

KV-M1921U

RM-694

SERVICE MANUAL

UK Model
Chassis No. SCC-D86G-A



BE-2A CHASSIS

MODELS OF THE SAME SERIES	
KV-M1921U	KV-M1420U/M1421U
KV-M2140U/M2141U	
KV-M1620U/M1621U	

SPECIFICATIONS

【KV-M1921U】

Television system I
Color system PAL
Channel coverage UHF : 21-69
Picture tube Black Trinitron tube
90° degree deflection
Approx. 49.0 cm (19 inches)
(Approx. 46.0cm picture measured diagonally)
Inputs Ⓜ 21-pin connector : CENELEC standard
Including RGB input
VGA Audio/Video input jacks
S-Video input
phono jacks
Outputs 21-pin connector : CENELEC standard
Headphones jack : minijack
Sound output 5W (Music power) 4 W (RMS)
Power consumption 85W
Dimensions Approx. 462x437x462 mm (w/h/d)
Weight Approx. 19 kg

【RM-694】

Remote control system infrared control
Power requirements 3V dc
2 batteries IEC designation
R6 (size AA)
Dimensions Approx. 55×18×185mm (w/h/d)
Weight Approx. 100g including batteries
Supplied accessories RM-694 Remote Commander (1)
IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.

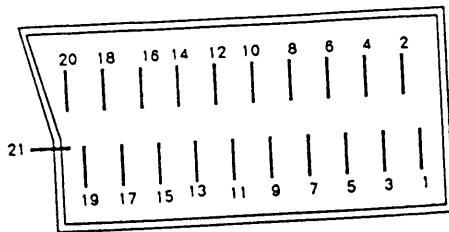


For Service Manuals
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TRINITRON® COLOUR TV

SONY®

21-pin Euro Connector Configuration



PIN	SIGNAL	SPECIFICATION
1	Audio output	0.5Vrms/1kilohm or less
2	Audio input	0.5Vrms/10kilohms or more
3	Audio output	0.5Vrms/1kilohm or less
4	Earth (audio)	
5	Earth (B-input)	
6	Audio input	0.5Vrms/10kilohms or more
7	B-input	0.7Vp-p/75ohms
8	Function switching	9.5V to 12V
9	Earth (G-input)	
10		
11	G-input	0.7Vp-p/75ohms
12		
13	Earth (R-input)	
14	Earth (blanking)	
15	R-input	0.7Vp-p/75ohms
16	Fast blanking	1V to 3V/75ohms
17	Earth (video)	
18	Earth (fast blanking)	
19	Video output	1Vp-p/75ohms
20	Video input	1Vp-p/75ohms
21	Screening plug	

4 pin connector (S)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75ohm, positive Sync 0.3V: 1/2 dB
4	C (S signal) input	0.3V ± 3dB 75ohm positive

SAFETY-RELATED COMPONENT WARNING !!


COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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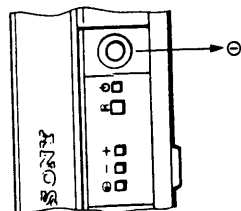
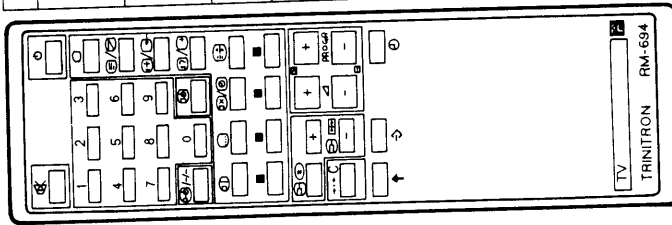
SECTION 1 GENERAL

1-1. PRESETTING OF CHANNELS

After having installed the TV, you now need to preset TV channels. Up to 60 programme positions are at your disposal. For channel presetting use the buttons with the red symbols on the Remote Commander.

Important: In order to ensure presetting, you have to keep the **SHIFT** button pressed, while pressing the other buttons (that is **SHIFT**, **+**, **-**, **C**) during presetting.

Automatic Presetting of Channels	
Action	Result
1 Turn on the TV using the power switch (I) on the set.	You are now in the preset mode. The programme number flashes.
2 Press both the SHIFT button and the PRESET button simultaneously.	The selected programme number will be indicated.
3 Press either the number buttons or PROGR +/- to select the programme number on which you want to preset the channel. Note: In case of two digit numbers, first press -/- , then the two number.	The scale with the frequency band changes.
4 Press both the SHIFT button and the + or - button repeatedly, until the desired channel is tuned in.	Repeat steps 3 and 4 for all other channels.
5 Repeat steps 3 and 4 for all other channels.	All channels are now stored. The programme number stops flashing.
6 Press both the SHIFT and the PRESET button simultaneously to store the channels.	



How to skip programme positions

Since you have 60 programme positions at your disposal, you may want to skip vacant programme positions, that is that they are skipped when you press the **PROGR +/-** buttons.

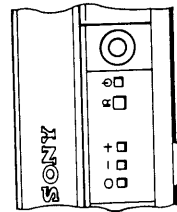
Action	Result
1 Press both the SHIFT button and the PRESET button simultaneously.	You are now in the preset mode. The programme position flashes.
2 Use either PROGR + or - to select the programme position you want to skip.	The selected programme position appears.
3 Press both the SHIFT button and the button C simultaneously.	
4 Press both the SHIFT button and the PRESET button simultaneously.	The programme position is now skipped. You are back in TV mode.

How to fine tune a channel manually

If the reception of a stored channel is not satisfactory, you can fine tune the channel manually.

Action	Result
Press both the SHIFT button and the + or - button simultaneously until the reception is good.	The channel is fine tuned.





Note: By pressing the respective programme number the automatic fine tuning will be restored.




1-2. TV OPERATION

Your TV set is supposed to be operated with the Remote Commander.

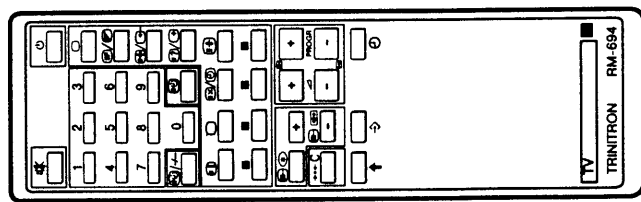
For the basic functions, however, it is also possible to use the buttons on the set.

How to switch the TV on and off	
Action	Result
1 Press the power switch  on the set.	The TV will turn on. Note: If the red indicator is on, the set is in standby mode.
2 Press a number button on the Remote Commander, to select a programme.	The selected programme appears.
In order to switch the set off temporarily: Press button  or any number button to switch it on again.	The set is in standby mode. Press button  or any number button to switch it on again.
In order to switch the set off temporarily: Press the power switch  on the set.	The set is switched off.

Sleep Timer

Press the  button repeatedly until the required time period is displayed on the screen (30, 60, 90 minutes or 0 for cancelling the request).

In this way you can select the time period after which the set switches itself automatically into standby-mode.



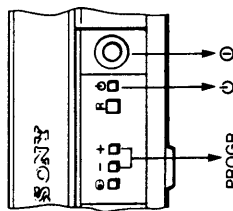
How to select programmes



Before selecting programmes make sure that you have preset channels.

Action	Result
1 Switch the TV on.	
2 Press PROGR +/– or the respective number button on the Remote Commander. In case of two digit numbers first press the button –/– and then the two respective number buttons.	The selected programme is displayed.



On the set:

Press the – button for lower programme positions and the + button for higher ones.




How to adjust the volume	
Action	Result
Press  or  .	The symbol and the bar for the volume are displayed on the screen. The volume is adjusted.





On the set

Press , until the symbol  is displayed on the screen, then adjust the volume by pressing the + or – buttons.


Muting of the sound:

Action	Result
Press button  .	The sound is switched off. Press the button again to restore the sound.

How to adjust the picture

Action	Result
1 Press button  repeatedly, until the desired item is displayed ( contrast,  colour intensity,  brightness).	The symbol and the respective bar display are displayed.
2 Press button + or –.	The selected picture item is adjusted.

On the set:


Press button  repeatedly in order to select the desired item, then adjust with the + or – button.

To return to factory-set levels



Press the button .

Other functions






On-screen display

Press the button  to display the programme number on the screen and press the button a second time to make it disappear.


Selecting the signal of a connected device.

Press the button to receive the signal of the device (e.g. a VTR) connected at the V  A connectors (front of the set), the S-Video input or the 21-pin connector (rear of the set). Press the button  to return to the TV mode.

On the set:

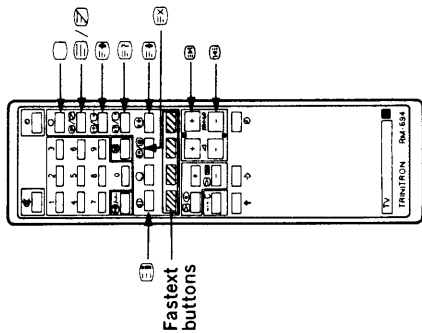
Press button  so that the symbols , , and  will be displayed. Press the + button to select the video input mode. Press  and + buttons a second time to return to the TV mode.

Time function

Press  to display the time. Press button again to cancel the request (only if teletext is broadcast).

1-3. HOW TO VIEW TELETEXT

Viewing Teletext



To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green. Select the TV channel for the desired teletext service. If the signal is weak, teletext errors can occur.

To receive the teletext service of a different TV channel

1. Press **TV** to return to the TV mode.
2. Select the desired TV channel.
3. Press **TEXT/MIX** (TEXT/MIX).

Press **TEXT/MIX** (TEXT/MIX) to display the teletext service.

Key in three digits of the desired page using the number buttons. If an error is made, complete the three-digit sequence by keying in any digit. Then, re-enter the correct page number.

The requested teletext page is displayed.

To return to TV mode press **TV** on the Remote Commander.

Teletext Functions

To request Index Page

Press **INDEX** (INDEX). If the necessary signal is not being broadcast, page 100 is displayed.

To access the next or preceding page

Press **PAGE+** or **PAGE-**

To superimpose the teletext display on the picture (MIX)

Press **MIX** twice from the TV mode. Press again to return to the TEXT display.

To prevent the Teletext page from being updated/changed

Press **HOLD**. The HOLD symbol appears on the screen. To resume normal teletext reception (press **TEXT/MIX**).

Fastext Operation

FASTEXT teletext enables you to access pages quickly and conveniently with one key operation. When a FASTEXT page is broadcast a colour coded menu will appear at the bottom of the screen. Each coloured prompt relates to the coloured keys on the Remote Commander. Pressing one of these will select the page described by the prompt. Selection may also be made by entering the three digit page number in the normal way.

To enlarge the Teletext display

Press **ENLARGE** once to enlarge the upper half of the display; (press **ENLARGE** again to enlarge the lower half of the display. And press again to return to the normal display).

To reveal concealed information such as answers to a quiz

Press **REVEAL**.

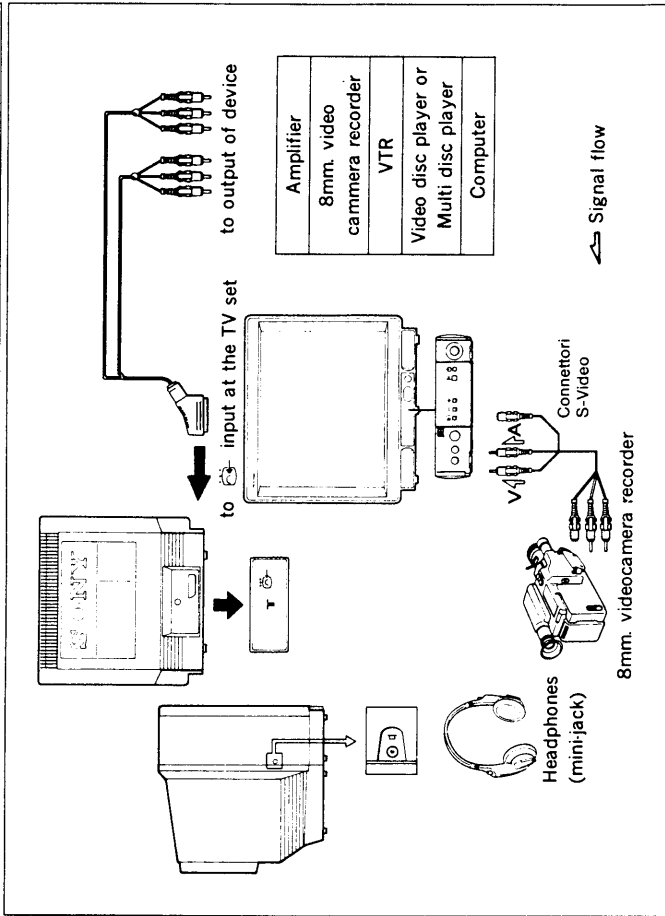
Press again to conceal the answers. To watch the TV programme while waiting for a requested page to be displayed

1. Request the new page.
2. Press **TEXT/MIX** to watch the TV programme. The requested page number and other data appear at the top of the screen. When the requested page has been captured, the page number is displayed in the top left hand corner of the screen. To view this page, press **TEXT/MIX**.

Correct FASTEXT operation relies on the necessary signals being transmitted by the Broadcasting Authorities. It is possible that some Broadcasters will not support this transmission. If FASTEXT is not transmitted, the decoder will operate as outlined above.

1-4. OPTIONAL CONNECTIONS/OPERATION

How to connect additional Audio/Video equipment



How to view the Video input signal

Press button **VIDEO** repeatedly in order to select the desired input mode (A for Audio/video signals from 21-pin EURO connector; V for video/audio connectors V on the front; S for S-video signals from the S-video (4-pin DIN) connectors on the front). Press button **TV** to return to TV mode.

On the set:

Press button **VIDEO** until the symbols **VIDEO**, **A**, **V**, or **S** appear on the screen, then press the **+** or **-** buttons to select the desired video input mode. Press **TV** again to return to TV-mode.

S-video input (Y/C input)

Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals. Separating the Y and C signals prevents them from interfering with one another, and therefore improves picture quality (especially luminance). This TV is equipped with one S-video input jack through which these separated signals can be input directly.

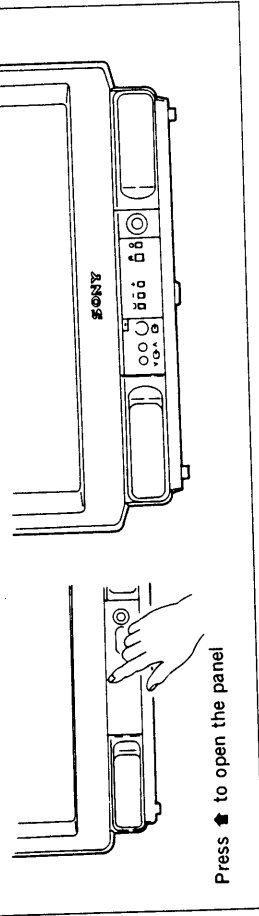
Notes

- When you have Audio/video equipment connected to both the A/V connectors and the 21-pin terminal, make sure that not both are switched on at the same time, otherwise the picture could be incomplete.
- In case of sound or picture distortions move the VTR away from the TV set.

1-5. PARTS IDENTIFICATION

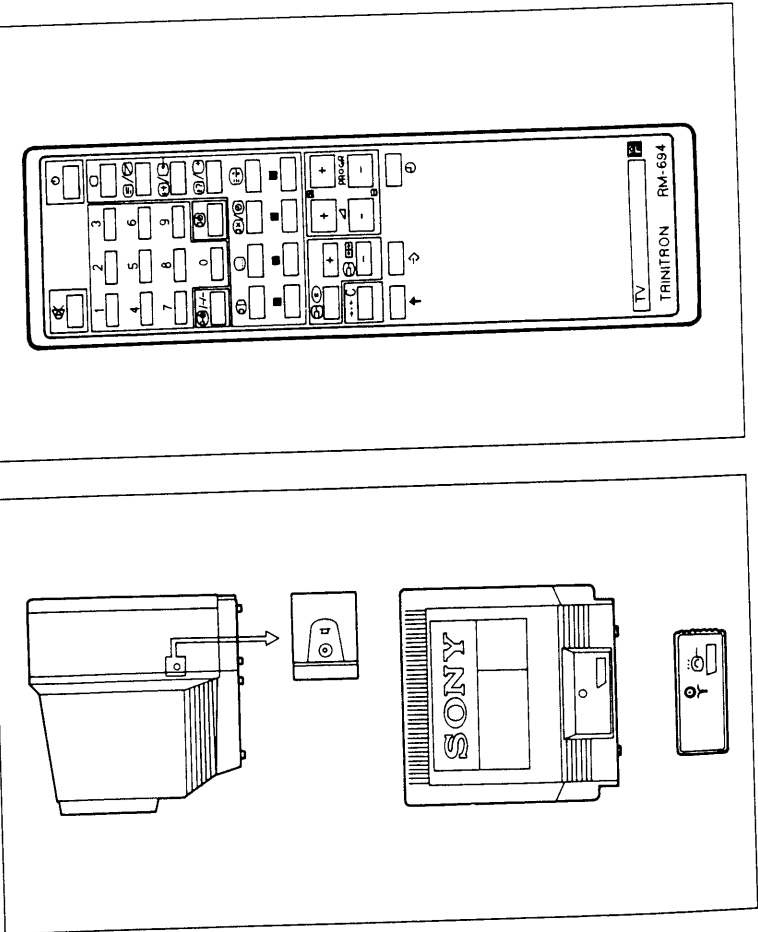
In the following you will find a short description of the parts and their function on the set or on the remote commander using the respective symbols. For more details refer to the page number given in the index.

TV-Set Front

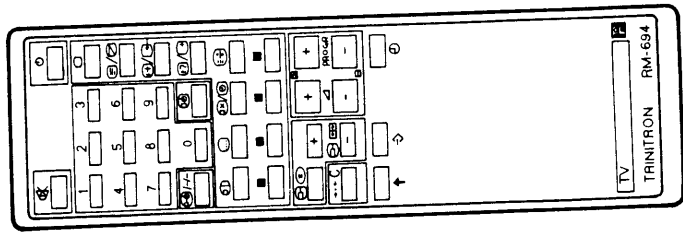


Press to open the panel

TV-Set Rear



Remote Commander



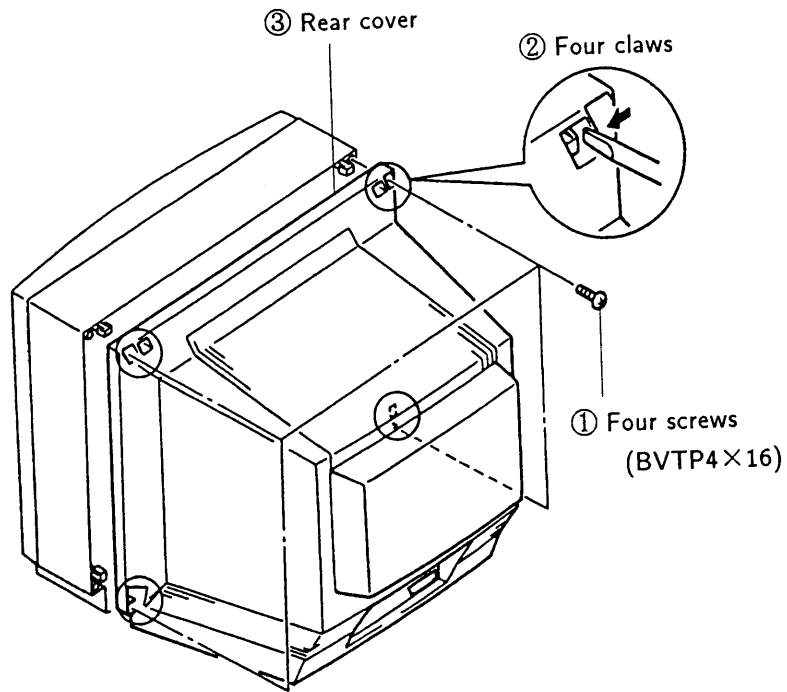
TV set	
Symbol	Function
	Headphones jack (mini-jack)
	Video input jack
	Audio input jack
	S-Video input
	Buttons for sound and picture adjustment
	Programme scanning buttons
	Remote control detector
	Standby indicator
	Power switch
	Aerial socket (rear of the set)
	21-pin connector (rear of the set)

Remote Commander	
Symbol	Function
	Mute button
1-9, 0, - / - -	Number buttons — in case of two digit numbers first press button - / - - and then two number buttons
	These Button has no function
	Select button for picture adjustment item
	Buttons for adjusting picture items
	Buttons for manual fine tuning of a channel / channel search
	Button for resetting the picture adjustment items to standard
	Buttons for clearing a programme position (in preset mode)
	Functions only in combination with other buttons
	Preset mode on / off buttons
	Button for switching the TV set into standby mode
	Used to return to TV-mode from standby and video input modes
	Button for selecting the video input modes
	On/off button for on screen display
	Time feature
	Programme scanning buttons
	Buttons for adjusting the volume
	Button for activating the sleep timer
	Teletext buttons
	FASTEXT buttons

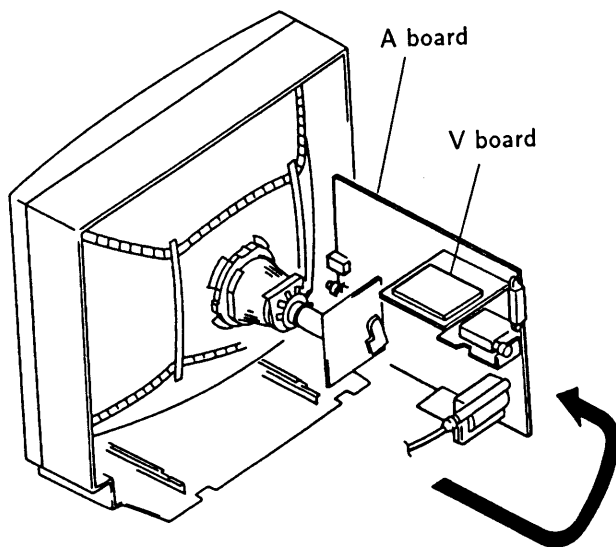
Note Buttons not referred to in this index have no function.
The green buttons are for Teletext.

