

KV-27XBR35 / 32XBR35

RM-Y113/TDR-IF310

SERVICEMANUAL

US Model

KV-27XBR35

Chassis No. SCC-F16D-A

KV-32XBR35

Chassis No. SCC-F16A-A

Canadian Model

KV-27XBR35

Chassis No. SCC-F17C-A

KV-32XBR35

Chassis No. SCC-F17A-A



(Photo : KV-32XBR35)

FN CHASSIS

MODELS OF THE SAME SERIES

KV-27XBR35/32XBR35	

SPECIFICATIONS

Television system American TV standards
 Channel coverage VHF: 2-13
 UHF: 1669
 CABLE TV: 1-125

Picture tube **Microblack™ Trinitron®** tube
 27-inch picture measured diagonally
 29-inch picture tube measured diagonally (KV-27XBR35)
 32-inch picture measured diagonally
 34-inch picture tube measured diagonally (KV-32XBR35)

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 kilohms

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 kilohms

AUDIO OUTPUT (VARIABLE)

(phono jacks)

More than 900 mVrms (100%

modulation) at the maximum volume

setting (variable)

Impedance : 5 kilohms

AUDIO LINE OUT

(phono jacks)

900 mVrms (100% modulation)

Impedance : 5 kilohms

• Continued on next page •

TRINITRON® COLOR TV

SONY®



Speaker output 13W X2 (8 ohms)
 Speaker size Tweeter 25 mm (1 in.) X2 units
 Woofer 100 mm (4 in.) X2 units
 Audio frequency response Tweeter 8 kHz-20 kHz
 Woofer 50 Hz-8 kHz
 Power requirements 120 V AC, 60 Hz
 Power consumption (KV-27XBR35)
 250W
 (KV-32XBR35)
 225W
 Dimensions (w/h/d) (KV-27XBR35)
 Approx. 756 X 578 X 519 mm
 (29 7/8 X 22 7/8 X 20 1/2 inches)
 (KV-32XBR35)
 Approx. 870 X 663 X 575.2 mm
 (34 3/8 X 26 1/8 X 22 3/4 inches)
 Weight (KV-27XBR35)
 Approx. 57.1kg (125 lb 15 oz)
 (KV-32XBR35)
 Approx. 77.3kg (170 lb 7 oz)
 Supplied accessories Remote Commander **RM-Y113 (1)**
 with 2 size AA (R6)
 EVEREADY batteries
 Wireless headphones
 TDR-IF310 (1) with 2 size AA (R6)
 EVEREADY batteries

Optional accessories U/V mixer EAC-66
 Connecting cable
 RK-74A
 VMC-810S/820S
 YC-15V/30V
 TV stand SU-27XBR3
 (KV-27XBR35)
 TV stand SU-32XBR3
 (KV-32XBR35)

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

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHASSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DEPANNAGE.
 LE CHASSIS DE CE RECEPTEUR EST DIRECTEMENT RACCORDE A L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MAPQUE Δ SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES 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 NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRESENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTE.

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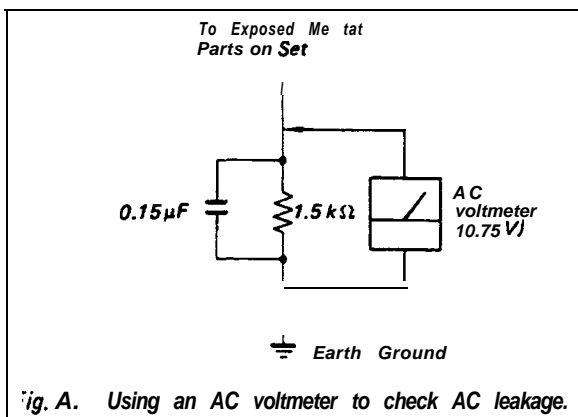
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SAFETY CHECK-OUT

(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.



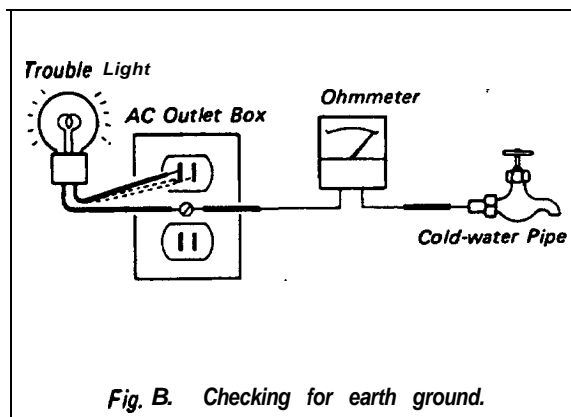
LEAKAGE TEST

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

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-S40A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is **0.75 V**, so analog meters must have an accurate **low-voltage** scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

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



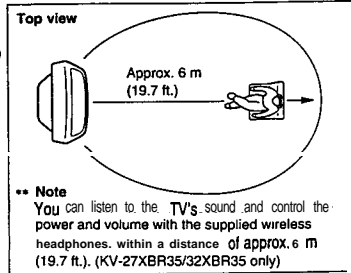
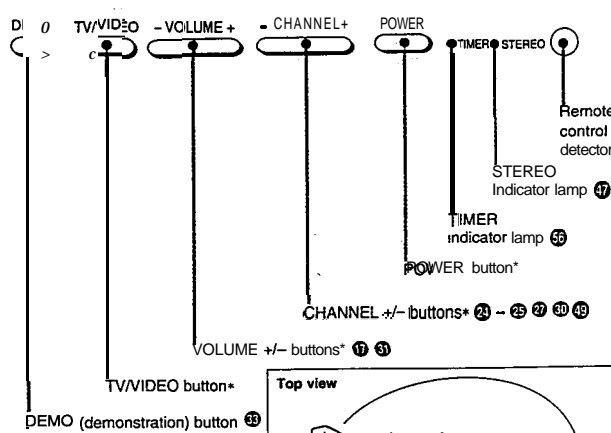
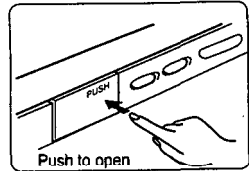
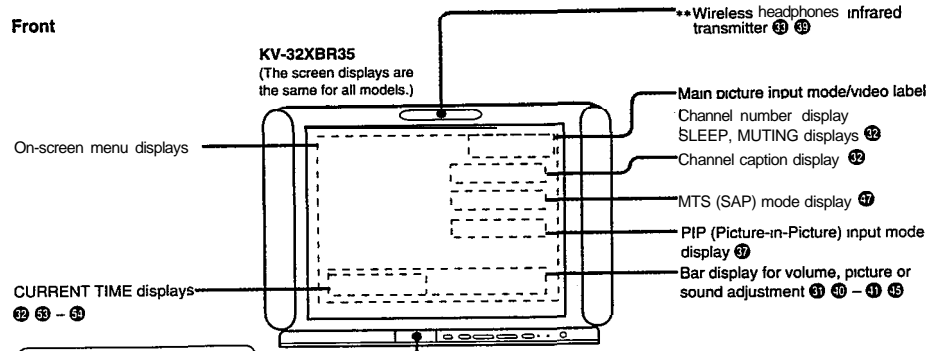
SECTION 1 GENERAL

This section is extracted from instruction manual.

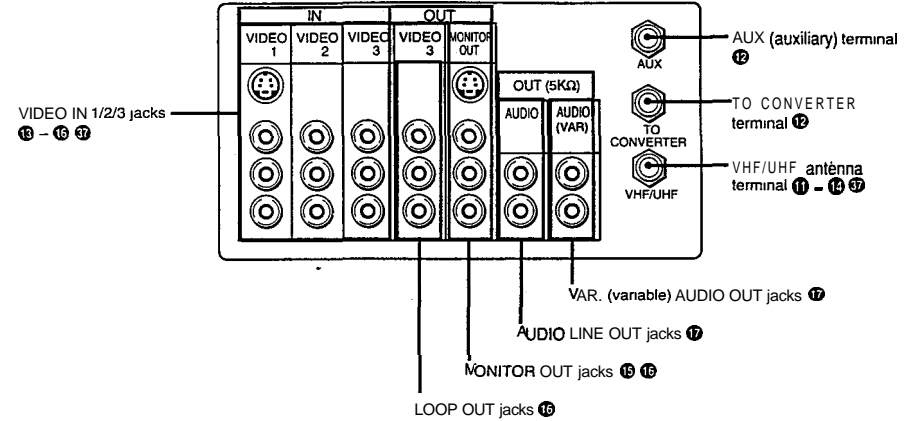
1-1. LOCATING CONTROLS AND CONNECTORS

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

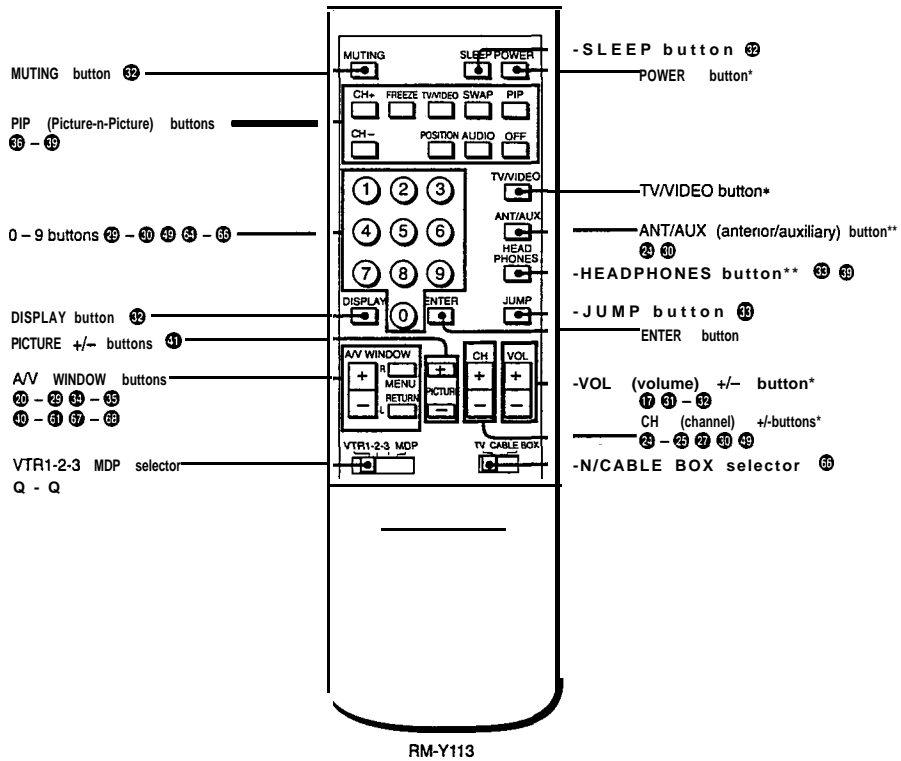
Front



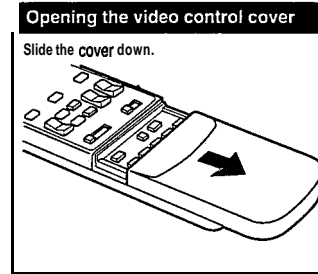
Rear



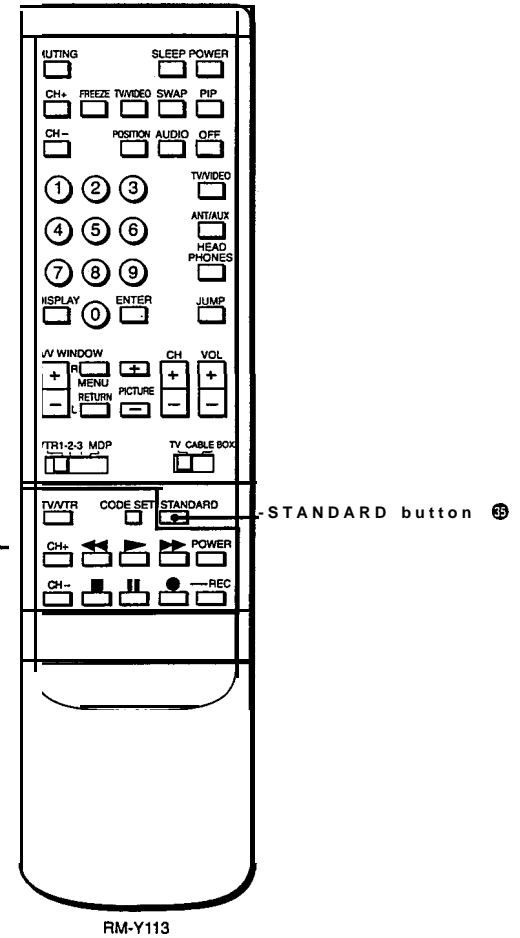
Remote Commander (with the video control cover closed)



Remote Commander (with the video control cover open)



Video operating buttons 32 - 35



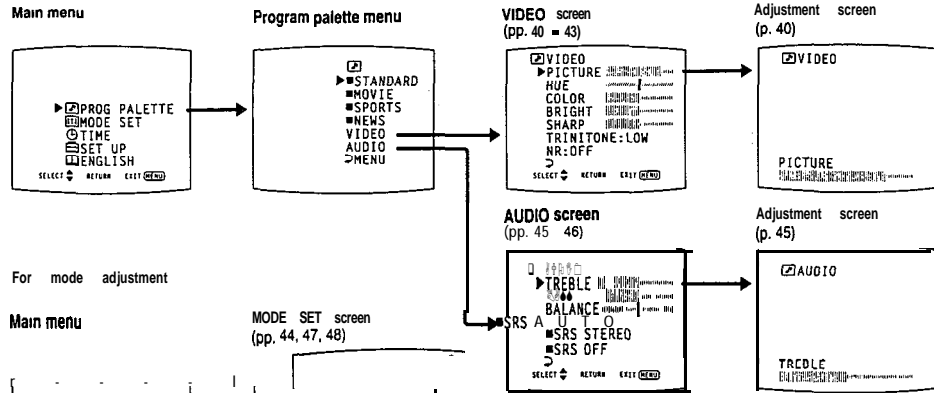
* Buttons with the same function are also located on the N (p. 6).

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. 66). Set the selector to TV to control the N with the Remote Commander.

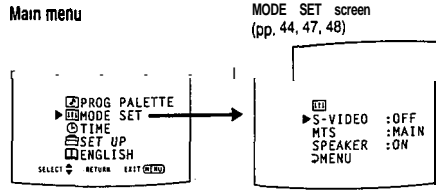
1-2. USING THE ON-SCREEN MENUS

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.

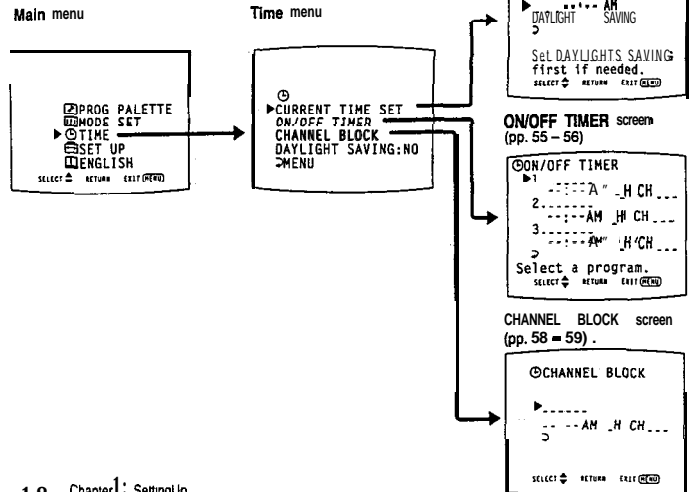
For picture and sound quality adjustment



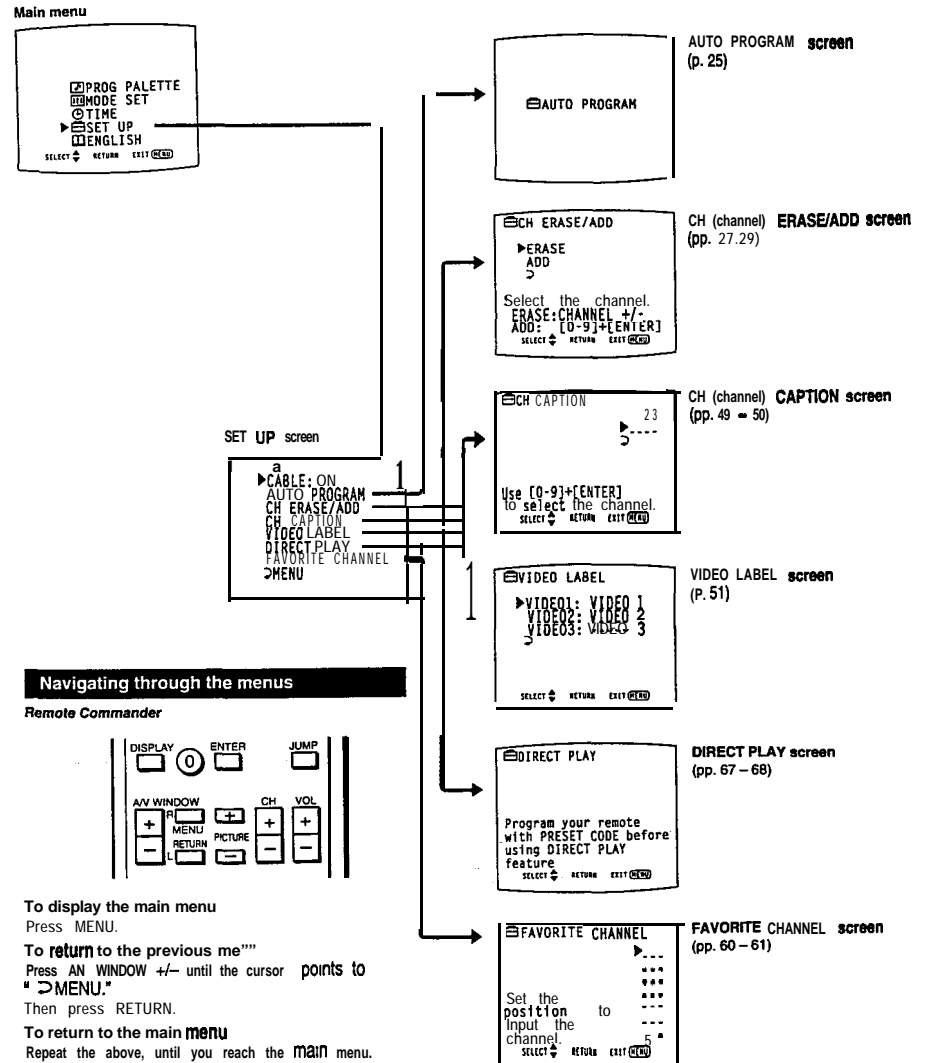
For mode adjustment



For time-related settings

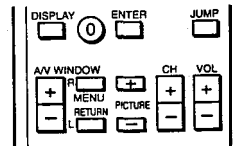


For presetting and other functions



Navigating through the menus

Remote Commander



To display the main menu

Press MENU.

To return to the previous menu

Press AN 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.

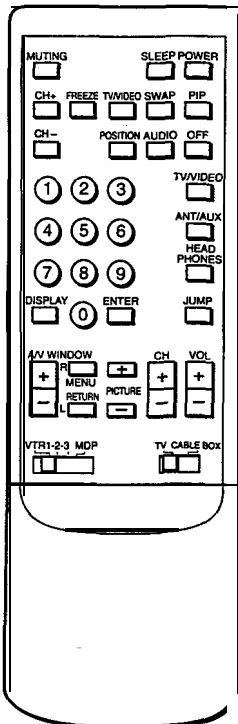
Note

The menu disappears automatically. If you do not press a button within 90 seconds.

Using the On-Screen Menus



Front of N



RM-Y113

Changing the menu language

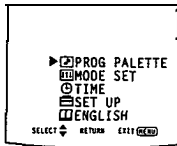
The menu language is factory-set to ENGLISH. Follow these instructions to change the menu language to Spanish or French, or back to English.

1 Press POWER on the TV or on the Remote Commander to turn on the TV

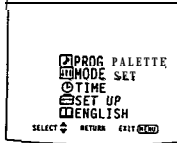
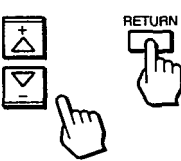
POWER

8

2 Press MENU. The "main menu" appears.



3 Press AN WINDOW +/- until the cursor points to 'ENGLISH'. Then press RETURN. The language display turns red.



4 Press AN WINDOW +/- to select the language. Each time you press AN WINDOW, the "ESPAÑOL," "FRANÇAIS" and "ENGLISH" menus appear.



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

5 Press RETURN. The language is selected.

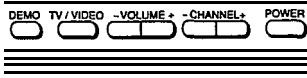


Spanish menu

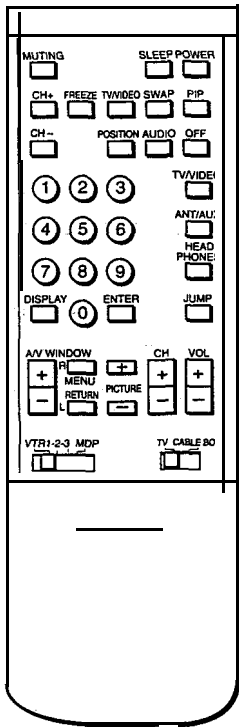
To return to the normal screen
Press MENU on the Remote Commander.

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

1-3. SETTING CABLE ON OR OFF



Front of TV


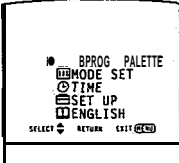


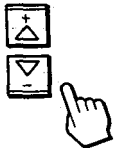

RM-Y113


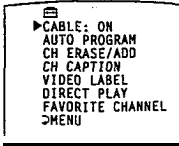
If you have cable connected to the TV, follow the steps below to set the cable connection on or off. Set CABLE OFF to preset or watch VHF or UHF channels, and set CABLE ON to preset or watch cable TV channels.



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

- 1** Press MENU.
The main menu appears.

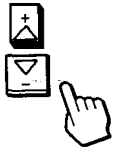
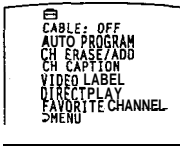


- 2** Press AN WINDOW +/- until the cursor points to "SET UP."





- 3** Press RETURN.
The set up menu appears, and the cursor points to "CABLE."



- 4** Press RETURN again.
The mode display turns red.

- 5** Press AN WINDOW +/- to select "ON" or "OFF"



- 6** Press RETURN.
The setting is complete.

To return to the previous menu

Press AN 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.

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

Number on this TV	Corresponding CAN channel
1	A-11
2	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	a
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
99	A-1
100	W+59
101	W+60
102	W+61
...	...
123	W+82
124	W+83
125	W+84

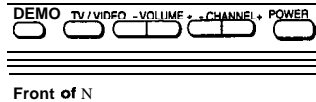
Check with your local cable N company for more complete information on the available channels.

* The designation of the cable N channels conforms to the EIA/NCTA recommendation

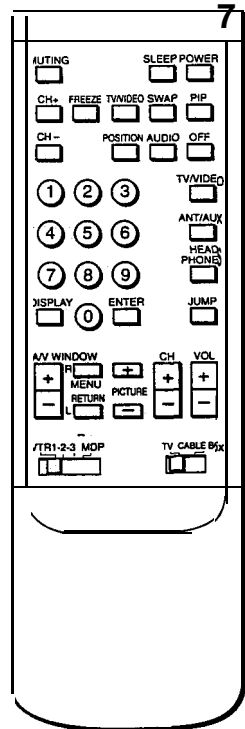
Setting CABLE ON or OFF

1-4. PRESETTING TV CHANNELS

By pressing N channels to the TV, you can select channels by pressing CHANNEL +/- on the N or CH +/- on the Remote Commander.



Front of N



RM-Y113

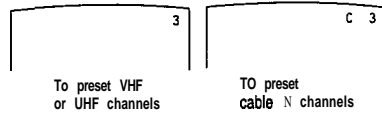
Presetting all receivable channels automatically

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

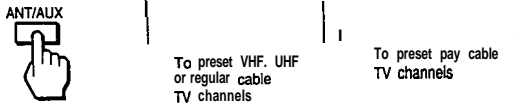
Notes

- N the N is in video mode, the "AUTO PROGRAM" display is shaded and cannot be selected. Press TV/VIDEO on the Nor on the Remote Commander to change to N 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. 22 - 23) to select the type of channel you want to preset, VHF/UHF or cable N.



Press ANT/AUX to select the type of channel you want to preset, VHF/UHF/regular cable N or pay cable TV.



2 Press MENU. The main menu appears.



3 Press A/V WINDOW +/- until the cursor points to "SET UP."



4 Press RETURN. The set up menu appears.



5 Press AN WINDOW +/- until the cursor points to "AUTO PROGRAM."



6 Press RETURN.



"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 - 62
Cable: 1 - 125

To select TV channels without presetting
press the 0 - 9 buttons and ENTER.

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.

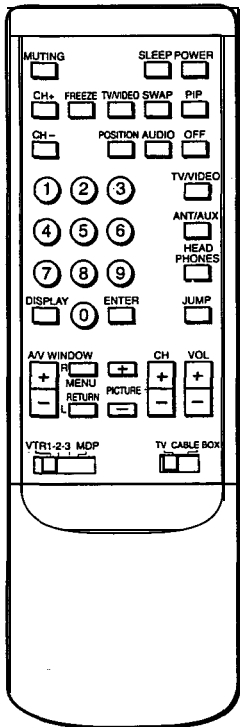
To return to the normal screen
Press MENU on the Remote Commander.

DEMO TV/VIDEO -VOLUME+ -CHANNEL+ POWER

Erasing TV channels

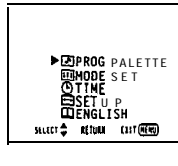
Follow these instructions to erase unnecessary N channels, so that when you press CH +/-, the channel(s) are skipped.

Front of N

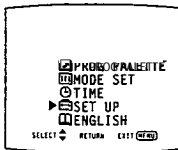
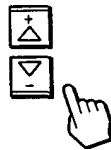


RM-Y113

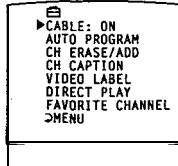
- 1 Press MENU
The main menu appears.



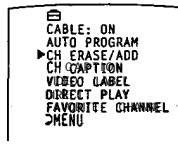
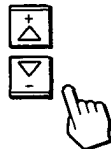
- 2 Press AV WINDOW +/- until the cursor points to "SET UP"



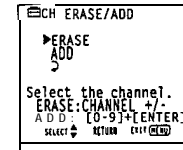
- 3 Press RETURN
The set up menu appears.



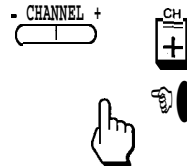
- 4 Press AN WINDOW +/- until the cursor points to "CH ERASE/ADD."



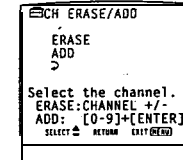
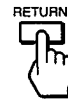
- 5 Press RETURN.
The CH ERASE/ADD screen appears, and the cursor points to "ERASE."



- 6 Press CHANNEL +/- on the N or CH +/- on the Remote Commander to select the channel you want to erase.
The channel display appears.



- 7 Press RETURN.
A "-" sign appears in front of the channel number display, indicating that the channel is erased; then the CH ERASE/ADD screen automatically reappears.



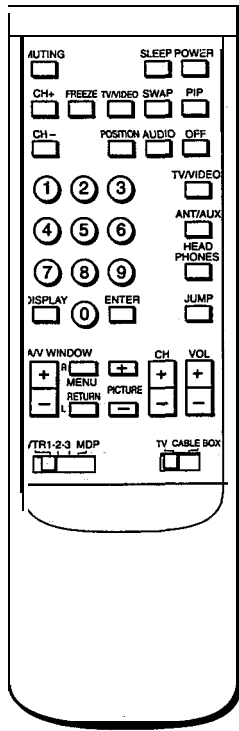
To erase another channel
Repeat steps 6 - 7.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "3 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.

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

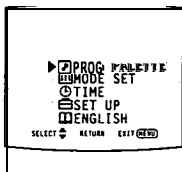


RM-Y113

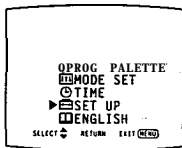
Adding TV channels

Follow these instructions to add TV channels one by one to the selection memory. Or to replace a N channel you previously erased (pp. 26 ■ 27).

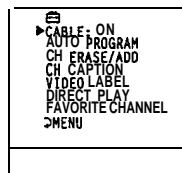
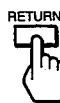
- 1 Press MENU
The main menu appears.



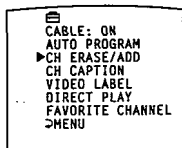
- 2 Press A/V WINDOW +/- until the cursor points to "SET UP."



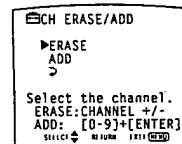
- 3 Press RETURN.
The set up menu appears.



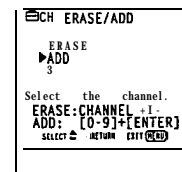
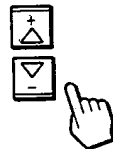
- 4 Press A/V WINDOW +/- until the cursor points to "CH ERASE/ADD."



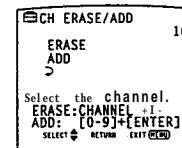
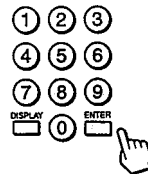
- 5 Press RETURN.
The CH ERASE/ADD screen appears



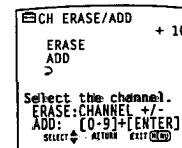
- 6 Press A/V WINDOW +/- until the cursor points to "ADD."



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



- 8 Press RETURN
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 - 6.

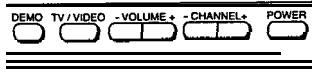
To return to the previous menu
Press A/V WINDOW +/- until the cursor points to "3 MENU."
Then press RETURN.

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

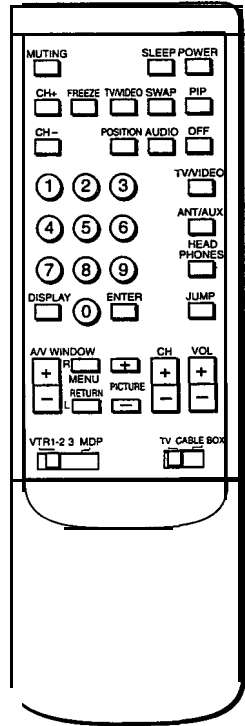
To return to the normal screen
Press MENU on the Remote Commander.

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

1-5. WATCHING TV PROGRAMS



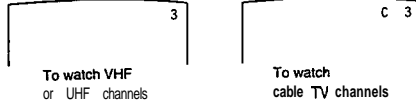
Front of N



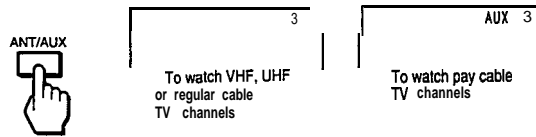
RM-Y113

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

1 Set the cable connection on or off (pp. 22 = 23) to select the type of channel you want to watch, VHF/UHF or cable N.

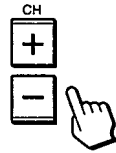


Press ANT/AUX to select the type of channel you want to watch, VHF/UHF/regular cable N or pay cable N.

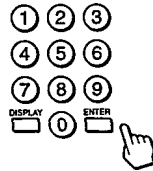


2 Select a channel in one of the following two ways:

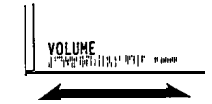
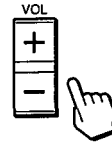
To scan the preset channels in numerical sequence, press CH +/-



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



3 Press VOL +/- to adjust the volume.



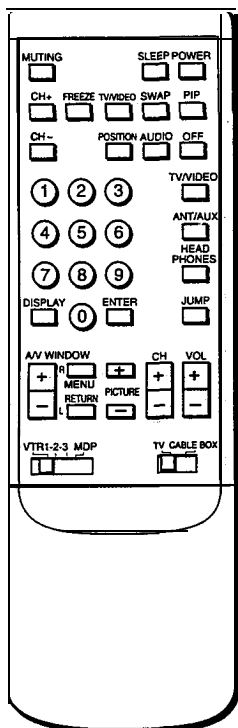
Press + to increase the volume. Press - to decrease the volume.

If VIDEO 1, VIDEO 2, VIDEO 3, S VIDEO, LD or VTR appears on the screen Press TV/VIDEO on the N or on the Remote Commander until a N channel number appears.

To select channels more easily Set FAVORITE CHANNEL (pp. 60 - 61).

To turn off the N Press POWER on the N or on the Remote Commander.

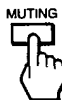
I-6. USING CONVENIENT FEATURES



RM-Y113

Muting the sound — MUTING

Press **MUTING**.
"MUTING" appears on the screen.



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)**.

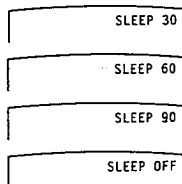


To turn off the displays
 Press **DISPLAY** again.

Setting the sleep timer — SLEEP

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

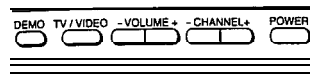
Press **SLEEP**.
 Each time you press **SLEEP**, the time increments "30," "60," "90" and **OFF** mode appear in sequence.



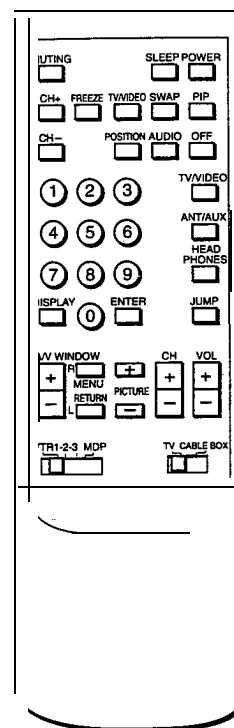
A red **"SLEEP"** display appears about one minute before the TV goes on.

To cancel the setting.
 Press **SLEEP** until **OFF** mode appears.
 A green **"SLEEP OFF"** display appears for about three seconds.

OR
 Turn the **N** off.
 The sleep timer setting is cancelled.



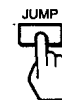
Front of N



RM-Y113

Switching quickly between two channels — JUMP

Use **this function** to keep track of two programs alternately.



To recall the channel you were watching previously
 Press **JUMP**.

To switch back to the first channel
 Press **JUMP** again.

Using the wireless headphones — HEADPHONES

Turning on the headphones does not affect the sound from the **N** speakers. If you want to listen to the sound from the headphones only, **turn off the N** speaker sound by **pressing VOLUME-** on the **N** or **VOL -** on the Remote Commander.

To turn on the headphones
 Press **HEADPHONES**.

A red **display** appears for **about three seconds**.

To control the headphones volume/
To turn the headphones power on or off
 Use the controls on the headphones.

To turn off the headphones
 Press the headphones power button first, then press **HEADPHONES**.

To use the headphones to listen to sound from s window picture (PIP function)
 See "Selecting the headphones audio source" (p. 39).

Notes

- When using the headphones, you cannot adjust sound quality or select sound modes (pp. 45 – 47) or use the muting feature (p. 32).
- After using the headphones, if you press **HEADPHONES** without **pressing the headphones power** button first, you may hear **noise**. This does **not** indicate a malfunction.

Previewing the features — DEMO

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

To restart DEMO from the beginning
 Press **DEMO** again.

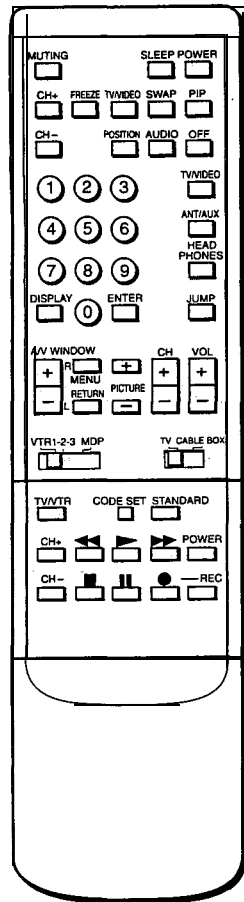
To stop DEMO
 Press any button.



1-7. SELECTING A PICTURE AND SOUND MODE

This TV features four modes (STANDARD, MOVIE, SPORTS, NEWS) 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.



RM-Y113
(with video control cover open)

- 1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."
- 2 Press RETURN.
The program palette menu appears.
- 3 Press A/V WINDOW +/- until the cursor points to "MOVIE."
- 4 Press RETURN.
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

8

When you select STANDARD mode
You receive standard picture and sound quality. Any video or audio adjustments you made ("Adjusting the TV," pp. 40 - 48) 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. 40 - 48.

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. 40 - 48.

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. 40 - 48.

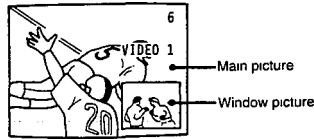
To return to the previous menu
Press AN WINDOW +/- until the cursor points to "MENU."
Then press RETURN.

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.

1-8. WATCHING TWO PICTURES AT ONCE (PIP)

You can watch both the **main picture** and a **window picture** **simultaneously**, using the Picture-m-Picture (PIP) function. Models KV-27XBR35/32XBR35 are equipped with two-tuner PIP, allowing you to watch two N channels at once.



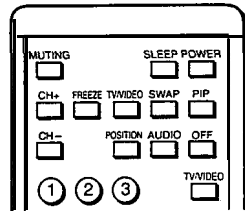
Picture-in-Picture special features

When **watching** the main picture and a window picture, you can:

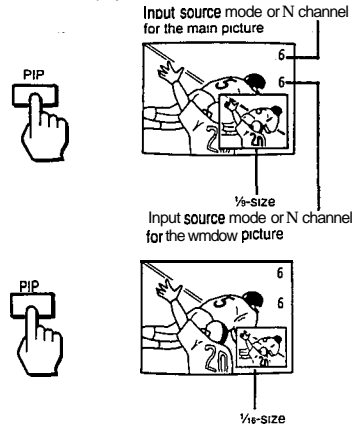
- Swap the **main** and **wmdow** pictures (SWAP).
- Change the position of the **wmdow picture** (POSITION).
- Display a **still picture** (FREEZE).
- Choose the sound from the **main** or **wmdow picture** (AUDIO).
- Listen to the **wmdow picture** sound through the supplied **wireless headphones** (HEADPHONES). (KV-27XBR35/32XBR35 only)

Displaying a window picture

Remote Commander



Press PIP to display a window picture



A window picture appears in the last mode you watched. Each time you press PIP, a 1/9 or 1/16 size window picture appears alternately.

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

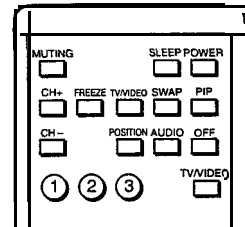
To receive the window picture sound
Press AUDIO.

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

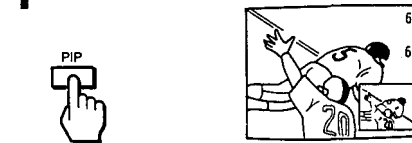
To restore the main picture sound
Press AUDIO again.

Changing the window picture input mode

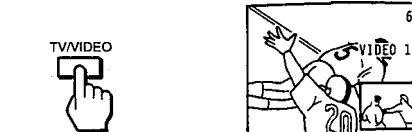
Remote Commander



1 Press PIP to display a window picture.



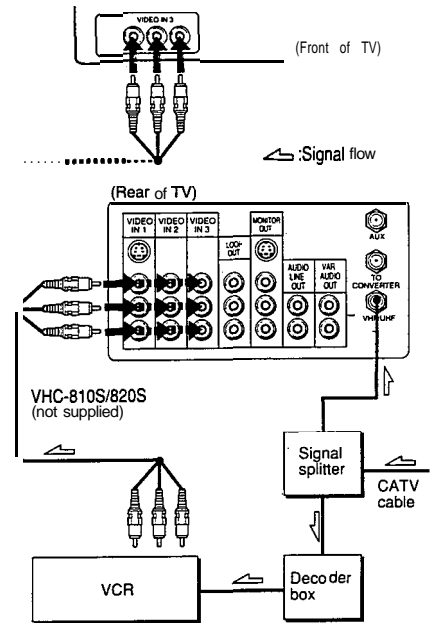
2 Press TV/VIDEO in the Picture-m-Picture control area to select the input mode. Each time you press TV/VIDEO, "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.



To change N channels in the window picture
Press CH +/- in the PIP control area.

Displaying CATV input as a window picture

To use Picture-m-Picture with pay cable N input, make the connections to your cable converter boxes shown below.



After making the above connections, turn the cable connection on by following the Steps on pp. 22 - 23; 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 N channels with the decoder box.

To control your cable converter box with the supplied Remote Commander
Seep. 66.

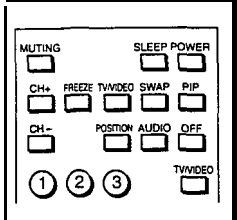
Notes

- The **wmdow picture** sound is also output from the VAR. AUDIO OUT jacks. The AUDIO LINE OUT and MONITOR OUT jacks output the main picture sound only.
- The video label and channel caption will not appear with the **wmdow picture** even if you have set them.
- If you select a blocked channel in the **wmdow picture**, the display "BLOCKED" appears with the **wmdow picture**. (See "Setting CHANNEL BLOCK," pp. 58 - 59.)

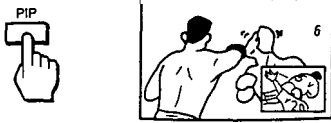
Changing the position of the window picture

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

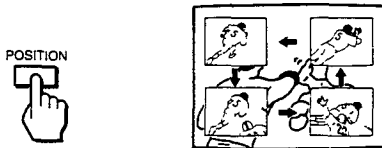
Remote Commander



1 Press PIP to display a window picture.

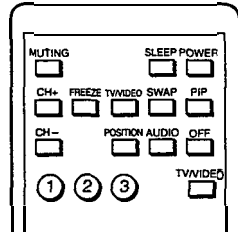


2 Press POSITION
Each time you press POSITION, the window picture moves as illustrated

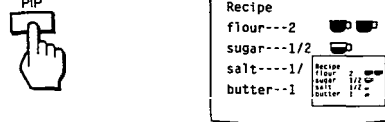


Use the FREEZE function to display a still picture. This function is useful when you want to write down a recipe from a cooking program, a displayed address or phone number and so on

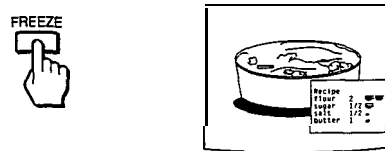
Remote Commander



1 Press PIP to display a window picture.



2 Press FREEZE.
The window picture image remains still on the screen.

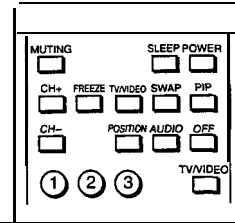


To restore the normal picture
Press FREEZE again.

Swapping the main and window pictures

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

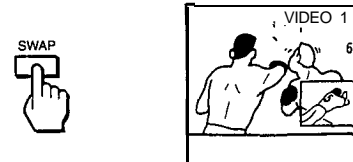
Remote Commander



1 Press PIP to display a window picture



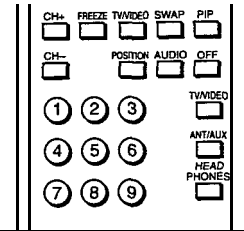
2 Press SWAP
Each time you press SWAP, the images from the main and window pictures switch places



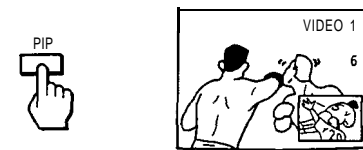
Selecting the headphones audio source (KV-27XBR35/32XBR35 only)

Follow these *instructions* to select the audio source that you want to receive through the supplied wireless headphones (main or window picture). If you want to listen to sound from the window picture, make sure that the sound from the window picture is being received (p. 36).

Remote Commander (RM-Y113)



1 Press PIP to display a window picture.



2 Press HEADPHONES.
Each time you press HEADPHONES the audio source changes to main picture, window picture and OFF in sequence
The display appears with the input mode

Notes

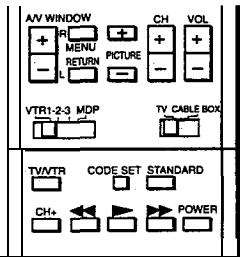
- If you turn PIP function off, the sound from the wireless headphones changes to the main picture sound
- If you turn off the TV, the next time you turn on the TV the headphones are off

1-9. ADJUSTING THE TV

You can adjust the picture and sound for each input mode (TV, VIDEO 1, VIDEO 2, VIDEO 3) by pressing TV/VIDEO on the N 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. 34 - 35).

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

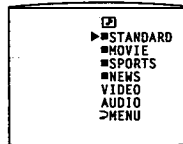
Remote Commander (with video control cover open)



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

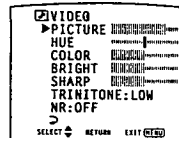


2 Press RETURN. The program palette menu appears.



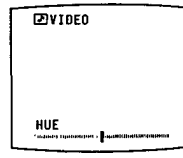
3 Press AV WINDOW +/- until the cursor points to "VIDEO."

4 Press RETURN. The VIDEO screen appears.



5 Press AV WINDOW +/- until the cursor points to the item you want to adjust.

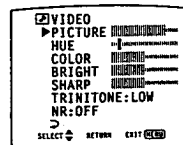
6 Press RETURN. The adjustment screen appears.



7 Press AN WINDOW +/- to make the adjustment.

Picture quality	Press AV WINDOW -	Press AV WINDOW +
PICTURE	For decreased picture contrast with soft color	For increased picture contrast with mid 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 Press RETURN. 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 press RETURN. Or, press STANDARD on the Remote Commander. All the items, including TRINITONE (p. 42) and NR (p. 43) return to their original factory settings.

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



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

2 Press RETURN twice. The adjustment is set, and the VIDEO screen automatically reappears.

To return to the previous menu Press AN WINDOW +/- until the cursor points to "MENU." Then press RETURN.

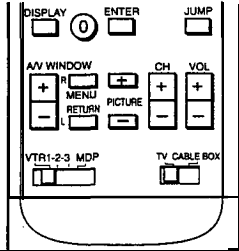
To return to the main menu Repeat the above, until you reach the main menu.

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

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.

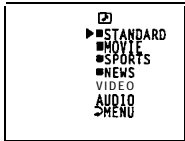
Remote Commander



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



2 Press **RETURN**.
The **program palette menu** appears.



3 Press **AV WINDOW +/-** until the **cursor** points to "VIDEO."

4 Press **RETURN**.
The **VIDEO** screen appears.



5 Press **AN WINDOW +/-** until the **cursor** points to "TRINITONE."

6 Press **RETURN**.
The **mode display** turns red.

7 Press **AV WINDOW +/-** to select "HIGH" or "LOW."
Select "HIGH" to make the **picture** cool (blush).
Select "LOW" to make the **picture** warm (reddish).

8 Press **RETURN**.
The **setting** is complete.

To return to the previous menu
Press **AV WINDOW +/-** until the **cursor** points to "3 MENU."
Then press **RETURN**.

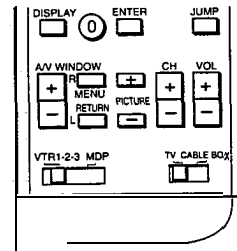
To return to the main menu
Repeat the **above**, until you reach the **main menu**.

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

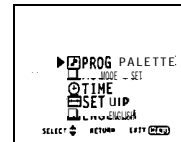
Setting NR (picture noise reduction) ON or OFF

Follow these **instructions** to reduce **picture noise**.

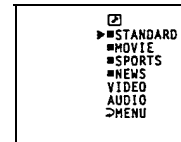
Remote Commander



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

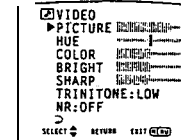


2 Press **RETURN**.
The **program palette menu** appears.

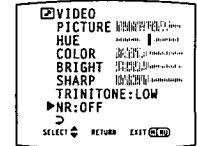


3 Press **AN WINDOW +/-** until the **cursor** points to "VIDEO."

4 Press **RETURN**.
The **VIDEO** screen appears.



5 Press **AN WINDOW +/-** until the **cursor** points to "NR."



6 Press **RETURN**.
The **mode display** turns red.

7 Press **AV WINDOW +/-** to select "ON" or "OFF."
Select "ON" to reduce **picture noise**.
Select "OFF" to restore the **normal picture**.

8 Press **RETURN**.
The **setting** is complete.

To return to the previous menu

Press **AN WINDOW +/-** until the **cursor** points to "3 MENU."
Then press **RETURN**.

To return to the main menu

Repeat the **above**, until you reach the **main menu**.

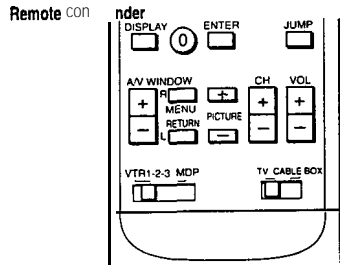
To return to the normal screen

Press **MENU** on the Remote Commander.

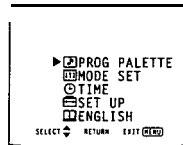
Setting S-VIDEO ON or OFF

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. 13 = 16.

Note
If the TV is in TV, VIDEO 2 or VIDEO 3 mode, the 'S-VIDEO' display is shaded and cannot be selected. Press TV/VIDEO on the TV or on the Remote Commander to change to VIDEO 1 mode.

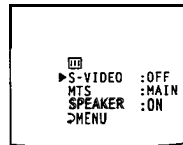


1 Press MENU.
The main menu appears.



2 Press AN WINDOW +/- until the cursor points to "MODE SET."

3 Press RETURN.
The mode set menu appears, with the cursor pointing to "S-VIDEO."



4 Press RETURN.
The mode display turns red.

5 Press AV WINDOW +/- to select "ON" or "OFF."

6 Press RETURN.
The setting is complete.

To return to the previous menu:
Press AV WINDOW +/- until the cursor points to "3 MENU."
Then press RETURN.

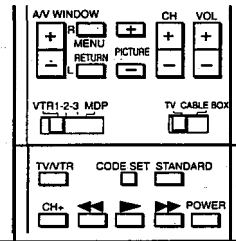
To return to the main menu:
Repeat the above, until you reach the main menu.

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

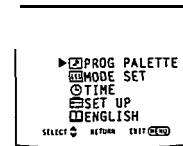
Adjusting the sound

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

Remote Commander (with video control cover open)



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

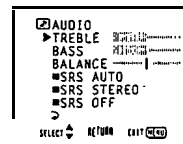


2 Press RETURN.
The program palette menu appears.



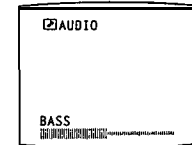
3 Press AN WINDOW +/- until the cursor points to "AUDIO."

4 Press RETURN.
The AUDIO screen appears.



5 Press AN WINDOW +/- until the cursor points to the item you want to adjust.

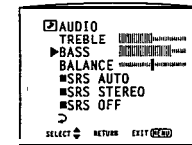
6 Press RETURN.
The adjustment screen appears.



7 Press AV WINDOW +/- to make the adjustment.

Sound quality	Press AV WINDOW -	Press AV WINDOW +
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 Press RETURN.
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 press RETURN; or, press STANDARD on the Remote Commander.
All the items, including SRS mode (p. 46) return to their original factory settings.

To return to the previous menu:
Press AV WINDOW +/- until the cursor points to "3 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.

Selecting an SRS (Sound Retrieval System) mode

For lifelike sound reproduction, follow the instructions below to select the SRS mode you prefer.

In SRS AUTO mode, SRS functions in both monaural and stereo modes.

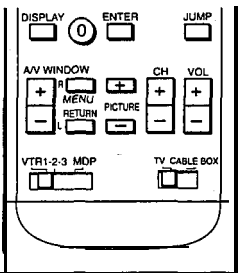
Monaural sound programs will have a 'simulated stereo' effect.

In SRS STEREO mode, SRS functions only when a stereo program is received.

The STEREO lamp on the TV lights up whenever a stereo broadcast is received.

Select SRS OFF mode to return to normal sound mode.

Remote Commander



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

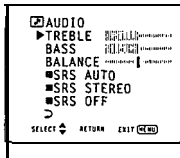


2 Press RETURN.
The program palette menu appears.



3 Press AN WINDOW +/- until the cursor points to "AUDIO."

4 Press RETURN.
The AUDIO screen appears.



5 Press AV WINDOW +/- until the cursor points to the SRS mode you want.

6 Press RETURN.
The mode is selected.

To change the SRS mode
Repeat steps 5 and 6.

To return to the previous menu
Press AV 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.

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 lamp on the TV lights up whenever a stereo broadcast is received.

Select SAP mode to listen to Second Audio Programs.

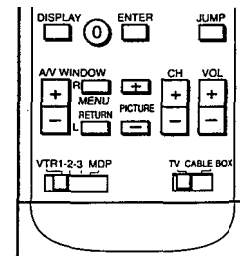
Select MONO mode to eliminate excessive noise during stereo broadcasts, caused by a weak incoming signal.

Note

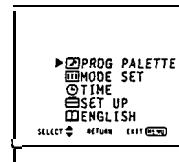
If the N is in video mods, the "MTS" display is shaded and cannot be selected.

Press TV/VIDEO on the N or on the Remote Commander to change to N mode.

Remote Commander

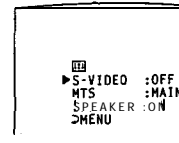


1 Press MENU.
The main menu appears.



2 Press AN WINDOW +/- until the cursor points to "MODE SET."

3 Press RETURN.
The mode set menu appears.



4 Press AV WINDOW +/- until the cursor points to "MTS."

5 Press RETURN.
The mode display turns red.

6 Press AV WINDOW +/- to select the mode you want.
Each time you press AV WINDOW +/-, "MAIN," "SAP" and "MONO" appear in sequence.

7 Press RETURN.
The mode is selected.

To return to the previous menu

Press AV 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.

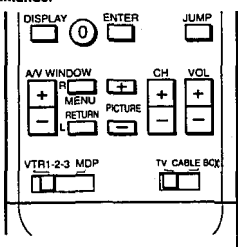
To return to the normal screen

Press MENU on the Remote Commander

Setting SPEAKER ON or OFF

Follow these instructions to turn the TV speakers off when you connect an audio system (p.17), and on when you want to listen to the sound from the TV speakers.

Remote Commander

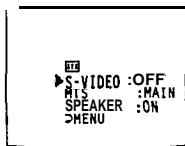


1 Press MENU. The main menu appears.



2 Press A/V WINDOW +/- until the cursor points to "MODE SET."

3 Press RETURN. The mode set menu appears.



4 Press A/V WINDOW +/- until the cursor points to "SPEAKER."

5 Press RETURN. The mode display turns red.

6 Press A/V WINDOW +/- to select "ON" or "OFF"

7 Press RETURN. The setting is complete.

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.

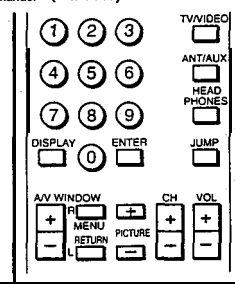
I-1 0. CUSTOMIZING THE SCREEN DISPLAY

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 (RM-Y113)

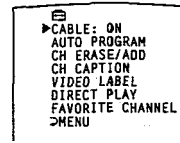


1 Press MENU. The main menu appears.



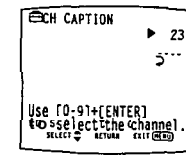
2 Press A/V WINDOW +/- until the cursor points to "SET UP."

3 Press RETURN. The set up menu appears.

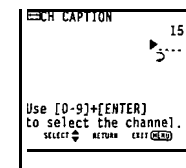


4 Press A/V WINDOW +/- until the cursor points to "CH CAPTION."

5 Press RETURN. The CH CAPTION screen appears.

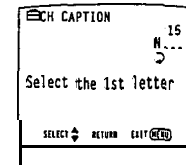


6 Press CH +/-, or press 1, 5 and ENTER to set channel "15."



7 Press RETURN. The first caption space turns red.

8 Press A/V WINDOW +/- to select "N."
Each time you press A/V WINDOW +/-, "0" - "9," "A" - "Z," "#," "/", " ", and "_" (blank space) appear in sequence.



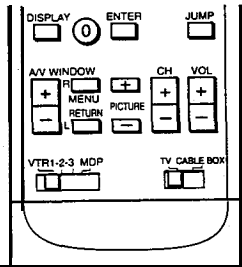
9 Press RETURN. The second caption space turns red.

(Continued)

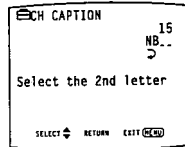
Setting channel captions – CH CAPTION

(Cont'd. from prev. page)

Remote Commander

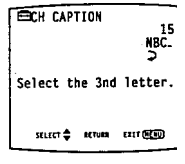


- 10** Press AN WINDOW +/- to select "B."



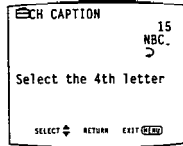
- 11** Press RETURN.
The third caption space turns red.

- 12** Press AN WINDOW +/- to select "C."



- 13** Press RETURN.
The fourth caption space turns red.

- 14** Press AN WINDOW +/- to select a blank space.



- 15** Press RETURN.
The setting is complete.
When you select or display the channel number, the channel caption also appears.

To caption mom 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 press RETURN.
The caption for that channel is erased.

To return to the previous menu
Press A/V WINDOW +/- until the cursor pants 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.

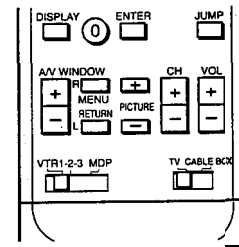
Note
You can set up to 32 channel captions. If the memory is full, "The memory is full, sorry" appears on the screen. Erase any unnecessary captions, and begin again.

Setting VIDEO LABEL

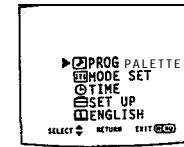
Follow these instructions to label each input mode in order to identify the equipment connected to each input terminal.

Example: Label VIDEO IN 1 as "VHS."

Remote Commander

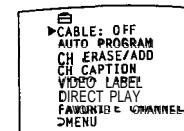


- 1** Press MENU.
The main menu appears.



- 2** Press AN WINDOW +/- until the cursor pants to "SET UP."

- 3** Press RETURN.
The set up menu appears.



- 4** Press AN WINDOW +/- until the cursor points to "VIDEO LABEL."

- 5** Press RETURN.
The VIDEO LABEL screen appears.



- 6** Press AN WINDOW +/- until the cursor points to the input mode you want to label. (In this case, the cursor is already panting to "VIDEO 1.")

- 7** Press RETURN.
The label display turns red.

- 8** Press AN WINDOW +/- to select "VHS."



Each time you press A/V WINDOW +/-, the label changes:

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

VIDEO 2 → BETA → 8mm → VHS → LD

VIDEO 3 → BETA → 8mm → VHS → LD

- Press RETURN.
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 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.

I-1 1. USING TIMER-ACTIVATED FUNCTIONS

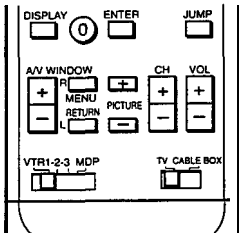
Setting DAYLIGHT SAVING

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:

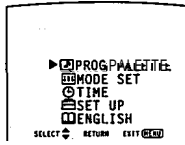
- After the first Sunday in April (spring daylight savings) Set to "YES" before setting the current time. Then, on the last Sunday in October (fall daylight savings), set to "NO."
All the time-related settings automatically move one hour back.
- After the last Sunday in October (fall daylight savings) 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 AV WINDOW +/- until the cursor points to "TIME."

- 3 Press RETURN.
The time menu appears.



- 4 Press AV WINDOW +/- until the cursor points to "DAYLIGHT SAVING:"

- 5 Press RETURN.
The mode display turns red.

- 6 Press AV WINDOW +/- to select "YES" or "NO."

- 7 Press RETURN.
The setting is complete.

To return to the previous menu

Press AN WINDOW +/- until the cursor points to "MENU". Then press RETURN.

To return to the main menu

Repeat the above, until you reach the "mar" me™.

To return to the normal screen

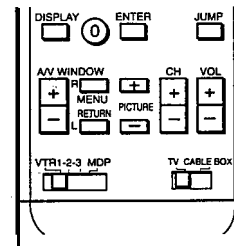
Press MENU on the Remote Commander.

Setting the clock — CURRENT TIME SET

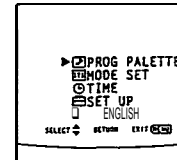
Follow these instructions to set the current time. The correct current time must be set in order to use the other time-related functions (DAYLIGHT SAVING, ON/OFF TIMER, CHANNEL BLOCK).

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

Remote Commander

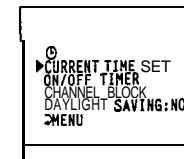


- 1 Press MENU.
The main menu appears.



- 2 Press AV WINDOW +/- until the cursor points to "TIME."

- 3 Press RETURN.
The time menu appears, and the cursor points to "CURRENT TIME SET."



- 4 Press RETURN again.
The CURRENT TIME SET screen appears, with a reminder to set DAYLIGHT SAVING.



If you do not need to set DAYLIGHT SAVING, press RETURN and continue from step 5.

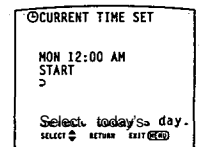
To set daylight saving

- a Press AN WINDOW +/- until the cursor points to "DAYLIGHT SAVING."
- b Press RETURN.
The time menu appears, and the cursor points to "DAYLIGHT SAVING."
- c Press RETURN.
- d Press AV WINDOW +/- to select "YES" or "NO."
- e Press RETURN.
The setting is complete.

To set the time, press AV WINDOW +/- until the cursor points to "CURRENT TIME SET"; press RETURN, then continue from step 5.

- 5 Press RETURN.
The CURRENT TIME SET screen appears, and the "SUN" display appears (red).

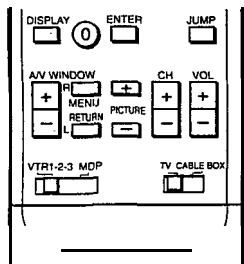
- 6 Press AN WINDOW +/- to select "MON."
Each time you press AV WINDOW +/-, the day changes consecutively.



(Continued)

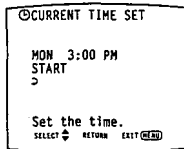
Setting the clock — CURRENT TIME SET (Cont'd. from prev. page)

Remote Commander



7 Press RETURN.
The hour and am/pm displays turn red.

8 Press AA' WINDOW +/- to set "3:00PM."
Each time you press AV WINDOW +/-, the hour changes in sequence beginning with "12:00AM."



9 Press RETURN.
The minute display turns red.

10 Press AV WINDOW +/- to select "15" (minutes).
Each time you press AV WINDOW +/-, the minutes change in sequence.



11 Press RETURN.
The cursor points to START..

12 Check the actual time, and press RETURN 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 AN 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.

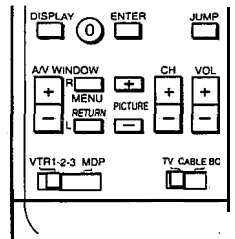
To return to the normal **screen**
Press MENU on the Remote Commander.

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.



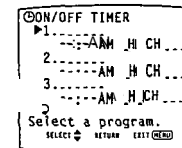
2 Press AV WINDOW +/- until the cursor points to "TIME."

3 Press RETURN.
The time menu appears.



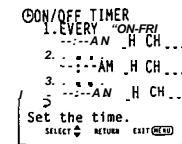
4 Press AV WINDOW +/- until the cursor points to "ON/OFF TIMER."

5 Press RETURN.
The ON/OFF TIMER screen appears, and the cursor points to "1."

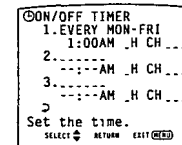


6 To set program 1, press RETURN.
(To set program 2 or 3, press AN WINDOW +/- until the cursor points to that program; then press RETURN.)
The day input space turns red.

7 Press AV WINDOW +/- to select "EVERY MON-FRI"; then press RETURN.
Each time you press AN WINDOW +/-, the days of the week change as show" in Fig. 1 (p. 57).



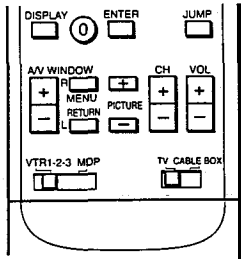
8 Press AN WINDOW +/- to select "1:00AM"; then press RETURN.
Each time you press AV WINDOW +/-, the hour changes in sequence.



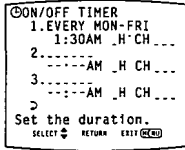
(Continued)

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

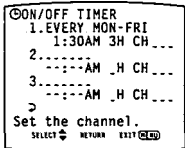
Remote Commander



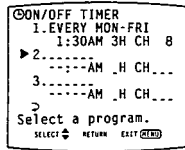
9 Press **AV WINDOW +/-** to select "30" (minutes); then press **RETURN**.
Each time you press **AV WINDOW +/-**, the minutes change in sequence.



10 Press **AV WINDOW +/-** to select "3" (hour duration); then press **RETURN**.
Each time you press **AV WINDOW +/-**, the duration changes from "1" = "6" in sequence.



11 Press **AN WINDOW +/-** to select "8" (channel); then press **RETURN**.
The **TIMER** lamp lights, indicating that the setting is complete.
Each time you press **AV WINDOW +/-**, the channel number changes from 1-125 in sequence.



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

To set program 2 or 3. Press **RETURN** 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** a blank space for the day. 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.

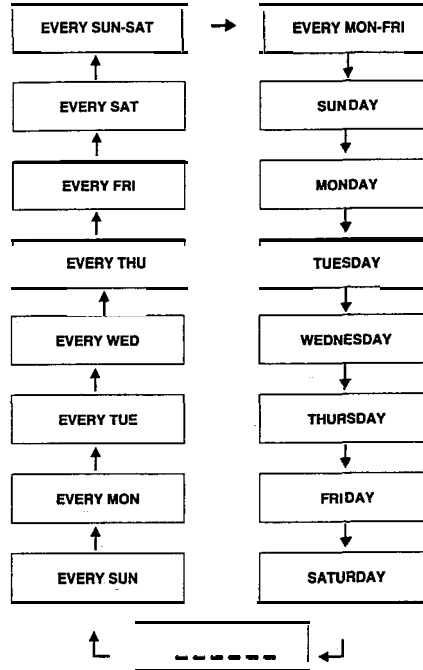
To **return** to the previous menu. Press **AV WINDOW +/-** until the cursor points to "MENU". Then press **RETURN**.

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.

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

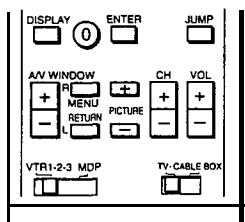
Fig. 1
Selecting the day(s) of the week
When you press **AN WINDOW +**, the days of th.3 week appear in the following order:



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.



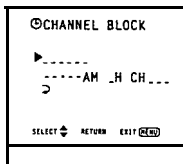
2 Press AV WINDOW +/- until the cursor points to "TIME."

3 Press RETURN.
The time menu appears.



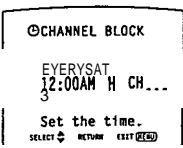
4 Press AN WINDOW +/- until the cursor points to "CHANNEL BLOCK."

5 Press RETURN.
The CHANNEL BLOCK screen appears, and the cursor points to the day input space.

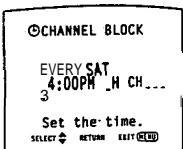


6 Press RETURN.
The day input space turns red.

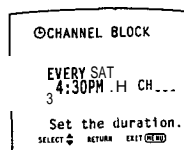
7 Press AN WINDOW +/- to select "EVERY SAT"; then press RETURN.
Each time you press AV WINDOW +/-, the days of the week change as shown in Fig. 1 (p. 57).



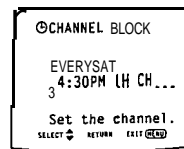
8 Press AV WINDOW +/- to select "4:00PM"; then press RETURN.
Each time you press AN WINDOW +/-, the hour changes in sequence.



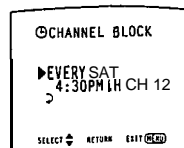
9 Press AN WINDOW +/- to select "30" (minutes); then press RETURN.
Each time you press AV WINDOW +/-, the minutes change in sequence.



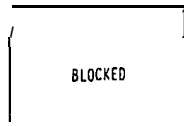
10 Press AN WINDOW +/- to select "1" (hour duration); then press RETURN.
Each time you press AV WINDOW +/-, the duration changes from "1" - "6" in sequence.



11 Press AN WINDOW +/- to select "12" (channel); then press RETURN.
The setting is complete.
Each time you press AV WINDOW +/-, 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, select the setting you want to erase, and select a blank space for the day. 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 AN 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.

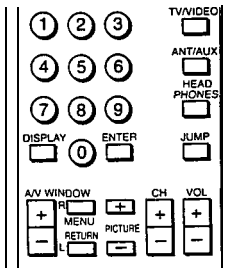
To return to the normal Screen
Press MENU on the Remote Commander

Note
If the ON/OFF TIMER is set for an overlapping time (pp. 55 - 57), 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.

1-12. SETTING FAVORITE CHANNEL

By **setting** FAVORITE CHANNEL, you can select the channels you use most frequently (up to **seven** channels) simply by pressing RETURN on the Remote Commander

Remote Commander (RM-Y113)



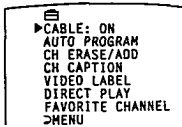
Follow these instructions to set the channels.

- 1 Press MENU
The *main* menu appears



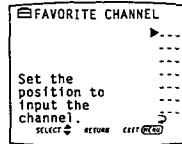
- 2 Press AV WINDOW +/- until the cursor points to "SET UP"

- 3 Press RETURN.
The set up menu appears.



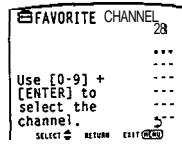
- 4 Press AV WINDOW +/- until the cursor points to "FAVORITE CHANNEL."

- 5 Press RETURN.
The FAVORITE CHANNEL screen appears, and the cursor points to the first channel position



- 6 Press AN WINDOW +/- to select the channel position; then press RETURN.

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



- 8 Press RETURN.
The setting is complete.

To set other channels
Repeat steps 6-8.

To **erase** a favorite channel setting
Press AN WINDOW +/- until the cursor points to the channel number you want to erase; 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 AN WINDOW +/- until the cursor points to "3 MENU."
Then press RETURN.

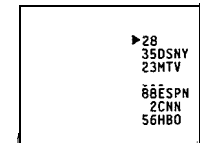
To return to the main menu
Repeat the above, until you reach the main menu

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

Selecting a favorite channel

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

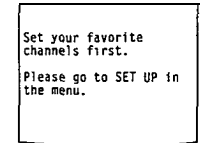
- 1 Press RETURN.
The FAVORITE CHANNEL display appears



Note
If you have set channel captions (pp 49-50), the captions appear with the channel numbers

- 2 Press AN WINDOW +/- to select the channel you want to watch; then press RETURN.
The channel is selected

If you press RETURN on the Remote Commander before setting FAVORITE CHANNEL, this screen appears.



Follow step 1-8 to set your favorite channels, and then make the selection

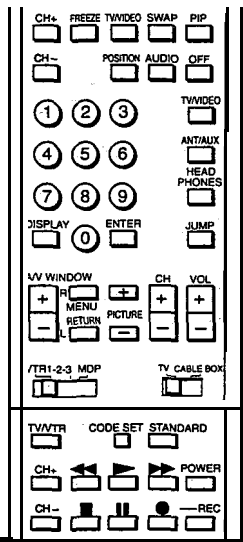
I-13. USING THE PRE-PROGRAMMED REMOTE COMMANDER

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 (**RM-V113**)
(with video control **cover** open)



1 Press **TV/VIDEO** to select the **input** mode of your connected **equipment** (VIDEO 1, VIDEO 2 or VIDEO 3).



You can skip **this** step and go directly to **video** mode with the **VTR1-2-3 MDP** selector, by using the **DIRECT PLAY** function (pp. 67 - 68).

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

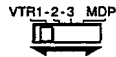


Fig. 2: Video equipment settings

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

3 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, press again.
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. 64 - 65), you must also set the Sony code to operate Sony equipment.

caution

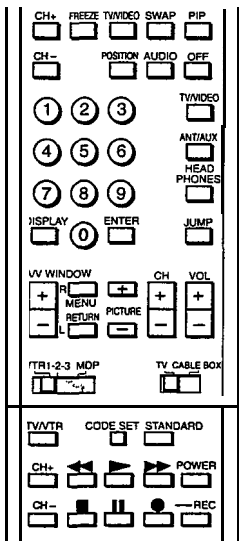
When you replace the **batteries**, do it within **approximately 30 minutes**. Otherwise Sony equipment settings and the settings you made under the **Pre-Programmed** function (pp. 64 - 66) may be erased.

Operating non-Sony or Sony video equipment

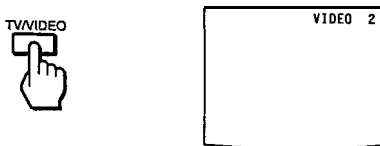
Follow these instructions to set the manufacturer's code, which will enable you to operate non-Sony and Sony video equipment with the pm-programmed Remote Commander.

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

Remote Commander (RM-Y113)
(with video control cover open)

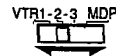


1 Press TV/VIDEO to select VIDEO 2.



You can skip this step and go directly to video mode with the VTR1-2-3 MDP selector, by using the DIRECT PLAY function (pp 67 - 68)

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



Note
You can use the VTR1-2-3 settings, but not MDP. By using these settings, you can use the Remote Commander to operate up to three pieces of equipment. To use another manufacturer's equipment besides a Sony VCR, set the selector to a position "a", being used for your Sony video equipment.

- Set the selector to MOP only to use your Sony multi-disc player (pp 62 - 63)

3 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. 65.)



4 Use the video operating buttons to operate the connected equipment. (see Fig. 3 on p. 62 and Fig. 4 on p. 63.)

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, 06
SAMSUNG	24, 32
SANYO	11, 15
scol-r	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
6 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.

For your convenience

Write the manufacturer name and code number for your equipment onto one of the supplied self-adhesive labels and affix the label to the Remote Commander for easy reference.

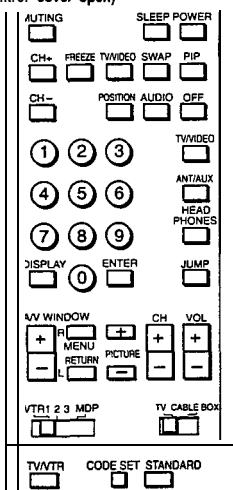
	BRAND	CODE
1		
2		
3		

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 (RM-Y113)
(with video control cover open)



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



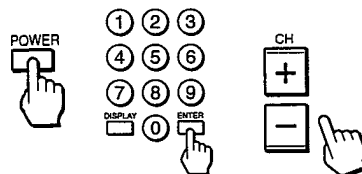
Notes

- 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 6 (Zenith's code number - see Fig 5) and ENTER



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	66

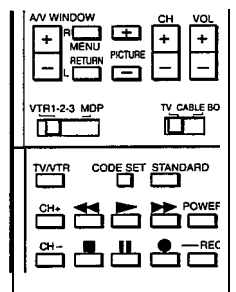
Selecting a VCR mode directly — DIRECT PLAY

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

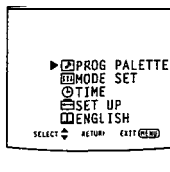
Example: Connect your VCR to the VIDEO IN 1 jacks, and set the VTR1-2-3 MDP selector to VTR2. When you press 5, the input mode changes to the VCR connected to the VIDEO IN 1 jacks.

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

Remote Commander With video control cover open

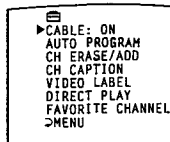


1 Press MENU.
The main menu appears



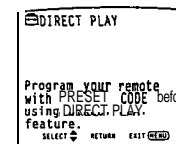
2 Press AN WINDOW +/- until the cursor points to "SET UP"

3 Press RETURN.
The set up menu appears



4 Press AV WINDOW +/- until the cursor points to "DIRECT PLAY."

5 Press RETURN.
A message screen appears



Note
This screen reminds you to set the manufacturer's code, if you have not already done so (pp 64 - 65)

6 Press RETURN again.
The DIRECT PLAY screen appears



7 Press AN WINDOW +/- until the cursor points to the video input mode. (When the video equipment is connected to VIDEO IN 1, select "VIDEO1.")

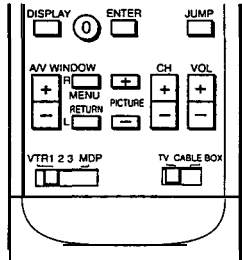
8 Press RETURN.
The mode display turns red

(Continued)

1-14. TROUBLESHOOTING

Selecting a VCR mode directly – DIRECT PLAY (Cont'd. from prev. page)

Remote Commander



- 9** Press **A/V WINDOW +/-** 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 **A/V WINDOW +/-**, "VTR 1," "VTR 2," "VTR 3," "MDP" and "OFF" appear in sequence.



- 10** Press **RETURN**
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 **A/V WINDOW +/-** until the cursor points to "3 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

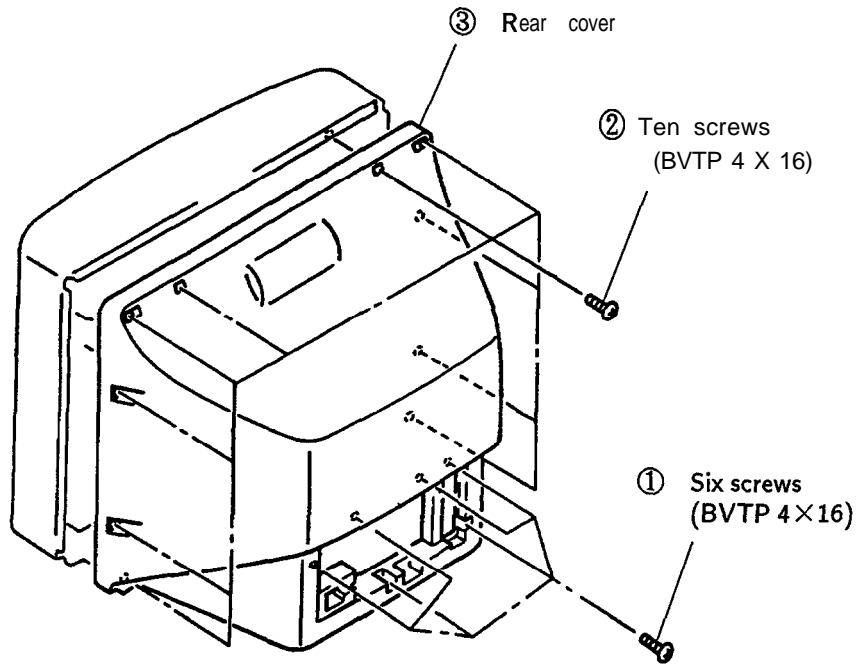
Press **MENU** on the Remote Commander.

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.

