

***SERVICE  
MANUAL***

**MODEL 1080 A MONITOR**

**PN 314041-02**



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# **MODEL 1080 A MONITOR**

## **PN 314041-02**

### **Commodore-Amiga, Inc.**

**1200 Wilson Drive, West Chester, Pennsylvania 19380 U.S.A.**

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## 1. SPECIFICATIONS

CRT	:	13", 90°, 0.39 mm Dot (Nonglare, grey)
Power Input	:	AC 120V, 60 Hz
Power Consumption	:	70W Typ.
Input Signals	:	NTSC Comp./Sep. video/Digital RGBI/ Analog RGB
Input Levels	:	Comp.: 1Vp-p, 75 ohms, Termination Digital RGBI : TTL levels Analog RGB : 0.7Vp-p
Audio Input	:	1.0Vp-p
Audio Output	:	1.0W
Video Bandwidth	:	NTSC : 4.2 MHz Digital RGBI : 15.32 MHz Analog RGB : 10 MHz
Scanning Frequency	:	Horizontal : 15.75 KHz Vertical : 60 Hz
Display Format	:	RGBI mode : 2000 Characters (80 col. x 25 lines, 6 x 7 dot array) Video mode : 1000 Characters (40 col. x 25 lines, 6 x 7 dot array)
Display Size	:	RGBI mode Horizontal : 250 mm Vertical : 182 mm
Resolution	:	RGBI mode : 2000 Characters Horizontal : 640 dots Vertical : 400 lines (interlaced) Video mode : 1000 Characters Horizontal : 320 dots Vertical : 400 lines (interlaced)
Dimensions	:	360 (W) x 327.5 (H) x 376 (D) mm
Weight	:	11.5 kg

## 2. X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this color monitor is 26.5 kV at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances exceed 27.5 kV. Each time a color monitor requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure on page 13 of this manual. It is recommended that the reading of the high voltage be recorded as part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This color monitor is equipped with a Fail Safe (FS) circuit which prevents the color monitor from producing an excessively high voltage even if the B+ voltage

increases abnormally. Each time the color monitor is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure on page 13 of this manual.

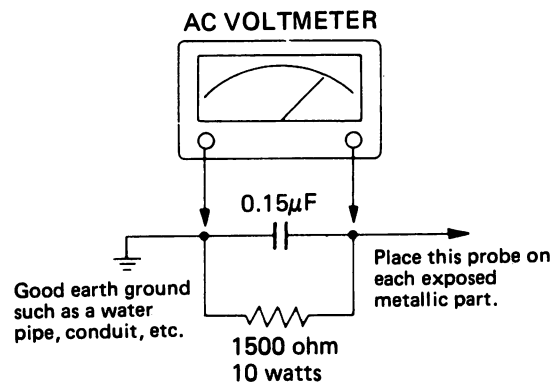
3. The only source of X-RAY RADIATION in this color monitor is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some parts in this color monitor have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

## 3. SAFETY PRECAUTION

**WARNING:** Service should not be attempted by anyone unfamiliar with the necessary precautions on this color monitor. The following are the necessary precautions to be observed before servicing this chassis.

1. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
2. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as: non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
3. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as terminals, screwheads, metal overlays, control shafts etc., to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 mfd, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 mfd capacitor. Reverse the AC plug at the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 1.5 volts RMS. This corresponds to 1.0 milliamp, AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



## 4. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by shading on the schematic diagram and the parts list.

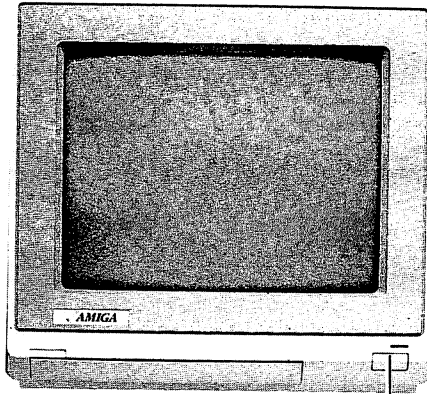
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

## 5. SERVICE NOTES

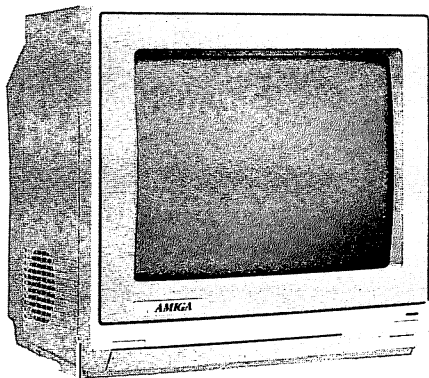
1. When replacing parts or circuit boards, clamp the lead wires to terminals before soldering.
2. When replacing a high wattage resistor (oxide metal film resistor) on circuit board, keep the resistor 10 mm (1/2 in.) away from circuit board.
3. Keep wires away from high voltage or high temperature components.

## 6. LOCATION FOR USER CONTROLS

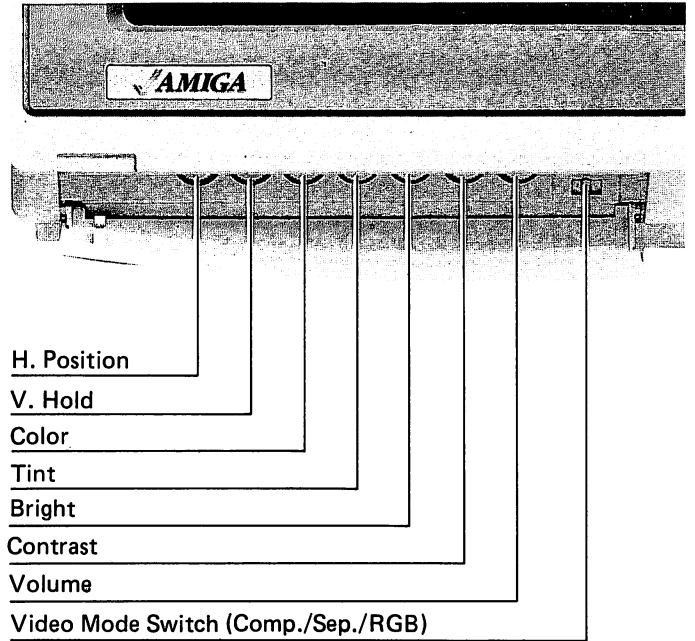
### Front View



Power Switch

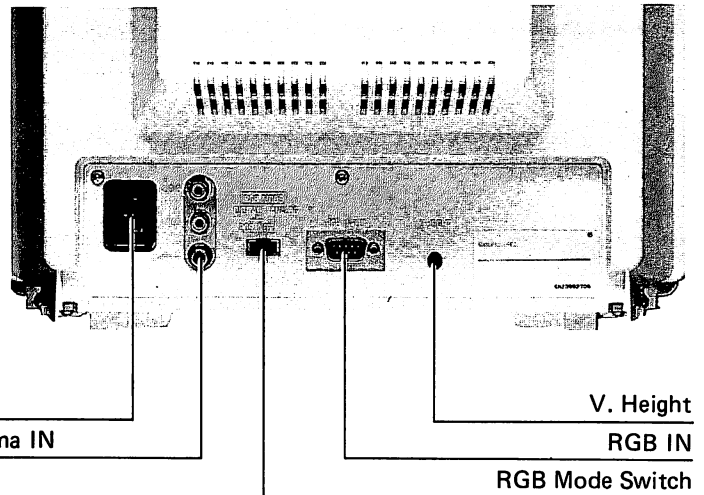


Headphone Jack



- H. Position
- V. Hold
- Color
- Tint
- Bright
- Contrast
- Volume
- Video Mode Switch (Comp./Sep./RGB)

### Rear View



- AC Receptacle
- Audio/Video/Chroma IN

- V. Height
- RGB IN
- RGB Mode Switch

## 7. CHASSIS VIEW

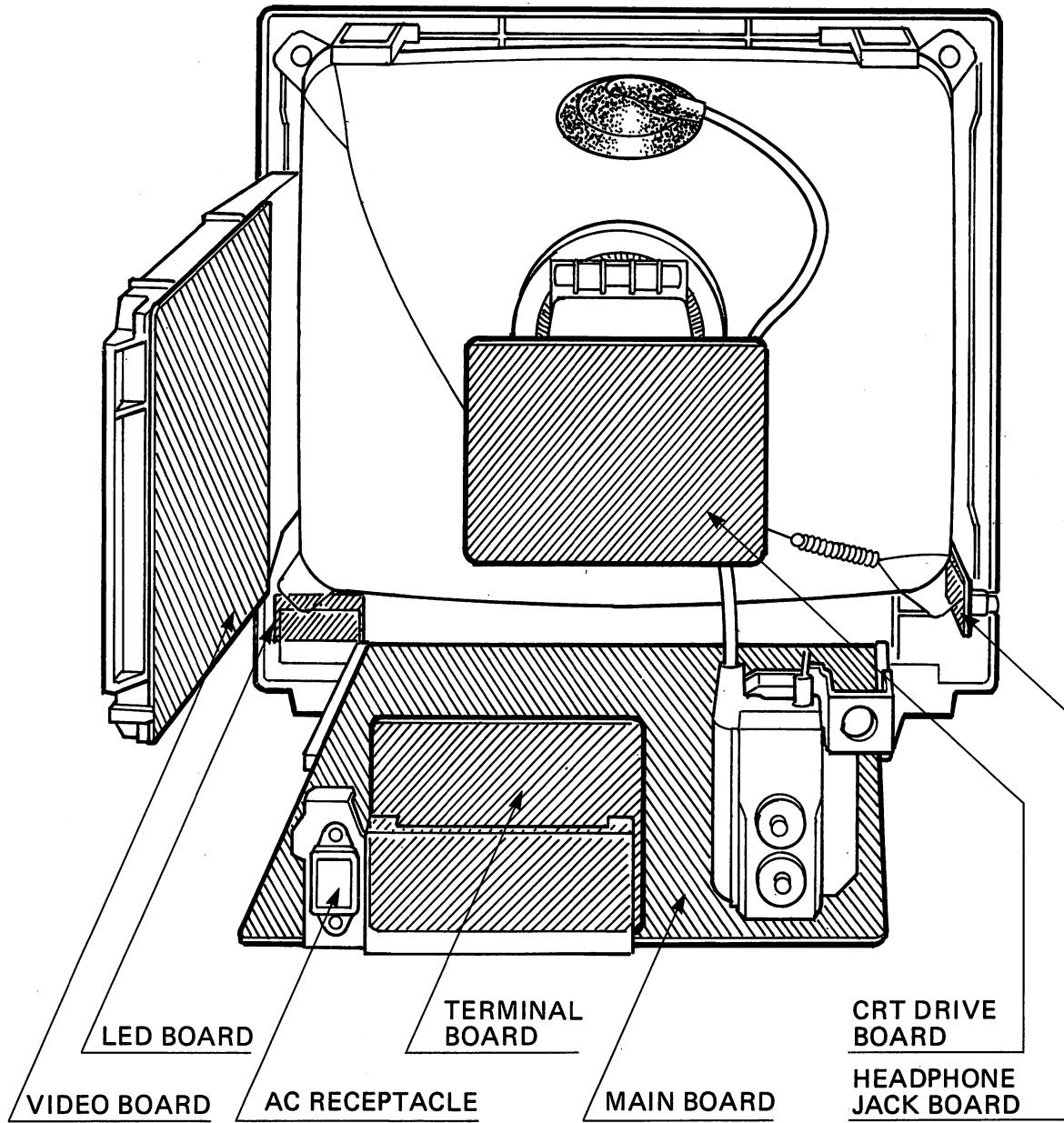
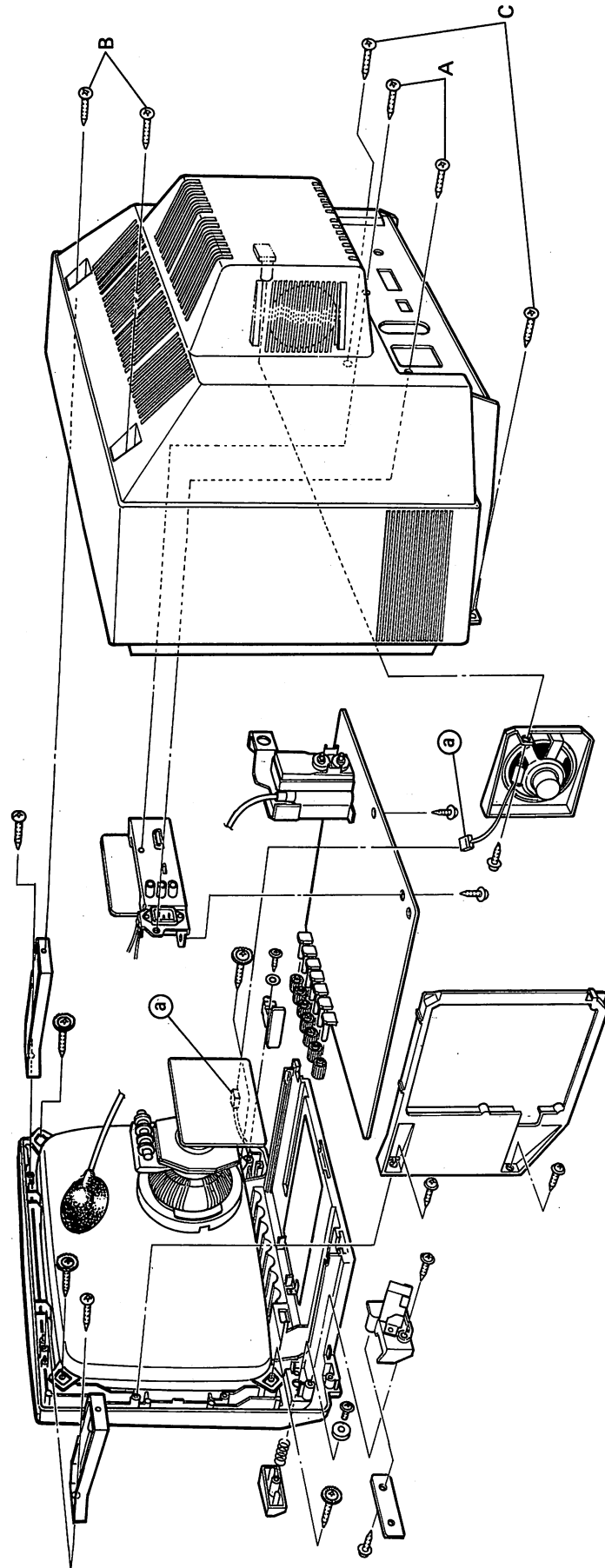


Figure 1. Chassis View

## 8. MECHANICAL DISASSEMBLY



### REAR COVER REMOVAL

1. Remove the screws "A".
2. Remove the screws "B" and "C".
3. Slightly open the rear cover, then remove the speaker connecting socket **a**.