SECTION 2 DISASSEMBLY

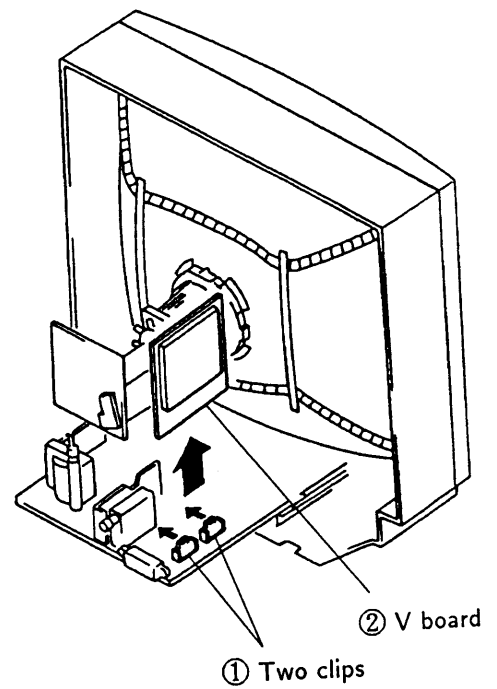
2-1. REAR COVER REMOVAL



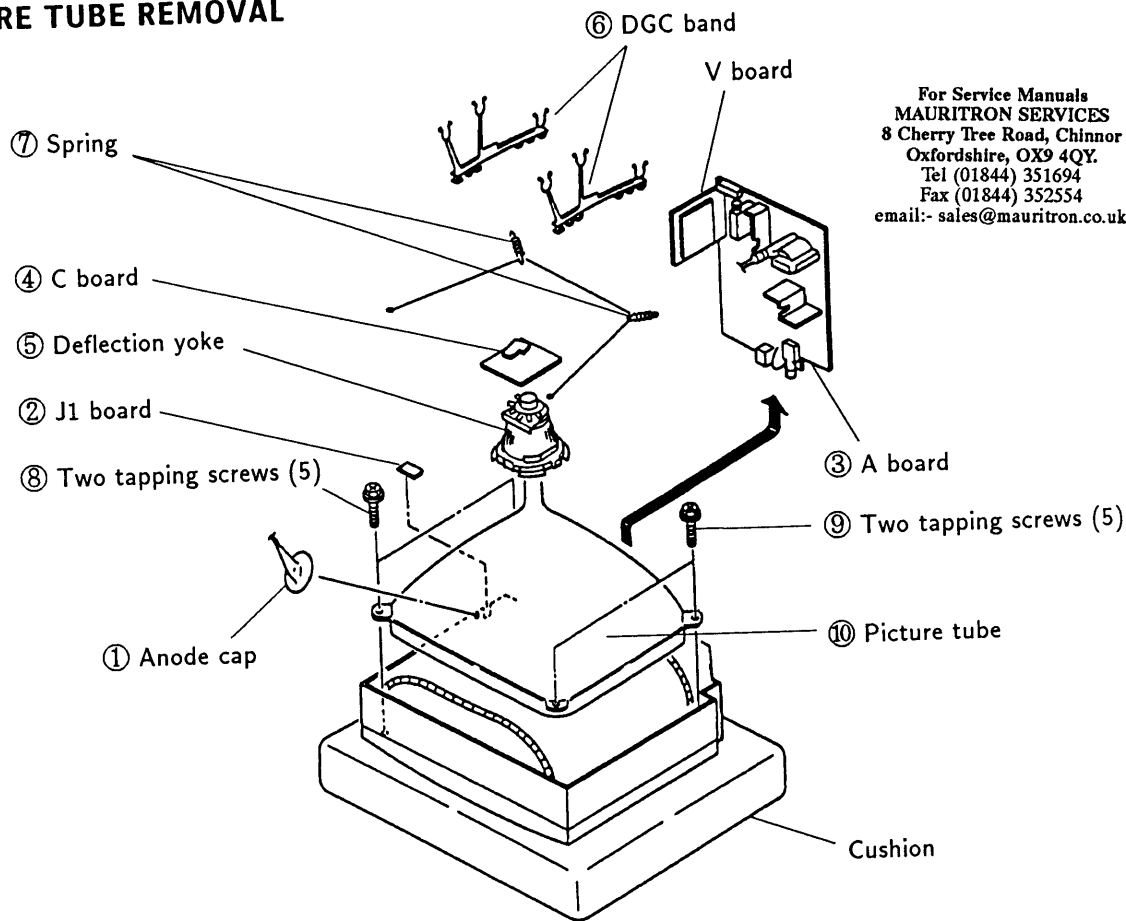
2-2. SERVICE POSITION



2-3. V BOARD REMOVAL



2-4. PICTURE TUBE REMOVAL

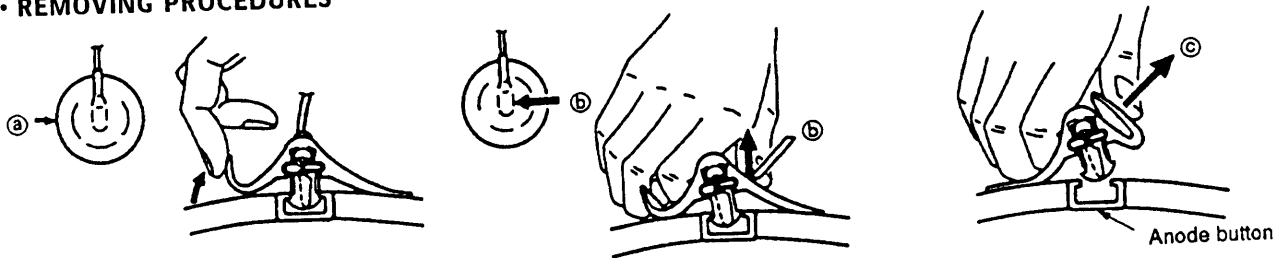


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• REMOVAL OF ANODE-CAP

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.

• REMOVING PROCEDURES

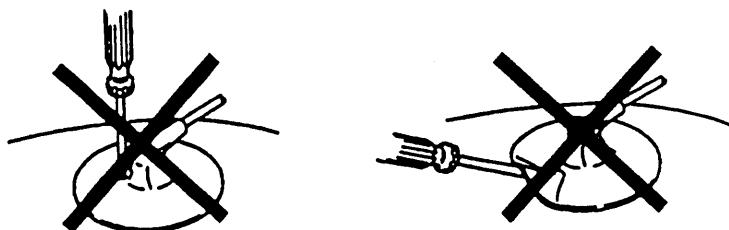


- ① Turn up one side of the rubber cap in the direction indicated by the arrow ②.
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ③.

- 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 ④.

• 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 hardy not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.



SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted. The controls and switch below should be set as follows unless otherwise noted :

- Ⓢ CONTRAST control 80% (or Normal by commander)
- ⚙ BRIGHTNESS control 50%

Perform the adjustments in order as follows:

Preparation:

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser..

3-1. BEAM LANDING

Demagnetize with a degausser

1. Input a raster signal with the pattern generator.

CONTRAST	}	normal
BRIGHTNESS		
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides evenly. (Fig.3-1 - 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig.3-1)
5. Switch over the raster signal to blue and green confirm the condition.
6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
7. When landing at the corner is not right, adjust by using the disk magnets. (Fig.3-4)

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G 2) and White Balance

Note: Test Equipment Required.

1. Color bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

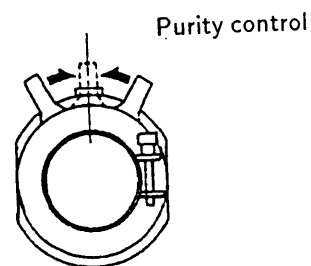


Fig.3-2

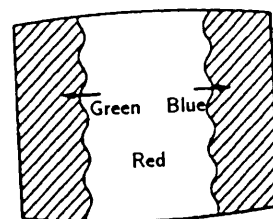


Fig.3-3

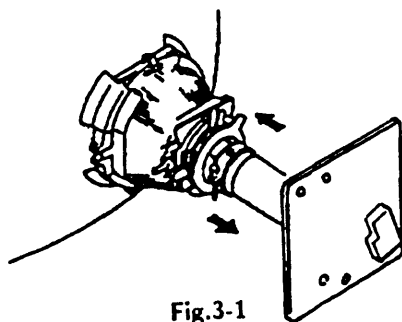


Fig.3-1

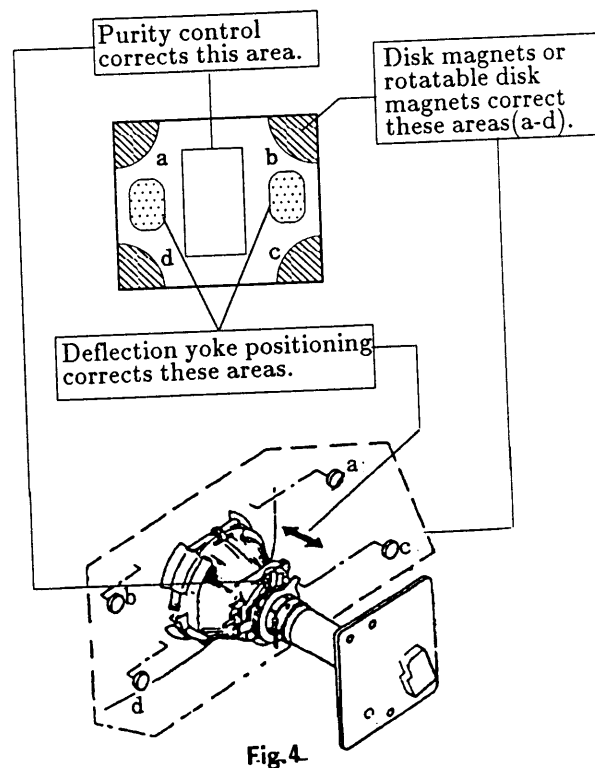


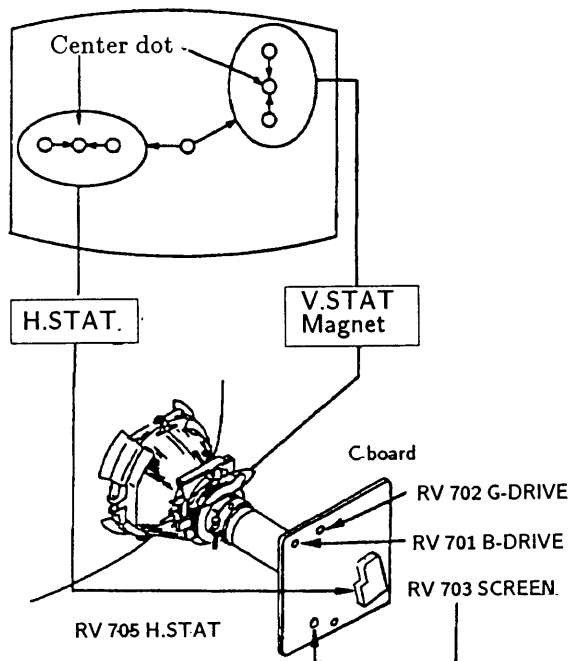
Fig.4

3-2. CONVERGENCE

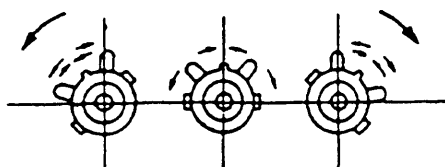
Preparation:

- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

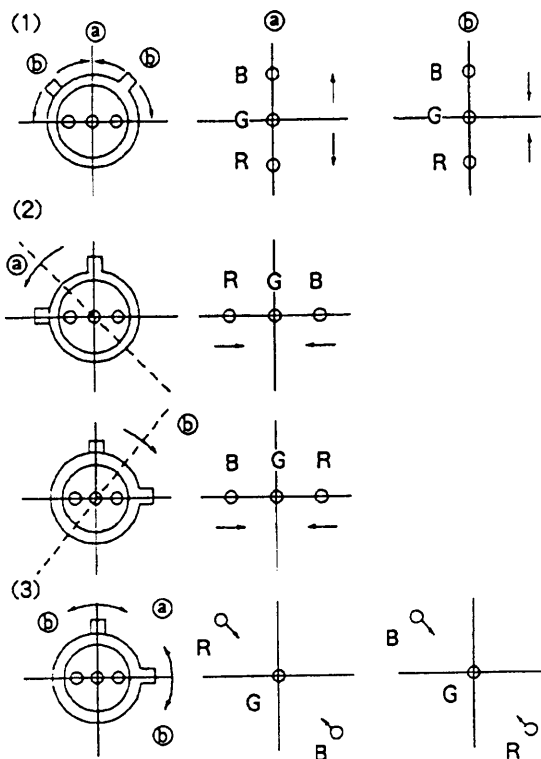
(1) Horizontal and Vertical Static Convergence



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



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

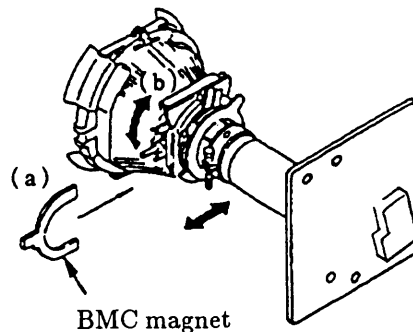


If the red and blue dot do not converge with green dots, perform following steps.

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

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

In either case, repeat Beam Landing Adjustment.



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email: mauritron@ dial.pipex.com

(2) Dynamic Convergence Adjustment

Preparation:

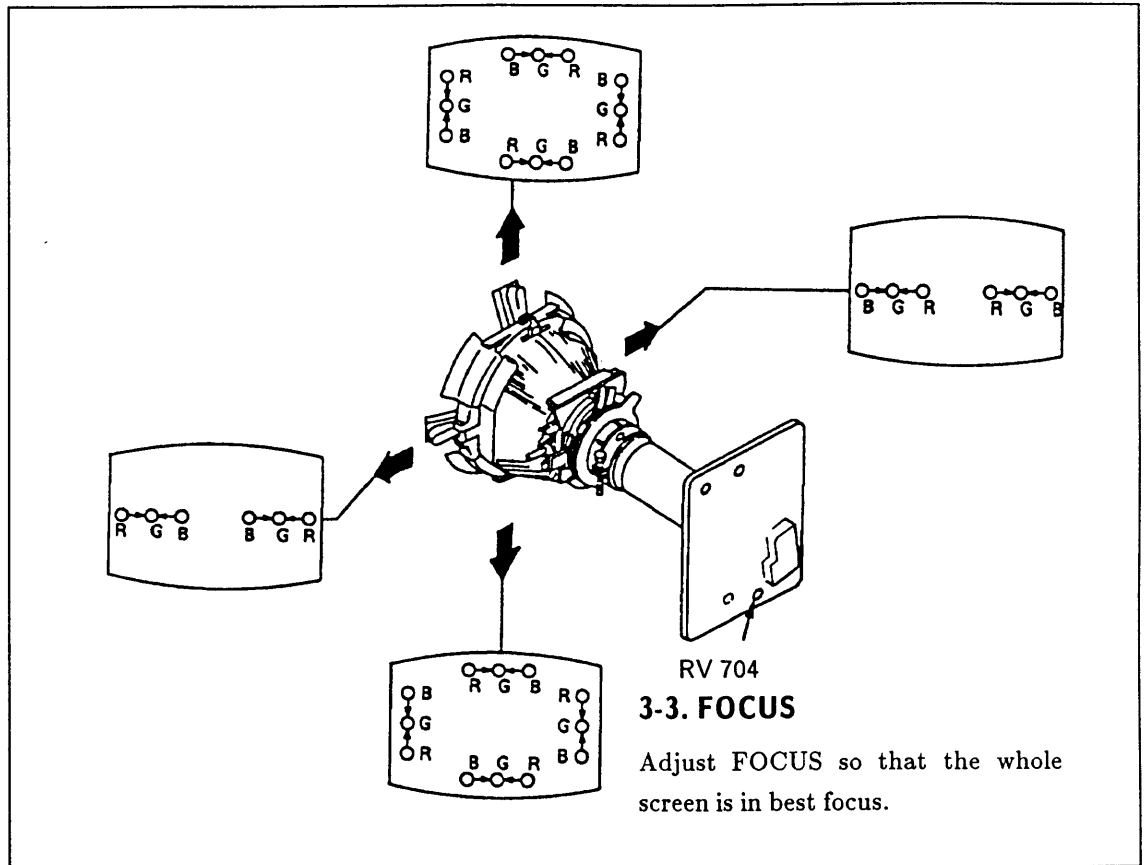
● Before starting perform Horizontal and Vertical static convergence Adjustment.

1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.

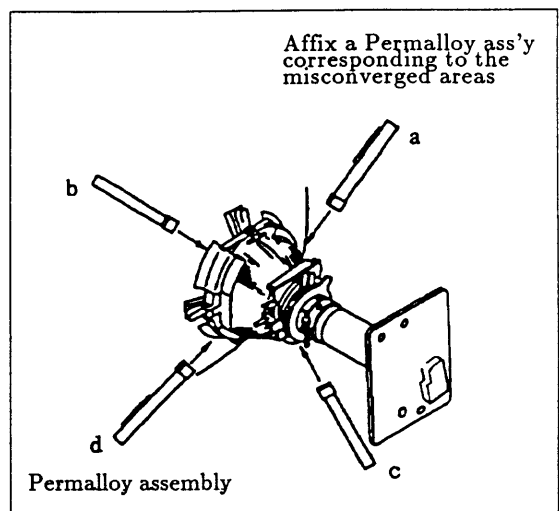
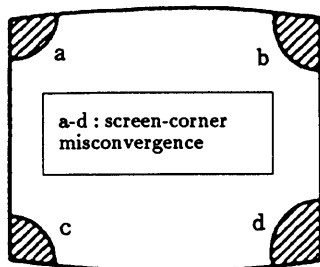
3. Move the deflection yoke for best convergence as shown below.

4. Tighten the deflection yoke screw.

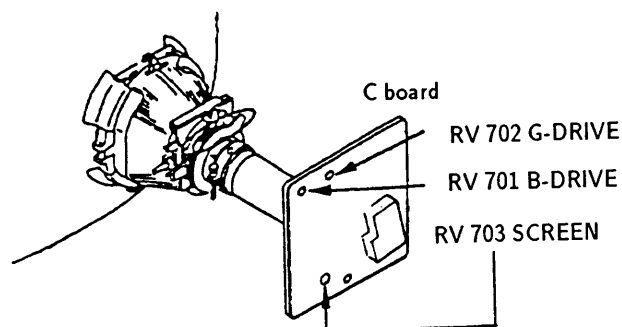
5. Install the deflection yoke spacers.



(3) Screen-corner Convergence



3-4. SCREEN (G 2) and WHITE BALANCE



Screen (G 2) Setting

1. Input dot signal from the pattern generator.
2. Set the picture BRIGHTNESS control to minimum level.
3. Apply 140 V DC to the cathodes of R,G and B from an external power source.
4. While watching the picture, adjust the G 2 volume RV703 (SCREEN) immediately before fly-back line disappears.

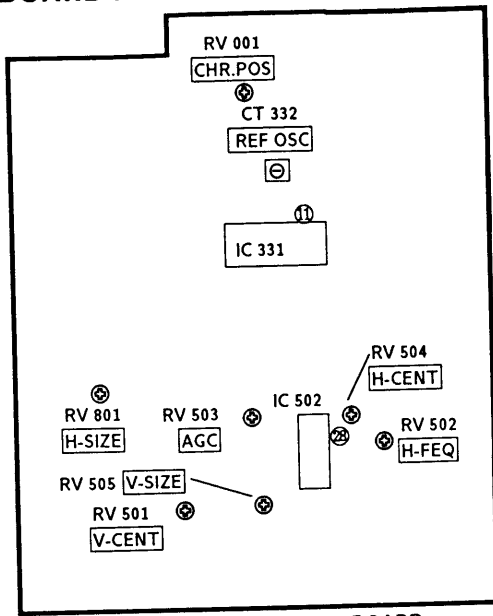
White Balance Adjustment

1. Input all-white signal from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the following using RV 701 (B DRIVE) and RV 702 (G DRIVE)

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4 CIRCUIT ADJUSTMENTS

4-1. A BOARD ADJUSTMENTS

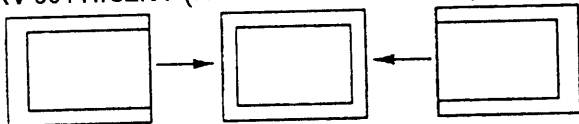


A BOARD
-Component side-

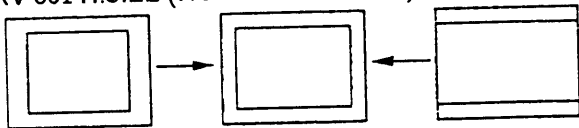
TU AGC Adjustment (RV 503)

1. Tune in air signal.
2. Adjust AGC VR (RV 503) so that snow-noise and cross-modulation just disappear from the picture.

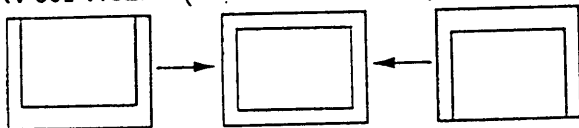
RV 504 H.CENT (HORIZONTAL CENTER)



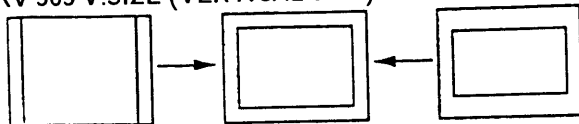
RV 801 H.SIZE (HORIZONTAL SIZE)



RV 501 V.CENT (VERTICAL CENTER)

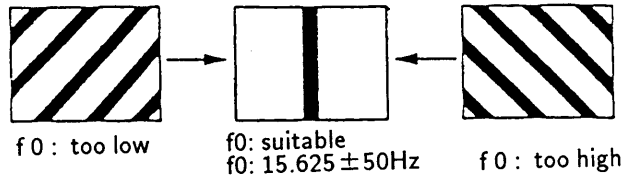


RV 505 V.SIZE (VERTICAL SIZE)



H.FREQ Adjustment (RV 502)

1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor (100 μ /16 V) between pin ② and GND of IC 502.
2. Adjust RV 502 (H.FREQ) to stop scrolling of the picture in the horizontal direction.
3. After adjustment, remove the electrolytic capacitor.