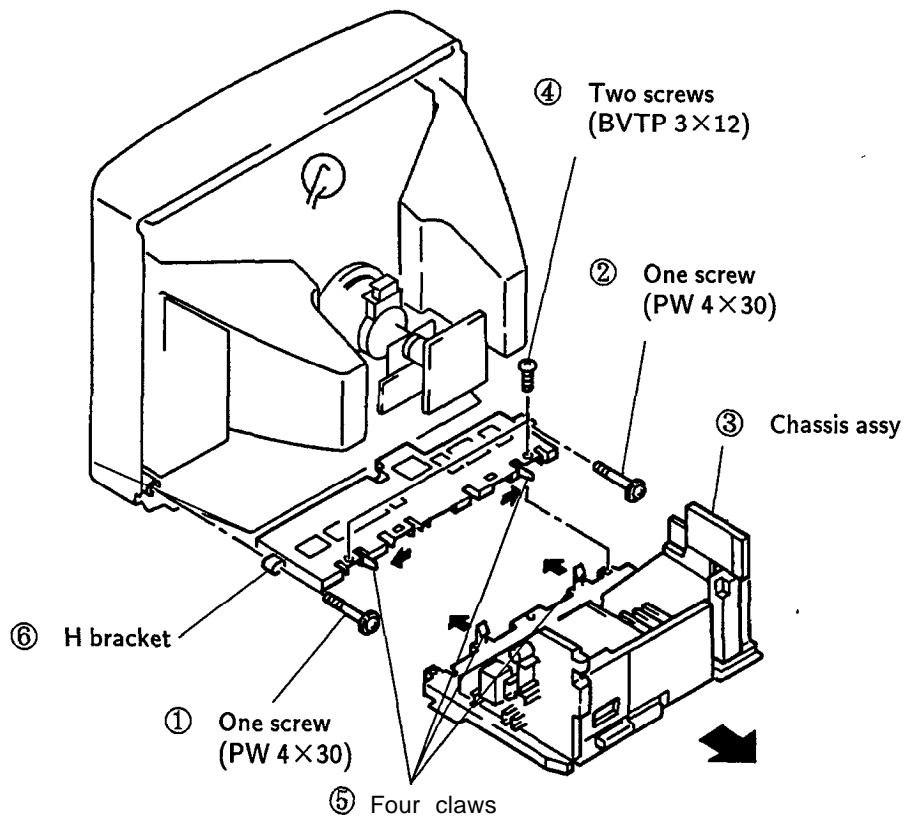
Symptom	Possible causes and remedies
No picture (screen not lit), no sound	<ul style="list-style-type: none"> Make sure POWER is switched on. Check the power cord connection. Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly. Make sure that the TV/CABLE BOX selector is set to TV.
Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> Adjust the picture using the VIDEO screen (pp. 40 - 43). Check the antenna/cable connections.
Good picture, no sound	<ul style="list-style-type: none"> Press VOLUME + on the TV or VOL + on the Remote Commander Press MUTING on the Remote Commander Check the MTS setting (p. 47). Check that the I-V/VIDEO and VTR1-2-3 MDP controls are set correctly. Make sure SPEAKER is set to ON (p. 48).
No color for color programs	<ul style="list-style-type: none"> Check the HUE and COLOR settings (pp. 40 - 41).
Snow and noise only	<ul style="list-style-type: none"> Check that it is an active or correct channel. Check the cable setting. Check the ANT/AUX button setting (KV-27XBR35/32XBR35 only). 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

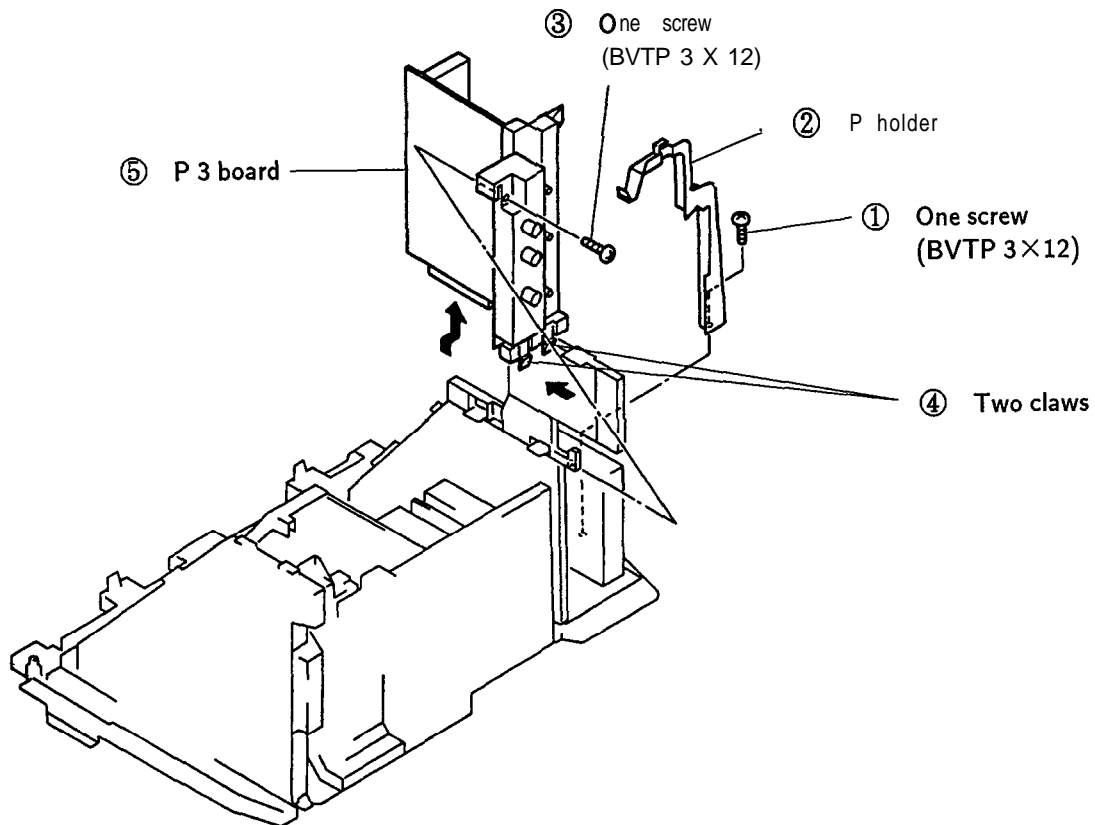
2-1. REAR COVER REMOVAL



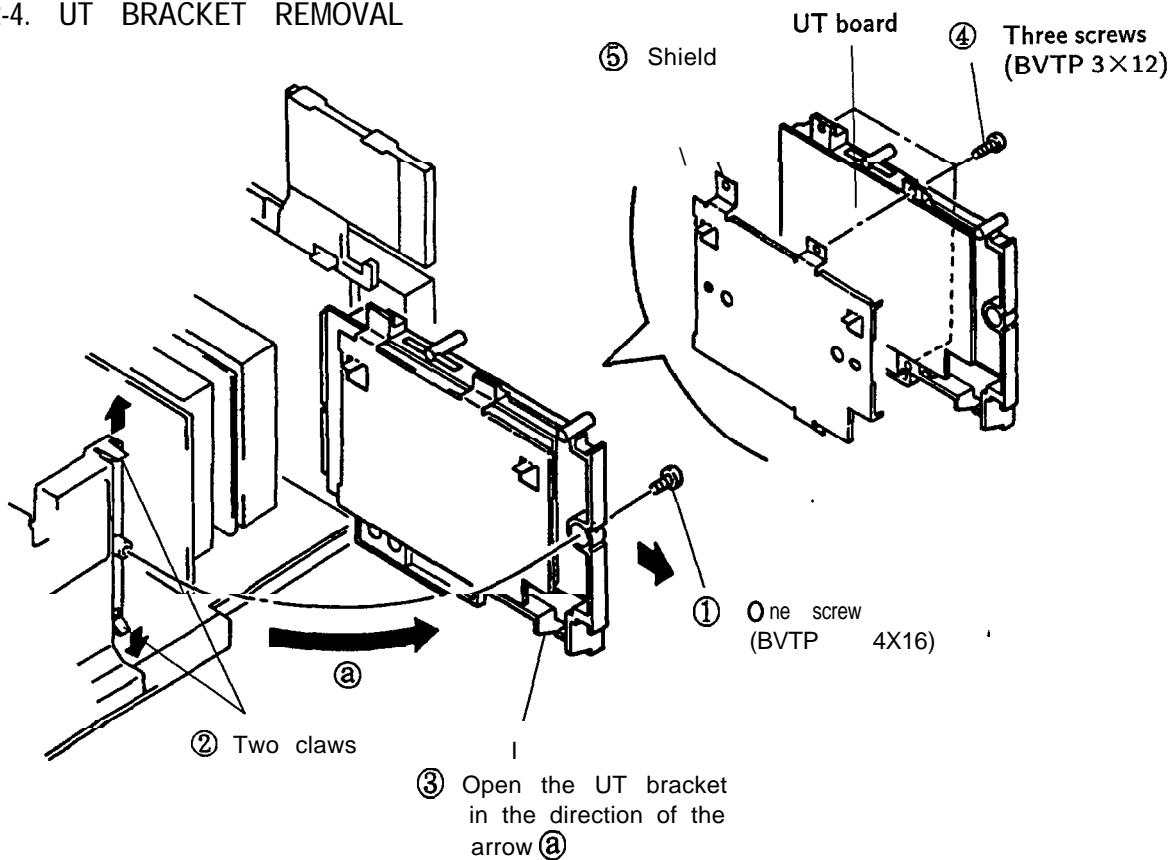
2-2. CHASSIS ASSY AND H BRACKET REMOVAL



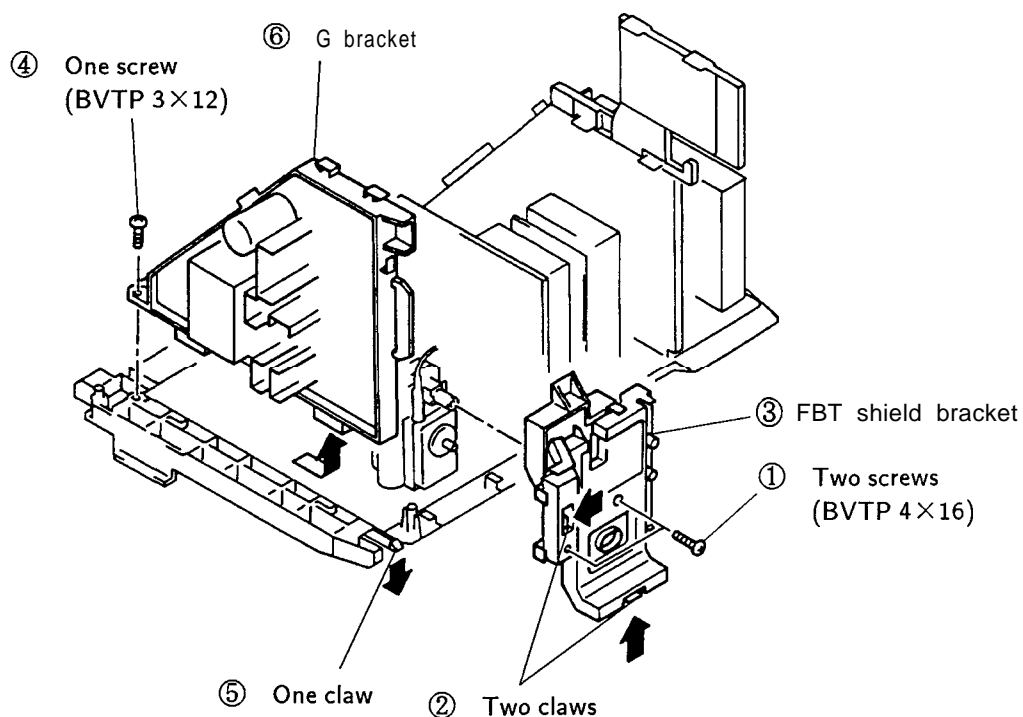
2-3. P3 BOARD REMOVAL



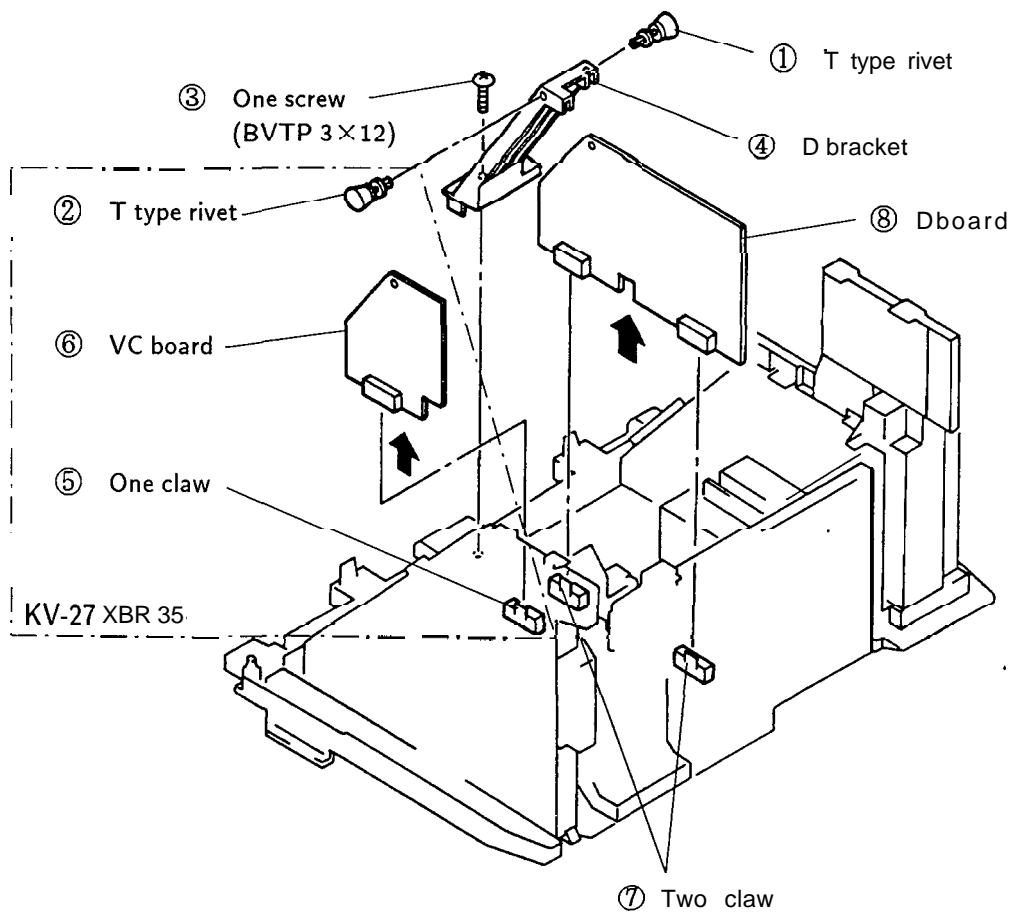
2-4. UT BRACKET REMOVAL



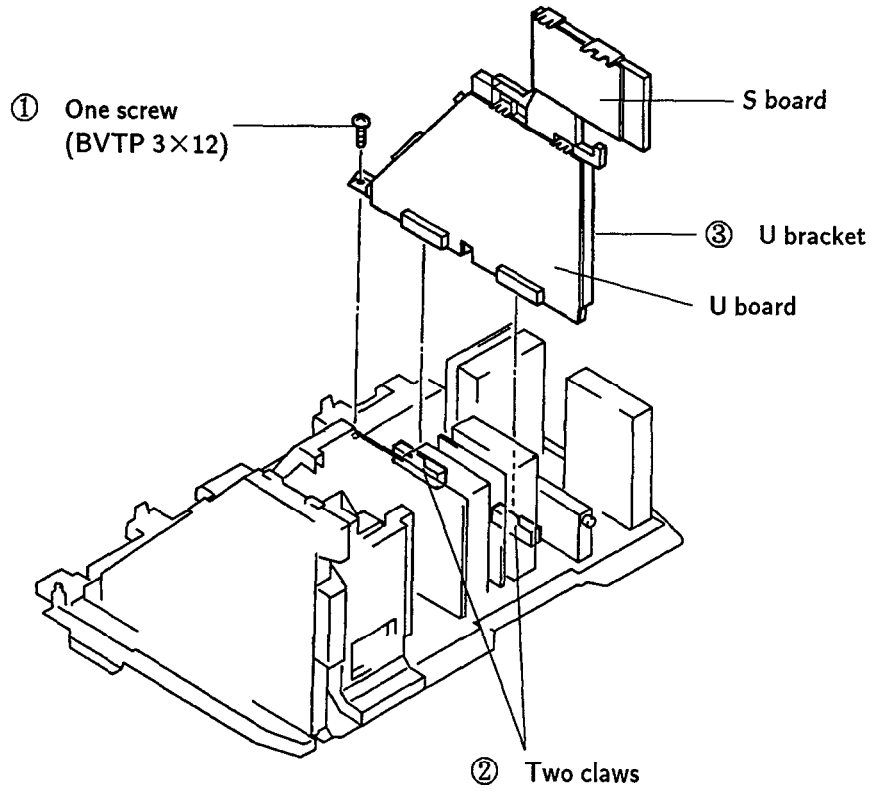
2-5. G BRACKET REMOVAL



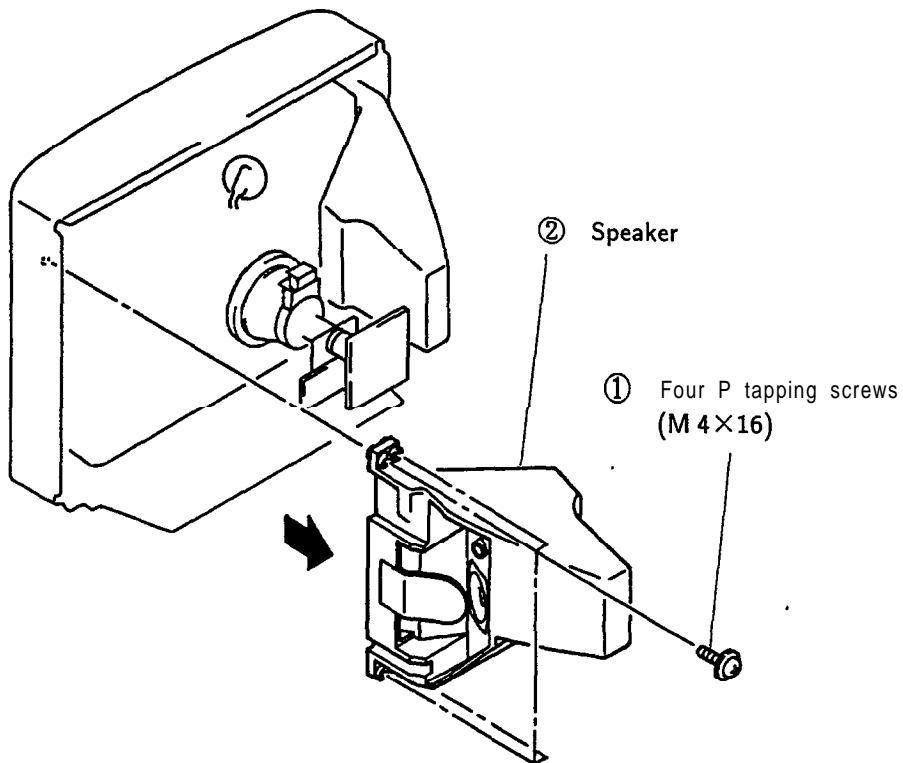
2-6. D BOARD REMOVAL



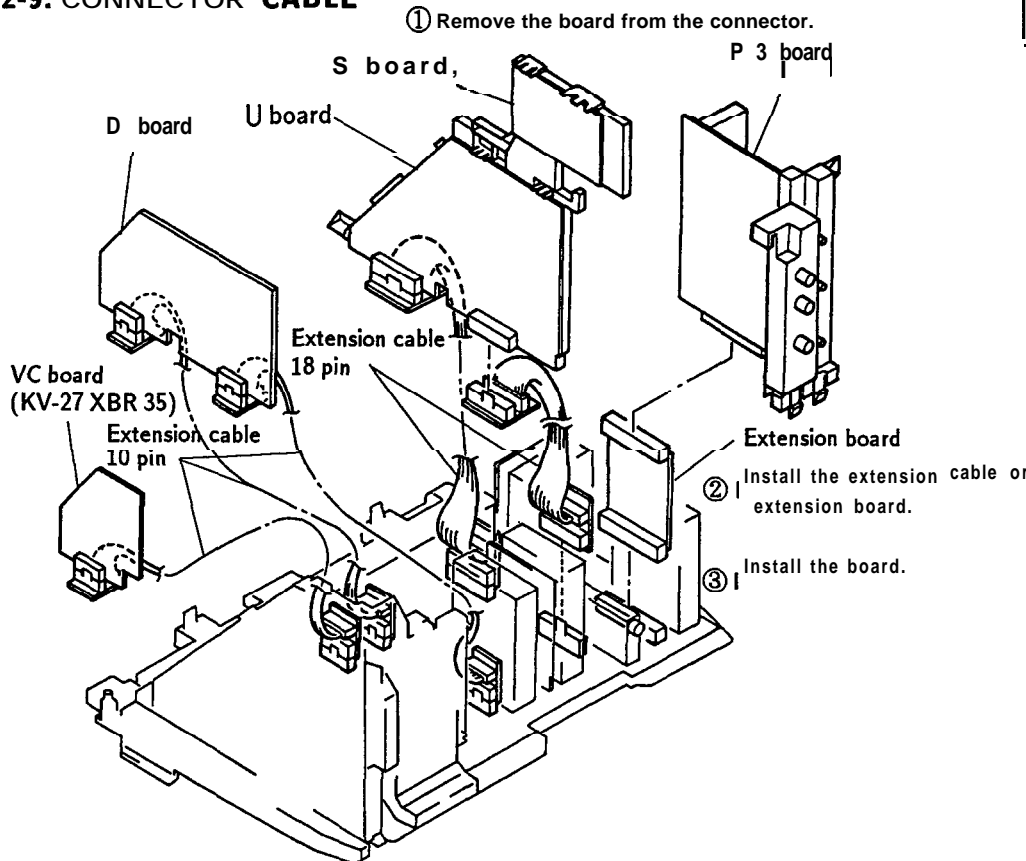
2-7. U BRACKET REMOVAL



2-8. SPEAKER REMOVAL

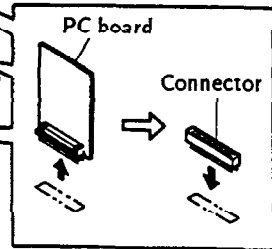
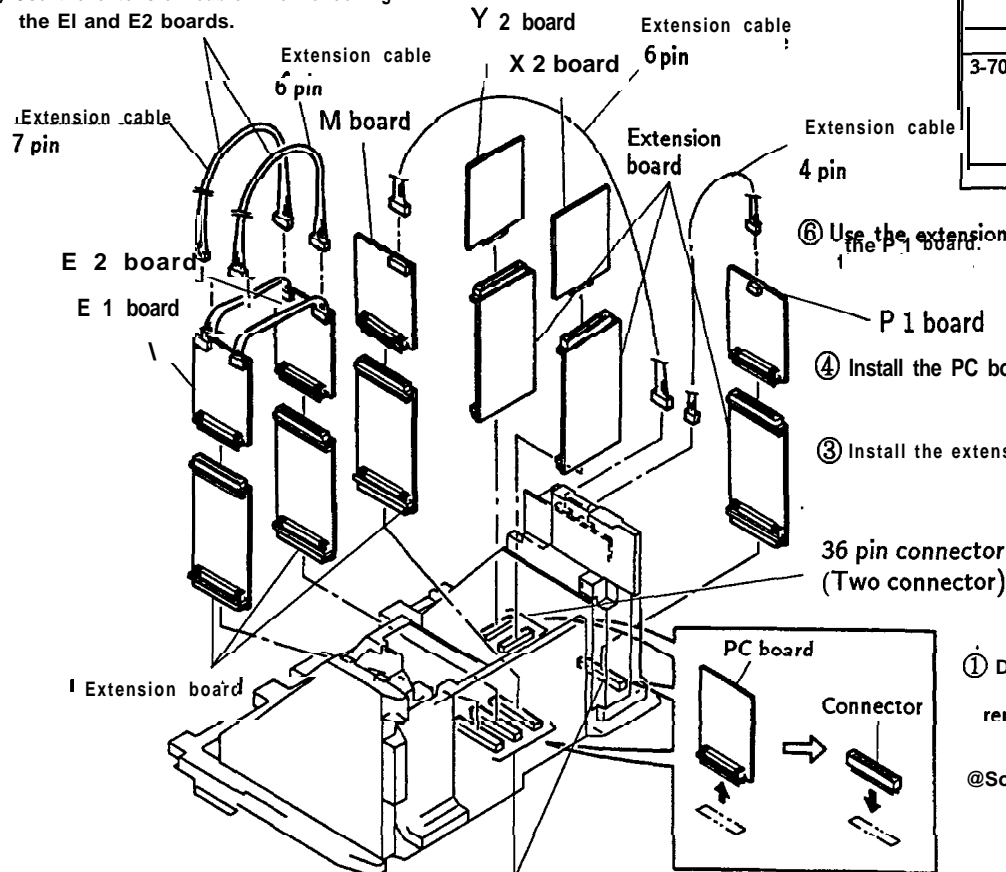


2-9. CONNECTOR CABLE



Exterior	
Extension cable	
4 pin	1-941-891-33
6 pin	1-941-891-31
7 pin	1-941-891-32
18 pin	3-702-558-01
10 pin	3-702-557-01
36 pin connect	3-702-561-01 to
50 pin connect	3-702-560-01 to
Extension board	3-702-559-01

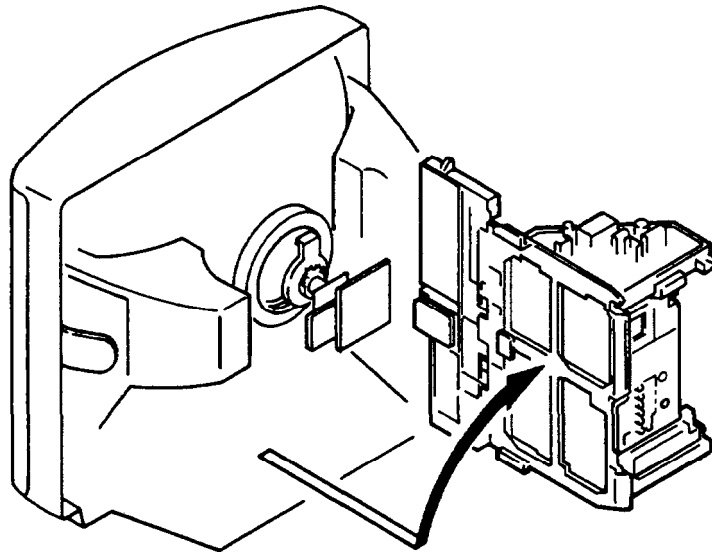
⑤ Use the extension cable when checking the E1 and E2 boards.



① De-solder the PC board and remove it.

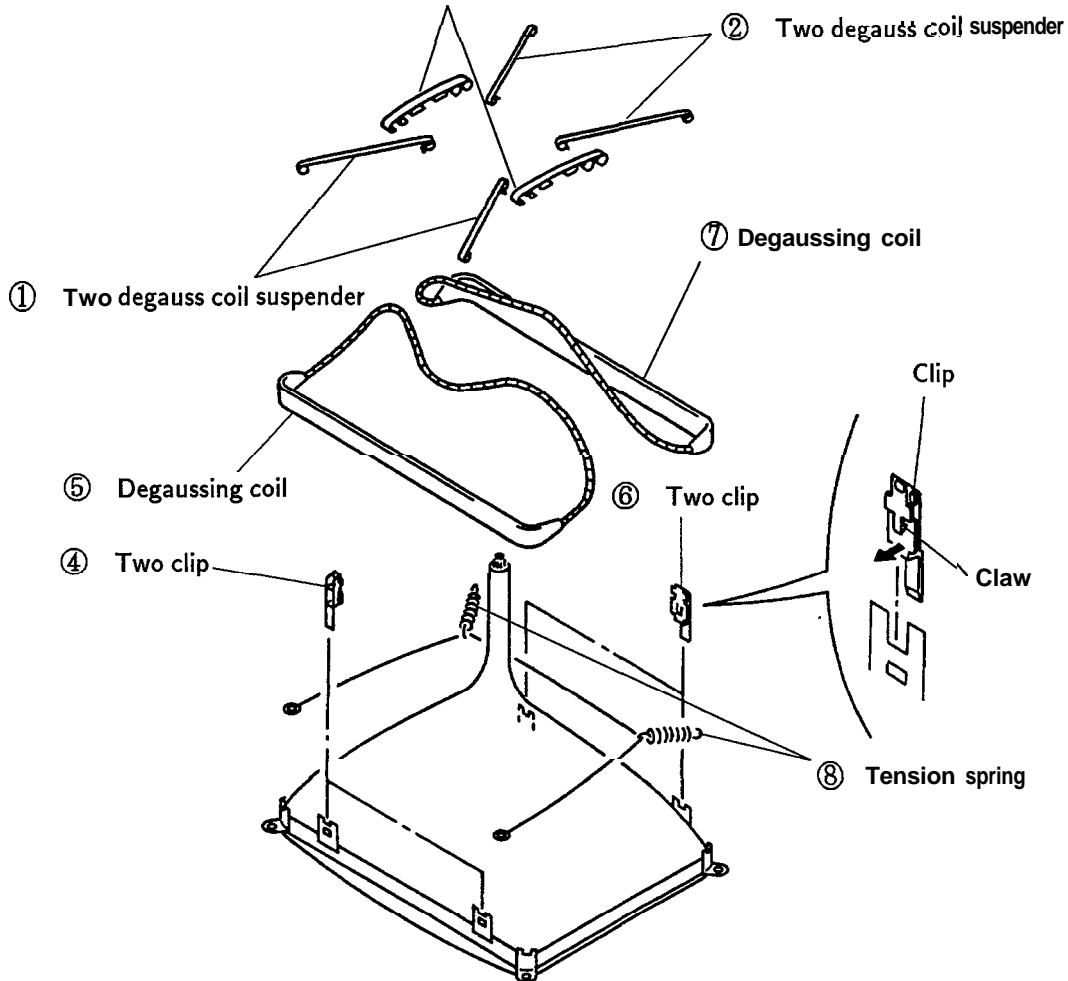
@Solder the connector.

2-10. SERVICE POSITION

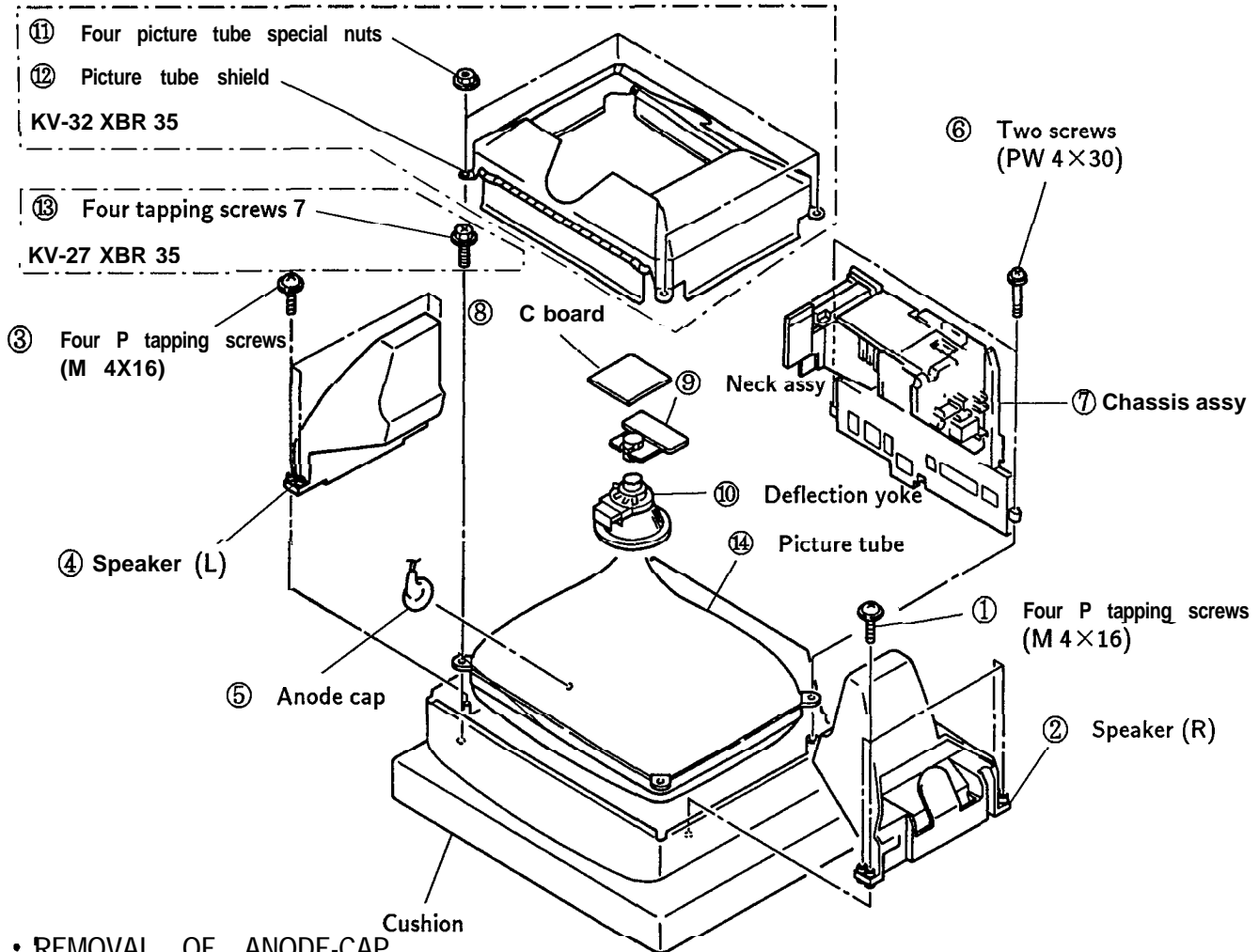


2-11. **DEGAUSSING** COIL REMOVAL (KV-27 XBR 35)

③ Two degaussing coil band (29)



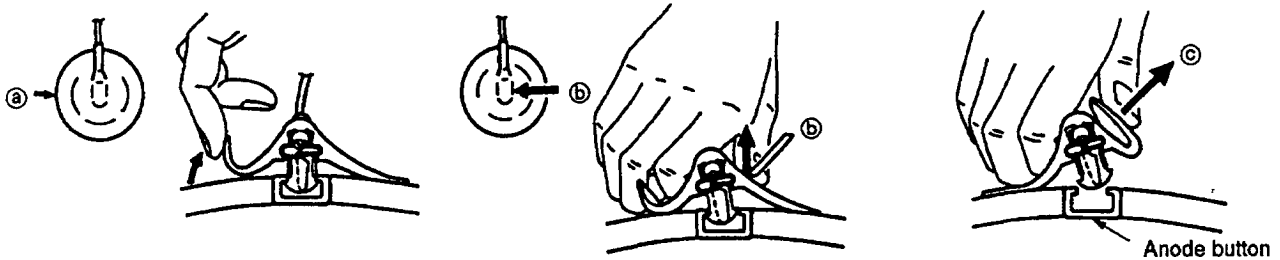
2-12. PICTURE TUBE REMOVAL



• 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



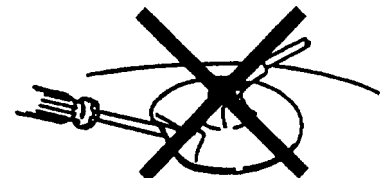
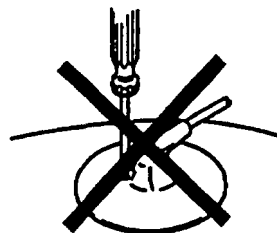
① Turn up one side of the rubber cap in the direction indicated by the arrow ②.

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

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

• 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.



2-13. REPAIR OF CHIP COMPONENT CIRCUIT BOARD

2-13-1. POINTS OF COMPONENT REMOVAL

Handing of blower type soldering iron

If hot blast is too strong or applied from a slanting direction, small components and solder near the component being removed can be blown off. Do not use blower type without temperature control.

2-13-2. NOTES ON SOLDERING FOR CHIP COMPONENTS

- 1) During soldering a chip component, if a soldering iron is applied for a long time, the heat may damage the component or cause pattern peeling.
- 2) Do not reuse a removed component. The characteristics of such a component **may** deteriorate.
- 3) Use wire solder containing silver (ϕ 0.3 or ϕ 0.6).
 (The pin electrodes of the laminated chip capacitor are silver +palladium, so if wire solder which does not contain silver is used, the silver of the pin electrode will be sucked into the solder.)

2-13-3. REMOVAL AND MOUNTING OF COMPONENTS

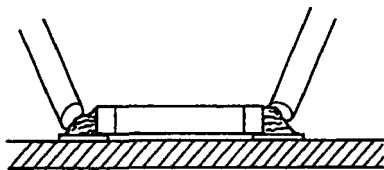
Chip resistor and chip capacitor

REMOVAL

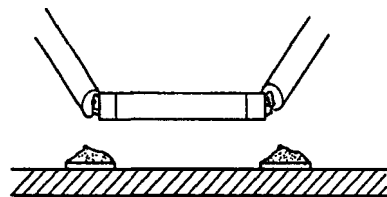
- Using two soldering irons
- 1) Mounted state



2) Melt the solder.

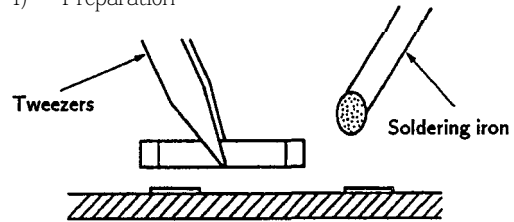


3) Remove the component.



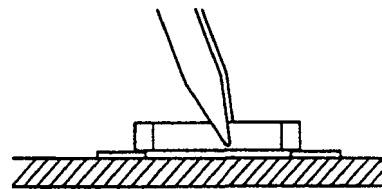
SOLDERING

1) Preparation

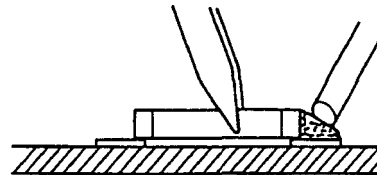


2) Location

Be careful not to misposition.

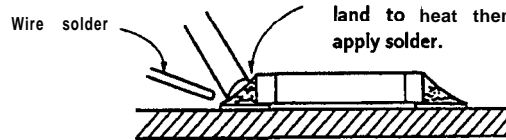


3) Tack soldering and flux application

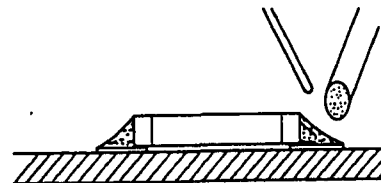


4) Soldering

Apply the soldering iron to the chip component and land to heat them and apply solder.



5) Soldering (Fix the fillet)



6) Visual inspection

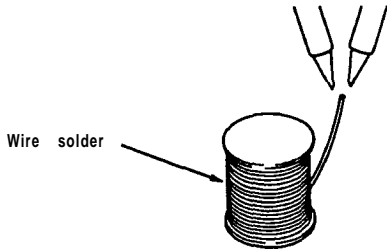
Check for the following defects :

- No-soldered part
- Bridge (to other components or lands)
- Mispositioning
- Other defects

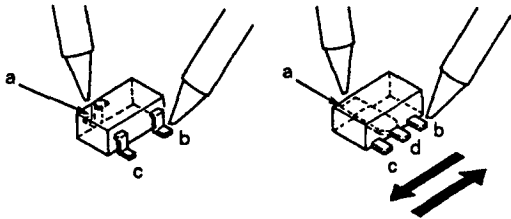
2-13-4. MINI-TRANSISTOR

REMOVAL

- Using two soldering irons
- 1) Put a little solder on the tip of two soldering irons.



- 2) Apply the tip of one soldering iron to the point "a" and the other to the points "b" → "c" (or "b" → "d" → "c") and move the component in the directions indicated by arrows in the figure to remove it.

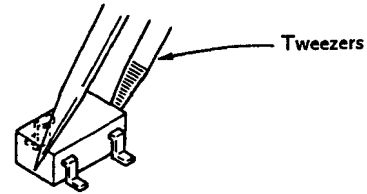


MOUNTING

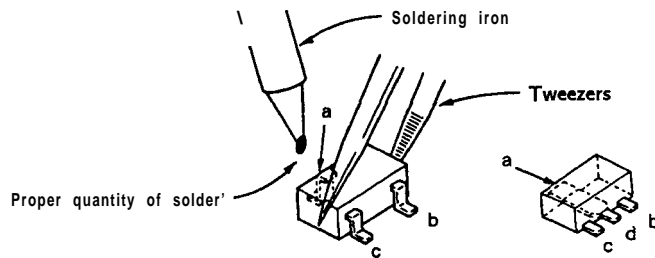
- 1) Apply a little flux to the land with a brush.



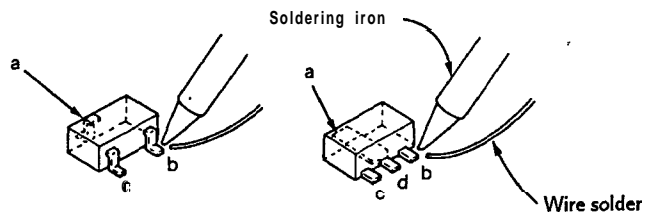
- 2) Place the component in position using tweezers.



- 3) Put a little solder on the tip of the soldering iron and solder the point "a" to **fix** the component.

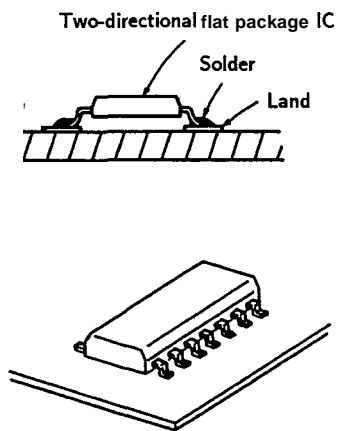


- 4) Bring the tip of the soldering iron and the wire solder close to the point to be soldered. Solder the points "b" → "c" (or "b" → "d" → "c") in order.

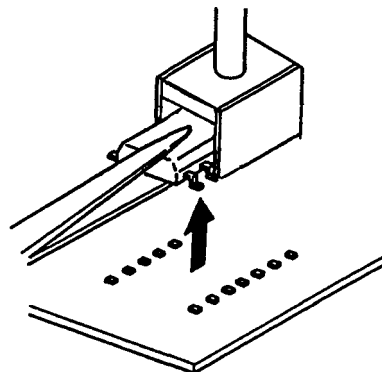


2-13-5. TWO-DIRECTIONAL FLAT PACKAGE IC

MOUNT CONDITION

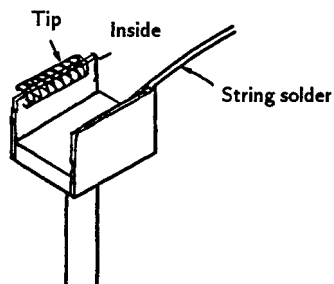


- 3) When the solder melts, lift the IC with a pair of tweezers and remove.



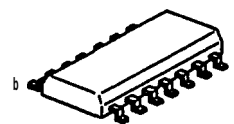
REMOVAL

- 1) Apply some solder on the inside and the tip of the iron tip jig.

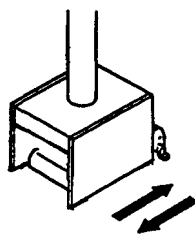


INSTALLATION

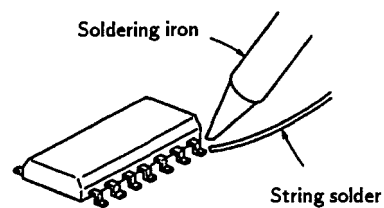
- 1) Place the two-directional flat package IC at the appointed position, solder pins a and b on the diagonal, and fasten it.



- 2) Place the iron tip jig over the IC, and move the jig to and fro as shown in the figure.

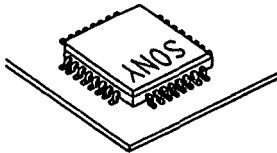
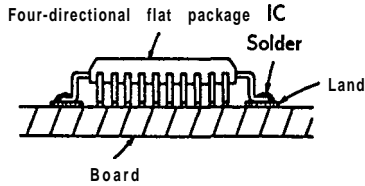


- 2) Solder the remaining pins with the soldering iron.



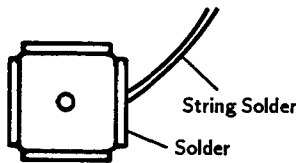
2-13-6. FOUR-DIRECTIONAL FLAT PACKAGE IC

MOUNT CONDITION

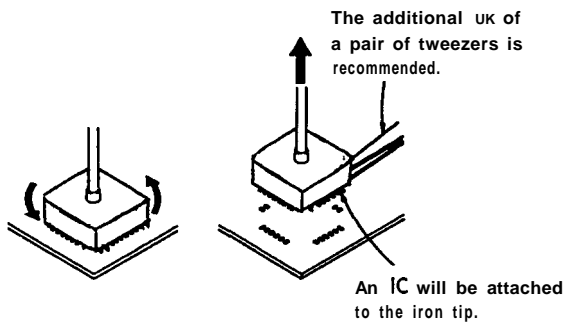


REMOVAL

- 1) Apply solder on the tip of the iron tip jig.



- 2) Place the iron tip jig over the IC, wait about two to three seconds, rotate the iron slightly and lift it up.



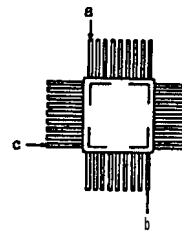
Note : For flat ICs of above 52 P, the IC may not be completely attracted when the iron tip jig is lifted up. In these cases, use a pair of tweezers to remove.

INSTALLATION

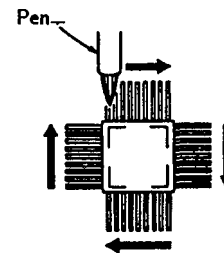
- 1) Place the four-directional flat package IC at the appointed position.



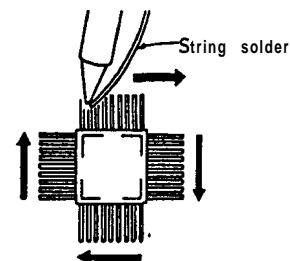
- 2) Apply a slight amount of solder on the iron tip, and solder the three sections in the order of a → b → c, and fix.



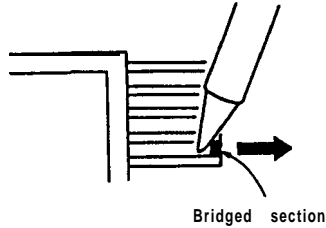
- 3) Apply a slight amount of flux with a pen on all four directions.



- 4) Apply solder on the iron tip and the string solder, and slide and solder in the directions of the arrows.



Note : 1) After soldering, if there are bridged sections, correct by **sliding** the soldering iron in the direction of the arrow.



If the bridges cannot be corrected using the above method, apply some flux with a pen and try again.

2) Soldering can be carried out more easily by sliding the iron tip near the tip of the IC leg. (Fig. A)

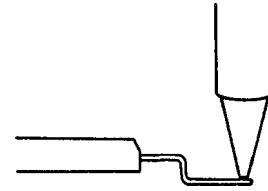


Fig. A

Be careful not to slide the bent sections of the leg as shown in Fig. B as soldering bridges will be formed.

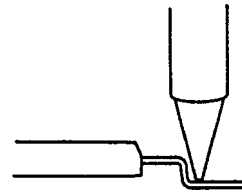


Fig. B

	Description	Part No	Measure (mm)			
			A	B	C	D
	jig package for removing IC 4-sided flat	3-702-555-01	41.0	31.0	51.0	11.0
	jig for removing 2-sided flat package IC	3-702-555-01	41.0	31.0	51.0	11.0
	soldering iron	3-702-552-01	5.5 w 60 g length 210 mm			
	soldering holder	3-702-553-01				

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 } normal
 Bightness }
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.
- a. If the beam does not land correctly in all the corners, use a magnet to adjust it.
 (See Figure 3-4.)

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

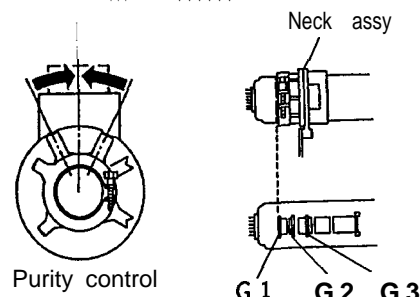


Fig.3-2

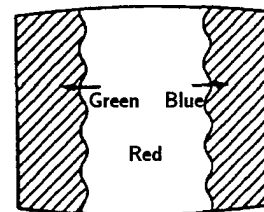


Fig.3-3

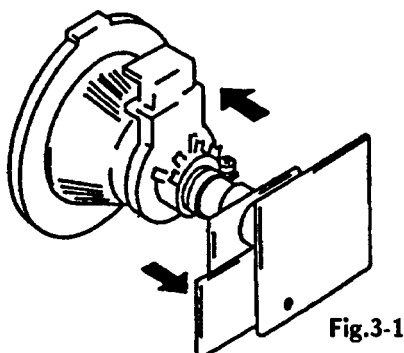


Fig.3-1

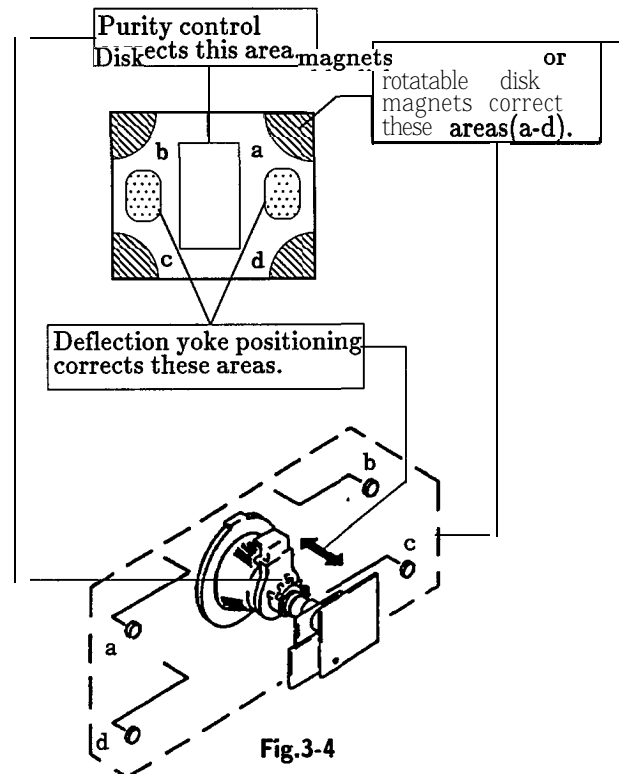


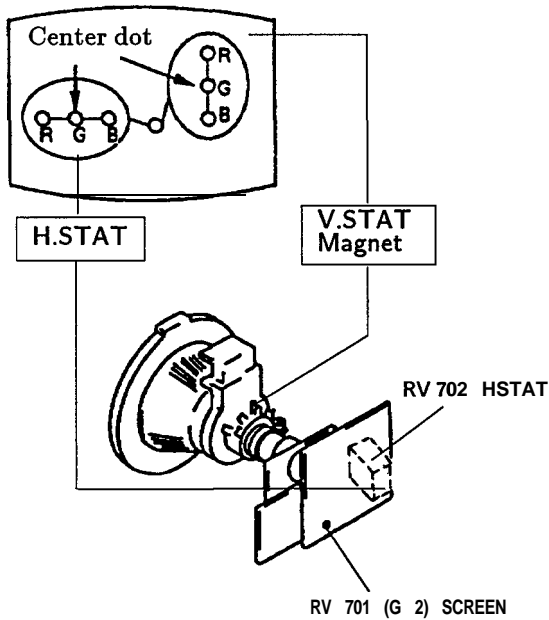
Fig.3-4

3-2. CONVERGENCE

Preparation :

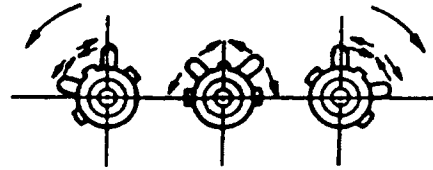
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

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

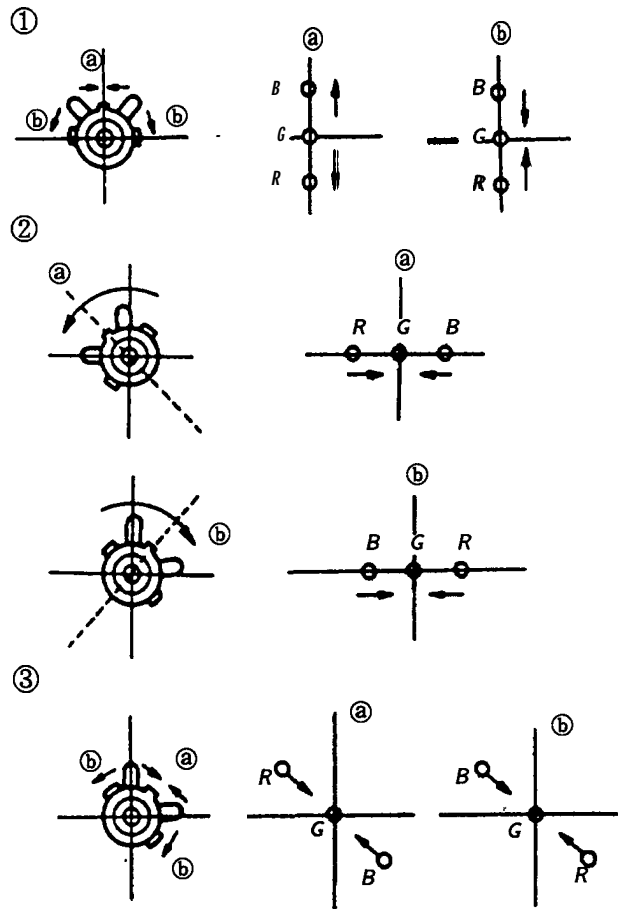


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the **V.STAT** magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the 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)

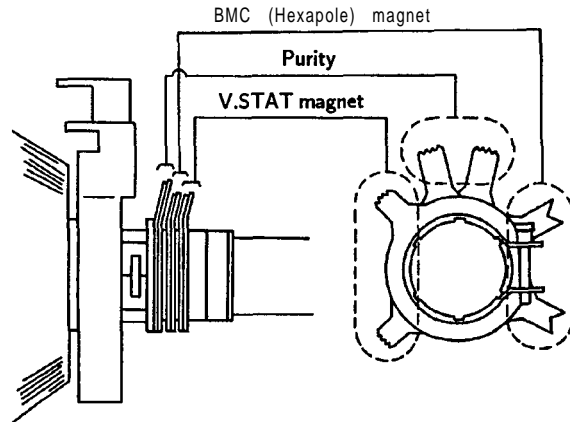
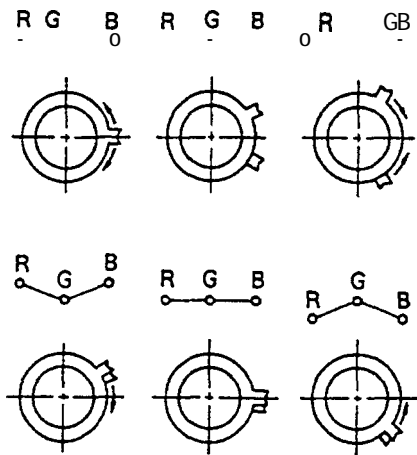
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



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



• Operation of BMC (Hexapole) Magnet

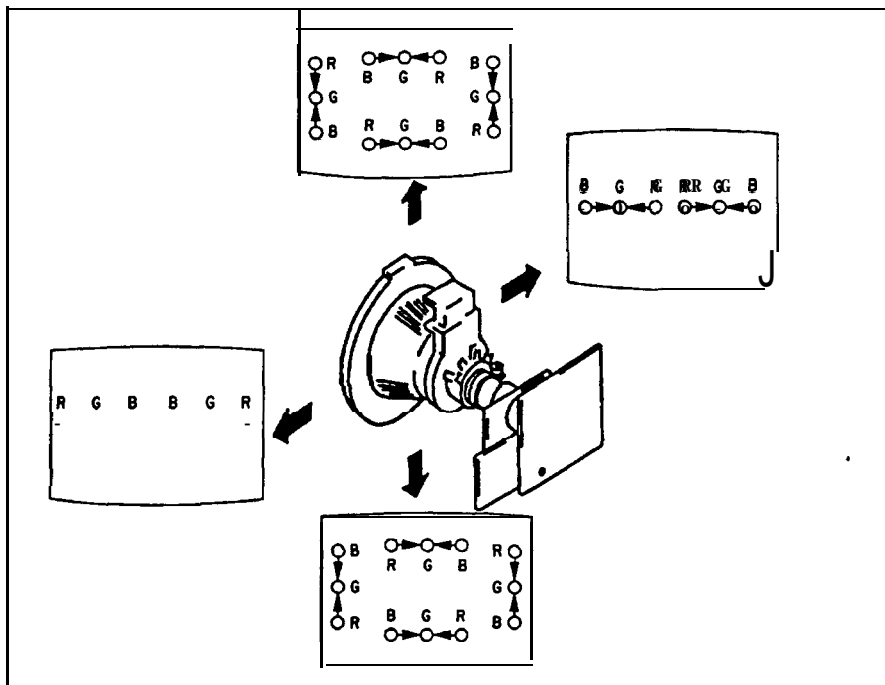


- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the **H.STAT** VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

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



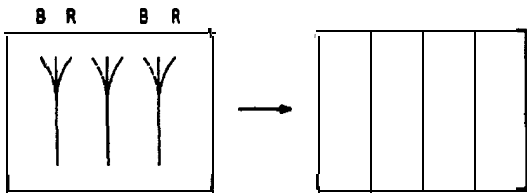
(3) Dynamic Convergence Circuit Adjustment

- 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. YBOW
LYBO	39	VP	L. YBOW
HAMP	26	VP	H. AMP
HTILT	36	VP	H. TILT
UCBO	20	VP	U. CBOW
UTIL	44	VP	U. TILT
LCBO	31	VP	L. CBOW
LTIL	63	VP	L. TILT
DCSH	19	VP	DC. SHIFT

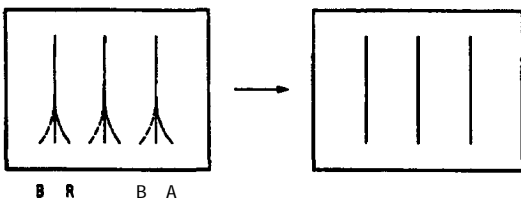
U. YBOW

Select UYBO with **1** and **4**



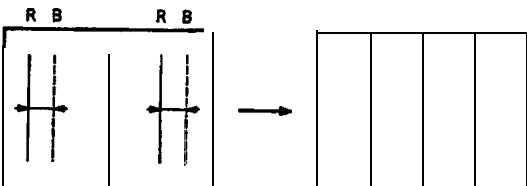
L. YBOW

Select LYBO with **1** and **4**



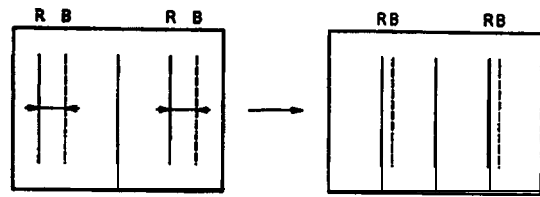
H. AMP

Select HAMP with **1** and **4**



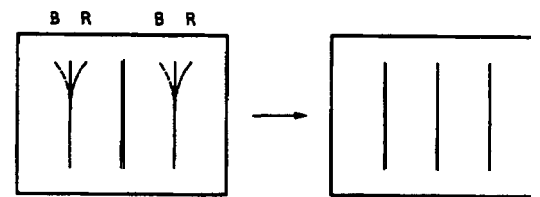
H. TILT

Select HTILT with **1** and **4**



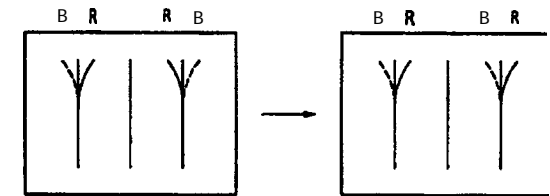
U. CBOW

Select UCBO with **1** and **4**



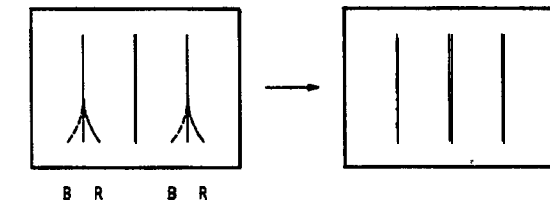
U. TILT

Select UTIL with **1** and **4**



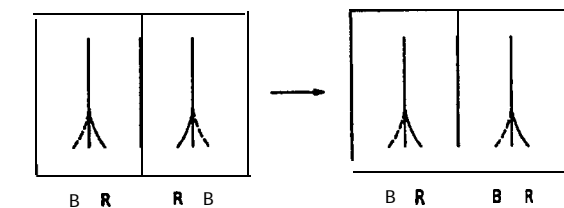
L. CBOW

Select LCBO with **1** and **4**

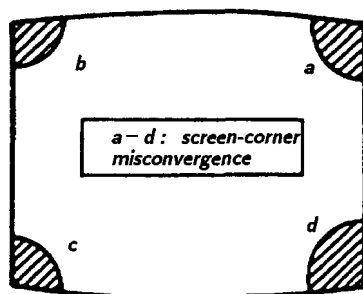


L. TILT

Select L. TIL with **1** and **4**

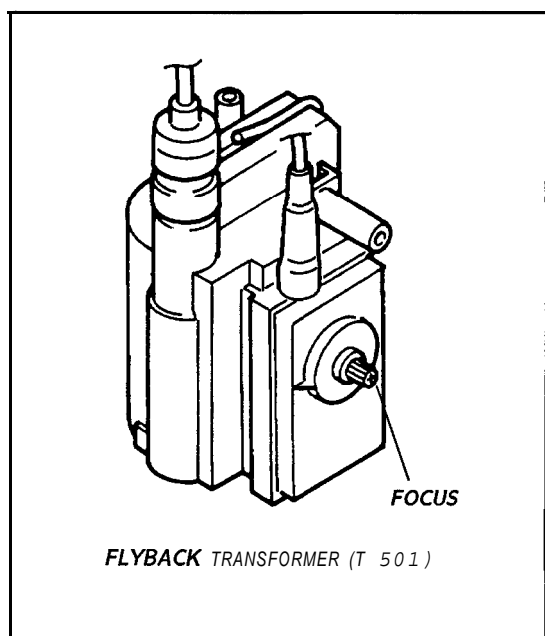
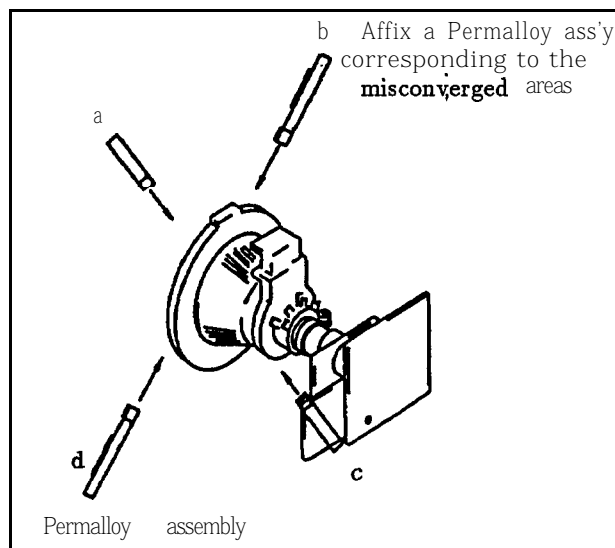


(4) Screen-corner Convergence



3-3. FOCUS ADJUSTMENT

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



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

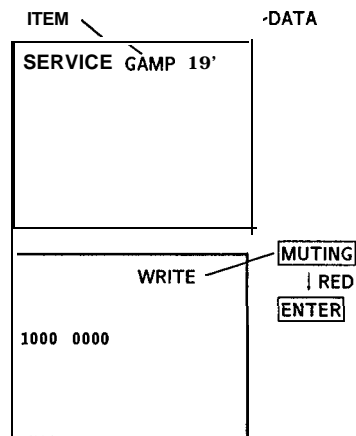
Set the standby condition (Press **POWER** button on the commander) in the next place, press **POWER** button again, hereupon it becomes TV mode.

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 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.

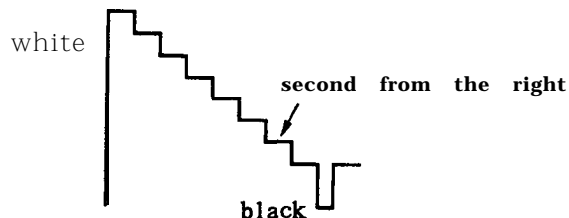
(Using the Remote Commander)

2. WHITE BALANCE ADJUSTMENTS

- 1) Set to service mode.
- 2) Press **STANDARD** to normal and if necessary "TRINITONE" set to "LOW" by **0** form .
- 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 BRIGIIT 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).

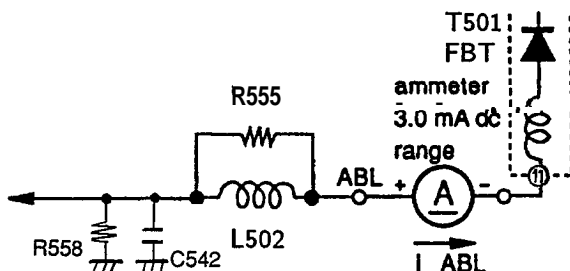
IC502, Q509, Q510, R565, R567, R568, R569

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.) **1640 ± 20μA** (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.) **152.0V** 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.) **140 ± 20μA** (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.) **154.5V** 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 pin@ of A-O connector is more than **127.0V** DC (27 in.) **100.0V** 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-O connector via **1SS119** from the DC stabilized power source.
Confirm that the minimum voltage is lower than **149.0V** DC (27 in.) **120.5V** 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

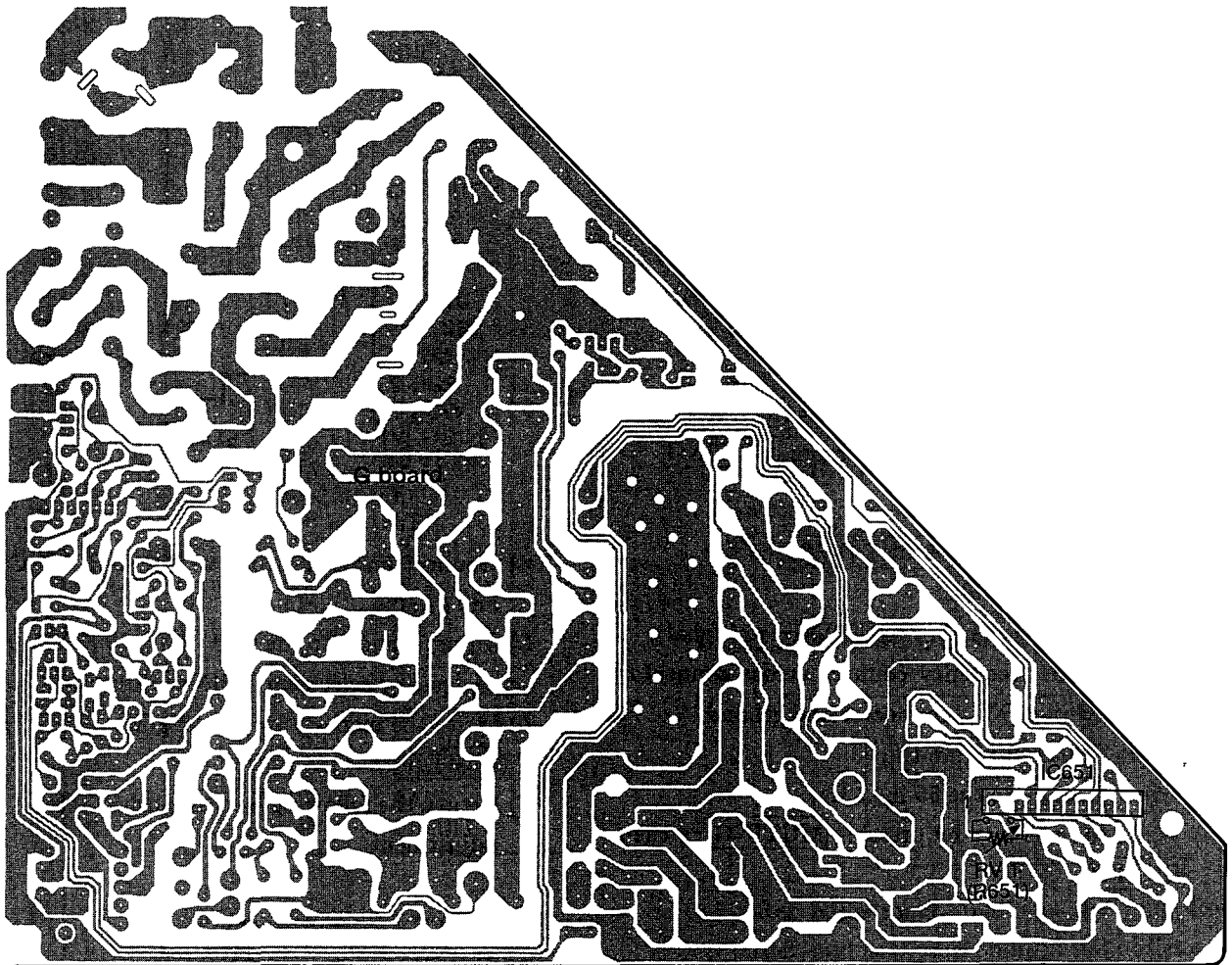
When step 2 is not satisfied, readjustment should be performed by altering the resistance value of **R566** CARBON **1/4W** (a component marked with ☒).

G BOARD

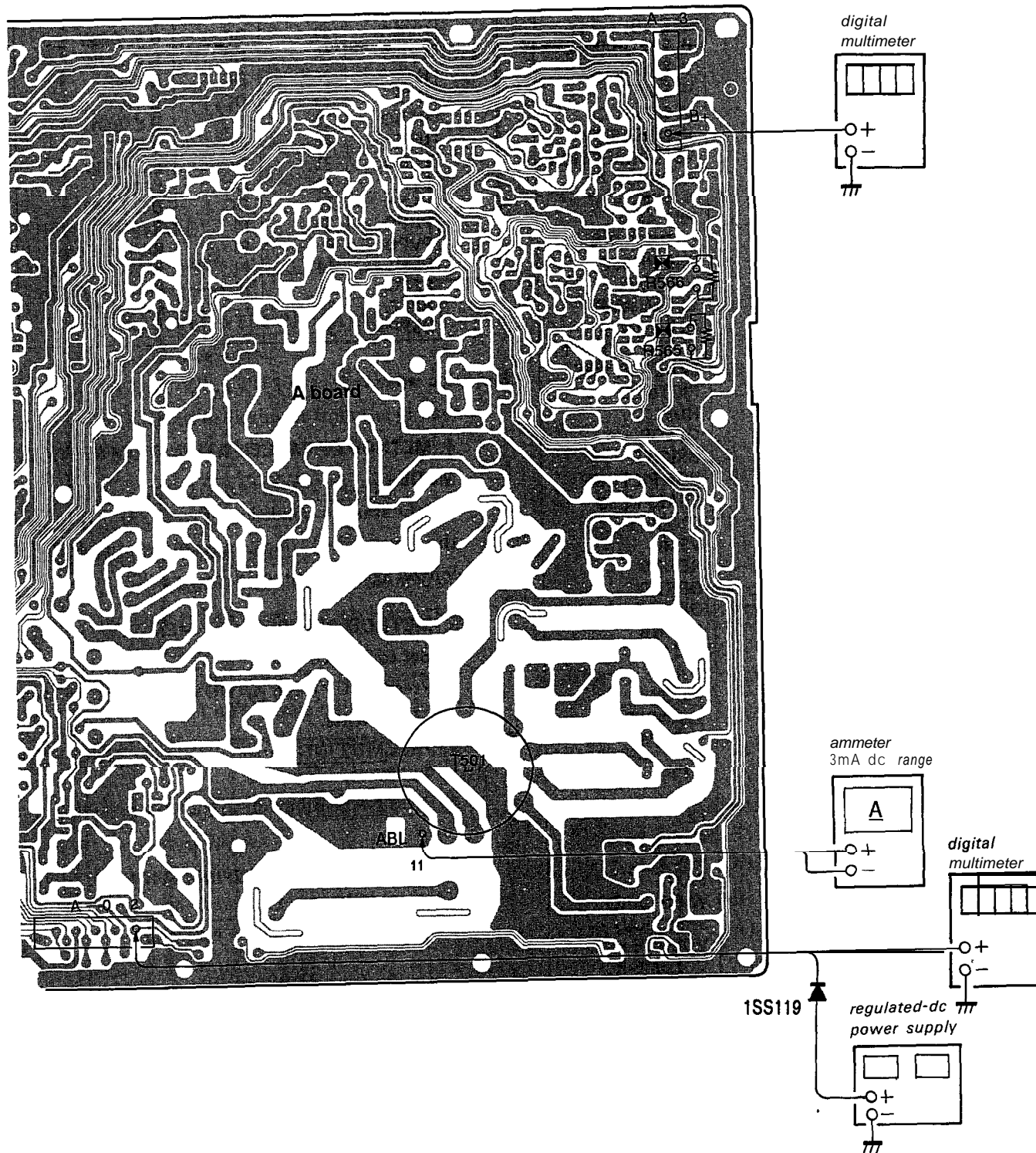
B+ VOLTAGE CONFIRMATION

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

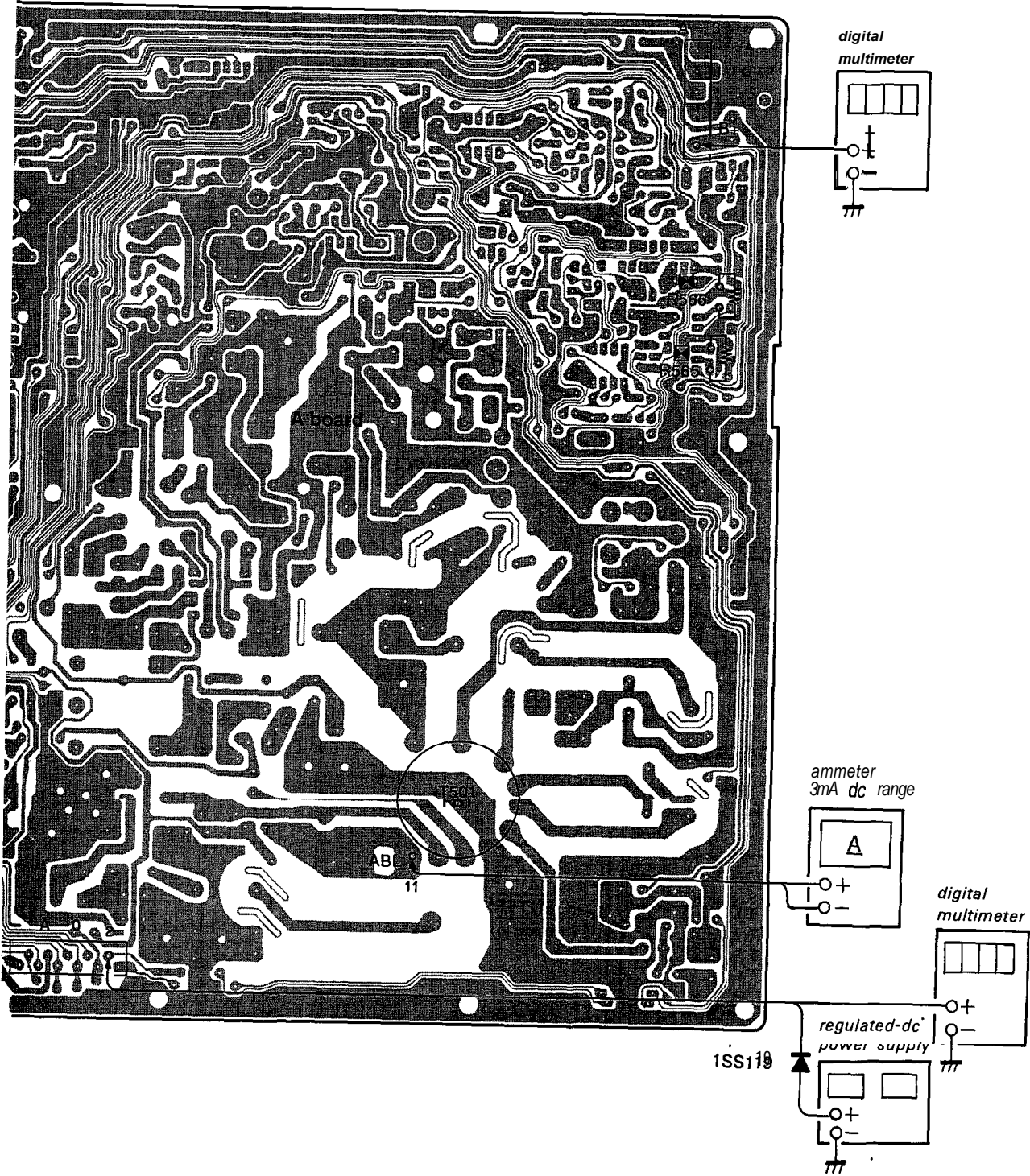
- 1) Supply $130 \pm 2\%$ V AC to with variable autotransformer.
- 2) Input an entirely monoscope signal.
- 3) Set the PICTURE control and the BRIGHT controls in to initial reset.
- 4) Confirm the voltage of A BOARD ① pin A-3 connector is less than **136.5V** DC.
- 5) If step 4) is not satisfied, replace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



(KV-27XBR35)



KV-32XBR35)



SECTION 5 CIRCUIT ADJUSTMENTS

5-I. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

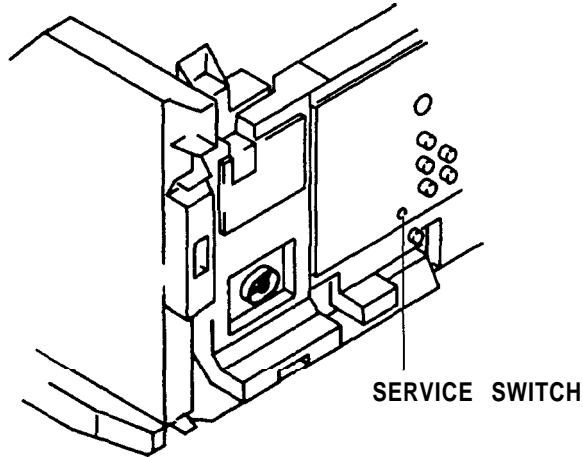
Use of Remote Commander (RM-Y113) can be performed circuit adjustments about this model.

1. METHOD OF SETTING THE SERVICE MODE

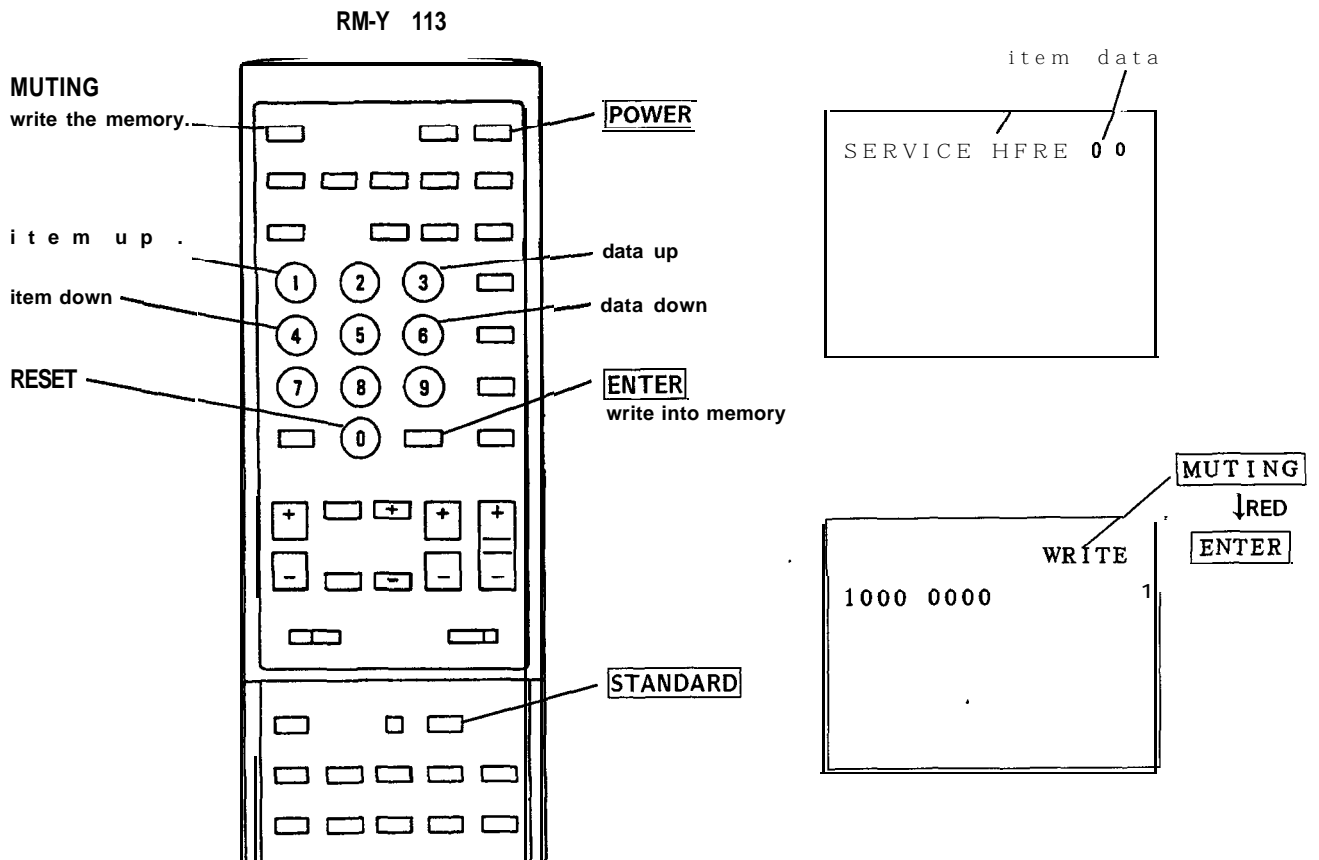
- 1) Press **POWER** button on the Remote Commander while pressing switch on the rear of the set.

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 REGIST	
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 NC
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	I1
DEEM	7	AP	I2
STEVE	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		

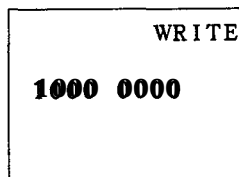
4. METHOD OF CANCELLATION FROM SERVICE MODE

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

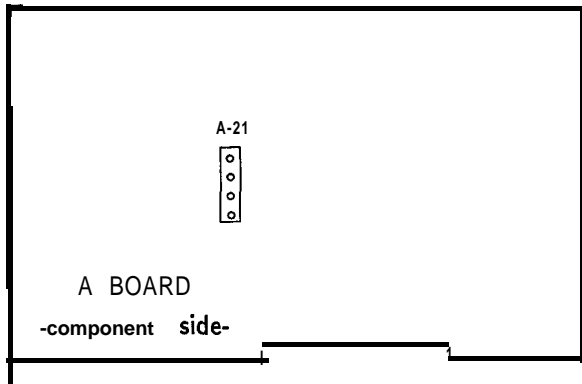
- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN), select an item of adjustments.
- 3) Press **MUTING** button indicate **WRITE** on screen.
- 4) Press **ENTER** button to write for memory.

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 \ominus of DY-1 connector and ground.
- 4) Select VFRE with **[1]** and **[4]**.
- 5) Adjust **[3]** and **[6]** to the 55 ± 0.5 Hz.
- 6) Write the memory by pressing **[MUTING]** → then **[ENTER]**.

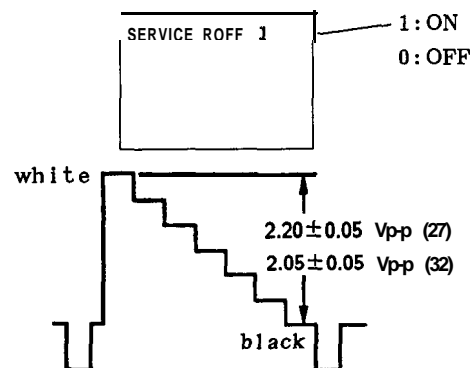
SUB CONTRAST ADJUSTMENT (SPIX)

- 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]**.

