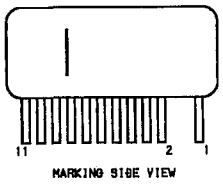

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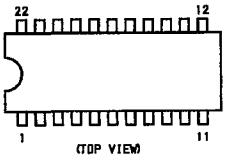

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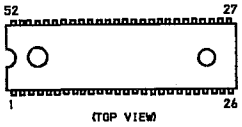

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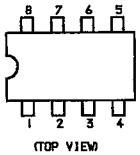

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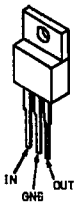

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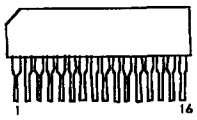

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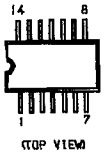

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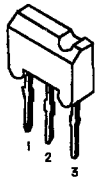

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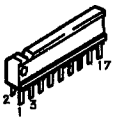

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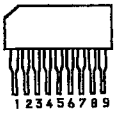

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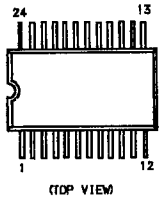

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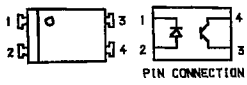

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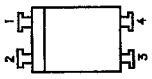

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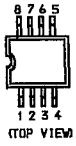

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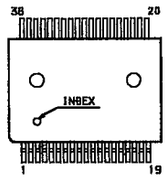

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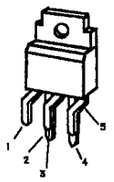

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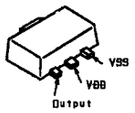

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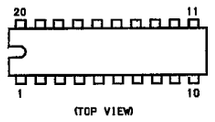

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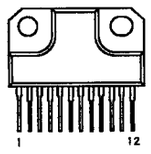

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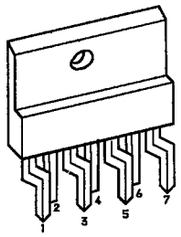

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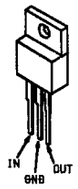

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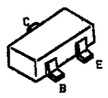

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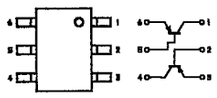

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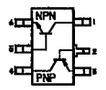

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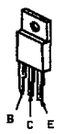

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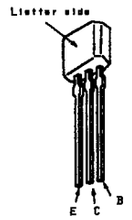

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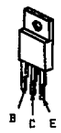

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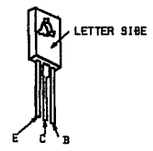

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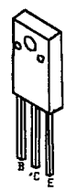

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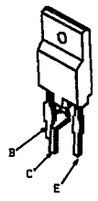

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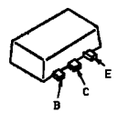

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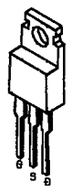

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RB-100A
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RD13ES-B2
RD2.2ES-B2
RD30ES-B2
RD3.3ES-B2
RD33ES-B2
RD39ES-B2
RD39ES-B3
RD39ES-B4
RD5.1ES-B2
RD5.6ES-B1
RD5.6ES-B3
RD6.2ES-B2
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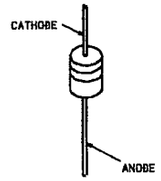

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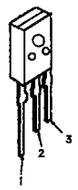

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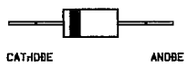

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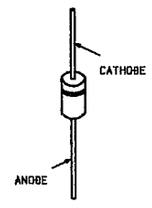

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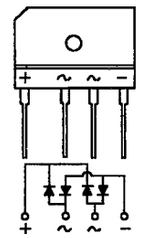

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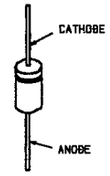

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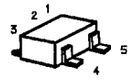

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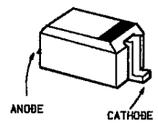

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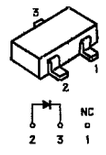
RD5.1M-B3
RD6.8M-B1



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RD6.2SB
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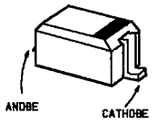

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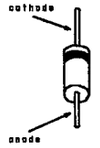

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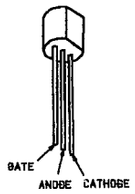
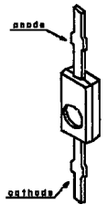
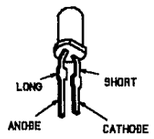


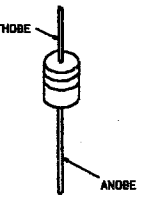
1T33



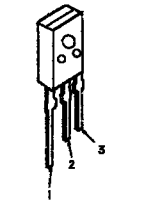
TLR124



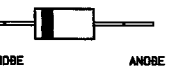
NS4
N20R
A38-006
A82-004
A83-006
A85-009
-100A
12ES-B2
13ES-B2
2.2ES-B2
30ES-B2
3.3ES-B2
33ES-B2
39ES-B2
39ES-B3
39ES-B4
5.1ES-B2
5.6ES-B1
5.6ES-B3
6.2ES-B2
6.8ES-B1
7.5ES-B2
9.1ES-B
9.1ES-L
P02-20EL-6394
S119



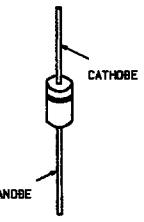
0SC4MR



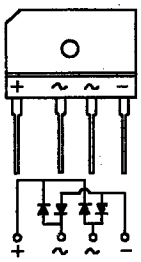
S4MF



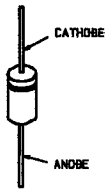
S6M-F
B24-06Ð
3AM
L20UF



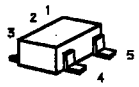
Ð6SB60L



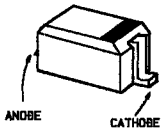
EGP20G
EL1Z
ERB44-06
GP08Ð
RGP10GPKG3
RGP15GPKG23
RU30A
1SS83



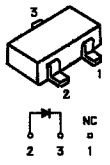
FMN1



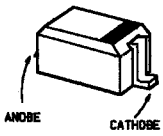
MA110



MA3130
RÐ18M-B1
RÐ3.3M-B1
RÐ5.1M-B3
RÐ6.8M-B1

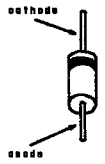


RÐ15SB
RÐ5.6SB
RÐ6.2SB
1SS352

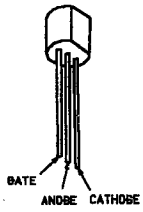


RÐ9.1EW

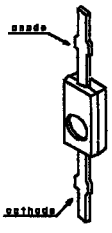
RGP02-17EL-6433



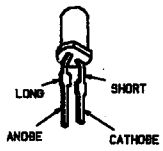
SHOR3Ð42



1T33



TLR124



SECTION 7
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

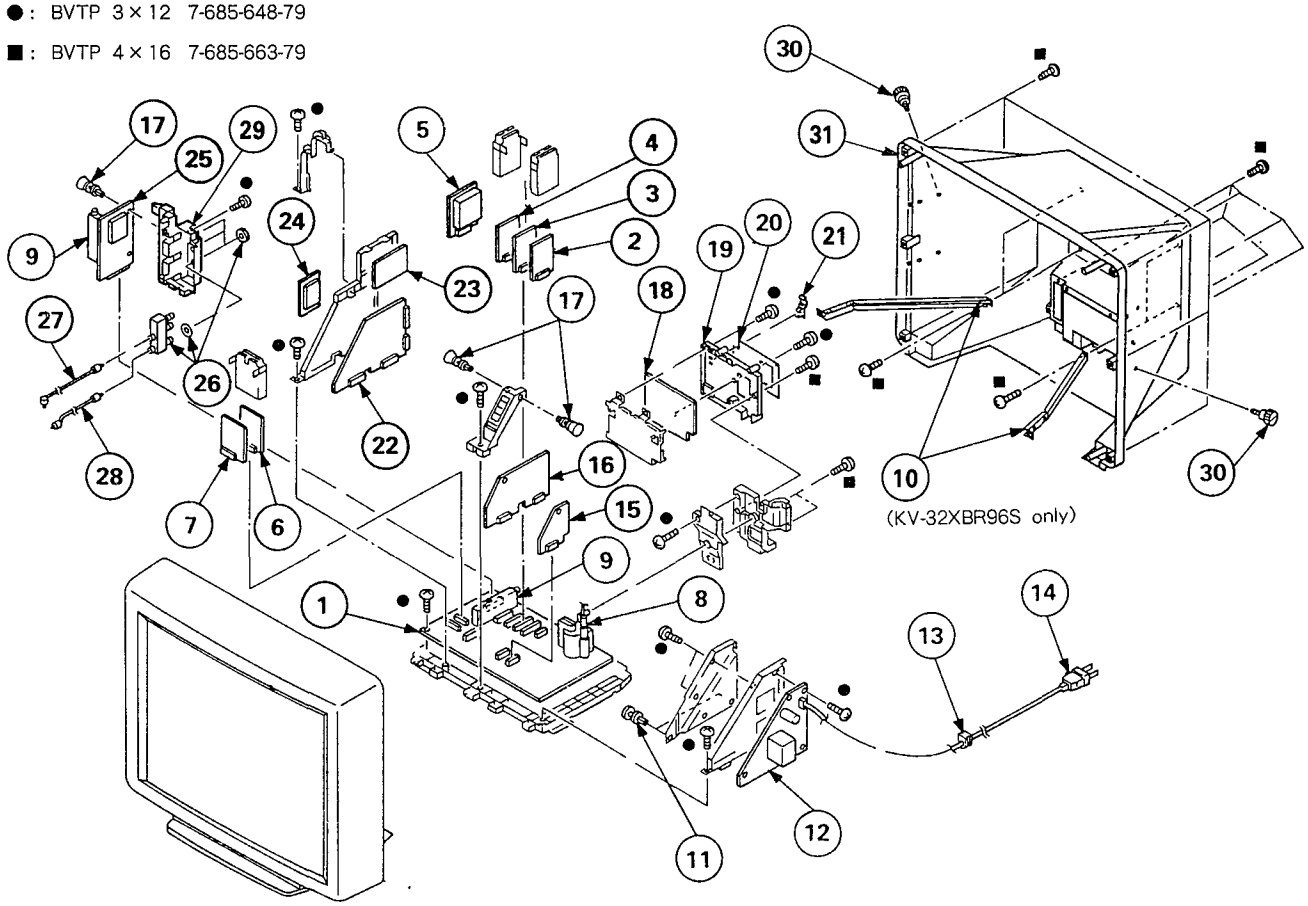
The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

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

7-1. CHASSIS

●: BVTP 3 × 12 7-685-648-79

■: BVTP 4 × 16 7-685-663-79

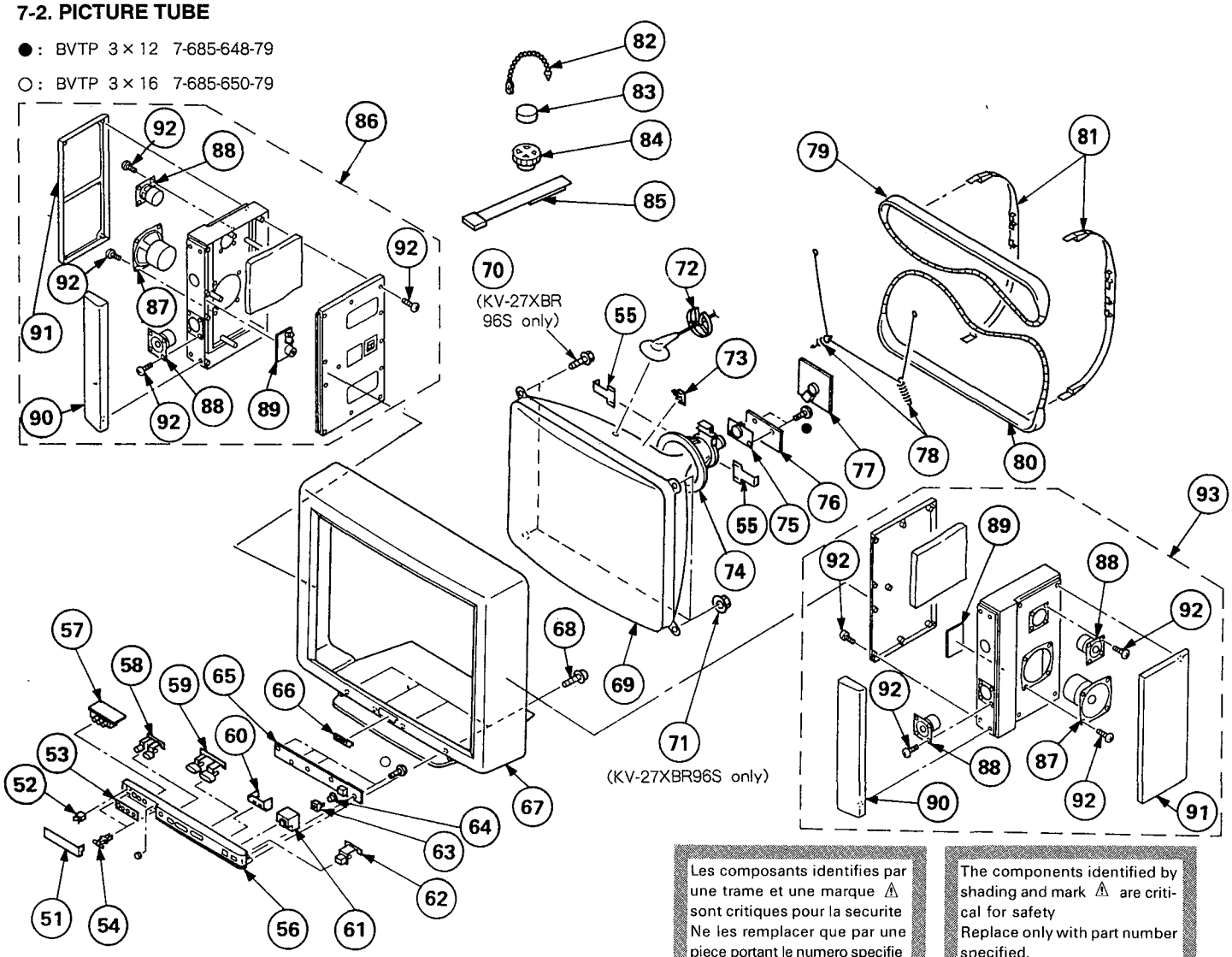


REF.NO.	PART NO.	DESCRIPTION	REMARK
1	*A-1297-164-A	A BOARD, COMPLETE (KV-32XBR96S(U/C))	2~7
	*A-1297-165-A	A BOARD, COMPLETE (KV-27XBR96S(U/C))	2~7
2	*A-1346-133-A	E1 BOARD, COMPLETE	
3	*A-1346-136-A	E2 BOARD, COMPLETE	
4	*A-1306-435-A	M BOARD, COMPLETE	
5	*A-1195-067-A	P2 BOARD, COMPLETE	
6	*A-1394-446-A	X3 BOARD, COMPLETE	
7	*A-1394-442-A	Y2 BOARD, COMPLETE	
8	⚠1-439-524-11	TRANSFORMER ASSY, FLYBACK (NX-3000A2) (KV-27XBR96S(U/C))	
	⚠1-453-126-11	TRANSFORMER ASSY, FLYBACK (NX-3000A3) (KV-32XBR96S(U/C))	
9	⚠1-693-102-22	TUNER (BTF-XA401)	
10	*4-036-731-01	BRACKET, REAR COVER (KV-32XBR96S(U/C))	
11	4-374-303-01	RIVET, NYLON	
12	*A-1316-160-A	G BOARD, COMPLETE	
13	⚠4-334-223-03	GROMMET, AC CORD	
14	⚠1-696-002-12	CORD, POWER(WITH NOISE FILTER)	
15	*A-1347-079-A	VC BOARD, COMPLETE (KV-27XBR96S(U/C))	
	*A-1347-081-A	VC BOARD, COMPLETE (KV-32XBR96S(U/C))	
16	*A-1341-664-A	D BOARD, COMPLETE (KV-27XBR96S(U/C))	
	*A-1341-678-A	D BOARD, COMPLETE (KV-32XBR96S(U/C))	
17	*4-397-418-01	RIVET, T TYPE	
18	*A-1373-422-A	UT BOARD, COMPLETE	
19	4-035-204-11	BRACKET, UT	
20	4-035-982-11	LABEL, UT	
21	4-329-127-00	CLAMP, CORD	
22	*A-1373-421-A	U BOARD, COMPLETE	
23	*A-1394-421-A	S BOARD, COMPLETE	
24	*A-1195-065-A	P4 BOARD, COMPLETE	
25	*A-1195-069-A	P3 BOARD, COMPLETE	
26	⚠1-417-178-11	SELECTOR, ANTENNA (AS-2)	
27	*1-555-400-00	CABLE, PIN	
28	*1-557-056-31	CABLE, P-P	
29	4-035-203-01	TERMINAL BOARD, ANTENNA	
30	X-4031-013-1	SCREW ASSY, ORNAMENTAL	
31	4-035-007-01	COVER, REAR (KV-32XBR96S(U/C))	
	4-037-303-01	COVER, REAR (KV-27XBR96S(U/C))	

7-2. PICTURE TUBE

●: BVTP 3 × 12 7-685-648-79

○: BVTP 3 × 16 7-685-650-79



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

REF.NO.	PART NO	DESCRIPTION	REMARK
51	4-035-199-01	DOOR, FRONT PANEL	
52	4-392-036-01	CATCHER, PUSH	
53	4-036-727-01	LABEL, JACK	
54	3-703-035-12	SHAFT, LID	
55	4-034-272-01	PLATE, CORRECTION, TLV	
56	4-035-057-21	PANEL, FRONT	
57	*1-643-664-11	HX2 BOARD	
58	4-035-179-01	BUTTON (A), MULTI	
59	4-035-154-01	BUTTON (B), MULTI	
60	4-035-120-01	GUIDE, LIGHT, LED	
61	4-035-119-01	FILTER (REMOTE CONTROL)	
62	4-035-153-01	BUTTON, POWER	
63	4-381-686-01	BRACKET (B), LIGHT GUIDE	
64	*4-388-603-01	GUIDE, LIGHT	
65	*1-643-663-11	HX1 BOARD	
66	3-704-179-01	EMBLEM (NO.9), SONY	
67	4-035-034-01	CABINET (WITH BEZEL) (KV-32XBR96S(U/C))	
	4-037-302-01	CABINET (WITH BEZEL) (KV-27XBR96S(U/C))	
68	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
69	⚠8-733-731-05	PICTURE TEBE (M81KVA10X) (KV-32XBR96S(U/C))	
	⚠8-733-837-05	PICTURE TEBE (M68KUZ10X) (KV-27XBR96S(U/C))	
70	4-390-505-01	SCREW (7), TAPPING (KV-27XBR96S(U/C))	
71	4-387-204-01	NUT, SPECIAL, PICTURE TUBE (KV-32XBR96S(U/C))	
72	*3-704-372-01	HOLDER, HV CABLE	
73	3-704-495-01	SPACER, DY	
74	⚠1-451-393-11	DEFLECTION YOKE (Y34EXA) (KV-32XBR96S(U/C))	
	⚠1-451-394-11	DEFLECTION YOKE (Y29EXA) (KV-27XBR96S(U/C))	
75	⚠1-452-616-13	NECK ASSY, PICTURE TUBE (NA323)	
76	*A-1342-220-A	V BOARD, COMPLETE	
77	*A-1331-271-A	C BOARD, COMPLETE	
78	4-036-329-01	SPRING (B), TENSION	
79	⚠1-406-586-11	COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))	
	⚠1-406-588-11	COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))	
80	⚠1-406-587-11	COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))	
	⚠1-406-589-11	COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))	
81	4-039-644-01	HOLDER, DGC (KV-32XBR96S(U/C))	
	4-039-643-02	HOLDER, DGC (KV-27XBR96S(U/C))	
82	4-308-870-00	CLIP, LEAD WIRE	
83	1-452-032-00	MAGNET,DISK; 10MMφ	
84	1-452-094-00	MAGNET, ROTATABLE DISK; 15MMφ	
85	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
86	1-504-181-11	SPEAKER SYSTEM (13CM)	87~92
87	9-903-495-01	WOOFER UNIT	
88	9-903-496-01	TWEETER UNIT	
89	9-903-497-01	NETWORK	
90	9-903-498-01	NET (SMALL)	
91	9-903-499-01	NET (LARGE)	
92	9-903-500-01	SCREW	
93	1-504-182-11	SPEAKER SYSTEM (13CM)	87~92