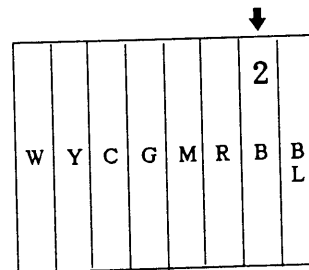


REF OSC 8.8 MHz Adjustment (CT 332)

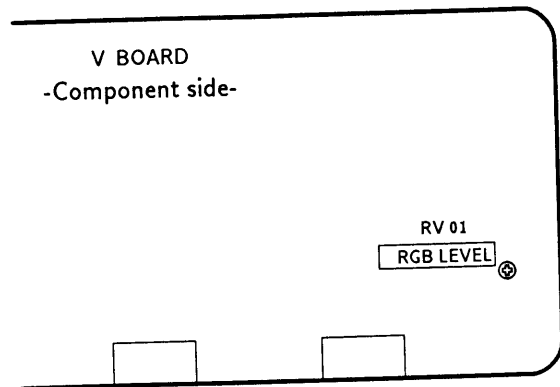
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ① of IC 331 and ground.
3. Adjust CT 332 to obtain color synchronization.
4. Remove the jumper wire from IC 331.

CHARACTER POSITION Adjustment (RV 001)

1. Input PAL COLOR BAR pattern.
2. Adjust RV 001 to position the character display at the point indicated by the arrow below.



V BOARD ADJUSTMENT



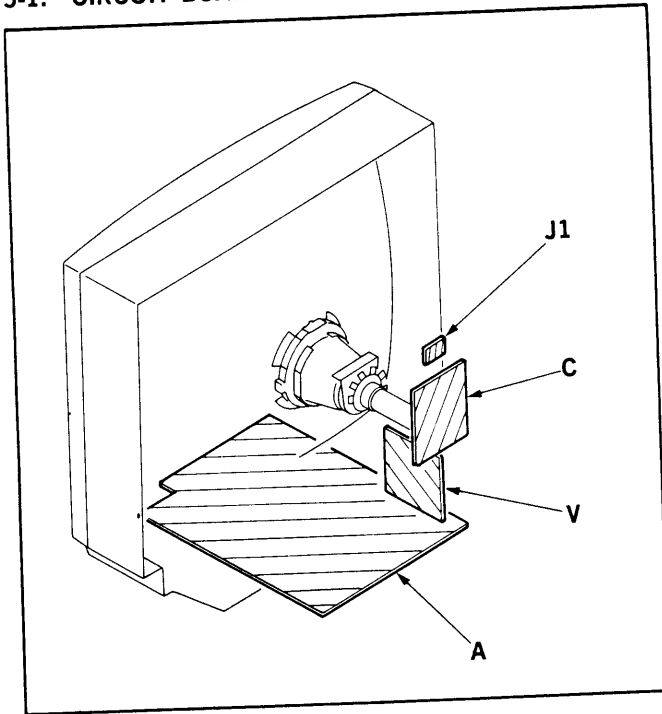
LEVEL Adjustment (RV 01)

PICTURE to maximum.

Adjust RV01 till the RGB output becomes maximum.


SECTION 5 DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



Reference information






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

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

Note:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$
50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power is as follows.

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

- Chip resistor is in 1/10W.
- All resistors are in ohms. k Ω : 1000 Ω , M Ω : 1000k Ω .
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltage are in V.
- Readings are taken with a 10M Ω digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
-  : B+ bus.
-  : Signal path. (RF)

SYSTEM CONTROL, A/V OUT,
H/V OUT, MEMORY, CHROMA

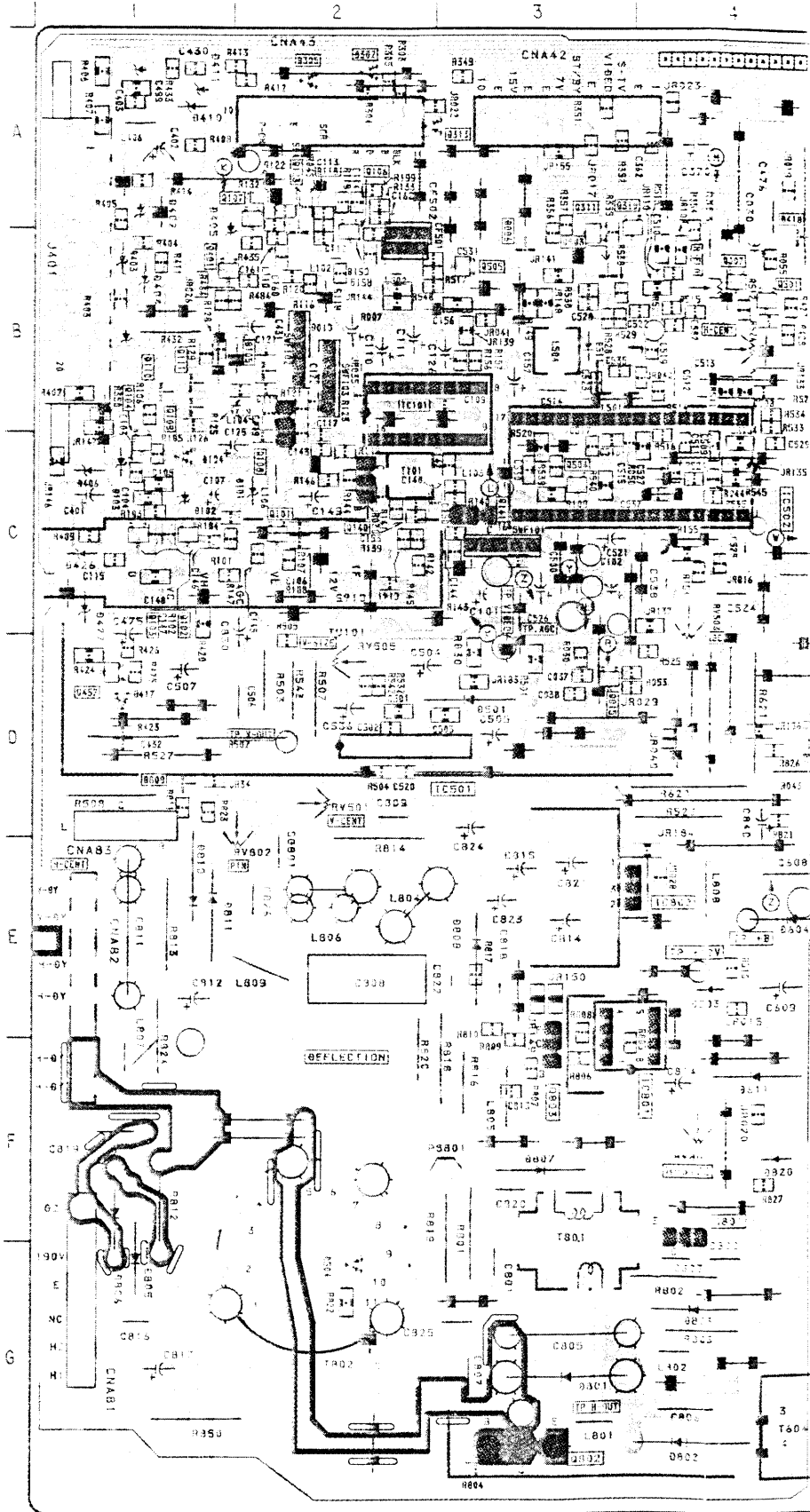
A

5-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

—A Board—

IC		D110	C-5
IC001	C-9	D301	C-6
IC002	D-8	D302	A-2
IC003	D-10	D303	B-6
IC004	D-9	D305	A-2
IC005	B-8	D306	B-6
IC102	B-5	D313	A-2
IC201	F-8	D321	C-5
IC301	D-5	D324	A-7
IC302	B-7	D334	B-6
IC331	C-6	D402	A-1
IC501	D-2	D403	B-1
IC502	C-4	D404	B-1
IC601	F-5	D405	A-1
IC801	E-3	D406	C-1
IC802	E-3	D411	A-1
		D412	C-8
		D417	D-1
		D418	A-4
		D426	C-1
		D427	C-1
TRANSISTOR		D450	B-5
Q001	D-8	D501	D-3
Q003	C-9	D503	E-4
Q004	D-10	D504	G-2
Q005	B-7	D519	C-8
Q006	C-8	D601	F-7
Q007	B-4	D602	F-5
Q015	D-3	D603	F-5
Q016	D-10	D604	E-4
Q017	E-9	D605	E-6
Q019	D-9	D606	D-5
Q020	D-8	D607	G-5
Q104	B-1	D608	G-5
Q106	A-2	D609	G-5
Q107	A-2	D610	G-5
Q112	A-6	D611	F-4
Q114	B-5	D801	G-3
Q115	A-6	D802	G-4
Q123	A-2	D803	G-4
Q141	C-3	D805	F-1
Q302	C-7	D806	F-1
Q304	B-6	D807	F-3
Q305	B-6	D808	E-3
Q307	B-5	D820	F-4
Q310	A-3	D1301	B-9
Q311	A-3	D1302	B-10
Q401	B-1	D1303	B-10
Q457	D-1	D1304	A-10
Q504	C-3	D1305	A-10
Q505	B-3	D1306	B-10
Q601	G-5	D1307	B-10
Q801	F-4		
Q802	G-3		
Q803	E-3		
Q1301	B-9		
Q1302	B-10		
Q1304	A-10		
Q1305	A-10		
Q1306	B-10		
		VARIABLE RESISTOR	
		RV001	D-9
		RV501	D-2
		RV502	B-4
		RV503	C-4
		RV504	B-4
		RV505	D-2
		RV801	F-4
		TRIMMER	
		CT332	C-7
DIODE			
D002	E-10		
D004	C-9		
D007	B-8		
D008	D-10		
D009	B-8		
D011	D-8		
D020	B-8		

—A Board—



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SYSTEM CONTROL, A/V OUT,
H/V OUT, MEMORY, CHROMA

A

A

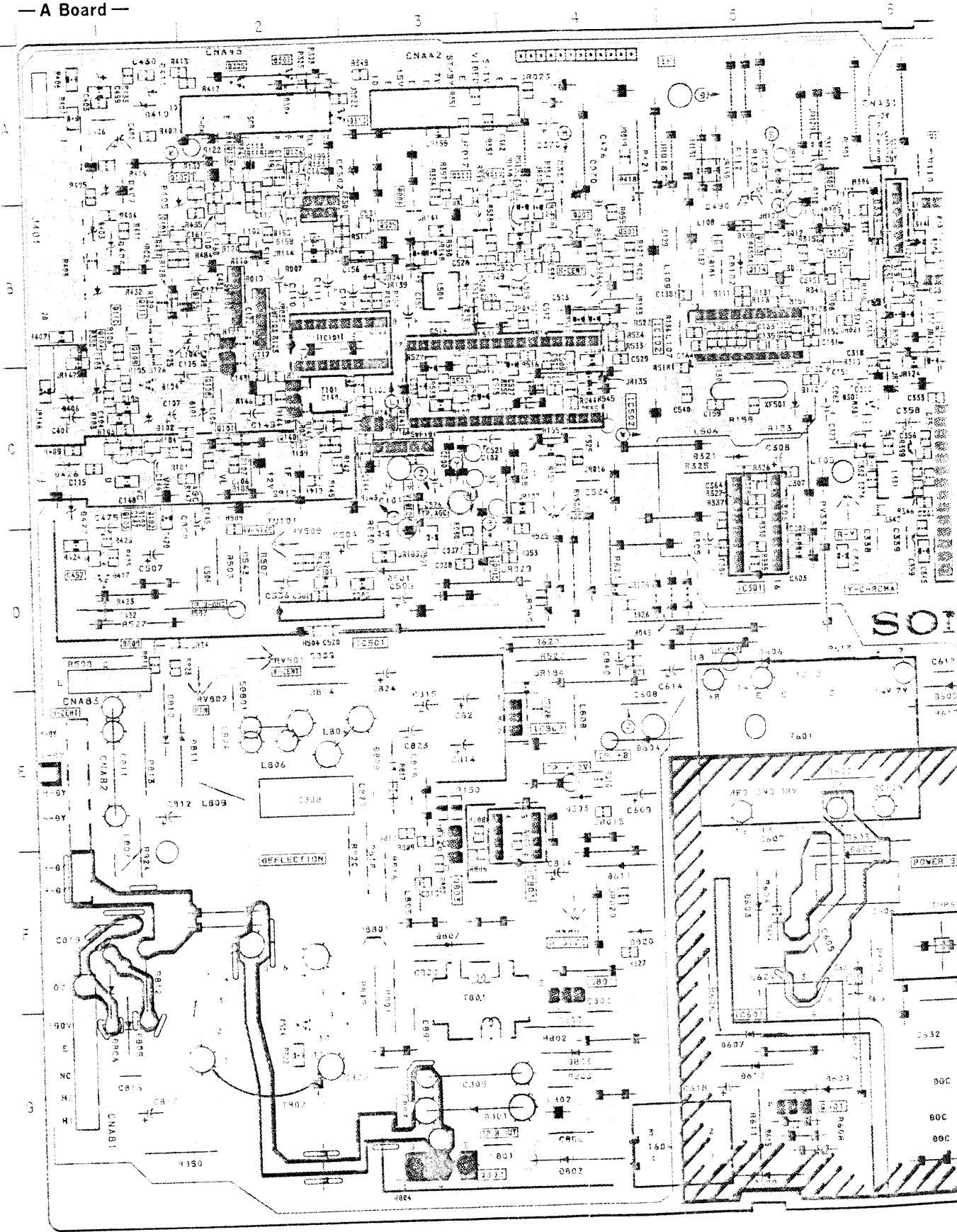
ATIC DIAGRAMS AND PRINTED WIRING BOARDS

— A Board —

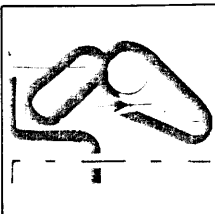
- D110 C5
- D301 C6
- D302 A-2
- D303 B-6
- D305 A-2
- D306 B-6
- D313 A-2
- D321 C-5
- D324 A-7
- D334 B-6
- D402 A-1
- D403 B-1
- D404 B-1
- D405 A-1
- D406 C-1
- D411 A-1
- D412 C-8
- D417 D-1
- D418 A-4
- D426 C-1
- D450 B-5
- D501 D-3
- D503 E-4
- D504 G-2
- D519 C-8
- D601 F-7
- D602 F-5
- D603 F-5
- D604 E-4
- D605 E-6
- D606 D-5
- D607 G-5
- D608 G-5
- D609 G-5
- D610 G-5
- D611 F-4
- D801 G-3
- D802 G-4
- D803 G-4
- D805 F-1
- D806 F-1
- D807 F-3
- D808 E-3
- D820 F-4
- D1301 B-9
- D1302 B-10
- D1303 B-10
- D1304 A-10
- D1305 A-10
- D1306 B-10
- D1307 B-10