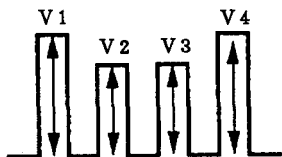


- 4) Connect an oscilloscope to TP 49 B of C board and ground.
- 5) Adjust **[3]** and **[6]** to the 2.20 (27) 2.05 (32) ± 0.05 V_p level by selecting SPIX with **[1]** and **[4]**.
- 6) Write the memory by pressing **[]** → then **[ENTER]**.
- 7) Return the following back to normal after adjustment.

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

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

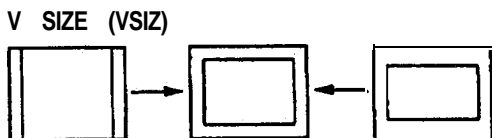
- 1) Input a color-bar signal.
- 2) Press **STANDARD** to normal.
- 3) Set to Service Mode.
- 4) Connect an oscilloscope to TR 49 R of C board and ground.
- 5) Adjust **3** and **4** to the $V1=V4$ and $V2=V3$ by select to SHUE and SCOL with **1** and **4**.



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

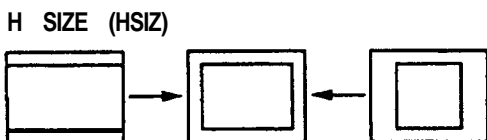
V.SIZE ADJUSTMENT (VSIZ)

- 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**.



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.CENTER ADJUSTMENT (H POS)

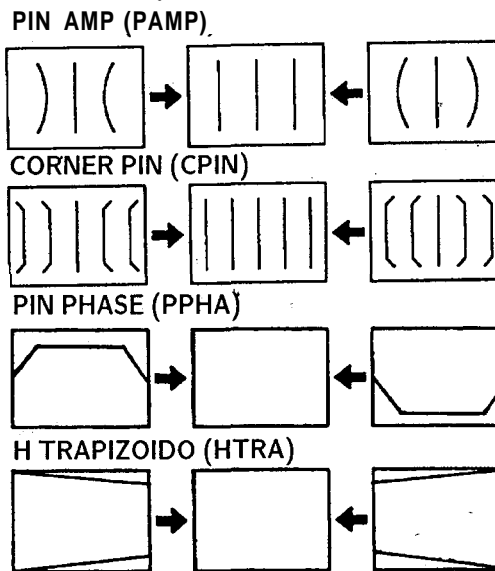
Note: Perform this adjustment after H.FREQUENCY ADJUSTMENT (HFRE).

- 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 connector 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) Write into the memory by the pressing **MUTING** → then **ENTER**.

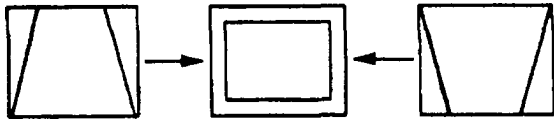


PIN AMP (PAMP), CORNER PIN (CPIN) PIN PHASE: (PPHA), H TRAPIZOID (HTRA) V LINEARITY (VLIN), V ANGLE (VANG), VS CORRECTION (VSCO), Y BOW (YBOW), V SHIFT (VPOS), AND V COMP (VCOM) ADJUSTMENTS

- 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 **ENTER** → _____



V-SHIFT (VPOS)



V COMP (VCOM)



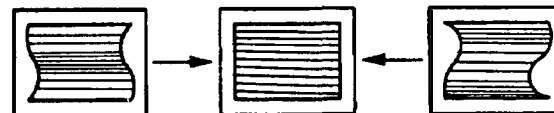
V LINEARITY (VLIN)



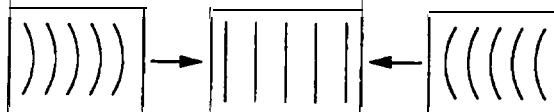
V ANGLE (VANG)



VS CORRECTION (VSCO)

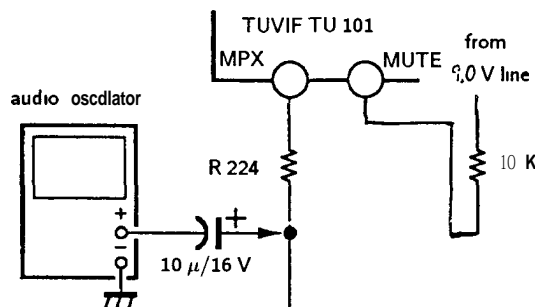


Y BOW (Y BOW)



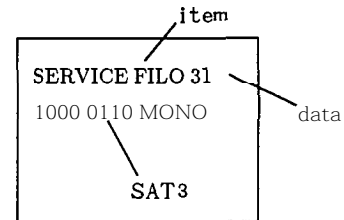
FILTER ADJUSTMENT (MPX, FILO)

- 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.



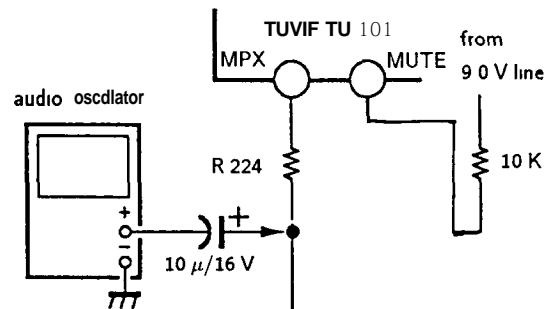
V 4fh SINE-WAVE 15 734 KHz ± 0.1 KHz
LEVEL 0 28 Vp-p

- 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 **1** then **ENTER**.



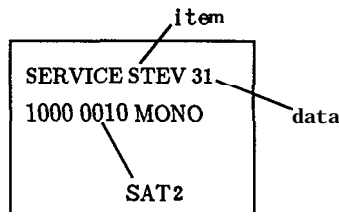
ST VCO ADJUSTMENT (MPX, STEV)

- 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 apply the frequency Vst. Then, apply DC voltage to mute of TUVIF TU 101 using 10kΩ connect to 9.0 V line



V 4fh 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, ADJUSTMENT (SAPV)

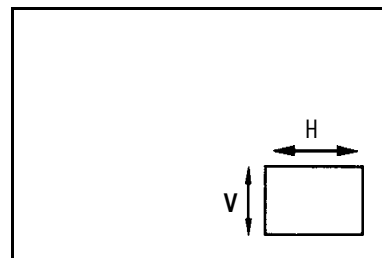
- 1) Set to Service Mode.
- 2) Input a stereo broadcast signal with SAP.
- 3) Select TEST with **[1]** and **[4]**, set the data to "0". And then, press **[MTS]** to MAIN.
- 4) Connect a digital multimeter to **TP-1(DBX)**. This voltage reading will equal V 1.
- 5) Press MTS to SAP and this voltage will equal V 2.
- 6) Select SAPV with **[1]** and **[4]**, adjust **[3]** and **[6]** so that $V_2 = V_1 \times 0.03$ VDC.
- 7) Write the memory by **[MUTING]** → **[ENTER]**.

SEPARATION ADJUSTMENT (SEP)

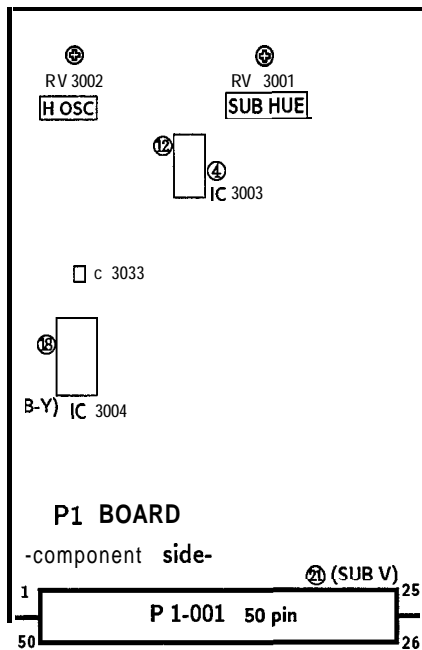
- 1) Set to Service Mode.
- 2) Press **[MTS]** to MAIN and receive a monoral broadcast signal.
In the next step, receive a stereo broadcast signal.
- 3) Select SEP and VD with **[1]** and **[4]**, adjust **[3]** and **[6]** so that a clear stereo sound is effected.

READ DELAY H/V (PHPO, PVPO)

- 1) Input a cross hatch signal.
- 2) Set to service mode.
- 3) Press P/P a display a window picture. (RIGHT LOWER Position)
- 4) Select PHPO, PVPO with **[1]** and **[4]**
- 5) Adjust **[3]** and **[6]** to the READ DELAY H/V.
- 6) Write the memory by pressing **[MUTING]** → then **[ENTER]**.

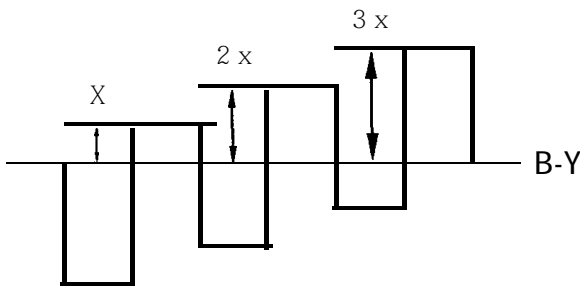


5-3. P1 BOARD ADJUSTMENTS



SUB HUE ADJUSTMENT (RV 3001)

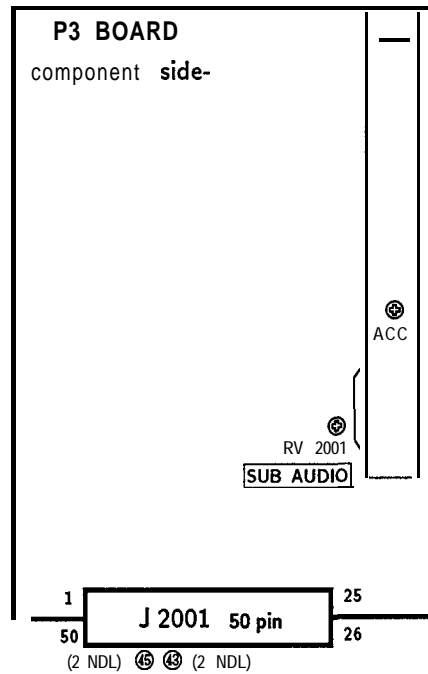
- 1) Set HUE and COLOR to the standard condition.
- 2) Make adjustment so that B-Y signal as shown to the right is obtained at the crossing point of R 3009 (0 Ω) and C 3033.
- 3) Supply the color bar signal of 75 IRE (white) at 2 Vpp to Pin 21 (SUB V) of P 1-001 and make adjustment by turning RV 3001.



[H. FREQUENCY (H OSC) ADJUSTMENT (RV-3002)]

- 1) Connect a frequency counter to Pin ④ (H OUT) of IC 3003.
- 2) Connect Pin ⑫ of IC 3003 to ground.
- 3) Adjust **RV3002** for a frequency of 15.734 kHz ± 50 Hz at Pin ④ of IC 3003.
(or until the frequency comes to a standstill.)

5-4. P3 BOARD ADJUSTMENTS



RF AGC ADJUSTMENT (IF BLOCK VR)

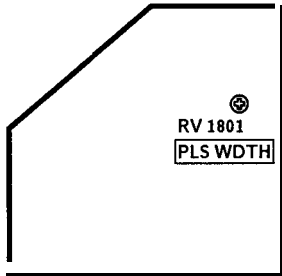
- 1) Input a color-bar signal.
- 2) Set to PICTURE IN PICTURE mode.
- 3) Adjust AGC VR of TU 2001 so that snow noise and cross-modulation disappear from the picture.
- 4) Confirm them at every channel.

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

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

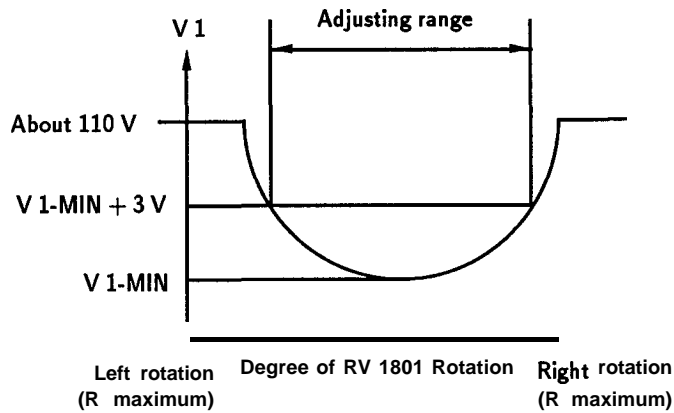
500 mVrms ± 2 dB

5-5. VC BOARD ADJUSTMENT
 (KV-27 XBR 35 only)



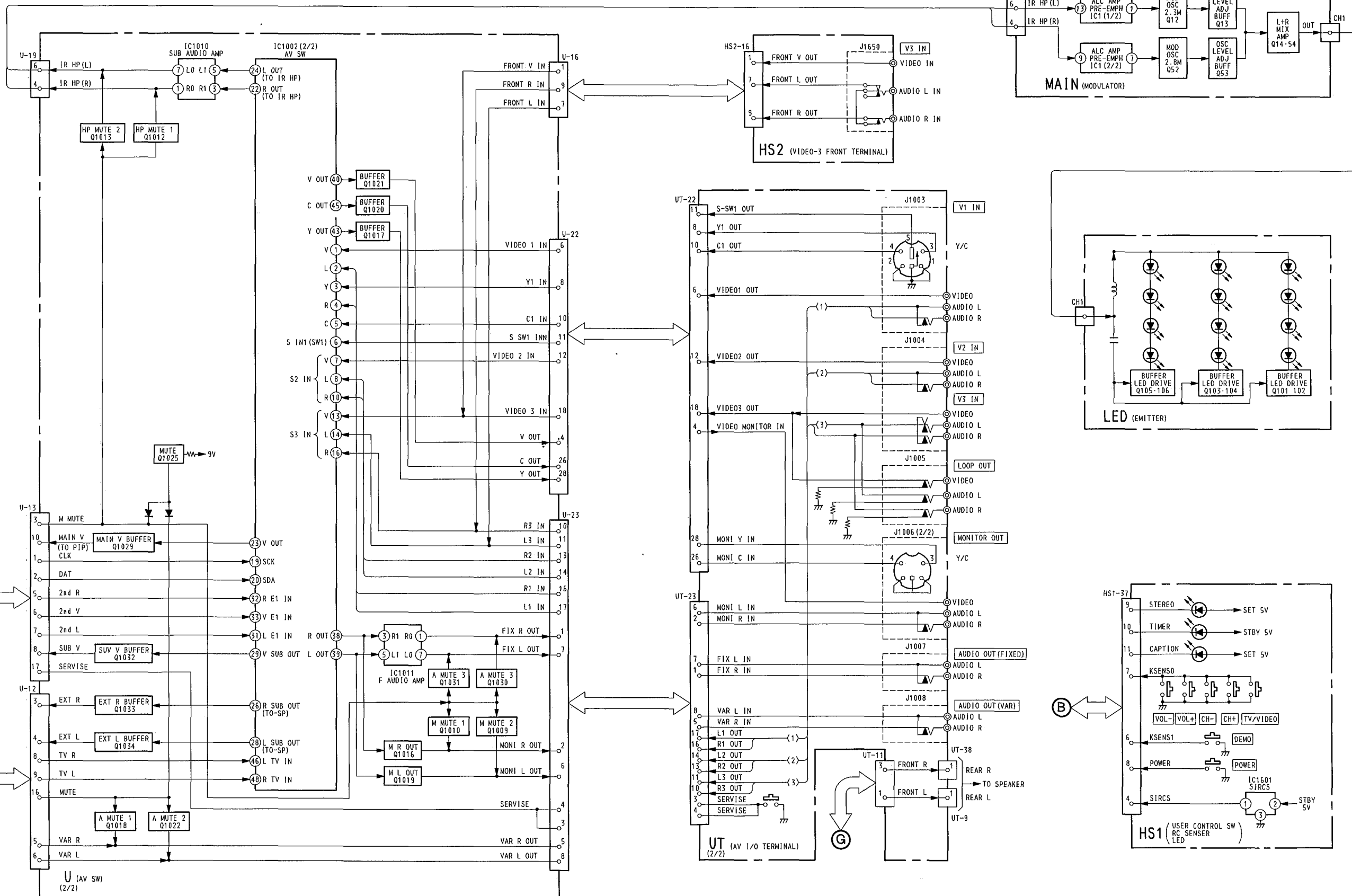
DRIVE PULSE PHASE ADJUSTMENT(RV 1801)

- 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.



SECTION 6
DIAGRAMS

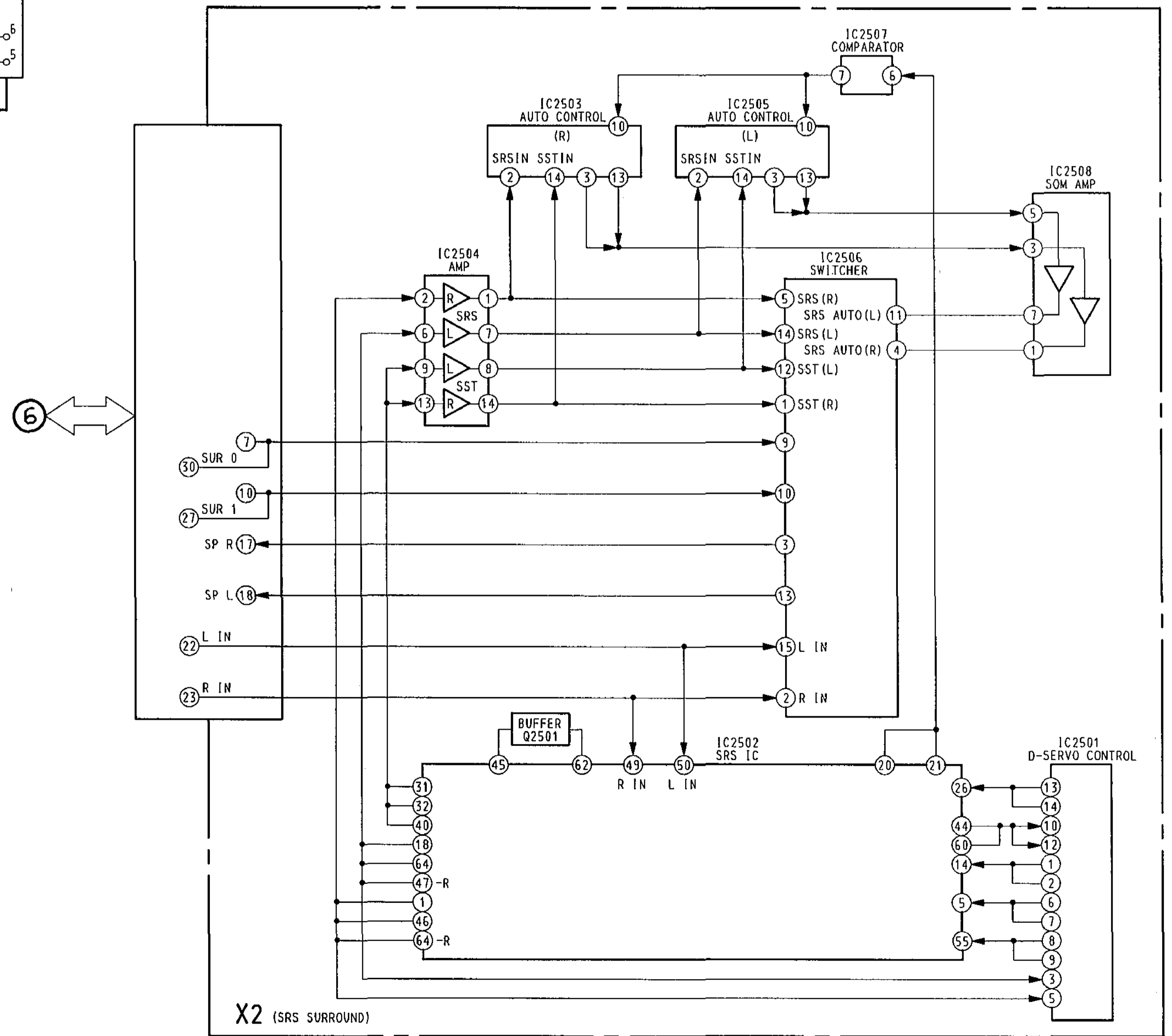
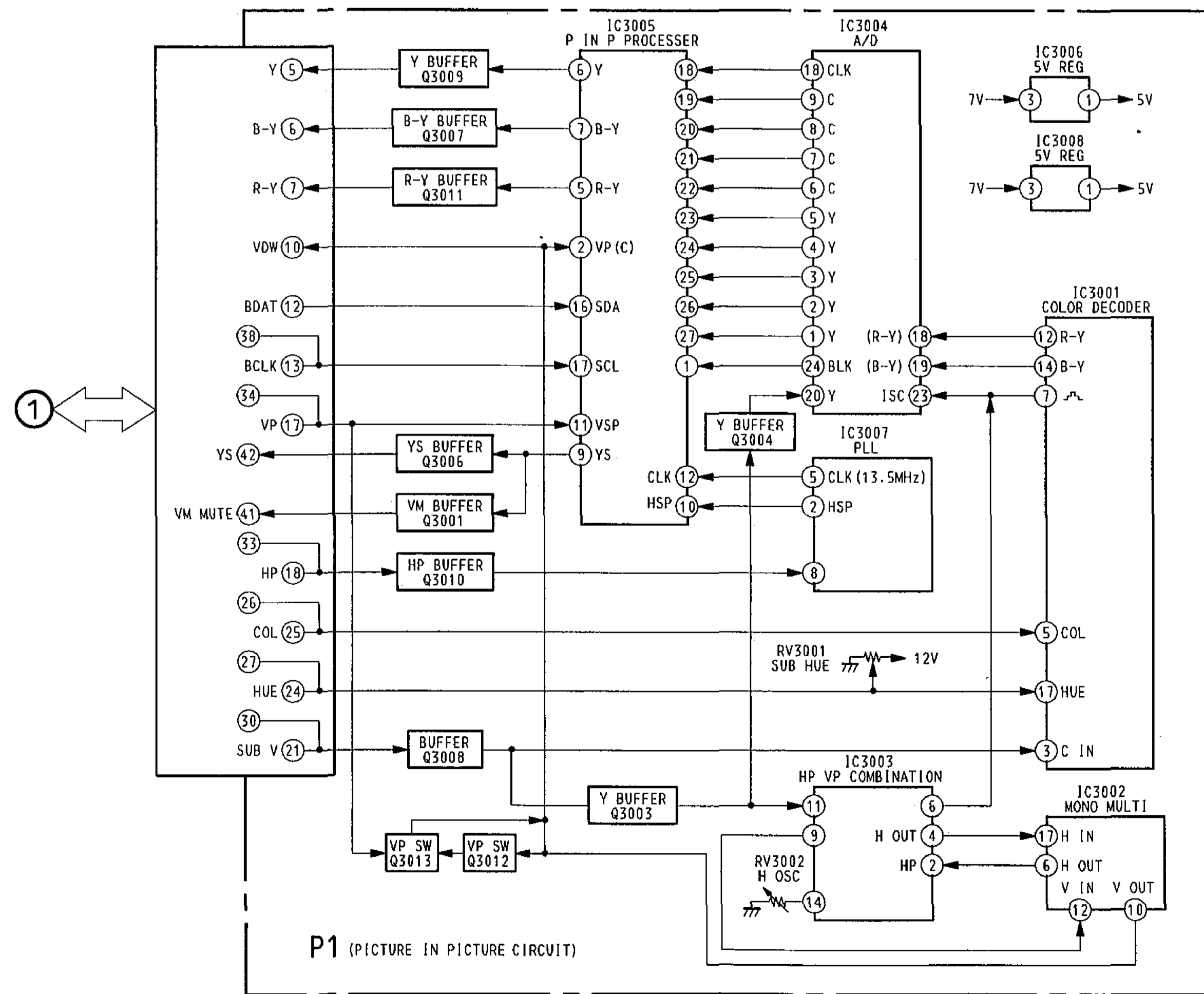
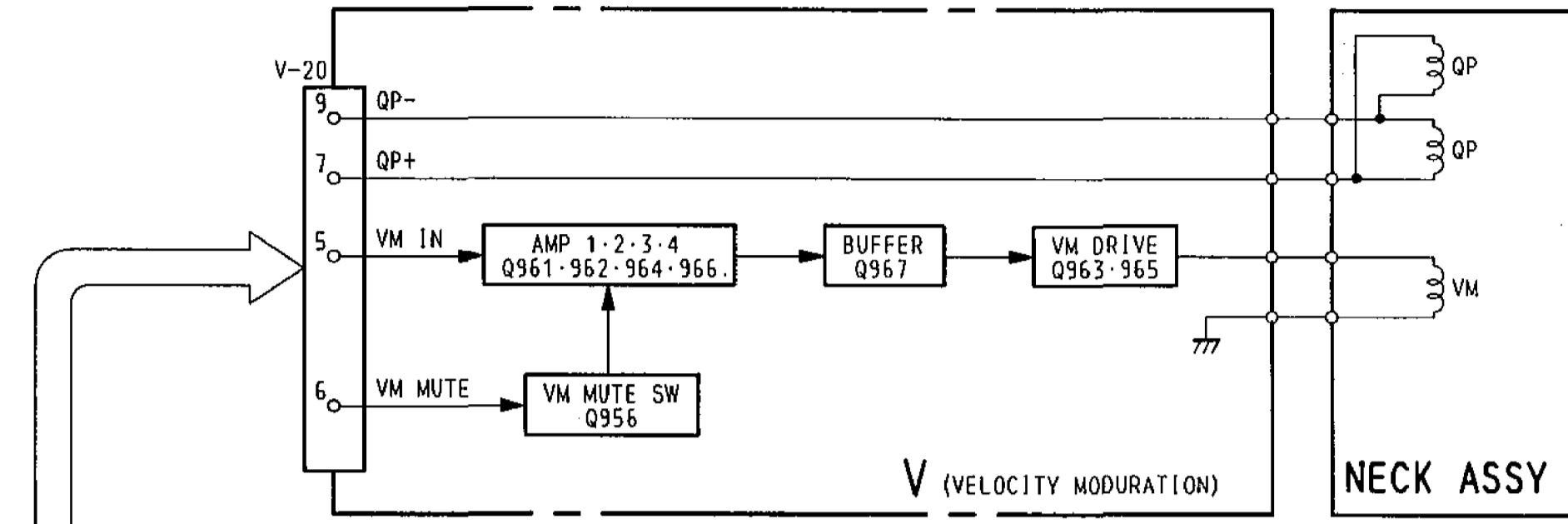
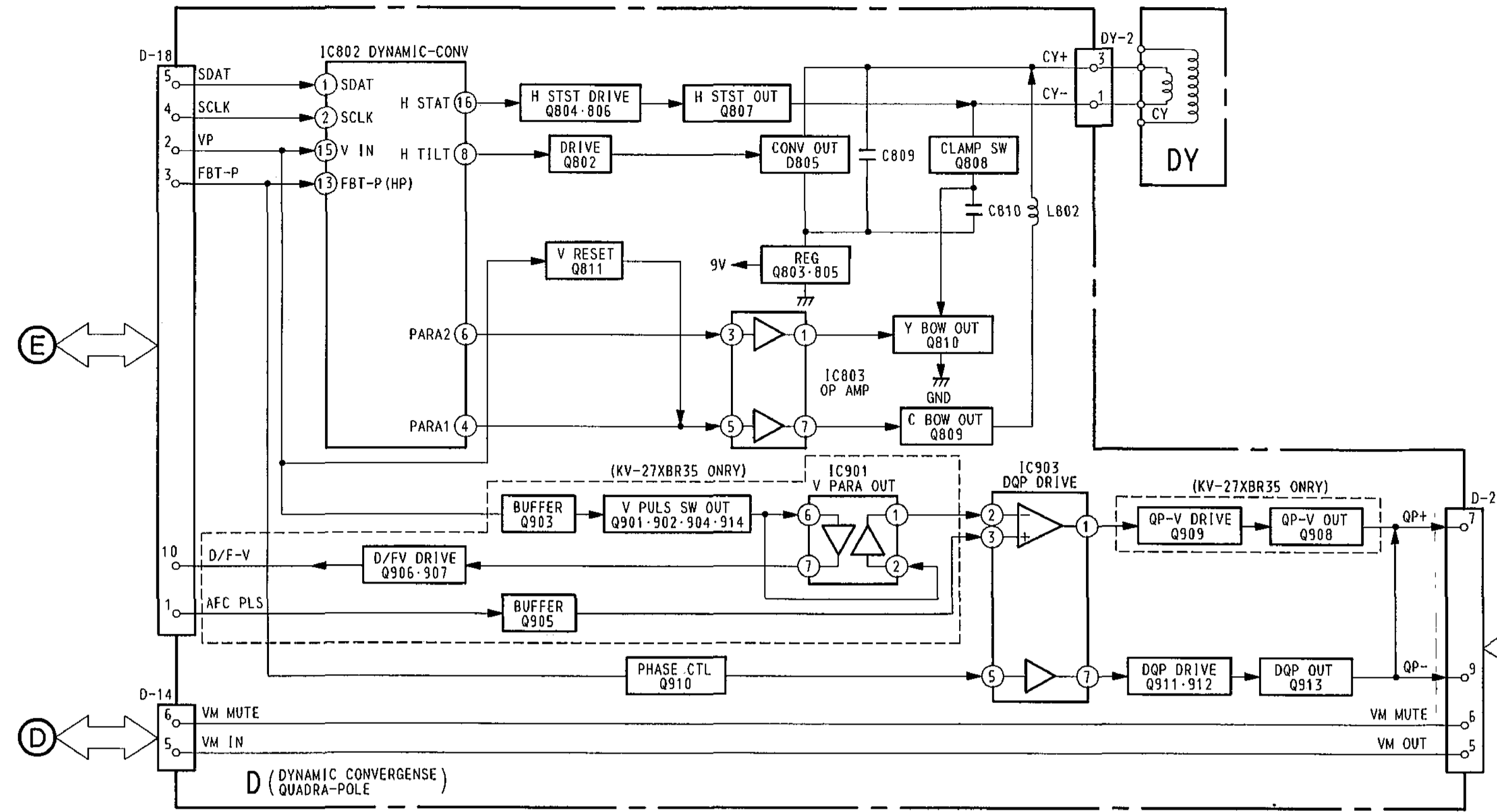
6-1. BLOCK DIAGRAMS (1)

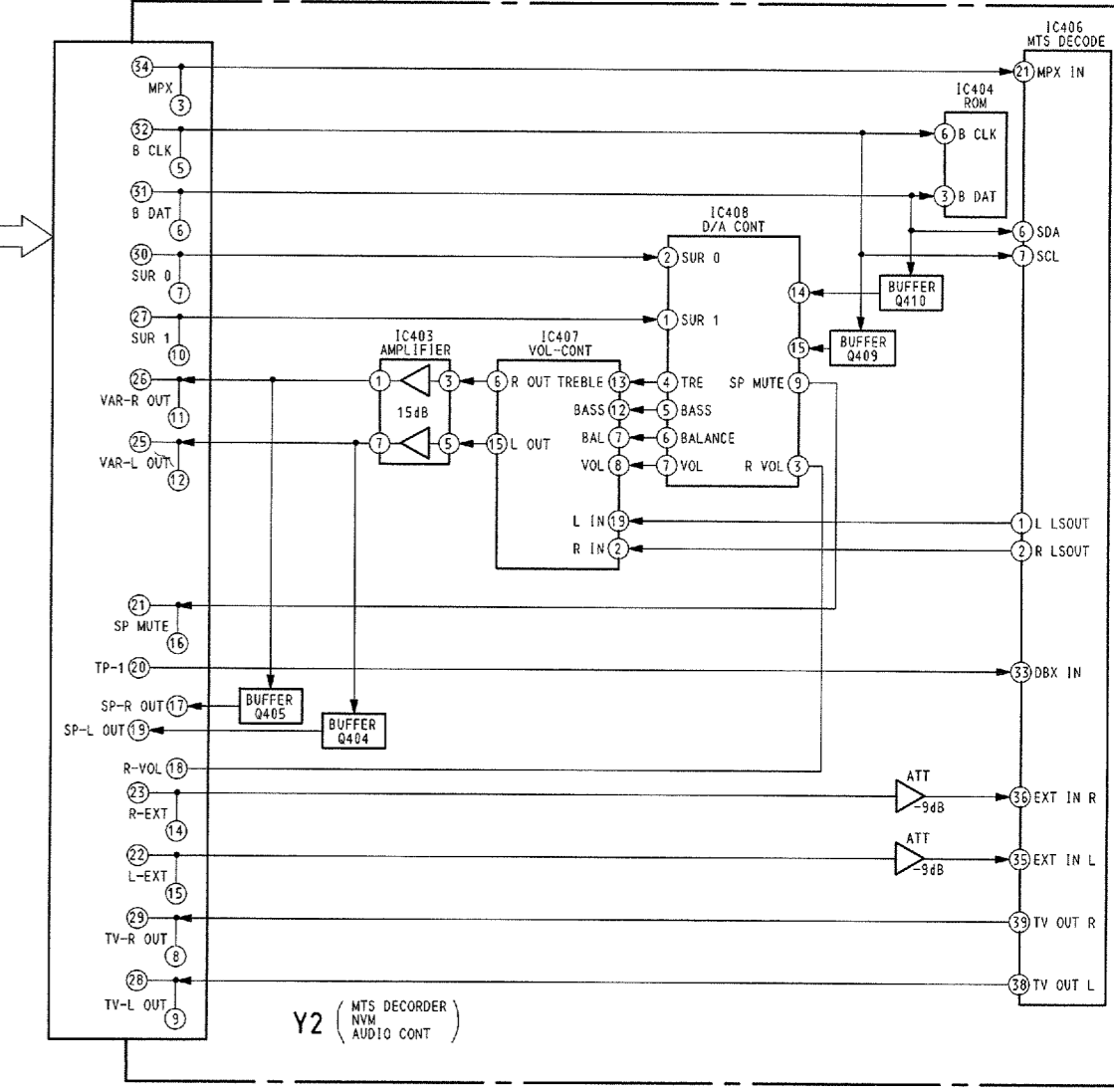
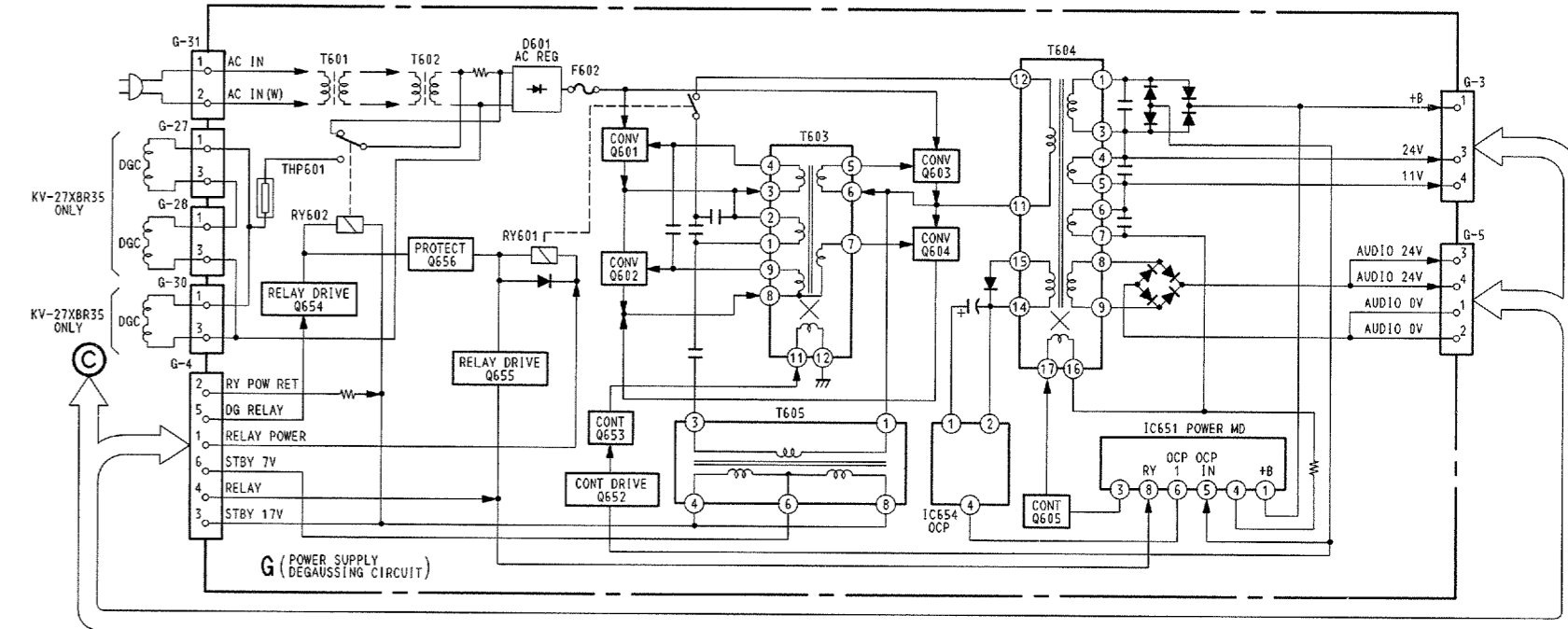
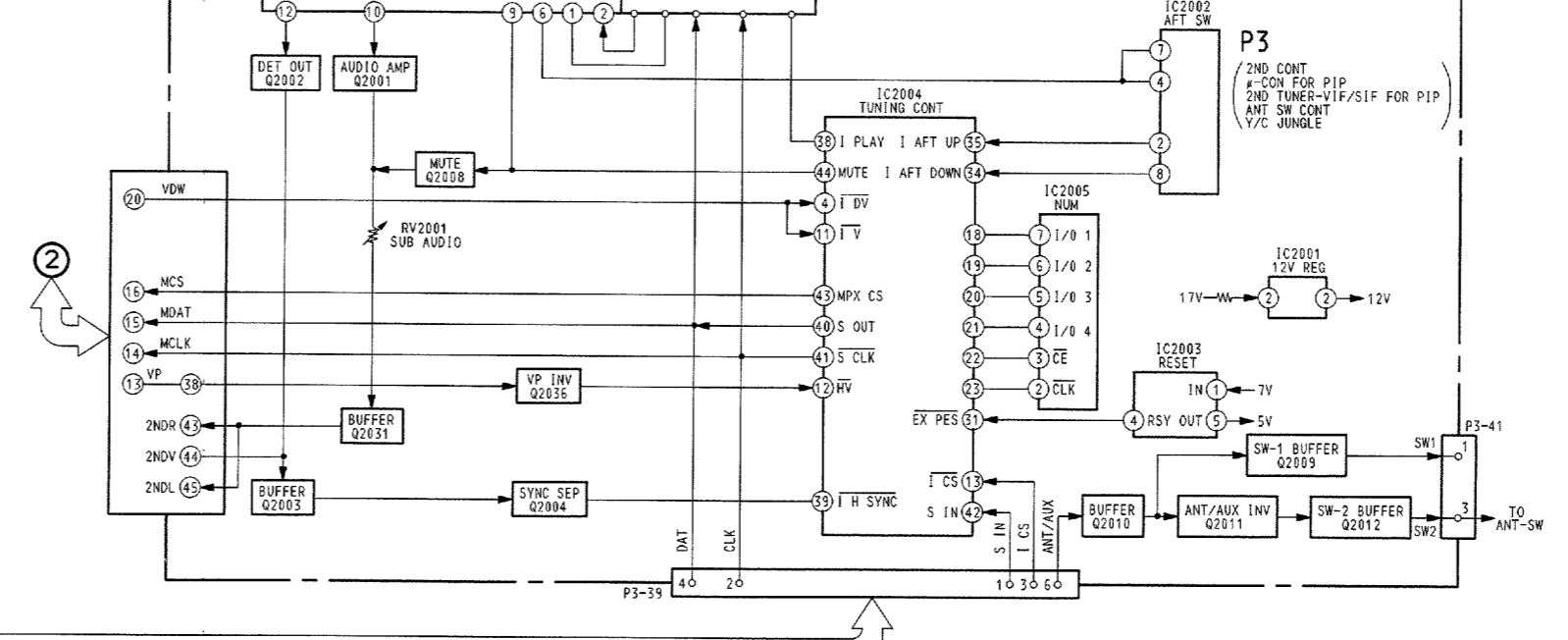
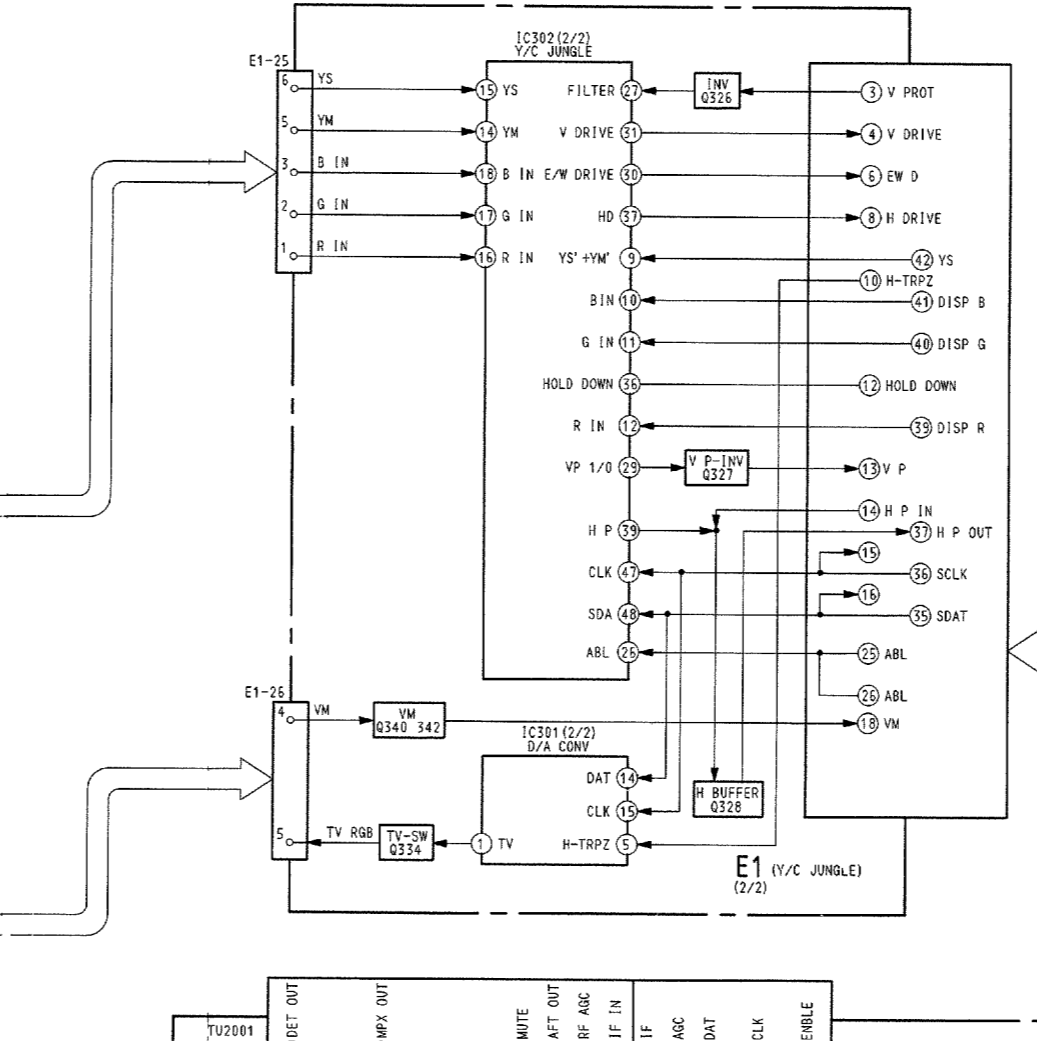
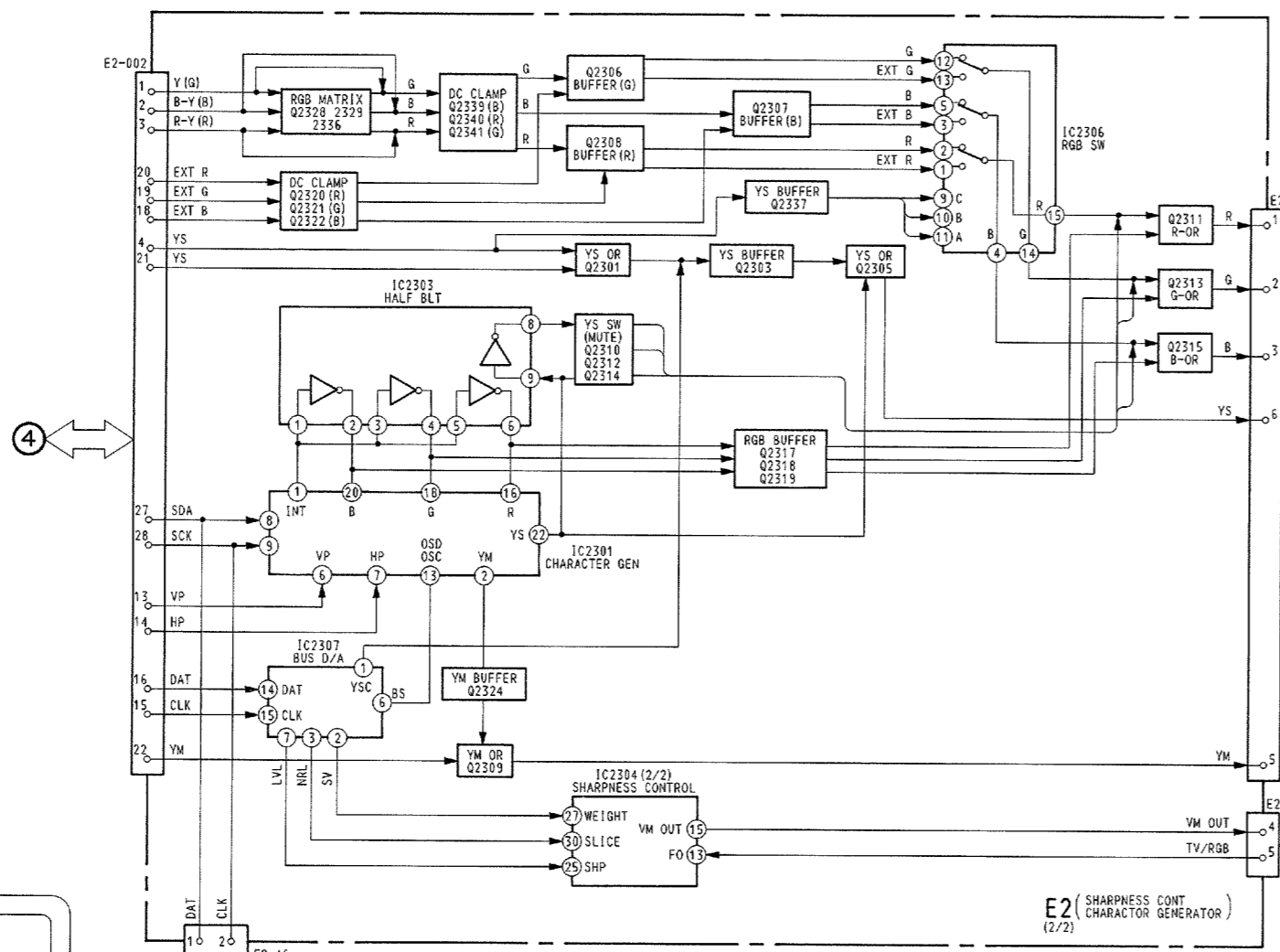
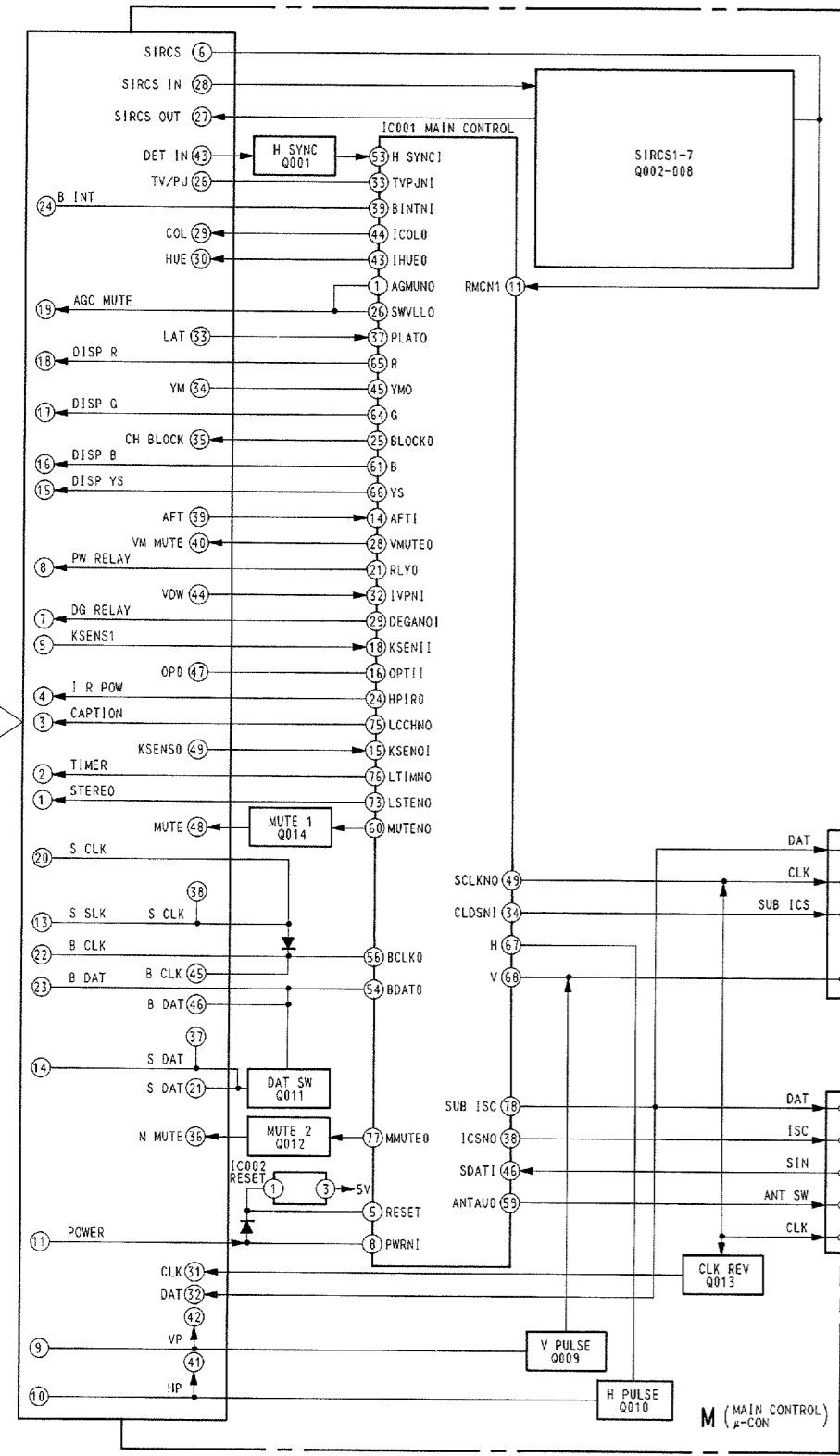


6-2. BLOCK DIAGRAMS (2)

KV-27XBR35/32XBR35
RM-Y113/TDR-IF310

KV-27XBR35/32XBR35
RM-Y113/TDR-IF310



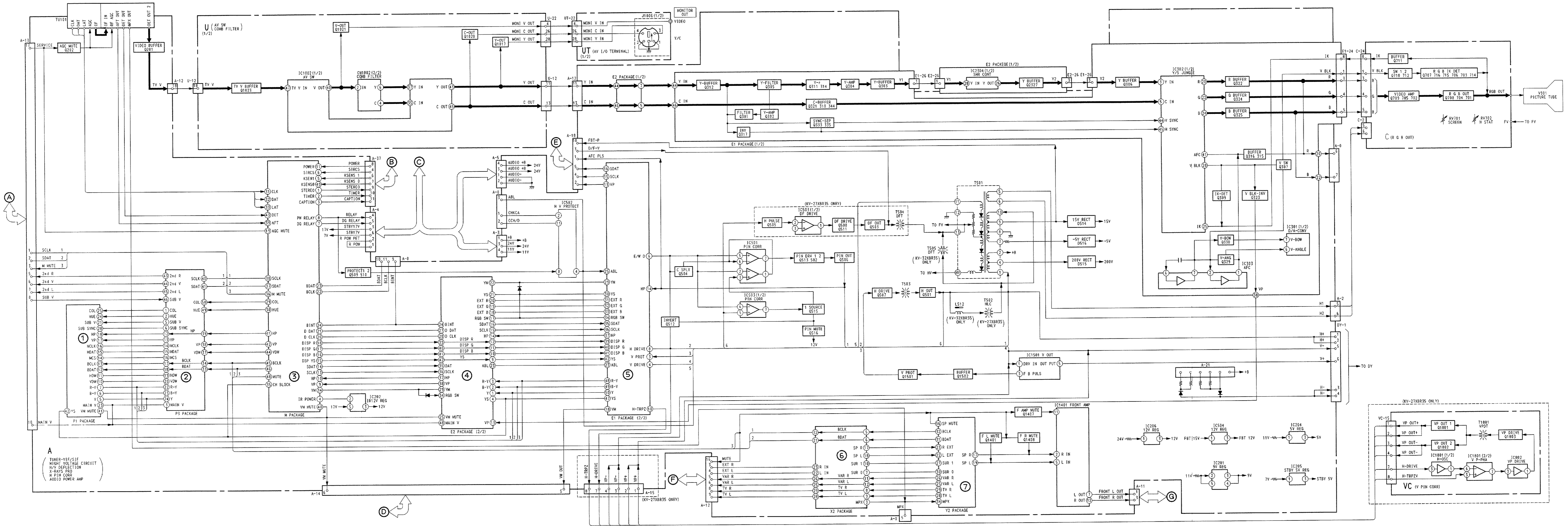


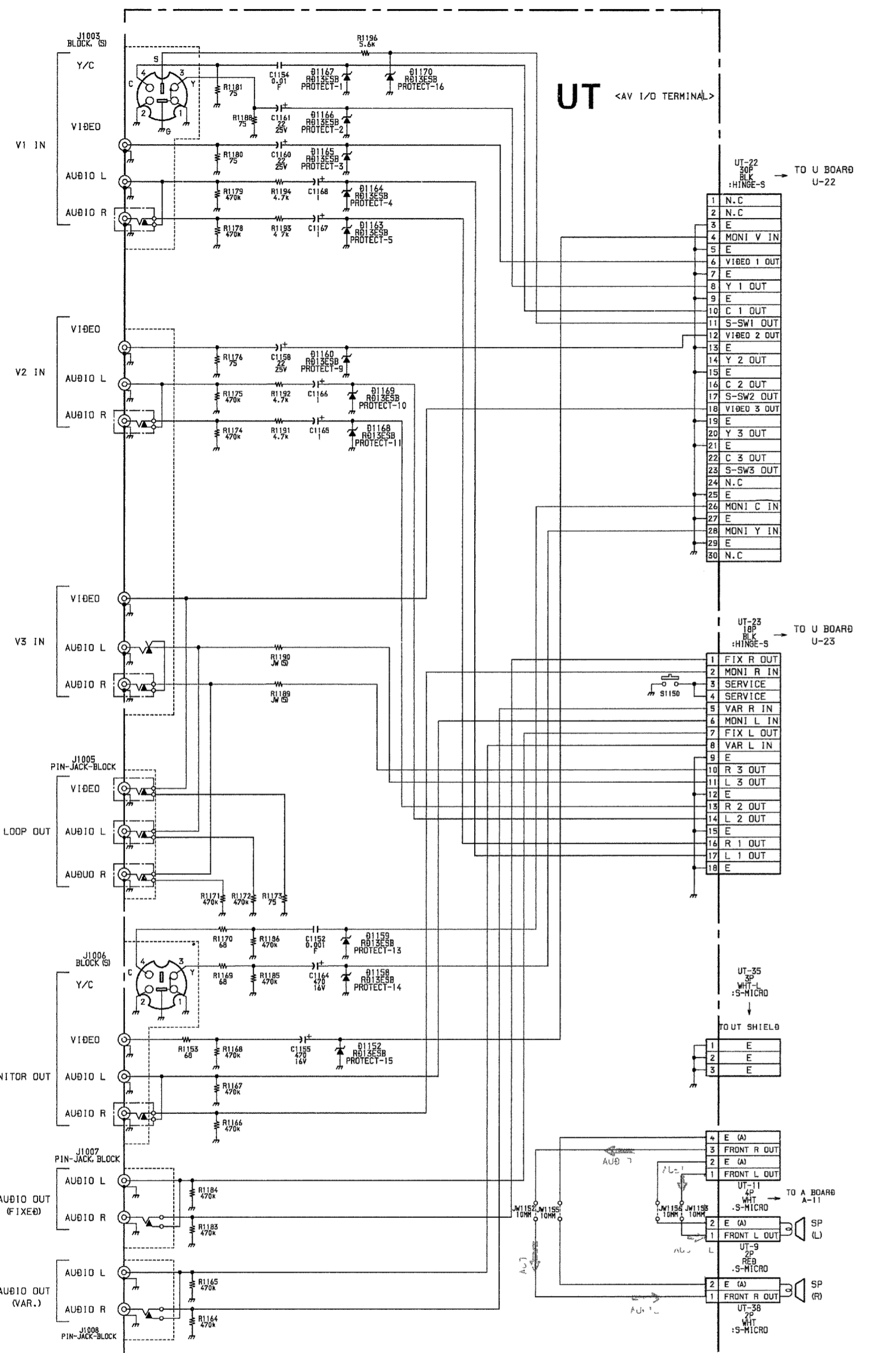
6-4. BLOCK DIAGRAMS (4)

KV-27XBR35/32XBR35
RM-Y113/TDR-IF310

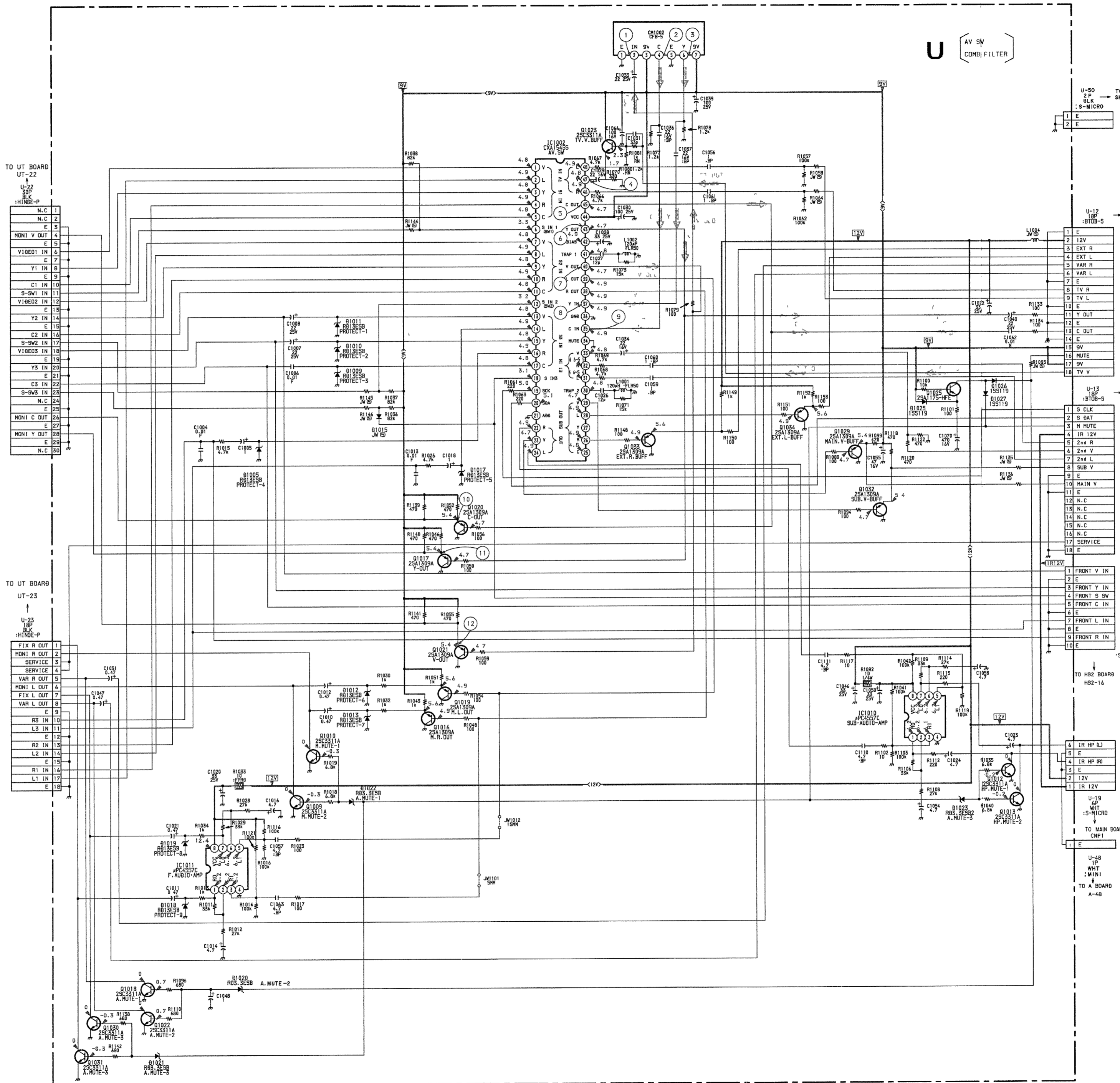
KV-27XBR35/32XBR35
RM-Y113/TDR-IF310

KV-27XBR35/32XBR35
RM-Y113/TDR-IF310

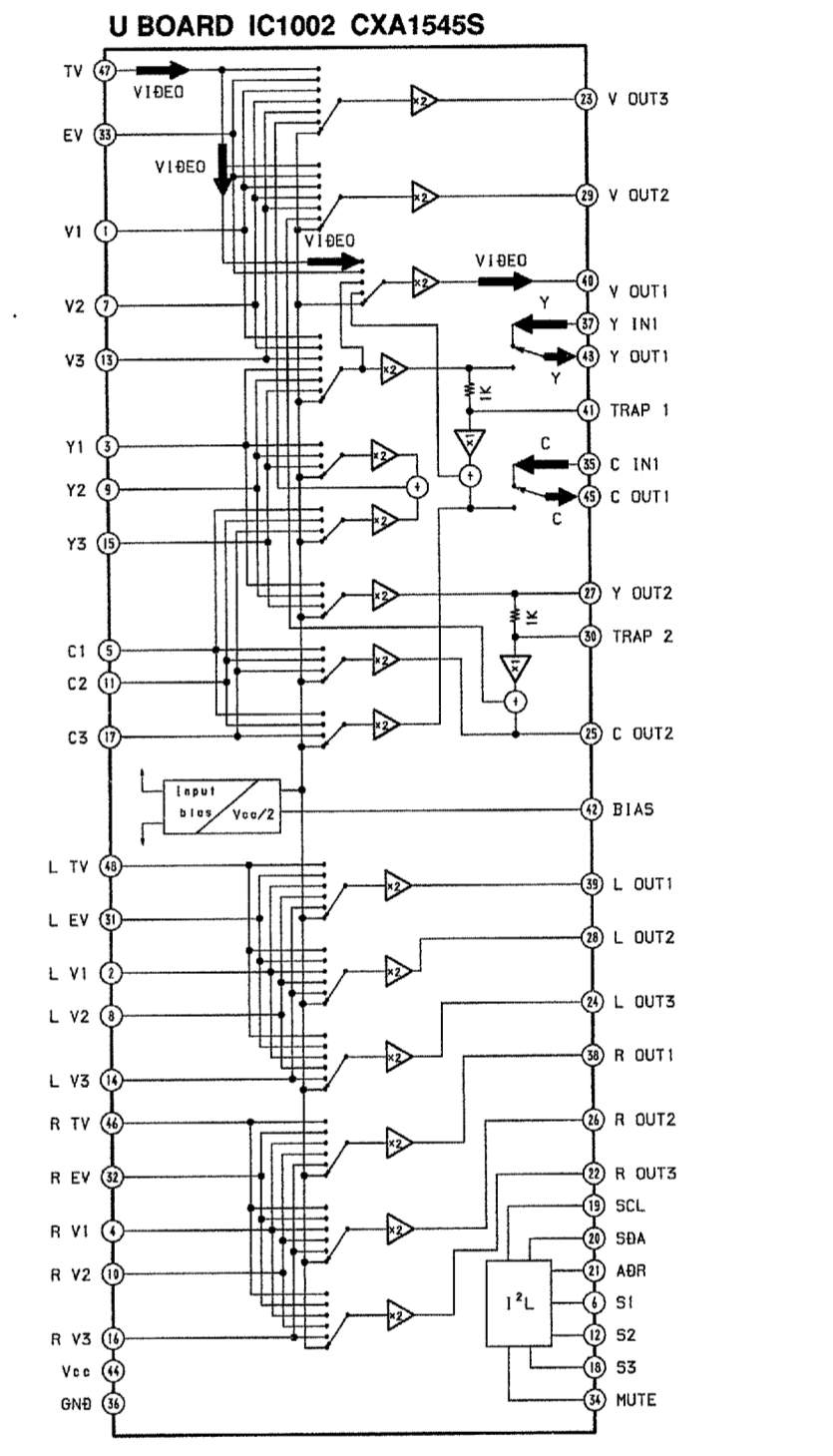




B-554017<U/C>-UT.



B-554017<U/C>-U..

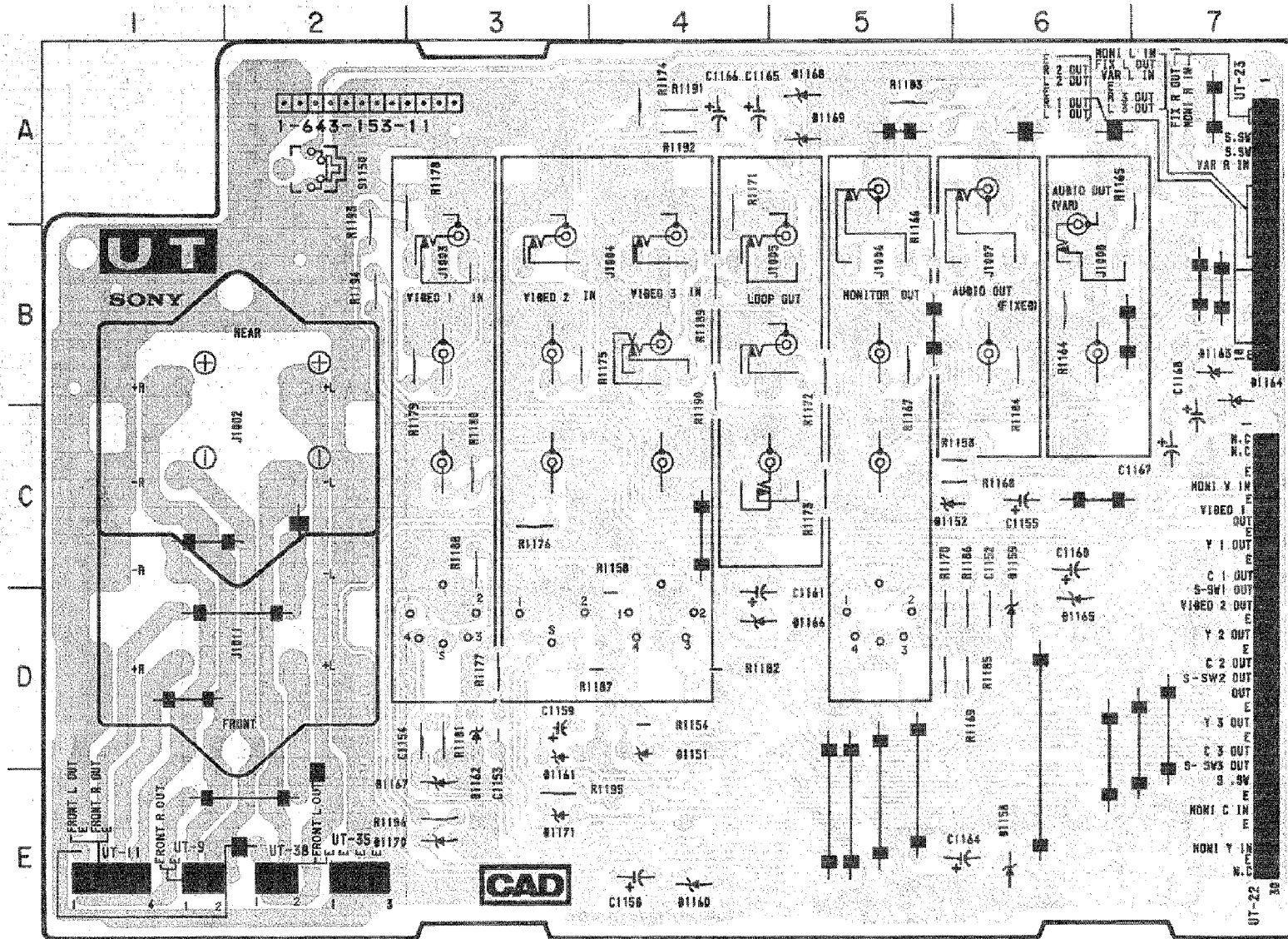


- U Board -

①	②	③
2.6 Vp-p (H)	2.2 Vp-p (H)	2.6 Vp-p (H)
④	⑤	⑥
2.2 Vp-p (H)	2 Vp-p (H)	2.2 Vp-p (H)
⑦	⑧	⑨
2.2 Vp-p (H)	2.2 Vp-p (H)	2 Vp-p (H)
⑩	⑪	⑫
2 Vp-p (H)	2 Vp-p (H)	2.2 Vp-p (H)

UT [AV I/O TERMINAL]

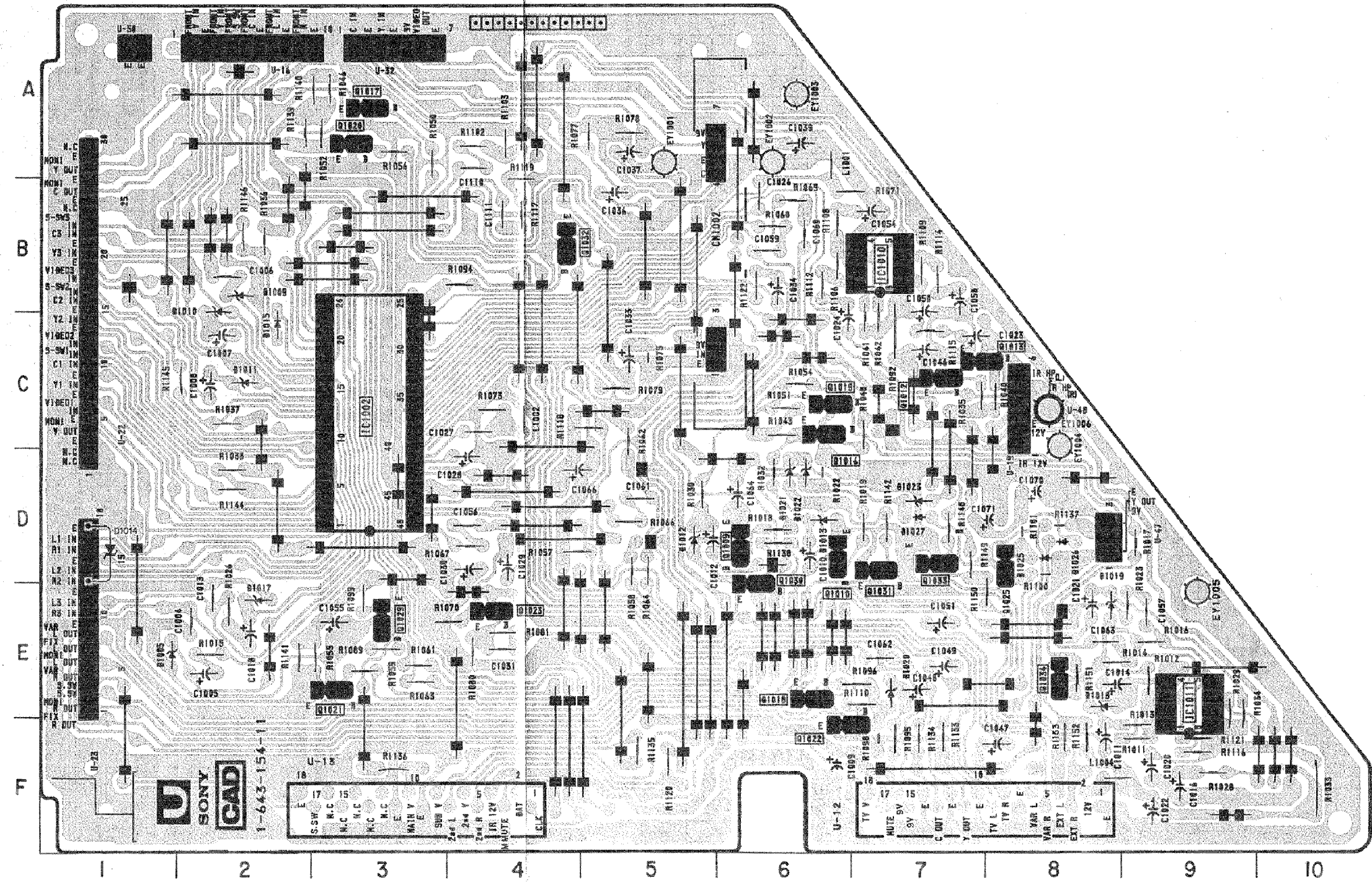
— UT Board —



U [AV SW COMB FILTER]

— U Board —

DIODE	
Ø1152	C-5
1158	E-6
1159	Ø-6
1160	E-4
1163	B-7
1164	B-7
1165	Ø-6
1166	Ø-4
1167	E-3
1168	A-5
1169	A-5
1170	E-3



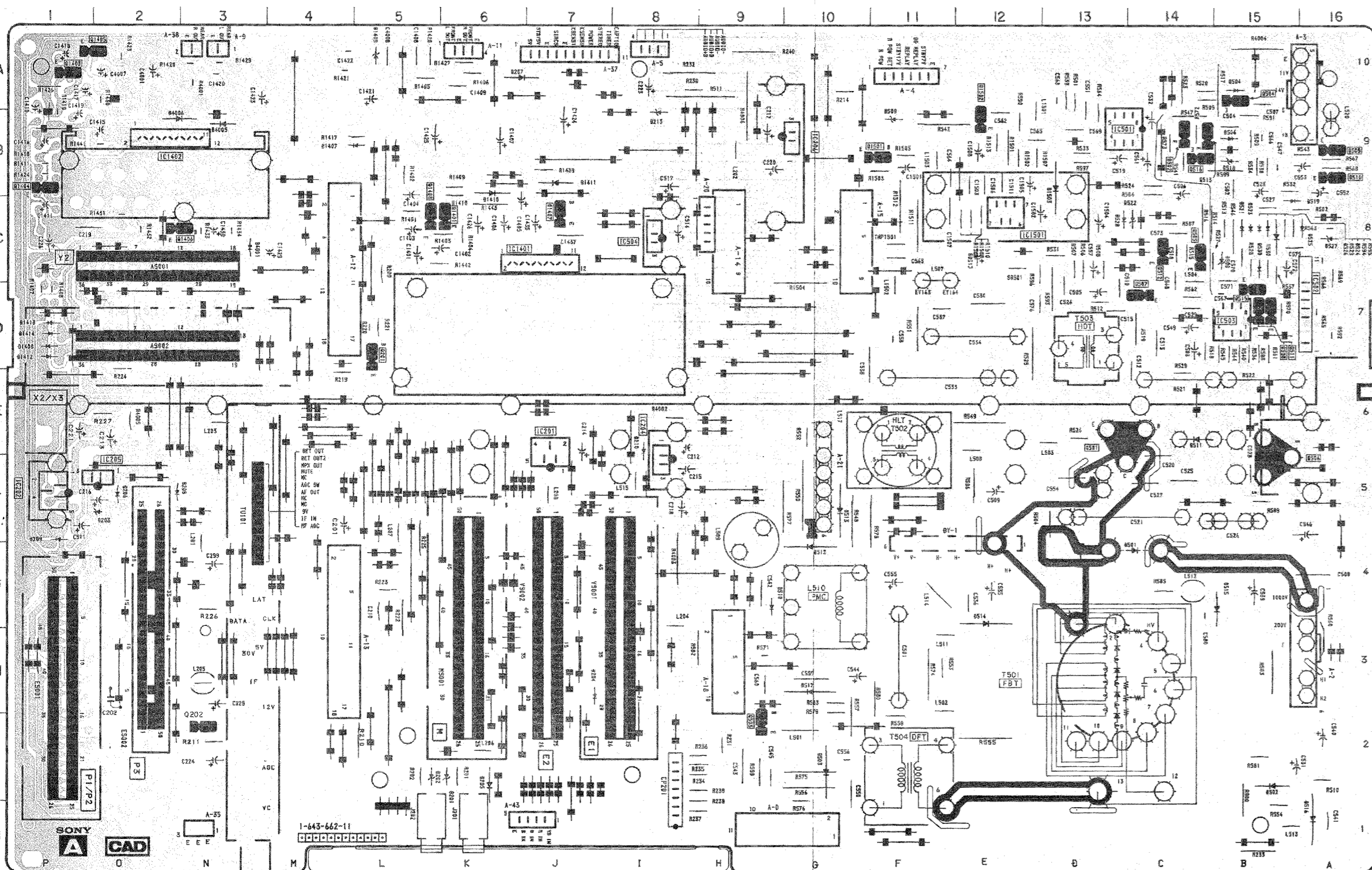
— U Board —

IC	
IC1002	c - 4
1010	G- S
1011	I- 2
TRANSISTOR	
Q1009	F- 3
1010	F- 3
1012	G- 4
1013	H- 4
1016	F- 4
1017	C- 6
1018	F- 2
1019	F- 4
1020	C- 6
1021	c- 2
1022	G- 1
1023	Ø- 2
1025	Q- 8
1029	c- 2
1030	F- 2
1031	G- 3
1032	D- 5
1033	G- 3
1034	H- Z
DIODE	
Ø1005	A- 2
1006	F- 8
1007	F- 7
1009	B- S
1010	B- 4
1011	B- 4
1012	E- 3
1013	F- 3
1014	Ø- 1
1017	B- 2
1018	H- 2
1019	H- 2
1020	G- 2
1021	F- 3
1022	F- 3
1023	G- 3
1025	Ø- 8
1026	Ø- 8
1027	Ø- 7

TUNER-VIF/SIF
HIGH VOLTAGE CIRCUIT
H/V DEFLECTION
X-RAYS PROT
H.PIN CORR
AUDIO POWER AMP

A

— A Board — (KV-27XBR35)

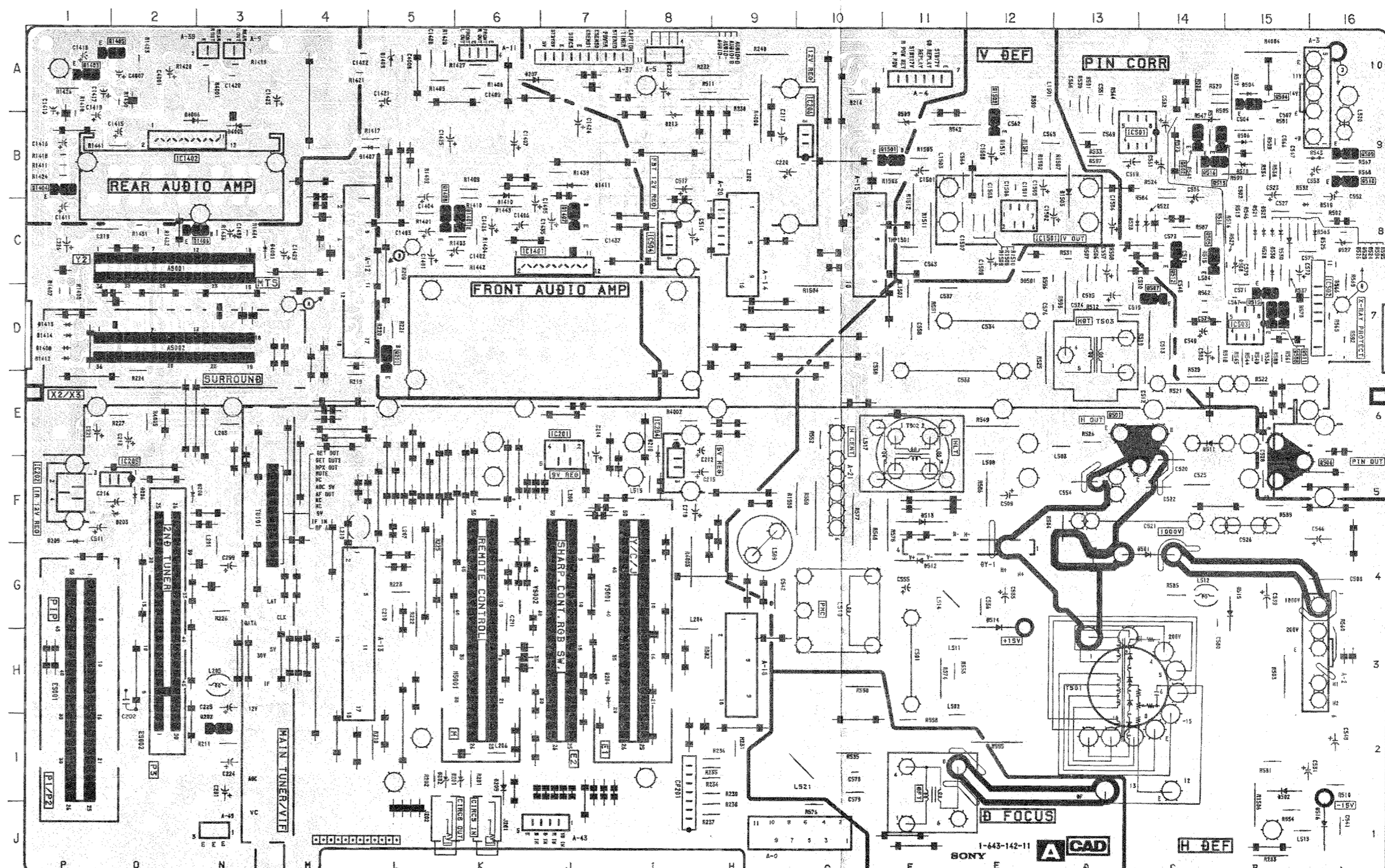


— A Board —

IC	510	G-9
IC201	E-7	E-14
202	F-1	G-10
204	F-8	F-10
205	F-2	G-12
206	B-10	G-15
501	B-13	J-16
502	Ø-16	H-10
503	Ø-15	B-15
504	C-8	C-15
1401	C-7	S22
1501	C-12	S24
Q201	Ø-5	S25
202	I-3	C-16
501	E-13	S29
502	B-14	C-15
503	I-9	530
504	A-15	1407
505	C-14	1408
506	E-15	1409
507	Ø-14	1410
508	Ø-15	1411
509	B-16	1412
510	B-16	1413
511	Ø-15	1414
512	C-14	1503
513	B-14	4001
515	Ø-15	
516	B-14	
1401	C-6	
1407	C-7	
1408	C-5	
1501	B-11	
1502	B-12	
DIODE		
Ø201	I-6	
202	I-5	
204	H-7	
205	I-6	
206	F-2	
207	A-6	
208	F-2	
209	F-1	
213	A-8	
501	G-14	
502	I-5	
503	I-10	
504	A-15	
506	B-15	
508	C-15	
Ø509	B-11	

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 — (KV-32XBR35)



— A Board —

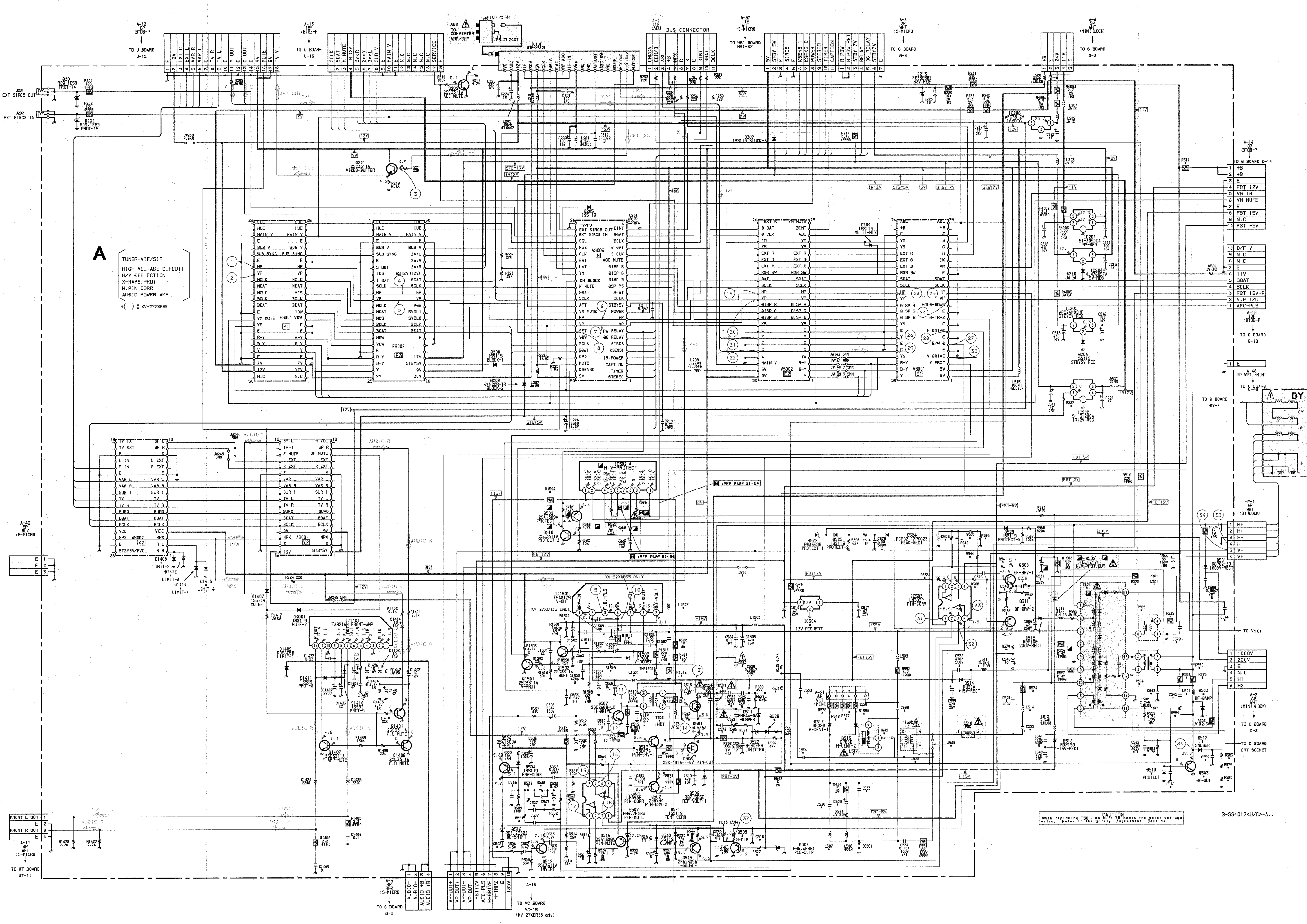
IC	516	J-16
IC201	E-7	B-15
202	F-1	S21
204	F-8	S22
205	F-2	S24
206	B-10	S25
501	B-13	S27
502	Ø-16	S28
503	Ø-15	S29
504	C-8	S30
1401	C-7	1407
1501	C-12	1409
Q201	Ø-5	1410
202	I-3	B-7
501	E-13	1503
502	B-14	4001
504	A-15	
506	F-15	
507	Ø-14	
509	B-16	
510	B-16	
512	C-14	
513	B-14	
515	Ø-15	
516	B-14	
1401	C-6	
1407	C-7	
1408	C-5	
1501	B-11	
1502	B-12	
DIODE		
Ø201	I-6	
202	I-5	
204	H-7	
205	I-6	
206	F-2	
207	A-6	
208	F-2	
209	F-1	
213	B-8	
501	G-14	
502	I-5	
504	A-15	
506	B-15	
508	C-15	
509	B-11	
511	E-14	
512	G-11	
Ø513	F-11	
514	G-12	
515	G-15	

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.