SECTION 8
ELECTRICAL PARTS LIST

P4

NOTE:

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

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

- 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 : μF, PF : μμF

COILS
- MMH : mH, UH : μH

- 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

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1195-065-A	P4 BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C1201	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1202	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C1203	1-163-105-00	CERAMIC CHIP 33PF	5%	50V	
C1204	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C1205	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	
C1206	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	
C1207	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1208	1-163-237-11	CERAMIC CHIP 27PF	5%	50V	
C1210	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C1211	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1213	1-126-154-11	ELECT 47MF	20%	6.3V	
C1214	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1215	1-126-154-11	ELECT 47MF	20%	6.3V	
C1216	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1217	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1218	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1219	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1220	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1221	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1222	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1223	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1224	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1225	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1226	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1227	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1228	1-126-154-11	ELECT 47MF	20%	6.3V	
C1229	1-126-157-11	ELECT 10MF	20%	6.3V	
C1230	1-126-157-11	ELECT 10MF	20%	6.3V	
C1231	1-126-157-11	ELECT 10MF	20%	6.3V	
C1232	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1233	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1234	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1235	1-124-257-00	ELECT 2.2MF	20%	50V	
C1237	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1238	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1239	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1240	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C1241	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
C1242	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	
C1243	1-126-177-11	ELECT 100MF	20%	6.3V	
C1245	1-126-157-11	ELECT 10MF	20%	6.3V	
C1246	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1249	1-126-157-11	ELECT 10MF	20%	6.3V	
C1250	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1251	1 164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1252	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1253	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1254	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1255	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1256	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	
		<CONNECTOR>			
P4-32	1-564-522-11	PLUG, CONNECTOR 7P			
		<FILTER>			
FL1201	1-239-550-11	FILTER, LOW PASS			
FL1202	1-239-550-11	FILTER, LOW PASS			
FL1203	1-239-550-11	FILTER, LOW PASS			
		<IC>			
IC1201	8-752-352-20	IC CXD2023Q			
IC1202	8-752-062-80	IC CXA1686M			
IC1203	8-759-112-06	IC UPC78N05H			
IC1204	8-759-112-06	IC UPC78N05H			
		<COIL>			
L1201	1-408-423-00	INDUCTOR 150UH			
L1202	1-414-042-21	INDUCTOR 18UH			
L1205	1-414-042-21	INDUCTOR 18UH			
		<TRANSISTOR>			
Q1202	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1203	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1204	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1205	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1206	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1207	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1208	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1209	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1211	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1212	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1213	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1214	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1215	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q1218	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1220	8-729-901-01	TRANSISTOR DTC144EK			
		<RESISTOR>			
R1201	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1202	1-216-001-00	METAL GLAZE 10	5%	1/10W	
R1203	1-216-025-00	METAL GLAZE 100	5%	1/10W	
R1204	1-216-630-11	METAL CHIP 130	0.50%	1/10W	
R1205	1-216-639-11	METAL CHIP 330	0.50%	1/10W	

P4 P3

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1206	1-216-620-11	METAL CHIP	51	0.50%	1/10W	
R1207	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1208	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1209	1-216-635-11	METAL CHIP	220	0.50%	1/10W	
R1210	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1211	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1212	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1213	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1214	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1215	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1216	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1217	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1218	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W	
R1219	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R1220	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R1221	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1222	1-216-103-00	METAL GLAZE	180K	5%	1/10W	
R1223	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1224	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1225	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R1226	1-216-666-11	METAL CHIP	4.3K	0.50%	1/10W	
R1228	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1229	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1230	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1231	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1232	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R1233	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1234	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R1235	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1238	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1239	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1241	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R1242	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1243	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R1244	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1245	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1246	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1247	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1248	1-216-635-11	METAL CHIP	220	0.50%	1/10W	
R1249	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1250	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R1251	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1252	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1253	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1254	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R1255	1-216-639-11	METAL CHIP	330	0.50%	1/10W	
R1256	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R1257	1-216-645-11	METAL CHIP	560	0.50%	1/10W	
R1258	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1259	1-216-644-11	METAL CHIP	510	0.50%	1/10W	
R1260	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1261	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1262	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1263	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1264	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1265	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1266	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1267	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1268	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1269	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1270	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1273	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1274	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1276	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R1284	1-216-025-00	METAL GLAZE	100	5%	1/10W	

<CRYSTAL>

X1201	1-577-611-11	OSCILALTOR, CERAMIC
X1202	1-567-878-11	VIBRATOR, CRYSTAL

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*A-1195-069-A P3 BOARD, COMPLETE
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<CAPACITOR>

C2001	1-124-910-11	ELECT	47MF	20%	50V
C2002	1-124-910-11	ELECT	47MF	20%	50V
C2003	1-124-119-00	ELECT	330MF	20%	16V
C2004	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2005	1-124-261-00	ELECT	10MF	20%	50V
C2006	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2007	1-126-157-11	ELECT	10MF	20%	16V
C2008	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2009	1-163-157-00	FILM	0.022MF	5%	50V
C2010	1-164-161-11	CERAMIC CHIP	0.0022MF		50V
C2011	1-126-157-11	ELECT	10MF	20%	16V
C2013	1-126-301-11	ELECT	1MF	20%	50V
C2014	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C2015	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C2016	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C2017	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C2018	1-124-465-00	ELECT	0.47MF	20%	50V
C2019	1-126-103-11	ELECT	470MF	20%	16V
C2020	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2021	1-126-157-11	ELECT	10MF	20%	16V
C2022	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2023	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C2024	1-124-465-00	ELECT	0.47MF	20%	50V
C2025	1-126-157-11	ELECT	10MF	20%	16V
C2026	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C2027	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C2028	1-163-107-00	CERAMIC CHIP	39PF	5%	50V
C2029	1-124-477-11	ELECT	47MF	20%	16V
C2031	1-124-910-11	ELECT	47MF	20%	50V
C2032	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2034	1-126-157-11	ELECT	10MF	20%	16V
C2035	1-126-157-11	ELECT	10MF	20%	16V
C2036	1-163-025-11	CERAMIC CHIP	0.001MF		50V
C2037	1-124-477-11	ELECT	47MF	20%	16V
C2038	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C2039	1-124-477-11	ELECT	47MF	20%	16V
C2040	1-124-903-11	ELECT	1MF	20%	50V
C2041	1-130-475-00	MYLAR	0.0022MF	5%	50V
C2042	1-124-902-00	ELECT	0.47MF	20%	50V
C2043	1-136-161-00	FILM	0.047MF	5%	50V
C2044	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2045	1-126-157-11	ELECT	10MF	20%	16V
C2046	1-136-169-00	FILM	0.22MF	5%	50V
C2047	1-124-463-00	ELECT	0.1MF	20%	50V
C2048	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2049	1-136-165-00	FILM	0.1MF	5%	50V
C2050	1-124-902-00	ELECT	0.47MF	20%	50V
C2051	1-126-157-11	ELECT	10MF	20%	16V
C2052	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C2053	1-163-093-00	CERAMIC CHIP	10PF	5%	50V

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

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Ne les remplacer que par une piece portant le numero specifie

REF.NO.	PART NO.	DESCRIPTION			REMARK
C2054	1-163-093-00	CERAMIC CHIP	10PF	5% 50V	
C2055	1-163-117-00	CERAMIC CHIP	100PF	5% 50V	
C2056	1-136-161-00	FILM	0.047MF	5% 50V	
C2057	1-124-477-11	ELECT	47MF	20% 16V	
C2058	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2059	1-136-177-00	FILM	1MF	5% 50V	
C2060	1-136-153-00	FILM	0.01MF	5% 50V	
C2061	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2062	1-163-095-00	CERAMIC CHIP	12PF	5% 50V	
C2063	1-163-101-00	CERAMIC CHIP	22PF	5% 50V	
C2064	1-164-161-11	CERAMIC CHIP	0.0022MF	10% 50V	
C2065	1-126-320-11	ELECT	10MF	20% 16V	
C2066	1-126-157-11	ELECT	10MF	20% 16V	
C2067	1-126-157-11	ELECT	10MF	20% 16V	
C2068	1-124-916-11	ELECT	22MF	20% 50V	
C2070	1-163-257-11	CERAMIC CHIP	180PF	5% 50V	
C2073	1-124-477-11	ELECT	47MF	20% 16V	
C2075	1-163-117-00	CERAMIC CHIP	100PF	5% 50V	

<CONNECTOR>

P3-39	*1-564-521-11	PLUG, CONNECTOR 6P	
P3-40	*1-564-519-11	PLUG, CONNECTOR 4P	
P3-41	*1-564-519-11	PLUG, CONNECTOR 4P	

<NETWORK>

CP2001	1-236-472-11	NETWORK, RES, THICK FILM	

<TRIMMER>

CV2001	1-141-245-00	CAP, TRIMMER	

<DIODE>

D2003	8-719-106-16	DIODE RD6.8MB1	
D2004	8-719-404-46	DIODE MA110	
D2005	8-719-404-46	DIODE MA110	
D2006	8-719-105-45	DIODE RD3.3MB1	
D2007	8-719-911-19	DIODE 1SS119	

<MODULE>

FL2001	1-235-941-11	YC MODULE	

<IC>

IC2001	8-759-231-58	IC UPC7812H	
IC2002	8-759-700-48	IC NJM2903S	
IC2003	8-759-805-37	IC L78LR05D-MA	
IC2004	8-759-066-51	IC MB88733-143	
IC2005	8-759-803-25	IC CXK1006L	
IC2006	8-752-006-12	IC CX20061	
IC2007	8-752-033-32	IC CXA1228S	

<JACK>

J2001	*1-573-962-11	CONNECTOR (MALE) 50P	

<COIL>

L2002	1-410-663-31	INDUCTOR	10UH
L2003	1-410-667-31	INDUCTOR	22UH
L2004	1-410-663-31	INDUCTOR	10UH
L2009	1-410-663-31	INDUCTOR	10UH
L2010	1-410-677-31	INDUCTOR	180UH
L2011	1-410-677-31	INDUCTOR	180UH

<TRANSISTOR>

Q2001	8-729-216-22	TRANSISTOR	2SA1162-G
Q2002	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2003	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2004	8-729-216-22	TRANSISTOR	2SA1162-G
Q2005	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2006	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2007	8-729-216-22	TRANSISTOR	2SA1162-G
Q2008	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q2009	8-729-216-22	TRANSISTOR	2SA1162-G
Q2010	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2011	8-729-216-22	TRANSISTOR	2SA1162-G
Q2012	8-729-216-22	TRANSISTOR	2SA1162-G
Q2015	8-729-216-22	TRANSISTOR	2SA1162-G
Q2016	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2017	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2018	8-729-420-81	TRANSISTOR	2SD874A-R
Q2019	8-729-216-22	TRANSISTOR	2SA1162-G
Q2020	8-729-216-22	TRANSISTOR	2SA1162-G
Q2021	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2022	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2023	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2024	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2025	8-729-216-22	TRANSISTOR	2SA1162-G
Q2026	8-729-216-22	TRANSISTOR	2SA1162-G
Q2027	8-729-216-22	TRANSISTOR	2SA1162-G
Q2028	8-729-216-22	TRANSISTOR	2SA1162-G
Q2029	8-729-216-22	TRANSISTOR	2SA1162-G
Q2030	8-729-216-22	TRANSISTOR	2SA1162-G
Q2031	8-729-216-22	TRANSISTOR	2SA1162-G
Q2032	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2033	8-729-600-12	TRANSISTOR	2SK108-C
Q2034	8-729-216-22	TRANSISTOR	2SA1162-G
Q2035	8-729-422-27	TRANSISTOR	2SD601A-Q
Q2036	8-729-422-27	TRANSISTOR	2SD601A-Q

<RESISTOR>

R2002⚠	1-216-357-91	METAL OXIDE	4.7	5%	1W	F
R2003	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R2004	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2006	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R2007	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R2008	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2009	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2010	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2011	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R2012	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R2013	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R2014	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R2015	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2016	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2017	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R2018	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2019	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2020	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R2021	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R2022	1-216-109-00	METAL GLAZE	330K	5%	1/10W	

P3

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Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2023	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2024	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R2025	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2026	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2027	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2028	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2029	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2030	1-216-009-00	METAL GLAZE	22	5%	1/10W	
R2031	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2032	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2033	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2034	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2035	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2036	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2037	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2038	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2039	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2040	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2041	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2042	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R2043	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2044	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2045	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2046	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2047	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2048	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2049	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2050	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R2051	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2052	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R2053	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2054	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2055	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2056	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2057	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2058	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2059	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2060	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2061	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2062	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2063	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2064	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2074	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2075	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2076	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2077	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R2078	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2079	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R2080	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2081	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R2082	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2083	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R2084	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R2085	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W	
R2086	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W	
R2087	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R2088	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R2089	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2090	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2091	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2093	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2094	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R2095	1-216-107-00	METAL GLAZE	270K	5%	1/10W	
R2096	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R2097	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2100	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2101	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R2102	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2104	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2105	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2106	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2107	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R2108	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2109	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2110	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2111	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R2112	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2113	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R2114	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R2115	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2116	1-216-119-00	METAL GLAZE	820K	5%	1/10W	
R2117	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2118	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R2119	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R2122	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2124	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2125	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R2127	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R2128	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R2129	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R2130	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R2131	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R2132	1-216-676-11	METAL CHIP	11K	0.50%	1/10W	
R2133	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2134	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2135	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R2136	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2137	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2138	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2139	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2140	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2141	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R2142	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2143	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2144	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2145	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2146	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2147	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R2148	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2149	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2152	1-216-295-00	METAL GLAZE	0	5%	1/10W	

<VARIABLE RESISTOR>

RV2001	1-238-015-11	RES, ADJ, CARBON 4.7K
RV2002	1-238-019-11	RES, ADJ, CARBON 47K
RV2003	1-238-017-11	RES, ADJ, CARBON 22K
RV2004	1-238-017-11	RES, ADJ, CARBON 22K

<TUNER>

TU2001⚠	1-693-102-22	TUNER (BTF-XA401)

<CRYSTAL>

X2001	1-567-192-11	OSCILLATOR, CERAMIC
X2002	1-567-505-11	OSCILLATOR, CRYSTAL

A

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

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.