Figure 2-1. Mechanical Disassembly

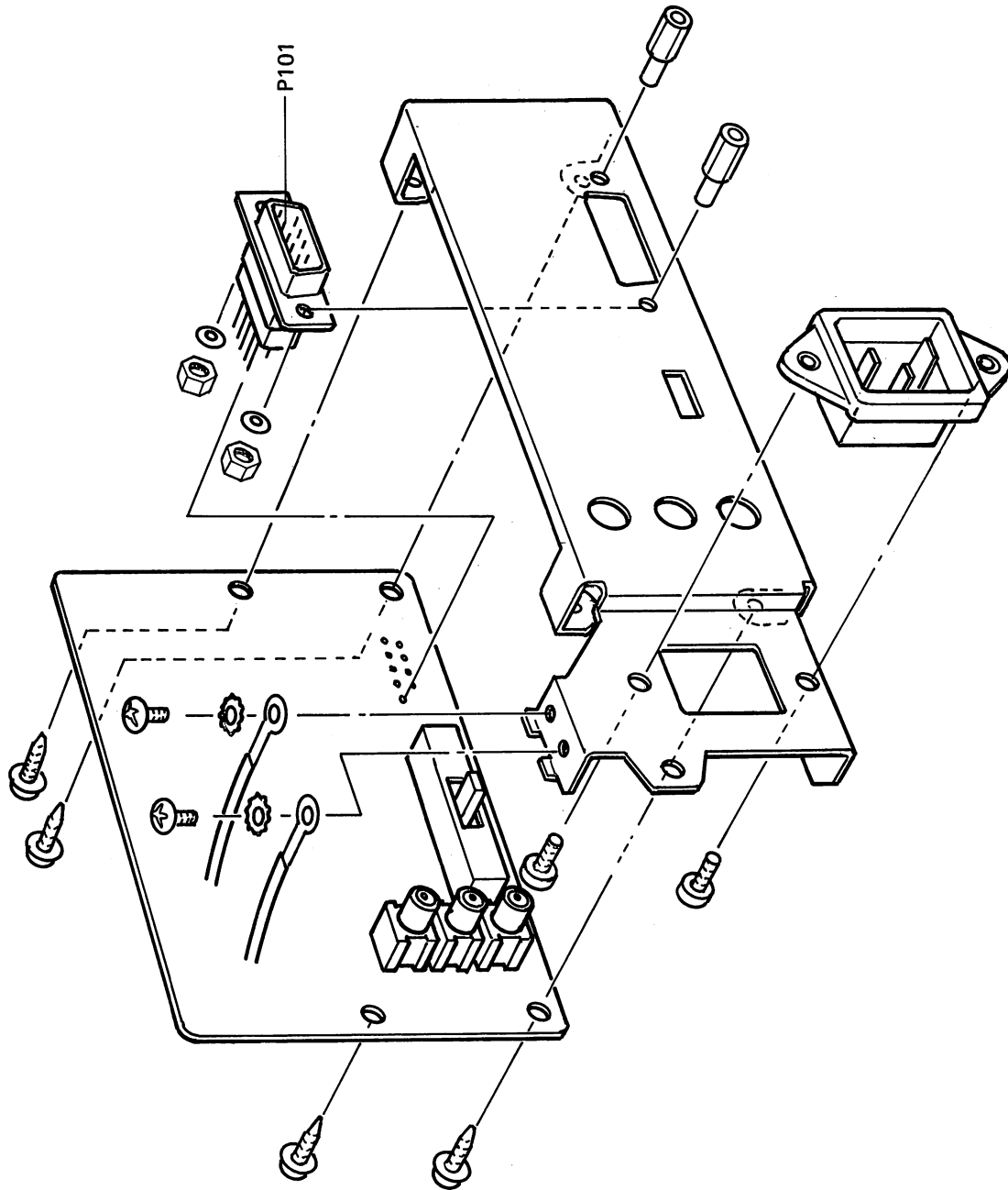
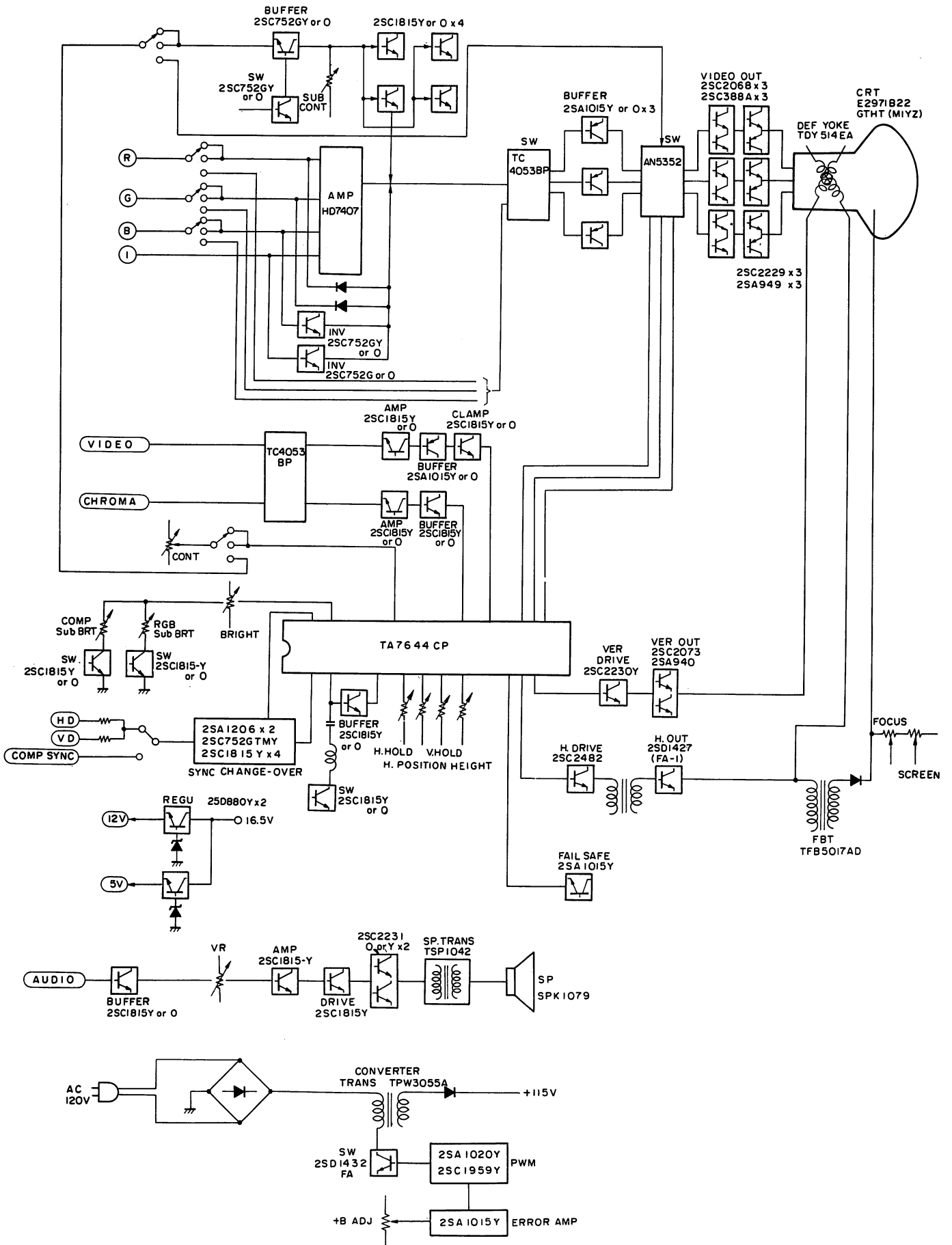


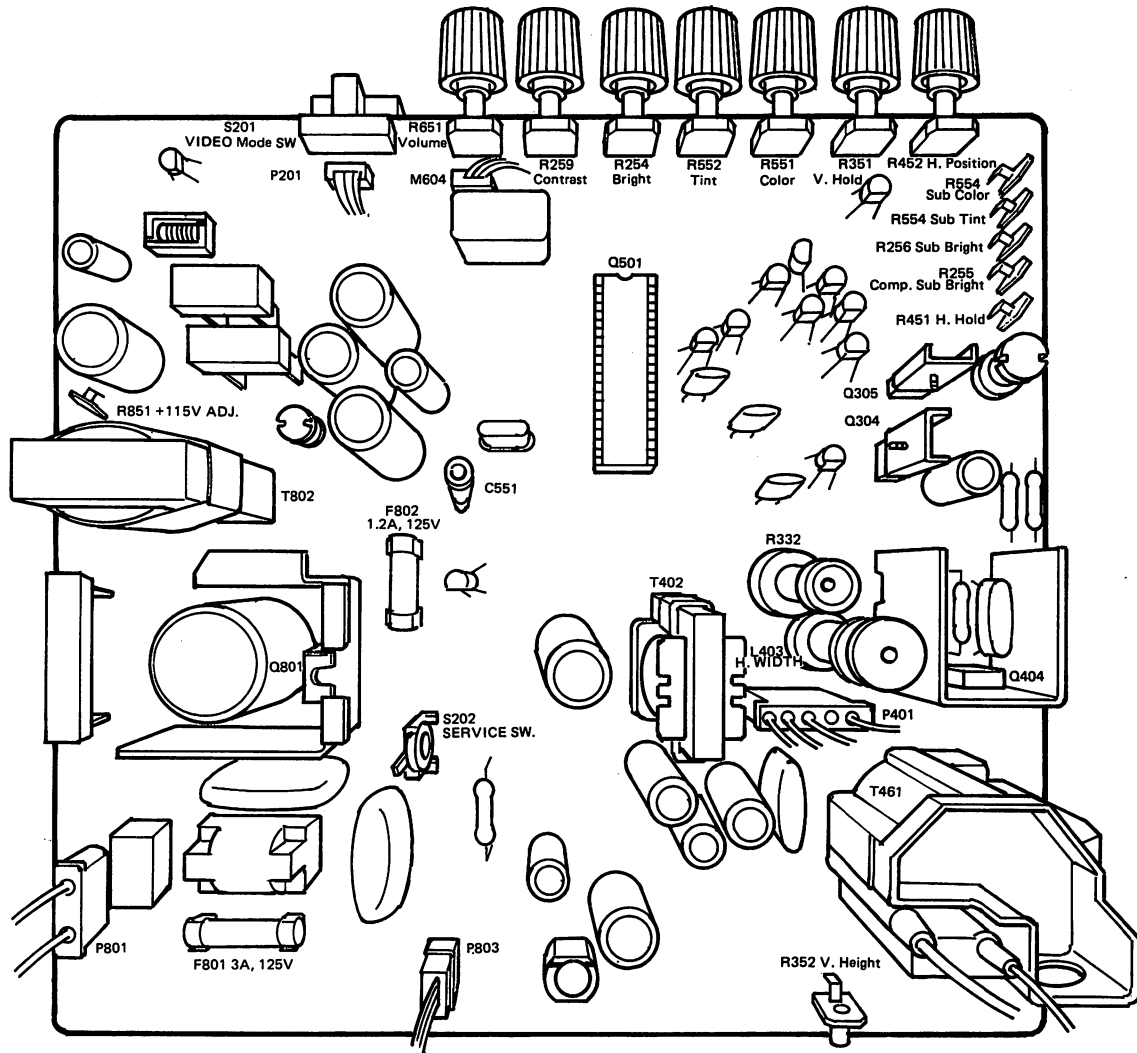
Figure 2-2. Mechanical Disassembly  
(Video Terminal Board)



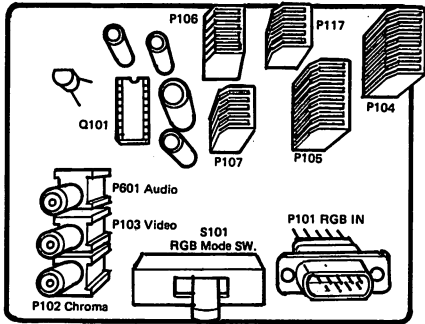
# 9. BLOCK DIAGRAM



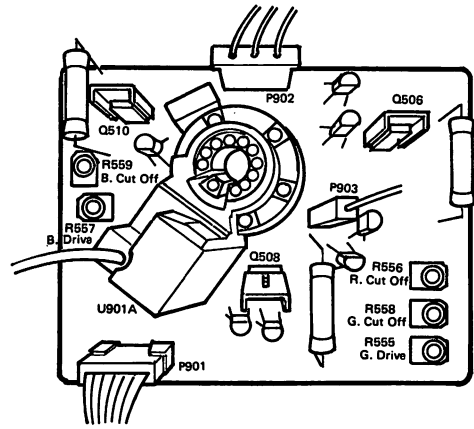
# 10. PARTS LAYOUT



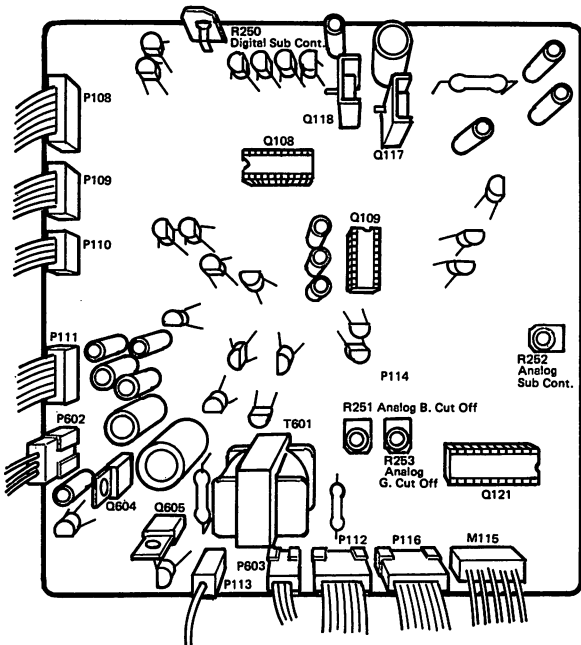
MAIN BOARD PW5253  
Figure 3.



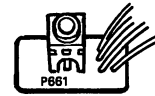
TERMINAL BOARD PW5252-3  
Figure 4.



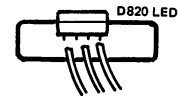
CRT DRIVE BOARD PW5252-2  
Figure 5.



VIDEO BOARD PW5252-1  
Figure 6.



HEADPHONE BOARD PW5252-4  
Figure 7.



LED BOARD PW5252-5  
Figure 8.

**WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.**

## 11. INSTALLATION AND SERVICE ADJUSTMENTS

### HORIZONTAL HOLD ADJUSTMENT

- (1) Connect the color monitor to a white pattern signal.
- (2) Set the brightness control to maximum.
- (3) Using a short jumper, connect terminal **(N)** of the main board to terminal **+12V**.
- (4) Turn the H. HOLD control (R451) and set it where the white pattern picture stops (i.e. there is no horizontal bar).
- (5) Remove the short jumper.

### VERTICAL HOLD ADJUSTMENT

- (1) Connect the color monitor to a white pattern signal.
- (2) Set the brightness control to click point.
- (3) Turn V. HOLD control (R351) and set it to the center of vertical hold range.

### HORIZONTAL POSITION ADJUSTMENT

[NOTE] This adjustment must always be preceded by horizontal hold adjustment.

- (1) Connect the color monitor to a white pattern signal.
- (2) Set the brightness control to click point.
- (3) Turn the H. POSITION control (R452) to ensure that an equal space can be obtained on the right and left sides of the screen.

### VERTICAL POSITION ADJUSTMENT

[NOTE] This adjustment must always be preceded by vertical hold adjustment.

- (1) Connect the color monitor to a white pattern signal.
- (2) Set the brightness control to click point.
- (3) Turn the V. POSITION control (R353) to ensure that an equal space can be obtained at the top and bottom of the screen.