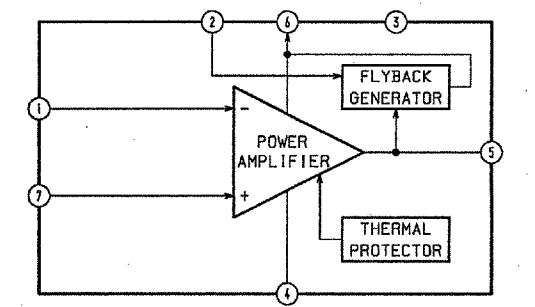
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

A BOARD * MARK NOTE
#: NOT MOUNTED

Part No.	Value	Part No.	Value
A18	10P	#	#
C502	0.001 1PP	0.0022 1PP	
503	10 50V	JW 50	
507	0.0015 1PT	#	
509	10 200V	4.7 250V	
518	0.047 1PPS	#	
A 520	0.001 2KV B	680P 2KV B	
A 521	0.022 200V 1HP	0.023 2KV 1HP	
A 528	0.056 450V 1PP	0.048 450V 1PP	
529	0.047 1PPS	#	
530	0.55 1PPS	#	
533	1.2 200V 1PPS	2 200V 1HP	
534	0.68 200V 1PPS	1 200V 1PT	
538	0.1 200V 1PT	0.15 200V 1PT	
543	0.0047 450V 1PP	#	
544	0.47 160V	#	
545	220P 500V	#	
548	470P 500V	#	
550	0.001 650V 1PP	#	
553	10 50V	#	
559	10 250V	#	
569	0.022 650V 1PP	#	
560	0.22 1PPS	#	
569	0.15 1PT	0.15 1PPS	
574	0.0035 200V 1PT	#	
579	#	0.01 200V 1PT	
579	#	0.047 200V 1PT	
1507	0.12 100V 1PT	0.15 100V 1PT	
1511	5P 1CM	#	
8503	ERA38-06	#	
510	185119	#	
517	ERA24-060	#	
528	JW 50	185119	
1408	152119	#	
1412	155119	#	
1413	185119	#	
1414	185119	#	
1C502	PH-30	PH-20	
2V39	17.50H	#	
40	#	3RH	
42	#	17.50H	
63	7.50H	#	
64	100H	#	
68	#	3RH	
0505	28C5840K	#	
505	28A1809A	#	
508	28C5514	JW 50 B-E	
511	28A1809A	#	
THP101	1-807-925-11	1-807-970-11	
1501	7.5K HLE.C	#	
504	10M HLE.OB	#	
507	68M	#	
511	1.5K	#	
A 517	#	HLC	
521	#	7.5K 1-459-148-15	
1501	35M HLE.OB	10M HLE.OB	
1502	JW 50	10M HLE.OB	
1503	35M HLE.OB	10M HLE.OB	
8501	15K	7.5K 1/4W 1RN	
502	18K	JW 50	
511	27 1/4W 1FPRB	22 1/4W 1FPRB	
516	1.5K	#	
518	47K	JW 50	
527	1K	#	
531	18K	#	
534	150K	150K	
535	#	22 1/4W 1FPRB	
536	10K	#	
538	150K	48K	
540	47K	#	
542	220 2W 1RS	470 2W 1RS	
543	350	JW 50	
544	100K	JW 50	
545	JW 50	#	
548	350 2W F 1RS	68 2W F 1RS	
550	47 3W F 1RS	68 3W F 1RS	
556	2.7K 2W F 1RS	#	
559	12K 1W F 1RS	#	
561	270	#	
562	7.5K 1/4W 1RN	#	
564	180K 1/4W 1RN	110K 1/4W 1RN	
570	56	#	
574	22 2W F 1RS	#	
575	2.7K 2W F 1RS	#	
577	150 2W F 1RS	#	
578	35 2W F 1RS	3W (15)	
579	100K	#	
580	100K	#	
583	100K	#	
584	56K 1/4W 1RN	82K 1/4W 1RN	
588	680	JW 50	
591	220K	#	
596	18K	#	
598	#	0.47 1/4W 1FPRB	
1502	3.3K 1/4W 1RN	4.2K 1/4W 1RN	
1504	JW (15)	#	
1509	27K 1/4W 1RN	47K 1/4W 1RN	
1512	1.2W F 1RS	1.5 2W F 1RS	
1500	JW (15)	15 2W 1RS	
A 1501	NK-0000A2	NK-0000A3	
A 502	1H	#	
503	HBT 1-437-195-13	HBT 1-437-217-11	
504	BFT	#	
505	#	BFT 1-413-059-11	

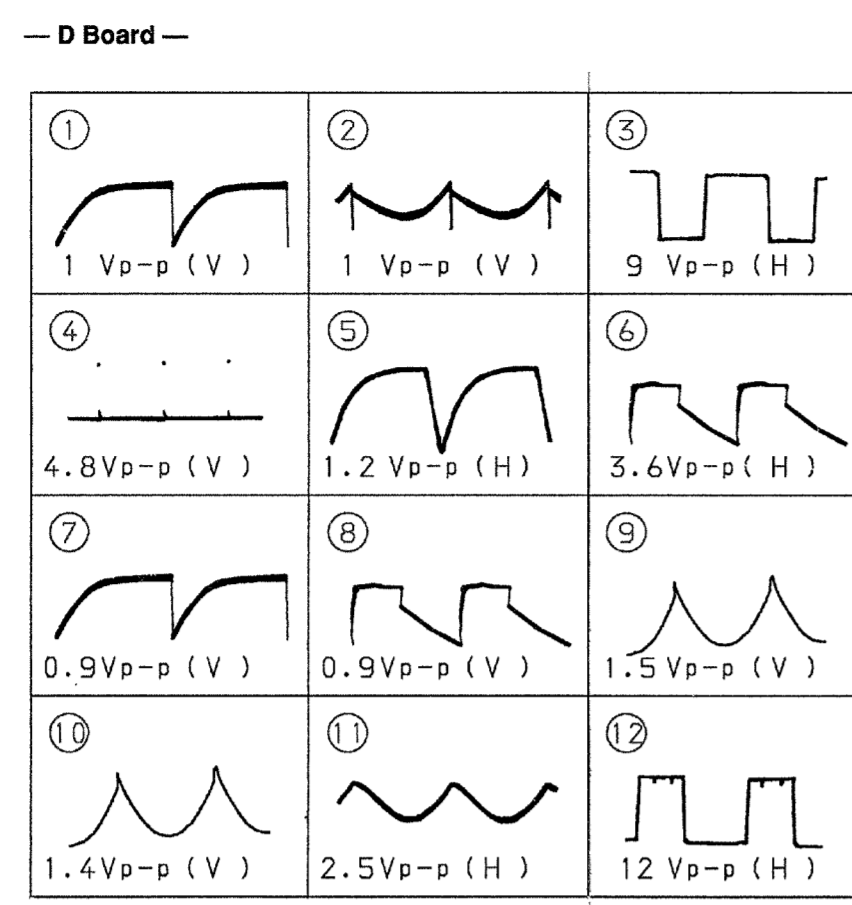
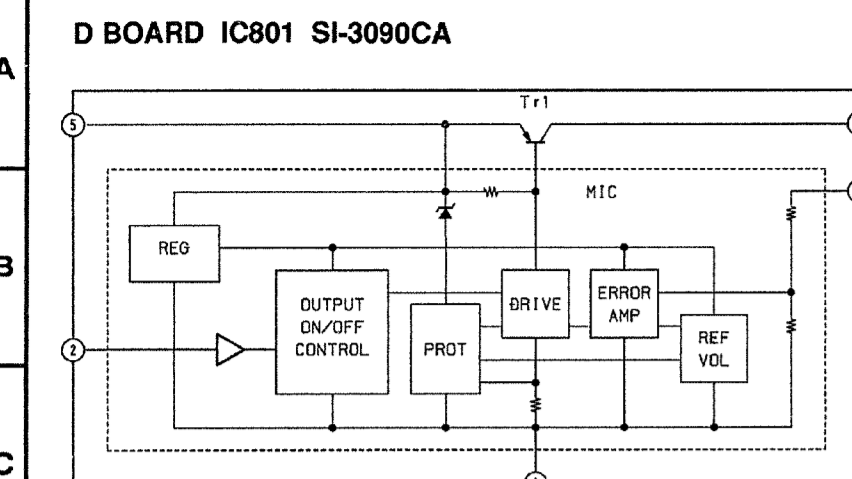


A BOARD IC1501 TDA8179



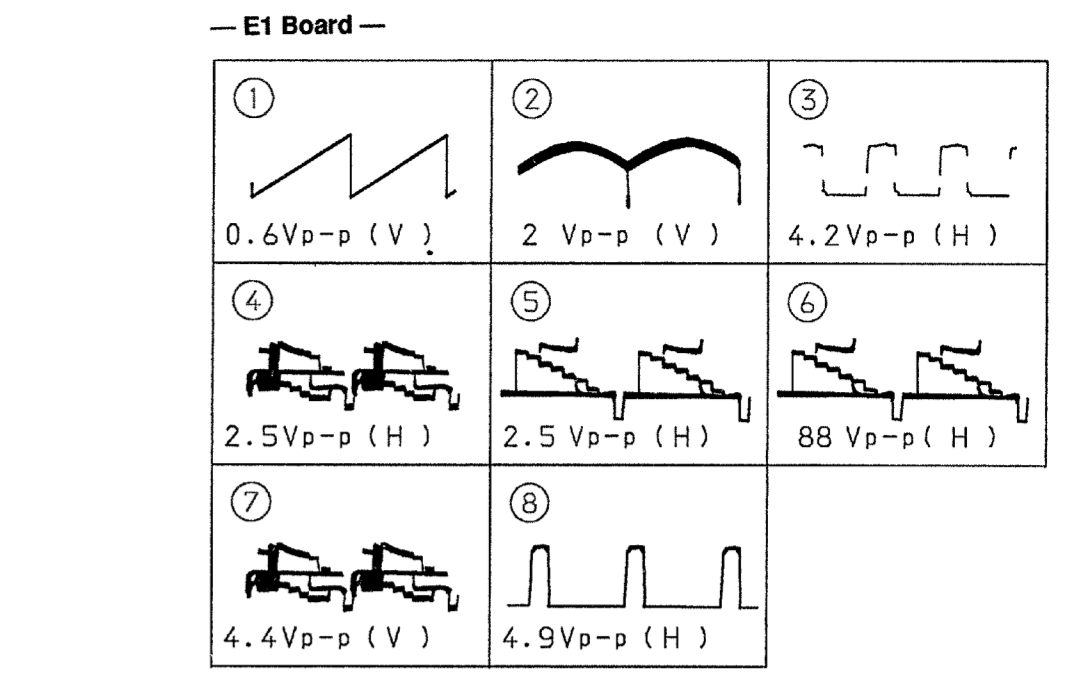
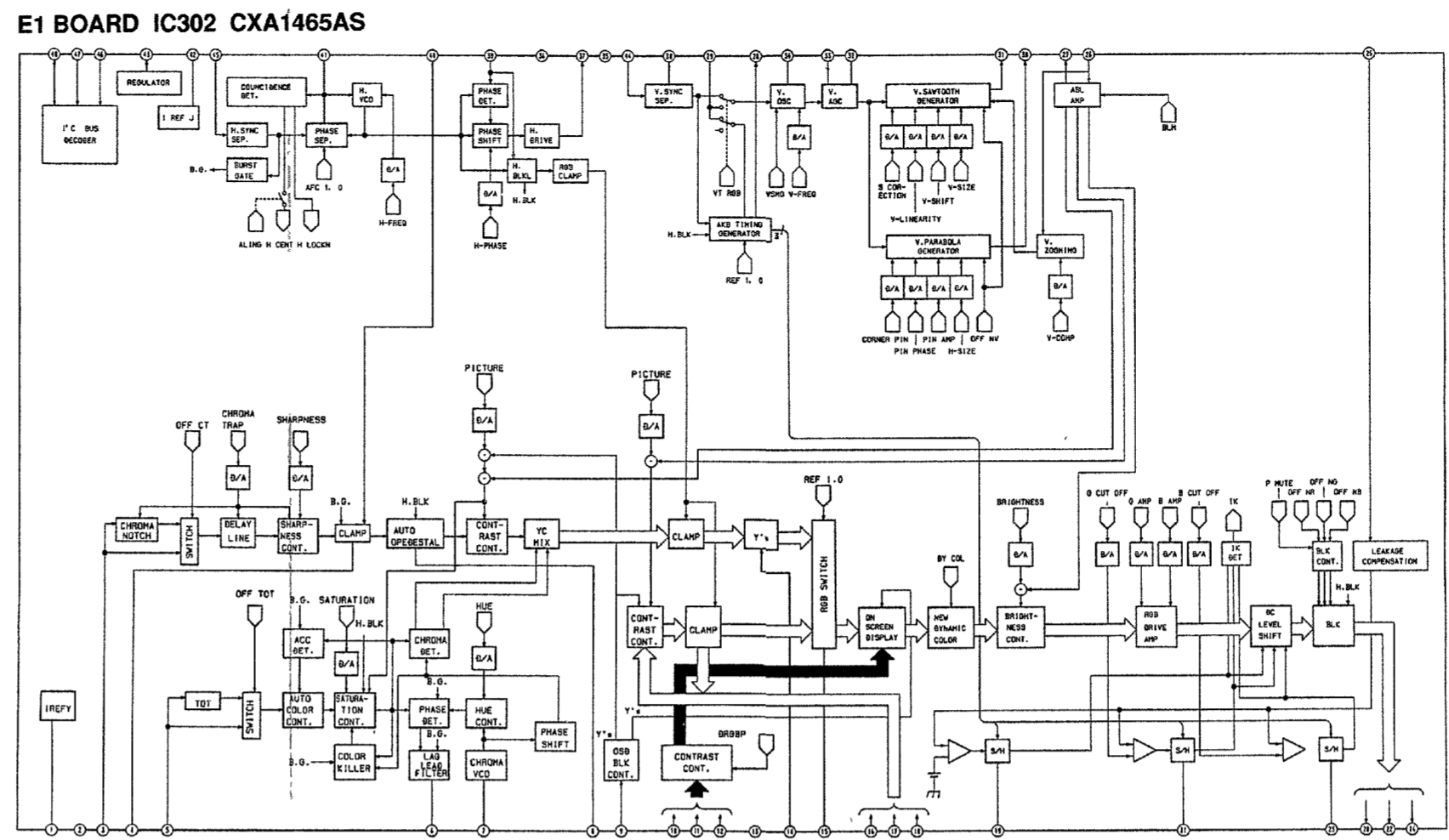
- A Board -

①	②	③
5 Vp-p (H)	4 Vp-p (V)	2.4 Vp-p (H)
④	⑤	⑥
5 Vp-p (H)	4.2 Vp-p (V)	5 Vp-p (H)
⑦	⑧	⑨
4.2 Vp-p (V)	2.4 Vp-p (H)	30.1 Vp-p (V)
⑩	⑪	⑫
60 Vp-p (V)	160 Vp-p (H)	3.5 Vp-p (H)
⑬	⑭	⑮
1000 p-p (H)	150 Vp-p (H)	20 Vp-p (H)
⑯	⑰	⑱
9 Vp-p (H)	9.6 Vp-p (H)	9 Vp-p (H)
⑲	⑳	㉑
5 Vp-p (H)	4.2 Vp-p (V)	2.4 Vp-p (H)
㉒	㉓	㉔
2.4 Vp-p (H)	4.9 Vp-p (H)	4.4 Vp-p (V)
㉕	㉖	㉗
88 Vp-p (H)	2.5 Vp-p (H)	2 Vp-p (V)
㉘	㉙	㉚
4.2 Vp-p (H)	2.5 Vp-p (H)	0.6 Vp-p (V)
㉛	㉜	㉝
10 Vp-p (H)	18 Vp-p (H)	6.4 Vp-p (H)
㉞	㉟	㊱
2.8 Vp-p (V)	150 Vp-p (H)	290 Vp-p (V)
㊲		
6 Vp-p (H)		



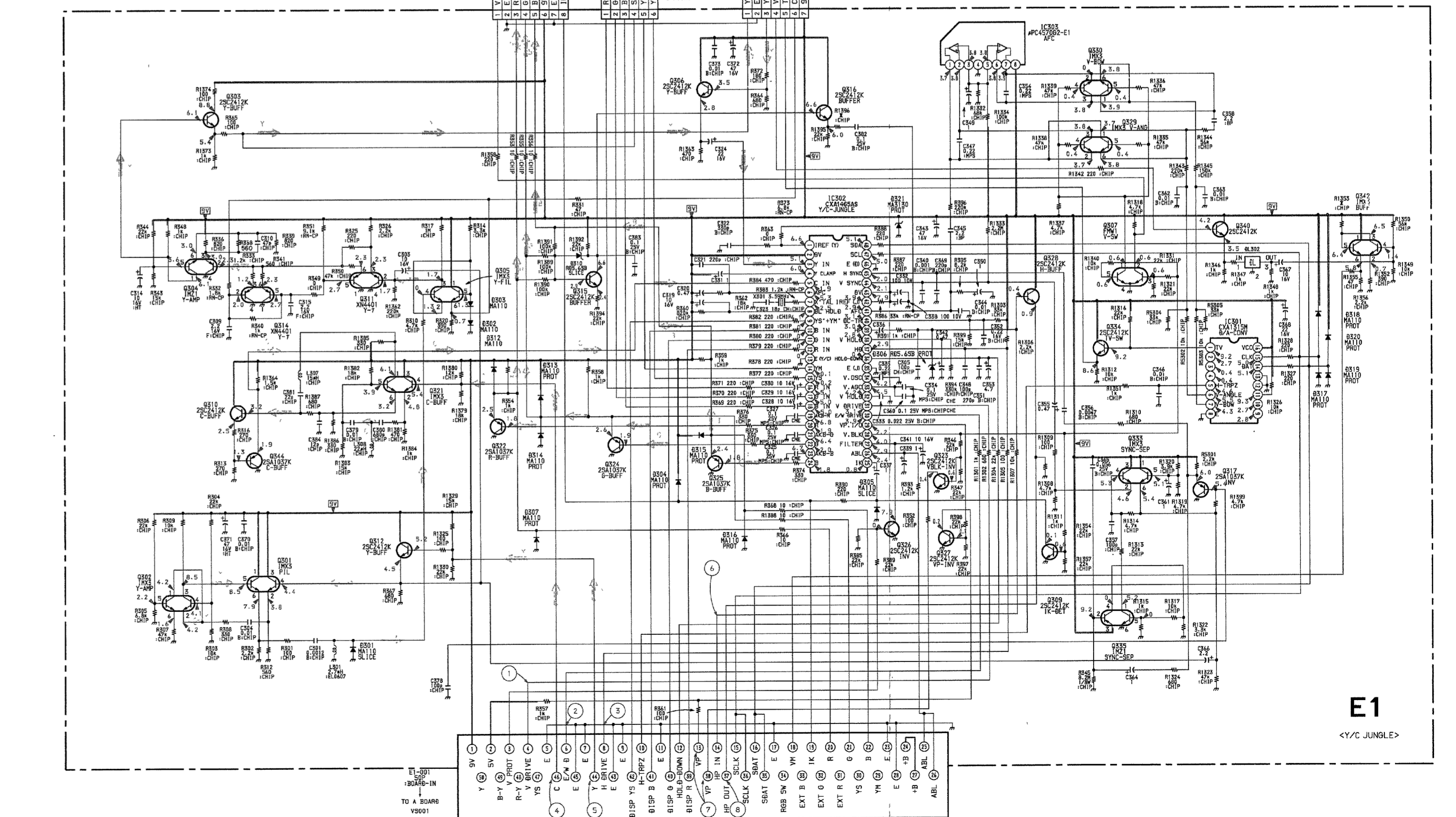
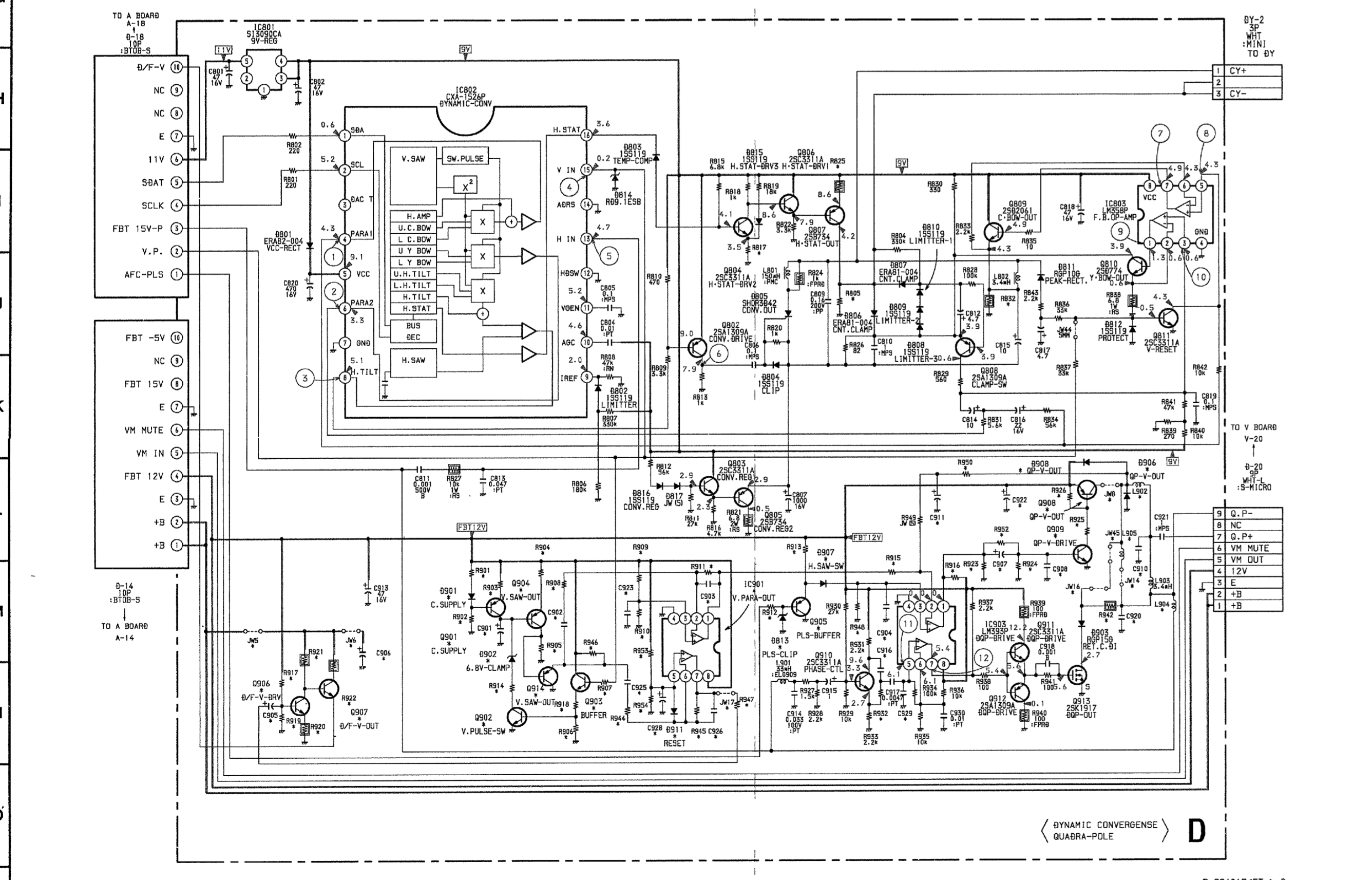
D BOARD * MARK NOTE #:NOT MOUNTED

	KV-27XBR35	KV-32XBR35	KV-27XBR35	KV-32XBR35			
C901	0.47	1MPS	#	R805 330	#		
902	10	50V	#	817	3.9K	#	
903	0.022	1MPS	#	825	47	1W F:RS	#
904	0.001	1MPS	#	832	#	150	2W F:RS
905	10	50V	#	901	4.7K	#	
906	10	160V	#	902	56K	#	
907	0.47	50V	#	903	10K	#	
908	5.0P	50V	#	904	10K	#	
910	0.24	200V	1PP	JW (IS)	905	10K	#
911	1000	25V	#	906	4.7K	#	
916	0.0047	1PT	0.001	1PT	907	10K	#
920	0.022	1PP	0.12	1PP	908	33K	#
922	1000	25V	#	909	22K	#	
923	0.001	1PT	#	910	33K	#	
925	10	50V	#	911	470K	#	
926	0.068	1MPS	#	912	10K	#	
928	10	50V	#	915	4.7K	#	
929	#	0.001	1PT	914	47	#	
				915	6.8K	#	
				916	2.2K	#	
				917	68K	#	
				918	470	#	
				919	10K	#	
				920	1.2K	1/4W F:PRD	#
				921	15K	1W 1:RS	#
				922	68	1W 1:RS	#
				923	10K	1W (IS)	#
				924	3.5K	#	
				944	22K	#	
				942	JW (IS)	1K	
JWS	15MH	#	944	22K	#	2W F:RS	
6	15MH	#	945	470K	#		
8	10MH	#	946	4.7K	#		
16	7.5MH	#	947	680	1/4W F:PRD	#	
17	10MH	#	948	68K	#	1W (IS)	
45	#	10MH	950	4.7K	#		
			952	100	#		
			953	270K	#		
			954	270K	#		
L902	7.5MH	#					
904	#	7.5MH					
905	#	PHC 150AH					
9201	25A1309A	#					
902	25C3311A	#					
903	25C3311A	#					
904	25A1309A	#					
905	25A1309A	#					
906	25C268B	#					
907	25C268B	#					
908	25B860	#					
909	25B774	#					
914	25A1309A	#					



E1 BOARD * MARK NOTE #:NOT MOUNTED

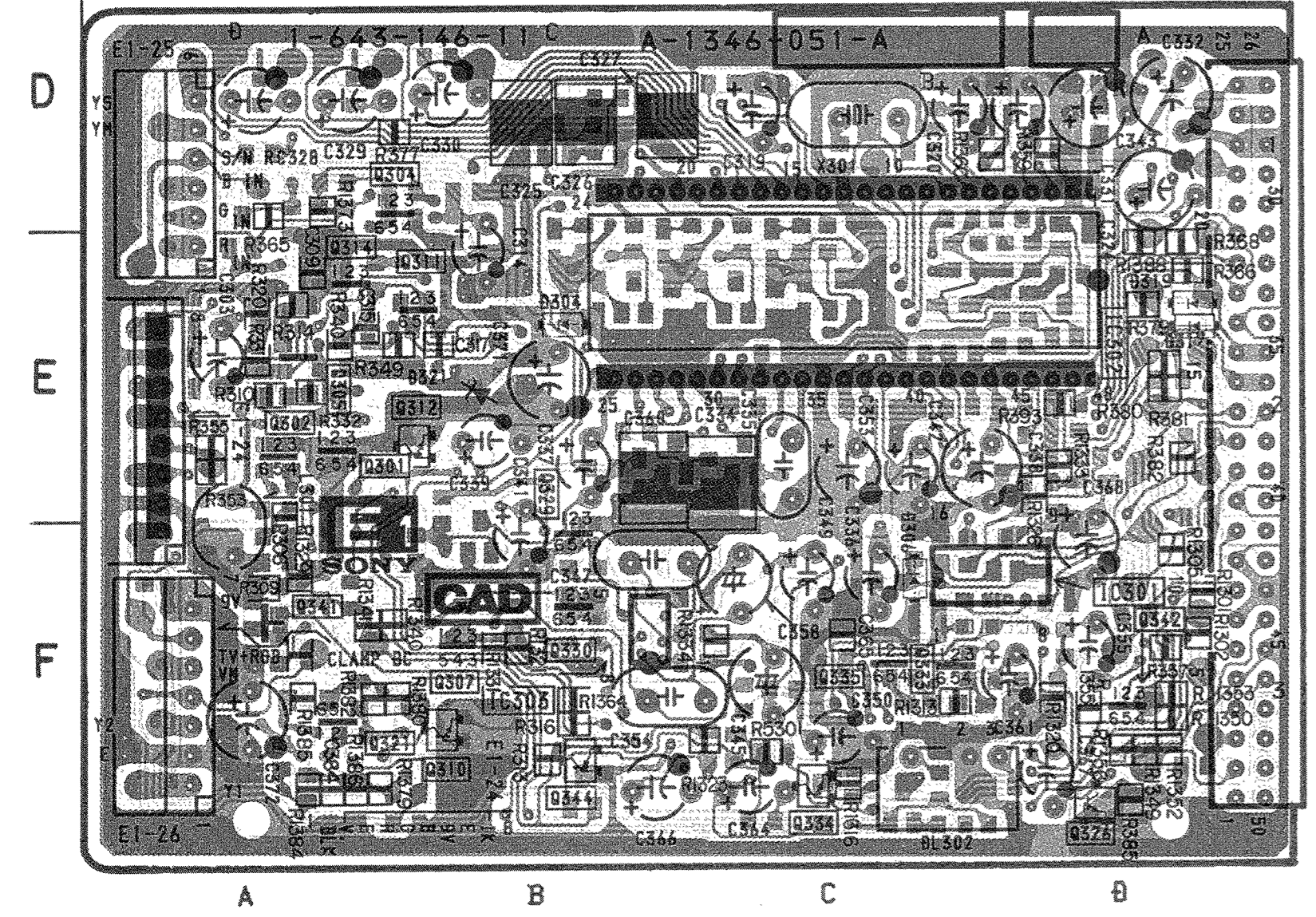
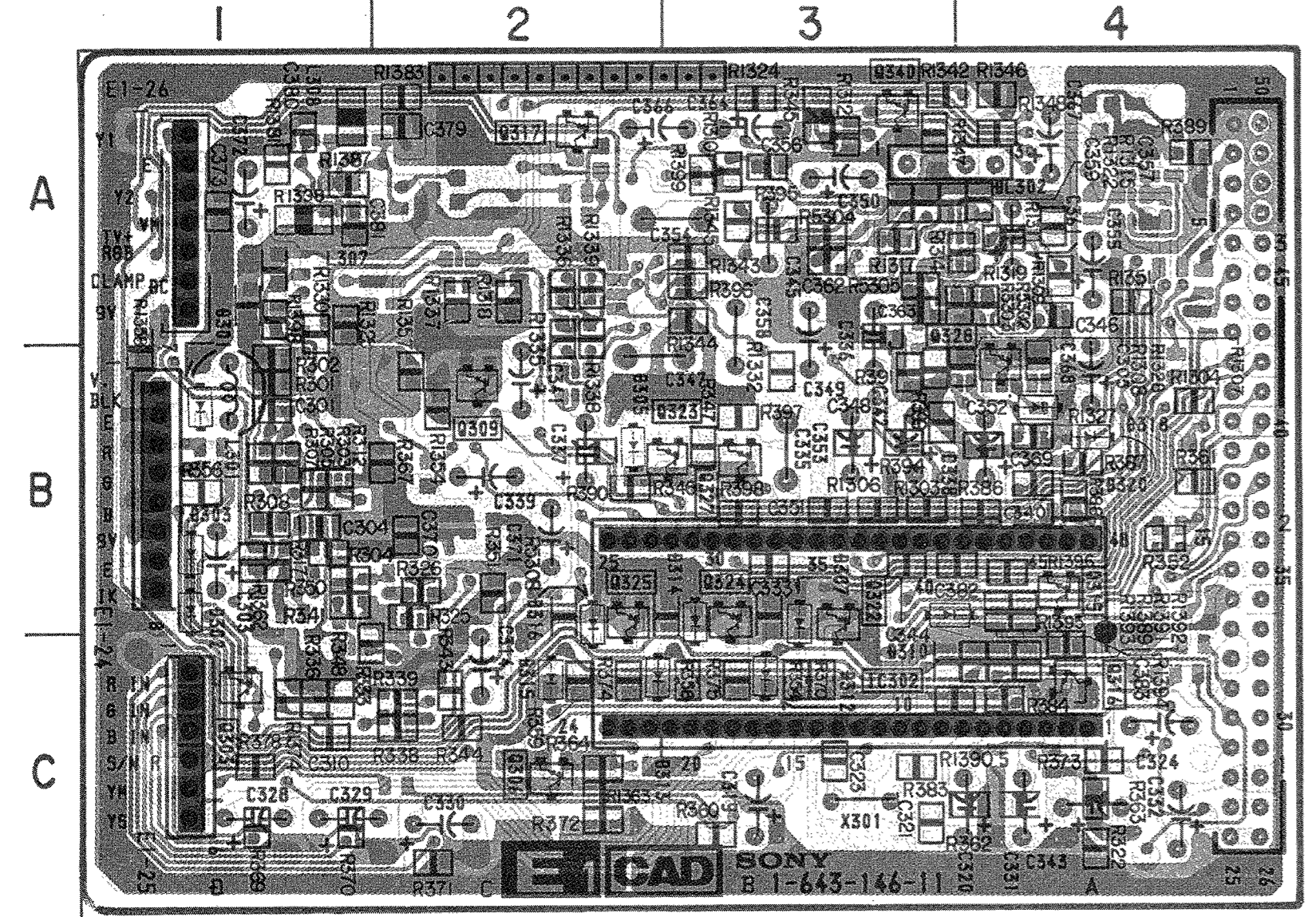
	KV-27XBR35	KV-32XBR35
C306	82P	50V
R1353	910	1/10W :CHIP
R1396	1M	1/10W :CHIP
	100P	50V
	1.5K	1/10W :CHIP
	1.5M	1/10W :CHIP



E1 [Y/C JUNGLE]

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

— E1 Board —



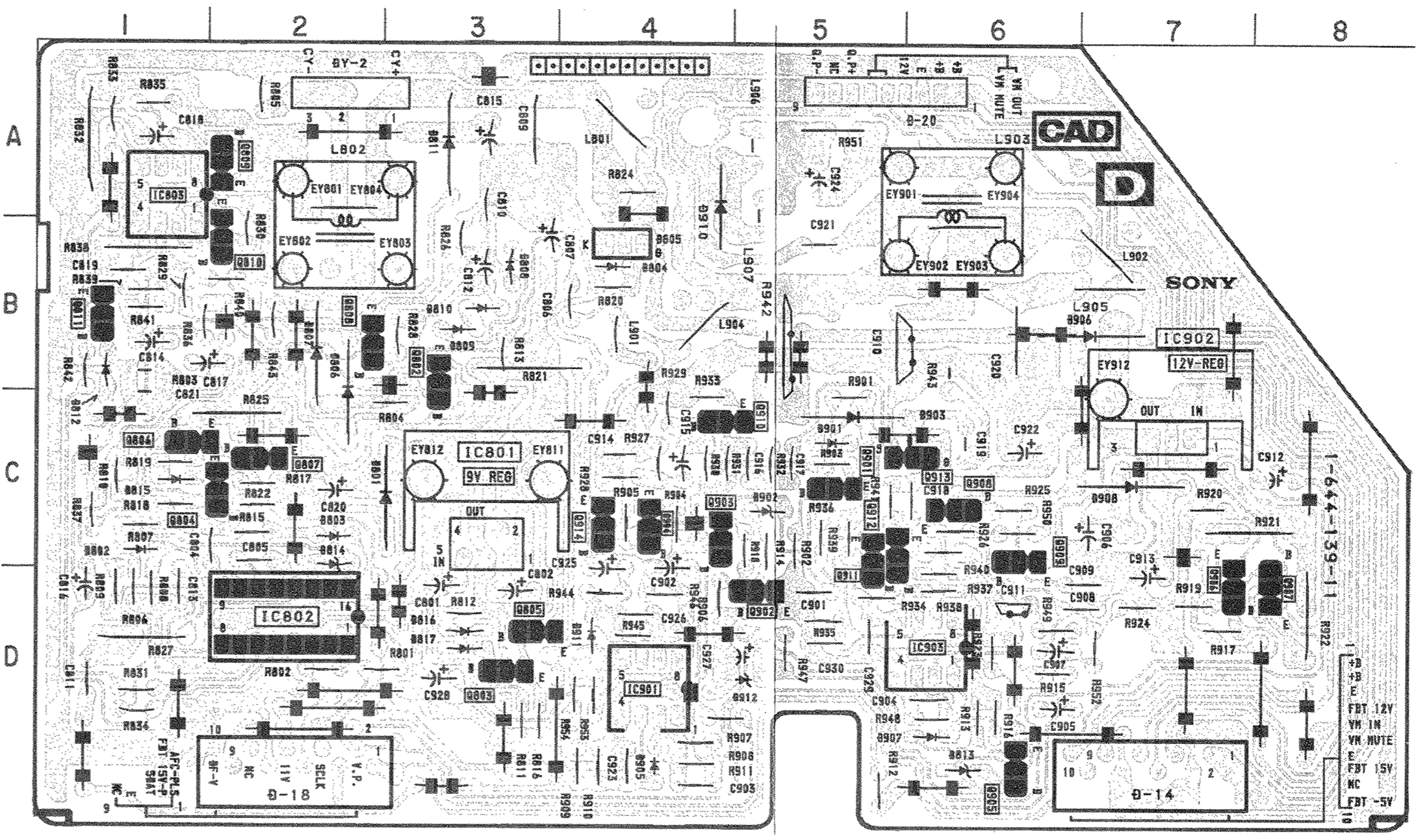
— E1 Board —

IC		D319	E-4
IC301	F-4	320	B-4
302	B-3	321	E-2
303	F-2		
TRANSISTOR			
Q301	E-2		
302	E-1		
303	C-1		
304	D-2		
305	E-1		
306	C-2		
307	F-2		
309	B-2		
310	F-2		
311	E-2		
312	E-2		
314	E-1		
315	B-4		
316	C-4		
317	A-2		
321	F-1		
322	B-3		
323	B-3		
324	B-3		
325	B-2		
326	F-4		
327	B-3		
328	B-4		
329	F-2		
330	F-2		
333	F-4		
334	F-3		
335	F-3		
340	A-3		
342	F-4		
344	F-2		
DIODE			
D301	B-1		
302	B-1		
303	B-1		
304	E-2		
305	B-2		
306	F-3		
307	B-3		
310	B-3		
312	C-3		
313	C-2		
314	B-3		
315	C-2		
316	B-2		
317	E-4		
318	B-4		

D [DYNAMIC CONVERGENSE, QUADRA-POLE]

[DYNAMIC CONVERGENSE, QUADRA-POLE]

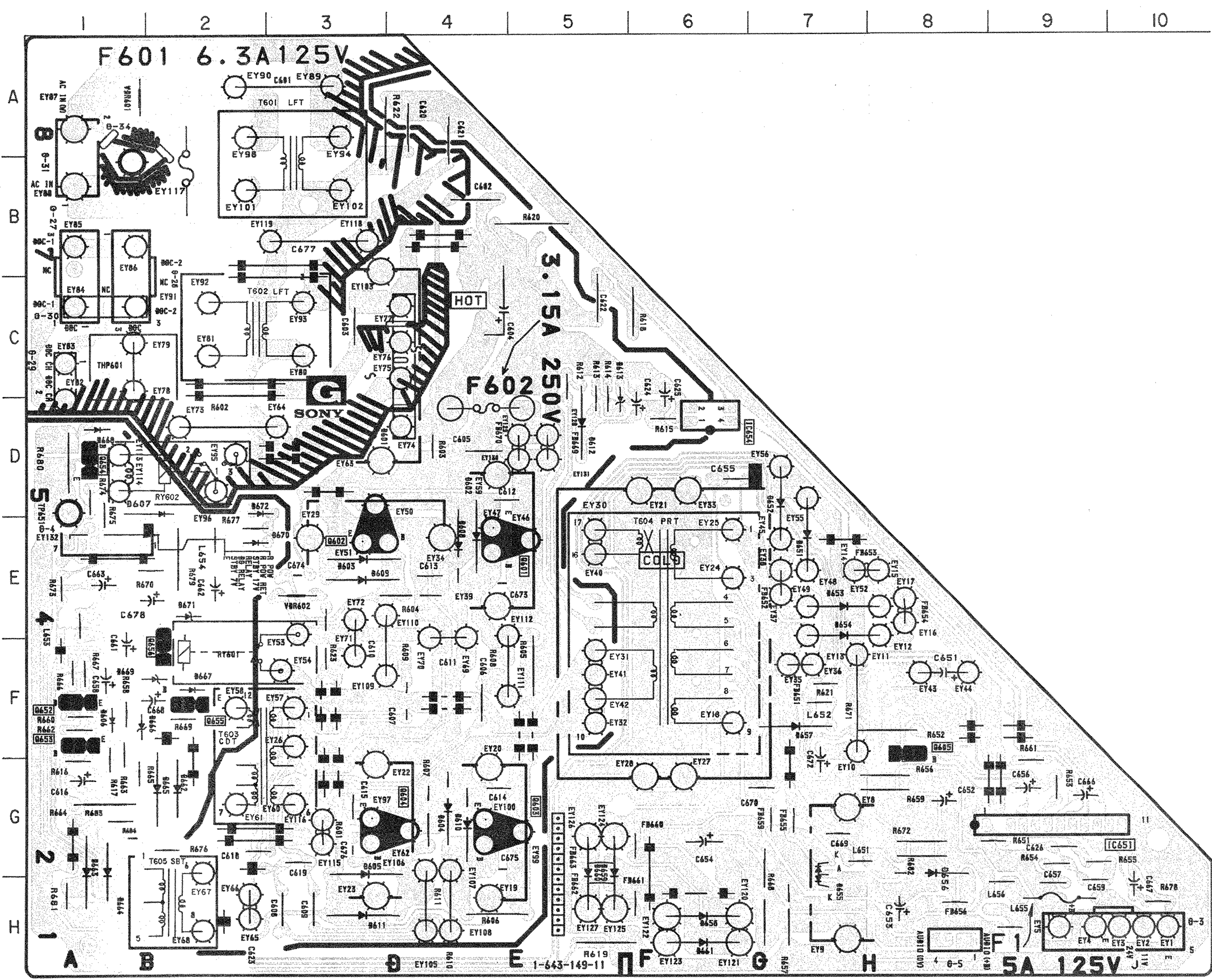
— D Board —



— D Board —

IC		907	D-6
IC801	C-3	908	C-7
802	D-2	911	D-4
803	A-1		
901	D-4		
903	D-6		
TRANSISTOR			
Q802	B-3		
803	D-3		
804	C-2		
805	D-3		
806	C-1		
807	C-2		
808	B-2		
809	A-2		
810	B-2		
811	B-1		
901	C-5		
902	D-5		
903	C-4		
904	C-4		
905	D-6		
906	D-7		
907	D-8		
908	C-6		
909	C-6		
910	C-4		
911	C-5		
912	C-5		
913	C-6		
914	C-4		
DIODE			
D801	C-3		
802	C-1		
803	C-2		
804	B-4		
805	B-4		
806	B-2		
807	B-2		
808	B-3		
809	B-3		
810	B-3		
811	A-3		
812	B-1		
813	D-6		
814	C-2		
815	C-1		
816	D-3		
901	C-5		
902	C-5		
903	C-5		
D906	B-7		

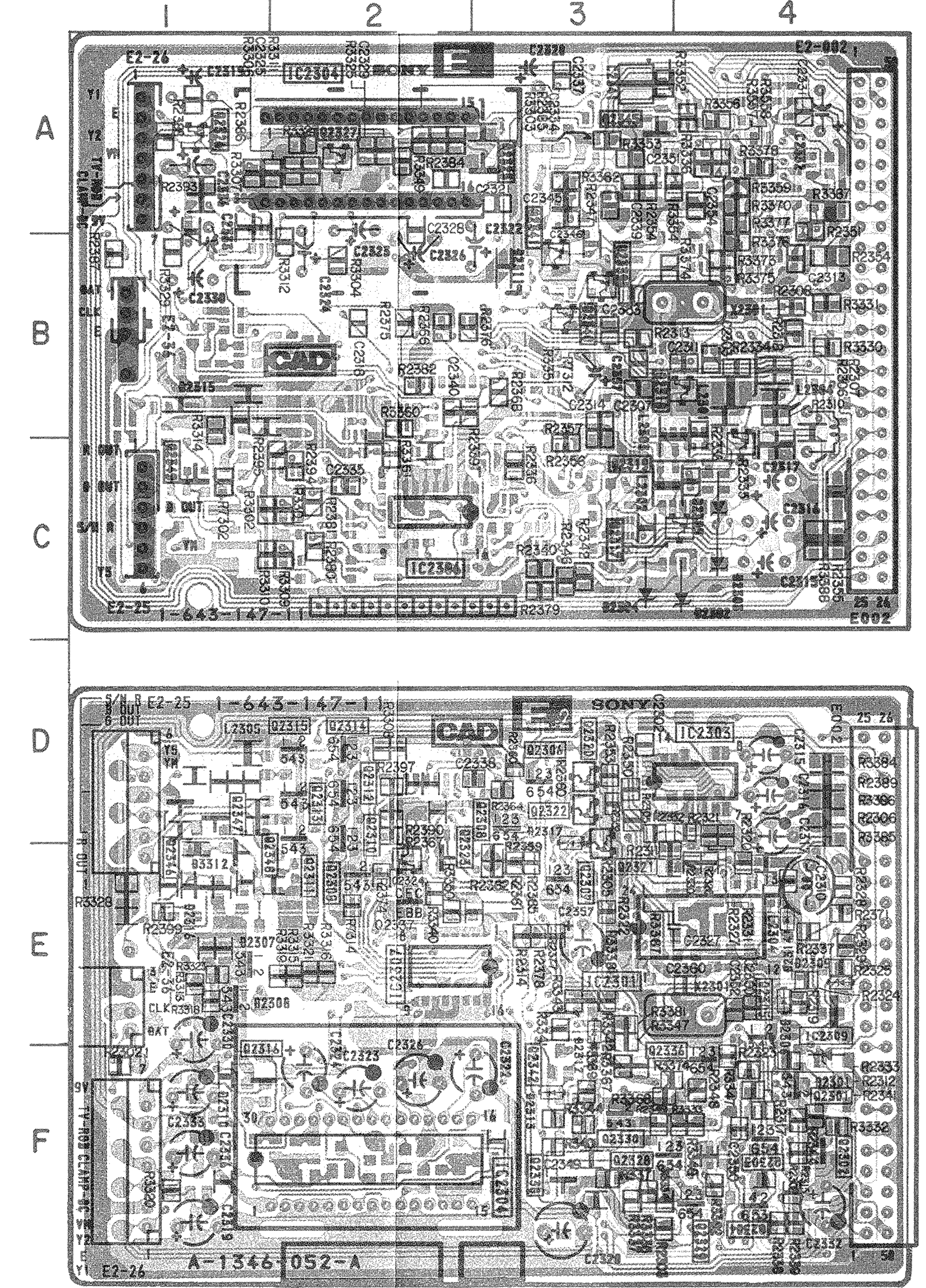
G [POWER SUPPLY, DEGAUSSING CIRCUIT]
— G Board —



— G Board —

IC	
IC651	G-9
654	D-6
TRANSISTOR	
Q601	E-4
602	E-3
603	G-4
604	G-3
605	F-8
652	F-1
653	F-1
654	D-1
655	F-2
656	F-2
DIODE	
D601	C-4
602	E-4
603	E-3
604	G-4
605	G-3
606	F-1
607	D-2
608	E-4
609	E-3
610	G-4
611	H-3
612	D-5
613	D-5
651	E-7
652	D-7
653	E-7
654	E-7
655	G-7
656	G-8
657	F-7
658	H-6
659	G-5
660	G-5
661	H-6
663	G-1
665	G-2
666	F-1
667	F-2
668	D-1
669	F-2
670	E-2
671	E-2
672	D-2
TEST POINT	
TP651	D-1

E2 [SHARPNESS CONT., CHARACTER GENERATOR]
— E2 Board —



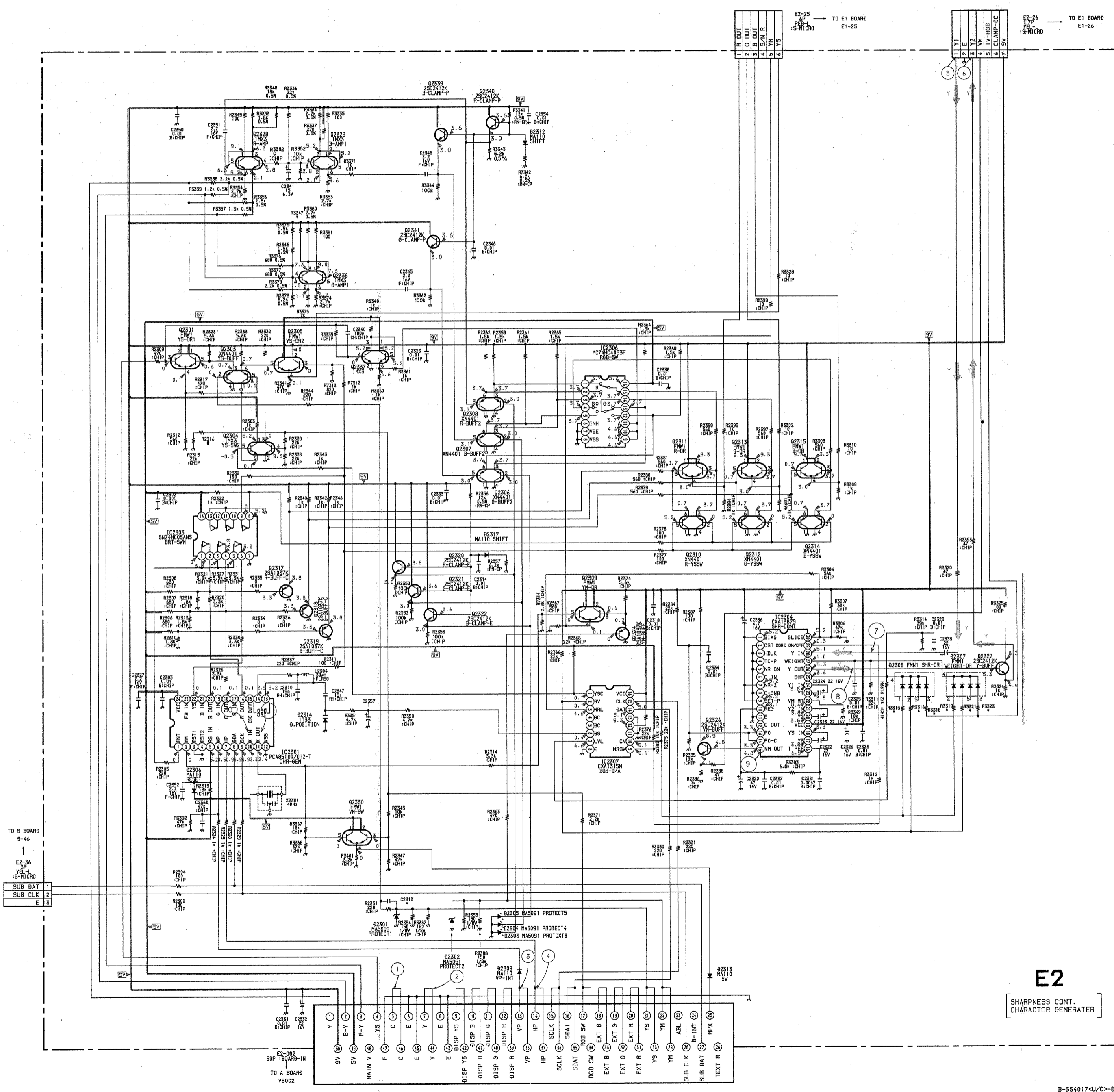
— E2 Board —

IC		D1411	B-7
IC2301	E-4	1413	D-1
2303	D-4	1414	D-1
2304	A-2	1503	B-13
2306	C-2	4001	C-3
2307	E-2		
TRANSISTOR			
Q2301	F-4		
2303	F-4		
2304	F-4		
2305	E-4		
2306	D-3		
2307	E-3		
2308	D-3		
2309	E-2		
2310	D-2		
2311	D-2		
2313	D-2		
2314	D-2		
2315	D-2		
2317	C-4		
2318	B-4		
2319	C-4		
2320	D-3		
2321	D-3		
2322	D-3		
2324	E-2		
2326	A-1		
2327	A-2		
2328	F-3		
2329	F-4		
2330	F-3		
2336	F-4		
2337	E-2		
2339	B-3		
2340	B-3		
2341	B-3		
DIODE			
D2301	F-4		
2302	C-4		
2303	C-4		
2304	C-3		
2305	C-4		
2306	F-4		
2307	E-1		
2308	E-1		
2309	E-4		
2312	E-3		
2313	F-3		
2314	E-4		
2317	D-3		

E2 BOARD **MARK NOTE

: NOT MOUNTED

	KV-27XBR35	KV-32XBR35
C2313	470P	#
R3315	15K 1/10W :CHIP	47K 1/10W :CHIP
3316	15K 1/10W :CHIP	8.2K 1/10W :CHIP
3318	56K 1/10W :CHIP	82K 1/10W :CHIP
3319	22K 1/10W :CHIP	82K 1/10W :CHIP
3321	18K 1/10W :CHIP	4.8K 1/10W :CHIP
3323	56K 1/10W :CHIP	150K 1/10W :CHIP
3347	27K 1/10W :RN-CP	33K 1/10W :RN-CP

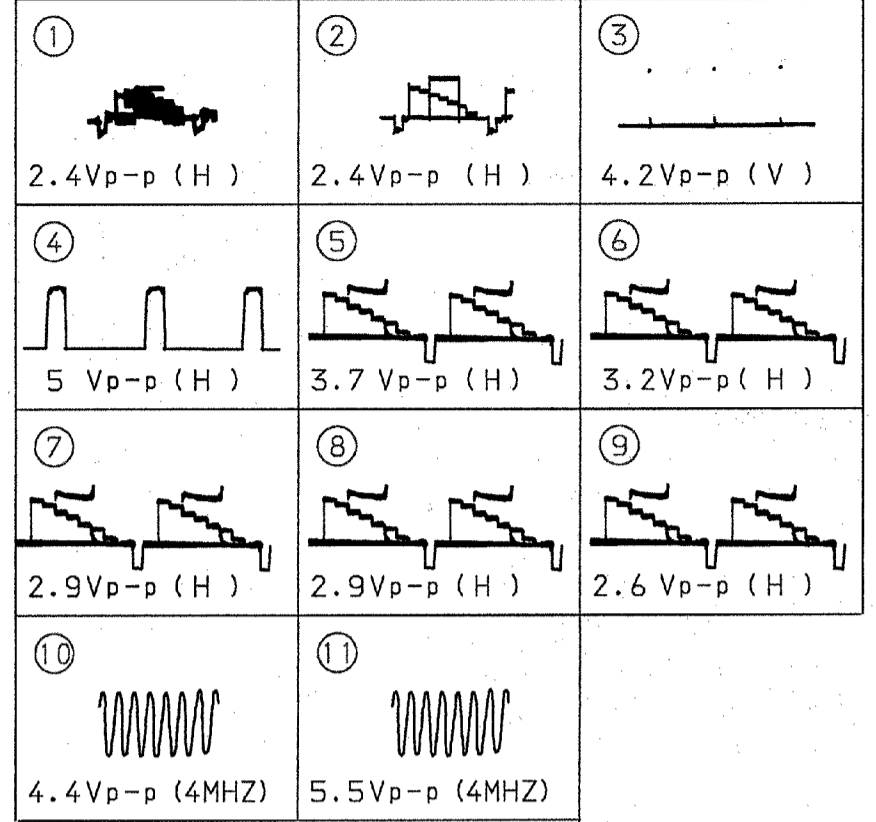


E2

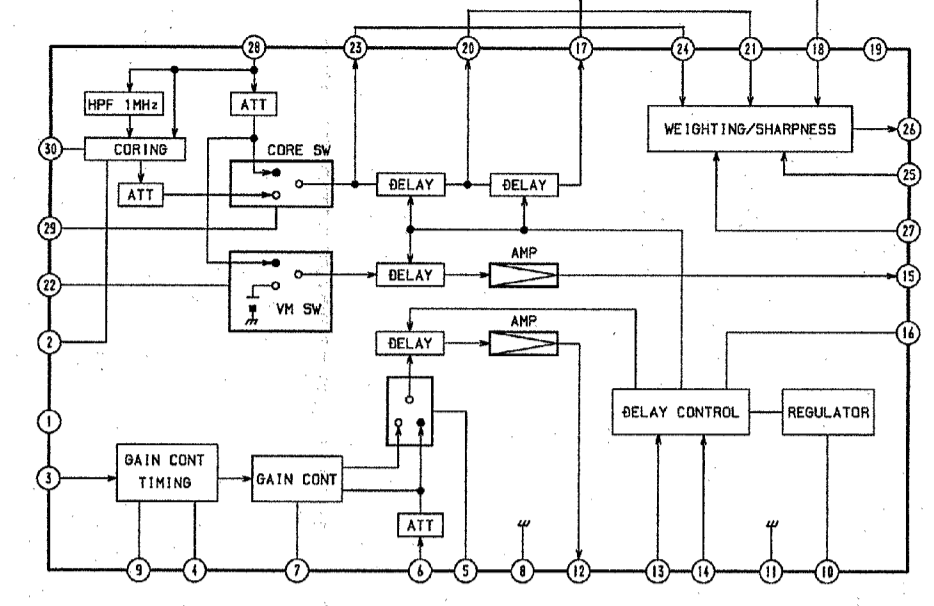
SHARPNESS CONT. CHARACTER GENERATOR

B-5940174/C-02

- E2 Board -



E2 BOARD IC2304 CXA1387S



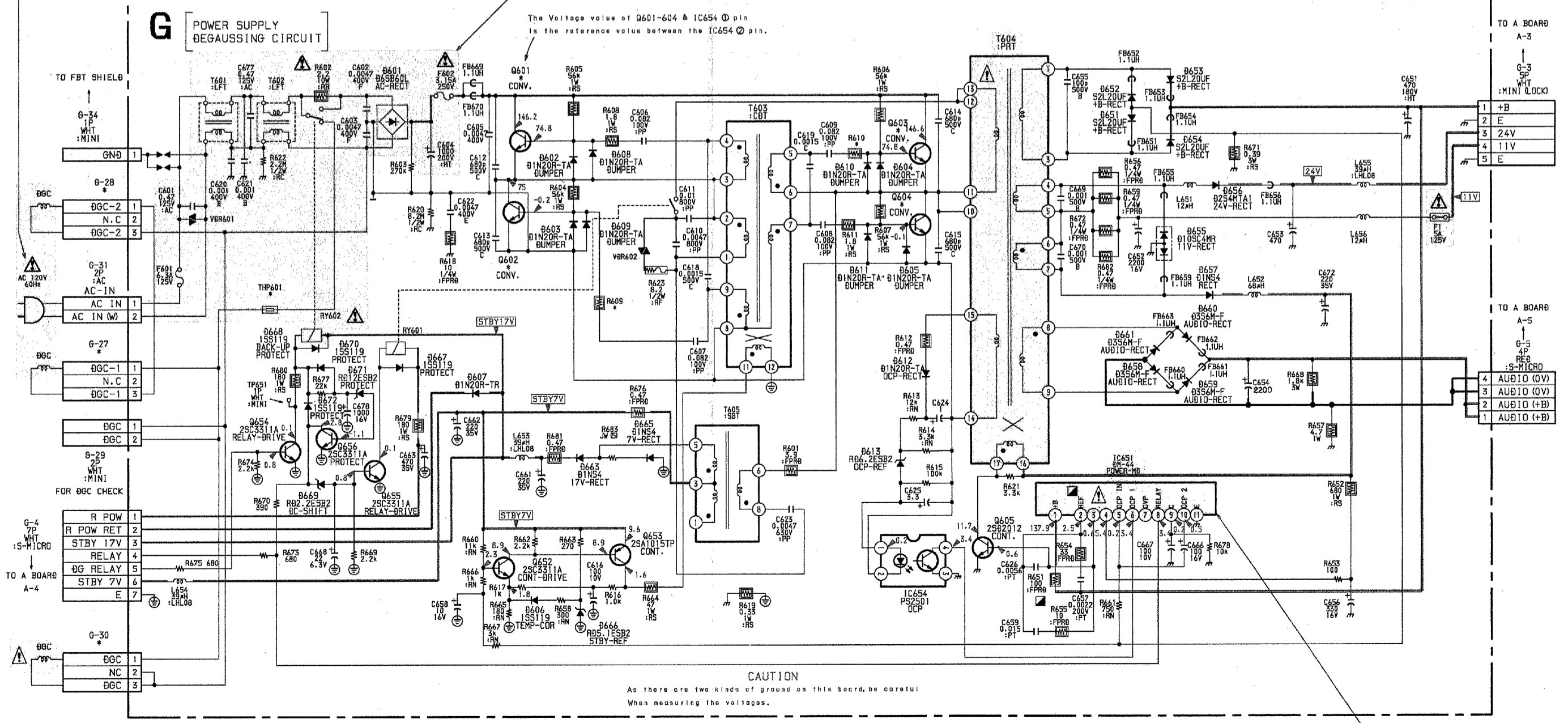
G BOARD

* MARK NOTE # : NOT MOUNTED

	KV-27XBR35	KV-32XBR35
G-27	3P WHT :MINI LOCK	#
G-28	3P WHT :MINI LOCK	#
G-30	#	2P WHT :MINI
Q601	2SC4664NPR-F	2SC4664MNP-F
Q602	2SC4664NPR-F	2SC4664MNP-F
Q603	2SC4664NPR-F	2SC4664MNP-F
Q604	2SC4664NPR-F	2SC4664MNP-F
R609	1.8 1W	1.5 1W
610	1.8 1W	1.5 1W
THP601	1-809-639-11	1-800-686-43

CAUTION GUS MODEL ONLY
This set is equipped with a 2-pronged power cord plug (see size of the plug is wider than the other). When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.

CAUTION
When taking a broken fuse (F602) off, discharge across C604 to avoid shock hazard.



G POWER SUPPLY DEGAUSSING CIRCUIT

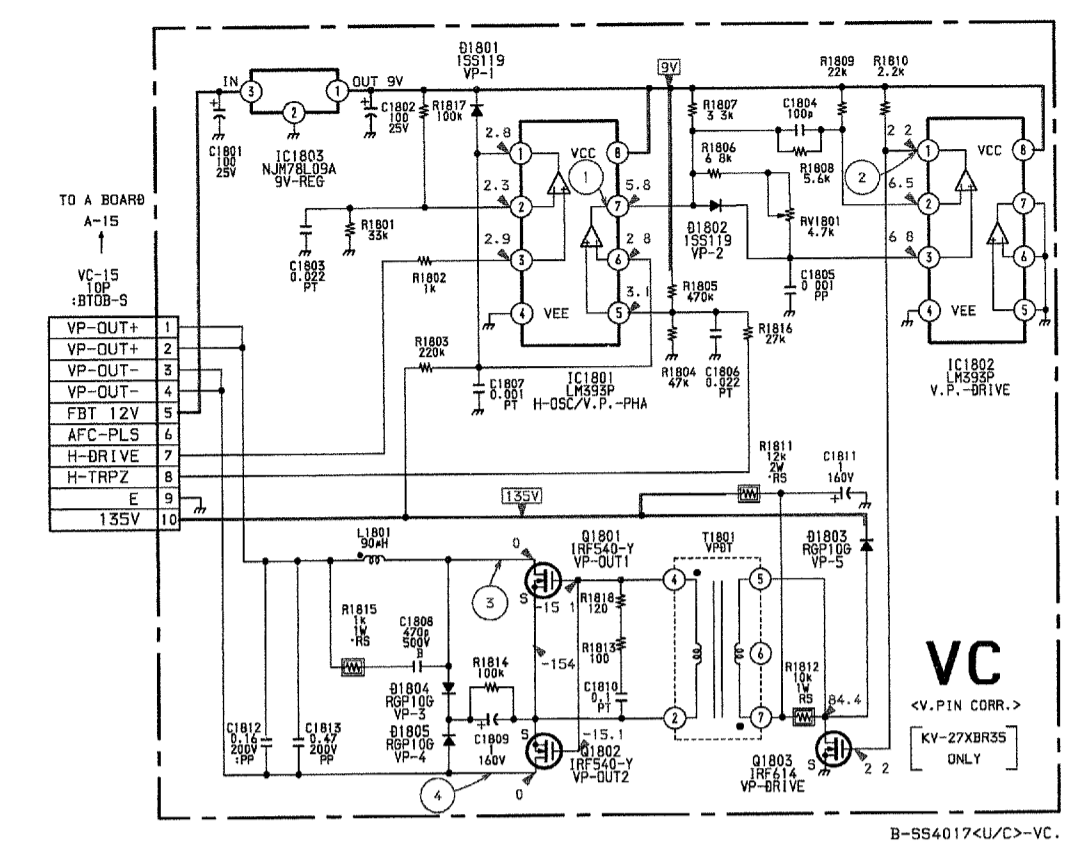
The Voltage value at G601-G04 & IC654 @ pin is the reference value between the IC654 @ pin.

CAUTION
As there are the kinds of ground on this board, be careful when measuring the voltages.