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1297-164-A	A BOARD, COMPLETE (KV-32XBR96S(U/C)) **********			
	*A-1297-165-A	A BOARD, COMPLETE (KV-27XBR96S(U/C)) **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C201	1-126-101-11	ELECT	100MF	20%	16V
C210	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C211	1-101-006-00	CERAMIC	0.047MF		50V
C213	1-126-103-11	ELECT	470MF	20%	16V
C214	1-126-101-11	ELECT	100MF	20%	16V
C215	1-124-910-11	ELECT	47MF	20%	50V
C216	1-126-101-11	ELECT	100MF	20%	16V
C217	1-124-126-00	ELECT	47MF	20%	25V
C218	1-126-103-11	ELECT	470MF	20%	16V
C219	1-136-169-00	FILM	0.22MF	5%	50V
C220	1-124-910-11	ELECT	47MF	20%	50V
C223	1-123-875-11	ELECT	10MF	20%	50V
C224	1-124-261-00	ELECT	10MF	20%	50V
C225	1-124-120-11	ELECT	220MF	20%	16V
C226	1-124-621-11	ELECT	3300MF	20%	6.3V
C299	1-126-101-11	ELECT	100MF	20%	16V
C501	1-137-114-11	FILM	0.68MF	5%	200V
C502	1-130-471-00	FILM	0.001MF	5%	50V
C503	1-124-261-00	ELECT	10MF	20%	50V
C504	1-136-161-00	FILM	0.047MF	5%	50V
C505	1-124-790-11	ELECT	0.47MF	20%	100V
C506	1-124-480-11	ELECT	470MF	20%	25V
C507	1-130-473-00	MYLAR	0.0015MF	5%	50V
C508	1-162-114-00	CERAMIC	0.0047MF		2KV
C509	1-124-808-51	ELECT	10MF	20%	200V
C510	1-102-110-00	CERAMIC	220PF	10%	50V
C511	1-124-477-11	ELECT	47MF	20%	25V
C512	1-162-318-11	CERAMIC	0.001MF	10%	500V
C513	1-106-391-12	MYLAR	0.1MF	10%	200V
C514	1-124-477-11	ELECT	47MF	20%	25V
C515	1-162-117-00	CERAMIC	100PF	10%	500V
C517	1-124-477-11	ELECT	47MF	20%	25V
C518	1-136-161-00	FILM	0.047MF	5%	50V
C519	1-124-472-11	ELECT	470MF	20%	10V
C520 ⚠	1-161-731-51	CERAMIC	0.001MF	10%	2KV
C521 ⚠	1-137-604-21	FILM	0.022MF	2%	2KV
C522	1-162-116-00	CERAMIC	680PF	10%	2KV
C523	1-124-465-00	ELECT	0.47MF	20%	50V
C524	1-130-487-00	MYLAR	0.022MF	5%	50V
C525	1-162-116-00	CERAMIC	680PF	10%	2KV
C526 ⚠	1-137-515-91	FILM	0.056MF	3%	400V
C527	1-136-167-00	FILM	0.15MF	5%	50V
C528	1-106-359-00	MYLAR	0.0047MF	10%	200V
C529	1-136-161-00	FILM	0.047MF	5%	50V
C530	1-136-105-00	FILM	0.33MF	5%	200V
C531	1-124-634-11	ELECT	1MF	20%	250V
C532	1-124-477-11	ELECT	47MF	20%	25V
C533	1-137-516-11	FILM	1.2MF	5%	200V
C534	1-137-114-11	FILM	0.68MF	5%	200V
C535	1-124-480-11	ELECT	470MF	20%	25V
C536	1-102-228-00	CERAMIC	470PF	10%	500V
C537	1-106-343-00	MYLAR	0.001MF	10%	100V
C538	1-106-391-12	MYLAR	0.1MF	10%	200V
C539	1-123-950-00	ELECT	47MF	20%	250V
C540	1-124-480-11	ELECT	470MF	20%	25V
C541	1-102-228-00	CERAMIC	470PF	10%	500V
C542	1-106-387-00	MYLAR	0.068MF	10%	200V
C543	1-129-898-00	FILM	0.0022MF	5%	630V
C544	1-124-797-11	ELECT	0.47MF	20%	160V
C545	1-102-244-00	CERAMIC	220PF	10%	500V
C546	1-123-024-21	ELECT	33MF		160V
C547	1-130-471-00	MYLAR	0.001MF	5%	50V
C548	1-130-467-00	MYLAR	470PF	5%	50V
C549	1-124-261-00	ELECT	10MF	20%	50V
C550	1-129-702-00	FILM	0.001MF	10%	630V
C551	1-130-471-00	MYLAR	0.001MF	5%	50V
C552	1-126-176-11	ELECT	220MF	20%	10V
C553	1-124-261-00	ELECT	10MF	20%	50V
C554 ⚠	1-161-731-51	CERAMIC	0.001MF	10%	2KV
C555	1-123-947-00	ELECT	10MF	20%	250V
C557	1-124-465-00	ELECT	0.47MF	20%	50V
C559	1-129-718-00	FILM	0.022MF	5%	630V
C560	1-136-169-00	FILM	0.22MF	5%	50V
C561	1-124-261-00	ELECT	10MF	20%	50V
C562	1-124-499-11	ELECT	1MF	20%	50V
C563	1-130-491-00	MYLAR	0.047MF	5%	50V
C564	1-130-495-00	MYLAR	0.1MF	5%	50V
C565	1-130-495-00	MYLAR	0.1MF	5%	50V
C569	1-130-497-00	MYLAR	0.15MF	5%	50V
C570	1-130-471-00	MYLAR	0.001MF	5%	50V
C571	1-130-471-00	FILM	0.001MF	2%	50V
C572	1-124-907-11	ELECT	10MF	20%	50V
C573	1-130-471-00	MYLAR	0.001MF	5%	50V
C575	1-102-038-00	CERAMIC	0.001MF		500V
C576	1-106-355-12	MYLAR	0.0033MF	10%	200V
C1401	1-124-910-11	ELECT	47MF	20%	50V
C1402	1-126-157-11	ELECT	10MF	20%	16V
C1403	1-126-157-11	ELECT	10MF	20%	16V
C1404	1-126-157-11	ELECT	10MF	20%	16V
C1405	1-124-910-11	ELECT	47MF	20%	50V
C1406	1-124-910-11	ELECT	47MF	20%	50V
C1407	1-124-607-11	ELECT	2200MF	20%	50V
C1408	1-136-165-00	FILM	0.1MF	5%	50V
C1409	1-136-165-00	FILM	0.1MF	5%	50V
C1415	1-124-910-11	ELECT	47MF	20%	50V
C1416	1-126-157-11	ELECT	10MF	20%	16V
C1417	1-126-157-11	ELECT	10MF	20%	16V
C1418	1-124-910-11	ELECT	47MF	20%	50V
C1419	1-124-910-11	ELECT	47MF	20%	50V
C1420	1-136-165-00	FILM	0.1MF	5%	50V
C1421	1-124-607-11	ELECT	2200MF	20%	50V
C1422	1-136-165-00	FILM	0.1MF	5%	50V
C1423	1-124-922-11	ELECT	1000MF	20%	50V
C1424	1-124-607-11	ELECT	2200MF	20%	50V
C1425	1-124-607-11	ELECT	2200MF	20%	50V
C1426	1-126-157-11	ELECT	10MF	20%	16V
C1430	1-124-916-11	ELECT	22MF	20%	50V
C1435	1-124-916-11	ELECT	22MF	20%	50V
C1437	1-130-499-00	MYLAR	0.22MF	5%	50V
C1501	1-124-916-11	ELECT	22MF	20%	50V
C1502	1-126-301-11	ELECT	1MF	20%	50V
C1503	1-102-114-00	CERAMIC	470PF	10%	50V
C1504	1-124-480-11	ELECT	470MF	20%	25V
C1505	1-124-911-11	ELECT	220MF	20%	50V
C1506	1-136-171-00	FILM	0.33MF	5%	50V
C1507	1-106-222-00	MYLAR	0.12MF	10%	100V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C1508	1-124-480-11	ELECT	470MF	20% 25V	
C1509	1-124-122-11	ELECT	100MF	20% 50V	
C1511	1-164-014-11	CERAMIC	5PF	0.25PF 50V	
C4001	1-124-922-11	ELECT	1000MF	20% 50V	
C4007	1-124-916-11	ELECT	22MF	20% 50V	
C4008	1-130-499-00	MYLAR	0.22MF	5% 50V	
		<CONNECTOR>			
A2	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P			
A3	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P			
A4	*1-564-510-11	PLUG, CONNECTOR 7P			
A5	*1-564-507-11	PLUG, CONNECTOR 4P			
A9	*1-564-505-11	PLUG, CONNECTOR 2P			
A11	*1-564-507-11	PLUG, CONNECTOR 4P			
A12	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P			
A13	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P			
A14	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P			
A15	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P			
A18	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P			
A21	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P			
A37	*1-564-514-11	PLUG, CONNECTOR 11P			
A38	*1-564-505-11	PLUG, CONNECTOR 2P			
A43	*1-564-508-11	PLUG, CONNECTOR 5P			
A49	*1-564-506-11	PLUG, CONNECTOR 3P			
A100	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P			
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P			
ES002	*1-573-960-11	CONNECTOR (FEMALE) 50P			
		<NETWORK>			
CP3001	1-236-176-11	NETWORK, RES, THICK FILM			
CP3002	1-236-176-11	NETWORK, RES, THICK FILM			
CP3003	1-236-176-11	NETWORK, RES, THICK FILM			
		<DIODE>			
D201	8-719-121-24	DIODE RD9.1ESL			
D202	8-719-121-24	DIODE RD9.1ESL			
D205	8-719-911-19	DIODE 1SS119			
D206	8-719-911-19	DIODE 1SS119			
D207	8-719-911-19	DIODE 1SS119			
D208	8-719-911-19	DIODE 1SS119			
D209	8-719-510-48	DIODE DIN20R			
D213	8-719-110-78	DIODE RD33ESB2			
D501	8-719-018-82	DIODE RGP02-20EL-6394			
D502 ⚠	8-719-302-44	DIODE EL1Z-VI			
D503	8-719-970-87	DIODE ERA38-06			
D504	8-719-911-19	DIODE 1SS119			
D506	8-719-109-90	DIODE RD5.6ESB3			
D508	8-719-109-88	DIODE RD5.6ESB1			
D509	8-719-110-03	DIODE RD7.5ESB2			
D510	8-719-911-19	DIODE 1SS119			
D511	8-719-300-33	DIODE RU-3AM			
D512	8-719-908-03	DIODE GP08D			
D513	8-719-908-03	DIODE GP08D			
D514	8-719-312-72	DIODE RU30A			
D515	8-719-302-43	DIODE EL1Z			
D516	8-719-979-85	DIODE EGP20G			
D517	8-719-943-06	DIODE ERB24-06D			
D518	8-719-109-93	DIODE RD6.2ESB2			
D521	8-719-911-19	DIODE 1SS119			
D522	8-719-110-72	DIODE RD30ESB2			
D524	8-719-028-72	DIODE RGP02-17EL-6433			
D525	8-719-911-19	DIODE 1SS119			
D527	8-719-110-78	DIODE RD33ESB2			
D529	8-719-911-19	DIODE 1SS119			
D530	8-719-911-19	DIODE 1SS119			
D1407	8-719-911-19	DIODE 1SS119			
D1408	8-719-911-19	DIODE 1SS119			
D1409	8-719-110-90	DIODE RD39ESB4			
D1410	8-719-901-83	DIODE 1SS83			
D1411	8-719-901-83	DIODE 1SS83			
D1412	8-719-911-19	DIODE 1SS119			
D1413	8-719-911-19	DIODE 1SS119			
D1414	8-719-911-19	DIODE 1SS119			
D1503	8-719-908-03	DIODE GP08D			
D4001	8-719-911-19	DIODE 1SS119			
D4005	8-719-901-83	DIODE 1SS83			
D4006	8-719-901-83	DIODE 1SS83			
		<IC>			
IC201	8-749-920-58	IC SI-3090CA			
IC204	8-759-701-75	IC NJM7805FA			
IC205	8-759-144-84	IC UPC24M05HF			
IC206	8-759-231-58	IC TA7812S			
IC501	8-759-103-93	IC UPC393C			
IC502	1-809-845-11	MODULE, PROTECTOR PM-30			
IC503	8-759-103-93	IC UPC393C			
IC504	8-759-231-58	IC TA7812S			
IC1401	8-759-246-70	IC TA8216H			
IC1402	8-759-246-70	IC TA8216H			
IC1501	8-759-506-46	IC TDA8179S			
		<JACK>			
J201	1-507-562-00	JACK			
J202	1-507-562-00	JACK			
		<COIL>			
L001	1-408-409-00	INDUCTOR	10UH		
L002	1-410-476-11	INDUCTOR	33UH		
L201	1-408-408-00	INDUCTOR	8.2UH		
L205	1-408-421-00	INDUCTOR	100UH		
L208	1-410-785-31	INDUCTOR	0.22UH		
L210	1-408-408-00	INDUCTOR	8.2UH		
L501	1-459-104-00	COIL, WITH CORE			
L502	1-412-552-31	INDUCTOR	2.2MMH		
L504	1-410-071-11	INDUCTOR	10MMH		
L507	1-459-483-00	COIL (WITH CORE)			
L508	1-421-541-00	COIL, CHOKE 1000UH			
L509	1-459-104-00	COIL, WITH CORE			
L510 ⚠	1-460-197-11	COIL, FERRITE (PMC)			
L511	1-412-519-11	INDUCTOR	3.3UH		
L512	1-412-531-31	INDUCTOR	33UH		
L513	1-412-519-11	INDUCTOR	3.3UH		
L514	1-459-123-00	COIL,DUST CORE(PAC)			
L515	1-410-645-31	INDUCTOR	100UH		
L520	1-412-531-31	INDUCTOR	33UH		
L1501	1-412-531-31	INDUCTOR	33UH		
L1503	1-412-531-31	INDUCTOR	33UH		
		<TRANSISTOR>			
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE			

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

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 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.

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REF.NO.	PART NO.	DESCRIPTION	REMARK
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q501	8-729-011-07	TRANSISTOR 2SC4763(LBSONY)	
Q502	8-729-140-97	TRANSISTOR 2SB734-34	
Q503	8-729-011-06	TRANSISTOR 2SC3840K	
Q504	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q505	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q506	8-729-011-00	TRANSISTOR 2SK1916-53-F87	
Q507	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q509	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q510	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q511	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q512	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q513	8-729-140-96	TRANSISTOR 2SD774-34	
Q515	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q516	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1401	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1403	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1404	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1405	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1407	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1408	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1502	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

R201	1-249-405-11	CARBON	100	5%	1/4W	F
R202	1-249-405-11	CARBON	100	5%	1/4W	F
R210	1-249-441-11	CARBON	100K	5%	1/4W	
R211	1-249-425-11	CARBON	4.7K	5%	1/4W	
R214	1-249-377-11	CARBON	0.47	5%	1/4W	F
R219	1-249-426-11	CARBON	5.6K	5%	1/4W	
R221	1-249-409-11	CARBON	220	5%	1/4W	
R222	1-249-434-11	CARBON	27K	5%	1/4W	
R223	1-249-433-11	CARBON	22K	5%	1/4W	
R224	1-249-409-11	CARBON	220	5%	1/4W	
R226	1-249-417-11	CARBON	1K	5%	1/4W	
R230 ⚠	1-215-923-51	METAL OXIDE	10K	5%	3W	F
R231	1-249-409-11	CARBON	220	5%	1/4W	F
R232 ⚠	1-216-380-91	METAL OXIDE	8.2	5%	2W	F
R233	1-249-409-11	CARBON	220	5%	1/4W	
R234	1-249-409-11	CARBON	220	5%	1/4W	
R235	1-249-409-11	CARBON	220	5%	1/4W	
R236	1-249-409-11	CARBON	220	5%	1/4W	
R237	1-249-409-11	CARBON	220	5%	1/4W	
R238	1-249-409-11	CARBON	220	5%	1/4W	
R239	1-249-409-11	CARBON	220	5%	1/4W	
R240	1-249-482-11	CARBON	4.7	5%	1/2W	F
R501	1-249-431-11	CARBON	15K	5%	1/4W	
R502	1-249-431-11	CARBON	15K	5%	1/4W	
R504 ⚠	1-215-869-91	METAL OXIDE	1K	5%	1W	F
R505	1-215-449-00	METAL	15K	1%	1/4W	
R506	1-249-423-11	CARBON	3.3K	5%	1/4W	
R507	1-249-411-11	CARBON	330	5%	1/4W	
R508	1-249-435-11	CARBON	33K	5%	1/4W	
R509	1-249-441-11	CARBON	100K	5%	1/4W	
R510	1-249-409-11	CARBON	220	5%	1/4W	F
R511	1-249-398-11	CARBON	27	5%	1/4W	F
R512	1-249-423-11	CARBON	3.3K	5%	1/4W	
R513	1-249-425-11	CARBON	4.7K	5%	1/4W	
R514	1-249-438-11	CARBON	56K	5%	1/4W	
R515	1-249-433-11	CARBON	22K	5%	1/4W	
R516	1-249-419-11	CARBON	1.5K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R517 ⚠	1-216-361-91	METAL OXIDE	0.22	5%	2W	F
R518	1-249-437-11	CARBON	47K	5%	1/4W	
R519	1-247-755-11	CARBON	1.8K	5%	1/2W	F
R520	1-249-441-11	CARBON	100K	5%	1/4W	
R521 ⚠	1-216-481-91	METAL OXIDE	1.2K	5%	3W	F
R522 ⚠	1-215-917-51	METAL OXIDE	1K	5%	3W	F
R523	1-249-425-11	CARBON	4.7K	5%	1/4W	
R524	1-215-445-00	METAL	10K	1%	1/4W	
R526	1-249-401-11	CARBON	47	5%	1/4W	
R527	1-249-417-11	CARBON	1K	5%	1/4W	
R528	1-247-903-00	CARBON	1M	5%	1/4W	
R529	1-249-429-11	CARBON	10K	5%	1/4W	
R530	1-215-457-00	METAL	33K	1%	1/4W	
R531	1-249-432-11	CARBON	18K	5%	1/4W	
R532	1-249-437-11	CARBON	47K	5%	1/4W	
R533	1-247-887-00	CARBON	220K	5%	1/4W	
R534	1-215-472-00	METAL	130K	1%	1/4W	
R536	1-249-429-11	CARBON	10K	5%	1/4W	
R537	1-215-465-00	METAL	68K	1%	1/4W	
R538	1-247-883-00	CARBON	150K	5%	1/4W	
R539	1-249-425-11	CARBON	4.7K	5%	1/4W	
R540	1-249-437-11	CARBON	47K	5%	1/4W	
R541	1-249-397-11	CARBON	22	5%	1/4W	F
R542 ⚠	1-215-888-91	METAL OXIDE	220	5%	2W	F
R543	1-249-411-11	CARBON	330	5%	1/4W	
R544	1-249-441-11	CARBON	100K	5%	1/4W	
R546	1-215-441-00	METAL	6.8K	1%	1/4W	
R547	1-249-441-11	CARBON	100K	5%	1/4W	
R548 ⚠	1-215-889-91	METAL OXIDE	330	5%	2W	F
R549 ⚠	1-215-881-91	METAL OXIDE	15	5%	2W	F
R550 ⚠	1-215-909-51	METAL OXIDE	47	5%	3W	F
R551	1-247-743-11	CARBON	220	5%	1/2W	F
R552	1-249-389-11	CARBON	4.7	5%	1/4W	F
R553	1-249-377-11	CARBON	0.47	5%	1/4W	F
R554	1-249-377-11	CARBON	0.47	5%	1/4W	F
R555	1-202-826-00	SOLID	4.7K	20%	1/2W	
R556 ⚠	1-216-459-91	METAL OXIDE	2.7K	5%	2W	F
R558	1-259-882-11	CARBON	3.3M	5%	1/4W	
R559 ⚠	1-216-439-91	METAL OXIDE	12K	5%	1W	F
R560	1-247-901-11	CARBON	820K	5%	1/4W	
R561	1-249-410-11	CARBON	270	5%	1/4W	
R562	1-215-450-00	METAL	16K	1%	1/4W	
R564	1-215-475-00	METAL	180K	1%	1/4W	
⊠R565 ⚠		CARBON			1/4W	
⊠R566 ⚠		CARBON			1/4W	
R567	1-249-425-11	CARBON	4.7K	5%	1/4W	
R568	1-249-425-11	CARBON	4.7K	5%	1/4W	
R569	1-249-417-11	CARBON	1K	5%	1/4W	
R570	1-249-402-11	CARBON	56	5%	1/4W	
R572	1-249-393-11	CARBON	10	5%	1/4W	F
R573	1-249-393-11	CARBON	10	5%	1/4W	F
R574 ⚠	1-215-882-91	METAL OXIDE	22	5%	2W	F
R575 ⚠	1-216-459-91	METAL OXIDE	2.7K	5%	2W	F
R576	1-249-417-11	CARBON	1K	5%	1/4W	F
R577 ⚠	1-215-887-91	METAL OXIDE	150	5%	2W	F
R578 ⚠	1-216-449-91	METAL OXIDE	56	5%	2W	F
R579	1-249-441-11	CARBON	100K	5%	1/4W	
R580	1-249-441-11	CARBON	100K	5%	1/4W	
R583	1-249-441-11	CARBON	100K	5%	1/4W	
R584	1-215-463-00	METAL	56K	1%	1/4W	
R587	1-249-441-11	CARBON	100K	5%	1/4W	
R588	1-249-415-11	CARBON	680	5%	1/4W	
R589	1-249-437-11	CARBON	47K	5%	1/4W	

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

A | **M**

REF.NO.	PART NO.	DESCRIPTION				REMARK
R590	1-249-431-11	CARBON	15K	5%	1/4W	
R591	1-247-887-00	CARBON	220K	5%	1/4W	
R592	1-249-429-11	CARBON	10K	5%	1/4W	
R593 ⚠	1-215-878-91	METAL OXIDE	33K	5%	1W	F
R594	1-247-903-00	CARBON	1M	5%	1/4W	
R595	1-249-440-11	CARBON	82K	5%	1/4W	
R596	1-249-432-11	CARBON	18K	5%	1/4W	
R597	1-249-437-11	CARBON	47K	5%	1/4W	
R599	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1401	1-215-445-00	METAL	10K	1%	1/4W	
R1402	1-215-445-00	METAL	10K	1%	1/4W	
R1403	1-215-430-00	METAL	2.4K	1%	1/4W	
R1404	1-215-430-00	METAL	2.4K	1%	1/4W	
R1405	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1406	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1407	1-215-447-00	METAL	12K	1%	1/4W	
R1408	1-215-447-00	METAL	12K	1%	1/4W	
R1409	1-249-433-11	CARBON	22K	5%	1/4W	
R1410	1-249-433-11	CARBON	22K	5%	1/4W	
R1418	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1419	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1420	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1421	1-249-385-11	CARBON	2.2	5%	1/4W	F
R1423	1-247-883-00	CARBON	150K	5%	1/4W	
R1424	1-249-433-11	CARBON	22K	5%	1/4W	
R1426	1-249-433-11	CARBON	22K	5%	1/4W	
R1427	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1428	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1429	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1431	1-249-405-11	CARBON	100	5%	1/4W	
R1433	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1434	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1439	1-247-883-00	CARBON	150K	5%	1/4W	
R1501	1-215-449-00	METAL	15K	1%	1/4W	
R1502	1-215-433-00	METAL	3.3K	1%	1/4W	
R1503	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1505	1-249-433-11	CARBON	22K	5%	1/4W	
R1506 ⚠	1-218-642-91	METAL OXIDE	100K	5%	1W	F
R1507	1-249-436-11	CARBON	39K	5%	1/4W	
R1508	1-215-453-00	METAL	22K	1%	1/4W	
R1509	1-215-455-00	METAL	27K	1%	1/4W	
R1510	1-249-383-11	CARBON	1.5	5%	1/4W	F
R1511 ⚠	1-215-888-91	METAL OXIDE	220	5%	2W	F
R1512 ⚠	1-216-369-91	METAL OXIDE	1	5%	2W	F
R1513	1-249-436-11	CARBON	39K	5%	1/4W	
R4001	1-249-421-11	CARBON	2.2K	5%	1/4W	
R4002	1-249-385-11	CARBON	2.2	5%	1/4W	F
R4003 ⚠	1-216-361-91	METAL OXIDE	0.22	5%	2W	F
R4004 ⚠	1-216-374-91	METAL OXIDE	2.7	5%	2W	F
R4006 ⚠	1-216-396-91	METAL OXIDE	3.9	5%	3W	F

<SPARK GAP>

SG501	1-519-422-11	GAP, SPARK	

<TRANSFORMER>

T501	⚠ 1-439-524-11	TRANSFORMER ASSY, FLYBACK (NX-3000A2)	(KV-27XBR96S(U/C))
	⚠ 1-453-126-11	TRANSFORMER ASSY, FLYBACK (NX-3000A3)	(KV-32XBR96S(U/C))
T502	⚠ 1-460-199-12	TRANSFORMER (HLT)	
T503	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
T504	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS	

REF.NO.	PART NO.	DESCRIPTION	REMARK

<THERMISTOR>

THP150	1-807-925-11	THERMISTOR	

<TUNER>

TU101	⚠ 1-693-102-22	TUNER (BTR-XA401)	

****

*A-1306-435-A M BOARD, COMPLETE
****

<CAPACITOR>

C001	1-124-261-00	ELECT	10MF	20%	50V
C002	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C003	1-136-161-00	FILM	0.047MF	5%	50V
C004	1-126-301-11	ELECT	1MF	20%	50V
C005	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C014	1-124-910-11	ELECT	47MF	20%	50V
C015	1-124-464-11	ELECT	0.22MF	20%	50V
C017	1-124-589-11	ELECT	47MF	20%	16V
C018	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C019	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V
C020	1-163-241-11	CERAMIC CHIP	39PF	5%	50V
C021	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C029	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C030	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C034	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C035	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C036	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C041	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C042	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C045	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C047	1-124-261-00	ELECT	10MF	20%	50V
C048	1-124-261-00	ELECT	10MF	20%	50V
C049	1-124-261-00	ELECT	10MF	20%	50V
C055	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C064	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C065	1-124-257-00	ELECT	2.2MF	20%	50V