### HORIZONTAL AMPLITUDE ADJUSTMENT

[NOTE] This adjustment must always be preceded by horizontal hold adjustment, horizontal position adjustment.

- (1) Connect the color monitor to an "H" character pattern signal.
- (2) Set the brightness control to click point.
- (3) Turn the H. WIDTH coil (L403) until  $H = 250 \pm 6$  mm.

### VERTICAL AMPLITUDE ADJUSTMENT

[NOTE] This adjustment must always be preceded by vertical hold adjustment and vertical picture position adjustment.

- (1) Connect the color monitor to a white pattern signal.
- (2) Set the brightness control to click point.
- (3) Turn the V. HEIGHT control (R352) until the picture height equals  $182 \pm 5$  mm.

## FOCUS ADJUSTMENT

1. Connect the color monitor to an "H" character signal.
2. Turn the focus control to obtain the best focus in the portion between the center and the left top corner of the display area.

## WHITE BALANCE ADJUSTMENT

### ■ NTSC Composite

1. Set the switch (S201) to COMP.
2. Connect the monitor to a white pattern signal of composite.
3. Set the COLOR control to minimum.
4. Turn the SCREEN control (on T461) fully counterclockwise.
5. Set the service switch at SERVICE.
6. Turn the RGB CUTOFF controls (R556, R558, R559) to obtain each CRT cathode voltage (KR, KG, KB) will be 100V DC using a high impedance voltmeter.
7. Slowly turn the SCREEN control clockwise until any two horizontal color bars appear.
8. Turn the CUTOFF controls counterclockwise so that two horizontal color bars of RGB (in the statement 7) disappear.
9. Turn the SCREEN control clockwise again until the third horizontal color bar appears.
10. Adjust the first and second color CUTOFF controls so that the horizontal color bar will be white.
11. If the white horizontal bar is glittering, turn the SCREEN control counterclockwise until the bar glitters slightly.
12. Set the service switch at NORMAL position.
13. Set the BRIGHTNESS and CONTRAST controls to maximum.
14. Adjust the GREEN and BLUE DRIVE controls (R555, R557) to obtain proper white balanced picture in high light area.
15. Rotate the BRIGHTNESS and CONTRAST controls to obtain dark gray raster. Then check the white balance in low brightness. If the white balance is not proper, adjust the CUTOFF controls (only two CUTOFF controls in the statement 10.) to obtain proper white balanced picture in low light area.
16. Check the white balance again. If it's not good, re-touch the CUTOFF controls and DRIVE controls to obtain a good white balance in both low and high light areas.

### ■ RGB

1. This adjustment must always be preceded by white balance adjustment of composite.
2. Set the switch (S201) to RGB and (S101) to Analog RGB.
3. Connect the monitor to a white pattern signal of Analog RGB.
4. Adjust the GREEN and BLUE CUTOFF controls (R253, R251) so as a good white balance in both low and high light areas.

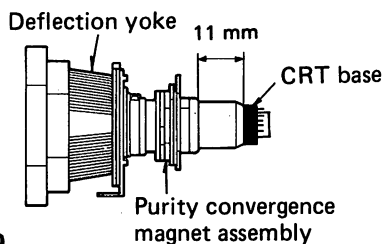


Figure 9.

## SUB-BRIGHTNESS ADJUSTMENT

1. Connect the monitor to a black pattern signal.
2. Set the CONTRAST and BRIGHTNESS controls to click position.

### ■ NTSC Composite

1. Set the switch (S201) to COMP.
2. Set the COLOR control to minimum.
3. Adjust the COMPO SUB-BRIGHTNESS (R255) so that the raster is slightly visible.

### ■ RGB

1. Set the switch (S201) to RGB and (S101) to Analog RGB.
2. Adjust the RGB SUB-BRIGHTNESS (R256) so that the raster is slightly visible.
3. Connect the monitor to an "H" character signal (2000 cha.).
4. Mount a brightness meter to the center of display area.
5. Adjust the SUB CONTRAST control (R252) to obtain 38 ft-L.
6. Set the switch (S101) to Digital RGBI.
7. Connect the monitor to an "H" character signal (2000 cha.).
8. Mount a brightness meter to the center of display area.
9. Adjust the SUB CONTRAST control (R250) to obtain 38 ft-L.

## CONVERGENCE MAGNET ASSEMBLY POSITIONING

Convergence magnet assembly and rubber wedges need mechanical positioning. Refer to figure 9.

## COLOR PURITY ADJUSTMENT

1. Allow the system to receive a white pattern signal.
2. Turn the CONTRAST and BRIGHTNESS controls to the maximum.
3. Preheat more than 30 minutes.
4. Using the degausser coil, degauss the picture tube.
5. Loosen the clamp screw of the yoke and slide the yoke backward.
6. Remove the Rubber Wedges.
7. Slide yoke toward the picture tube.
8. Receive green raster pattern signal.
9. Rotate and spread the tabs of the purity magnet (See Figure 11.) around the neck of the picture tube until impurity area at four corners are equal.
10. Viewing the screen, slide the yoke backwards until the complete screen presents a uniform green color.
11. With the yoke remaining in the position (10), check that the screen presents a uniform red color and a uniform blue color, respectively by Red and Blue raster pattern signal.
12. Viewing the screen, turn the yoke and tighten the clamp screw of the yoke, when the picture becomes horizontal.
13. Proceed with convergence adjustment.

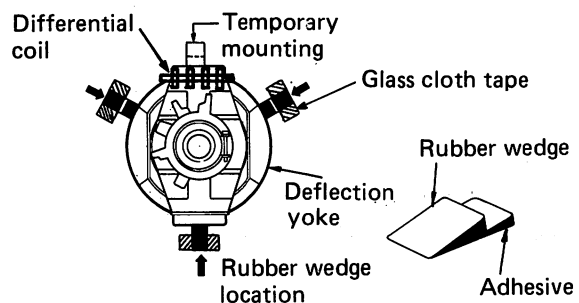


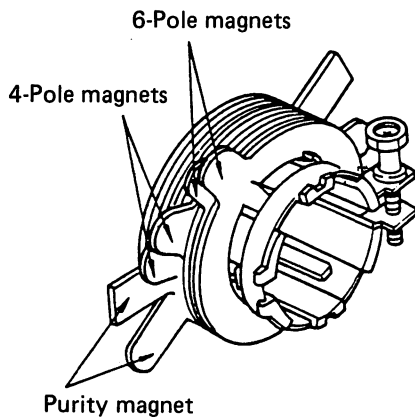
Figure 10.

## CONVERGENCE ADJUSTMENTS

[NOTE] Before attempting any convergence adjustments, the color monitor should be operated for at least fifteen minutes.

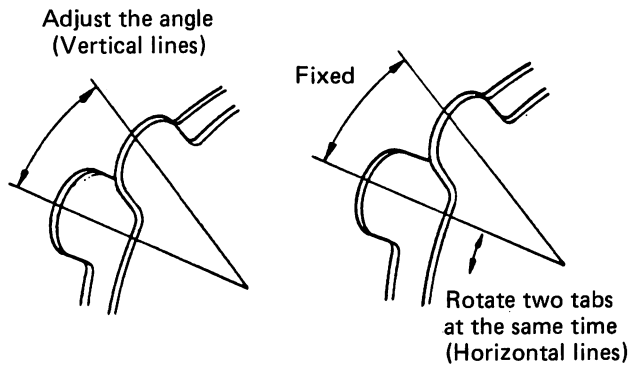
### ■ Center Convergence Adjustment

1. Allow the system to receive a crossbar pattern signal.
2. Adjust the BRIGHTNESS and CONTRAST controls for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 12) and superimpose red and blue vertical lines in the center area of the picture screen. (See figure 13.)
4. Turn both tabs at the same time keeping the constant angle to superimpose red and blue horizontal lines at the center of the screen. (See figure 12.)
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line with green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3, 4, 5, keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets interact and make dot movement complex.



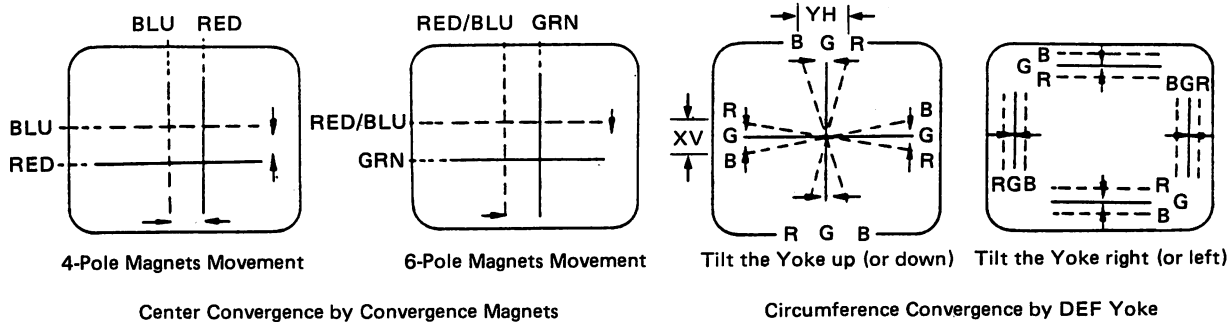
Convergence magnet assembly

Figure 11.



Adjustment of magnets

Figure 12.



Center Convergence by Convergence Magnets

Circumference Convergence by DEF Yoke

Figure 13. Dot Movement Pattern

### ■ Circumference Convergence Adjustment

[NOTE] This adjustment requires Rubber Wedges and Glass Cloth Tapes.

1. Place a wedge as shown in figure 10 temporarily.
2. Tilt front of the deflection yoke up or down to obtain better convergence of YH on top and bottom then adjust differential coil of deflection yoke to obtain better convergence of XV on left and right. (See figure 13.) Push the mounted wedge into the space between the picture tube and the yoke to hold the yoke temporarily.
3. Place other wedge into bottom space.
4. Tilt front of the yoke right or left to obtain better convergence in circumference. (See figure 13.)
5. Hold the yoke position and put another wedge in either upper space. Place the wedge on the picture tube to hold the yoke.
6. Detach the temporarily mounted wedge and put it in another upper space. Place it on the picture tube to fix the yoke.
7. After placing three wedges, recheck overall convergence. Tighten the screw firmly to hold the yoke tightly in place.
8. Stick three glass cloth tapes on wedges as shown in figure 10.

## COLOR SYNC. ALIGNMENT

1. Apply a color bar signal and warm up for five minutes.
2. Connect a capacitor (0.47 mfd) between terminal TP-42 and the junction of C204 and C205.
3. Connect a resistor (1k ohm) between pin 13 of IC501 and +11 volt source line.
4. Set the controls as follows:  
CONTRAST: Minimum  
TINT: Click  
COLOR: Maximum
5. Adjust the color sync. variable capacitor (C551) on the Main Board so that the color bar pattern stands still or drifts slowly across the picture screen.

6. Remove the capacitor and the resistor.
7. Check that the color sync. is stable with signal and power on-off operation. If the color is slow to appear or the color sync. is out of order, retouch the color sync. variable capacitor (C551) for proper color monitor.

## SUB COLOR · SUB TINT ADJUSTMENT

1. Apply a rainbow color signal of composite.
2. Set the CONTRAST, COLOR and TINT controls to click position.
3. Adjust the SUB TINT (R553) and SUB COLOR (R554) controls to obtain a good tint and color respectively.

## 12. HIGH VOLTAGE CHECK

**CAUTION:** There is no HIGH VOLTAGE ADJUSTMENT on this chassis. The +115 volt power supply must be properly adjusted to insure the correct high voltage.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the color monitor. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).

3. High voltage shall be below 27.5kV.
4. Rotate the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit (27.5kV) under any conditions.

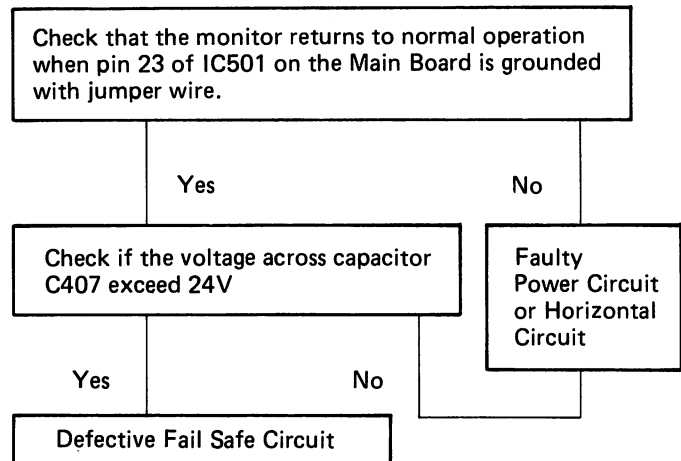
## 13. FS CIRCUIT CHECK

The Fail Safe (FS) circuit check is indispensable for the final check in the servicing. Checking should be done following the steps below.

1. Turn the power switch on and adjust customer controls for normal operation.
2. Temporarily short TP-Ⓡ and TP-ⓧ on Main board with a jumper wire. Raster and sound will disappear.
3. The color monitor must remain in this state even after removing the jumper wire. This indicates that the FS circuit is functioning properly.
4. To obtain a picture again, temporarily turn the color monitor off and allow the FS circuit more than 30 seconds to reset. Then turn the power switch on to produce a normal picture.