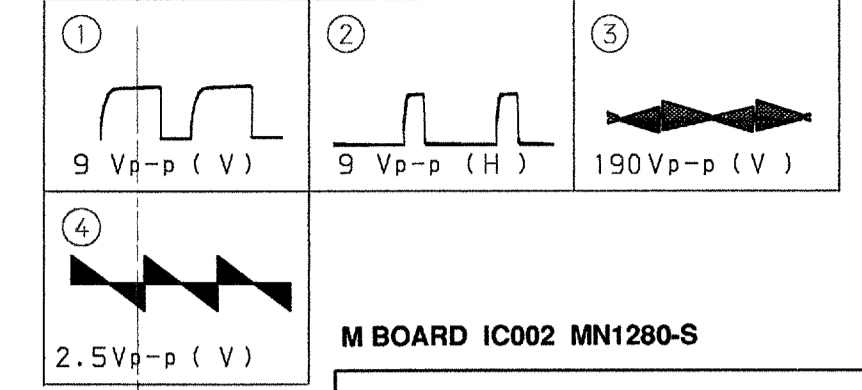
CAUTION
When replacing IC651 & R651, be sure to check the 02 line voltages. Refer to the Safety Adjustment Section, SEE PAGE 51-54

B-5940174/C2-G

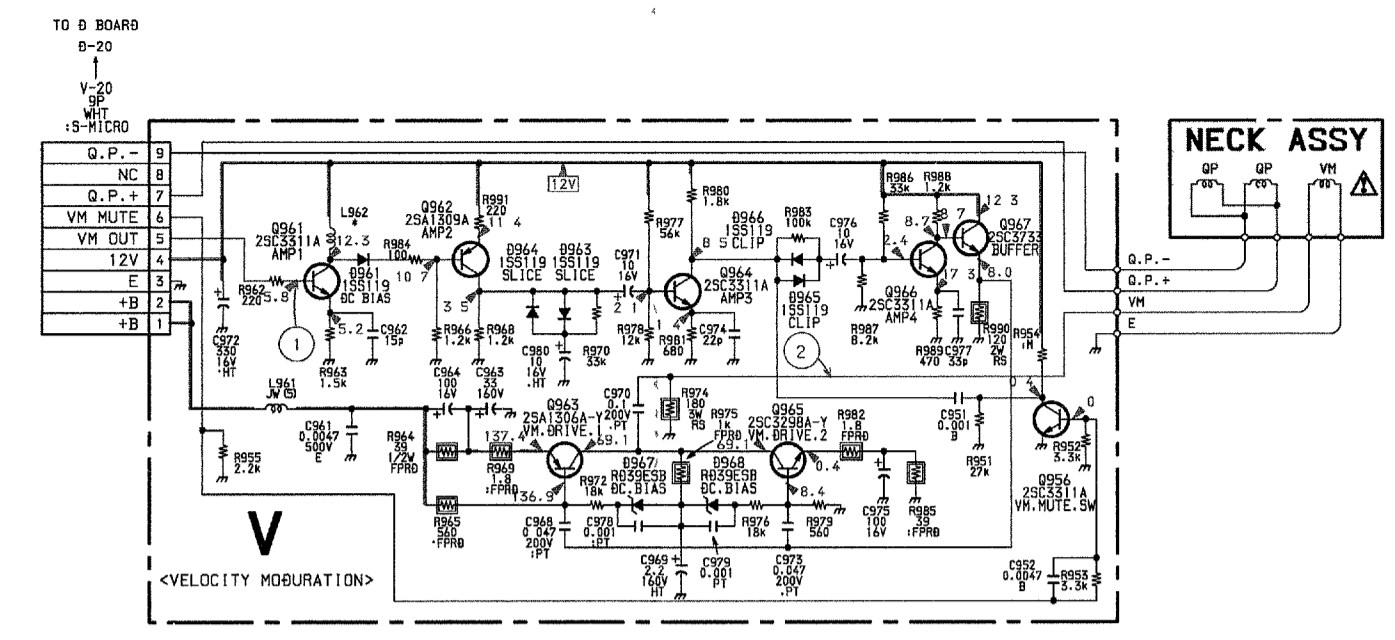
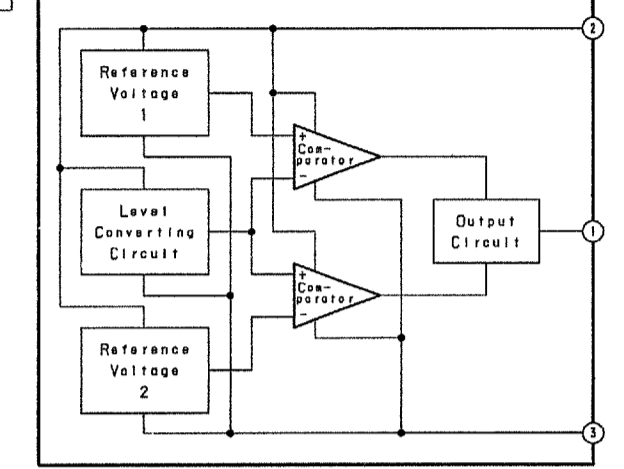
(KV-27XBR35 ONLY)



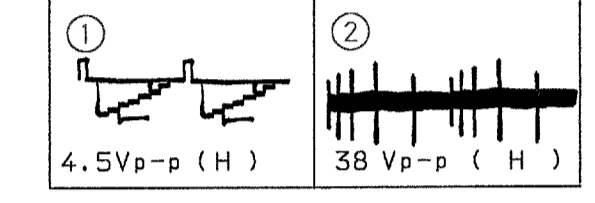
— VC Board —



M BOARD IC002 MN1280-S

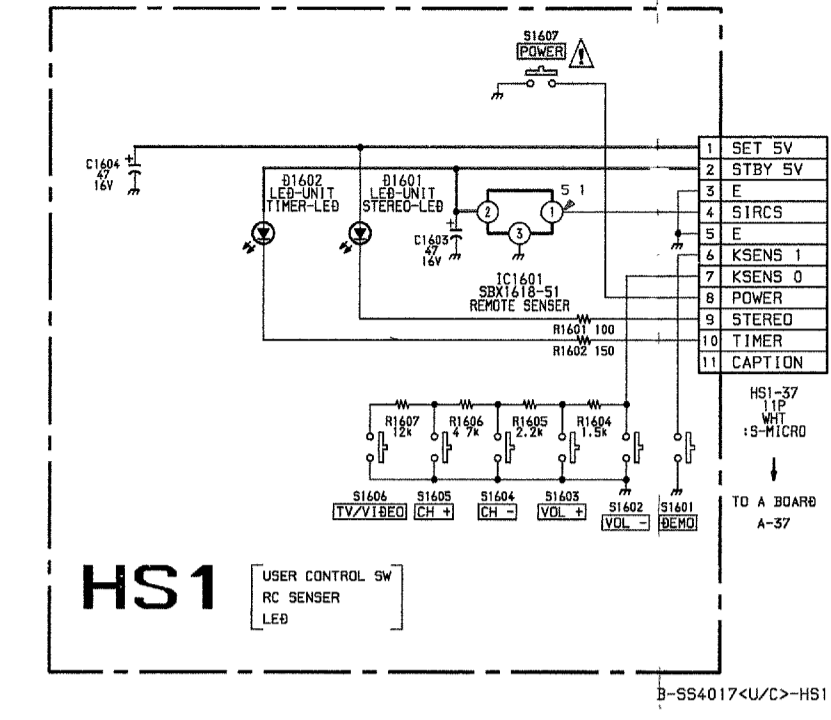


— V Board —

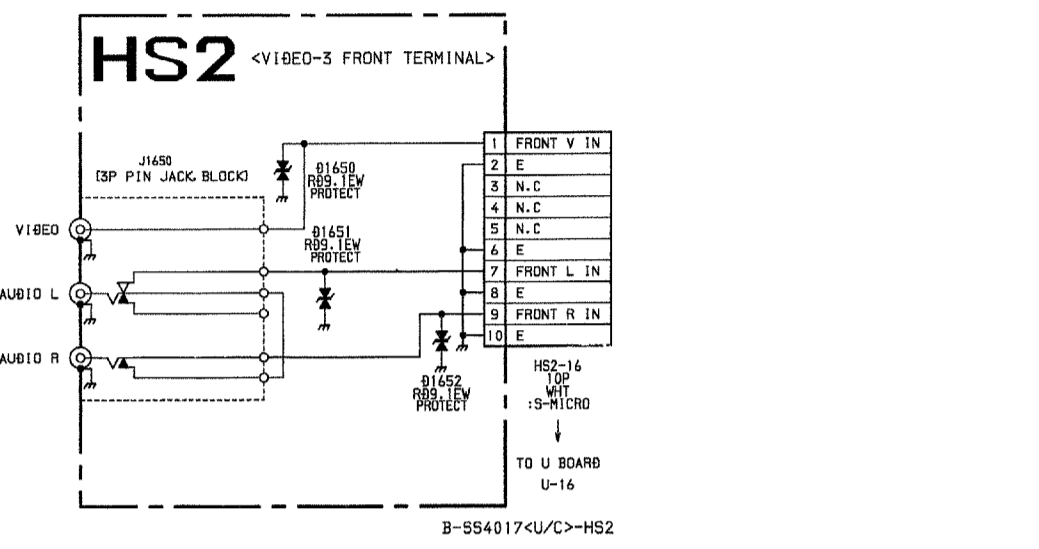


V BOARD * MARK NOTE

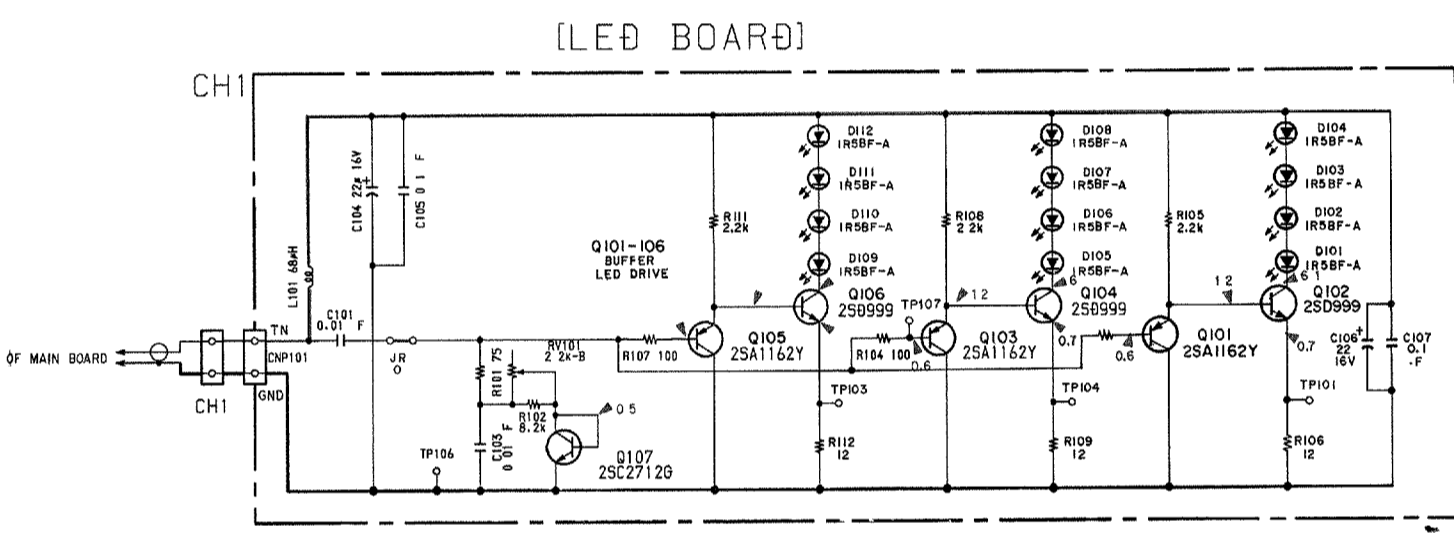
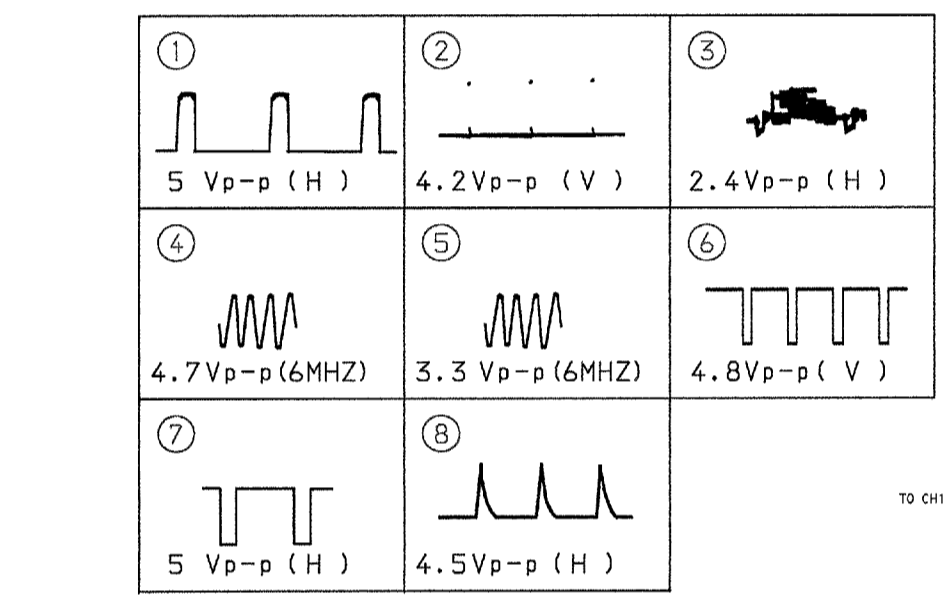
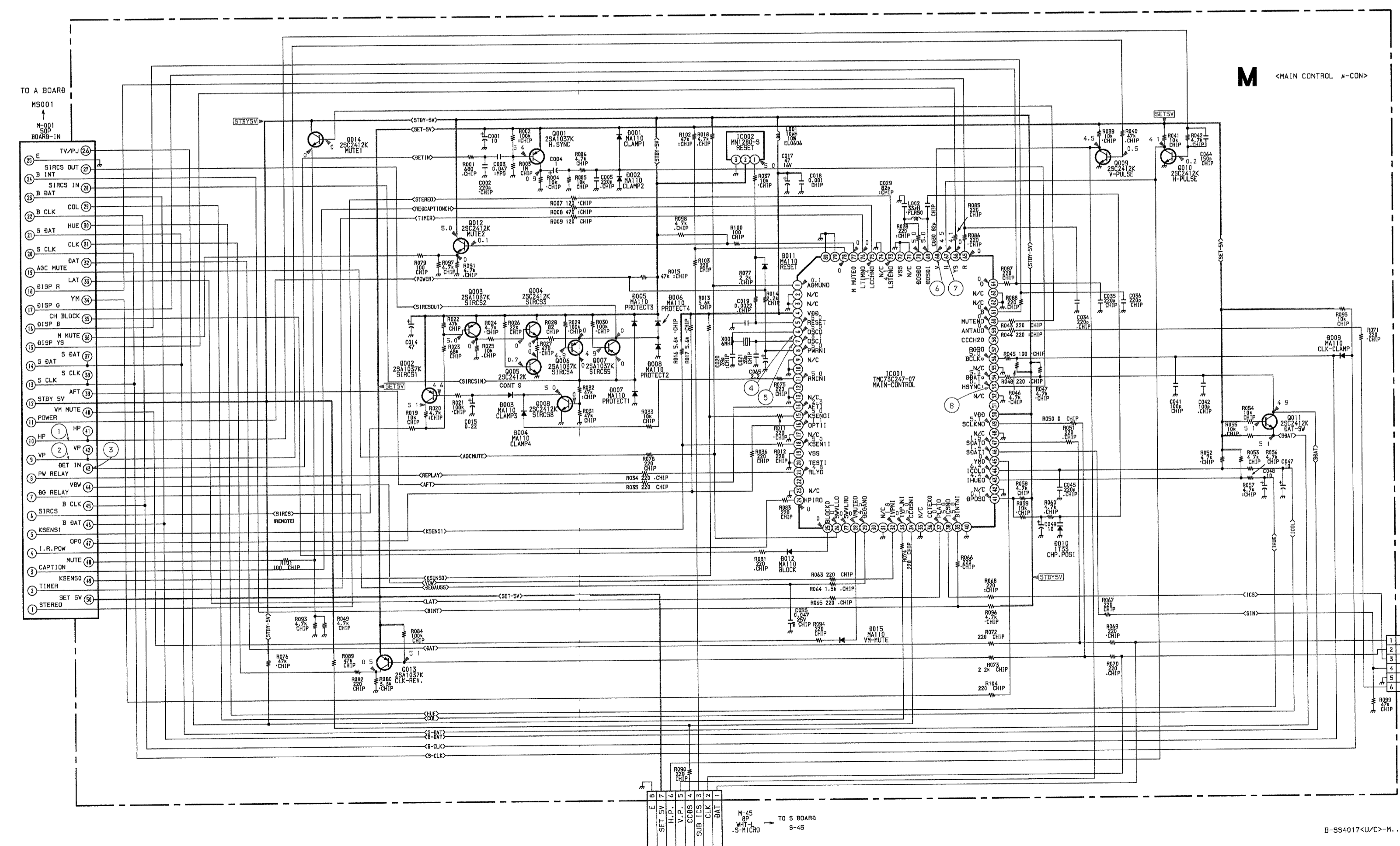
KV-27XBR35	KV-32XBR35
L962	39uH
	47uH



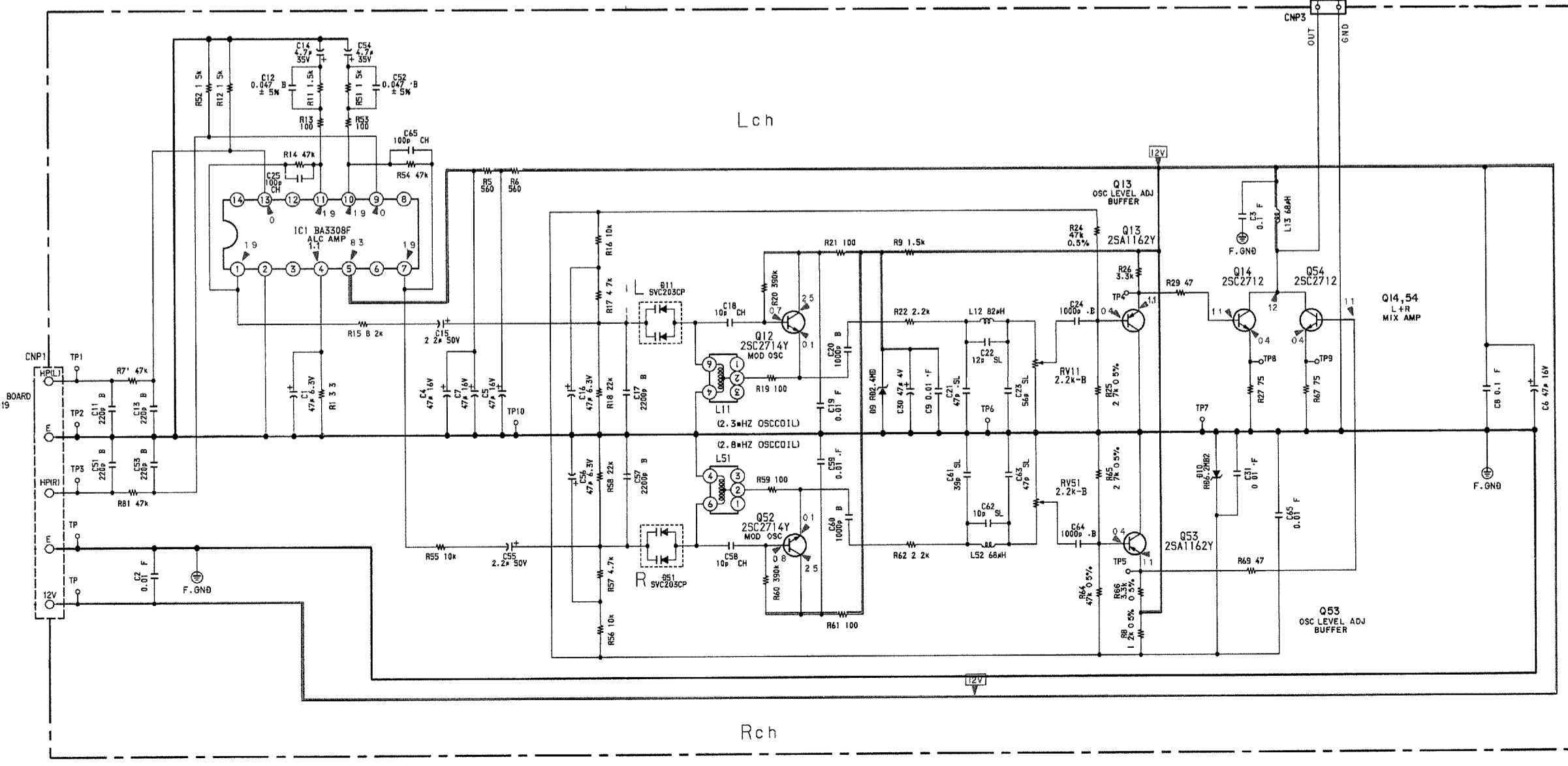
HS1



HS2



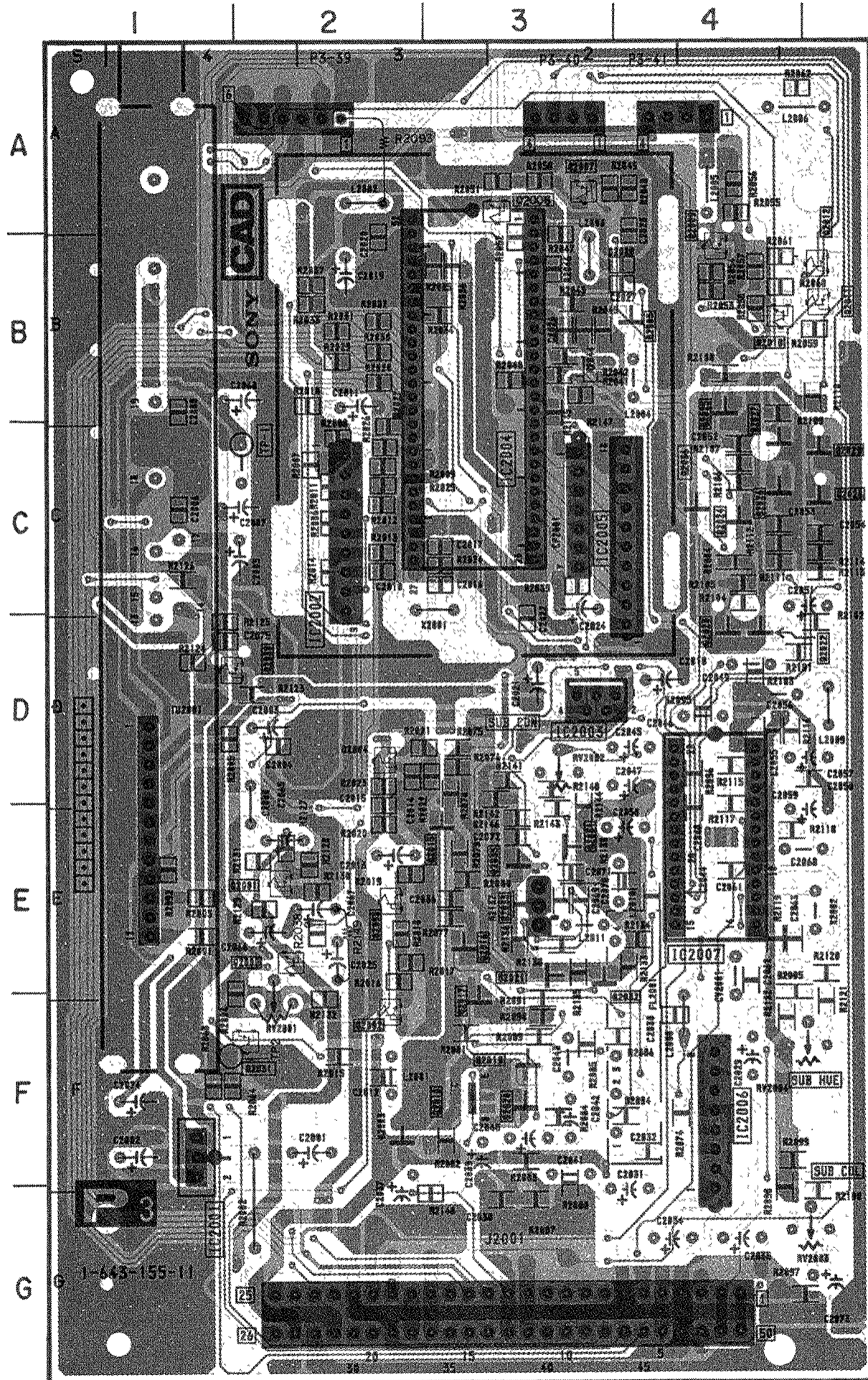
[MAIN BOARD]



P3

2ND CONT. u-CON FOR PIP
2ND TUNER-VIF/SIF FOR PIP
Y/C JUNGLE FOR PIP
ANT SW CONT

— P3 Board —



— P3 Board —

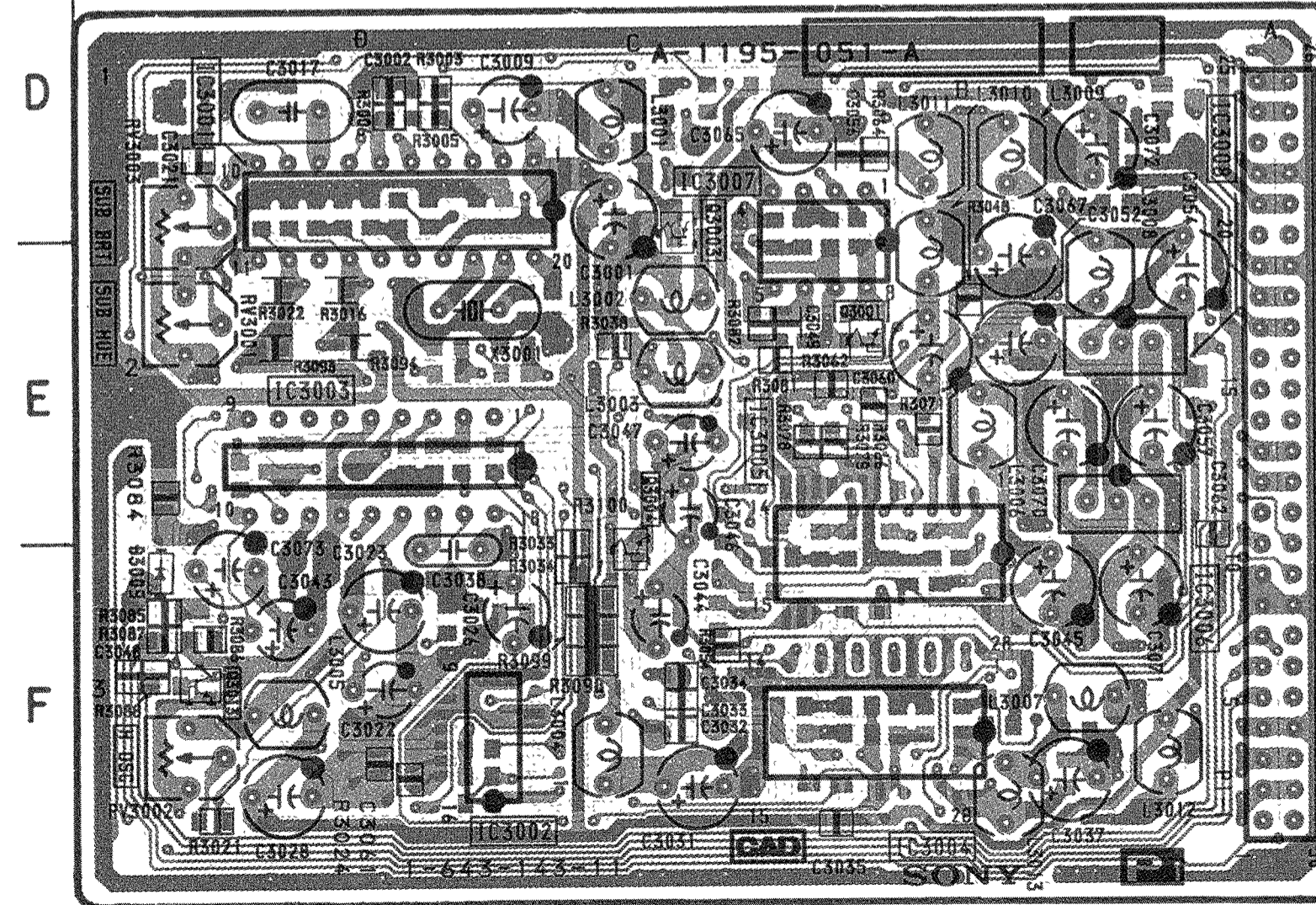
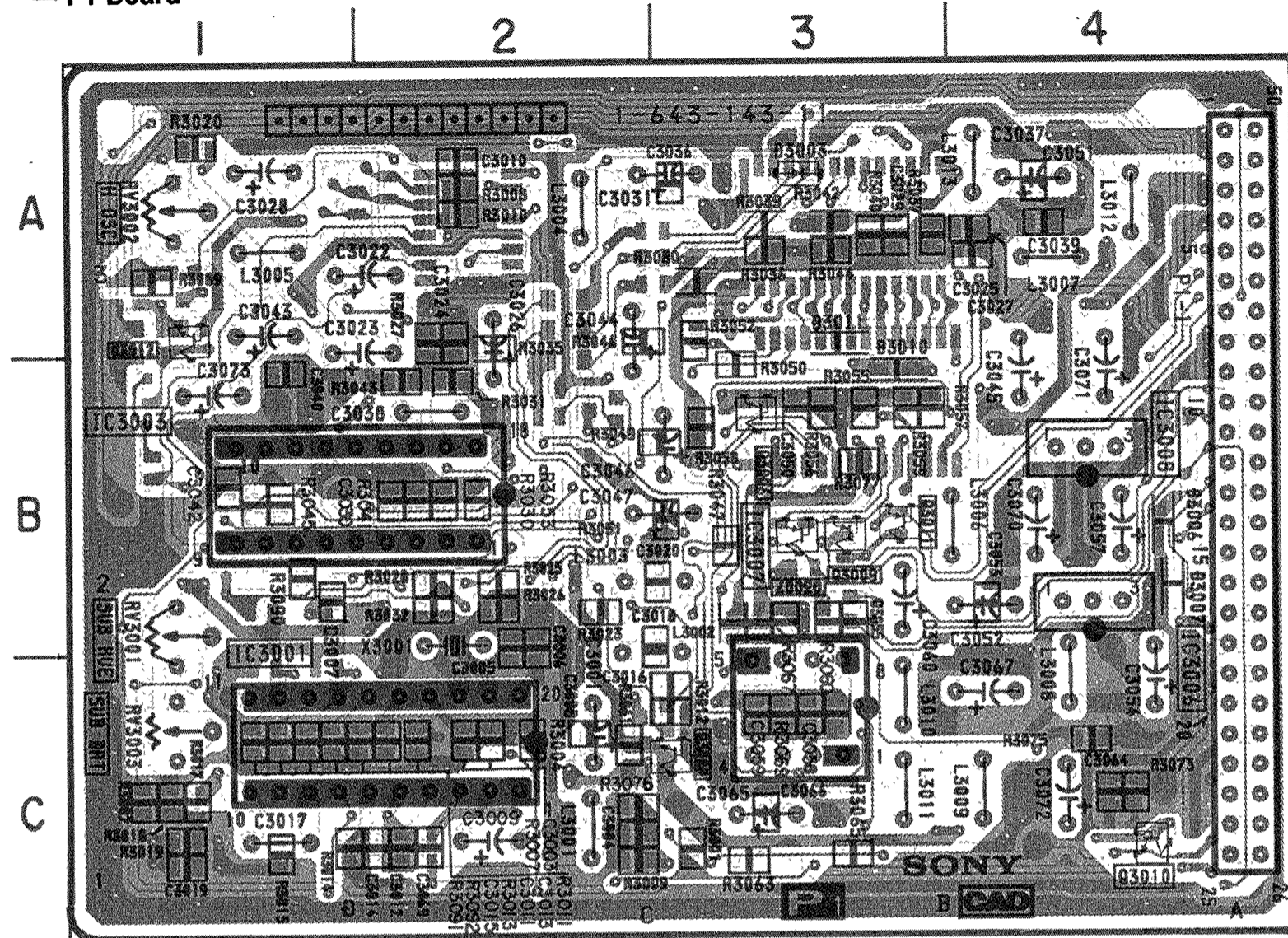
IC	
IC2001	F-1
2002	C-2
2003	D-3
2004	B-3
2005	C-3
TRANSISTOR	
Q2001	E-2
2002	F-2
2003	E-2
2004	D-2
2005	B-4
2006	A-3
2007	A-3
2008	E-2
2009	B-4
2010	B-4
2011	B-5
2012	A-5
2030	D-1
2031	F-2
2036	C-4
VALIABLE RESISTOR	
RV2001	F-2
TESTPOINT	
TP1	C-2
TP2	F-1
TP1	C-2
TP2	F-1

P1

[PICTURE IN PICTURE CIRCUIT]

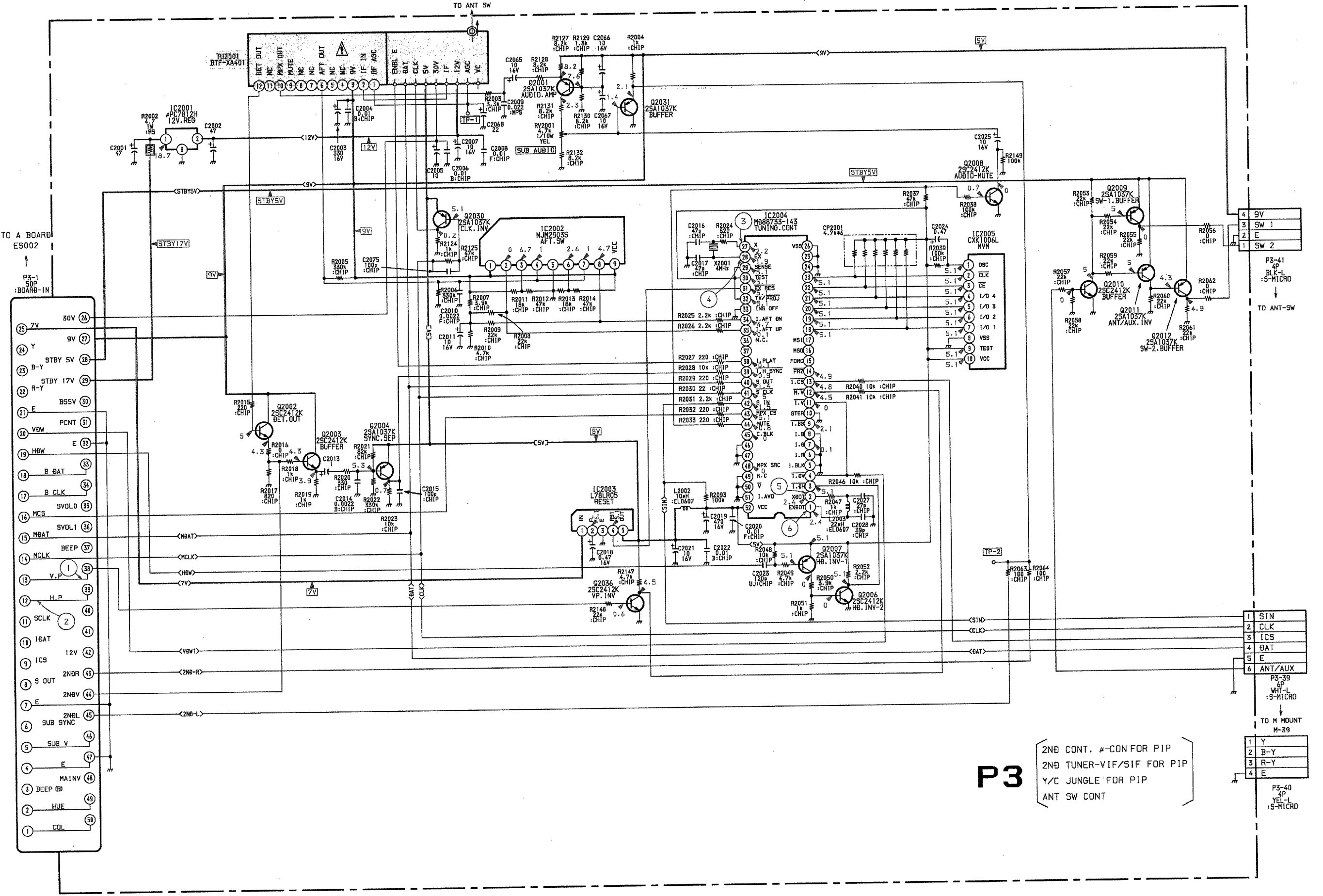
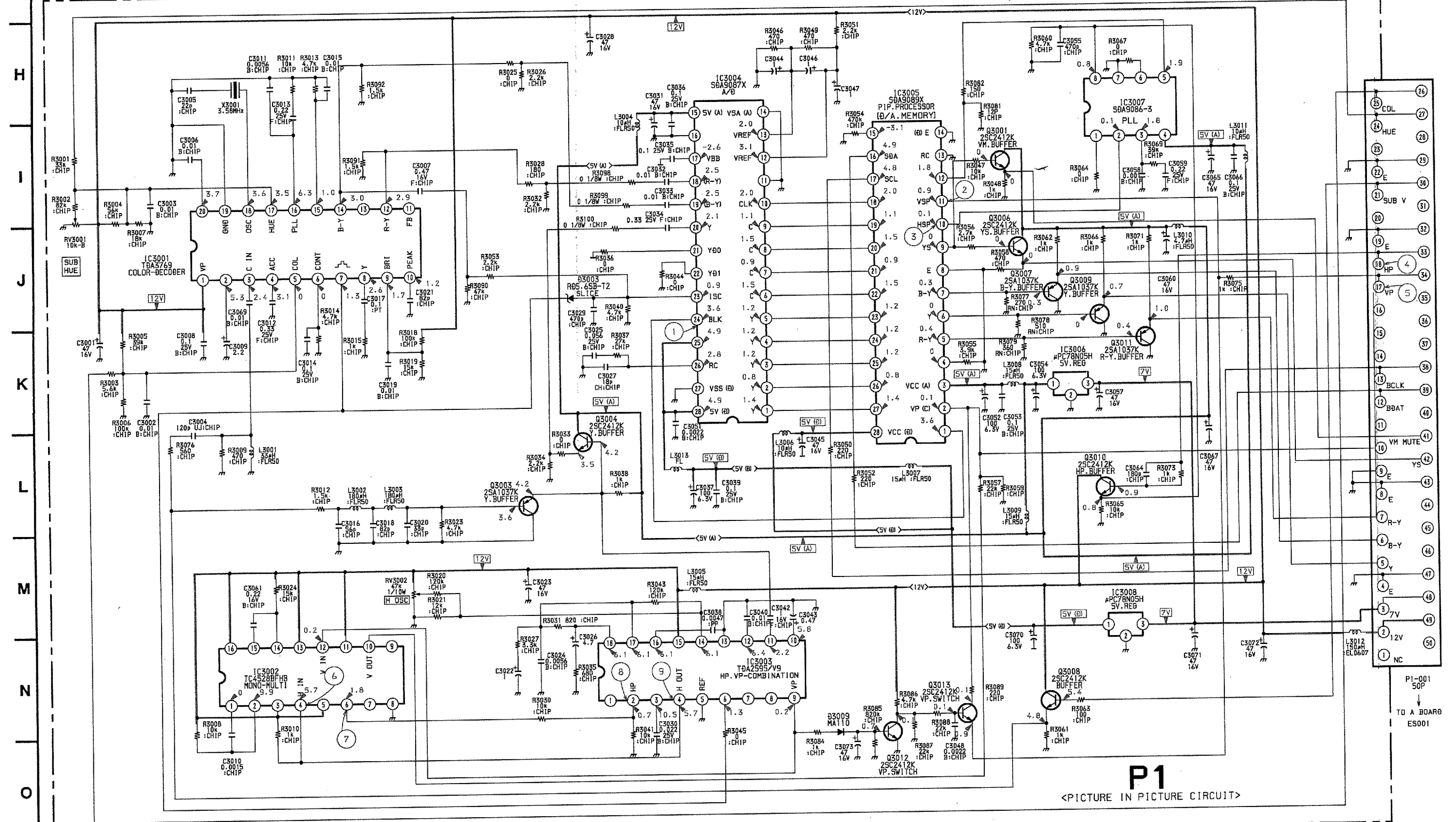
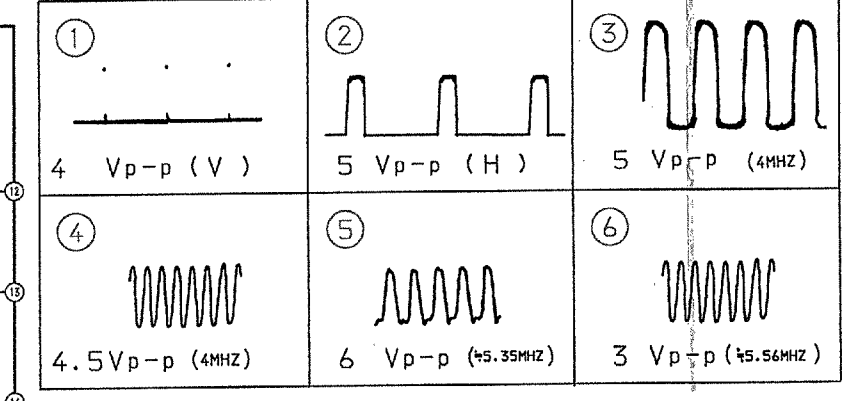
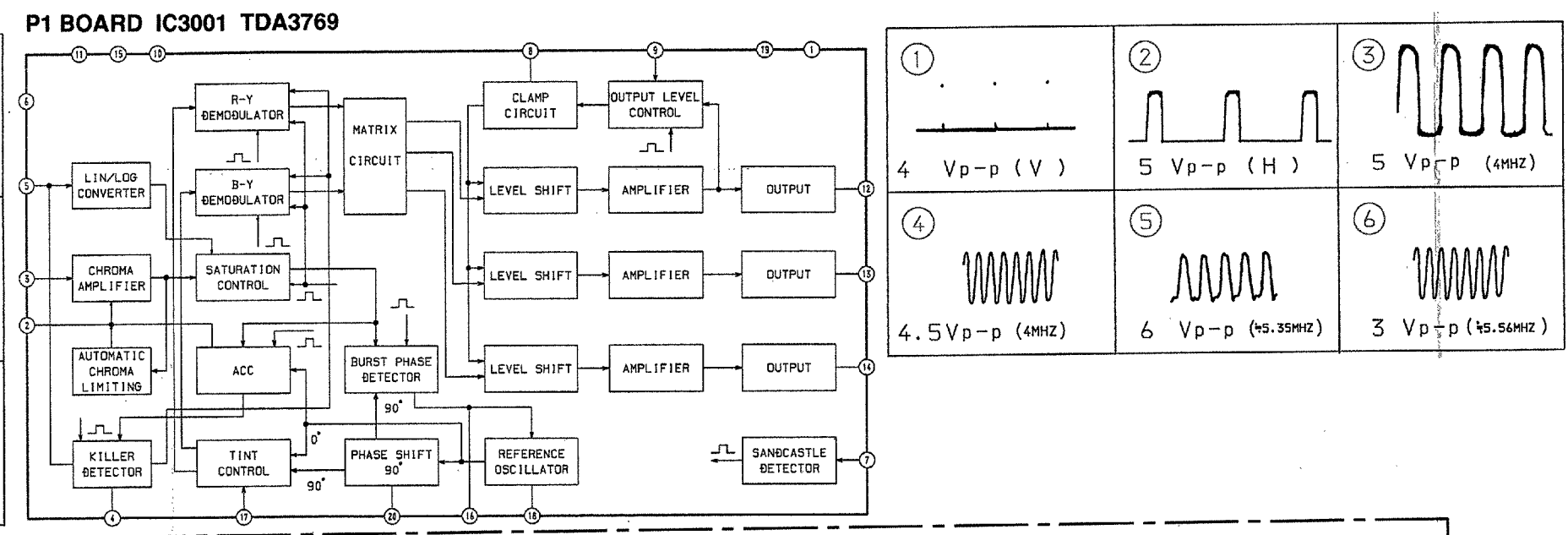
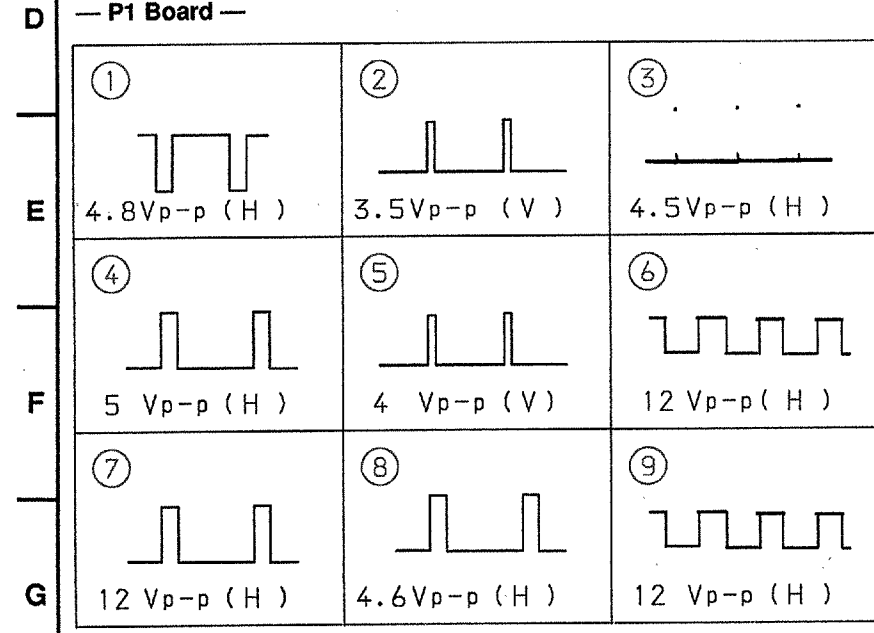
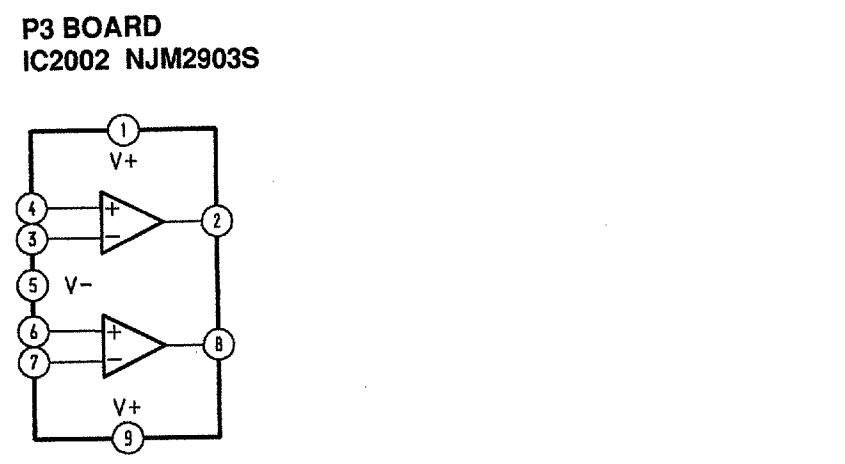
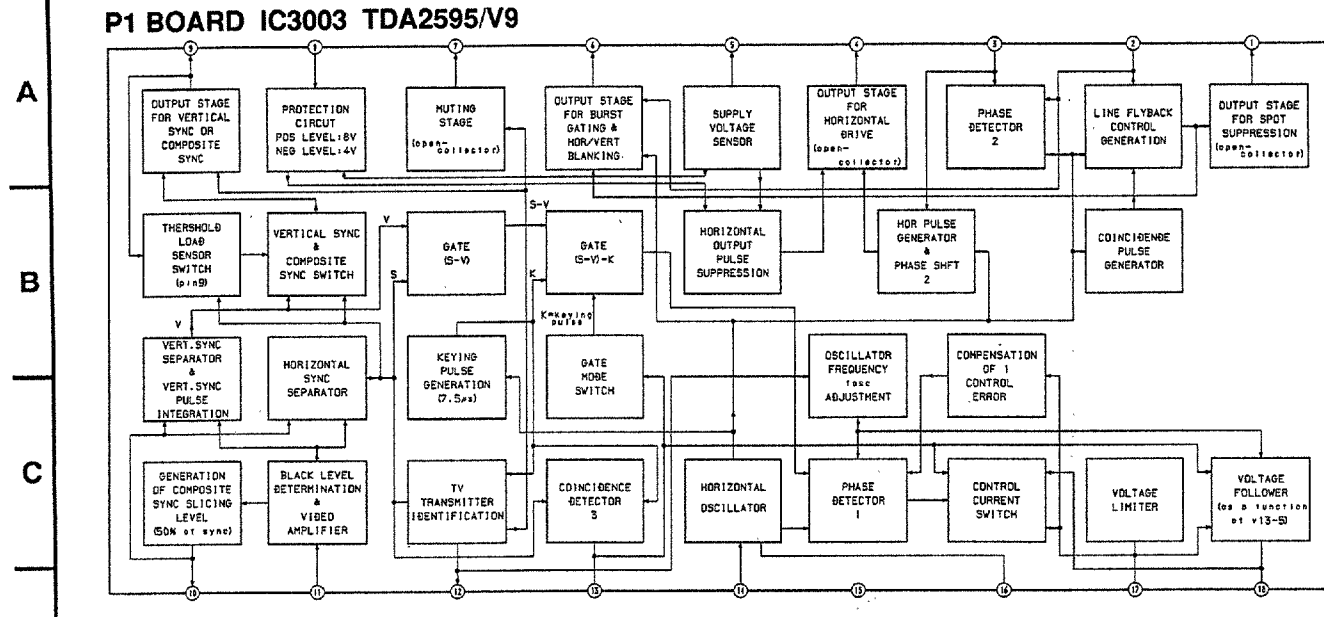
— P1 Board —

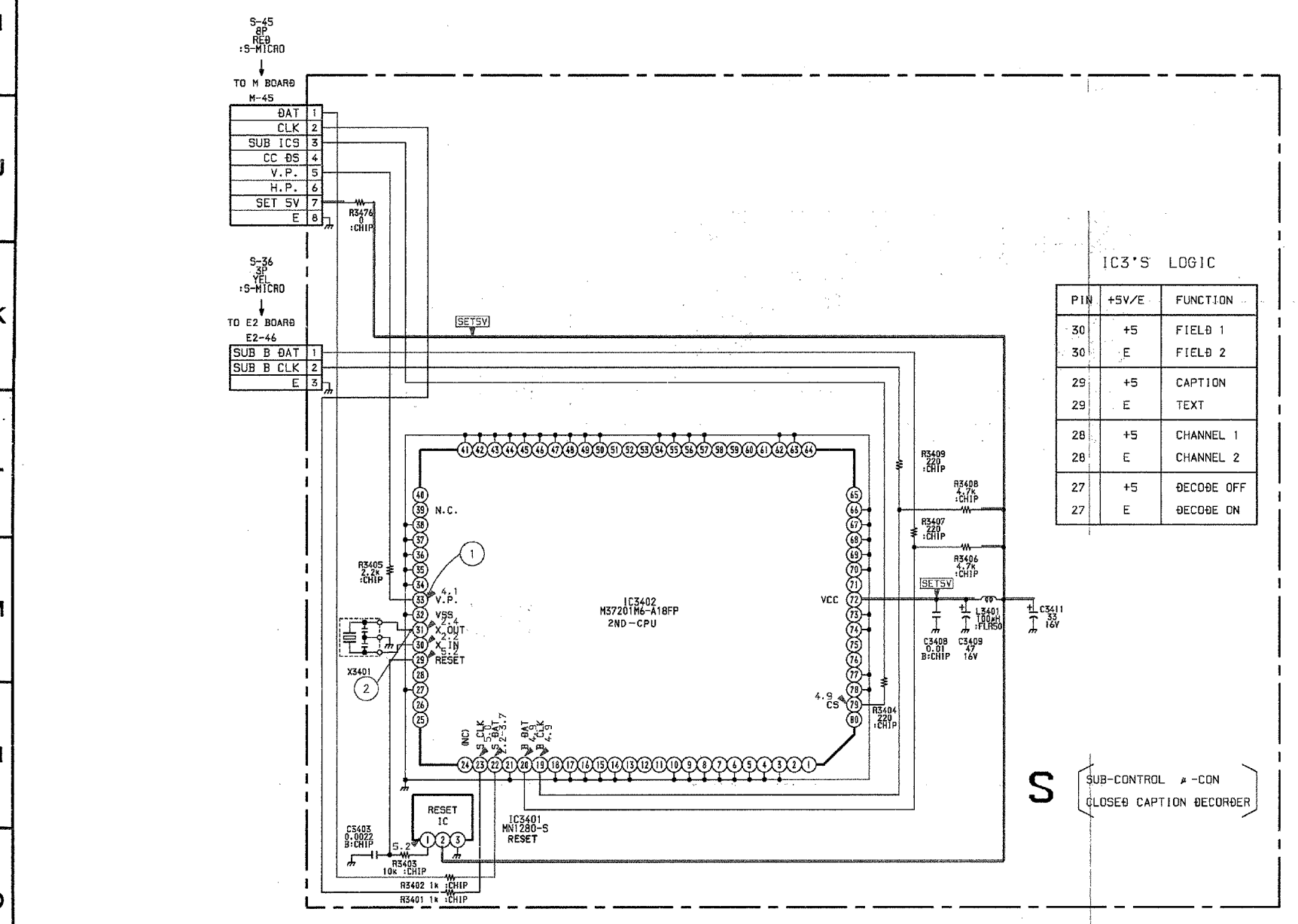
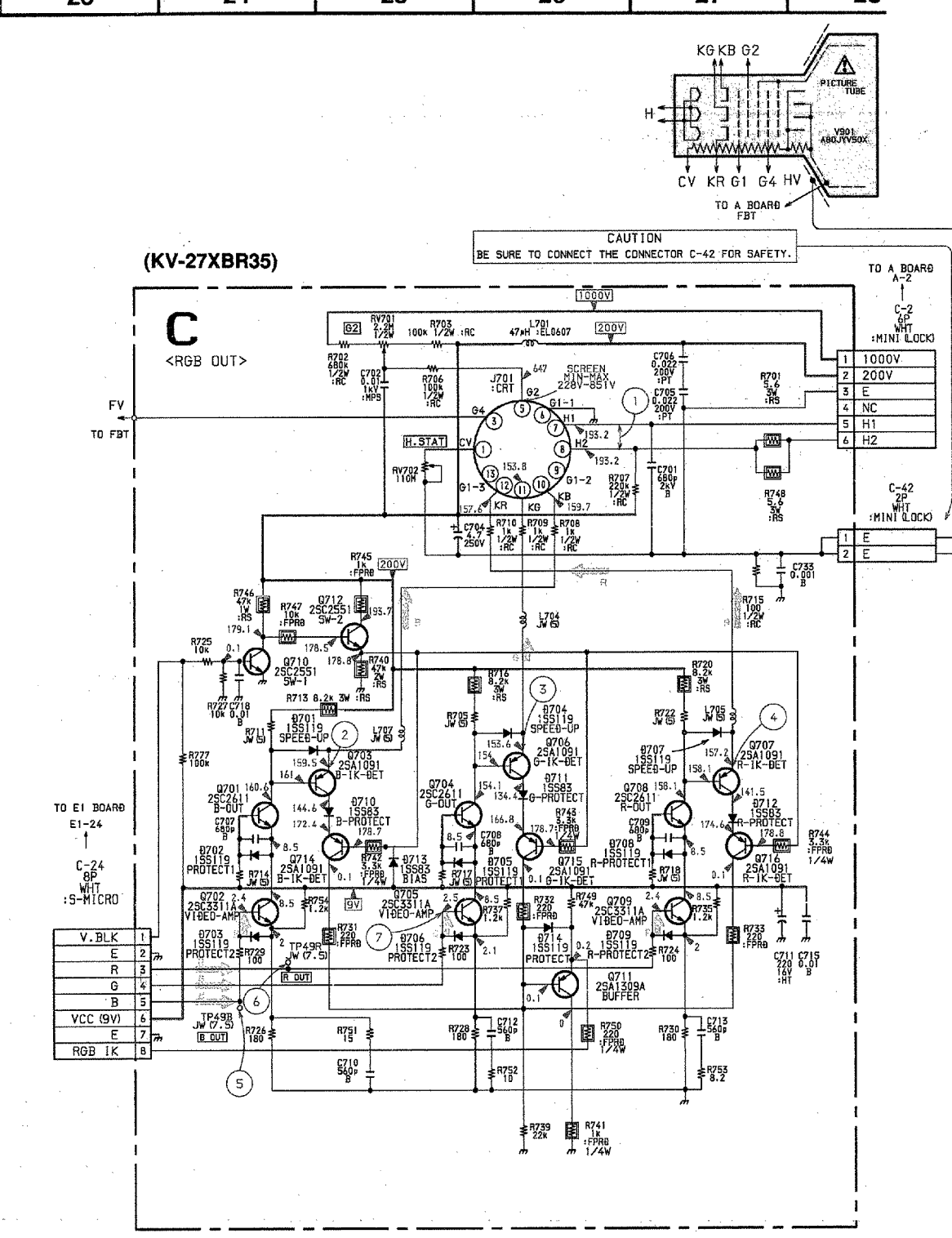
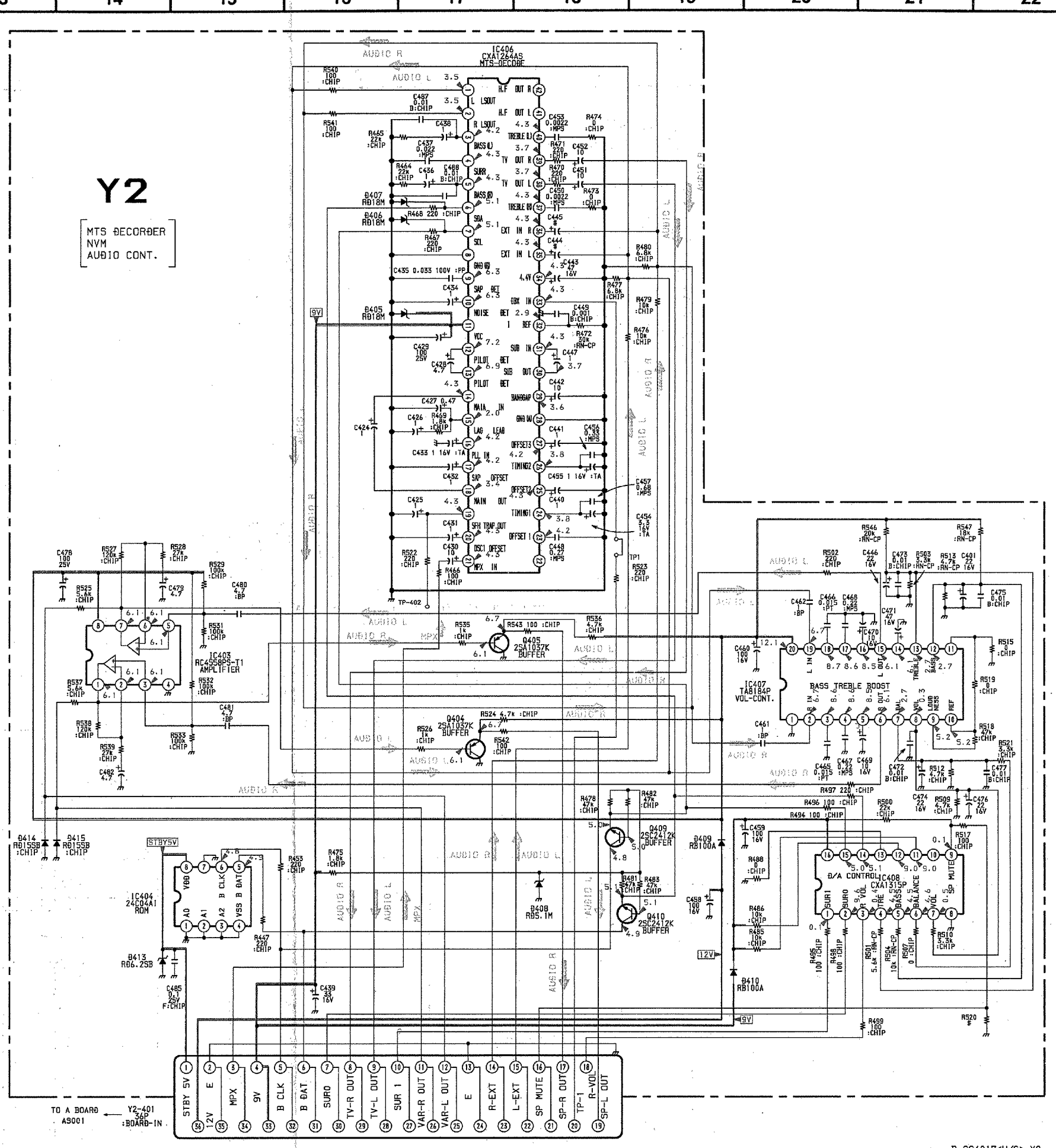
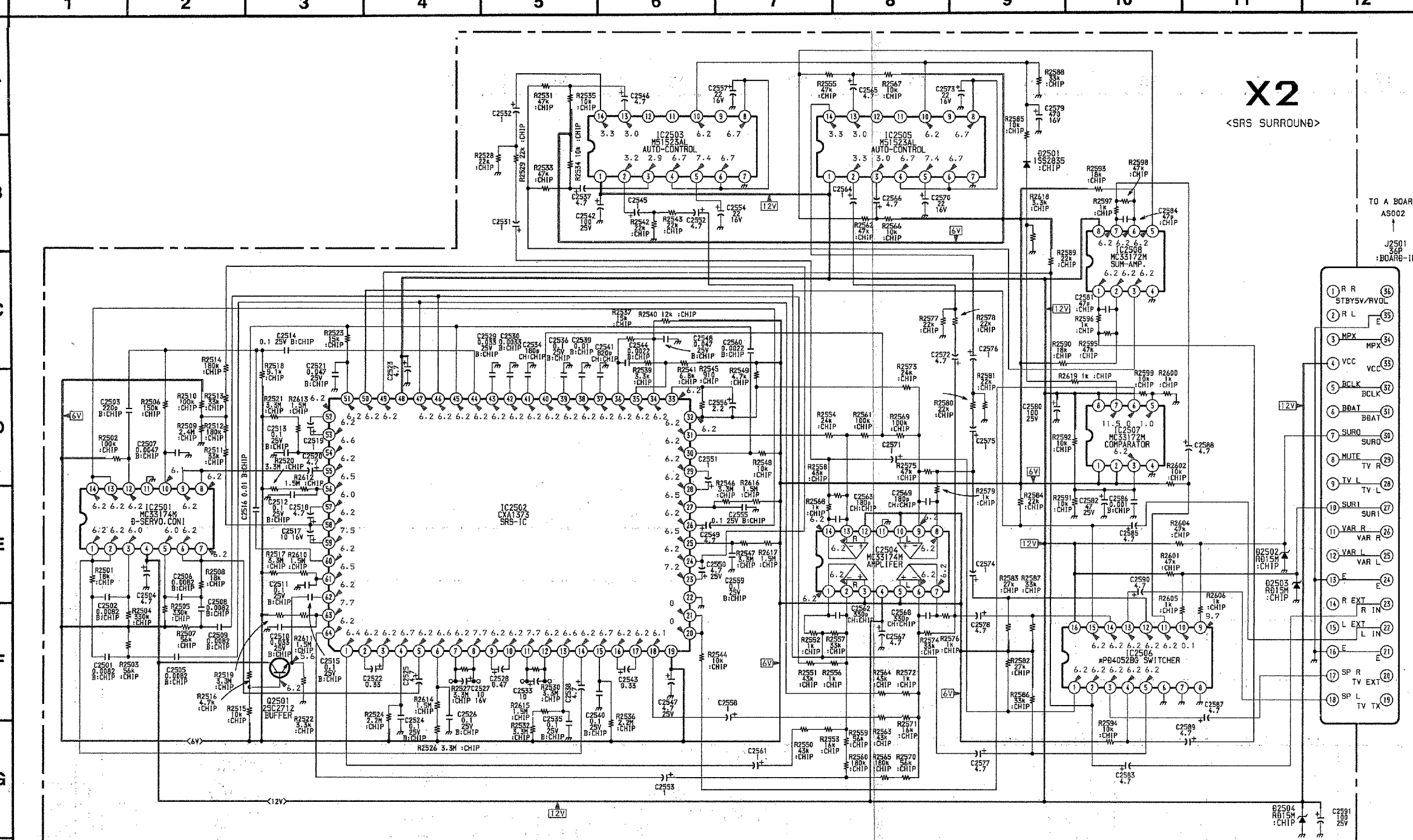
- [Pattern from the side which enables seeing.]
- [Pattern of the rear side.]



— P1 Board —

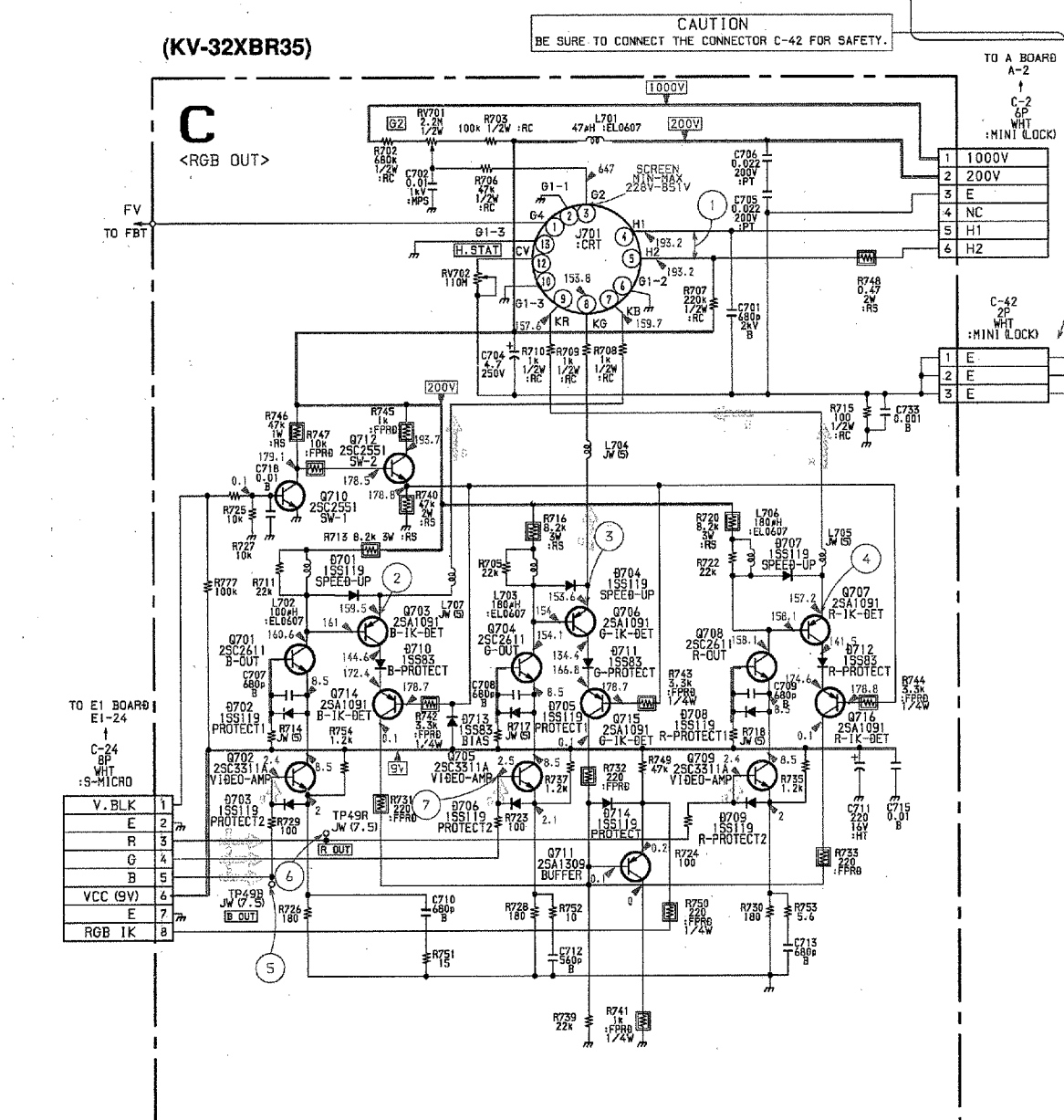
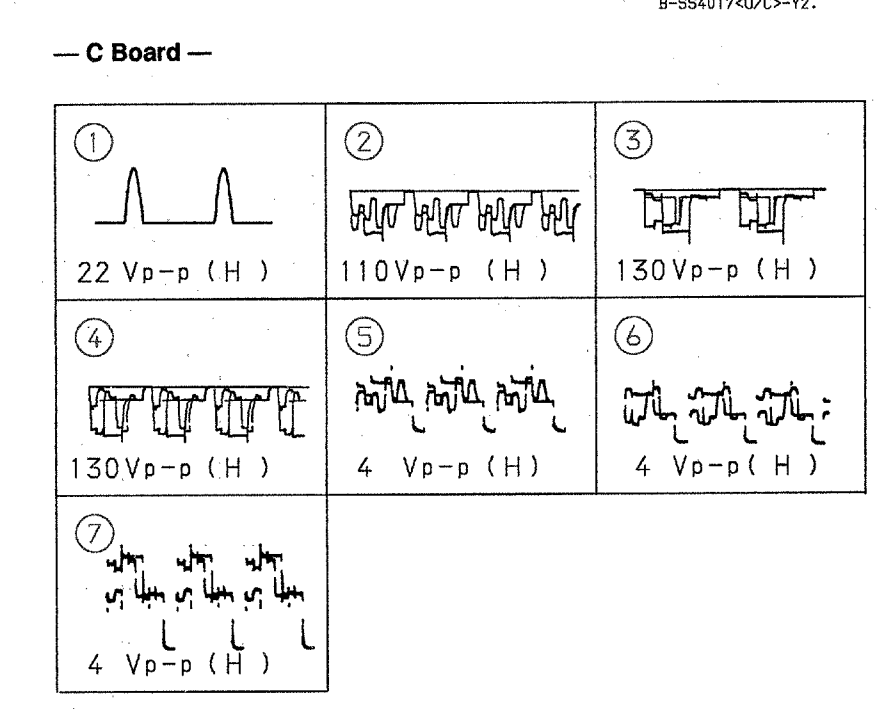
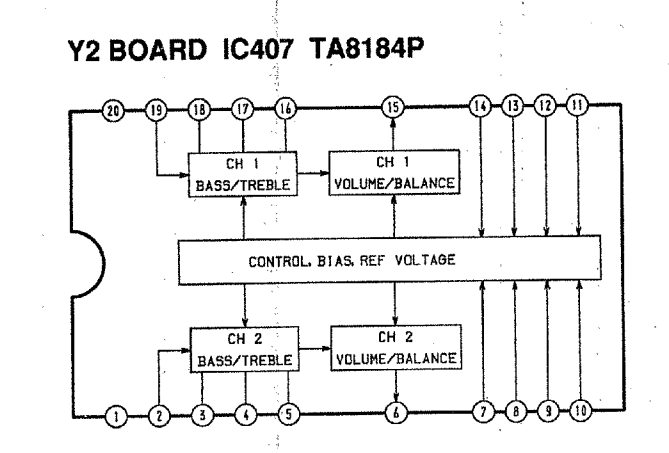
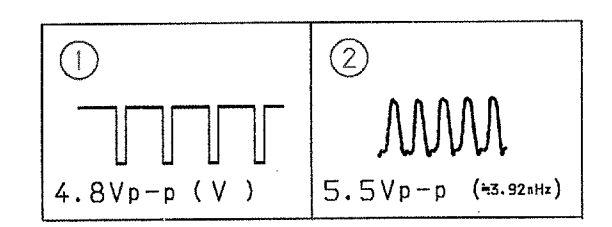
IC	
IC3001	C-2
3002	F-2
3003	B-1
3004	F-3
3005	F-3
3006	B-4
3007	E-3
3008	B-4
TRANSISTOR	
Q3001	E-3
3003	D-2
3004	E-2
3006	B-3
3007	B-3
3008	C-3
3009	B-3
3010	C-4
3011	B-3
3012	A-1
3013	F-1
DIODE	
D3003	A-3
3009	F-1
VALIABLE RESISTOR	
RV3001	B-1
3002	A-1





IC3'S LOGIC

Pin	+SV/E	FUNCTION
30	+S	FIELB 1
30	E	FIELB 2
29	+S	CAPTION
29	E	TEXT
28	+S	CHANNEL 1
28	E	CHANNEL 2
27	+S	DECODE OFF
27	E	DECODE ON



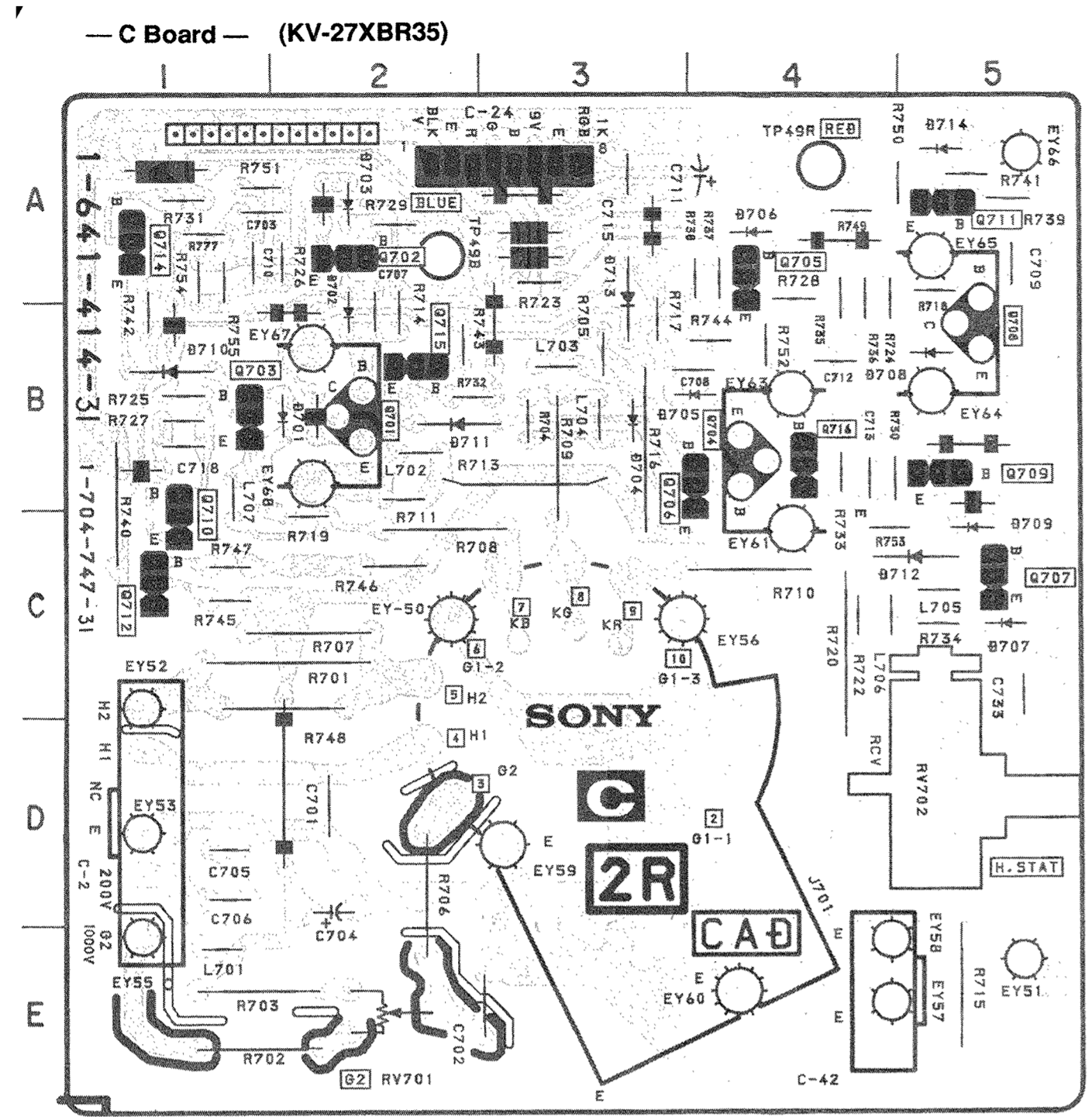
C [R.G.B. OUT]

S [SUB-CONTROL U-CON, CLOSED CAPTION DECODER]

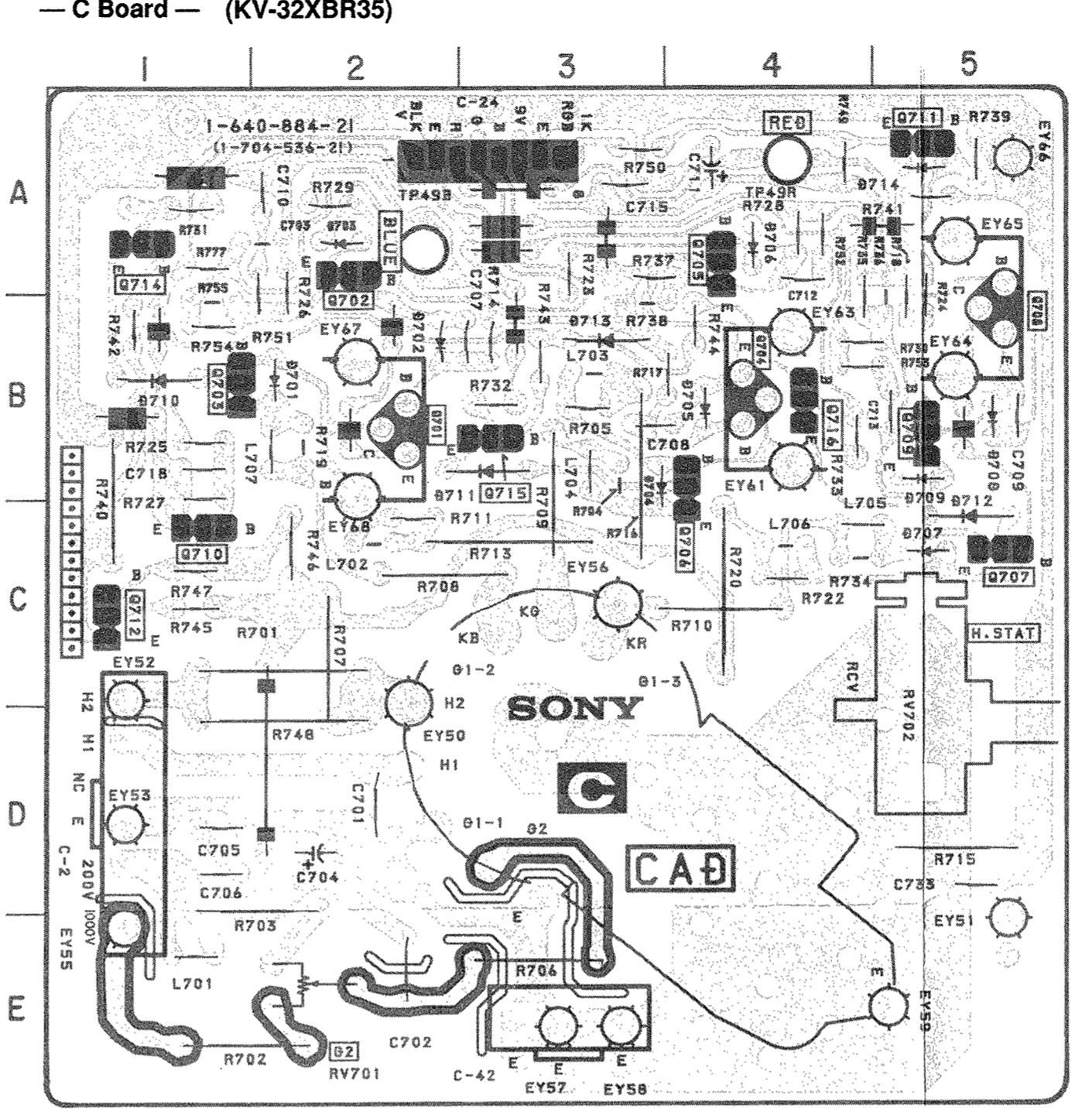
C [R.G.B. OUT]

Y2 [MTS DECODER, N/M, AUDIO CONT.]