VARIABLE RESISTOR	
RV001	D-9
RV501	D-2
RV502	B-4
RV503	C-4
RV504	B-4
RV505	D-2
RV801	F-4

TRIMMER	
CT332	C-7

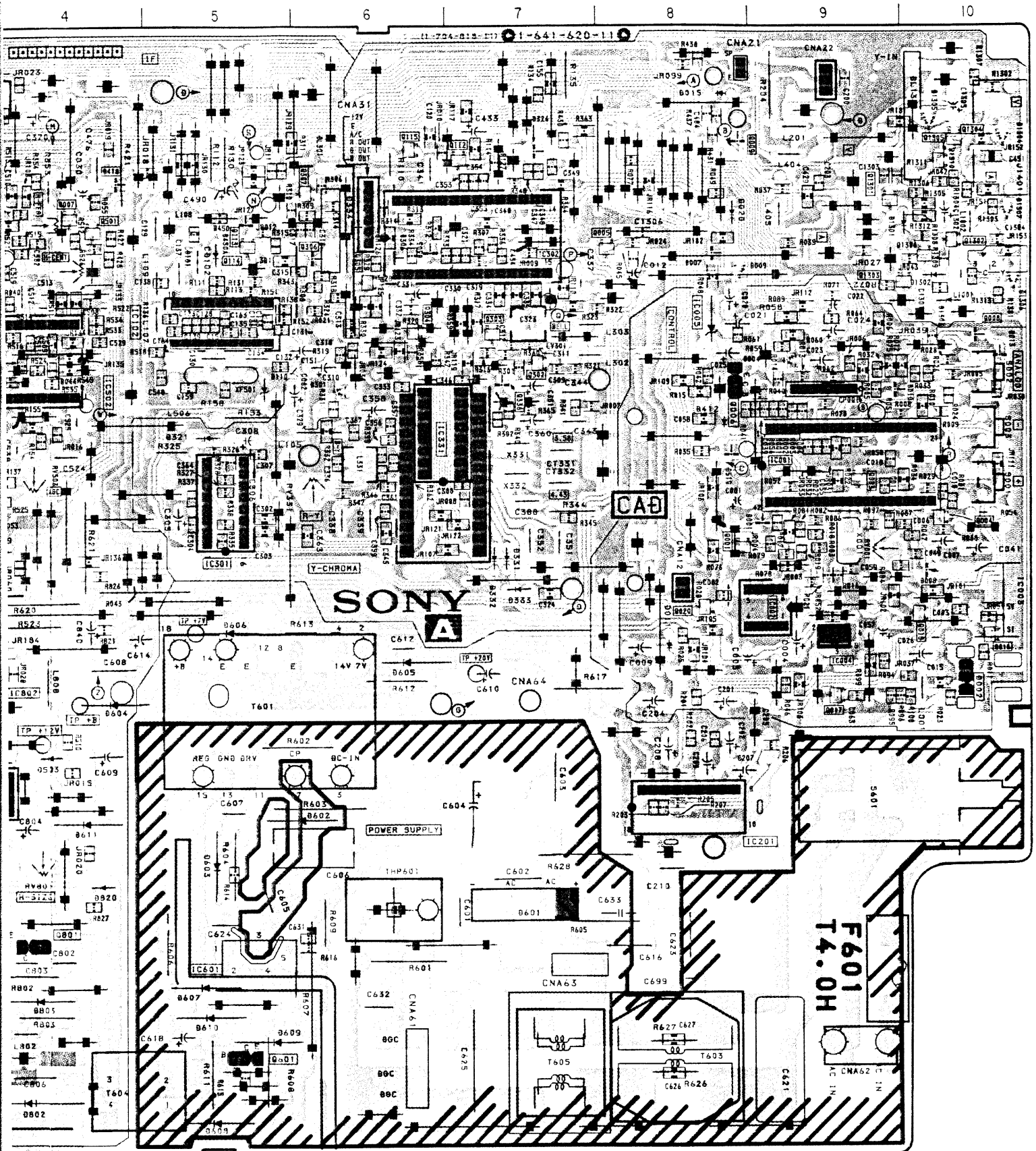


A

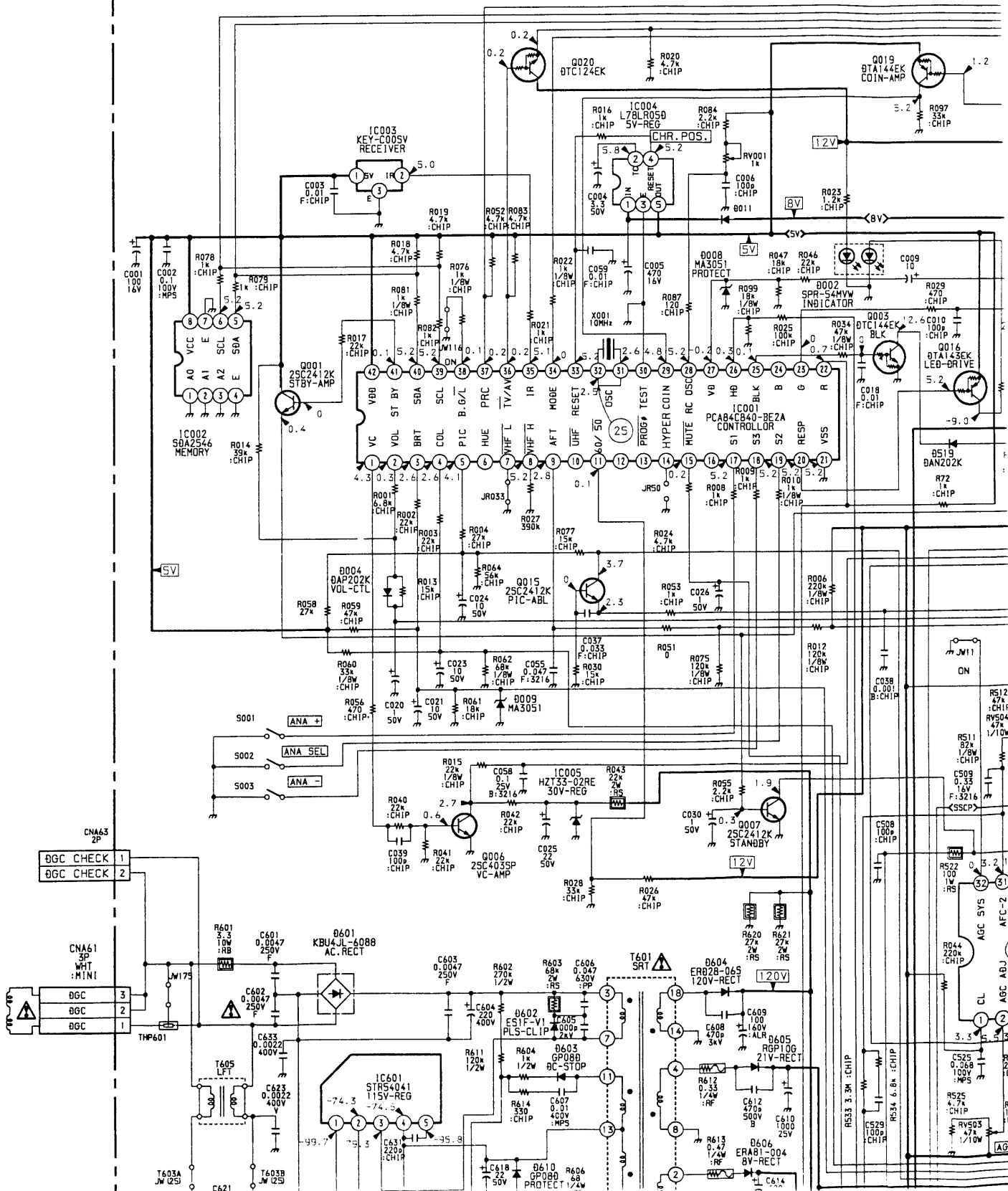


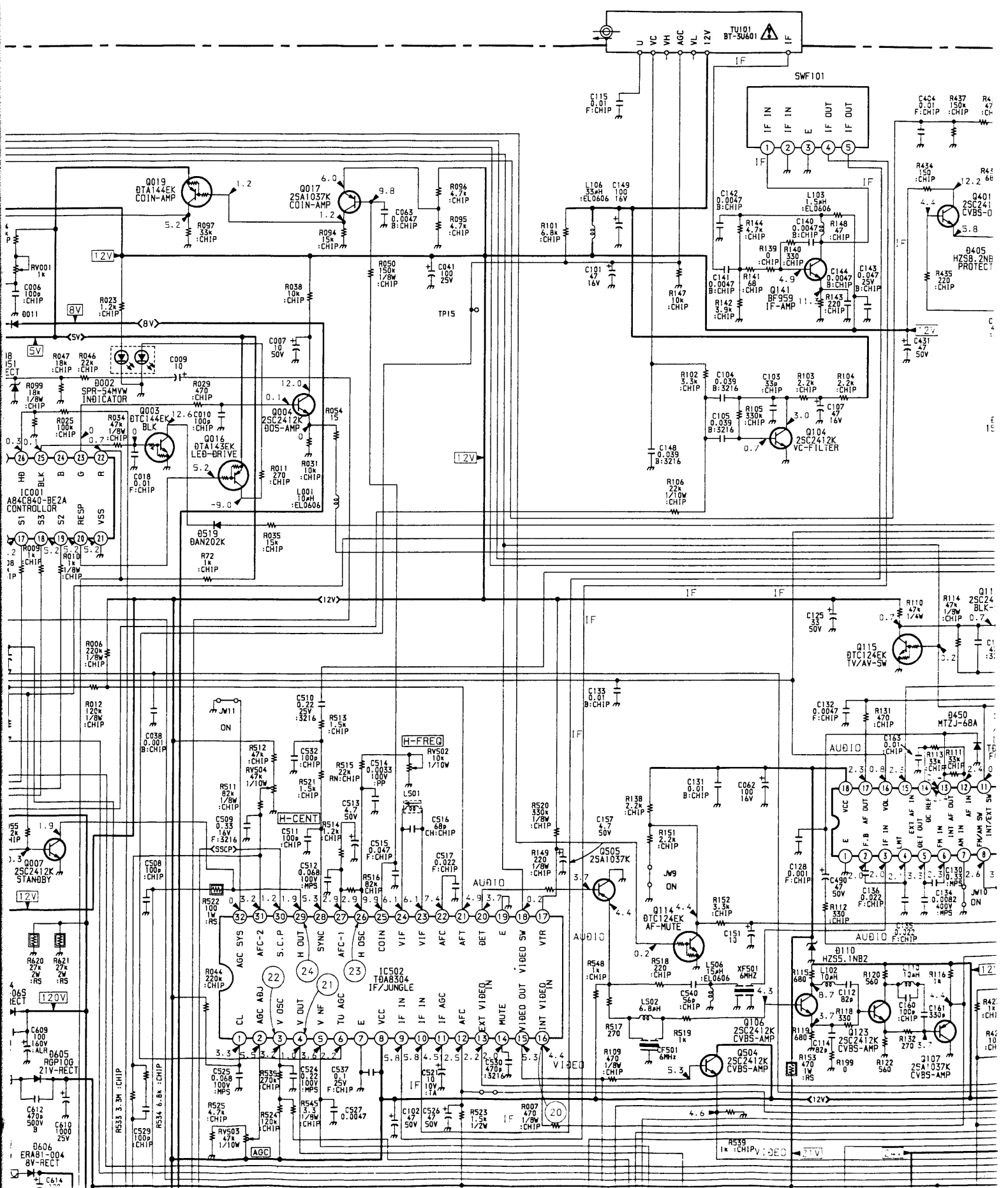
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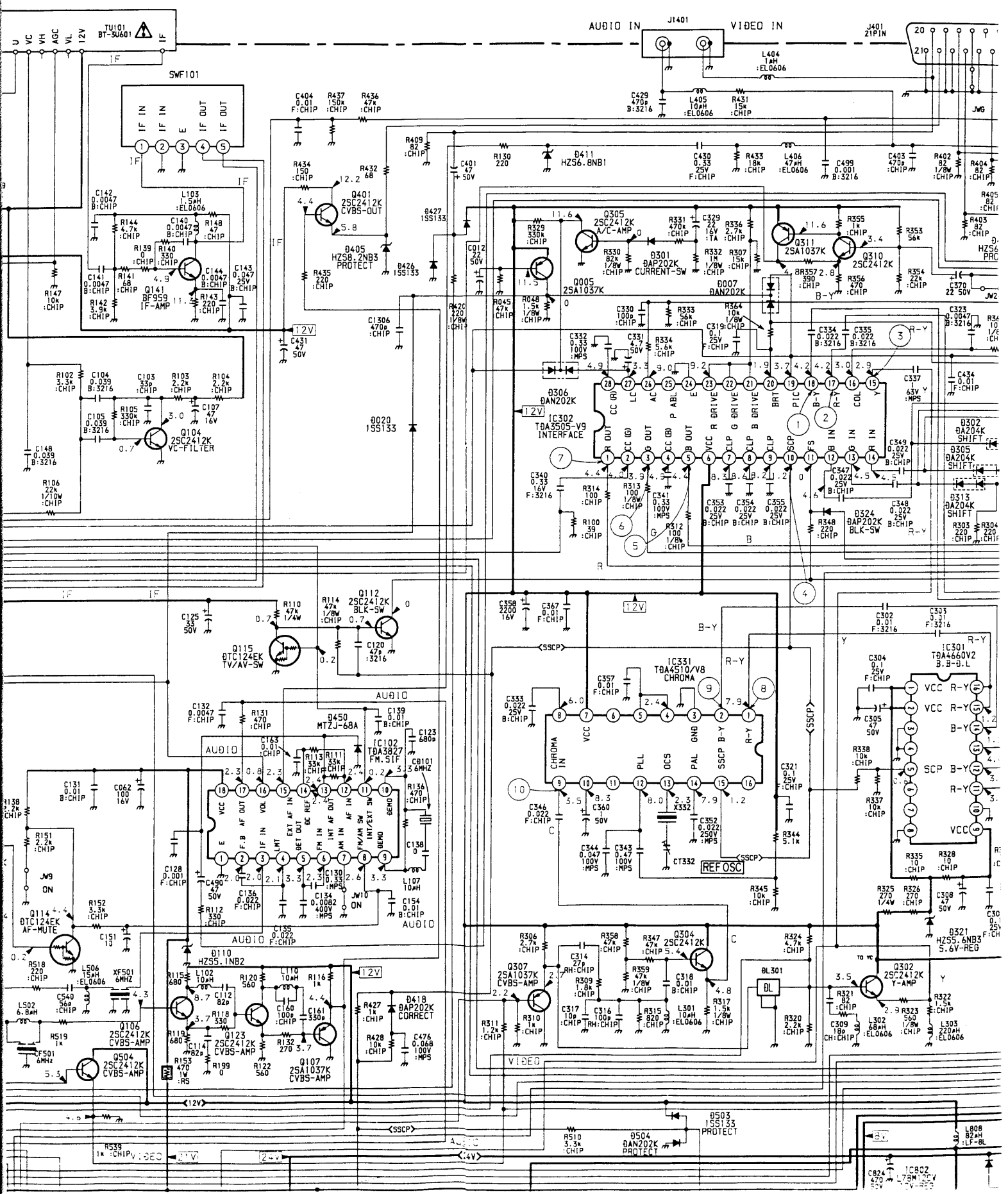
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