<CONNECTOR>

M39	*1-564-521-11	PLUG, CONNECTOR 6P
M45	*1-564-523-11	PLUG, CONNECTOR 8P
M001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P

<DIODE>

D001	8-719-404-46	DIODE MA110
D002	8-719-404-46	DIODE MA110
D003	8-719-404-46	DIODE MA110
D004	8-719-404-46	DIODE MA110
D005	8-719-404-46	DIODE MA110
D006	8-719-404-46	DIODE MA110
D007	8-719-404-46	DIODE MA110
D008	8-719-404-46	DIODE MA110
D009	8-719-404-46	DIODE MA110
D010	8-719-300-57	DIODE 1T33
D011	8-719-404-46	DIODE MA110
D012	8-719-404-46	DIODE MA110
D014	8-719-404-46	DIODE MA110
D015	8-719-404-46	DIODE MA110

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<IC>				
IC001	8-759-169-06	IC TMC73C247-10				
IC002	8-759-403-44	IC MN1280-S				
		<COIL>				
L001	1-408-409-00	INDUCTOR	10UH			
L002	1-410-476-11	INDUCTOR	33UH			
		<TRANSISTOR>				
Q001	8-729-216-22	TRANSISTOR 2SA1162-G				
Q002	8-729-216-22	TRANSISTOR 2SA1162-G				
Q003	8-729-216-22	TRANSISTOR 2SA1162-G				
Q004	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q005	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q006	8-729-216-22	TRANSISTOR 2SA1162-G				
Q007	8-729-216-22	TRANSISTOR 2SA1162-G				
Q008	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q009	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q010	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q011	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q012	8-729-422-27	TRANSISTOR 2SD601A-Q				
Q013	8-729-216-22	TRANSISTOR 2SA1162-G				
Q014	8-729-422-27	TRANSISTOR 2SD601A-Q				
		<RESISTOR>				
R001	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R002	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R003	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R004	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R005	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R006	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R007	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R008	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R009	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R011	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R012	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R013	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R014	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R015	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R016	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R017	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R018	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R019	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R020	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R021	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R022	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R023	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R024	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R025	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R026	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R027	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R028	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R029	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R030	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R031	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R032	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R033	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R034	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R035	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R036	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R037	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R038	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R039	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R040	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R041	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R042	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R043	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R044	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R045	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R046	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R047	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R048	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R049	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R050	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R051	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R052	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R053	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R054	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R055	1-216-073-00	METAL GLAZE	10K	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	
R059	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R060	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R063	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R064	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R065	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R066	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R067	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R068	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R069	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R070	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R071	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R072	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R073	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R074	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R075	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R076	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R077	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R078	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R079	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R080	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R081	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R082	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R083	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R084	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R085	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R086	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R087	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R088	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R089	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R090	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R091	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R092	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R093	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R094	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R095	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R096	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R097	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R098	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R099	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R100	1-216-025-00	METAL GLAZE	100	5%	1/10W	

M E1

REF.NO.	PART NO.	DESCRIPTION				REMARK
R101	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R102	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R103	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R104	1-216-033-00	METAL GLAZE	220	5%	1/10W	
		<CRYSTAL>				
X001	1-579-743-11	VIBRATOR, CRYSTAL				
**********						
	*A-1346-133-A	E1 BOARD, COMPLETE				
		**********				
		<CAPACITOR>				
C301	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V	
C303	1-126-157-11	ELECT	10MF	20%	16V	
C304	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C305	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C306	1-163-115-00	CERAMIC CHIP	82PF	5%	50V	
C309	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
C310	1-163-109-00	CERAMIC CHIP	47PF	5%	50V	
C314	1-124-915-11	ELECT	10MF	20%	16V	
C315	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
C319	1-126-157-11	ELECT	10MF	20%	16V	
C320	1-124-465-00	ELECT	0.47MF	20%	50V	
C321	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C322	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C323	1-163-099-00	CERAMIC CHIP	18PF	5%	50V	
C324	1-124-234-00	ELECT	22MF	20%	16V	
C325	1-104-563-11	FILM CHIP	0.1MF	5%	16V	
C326	1-104-563-11	FILM CHIP	0.1MF	5%	16V	
C327	1-104-563-11	FILM CHIP	0.1MF	5%	16V	
C328	1-126-157-11	ELECT	10MF	20%	16V	
C329	1-126-157-11	ELECT	10MF	20%	16V	
C330	1-126-157-11	ELECT	10MF	20%	16V	
C331	1-126-301-11	ELECT	1MF	20%	50V	
C332	1-124-584-00	ELECT	100MF	20%	10V	
C333	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	
C334	1-137-491-11	FILM CHIP	0.1MF	5%	25V	
C335	1-136-169-00	FILM	0.22MF	5%	50V	
C336	1-126-301-11	ELECT	1MF	20%	50V	
C337	1-126-301-11	ELECT	1MF	20%	50V	
C338	1-124-584-00	ELECT	100MF	20%	10V	
C339	1-124-791-11	ELECT	1MF	20%	50V	
C340	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C341	1-126-157-11	ELECT	10MF	20%	16V	
C342	1-124-465-00	ELECT	0.47MF	20%	50V	
C343	1-124-589-11	ELECT	47MF	20%	16V	
C344	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C345	1-124-767-00	ELECT	2.2MF	20%	50V	
C346	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C347	1-136-169-00	FILM	0.22MF	5%	50V	
C348	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C349	1-126-301-11	ELECT	1MF	20%	50V	
C350	1-126-301-11	ELECT	1MF	20%	50V	
C351	1-163-002-11	CERAMIC CHIP	270PF	10%	50V	
C352	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C353	1-126-163-11	ELECT	4.7MF	20%	50V	
C354	1-136-169-00	FILM	0.22MF	5%	50V	
C355	1-124-465-00	ELECT	0.47MF	20%	50V	
C356	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C357	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C358	1-124-767-00	ELECT	2.2MF	20%	50V	
C360	1-137-491-11	FILM CHIP	0.1MF	5%	25V	
C361	1-126-301-11	ELECT	1MF	20%	50V	
C362	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C363	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C364	1-126-301-11	ELECT	1MF	20%	50V	
C365	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V	
C366	1-124-257-00	ELECT	2.2MF	20%	50V	
C367	1-126-157-11	ELECT	10MF	20%	16V	
C368	1-124-234-00	ELECT	22MF	20%	16V	
C369	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C370	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C371	1-124-126-00	ELECT	47MF	20%	16V	
C372	1-124-589-11	ELECT	47MF	20%	16V	
C373	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C378	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C379	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C380	1-163-137-00	CERAMIC CHIP	680PF	5%	50V	
C381	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	
C382	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C383	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C384	1-163-095-00	CERAMIC CHIP	12PF	5%	50V	
		<CONNECTOR>				
E1-24	1-564-523-11	PLUG, CONNECTOR 8P				
E1-25	*1-564-521-11	PLUG, CONNECTOR 6P				
E1-26	*1-564-522-11	PLUG, CONNECTOR 7P				
E1-001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P				
		<DIODE>				
D301	8-719-404-46	DIODE MA110				
D302	8-719-404-46	DIODE MA110				
D303	8-719-404-46	DIODE MA110				
D304	8-719-404-46	DIODE MA110				
D305	8-719-404-46	DIODE MA110				
D306	8-719-158-15	DIODE RD5.6SB				
D307	8-719-404-46	DIODE MA110				
D310	8-719-158-15	DIODE RD5.6SB				
D312	8-719-404-46	DIODE MA110				
D313	8-719-404-46	DIODE MA110				
D314	8-719-404-46	DIODE MA110				
D315	8-719-404-46	DIODE MA110				
D316	8-719-404-46	DIODE MA110				
D317	8-719-404-46	DIODE MA110				
D318	8-719-404-46	DIODE MA110				
D319	8-719-404-46	DIODE MA110				
D320	8-719-404-46	DIODE MA110				
D321	8-719-400-94	DIODE MA3130				
		<DELAY LINE>				
DL302	1-415-817-11	DELAY LINE				
		<IC>				
IC301	8-752-058-68	IC CXA1315M				
IC302	8-752-059-67	IC CXA1465AS				
IC303	8-759-106-02	IC UPC4570G2				
		<COIL>				
L301	1-410 064-11	INDUCTOR	2.7MMH			
L307	1-410-944-31	INDUCTOR CHIP	15UH			

REF.NO.	PART NO.	DESCRIPTION	REMARK
L308	1-410-946-31	INDUCTOR CHIP 22UH	
		<TRANSISTOR>	
Q301	8-729-925-79	TRANSISTOR IMX3	
Q302	8-729-925-79	TRANSISTOR IMX3	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q304	8-729-907-46	TRANSISTOR IMZ1	
Q305	8-729-925-79	TRANSISTOR IMX3	
Q306	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q307	8-729-903-10	TRANSISTOR FMW1	
Q309	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q310	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q311	8-729-403-27	TRANSISTOR XN4401	
Q312	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q314	8-729-403-27	TRANSISTOR XN4401	
Q315	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q316	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q317	8-729-216-22	TRANSISTOR 2SA1162-G	
Q321	8-729-925-79	TRANSISTOR IMX3	
Q322	8-729-216-22	TRANSISTOR 2SA1162-G	
Q323	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q324	8-729-216-22	TRANSISTOR 2SA1162-G	
Q325	8-729-216-22	TRANSISTOR 2SA1162-G	
Q326	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q327	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q328	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q329	8-729-925-79	TRANSISTOR IMX3	
Q330	8-729-925-79	TRANSISTOR IMX3	
Q333	8-729-925-79	TRANSISTOR IMX3	
Q334	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q335	8-729-907-46	TRANSISTOR IMZ1	
Q340	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q342	8-729-925-79	TRANSISTOR IMX3	
Q344	8-729-216-22	TRANSISTOR 2SA1162-G	
		<RESISTOR>	
R301	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R302	1 216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R303	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R304	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R305	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R306	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R307	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R308	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R309	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R310	1-216 065-00	METAL GLAZE 4.7K 5% 1/10W	
R312	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R313	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R314	1-216-061-00	METAL GLAZE 3 3K 5% 1/10W	
R316	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R317	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R320	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R325	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R326	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R331	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R332	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R333	1 216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R336	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R338	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R339	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R340	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R341	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R343	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R344	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R345	1-216-292-11	METAL GLAZE 8.2M 5% 1/8W	
R346	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R347	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R348	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R349	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R350	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R351	1-216-674-11	METAL CHIP 9.1K 0.50% 1/10W	
R352	1-216-011-00	METAL GLAZE 27 5% 1/10W	
R353	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R354	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R355	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R356	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R357	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R358	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R359	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R360	1-216-119-00	METAL GLAZE 820K 5% 1/10W	
R361	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R362	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R363	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R364	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R365	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R366	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R367	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R368	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R369	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R370	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R371	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R372	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R373	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
R374	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R375	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R376	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R377	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R378	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R379	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R380	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R381	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R382	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R383	1-216-653-11	METAL CHIP 1.2K 0.50% 1/10W	
R384	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R385	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R386	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R387	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R388	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R389	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R390	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R391	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R393	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R394	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R395	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R396	1-216-105-00	METAL GLAZE 220K 5% 1/10W	
R397	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R398	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R399	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R1301	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1302	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R1303	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1304	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1305	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1306	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1307	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

E1 E2

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1308	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1309	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1310	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1311	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1312	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1313	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1314	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1315	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1316	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1317	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1318	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1319	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1320	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R1321	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1322	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1323	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1324	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1325	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1326	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1327	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1328	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1329	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1330	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1331	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1332	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R1333	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	
R1334	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1335	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1336	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1337	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1338	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1339	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1340	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1342	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1343	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R1344	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R1345	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R1346	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1347	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1348	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1349	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1350	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R1351	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1352	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1353	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1354	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1355	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R1356	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1357	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1358	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1362	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R1363	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1364	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1373	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1374	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1379	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1380	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1381	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1382	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1383	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1384	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1385	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1386	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1387	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1388	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1389	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1390	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1391	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1392	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1394	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1395	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1396	1-216-125-00	METAL GLAZE	1.5M	5%	1/10W	
R1399	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R5301	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5302	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5303	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5304	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R5305	1-216-085-00	METAL GLAZE	33K	5%	1/10W	

<CRYSTAL>

X301	1-567-505-11	OSCILLATOR, CRYSTAL	

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*A-1346-136-A E2 BOARD, COMPLETE
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<CAPACITOR>

C2302	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C2303	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2310	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C2313	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C2314	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2315	1-126-157-11	ELECT	10MF	20%	16V
C2316	1-126-157-11	ELECT	10MF	20%	16V
C2317	1-126-157-11	ELECT	10MF	20%	16V
C2318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2320	1-124-589-11	ELECT	47MF	20%	16V
C2321	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C2322	1-124-234-00	ELECT	22MF	20%	16V
C2323	1-124-234-00	ELECT	22MF	20%	16V
C2324	1-124-234-00	ELECT	22MF	20%	16V
C2325	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2326	1-124-589-11	ELECT	47MF	20%	16V
C2327	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C2328	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2329	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2331	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2332	1-124-234-00	ELECT	22MF	20%	16V
C2333	1-124-234-00	ELECT	22MF	20%	16V
C2334	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2335	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2336	1-126-163-11	ELECT	4.7MF	20%	16V
C2337	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2338	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C2340	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2345	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C2346	1-164-232-11	CERAMIC CHIP	0 01MF	10%	50V
C2347	1-163-367-11	CERAMIC CHIP	39PF	5%	50V
C2349	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C2350	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2351	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C2352	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C2353	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2354	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2357	1-126-301-11	ELECT	1MF	20%	50V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C2360	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
		<CONNECTOR>	
E2-25	*1-564-521-11	PLUG, CONNECTOR 6P	
E2-26	*1-564-522-11	PLUG, CONNECTOR 7P	
E2-46	*1-564-518-11	PLUG, CONNECTOR 3P	
E2-002	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	
		<DIODE>	
D2306	8-719-404-46	DIODE MA110	
D2307	8-719-946-98	DIODE FMN1	
D2308	8-719-946-98	DIODE FMN1	
D2309	8-719-404-46	DIODE MA110	
D2312	8-719-404-46	DIODE MA110	
D2313	8-719-404-46	DIODE MA110	
D2314	8-713-300-57	DIODE 1T33	
D2317	8-719-404-46	DIODE MA110	
		<IC>	
IC2301	8-759-066-52	IC PCA8510T/012-T	
IC2303	8-759-925-75	IC SN74HC05ANS	
IC2304	8-752-037-15	IC CXA1387S	
IC2306	8-759-011-65	IC MC74HC4053F	
IC2307	8-752-058-68	IC CXA1315M	
		<COIL>	
L2304	1-408-414-00	INDUCTOR 27UH	
		<TRANSISTOR>	
Q2301	8-729-903-10	TRANSISTOR FMW1	
Q2303	8-729-403-27	TRANSISTOR XN4401	
Q2304	8-729-925-79	TRANSISTOR IMX3	
Q2305	8-729-903-10	TRANSISTOR FMW1	
Q2306	8-729-403-27	TRANSISTOR XN4401	
Q2307	8-729-403-27	TRANSISTOR XN4401	
Q2308	8-729-403-27	TRANSISTOR XN4401	
Q2309	8-729-903-10	TRANSISTOR FMW1	
Q2310	8-729-403-27	TRANSISTOR XN4401	
Q2311	8-729-903-10	TRANSISTOR FMW1	
Q2312	8-729-403-27	TRANSISTOR XN4401	
Q2313	8-729-903-10	TRANSISTOR FMW1	
Q2314	8-729-403-27	TRANSISTOR XN4401	
Q2315	8-729-903-10	TRANSISTOR FMW1	
Q2317	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2318	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2319	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2320	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2321	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2322	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2324	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2326	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2327	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2330	8-729-903-10	TRANSISTOR FMW1	
Q2337	8-729-925-79	TRANSISTOR IMX3	
Q2338	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2339	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2340	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2341	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2342	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2345	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<RESISTOR>	
R2302	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2303	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2304	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2305	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R2306	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R2307	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R2308	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R2309	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R2310	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R2311	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2312	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R2313	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R2314	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2315	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2317	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R2318	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R2319	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R2320	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2321	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R2322	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2323	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R2324	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2325	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2326	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2327	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R2328	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2329	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2330	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2331	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R2332	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2333	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R2334	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2335	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2336	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2337	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R2338	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2340	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2341	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R2342	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2343	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2344	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R2345	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R2346	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2347	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
R2350	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2351	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R2352	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2353	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R2354	1-216-210-00	METAL GLAZE 3.3K 5% 1/8W	
R2355	1-216-178-00	METAL GLAZE 150 5% 1/8W	
R2356	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
R2357	1-216-670-11	METAL CHIP 6.2K 0.50% 1/10W	
R2359	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R2360	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R2361	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R2362	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R2363	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R2364	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R2365	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R2366	1-216-081-00	METAL GLAZE 22K 5% 1/10W	

E2 Y2

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2367	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2368	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2371	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2374	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R2375	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2376	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2377	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2378	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2379	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2380	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2381	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2382	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2384	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2385	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R2386	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2387	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2388	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R2390	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2393	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R2394	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2395	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R2397	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2399	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3301	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3302	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3303	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R3304	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R3306	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3307	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R3308	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R3309	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3310	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3311	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3312	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3313	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R3314	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R3315	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3316	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3318	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R3319	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3320	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R3321	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R3323	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R3324	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3325	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R3328	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3330	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3331	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3332	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3339	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3340	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3341	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R3342	1-216-670-11	METAL CHIP	6.2K	0.50%	1/10W	
R3343	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3344	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3349	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3350	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3351	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3353	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3354	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3361	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3362	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3364	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3365	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R3367	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3368	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R3369	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3370	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3371	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3374	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3392	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3401	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R7312	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R7313	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R7314	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	

<CRYSTAL>

X2301	1-577-071-11	VIBRATOR, CERAMIC				

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	*A-1394-442-A	Y2 BOARD, COMPLETE				
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<CAPACITOR>

C401	1-124-234-00	ELECT	22MF	20%	16V
C424	1-126-301-11	ELECT	1MF	20%	50V
C425	1-126-301-11	ELECT	1MF	20%	50V
C426	1-126-301-11	ELECT	1MF	20%	50V
C427	1-124-465-00	ELECT	0.47MF	20%	50V
C428	1-126-163-11	ELECT	4.7MF	20%	50V
C429	1-124-478-11	ELECT	100MF	20%	25V
C430	1-124-261-00	ELECT	10MF	20%	50V
C431	1-126-301-11	ELECT	1MF	20%	50V
C432	1-126-301-11	ELECT	1MF	20%	50V
C433	1-131-347-00	TANTALUM	1MF	20%	16V
C434	1-126-301-11	ELECT	1MF	20%	50V
C435	1-130-309-00	FILM	0.033MF	5%	100V
C436	1-126-301-11	ELECT	1MF	20%	50V
C437	1-130-487-00	MYLAR	0.022MF	5%	50V
C438	1-126-301-11	ELECT	1MF	20%	50V
C439	1-124-034-51	ELECT	33MF	20%	16V
C440	1-126-301-11	ELECT	1MF	20%	50V
C441	1-126-301-11	ELECT	1MF	20%	50V
C442	1-124-261-00	ELECT	10MF	20%	50V
C443	1-124-589-11	ELECT	47MF	20%	16V
C444	1-126-163-11	ELECT	4.7MF	20%	50V
C445	1-126-163-11	ELECT	4.7MF	20%	50V
C446	1-124-234-00	ELECT	22MF	20%	16V
C447	1-126-301-11	ELECT	1MF	20%	50V
C448	1-136-170-00	FILM	0.27MF	5%	50V
C449	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C450	1-130-475-00	MYLAR	0.0022MF	5%	50V
C451	1-124-261-00	ELECT	10MF	20%	50V
C452	1-124-261-00	ELECT	10MF	20%	50V
C453	1-130-475-00	MYLAR	0.0022MF	5%	50V
C454	1-131-368-00	TANTALUM	3.3MF	10%	16V
C455	1-131-347-00	TANTALUM	1MF	20%	16V
C456	1-136-171-00	FILM	0.33MF	5%	50V
C457	1-136-175-00	FILM	0.68MF	5%	50V
C458	1-126-101-11	ELECT	100MF	20%	16V
C459	1-126-101-11	ELECT	100MF	20%	16V
C460	1-126-101-11	ELECT	100MF	20%	16V
C461	1-124-499-11	ELECT	1MF	20%	50V
C462	1-124-499-11	ELECT	1MF	20%	50V
C465	1-130-485-00	MYLAR	0.015MF	5%	50V