X2 [SRS SURROUND]

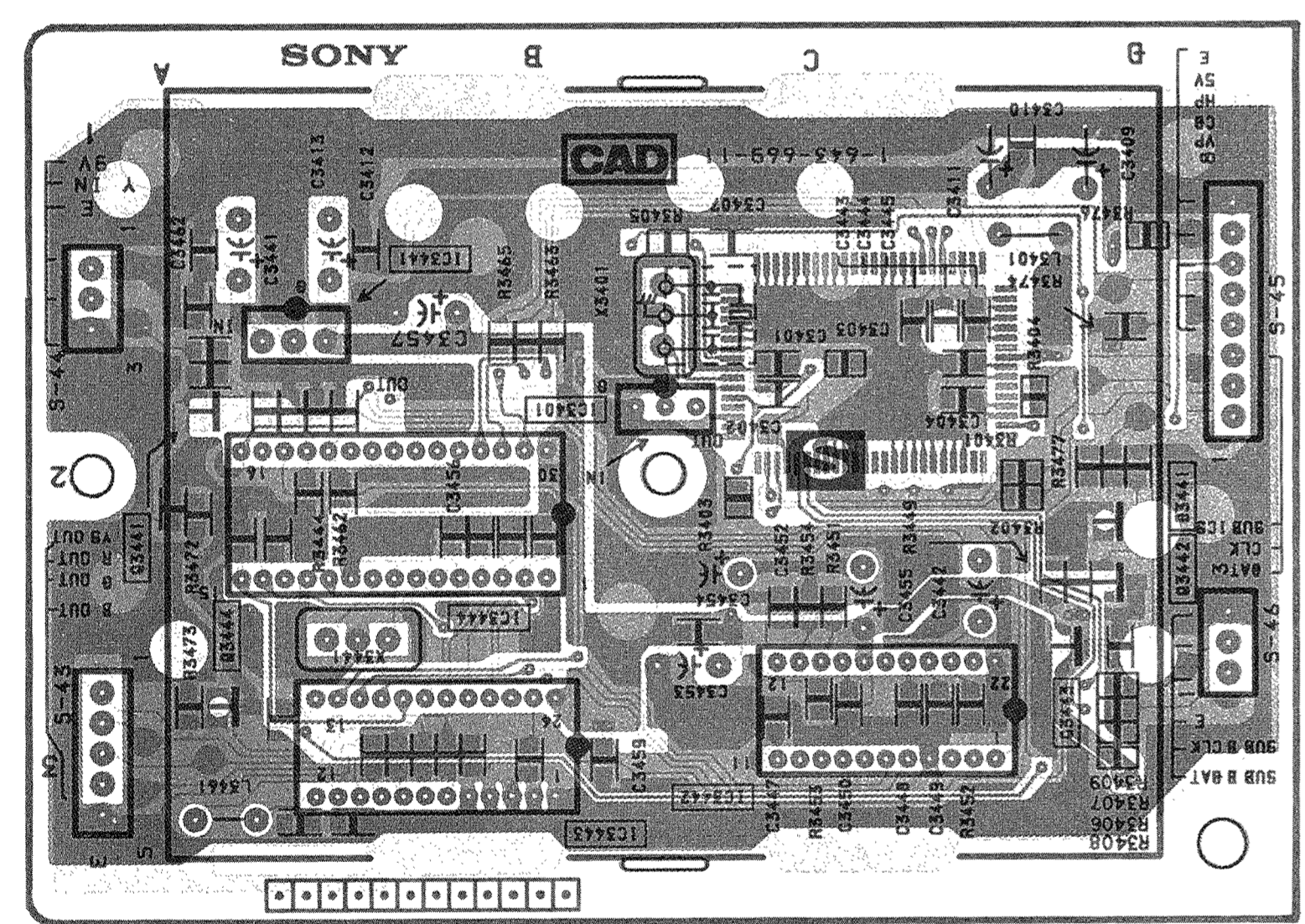


TRANSISTOR		VAL IABLE RESISTOR	
Q701	B-2	RV701	E-2
702	A-2	702	D-5
703	B-1	TEST POINT	
704	B-4	TP49B	A-2
705	A-4	49R	A-4
706	B-4		
707	C-5		
708	B-5		
709	B-5		
710	B-1		
711	A-5		
712	C-1		
714	A-1		
715	B-2		
716	B-4		
DIODE			
D701	B-2		
702	B-2		
703	A-2		
704	B-3		
705	B-4		
706	A-4		
707	C-5		
708	B-5		
709	C-5		
710	B-1		
711	B-2		
712	C-5		
713	A-3		
714	A-5		

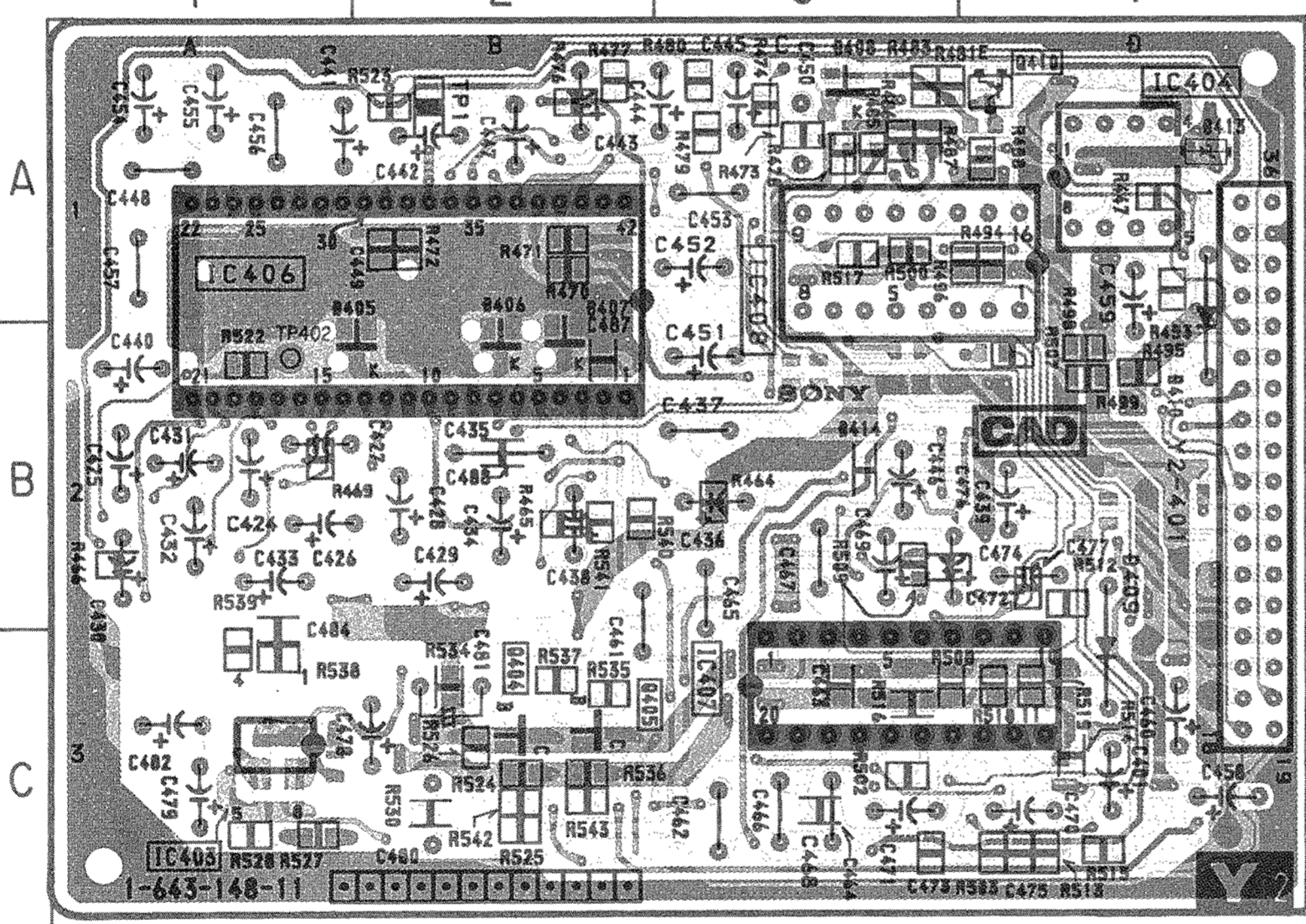


TRANSISTOR		VAL IABLE RESISTOR	
Q701	B-2	RV701	E-2
702	A-2	702	C-5
703	B-1	TEST POINT	
704	B-4	TP49B	A-2
705	A-4	49R	A-4
706	B-4		
707	C-5		
708	B-5		
709	B-5		
710	C-1		
711	A-5		
712	C-1		
714	A-1		
715	B-3		
716	B-4		
DIODE			
D701	B-2		
702	B-2		
703	A-2		
704	B-3		
705	B-4		
706	A-4		
707	C-5		
708	B-5		
709	B-5		
710	B-1		
711	B-3		
712	C-5		
713	B-3		
714	A-5		

— S Board —



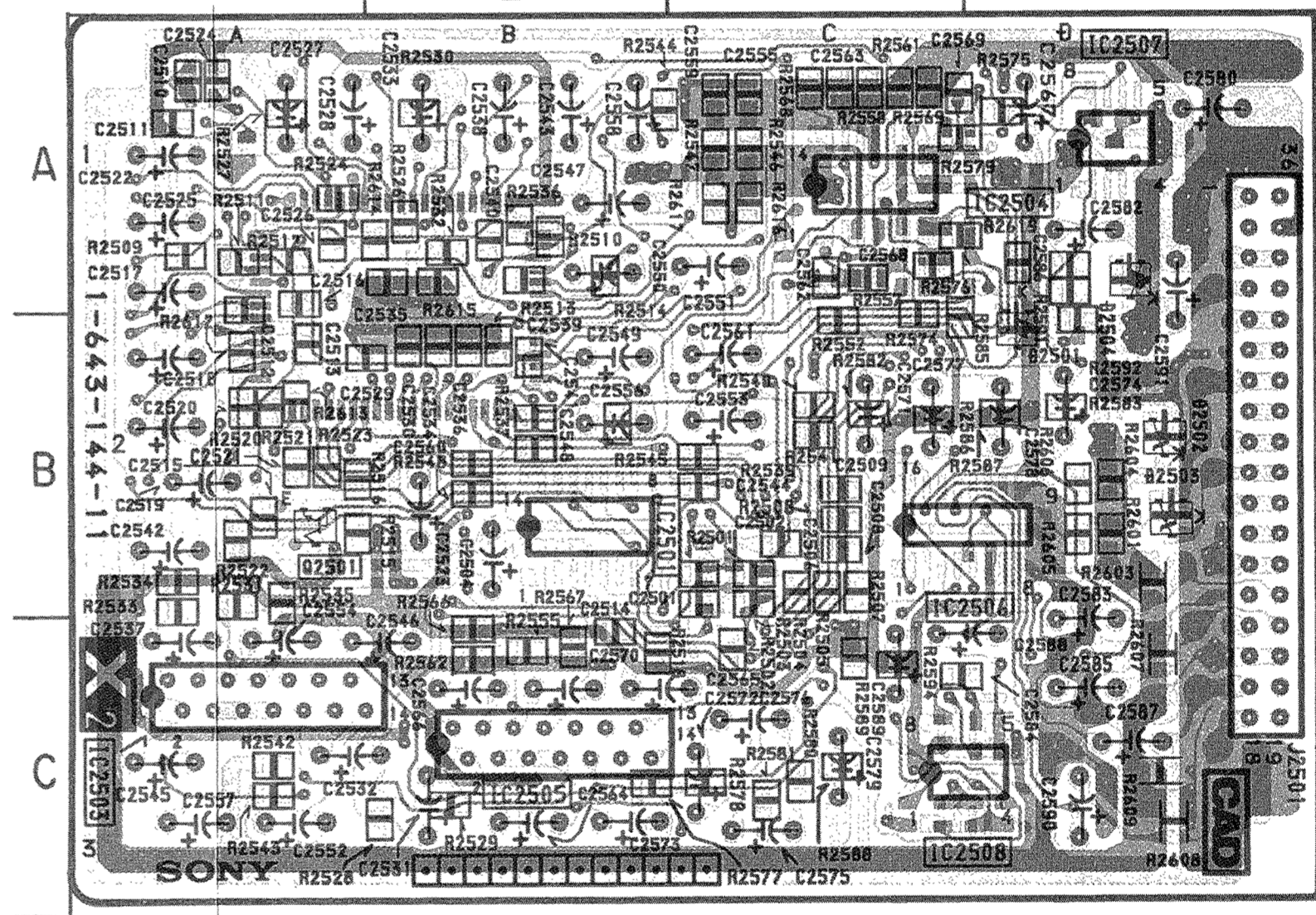
— Y2 Board —



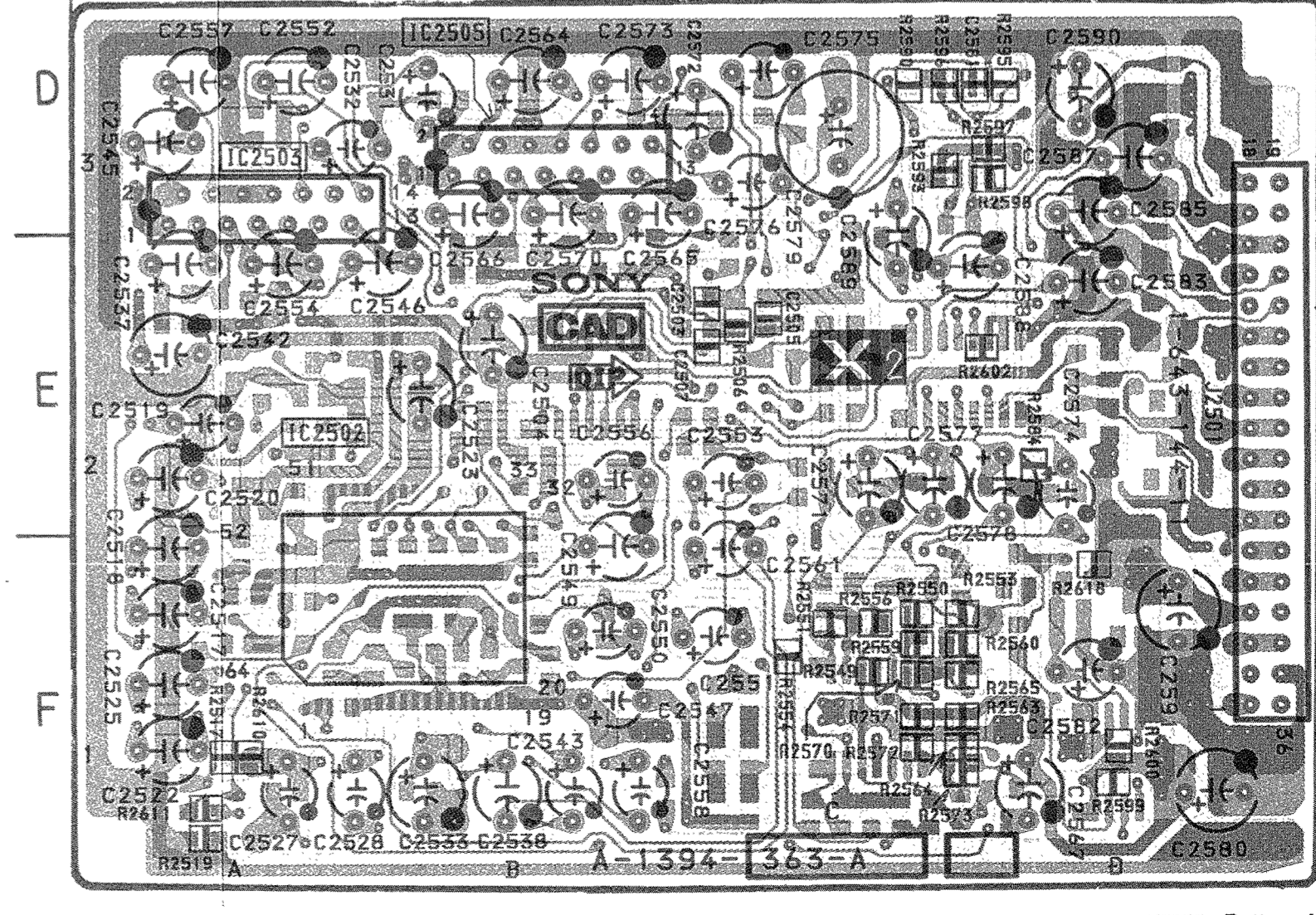
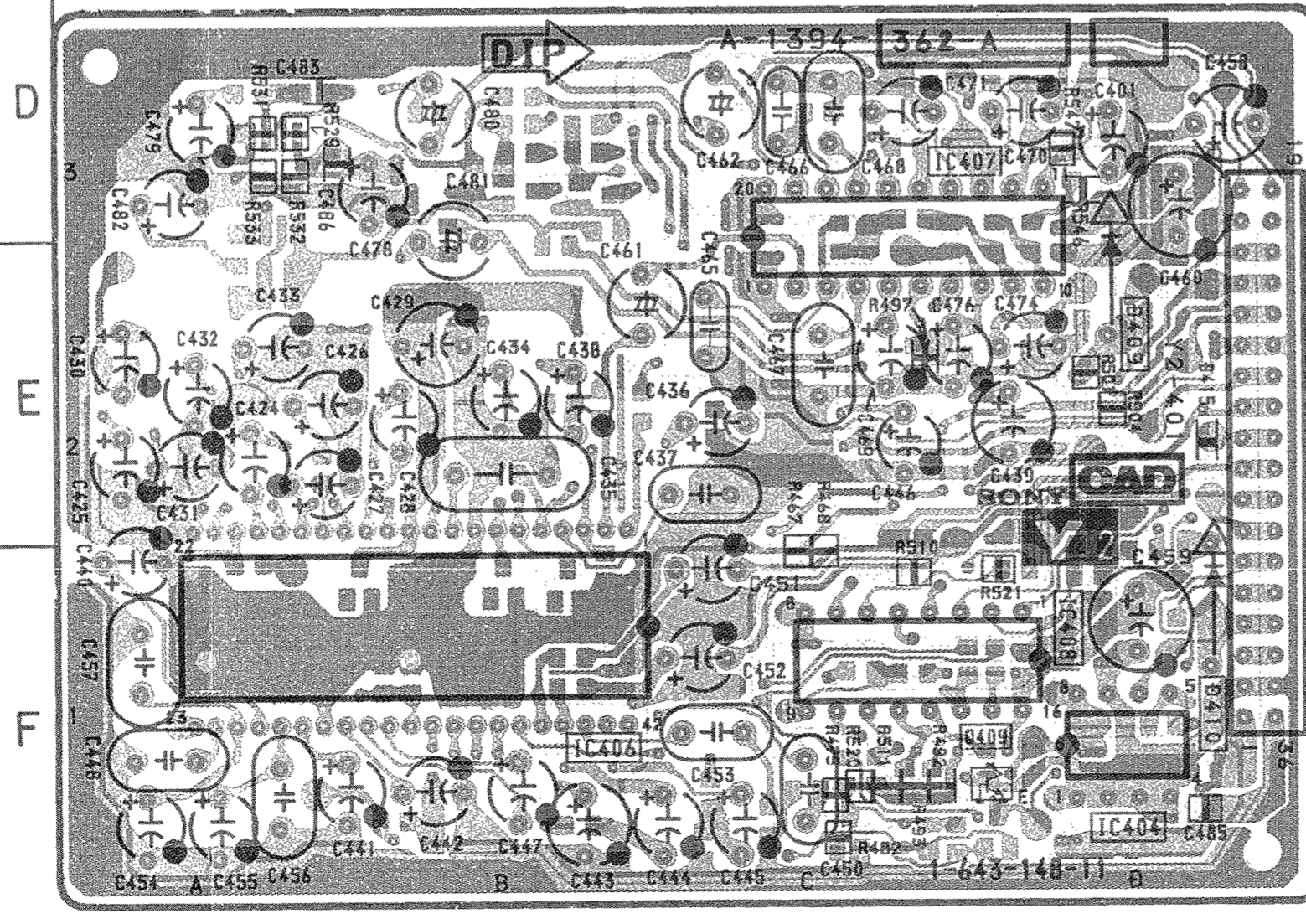
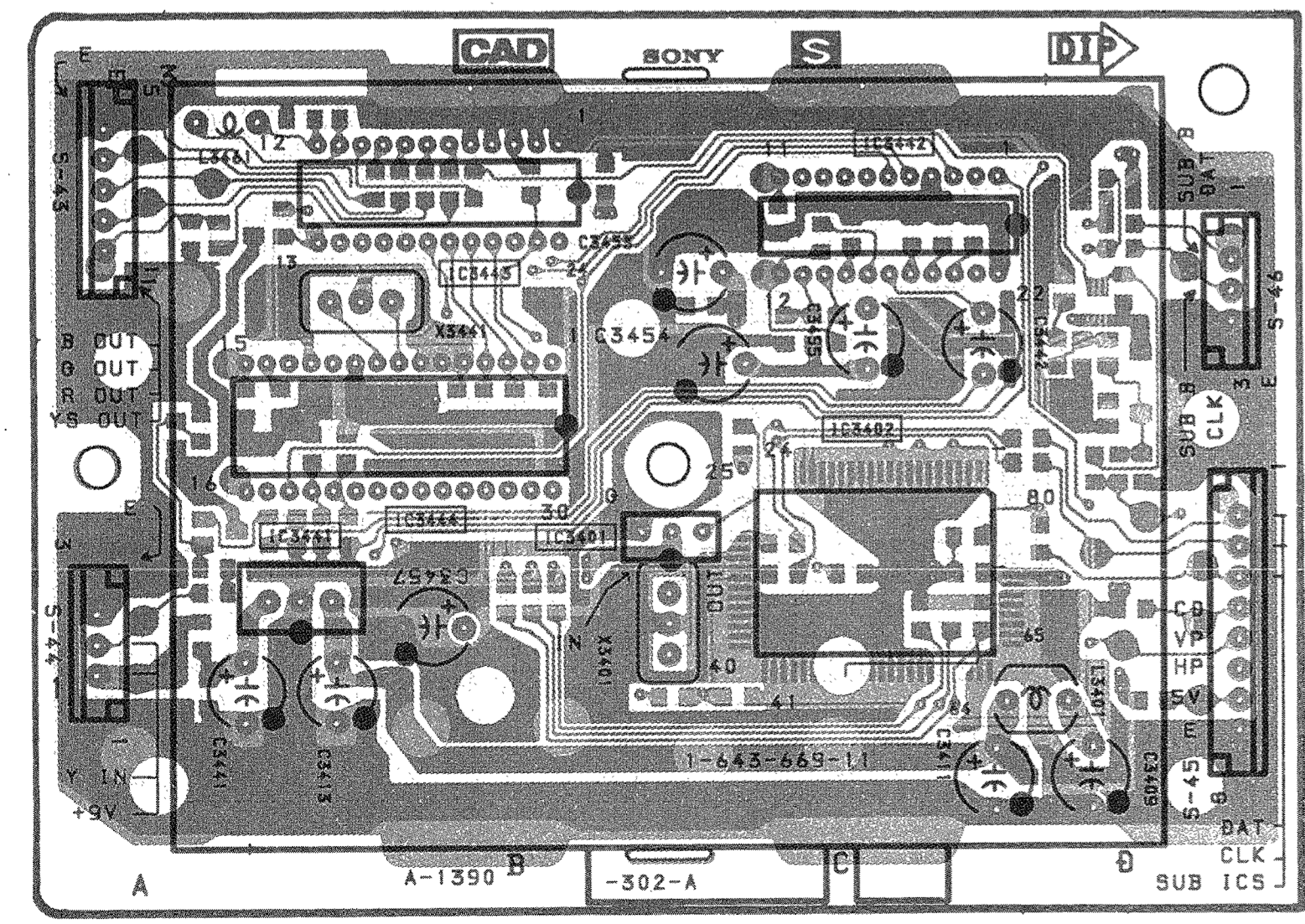
— Y2 Board —

IC	
IC403	C-1
404	A-4
406	A-2
407	C-3
408	A-3
TRANSISTOR	
Q404	C-2
405	C-2
409	F-4
410	A-4
DIODE	
D405	B-2
406	B-2
407	B-2
408	A-3
409	C-4
410	A-4
413	A-4
414	B-3
415	E-4
TEST POINT	
TP1	A-2

— X2 Board —



IC	
IC2501	B-2
2502	F-2
2503	C-1
2504	A-3
2505	C-2
2506	B-4
2507	A-4
2508	C-4
TRANSISTOR	
Q2501	B-1
DIODE	
D2501	B-4
2502	B-4
2503	B-4
2504	A-4



• : Pattern from the side which enables seeing. — 127 —

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

— 128 —

— 129 —

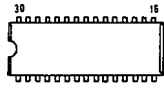
• : Pattern from the side which enables seeing. • : Pattern of the rear side.

6-8. SEMICONDUCTORS

AN78N05A
μPC78N05H



CXA1387S



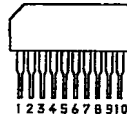
(TOP VIEW)

CXA1465AS
CXA1545S

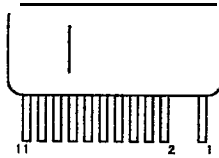


(TOP VIEW)

CXK1006L

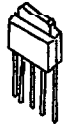


DM44

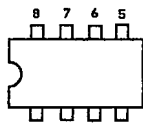


MARKING SIDE VIEW

L78LR05D-MA

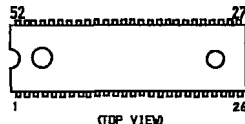


LM358P
LM393P
SDA9086-3
ST24C02CP
μPC358C
μPC4557C
24C04A1



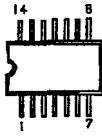
(TOP VIEW)

MB88733-143



(TOP VIEW)

MC3374M
SN74HC05ANS



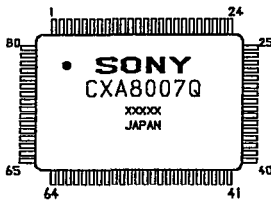
(TOP VIEW)

MN1280-S

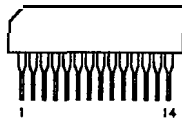


(TOP VIEW)

M37201M6-A18EP

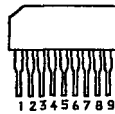


M51523AL



(TOP VIEW)

NJM2903S



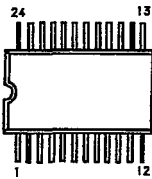
(TOP VIEW)

NJM78L09A
RC78L09A



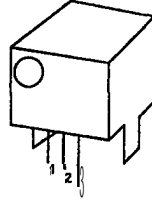
(TOP VIEW)

PCA8510T-012

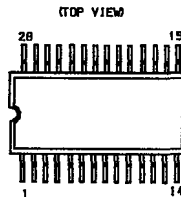


(TOP VIEW)

SBX1616-51

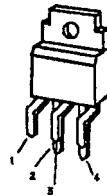


SDA9087XGEG
SDA9089XGEG



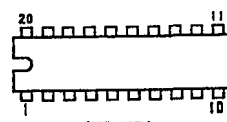
(TOP VIEW)

SI-3090CA
SI-3120CA



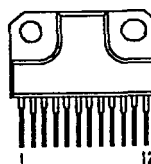
(TOP VIEW)

TAB184P
TDA3769



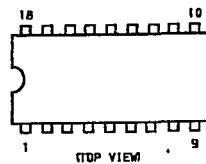
(TOP VIEW)

TAB216H



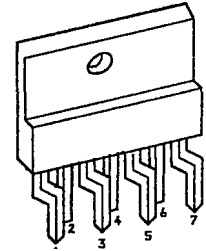
(TOP VIEW)

TDA2595/V9

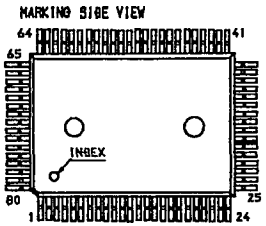


(TOP VIEW)

TDA8179S



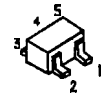
TMC73C247-I



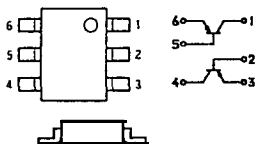
μPC24M05HF



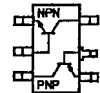
FMW1
XN1501



IMNT1US
XN4401



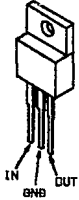
IMZ1
IMX3



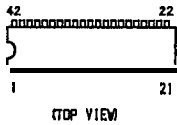
IRF540Y
IRF610
IRF614
2SK1916



AN7812
M5F7805L
NJM7805FA
RC7805FA
RC7812FA
TA78012AP
TA7805S
μPC7812H

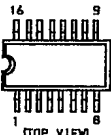


CXA1264AS



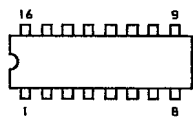
(TOP VIEW)

CXA1315M
MC14528BF
MC74HC4053F
TC4528BFHB
μPD4052BG



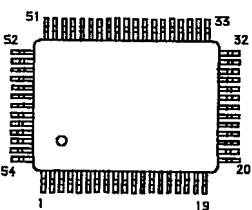
(TOP VIEW)

CXA1315P
CXA1526P
RC78M05FA



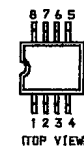
(TOP VIEW)

CXA1373Q



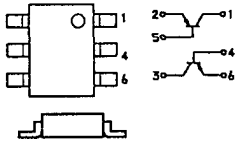
(TOP VIEW)

LM360M
RC4558PS
MC33172ML



(TOP VIEW)

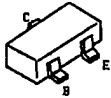
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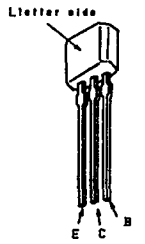
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25A10910
25A1091-0
25A733K
25A933S
25C25510
25C2551-0



25A1037K
25A1162
25B709A
25C1623
25C2412K
25C2712
25B601A



25A1175
25A1309A
25A933S
25C2785
25C3311A



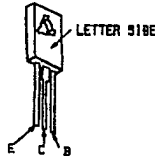
25A1306A-Y
25C3298-B-Y
25B2061



?5B734
?5C3733
?5B774



25C2611
25C2688
25C3840K



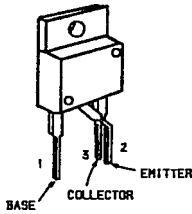
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25C4664MNP
25C4664NPR



25C4763



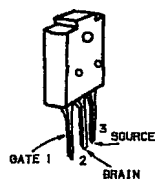
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25B1585-LK
25B2012



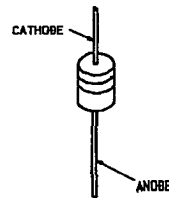
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25K1917



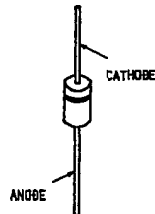
Ø1NS4
Ø1N20R
Ø2S4M
EGP20G
ERA38-06
ERA82-004
ERA83-006
RB-1 00A
RØ12ES-B2
RØ13ES-B2
RØ22ES-B2
RØ30ES-B2
RØ3.0ESL1
RØ33ES-B2
RØ36ES-B
RØ39ES-B
RØ39ES-B2
RØ4.3ES-B2
RØ4.7ES-B3
RØ5.1ES-B3
RØ5.6ES-B1
RØ6.2ES-B2
RØ6.8ES-B1
RØ7.5ES-B2
RØ9.1ES-B
RØ9.1ES-L
RGP02-20EL
15S119
15V113
WG713A



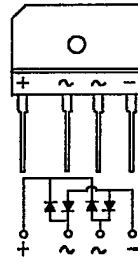
Ø10SC4MR



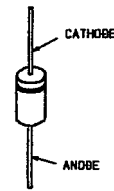
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ERB24-06Ø
RU3AM
S2LA20
S2L20UF



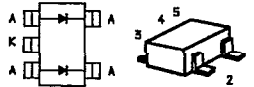
Ø6SB60L



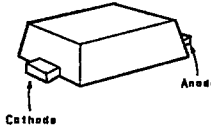
ERA81 -004
ERB44-06
GP08Ø
RGP02-17
RGP10G
RGP15G
RU30A
1SS83



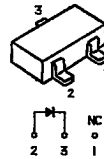
FMN1



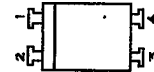
MA1 10
MA509 1



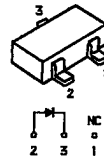
MA3130



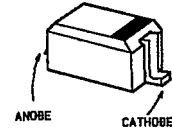
PC817
PS2501



RØ15M-B1
RØ18M-B1
Rf15.1 M-B3



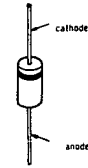
RØ5.6SB-T2
RØ6.2B-T2
15S352



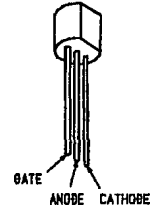
RØ9.1EW



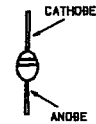
RGP10GPKG23



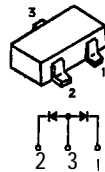
SHOR3Ø42



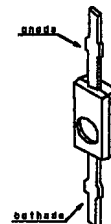
U05G



152835
152836



1 T33



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

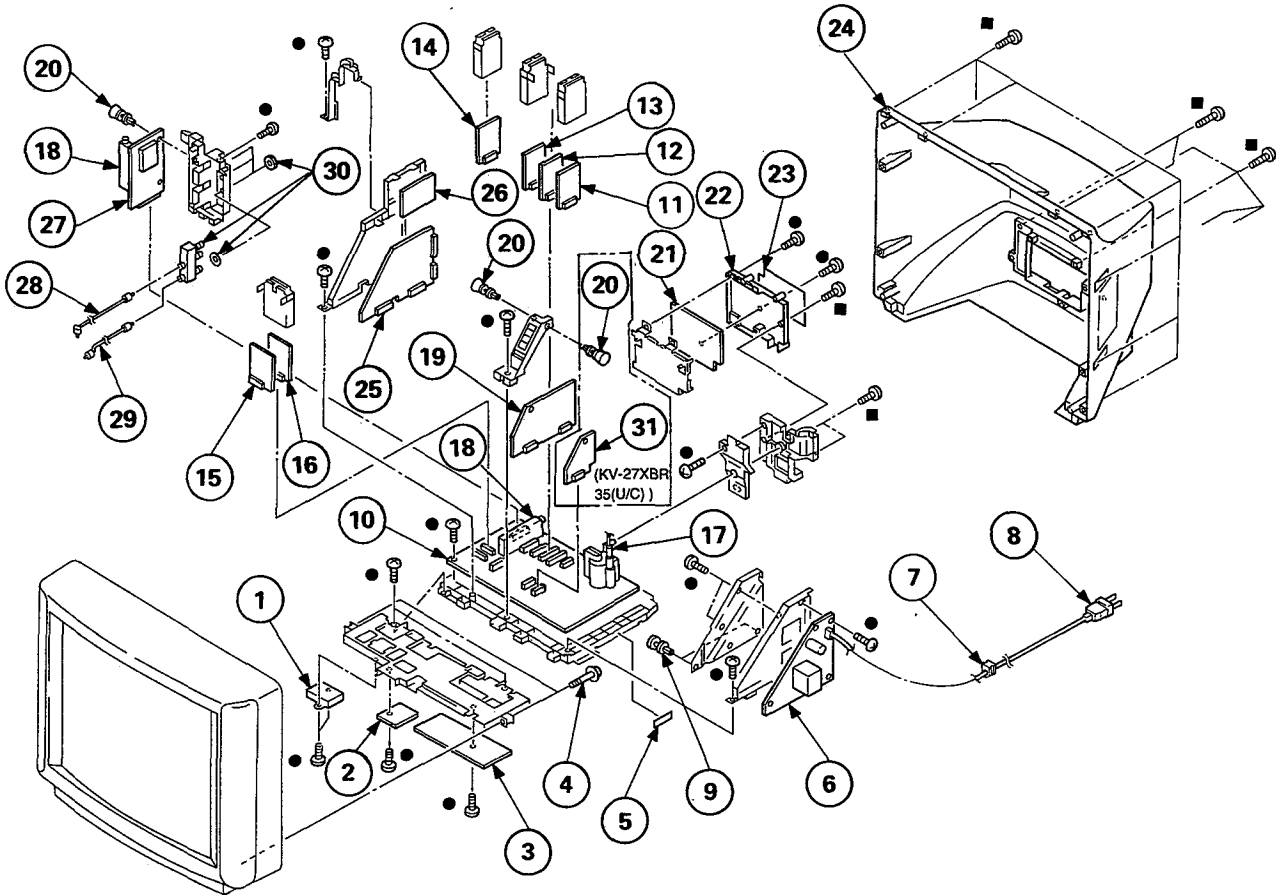
- Items marked "*" are not stocked since they are seldom required for routine service. Some delays should be anticipated when ordering these items.

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

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié

7-1. CHASSIS

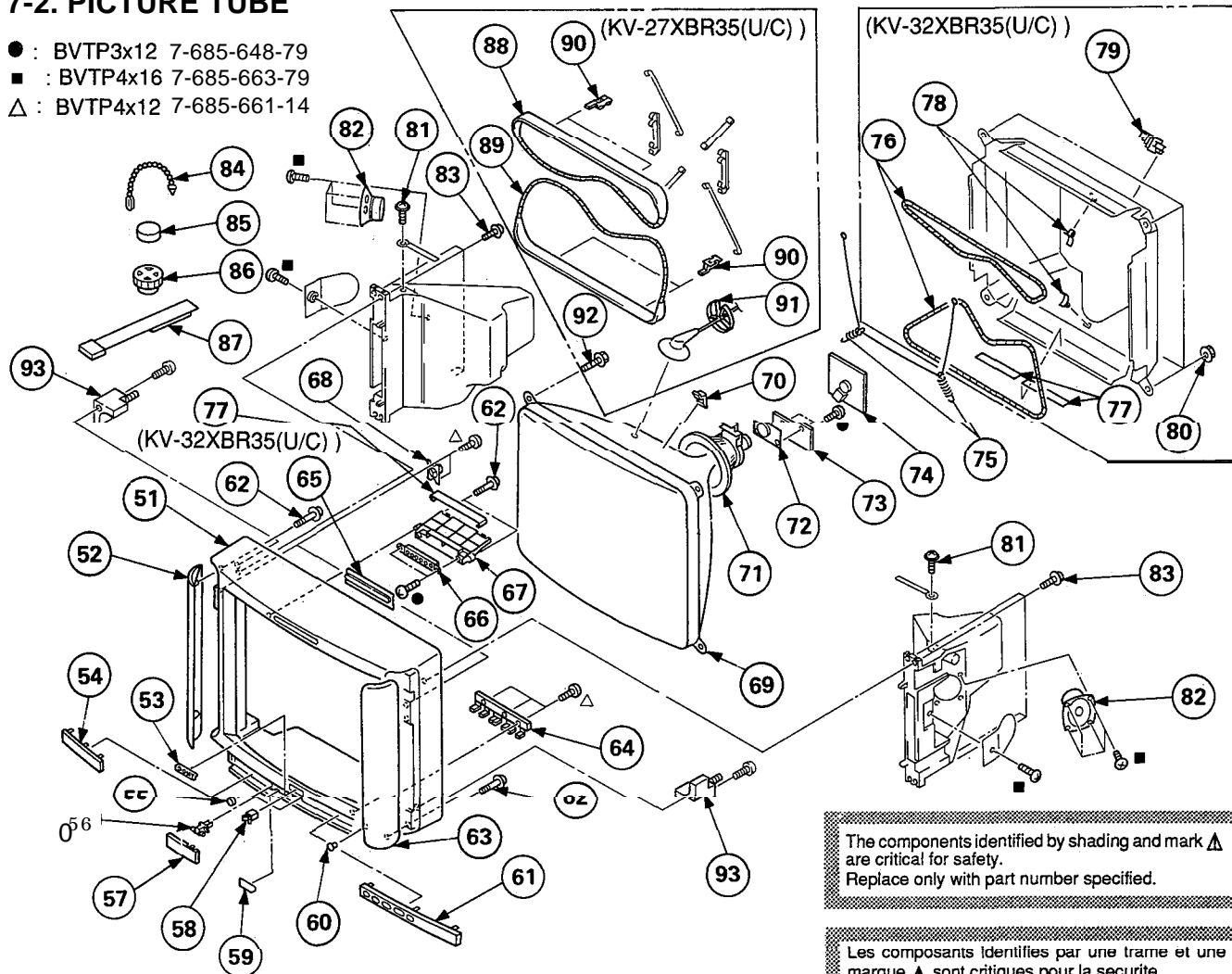
- : BVTP3x127-685-648-79
- : BVTP4x16 7-685-663-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	A-4546-027-A	TRANSMITTER TMR-D1002	32	16	*A-1394-363-A	X2 BOARD, COMPLETE	
2	*1-643-151-11	HS2 BOARD		17	▲ 1-439-513-11	TRANSFORMER ASSY, FLYBACK (NX-2602A3) (KV-32XBR35(U/C))	
3	*1-643-150-11	HS1 BOARD			▲ 1-439-524-11	TRANSFORMER ASSY, FLYBACK- (NX-3000A2) (KV-27XBR35(U/C))	
4	4-319-520-11	SCREW, SPECIAL (+PW4X30)		18	▲ 1-693-102-21	TUNER (BTF-XA401)	
5	*3-703-044-26	LABEL, CAUTION		19	*A-1341-535-A	D BOARD, COMPLETE (KV-32XBR35(U/C))	
6	*A-1316-125-A	G BOARD, COMPLETE (KV-32XBR35(U/C))			*A-1341-545-A	D BOARD, COMPLETE (KV-27XBR35(U/C))	
	*A-1316-128-A	G BOARD, COMPLETE (KV-27XBR35(U/C))		20	*4-397-418-01	RIVET, T TYPE	
7	▲ 4-334-223-03	GROUP, AC CORD		21	*A-1373-322-A	UT BOARD, COMPLETE	
8	▲ 1-696-002-11	CORD, POWER (WITH NOISE FILTER)		22	4-035-204-01	BRACKET, UT	
9	4-374-303-01	RIVET, NYLON		23	4-035-982-01	LABEL, UT	
10	*A-1296-942-A	A BOARD, COMPLETE	11~16 (KV-32XBR35(U/C))	24	X-4030-333-1	COVER ASSY, REAR (KV-32XBR35(U/C))	
	*A-1296-949-A	A BOARD, COMPLETE	11~16 (KV-27XBR35(U/C))		X-4030-451-1	COVER ASSY, REAR (KV-27XBR35(U/C))	
11	*A-1346-051-A	E1 BOARD, COMPLETE (KV-32XBR35(U/C))		25	*A-1373-323-A	U BOARD, COMPLETE	
	*A-1346-057-A	E1 BOARD, COMPLETE (KV-27XBR35(U/C))		26	*1-643-669-11	S BOARD	
12	*A-1346-052-A	E2 BOARD, COMPLETE (KV-32XBR35(U/C))		27	*A-1195-052-A	P3 BOARD, COMPLETE	
	*A-1346-058-A	E2 BOARD, COMPLETE (KV-27XBR35(U/C))		28	*1-555-400-00	CABLE, PIN	
13	*A-1306-415-A	M BOARD, COMPLETE		29	*1-557-056-31	CABLE, P-P	
14	*A-1195-051-A	P1 BOARD, COMPLETE		30	▲ 1-417-178-11	SELECTOR, ANTENNA (AS-2)	
15	*A-1394-362-A	Y2 BOARD, COMPLETE		31	*A-1347-068-A	VC BOARD, COMPLETE (KV-27XBR35(U/C))	
				32	*A-4542-096-A	MAIN BOARD, COMPLETE	

7-2. PICTURE TUBE

- : BVTP3x12 7-685-648-79
- : BVTP4x16 7-685-663-79
- △ : BVTP4x12 7-685-661-14



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

Les composants identifiés par une trame et une marque **△** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-035-757-01	CABINET (WITH BEZEL) (KV-32XBR35(U/C))	
	4-036-463-01	CABINET (WITH BEZEL) (KV-27XBR35(U/C))	
52	X-4030-330-1	GRILLE ASSY (LEFT), SPEAKER	
	x-4030-449-1	GRILLE ASSY (LEFT), SPEAKER	
53		(KV-27XBR35(U/C))	
54	3-704-179-01	EMBLEM (NO.9), SONY	
		PANEL (LEFT), ORNAMENTAL (KV-32XBR35(U/C))	
55	4-036-455-01	PANEL (LEFT), ORNAMENTAL (KV-27XBR35(U/C))	
56	3-703-005-11	CUSHION SHAFT, LID	
	4-035-687-01	DOOR (KV-32XBR35(U/C))	
	4-036-446-01	DOOR (KV-27XBR35(U/C))	
57		CATCHER, - PUSH	
58	4-382-006-01	LABEL, JACK	
59	4-005-750-01		
60	*4-389-517-01	GUIDE (H), LIGHT	
61	4-035-753-01	PANEL (RIGHT), ORNAMENTAL (KV-32XBR35(U/C))	
62	4-036-456-01	PANEL (RIGHT), ORNAMENTAL (KV-27XBR35(U/C))	
63	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
	x-4030-331-1	GRILLE ASSY (RIGHT), SPEAKER	
	X-4030-450-1	GRILLE ASSY (RIGHT), SPEAKER	
		(KV-27XBR35(U/C))	
64	4-035-688-01	BUTTON, MULTI	
65	4-035-844-01	FILTER, TRANSMITTER (KV-32XBR35(U/C))	
	4-036-447-01	FILE, TRANSMITTER (KV-27XBR35(U/C))	
66	A-4546-028-A	LUMINOUS UNIT IFP-D1002	94
67	4-035-845-01	HOLDER, TRANSMITTER	
68	1-544-580-11	SPEAKER (2.5CM)	
69	△ 8-733-723-05	PICTURE TUBE(A80JYV50X) (KV-32XBR35(U/C))	
	△ 8-733-835-05	PICTURE TUBE(M68KUZ10X) (KV-27XBR35(U/C))	

REF. NO.	PART NO.	DESCRIPTION	REMARK
70	3-704-495-01	SPACER, DY	
71	△ 1-451-315-11	DEFLECTION YOKE (Y34FXA) (KV-32XBR35(U/C))	
	△ 1-451-394-11	DEFLECTION YOKE (Y29BXA) (KV-27XBR35(U/C))	
72	△ 1-452-579-11	NECK ASSY, PICTURE TUBE (NA322)	
	△ 1-452-616-11	NECK ASSY, PICTURE TUBE (NA323)	
		(KV-27XBR35(U/C))	
73	*A-1342-176-A	V BOARD, COMPLETE (KV-32XBR35(U/C))	
	*A-1342-182-A	V BOARD, COMPLETE (KV-27XBR35(U/C))	
74	*A-1331-203-A	C BOARD, COMPLETE (KV-32XBR35(U/C))	
	*A-1331-209-A	C BOARD, COMPLETE (KV-27XBR35(U/C))	
75	4-036-329-01	SPRING (B), TENSLOM	
76	△ 1-426-356-11	COIL, DEMAGNETIZATION (KV-32XBR35(U/C))	
77	4-385-725-01	SHEET, BLOTTING (KV-32XBR35(U/C))	
78	*4-371-629-01	STOPPER, WIRE (KV-32XBR35(U/C))	
79	4-033-681-01	HOLDER, LEAD (KV-32XBR35(U/C))	
80	4-387-204-01	NUT, SPECIAL, PICTURE TUBE	
		(KV-32XBR35(U/C))	
81	4-948-214-01	SCREW (2) (M4X8), TAPPING	
82	1-544-544-11	SPEAKER (10CM)	
83	4-384-096-01	SCREW (4X16), TAPPING, +P	
84	4-308-870-00	CLIP, LEAD WIRE	
85	1-452-032-00	MAGNET, DISK, 10MM φ	
86	1-452-094-00	MAGNET, ROTATABLE DISK, 15MM φ	
87	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
88	△ 1-426-573-11	COIL, DEGAUSSING (KV-27XBR35(U/C))	
89	△ 1-426-574-11	COIL, DEGAUSSING (KV-27XBR35(U/C))	
90	4-033-545-01	CLIP (KV-27XBR35(U/C))	
91	*3-704-372-01	HOLDER, HV CABLE (KV-27XBR35(U/C))	
92	4-390-505-01	SCREW (7), TAPPING (KV-27XBR35(U/C))	
93	4-031-429-01	BRACKET, PICTURE TUBE (KV-32XBR35(U/C))	
94	*1-643-140-11	LED BOARD	

P3

SECTION 8
ELECTRICAL PARTS LIST

NOTE

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

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité
Ne les remplacer que par une pièce portant le numéro spécifié

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

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

All variable and adjustable resistors have characteristic curve B, unless otherwise noted

CAPACITORS MF μ F, PF μ F
The components identified by \square 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

COILS MMH mH, UH μ H

RESISTORS
All resistors are in ohms
F nonflammable

REF. NO.	PART NO.	DESCRIPTION	REMARK	EF. NO.	PART NO.	DESCRIPTION	REMARK
*A-1195-052-A	P3 BOARD, COMPLETE	*****		52001	*1-573-962-11	CONNECTOR (MALE) 50P	
<CAPACITOR>				<COIL>			
C2001	1-124-910-11	ELECT	47MF 20% 50v	L2002	1-410-663-31	INDUCTOR 10UH	
C2002	1-124-910-11	ELECT	47MF 20% 50V	L2003	1-410-667-31	INDUCTOR 22UH	
C2003	1-124-119-00	ELECT	330MF 20% 16V	12009	1-410-663-31	INDUCTOR 10UH	
C2004	1-164-232-11	CERAM C	CHIP 0.01MF 10% 50V	<CONNECTOR>			
C2005	1-114-261-00	ELECT	10MF 20% 50V	P3-39	*1-564-521-11	PLUG, CONNECTOR 6P	
C2006	1-164-232-11	CERAM C	CHIP 0.01MF 10% 50V	P3-40	*1-564-519-11	PLUG, CONNECTOR 4P	
C2007	1-126-157-11	ELECT	10MF 20% 16V	P3-41	*1-564-519-11	PLUG, CONNECTOR 4P	
C2008	1-163-031-11	CERAM C	CHIP 0.01MF 50V	<TRANSISTOR>			
C2009	1-163-157-00	FILM	0.022MF 5% 50V	Q2001	8-729-216-22	TRANSISTOR 2SA1162-G	
C2010	1-164-161-11	CERAM C	CHIP 0.0022MF 50V	Q2002	g-729-920-74	TRANSISTOR 2SC2412K-QR	
C2011	1-126-157-11	ELECT	10MF 20% 16V	Q2003	8-729-920-74	TRANSISTOR 2SC2412K-QR	
C2013	1-126-301-11	ELECT	1MF 20% 50V	Q2004	g-729-216-22	TRANSISTOR 2SA1162-G	
C2014	1-164-161-11	CERAM C	CHIP 0.0022MF 10% 50V	Q2005	a-729-920-74	TRANSISTOR 2SC2412K-QR	
C2015	1-163-117-00	CERAM C	CHIP 100PF 5% 50V	Q2006	8-729-920-74	TRANSISTOR 2SC2412K-QR	
C2016	1-163-109-00	CERAM C	CHIP 47PF 5% 50V	Q2007	8-729-216-22	TRANSISTOR 2SA1162-G	
C2017	1-163-109-00	CERAM C	CHIP 47PF 5% 50V	Q2008	8-729-920-74	TRANSISTOR 2SC2412K-QR	
C2018	1-124-465-00	ELECT	0.47MF 20% 50V	Q2009	8-729-216-22	TRANSISTOR 2SA1162-G	
C2019	1-126-103-11	ELECT	470MF 20% 16V	Q2010	8-729-920-74	TRANSISTOR 2SC2412K-QR	
C2020	1-163-031-11	CERAM C	CHIP 0.01MF 50v	Q2011	g-729-216-22	TRANSISTOR 2SA1162-G	
C2021	1-126-157-11	ELECT	10MF 20% 16V	Q2012	8-729-216-22	TRANSISTOR 2SA1162-G	
C2022	1-164-232-11	CERAM C	CHIP 0.01MF 10% 50V	Q2030	8-729-216-22	TRANSISTOR 2SA1162-G	
C2023	1-163-119-00	CERAM C	CHIP 120PF 5% 50V	82031	8-729-216-22	TRANSISTOR 2SA1162-G	
C2024	1-124-465-00	ELECT	0.47MF 20% 50V	Q2036	g-729-920-74	TRANSISTOR 2SC2412K-QR	
C2025	1-126-157-11	ELECT	10MF 20% 16V	<RESISTOR>			
C2027	1-163-103-00	CERAM C	CHIP 27PF 5% 50V	R2002	1-216-357-00	METAL OXIDE 4.7 5% 1W F	
C2028	1-163-107-00	CERAM C	CHIP 39PF 5% 50V	R2003	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
C2065	1-126-157-11	ELECT	10MF 20% 16V	R2004	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
C2066	1-126-157-11	ELECT	10MF 20% 16V	R2005	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
C2067	1-126-157-11	ELECT	10MF 20% 16V	R2006	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
C2068	1-126-233-11	ELECT	22MF 20% 50v	R2007	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
C2075	1-163-117-00	CERAM C	CHIP 100PF 5% 50v	R2008	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
<NETWORK>				R2009	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
CP200	1-236 472-11	NETWORK, RES, THICK FILM		R2010	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
<IC>				R2011	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
IC2001	8-759-982-13	IC RC7812FA		R2012	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
IC2002	8-759-700-48	IC NJM2903S		R2013	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
IC2003	8-759-805-37	IC L78LR05D-MA		R2014	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
IC2004	8-759-066-51	IC MB88733-143		R2015	1-216-033-00	METAL GLAZE 220 5% 1/10W	
IC2005	8-759-803-25	IC CXK1006L		R2016	1-216-295-00	METAL GLAZE 0 5% 1/10W	
<JACK>				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	

P3 A

The components identified by shading and mark Δ are critical for safety.
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REF. NO.	PART NO.	DESCRIPTION	REMARK
R2020	I-216-037-00	METAL GLAZE 330 5%	1/10W
R2021	I-216-095-00	METAL GLAZE 82K 5%	1/10W
R2022	I-216-109-00	METAL GLAZE 330K 5%	1/10W
R2023	I-216-073-00	METAL GLAZE 10K 5%	1/10W
R2024	I-216-047-00	METAL GLAZE 820 5%	1/10W
R2025	I-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2026	I-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2027	I-216-033-00	METAL GLAZE 220 5%	1/10W
R2028	I-216-073-00	METAL GLAZE 10K 5%	1/10W
H2029	I-216-033-00	METAL GLAZE 220 5%	1/10W
R2030	I-216-009-00	METAL GLAZE 22 5%	1/10W
R2031	I-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2032	I-216-033-00	METAL GLAZE 220 5%	1/10W
R2033	I-216-033-00	METAL GLAZE 220 5%	1/10W
R2037	I-216-089-00	METAL GLAZE 47K 5%	1/10W
R2038	I-216-097-00	METAL GLAZE 100K 5%	1/10W
R2039	I-216-097-00	METAL GLAZE 100K 5%	1/10W
R2040	I-216-073-00	METAL GLAZE 10K 5%	1/10W
R2041	I-216-073-00	METAL GLAZE 10K 5%	1/10W
R2046	I-216-073-00	METAL GLAZE 10K 5%	1/10W
R2047	I-216-049-00	METAL GLAZE 1K 5%	1/10W
R2048	I-216-073-00	METAL GLAZE 10K 5%	1/10W
R2049	I-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R2050	I-216-063-00	METAL GLAZE 3.9K 5%	1/10W
R2051	I-216-049-00	METAL GLAZE 1K 5%	1/10W
R2052	I-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2053	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2054	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2055	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2056	I-216-295-00	METAL GLAZE 0 5%	1/10W
R2057	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2058	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2059	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2060	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2061	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2062	I-216-295-00	METAL GLAZE 0 5%	1/10W
R2063	I-216-025-00	METAL GLAZE 100 5%	1/10W
R2064	I-216-025-00	METAL GLAZE 100 5%	1/10W
R2093	I-249-441-11	CARBON 100K 5%	1/4W
R2124	I-216-049-00	METAL GLAZE 1K 5%	1/10W
R2125	I-216-089-00	METAL GLAZE 47K 5%	1/10W
R2127	I-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R2128	I-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R2129	I-216-055-00	METAL GLAZE 1.8K 5%	1/10W
R2130	I-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R2131	I-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R2132	I-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R2147	I-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R2148	I-216-081-00	METAL GLAZE 22K 5%	1/10W
R2149	I-249-441-11	CARBON 100K 5%	1/4W
<VARIABLE RESISTOR>			
RV2001	I-238-015-11	RES, ADJ, CARBON 4.7K	
<TUNER>			
TU2001	Δ I-693-102-21	TUNER (BTR-XA401)	
<CRYSTAL'>			
X2001	I-567-192-11	OSCILLATOR, CERAMIC	

REF. NO.	PART NO.	DESCRIPTION	REMARK
*A- 1296-942- A A BOARD, COMPLETE(KV-32XBR35(U/C)) *****			
*4-341-751-01 EYELET (EY101~EY172)			
*4-341-752-01 EYELET (EY1~EY55)			
4-382-854-11 SCREW (M3X10), P, SW (+)			
<CONNECTOR,>			
A0	*1-573-979-1	CONNECTOR BOARD TO BOARD	11P
A2	*1-573-964-1	PIN, CONNECTOR (PC BOARD)	6P
A3	*1-573-986-1	PIN, CONNECTOR (PC BOARD)	5P
A4	*1-564-510-11	PLUG, CONNECTOR	7P
A5	*1-564-507-1	PLUG, CONNECTOR	4P
A11	*1-564-507-11	PLUG, CONNECTOR	4P
A12	1-573-297-1	CONNECTOR, BOARD TO BOARD	18P
A13	1-573-297-1	CONNECTOR, BOARD TO BOARD	18P
A14	1-573-296-1	CONNECTOR, BOARD TO BOARD	10P
A18	1-573-296-1	CONNECTOR, BOARD TO BOARD	10P
A21	*1-508-768-00	PIN, CONNECTOR (5MM PITCH)	GP
A37	*1-564-514-11	PLUG, CONNECTOR	11P
A48	*1-508-784-00	PIN, CONNECTOR (5MM PITCH)	1P
A49	*1-564-506-11	PLUG, CONNECTOR	3P
DY1	*1-580-798-11	CONNECTOR PIN (DY)	6P
IES002	*1-573-960-11	CONNECTOR (FEMALE)	50P
<CAPACITOR>			
C201	1-126-101-11	ELECT	100MF 20% 16V
C202	1-102-108-00	CERAMIC	150PF 10% 50v
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	4i0MF 20% 16V
C214	I-126-101-11	ELECT	100MF 20% 16V
C215	I-124-910-11	ELECT	47MF 20% 50V
C216	I-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
C221	1-124-910-11	ELECT	47MF 20% 50V
C223	1-124-261-00	ELECT	10MF 20% 50V
C224	t-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	1-137-116-11	FILM	1MF 5% 200V
C502	1-130-728-00	FILM	0.0022MF 5% 50V
C504	I-136-161-00	FILM	0.047MF 5% 50v
C505	I-124-790-11	ELECT	0.47MF 20% 100V
C506	1-124-480-11	ELECT	470MF 20% 25V
C508	I-162-114-00	CERAMIC	0.0047MF 2KV
C509	1-123-946-00	ELECT	4.7MF 20% 250V
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	I-124-477-11	ELECT	47MF 20% 25V
C515	I-162-117-00	CERAMIC	100PF 10% 500v
C517	1-124-477-11	ELECT	47MF 20% 25V
C519	1-124-472-11	ELECT	470MF 20% 10V
C520	I-162-116-00	CERAMIC	680PF 10% 2KV
C521	Δ I-137-606-21	FILM	0.023MF 3% 2KV



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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C522	1-162-116-00	CERAMIC	680PF 10% 2KV	<DIODE>			
C523	1-124-465-00	ELECT	0.47MF 20% 50V	D201	8-719-110-13	DIODE	RD9.1ES-B2
C524	1-130-487-00	MYLAK	0.022MF 5% 50V	D202	8-719-110-13	DIODE	RD9.1ES-B2
C525	1-162-116-00	CERAMIC	680PF 10% 2KV	D204	8-719-911-19	DIODE	1SS119
C526	-1-136-895-51	FILM	0.068MF 5% 630V	D205	8-719-911-19	DIODE	1SS119
C527	1-130-495-00	MYLAR	0.1MF 5% 50V	D206	8-719-911-19	DIODE	1SS119
C528	1-106-359-00	MYLAR	0.0047MF 10% 200V	I1207	8-719-911-19	DIODE	1SS119
C531	1-124-634-11	ELECT	1MF 20% 250V	D208	8-719-911-19	DIODE	1SS119
C532	1-124-477-11	ELECT	47MF 20% 25V	D209	8-719-510-48	DIODE	D1N20R
C533	1-137-119-11	FILM	2MF 5% 200V	D213	a-719-110-78	DIODE	RD33ES-B2
C534	1-137-116-11	FILM	1MF 5% 200V	D501	a-719-018-82	DIODE	RGPO2-20EL-6394
C535	1-124-480-11	ELECT	470MF 20% 25V	D502	Δ 8-719-302-43	DIODE	EL1Z
C536	1-102-228-00	CERAMIC	470PF 10% 500V	D504	8-719-911-19	DIODE	1SS119
C537	1-106-343-00	MYLAR	0.001MF 10% 100V	D506	8-719-109-90	DIODE	RD5.6ES-B3
C538	1-106-395-00	MYLAR	0.15MF 10% 200V	D508	R-719-109-88	DIODE	RD5.6ES-B1
C539	1-123-950-00	ELECT	47MF 20% 250V	D509	8-719-110-03	DIODE	RD7.5ES-B2
C540	1-124-480-11	ELECT	470MF 20% 25V	D511	8-719-300-33	DIODE	RU-3AM
C541	1-102-228-00	CERAMIC	470PF 10% 500V	I1512	8-719-911-55	DIODE	U05G
C542	1-106-387-00	MYLAR	0.068MF 10% 200V	I1513	8-719-911-55	DIODE	U05G
C546	1-123-024-21	ELECT	33MF 160V	D514	8-719-312-72	DIODE	RU30A
C549	1-124-261-00	ELECT	10MF 20% 50V	D515	8-719-300-33	DIODE	RU-3AM
C551	1-130-471-00	MYLAR	0.001MF 5% 50V	D516	8-719-979-85	DIODE	EGP20G
C552	1-126-176-11	ELECT	220MF 20% 10V	D518	8-719-109-93	DIODE	RD6.2ES-B2
C554	Δ 1-161-731-51	CERAMIC	0.001MF 10% 2KV	D521	8-719-911-19	DIODE	1SS119
C557	1-124-465-00	ELECT	0.47MF 20% 50V	D522	a-719-110-72	DIODE	RD30ES-B2
C561	1-124-261-00	ELECT	10MF 20% 50V	I.524	8-719-976-64	DIODE	RGPO2-17
C562	1-124-499-11	ELECT	1MF 20% 50V	D525	8-719-911-19	DIODE	1SS119
C563	1-130-491-00	MYLAR	0.047MF 5% 50V	D527	8-719-110-78	DIODE	RD33ES-B2
C564	1-130-495-00	MYLAR	0.1MF 5% 50V	D528	8-719-911-19	DIODE	1SS119
C565	1-130-495-00	MYLAR	0.1MF 5% 50V	D529	8-719-911-19	DIODE	1SS119
C566	1-130-485-00	MYLAR	0.015MF 5% 50V	D530	8-719-911-19	DIODE	1SS119
C569	1-136-167-00	FILM	0.15MF 5% 50V	D1407	8-719-911-19	DIODE	1SS119
C570	1-130-471-00	MYLAR	0.001MF 5% 50V	D1409	8-719-110-90	DIODE	RD39ES-B4
C571	1-130-651-00	FILM	0.001MF 2% 100V	D1410	a-719-901-83	DIODE	1SS83
C572	1-124-261-00	ELECT	10MF 20% 50V	D1411	8-719-901-83	DIODE	1SS83
C573	1-130-471-00	MYLAR	0.001MF 5% 50V	D1503	8-719-911-55	DIODE	U05G
C575	1-102-038-00	CERAMIC	0.001MF 500V	D4001	a-719-911-19	DIODE	1SS119
C578	1-106-367-00	MYLAR	0.01MF 10% 200V	<IC>			
C579	1-106-383-00	MYLAR	0.047MF 200V	IC201	8-749-920-58	IC	SI-3090CA
C1401	1-124-910-11	ELECT	47MF 20% 50V	IC202	8-749-921-99	IC	SI-3120CA
C1402	1-126-157-11	ELECT	10MF 20% 16V	IC204	8-759-231-53	IC	TA7805S
C1403	1-126-157-11	ELECT	10MF 20% 16V	IC205	8-759-144-84	IC	UPC24M05HF
C1404	1-126-157-11	ELECT	10MF 20% 16V	IC206	8-759-982-13	IC	RC7812FA
C1405	1-124-910-11	ELECT	47MF 20% 50V	IC501	8-759-987-16	IC	LM393P
C1406	1-124-910-11	ELECT	47MF 20% 50V	IC502	1-809-726-11	MODULE	PROTECTOR PM-29
C1407	1-124-607-11	ELECT	2200MF 20% 50V	IC503	8-759-987-16	IC	LM393P
C1408	1-136-165-00	FILM	0.1MF 5% 50V	IC504	8-759-146-55	IC	UPC2412HF
C1409	1-136-165-00	FILM	0.1MF 5% 50V	IC1401	8-759-246-70	IC	TA8216H
C1424	1-124-607-11	ELECT	2200MF 20% 50V	IC1501	8-759-506-46	IC	TDA8179S
C1425	1-124-607-11	ELECT	2200MF 20% 50V	<COIL>			
C1426	1-126-157-11	ELECT	10MF 20% 16V	L201	1-408-408-00	INDUCTOR	8.2UH
C1435	1-126-233-11	ELECT	22MF 20% 50V	L205	r-410-645-31	INDUCTOR	100UH
C1437	1-130-499-00	MYLAR	0.22MF 5% 50V	L208	1-410-785-31	INDUCTOR	0.22UH
C1501	1-126-233-11	ELECT	22MF 20% 50V	L210	1-408-408-00	INDUCTOR	8.2UH
C1502	1-126-301-11	ELECT	1MF 20% 50V	L502	1-412-552-31	INDUCTOR	2.2MH
C1503	1-102-114-00	CERAMIC	470PF 10% 50V	L508	1-421-541-00	COIL	CHOKE 1000UH
C1504	1-124-480-11	ELECT	470MF 20% 25V	L509	1-459-104-00	COIL	WITH CORE
C1505	1-124-911-11	ELECT	220MF 20% 50V	L510	Δ 1-460-197-11	COIL	FERRITE (PMC)
C1506	1-136-171-00	FILM	0.33MF 5% 50V	L511	1-412-519-11	INDUCTOR	3.3UH
C1507	1-106-224-00	MYLAR	0.15MF 10% 100V				
C1508	1-124-480-11	ELECT	470MF 20% 25V				
C1509	1-124-122-11	ELECT	100MF 20% 50V				



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

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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	REF. NO.	PART NO.	DESCRIPTION	REMARK
L512	I-412-531-31	INDUCTOR 33UH		R510	1-249-409-11	CARBON 220 5%	1/4W F
L513	1-412-519-11	INDUCTOR 3.3UH		R511	1-249-397-11	CARBON 22 5%	1/4W F
1515	1-410-645-31	INDUCTOR 100UH		R512	1-249-423-11	CARBON 3.3K 5%	1/4W
L517	▲ 1-459-973-21	COIL, HORIZONTAL LINEARITY		R513	1-249-425-11	CARBON 4.7K 5%	1/4W
L520	1-412-531-31	INDUCTOR 33UH		R514	1-249-438-11	CARBON 56K 5%	1/4W
L521	1-459-148-00	COIL		R515	1-249-433-11	CARBON 22K 5%	1/4W
L1501	I-412-525-31	INDUCTOR 10UH		R519	1-247-755-11	CARBON 1.8K 5%	1/2W F
L1502	1-412-525-31	INDUCTOR 10UH		R520	I-249-441-11	CARBON 100K 5%	1/4W
L1503	1-412-525-31	INDUCTOR 10UH		R521	1-216-481-11	METAL OXIDE 1.2K 5%	3W F
<TRANSISTOR>				R522	1-215-917-11	METAL OXIDE 1K 5%	3W F
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE		R523	1-249-425-11	CARBON 4.7K 5%	1/4W
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE		R524	1-215-445-00	METAL 10K 1%	1/4W
Q501	8-729-011-07	TRANSISTOR 2SC4763 (LBSONY)		R526	1-249-401-11	CARBON 47 5%	1/4W
Q502	8-729-140-97	TRANSISTOR 2SB734-34		R528	1-247-903-00	CARBON 1M 5%	1/4W
9504	8-729-119-76	TRANSISTOR 2SA1175-HFE		R529	1-249-429-11	CARBON 10K 5%	1/4W
Q506	8-729-011-00	TRANSISTOR 2SK1916-F87		R530	1-215-457-00	METAL 33K 1%	1/4W
9507	8-729-119-80	TRANSISTOR 2SC2688-LK		R532	1-249-437-11	CARBON 47K 5%	1/4W
Q509	8-729-319-76	TRANSISTOR 2SA1175-HFE		R533	1-247-887-00	CARBON 220K 5%	1/4W
Q510	B-729-119-78	TRANSISTOR 2SC2785-HFE		R534	1-247-883-00	CARBON 150K 5%	1/4W
Q512	B-729-119-78	TRANSISTOR 2SC2785-HFE		R535	1-249-397-11	CARBON 22 5%	1/4W F
Q513	8-729-140-96	TRANSISTOR 2SD774-34		R537	1-215-465-00	METAL 68K 1%	1/4W
Q515	8-729-119-76	TRANSISTOR 2SA1175-HFE		R538	1-249-439-11	CARBON 68K 5%	1/4W
Q516	8-729-119-76	TRANSISTOR 2SA1175-HFE		R539	1-215-437-00	METAL 4.7K 1%	1/4W
Q1401	8-729-119-78	TRANSISTOR 2SC2785-HFE		R541	1-249-397-11	CARBON 22 5%	1/4W F
91407	8-729-119-78	TRANSISTOR 2SC2785-HFE		R542	1-215-890-11	METAL OXIDE 470 5%	2W F
Q1408	8-729-119-78	TRANSISTOR 2SC2785-HFE		R546	1-215-441-00	METAL 6.8K 1%	1/4W
Q1501	8-729-119-78	TRANSISTOR 2SC2785-HFE		R547	I-249-441-11	CARBON 100K 5%	1/4W
Q1502	8-729-119-78	TRANSISTOR 2SC2785-HFE		R548	1-215-885-00	METAL OXIDE 2W 5%	F
<RESISTOR>				R549	1-215-881-11	METAL OXIDE 08 5%	2W F
R201	1-249-405-11	CARBON 100 5%	1/4W F	R550	1-215-910-00	METAL OXIDE 68 5%	3W F
R202	1-249-405-11	CARBON 100 5%	1/4W F	R551	1-247-743-11	CARBON 220 5%	1/2W F
R210	1-249-441-11	CARBON 100K 5%	1/4W	R552	1-249-389-11	CARBON 4.7 5%	1/4W F
R211	1-249-425-11	CARBON 4.7K 5%	1/4W	R553	1-249-377-11	CARBON 0.47 5%	1/4W F
R214	1-249-377-11	CARBON 0.47 5%	1/4W F	R554	1-249-377-11	CARBON 0.47 5%	1/4W F
R219	1-249-426-11	CARBON 5.6K 5%	1/4W	R558	1-259-882-11	CARBON 3.3M 5%	1/4W
R221	1-249-409-11	CARBON 220 5%	1/4W	R560	1-247-901-11	CARBON 820K 5%	1/4W
R222	1-249-436-11	CARBON 39K 5%	1/4W	R564	1-215-470-00	METAL 110K 1%	1/4W
R223	1-249-434-11	CARBON 27K 5%	1/4W	▲ R565 ▲	CARBON		1/4W
R224	1-249-409-11	CARBON 220 5%	1/4W	▲ R566 ▲	CARBON		1/4W
R225	1-249-419-11	CARBON 1.5K 5%	1/4W	R567	1-249-425-11	CARBON 4.7K 5%	1/4W
R226	1-249-417-11	CARBON 1K 5%	1/4W	R568	1-249-425-11	CARBON 4.7K 5%	1/4W
R227	1-249-417-11	CARBON 1K 5%	1/4W	R569	1-249-417-11	CARBON 1K 5%	1/4W
R230	1-215-923-00	METAL OXIDE 10K 5%	3W F	R572	1-249-393-11	CARBON 10 5%	1/4W F
R231	1-249-40Y-II	CARBON 220 5%	1/4W F	R573	1-249-393-11	CARBON 10 5%	1/4W F
R232	1-216-380-11	METAL OXIDE 8.2 5%	2W F	R576	1-249-417-11	CARBON 1K 5%	1/4W F
R233	1-249-409-11	CARBON 220 5%	1/4W	R584	1-215-467-00	METAL 82K 1%	1/4W
R234	1-249-409-11	CARBON 220 5%	1/4W	R587	1-249-441-11	CARBON 100K 5%	1/4W
R235	1-249-409-11	CARBON 220 5%	1/4W	R589	1-249-437-11	CARBON 47K 5%	1/4W
R236	1-249-409-11	CARBON 220 5%	1/4W	R590	1-249-431-11	CARBON 15K 5%	1/4W
R237	1-249-409-11	CARBON 220 5%	1/4W	R592	1-249-429-11	CARBON 10K 5%	1/4W
R238	1-249-409-11	CARBON 220 5%	1/4W	R593	1-215-878-00	METAL OXIDE 33K 5%	1W F
R239	1-249-409-11	CARBON 220 5%	1/4W	R594	1-247-903-00	CARBON 1M 5%	1/4W
R240	1-249-482-11	CARBON 4.7 5%	1/2W F	R595	1-249-440-11	CARBON 82K 5%	1/4W
R501	1-215-442-00	METAL 7.5K 1%	1/4W	R597	1-249-437-11	CARBON 47K 5%	1/4W
R504	1-215-869-11	METAL OXIDE 1K 5%	1W F	R598	1-249-377-11	CARBON 0.47 5%	1/4W F
R505	1-215-449-00	METAL 15K 1%	1/4W	R599	1-249-425-11	CARBON 4.7K 5%	1/4W
R506	1-249-423-11	CARBON 3.3K 5%	1/4W	R1401	1-215-444-00	METAL 9.1K 1%	1/4W
R507	1-249-411-11	CARBON 330 5%	1/4W	RI402	1-215-444-00	METAL 9.1K 1%	1/4W
R508	1-249-435-11	CARBON 33K 5%	1/4W	RI403	1-215-430-00	METAL 2.4K 1%	1/4W
R509	1-249-441-11	CARBON 100K 5%	1/4W	RI404	1-215-430-00	METAL 2.4K 1%	1/4W
				RI405	1-249-385-11	CARBON 2.2 5%	1/4W F
				R1406	1-249-385-11	CARBON 2.2 5%	1/4W F
				R1409	1-249-433-11	CARBON 22K 5%	1/4W
				RI410	1-249-433-11	CARBON 22K 5%	1/4W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R1427	I-249-421-11	CARBON	2.2K 5% 1/4W	DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P	
R1428	I-249-421-11	CARBON	2.2K 5% 1/4W	BS002	*1-573-960-11	CONNECTOR (FEMALE) 50P	
RI439	I-247-883-00	CARBON	150K 5% 1/4W				
R1501	I-215-449-00	METAL	15K 1% 1/4W				
R1502	I-215-436-00	METAL	4.3K 1% 1/4W				
						<CAPACITOR>	
R1503	I-249-425-11	CARBON	4.7K 5% 1/4W	C201	1-126-101-11	ELECT	100MF 20% 16V
R1505	I-249-433-11	CARBON	22K 5% 1/4W	C202	1-102-108-00	CERAMI C	150PF 10% 50V
R1506	I-218-642-91	METAL OXIDE	100K 5% 1/4W	C210	1-102-121-00	CERAMI C	0.0022MF 10% 50V
R1507	I-249-436-11	CARBON	39K 5% 1/4W	C211	1-101-006-00	CERAMI C	0.047MF 50V
R1508	I-215-453-00	METAL	22K 1% 1/4W	C213	1-126-103-11	ELECT	470MF 20% 16V
R1509	I-215-461-00	METAL	47K 1% 1/4W	C214	1-126-101-11	ELECT	100MF 20% 16V
R1510	I-249-383-11	CARBON	1.5 5% 1/4W	C215	1-124-910-11	ELECT	47MF 20% 50V
R1511	I-215-888-00	METAL OXIDE	220 5% 2W	C216	1-126-101-11	ELECT	100MF 20% 16V
R1512	I-216-371-00	METAL OXIDE	1.5 5% 2W	C217	1-124-126-00	ELECT	47MF 20% 25V
R1513	I-249-436-11	CARBON	39K 5% 1/4W	C218	1-126-103-11	ELECT	470MF 20% 16V
R1550	I-215-881-11	METAL OXIDE	15 5% 2W	C219	1-136-169-00	FILM	0.22MF 5% 50V
R4002	I-249-385-11	CARBON	2.2 5% 1/4W	C220	I-124-910-11	ELECT	47MF 20% 50V
R4003	I-216-361-00	METAL OXIDE	0.22 5% 2W	C221	1-124-910-11	ELECT	47MF 20% 50V
R4004	I-216-374-00	METAL OXIDE	2.7 5% 2W	C223	1-124-261-00	ELECT	10MF 20% 50V
R4006	I-216-396-11	METAL OXIDE	3.9 5% 3W	C224	1-124-261-00	ELECT	10MF 20% 50V
		<SPARK GAP>		C225	1-124-120-11	ELECT	220MF 20% 16V
SG501	I-519-422-11	GAP, SPARK		C226	I-124-621-11	ELECT	3300MF 20% 6.3V
		<TRANSFORMER>		C299	1-126-101-11	ELECT	100MF 20% 16V
T501	I-439-513-11	TRANSFORMER ASSY FLYBACK (NX-2602A3)		C501	1-137-116-11	FILM	1MF 5% 200V
T503	I-437-217-11	TRANSFORMER, HORIZONTAL DRIVE		C502	I-130-471-00	FILM	0.001MF 5% 50V
T505	I-413-059-00	TRANSFORMER, FERRITE (DFT)		C503	1-124-261-00	ELECT	10MF 20% 50V
		<THERMISTOR>		C504	1-136-161-00	FILM	0.047MF 5% 50V
THP1501	I-807-970-11	THERMISTOR		C505	1-124-790-11	ELECT	0.47MF 20% 100V
		<TUNER>		C506	1-124-480-11	ELECT	470MF 20% 25V
TU101	I-693-102-21	TUNER (BTF-XA401)		C507	1-130-473-00	MYLAR	0.0015MF 5% 50V
		*****		C508	1-162-114-00	CERAMI C	0.0047MF 2KV
		*A-1296-949-A A BOARD, COMPLETE (KV-27XBR35(U/C))		C509	I-124-808-51	ELECT	10MF 20% 200V
		*****		C510	I-102-110-00	CERAMI C	220PF 10% 50V
		*4-341-751-01 EYELET (EY101~EY169, N171, EY172)		C511	1-124-477-11	ELECT	47MF 20% 25V
		*4-341-752-01 EYELET (EY1~EY55)		C512	1-162-318-11	CERAMI C	0.001MF 10% 500V
		4-382-854-11 SCREW (M3X10), P, SW (+)		C513	1-106-391-12	MYLAR	0.1MF 10% 200V
		<CONNECTOR>		C514	1-124-477-11	ELECT	47MF 20% 25V
A0	*1-573-979-11	CONNECTOR, BOARD TO BOARD 11P		C515	1-162-117-00	CERAMI C	100PF 10% 50V
A2	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P		C517	1-124-477-11	ELECT	47MF 20% 25V
A3	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P		C518	1-136-161-00	FILM	0.047MF 5% 50V
A4	*1-564-510-11	PLUG, CONNECTOR 7P		C519	1-124-472-11	ELECT	470MF 20% 10V
A5	*1-564-507-11	PLUG, CONNECTOR 4P		C520	I-161-754-00	CERAMI C	0.001MF 10% 2KV
A11	*1-564-507-11	PLUG, CONNECTOR 4P		C521	I-137-604-21	FILM	0.022MF 2% 200V
A12	1-573-297-11	CONNECTOR, BOARD TO BOARD 18P		C522	1-162-116-00	CERAMI C	680PF 10% 2KV
A13	I-573-297-11	CONNECTOR, BOARD TO BOARD 18P		C523	1-124-465-00	ELECT	0.47MF 20% 50V
A14	I-573-296-11	CONNECTOR, BOARD TO BOARD 10P		C524	1-130-487-00	MYLAR	0.022MF 5% 50V
A15	I-573-296-11	CONNECTOR, BOARD TO BOARD 10P		C525	1-162-116-00	CERAMI C	680PF 10% 2KV
A18	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P		C526	AI-137-515-91	FILM	0.056MF 3% 400V
A21	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P		C527	1-136-167-00	FILM	0.15MF 5% 50V
A37	*1-564-514-11	PLUG, CONNECTOR 11P		C528	1-106-359-00	MYLAR	0.0047MF 10% 200V
A48	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		C529	1-136-161-00	FILM	0.047MF 5% 50V
A49	*1-564-506-11	PLUG, CONNECTOR 3P		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	CERAMI C	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	CERAMI C	470PF 10% 500V
				C542	1-106-387-00	MYLAR	0.068MF 10% 200V

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REF. NO.	PART NO.	DESCRIPTION	REMARK
C543	1-136-347-11	FILM	0.0047MF 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
Δ C554	Δ 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	1-130-651-00	FILM	0.001MF 2% 100V
C572	1-124-261-00	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 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
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
C1435	1-126-233-11	ELECT	22MF 20% 50V
C1437	1-130-499-00	MYLAR	0.22MF 5% 50V
C1501	1-126-233-11	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	1-108-390-91	MYLAR	0.12MF 10% 100V
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

<DIODE>

D201	8-719-110-13	DIODE	RD9.1ES-B2
D202	8-719-110-13	DIODE	RD9.1ES-B2
D204	8-719-911-19	DIODE	1SS119
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	D1N20R
D213	8-719-110-78	DIODE	RD33ES-B2

REF. NO.	PART NO.	DESCRIPTION	REMARK
D501	8-719-018-82	DIODE	RGPO2-20EL-6394
D502	Δ 8-719-302-43	DIODE	EL1Z
D503	t-719-970-87	DIODE	ERA38-06
D504	8-719-911-19	DIODE	1SS119
D506	8-719-109-90	DIODE	RD5.6ES-B3
D508	g-719-109-88	DIODE	RD5.6ES-B1
D509	8-719-110-03	DIODE	RD7.5ES-B2
D510	8-719-911-19	DIODE	1SS119
D511	a-719-300-33	DIODE	RU-3AM
D512	g-719-911-55	DIODE	U05G
D513	8-719-911-55	DIODE	U05G
D514	8-719-312-72	DIODE	RU30A
D515	k-719-300-33	DIODE	RU-3AM
D516	8-719-979-85	DIODE	EGP20G
D517	8-719-943-06	DIODE	ERB24-06D
D518	8-719-109-93	DIODE	RD6.2ES-B2
D521	g-719-911-19	DIODE	1SS119
D522	8-719-110-72	DIODE	RD30ES-B2
D524	8-719-976-64	DIODE	RGPO2-17
D525	8-719-911-19	DIODE	1SS119
D527	a-719-110-78	DIODE	RD33ES-B2
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	RD39ES-B4
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	8-719-911-55	DIODE	U05G
D4001	8-719-911-19	DIODE	1SS119

<IC>

IC201	8-749-920-58	IC	S1-3090CA
IC202	8-749-921-99	IC	S1-3120CA
IC204	8-759-231-53	IC	TA7805S
IC205	8-759-144-84	IC	UPC24M05HF
IC206	8-759-982-13	IC	RC7812FA
IC501	8-759-987-16	IC	LM393P
IC502	1-809-845-11	MODULE	PROTECTOR PM-30
IC503	8-759-987-16	IC	LM393P
IC504	8-759-982-13	IC	RC7812FA
IC1401	g-759-246-70	IC	TA8216H
IC1501	g-759-506-46	IC	TDA8179S

<COIL>

L201	1-408-408-00	INDUCTOR	8.2UH
L205	1-410-645-31	INDUCTOR	100UH
L208	1-410-785-31	INDUCTOR	0.22UH
L210	1-408-408-00	INDUCTOR	8.2UH
L501	1-459-148-00	COIL	
L502	1-412-552-31	INDUCTOR	2.2MH
L504	1-410-455-11	INDUCTOR	10MH
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	Δ 1-460-197-11	COIL	FERRITE (PMC)
L511	t-412-519-11	INDUCTOR	3.3UH
L512	1-412-531-31	INDUCTOR	33UH

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

Les composants identifiés par une trame et une marque **Δ** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifique.