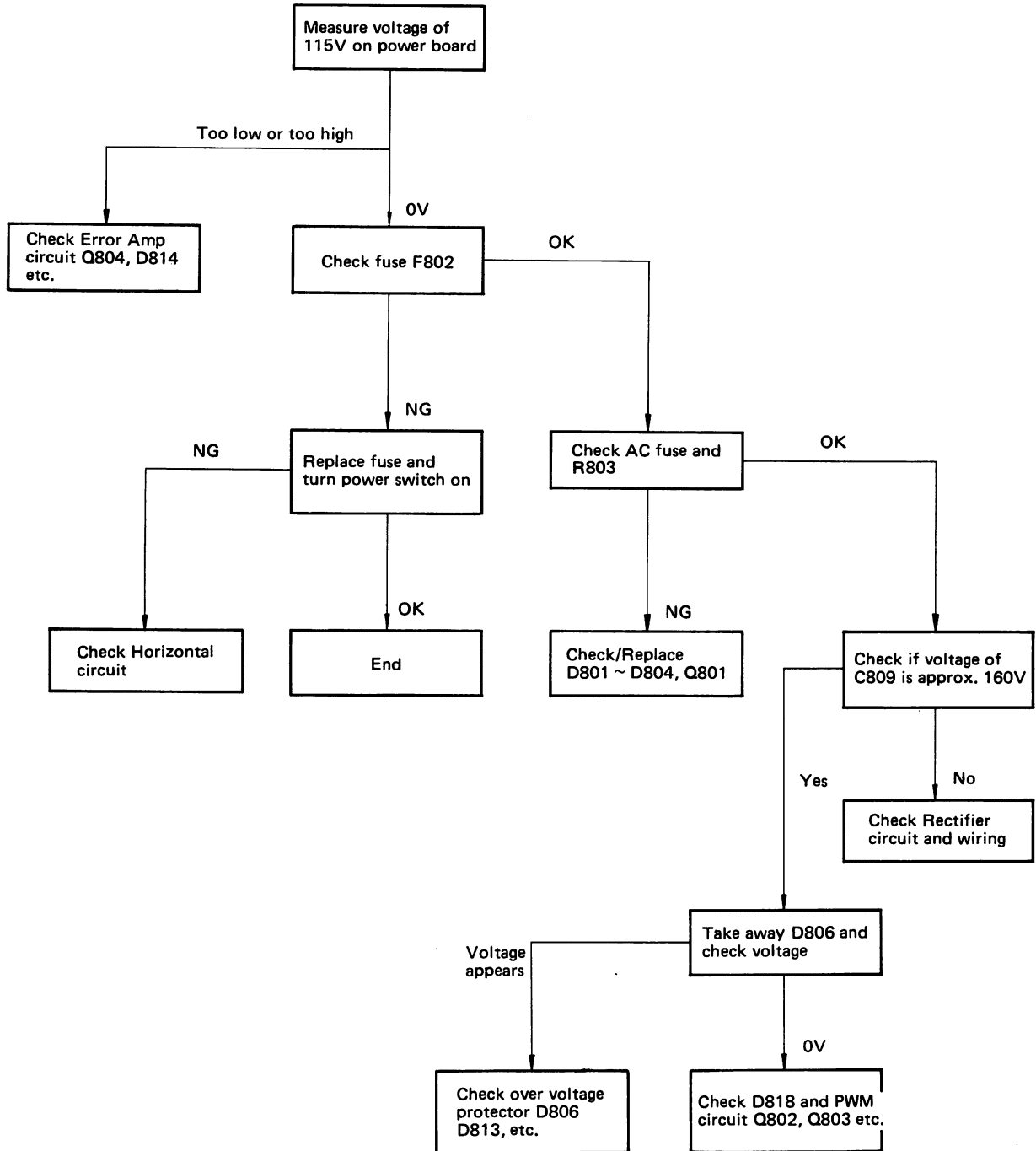
### FS circuit

The FS circuit samples horizontal pulses should the high voltage rise above normal limits. The FS circuit activates and prevents excessive anode voltage from being developed.



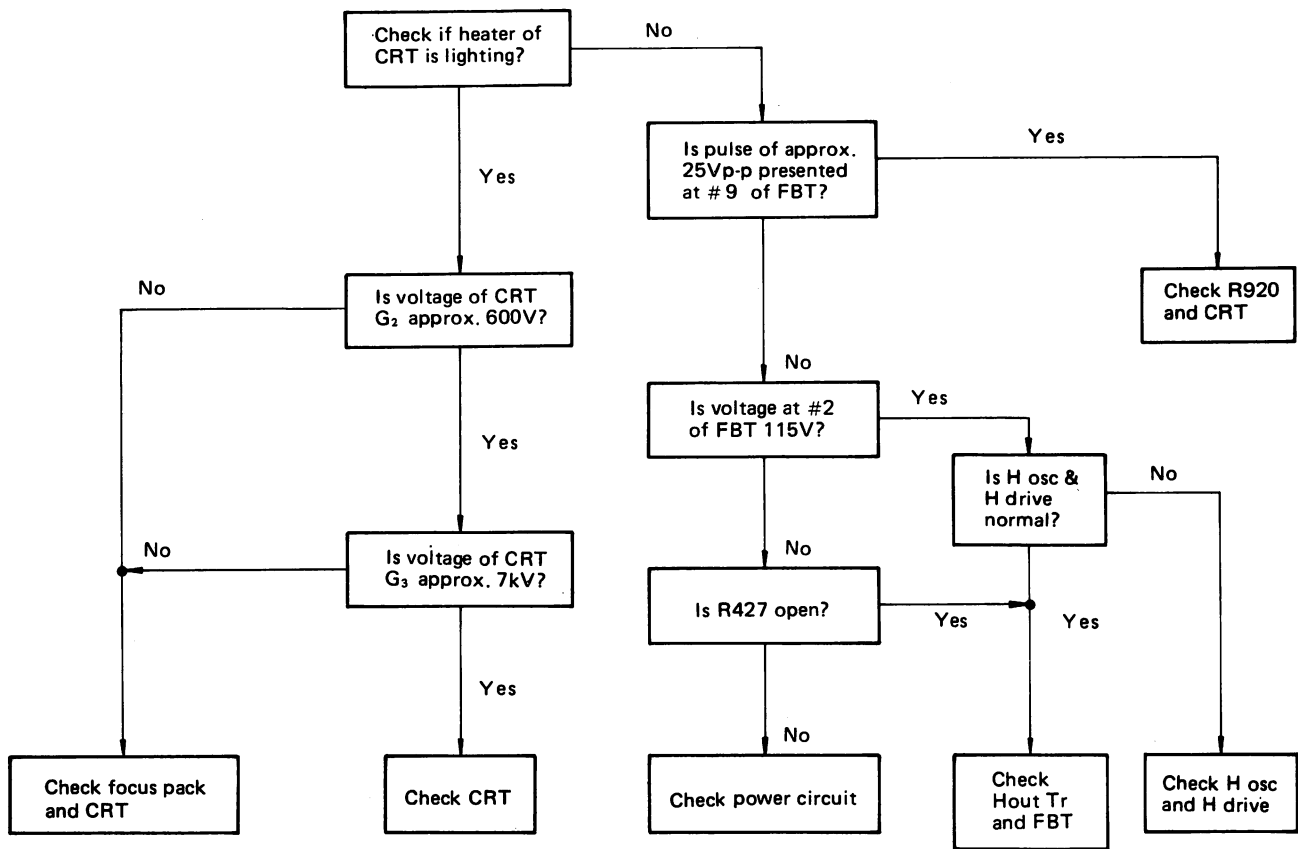
# 14. TROUBLESHOOTING CHARTS

## POWER CIRCUIT

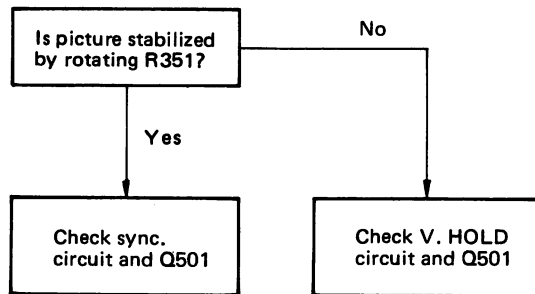




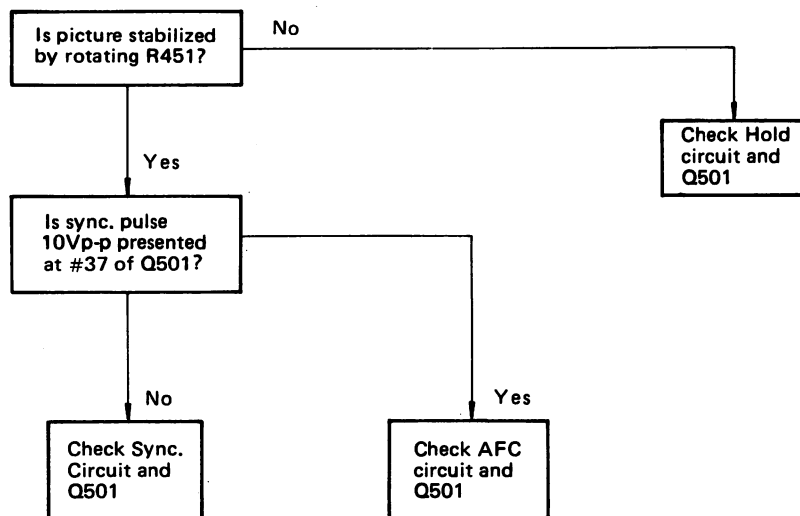
# NO RASTER



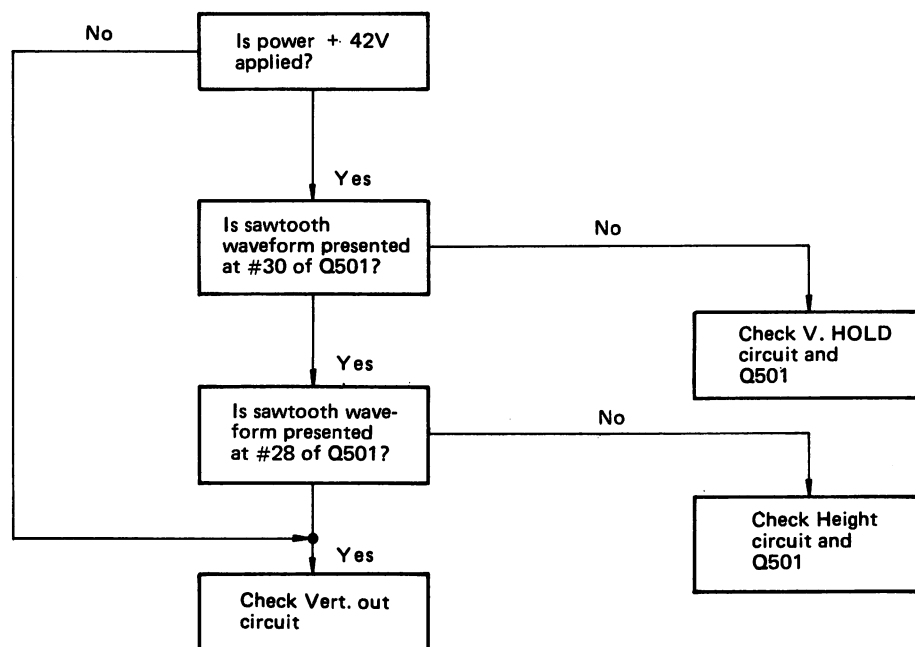
# NO VERTICAL SYNC.



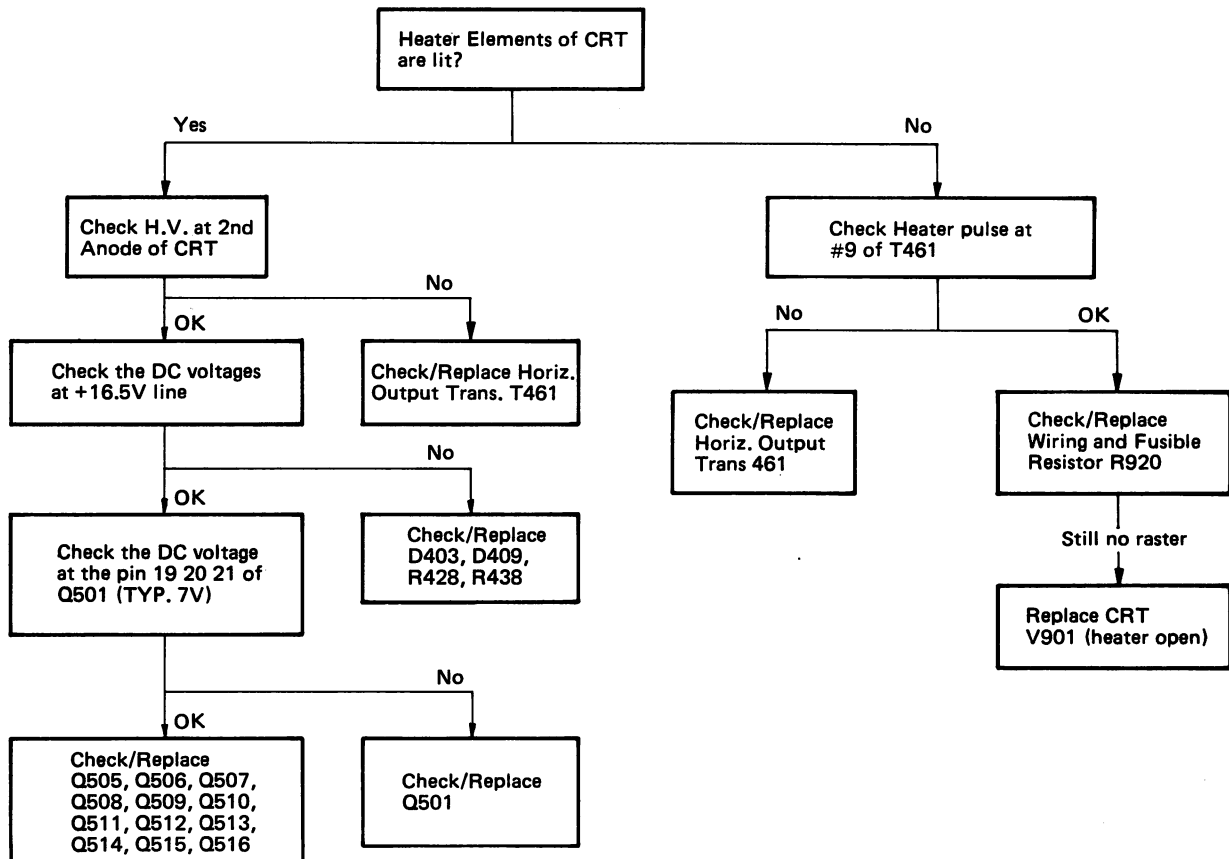
## NO HORIZONTAL SYNC.