REF.NO.	PART NO.	DESCRIPTION				REMARK
C466	1-130-485-00	MYLAR	0.015MF	5%	50V	
C467	1-136-169-00	FILM	0.22MF	5%	50V	
C468	1-136-169-00	FILM	0.22MF	5%	50V	
C469	1-126-157-11	ELECT	10MF	20%	16V	
C470	1-126-157-11	ELECT	10MF	20%	16V	
C471	1-124-589-11	ELECT	47MF	20%	16V	
C472	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C473	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C474	1-124-234-00	ELECT	22MF	20%	16V	
C475	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C476	1-124-234-00	ELECT	22MF	20%	16V	
C477	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C478	1-124-478-11	ELECT	100MF	20%	25V	
C479	1-126-163-11	ELECT	4.7MF	20%	50V	
C480	1-124-768-11	ELECT	4.7MF	20%	50V	
C481	1-124-768-11	ELECT	4.7MF	20%	50V	
C482	1-126-163-11	ELECT	4.7MF	20%	50V	
C483	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C484	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C485	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C487	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C488	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	

<CONNECTOR>

Y2-401	1-573-966-11	PIN, CONNECTOR (PC BOARD) 36P

<DIODE>

D405	8-719-107-13	DIODE RD18MB1
D406	8-719-107-13	DIODE RD18MB1
D407	8-719-107-13	DIODE RD18MB1
D408	8-719-105-83	DIODE RD5.1MB3
D409	8-719-981-50	DIODE RB-100A
D410	8-719-981-50	DIODE RB-100A
D413	8-719-158-19	DIODE RD6.2SB
D414	8-719-158-55	DIODE RD15SB
D415	8-719-158-55	DIODE RD15SB

<IC>

IC403	8-759-996-43	IC RC4558PS
IC404	8-759-067-24	IC 24C04AI/P
IC406	8-752-037-24	IC CXA1264AS
IC407	8-759-245-75	IC TA8184P
IC408	8-752-057-18	IC CXA1315P

<TRANSISTOR>

Q404	8-729-216-22	TRANSISTOR 2SA1162-G
Q405	8-729-216-22	TRANSISTOR 2SA1162-G
Q409	8-729 422-27	TRANSISTOR 2SD601A-Q
Q410	8-729-422-27	TRANSISTOR 2SD601A-Q

<RESISTOR>

R447	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R453	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R464	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R465	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R466	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R467	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R468	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R469	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R470	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R471	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R472	1-216-686-11	METAL CHIP	30K	0.50%	1/10W	
R473	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R474	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R475	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R476	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W	
R477	1-216-676-11	METAL CHIP	11K	0.50%	1/10W	
R478	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R479	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W	
R480	1-216-676-11	METAL CHIP	11K	0.50%	1/10W	
R481	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R482	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R483	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R485	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R486	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R488	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R494	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R495	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R496	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R497	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R498	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R499	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R500	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R501	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R502	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R503	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	
R504	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W	
R507	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R509	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R510	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R512	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R513	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	
R515	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R517	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R518	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R519	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R521	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R522	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R523	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R524	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R525	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R526	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R527	1-218-753-11	METAL CHIP	110K	0.50%	1/10W	
R528	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R529	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R531	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R532	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R533	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R535	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R536	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R537	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R538	1-218-753-11	METAL CHIP	110K	0.50%	1/10W	
R539	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R540	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R541	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R542	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R543	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R546	1-216-682-11	METAL CHIP	20K	0.50%	1/10W	
R547	1-216-682-11	METAL CHIP	20K	0.50%	1/10W	

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X3

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1394-446-A	X3 BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C2501	1-124-477-11	ELECT	47MF	20% 16V	
C2502	1-124-477-11	ELECT	47MF	20% 16V	
C2505	1-124-638-11	ELECT	22MF	20% 6.3V	
C2506	1-126-177-11	ELECT	100MF	20% 10V	
C2507	1-126-163-11	ELECT	4.7MF	20% 16V	
C2508	1-163-109-00	CERAMIC CHIP	47PF	5% 50V	
C2509	1-126-163-11	ELECT	4.7MF	20% 50V	
C2512	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2513	1-163-109-00	CERAMIC CHIP	47PF	5% 50V	
C2514	1-126-163-11	ELECT	4.7MF	20% 16V	
C2516	1-126-163-11	ELECT	4.7MF	20% 50V	
C2517	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2518	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2519	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2520	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2521	1-163-088-00	CERAMIC CHIP	5PF	0.25PF 50V	
C2522	1-163-009-11	CERAMIC CHIP	0.001MF	10% 50V	
C2523	1-163-100-00	CERAMIC CHIP	20PF	5% 50V	
C2524	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2525	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2526	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2527	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2528	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2529	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2532	1-126-163-11	ELECT	4.7MF	20% 16V	
C2536	1-124-589-11	ELECT	47MF	20% 16V	
C2537	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2540	1-126-163-11	ELECT	4.7MF	20% 16V	
C2544	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2545	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2546	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2547	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2548	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2549	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2550	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2551	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2552	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2553	1-126-177-11	ELECT	100MF	20% 10V	
C2554	1-163-033-00	CERAMIC CHIP	0.022MF	50V	
C2557	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2558	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2560	1-126-163-11	ELECT	4.7MF	20% 16V	
C2561	1-163-263-11	CERAMIC CHIP	330PF	5% 50V	
C2562	1-163-018-00	CERAMIC CHIP	0.0056MF	10% 50V	
C2563	1-164-695-11	CERAMIC CHIP	0.0022MF	5% 50V	
C2566	1-126-163-11	ELECT	4.7MF	20% 16V	
C2569	1-164-695-11	CERAMIC CHIP	0.0022MF	5% 50V	
C2570	1-163-018-00	CERAMIC CHIP	0.0056MF	10% 50V	
C2571	1-163-263-11	CERAMIC CHIP	330PF	5% 50V	
C2572	1-164-695-11	CERAMIC CHIP	0.0022MF	5% 50V	
C2573	1-163-263-11	CERAMIC CHIP	330PF	5% 50V	
C2574	1-163-018-00	CERAMIC CHIP	0.0056MF	10% 50V	
C2575	1-163-031-11	CERAMIC CHIP	0.01MF	50V	
C2577	1-124-465-00	ELECT	0.47MF	20% 50V	
C2578	1-124-465-00	ELECT	0.47MF	20% 50V	
C2579	1-163-018-00	CERAMIC CHIP	0.0056MF	10% 50V	
C2580	1-163-263-11	CERAMIC CHIP	330PF	5% 50V	
C2581	1-164-695-11	CERAMIC CHIP	0.0022MF	5% 50V	
C2582	1-124-234-00	ELECT	22MF	20% 16V	
C2583	1-124-589-11	ELECT	47MF	20% 16V	
C2590	1-135-179-21	TANTAL. CHIP	2.2MF	20% 16V	
C2591	1-135-179-21	TANTAL. CHIP	2.2MF	20% 16V	
C2592	1-135-179-21	TANTAL. CHIP	2.2MF	20% 16V	
C2593	1-135-179-21	TANTAL. CHIP	2.2MF	20% 16V	
		<DIODE>			
D2501	8-719-404-46	DIODE MA110			
		<FERRITE BEAD>			
FB2502	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH			
FB2504	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH			
		<FILTER>			
FL2501	1-236-164-11	ENCAPSULATED COMPONENT			
FL2503	1-236-164-11	ENCAPSULATED COMPONENT			
FL2505	1-236-164-11	ENCAPSULATED COMPONENT			
FL2506	1-236-129-11	ENCAPSULATED COMPONENT			
FL2507	1-236-129-11	ENCAPSULATED COMPONENT			
FL2508	1-236-129-11	ENCAPSULATED COMPONENT			
FL2509	1-236-129-11	ENCAPSULATED COMPONENT			
		<IC>			
IC2501	8-759-052-52	IC L78M05T-FA			
IC2502	8-759-031-31	IC MC33174M			
IC2503	8-752-344-45	IC CXD2555Q			
IC2504	8-752-343-18	IC CXD2704Q			
IC2506	8-759-031-31	IC MC33174M			
IC2507	8-752-344-45	IC CXD2555Q			
IC2508	8-752-844-48	IC CXP5068H-205Q			
IC2509	8-759-042-02	IC S-80743AL-A7-S			
IC2510	8-752-332-80	IC CXD1160AQ			
IC2511	8-759-932-21	IC MB81256-12PSZ			
IC2512	8-759-069-14	IC M51132L			
IC2513	8-759-100-96	IC UPC4558G2			
		<JACK>			
J2501	1-573-966-11	PIN, CONNECTOR (PC BOARD) 36P			
		<COIL>			
L2501	1-410-204-31	INDUCTOR CHIP	10UH		
L2504	1-410-204-31	INDUCTOR CHIP	10UH		
L2505	1-410-196-11	INDUCTOR CHIP	2.2UH		
L2510	1-410-204-31	INDUCTOR CHIP	10UH		
L2511	1-410-204-31	INDUCTOR CHIP	10UH		
L2512	1-410-204-31	INDUCTOR CHIP	10UH		
L2513	1-410-204-31	INDUCTOR CHIP	10UH		
L2514	1-410-204-31	INDUCTOR CHIP	10UH		
L2515	1-410-204-31	INDUCTOR CHIP	10UH		
L2516	1-410-204-31	INDUCTOR CHIP	10UH		
L2517	1-410-204-31	INDUCTOR CHIP	10UH		
		<TRANSISTOR>			
Q2501	8-729-422-27	TRANSISTOR 2SD601A-Q			

REF.NO.	PART NO.	DESCRIPTION				REMARK
		<RESISTOR>				
R2501	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2502	1-216-699-11	METAL CHIP	100K	0.50%	1/10W	
R2505	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R2506	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R2507	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2508	1-216-699-11	METAL CHIP	100K	0.50%	1/10W	
R2509	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2510	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2511	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	
R2512	1-216 667-11	METAL CHIP	4.7K	0.50%	1/10W	
R2513	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2518	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2519	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2520	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2521	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2522	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2531	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2532	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2533	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R2534	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R2535	1-216 677-11	METAL CHIP	12K	0.50%	1/10W	
R2536	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R2537	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R2538	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R2539	1-216 049-00	METAL GLAZE	1K	5%	1/10W	
R2540	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2541	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2542	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2543	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R2544	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R2545	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R2546	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R2547	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R2548	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R2549	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2550	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2551	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2552	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2557	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2559	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2560	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2561	1 216-073-00	METAL GLAZE	10K	5%	1/10W	
R2562	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2563	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2564	1 216-025-00	METAL GLAZE	100	5%	1/10W	
R2565	1-216 089-00	METAL GLAZE	47K	5%	1/10W	
R2566	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2567	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2568	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2569	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2570	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2571	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2572	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2573	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2574	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2575	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2576	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2577	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2578	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2579	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2583	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2584	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2585	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2590	1-216-631-11	METAL CHIP	150	0.50%	1/10W	
R2591	1-216-631-11	METAL CHIP	150	0.50%	1/10W	
R2592	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2593	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2594	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2595	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2596	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2597	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2598	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2599	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2600	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2601	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2602	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2603	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	
R2605	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R2606	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R2607	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R2608	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R2609	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2610	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2611	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2612	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		<CRYSTAL>				
X2501	1-579-692-31	VIBRATOR, CRYSTAL				
**********						
	*A-1195-067-A	P2 BOARD, COMPLETE				
		**********				
		<CAPACITOR>				
C3001	1-163-111-00	CERAMIC CHIP	56PF	5%	50V	
C3002	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C3003	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C3004	1-124-034-51	ELECT	33MF	20%	16V	
C3005	1-124-034-51	ELECT	33MF	20%	16V	
C3006	1-126-177-11	ELECT	100MF	20%	6.3V	
C3007	1-126-177-11	ELECT	100MF	20%	6.3V	
C3008	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C3009	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	
C3010	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C3011	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	
C3012	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C3013	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C3014	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	
C3015	1-130-483-00	MYLAR	0.01MF	5%	50V	
C3016	1-126-177-11	ELECT	100MF	20%	6.3V	
C3017	1-126-301-11	ELECT	1MF	20%	50V	
C3018	1-130-477-00	MYLAR	0.0033MF	5%	50V	
C3019	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C3020	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C3021	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	
C3022	1-163-115-00	CERAMIC CHIP	82PF	5%	50V	
C3023	1-126-301-11	ELECT	1MF	20%	50V	
C3024	1-126-177-11	ELECT	100MF	20%	6.3V	
C3025	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C3026	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	
C3027	1-124-034-51	ELECT	33MF	20%	16V	
C3028	1-163-085-00	CERAMIC CHIP	2PF	0.25PF	50V	
C3029	1-163-097-00	CERAMIC CHIP	15PF	5%	50V	
C3030	1-124-034-51	ELECT	33MF	20%	16V	
C3031	1-126-096-11	ELECT	10MF	20%	25V	

P2

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3032	1-130-479-00	MYLAR	0.0047MF	5%	50V
C3033	1-124-465-00	ELECT	0.47MF	20%	50V
C3034	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3035	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3036	1-124-034-51	ELECT	33MF	20%	16V
C3037	1-126-163-11	ELECT	4.7MF	20%	50V
C3038	1-124-034-51	ELECT	33MF	20%	16V
C3039	1-126-163-11	ELECT	4.7MF	20%	50V
C3040	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3041	1-124-034-51	ELECT	33MF	20%	16V
C3042	1-130-491-00	MYLAR	0.047MF	5%	50V
C3043	1-124-465-00	ELECT	0.47MF	20%	50V
C3044	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3045	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3046	1-126-177-11	ELECT	100MF	20%	6.3V
C3047	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3049	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3050	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3051	1-124-034-51	ELECT	33MF	20%	16V
C3052	1-126-101-11	ELECT	100MF	20%	16V
C3054	1-124-261-00	ELECT	10MF	20%	50V
C3057	1-124-478-11	ELECT	100MF	20%	25V
C3058	1-124-478-11	ELECT	100MF	20%	25V

<CONNECTOR>

P2-40	*1-564-519-11	PLUG, CONNECTOR 4P	

<NETWORK>

CP3001	1-236-176-11	NETWORK, RES, THICK FILM	
CP3002	1-236-176-11	NETWORK, RES, THICK FILM	
CP3003	1-236-176-11	NETWORK, RES, THICK FILM	

<DIODE>

D3002	8-713-300-57	DIODE 1T33	
D3003	8-713-300-57	DIODE 1T33	
D3004	8-719-404-46	DIODE MA110	

<FILER>

FL3001	1-236-129-11	ENCAPSULATED COMPONENT	
FL3002	1-236-129-11	ENCAPSULATED COMPONENT	
FL3003	1-236-129-11	ENCAPSULATED COMPONENT	
FL3004	1-236-071-11	ENCAPSULATED COMPONENT	
FL3005	1-236-071-11	ENCAPSULATED COMPONENT	
FL3006	1-236-129-11	ENCAPSULATED COMPONENT	
FL3007	1-236-164-11	ENCAPSULATED COMPONENT	
FL3008	1-236-163-11	ENCAPSULATED COMPONENT	
FL3009	1-236-164-11	ENCAPSULATED COMPONENT	
FL3010	1-236-129-11	ENCAPSULATED COMPONENT	
FL3011	1-236-163-11	ENCAPSULATED COMPONENT	
FL3012	1-236-163-11	ENCAPSULATED COMPONENT	
FL3013	1-236-163-11	ENCAPSULATED COMPONENT	
FL3014	1-236-129-11	ENCAPSULATED COMPONENT	

<IC>

IC3001	8-759-032-11	IC MC74HC04AF
IC3002	8-759-032-11	IC MC74HC04AF
IC3003	8-752-332-83	IC CXD1220AQ
IC3004	8-759-630-63	IC M5M4C500L-10K
IC3005	8-759-605-14	IC M52678P
IC3006	8-759-630-63	IC M5M4C500L-10K
IC3007	8-759-011-65	IC MC74HC4053F
IC3008	8-759-630-63	IC M5M4C500L-10K
IC3009	8-759-605-14	IC M52678P
IC3010	8-759-112-06	IC UPC78N05H
IC3011	8-759-049-49	IC UPC7893AHF

<JACK>

J3001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P

<COIL>

L3001	1-410-470-11	INDUCTOR	10UH
L3002	1-410-470-11	INDUCTOR	10UH
L3003	1-410-470-11	INDUCTOR	10UH
L3004	1-410-470-11	INDUCTOR	10UH
L3005	1-408-420-00	INDUCTOR	82UH
L3005	1-408-420-00	INDUCTOR	82UH
L3006	1-408-421-00	INDUCTOR	100UH
L3007	1-410-434-21	INDUCTOR	180UH
L3008	1-408-427-00	INDUCTOR	330UH

<TRANSISTOR>

Q3001	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3002	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3003	8-729-216-22	TRANSISTOR 2AS1162-G
Q3004	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3005	8-729-216-22	TRANSISTOR 2AS1162-G
Q3006	8-729-216-22	TRANSISTOR 2AS1162-G
Q3007	8-729-216-22	TRANSISTOR 2AS1162-G
Q3008	8-729-216-22	TRANSISTOR 2AS1162-G
Q3009	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3010	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3011	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3012	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3013	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3014	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3015	8-729-422-27	TRANSISTOR 2SD601A-Q

<RESISTOR>

R3001	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3002	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R3003	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3005	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3006	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3007	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3008	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3009	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3010	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3011	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3012	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R3013	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R3014	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R3015	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R3016	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R3017	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3018	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R3019	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3020	1-216-017-00	METAL GLAZE	47	5%	1/10W
R3021	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3022	1-216-049-00	METAL GLAZE	1K	5%	1/10W

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

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

REF.NO.	PART NO.	DESCRIPTION				REMARK
R3024	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3025	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3026	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3027	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R3028	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3029	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3030	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R3031	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R3032	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3033	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R3034	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3035	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R3036	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3037	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R3038	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3039	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R3040	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3041	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3042	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3043	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R3044	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3045	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3046	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R3047	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3048	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3049	1-216-662-11	METAL CHIP	3K	0.50%	1/10W	
R3050	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R3051	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3052	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3054	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3055	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R3056	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3057	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R3058	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3059	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R3060	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R3061	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R3062	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3063	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R3064	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3065	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R3066	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R3067	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R3068	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R3069	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R3070	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R3071	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R3072	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3073	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R3074	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3080⚠	1-216-358-91	METAL OXIDE	5.6	5%	1W	F

<VARIABLE RESISTOR>

RV3001	1-238-012-11	RES, ADJ, CARBON 1K
RV3002	1-238-012-11	RES, ADJ, CARBON 1K

<TRANSFORMER>

T3001	1-404-607-11	COIL
T3002	1-404-607-11	COIL

****

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1316-160-A	G BOARD, COMPLETE			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			

<CAPACITOR>

C601 ⚠	1-136-311-51	FILM	0.47MF	20%	125V
C602 ⚠	1-162-599-81	CERAMIC	0.0047MF	20%	400V
C603 ⚠	1-162-599-81	CERAMIC	0.0047MF	20%	400V
C604 ⚠	1-128-588-11	ELECT	1000MF	20%	200V
C605	1-162-599-12	CERAMIC	0.0047MF	20%	400V
C606	1-137-580-11	FILM	0.082MF	5%	100V
C607	1-137-580-11	FILM	0.082MF	5%	100V
C608	1-137-580-11	FILM	0.082MF	5%	100V
C609	1-137-580-11	FILM	0.082MF	5%	100V
C610	1-137-588-11	FILM	0.0047MF	5%	800V
C611	1-137-592-11	FILM	0.01MF	5%	800V
C612	1-164-625-11	CERAMIC	680PF	10%	500V
C613	1-164-625-11	CERAMIC	680PF	10%	500V
C614	1-164-625-11	CERAMIC	680PF	10%	500V
C615	1-164-625-11	CERAMIC	680PF	10%	500V
C616	1-124-443-00	ELECT	100MF	20%	10V
C618	1-164-735-11	CAP, CERAMIC	1500PF		
C619	1-164-735-11	CAP, CERAMIC	1500PF		
C620 ⚠	1-161-741-51	CERAMIC	0.001MF	10%	400V
C621 ⚠	1-161-741-51	CERAMIC	0.001MF	10%	400V
C622	1-162-599-12	CERAMIC	0.0047MF	20%	400V
C623	1-137-493-11	FILM	0.0047MF	5%	630V
C624	1-126-301-11	ELECT	1MF	20%	50V
C625	1-126-162-11	ELECT	3.3MF	20%	50V
C626	1-130-480-00	MYLAR	0.0056MF	5%	50V
C651	1-104-702-11	ELECT	470MF	20%	180V
C651	1-124-960-11	ELECT	470MF	20%	180V
C652	1-124-556-11	ELECT	2200MF	20%	16V
C653	1-124-913-11	ELECT	470MF	20%	50V
C654	1-124-607-11	ELECT	2200MF	20%	50V
C655	1-162-117-00	CERAMIC	100PF	10%	500V
C656	1-124-119-00	ELECT	330MF	20%	16V
C657	1-106-351-00	MYLAR	0.0022MF		200V
C658	1-126-157-11	ELECT	10MF	20%	16V
C659	1-130-485-00	MYLAR	0.015MF	5%	50V
C661	1-124-484-11	ELECT	220MF	20%	35V
C662	1-124-484-11	ELECT	220MF	20%	35V
C663	1-126-104-11	ELECT	470MF	20%	35V
C666	1-126-101-11	ELECT	100MF	20%	16V
C667	1-124-443-00	ELECT	100MF	20%	10V
C668	1-124-638-11	ELECT	22MF	20%	6.3V
C669	1-162-318-11	CERAMIC	0.001MF	10%	500V
C670	1-162-318-11	CERAMIC	0.001MF	10%	500V
C672	1-124-484-11	ELECT	220MF	20%	35V
C677 ⚠	1-136-311-51	FILM	0.47MF	20%	125V
C678	1-124-360-00	ELECT	1000MF	20%	16V