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



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L513	I-412-519-11	INDUCTOR 3.3UH		R508	i-249-435-11	CARBON 33K 5%	1/4W
L514	I-459-123-00	COIL, DUST CORE (PAC)		R509	i-249-441-11	CARBON 100K 5%	1/4W
L515	I-410-645-31	INDUCTOR 100UH		R510	i-249-409-11	CARBON 220 5%	1/4W F
L520	I-412-531-31	INDUCTOR 33UH		R511	i-249-398-11	CARBON 27 5%	1/4W F
L1501	i-412-531-31	INDUCTOR 33UH		R512	i-249-423-11	CARBON 3.3K 5%	1/4W
L1503	I-412-531-31	INDUCTOR 33UH		R513	i-249-425-11	CARBON 4.7K 5%	1/4W
<TRANSISTOR>				R514	I-249-438-11	CARBON 56K 5%	1/4W
Q201	g-729-119-78	TRANSISTOR 2SC2785-HFE		R515	i-249-433-11	CARBON 22K 5%	1/4W
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE		R516	i-249-419-11	CARBON 1.5K 5%	1/4W
Q501	8-729-011-07	TRANSISTOR 2SC4763 (LBSONY)		R518	i-249-437-11	CARBON 47K 5%	1/4W
Q502	8-729-140-97	TRANSISTOR 2SB734-34		R519	i-247-755-11	CARBON 1.8K 5%	1/2W F
Q503	8-729-011-06	TRANSISTOR 2SC3840K		R520	i-249-441-11	CARBON 100K 5%	1/4W
Q504	8-729-119-76	TRANSISTOR 2SA1175-HFE		R521	i-216-481-11	METAL OXIDE 1.2K 5%	3w F
Q505	g-729-119-76	TRANSISTOR 2SA1175-HFE		R522	i-215-917-11	METAL OXIDE 1K 5%	3w F
Q506	8-729-011-00	TRANSISTOR 2SK1916-F87		R523	i-249-425-11	CARBON 4.7K 5%	1/4W
Q507	8-729-119-80	TRANSISTOR 2SC2688-LK		R524	i-215-445-00	METAL 10K 1%	1/4W
Q508	g-729-119-78	TRANSISTOR 2SC2785-HFE		R526	i-249-401-11	CARBON 47 5%	1/4W
Q509	g-729-119-76	TRANSISTOR 2SA1175-HFE		R527	i-249-417-11	CARBON 1K 5%	1/4W
Q510	g-729-119-78	TRANSISTOR 2SC2785-HFE		R528	i-247-903-00	CARBON 1M 5%	1/4W
Q511	8-729-119-76	TRANSISTOR 2SA1175-HFE		R529	i-249-429-11	CARBON 10K 5%	1/4W
Q512	g-729-119-78	TRANSISTOR 2SC2785-HFE		R530	I-215-457-00	METAL 33K 1%	1/4W
Q513	g-729-140-96	TRANSISTOR 2SD774-34		R531	i-249-432-11	CARBON 18K 5%	1/4W
Q515	8-729-119-76	TRANSISTOR 2SA1175-HFE		R532	I-249-437-11	CARBON 47K 5%	1/4W
Q516	8-729-119-76	TRANSISTOR 2SA1175-HFE		R533	i-247-887-00	CARBON 220K 5%	1/4W
Q1401	g-721-119-78	TRANSISTOR 2SC2785-HFE		R534	i-215-472-00	METAL 130K 1%	1/4W
Q1407	8-729-119-78	TRANSISTOR 2SC2785-HFE		R536	i-249-429-11	CARBON 10K 5%	1/4W
Q1408	B-729-119-78	TRANSISTOR 2SC2785-HFE		R537	I-215-465-00	METAL 68K 1%	1/4W
Pi 501	8-729-139-78	TRANSISTOR 2SC2785-HFE		R538	i-247-883-00	CARBON 150K 5%	1/4W
Q1502	g-729-119-78	TRANSISTOR 2SC2785-HFE		R539	i-249-425-11	CARBON 4.7K 5%	1/4W
<RESISTOR>				R540	i-249-437-11	CARBON 47K 5%	1/4W
R201	I-249-405-11	CARBON 100 5%	1/4W F	R541	i-249-397-11	CARBON 22 5%	1/4W F
R202	i-249-405-11	CARBON 100 5%	1/4W F	R542	i-215-888-00	METAL OXIDE 220 5%	2W F
R210	i-249-441-11	CARBON 100K 5%	1/4W	R543	i-249-411-11	CARBON 330 5%	1/4W
R211	i-249-425-11	CARBON 4.7K 5%	1/4W	R544	i-249-441-11	CARBON 100K 5%	1/4W
R214	i-249-377-11	CARBON 0.47 5%	1/4W F	R546	i-215-441-00	METAL 6.8K 1%	1/4W
R219	i-249-426-11	CARBON 5.6K 5%	1/4W	R547	i-249-441-11	CARBON 100K 5%	1/4W
R221	i-249-409-11	CARBON 220 5%	1/4W	R548	i-215-889-00	METAL OXIDE 330 5%	2W F
R222	i-249-436-11	CARBON 39K 5%	1/4W	R549	i-215-881-11	METAL OXIDE 15 5%	2W F
R223	i-249-434-11	CARBON 27K 5%	1/4W	R550	i-215-909-11	METAL OXIDE 47 5%	3W F
R224	i-249-409-11	CARBON 220 5%	1/4W	R551	i-247-743-11	CARBON 220 5%	1/2W F
R225	i-249-419-11	CARBON 1.5K 5%	1/4W	R552	i-249-389-11	CARBON 4.7 5%	1/4W F
R226	i-249-417-11	CARBON 1K 5%	1/4W	R553	i-249-377-11	CARBON 0.47 5%	1/4W F
R227	i-249-417-11	CARBON 1K 5%	1/4W	R554	i-249-377-11	CARBON 0.47 5%	1/4W F
R230	I-215-923-00	METAL OXIDE 10K 5%	3W F	R556	i-216-459-00	METAL OXIDE 2.7K 5%	2W F
R231	i-249-409-11	CARBON 220 5%	1/4W F	R558	i-259-882-11	CARBON 3.3M 5%	1/4W
11232	i-216-380-11	METAL OXIDE 8.2 5%	2W F	R559	i-216-439-00	METAL OXIDE 12K 5%	1W F
R233	i-249-403-11	CARBON 220 5%	1/4W	R560	i-247-901-11	CARBON 820K 5%	1/4W
R234	i-249-409-11	CARBON 220 5%	1/4W	R561	i-249-410-11	CARBON 270 5%	1/4W
R235	i-249-409-11	CARBON 220 5%	1/4W	R562	i-215-442-00	METAL 7.5K 1%	1/4W
R236	i-249-409-11	CARBON 220 5%	1/4W	R564	i-215-475-00	METAL 180K 1%	1/4W
R237	i-249-409-11	CARBON 220 5%	1/4W	R565 Δ	CARBON		1/4W
R238	i-249-409-11	CARBON 220 5%	1/4W	R566 Δ	CARBON		1/4W
R239	i-249-409-11	CARBON 220 5%	1/4W	R567	i-249-425-11	CARBON 4.7K 5%	1/4W
R240	i-249-482-11	CARBON 4.7 5%	1/2W F	R568	i-249-425-11	CARBON 4.7K 5%	1/4W
R501	i-249-431-11	CARBON 15K 5%	1/4W	R569	i-249-417-11	CARBON 1K 5%	1/4W
R502	i-249-431-11	CARBON 15K 5%	1/4W	R570	i-249-402-11	CARBON 56 5%	1/4W
R504	i-215-869-11	METAL OXIDE 1K 5%	1W F	R572	i-249-393-11	CARBON 10 5%	1/4W F
R505	i-215-449-00	METAL 15K 1%	1/4W	R573	i-249-393-11	CARBON 10 5%	1/4W F
R506	i-249-423-11	CARBON 3.3K 5%	1/4W	R574	I-215-882-00	METAL OXIDE 22 5%	2W F
R507	i-249-411-11	CARBON 330 5%	1/4W	R575	i-216-459-00	METAL OXIDE 2.7K 5%	2W F
				R576	i-249-417-11	CARBON 1K 5%	1/4W F
				R577	i-215-887-00	METAL OXIDE 150 5%	2W F
				R578	i-215-883-11	METAL OXIDE 33 5%	2W F

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

Les composants identifiés par une trame et une marque **Δ** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié

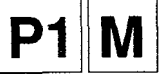
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REF. NO.	PART NO.	DESCRIPTION	REMARK
R579	I-249-441-11	CARBON	100K 5% 1/4W
R580	I-249-441-11	CARBON	100K 5% 1/4W
R583	I-249-441-11	CARBON	100K 5% 1/4W
R584	I-215-463-00	METAL	56K 1% 1/4W
R587	I-249-441-11	CARBON	100K 5% 1/4W
R588	I-249-415-11	CARBON	680 5% 1/4W
R589	I-249-437-11	CARBON	47K 5% 1/4W
R590	I-249-431-11	CARBON	15K 5% 1/4W
R591	I-247-887-00	CARBON	220K 5% 1/4W
R592	I-249-429-11	CARBON	10K 5% 1/4W
R593	I-215-878-00	METAL OXIDE	33K 5% 1W F
R594	I-247-903-00	CARBON	5% 1/4W
R595	I-249-440-11	CARBON	82K 5% 1/4W
R596	I-249-432-11	CARBON	18K 5% 1/4W
R597	I-249-437-11	CARBON	47K 5% 1/4W
R599	I-249-425-11	CARBON	4.7K 5% 1/4W
R1401	f-215-444-00	METAL	9.1K 1% 1/4W
R1402	r-215-444-00	METAL	9.1K 1% 1/4W
R1403	I-215-430-00	METAL	2.4K 1% 1/4W
R1404	I-215-430-00	METAL	2.4K 1% 1/4W
R1405	I-249-385-11	CARBON	2.2 5% 1/4W F
R1406	I-249-385-11	CARBON	2.2 5% 1/4W F
R1409	I-249-433-11	CARBON	22K 5% 1/4W
R1410	I-249-433-11	CARBON	22K 5% 1/4W
R1427	I-249-421-11	CARBON	2.2K 5% 1/4W
R1428	I-249-421-11	CARBON	2.2K 5% 1/4W
R1439	I-247-883-00	CARBON	150K 5% 1/4W
R1501	I-215-449-00	METAL	15K 1% 1/4W
R1502	I-215-433-00	METAL	3.3K 1% 1/4W
R1503	I-249-425-11	CARBON	4.7K 5% 1/4W
R1505	I-249-433-11	CARBON	22K 5% 1/4W
R1506	I-218-642-91	METAL OXIDE	100K 5% 1W F
R1507	I-249-436-11	CARBON	39K 5% 1/4W
R1508	I-215-453-00	METAL	22K 1% 1/4W
R1509	I-215-455-00	METAL	27K 1% 1/4W
R1510	f-249-383-11	CARBON	1.5 5% 1/4W F
R1511	I-215-888-00	METAL OXIDE	220 5% 2W F
R1512	I-216-369-00	METAL OXIDE	1 5% 2W F
R1513	I-249-436-11	CARBON	39K 5% 1/4W
R4002	I-249-385-11	CARBON	2.2 5% 1/4W F
R4003	I-216-361-00	METAL OXIDE	0.22 5% 2W F
R4004	I-216-374-00	METAL OXIDE	2.7 5% 2W F
R4006	I-216-396-11	METAL OXIDE	3.9 5% 3W F
<SPARK GAP>			
SC501	I-5 19-422-11	GAP, SPARK	
<TRANSFORMER>			
T501	Δ I-439-524-11	TRANSFORMER ASSY, FLYBACK (NX-3000A2)	
T502	Δ I-460-199-11	TRANSFORMER (HLT)	
T503	I-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
T504	I-424-584-11	TRANSFORMER, DYNAMIC FOCUS	
<THERMISTOR>			
THP1501	I-807-925-11	THERMISTOR	
<TUNER>			
TU101	Δ I-693-102-21	TUNER (BTF-YA401)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
*A-1195-051-A	P1	BOARD, COMPLETE	*****
<CAPACITOR>			
C3001	I-124-589-11	ELECT	47MF 20% 16V
C3002	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3003	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3004	I-163-119-00	CERAMIC CHIP	120PF 5% 50V
C3005	I-163-101-00	CERAMIC CHIP	22PF 5% 50V
C3006	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3007	I-164-005-11	CERAMIC CHIP	0.47MF 16V
C3008	I-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C3009	I-124-257-00	ELECT	2.2MF 20% 50V
C3010	I-163-145-00	CERAMIC CHIP	0.0015MF 5% 50V
C3011	I-163-018-00	CERAMIC CHIP	0.0056MF 10% 50V
C3012	I-164-336-11	CERAMIC CHIP	0.33MF 25V
C3013	I-164-222-11	CERAMIC CHIP	0.22MF 25V
C3014	I-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C3015	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3016	I-163-111-00	CERAMIC CHIP	56PF 5% 50V
C3017	I-130-495-00	MYLAR	0.1MF 5% 50V
C3018	I-163-115-00	CERAMIC CHIP	82PF 5% 50V
C3019	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3020	I-163-105-00	CERAMIC CHIP	33PF 5% 50V
C3021	I-163-115-00	CERAMIC CHIP	82PF 5% 50V
C3022	I-126-301-11	ELECT	1MF 20% 50V
C3023	I-124-589-11	ELECT	47MF 20% 16V
C3024	I-163-018-00	CERAMIC CHIP	0.0056MF 10% 50V
C3025	I-164-343-11	CERAMIC CHIP	0.056MF 10% 25V
C3026	I-126-163-11	ELECT	4.7MF 20% 50V
C3027	I-163-099-00	CERAMIC CHIP	18PF 5% 50V
C3028	I-124-589-11	ELECT	47MF 20% 16V
C3029	I-163-133-00	CERAMIC CHIP	470PF 5% 50V
C3030	I-163-037-11	CERAMIC CHIP	0.022MF 10% 25V
C3031	I-124-589-11	ELECT	47MF 20% 16V
C3032	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3033	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3034	I-164-336-11	CERAMIC CHIP	0.33MF 25V
C3035	I-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C3036	I-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C3037	I-126-177-11	ELECT	100MF 20% 6.3V
C3038	I-136-287-11	FILM	0.0047MF 5% 50V
C3039	I-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C3040	I-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3042	I-164-346-11	CERAMIC CHIP	1MF 16V
C3043	I-124-465-00	ELECT	0.47MF 20% 50V
C3044	I-126-301-11	ELECT	1MF 20% 50V
C3045	I-124-589-11	ELECT	47MF 20% 16V
C3046	I-126-301-11	ELECT	1MF 20% 50V
C3047	I-126-301-11	ELECT	1MF 20% 50V
C3048	I-164-161-11	CERAMIC CHIP	0.0022MF 10% 50V
C3051	I-164-161-11	CERAMIC CHIP	0.0022MF 10% 50V
C3052	I-126-177-11	ELECT	100MF 20% 6.3V
C3053	I-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C3054	I-126-177-11	ELECT	100MF 20% 6.3V
C3055	I-163-133-00	CERAMIC CHIP	470PF 5% 50V
C3057	I-124-589-11	ELECT	47MF 20% 16V
C3058	I-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
C3059	I-164-222-11	CERAMIC CHIP	0.22MF 25V
C3060	I-124-589-11	ELECT	47MF 20% 16V
C3061	I-164-489-11	CERAMIC CHIP	0.22MF 10% 16V
C3064	I-163-123-00	CERAMIC CHIP	180PF 5% 50V

P1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C3065	1-124-589-11	ELECT	47MF 20%	R3004	1-216-091-00	METAL GLAZE	56K 5% 1/10W
C3066	1-164-004-11	CERAMIC CHIP	0.1MF 10%	R3005	1-216-689-11	METAL GLAZE	39K 5% 1/10W
C3067	1-124-589-11	ELECT	47MF 20%	R3006	1-216-097-00	METAL GLAZE	100K 5% 1/10W
C3069	1-164-232-11	CERAMIC CHIP	0.01MF 10%	R3007	1-216-079-00	METAL GLAZE	18K 5% 1/10W
C3070	1-126-177-11	ELECT	100MF 20%	R3008	1-216-073-00	METAL GLAZE	10K 5% 1/10W
C3071	1-124-589-11	ELECT	47MF 20%	R3009	1-216-041-00	METAL GLAZE	470 5% 1/10W
C3072	1-124-589-11	ELECT	47MF 20%	R3010	1-216-049-00	METAL GLAZE	1K 5% 1/10W
C3073	1-124-589-11	ELECT	47MF 20%	R3011	1-216-073-00	METAL GLAZE	10K 5% 1/10W
<DIODE>				R3012	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
D3003	8-719-158-15	DIODE RD5 6S-B		R3013	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
D3009	8-719-404-46	DIODE MA110		R3014	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
<IC>				R3015	1-216-049-00	METAL GLAZE	1K 5% 1/10W
I C3001	8-759-046-25	IC TDA3769		R3018	1-216-097-00	METAL GLAZE	100K 5% 1/10W
IC3002	g-759-009-46	IC MC14528BF		R3019	1-216-077-00	METAL GLAZE	15K 5% 1/10W
IC3003	8-759-513-48	IC TDA2595/V9		R3020	1-216-099-00	METAL GLAZE	120K 5% 1/10W
If3004	8-759-055-51	IC SDA9087XGEG		R3021	1-216-075-00	METAL GLAZE	12K 5% 1/10W
IC3005	8-759-055-52	IC SDA9089XGEG		R3023	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
IC3006	8-759-112-06	IC UPC78N05H		R3024	1-216-077-00	METAL GLAZE	15K 5% 1/10W
IC3007	B-759-046-27	IC SDA9086-3		R3025	1-216-295-00	METAL GLAZE	0 5% 1/10W
IC3008	8-751-112-06	IC UPC78N05H		R3026	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
<COIL>				R3027	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
L3001	-410-476-11	INDUCTOR	33UH	R3028	1-216-031-00	METAL GLAZE	180 5% 1/10W
L3002	-408-424-00	INDUCTOR	180UH	R3030	1-216-073-00	METAL GLAZE	10K 5% 1/10W
L3003	-408-424-00	INDUCTOR	180UH	R3031	1-216-047-00	METAL GLAZE	820 5% 1/10W
L3004	-410-470-11	INDUCTOR	10UH	R3032	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
L3005	-410-472-41	INDUCTOR	15UH	R3033	1-216-295-00	METAL GLAZE	0 5% 1/10W
L3006	1-410-470-11	INDUCTOR	10UH	R3034	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
L3007	1-410-472-41	INDUCTOR	15UH	R3035	1-216-045-00	METAL GLAZE	680 53 1/10W
L3008	1-410-472-41	INDUCTOR	15UH	R3036	1-216-295-00	METAL GLAZE	0 5% 1/10W
L3009	1-410-472-41	INDUCTOR	15UH	R3037	1-216-083-00	METAL GLAZE	27K 5% 1/10W
L3010	1-410-466-41	INDUCTOR	4.7UH	R3038	1-216-049-00	METAL GLAZE	1K 5% 1/10W
L3011	1-410-470-11	INDUCTOR	10UH	R3040	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
L3012	1-410-676-31	INDUCTOR	150UH	R3041	1-216-073-00	METAL GLAZE	10K 5% 1/10W
L3013	1-412-911-11	INDUCTOR, FERRITE BEAD		R3043	1-216-099-00	METAL GLAZE	120K 5% 1/10W
<CONNECTOR>				R3044	1-216-295-00	METAL GLAZE	0 5% 1/10W
P1-001*1-573-965-11	PIN, CONNECTOR (PC BOARD) 50P			R3045	1-216-295-00	METAL GLAZE	0 5% 1/10W
<TRANSISTOR>				R3046	1-216-041-00	METAL GLAZE	470 5% 1/10W
Q3001	a-729-920-74	TRANSISTOR	2SC2412K-QR	R3047	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q3003	8-729-216-22	TRANSISTOR	2SA1162-G	R3048	1-216-049-00	METAL GLAZE	1K 5% 1/10W
Q3004	a-729-920-74	TRANSISTOR	2SC2412K-QR	R3049	1-216-041-00	METAL GLAZE	470 5% 1/10W
Q3006	8-729-920-74	TRANSISTOR	2SC2412K-QR	R3050	1-216-033-00	METAL GLAZE	220 5% 1/10W
93007	8-729-216-22	TRANSISTOR	2SA1162-G	R3051	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
93008	8-729-920-74	TRANSISTOR	2SC2412K-QR	R3052	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q3009	8-729-216-22	TRANSISTOR	2SA1162-G	R3053	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
Q3010	8-729-920-74	TRANSISTOR	2SC2412K-QR	R3054	1-216-113-00	METAL GLAZE	470K 5% 1/10W
Q3011	g-729-216-22	TRANSISTOR	2SA1162-G	R3055	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
Q3012	8-729-920-74	TRANSISTOR	2SC2412K-QR	R3056	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
93013	8-729-920-74	TRANSISTOR	2SC2412K-QR	R3057	1-216-081-00	METAL GLAZE	22K 5% 1/10W
<RESISTOR>				R3058	1-216-041-00	METAL GLAZE	470 5% 1/10W
R3001	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R3059	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R3002	1-216-095-00	METAL GLAZE	82K 5% 1/10W	R3060	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R3003	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R3061	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3004	1-216-091-00	METAL GLAZE	56K 5% 1/10W	R3062	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3005	1-216-689-11	METAL GLAZE	39K 5% 1/10W	R3063	1-216-025-00	METAL GLAZE	100 5% 1/10W
R3006	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R3064	1-216-295-00	METAL GLAZE	0 5% 1/10W
R3007	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R3065	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R3008	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R3066	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3009	1-216-041-00	METAL GLAZE	470 5% 1/10W	R3067	1-216-295-00	METAL GLAZE	0 5% 1/10W
R3010	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R3069	1-216-689-11	METAL GLAZE	39K 5% 1/10W
R3011	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R3071	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3012	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R3073	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3013	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R3075	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3014	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R3076	1-216-043-00	METAL GLAZE	560 5% 1/10W
R3015	1-216-049-00	METAL GLAZE	1K 5% 1/10W				



REF. NO.	PART NO.	DESCRIPTION	REMARK
R3077	1-216-637-11	METAL CHIP 270 0.50%	1/10W
R3078	1-216-644-11	METAL CHIP 510 0.50%	1/10W
R3079	1-210-640-11	METAL CHIP 360 0.50%	1/10W
R3081	1-163-095-00	CERAMIC CHIP 12PF	5% 50v
R3082	1-216-029-00	METAL GLAZE 150 5%	1/10W
R3084	1-216-049-00	METAL GLAZE 1K 5%	1/10W
113085	1-216-119-00	METAL GLAZE 820K 5%	1/10W
R3086	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R3087	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R3088	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R3089	1-216-033-00	METAL GLAZE 220 5%	1/10W
R3090	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R3091	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R3092	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R3098	1-216-296-00	METAL GLAZE 0 5%	1/8W
K3099	1-216-296-00	METAL GLAZE 0 5%	1/8W
R3100	1-216-296-00	METAL GLAZE 0 5%	1/8W
<VARIABLE RESISTOR>			
RV3001	1-241-630-11	RES, ADJ, CARBON 10K	
RV3002	1-241-632-11	RES, ADJ, CARBON 47K	
<CRYSTAL>			
X3001	1-567-505-11	OSCILLATOR, CRYSTAL	

*A-1306-415-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
co14	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
co42	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
C041	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
<DIODE>			
D001	8-719-404-46	DIODE MA110	

REF. NO.	PART NO.	DESCRIPTION	REMARK
D002	a-719-404-46	DIODE MA110	
D003	g-719-404-46	DIODE MA110	
D004	8-719-404-46	DIODE MA110	
D005	g-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	8-713-300-57	DIODE 1T33	
D011	g-719-404-46	DIODE MA110	
D012	8-719-404-46	DIODE MA110	
D015	g-719-404-46	DIODE MA110	
<IC>			
IC001	8-759-066-50	IC TMC73C247-07	
IC002	8-759-403-44	IC MN1280-S	
<COIL>			
L001	1-408-409-00	INDUCTOR	10UH
L002	1-410-476-11	INDUCTOR	33UH
<CONNECTOR>			
M001	*1-573-965-11	PIN, CONNECTOR (PC BOARD)	50P
M39	*1-564-521-11	PLUG, CONNECTOR	6P
M45	*1-564-523-11	PLUG, CONNECTOR	8P
<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	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q005	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q006	8-729-216-22	TRANSISTOR 2SA1162-G	
8007	8-729-216-22	TRANSISTOR 2SA1162-G	
Q008	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q009	g-729-920-74	TRANSISTOR 2SC2412K-QR	
Q010	a-729-920-74	TRANSISTOR 2SC2412K-QR	
Q011	a-729-920-74	TRANSISTOR 2SC2412K-QR	
Q012	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q013	8-729-216-22	TRANSISTOR 2SA1162-G	
Q014	8-729-920-74	TRANSISTOR 2SC2412K-QR	
<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

E1

REF. NO.	PART NU.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C337	1-126-301-11	ELECT	1MF 20%	50V			
C338	1-124-584-00	ELECT	100MF 20%	10V			
C339	1-126-301-11	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 I-HIP	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			
C359	1-164-004-11	CERAMIC CHIP	0.1MF 10%	25V			
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	1-164-231-11	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			
<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 RD5.6S-B					
D307	8-719-404-46	DIODE MA110					
D310	R-719-158-15	DIODE RD5.6S-B					
D312	8-719-404-46	DIODE MA110					
D313	8-719-404-46	DIODE MA110					
D314	R-711-404-46	DIODE MA110					
D315	8-719-404-46	DIODE MA110					
D316	8-719-404-46	DIODE MA110					
D317	8-719-404-46	DIODE MA110					
O318	8-719-404-46	DIODE MA110					
D319	8-719-404-46	DIODE MA110					
D320	X-719-404-46	DIODE MA110					
D321	8-719-400-94	DIODE MA3130					
<DELAY LINE>							
DL302	1-415-817-11	DELAY LINE					
<CONNECTOR>							
E1-001	*1-573-965-11	PIN, CONNECTOR (PC BOARD)					50P
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
<IC>							
IC301	8-752-058-68	IC CXA1315M					
IC302	8-752-059-67	IC CXA1465AS					
IC303	B-759-106-02	IC UPC4570G2					
<COIL>							
L301	1-410-064-11	INDUCTOR					2.7MMH
L307	1-410-944-31	INDUCTOR CHIP					15UH
L308	1-410-946-31	INDUCTOR CHIP					22UH
<TRANSISTOR>							
Q301	8-729-925-79	TRANSISTOR					1MX3
Q302	8-729-925-79	TRANSISTOR					1MX3
Q303	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q304	8-729-907-46	TRANSISTOR					1MZ1
Q305	8-729-925-79	TRANSISTOR					1MX3
Q306	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q307	8-729-903-10	TRANSISTOR					FMW1
Q309	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q310	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q311	8-729-920-39	TRANSISTOR					1MT1US
Q312	8-729-920-74	TRANSISTOR					2SC2412K-QR
8314	a-729-920-39	TRANSISTOR					1MT1US
Q315	g-729-920-74	TRANSISTOR					2SC2412K-QR
Q316	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q317	8-729-216-22	TRANSISTOR					2SA1162-G
Q321	8-729-925-79	TRANSISTOR					1MX3
Q322	8-729-216-22	TRANSISTOR					2SA1162-G
Q323	8-729-920-74	TRANSISTOR					2SC2412K-QR
8324	8-729-216-22	TRANSISTOR					2SA1162-G
Q325	8-729-216-22	TRANSISTOR					2SA1162-G
Q326	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q327	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q328	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q329	8-729-925-79	TRANSISTOR					1MX3
Q330	8-729-925-79	TRANSISTOR					1MX3
Q333	8-729-925-79	TRANSISTOR					1MX3
Q334	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q335	8-729-907-46	TRANSISTOR					1MZ1
Q340	8-729-920-74	TRANSISTOR					2SC2412K-QR
Q342	8-729-925-79	TRANSISTOR					1MX3
Q344	8-729-216-22	TRANSISTOR					2SA1162-G
<RESISTOR>							
R301	1-236-025-00	METAL GLAZE					100 5%
R302	1-216-057-00	METAL GLAZE					2.2K 5%
R303	1-216-079-00	METAL GLAZE					18K 5%



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R304	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R384	1-216-041-00	METAL GLAZE 470 5%	1/10W
R305	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W	R385	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R306	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R386	1-216-687-11	METAL CHIP 33K 0.50%	1/10W
R307	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R387	1-216-033-00	METAL GLAZE 220 5%	1/10W
R308	1-216-037-00	METAL GLAZE 330 5%	1/10W	R388	1-216-033-00	METAL GLAZE 220 5%	1/10W
R309	-216-073-00	METAL GLAZE 10K 5%	1/10W	R389	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R310	-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R390	1-216-033-00	METAL GLAZE 220 5%	1/10W
R312	-216-043-00	METAL GLAZE 560 5%	1/10W	R391	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R313	-216-035-00	METAL GLAZE 270 5%	1/10W	R393	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W
R314	-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R394	1-216-109-00	METAL GLAZE 330K 5%	1/10W
R316	-216-035-00	METAL GLAZE 270 5%	1/10W	R395	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R317	-216-121-00	METAL GLAZE 1M 5%	1/10W	R396	1-216-105-00	METAL GLAZE 220K 5%	1/10W
R320	-216-039-00	METAL GLAZE 390 5%	1/10W	R397	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R325				R398	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R326	-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R399	1-216-077-00	METAL GLAZE 15K 5%	1/10W
R331	-216-017-00	METAL GLAZE 47 5%	now	R1301	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R332	-216-657-11	METAL CHIP 1.8K 0.50%	1/10W	R1302	1-216-045-00	METAL GLAZE 680 5%	1/10W
R333	-216-051-00	METAL GLAZE 1.2K 5%	1/10W	R1303	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R336	-216-047-00	METAL GLAZE 820 5%	1/10W	R1304	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R338	-216-043-00	METAL GLAZE 560 5%	1/10W	R1305	1-216-025-00	METAL GLAZE 100 5%	1/10W
R339	-216-047-00	METAL GLAZE 820 5%	1/10W	R1306	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R340	-216-651-11	METAL CHIP 1K 0.50%	1/10W	R1307	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R341	-216-043-00	METAL GLAZE 560 5%	1/10W	R1308	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R343	-216-077-00	METAL GLAZE 15K 5%	1/10W	R1309	1-216-025-00	METAL GLAZE 100 5%	1/10W
R344	-216-081-00	METAL GLAZE 22K 5%	1/10W	R1310	1-216-045-00	METAL GLAZE 680 5%	1/10W
R345	1-216-292-11	METAL GLAZE 8.2M 5%	1/8W	R1311	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R346	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1312	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R347	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1313	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R348	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1314	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R349	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1315	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R350	-216-089-00	METAL GLAZE 47K 5%	1/10W	R1316	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R351	-216-674-11	METAL CHIP 9.1K 0.50%	1/10W	R1317	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R352	-216-011-00	METAL GLAZE 27 5%	1/10W	R1318	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R353	-216-001-00	METAL GLAZE 10 5%	1/10W	R1319	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R354	-216-049-00	METAL GLAZE 1K 5%	1/10W	R1320	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
R355	-216-001-00	METAL GLAZE 10 5%	1/10W	R1321	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R356	-216-001-00	METAL GLAZE 10 5%	1/10W	R1322	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R357	-216-049-00	METAL GLAZE 1K 5%	1/10W	R1323	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R358	-216-049-00	METAL GLAZE 1K 5%	1/10W	R1324	1-216-045-00	METAL GLAZE 680 5%	1/10W
R359	-216-049-00	METAL GLAZE 1K 5%	1/10W	R1325	1-216-025-00	METAL GLAZE 100 5%	1/10W
R360	1-216-119-00	METAL GLAZE 820K 5%	1/10W	R1326	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R361	1-216-025-00	METAL GLAZE 100 5%	1/10W	R1327	1-216-033-00	METAL GLAZE 220 5%	1/10W
R362	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R1328	1-216-033-00	METAL GLAZE 220 5%	1/10W
R363	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1329	1-216-077-00	METAL GLAZE 15K 5%	1/10W
R364	1-216-045-00	METAL GLAZE 680 5%	1/10W	R1330	1-216-081-00	METAL GLAZE 22K 5%	1/10W
A365	1-216-025-00	METAL GLAZE 100 5%	1/10W	R1331	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R366	1-216-001-00	METAL GLAZE 10 5%	1/10W	R1332	1-216-093-00	METAL GLAZE 68K 5%	1/10W
R367	1-236-045-00	METAL GLAZE 680 5%	1/10W	R1333	1-216-129-00	METAL GLAZE 2.2M 5%	1/10W
R368	1-216-001-00	METAL GLAZE 10 5%	1/10W	R1334	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R369	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1335	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R370	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1336	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R371	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1337	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R372	1-216-031-00	METAL GLAZE 180 5%	1/10W	R1338	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R373	1-216-671-11	METAL CHIP 6.8K 0.50%	1/10W	R1339	1-236-089-00	METAL GLAZE 47K 5%	1/10W
R374	1-216-037-00	METAL GLAZE 330 5%	1/10W	R1340	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R375	-216-037-00	METAL GLAZE 330 5%	1/10W	R1342	1-216-033-00	METAL GLAZE 220 5%	1/10W
R376	-216-037-00	METAL GLAZE 330 5%	1/10W	R1343	1-216-105-00	METAL GLAZE 220K 5%	1/10W
R377	-216-033-00	METAL GLAZE 220 5%	1/10W	R1344	1-216-091-00	METAL GLAZE 56K 5%	1/10W
R378	-216-033-00	METAL GLAZE 220 5%	1/10W	R1345	1-216-101-00	METAL GLAZE 150K 5%	1/10W
R379	-216-033-00	METAL GLAZE 220 5%	1/10W	R1346	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R380	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1347	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R381	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1348	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R382	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1349	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R383	1-216-653-11	METAL CHIP 1.2K 0.50%	1/10W				

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REF.	PART	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		<COIL>					
L2304	1-408-416-00	INDUCTOR 39UH		R2328	1-216-049-00	METAL GLAZE 1K 5%	1/10W
		<TRANSI STOR>		R2329	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2301	8-729-903-10	TRANSI STOR FMW1		R2330	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
Q2303	a-729-920-39	TRANSI STOR 1MT1 US		R2331	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
Q2304	8-729-925-79	TRANSI STOR 1MX3		R2332	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q2305	8-729-903-10	TRANSI STOR FMW1		R2333	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
Q2306	8-729-920-39	TRANSI STOR 1MT1 US		R2334	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q2307	8-729-920-39	TRANSI STOR 1MT1 US		R2335	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q2308	g-729-920-39	TRANSI STOR 1MT1 US		R2336	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q2309	8-729-903-10	TRANSI STOR FMW1		R2337	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q2310	8-729-920-39	TRANSI STOR 1MT1 US		R2338	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q2311	R-729-903-10	TRANSI STOR FMW1		R2339	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q2312	8-729-920-39	TRANSI STOR 1MT1 US		R2340	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2313	8-729-903-10	TRANSI STOR FMW1		R2341	1-216-041-00	METAL GLAZE 470 5%	1/10W
Q2314	8-729-920-39	TRANSI STOR 1MT1 US		R2342	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2315	8-729-903-10	TRANSI STOR FMW1		R2343	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2317	8-729-216-22	TRANSI STOR 2SA1162-G		R2344	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q2318	8-729-216-22	TRANSI STOR 2SA1162-G		R2345	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q2319	8-729-216-22	TRANSI STOR 2SA1162-G		R2346	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2320	8-729-920-74	TRANSI STOR 2SC2412K-QR		R2347	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q2321	8-729-920-74	TRANSI STOR 2SC2412K-QR		R2348	1-216-655-11	METAL CHIP 1.5K 0.50%	1/10W
Q2322	8-729-920-74	TRANSI STOR 2SC2412K-QR		R2349	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q2324	8-729-216-22	TRANSI STOR 2SA1162-G		R2350	1-216-097-00	METAL GLAZE 100K 5%	1/10W
Q2326	8-729-920-74	TRANSI STOR 2SC2412K-QR		R2351	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q2327	8-729-920-74	TRANSI STOR 2SC2412K-QR		R2352	1-216-097-00	METAL GLAZE 100K 5%	1/10W
Q2328	8-729-925-79	TRANSI STOR 1MX3		R2353	1-216-097-00	METAL GLAZE 100K 5%	1/10W
Q2329	8-729-925-79	TRANSI STOR 1MX3		R2354	1-216-178-00	METAL GLAZE 150 5%	1/8W
Q2330	8-729-903-10	TRANSI STOR FMW1		R2355	1-216-178-00	METAL GLAZE 150 5%	1/8W
Q2336	8-729-925-79	TRANSI STOR 1MX3		R2356	1-216-677-11	METAL CHIP 12K 0.50%	1/10W
Q2337	8-729-925-79	TRANSI STOR 1MX3		R2357	1-216-670-11	METAL CHIP 6.2K 0.50%	1/10W
Q2339	8-729-920-74	TRANSI STOR 2SC2412K-QR		R2359	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
Q2340	e-729-920-74	TRANSI STOR 2SC2412K-QR		R2360	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
Q2341	8-729-920-74	TRANSI STOR 2SC2412K-QR		R2361	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
		<RESI STOR>		R2362	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R2302	1-216-025-00	METAL GLAZE 100 5%	1/10W	R2363	1-216-041-00	METAL GLAZE 470 5%	1/10W
R2303	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R2364	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R2304	1-216-025-00	METAL GLAZE 100 5%	1/10W	R2365	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R2305	1-216-033-00	METAL GLAZE 220 5%	1/10W	R2366	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2306	1-216-045-00	METAL GLAZE 680 5%	1/10W	R2367	1-216-043-00	METAL GLAZE 560 5%	1/10W
R2307	1-216-045-00	METAL GLAZE 680 5%	1/10W	R2368	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2308	1-216-045-00	METAL GLAZE 680 5%	1/10W	R2371	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2309	1-216-041-00	METAL GLAZE 470 5%	1/10W	R2374	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R2310	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W	R2375	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2311	1-216-025-00	METAL GLAZE 100 5%	1/10W	R2376	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2312	1-216-043-00	METAL GLAZE 560 5%	1/10W	R2377	1-216-025-00	METAL GLAZE 100 5%	1/10W
R2313	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W	R2378	1-216-025-00	METAL GLAZE 100 5%	1/10W
R2314	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R2379	1-216-043-00	METAL GLAZE 560 5%	1/10W
R2315	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R2380	1-216-043-00	METAL GLAZE 560 5%	1/10W
R2317	1-216-041-00	METAL GLAZE 470 5%	1/10W	R2381	1-216-043-00	METAL GLAZE 560 5%	1/10W
R2318	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W	R2382	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2319	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R2384	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2320	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R2385	1-216-075-00	METAL GLAZE 12K 5%	1/10W
R2321	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W	R2386	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2322	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R2387	1-216-025-00	METAL GLAZE 100 5%	1/10W
R2323	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R2388	1-216-017-00	METAL GLAZE 47 5%	1/10W
R2324	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R2390	1-216-043-00	METAL GLAZE 560 5%	1/10W
R2325	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R2393	1-216-017-00	METAL GLAZE 47 5%	1/10W
R2326	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R2394	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2327	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W	R2395	1-216-001-00	METAL GLAZB 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

E2 Y2

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R3304	-216-091-00	METAL GLAZE	56K 5% 1/10W	F, 3357	1-216-654-11	METAL CHIP	1.3K 0.50% 1/10W
R3306	-216-089-00	METAL GLAZE	47K 5% 1/10W	H3358	1-216-659-11	METAL CHIP	2.2K 0.50% 1/10W
R3307	-216-085-00	METAL GLAZE	33K 5% 1/10W	H3359	1-216-653-11	METAL CHIP	1.2K 0.50% 1/10W
R3308	-216-043-00	METAL GLAZE	560 5% 1/10W	H3360	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3309	-216-049-00	METAL GLAZE	1K 5% 1/10W	R3361	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3310	-216-001-00	METAL GLAZE	10 5% 1/10W	R3362	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R3311	-216-081-00	METAL GLAZE	22K 5% 1/10W	H3367	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R3312	-216-049-00	METAL GLAZE	1K 5% 1/10W	R3368	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R3313	-216-083-00	METAL GLAZE	27K 5% 1/10W	H3369	1-216-001-00	METAL GLAZE	10 5% 1/10W
R3314	-216-689-11	METAL GLAZE	39K 5% 1/10W	H3370	1-216-001-00	METAL GLAZE	10 5% 1/10W
R3315	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R3371	1-216-001-00	METAL GLAZE	10 5% 1/10W
	-216-077-00	METAL GLAZE	15K 5% 1/10W	H3373	1-216-673-11	METAL CHIP	8.2K 0.50% 1/10W
R3316	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	R3374	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
	1-216-077 00	METAL GLAZE	15K 5% 1/10W	H3375	1-216-056-00	METAL GLAZE	2K 5% 1/10W
R3318	1-216-095-00	METAL GLAZE	82K 5% 1/10W	H3375	1-216-658-11	METAL CHIP	2K 0.50% 1/10W
	1-216-091-00	METAL GLAZE	56K 5% 1/10W	H3376	1-216-647-11	METAL CHIP	680 0.50% 1/10W
R3319	1-216-095-00	METAL GLAZE	82K 5% 1/10W	H3377	1-216-647-11	METAL CHIP	680 0.50% 1/10W
	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3378	1-216-659-11	METAL CHIP	2.2K 0.50% 1/10W
R3320	-216-017-00	METAL GLAZE	47 5% 1/10W	R3379	1-216-655-11	METAL CHIP	1.5K 0.50% 1/10W
R3321	-216-069-00	METAL GLAZE	6.8K 5% 1/10W	H3380	1-216-661-11	METAL CHIP	2.7K 0.50% 1/10W
	-216-079-00	METAL GLAZE	18K 5% 1/10W	H3381	1-216-025-00	METAL GLAZE	100 5% 1/10W
R3323	1-216-101-00	METAL GLAZE	150K 5% 1/10W	H3382	1-216-298-00	METAL GLAZE	0.50 5% 1/10W
	1-216-091-00	METAL GLAZE	56K 5% 1/10W	H3388	1-216-088-00	METAL GLAZE	150 5% 1/10W
R3324	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R3401	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R3325	1-216-025-00	METAL GLAZE	100 5% 1/10W	H17312	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3328	1-216-001-00	METAL GLAZE	10 5% 1/10W	H27313	1-216-047-00	METAL GLAZE	820 5% 1/10W
R3330	1-216-033-00	METAL GLAZE	220 5% 1/10W	H17314	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R3331	1-216-033-00	METAL GLAZE	220 5% 1/10W			<CRYSTAL>	
R3332	1-216-081-00	METAL GLAZE	22K 5% 1/10W	X2301	1-577-071-11	VI BRATOR, CERAMIC	
R3333	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W			*****	
R3334	1-216-661-11	METAL CHIP	2.7K 0.50% 1/10W			*A-1394-362-A	Y2 BOARD, COMPLETE
R3335	1-216-025-00	METAL GLAZE	100 5% 1/10W			*****	
R3336	1-216-683-11	METAL CHIP	22K 0.50% 1/10W			<CAPACITOR>	
R3337	1-216-685-11	METAL CHIP	27K 0.50% 1/10W	C401	1-124-234-00	ELECT	22MF 20% 16V
R3339	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C424	1-126-301-11	ELECT	1MF 20% 50V
R3340	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C425	1-126-301-11	ELECT	1MF 20% 50V
R3341	1-216-677-11	METAL CHIP	12K 0.50% 1/10W	C426	1-126-301-11	ELECT	1MF 20% 50V
R3342	1-216-670-11	METAL CHIP	6.2K 0.50% 1/10W	C427	1-124-465-00	ELECT	0.47MF 20% 50V
R3343	1-216-097-00	METAL GLAZE	100K 5% 1/10W	C428	1-126-163-11	ELECT	4.7MF 20% 50V
R3344	1-216-097-00	METAL GLAZE	100K 5% 1/10W	C429	1-124-478-11	ELECT	100MF 20% 25V
R3347	1-216-687-11	METAL CHIP	33K 0.50% 1/10W	C430	1-124-261-00	ELECT	10MF 20% 50V
	1-216-685-11	METAL CHIP	27K 0.50% 1/10W	C431	1-126-301-11	ELECT	1MF 20% 50V
				C432	1-126-301-11	ELECT	1MF 20% 50V
R3348	1-216-681-11	METAL CHIP	18K 0.50% 1/10W	C433	1-131-347-00	TANTALUM	1MF 20% 16V
R3349	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C434	1-126-301-11	ELECT	1MF 20% 50V
R3350	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C435	1-130-309-00	FILM	0.033MF 5% 100V
R3351	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C436	1-126-301-11	ELECT	1MF 20% 50V
R3352	1-216-073 00	METAL GLAZE	10K 5% 1/10W	C437	1-130-487-00	MYLAR	0.022MF 5% 50V
K3353	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	C438	1-126-301-11	ELECT	1MF 20% 50V
R3354	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	C439	1-124-034-51	ELECT	33MF 20% 16V
R3356	1-216-655-11	METAL CHIP	1.5K 0.50% 1/10W	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
				C446	1-124-234-00	ELECT	22MF 20% 16V
				C447	1-126-301-11	ELECT	1MF 20% 50V

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
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		
C466	1-130-485-00	MYLAR	0.015MF	5%	50V		
C467	1-136-369-00	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	J-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		
1485	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		
<DIODE>							
D405	g-719-107-13	DIODE	RD18M-B1				
D406	8-719-107-13	DIODE	RD18M-B1				
D407	8-719-107-13	DIODE	RD18M-B1				
D408	8-719-105-83	DIODE	RD5.1M-B3				
D409	8-719-981-50	DIODE	RB-100A				
D410	8-719-981-50	DIODE	RB-100A				
D413	8-719-158-19	DIODE	RD6.2S-B				
D414	8-719-158-55	DIODE	RD15S-B				
D415	8-719-158-55	DIODE	RD15S-B				
<IC>							
IC403	8-759-996-43	IC	RC4558PS				
IC404	8-759-067-24	IC	24C04A1/P				
IC406	8-752-037-24	IC	CXA1264AS				
IC407	8-759-245-75	IC	TA8184P				
IC408	8-752-057-18	IC	CXA1315P				
<TRANSISTOR>							
9404	8-729-216-22	TRANSISTOR	2SA1162-G				
Q405	8-729-216-22	TRANSISTOR	2SA1162-G				
Q409	8-729-920-74	TRANSISTOR	2SC2412K-QR				
Q410	H-729-920-74	TRANSISTOR	2SC2412K-QR				
<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		
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	1-216-675-11	METAL CHIP	10K	0.50%	1/10W		
R477	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W		
R478	1-216-089-00	METAL GLAZE	47K	5%	1/10W		
R479	1-216-675-11	METAL CHIP	10K	0.50%	1/10W		
R480	1-216-672-11	METAL CHIP	7.5K	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	1-216-675-11	METAL CHIP	10K	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	1-216-667-11	METAL CHIP	4.7K	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	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W		
R526	1-216-049-00	METAL GLAZE	1K	5%	1/10W		
R527	1-218-754-11	METAL CHIP	120K	0.50%	1/10W		
R528	1-216-685-11	METAL CHIP	27K	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	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W		

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HEF NO	PART NO	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R538	-218-754-11	METAL CHIP 120K 0.50% 1/10W		C2547	1-126-163-11	ELECT 4.7MF	20% 25V
R539	-216-685-11	METAL CHIP 27K 0.50% 1/10W		C2548	1-163-809-11	CERAMIC CttIP 0.047MF	10% 25V
R542	-216-025-00	METAL GLAZE 100 5% 1/10W		C2549	1-126-163-11	ELECT 4.7MF	20% 50V
R543	-216-025-00	METAL GLAZE 100 5% 1/10W		C2550	1-126-163-11	ELECT 4.7MF	20% 25V
R546	-216-682-11	METAL CHIP 20K 0.50% 1/10W		C2551	1-126-301-11	ELECT 1MF	20% 50V
R547	1-216-681-11	METAL CHIP 18K 0.50% 1/10W		C2552	1-126-163-11	ELECT 4.7MF	20% 50V
<CONNECTOR>				C2553	1-126-301-11	ELECT 1MF	20% 50V
Y2-401*1-573-966-11 PIN, CONNECTOR (PC BOARD) 36P				C2554	1-124-234-00	ELECT 22MF	20% 16V
*****				C2555	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
*A-1394-363-A X2 BOARD, COMPLETE				C2556	1-124-257-00	ELECT 2.2MF	20% 50V
*****				C2557	1-124-234-00	ELECT 22MF	20% 16V
<CAPACITOR>				C2558	1-126-301-11	ELECT 1MF	20% 50V
C2501	-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V		C2559	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2502	-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V		C2560	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
C2503	-163-001-11	CERAMIC CHIP 220PF 10% 50V		C2561	1-126-301-11	ELECT 1MF	20% 50V
C2504	-126-163-11	ELECT 4.7MF 20% 50V		C2562	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C2505	-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V		C2563	1-163-257-11	CERAMIC CHIP 180PF	5% 50V
C2506	-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V		C2564	1-126-301-11	ELECT 1MF	20% 50V
C2507	-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V		C2565	1-126-163-11	ELECT 4.7MF	20% 50V
C2508	-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V		C2566	1-126-163-11	ELECT 4.7MF	20% 50V
C2509	-163-020-00	CERAMIC CHIP 0.0082MF 10% 50V		C2567	1-126-163-11	ELECT 4.7MF	20% 50V
C2510	-163-989-11	CERAMIC CHIP 0.033MF 10% 25V		C2568	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
C2511	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C2569	1-163-257-11	CERAMIC CHIP 180PF	5% 50V
C2512	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C2570	1-124-234-00	ELECT 22MF	20% 16V
C2513	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C2571	1-126-301-11	ELECT 1MF	20% 50V
C2514	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C2572	1-126-163-11	ELECT 4.7MF	20% 50V
C2515	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C2573	1-124-234-00	ELECT 22MF	20% 16V
C2516	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V		C2574	1-126-301-11	ELECT 1MF	20% 50V
C2517	1-126-157-11	ELECT 10MF 20% 16V		C2575	1-126-301-11	ELECT 1MF	20% 50V
C2518	1-126-163-11	ELECT 4.7MF 20% 50V		C2576	1-126-301-11	ELECT 1MF	20% 50V
C2519	1-126-301-11	ELECT 1MF 20% 50V		C2577	1-126-163-11	ELECT 4.7MF	20% 50V
C2520	1-126-163-11	ELECT 4.7MF 20% 50V		C2578	1-126-163-11	ELECT 4.7MF	20% 50V
C2521	1-163-809-11	CERAMIC CHIP 0.047MF 10% 25V		C2579	1-126-103-11	ELECT 470MF	20% 16V
C2522	1-124-252-00	ELECT 0.33MF 20% 50V		C2580	1-124-478-11	ELECT 100MF	20% 25V
C2523	1-126-163-11	ELECT 4.7MF 20% 50V		C2581	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
C2524	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C2582	1-124-477-11	ELECT 47MF	20% 25V
C2525	1-126-163-11	ELECT 4.7MF 20% 50V		C2583	1-126-163-11	ELECT 4.7MF	20% 50V
C2526	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C2584	1-163-109-00	CERAMIC CttIP 47PF	5% 50V
C2527	1-126-157-11	ELECT 10MF 20% 16V		C2585	1-126-163-11	ELECT 4.7MF	20% 50V
C2528	1-124-465-00	ELECT 0.47MF 20% 50V		C2586	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C2529	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V		C2587	1-126-163-11	ELECT 4.7MF	20% 50V
C2530	1-164-182-11	CERAMIC CttIP 0.0033MF 10% 50V		C2588	1-126-163-11	ELECT 4.7MF	20% 50V
C2531	1-126-301-11	ELECT 1MF 20% 50V		C2589	1-126-163-11	ELECT 4.7MF	20% 50V
C2532	1-126-301-11	ELECT 1MF 20% 50V		C2590	1-126-163-11	ELECT 4.7MF	20% 50V
C2533	1-124-261-00	ELECT 10MF 20% 50V		C2591	1-124-478-11	ELECT 100MF	20% 25V
C2534	1-163-257-11	CERAMIC CttIP 180PF 5% 50V		<DIODE>			
C2535	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		D2501	8-719-104-34	DIODE 1S2835	
C2536	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		D2502	8-719-106-88	DIODE RD15M-B1	
C2537	1-126-163-11	ELECT 4.7MF 20% 50V		D2503	8-719-106-88	DIODE RD15M-B1	
C2538	1-126-163-11	ELECT 4.7MF 20% 50V		D2504	8-719-106-88	DIODE RD15M-B1	
C2539	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V		<IC>			
C2540	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		IC2501	g-759-031-31	IC MC33174M	
C2541	1-163-139-00	CERAMIC CHIP 820PF 5% 50V		IC2502	g-752-050-75	IC CXA1373Q	
C2542	1-124-478-11	ELECT 100MF 20% 25V		IC2503	8-759-604-70	IC M51523AL	
C2543	1-124-252-00	ELECT 0.33MF 20% 50V		IC2504	8-759-031-31	IC MC33174M	
C2544	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V		IC2505	8-759-604-70	IC M51523AL	
C2545	1-126-301-11	ELECT 1MF 20% 50V		IC2506	g-759-106-22	IC UPD4052BG	
C2546	126-163-11	ELECT 4.7MF 20% 50V		IC2507	8-759-038-68	IC MC33172ML	
				IC2508	8-759-038-68	IC MC33172ML	

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		<JACK>					
J2501	*1-573-966-11	PIN, CONNECTOR (PC BOARD)	36P	R2556	1-216-049-00	METAL GLAZE 1K 5%	1/10W
		<TRANSISTOR>		R2557	1-216-085-00	METAL GLAZE 33K 5%	1/10W
I12501	8 729-230-49	TRANSISTOR 2SC2712-YG		R2558	1-216-088-00	METAL GLAZE 43K 5%	1/10W
		<RESISTOR>		R2559	1-216-091-00	METAL GLAZE 56K 5%	1/10W
R2501	-216-079-00	METAL GLAZE 18K 5%	1/10W	R2560	1-216-103-00	METAL GLAZE 180K 5%	1/10W
R2502	-216-097-00	METAL GLAZE 100K 5%	1/10W	R2561	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R2503	-216-091-00	METAL GLAZE 56K 5%	1/10W	R2562	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2504	-216-109-00	METAL GLAZE 330K 5%	1/10W	R2563	1-216-088-00	METAL GLAZE 43K 5%	1/10W
R2505	-216-109-00	METAL GLAZE 330K 5%	1/10W	R2564	1-216-088-00	METAL GLAZE 43K 5%	1/10W
R2506	1-216-101-00	METAL GLAZE 150K 5%	1/10W	R2565	1-216-103-00	METAL GLAZE 180K 5%	1/10W
R2507	1-216-091-00	METAL GLAZE 56K 5%	1/10W	R2566	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2508	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R2567	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2509	1-216-130-11	METAL GLAZE 2.4M 5%	1/10W	R2568	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2510	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R2569	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R2511	1-216-085-00	METAL GLAZE 33K 5%	1/10W	R2570	1-216-091-00	METAL GLAZE 56K 5%	1/10W
R2512	1-216-103-00	METAL GLAZE 180K 5%	1/10W	R2571	1-216-078-00	METAL GLAZE 16K 5%	1/10W
R2513	1-216-085-00	METAL GLAZE 33K 5%	1/10W	R2572	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2514	1-216-103-00	METAL GLAZE 180K 5%	1/10W	R2573	1-216-082-00	METAL GLAZE 24K 5%	1/10W
R2515	J-216 073-00	METAL GLAZE 10K 5%	1/10W	R2574	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R2516	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R2575	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2517	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2576	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2518	1-216-072-00	METAL GLAZE 9.1K 5%	1/10W	R2577	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2519	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2578	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2520	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2579	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2521	-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2580	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2522	-216 061-00	METAL GLAZE 3.3K 5%	1/10W	R2581	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2523	-216-077-00	METAL GLAZE 15K 5%	1/10W	R2582	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R2524	-216-129-00	METAL GLAZE 2.2M 5%	1/10W	R2583	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R2526	-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2584	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2527	-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2585	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2528	-216-081-00	METAL GLAZE 22K 5%	1/10W	R2586	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R2529	-216-081-00	METAL GLAZE 22K 5%	1/10W	R2587	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R2530	-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2588	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R2531	-216-089-00	METAL GLAZE 47K 5%	1/10W	R2589	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2532	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2590	1-216-079-00	METAL GLAZE 18K 5%	1/10W
R2533	1-216-089-00	METAL GLAZE 47K 5%	1/10W	R2591	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2534	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R2592	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2535	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R2593	1-216-079-00	METAL GLAZE 18K 5%	1/10W
R2536	1-236-129-00	METAL GLAZE 2.2M 5%	1/10W	R2594	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2537	-216-077-00	METAL GLAZE 15K 5%	1/10W	R2595	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2539	-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R2596	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2540	-216-075-00	METAL GLAZE 12K 5%	1/10W	R2597	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2541	-216-069-00	METAL GLAZE 6.8K 5%	1/10W	R2598	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2542	-216-081-00	METAL GLAZE 22K 5%	1/10W	R2599	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2543	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R2600	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2544	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R2601	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2545	1-216-048-00	METAL GLAZE 910 5%	1/10W	R2602	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2546	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2604	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2547	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2605	1-216-049-00	METAL GLAZE 1K 5%	1/10W
K2548	-216-073-00	METAL GLAZE 10K 5%	1/10W	R2606	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2549	-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R2610	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
R2550	-216-088-00	METAL GLAZE 43K 5%	1/10W	R2611	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
R2551	-216-088-00	METAL GLAZE 43K 5%	1/10W	R2612	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
R2552	-216-049-00	METAL GLAZE 1K 5%	1/10W	R2613	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
R2553	-216-078-00	METAL GLAZE 16K 5%	1/10W	R2614	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
R2554	-216-082-00	METAL GLAZE 24K 5%	1/10W	R2615	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
R2555	-216-089-00	METAL GLAZE 47K 5%	1/10W	R2616	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
				R2617	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W
				R2618	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
				R2619	1-216-049-00	METAL GLAZE 1K 5%	1/10W



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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
*A-1316-125-A	G BOARD, COMPLETE	(KV-32XBR35(U/C))		D601	8-719-510-99	DIODE D6SB69I	
*A-1316-128-A	G BOARD, COMPLETE	(KV-27XBR35(U/C))		D602	8-719-510-88	DIODE D1N20R	
		*****		D603	8-719-510-48	DIODE D1N20R	
		*****		D604	8-719-510-48	DIODE D1N20R	
*4-341-751-01	EYELET	(EY1~EY5, EY10, EY11~EY18, EY24~EY26, EY30~EY32, EY35~EY38, EY40~EY58, EY60~EY62, EY64~EY86, EY89~EY102, EY105~EY116, EY118, EY119, EY128~EY131)		D605	8-719-510-48	DIODE D1N20R	
*4-341-752-01	EYELET	(EY8, EY9, EY19~EY23, EY27~EY29, EY33, EY34, EY39, EY59, EY63, EY87, EY88, EY103, EY117, EY120~EY127, EY132)		D606	8-719-911-19	DIODE 1SS119	
4-3x2-854-11	SCREW (M3X10), P, SW (+)			D607	8-719-510-48	DIODE D1N20R	
<CAPACITOR>							
C601	1-162-311-51	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	1-162-345-11	ELECT	1000MF	20%	20V		
C605	1-162-599-12	CERAMIC	0.0047MF	20%	400V		
C606	1-137-580-1-1	FILM	0.082MF	5%	100V		
C607	1-137-580-1-1	FILM	0.082MF	5%	100V		
C608	1-137-580-1-1	FILM	0.082MF	5%	100V		
C609	1-137-580-1-1	FILM	0.082MF	5%	100V		
C610	1-137-588-1-1	FILM	0.0047MF	5%	800V		
C611	1-137-532-1-1	FILM	0.01MF	5%	800V		
C612	I-164-625-1-1	CERAMIC	680PF	10%	500V		
C613	I-164-625-1-1	CERAMIC	680PF	10%	500V		
C614	I-164-625-1-1	CERAMIC	680PF	10%	500V		
C615	3-164-625-1-1	CERAMIC	680PF	10%	500V		
C616	1-124-443-00	ELECT	100MF	20%	10V		
C618	I-164-735-11	CAP, CERAMIC	1500PF				
C619	I-164-735-11	CAP, CERAMIC	1500PF				
C620	1-162-741-51	CERAMIC	0.001MF	10%	400V		
C621	1-162-741-51	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	I-130-480-00	MLAR	0.0056MF	5%	50V		
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	MLAR	0.0022MF		200V		
C658	1-126-157-11	ELECT	10MF	20%	16V		
C659	1-130-485-00	MLAR	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	1-124-61X-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		
C673	1-162-311-51	FILM	0.47MF	20%	125V		
C678	1-124-369-00	ELECT	1000MF	20%	16V		
D653	8-719-027-43	DIODE	S2L20UF				
L 654	8-719-027-43	DIODE	S2L20UF				
D655	a-719-510-13	DIODE	D10SC4MR				
D656	g-719-022-97	DIODE	D25AMP				
D657	8-719-510-02	DIODE	D1NS4				
L 658	8-719-027-22	DIODE	D3S6M-F				
D659	a-719-027-22	DIODE	D3S6M-F				
I							
D660	8-719-027-22	DIODE	D3S6M-F				
D663	X-719-510-02	DIODE	D1NS4				
L 665	8-719-510-02	DIODE	D1NS4				
D666	8-719-109-85	DIODE	RD5.1ES-B2				
D667	8-719-911-19	DIODE	1SS119				
D668	8-719-911-19	DIODE	1SS119				
I 669	8-719-109-54	DIODE	RD2.2ES-B2				
I 3670	8-719-911-19	DIODE	1SS119				
I 3671	8-719-110-31	DIODE	RD12ES-B2				
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				
FB652	1-410-397-21	FERRITE BEAD	INDUCTOR				
FB653	1-410-397-21	FERRITE BEAD	INDUCTOR				
FB654	1-410-397-21	FERRITE BEAD	INDUCTOR				
FB655	1-412-911-11	INDUCTOR, FERRITE BEAD					
FB656	1-410-397-21	FERRITE BEAD	INDUCTOR				
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				
FB670	1-410-397-21	FERRITE BEAD	INDUCTOR				
<CONNECTOR>							
G3	x1-573-986-11	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				

<DIODE>

(KV-27XBR35(U/C))

G

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
G28	*f--573 963-11	PIN, CONNECTOR (PC BOARD) 3P		R618	1-247-688-11	CARBON	10 5% 1/4W F
		(KV-27XBR35(U/C))		R619	1-216-343-91	METAL OXIDE	0.33 5% 1W F
G29	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		R620	1-202-730-00	SOLID	8.2M 20% 1/2W
G30	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 2P		R621	1-249-423-11	CARBON	3.3K 5% 1/4W
		(KV-32XBR35(U/C))		R622	1-202-888-91	SOLID	2.2M 20% 1/2W
G31	*1-580-843-11	PIN, CONNECTOR (POWER)		R623	1-212-938-00	FUSIBLE	8.2 5% 1/2W F
TP651	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		R651	1-249-405-11	CARBON	100 5% 1/4W F
<IC>				R652	1-215-868-00	METAL OXIDE	680 5% 1W F
TP651 Δ 1-809-524-11 MOBILE POWER DM-44				R653	1-249-405-11	CARBON	100 5% 1/4W
TP654 8-719-156-73 PHOTO COUPLER PS2501-ILB				R654	1-249-399-11	CARBON	33 5% 1/4W F
<COIL>				R655	1-249-393-11	CARBON	10 5% 1/4W F
1.651	I-412-526-11	INDUCTOR	12UH	R656	1-249-443-11	CARBON	0.47 5% 1/4W F
1652	1-410-673-31	INDUCTOR	68UH	R657	1-216-357-00	METAL OXIDE	4.7 5% 1W F
1653	1-412-532-11	INDUCTOR	39UH	R658	1-215-408-00	METAL	300 1% 1/4W
L654	1-412-532-11	INDUCTOR	39UH	R659	1-249-443-11	CARBON	0.47 5% 1/4W F
LG55	1-412-532-11	INDUCTOR	39UH	R660	1-215-446-00	METAL	11K 1% 1/4W
1656	r-412-526-11	INDUCTOR	12UH	R661	1-215-418-00	METAL	750 1% 1/4W
<TRANSISTOR>				R662	1-249-421-11	CARBON	2.2K 5% 1/4W
Q601	8-729-927-22	TRANSISTOR 2SC4664MNP-F	KV-32XBR35(U/C)	R663	1-249-410-11	CARBON	270 5% 1/4W
	B-729-927-23	TRANSISTOR 2SC4664NPR-F	KV-27XBR35(U/C)	R664	1-215-861-00	METAL OXIDE	47 5% 1W F
Q602	8-729-927-22	TRANSISTOR 2SC4664MNP-F	(KV-32XBR35(U/C))	R665	1-215-403-00	METAL	180 1% 1/4W
	8-729-927-23	TRANSISTOR 2SC4664NPR-F	(KV-27XBR35(U/C))	R666	1-215-421-00	METAL	1K 1% 1/4W
Q603	8-729-927-22	TRANSISTOR 2SC4664MNP-F	(KV-32XBR35(U/C))	R667	1-215-432-00	METAL	3K 1% 1/4W
	8-729-927-23	TRANSISTOR 2SC4664NPR-F	(KV-27XBR35(U/C))	R668	1-249-421-1	METAL OXIDE	1.8K 5% 3W F
Q604	8-729-927-22	TRANSISTOR 2SC4664MNP-F	(KV-32XBR35(U/C))	R669	1	CARBON	2.2K 5% 1/4W
	8-729-927-23	TRANSISTOR 2SC4664NPR-F	(KV-27XBR35(U/C))	R670	1-249-412-1	CARBON	390 5% 1/4W
Q605	R-729-209-15	TRANSISTOR 2SD2012		R671	1-216-384-11	METAL OXIDE	0.39 5% 3W F
9652	8-729-119-78	TRANSISTOR 2SC2785-HFE		R672	1-249-443-1	CARBON	0.47 5% 1/4W F
Q653	8-729-201-53	TRANSISTOR 2SA1015-GR		R673	1-249-415-1	CARBON	680 5% 1/4W
Q654	8-729-119-78	TRANSISTOR 2SC2785-HFE		R674	1-249-421-1	CARBON	2.2K 5% 1/4W
Q655	8-729-119-78	TRANSISTOR 2SC2785-HFE		R675	1-249-415-1	CARBON	680 5% 1/4W
Q656	8-729-119-78	TRANSISTOR 2SC2785-HFE		R676	1-249-377-1	CARBON	0.47 5% 1/4W F
<RESISTOR>				R677	1-249-433-11	CARBON	22K 5% 1/4W
R601	1-249-388-11	CARBON	3.9 5% 1/4W F	R678	1-249-429-11	CARBON	10K 5% 1/4W
R602	1-202-707-12	WIREWOUND	2.2 5% 10W	R679	1-216-428-00	METAL OXIDE	180 5% 1W F
R603	1-247-889-00	CARBON	27.1K 5% 1/4W	R680	1-216-428-00	METAL OXIDE	180 5% 1W F
R604	f-216-443-11	METAL OXIDE	56K 5% 1W F	R681	1-249-377-11	CARBON	0.47 5% 1/4W F
R605	1-216-443-11	METAL OXIDE	56K 5% 1W F	R682	1-249-443-11	CARBON	0.47 5% 1/4W F
R606	1-216-443-11	METAL OXIDE	56K 5% 1W F	<RELAY>			
R607	f-216-443-11	METAL OXIDE	56K 5% 1W F	RY601	1-515-516-00	RELAY	
11608	1-216-352-11	METAL OXIDE	1.8 5% 1W F	RY602	1-515-669-21	RELAY	
R609	1-216-351-00	METAL OXIDE	1.5 5% 1W F	<TRANSFORMER>			
	J-216-352-11	METAL OXIDE	1.8 5% 1W F	T601	1-424-585-11	TRANSFORMER, LINE FILTER	
				T602	1-424-585-11	TRANSFORMER, LINE FILTER	
R610	f-216-351-00	METAL OXIDE	1.5 5% 1W F	T603	1-450-300-31	TRANSFORMER, CONVERTER DRIVE	
	J-216-352-11	METAL OXIDE	1.8 5% 1W F	T604	1-450-958-11	TRANSFORMER, CONVERTER (PRT)	
				T605	1-424-663-11	TRANSFORMER, FERRITE (SBT)	
R611	1-216-352-11	METAL OXIDE	1.8 5% 1W F	<THERMISTOR>			
R612	1-249-377-11	CARBON	0.47 5% 1/4W F	TP601	1-800-686-43	THERMISTOR (POSITIVE) (KV-32XBR35(U/C))	
R613	1-215-447-00	METAL	12K 1% 1/4W		1-809-539-11	THERMISTOR, POSITIVE (KV-27XBR35(U/C))	
R614	1-215-433-00	METAL	3.3K 1% 1/4W	<VARISTOR>			
R615	f-249-441-11	CARBON	100K 5% 1/4W	VDR601	1-809-786-11	VARISTOR	
R616	1-249-417-11	CARBON	1K 5% 1/4W	VDR602	1-809-264-81	VARISTOR	
R617	1-249-417-11	CARBON	1K 5% 1/4W	*****			



REF. NO.	PART NO	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
*A 1331-203-A	C BOARD, COMPLETE	(KV-32XBR35(U/C))				<COIL>	
*A 1331-209-A	C BOARD, COMPLETE	(KV-27XBR35(U/C))		L701	1-410-671-31	INDUCTOR	47UH
				L702	1-410-645-31	INDUCTOR	100UH (KV-27XBR35(U/C))
				L703	1-410-677-31	INDUCTOR	180UH (KV-27XBR35(U/C))
				L706	1-410-677-31	INDUCTOR	180UH (KV-27XBR35(U/C))
3-704-359-01	SCREW (M3X10), SW (+) P					<TRANSISTOR>	
*4-341-751-01	EYELET (EY51~EY53, EY55, EY57, EY58, EY59(KV-32XBR35(U/C)), EY66)			Q701	8-729-326-11	TRANSI STOR	2SC2611
*4-341-752-01	EYELET (EY50, EY56, EY59(KV-27XBR35(U/C)), EY60(KV-27XBR35(U/C)), EY61, EY63~EY65, EY67, EY68)			Q702	8-729-119-78	TRANSI STOR	2SC2785-HFE
				Q703	8-729-200-17	TRANSI STOR	2SA1091-0
				Q704	8-729-326-11	TRANSI STOR	2SC2611
				Q705	8-729-119-78	TRANSI STOR	2SC2785-HFE
				Q706	B-729-200-17	TRANSI STOR	2SA1091-0
				Q707	8-729-200-17	TRANSI STOR	2SA1091-0
				Q708	8-729-326-11	TRANSI STOR	2SC2611
				Q709	8-729-119-78	TRANSI STOR	2SC2785-HFE
				Q710	8-729-255-12	TRANSI STOR	2SC2551-0
				Q711	8-729-119-76	TRANSI STOR	2SA1175-HFE
				Q712	8-729-255-12	TRANSI STOR	2SC2551-0
				9714	8-729-200-17	TRANSI STOR	2SA1091-0
				Q715	8-729-200-17	TRANSI STOR	2SA1091-0
				Q716	8-729-200-17	TRANSI STOR	2SA1091-0
						<RESISTOR>	
				R701	1-216-398-11	METAL OXIDE	5.6 5% 3W F (KV-32XBR35(U/C))
				R702	1-202-883-11	SOLID	680K 20% 1/2W (KV-27XBR35(U/C))
				R703	1-202-838-00	SOLID	100K 20% 1/2W (KV-32XBR35(U/C))
				R705	1-249-433-11	CARBON	22K 5% 1/4W (KV-27XBR35(U/C))
				R706	1-202-838-00	SOLID	100K 20% 1/2W (KV-32XBR35(U/C))
					1-202-815-11	SOLID	47K 20% 1/2W (KV-27XBR35(U/C))
				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	f-249-433-11	CARBON	22K 5% 1/4W (KV-27XBR35(U/C))
				R713	1-216-486-00	METAL OXIDE	8.2K 5% 3W F (KV-27XBR35(U/C))
				R715	1-202-549-00	SOLID	100 10% 1/2W
				R716	1-216-486-00	METAL OXIDE	8.2K 5% 3W F
				R720	1-216-486-00	METAL OXIDE	8.2K 5% 3W F
				R722	1-249-433-11	CARBON	22K 5% 1/4W (KV-27XBR35(U/C))
				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	1-215-902-11	METAL OXIDE	47K 5% 2W F
				R741	1-249-417-11	CARBON	1K 5% 1/4W F
						<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				
						<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	1-164-082-11	CERAMIC	560PF 10% 50V (KV-32XBR35(U/C))				
	1-164-083-11	CERAMIC	680PF 10% 50V (KV-27XBR35(U/C))				
C711	-124-120-11	ELECT	220MF 20% 16V				
C712	-164-082-11	CERAMIC	560PF 10% 50V				
c713	-164-082-11	CERAMIC	560PF 10% 50V (KV-32XBR35(U/C))				
	1-164-083-11	CERAMIC	680PF 10% 50V (KV-27XBR35(U/C))				
c715	-102-129-00	CERAMIC	0.01MF 10% 50V				
C718	-102-129-00	CERAMIC	0.01MF 10% 50V				
(733	1-102-074-00	CERAMIC	0.001MF 10% 50V				
						<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	R-719-901-83	DIODE	15S83				
D714	8-719-911-19	DIODE	1SS119				
						<JACK>	
J701	1-540-071-11	SOCKET, PICTURE TUBE	(KV-32XBR35(U/C))				
	1-540-223-11	SOCKET, PICTURE TUBE	(KV-27XBR35(U/C))				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R742	t-249-423-11	CARBON	3.3K 5% 1/4W F	C929	I-130-471-00	MYLAR	0.001MF 5% 50V
R743	1-243-423-11	CARBON	3.3K 5% 1/4W F	C930	1-130-483-00	MYLAR	0.01MF 5% 50V
R744	1-249-423-11	CARBON	3.3K 5% 1/4W F			<CONNECTOR>	
R745	t-249-417-11	CARBON	1K 5% 1/4W F				
R746	I-215-902-11	METAL OXIDE	47K 5% 1W F				
R747	1-249-429-11	CARBON	10K 5% 1/4W F	D14	*1-573-299-11	CONNECTOR, BOARD TO BOARD	10P
R748	1--216-398-11	METAL OXIDE	5.6 5% 3W F	D18	*1-573-299-11	CONNECTOR, BOARD TO BOARD	10P
			(KV-32XBR35(U/C))	D20	*1-564-524-11	PLUG, CONNECTOR	9P
	1-216-365-00	METAL OXIDE	0.47 5% 2W F	DY2	*1-508-765-00	PIN, CONNECTOR (5MM PITCH)	31'
			(KV-27XBR35(U/C))			<DIODE>	
11749	1-249-437-11	CARBON	47K 5% 1/4W	D801	8-719-913-44	DIODE ERA82-004	
R750	1-249-409-11	CARBON	220 5% 1/4W F	D802	8-719-911-19	DIODE 1SS119	
R751	1-249-395-11	CAHBON	15 5% 1/4W	D803	8-719-911-19	DIODE 1SS119	
R752	1-249-393-11	CARBON	10 5% 1/4W	D804	8-719-911-19	DIODE 1SS119	
R753	1-249-392-11	CARBON	a.2 5% 1/4W	D805	8-719-801-35	THYRISTOR SHOR3D42	
			(KV-32XBR35(U/C))	D806	8-719-980-78	DIODE ERA83-006	
	1-249-390-11	CARBON	5.6 5% 1/4W	D807	8-719-980-78	DIODE ERA83-006	
			(KV-27XBR35(U/C))	D808	8-719-911-19	DIODE 1SS119	
R754	I-244-418-11	CARBON	1.2K 5% 1/4W	D809	8-719-911-19	DIODE 1SS119	
R777	1-249-441-11	CARBON	100K 5% 1/4W	D810	8-719-911-19	DIODE 1SS119	
			(KV-32XBR35(U/C))	D811	8-719-300-33	DIODE KU-3AM	
			(KV-27XBR35(U/C))	D812	8-719-911-19	DIODE 1SS119	
			(KV-32XBR35(U/C))	D814	8-719-110-13	DIODE RD9,IES-B2	
			(KV-27XBR35(U/C))	D815	8-719-911-19	DIODE 1SS119	
			(KV-27XBR35(U/C))	D816	8-719-911-19	DIODE 1SS119	
			(KV-27XBR35(U/C))	D903	8-719-979-85	DIODE EGP20G	
			(KV-27XBR35(U/C))			<IC>	
			(KV-27XBR35(U/C))	IC801	8-749-920-58	IC SI-3090CA	
			(KV-27XBR35(U/C))	IC802	8-752-052-88	IC CXA1526P	
			(KV-27XBR35(U/C))	IC803	8-759-135-80	IC UPC358C	
			(KV-27XBR35(U/C))	IC903	8-759-987-16	IC LM393P	
			(KV-27XBR35(U/C))			<COIL>	
			(KV-27XBR35(U/C))	L801	1-459-592-11	COIL (WITH CORE) (PMC)	
			(KV-27XBR35(U/C))	L802	1-459-941-12	COIL, CHOKE 3.4MMH	
			(KV-27XBR35(U/C))	L901	1-410-093-11	INDUCTOR 33MMH	
			(KV-27XBR35(U/C))	L903	1-459-941-12	COIL, CHOKE 3.4MMH	
			(KV-27XBR35(U/C))	L904	1-459-148-00	COIL	
			(KV-27XBR35(U/C))	L905	1-459-592-11	COIL (WITH CORE) (PMC)	
			(KV-27XBR35(U/C))			<TRANSISTOR>	
			(KV-27XBR35(U/C))	Q802	8-729-119-76	TRANSISTOR 2SA1175-HFE	
			(KV-27XBR35(U/C))	Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE	
			(KV-27XBR35(U/C))	Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE	
			(KV-27XBR35(U/C))	Q805	8-729-140-97	TRANSISTOR 2SB734-34	
			(KV-27XBR35(U/C))	Q806	8-729-119-78	TRANSISTOR 2SC2785-HFE	
			(KV-27XBR35(U/C))	Q807	8-729-140-97	TRANSISTOR 2SB734-34	
			(KV-27XBR35(U/C))	Q808	8-729-119-76	TRANSISTOR 2SA1175-HFE	
			(KV-27XBR35(U/C))	Q809	8-729-209-15	TRANSISTOR 2SD2012	
			(KV-27XBR35(U/C))	Q810	8-729-140-96	TRANSISTOR 2SD774-34	
			(KV-27XBR35(U/C))	Q811	8-729-119-78	TRANSISTOR 2SC2785-HFE	
			(KV-27XBR35(U/C))	Q910	8-729-119-78	TRANSISTOR 2SC2785-HFE	
			(KV-27XBR35(U/C))	Q911	8-729-119-78	TRANSISTOR 2SC2785-HFE	
			(KV-27XBR35(U/C))	Q912	8-729-119-76	TRANSISTOR 2SA1175-HFE	
			(KV-27XBR35(U/C))	8913	8-729-011-02	TRANSISTOR 2SK1917	
			(KV-27XBR35(U/C))			<CAPACITOR>	
			(KV-27XBR35(U/C))	C801	1-124-589-11	ELECT 47MF 20% 16V	
			(KV-27XBR35(U/C))	C802	t-124-589-11	ELECT 47MF 20% 16V	
			(KV-27XBR35(U/C))	C804	1-130-483-00	MYLAR 0.01MF 5% 50V	
			(KV-27XBR35(U/C))	C805	1-136-165-00	FILM 0.1MF 5% 50V	
			(KV-27XBR35(U/C))	C806	1-136-165-00	FILM 0.1MF 5% 50V	
			(KV-27XBR35(U/C))	C807	1-124-360-00	ELECT 1000MF 20% 16V	
			(KV-27XBR35(U/C))	C809	1-136-104-00	FILM 0.16MF 5% 200V	
			(KV-27XBR35(U/C))	C810	1-136-177-00	FILM 1MF 5% 50V	
			(KV-27XBR35(U/C))	C811	1-162-318-11	CERAMIC 0.001MF 10% 500V	
			(KV-27XBR35(U/C))	C812	1-126-163-11	ELECT 4.7MF 20% 50V	
			(KV-27XBR35(U/C))	C813	1-130-491-00	MYLAR 0.047MF 5% 50V	
			(KV-27XBR35(U/C))	C814	1-124-261-00	ELECT 10MF 20% 50V	
			(KV-27XBR35(U/C))	C815	1-124-261-00	ELECT 10MF 20% 50V	
			(KV-27XBR35(U/C))	C816	1-124-234-00	ELECT 22MF 20% 16V	
			(KV-27XBR35(U/C))	C817	1-126-163-11	ELECT 4.7MF 20% 50V	
			(KV-27XBR35(U/C))	C818	1-124-589-11	ELECT 47MF 20% 16V	
			(KV-27XBR35(U/C))	C819	t-136-165-00	FILM 0.1MF 5% 50V	
			(KV-27XBR35(U/C))	C820	1-126-103-11	ELECT 470MF 20% 16V	
			(KV-27XBR35(U/C))	C913	1-124-589-11	ELECT 47MF 20% 16V	
			(KV-27XBR35(U/C))	C914	1-1136-379-12	MYLAR 0.033MF 10% 100V	
			(KV-27XBR35(U/C))	C915	1-126-301-11	ELECT 1MF 20% 50V	
			(KV-27XBR35(U/C))	C916	1-130-471-00	MYLAR 0.001MF 5% 50V	
			(KV-27XBR35(U/C))	C917	1-130-479-00	MYLAR 0.0047MF 5% 50V	
			(KV-27XBR35(U/C))	C918	1-102-074-00	CERAMIC 0.001MF 10% 50V	
			(KV-27XBR35(U/C))	C920	1-136-946-11	FILM 0.12MF 5% 200V	
			(KV-27XBR35(U/C))	C921	1-136-177-00	FILM 1MF 5% 50V	



REF. NO.	PART NO.	DESCRIPTION	REMARK	EF. NO.	PART NO.	DESCRIPTION	REMARK
<RESISTOR>				<CAPACITOR>			
R801	1-249-409-11	CARBON	220 5% 1/4W	C801	1-124-589-11	ELECT	47MF 20% 16V
R802	1-249-409-11	CARBON	220 5% 1/4W	C802	1-124-589-11	ELECT	47MF 20% 16V
R804	1-247-891-00	CARBON	330K 5% 1/4W	C804	1-130-483-00	MYLAR	0.01MF 5% 50V
R806	1-247-885-00	CARBON	180K 5% 1/4W	C805	1-136-165-00	FILM	0.1MF 5% 50V
R807	1-247-891-00	CARBON	330K 5% 1/4W	C806	1-136-165-00	FILM	0.1MF 5% 50V
R808	1-215-461-00	METAL	47K 1% 1/4W	C807	1-124-360-00	ELECT	1000MF 20% 16V
R809	1-249-423-11	CARBON	3.3K 5% 1/4W	C809	1-136-104-00	FILM	0.16MF 5% 200V
R810	1-249-413-11	CARBON	470 5% 1/4W	C810	1-136-177-00	FILM	1MF 5% 50V
R811	1-249-434-11	CARBON	27K 5% 1/4W	C811	1-162-318-11	CERAMIC	0.001MF 10% 500V
R812	1-249-438-11	CARBON	56K 5% 1/4W	C812	1-126-163-11	ELECT	4.7MF 20% 50V
R813	1-249-417-11	CARBON	1K 5% 1/4W	C813	1-130-491-00	MYLAR	0.047MF 5% 50V
R815	1-249-427-11	CARBON	6.8K 5% 1/4W	C814	1-124-261-00	ELECT	10MF 20% 50V
R816	1-249425-11	CARBON	4.7K 5% 1/4W	C815	1-124-261-00	ELECT	10MF 20% 50V
R817	1-249-423-11	CARBON	3.3K 5% 1/4W	C816	1-124-234-00	ELECT	22MF 20% 16V
R818	1-244-417-11	CARBON	1K 5% 1/4W	C817	1-126-163-11	ELECT	4.7MF 20% 50V
R819	1-249-432-11	CARBON	18K 5% 1/4W	C818	1-124-589-11	ELECT	47MF 20% 16V
RR20	1-249-417-11	CARBON	1K 5% 1/4W	C819	1-136-165-00	FILM	0.1MF 5% 50V
R821	1-216-379-11	METAL OXIDE	6.8 5% 2W F	C820	1-126-103-11	ELECT	470MF 20% 16V
11822	1-249-423-11	CARBON	3.3K 5% 1/4W	C901	1-136-173-00	FILM	0.47MF 5% 50V
R824	1-249-417-11	CARBON	1K 5% 1/4W F	C902	1-124-261-00	ELECT	10MF 20% 50V
R825	1-215-857-11	METAL OXIDE	10 5% 1W F	C903	1-163-157-00	FILM	0.022MF 5% 50V
R826	1-249-404-00	CARBON	82 5% 1/4W	C904	1-130-471-00	MYLAR	0.001MF 5% 50V
R827	1-215-875-11	METAL OXIDE	10K 5% 1W F	C905	1-124-261-00	ELECT	10MF 20% 50V
R828	1-249-441-11	CARBON	100K 5% 1/4W	C906	1-124-046-00	ELECT	10MF 20% 160V
R829	1-249-414-11	CARBON	560 5% 1/4W	C907	1-124-465-00	ELECT	0.47MF 20% 50V
11830	1-249-411-11	CARBON	330 5% 1/4W	C908	1-102-112-00	CERAMIC	330PF 10% 50V
R831	1-249-426-11	CARBON	5.6K 5% 1/4W	C910	1-136-756-11	FILM	0.24MF 5% 200V
R832	1-215-887-00	METAL OXIDE	150 5% 2W F	C911	1-136-177-00	FILM	1MF 5% 50V
R833	1-249-421-11	CARBON	2.2K 5% 1/4W	C913	1-124-589-11	ELECT	47MF 20% 16V
R834	1-249-438-11	CARBON	5.6K 5% 1/4W	C914	1-106-379-12	MYLAR	0.033MF 10% 100V
R835	1-249-393-11	CARBON	33K 5% 1/4W	C915	1-126-301-11	ELECT	1MF 20% 50V
R836	1-249-435-11	CARBON	1/4W	C916	1-130-479-00	MYLAR	0.0047MF 5% 50V
R837	1-249-435-11	CARBON	1/4W	C917	1-130-479-00	MYLAR	0.0047MF 5% 50V
R838	1-216-359-00	METAL OXIDE	6.8 5% 1W F	C918	1-102-074-00	CERAMIC	0.001MF 10% 50V
R839	1-249-410-11	CARBON	270 5% 1/4W	C920	1-130-202-00	FILM	0.022MF 5% 400V
R840	1-249-429-11	CARBON	47K 5% 1/4W	C921	1-136-177-00	FILM	1MF 5% 50V
R841	1-249-437-11	CARBON	10K 5% 1/4W	C922	1-124-557-11	ELECT	1000MF 20% 25V
R842	1-249-429-11	CARBON	1/4W	C923	1-130-471-00	MYLAR	0.001MF 5% 50V
R843	1-249-421-11	CARBON	2.2K 5% 1/4W	C925	1-124-261-00	ELECT	10MF 20% 50V
RY27	1-249-419-11	CARBON	1.5K 5% 1/4W	C926	1-136-175-00	FILM	0.068MF 5% 50V
R928	1-249-421-11	CARBON	2.2K 5% 1/4W	C928	1-124-261-00	ELECT	10MF 20% 50V
R929	1-249-429-11	CARBON	10K 5% 1/4W	C930	1-130-483-00	MYLAR	0.01MF 5% 50V
R930	1-249-434-11	CARBON	27K 5% 1/4W				
R931	1-249-421-11	CARBON	2.2K 5% 1/4W				
R932	1-249-423-11	CARBON	3.3K 5% 1/4W				
R933	1-249-421-11	CARBON	2.2K 5% 1/4W				
R934	1-249-441-11	CARBON	100K 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 F				
R942	1-215-892-11	METAL OXIDE	1K 5% 2W F				
*****				<CONNECTOR>			
*A -1341-545-A D BOARD, COMPLETE (KV-27XBR35(U/C))				D14 x1-573-299-11 CONNECTOR, BOARD TO BOARD 10P			
*****				D18 *1-573-299-11 CONNECTOR, BOARD TO BOARD 10P			
*4-341-751-01 EYELET (EY801~EY804,EY901~EY904)				D20 x1-564-524-11 PLUG, CONNECTOR 9P			
*4-341-752-01 EYELET (EY811,EY812)				DY2 *1-508-765-00 PIN, CONNECTOR (5MM PITCH) 3P			
4-382-854-11 SCREW (M3X10), P. SW (+)				<DIODE>			
*****				D801 8-719-913-44 DIODE ERA82-004			
*****				D802 8-719-911-19 DIODE ISS119			
*****				D803 8-719-911-19 DIODE ISS119			
*****				D804 8-719-911-19 DIODE ISS119			
*****				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 ISS119			
*****				D809 8-719-911-19 DIODE ISS119			
*****				D810 8-719-911-19 DIODE ISS119			

D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D811	E-719-300-33	DIODE RU-3AM		H808	I-215-461-00	METAL	47K 1% 1/4W
D812	8-719-911-19	DIODE 1SS119		R809	1-249-423-11	CARBON	3.3K 5% 1/4W
D813	8-719-109-88	DIODE RD5.6ES-B1		R810	1-249-413-11	CARBON	470 5% 1/4W
D814	8-719-110-13	DIODE RD9.1ES-B2		R811	1-249-434-11	CARBON	27K 5% 1/4W
D815	8-719-911-19	DIODE 1SS119		R812	1-243-438-11	CARBON	56K 5% 1/4W
D816	g-719-911-19	DIODE 1SS119		R813	1-249-417-11	CARBON	1K 5% 1/4W
D901	8-719-911-19	DIODE 1SS119		H815	1-249-427-11	CARBON	6.8K 5% 1/4W
D902	8-719-109-96	DIODE RD6.8ES-B1		R816	1-249-425-11	CARBON	4.7K 5% 1/4W
DY03	R-719-979-85	DIODE EGP20G		R817	1-249-424-11	CARBON	3.9K 5% 1/4W
D906	8-719-980-78	DIODE ERA83-006		R818	1-249-417-11	CARBON	1K 5% 1/4W
D907	8-719-911-19	DIODE 1SS119		R819	1-249-432-11	CARBON	18K 5% 1/4W
D908	8-719-980-78	DIODE ERA83-006		H820	1-249-417-11	CARBON	1K 5% 1/4W
D911	8-719-911-19	DIODE 1SS119		R821	I-216-379-11	METAL OXIDE	6.8 5% 2W F
				H822	1-249-423-11	CARBON	3.3K 5% 1/4W
IC801	8-749-920-58	IC SI-30YOCA		R824	1-249-417-11	CARBON	1K 5% 1/4W F
IC802	g-752-052-88	IC CXA1526P		R825	I-215-861-00	METAL OXIDE	47 5% 1W F
IC803	8-759-135-80	IC UPC358C		H826	1-249-404-00	CARBON	82 5% 1/4W
IC901	g-759-135-80	IC UPC358C		R827	I-215-875-11	METAL OXIDE	10K 5% F
ICY03	g-759-987-16	IC LM393P		H828	1-249-441-11	CARBON	100K 5% :: a
		<COIL>		R829	1-249-414-11	CARBON	560 5% 1/4W
L801	1-459-592-11	COIL (WITH CORE) (PMC)		R830	1-249-411-11	CARBON	330 5% 1/4W
L802	1-459-941-12	COIL, CHOKE 3.4MMH		R831	1-249-426-11	CARBON	5.6K 5% 1/4W
L901	1-410-093-11	INDUCTOR 33MMH		H833	1-249-421-11	CARBON	2.2K 5% 1/4W
L902	1-459-148-00	COIL		R834	1-249-438-11	CARBON	56K 5% 1/4W
L903	1-459-941-12	COIL, CHOKE 3.4MMH		H835	1-249-393-11	CARBON	10 5% 1/4W
		<TRANSISTOR>		H836	1-249-435-11	CAHBON	33K 5% 1/4W
Q802	g-729-119-76	TRANSISTOR 2SA1175-HFE		H837	1-249-435-11	CARBON	33K 5% 1/4W
Q803	g-729-119-78	TRANSISTOR 2SC2785-HFE		R838	1-216-359-00	METAL OXIDE	6.8 5% 1W F
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE		H839	1-249-410-11	CARBON	270 5% 1/4W
Q805	8-729-140-97	TRANSISTOR 2SB734-34		R840	1-249-429-11	CARBON	10K 5% 1/4W
Q806	8-729-119-78	TRANSISTOR 2SC2785-HFE		R841	1-249-437-11	CARBON	47K 5% 1/4W
Q807	g-729-140-97	THANSI STUH 2SB734-34		H842	1-249-429-11	CARBON	10K 5% 1/4W
Q808	8-729-119-76	TRANSISTOR 2SA1175-HFE		R843	1-249-421-11	CARBON	2.2K 5% 1/4W
Q809	g-729-209-15	TRANSISTOR 2SD2012		R901	1-249-425-11	CARBON	4.7K 5% 1/4W
Q810	E-729-140-96	TRANSISTOR 2SD774-34		R902	1-249-438-11	CARBON	56K 5% 1/4W
Q811	8-729-119-78	TRANSISTOR 2SC2785-HFE		R903	1-249-429-11	LAHBON	10K 5% 1/4W
Q901	8-729-119-76	TRANSISTOR 2SA1175-HFE		H904	1-249-429-11	CARBON	10K 5% 1/4W
Q902	g-729-119-78	TRANSISTOR 2SC2785-HFE		R905	1-249-429-11	CARBON	10K 5% 1/4W
Q903	8-729-119-78	TRANSISTOR 2SC2785-HFE		R906	1-249-425-11	CARBON	4.7K 5% 1/4W
Q904	g-729-119-76	TRANSISTOR 2SA1175-HFE		R907	1-249-429-11	CARBON	10K 5% 1/4W
9905	g-729-119-76	TRANSISTOR 2SA1175-HFE		R908	1-249-435-11	CARBON	33K 5% 1/4W
Q906	g-729-119-80	TRANSISTOR 2SC2688-LK		R909	1-249-433-11	CARBON	22K 5% 1/4W
Q907	8-729-119-80	TRANSISTOR 2SC2688-LK		R910	1-249-436-11	CARBON	39K 5% 1/4W
8908	8-729-300-80	TRANSISTOR 2SB860		R911	i-247-895-00	CARBON	470K 5% 1/4W
Q909	g-729-140-96	TRANSISTOR 2SD774-34		R912	1-249-429-11	CARBON	10K 5% 1/4W
Q910	8-729-119-78	TRANSISTOR 2SC2785-HFE		R913	1-249-425-11	CARBON	4.7K 5% 1/4W
Q911	8-729-119-78	TRANSISTOR 2SC2785-HFE		R914	1-249-401-11	CARBON	47 5% 1/4W
9912	g-724-119-76	TRANSISTOR 2SA1175-HFE		R915	1-249-427-11	CARBON	6.8K 5% 1/4W
Q913	8-729-011-02	TRANSISTOR 2SK1917		R916	1-249-421-11	CARBON	2.2K 5% 1/4W
Q914	g-729-119-76	TRANSISTOR 2SA1175-HFE		H917	1-249-439-11	CARBON	68K 5% 1/4W
		<RESISTOR>		R918	1-249-413-11	CARBON	470 5% 1/4W
R801	1-249-409-11	CARBON 220 5%	1/4W	R919	1-249-432-11	CARBON	18K 5% 1/4W
R802	1-249-409-11	CARBON 220 5%	1/4W	R920	1-249-418-11	CARBON	1.2K 5% 1/4W F
H804	1-247-891-00	CARBON 330K 5%	1/4W	R921	1-215-876-00	METAL OXIDE	15K 5% 1W F
H805	1-249-411-11	CARBON 330 5%	1/4W	H922	1-215-862-11	METAL OXIDE	68 5% 1W F
R806	1-247-885-00	CARBON 180K 5%	1/4W	R923	1-249-429-11	CARBON	10K 5% 1/4W
R807	1-247-891-00	CAHBUN 330K 5%	1/4W	H924	1-249-423-11	CARBON	3.3K 5% 1/4W
				H925	1-249-415-11	CARBON	680 5% 1/4W
				H926	1-249-409-11	CARBON	220 5% 1/4W
				H927	1-249-419-11	CARBON	1.5K 5% 1/4W
				H928	1-249-421-11	CARBON	2.2K 5% 1/4W
				H929	1-249-429-11	CARBON	10K 5% 1/4W
				R930	1-249-434-11	CARBON	27K 5% 1/4W
				R931	1-249-421-11	CAHBUN	2.2K 5% 1/4W



REF. NO.	PART NO.	DESCRIPTION	REMARK
R932	I-249-433-11	CARBON 22K 5% 1/4W	
RY33	1-249-421-11	CARBON 2.2K 5% 1/4W	
R934	1-249-441-11	CARBON 100K 5% 1/4W	
R935	1-249-429-11	CARBON 10K 5% 1/4W	
R936	1-249-429-11	CARBON 10K 5% 1/4W	
R937	-249-421-11	CARBON 2.2K 5% 1/4W	
R938	-249-405-11	CARBON 100 5% 1/4W	
R939	-249-405-11	CARBON 100 5% 1/4W	F
R940	-249-405-11	CARBON 100 5% 1/4W	F
R941	-249-405-11	CARBON 100 5% 1/4W	
R944	-249-433-11	CARBON 22K 5% 1/4W	
R945	-247-895-00	CARBON 470K 5% 1/4W	
R946	-249-425-11	CARBON 4.7K 5% 1/4W	
R947	-249-415-11	CARBON 680 5% 1/4W	F
R948	-249-439-11	CARBON 68K 5% 1/4W	
R950	I-249-425-11	CARBON 4.7K 5% 1/4W	
R952	1-249-405-11	CARBON 100 5% 1/4W	
R953	I-247-889-00	CARBON 270K 5% 1/4W	
R954	1-247-889-00	CARBON 270K 5% 1/4W	

*A-1342-176-A	V BOARD, COMPLETE (KV-32XBR35(U/C))	*****	
*A-1342-182-A	V BOARD, COMPLETE (KV-27XBR35(U/C))	*****	
*4-341-751-01	EYELET (EY5)		
*4-341-752-01	EYELET (EY1~EY4)		
4-382-854-11	SCREW (M3X10), P, SW (+)		
<CAPACITOR>			
C951	-102-074-00	CERAMIC 0.001MF 10% 50V	
C952	-102-125-00	CERAMIC 0.0047MF 10% 50V	
C961	-161-830-00	CERAMIC 0.0047MF 500V	
C962	-102-951-00	CERAMIC 15PF 5% 50V	
C963	-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	
<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 RD39ES-B2	
D968	8-719-110-88	DIODE RD39ES-B2	
<COIL>			
L962	1-410-478-11	INDUCTOR 47UH (KV-32XBR35(U/C))	

REF. NO.	PART NO.	DESCRIPTION	REMARK
L962	1-408-416-00	INDUCTOR 39UH (KV-27XBR35(U/C))	
<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	8-729-208-39	TRANSISTOR 2SA1306A-Y	
Q964	a-729-119-78	TRANSISTOR 2SC2785-HFE	
Q965	8-729-208-72	TRANSISTOR 2SC3298B-Y	
Q966	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q967	a-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	1-216-476-11	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	1-216-451-11	METAL OXIDE 120 5% 2W	F
R991	1-249-409-11	CARBON 220 5% 1/4W	
<CONNECTOR>			
V20	*1-564-512-11	PLUG, CONNECTOR 9P	

*A-1347-068-A	VC BOARD, COMPLETE (KV-27XBR35(U/C))	*****	
*4-341-751-01	EYELET (EY1801~EY1804)		
<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	

VC HS1 HS2

Les composants identifiés par une
trame et une marque **Δ** sont
critiques pour la sécurité
Ne les remplacer que par une pièce
portant le numéro spécifié.