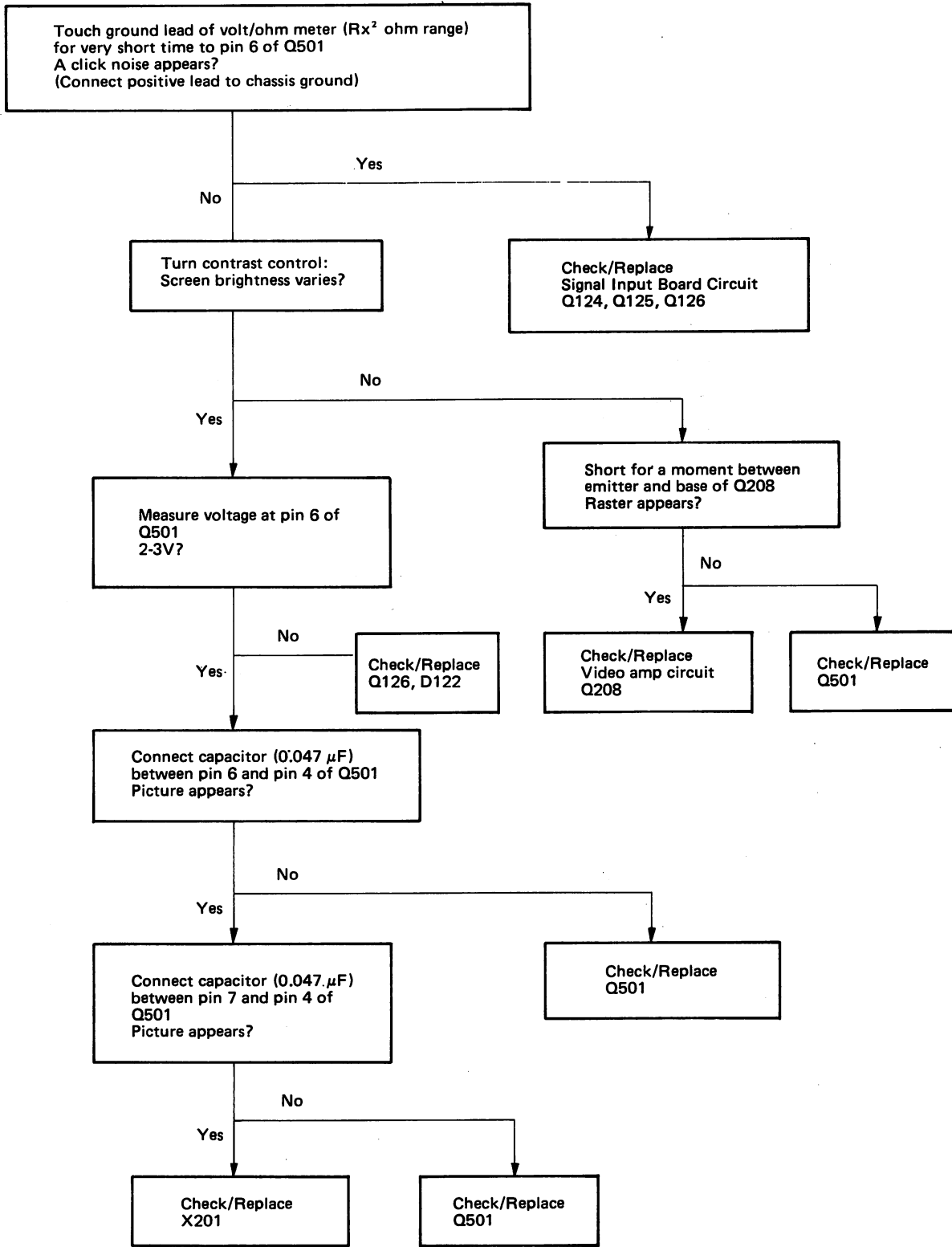
## NO VERTICAL SWEEP



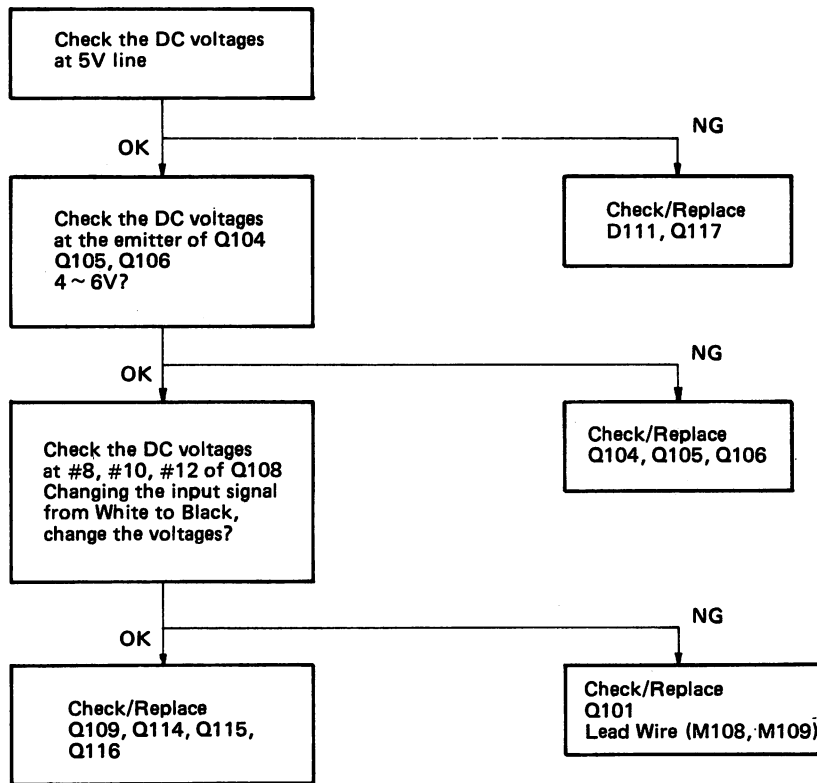
# NO RASTER (SOUND OK) – NTSC COMPOSITE



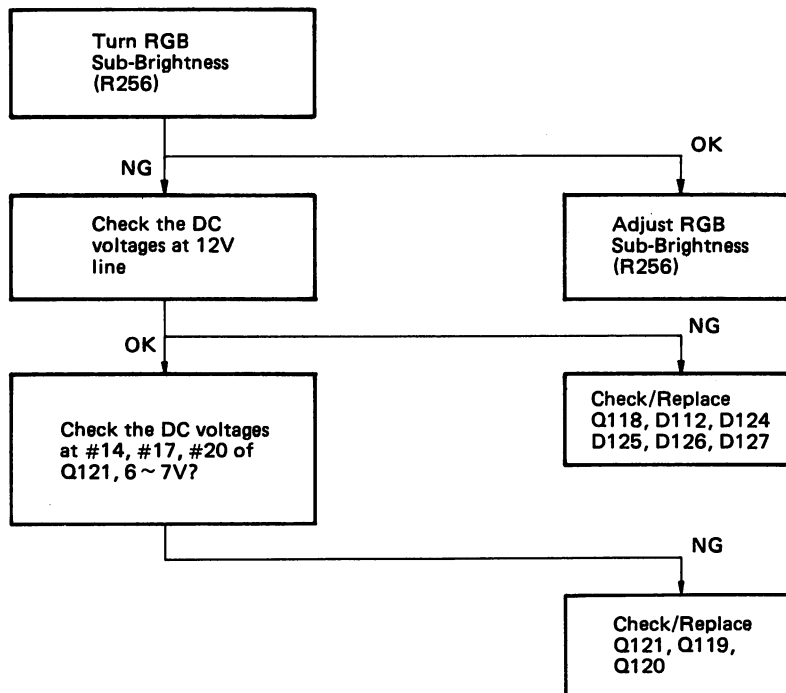
**NO PICTURE AND NORMAL SOUND – NTSC COMPOSITE**



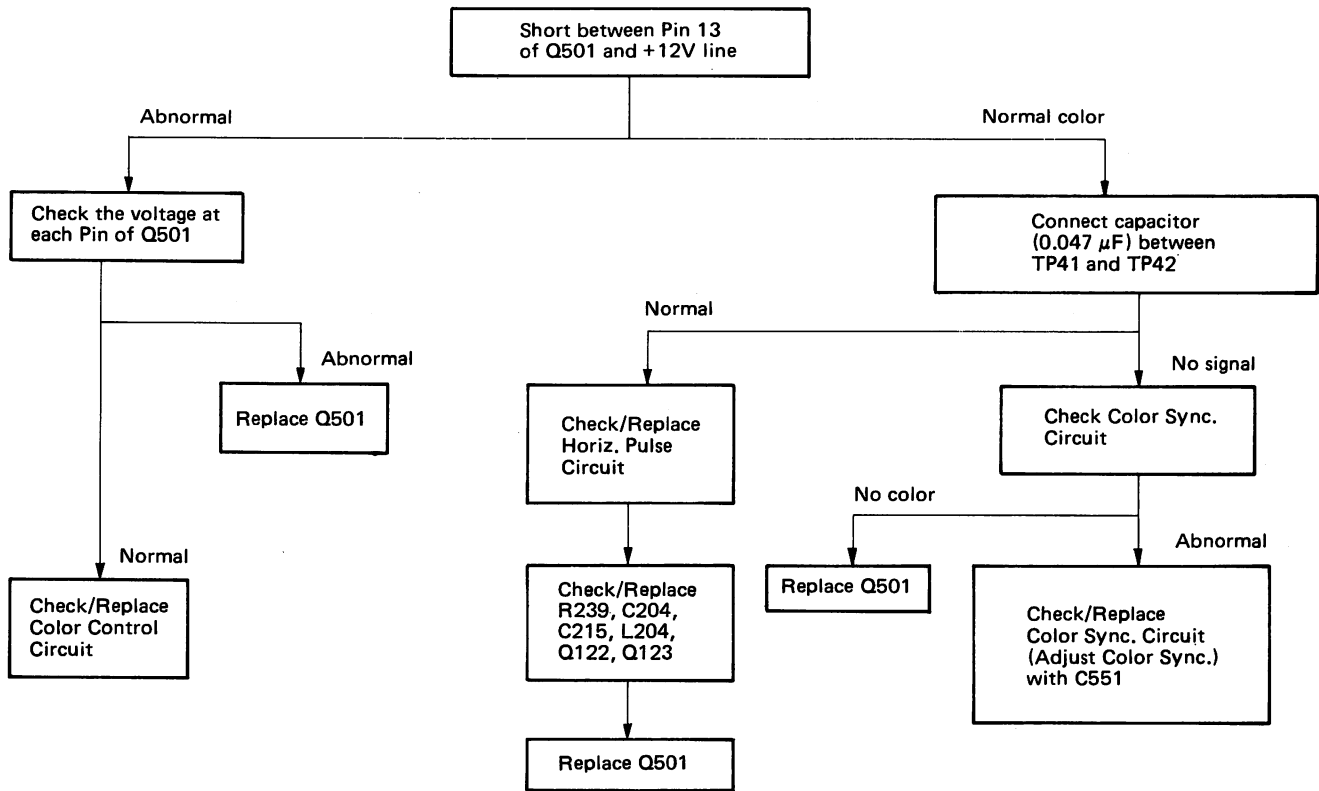
**NO PICTURE – RGB (NTSC COMPO OK)**



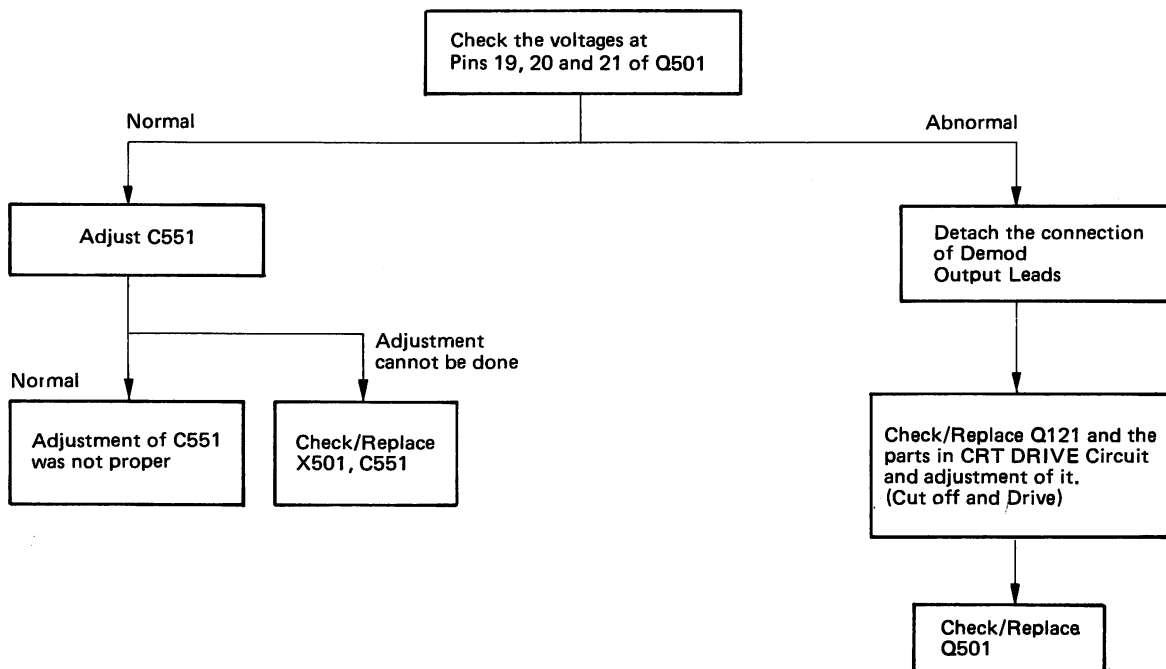
**NO RASTER – RGB (NTSC COMPO OK)**



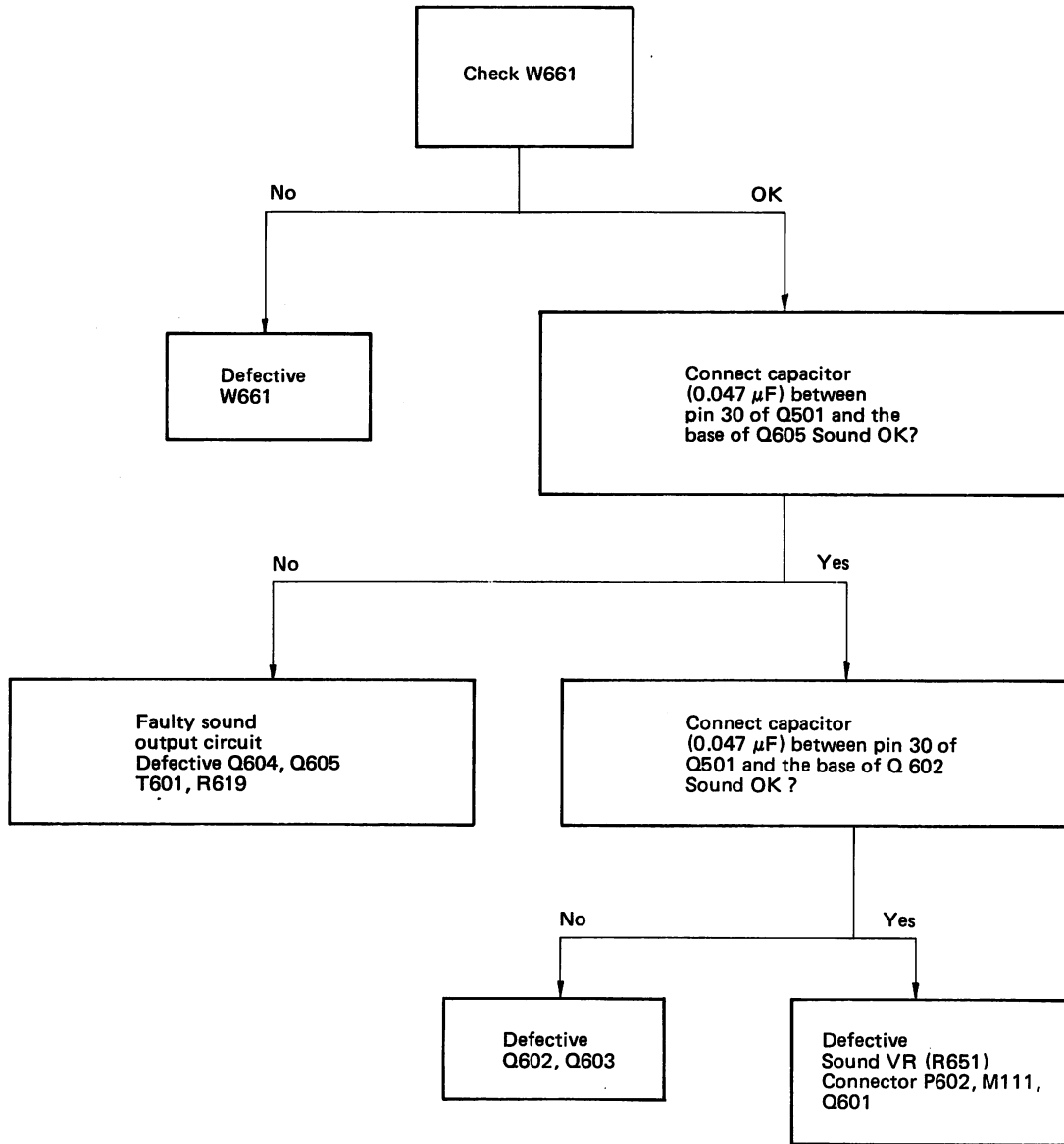
## NO COLOR – NTSC COMPOSITE



## SPECIFIC TINTED COLOR – NTSC COMPOSITE



**NO SOUND (NORMAL PICTURE)**



## 15. CHASSIS REPLACEMENT PARTS LIST

**WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.**

**CAUTION:** The shaded areas and  $\Delta$  marks in the schematic diagram and the parts list designated components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the **PRODUCT SAFETY NOTICE** on page 2. Do not degrade the safety of the monitor through improper servicing.