<CONNECTOR>

G3	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P
G4	*1-564-510-11	PLUG, CONNECTOR 7P
G5	*1-564-507-11	PLUG, CONNECTOR 4P
G27	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
G28	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
G29	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
G31	*1-580-843-11	PIN, CONNECTOR (POWER)
TP651	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P

G

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

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>	
D601	⚠ 8-719-022-99	DIODE D6SB60L	
D602	8-719-510-48	DIODE D1N20R	
D603	8-719-510-48	DIODE D1N20R	
D604	8-719-510-48	DIODE D1N20R	
D605	8-719-510-48	DIODE D1N20R	
D606	8-719-911-19	DIODE 1SS119	
D607	8-719-510-48	DIODE D1N20R	
D608	8-719-510-48	DIODE D1N20R	
D609	8-719-510-48	DIODE D1N20R	
D610	8-719-510-48	DIODE D1N20R	
D611	8-719-510-48	DIODE D1N20R	
D612	8-719-510-48	DIODE D1N20R	
D613	8-719-109-93	DIODE RD6.2ESB2	
D651	8-719-027-43	DIODE S2L20UF	
D652	8-719-027-43	DIODE S2L20UF	
D653	8-719-027-43	DIODE S2L20UF	
D654	8-719-027-43	DIODE S2L20UF	
D655	8-719-510-13	DIODE D10SC4MR	
D656	8-719-022-97	DIODE D2S4MF	
D657	8-719-510-02	DIODE D1NS4	
D658	8-719-027-22	DIODE D3S6M-F	
D659	8-719-027-22	DIODE D3S6M-F	
D660	8-719-027-22	DIODE D3S6M-F	
D661	8-719-027-22	DIODE D3S6M-F	
D663	8-719-510-02	DIODE D1NS4	
D665	8-719-510-02	DIODE D1NS4	
D666	8-719-109-85	DIODE RD5.1ESB2	
D667	8-719-911-19	DIODE 1SS119	
D668	8-719-911-19	DIODE 1SS119	
D669	8-719-109-54	DIODE RD2.2ESB2	
D670	8-719-911-19	DIODE 1SS119	
D671	8-719-110-31	DIODE RD12ESB2	
D672	8-719-911-19	DIODE 1SS119	
		<FUSE>	
F1	⚠ 1-532-783-21	FUSE, MICRO (SECONDARY) 5A/125V	
F601	⚠ 1-576-222-11	FUSE 6.3A/125V	
	1-533-190-11	CLIP, FUSE; F601	
F602	⚠ 1-576-107-22	FUSE 3.15A/250V	
	1-533-223-11	CLIP, FUSE; F602	
		<FERRITE BEAD>	
FB651	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB652	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB653	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB654	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB655	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB656	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB659	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB660	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB661	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB662	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB663	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB669	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB670	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
		<IC>	
IC651	⚠ 1-809-524-12	POWER MODULE DM-44A	
IC654	8-719-156-73	PHOTO COUPLER PS2501-1LB	
		<COIL>	
L651	1-412-526-11	INDUCTOR 12UH	
L652	1-410-673-31	INDUCTOR 68UH	
L653	1-412-532-11	INDUCTOR 39UH	
L654	1-412-532-11	INDUCTOR 39UH	
L655	1-412-532-11	INDUCTOR 39UH	
L656	1-412-526-11	INDUCTOR 12UH	
		<TRANSISTOR>	
Q601	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
Q602	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
Q603	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
Q604	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
Q605	8-729-209-15	TRANSISTOR 2SD2012	
Q652	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q653	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q654	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q655	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q656	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		<RESISTOR>	
R601	1-249-388-11	CARBON 3.9 5% 1/4W	F
R602	⚠ 1-205-707-12	WIREWOUND 2.2 5% 10W	
R603	1-247-889-00	CARBON 270K 5% 1/4W	
R604	⚠ 1-216-443-91	METAL OXIDE 56K 5% 1W	F
R605	⚠ 1-216-443-91	METAL OXIDE 56K 5% 1W	F
R606	⚠ 1-216-443-91	METAL OXIDE 56K 5% 1W	F
R607	⚠ 1-216-443-91	METAL OXIDE 56K 5% 1W	F
R608	⚠ 1-216-352-91	METAL OXIDE 1.8 5% 1W	F
R609	⚠ 1-216-352-91	METAL OXIDE 1.8 5% 1W	F
R610	⚠ 1-216-352-91	METAL OXIDE 1.8 5% 1W	F
R611	⚠ 1-216-352-91	METAL OXIDE 1.8 5% 1W	F
R612	1-249-377-11	CARBON 0.47 5% 1/4W	F
R613	1-215-447-00	METAL 12K 1% 1/4W	
R614	1-215-433-00	METAL 3.3K 1% 1/4W	
R615	1-249-441-11	CARBON 100K 5% 1/4W	
R616	1-249-417-11	CARBON 1K 5% 1/4W	
R617	1-249-417-11	CARBON 1K 5% 1/4W	
R618	1-247-688-11	CARBON 10 5% 1/4W	F
R619	⚠ 1-216-343-91	METAL OXIDE 0.33 5% 1W	F
R620	1-202-730-00	SOLID 8.2M 20% 1/2W	
R621	1-249-423-11	CARBON 3.3K 5% 1/4W	
R622	⚠ 1-202-888-91	SOLID 2.2M 20% 1/2W	
R623	1-212-956-00	FUSIBLE 8.2 5% 1/2W	F
R651	1-249-405-11	CARBON 100 5% 1/4W	F
R652	⚠ 1-215-868-91	METAL OXIDE 680 5% 1W	F
R653	1-249-405-11	CARBON 100 5% 1/4W	
R654	1-249-399-11	CARBON 33 5% 1/4W	F
R655	1-249-393-11	CARBON 10 5% 1/4W	F
R656	1-249-443-11	CARBON 0.47 5% 1/4W	F
R657	⚠ 1-216-357-91	METAL OXIDE 4.7 5% 1W	F
R658	1-215-408-00	METAL 300 1% 1/4W	
R659	1-249-443-11	CARBON 0.47 5% 1/4W	F
R660	1-215-446-00	METAL 11K 1% 1/4W	
R661	1-215-418-00	METAL 750 1% 1/4W	
R662	1-249-421-11	CARBON 2.2K 5% 1/4W	
R663	1-249-410-11	CARBON 270 5% 1/4W	
R664	⚠ 1-215-861-91	METAL OXIDE 47 5% 1W	F
R665	1-215-403-00	METAL 180 1% 1/4W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R666	1-215-421-00	METAL	1K	1%	1/4W	
R667	1-215-432-00	METAL	3K	1%	1/4W	
R668 ⚠	1-216-482-51	METAL OXIDE	1.8K	5%	3W	F
R669	1-249-421-11	CARBON	2.2K	5%	1/4W	
R670	1-249-412-11	CARBON	390	5%	1/4W	
R671 ⚠	1-216-384-51	METAL OXIDE	0.39	5%	3W	F
R672	1-249-443-11	CARBON	0.47	5%	1/4W	F
R673	1-249-415-11	CARBON	680	5%	1/4W	
R674	1-249-421-11	CARBON	2.2K	5%	1/4W	
R675	1-249-415-11	CARBON	680	5%	1/4W	
R676	1-249-377-11	CARBON	0.47	5%	1/4W	F
R677	1-249-433-11	CARBON	22K	5%	1/4W	
R678	1-249-429-11	CARBON	10K	5%	1/4W	
R679 ⚠	1-216-428-91	METAL OXIDE	180	5%	1W	F
R680 ⚠	1-216-428-91	METAL OXIDE	180	5%	1W	F
R681	1-249-377-11	CARBON	0.47	5%	1/4W	F
R682	1-249-443-11	CARBON	0.47	5%	1/4W	F

<RELAY>

RY601	1-515-516-00	RELAY	
RY602 ⚠	1-515-669-21	RELAY	

<TRANSFORMER>

T601 ⚠	1-424-585-11	TRANSFORMER, LINE FILTER	
T602 ⚠	1-424-585-11	TRANSFORMER, LINE FILTER	
T603	1-450-300-31	TRANSFORMER, CONVERTER DRIVE	
T604 ⚠	1-450-958-12	TRANSFORMER, CONVERTER (PRT)	
T605	1-424-663-11	TRANSFORMER, FERRITE (SBT)	

<THERMISTOR>

THP601 ⚠	1-809-539-11	THERMISTOR, POSITIVE	

<VARISTOR>

VDR601 ⚠	1-809-786-11	VARISTOR	
VDR602	1-809-264-71	VARISTOR	

****

*A-1331-271-A C BOARD, COMPLETE
****

<CAPACITOR>

C701	1-162-116-00	CERAMIC	680PF	10%	2KV
C702	1-137-490-11	FILM	0.01MF	10%	1KV
C704	1-123-946-00	ELECT	4.7MF	20%	250V
C705	1-106-375-12	MYLAR	0.022MF		200V
C706	1-106-375-12	MYLAR	0.022MF		200V
C707	1-164-083-11	CERAMIC	680PF	10%	50V
C708	1-164-083-11	CERAMIC	680PF	10%	50V
C709	1-164-083-11	CERAMIC	680PF	10%	50V
C710	1-164-083-11	CERAMIC	680PF	10%	50V
C711	1-124-120-11	ELECT	220MF	20%	16V
C712	1-164-082-11	CERAMIC	560PF	10%	50V
C713	1-164-083-11	CERAMIC	680PF	10%	50V
C715	1-102-129-00	CERAMIC	0.01MF	10%	50V
C718	1-102-129-00	CERAMIC	0.01MF	10%	50V
C733	1-102-074-00	CERAMIC	0.001MF	10%	50V

REF.NO.	PART NO.	DESCRIPTION	REMARK

<CONNECTOR>

C2	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P	
C24	*1-564-511-51	PLUG, CONNECTOR 8P	
C42	*1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P	

<DIODE>

D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D703	8-719-911-19	DIODE 1SS119	
D704	8-719-911-19	DIODE 1SS119	
D705	8-719-911-19	DIODE 1SS119	
D706	8-719-911-19	DIODE 1SS119	
D707	8-719-911-19	DIODE 1SS119	
D708	8-719-911-19	DIODE 1SS119	
D709	8-719-911-19	DIODE 1SS119	
D710	8-719-901-83	DIODE 1SS83	
D711	8-719-901-83	DIODE 1SS83	
D712	8-719-901-83	DIODE 1SS83	
D713	8-719-901-83	DIODE 1SS83	
D714	8-719-911-19	DIODE 1SS119	

<JACK>

J701 ⚠	1-540-223-11	SOCKET, PICTURE TUBE	

<COIL>

L701	1-410-671-31	INDUCTOR	47UH
L702	1-410-645-31	INDUCTOR	100UH
L703	1-410-677-31	INDUCTOR	180UH
L706	1-410-677-31	INDUCTOR	180UH

<TRANSISTOR>

Q701	8-729-326-11	TRANSISTOR 2SC2611	
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q703	8-729-200-17	TRANSISTOR 2SA1091-O	
Q704	8-729-326-11	TRANSISTOR 2SC2611	
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q706	8-729-200-17	TRANSISTOR 2SA1091-O	
Q707	8-729-200-17	TRANSISTOR 2SA1091-O	
Q708	8-729-326-11	TRANSISTOR 2SC2611	
Q709	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q710	8-729-255-12	TRANSISTOR 2SC2551-O	
Q711	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q712	8-729-255-12	TRANSISTOR 2SC2551-O	
Q714	8-729-200-17	TRANSISTOR 2SA1091-O	
Q715	8-729-200-17	TRANSISTOR 2SA1091-O	
Q716	8-729-200-17	TRANSISTOR 2SA1091-O	

<RESISTOR>

R702	1-202-883-11	SOLID	680K	20%	1/2W	
R703	1-202-838-00	SOLID	100K	20%	1/2W	
R705	1-249-433-11	CARBON	22K	5%	1/4W	
R706	1-202-815-11	SOLID	47K	20%	1/2W	
R707	1-202-842-11	SOLID	220K	20%	1/2W	
R708	1-202-818-00	SOLID	1K	20%	1/2W	
R709	1-202-818-00	SOLID	1K	20%	1/2W	
R710	1-202-818-00	SOLID	1K	20%	1/2W	
R711	1-249-433-11	CARBON	22K	5%	1/4W	
R713 ⚠	1-216-486-51	METAL OXIDE	8.2K	5%	3W	F
R715	1-202-549-00	SOLID	100	10%	1/2W	
R716 ⚠	1-216-486-51	METAL OXIDE	8.2K	5%	3W	F
R720 ⚠	1-216-486-51	METAL OXIDE	8.2K	5%	3W	F

C D

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R722	1-249-433-11	CARBON	22K	5%	1/4W	
R723	1-249-405-11	CARBON	100	5%	1/4W	
R724	1-249-405-11	CARBON	100	5%	1/4W	
R725	1-249-429-11	CARBON	10K	5%	1/4W	
R726	1-249-408-11	CARBON	180	5%	1/4W	
R727	1-249-429-11	CARBON	10K	5%	1/4W	
R728	1-249-408-11	CARBON	180	5%	1/4W	
R729	1-249-405-11	CARBON	100	5%	1/4W	
R730	1-249-408-11	CARBON	180	5%	1/4W	
R731	1-249-409-11	CARBON	220	5%	1/4W	F
R732	1-249-409-11	CARBON	220	5%	1/4W	F
R733	1-249-409-11	CARBON	220	5%	1/4W	F
R735	1-249-418-11	CARBON	1.2K	5%	1/4W	
R737	1-249-418-11	CARBON	1.2K	5%	1/4W	
R739	1-249-433-11	CARBON	22K	5%	1/4W	
R740 ⚠	1-215-902-91	METAL OXIDE	47K	5%	2W	F
R741	1-249-417-11	CARBON	1K	5%	1/4W	F
R742	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R743	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R744	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R745	1-249-417-11	CARBON	1K	5%	1/4W	F
R746 ⚠	1-215-879-91	METAL OXIDE	47K	5%	1W	F
R747	1-249-429-11	CARBON	10K	5%	1/4W	F
R748 ⚠	1-216-365-91	METAL OXIDE	0.47	5%	2W	F
R749	1-249-437-11	CARBON	47K	5%	1/4W	
R750	1-249-409-11	CARBON	220	5%	1/4W	F
R751	1-249-395-11	CARBON	15	5%	1/4W	
R752	1-249-393-11	CARBON	10	5%	1/4W	
R753	1-249-390-11	CARBON	5.6	5%	1/4W	
R754	1-249-418-11	CARBON	1.2K	5%	1/4W	
R777	1-249-441-11	CARBON	100K	5%	1/4W	

<VARIABLE RESISTOR>

RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
RV702	1-241-714-11	RES, ADJ, METAL FILM 110M	

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	*A-1341-664-A	D BOARD, COMPLETE (KV-27XBR96S(U/C))	
		**********	
	*A-1341-678-A	D BOARD, COMPLETE (KV-32XBR96S(U/C))	
		**********	
	4-382-854-11	SCREW (M3X10), P, SW (+)	

<CAPACITOR>

C801	1-124-589-11	ELECT	47MF	20%	16V
C802	1-124-589-11	ELECT	47MF	20%	16V
C804	1-130-483-00	MYLAR	0.01MF	5%	50V
C805	1-136-165-00	FILM	0.1MF	5%	50V
C806	1-136-165-00	FILM	0.1MF	5%	50V
C807	1-124-360-00	ELECT	1000MF	20%	16V
C809	1-136-104-00	FILM	0.16MF	5%	200V
C810	1-136-177-00	FILM	1MF	5%	50V
C811	1-162-318-11	CERAMIC	0.001MF	10%	500V
C812	1-126-163-11	ELECT	4.7MF	20%	50V
C813	1-130-491-00	MYLAR	0.047MF	5%	50V
C814	1-124-261-00	ELECT	10MF	20%	50V
C815	1-124-261-00	ELECT	10MF	20%	50V
C816	1-124-234-00	ELECT	22MF	20%	16V
C817	1-126-163-11	ELECT	4.7MF	20%	50V
C818	1-124-589-11	ELECT	47MF	20%	16V
C819	1-136-165-00	FILM	0.1MF	5%	50V
C820	1-126-103-11	ELECT	470MF	20%	16V
C901	1-136-173-00	FILM	0.47MF	5%	50V
C902	1-124-261-00	ELECT	10MF	20%	50V
C903	1-136-169-00	FILM	0.22MF	5%	50V
C904	1-130-471-00	MYLAR	0.001MF	5%	50V
C905	1-124-261-00	ELECT	10MF	20%	50V
C906	1-124-046-00	ELECT	10MF	20%	160V
C907	1-124-465-00	ELECT	0.47MF	20%	50V
C908	1-102-112-00	CERAMIC	330PF	10%	50V
C910	1-136-103-00	FILM	0.1MF	5%	200V
C911	1-136-165-00	FILM	0.1MF	5%	50V
C913	1-124-589-11	ELECT	47MF	20%	16V
C914	1-106-367-00	MYLAR	0.01MF	10%	100V
C915	1-126-301-11	ELECT	1MF	20%	50V
C917	1-130-471-00	MYLAR	0.001MF	5%	50V
C918	1-102-074-00	CERAMIC	0.001MF	10%	50V
C920	1-136-601-11	FILM	0.01MF	5%	630V
C922	1-124-557-11	ELECT	1000MF	20%	25V
C923	1-130-471-00	MYLAR	0.001MF	5%	50V
C925	1-124-261-00	ELECT	10MF	20%	50V
C926	1-136-165-00	FILM	0.1MF	5%	50V
C927	1-136-171-00	FILM	0.33MF	5%	50V
C928	1-124-261-00	ELECT	10MF	20%	50V
C930	1-130-483-00	MYLAR	0.01MF	5%	50V
C931	1-130-475-00	MYLAR	0.0022MF	10%	50V

<CONNECTOR>

D14	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P
D18	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P
D20	1-564-524-11	PLUG, CONNECTOR 9P
DY2	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P

<DIODE>

D801	8-719-987-87	DIODE ERA85-009
D802	8-719-911-19	DIODE 1SS119
D803	8-719-911-19	DIODE 1SS119
D804	8-719-911-19	DIODE 1SS119
D805	8-719-801-35	THYRISTOR SHOR3D42
D806	8-719-980-78	DIODE ERA83-006
D807	8-719-980-78	DIODE ERA83-006
D808	8-719-911-19	DIODE 1SS119
D809	8-719-911-19	DIODE 1SS119
D810	8-719-911-19	DIODE 1SS119
D811	8-719-302-43	DIODE EL1Z
D812	8-719-911-19	DIODE 1SS119
D813	8-719-109-88	DIODE RD5.6ESB1
D814	8-719-121-24	DIODE RD9.1ESL
D815	8-719-911-19	DIODE 1SS119
D816	8-719-911-19	DIODE 1SS119
D901	8-719-911-19	DIODE 1SS119
D902	8-719-109-96	DIODE RD6.8ESB1
D903	8-719-979-85	DIODE EGP20G
D906	8-719-980-78	DIODE ERA83-006
D907	8-719-911-19	DIODE 1SS119
D908	8-719-980-78	DIODE ERA83-006
D911	8-719-911-19	DIODE 1SS119