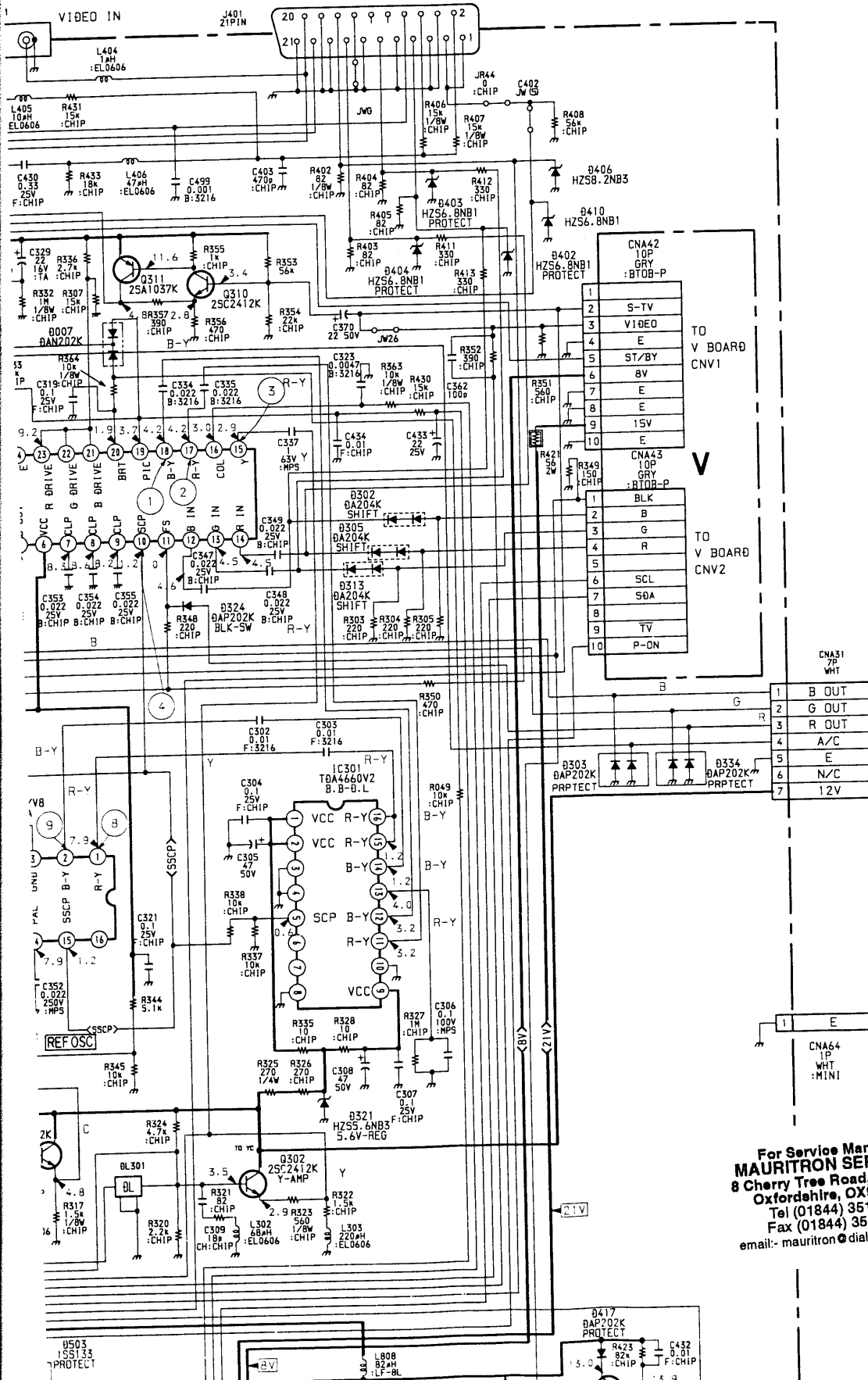


A (SYSTEM CONTROL)
A/V OUT, H/V OUT
MEMORY, CHROMA

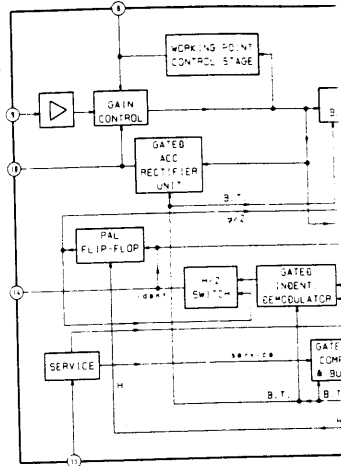




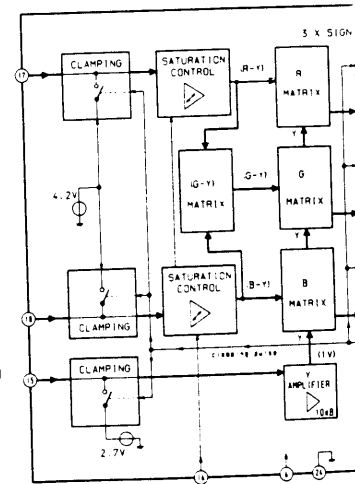




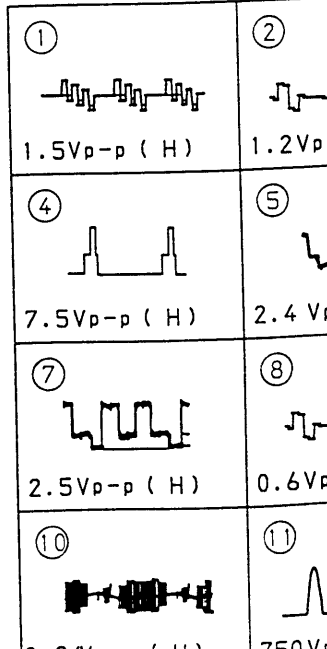
A BOARD IC331 TDA4510



A BOARD IC302 TDA3505-

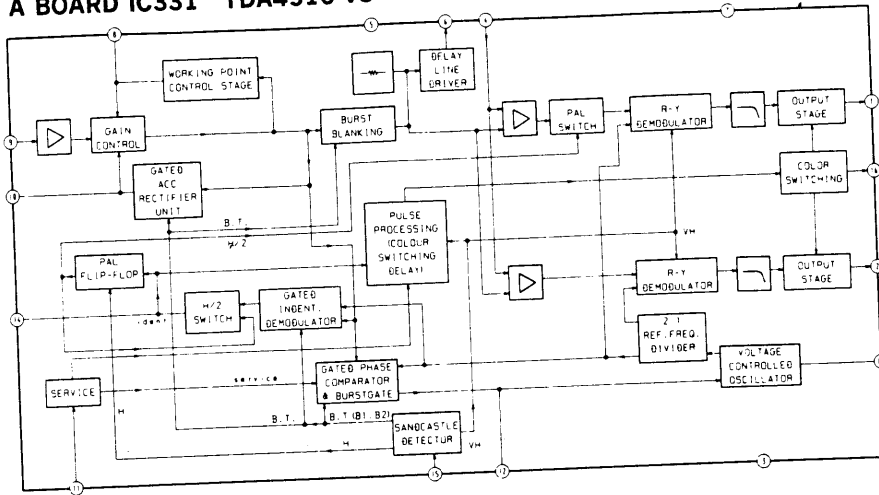


• A Board

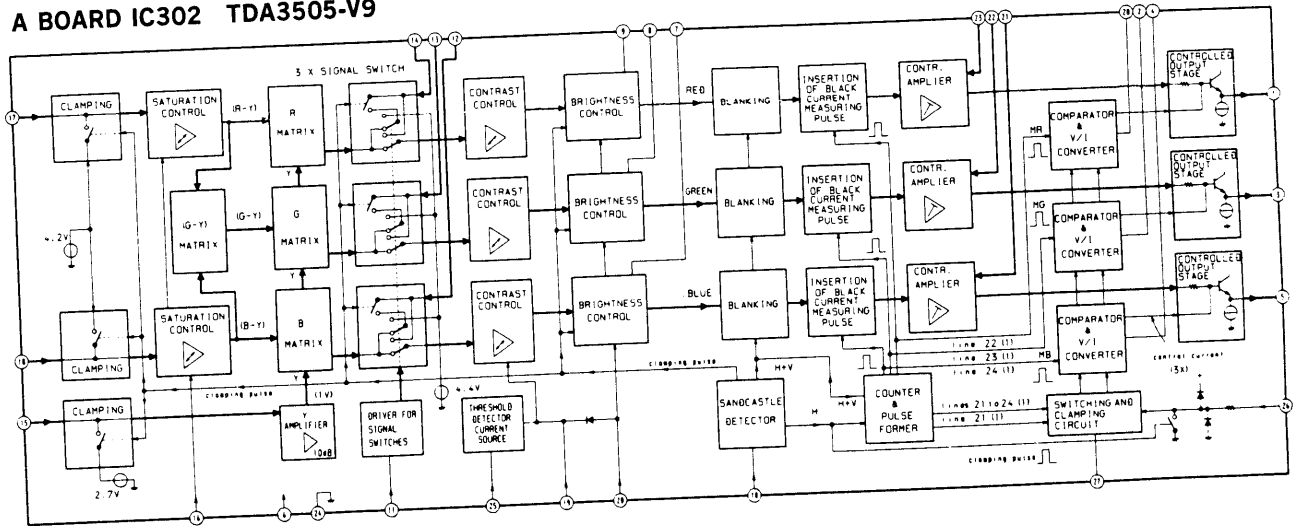


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A BOARD IC331 TDA4510-V8



A BOARD IC302 TDA3505-V9

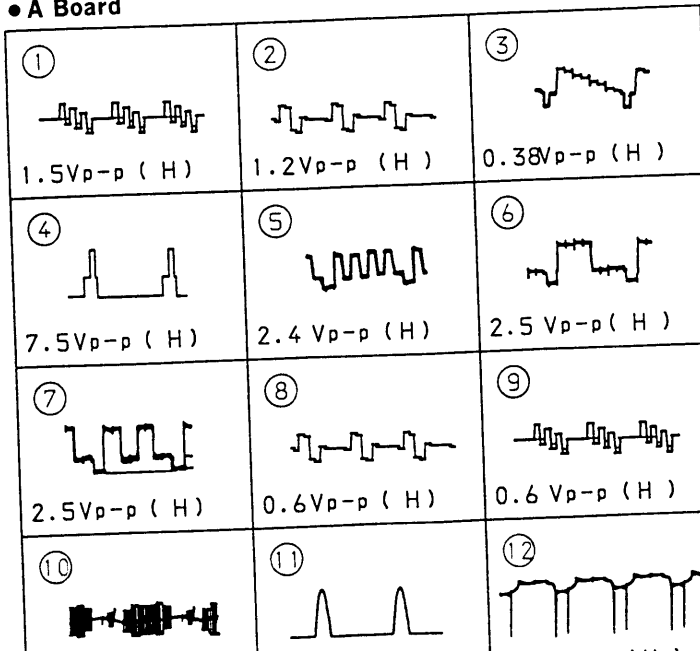


CNA31
7P
WHT

OUT
OUT
OUT
A/C
E
N/C
12V

TO C BOARD
CNC73

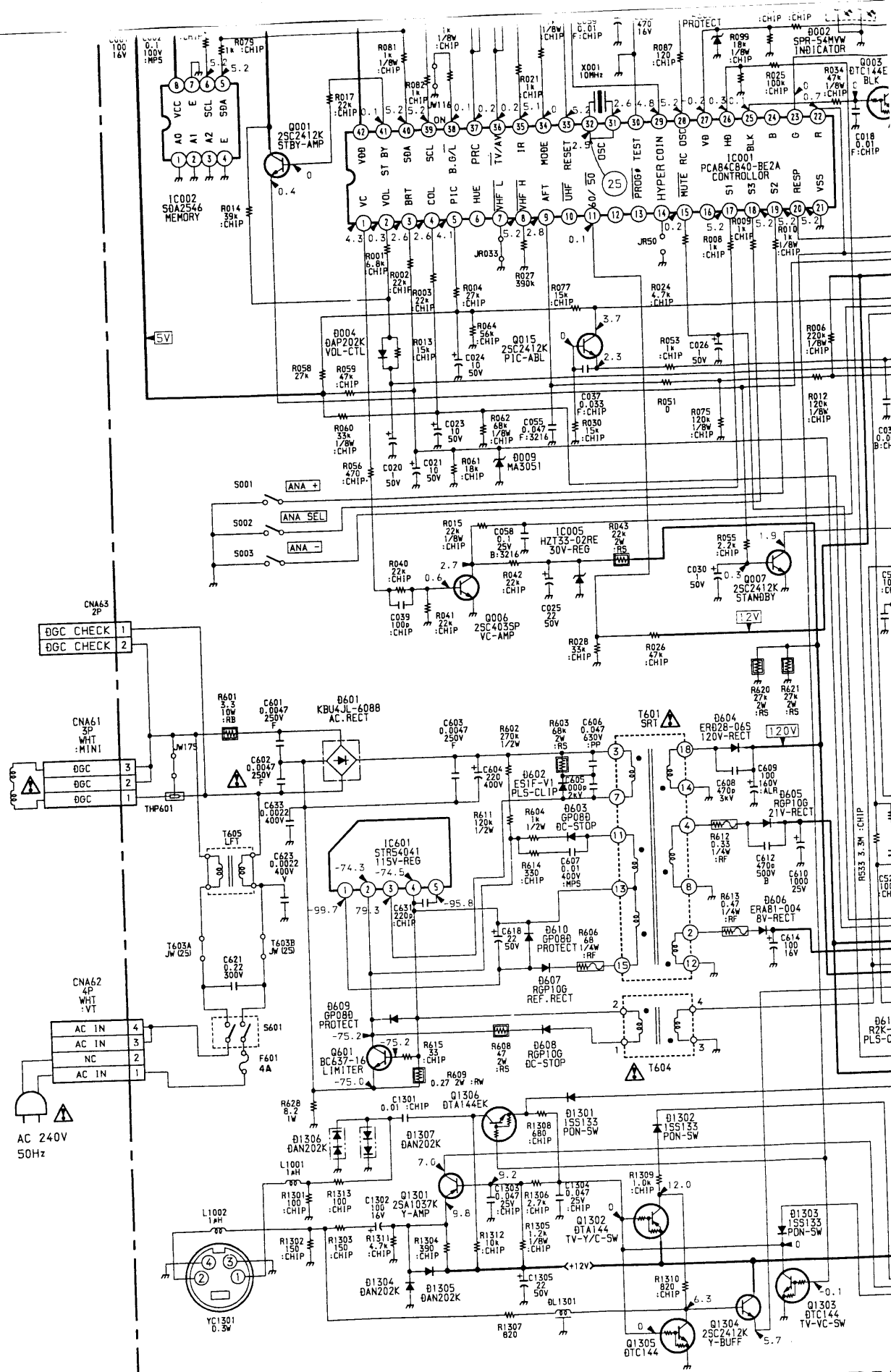
• A Board

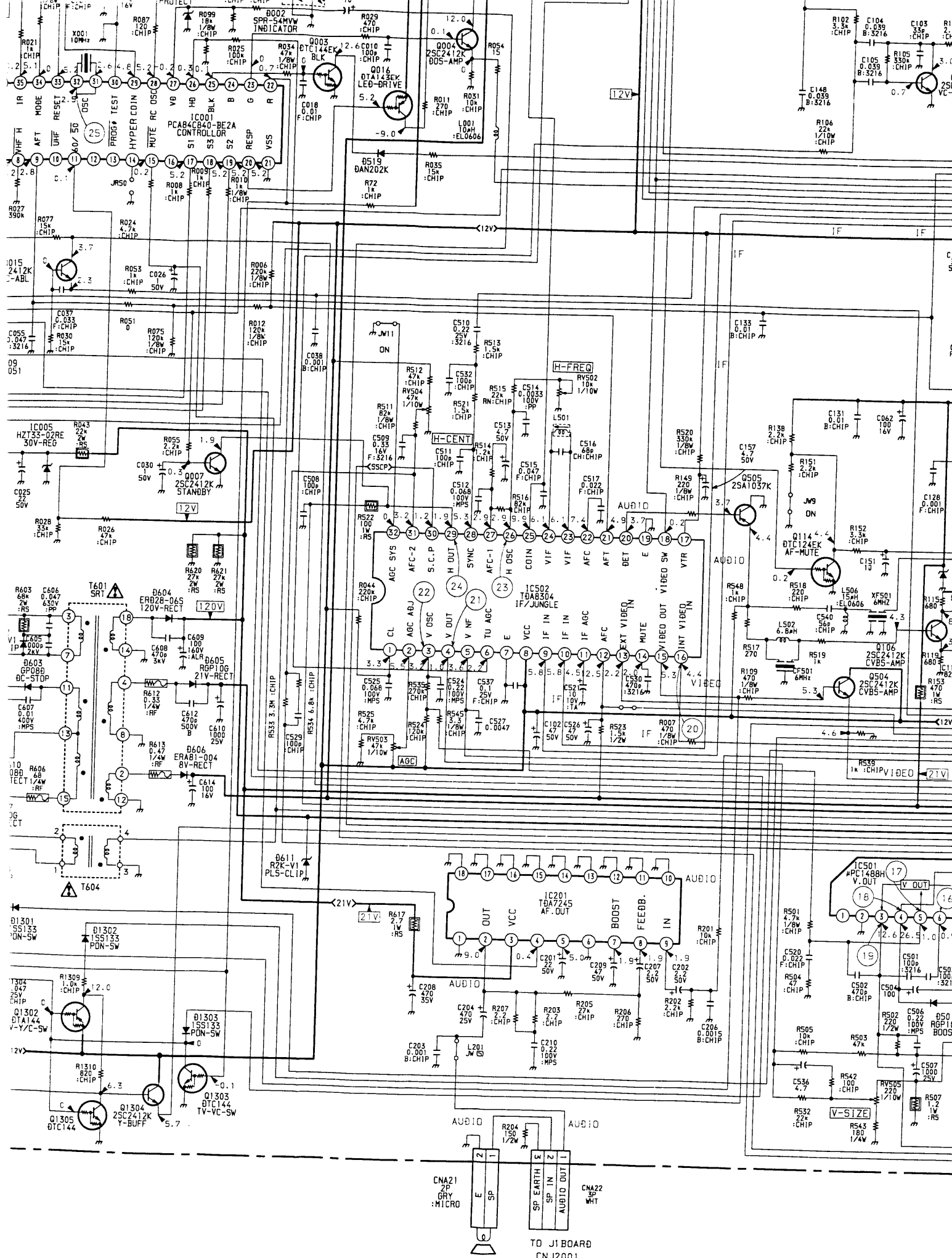


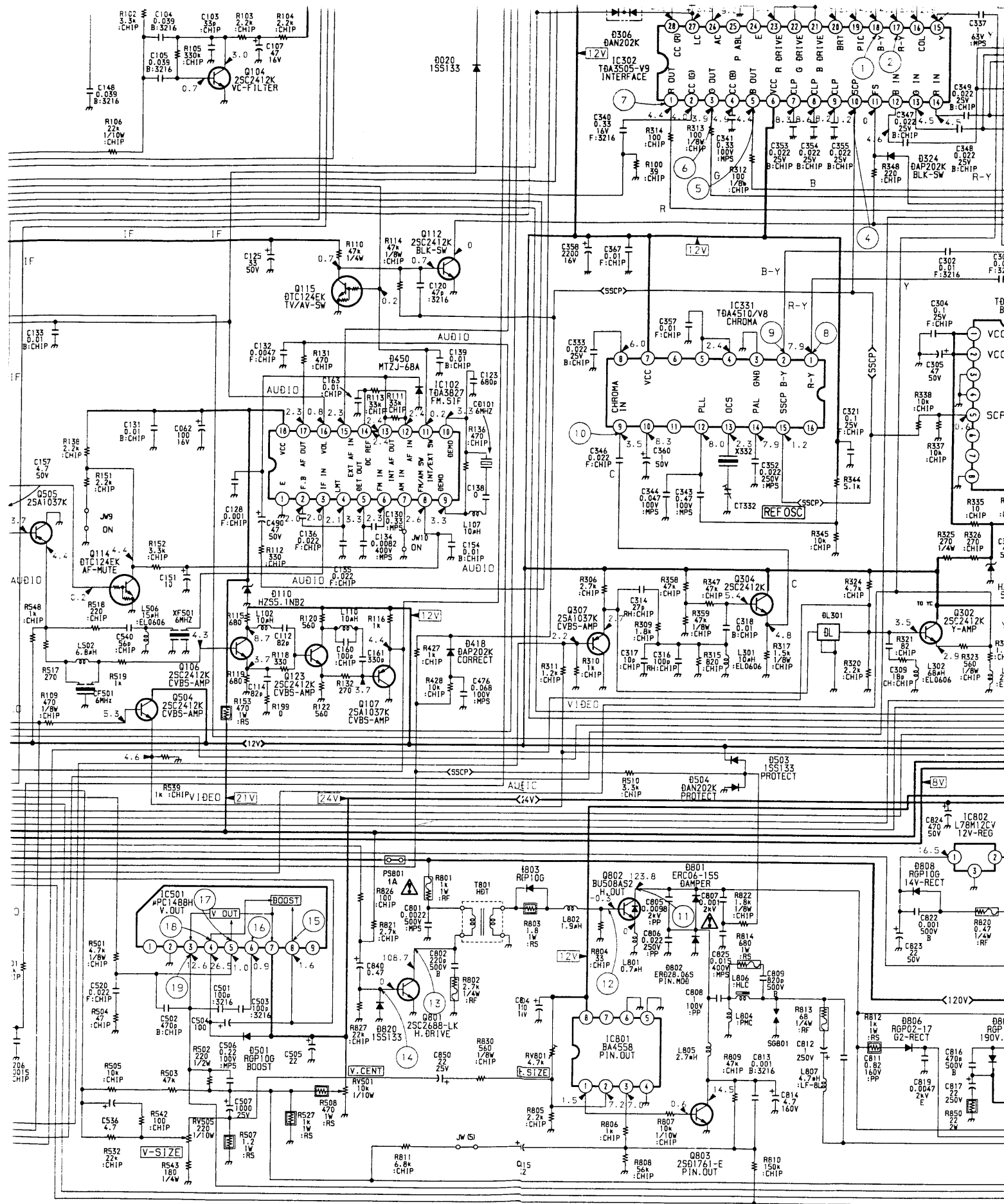
E TO COATING E

A64
P
HT
INI

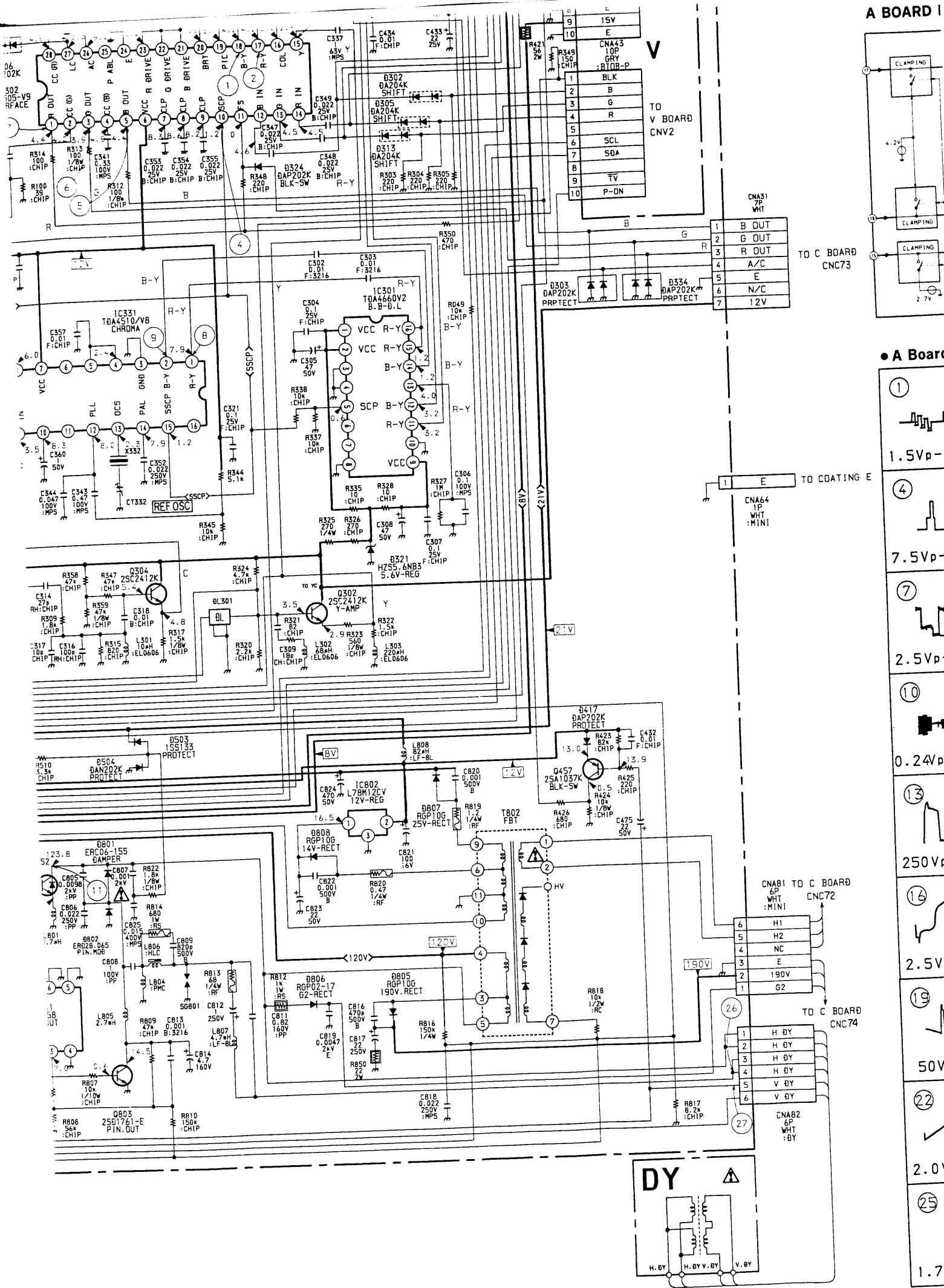
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N
O





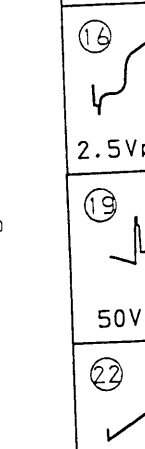
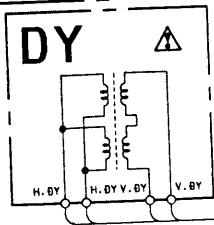


A BOARD I

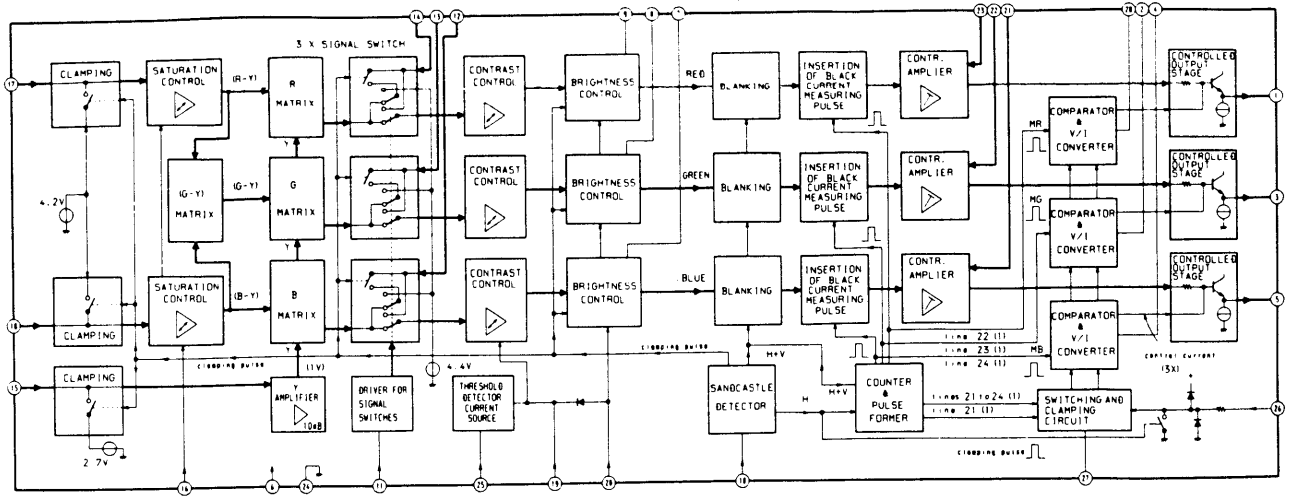


• A Board

- ①
- ④
- ⑦
- ⑩
- ⑬
- ⑯
- ⑲
- ⑳
- ㉓



A BOARD IC302 TDA3505-V9



• A Board

① 1.5Vp-p (H)	② 1.2Vp-p (H)	③ 0.38Vp-p (H)
④ 7.5Vp-p (H)	⑤ 2.4 Vp-p (H)	⑥ 2.5 Vp-p (H)
⑦ 2.5Vp-p (H)	⑧ 0.6Vp-p (H)	⑨ 0.6 Vp-p (H)
⑩ 0.24Vp-p (H)	⑪ 750Vp-p (H)	⑫ 12 Vp-p (H)
⑬ 250Vp-p (H)	⑭ 3.4Vp-p (H)	⑮ 2.0Vp-p (V)
⑯ 2.5Vp-p (V)	⑰ 1.5Vp-p (V)	⑱ 2.2Vp-p (V)
⑲ 50Vp-p (V)	⑳ 1.7Vp-p (H)	㉑ 5.2 Vp-p (V)
㉒ 2.0Vp-p (V)	㉓ 1.8 Vp-p (H)	㉔ 2.8 Vp-p (H)
㉕ 1.7Vp-p (10MHz)	㉖ 200Vp-p (H)	㉗ 4.2 Vp-p (V)

NA31
7P
WHT
JUT
JUT
JUT
7C
7C
2V

TO C BOARD
CNC73

TO COATING E

4

1

TO C BOARD
CNC72

1

2

3

3V

2

TO C BOARD
CNC74

JY

JY

JY

JY

JY

JY

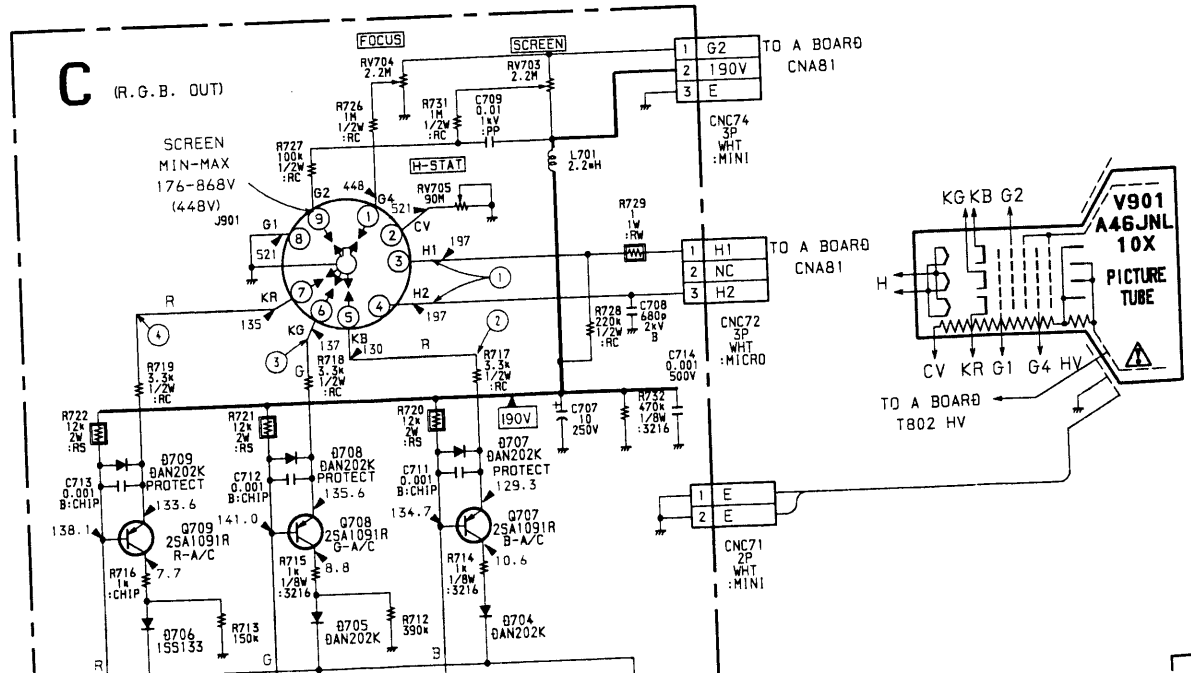
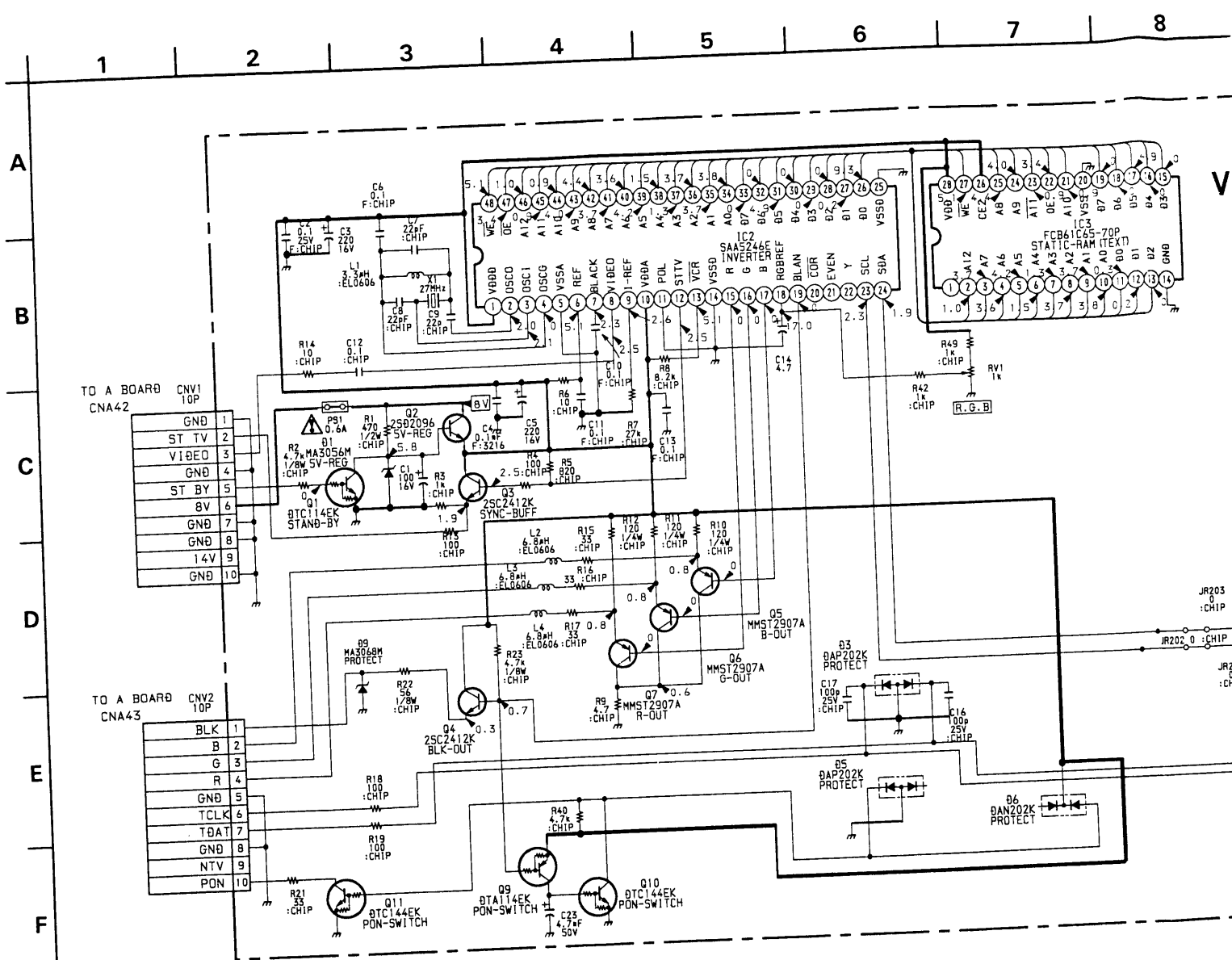
4B2