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

REF. NO.	PART NO.	DESCRIPTION	REMARK
CI805	1-130-471-00	FILM	0.001MF 5% 50v
CI806	1-130-487-00	MYLAR	0.022MF 5% 50v
CI807	1-130-471-00	MYLAR	0.001MF 5% 50v
CI808	1-102-228-00	CERAMIC	470PF 10% 500V
CI809	1-124-798-11	ELECT	1MF 20% 160V
CI810	1-130-495-00	MYLAR	0.1MF 5% 50V
CI811	1-124-798-11	ELECT	1MF 20% 160V
CI812	1-136-104-00	FILM	0.16MF 5% 200V
CI813	1-129-765-00	FILM	0.047MF 10% 200v
<DIODE>			
D1801	8-719-911-19	DIODE	1SS119
O1802	8-719-911-19	DIODE	1SS119
D1803	8-719-300-33	DIODE	RU-3AM
D1804	8-719-300-33	DIODE	RU-3AM
D1805	M-719-300-33	DIODE	RU-3AM
<IC>			
IC1801	8-753-987-16	IC	LM393P
IC1802	8-759-987-16	IC	LM393P
IC1803	B-759-708-09	IC	NJM78L09A
<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
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	1-216-463-00	METAL OXIDE	12K 5% 2W F
R1812	1-215-875-11	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	1-215-869-11	METAL OXIDE	1K 5% 1W F
R1816	1-249-434-11	CARBON	27K 5% 1/4W
R1817	1-249-441-11	CARBON	100K 5% 1/4W
R1818	1-249-406-11	CARBON	120 5% 1/4W
<VARIABLE RESISTOR>			
RV1801	1-22X-903-00	RES, ADJ, METAL GLAZE	4.7K
<TRANSFORMER>			
T1801	1-437-212-11	TRANSFORMER, FERRITE (VPDT)	
<CONNECTOR>			

REF. NO.	PART NO.	DESCRIPTION	REMARK
VC15	*1-573-299-11	CONNECTOR, BOARD TO BOARD	10P

	*1-643-150-11	HS1 BOARD	*****
<CAPACITOR>			
CI603	I-124-589-11	ELECT	47MF 20% 16V
CI604	I-124-589-11	ELECT	47MF 20% 16V
<DIODE>			
DI601	1-809-718-1	LED UNIT	
DI602	1-809-718-1	LED UNIT	
<CONNECTOR>			
HS1-37	*1-564-514-11	PLUG, CONNECTOR	11P
<IC>			
IC1601	8-741-100-62	IC	SBX1618-51
<RESISTOR>			
R1601	-249-405-11	CARBON	100 5% 1/4W
R1602	-249-407-11	CARBON	150 5% 1/4W
R1604	-249-419-11	CARBON	1.5K 5% 1/4W
R1605	-249-421-11	CARBON	2.2K 5% 1/4W
R1606	-249-425-11	CARBON	4.7K 5% 1/4W
R1607	-249-430-11	CARBON	12K 5% 1/4W
<SWITCH>			
S1601	1-571-532-21	SWITCH, TACTIL	
S1602	1-571-532-21	SWITCH, TACTIL	
S1603	1-571-532-21	SWITCH, TACTIL	
S1604	f-571-532-21	SWITCH, TACTIL	
S1605	1-571-532-21	SWITCH, TACTIL	
S1606	1-571-532-21	SWITCH, TACTIL	
S1607	*1-571-532-23	SWITCH, TACTIL (POWER)	

	*1-643-151-11	HS2 BOARD	*****
<DIODE>			
D1650	8-719-108-12	DIODE RD9, E-W	
D1651	8-719-108-12	DIODE RD9, E-W	
D1652	8-719-108-12	DIODE RD9, E-W	
<CONNECTOR>			
HS2-16	*1-564-513-11	PLUG, CONNECTOR	10P
HS2-49	*1-564-506-11	PLUG, CONNECTOR	3P
<JACK>			
51650	I-569-804-11	JACK BLOCK, PIN (L TYPE)	3P



REF. NO.	PART NO.	DESCRIPTION	REMARK
*A-1373-322-A UT BOARD, COMPLETE *****			
<CAPACITOR>			
152	1-102-074-00	CERAMIC 0.001MF	10% 50V
154	1-164-096-11	CERAMIC 0.01MF	50V
155	1-126-103-11	ELECT 470MF	20% 16V
158	1-124-598-11	ELECT 22MF	20% 25V
160	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
<DIODE>			
D1152	8-719-110-36	DIODE RD13ES-B2	
D1158	R-719-110-36	DIODE RD13ES-B2	
D1159	8-719-110-36	DIODE RD13ES-B2	
D1160	X-719-110-36	DIODE RD13ES-B2	
D1163	R-719-110-36	DIODE RD13ES-B2	
D1164	8-719-110-36	DIODE RD13ES-B2	
D1165	R-719-110-36	DIODE RD13ES-B2	
D1166	8-719-110-36	DIODE RD13ES-B2	
D1167	B-719-110-36	DIODE RD13ES-B2	
D1168	8-719-110-36	DIODE RD13ES-B2	
D1169	8-719-110-36	DIODE RD13ES-B2	
D1170	8-719-110-36	DIODE RD13ES-B2	
<JACK>			
J1003	-573-970-11	BLOCK, (S) TERMINAL	
J1004	-695-049-11	BLOCK, (S) TERMINAL	
J1005	1-695-054-11	JACK BLOCK, PIN	
J1006	1-573-970-11	BLOCK, (S) TERMINAL	
J1007	1-573-969-11	JACK BLOCK, PIN	
61008	1-573-969-11	JACK BLOCK, PIN	
<RESISTOR>			
R1153	-249-403-11	CARBON 68 5%	1/4W
R1164	-247-895-00	CARBON 470K 5%	1/4W
R1165	-247-895-00	CARBON 470K 5%	1/4W
R1166	-247-895-00	CARBON 470K 5%	1/4W
R1167	-247-895-00	CARBON 470K 5%	1/4W
R1168	-247-895-00	CARBON 470K 5%	1/4W
R1169	-247-895-00	CARBON 470K 5%	1/4W
R1170	-249-403-11	CARBON 68 5%	1/4W
R1171	-247-895-00	CARBON 470K 5%	1/4W
R1172	-247-895-00	CAHBUN 470K 5%	1/4W
R1173	1-247-804-11	CAHBUN 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
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
R1183	1-247-895-00	CARBON 470K 5%	1/4W
R1184	1-247-895-00	CARBON 470K 5%	1/4W

REF. NO.	PART NO.	DESCRIPTION	REMARK
R1185	1-247-895-00	CARBON 470K 5%	1/4W
R1186	1-247-895-00	CARBON 470K 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
H1194	1-215-437-00	METAL 4.7K 1%	1/4W
F1196	1-249-426-11	CARBON 5.6K 5%	1/4W
<SWITCH>			
S1150	1-572-198-11	SWITCH, KEYBOARD	
<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	

*A-1373-323-A U BOARD, COMPLETE *****			
*4-341-751-01 EYELET (EY1001~EY1005)			
*4-341-752-01 EYELET (EY1006)			
<CAPACITOR>			
C1004	1-164-096-11	CERAMIC 0.01MF	50V
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	1-164-096-11	CERAMIC 0.01MF	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
C1023	1-126-163-11	ELECT 4.7MF	20% 50V
C1024	1-126-163-11	ELECT 4.7MF	20% 50V
C1026	1-164-04X-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
C1033	1-124-598-11	ELECT 22MF	20% 25V
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
C1046	1-124-242-00	ELECT 33MF	20% 25V
C1047	1-124-465-00	ELECT 0.47MF	20% 50V
C1048	1-126-301-11	ELECT 1MF	20% 50V
C1043	1-124-598-11	ELECT 22MF	20% 25V

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1050	1-124-242-C10	ELECT	33MF 20% 25V	Q1022	8-729-119-78	TRANSISTOR	2SC2785-HFE
C1051	1-124-465-C10	ELECT	0.47MF 20% 50V	Q1023	8-729-119-78	TRANSISTOR	2SC2785-HFE
C1054	1-126-163-1.1	ELECT	4.7MF 20% 50V	Q1025	8-729-119-76	TRANSISTOR	2SA1175-HFE
C1055	1-124-589-1.1	ELECT	47MF 20% 16V	Q1029	8-729-119-76	TRANSISTOR	2SA1175-HFE
C1056	1-124-499-1.1	ELECT	1MF 20% 50V	Q1030	8-729-119-78	TRANSISTOR	2SC2785-HFE
C1057	1-124-768-1.1	ELECT	4.7MF 20% 50V	Q1031	8-729-119-78	TRANSISTOR	2SC2785-HFE
C1058	1-126-163-1.1	ELECT	4.7MF 20% 50V	Q1032	8-729-119-76	TRANSISTOR	2SA1175-HFE
C1059	1-124-499-1.1	ELECT	1MF 20% 50V	Q1033	8-729-119-76	TRANSISTOR	2SA1175-HFE
C1060	1-124-499-1.1	ELECT	1MF 20% 50V	Q1034	8-729-119-76	TRANSISTOR	2SA1175-HFE
C1061	1-124-499-1.1	ELECT	1MF 20% 50V				
C1062	1-102-129-00	CERAMIC	0.01MF 10% 50V			<RESISTOR>	
C1063	1-124-768-1.1	ELECT	4.7MF 20% 50V	R1011	1-249-435-11	CARBON	33K 5% 1/4W
C1066	1-126-101-1.1	ELECT	100MF 20% 16V	R1012	1-249-434-11	CARBON	27K 5% 1/4W
C1070	-126-103-1.1	ELECT	470MF 20% 16V	R1013	1-249-417-11	CARBON	1K 5% 1/4W
C1110	124-768-1.1	ELECT	4.7MF 20% 50V	R1014	1-249-441-11	CARBON	100K 5% 1/4W
C1111	-124-768-1.1	ELECT	4.7MF 20% 50V	R1015	1-215-437-00	METAL	4.7K 1% 1/4W
		<FILTER BLOCK>		R1016	1-249-441-11	CARBON	100K 5% 1/4W
CM1002	1-466-623-1.1	FILTER BLOCK, COMB (CFB-5)		R1017	1-249-405-11	CARBON	100 5% 1/4W
		<DIODE>		R1018	1-249-427-11	CARBON	6.8K 5% 1/4W
D1005	8-719-110-36	DIODE RD13ES-B2		R1019	1-249-427-11	CARBON	6.8K 5% 1/4W
D1009	8-719-110-36	DIODE RD13ES-B2		R1023	1-249-405-11	CARBON	100 5% 1/4W
D1010	8-719-110-36	DIODE RD13ES-B2					
D1011	8-719-110-36	DIODE RD13ES-B2		R1026	1-215-437-00	METAL	4.7K 1% 1/4W
D1012	8-719-110-36	DIODE RD13ES-B2		R1028	1-249-434-11	CARBON	27K 5% 1/4W
D1013	8-719-110-36	DIODE RD13ES-B2		R1029	1-249-435-11	CARBON	33K 5% 1/4W
D1014	8-719-110-36	DIODE RD13ES-B2		R1030	1-249-417-11	CARBON	1K 5% 1/4W
D1017	8-719-110-36	DIODE RD13ES-B2		R1032	1-249-417-11	CARBON	1K 5% 1/4W
D1018	8-719-110-36	DIODE RD13ES-B2					
D1019	8-719-110-36	DIODE RD13ES-B2		R1033	1-249-393-11	CARBON	10 5% 1/4W F
D1020	8-719-109-66	DIODE RD3.3ES-B2		R1034	1-249-417-11	CARBON	1K 5% 1/4W
D1021	8-719-109-66	DIODE RD3.3ES-B2		R1035	1-249-427-11	CARBON	6.8K 5% 1/4W
D1022	8-719-109-66	DIODE RD3.3ES-B2		R1036	1-249-440-11	CARBON	82K 5% 1/4W
D1023	8-719-109-66	DIODE RD3.3ES-B2		R1037	1-249-440-11	CARBON	82K 5% 1/4W
D1025	8-719-911-19	DIODE 1SS119		R1038	1-249-440-11	CARBON	82K 5% 1/4W
D1026	8-719-911-19	DIODE 1SS119		R1040	1-249-427-11	CARBON	6.8K 5% 1/4W
D1027	8-719-911-19	DIODE 1SS119		R1041	1-249-441-11	CARBON	100K 5% 1/4W
		<IC>		R1042	1-249-441-11	CARBON	100K 5% 1/4W
IC1002	a-752-056-50	IC CXA1545S		R1043	1-249-417-11	CARBON	1K 5% 1/4W
IC1010	8-759-145-57	IC UPC4557C					
IC1011	8-759-145-57	IC UPC4557C		R1046	1-249-413-11	CARBON	470 5% 1/4W
		<COIL>		R1048	1-249-405-11	CARBON	100 5% 1/4W
L1001	1-408-422-00	INDUCTOR 120UH		R1050	1-249-405-11	CARBON	100 5% 1/4W
L1002	1-408-422-00	INDUCTOR 120UH		R1051	1-249-417-11	CARBON	1K 5% 1/4W
		<TRANSISTOR>		R1052	1-249-413-11	CARBON	470 5% 1/4W
Q1009	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1010	8-729-119-78	TRANSISTOR 2SC2785-HFE		R1054	1-249-405-11	CARBON	100 5% 1/4W
Q1012	8-729-119-78	TRANSISTOR 2SC2785-HFE		R1055	1-249-413-11	CARBON	470 5% 1/4W
Q1013	8-729-119-78	TRANSISTOR 2SC2785-HFE		R1056	1-249-405-11	CARBON	100 5% 1/4W
Q1016	8-729-119-76	TRANSISTOR 2SA1175-HFE		R1057	1-249-441-11	CARBON	100K 5% 1/4W
Q1017	8-729-119-76	TRANSISTOR 2SA1175-HFE		R1059	1-249-405-11	CARBON	100 5% 1/4W
Q1018	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1019	8-729-119-76	TRANSISTOR 2SA1175-HFE		R1061	1-249-409-11	CARBON	220 5% 1/4W
Q1020	8-729-119-76	TRANSISTOR 2SA1175-HFE		R1062	1-249-441-11	CARBON	100K 5% 1/4W
Q1021	8-729-119-76	TRANSISTOR 2SA1175-HFE		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
				R1092	1-247-688-11	CARBON	10 5% 1/4W F

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REF. NO.	PART NO.	DESCRIPTION	REMARK
R1094	1-249-405-11	CARBON	100 5% 1/4W
R1096	1-249-405-11	CARBON	100 5% 1/4W
R1099	1-249-413-11	CARBON	470 5% 1/4W
R1100	1-249-429-11	CARBON	10K 5% 1/4W
R1101	1-241-405-f 1	CARBON	100 5% 1/4W
R1102	1-249-393-1	CARBON	10 5% 1/4W
R1103	1-249-441-1	CARBON	100K 5% 1/4W
R1106	1-249-435-1	CARBON	33K 5% 1/4W
R1108	1-249-434-1	CARBON	27K 5% 1/4W
R1109	1-249-435-1	CARBON	33K 5% 1/4W
R1110	1-249-405-11	CARBON	100 5% 1/4W
R1112	1-249-409-11	CARBON	220 5% 1/4W
R1114	1-249-434-11	CARBON	27K 5% 1/4W
R1115	1-249-409-11	CARBON	220 5% 1/4W
R1116	1-249-441-11	CARBON	LOOK 5% 1/4W
R1117	1-249-393-1	CARBON	10 5% 1/4W
R1118	1-249-413-1	CARBON	470 5% 1/4W
R1119	1-249-441-1	CARBON	100K 5% 1/4W
R1120	1-249-413-1	CARBON	470 5% 1/4W
R1121	1-249-441-1	CARBON	100K 5% 1/4W
R1122	-249-413-11	CARBON	470 5% 1/4W
R1133	-249-405-11	CARBON	100 5% 1/4W
R1134	-249-405-11	CARBON	100 5% 1/4W
R1138	-249-415-11	CARBON	680 5% 1/4W
R1139	-249-413-11	CARBON	470 5% 1/4W
R1140	-249-413-11	CARBON	470 5% 1/4W
A1141	249-413-11	CARBON	470 5% 1/4W
R1142	-249-415-11	CARBON	680 5% 1/4W
R1148	249-405-11	CARBON	100 5% 1/4W
R1149	-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
<CONNECTOR>			
U12	1-573-300-11	CONNECTOR, BOARD TO BOARD	18P
U13	1-573-300-11	CONNECTOR, BOARD TO BOARD	18P
U16	*1-564-513-11	PLUG, CONNECTOR	10P
U19	*1-564-509-11	PLUG, CONNECTOR	6P
U22	1-566-942-11	CONNECTOR, HINGE (RECEPTACLE)	30P
U23	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)	
U48	*1-508-784-00	PIN, CONNECTOR (5MM FITCH)	1P
U50	*1-564-505-11	PLUG, CONNECTOR	2P

*1-643-669-11	S BOARD	*****	
<CAPACITOR>			
C3403	1-164-161-11	CERAMIC CHIP	0.0022MF 10% 50V
C3408	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C3409	1-124-477-11	ELECT	47MF 20% 16V
C3411	1-124-034-51	ELECT	33MF 20% 16V
<IC>			
IC3401	8-759-403-44	IC	MN1280-S
IC3402	8-759-070-42	IC	M37201M6-A18FP
<COIL>			
L3401	1-408-421-00	INDUCTOR	100UH

REF. NO.	PART NO.	DESCRIPTION	REMARK
<RESISTOR>			
R3401	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R3402	1-216-049-00	METAL GLAZE	1K 5% 1/10W
H3403	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	-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R3407	-216-033-00	METAL GLAZE	220 5% 1/10W
R3408	-216-033-00	METAL GLAZE	4.7K 5% 1/10W
R3409			220 5% 1/10W
R3476	-216-295-00	METAL GLAZE	0 5% 1/10W
<CONNECTOR>			
S45	*1-564-511-71	PLUG, CONNECTOR	8P
S46	*1-564-506-11	PLUG, CONNECTOR	3P
<CRYSTAL>			
X3401	1-577-082-11	VIBRATOR, CERAMIC	

*A-4542-096-A MAIN BOARD, COMPLETE *****			
<CAPACITOR>			
C1	1-126-205-11	ELECT CHIP	47MF 20% 6.3V
C2	1-163-031-11	CERAMIC CHIP	0.01MF 50V
C3	1-163-038-00	CERAMIC CHIP	0.1MF 25V
C4	1-126-204-11	ELECT CHIP	47MF 20% 16V
c5	1-126-204-11	ELECT CHIP	47MF 20% 16V
C6	1-126-204-11	ELECT CHIP	47MF 20% 16V
C7	1-126-204-11	ELECT CHIP	47MF 20% 16V
C8	1-163-038-00	CERAMIC CHIP	0.1MF 25V
c9	1-163-031-11	CERAMIC CHIP	0.01MF 50V
C11	1-163-001-11	CERAMIC CHIP	220PF 10% 50v
C12	1-163-809-11	CERAMIC CHIP	0.047MF 5% 25V
C13	1-163-001-11	CERAMIC CHIP	220PF 10% 50V
C14	1-126-603-11	ELECT CHIP	4.7MF 20% 35V
C15	1-126-601-11	ELECT CHIP	2.2MF 20% 50V
C16	1-126-205-11	ELECT CHIP	47MF 20% 6.3V
C17	1-164-161-11	CERAMIC CHIP	0.0022MF 10% 50v
C18	1-163-227-11	CERAMIC CHIP	10PF 5% 50v
C19	1-163-031-11	CERAMIC CHIP	0.01MF 50V
C20	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
C21	1-163-109-11	CERAMIC CHIP	47PF 5% 50V
C22	1-163-095-00	CERAMIC CHIP	12PF 5% 50V
C23	1-163-111-00	CERAMIC CHIP	56PF 5% 50V
C24	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
C25	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C30	1-126-607-11	ELECT CHIP	47MF 20% 4V
C31	1-163-031-11	CERAMIC CHIP	0.01MF 50V
C51	1-163-001-11	CERAMIC CHIP	220PF 10% 50V
C52	1-163-809-11	CERAMIC CHIP	0.047MF 5% 25v
c53	1-163-001-11	CERAMIC CHIP	220PF 10% 50v
c54	1-126-603-11	ELECT CHIP	4.7MF 20% 35v
c55	1-126-601-11	ELECT CHIP	2.2MF 20% 50v
C56	J-126-205-11	ELECT CHIP	47MF 20% 6.3V
C57	1-164-161-11	CERAMIC CHIP	0.0022MF 10% 50V
C58	1-163-227-11	CERAMIC CHIP	10PF 5% 50v
c59	1-163-031-11	CERAMIC CHIP	0.01MF 50v

MAIN LED

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C60	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	R21	1-216-025-00	METAL GLAZE 100 5%	1/10W
C61	1-163-107-00	CERAMIC CHIP 39PF	5% 50V	R22	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
C62	1-163-093-00	CERAMIC CHIP 10PF	5% 50V	R24	1-216-691-11	METAL CHIP 47K 0.50%	1/10W
C63	1-163-109-00	CERAMIC CHIP 47YF	5% 50V	R25	1-216-661-11	METAL CHIP 2.7K 0.50%	1/10W
C64	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	R26	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
C65	1-163-031-11	CERAMIC CHIP 0.01MF	50V	R27	1-216-022-00	METAL GLAZE 75 5%	1/10W
<CONNECTOR>				R29	1-216-017-00	METAL GLAZE 47 5%	1/10W
CNP1	*1-564-521-11	PLUG, CONNECTOR 6P		R51	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
CNP3	*1-564-517-11	PLUG, CONNECTOR 2P		R52	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
<DIODE>				R53	1-216-025-00	METAL GLAZE 100 5%	1/10W
D9	8-719-105-28	DIODE RD2.4M-B		R54	1-216-089-00	METAL GLAZE 47K 5%	1/10W
D10	8-719-106-08	DIODE RD6.2M-B2		R55	1-216-073-00	METAL GLAZE 10K 5%	1/10W
D11	8-719-939-02	DIODE SVC203CP		R56	1-216-073-00	METAL GLAZE 10K 5%	1/10W
D51	8-719-939-02	DIODE SVC203CP		R57	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
<IC>				R58	1-216-081-00	METAL GLAZE 22K 5%	1/10W
IC1	8-759-998-71	IC BA3308F		R59	1-216-025-00	METAL GLAZE 100 5%	1/10W
<COIL>				R60	1-216-111-00	METAL GLAZE 390K 5%	1/10W
L11	1-406-333-11	COIL (OSC)		R61	1-216-025-00	METAL GLAZE 100 5%	1/10W
L12	1-410-392-11	INDUCTOR CHIP 82UH		R62	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
L13	1-412-400-31	INDUCTOR 68UH		R64	1-216-691-11	METAL CHIP 47K 0.50%	1/10W
L51	1-406-334-11	COIL (OSC)		R65	1-216-661-11	METAL CHIP 2.7K 0.50%	1/10W
L52	1-410-391-11	INDUCTOR CHIP 68UH		R66	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
<TRANSISTOR>				R67	1-216-022-00	METAL GLAZE 75 5%	1/10W
Q12	8-729-200-87	TRANSISTOR 2SC2714-Y		R69	1-216-017-00	METAL GLAZE 47 5%	1/10W
Q13	8-729-216-22	TRANSISTOR 2SA1162-G		R71	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q14	8-729-230-49	TRANSISTOR 2SC2712-YG		R81	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q52	8-729-200-87	TRANSISTOR 2SC2714-Y		<VARIABLE RESISTOR>			
Q53	8-729-216-22	TRANSISTOR 2SA1162-G		RV11	1-238-989-11	RES, ADJ, METAL GLAZE 2.2K	
Q54	8-729-230-49	TRANSISTOR 2SC2712-YG		RV51	1-238-989-11	RES, ADJ, METAL GLAZE 2.2K	
<RESISTOR>				*****			
JW2	1-216-296-00	METAL GLAZE 0 5%	1/8W	*1-643-140-11	LED BOARD		
JW3	1-216-295-00	METAL GLAZE 0 5%	1/10W	*****			
JW4	1-216-295-00	METAL GLAZE 0 5%	1/10W	<CAPACITOR>			
JW5	1-216-296-00	METAL GLAZE 0 5%	1/8W	C101	1-163-031-11	CERAMIC CHIP 0.01MF	50V
JW6	1-216-296-00	METAL GLAZE 0 5%	1/8W	C103	1-163-031-11	CERAMIC CHIP 0.01MF	50V
JW8	1-216-296-00	METAL GLAZE 0 5%	1/8W	C104	1-126-395-11	ELECT CHIP 22MF	20% 16V
R1	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	C105	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R5	1-216-043-00	METAL GLAZE 560 5%	1/10W	C106	1-126-395-11	ELECT CHIP 22MF	20% 16V
R6	1-216-043-00	METAL GLAZE 560 5%	1/10W	C107	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R8	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W	<CONNECTOR>			
R9	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	CNP101	*1-564-517-11	PLUG, CONNECTOR 2P	
R11	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	<DIODE>			
R12	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W	D101	8-719-992-10	DIODE 1R5BF-A	
R13	1-216-025-00	METAL GLAZE 100 5%	1/10W	D102	8-719-992-10	DIODE 1R5BF-A	
R14	1-216-089-00	METAL GLAZE 47K 5%	1/10W	D103	8-719-992-10	DIODE 1R5BF-A	
R15	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W	D104	a-719-992-10	DIODE 1R5BF-A	
R16	1-216-073-00	METAL GLAZE 10K 5%	1/10W	D105	8-719-992-10	DIODE 1R5BF-A	
R17	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	D106	8-719-992-10	DIODE 1R5BF-A	
R18	1-216-081-00	METAL GLAZE 22K 5%	1/10W	D107	8-719-992-10	DIODE 1R5BF-A	
R19	1-216-025-00	METAL GLAZE 100 5%	1/10W	D108	8-719-992-10	DIODE 1R5BF-A	
R20	1-216-111-00	METAL GLAZE 390K 5%	1/10W	D109	8-719-992-10	DIODE 1R5BF-A	
				D110	8-719-992-10	DIODE 1R5BF-A	
				D111	B-719-992-10	DIODE 1R5BF-A	
				D112	8-719-992-10	DIODE 1R5BF-A	



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

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	FART NO.	DESCRIPTION	REMARK
		<COIL>				ACCESSORIES AND PACKING MATERIALS	

L101	1-412-400-31	INDUCTOR 68UH		1-559-913-11		CABLE, ANTENNA CONNECTION	
		<TRANSISTOR>		3-755-193-21		MANUAL, INSTRUCTION (ENGLISH)	
Q101	M-723-216-22	TRANSISTOR 2SA1162-G		3-755-193-31		MANUAL, INSTRUCTION (FRENCH)	(KV-27XBR35(C), 32XBR35(C))
Q102	8-729-106-68	TRANSISTOR 2SD1615A-GP		3-755-193-41		MANUAL, INSTRUCTION (SPANISH)	(KV-27XBR35(U), 32XBR35(U))
Q103	R-729-216-22	TRANSISTOR 2SA1162-G		*4-035-985-01		CUSHION (UPPER) (ASSY)	(KV-32XBR35(U/C))
Q104	8-729-106-68	TRANSISTOR 2SD1615A-GP		*4-035-986-01		CUSHION (LOWER) (ASSY)	(KV-32XBR35(U/C))
Q105	8-729-216-22	TRANSISTOR 2SA1162-G		*4-035-991-01		INDIVIDUAL CARTON	(KV-32XBR35(U/C))
Q106	8-729-106-68	TRANSISTOR 2SD1615A-GP		*4-036-851-01		INDIVIDUAL CARTON	(KV-27XBR35(U/C))
Q107	8-729-230-49	TRANSISTOR 2SC2712-YG		*4-036-852-01		CUSHION (UPPER) (ASSY)	(KV-27XBR35(U/C))
		<RESISTOR>		*4-036-853-01		CUSHION (LOWER) (ASSY)	(KV-27XBR35(U/C))
JW101	t-216-295-00	METAL GLAZE 0 5%	1/10W	*4-384-027-01		BAG, PROTECTION	
R101	1-216-022-00	METAL GLAZE 75 5%	1/10W	A-4503-953-A		HEADPHONE	TDR-IF310
R102	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W			REMOTE COMMANDER	
R104	1-216-025-00	METAL GLAZE 100 5%	1/10W	1-693-113-1		REMOTE COMMANDER (RM-Y113)	
R105	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	9-902-719-0		COVER (FOR RM-Y113)	
R106	1-216-003-11	METAL GLAZE 12 5%	1/10W	9-998-214-0		COVER, BATTERY (FOR RM-Y113)	
R107	1-216-025-00	METAL GLAZE 100 5%	1/10W				
R108	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W				
R109	1-216-003-11	METAL GLAZE 12 5%	1/10W				
R110	1-216-025-00	METAL GLAZE 100 5%	1/10W				
RI11	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W				
RI12	1-216-003-11	METAL GLAZE 12 5%	1/10W				
		<VARIABLE RESISTOR>					
RV101	1-238-989-11	RES, ADJ, METAL GLAZE 2.2K					
		MISCELLANEOUS					

		A-417-178-11	SELECTOR, ANTENNA (AS-2)				
		A-426-356-11	COIL, DEMAGNETIZATION (KV-32XBR35(U/C))				
		A-426-573-11	COIL, DEGAUSSING (KV-27XBR35(U/C))				
		A-426-574-11	COIL, DEGAUSSING (KV-27XBR35(U/C))				
		A-451-315-11	DEFLECTION YOKE (Y34FXA) (KV-32XBR35(U/C))				
		A-451-394-11	DEFLECTION YOKE (Y29GXA) (KV-27XBR35(U/C))				
		1-452-032-00	MAGNET, DISK; 10MM φ				
		1-452-094-00	MAGNET, ROTATABLE DISK; 15MM φ				
		A-452-579-11	NECK ASSY, PICTURE TUBE (NA322)				(KV-32XBR35(U/C))
		A-452-616-11	NECK ASSY, PICTURE TUBE (NA323)				(KV-27XBR35(U/C))
		1-544-544-11	SPEAKER (10CM)				
		1-544-580-11	SPEAKER (2.5CM)				
		*1-555-400-00	CABLE, PIN				
		*1-557-056-31	CABLE, P-P				
		A-606-002-11	CORD, POWER (WITH NOISE FILTER)				
		A-4546-027-A	TRANSMITTER FOR D1002				
		A-4546-028-A	LUMINOUS UNIT IFP-D1002				
V901	A-8-733-723-05	PICTURE TUBE (A80JYV50X)	(KV-32XBR35(U/C))				
	A-8-733-835-05	PICTURE TUBE (M66KUZ10X)	(KV-27XBR35(U/C))				

MEMO

ACCESSORY

TDR-IF310

SPECIFICATIONS

General	
Modulation system	Frequency modulation
Carrier frequency	Right 28 MHz Left 23 MHz
Effective range	Up to approx 7 m (23 ft)
Frequency response	18 - 22,000 Hz
Distortion	Less than 1% at 1 kHz
Headphones	MDR-IF310
Power source	DC 3 V, 2 x R6 (size AA) battery
Weight	Approx 170 g (60 oz) incl batteries

Design and specifications subject to change
without notice

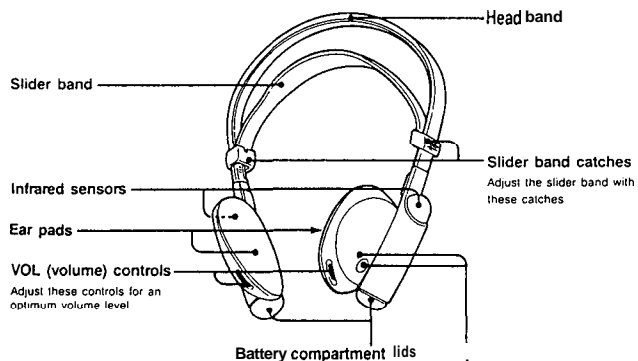
CORDLESS STEREO HEADPHONES

SECTION 1
GENERAL

This section is extracted from instruction manual.

Parts Identification

Headphones



POWER switch and indicator
Press the POWER switch. The indicator lights up. To turn off the power, press it again. When approximately 3 hours have elapsed without the unit being used, the POWER switch will be turned off automatically to avoid unnecessary battery wear.

Power Source of the Headphones

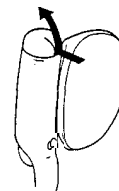
Use two R6 (size AA) batteries for the headphones. Be sure to use the same type of batteries for both right and left battery compartments.

When the batteries become weak
The POWER indicator dims and a hissing noise increases. In such a case, replace both batteries.
The approximate battery life for continuous operation is as follows:

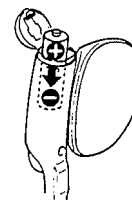
Sony alkaline battery AM3(N): 120 hours
Sony battery SUM 3(NS): 60 hours

Battery Installation

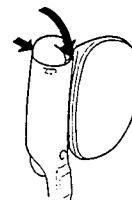
1 Open both battery compartments' lids



2 Insert the batteries with the correct polarity



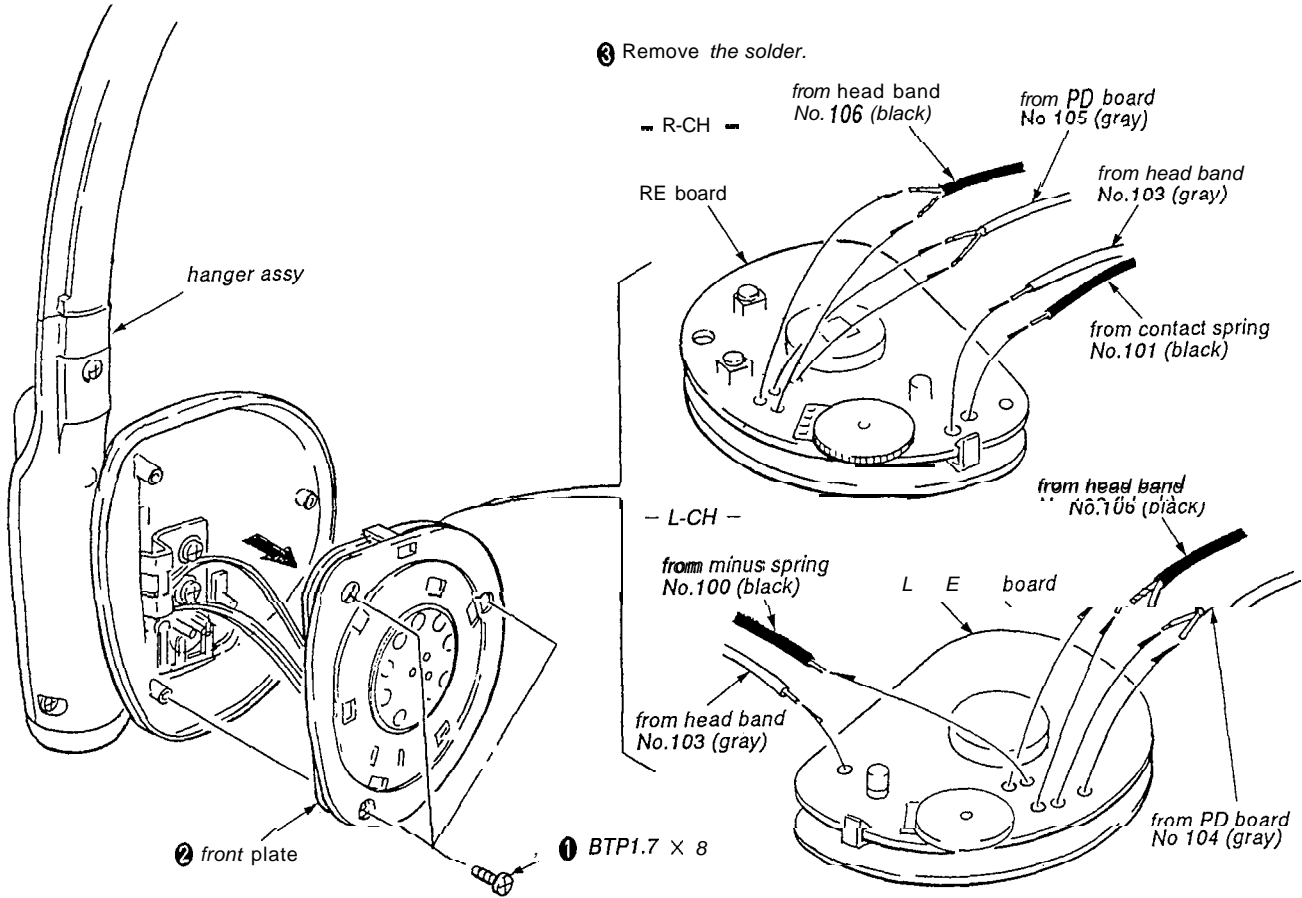
3 Close the battery compartments' lids



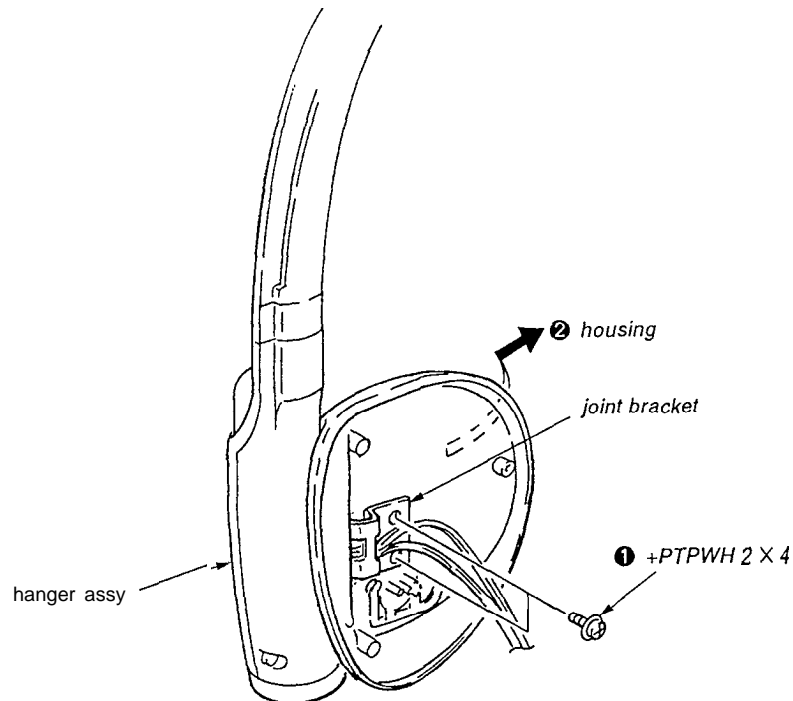
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given

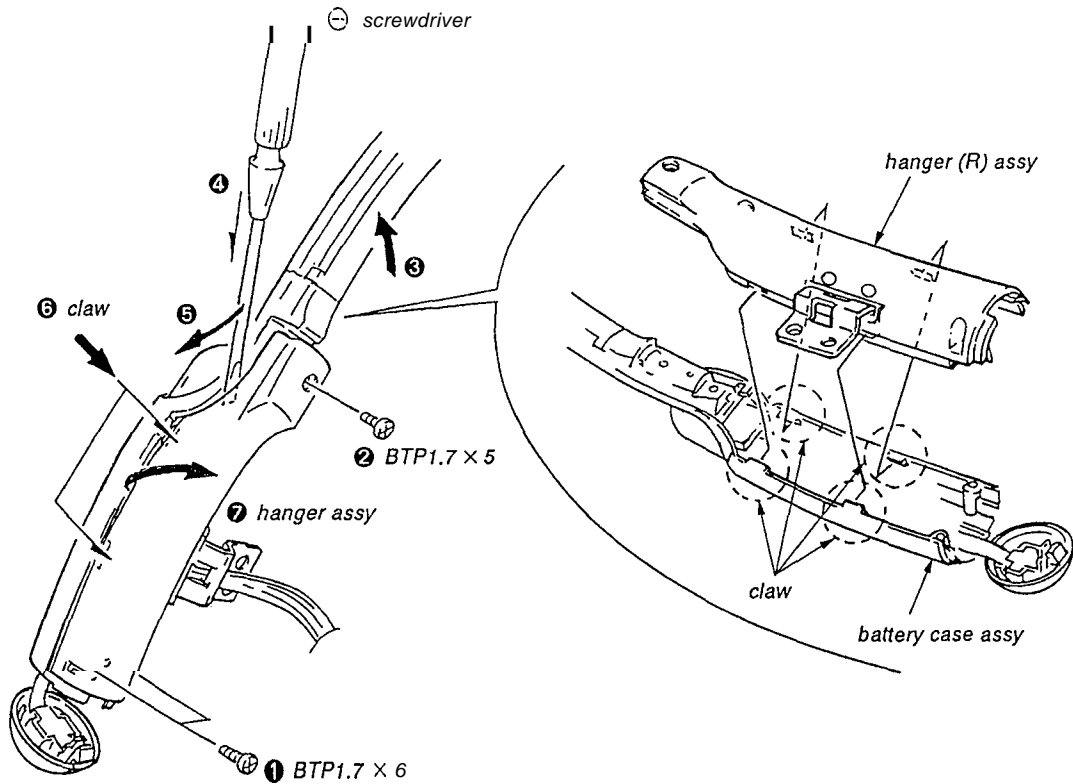
FRONT PLATE



HOUSING

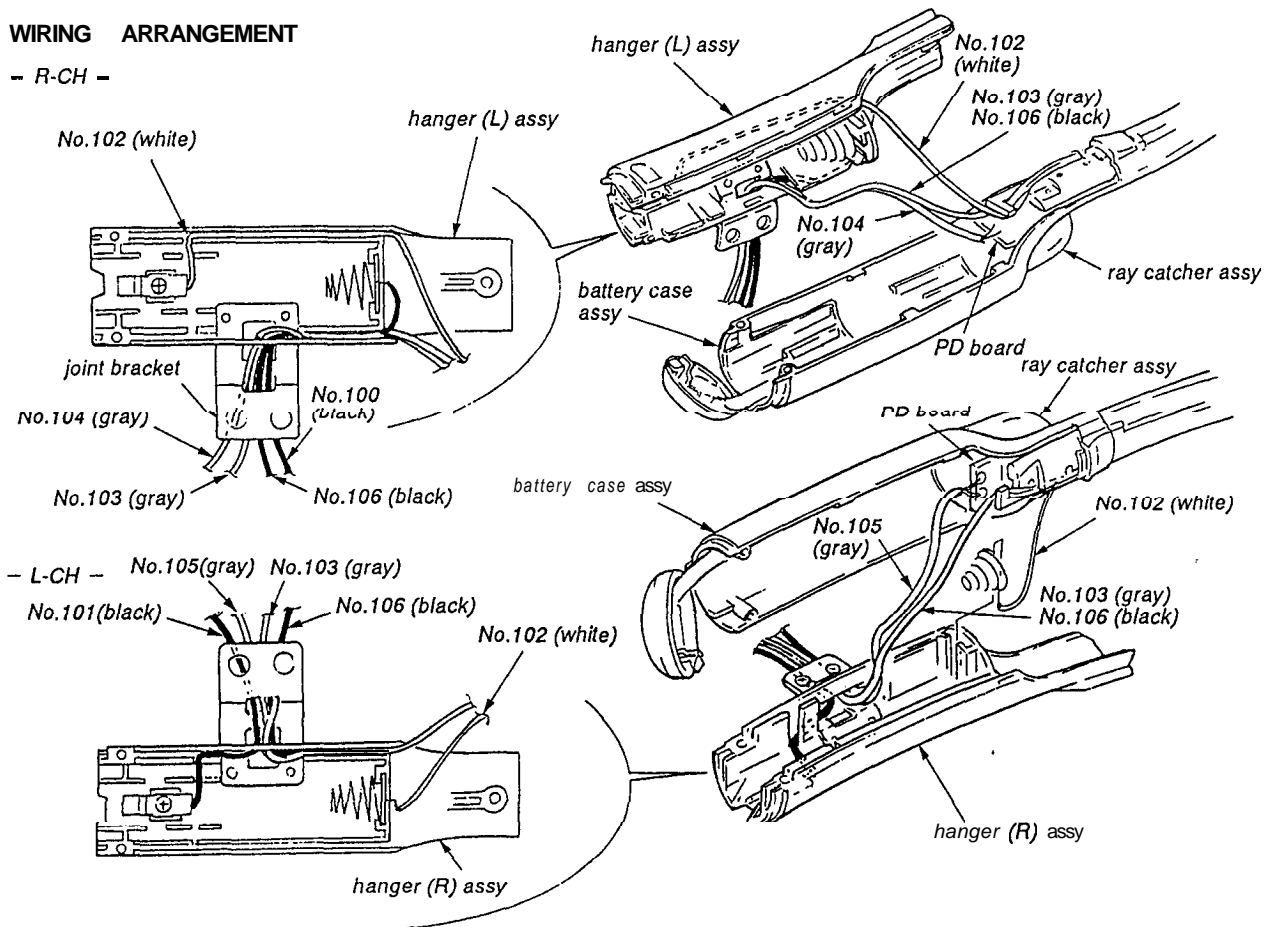


HANGER



WIRING ARRANGEMENT

- R-CH -



SECTION 3 ADJUSTMENTS

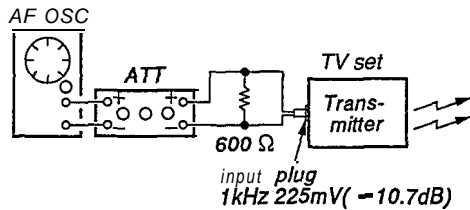
Note:

1. On adjusting, use the transmitter TV set.
2. L-ch adjustment should be completed before performing R-ch adjustment.

$0 \text{ dB} = 0.775 \text{ V}$

[Receiving Frequency Adjustment]

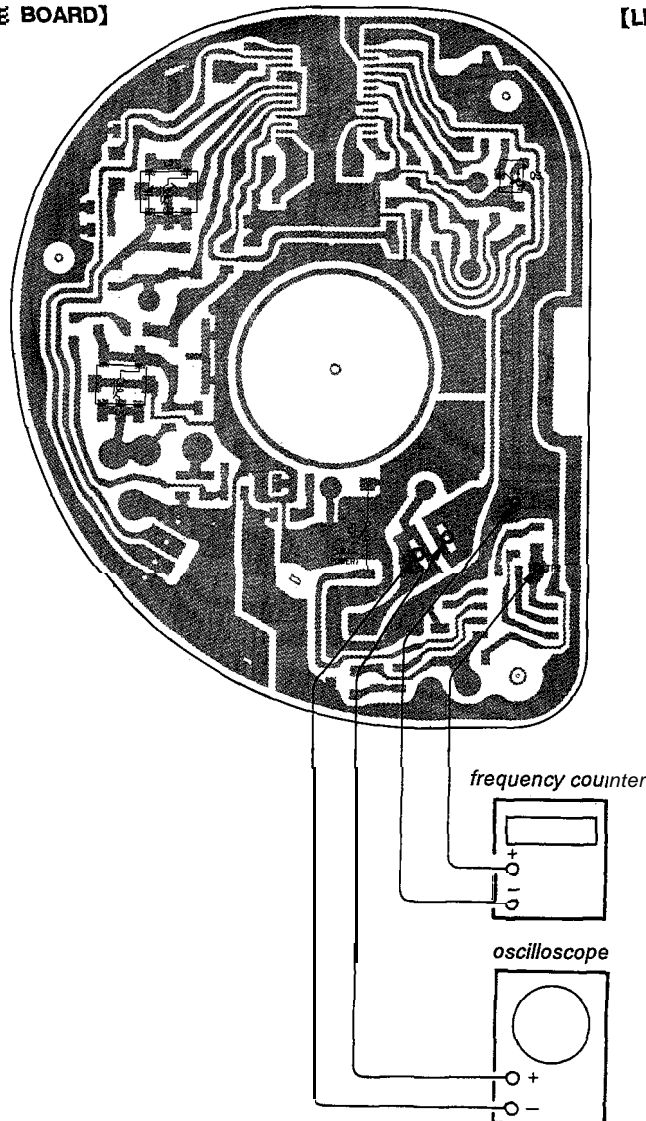
Preparation:



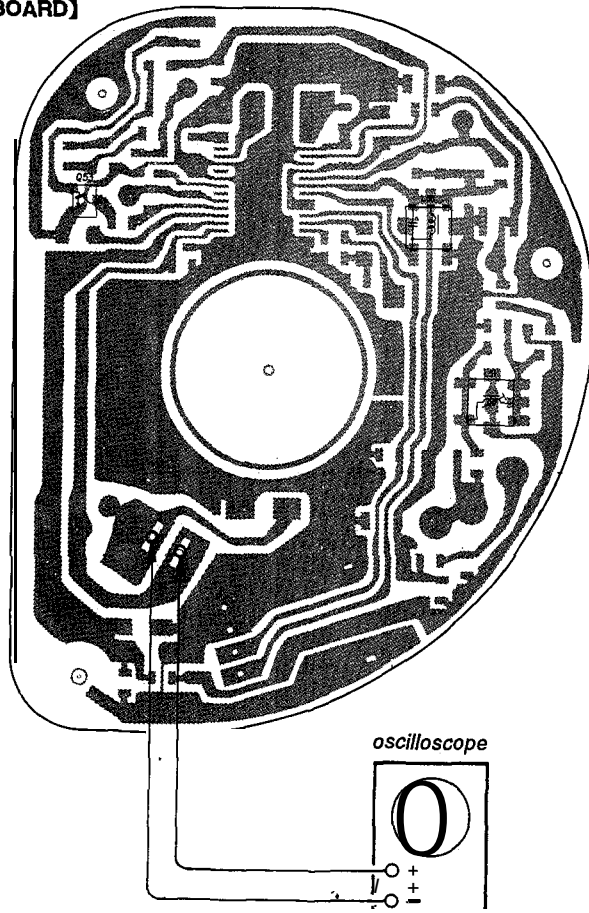
1. Feed a signal to TV set and connect a power supply.
2. Volume control: Optional position.
3. Short-circuit: Q3 (Q53) Base - Emitter (Ground)

[Connection and Adjustment Location]

[RE BOARD]



[LE BOARD]



Procedure:

1. Connect an oscilloscope to SPI or SP51.
2. Turn on the power switch on the headphones.
3. Adjust to make minute input level with changing the direction of the emitting position of jig so that the noise appears on the waveform.
4. Adjust with L5 (L-ch) or L55 (R-ch) to maximize the reading on the oscilloscope.
5. Adjust with L1 (L-ch) or L51 (R-ch) to maximize the reading on the oscilloscope.
6. Release the short-circuit position.
Q3 (Q53) Base - Emitter (Ground)

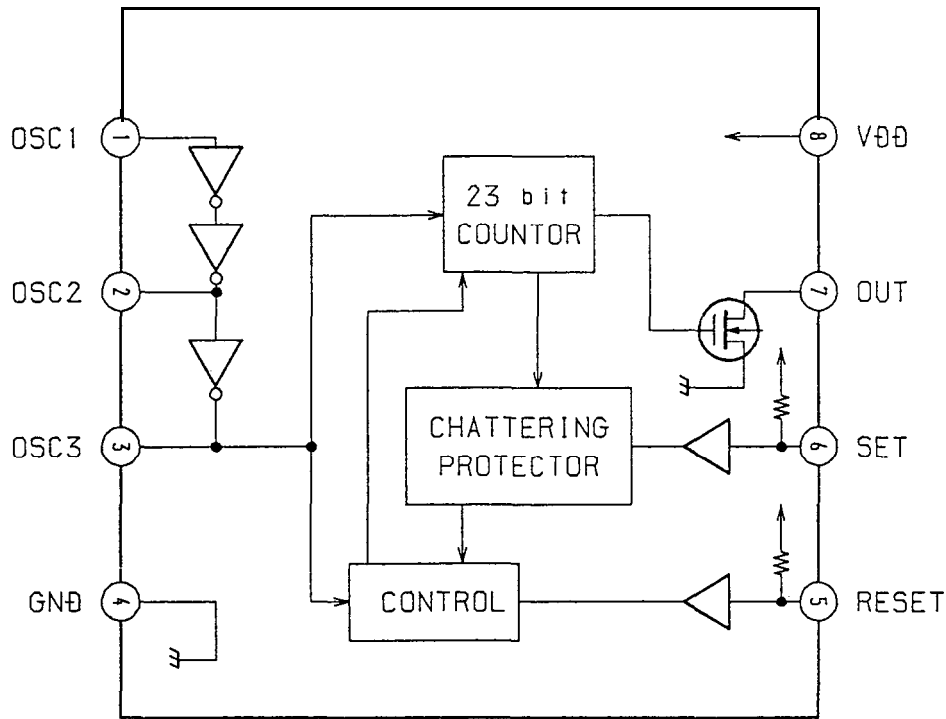
[Timer Clock Frequency Check]

1. Connect a frequency counter to TP2 and TP (GND).
2. Check the reading on the frequency counter becomes to the checking value.
Checking value: 300 Hz - 390 Hz.

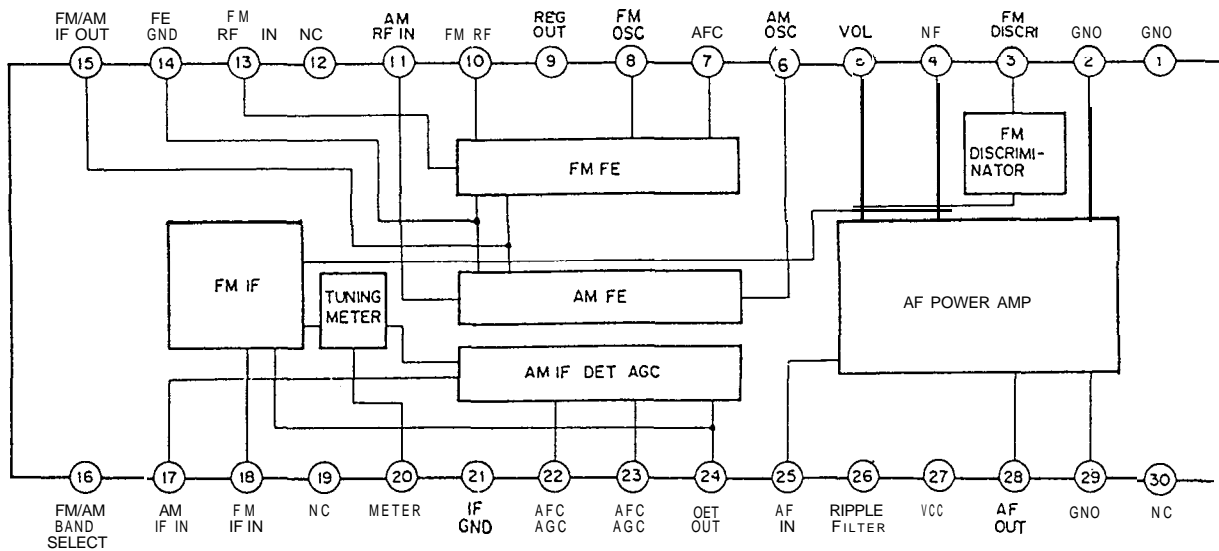
SECTION 4
DIAGRAMS

• IC Block Diagrams

IC2 BU2305F



IC21, 51 CXA1 280N



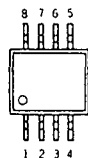
4-1. PRINTED WIRING BOARDS

● Semiconductor Location

Ref. No.	Location
D1	G-3
D2	E-2
D52	D-12
IC1	C-4
IC2	H-5
IC51	D-10
PH101	A-5, A-8
PH102	A-6, A-9
Q2	H-4
Q3	D-5
Q4	D-4
Q5	D-5
Q51	E-13
Q53	D-9
Q54	C-9
Q55	D-9

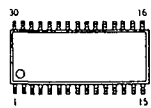
● Semiconductor Lead Layout

BU2305F



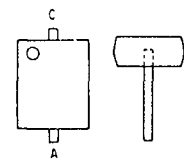
(TOP VIEW)

CXA1280N

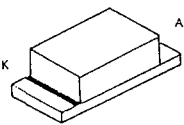


(TOP VIEW)

PP601-1

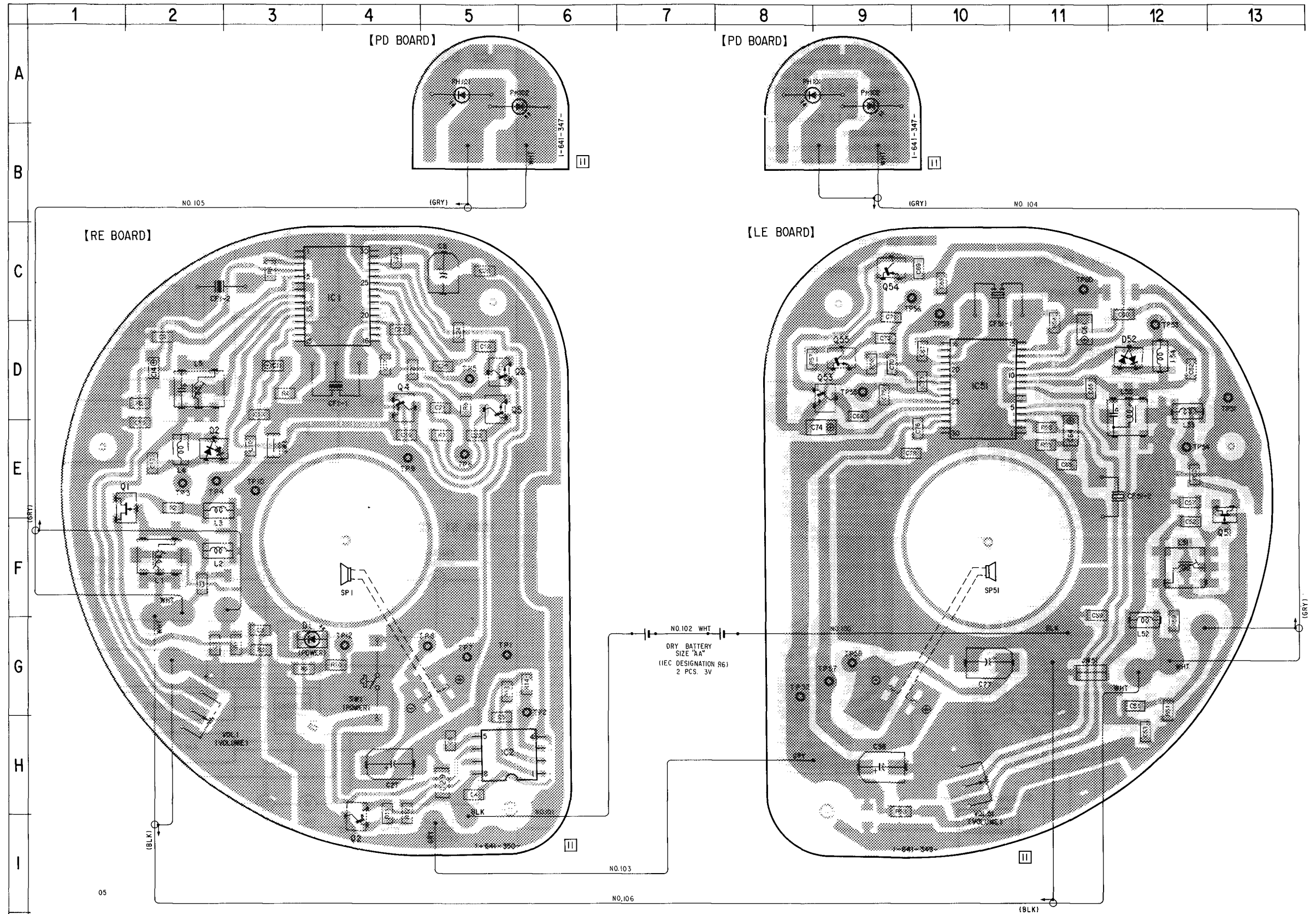


CL-150R-CD

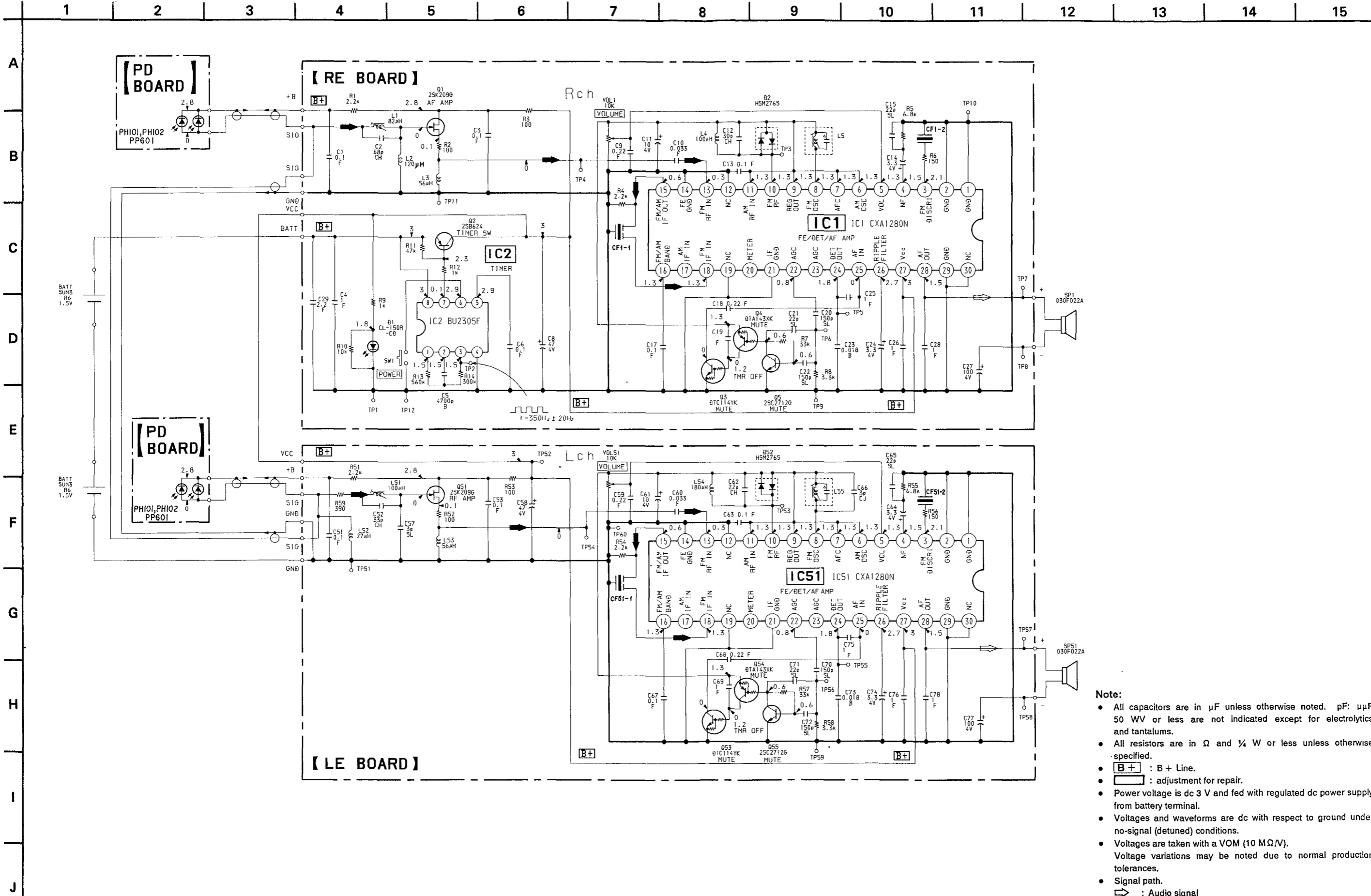


Note:

- : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern on the side which is seen.



4-2. SCHEMATIC DIAGRAM • See page 172 for IC Block Diagrams.



- Note:**
- All capacitors are in μF unless otherwise noted. pF : μpF . 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
 - **B+** : B + Line.
 - : adjustment for repair.
 - Power voltage is dc 3 V and fed with regulated dc power supply from battery terminal.
 - Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 - Voltages are taken with a VOM (10 M Ω/V). Voltage variations may be noted due to normal production tolerances.
 - Signal path.
 - ◁ : Audio signal
 - ▶ : RF signal

SECTION 6

ELECTRICAL PARTS LIST

PD LE RE

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on these sets
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- **RESISTORS**
All resistors are in ohms.
METAL: Metal-film resistor
METALOXIDE: Metal Oxide-film resistor
F: nonflammable

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

When including parts by reference number, please include the board name

SEMICONDUCTORS

In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD.

CAPACITORS

uF: μ F

COILS

uH: μ H

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	*1-641-347-11	PD BOARD					

		<DIODE>					
PH101	8-719-975-20	PHOTO DIODE	PP601-1				
PH102	8-719-975-20	PHOTO DIODE	PP601-1				

	*A-4542-061-A	LB BOARD, COMPLETE					

	1-578-717-71	FILTER, CRYSTAL					
		<CAPACITOR>					
C51	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C52	1-163-239-11	CERAMIC CHIP	33PF 5%				
C53	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C57	1-163-086-00	CERAMIC CHIP	3PF 0.25PF 50V				
C58	1-126-607-11	ELECT CHIP	47MF 20% 4V				
c59	1-164-222-11	CERAMIC CHIP	0.22MF 25V				
C60	1-163-034-00	CERAMIC CHIP	0.033MF 50V				
C61	1-135-201-11	TANTAL. CHIP	10MF 20% 4V				
C62	1-163-235-11	CERAMIC CHIP	22PF 5% 50V				
C63	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C64	1-135-180-21	TANTAL. CHIP	3.3MF 20% 4V				
C65	1-163-101-00	CERAMIC CHIP	22PF 5% 50V				
C66	1-163-220-11	CERAMIC CHIP	3PF 0.25PF 50V				
C67	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C68	1-164-222-11	CERAMIC CHIP	0.22MF 25V				
C69	1-164-346-11	CERAMIC CHIP	1MF 16V				
C70	1-163-121-00	CERAMIC CHIP	150PF 5% 50V				
C71	1-163-101-00	CERAMIC CHIP	22PF 5% 50V				
C72	1-163-121-00	CERAMIC CHIP	150PF 5% 50V				
C73	1-163-024-00	CERAMIC CHIP	0.018MF 10% 50V				
C74	1-135-180-21	TANTAL. CHIP	3.3MF 20% 4V				
C75	1-164-346-11	CERAMIC CHIP	1MF 16V				
C76	1-164-346-11	CERAMIC CHIP	1MF 16V				
C77	1-126-209-11	ELECT CHIP	100MF 20% 4V				
C78	1-164-346-11	CERAMIC CHIP	1MF 16V				
		<DIODE>					
D52	g-719-946-33	DIODE	HSM276S				
		<IC>					
IC51	8-759-605-59	IC	CXA1280N				
		<COIL>					
L51	1-424-333-11	COIL					
L52	1-410-386-11	INDUCTOR CHIP	27UH				
L53	1-410-390-11	INDUCTOR CHIP	56UH				
L54	1-410-657-21	INDUCTOR CHIP	180UH				
L55	1-406-436-11	COIL (OSC)					
		<TRANSISTOR>					
Q51	g-729-220-93	TRANSISTOR	2SK209-G				
Q53	8-729-900-52	TRANSISTOR	DTC114YK				
Q54	8-729-906-45	TRANSISTOR	DTA143XK				
Q55	g-729-230-49	TRANSISTOR	2SC2712-YG				
		<RESISTOR>					
JW51	1-216-296-00	METAL GLAZE	0 5% /8W				
R51	1-216-057-00	METAL GLAZE	2.2K 5% /10W				
R52	1-216-025-00	METAL GLAZE	100 5% /10W				
R53	1-216-025-00	METAL GLAZE	100 5% /10W				
R54	1-216-057-00	METAL GLAZE	2.2K 5% /10W				
R55	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W				
R56	1-216-029-00	METAL GLAZE	150 5% 1/10W				
R57	1-216-085-00	METAL GLAZE	33K 5% 1/10W				
R58	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
R59	1-216-039-00	METAL GLAZE	390 5% 1/10W				
		<VARIABLE RESISTOR>					
VOL51	1-238-906-11	RES, VAR, CARBON	10K				

	*A-4542-062-A	RE BOARD, COMPLETE					

	1-578-717-71	FILTER, CRYSTAL					
		<CAPACITOR>					
C1	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C2	1-163-113-00	CERAMIC CHIP	68PF 5% 50V				
C3	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C4	1-164-346-11	CERAMIC CHIP	1MF 16V				
C5	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V				
C6	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C8	1-126-607-11	ELECT CHIP	47MF 20% 4V				
C9	1-164-222-11	CERAMIC CHIP	0.22MF 25V				
C10	1-163-989-11	CERAMIC CHIP	0.033MF 10% 25V				
C11	1-135-201-11	TANTAL. CHIP	10MF 20% 4V				
C12	1-163-104-00	CERAMIC CHIP	30PF 5% 50V				
C13	1-163-038-00	CERAMIC CHIP	0.1MF 25V				
C14	1-135-180-21	TANTAL. CHIP	3.3MF 20% 4V				
C15	1-163-101-00	CERAMIC CHIP	22PF 5% 50V				

RE

REF NO.	PART NO	DESCRIPTION	REMARK
C17	I-163-038-00	CERAMIC CHIP 0.1MF	25V
C18	I-164-222-11	CERAMIC CHIP 0.22MF	25V
C19	I-164-346-11	CERAMIC CHIP 1MF	16V
C20	I-163-121-00	CERAMIC CHIP 150PF	5% 50V
C21	I-163-101-00	CERAMIC CHIP 22PF	5% 50V
C22	I-163-121-00	CERAMIC CHIP 150PF	5% 50V
C23	I-163-024-00	CERAMIC CHIP 0.018MF	10% 50V
C24	I-135-180-21	TANTAL. CHIP 3.3MF	20% 4V
C25	I-164-346-11	CERAMIC CHIP 1MF	16V
C26	I-164-346-11	CERAMIC CHIP 1MF	16V
C27	I-126-209-11	ELECT CHIP 100MF	20% 4V
C28	I-164-346-11	CERAMIC CHIP 1MF	16V
C29	I-164-337-11	CERAMIC CHIP 2.2MF	16V
<DIODE>			
D1	B-719-989-22	DIODE CL-150R-CD	
D2	B-711-946-33	DIODE HSM276S	
<IC>			
IC1	B-7511-605-59	IC CXA1280N	
IC2	B-759-044-56	IC BU2305F	
<COIL>			
L1	I--424-334-11	COIL	
L2	I-410-655-31	INDUCTOR CHIP 120UH	
L3	I-410-390-11	INDUCTOR CHIP 5GUH	
L4	I-410-393-11	INDUCTOR CHIP 100UH	
L5	I-406-436-11	COIL (OSC)	
<TRANSISTOR>			
Q1	H-729-220-93	TRANSISTOR 2SK209-G	
Q2	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q3	8-729-900-52	TRANSISTOR DTC114YK	
Q4	8-729-906-45	TRANSISTOR DTA143XK	
Q5	8-729-230-49	TRANSISTOR 2SC2712-YG	
<RESISTOR>			
JW1	I-216-296-00	METAL GLAZE 0 5%	1/8W
R1	I-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2	I-216-025-00	METAL GLAZE 100 5%	1/10W
R3	I-216-025-00	METAL GLAZE 100 5%	1/10W
R4	I-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R5	I-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R6	I-216-029-00	METAL GLAZE 150 5%	1/10W
R7	I-216-085-00	METAL GLAZE 33K 5%	1/10W
R8	I-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R9	I-216-049-00	METAL GLAZE 1K 5%	1/10W
R10	I-216-073-00	METAL GLAZE 10K 5%	1/10W
R11	I-216-089-00	METAL GLAZE 47K 5%	1/10W
R12	I-216-049-00	METAL GLAZE 1K 5%	1/10W
R13	I-216-115-00	METAL GLAZE 560K 5%	1/10W
R14	I-216-108-00	METAL GLAZE 300K 5%	1/10W
<SWITCH>			
SW1	I-572-473-11	SWITCH, TACTIL	
<VARIABLE RESISTOR>			
VOL1	I-238-906-11	RES, VAR, CARBON 10K	