<IC>

IC801	8-749-920-58	IC SI-3090CA
IC802	8-752-052-88	IC CXA1526P
IC803	8-759-135-80	IC UPC358C

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REF.NO.	PART NO.	DESCRIPTION				REMARK
IC901	8-759-135-80	IC UPC358C				
IC903	8-759-987-16	IC LM393P				
		<COIL>				
L801	1-459-592-11	COIL (WITH CORE) (PMC)				
L802	1-459-941-12	COIL, CHOKE 3.4MMH				
L901	1-410-093-11	INDUCTOR 33MMH				
L902	1-459-075-00	COIL,DYNAMIC CONVERSION CHOKE				
		<TRANSISTOR>				
Q802	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q805	8-729-140-97	TRANSISTOR 2SB734-34				
Q806	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q807	8-729-140-97	TRANSISTOR 2SB734-34				
Q808	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q809	8-729-209-15	TRANSISTOR 2SD2012				
Q810	8-729-140-96	TRANSISTOR 2SD774-34				
Q811	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q901	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q902	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q903	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q904	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q906	8-729-119-80	TRANSISTOR 2SC2688-LK				
Q907	8-729-119-80	TRANSISTOR 2SC2688-LK				
Q908	8-729-300-80	TRANSISTOR 2SB860				
Q909	8-729-140-96	TRANSISTOR 2SD774-34				
Q910	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q911	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q912	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q913	8-729-011-02	TRANSISTOR 2SK1917				
Q914	8-729-119-76	TRANSISTOR 2SA1175-HFE				
		<RESISTOR>				
R801	1-249-409-11	CARBON	220	5%	1/4W	
R802	1-249-409-11	CARBON	220	5%	1/4W	
R804	1-247-891-00	CARBON	330K	5%	1/4W	
R806	1-247-885-00	CARBON	180K	5%	1/4W	
R807	1-247-891-00	CARBON	330K	5%	1/4W	
R808	1-215-461-00	METAL	47K	1%	1/4W	
R809	1-249-423-11	CARBON	3.3K	5%	1/4W	
R810	1-249-413-11	CARBON	470	5%	1/4W	
R811	1-249-434-11	CARBON	27K	5%	1/4W	
R812	1-249-438-11	CARBON	56K	5%	1/4W	
R813	1-249-417-11	CARBON	1K	5%	1/4W	
R815	1-249-427-11	CARBON	6.8K	5%	1/4W	
R816	1-249-425-11	CARBON	4.7K	5%	1/4W	
R817	1-249-422-11	CARBON	2.7K	5%	1/4W	
R818	1-249-417-11	CARBON	1K	5%	1/4W	
R819	1-249-432-11	CARBON	18K	5%	1/4W	
R820	1-249-417-11	CARBON	1K	5%	1/4W	
R821 ⚠	1-216-379-91	METAL OXIDE	6.8	5%	2W	F
R822	1-249-423-11	CARBON	3.3K	5%	1/4W	
R824	1-249-417-11	CARBON	1K	5%	1/4W	F
R825 ⚠	1-215-857-91	METAL OXIDE	10	5%	1W	F
R826	1-249-404-00	CARBON	82	5%	1/4W	
R827 ⚠	1-215-875-91	METAL OXIDE	10K	5%	1W	F
R828	1-249-441-11	CARBON	100K	5%	1/4W	
R829	1-249-414-11	CARBON	560	5%	1/4W	
R830	1-249-411-11	CARBON	330	5%	1/4W	
R831	1-249-426-11	CARBON	5.6K	5%	1/4W	
R832 ⚠	1-215-887-91	METAL OXIDE	150	5%	2W	F
R833	1-249-421-11	CARBON	2.2K	5%	1/4W	
R834	1-249-438-11	CARBON	56K	5%	1/4W	
R835	1-249-393-11	CARBON	10	5%	1/4W	
R836	1-249-435-11	CARBON	33K	5%	1/4W	
R837	1-249-435-11	CARBON	33K	5%	1/4W	
R838 ⚠	1-216-359-91	METAL OXIDE	6.8	5%	1W	F
R839	1-249-410-11	CARBON	270	5%	1/4W	
R840	1-249-429-11	CARBON	10K	5%	1/4W	
R841	1-249-437-11	CARBON	47K	5%	1/4W	
R842	1-249-429-11	CARBON	10K	5%	1/4W	
R843	1-249-421-11	CARBON	2.2K	5%	1/4W	
R901	1-249-425-11	CARBON	4.7K	5%	1/4W	
R902	1-249-438-11	CARBON	56K	5%	1/4W	
R903	1-249-429-11	CARBON	10K	5%	1/4W	
R904	1-249-429-11	CARBON	10K	5%	1/4W	
R905	1-249-429-11	CARBON	10K	5%	1/4W	
R906	1-249-425-11	CARBON	4.7K	5%	1/4W	
R907	1-249-429-11	CARBON	10K	5%	1/4W	
R908	1-249-437-11	CARBON	47K	5%	1/4W	
R909	1-249-433-11	CARBON	22K	5%	1/4W	
R910	1-249-431-11	CARBON	15K	5%	1/4W	
R911	1-247-895-00	CARBON	470K	5%	1/4W	
R912	1-249-429-11	CARBON	10K	5%	1/4W	
R913	1-249-425-11	CARBON	4.7K	5%	1/4W	
R914	1-249-401-11	CARBON	47	5%	1/4W	
R915	1-249-425-11	CARBON	4.7K	5%	1/4W	
R916	1-249-421-11	CARBON	2.2K	5%	1/4W	
R917	1-249-439-11	CARBON	68K	5%	1/4W	
R918	1-249-413-11	CARBON	470	5%	1/4W	
R919	1-249-437-11	CARBON	47K	5%	1/4W	
R920	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R921 ⚠	1-215-876-91	METAL OXIDE	15K	5%	1W	F
R922 ⚠	1-215-870-91	METAL OXIDE	1.5K	5%	1W	F
R923	1-249-429-11	CARBON	10K	5%	1/4W	
R924	1-249-423-11	CARBON	3.3K	5%	1/4W	
R925	1-249-415-11	CARBON	680	5%	1/4W	
R926	1-249-409-11	CARBON	220	5%	1/4W	
R927	1-249-429-11	CARBON	10K	5%	1/4W	
R928	1-249-421-11	CARBON	2.2K	5%	1/4W	
R929	1-249-429-11	CARBON	10K	5%	1/4W	
R930	1-249-434-11	CARBON	27K	5%	1/4W	
R931	1-249-421-11	CARBON	2.2K	5%	1/4W	
R933	1-249-421-11	CARBON	2.2K	5%	1/4W	
R934	1-249-439-11	CARBON	68K	5%	1/4W	
R935	1-249-429-11	CARBON	10K	5%	1/4W	
R936	1-249-429-11	CARBON	10K	5%	1/4W	
R937	1-249-421-11	CARBON	2.2K	5%	1/4W	
R938	1-249-405-11	CARBON	100	5%	1/4W	
R939	1-249-405-11	CARBON	100	5%	1/4W	F
R940	1-249-405-11	CARBON	100	5%	1/4W	F
R941	1-249-405-11	CARBON	100	5%	1/4W	
R944	1-249-432-11	CARBON	18K	5%	1/4W	
R945	1-247-895-00	CARBON	470K	5%	1/4W	
R946	1-249-425-11	CARBON	4.7K	5%	1/4W	
R947	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R948	1-249-435-11	CARBON	33K	5%	1/4W	
R950	1-249-425-11	CARBON	4.7K	5%	1/4W	
R952	1-249-405-11	CARBON	100	5%	1/4W	
R953	1-247-889-00	CARBON	270K	5%	1/4W	
R954	1-247-889-00	CARBON	270K	5%	1/4W	
R956	1-249-433-11	CARBON	22K	5%	1/4W	

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V VC

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REF.NO.	PART NO.	DESCRIPTION				REMARK
	*A-1342-220-A	V BOARD, COMPLETE				
		**********				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CAPACITOR>				
C951	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C952	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C961	1-161-830-00	CERAMIC	0.0047MF		500V	
C962	1-102-951-00	CERAMIC	15PF	5%	50V	
C963	1-123-935-00	ELECT	33MF	20%	160V	
C964	1-126-101-11	ELECT	100MF	20%	16V	
C968	1-106-383-00	MYLAR	0.047MF		200V	
C969	1-124-799-11	ELECT	2.2MF	20%	160V	
C970	1-106-391-12	MYLAR	0.1MF	10%	200V	
C971	1-126-157-11	ELECT	10MF	20%	16V	
C972	1-126-541-11	ELECT	330MF	20%	16V	
C973	1-106-383-00	MYLAR	0.047MF		200V	
C974	1-102-959-00	CERAMIC	22PF	5%	50V	
C975	1-126-101-11	ELECT	100MF	20%	16V	
C976	1-126-157-11	ELECT	10MF	20%	16V	
C977	1-102-963-00	CERAMIC	33PF	5%	50V	
C978	1-130-471-00	MYLAR	0.001MF	5%	50V	
C979	1-130-471-00	MYLAR	0.001MF	5%	50V	
C980	1-124-915-11	ELECT	10MF	20%	16V	
		<CONNECTOR>				
V20	*1-564-512-11	PLUG, CONNECTOR 9P				
		<DIODE>				
D961	8-719-911-19	DIODE 1SS119				
D963	8-719-911-19	DIODE 1SS119				
D964	8-719-911-19	DIODE 1SS119				
D965	8-719-911-19	DIODE 1SS119				
D966	8-719-911-19	DIODE 1SS119				
D967	8-719-110-88	DIODE RD39ESB2				
D968	8-719-110-88	DIODE RD39ESB2				
		<COIL>				
L962	1-408-416-00	INDUCTOR	39UH			
		<TRANSISTOR>				
Q956	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q961	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q962	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q963	8-729-017-05	TRANSISTOR 2SA1837				
Q964	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q965	8-729-017-06	TRANSISTOR 2SC4793				
Q966	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q967	8-729-142-86	TRANSISTOR 2SC3733				
		<RESISTOR>				
R951	1-249-434-11	CARBON	27K	5%	1/4W	
R952	1-249-423-11	CARBON	3.3K	5%	1/4W	
R953	1-249-423-11	CARBON	3.3K	5%	1/4W	
R954	1-247-903-00	CARBON	1M	5%	1/4W	
R955	1-249-421-11	CARBON	2.2K	5%	1/4W	
R962	1-249-409-11	CARBON	220	5%	1/4W	
R963	1-249-419-11	CARBON	1.5K	5%	1/4W	
R964	1-247-734-11	CARBON	39	5%	1/2W	F
R965	1-249-414-11	CARBON	560	5%	1/4W	F
R966	1-249-418-11	CARBON	1.2K	5%	1/4W	
R968	1-249-418-11	CARBON	1.2K	5%	1/4W	
R969	1-249-384-11	CARBON	1.8	5%	1/4W	F
R970	1-249-435-11	CARBON	33K	5%	1/4W	
R972	1-249-432-11	CARBON	18K	5%	1/4W	
R974 ⚠	1-216-476-51	METAL OXIDE	180	5%	3W	F
R975	1-249-417-11	CARBON	1K	5%	1/4W	F
R976	1-249-432-11	CARBON	18K	5%	1/4W	
R977	1-249-438-11	CARBON	56K	5%	1/4W	
R978	1-249-430-11	CARBON	12K	5%	1/4W	
R979	1-249-414-11	CARBON	560	5%	1/4W	
R980	1-249-420-11	CARBON	1.8K	5%	1/4W	
R981	1-249-415-11	CARBON	680	5%	1/4W	
R982	1-249-384-11	CARBON	1.8	5%	1/4W	F
R983	1-249-441-11	CARBON	100K	5%	1/4W	
R984	1-249-405-11	CARBON	100	5%	1/4W	
R985	1-249-400-11	CARBON	39	5%	1/4W	F
R986	1-249-435-11	CARBON	33K	5%	1/4W	
R987	1-249-428-11	CARBON	8.2K	5%	1/4W	
R988	1-249-418-11	CARBON	1.2K	5%	1/4W	
R989	1-249-413-11	CARBON	470	5%	1/4W	
R990 ⚠	1-216-451-91	METAL OXIDE	120	5%	2W	F
R991	1-249-409-11	CARBON	220	5%	1/4W	

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	*A-1347-079-A	VC BOARD, COMPLETE (KV-27XBR96S(U/C))				
		**********				
	*A-1347-081-A	VC BOARD, COMPLETE (KV-32XBR96S(U/C))				
		**********				
	3-710-578-01	COVER, VOLUME, 6 MOLD				
		<CAPACITOR>				
C1801	1-124-478-11	ELECT	100MF	20%	25V	
C1802	1-124-478-11	ELECT	100MF	20%	25V	
C1803	1-130-487-00	MYLAR	0.022MF	5%	50V	
C1804	1-102-973-00	CERAMIC	100PF	5%	50V	
C1805	1-130-471-00	FILM	0.001MF	5%	50V	
C1806	1-130-487-00	MYLAR	0.022MF	5%	50V	
C1807	1-130-471-00	MYLAR	0.001MF	5%	50V	
C1808	1-102-228-00	CERAMIC	470PF	10%	500V	
C1809	1-124-798-11	ELECT	1MF	20%	160V	
C1810	1-130-495-00	MYLAR	0.1MF	5%	50V	
C1811	1-124-798-11	ELECT	1MF	20%	160V	
C1812	1-136-104-00	FILM	0.16MF	5%	200V (KV-27XBR96S(U/C)	
C1812	1-136-756-11	FILM	0.24MF	5%	200V (KV-32XBR96S(U/C)	
C1813	1-129-765-00	FILM	0.047F	10%	200V (KV-27XBR96S(U/C)	
		<CONNECTOR>				
VC15	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P				

VC | HX1 | HX2 | U

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REF.NO.	PART NO.	DESCRIPTION	REMARK
		<DIODE>	
D1801	8-719-911-19	DIODE 1SS119	
D1802	8-719-911-19	DIODE 1SS119	
D1803	8-719-302-43	DIODE EL1Z	
D1804	8-719-302-43	DIODE EL1Z	
D1805	8-719-302-43	DIODE EL1Z	
		<IC>	
IC1801	8-759-987-16	IC LM393P	
IC1802	8-759-987-16	IC LM393P	
IC1803	8-759-168-20	IC TA78L09S	
		<COIL>	
L1801	1-460-200-11	COIL (WITH CORE)	
		<TRANSISTOR>	
Q1801	8-729-012-26	TRANSISTOR IRF540Y	
Q1802	8-729-012-26	TRANSISTOR IRF540Y	
Q1803	8-729-931-45	TRANSISTOR IRF614	
		<RESISTOR>	
R1801	1-249-435-11	CARBON 33K 5% 1/4W	
R1802	1-249-417-11	CARBON 1K 5% 1/4W	
R1803	1-247-887-00	CARBON 220K 5% 1/4W	
R1804	1-249-437-11	CARBON 47K 5% 1/4W	
R1805	1-247-895-00	CARBON 470K 5% 1/4W	
R1806	1-249-427-11	CARBON 6.8K 5% 1/4W	(KV-27XBR96S(U/C)
R1806	1-249-428-11	CARBON 8.2K 5% 1/4W	(KV-32XBR96S(U/C)
R1807	1-249-423-11	CARBON 3.3K 5% 1/4W	
R1808	1-249-426-11	CARBON 5.6K 5% 1/4W	
R1809	1-249-433-11	CARBON 22K 5% 1/4W	
R1810	1-249-421-11	CARBON 2.2K 5% 1/4W	
R1811⚠	1-216-463-91	METAL OXIDE 12K 5% 2W F	
R1812⚠	1-215-875-91	METAL OXIDE 10K 5% 1W F	
R1813	1-249-405-11	CARBON 100 5% 1/4W	
R1814	1-249-441-11	CARBON 100K 5% 1/4W	
R1815⚠	1-215-869-91	METAL OXIDE 1K 5% 1W F	
R1816	1-249-434-11	CARBON 27K 5% 1/4W	(KV-27XBR96S(U/C)
R1816	1-249-437-11	CARBON 47K 5% 1/4W	(KV-32XBR96S(U/C)
R1817	1-249-441-11	CARBON 100K 5% 1/4W	
R1818	1-249-406-11	CARBON 120 5% 1/4W	
		<VARIABLE RESISTOR>	
RV1801	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
		<TRANSFORMER>	
T1801	1-437-212-11	TRANSFORMER, FERRITE (VPDT)	
**********			
	*1-643-663-11	HX1 BOARD *********	
	*4-348-208-00	HOLDER, LED	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<CAPACITOR>	
C1603	1-124-589-11	ELECT 47MF 20% 16V	
C1604	1-124-589-11	ELECT 47MF 20% 16V	
		<DIODE>	
D1601	8-719-812-41	DIODE TLR124	
D1602	8-719-812-41	DIODE TLR124	
		<CONNECTOR>	
HX137	*1-564-514-11	PLUG, CONNECTOR 11P	
		<IC>	
IC1601	8-741-148-33	IC SBX1483-59	
		<RESISTOR>	
R1601	1-249-408-11	CARBON 180 5% 1/4W	
R1602	1-249-407-11	CARBON 150 5% 1/4W	
R1604	1-249-419-11	CARBON 1.5K 5% 1/4W	
R1605	1-249-421-11	CARBON 2.2K 5% 1/4W	
R1606	1-249-425-11	CARBON 4.7K 5% 1/4W	
R1607	1-249-430-11	CARBON 12K 5% 1/4W	
		<SWITCH>	
S1601	1-572-198-11	SWITCH, KEYBOARD	
S1604	1-572-198-11	SWITCH, KEYBOARD	
S1605	1-572-198-11	SWITCH, KEYBOARD	
S1606	1-572-198-11	SWITCH, KEYBOARD	
S1607⚠	1-572-198-11	SWITCH, KEYBOARD (POWER)	
**********			
	*1-643-664-11	HX2 BOARD *********	
		<CONNECTOR>	
HX2-49	*1-564-518-11	PLUG, CONNECTOR 3P	
HX216	*1-564-525-11	PLUG, CONNECTOR 10P	
		<DIODE>	
D1650	8-719-108-12	DIODE RD9.1EW	
D1651	8-719-108-12	DIODE RD9.1EW	
D1652	8-719-108-12	DIODE RD9.1EW	
D1653	8-719-108-12	DIODE RD9.1EW	
D1654	8-719-108-12	DIODE RD9.1EW	
D1655	8-719-108-12	DIODE RD9.1EW	
		<JACK>	
J1650	1-695-307-11	TERMINAL BLOCK, S 3P	
**********			
	*A-1373-421-A	U BOARD, COMPLETE **********	
		<CAPACITOR>	
C1004	1-102-125-00	CERAMIC 0.0047MF 10% 50V	

U

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1005	1-126-301-11	ELECT	1MF	20%	50V	
C1006	1-164-096-11	CERAMIC	0.01MF		50V	
C1007	1-124-598-11	ELECT	22MF	20%	25V	
C1008	1-124-598-11	ELECT	22MF	20%	25V	
C1010	1-124-465-00	ELECT	0.47MF	20%	50V	
C1011	1-124-465-00	ELECT	0.47MF	20%	50V	
C1012	1-124-465-00	ELECT	0.47MF	20%	50V	
C1013	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C1014	1-126-163-11	ELECT	4.7MF	20%	50V	
C1016	1-126-163-11	ELECT	4.7MF	20%	50V	
C1018	1-126-301-11	ELECT	1MF	20%	50V	
C1020	1-124-242-00	ELECT	33MF	20%	25V	
C1021	1-124-465-00	ELECT	0.47MF	20%	50V	
C1022	1-124-242-00	ELECT	33MF	20%	25V	
C1026	1-164-048-11	CERAMIC	12PF	5%	50V	
C1027	1-164-048-11	CERAMIC	12PF	5%	50V	
C1028	1-124-242-00	ELECT	33MF	20%	25V	
C1029	1-124-282-00	ELECT	22MF	20%	16V	
C1030	1-124-478-11	ELECT	100MF	20%	25V	
C1031	1-102-963-00	CERAMIC	33PF	5%	50V	
C1034	1-124-282-00	ELECT	22MF	20%	16V	
C1036	1-124-282-00	ELECT	22MF	20%	16V	
C1037	1-124-282-00	ELECT	22MF	20%	16V	
C1039	1-124-478-11	ELECT	100MF	20%	25V	
C1047	1-124-465-00	ELECT	0.47MF	20%	50V	
C1048	1-126-301-11	ELECT	1MF	20%	50V	
C1049	1-124-598-11	ELECT	22MF	20%	25V	
C1051	1-124-465-00	ELECT	0.47MF	20%	50V	
C1055	1-124-589-11	ELECT	47MF	20%	16V	
C1056	1-124-499-11	ELECT	1MF	20%	50V	
C1057	1-124-768-11	ELECT	4.7MF	20%	50V	
C1059	1-124-499-11	ELECT	1MF	20%	50V	
C1060	1-124-499-11	ELECT	1MF	20%	50V	
C1061	1-124-499-11	ELECT	1MF	20%	50V	
C1062	1-102-129-00	CERAMIC	0.01MF	10%	50V	
C1063	1-124-768-11	ELECT	4.7MF	20%	50V	
C1066	1-126-101-11	ELECT	100MF	20%	16V	
C1070	1-126-103-11	ELECT	470MF	20%	16V	