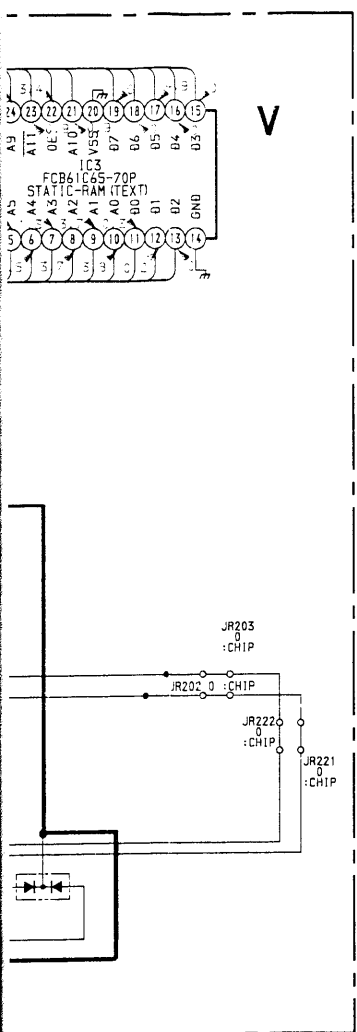
1P

1T

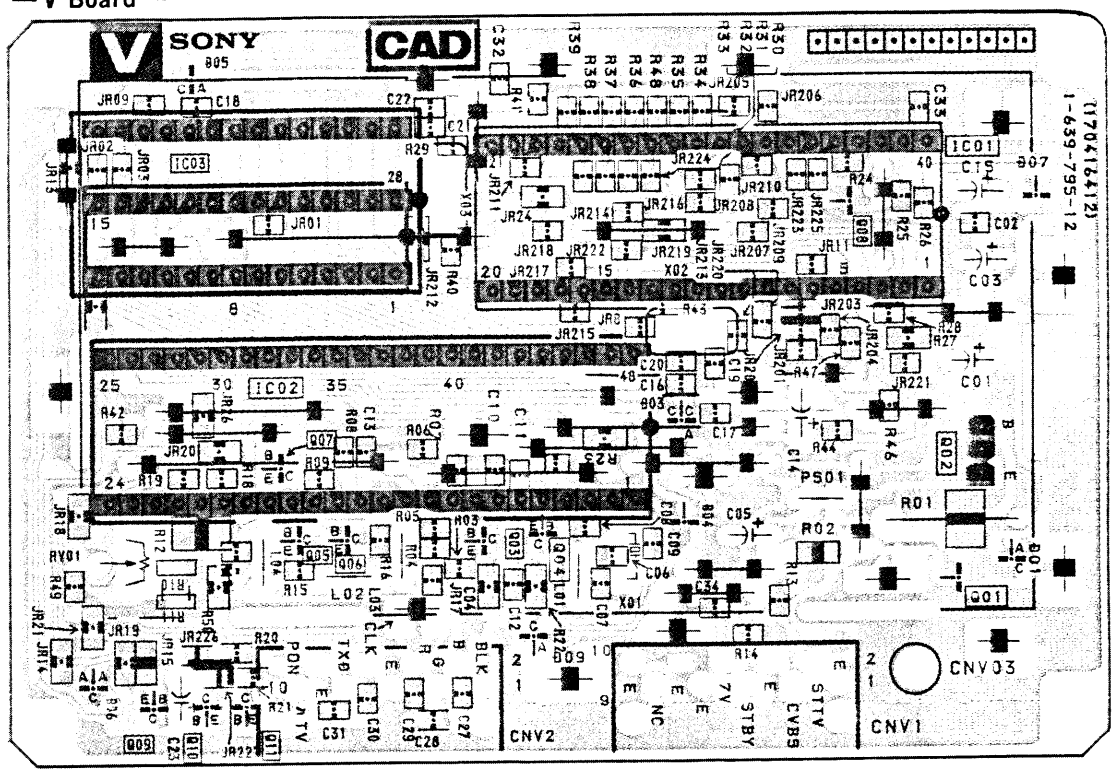
JY

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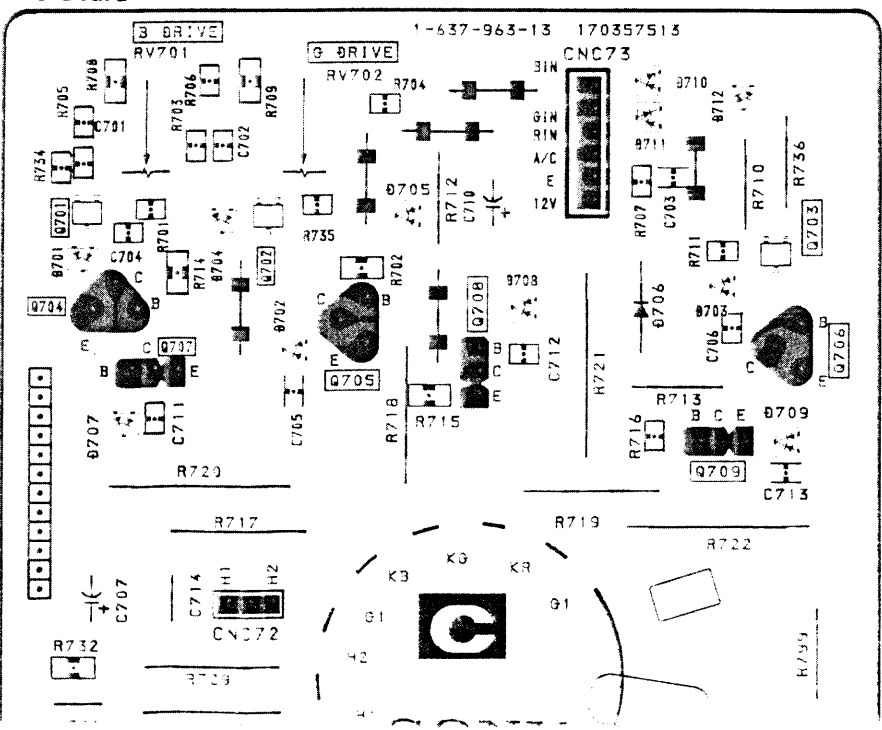




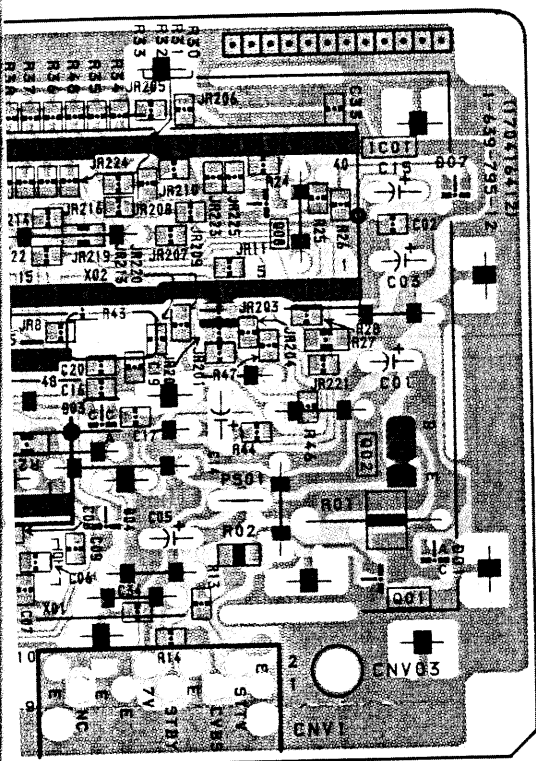
— V Board —



— C Board —



W

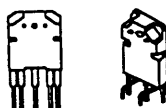


5-3. SEMICONDUCTORS

KEY-C00SV-F



STR54041



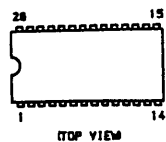
μPCS74J



L78LR050-MA



T0A3505-V1
FCB61C65-70P



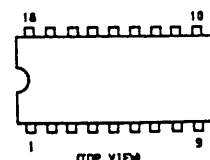
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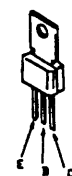
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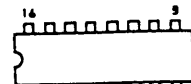
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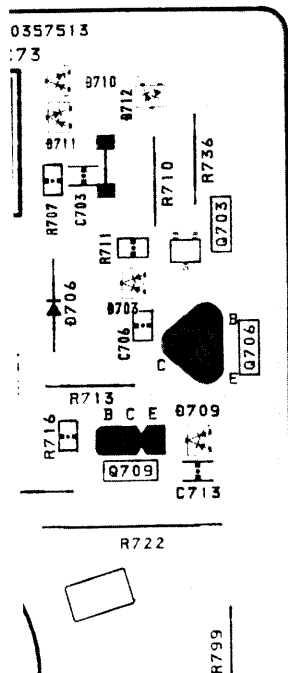
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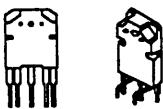


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CONDUCTORS

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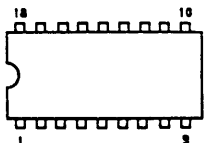


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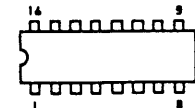
(TOP VIEW)

T0A3827-V3
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(TOP VIEW)

T0A4510/V8
T0A4660V2



#PC574J



BC637-16

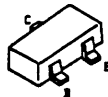


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BF959

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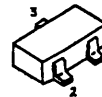
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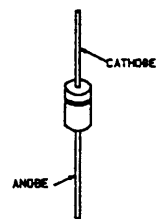


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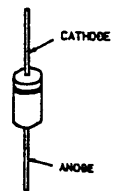


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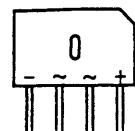
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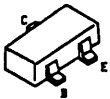
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ES1F-N
RGP02-17
R2K
RU-3AM



KBU4JL-6088



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 2SC2712YG



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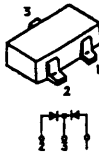
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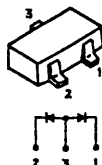
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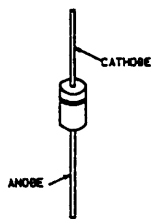


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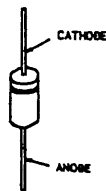


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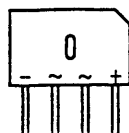
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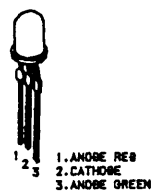
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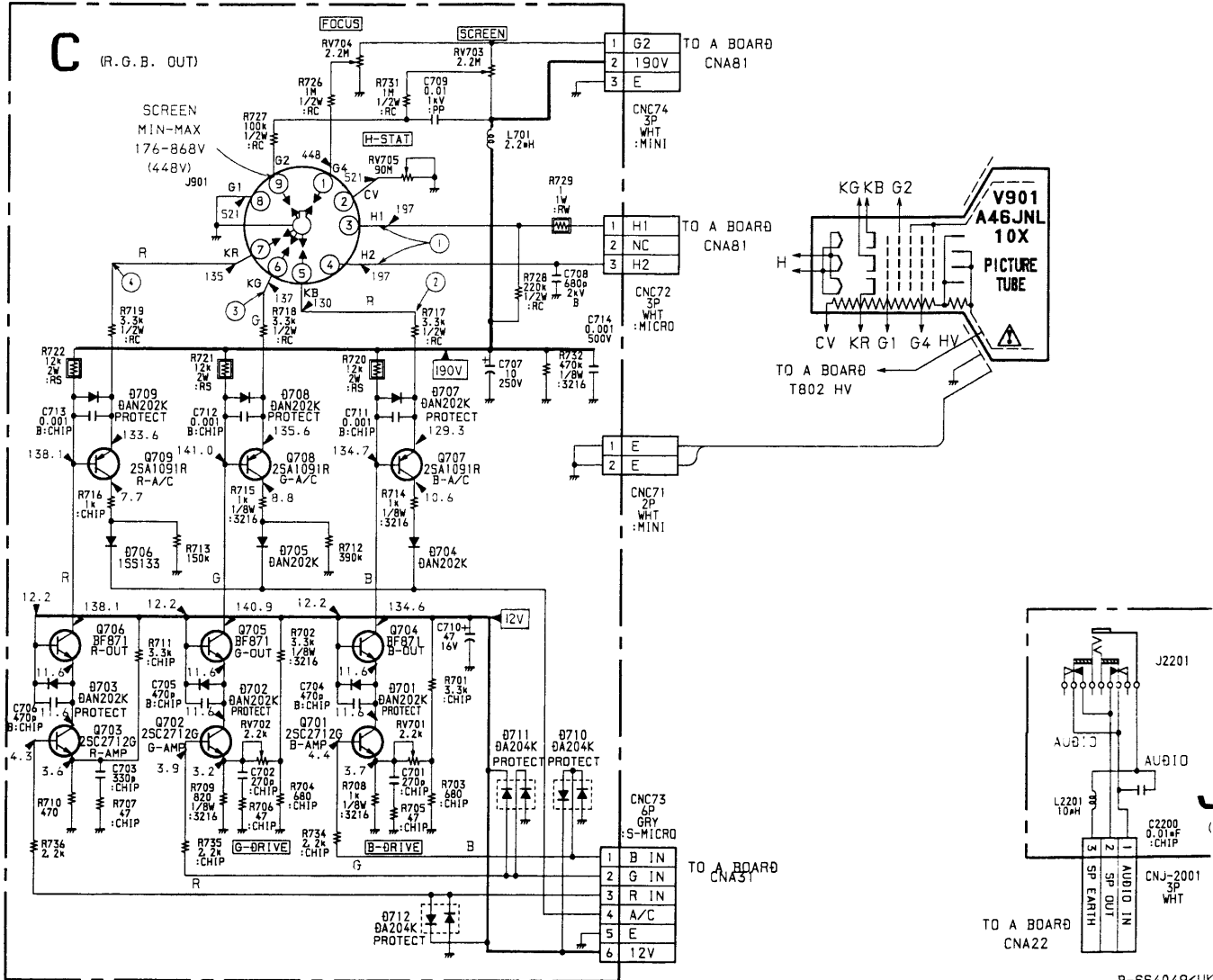
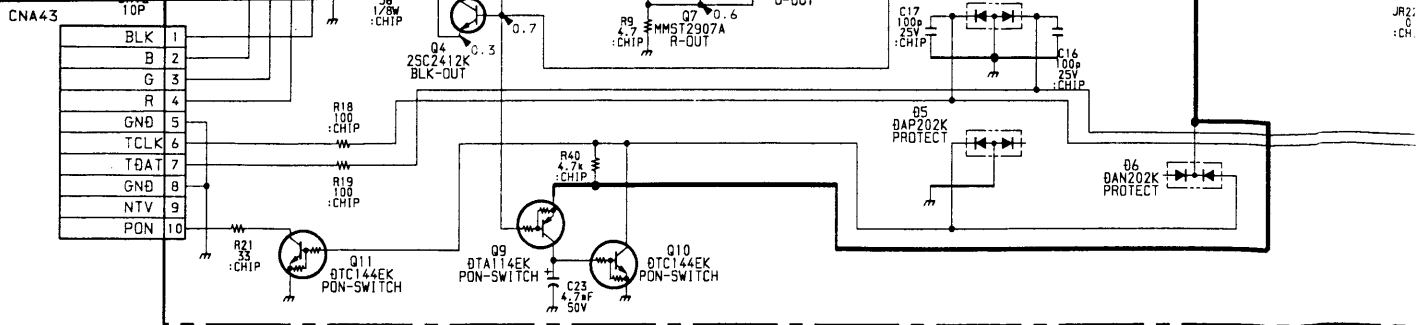


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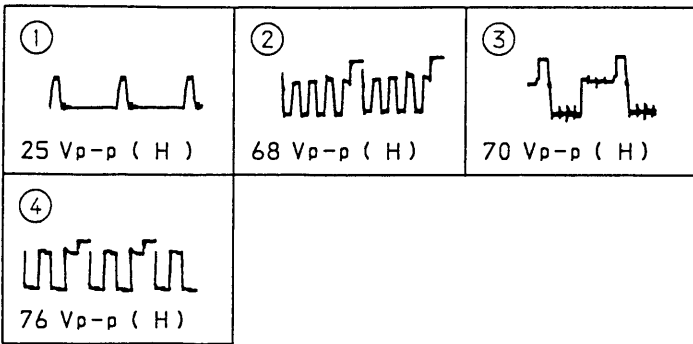


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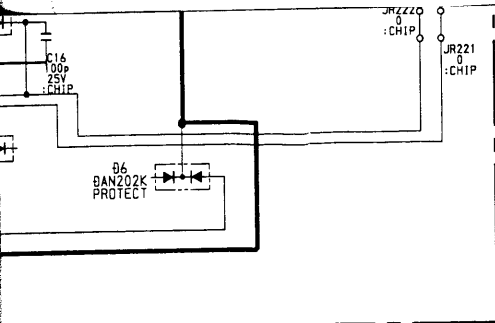




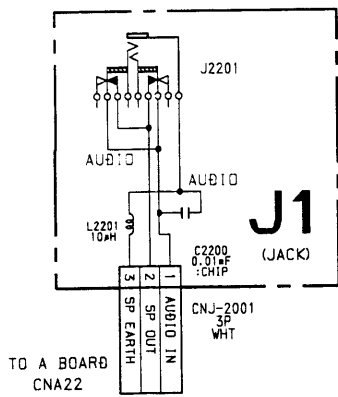
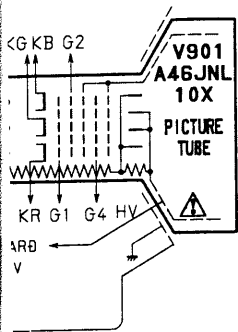
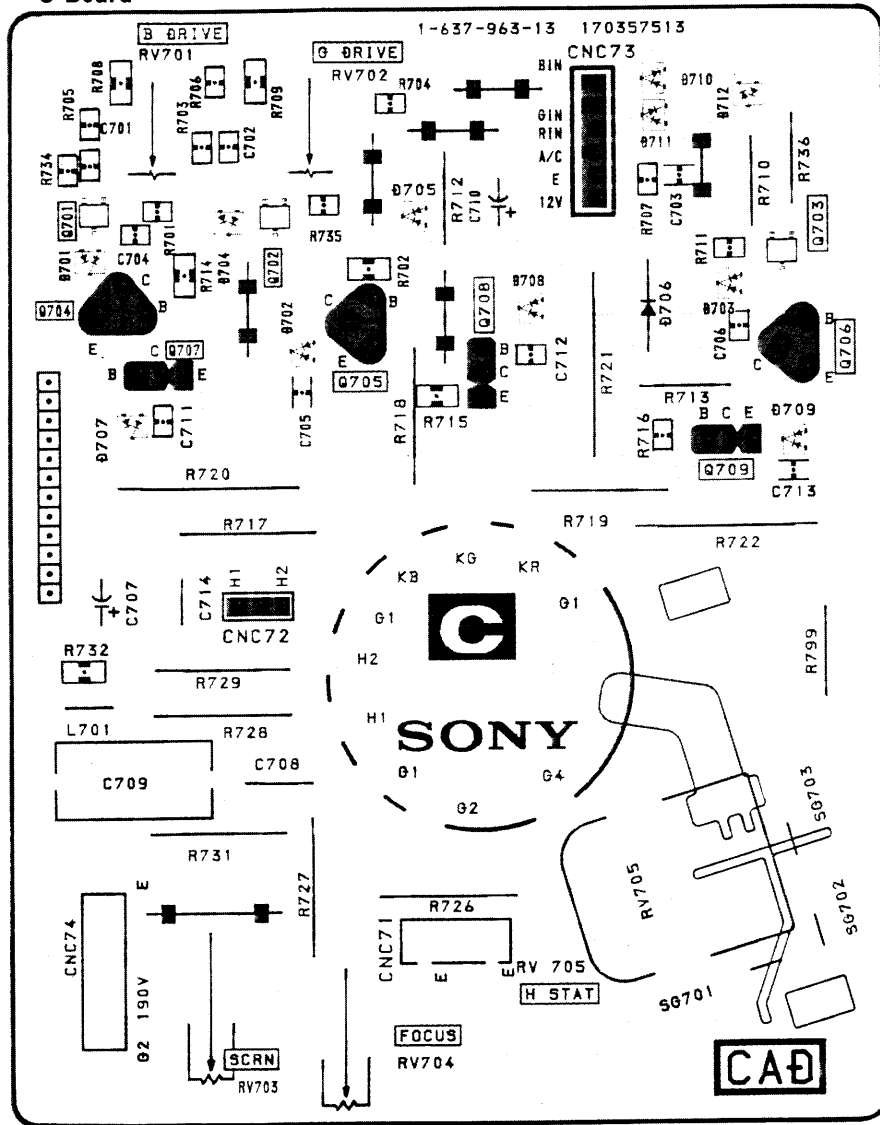
● C Board



For Service Manuals
MAURITRON SERVICES
 8 Cherry Tree Road, Chinnor
 Oxfordshire, OX9 4QY.
 Tel (01844) 351694
 Fax (01844) 352554
 email:- sales@mauritron.co.uk

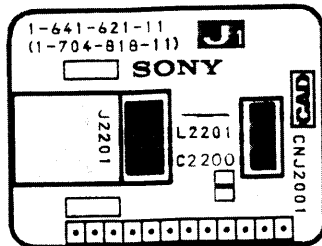


- C Board -



B-SS4049<UK.>-J1.