**ABBREVIATIONS:**

Capacitors . . . . . CD: Ceramic Disk, PF: Plastic Film, EL: Electrolytic.  
Resistors . . . . . CF: Carbon Film, CC: Carbon Composition, MF: Metal Film, OMF: Oxide Metal Film,  
VR: Variable Resistor, FR: Fusible Resistor.

(All CD and PF capacitors are  $\pm 5\%$ , 50V and all resistors,  $\pm 5\%$  unless otherwise noted.)

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
<b>MAIN BOARD</b>			
U902A	602083-42	23331519	Main Board Assembly, PW5253
<b>CAPACITORS</b>			
C201	602081-86	24633100	EL, 10 $\mu$ F, 16V
C202	602081-55	24436910	CD, 91pF
C203	602080-43	24232103	CD, 0.01 $\mu$ F, +80%, -20%
C204	602081-44	24436300	CD, 30pF
C205	602081-52	24436680	CD, 68pF
C206	602081-88	24633220	EL, 22 $\mu$ F, 16V
C207	602082-25	24636479	EL, 4.7 $\mu$ F, 50V
C208	602081-42	24436220	CD, 22pF
C209	602081-95	24636010	EL, 1 $\mu$ F, 50V
C212	602082-32	24692103	PF, 0.01 $\mu$ F
C213	602081-86	24633100	EL, 10 $\mu$ F, 16V
C214	602082-39	24794221	EL, 220 $\mu$ F, 16V
C215	602081-39	24436120	CD, 12pF
C216	602083-78	24795101	EL, 100 $\mu$ F, 25V
C301	602081-95	24636010	EL, 1 $\mu$ F, 50V
C302	602082-42	24797331	EL, 330 $\mu$ F, 50V
C303	602081-43	24436271	CD, 270pF
C304	602082-35	24692563	PF, 0.056 $\mu$ F
C305	602081-93	24635100	EL, 10 $\mu$ F, 35V
C306	602081-37	24435181	CD, 180pF, 500V
C307	602080-34	24212152	CD, 1500pF, $\pm 10\%$
C308	602081-81	24617981	EL, 2.2 $\mu$ F, $\pm 10\%$ , 50V
C309	602082-43	24828153	PF, 0.015 $\mu$ F, 200V
C310	602082-27	24640989	EL, 4.7 $\mu$ F, 160V
C311	602080-41	24214392	CD, 3900pF, $\pm 10\%$ , 500V
C312	602081-77	24577228	EL (Tantalum), 0.22 $\mu$ F, $\pm 10\%$ , 35V
C313	602082-19	24636100	EL, 10 $\mu$ F, 50V
C314	602082-24	24635478	EL, 0.47 $\mu$ F, 50V
C315	602081-81	24617981	EL, 2.2 $\mu$ F, $\pm 10\%$ , 50V
C316	602082-41	24797221	EL, 220 $\mu$ F, 50V
C317	602080-39	24214331	CD, 330pF, $\pm 10\%$ , 500V
C318	602080-43	24232103	CD, 0.01 $\mu$ F, +80%, -20%
C319	602082-22	24636339	EL, 3.3 $\mu$ F, 50V
C320			
C325	602081-52	24436680	CD, 68pF
C401	602082-46	24867682	PF, 6800pF
C402	602082-24	24636478	EL, 0.47 $\mu$ F, 50V
C403	602082-45	24867562	PF, 5600pF
C404	602081-82	24617992	EL, 2.2 $\mu$ F, $\pm 20\%$ , 50V
C405	602081-80	24598242	PF, 2400pF
C406	602082-29	24642220	EL, 22 $\mu$ F, 160V
C407	602082-25	24636479	EL, 4.7 $\mu$ F, 50V
$\Delta$ C408	602080-29	24095963	PF, 0.51 $\mu$ F, 200V
C409	602081-94	24635479	EL, 4.7 $\mu$ F, 35V
C410	602081-85	24632470	EL, 47 $\mu$ F, 10V
C411	602082-44	24828223	PF, 0.022 $\mu$ F, 200V
C412	602081-79	24598122	PF, 1200pF
C418	602080-40	24214391	CD, 390pF, $\pm 10\%$ , 500V
C419	602081-41	24436151	CD, 150pF
C420	602080-34	24212152	CD, 1500pF, $\pm 10\%$
C421	602082-37	24792222	EL, 2200 $\mu$ F, 6.3V
$\Delta$ C422	602080-27	24095510	PF, 3900pF, 1.6kV

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
$\Delta$ C423	602080-28	24095511	PF, 4300pF, 1.6kV
C425	602081-92	24634470	EL, 47 $\mu$ F, 25V
C426	602082-30	24642330	EL, 33 $\mu$ F, 160V
C427	602082-40	24795471	EL, 470 $\mu$ F, 25V
C428	602081-91	24634220	EL, 22 $\mu$ F, 25V
C429	602081-78	24591152	PF, 1500pF
C430	602082-38	24794102	EL, 1000 $\mu$ F, 16V
C503	602082-24	24636478	EL, 0.47 $\mu$ F, 50V
C504	602080-43	24232103	CD, 0.01 $\mu$ F, +80%, -20%
C505			
C506	602080-33	24212102	CD, 1000pF, $\pm 10\%$
C509	602081-45	24436330	CD, 33pF
C510	602081-38	24436100	CD, 10pF, $\pm 0.25$ pF
C514	602082-24	24636478	EL, 0.47 $\mu$ F, 50V
C515	602080-43	24232103	CD, 0.01 $\mu$ F, +80%, -20%
C516	602082-47	24868393	PF, 0.039 $\mu$ F
C521	602081-54	24436820	CD, 82pF
C522	602081-56	24436911	CD, 910pF
C530	602081-39	24436120	CD, 12pF
C541	602081-46	24436331	CD, 330pF
C542			
C543			
C551	602080-23	24094541	Variable Capacitor, 2.5 ~ 23pF, 250V
$\Delta$ C801	602080-32	24095991	PF, 0.1 $\mu$ F, $\pm 20\%$ , AC125V
$\Delta$ C802	602080-25	24094821	CD, 1000pF, $\pm 10\%$ , AC125V
$\Delta$ C803			
$\Delta$ C804			
$\Delta$ C805			
$\Delta$ C806	602080-26	24094905	CD, 0.01 $\mu$ F, +80%, -20%, AC250V
$\Delta$ C807			
$\Delta$ C808			
C809	602080-22	24086961	EL, 470 $\mu$ F, 200V
C810	602080-30	24095977	PF, 3300pF, 1.6kV
C811	602082-23	24636470	EL, 47 $\mu$ F, 50V
C812	602081-59	24538474	PF, 0.47 $\mu$ F
C813	602081-83	24630991	EL, 47 $\mu$ F, 25V
C814	602080-43	24232103	CD, 0.01 $\mu$ F, +80%, -20%
C815	602082-34	24692303	PF, 0.03 $\mu$ F
C816	602082-25	24636479	EL, 4.7 $\mu$ F, 50V
C817	602080-33	24212102	CD, 1000pF, $\pm 10\%$
C818	602081-95	24636010	EL, 1 $\mu$ F, 50V
C819	602081-80	24598142	PF, 2400pF
C820	602080-42	24215181	CD, 180pF, $\pm 10\%$ , 1kV
C821	602082-26	24640972	EL, 33 $\mu$ F, 160V
C822			
C823	602082-28	24622101	EL, 100 $\mu$ F, 160V
C824	602080-24	24094819	CD, 4700pF, $\pm 20\%$ , AC125V
<b>RESISTORS</b>			
R220	602081-20	24366223	CD, 22k ohm, 1/6W
R221			
R222	602081-16	24366202	CF, 2000 ohm, 1/6W
R223	602081-04	24366103	CF, 10k ohm, 1/6W
R224	602081-07	24366123	CF, 12k ohm, 1/6W
R225	602082-10	24366472	CF, 4700 ohm, 1/6W
R226	602081-07	24366123	CF, 12k ohm, 1/6W



LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
R227	602081-13	24366182	CF, 1800 ohm, 1/6W
R228	602081-20	24366223	CF, 22k ohm, 1/6W
R229			
R230			
R231	602081-11	24366161	CF, 160 ohm, 1/6W
R232	602081-09	24366152	CF, 1500 ohm, 1/6W
R233	602081-12	24366162	CF, 1600 ohm, 1/6W
R234	602082-00	24366332	CF, 3300 ohm, 1/6W
R235	602082-01	24366333	CF, 33k ohm, 1/6W
R236	602081-14	24366183	CF, 18k ohm, 1/6W
R237	602081-12	24366162	CF, 1600 ohm, 1/6W
R238	602082-06	24366392	CF, 3900 ohm, 1/6W
R239	602081-03	24366102	CF, 1000 ohm, 1/6W
R240	602080-92	24360623	CF, 62k ohm, 1/8W
R241	602080-64	24360124	CF, 120k ohm, 1/8W
R242	602082-14	24366562	CF, 5600 ohm, 1/6W
R243	602081-08	24366151	CF, 150 ohm, 1/6W
R244	602081-03	24366102	CF, 1000 ohm, 1/6W
R245	602082-15	24366563	CF, 56k ohm, 1/6W
R246	602081-20	24366223	CF, 22k ohm, 1/6W
R247			
R248			
R249	602080-74	24360224	CF, 220k ohm, 1/8W
R249	602081-64	24552471	OMF, 470 ohm, 1/2W
R254	602080-07	24060353	VR, 500 ohm, 0.15W, Center Click
R255	602080-18	24066890	VR, 5000 ohm, 0.3W
R256	602080-19	24066891	VR, 2000 ohm, 0.3W
R259	602080-09	24060498	VR, 10k ohm, 0.15W, Center Click
R260	602080-84	24360471	CF, 470 ohm, 1/8W
R261	602081-10	24366153	CF, 15k ohm, 1/6W
R262	602082-48	24941562	CC, 5600 ohm, 1/4W
R263	602081-24	24366682	CF, 6800 ohm, 1/6W
R264	602082-06	24366392	CF, 3900 ohm, 1/6W
R265	602081-67	24552911	OMF, 910 ohm, 1/2W
R266	602082-13	24366561	CF, 560 ohm, 1/6W
R267	602082-12	24366560	CF, 56 ohm, 1/6W
R269	602080-69	24360202	CF, 2000 ohm, 1/8W
R270	602081-09	24366152	CF, 1500 ohm, 1/6W
R301	602081-06	24366112	CF, 1100 ohm, 1/6W
R302	602081-15	24366201	CF, 200 ohm, 1/6W
R303	602081-16	24366202	CF, 2000 ohm, 1/6W
R304	602081-99	24366331	CF, 330 ohm, 1/6W
R305	602082-10	24366472	CF, 4700 ohm, 1/6W
R306	602081-66	24552821	OMF, 820 ohm, 1/2W
R307	602081-23	24366244	CF, 240k ohm, 1/6W
R308	602082-01	24366333	CF, 33k ohm, 1/6W
R309	602081-66	24552821	OMF, 820 ohm, 1/2W
R310	602081-74	24554472	OMF, 4700 ohm, 2W
R311	602081-17	24366203	CF, 20k ohm, 1/6W
R312	602081-74	24554472	OMF, 4700 ohm, 2W
R313	602082-15	24366563	CF, 56k ohm, 1/6W
R314	602081-14	24366183	CF, 18k ohm, 1/6W
R315	602081-22	24366243	CF, 24k ohm, 1/6W
R316	602081-03	24366102	CF, 1000 ohm, 1/6W
R317	602081-98	24366303	CF, 30k ohm, 1/6W
△R318	602080-46	24322309	OMF, 3 ohm, 1W
R319	602081-73	24554162	OMF, 1600 ohm, 2W
△R320	602082-57	24982439	MF, 4.3 ohm, 1/2W
R321	602082-10	24366472	CF, 4700 ohm, 1/6W
R322	602081-71	24553821	OMF, 820 ohm, 1W
R323	602081-07	24366123	CF, 12k ohm, 1/6W
R324	602082-10	24366472	CF, 4700 ohm, 1/6W
R325	602081-26	24366822	CF, 8200 ohm, 1/6W
R326			
R327			
R327	602080-63	24360123	CF, 12k ohm, 1/8W
R328	602081-07	24366123	CF, 12k ohm, 1/6W
R329	602082-10	24366472	CF, 4700 ohm, 1/6W
R330	602081-03	24366102	CF, 1000 ohm, 1/6W

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
R331	602082-08	24366434	CF, 430k ohm, 1/6W
R332	602080-08	24060427	VR, 10k ohm, 2W
R333	602082-10	24366472	CF, 4700 ohm, 1/6W
R334	602081-04	24366103	CF, 10k ohm, 1/6W
R336			
R341	602081-18	24366204	CF, 200k ohm, 1/6W
R342	602081-96	24366273	CF, 27k ohm, 1/6W
R351	602080-14	24063990	VR, 200k ohm, 0.15W
R352	602080-13	24061768	VR, 100k ohm, 0.3W
R401	602080-02	24003989	MF, 3900 ohm, ±2%, 1/4W
R402	602080-52	24327273	MF, 27k ohm, ±1%, 1/4W
R403	602082-03	24366362	CF, 3600 ohm, 1/6W
R404			
R405	602082-04	24366363	CF, 36k ohm, 1/6W
R406	602081-30	24378154	CF, 150k ohm, ±2%, 1/8W
△R407	602081-57	24532332	FR, 3300 ohm, 1W
R408	602081-33	24383122	OMF, 1200 ohm, 2W
R409			
R410	602080-03	24003990	MF, 15k ohm, ±2%, 1/4W
△R411	602080-48	24327153	MF, 15k ohm, ±1%, 1/4W
R412	602081-22	24366243	CF, 24k ohm, 1/6W
△R413	602080-54	24327512	MF, 5100 ohm, ±1%, 1/4W
△R414	602080-51	24327271	MF, 270 ohm, ±1%, 1/4W
R415	602081-05	24366104	CF, 100k ohm, 1/6W
R416	602081-04	24366103	CF, 10k ohm, 1/6W
R417	602082-01	24366333	CF, 33k ohm, 1/6W
△R418	602082-54	24982109	MF, 1 ohm, 1/2W
R419	602081-29	24367152	CF, 1500 ohm, ±2%
R420	602081-34	24383682	OMF, 6800 ohm, 2W
R421	602081-28	24367121	CF, 120 ohm, ±2%, 1/6W
R422	602081-65	24552561	OMF, 560 ohm, 1/2W
R423	602080-53	24327303	MF, 30k ohm, ±1%, 1/4W
△R424	602082-56	24982229	MF, 2.2 ohm, 1/2W
R425	602080-56	24327562	MF, 5600 ohm, ±1%, 1/4W
R426	602080-57	24327682	MF, 6800 ohm, ±1%, 1/4W
△R427	602082-58	24992109	MF, 1 ohm, ±10%, 1/2W
△R428	602080-47	24322569	OMF, 5.6 ohm, 1W
R429	602081-35	24383750	OMF, 75 ohm, 2W
△R430	602080-45	24321829	OMF, 8.2 ohm, 1/2W
R431	602081-70	24553561	OMF, 560 ohm, 1W
R432	602082-06	24366392	CF, 3900 ohm, 1/6W
△R438	602080-44	24321339	OMF, 3.3 ohm, 1/2W
R451	602080-17	24066889	VR, 10k ohm, 0.3W
R452	602080-16	24063996	VR, 2k ohm, 0.15W
R501	602081-25	24366683	CF, 68k ohm, 1/6W
R502	602081-27	24366913	CF, 91k ohm, 1/6W
R503	602082-13	24366561	CF, 560 ohm, 1/6W
R504	602081-07	24366123	CF, 12k ohm, 1/6W
R506	602081-49	24941565	CC, 5.6M ohm, 1/4W
R507	602081-03	24366102	CF, 1000 ohm, 1/6W
R508	602081-09	24366152	CF, 1500 ohm, 1/6W
R509	602082-11	24366473	CF, 47k ohm, 1/6W
R510	602081-21	24366224	CF, 220k ohm, 1/6W
R514	602082-06	24366392	CF, 3900 ohm, 1/6W
R517	602081-10	24366153	CF, 15k ohm, 1/6W
R518	602081-03	24366102	CF, 1000 ohm, 1/6W
R525	602082-17	24366681	CF, 680 ohm, 1/6W
R526	602082-09	24366471	CF, 470 ohm, 1/6W
R541	602081-19	24366222	CF, 2200 ohm, 1/6W
R542			
R543			
R544	602082-05	24366391	CF, 390 ohm, 1/6W
R545			
R546			
R551	602080-09	24060498	VR, 10k ohm, 0.15W, Center Click
R552			
R553	602080-10	24061656	VR, 10k ohm, 0.125W
R554			
R651			
R651	602080-15	24063994	VR, 10k ohm, 0.15W