<CONNECTOR>

U12	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P	
U13	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P	
U16	*1-564-513-11	PLUG, CONNECTOR 10P	
U22	1-566-942-11	CONNECTOR,HINGE(RECEPTACLE)30P	
U23	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)	
U32	*1-564-510-11	PLUG, CONNECTOR 7P	
U47	*1-564-506-11	PLUG, CONNECTOR 3P	
U50	*1-564-505-11	PLUG, CONNECTOR 2P	

<DIODE>

D1005	8-719-110-36	DIODE RD13ESB2	
D1009	8-719-110-36	DIODE RD13ESB2	
D1010	8-719-110-36	DIODE RD13ESB2	
D1011	8-719-110-36	DIODE RD13ESB2	
D1012	8-719-110-36	DIODE RD13ESB2	
D1013	8-719-110-36	DIODE RD13ESB2	
D1014	8-719-110-36	DIODE RD13ESB2	
D1017	8-719-110-36	DIODE RD13ESB2	
D1018	8-719-110-36	DIODE RD13ESB2	
D1019	8-719-110-36	DIODE RD13ESB2	
D1020	8-719-109-66	DIODE RD3.3ESB2	
D1021	8-719-109-66	DIODE RD3.3ESB2	
D1022	8-719-109-66	DIODE RD3.3ESB2	
D1025	8-719-911-19	DIODE 1SS119	
D1026	8-719-911-19	DIODE 1SS119	
D1027	8-719-911-19	DIODE 1SS119	

<IC>

IC1002	8-752-056-50	IC CXA1545S	
IC1011	8-759-145-57	IC UPC4557C	

<COIL>

L1001	1-408-422-00	INDUCTOR	120UH
L1002	1-408-422-00	INDUCTOR	120UH

<TRANSISTOR>

Q1009	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1010	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1016	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1017	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1018	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1019	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1020	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1021	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1022	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1023	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1025	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1029	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1030	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1031	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1032	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1033	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1034	8-729-119-76	TRANSISTOR 2SA1175-HFE	

<RESISTOR>

R1011	1-249-435-11	CARBON	33K	5%	1/4W	
R1012	1-249-434-11	CARBON	27K	5%	1/4W	
R1013	1-249-417-11	CARBON	1K	5%	1/4W	
R1014	1-249-441-11	CARBON	100K	5%	1/4W	
R1015	1-215-437-00	METAL	4.7K	1%	1/4W	
R1016	1-249-441-11	CARBON	100K	5%	1/4W	
R1017	1-249-405-11	CARBON	100	5%	1/4W	
R1018	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1019	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1023	1-249-405-11	CARBON	100	5%	1/4W	
R1026	1-215-437-00	METAL	4.7K	1%	1/4W	
R1028	1-249-434-11	CARBON	27K	5%	1/4W	
R1029	1-249-435-11	CARBON	33K	5%	1/4W	
R1030	1-249-417-11	CARBON	1K	5%	1/4W	
R1032	1-249-417-11	CARBON	1K	5%	1/4W	
R1033	1-249-393-11	CARBON	10	5%	1/4W	F
R1034	1-249-417-11	CARBON	1K	5%	1/4W	
R1036	1-249-440-11	CARBON	82K	5%	1/4W	
R1037	1-249-440-11	CARBON	82K	5%	1/4W	
R1038	1-249-440-11	CARBON	82K	5%	1/4W	
R1043	1-249-417-11	CARBON	1K	5%	1/4W	
R1046	1-249-413-11	CARBON	470	5%	1/4W	
R1048	1-249-405-11	CARBON	100	5%	1/4W	
R1050	1-249-405-11	CARBON	100	5%	1/4W	
R1051	1-249-417-11	CARBON	1K	5%	1/4W	
R1052	1-249-413-11	CARBON	470	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1054	1-249-405-11	CARBON	100	5%	1/4W	
R1055	1-249-413-11	CARBON	470	5%	1/4W	
R1056	1-249-405-11	CARBON	100	5%	1/4W	
R1057	1-249-441-11	CARBON	100K	5%	1/4W	
R1059	1-249-405-11	CARBON	100	5%	1/4W	
R1061	1-249-409-11	CARBON	220	5%	1/4W	
R1062	1-249-441-11	CARBON	100K	5%	1/4W	
R1063	1-249-409-11	CARBON	220	5%	1/4W	
R1066	1-215-437-00	METAL	4.7K	1%	1/4W	
R1067	1-215-437-00	METAL	4.7K	1%	1/4W	
R1068	1-215-437-00	METAL	4.7K	1%	1/4W	
R1069	1-215-437-00	METAL	4.7K	1%	1/4W	
R1070	1-249-411-11	CARBON	330	5%	1/4W	
R1071	1-249-431-11	CARBON	15K	5%	1/4W	
R1073	1-249-431-11	CARBON	15K	5%	1/4W	
R1077	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1078	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1079	1-249-405-11	CARBON	100	5%	1/4W	
R1080	1-215-423-00	METAL	1.2K	1%	1/4W	
R1081	1-215-421-00	METAL	1K	1%	1/4W	
R1089	1-249-405-11	CARBON	100	5%	1/4W	
R1094	1-249-405-11	CARBON	100	5%	1/4W	
R1096	1-249-415-11	CARBON	680	5%	1/4W	
R1099	1-249-413-11	CARBON	470	5%	1/4W	
R1100	1-249-429-11	CARBON	10K	5%	1/4W	
R1101	1-249-405-11	CARBON	100	5%	1/4W	
R1110	1-249-415-11	CARBON	680	5%	1/4W	
R1116	1-249-441-11	CARBON	100K	5%	1/4W	
R1118	1-249-413-11	CARBON	470	5%	1/4W	
R1120	1-249-413-11	CARBON	470	5%	1/4W	
R1121	1-249-441-11	CARBON	100K	5%	1/4W	
R1122	1-249-413-11	CARBON	470	5%	1/4W	
R1133	1-249-405-11	CARBON	100	5%	1/4W	
R1134	1-249-405-11	CARBON	100	5%	1/4W	
R1137	1-249-411-11	CARBON	330	5%	1/4W	
R1138	1-249-415-11	CARBON	680	5%	1/4W	
R1139	1-249-413-11	CARBON	470	5%	1/4W	
R1140	1-249-413-11	CARBON	470	5%	1/4W	
R1141	1-249-413-11	CARBON	470	5%	1/4W	
R1142	1-249-415-11	CARBON	680	5%	1/4W	
R1147	1-249-405-11	CARBON	100	5%	1/4W	
R1148	1-249-405-11	CARBON	100	5%	1/4W	
R1149	1-249-417-11	CARBON	1K	5%	1/4W	
R1150	1-249-405-11	CARBON	100	5%	1/4W	
R1151	1-249 405-11	CARBON	100	5%	1/4W	
R1152	1-249-417-11	CARBON	1K	5%	1/4W	

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*A-1373-422-A UT BOARD, COMPLETE
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<CAPACITOR>

C1152	1-102-074-00	CERAMIC	0.001MF	10%	50V
C1153	1-164-096-11	CERAMIC	0.01MF		50V
C1154	1-164-096-11	CERAMIC	0.01MF		50V
C1155	1-126-103-11	ELECT	470MF	20%	16V
C1158	1-124-598-11	ELECT	22MF	20%	25V
C1159	1-124-598-11	ELECT	22MF	20%	25V
C1160	1-124-598-11	ELECT	22MF	20%	25V
C1161	1-124-598-11	ELECT	22MF	20%	25V
C1164	1-126-103-11	ELECT	470MF	20%	16V
C1165	1-126-301-11	ELECT	1MF	20%	50V
C1166	1-126-301-11	ELECT	1MF	20%	50V
C1167	1-126-301-11	ELECT	1MF	20%	50V
C1168	1-126-301-11	ELECT	1MF	20%	50V

<CONNECTOR>

UT9	*1-564-517-11	PLUG, CONNECTOR 2P	
UT11	*1-564-519-11	PLUG, CONNECTOR 4P	
UT22	*1-566-941-11	CONNECTOR, HINGE (TAB)	30P
UT23	*1-566-641-11	CONNECTOR, HINGE (TAB)	18P
UT35	*1-564-518-11	PLUG, CONNECTOR 3P	
UT38	*1-564-517-11	PLUG, CONNECTOR 2P	

<DIODE>

D1151	8-719-110-36	DIODE	RD13ESB2
D1152	8-719-110-36	DIODE	RD13ESB2
D1158	8-719-110-36	DIODE	RD13ESB2
D1159	8-719-110-36	DIODE	RD13ESB2
D1160	8-719-110-36	DIODE	RD13ESB2
D1161	8-719-110-36	DIODE	RD13ESB2
D1162	8-719-110-36	DIODE	RD13ESB2
D1163	8-719-110-36	DIODE	RD13ESB2
D1164	8-719-110-36	DIODE	RD13ESB2
D1165	8-719-110-36	DIODE	RD13ESB2
D1166	8-719-110-36	DIODE	RD13ESB2
D1167	8-719-110-36	DIODE	RD13ESB2
D1168	8-719-110-36	DIODE	RD13ESB2
D1169	8-719-110-36	DIODE	RD13ESB2
D1170	8-719-110-36	DIODE	RD13ESB2
D1171	8-719-110-36	DIODE	RD13ESB2
D1172	8-719-110-78	DIODE	RD33ESB2
D1173	8-719-110-78	DIODE	RD33ESB2
D1174	8-719-110-78	DIODE	RD33ESB2
D1175	8-719-110-78	DIODE	RD33ESB2
D1176	8-719-110-78	DIODE	RD33ESB2
D1177	8-719-110-78	DIODE	RD33ESB2
D1178	8-719-110-78	DIODE	RD33ESB2
D1179	8-719-110-78	DIODE	RD33ESB2

<JACK>

J1001	1-537-188-11	TERMINAL, PUSH (8P)
J1003	1-573-970-11	BLOCK, (S) TERMINAL
J1004	1-695-304-11	TERMINAL BLOCK, S
J1005	1-695-054-11	JACK BLOCK, PIN
J1006	1-573-970-11	BLOCK, (S) TERMINAL
J1007	1-573-969-11	JACK BLOCK, PIN
J1008	1-573-969-11	JACK BLOCK, PIN

<RESISTOR>

R1153	1-249-403-11	CARBON	68	5%	1/4W
R1154	1-249-426-11	CARBON	5.6K	5%	1/4W
R1155	1-249-417-11	CARBON	1K	5%	1/4W
R1158	1-247-804-11	CARBON	75	5%	1/4W
R1164	1-247-895-00	CARBON	470K	5%	1/4W
R1165	1-247-895-00	CARBON	470K	5%	1/4W
R1166	1-247-895-00	CARBON	470K	5%	1/4W
R1167	1-247-895-00	CARBON	470K	5%	1/4W
R1168	1-247-895-00	CARBON	470K	5%	1/4W
R1169	1-249-403-11	CARBON	68	5%	1/4W
R1170	1-249-403-11	CARBON	68	5%	1/4W
R1171	1-247-895-00	CARBON	470K	5%	1/4W

UT S

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1172	1-247-895-00	CARBON	470K	5%	1/4W	
R1173	1-247-804-11	CARBON	75	5%	1/4W	
R1174	1-247-895-00	CARBON	470K	5%	1/4W	
R1175	1-247-895-00	CARBON	470K	5%	1/4W	
R1176	1-247-804-11	CARBON	75	5%	1/4W	
R1177	1-247-804-11	CARBON	75	5%	1/4W	
R1178	1-247-895-00	CARBON	470K	5%	1/4W	
R1179	1-247-895-00	CARBON	470K	5%	1/4W	
R1180	1-247-804-11	CARBON	75	5%	1/4W	
R1181	1-247-804-11	CARBON	75	5%	1/4W	
R1182	1-247-804-11	CARBON	75	5%	1/4W	
R1183	1-247-895-00	CARBON	470K	5%	1/4W	
R1184	1-247-895-00	CARBON	470K	5%	1/4W	
R1185	1-247-895-00	CARBON	470K	5%	1/4W	
R1186	1-247-895-00	CARBON	470K	5%	1/4W	
R1187	1-247-804-11	CARBON	75	5%	1/4W	
R1188	1-247-804-11	CARBON	75	5%	1/4W	
R1191	1-215-437-00	METAL	4.7K	1%	1/4W	
R1192	1-215-437-00	METAL	4.7K	1%	1/4W	
R1193	1-215-437-00	METAL	4.7K	1%	1/4W	
R1194	1-215-437-00	METAL	4.7K	1%	1/4W	
R1195	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1196	1-249-426-11	CARBON	5.6K	5%	1/4W	

<SWITCH>

S1150	1-572-198-11	SWITCH, KEYBOARD	

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	*A-1394-421-A	S BOARD, COMPLETE	
		**********	

<CAPACITOR>

C3403	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C3408	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3409	1-124-589-11	ELECT	47MF	20%	16V
C3411	1-124-034-51	ELECT	33MF	20%	16V
C3442	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C3446	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C3447	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C3448	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3449	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C3451	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3452	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C3453	1-124-589-11	ELECT	47MF	20%	16V
C3454	1-126-162-11	ELECT	3.3MF	20%	50V
C3455	1-126-163-11	ELECT	4.7MF	20%	16V
C3456	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C3457	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C3459	1-124-589-11	ELECT	47MF	20%	16V
C3460	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C3461	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C3507	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3508	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3509	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C3515	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C3540	1-126-157-11	ELECT	10MF	20%	16V

<CONNECTOR>

S42	*1-565-514-11	SOCKET, CONNECTOR 2P
S42	*1-568-378-21	PIN, CONNECTOR 3P
S43	*1-564-508-11	PLUG, CONNECTOR 5P
S45	*1-564-511-71	PLUG, CONNECTOR 8P
S46	*1-564-506-11	PLUG, CONNECTOR 3P
S47	*1-564-506-11	PLUG, CONNECTOR 3P

<DIODE>

D3444	8-719-404-46	DIODE MA110

<IC>

IC3401	8-759-403-44	IC MN1280-S
IC3402	8-759-070-42	IC M37201M6-A18FP
IC3441	8-759-708-05	IC NJM78L05A
IC3442	8-759-084-12	IC LA7945
IC3443	8-759-187-22	IC LC7458B-03
IC3444	8-759-403-44	IC MN1280-S

<COIL>

L3401	1-408-421-00	INDUCTOR	100UH
L3461	1-408-409-00	INDUCTOR	10UH
L3462	1-408-421-00	INDUCTOR	100UH

<TRANSISTOR>

Q3441	8-729-422-27	TRANSISTOR 2SD601A-Q
Q3444	8-729-903-10	TRANSISTOR FMW1

<RESISTOR>

R3401	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3402	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3403	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3404	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3405	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3406	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3407	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3408	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3409	1-216-033-00	METAL GLAZE	220	5%	1/10W
R3441	1-216-025-00	METAL GLAZE	100	5%	1/10W
R3442	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3443	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3444	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3445	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R3446	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3449	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3450	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3451	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R3452	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R3453	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R3454	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3455	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3456	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3463	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3464	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3465	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3472	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R3473	1-216-025-00	METAL GLAZE	100	5%	1/10W
R3474	1-216-295-00	METAL GLAZE	0	5%	1/10W
R3504	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R3509	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3511	1-216-025-00	METAL GLAZE	100	5%	1/10W
R3512	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W

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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK
R3513	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R3514	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R3519	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R3520	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R3521	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R3525	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R3526	1-216 073-00	METAL GLAZE 10K 5% 1/10W	
R3528	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R3529	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R3530	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R3531	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R3532	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R3535	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R3537	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R3540	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
		<CRYSTAL>	
X3401	1-577-358-21	VIBRATOR, CERAMIC	
X3441	1-577-364-11	VIBRATOR, CERAMIC	
		**********	
		MISCELLANEOUS	
		**********	
	⚠1-406-586-11	COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))	
	⚠1-406-587-11	COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))	
	⚠1-406-588-11	COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))	
	⚠1-406-589-11	COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))	
	⚠1-417-178-11	SELECTOR, ANTENNA (AS-2)	
	⚠1-451-393-11	DEFLECTION YOKE (Y34EXA) (KV-32XBR96S(U/C))	
	⚠1-451-394-11	DEFLECTION YOKE (Y29EXA) (KV-27XBR96S(U/C))	
	⚠1-452-616-13	NECK ASSY, PICTURE TUBE (NA323)	
	*1-555-400-00	CABLE, PIN	
	*1-557-056-31	CABLE, P-P	
	⚠1-696-002-12	CORD, POWER(WITH NOISE FILTER) 7A/125V	
V901	⚠8-733-731-05	PICTURE TUBE (M81KVA10X) (KV-32XBR96S(U/C))	
V901	⚠8-733-837-05	PICTURE TUBE (M68KUZ10X) (KV-27XBR96S(U/C))	
		**********	
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	X-4031-013-1	SCREW ASSY, ORNAMENTAL	
	1-504-181-11	SPEAKER SYSTEM (13CM)	
	1-504-182-11	SPEAKER SYSTEM (13CM)	
	1-559-238-11	CORD, SPEAKER CONNECTION	
	3-757-188-21	MANUAL, INSTRUCTION (ENGLISH)	
	3-757-188-31	MANUAL, INSTRUCTION (FRANCH) (KV-27XBR96S(C),KV-32XBR96S(C))	
	3-757-188-41	MANUAL, INSTRUCTION (SPANISH) (KV-27XBR96S(U),KV-32XBR96S(U))	
	*4-041-259-01	BAG, PROTECTION (KV-32XBR96S(U/C))	
	4-036-347-01	BOX, SPEAKER (KV-32XBR96S(U/C))	
	*4-036-702-01	PLATE, TOP (KV-32XBR96S(U/C))	
	*4-036-704-01	CUSHION (UPPER) (ASSY) (KV-32XBR96S(U/C)	
	*4-036-706-01	CUSHION (LOWER) (ASSY) (KV-32XBR96S(U/C)	
	*4-036-711-01	INDIVIDUAL CARTON (KV-32XBR96S(U/C))	
	4-036-807-01	BRACKET (L), SPEAKER (KV-32XBR96S(U/C))	
	4-036-808-01	BRACKET (R), SPEAKER (KV-32XBR96S(U/C))	
	4-036-809-01	CUSHION, RUBBER	
	4-037-304-01	BRACKET (L), SPEAKER (KV-27XBR96S(U/C))	
	4-037-305-01	BRACKET (R), SPEAKER (KV-27XBR96S(U/C))	
	*4-037-680-01	CUSHION (LOWER) (ASSY)(KV-27XBR96S(U/C))	
	*4-037-681-01	CUSHION (UPPER) (ASSY)(KV-27XBR96S(U/C))	
	*4-037-684-01	INDIVIDUAL CARTON (KV-27XBR96S(U/C))	
	*4-384-027-01	BAG, PROTECTION (KV-27XBR96S(U/C))	
	9-910-999-32	BAG, POLYETHYLENE	
		REMOTE COMMANDER	
	1-693-156-21	REMOTE COMMANDER (RM-Y114A)	
	9-902-623-01	COVER, BATTERY (FOR RM-Y114A)	
	9-902-624-01	COVER (FOR RM-Y114A)	

9-964-951-01

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