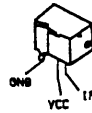
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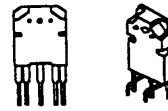
Service Manuals
RON SERVICES
 Free Road, Chinnor
 High Wycombe, Ox9 4QY.
 (1844) 351694
 (1844) 352554
 ron@mauritron.co.uk

5-3. SEMICONDUCTORS

KEY-C005V-F



STR54041



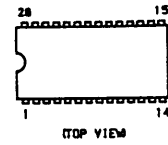
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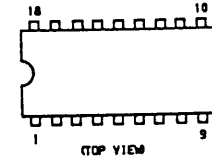
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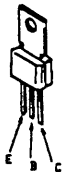
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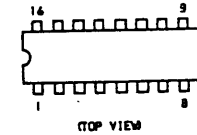
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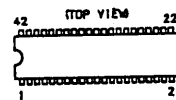
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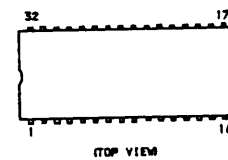
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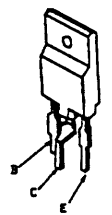
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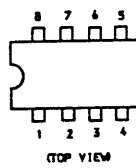
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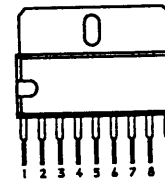
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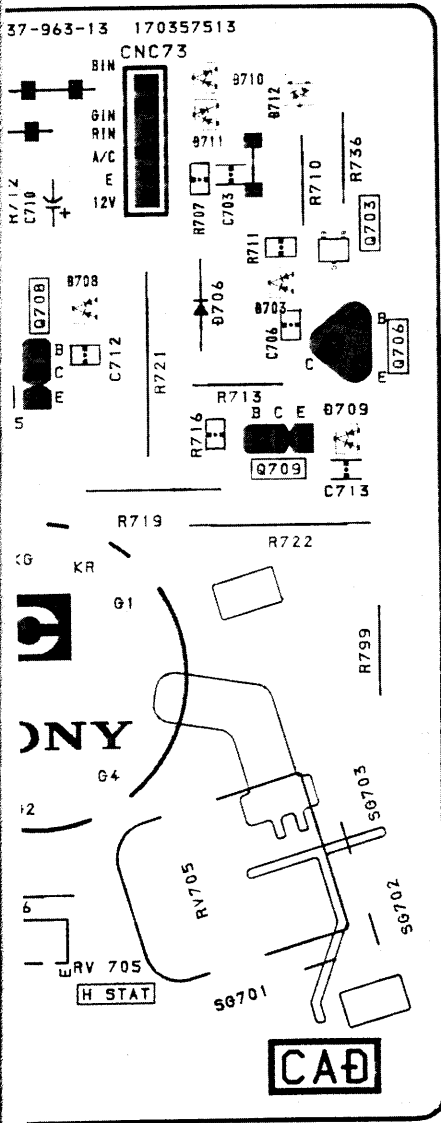
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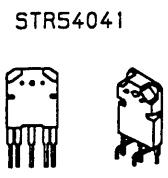
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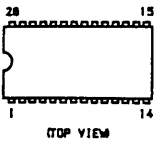
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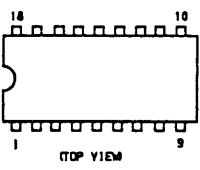
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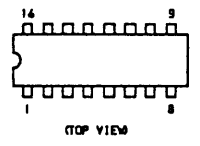
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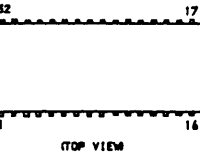
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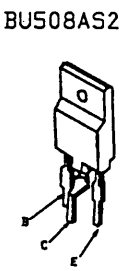
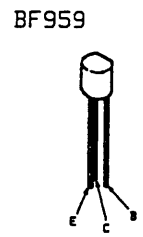
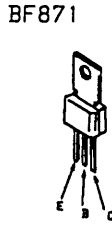
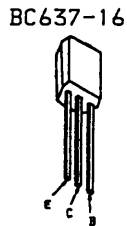
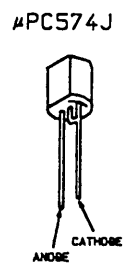
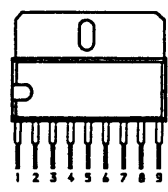
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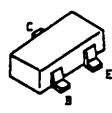
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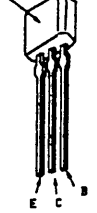
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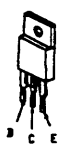
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MARKING SIDE VIEW



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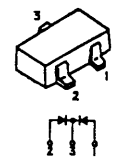
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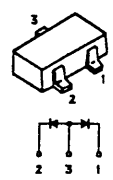
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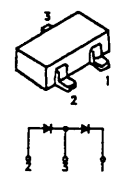
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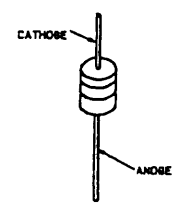
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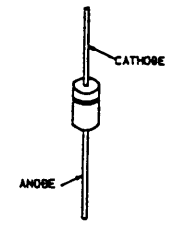
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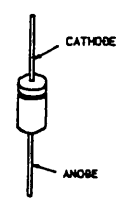
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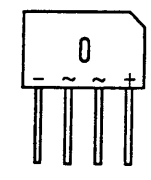
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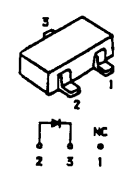
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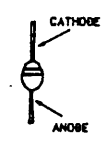
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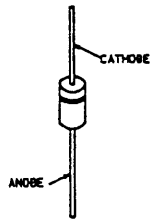
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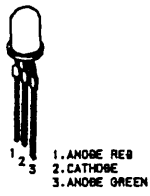
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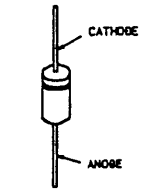
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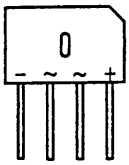
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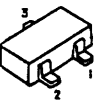
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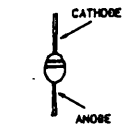
KBU4JL-6088



MA3051
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 R05.6M-B2
 R06.8M-B2



U05G



SECTION 6 EXPLODED VIEW

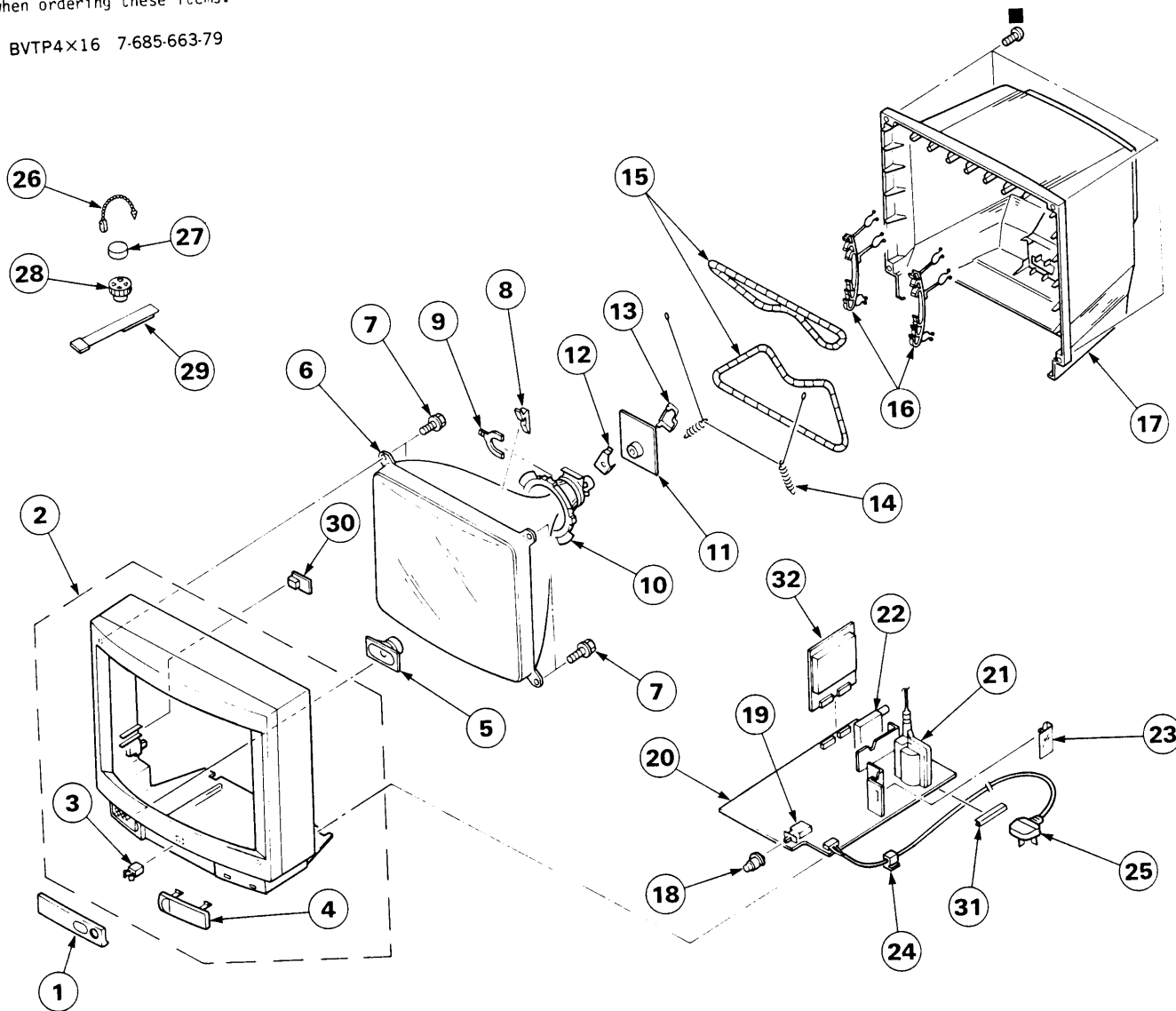
NOTE:

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

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

For Service Manuals
MAURITRON SERVICES
8 Cherry Tree Road, Chinnor
Oxfordshire, OX9 4QY.
Tel (01844) 351694
Fax (01844) 352554
email:- sales@mauritron.co.uk

■: BVTP4×16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-200-904-01	DOOR (PAINTED)		17	4-200-911-01	COVER, REAR	
2	X-4200-090-1	CABINET ASSY (WITH BEZEL ASSY)	3, 4	18	4-200-906-01	BUTTON, POWER	
3	4-392-036-01	CATCHER, PUSH		19	Δ 1-571-433-12	SWITCH, PUSH (AC POWER)	
4	4-200-901-01	COVER, FRONT (PAINTED)		20	A-1632-061-A	A BOARD, COMPLETE	
5	1-503-258-21	SPEAKER		21	Δ 1-439-432-21	TRANSFORMER ASSY, FLYBACK (UX-1622)	
6	Δ 8-737-951-05	PICTURE TUBE (A46JNL10X)		22	Δ 1-465-542-11	TUNER, UHF (BT-3U601)	
7	4-307-249-00	SCREW (5), TAPPING		23	*4-200-400-01	PLATE, INSULATION	
8	3-704-495-01	SPACER, DY		24	Δ 4-389-201-03	HOLDER, AC CORD	
9	1-452-277-00	MAGNET, BMC		25	Δ 1-590-762-11	CORD, POWER (WITH PLUG)	
10	Δ 1-451-279-21	DEFLECTION YOKE (Y19PXA)		26	4-308-870-00	CLIP, LEAD WIRE	
11	*A-1638-019-A	C BOARD, COMPLETE		27	1-452-032-00	MAGNET, DISK; 10MM ϕ	
12	*4-374-717-01	COVER (MAIN), CV VOL		28	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
13	*4-374-704-01	COVER (REAR LID), CV VOL		29	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
14	4-369-318-00	SPRING, TENSION		30	*1-641-621-11	J1 BOARD	
15	Δ 1-426-359-31	COIL, DEMAGNETIZATION		31	4-374-959-31	REINFORCEMENT, PC BOARD	
16	*4-386-622-11	BAND, DGC		32	A-1645-018-A	V BOARD, COMPLETE	

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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
CNA62	*1-580-844-11	PIN, CONNECTOR (POWER)		D1301	8-719-911-19	DIODE 1SS119	
CNA63	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		D1302	8-719-911-19	DIODE 1SS119	
CNA64	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		D1303	8-719-911-19	DIODE 1SS119	
CNA81	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P		D1304	8-719-800-76	DIODE 1SS226	
CNA82	*1-580-798-11	CONNECTOR PIN (BY) 6P		D1305	8-719-800-76	DIODE 1SS226	
		<TRIMMER>		D1306	8-719-800-76	DIODE 1SS226	
CT332	1-141-418-11	CAP, ALU		D1307	8-719-800-76	DIODE 1SS226	
		<DIODE>				<DELAY LINE>	
D002	8-719-920-55	DIODE SPR-54MVW		DL301	1-236-062-11	MODULE, Y DELAY LINE	
D004	8-719-104-34	DIODE 1S2836		DL1301	1-415-613-11	DELAY LINE, Y	
D007	8-719-400-18	DIODE MA152WK				<FUSE>	
D008	8-719-105-82	DIODE ED5.1M-B2		F601	Δ 1-576-231-21	FUSE (H.B.C.) 4A/250V	
D009	8-719-105-82	DIODE ED5.1M-B2			4-201-057-01	COVER, FUSE; F601	
D011	8-719-911-19	DIODE 1SS119				<IC>	
D020	8-719-911-19	DIODE 1SS119		IC001	8-759-062-07	IC PCA84C840P/016	
D110	8-719-109-85	DIODE ED5.1ES-B2		IC002	8-759-043-86	IC ST24C02AB1	
D301	8-719-104-34	DIODE 1S2836		IC003	8-749-922-13	IC KEY-C00SV-F	
D302	8-719-800-76	DIODE 1SS226		IC004	8-759-805-37	IC L78LR05D-MA	
D303	8-719-104-34	DIODE 1S2836		IC005	8-759-157-40	IC UPC574J	
D305	8-719-800-76	DIODE 1SS226		IC102	8-759-044-41	IC TDA3827/V3	
D306	8-719-400-18	DIODE MA152WK		IC201	8-759-502-74	IC TDA7245	
D313	8-719-800-76	DIODE 1SS226		IC301	8-759-505-39	IC TDA4660V2	
D321	8-719-109-89	DIODE ED5.6ES-B2		IC302	8-759-512-04	IC TDA3505-V1	
D324	8-719-104-34	DIODE 1S2836		IC331	8-759-513-46	IC TDA4510/V8	
D334	8-719-104-34	DIODE 1S2836		IC501	8-759-113-05	IC UPC1488H	
D402	8-719-109-97	DIODE ED6.8ES-B2			*4-389-343-01	SPRING; IC501	
D403	8-719-109-97	DIODE ED6.8ES-B2		IC502	8-759-515-72	IC TDA8304	
D404	8-719-109-97	DIODE ED6.8ES-B2		IC601	8-749-901-65	IC STR54041	
D405	8-719-110-09	DIODE ED8.2ES-B3			*4-368-683-01	SPRING; IC601	
D406	8-719-110-09	DIODE ED8.2ES-B3		IC801	8-759-945-58	IC RC4558P	
D411	8-719-109-97	DIODE ED6.8ES-B2		IC802	8-759-604-39	IC M5F78M12L	
D412	8-719-010-34	DIODE UZ-4.7BSC			*4-389-343-01	SPRING; IC802	
D417	8-719-104-34	DIODE 1S2836				<JACK>	
D418	8-719-104-34	DIODE 1S2836		J401	1-561-534-00	SOCKET 21P	
D426	8-719-911-19	DIODE 1SS119		J1401	1-563-500-11	JACK BLOCK, PIN (L TYPE) 2P	
D427	8-719-911-19	DIODE 1SS119				<COIL>	
D450A	8-719-109-97	DIODE ED6.8ES-B2		L001	1-408-409-00	INDUCTOR 10UH	
D501	8-719-300-33	DIODE RU-3AM		L102	1-408-409-00	INDUCTOR 10UH	
D503	8-719-911-19	DIODE 1SS119		L103	1-408-399-00	INDUCTOR 1.5UH	
D504	8-719-400-18	DIODE MA152WK		L106	1-408-415-00	INDUCTOR 33UH	
D519	8-719-400-18	DIODE MA152WK		L107	1-408-409-00	INDUCTOR 10UH	
D601	Δ 8-719-946-90	DIODE KBU4JL-6088		L110	1-408-409-00	INDUCTOR 10UH	
D602	8-719-976-64	DIODE RGP02-17		L301	1-408-409-00	INDUCTOR 10UH	
D603	8-719-911-55	DIODE U05G		L302	1-408-419-00	INDUCTOR 68UH	
D604	8-719-928-08	DIODE ERD28-08S		L303	1-408-425-00	INDUCTOR 220UH	
D605	8-719-300-33	DIODE RU-3AM		L404	1-408-397-00	INDUCTOR 1UH	
D606	8-719-980-78	DIODE ERA83-006		L405	1-408-409-00	INDUCTOR 10UH	
D607	8-719-300-33	DIODE RU-3AM		L406	1-408-417-00	INDUCTOR 47UH	
D608	8-719-300-33	DIODE RU-3AM		L501	1-404-493-31	COIL	
D609	8-719-911-55	DIODE U05G		L502	1-408-407-00	INDUCTOR 6.8UH	
D610	8-719-911-55	DIODE U05G		L506	1-408-411-00	INDUCTOR 15UH	
D611	8-719-312-40	DIODE R2K		L801	1-407-365-00	COIL, CHOKE	
D801	8-719-945-80	DIODE ERC06-15S		L802	1-420-872-00	COIL, AIR CORE	
D802	8-719-928-08	DIODE ERD28-08S		L804	1-459-390-00	COIL (WITH CORE)	
D803	8-719-300-33	DIODE RU-3AM					
D805	8-719-300-33	DIODE RU-3AM					
D806	8-719-976-64	DIODE RGP02-17					
D807	8-719-300-33	DIODE RU-3AM					
D808	8-719-300-33	DIODE RU-3AM					
D820	8-719-911-19	DIODE 1SS119					

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KV-M1921U
RM-694

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L805	1-459-105-21	COIL(WITH CORE)		JR009	1-216-295-00	METAL GLAZE	0 5% 1/10W
L806	1-459-756-12	COIL, HORIZONTAL LINEARITY		JR010	1-216-295-00	METAL GLAZE	0 5% 1/10W
L807	1-408-239-00	INDUCTOR 4.7MMH		JR011	1-216-295-00	METAL GLAZE	0 5% 1/10W
L808	1-408-226-00	INDUCTOR 82UH		JR012	1-216-295-00	METAL GLAZE	0 5% 1/10W
L1001	1-408-397-00	INDUCTOR 1UH		JR015	1-216-295-00	METAL GLAZE	0 5% 1/10W
L1002	1-408-397-00	INDUCTOR 1UH		JR016	1-216-295-00	METAL GLAZE	0 5% 1/10W
	<IC LINK>			JR017	1-216-295-00	METAL GLAZE	0 5% 1/10W
PS801 Δ	1-532-637-91	LINK, IC 1A		JR018	1-216-295-00	METAL GLAZE	0 5% 1/10W
	<TRANSISTOR>			JR019	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q001	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR020	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q003	8-729-901-01	TRANSISTOR DTC144EK		JR021	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q004	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR022	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q005	8-729-923-54	TRANSISTOR DTA143TK		JR023	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q006	8-729-922-66	TRANSISTOR 2SC2410SN		JR024	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q007	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR026	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q015	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR027	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q016	8-729-901-47	TRANSISTOR DTA145EK		JR028	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q017	8-729-216-22	TRANSISTOR 2SA1162-G		JR029	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q019	8-729-901-06	TRANSISTOR DTA144EK		JR030	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q020	8-729-901-00	TRANSISTOR DTC124EK		JR033	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q104	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR034	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q106	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR036	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q107	8-729-216-22	TRANSISTOR 2SA1162-G		JR037	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q112	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR038	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q114	8-729-901-00	TRANSISTOR DTC124EK		JR039	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q115	8-729-901-00	TRANSISTOR DTC124EK		JR040	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q123	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR041	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q141	8-729-014-99	TRANSISTOR BF959-AMMO		JR042	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR043	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q304	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR051	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q305	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR052	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q307	8-729-216-22	TRANSISTOR 2SA1162-G		JR060	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q310	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR099	1-216-295-00	METAL GLAZE	0 5% 1/10W
Q311	8-729-216-22	TRANSISTOR 2SA1162-G		JR101	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q401	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR102	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q457	8-729-216-22	TRANSISTOR 2SA1162-G		JR103	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR104	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q505	8-729-216-22	TRANSISTOR 2SA1162-G		JR105	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q601	8-729-906-74	TRANSISTOR BC637-16		JR106	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q801	8-729-119-80	TRANSISTOR 2SC2688-LK		JR108	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q802	8-729-925-64	TRANSISTOR BU508AS2		JR109	1-216-296-00	METAL GLAZE	0 5% 1/8W
	*4-389-343-01	SPRING; Q802		JR110	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q803	8-729-202-03	TRANSISTOR 2SD1408-Y		JR111	1-216-296-00	METAL GLAZE	0 5% 1/8W
	*4-389-343-01	SPRING; Q803		JR117	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q1301	8-729-216-22	TRANSISTOR 2SA1162-G		JR118	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q1302	8-729-901-06	TRANSISTOR DTA144EK		JR119	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q1303	8-729-901-01	TRANSISTOR DTC144EK		JR123	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q1304	8-729-120-28	TRANSISTOR 2SC1623-L5L6		JR125	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q1305	8-729-901-01	TRANSISTOR DTC144EK		JR126	1-216-296-00	METAL GLAZE	0 5% 1/8W
Q1306	8-729-901-01	TRANSISTOR DTC144EK		JR127	1-216-296-00	METAL GLAZE	0 5% 1/8W
	<RESISTOR>			JR128	1-216-296-00	METAL GLAZE	0 5% 1/8W
JR003	1-216-295-00	METAL GLAZE	0 5% 1/10W	JR129	1-216-296-00	METAL GLAZE	0 5% 1/8W
JR004	1-216-295-00	METAL GLAZE	0 5% 1/10W	JR130	1-216-296-00	METAL GLAZE	0 5% 1/8W
JR005	1-216-295-00	METAL GLAZE	0 5% 1/10W	JR131	1-216-296-00	METAL GLAZE	0 5% 1/8W
JR006	1-216-295-00	METAL GLAZE	0 5% 1/10W	JR133	1-216-296-00	METAL GLAZE	0 5% 1/8W
JR007	1-216-295-00	METAL GLAZE	0 5% 1/10W	JR134	1-216-296-00	METAL GLAZE	0 5% 1/8W
JR008	1-216-295-00	METAL GLAZE	0 5% 1/10W	JR135	1-216-296-00	METAL GLAZE	0 5% 1/8W
				JR136	1-216-296-00	METAL GLAZE	0 5% 1/8W
				JR137	1-216-296-00	METAL GLAZE	0 5% 1/8W
				JR139	1-216-296-00	METAL GLAZE	0 5% 1/8W
				JR144	1-216-296-00	METAL GLAZE	0 5% 1/8W
				JR146	1-216-296-00	METAL GLAZE	0 5% 1/8W
				JR147	1-216-296-00	METAL GLAZE	0 5% 1/8W
				JR148	1-216-296-00	METAL GLAZE	0 5% 1/8W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
JR149	1-216-296-00	METAL GLAZE	0 5% 1/8W	R064	1-216-091-00	METAL GLAZE	56K 5% 1/10W
JR150	1-216-296-00	METAL GLAZE	0 5% 1/8W	R072	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR151	1-216-296-00	METAL GLAZE	0 5% 1/8W	R075	1-216-248-00	METAL GLAZE	120K 5% 1/8W
JR152	1-216-296-00	METAL GLAZE	0 5% 1/8W	R076	1-216-198-00	METAL GLAZE	1K 5% 1/8W
JR153	1-216-296-00	METAL GLAZE	0 5% 1/8W	R077	1-216-077-00	METAL GLAZE	15K 5% 1/10W
JR155	1-216-296-00	METAL GLAZE	0 5% 1/8W	R078	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR181	1-216-296-00	METAL GLAZE	0 5% 1/8W	R079	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR182	1-216-296-00	METAL GLAZE	0 5% 1/8W	R081	1-216-198-00	METAL GLAZE	1K 5% 1/8W
JR183	1-216-296-00	METAL GLAZE	0 5% 1/8W	R082	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR184	1-216-296-00	METAL GLAZE	0 5% 1/8W	R083	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R001	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R084	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R002	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R087	1-216-027-00	METAL GLAZE	120 5% 1/10W
R003	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R094	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R004	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R095	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R006	1-216-254-00	METAL GLAZE	220K 5% 1/8W	R096	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R007	1-216-190-00	METAL GLAZE	470 5% 1/8W	R097	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R008	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R099	1-216-228-00	METAL GLAZE	18K 5% 1/8W
R009	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R100	1-216-015-00	METAL GLAZE	39 5% 1/10W
R010	1-216-198-00	METAL GLAZE	1K 5% 1/8W	R101	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R011	1-216-035-00	METAL GLAZE	270 5% 1/10W	R102	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R012	1-216-248-00	METAL GLAZE	120K 5% 1/8W	R103	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R013	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R104	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R014	1-216-748-11	METAL GLAZE	39K 5% 1/10W	R105	1-216-109-00	METAL GLAZE	330K 5% 1/10W
R015	1-216-230-00	METAL GLAZE	22K 5% 1/8W	R106	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R016	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R109	1-216-190-00	METAL GLAZE	470 5% 1/8W
R017	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R110	1-249-437-11	CARBON	47K 5% 1/4W
R018	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R111	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R019	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R112	1-249-411-11	CARBON	330 5% 1/4W
R020	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R113	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R021	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R114	1-216-238-00	METAL GLAZE	47K 5% 1/8W
R022	1-216-198-00	METAL GLAZE	1K 5% 1/8W	R115	1-216-045-00	METAL GLAZE	680 5% 1/10W
R023	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	R116	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R024	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R118	1-216-037-00	METAL GLAZE	330 5% 1/10W
R025	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R119	1-216-045-00	METAL GLAZE	680 5% 1/10W
R026	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R120	1-216-043-00	METAL GLAZE	560 5% 1/10W
R028	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R122	1-216-043-00	METAL GLAZE	560 5% 1/10W
R029	1-216-041-00	METAL GLAZE	470 5% 1/10W	R130	1-249-409-11	CARBON	220 5% 1/4W
R030	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R131	1-216-041-00	METAL GLAZE	470 5% 1/10W
R031	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R132	1-216-035-00	METAL GLAZE	270 5% 1/10W
R034	1-216-238-00	METAL GLAZE	47K 5% 1/8W	R136	1-216-041-00	METAL GLAZE	470 5% 1/10W
R035	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R138	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R038	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R139	1-216-295-00	METAL GLAZE	0 5% 1/10W
R040	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R140	1-216-037-00	METAL GLAZE	330 5% 1/10W
R041	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R141	1-216-021-00	METAL GLAZE	68 5% 1/10W
R042	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R142	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R043	1-215-900-11	METAL OXIDE	22K 5% 2W	R143	1-216-033-00	METAL GLAZE	220 5% 1/10W
R044	1-216-105-00	METAL GLAZE	220K 5% 1/10W	R144	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R045	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R147	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R046	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R148	1-216-017-00	METAL GLAZE	47 5% 1/10W
R047	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R149	1-216-182-00	METAL GLAZE	220 5% 1/8W
R048	1-216-202-00	METAL GLAZE	1.5K 5% 1/8W	R151	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R049	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R152	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R050	1-216-250-00	METAL GLAZE	150K 5% 1/8W	R153	1-215-867-00	METAL OXIDE	470 5% 1W
R051	1-216-295-00	METAL GLAZE	0 5% 1/10W	R199	1-216-295-00	METAL GLAZE	0 5% 1/10W
R052	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R201	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R053	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R202	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R054	1-249-395-11	CARBON	15 5% 1/4W	R203	1-216-298-00	METAL GLAZE	2.2 5% 1/10W
R055	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R204	1-247-741-11	CARBON	150 5% 1/2W
R056	1-216-041-00	METAL GLAZE	470 5% 1/10W	R205	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R058	1-249-434-11	CARBON	27K 5% 1/4W	R206	1-216-035-00	METAL GLAZE	270 5% 1/10W
R059	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R207	1-216-298-00	METAL GLAZE	2.2 5% 1/10W
R060	1-216-234-00	METAL GLAZE	33K 5% 1/8W	R303	1-216-033-00	METAL GLAZE	220 5% 1/10W
R061	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R304	1-216-033-00	METAL GLAZE	220 5% 1/10W
R062	1-216-242-00	METAL GLAZE	68K 5% 1/8W				