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
R801	602082-52	24942335	CC, 3.3M ohm, 1/2W
<del>R802</del>	<del>602082-51</del>	<del>24942185</del>	<del>CC, 1.8M ohm, 1/2W</del>
<del>R803</del>	<del>602080-04</del>	<del>24007775</del>	<del>Cement, 5.6 ohm, 10W</del>
R804	602080-06	24007942	Cement, 180 ohm, 5W
R805	602081-75	24554563	OMF, 56k ohm, 2W
R807	602082-03	24366362	CF, 3600 ohm, 1/6W
R808	602081-60	24552100	OMF, 10 ohm, 1/2W
R809	602082-02	24366361	CF, 360 ohm, 1/6W
R810	602081-02	24366100	CF, 10 ohm, 1/6W
R811	602082-55	24982159	MF, 1.5 ohm, 1/2W
R812	602080-49	24327154	MF, 150k ohm, ±1%, 1/4W
R813	602081-31	24378334	CF, 330k ohm, ±2%, 1/8W
<del>R814</del>	<del>602082-59</del>	<del>24992228</del>	<del>MF, 0.22 ohm, ±10%, 1/2W</del>
R815	602080-05	24007842	Cement, 12 ohm, 5W
R816	602082-02	24366361	CF, 360 ohm, 1/6W
R817	602081-03	24366102	CF, 1000 ohm, 1/6W
R818	602082-10	24366472	CF, 4700 ohm, 1/6W
<del>R819</del>	<del>602082-12</del>	<del>24366560</del>	<del>CF, 56 ohm, 1/6W</del>
<del>R820</del>	<del>602080-50</del>	<del>24327182</del>	<del>MF, 1800 ohm, ±1%, 1/4W</del>
<del>R821</del>	<del>602080-02</del>	<del>24003989</del>	<del>MF, 3900 ohm, ±2%, 1/4W</del>
R822	602081-97	24366302	CF, 3000 ohm, 1/6W
R823	602081-06	24366112	CF, 1100 ohm, 1/6W
R824	602082-07	24366393	CF, 39k ohm, 1/6W
<del>R825</del>	<del>602081-76</del>	<del>24556109</del>	<del>FR, 1 ohm, ±10%, 1/2W</del>
R826	602081-62	24552202	OMF, 2000 ohm, 1/2W
R827	602080-55	24327561	MF, 560 ohm, ±1%, 1/4W
R828	602081-69	24553473	OMF, 47k ohm, 1W
R830	602082-50	24942182	CC, 1800 ohm, 1/2W
R831			
<del>R861</del>	<del>602080-20</del>	<del>24066893</del>	<del>VR, 500 ohm, 0.3W</del>
<del>R910</del>	<del>602083-73</del>	<del>24000862</del>	<del>Thermistor, 7 ohm, 140V</del>
<b>COILS AND TRANSFORMERS</b>			
L202	602083-40	23283300	Coil, TRF4300JG, Peaking
L203	602083-41	23283820	Coil, TRF4820JG, Peaking
L204	602083-37	23237977	Coil, TRF4680AC
<del>L403</del>	<del>602083-29</del>	<del>23222244</del>	<del>Coil, TLN2014, H. Width</del>
<del>L404</del>	<del>602083-30</del>	<del>23222677</del>	<del>Coil, TLN2049, H. Lin.</del>
L406	602083-27	23221026	Coil, AZ9004Y, Choke
L801	602083-28	23221061	Coil, TLN1015F, Choke
L802	602083-31	23222694	Coil, TLN2026
T401	602083-32	23224988	Transformer, TLN1032, H. Drive
<del>T402</del>	<del>602083-34</del>	<del>23228986</del>	<del>Transformer, TPC2015, Side DFC</del>
<del>T461</del>	<del>602083-35</del>	<del>23236036</del>	<del>Transformer, TFB5017AD, FBT</del>
<del>T801</del>	<del>602083-24</del>	<del>23211967</del>	<del>Line Filter, TRF3113</del>
<del>T802</del>	<del>602083-25</del>	<del>23213721</del>	<del>Transformer, TPW3055A</del>
<b>SEMICONDUCTORS</b>			
Q201	602082-61	A6317440	Transistor, 2SC1815-Y
Q202	602082-61	A6317440	Transistor, 2SC1815-Y
Q203			
Q204			
Q205			
Q206	602082-61	A6317440	Transistor, 2SC1815-Y
Q207			
Q208	602082-70	A6509140	Transistor, 2SA562TM-Y
Q301	602082-98	23114544	Transistor, 2SA1206
Q302			
Q303	602082-67	A6325010	Transistor, 2SC2230-Y
Q304	602082-65	A6319550	Transistor, 2SC2073
Q305	602082-71	A6532320	Transistor, 2SA940
Q306	602082-77	A6734590	Transistor, 2SC752GTM-Y
Q307	602082-61	A6317440	Transistor, 2SC1815-Y
Q403	602082-69	A6330000	Transistor, 2SC2482 FA-1
Q404	602082-79	A6868700	Transistor, 2SD1427 FA-1
<del>Q405</del>	<del>602082-73</del>	<del>A6534020</del>	<del>Transistor, 2SA1015-Y</del>
Q406	602082-77	A6734590	Transistor, 2SC752GTM-Y
Q501	602082-95	B0356451	IC, TA7644CP
<del>Q801</del>	<del>602082-80</del>	<del>A6868950</del>	<del>Transistor, 2SD1432 FA</del>
Q802	602082-63	A6319300	Transistor, 2SC1959-Y
Q803	602082-75	A6534125	Transistor, 2SA1020-Y

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
Q804	602082-74	A6534040	Transistor, 2SA1015-Y
D201	602082-87	A7246711	Diode, 1S1555
D202			
D203			
D204			
D205	602082-86	A7246602	Diode, 1S1553
D209			
D212			
D213			
D214	602082-87	A7246711	Diode, 1S1555
D215			
D216			
D301	602082-86	A6246602	Diode, 1S1553
D302	602082-89	A7568475	Diode, TVR-2D
D303	602083-00	23115888	Diode, RU-1A
D304	602082-87	A7246711	Diode, 1S1555
D305			
D306			
D307	602082-82	A7110116	Zener Diode, 05Z6.8Z FA-1
D308	602082-87	A7246711	Diode, 1S1555
D310	602082-87	A7568475	Diode, TVR-2D
D401	602082-93	A7978850	Diode, S5295G
D402	602082-87	A7246711	Diode, 1S1555
D403	602082-93	A7978850	Diode, S5295G
<del>D404</del>	<del>602082-99</del>	<del>23115774</del>	<del>Zener Diode, RD6.2E FA-1</del>
D405	602082-88	A7568460	Diode, TVR-1B
D409	602082-93	A7978850	Diode, S5295G
D501	602082-87	A7246711	Diode, 1S1555
D504	602082-84	A7110411	Zener Diode, 05Z12Y
D505	602082-87	A7246711	Diode, 1S1555
<del>D801</del>	602082-90	A7568750	Diode, 1S1887A FA-1
<del>D802</del>			
<del>D803</del>			
<del>D804</del>			
D805	602082-94	A7978855	Diode, S5295J
D806	602082-92	A7800720	Thyristor, SFOR1B41
D807	602082-94	A7978850	Diode, S5295G
D808			
D809			
D810	602082-86	A7246602	Diode, 1S1553
D811	602083-74	A7568300	Diode, 1S1835
D812			
D813	602082-81	A7110018	Zener Diode, 05Z5.6Z
D814	602082-99	23115774	Zener Diode, RD6.2E FA-1
D815	602082-87	A7246711	Diode, 1S1555
D816			
D817	602082-86	A7246602	Diode, 1S1553
D818	602082-91	A7580660	Diode, 3JH61
<b>MISCELLANEOUS</b>			
X201	602083-39	23250990	Coil, TRF2015
X501	602083-13	23153961	Crystal
S201	602083-08	23145452	Slide Switch, 2C3P
S202	602083-11	23145682	Switch Lever, 1C3P
<del>F801</del>	<del>602083-07</del>	<del>23144942</del>	<del>Fuse, 3A, UL</del>
<del>F801A</del>	<del>602083-15</del>	<del>23165081</del>	<del>Fuse Holder</del>
<del>F802</del>	<del>602083-06</del>	<del>23144911</del>	<del>Fuse, 1.2A, UL</del>
<del>F802A</del>	<del>602083-16</del>	<del>23165102</del>	<del>Fuse Holder</del>
<b>VIDEO BOARD</b>			
U901	602083-43	23331518	Video Board Assembly, PW5252-1
<b>CAPACITORS</b>			
C104	602081-90	24633470	EL, 47µF, 16V
C105			
C106			
C107	602081-40	24436121	CD, 120pF
C108	602081-86	24633100	EL, 10µF, 16V
C109	602082-24	24636478	EL, 0.47µF, 50V

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
C110	602083-88	24436240	CD, 24pF, $\pm 0.25\mu\text{F}$
C111			
C112	602081-39	24436120	CD, 12pF
C113	602082-24	24636478	EL, 0.47 $\mu\text{F}$ , 50V
C114	602080-43	24232103	CD, 0.01 $\mu\text{F}$ , +80%, -20%
C115	602081-94	24635479	EL, 4.7 $\mu\text{F}$ , 35V
C116	602080-43	24232103	CD, 0.01 $\mu\text{F}$ , +80%, -20%
C117	602081-94	24635479	EL, 4.7 $\mu\text{F}$ , 35V
C118	602082-24	24636478	EL, 0.47 $\mu\text{F}$ , 50V
C119	602081-86	24633100	EL, 10 $\mu\text{F}$ , 16V
C120	602082-25	24636479	EL, 4.7 $\mu\text{F}$ , 50V
C121	602081-95	24636010	EL, 1 $\mu\text{F}$ , 50V
C122	602080-43	24232103	CD, 0.01 $\mu\text{F}$ , +80%, -20%
C123	602081-95	24636010	EL, 1 $\mu\text{F}$ , 50V
C124			
C125	602081-88	24633220	EL, 22 $\mu\text{F}$ , 16V
C126	602081-95	24636010	EL, 1 $\mu\text{F}$ , 50V
C127	602081-86	24633100	EL, 10 $\mu\text{F}$ , 16V
C128	602081-84	24632221	EL, 220 $\mu\text{F}$ , 10V
C129	602081-86	24633100	EL, 10 $\mu\text{F}$ , 16V
C130	602082-21	24636229	EL, 2.2 $\mu\text{F}$ , 50V
C131	602081-88	24633220	EL, 22 $\mu\text{F}$ , 16V
C132	602081-95	24636010	EL, 1 $\mu\text{F}$ , 50V
C133	602081-89	24633221	EL, 220 $\mu\text{F}$ , 16V
C134	602080-43	24232103	CD, 0.01 $\mu\text{F}$ , +80%, -20%
C135	602083-89	24436201	CD, 200pF
C136	602081-41	24436151	CD, 150pF
C137			
C142	602081-90	24633470	EL, 47 $\mu\text{F}$ , 16V
C603	602081-86	24633100	EL, 10 $\mu\text{F}$ , 16V
C604	602080-37	24212682	CD, 6800pF, $\pm 10\%$
C605	602081-87	24633101	EL, 100 $\mu\text{F}$ , 16V
C606	602082-36	24693123	PF, 0.012 $\mu\text{F}$ , 100V
C607	602081-95	24636010	EL, 1 $\mu\text{F}$ , 50V
C608	602082-29	24642220	EL, 22 $\mu\text{F}$ , 160V
C609	602080-21	24085040	EL, 2.2 $\mu\text{F}$ , 250V, NP
C610	602080-33	24212102	CD, 1000pF, $\pm 10\%$
<b>RESISTORS</b>			
R114	602081-00	24360910	CF, 91 ohm, 1/8W
R115	602083-81	24360911	CF, 910 ohm, 1/8W
R116	602080-68	24360201	CF, 200 ohm, 1/8W
R117	602080-78	24360331	CF, 330 ohm, 1/8W
R118			
R119			
R120			
R121	602080-84	24360471	CF, 470 ohm, 1/8W
R122			
R123			
R124			
R125	602081-00	24360910	CF, 91 ohm, 1/8W
R126			
R127	602080-96	24360751	CF, 750 ohm, 1/8W
R128	602080-59	24360102	CF, 1000 ohm, 1/8W
R129	602080-69	24360202	CF, 2000 ohm, 1/8W
R130			
R131			
R132			
R133	602080-78	24360331	CF, 330 ohm, 1/8W
R134	602080-71	24360221	CF, 220 ohm, 1/8W
R135	602080-59	24360102	CF, 1000 ohm, 1/8W
R136	602080-75	24360271	CF, 270 ohm, 1/8W
R137	602080-69	24360202	CF, 2000 ohm, 1/8W
R138	602080-59	24360102	CF, 1000 ohm, 1/8W
R139	602080-71	24360221	CF, 220 ohm, 1/8W
R140	602080-75	24360271	CF, 270 ohm, 1/8W
R141	602080-91	24360621	CF, 620 ohm, 1/8W
R142			
R143			