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

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R305	1-216-033-00	METAL GLAZE	220 5% 1/10W	R426	1-216-045-00	METAL GLAZE	680 5% 1/10W
R306	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R427	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R307	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R428	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R309	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W	R430	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R310	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R431	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R311	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	R432	1-249-403-11	CARBON	68 5% 1/4W
R312	1-216-174-00	METAL GLAZE	100 5% 1/8W	R433	1-216-079-00	METAL GLAZE	18K 5% 1/10W
R313	1-216-174-00	METAL GLAZE	100 5% 1/8W	R434	1-216-029-00	METAL GLAZE	150 5% 1/10W
R314	1-216-025-00	METAL GLAZE	100 5% 1/10W	R435	1-216-033-00	METAL GLAZE	220 5% 1/10W
R315	1-216-047-00	METAL GLAZE	820 5% 1/10W	R436	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R317	1-216-202-00	METAL GLAZE	1.5K 5% 1/8W	R437	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R320	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R501	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W
R321	1-216-023-00	METAL GLAZE	82 5% 1/10W	R502	1-247-743-11	CARBON	220 5% 1/2W
R322	1-216-055-00	METAL GLAZE	1.5K 5% 1/10W	R503	1-249-437-11	CARBON	47K 5% 1/4W
R323	1-216-192-00	METAL GLAZE	560 5% 1/8W	R504	1-216-017-00	METAL GLAZE	47K 5% 1/10W
R324	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R505	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R325	1-249-410-11	CARBON	270 5% 1/4W	R507	1-216-350-11	METAL OXIDE	1.2 5% 1W F
R326	1-216-035-00	METAL GLAZE	270 5% 1/10W	R508	1-215-867-00	METAL OXIDE	470 5% 1W
R327	1-216-121-00	METAL GLAZE	1M 5% 1/10W	R510	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R328	1-216-001-00	METAL GLAZE	10 5% 1/10W	R511	1-216-244-00	METAL GLAZE	82K 5% 1/8W
R329	1-216-109-00	METAL GLAZE	330K 5% 1/10W	R512	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R330	1-216-244-00	METAL GLAZE	82K 5% 1/8W	R513	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R331	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R514	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R332	1-216-270-00	METAL GLAZE	1M 5% 1/8W	R515	1-216-683-11	METAL CHIP	22K 0.50% 1/10W
R333	1-216-091-00	METAL GLAZE	56K 5% 1/10W	R516	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R334	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R517	1-216-035-00	METAL GLAZE	270 5% 1/10W
R335	1-216-001-00	METAL GLAZE	10 5% 1/10W	R518	1-216-033-00	METAL GLAZE	220 5% 1/10W
R336	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R519	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R337	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R520	1-216-258-00	METAL GLAZE	330K 5% 1/8W
R338	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R521	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R344	1-247-848-11	CARBON	5.1K 5% 1/4W	R522	1-215-863-11	METAL OXIDE	100 5% 1W
R345	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R523	1-247-754-11	CARBON	1.5K 5% 1/2W
R347	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R524	1-216-099-00	METAL GLAZE	120K 5% 1/10W
R348	1-216-033-00	METAL GLAZE	220 5% 1/10W	R525	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R349	1-216-029-00	METAL GLAZE	150 5% 1/10W	R527	1-215-869-11	METAL OXIDE	1K 5% 1W
R350	1-216-041-00	METAL GLAZE	470 5% 1/10W	R532	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R351	1-216-043-00	METAL GLAZE	560 5% 1/10W	R533	1-216-133-00	METAL GLAZE	3.3M 5% 1/10W
R352	1-216-039-00	METAL GLAZE	390 5% 1/10W	R534	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R353	1-249-438-11	CARBON	56K 5% 1/4W	R535	1-216-107-00	METAL GLAZE	270K 5% 1/10W
R354	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R539	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R355	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R542	1-216-025-00	METAL GLAZE	100 5% 1/10W
R356	1-216-041-00	METAL GLAZE	470 5% 1/10W	R543	1-249-408-11	CARBON	180 5% 1/4W
R357	1-216-039-00	METAL GLAZE	390 5% 1/10W	R545	1-216-282-00	METAL GLAZE	3.3M 5% 1/8W
R358	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R548	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R359	1-216-238-00	METAL GLAZE	47K 5% 1/8W	R601	Δ 1-205-909-11	WIREWOUND	3.3 5% 10W F
R363	1-216-222-00	METAL GLAZE	10K 5% 1/8W	R602	1-214-923-00	CARBON	270K 5% 1/2W
R364	1-216-222-00	METAL GLAZE	10K 5% 1/8W	R603	1-215-903-11	METAL OXIDE	68K 5% 2W
R402	1-216-172-00	METAL GLAZE	82 5% 1/8W	R604	1-247-752-11	CARBON	1K 5% 1/2W
R403	1-216-023-00	METAL GLAZE	82 5% 1/10W	R606	1-212-877-11	FUSIBLE	68 5% 1/4W
R404	1-216-023-00	METAL GLAZE	82 5% 1/10W	R608	1-215-884-11	METAL OXIDE	47 5% 2W
R405	1-216-023-00	METAL GLAZE	82 5% 1/10W	R609	1-207-905-00	WIREWOUND	0.27 10% 2W
R406	1-216-226-00	METAL GLAZE	15K 5% 1/8W	R611	1-214-915-00	CARBON	120K 5% 1/2W
R407	1-216-226-00	METAL GLAZE	15K 5% 1/8W	R612	1-219-137-11	FUSIBLE	0.33 5% 1/4W
R408	1-216-091-00	METAL GLAZE	56K 5% 1/10W	R613	1-217-811-11	FUSIBLE	0.47 5% 1/4W
R409	1-216-023-00	METAL GLAZE	82 5% 1/10W	R614	1-216-037-00	METAL GLAZE	330 5% 1/10W
R411	1-216-037-00	METAL GLAZE	330 5% 1/10W	R615	1-216-013-00	METAL GLAZE	33 5% 1/10W
R412	1-216-037-00	METAL GLAZE	330 5% 1/10W	R617	1-216-354-11	METAL OXIDE	2.7 5% 1W F
R413	1-216-037-00	METAL GLAZE	330 5% 1/10W	R620	1-216-465-11	METAL OXIDE	27K 5% 2W
R414	1-216-041-00	METAL GLAZE	470 5% 1/10W	R621	1-216-465-11	METAL OXIDE	27K 5% 2W
R420	1-216-182-00	METAL GLAZE	220 5% 1/8W	R628	1-218-265-11	METAL GLAZE	8.2M 5% 1W
R421	1-216-449-11	METAL OXIDE	56 5% 2W	R801	1-217-778-11	FUSIBLE	1K 5% 1W F
R423	1-216-095-00	METAL GLAZE	82K 5% 1/10W	R802	1-217-819-91	FUSIBLE	2.7K 5% 1/4W
R424	1-216-222-00	METAL GLAZE	10K 5% 1/8W	R803	1-216-352-11	METAL OXIDE	1.8 5% 1W F
R425	1-216-033-00	METAL GLAZE	220 5% 1/10W				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<COIL>					
L701	1-407-496-00	INDUCTOR 2.2MMH		C1	1-126-101-11	ELECT 100MF	20% 16V
		<TRANSISTOR>		C2	1-163-038-00	CERAMIC CHIP 0.1MF	25V
Q701	8-729-230-49	TRANSISTOR 2SC2712-YG		C3	1-124-120-11	ELECT 220MF	20% 16V
Q702	8-729-230-49	TRANSISTOR 2SC2712-YG		C4	1-163-077-00	CERAMIC CHIP 0.1MF	50V
Q703	8-729-230-49	TRANSISTOR 2SC2712-YG		C5	1-124-120-11	ELECT 220MF	20% 16V
Q704	8-729-906-70	TRANSISTOR BF871		C6	1-163-038-00	CERAMIC CHIP 0.1MF	25V
Q705	8-729-906-70	TRANSISTOR BF871		C7	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
Q706	8-729-906-70	TRANSISTOR BF871		C8	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
Q707	8-729-200-17	TRANSISTOR 2SA1091-0		C9	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
Q708	8-729-200-17	TRANSISTOR 2SA1091-0		C10	1-163-038-00	CERAMIC CHIP 0.1MF	25V
Q709	8-729-200-17	TRANSISTOR 2SA1091-0		C11	1-163-038-00	CERAMIC CHIP 0.1MF	25V
		<RESISTOR>		C12	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R701	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W		C13	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R702	1-216-210-00	METAL GLAZE 3.3K 5% 1/8W		C14	1-124-927-11	ELECT 4.7MF	20% 50V
R703	1-216-045-00	METAL GLAZE 680 5% 1/10W		C16	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R704	1-216-045-00	METAL GLAZE 680 5% 1/10W		C17	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R705	1-216-017-00	METAL GLAZE 47 5% 1/10W		C23	1-124-927-11	ELECT 4.7MF	20% 50V
R706	1-216-017-00	METAL GLAZE 47 5% 1/10W		C26	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R707	1-216-017-00	METAL GLAZE 47 5% 1/10W		C27	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R708	1-216-198-00	METAL GLAZE 1K 5% 1/8W		C28	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R709	1-216-196-00	METAL GLAZE 820 5% 1/8W		C29	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R710	1-249-413-11	CARBON 470 5% 1/4W		C32	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R711	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W		C33	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R712	1-247-893-11	CARBON 390K 5% 1/4W				<CONNECTOR>	
R713	1-247-883-00	CARBON 150K 5% 1/4W		CNV1	*1-565-393-11	CONNECTOR, BOARD TO BOARD	
R714	1-216-198-00	METAL GLAZE 1K 5% 1/8W		CNV2	*1-565-393-11	CONNECTOR, BOARD TO BOARD	
R715	1-216-198-00	METAL GLAZE 1K 5% 1/8W				<DIODE>	
R716	1-216-049-00	METAL GLAZE 1K 5% 1/10W		D1	8-719-105-91	DIODE RD5.6M-B2	
R717	1-202-824-00	SOLID 3.3K 10% 1/2W		D3	8-719-104-34	DIODE 1S2836	
R718	1-202-824-00	SOLID 3.3K 10% 1/2W		D5	8-719-104-34	DIODE 1S2836	
R719	1-202-824-00	SOLID 3.3K 10% 1/2W		D6	8-719-400-18	DIODE MA152WK	
R720	1-216-463-00	METAL OXIDE 12K 5% 2W		D9	8-719-106-17	DIODE RD6.8M-B2	
R721	1-216-463-00	METAL OXIDE 12K 5% 2W				<IC>	
R722	1-216-463-00	METAL OXIDE 12K 5% 2W		IC2	8-759-045-54	IC SAA5246P/E/M4A	
R726	1-202-719-00	SOLID 1M 10% 1/2W		IC3	8-759-510-49	IC FCB61C65L-70P	
R727	1-202-838-00	SOLID 100K 10% 1/2W				<COIL>	
R728	1-202-842-11	SOLID 220K 10% 1/2W		L1	1-408-403-00	INDUCTOR 3.3UH	
R729	1-216-349-00	METAL OXIDE 1 5% 1W F		L2	1-408-407-00	INDUCTOR 6.8UH	
R731	1-202-719-00	SOLID 1M 10% 1/2W		L3	1-408-407-00	INDUCTOR 6.8UH	
R732	1-216-262-00	METAL GLAZE 470K 5% 1/8W		L4	1-408-407-00	INDUCTOR 6.8UH	
R734	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W				<IC LINK>	
R735	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		PS1	Δ 1-532-679-91	LINK, IC (ICP-N15) 0.6A	
R736	1-249-421-11	CARBON 2.2K 5% 1/4W				<TRANSISTOR>	
		<VARIABLE RESISTOR>		Q1	8-729-900-53	TRANSISTOR DTC114EK	
RV701	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K		Q2	8-729-920-92	TRANSISTOR 2SD2096-EF	
RV702	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K		Q3	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
RV703	1-230-641-11	RES, ADJ, METAL GLAZE 2.2K		Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
RV704	1-230-641-11	RES, ADJ, METAL GLAZE 2.2K		Q5	8-729-807-87	TRANSISTOR 2SB1295-UL6	
RV705	1-230-798-11	RES, ADJ, METAL GLAZE 90M		Q6	8-729-807-87	TRANSISTOR 2SB1295-UL6	
		A-1645-018-A V BOARD, COMPLETE		Q7	8-729-807-87	TRANSISTOR 2SB1295-UL6	
		<CAPACITOR>		Q9	8-729-901-04	TRANSISTOR DTA114EK	
				Q10	8-729-901-01	TRANSISTOR DTC144EK	
				Q11	8-729-901-01	TRANSISTOR DTC144EK	

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V J1

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<RESISTOR>				*1-641-621-11 J1 BOARD *****			
JR01	1-216-295-00	METAL GLAZE 0	5% 1/10W	<CAPACITOR>			
JR02	1-216-295-00	METAL GLAZE 0	5% 1/10W	C2200	1-163-031-11	CERAMIC CHIP 0.01MF	50V
JR03	1-216-295-00	METAL GLAZE 0	5% 1/10W	<CONNECTOR>			
JR08	1-216-295-00	METAL GLAZE 0	5% 1/10W	CNJ2001*	1-568-878-51	PIN, CONNECTOR 3P	
JR09	1-216-295-00	METAL GLAZE 0	5% 1/10W	<JACK>			
JR11	1-216-295-00	METAL GLAZE 0	5% 1/10W	J2201	1-562-837-11	JACK	
JR14	1-216-296-00	METAL GLAZE 0	5% 1/8W	<COIL>			
JR15	1-216-296-00	METAL GLAZE 0	5% 1/8W	L2201	1-408-409-00	INDUCTOR 10UH	
JR17	1-216-295-00	METAL GLAZE 0	5% 1/10W	*****			
JR18	1-216-296-00	METAL GLAZE 0	5% 1/8W	MISCELLANEOUS *****			
JR19	1-216-296-00	METAL GLAZE 0	5% 1/8W	Δ 1-426-359-31 COIL, DEMAGNETIZATION Δ 1-451-279-21 DEFLECTION YOKE (Y19PXA) 1-452-032-00 MAGNET, DISK; 10MM ϕ 1-452-094-00 MAGNET, ROTABLE DISK; 15MM ϕ 1-452-277-00 MAGNET, BMC 1-503-258-21 SPEAKER Δ 1-590-762-11 CORD, POWER (WITH PLUG)			
JR20	1-216-296-00	METAL GLAZE 0	5% 1/8W	V901	Δ 8-737-951-05	PICTURE TUBE (A46JNL10X)	
JR21	1-216-296-00	METAL GLAZE 0	5% 1/8W	*****			
JR23	1-216-295-00	METAL GLAZE 0	5% 1/10W	ACCESSORIES AND PACKING MATERIALS *****			
JR24	1-216-296-00	METAL GLAZE 0	5% 1/8W	PART NO. DESCRIPTION REMARK ----- ----- ----- *4-034-216-01 CUSHION (UPPER) (ASSY) *4-034-217-01 CUSHION (LOWER) (ASSY) *4-034-218-01 INDIVIDUAL CARTON 4-200-865-61 MANUAL, INSTRUCTION (ENGLISH) *4-384-027-01 BAG, PROTECTION			
JR25	1-216-296-00	METAL GLAZE 0	5% 1/8W	REMOTE COMMANDER			
JR26	1-216-296-00	METAL GLAZE 0	5% 1/8W	1-465-562-11	CONTROL UNIT, REMOTE (RM-694)		
JR202	1-216-295-00	METAL GLAZE 0	5% 1/10W	4-035-049-01	COVER, BATTERY (FOR RM-694)		
JR203	1-216-295-00	METAL GLAZE 0	5% 1/10W	*****			
JR221	1-216-295-00	METAL GLAZE 0	5% 1/10W	*****			
JR222	1-216-295-00	METAL GLAZE 0	5% 1/10W	*****			
R1	1-218-326-11	METAL GLAZE 470	5% 1/2W	*****			
R2	1-216-214-00	METAL GLAZE 4.7K	5% 1/8W	*****			
R3	1-216-049-00	METAL GLAZE 1K	5% 1/10W	*****			
R4	1-216-025-00	METAL GLAZE 100	5% 1/10W	*****			
R5	1-216-047-00	METAL GLAZE 820	5% 1/10W	*****			
R6	1-216-001-00	METAL GLAZE 10	5% 1/10W	*****			
R7	1-216-083-00	METAL GLAZE 27K	5% 1/10W	*****			
R8	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W	*****			
R9	1-216-308-00	METAL GLAZE 4.7	5% 1/10W	*****			
R10	1-218-325-11	METAL GLAZE 120	5% 1/4W	*****			
R11	1-218-325-11	METAL GLAZE 120	5% 1/4W	*****			
R12	1-218-325-11	METAL GLAZE 120	5% 1/4W	*****			
R13	1-216-025-00	METAL GLAZE 100	5% 1/10W	*****			
R14	1-216-001-00	METAL GLAZE 10	5% 1/10W	*****			
R15	1-216-013-00	METAL GLAZE 33	5% 1/10W	*****			
R16	1-216-013-00	METAL GLAZE 33	5% 1/10W	*****			
R17	1-216-013-00	METAL GLAZE 33	5% 1/10W	*****			
R18	1-216-025-00	METAL GLAZE 100	5% 1/10W	*****			
R19	1-216-025-00	METAL GLAZE 100	5% 1/10W	*****			
R21	1-216-013-00	METAL GLAZE 33	5% 1/10W	*****			
R22	1-216-168-00	METAL GLAZE 56	5% 1/8W	*****			
R23	1-216-214-00	METAL GLAZE 4.7K	5% 1/8W	*****			
R40	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	*****			
R42	1-216-049-00	METAL GLAZE 1K	5% 1/10W	*****			
R49	1-216-049-00	METAL GLAZE 1K	5% 1/10W	*****			
R50	1-216-296-00	METAL GLAZE 0	5% 1/8W	*****			
<VARIABLE RESISTOR>				*****			
RV1	1-238-012-11	RES, ADJ, CARBON 1K		*****			
<CRYSTAL>				*****			
X1	1-579-266-31	CRYSTAL VIBRATOR		*****			