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
R144	602080-94	24360681	CF, 680 ohm, 1/8W
R145			
R146			
R147	602080-85	24360472	CF, 4700 ohm, 1/8W
R148			
R149	602080-75	24360271	CF, 270 ohm, 1/8W
R150			
R151	602081-61	24552101	OMF, 100 ohm, 1/2W
R152	602080-78	24360331	CF, 330 ohm, 1/8W
R153	602080-89	24360562	CF, 5600 ohm, 1/8W
R154	602080-73	24360223	CF, 22k ohm, 1/8W
R155	602081-72	24554151	OMF, 150 ohm, 2W
R156	602080-66	24360152	CF, 1500 ohm, 1/8W
R157	602080-69	24360202	CF, 2000 ohm, 1/8W
R158			
R159			
R160	602080-71	24360221	CF, 220 ohm, 1/8W
R161			
R162			
R163	602080-84	24360471	CF, 470 ohm, 1/8W
R164			
R165			
R167	602081-64	24552471	OMF, 470 ohm, 1/2W
R168	602080-99	24360822	CF, 8200 ohm, 1/8W
R169	602080-72	24360222	CF, 2200 ohm, 1/8W
R170	602080-99	24360822	CF, 8200 ohm, 1/8W
R171	602080-72	24360222	CF, 2200 ohm, 1/8W
R172	602080-58	24360101	CF, 100 ohm, 1/8W
R173			
R176	602080-59	24360102	CF, 1000 ohm, 1/8W
R177	602080-94	24360681	CF, 680 ohm, 1/8W
R178	602080-59	24360102	CF, 1000 ohm, 1/8W
R179	602080-85	24360472	CF, 4700 ohm, 1/8W
R180	602080-79	24360331	CF, 330 ohm, 1/8W
R183	602080-94	24360681	CF, 680 ohm, 1/8W
R184	602080-98	24360821	CF, 820 ohm, 1/8W
R185			
R186	602080-87	24360560	CF, 56 ohm, 1/8W
R187			
R188			
R190	602080-66	24360152	CF, 1500 ohm, 1/8W
R191	602080-86	24360512	CF, 5100 ohm, 1/8W
R192	602080-60	24360103	CF, 10k ohm, 1/8W
R193	602080-81	24360362	CF, 3600 ohm, 1/8W
R194	602080-72	24360222	CF, 2200 ohm, 1/8W
R195	602080-79	24360332	CF, 3300 ohm, 1/8W
R196	602080-60	24360103	CF, 10k ohm, 1/8W
R197	602080-96	24360751	CF, 750 ohm, 1/8W
R198	602080-85	24360472	CF, 4700 ohm, 1/8W
R199	602080-72	24360222	CF, 2200ohm, 1/8W
R200			
R201	602080-79	24360332	CF, 3300 ohm, 1/8W
R202	602080-61	24360104	CF, 100k ohm, 1/8W
R203	602080-72	24360222	CF, 2200 ohm, 1/8W
R204	602081-64	24552471	OMF, 470 ohm, 1/2W
R212	602083-90	24552361	OMF, 3600 ohm, 1/2W
R213	602080-59	24360102	CF, 1000 ohm, 1/8W
R214			
R215			
R217	602083-91	24552112	OMF, 1100 ohm, 1/2W
R250	602080-19	24066891	VR, 2000 ohm, 0.3W
R251	602080-11	24061668	VR, 10k ohm, 0.125W
R252			
R253			
R271	602080-63	24360123	CF, 12k ohm, 1/8W
R606	602080-92	24360623	CF, 62k ohm, 1/8W
R607	602080-59	24360102	CF, 1000 ohm, 1/8W
R608	602080-89	24360562	CF, 5600 ohm, 1/8W
R609	602080-85	24360472	CF, 4700 ohm, 1/8W

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION			
R610	602080-61	24360104	CF, 100k ohm, 1/8W			
R611	602080-94	24360681	CF, 68k ohm, 1/8W			
R612	602081-32	24381112	OMF, 1100 ohm, 1/2W			
R613	602081-68	24553363	OMF, 36k ohm, 1W			
R614	602080-82	24360394	CF, 390k ohm, 1/8W			
R615	602080-95	24360683	CF, 68k ohm, 1/8W			
R616	602080-65	24360151	CF, 150 ohm, 1/8W			
R617	602080-72	24360222	CF, 2200 ohm, 1/8W			
R618	602080-59	24360102	CF, 1000 ohm, 1/8W			
R619	602081-58	24532471	FR, 470 ohm, 1W			
R620	602081-63	24552330	OMF, 33 ohm, 1/2W			
<b>COIL</b>						
L104	602083-36	23237975	Coil, TRF4101AC			
<b>SEMICONDUCTORS</b>						
Q102	602082-77	A6734590	Transistor, 2SC752GTM-Y			
Q103						
Q104						
Q105	602082-61	A6317440	Transistor, 2SC1815-Y			
Q106						
Q107						
Q108						
Q109	602083-04	23119784	IC, HD7407P			
Q110	602082-96	B0470532	IC, TC4053BP			
Q111	602082-77	A6734590	Transistor, 2SC752GTM-Y			
Q112						
Q113	602082-61	A6317440	Transistor, 2SC1815-Y			
Q114	602082-74	A6534040	Transistor, 2SA1015-Y			
Q115						
Q116						
Q117	602082-78	A6848520	Transistor, 2SD880-Y			
Q118						
Q119	602082-74	A6534040	Transistor, 2SA1015-Y			
Q120						
Q121	602083-03	23119723	IC, AN5352			
Q122	602082-61	A6317440	Transistor, 2SC1815-Y			
Q123						
Q124						
Q125	602082-74	A6534040	Transistor, 2SA1015-Y			
Q126	602082-61	A6317440	Transistor, 2SA1815-Y			
Q602						
Q603						
Q604	602082-68	A6325120	Transistor, 2SC2231-O			
Q605						
D101						
D102	602082-87	A7246711	Diode, 1S1555			
D103						
D104						
D105						
D106						
D107						
D108						
D109						
D110						
D111				602082-81	A7110018	Zener Diode, 05Z5.6Z
D112				602083-77	A7110311	Zener Diode, 05Z10X
D114	602082-87	A7246711	Diode, 1S1555			
D115						
D119	602082-83	A7110410	Zener Diode, 05Z12X			
D120						
D121						
D122						
D124						
D125						
D126						
D127						
D128	602082-87	A7240711	Diode, 1S1555			
D510						
D511						
D512						

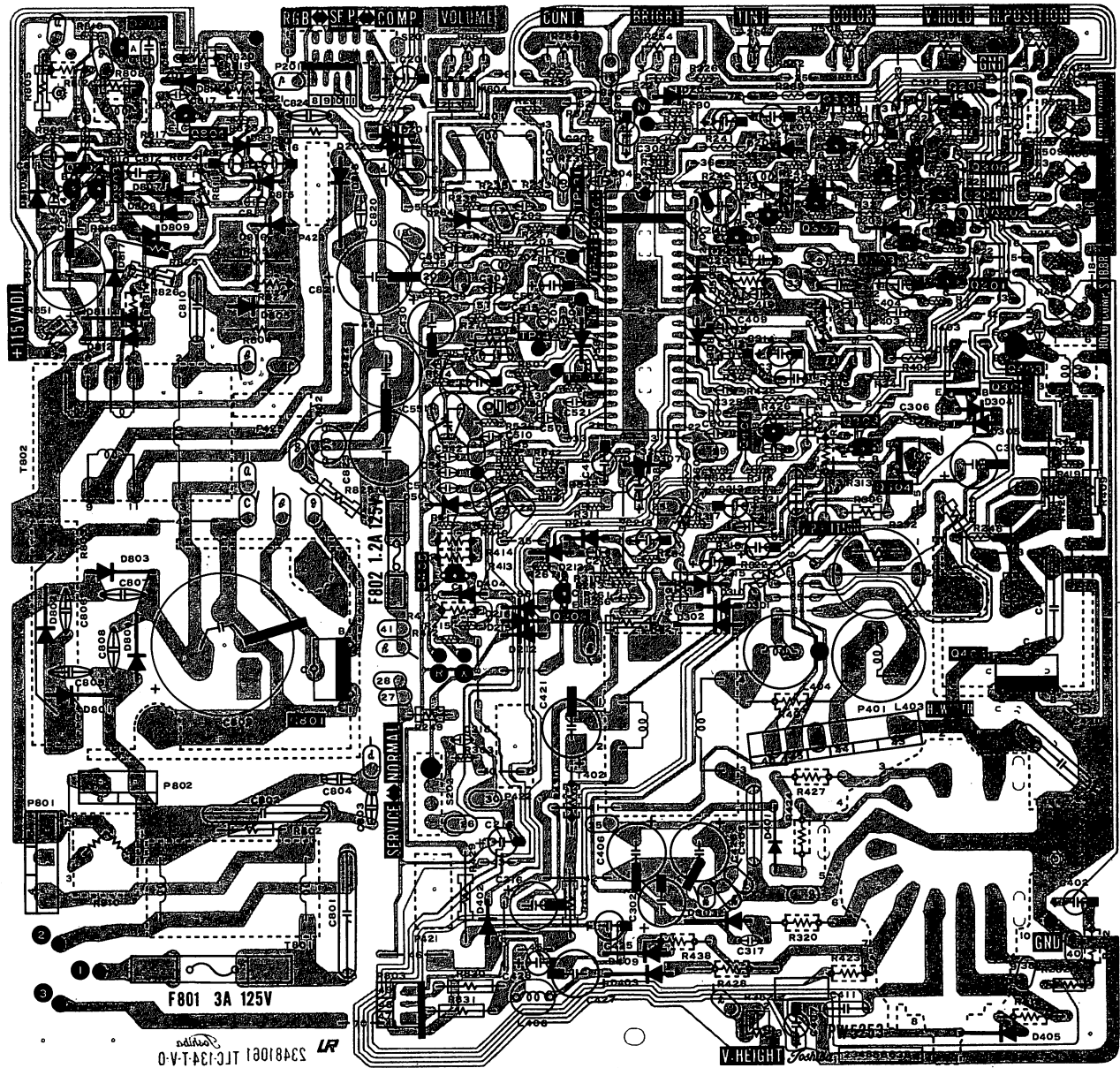
LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
D601	602082-86	A7246602	Diode, 1S1553
<b>CRT DRIVE BOARD</b>			
U901	602083-44	23331518	CRT Drive Board Assembly, PW5252-2
<b>CAPACITORS</b>			
C589	602080-38	24214103	CD, 0.01 $\mu$ F, $\pm$ 10%, 500V
C590	602081-87	24633101	EL, 100 $\mu$ F, 16V
C591	602080-36	24212471	CD, 470pF, $\pm$ 10%
C592	602082-33	24692104	PF, 0.1 $\mu$ F
C593	602080-36	24212471	CD, 470pF, $\pm$ 10%
C594	602083-92	24436431	CD, 430pF, $\pm$ 10%
C595	602080-36	24212471	CD, 470pF, $\pm$ 10%
C596	602082-33	24692104	PF, 0.1 $\mu$ F
C597	602083-92	24436431	CD, 430pF, $\pm$ 10%
C598	602082-33	24692104	PF, 0.1 $\mu$ F
C599	602083-92	24436431	CD, 430pF, $\pm$ 10%
C902	602080-31	24095989	PF, 1000pF, 1.6kV
C903	602082-31	24642479	EL, 4.7 $\mu$ F, 160V
<b>RESISTORS</b>			
R531	602080-59	24360102	CF, 1000 ohm, 1/8W
R532			
R533			
R534	602080-88	24360561	CF, 560 ohm, 1/8W
R535			
R536			
R537	602080-70	24360220	CF, 22 ohm, 1/8W
R538			
R539			
R555	602080-12	24061673	VR, 200 ohm, 0.125W
R556	602080-11	24061668	VR, 10k ohm, 0.125W
R557	602080-12	24061673	VR, 200 ohm, 0.125W
R558	602080-11	24061668	VR, 10k ohm, 0.125W
R559			
R561	602080-87	24360560	CF, 56 ohm, 1/8W
R562			
R563			
R565	602080-62	24360105	CF, 1M ohm, 1/8W
R566			
R567			
R590	602080-83	24360430	CF, 43 ohm, 1/8W
R591	602080-93	24360680	CF, 68 ohm, 1/8W
R592	602081-36	24384332	OMF, 3300 ohm, 3W
R593	602080-93	24360680	CF, 68 ohm, 1/8W
R594	602081-36	24384332	OMF, 3300 ohm, 3W
R595	602080-93	24360680	CF, 68 ohm, 1/8W
R596	602081-36	24384332	OMF, 3300 ohm, 3W
R901	602082-53	24942681	CC, 680 ohm, 1/2W
R902			
R903			
R920	602080-01	24000888	FR, 2 ohm, 1W
<b>COILS</b>			
L591	602083-38	23237983	Coil, TRF4220AC, Peaking
L592			
L593			
<b>SEMICONDUCTORS</b>			
Q505	602082-76	A6708870	Transistor, 2SC388ATM
Q506	602082-64	A6319400	Transistor, 2SC-2068
Q507	602082-76	A6708870	Transistor, 2SC388ATM
Q508	602082-64	A6319400	Transistor, 2SC-2068
Q509	602082-76	A6708870	Transistor, 2SC388ATM
Q510	602082-64	A6319400	Transistor, 2SC-2068
Q511	602082-66	A6324940	Transistor, 2SC2229-Y
Q512	602082-72	A6532840	Transistor, 2SA949-Y
Q513	602082-66	A6324940	Transistor, 2SC2229-Y
Q514	602082-72	A6532840	Transistor, 2SA949-Y
Q515	602082-66	A6324940	Transistor, 2SC2229-Y
Q516	602082-72	A6532840	Transistor, 2SA949-Y

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
<b>MISCELLANEOUS</b>			
△Z906			
△Z908	602083-05	23140607	Spark Gap, 0.7 ~ 1.5kV
△V901A	602083-01	23116495	Socket, 9P
△V901B	602083-93	23832622	Socket Cover
<b>TERMINAL BOARD</b>			
U901	602083-45	23331518	Terminal Board Assembly, PW5252-3
<b>CAPACITORS</b>			
C101	602081-86	24633100	EL, 10μF, 16V
C102	602081-87	24633101	EL, 100μF, 16V
C103	602082-24	24636478	EL, 0.47μF, 50V
C138			
C139	602083-80	24436301	CD, 300pF
C140			
C141	602080-33	24212102	CD, 1000pF
C601	602081-95	24636010	EL, 1μF, 50V
C602	602081-86	24633100	EL, 10μF, 16V
<b>RESISTORS</b>			
R101			
R102	602080-72	24360222	CF, 2200 ohm, 1/8W
R103			
R104	602080-97	24360820	CF, 82 ohm, 1/8W
R105			
R106	602080-90	24360563	CF, 56k ohm, 1/8W
R107			
R108	602080-67	24360153	CF, 15k ohm, 1/8W
R109			
R110	602080-73	24360223	CF, 22k ohm, 1/8W
R111	602080-89	24360562	CF, 5600 ohm, 1/8W
R112	602081-61	24552101	OMF, 100 ohm, 1/2W
R113	602080-89	24360562	CF, 5600 ohm, 1/8W
R205			
R206	602080-78	24360331	CF, 330 ohm, 1/8W
R207			
R208			
R209	602080-84	24360471	CF, 470 ohm, 1/8W
R601	602080-77	24360303	CF, 30k ohm, 1/8W
R602	602080-78	24360331	CF, 330 ohm, 1/8W
R604	602080-77	24360303	CF, 30k ohm, 1/8W
R605	602080-79	24360332	CF, 3300 ohm, 1/8W
<b>COILS</b>			
L105			
L106			
L107	602083-79	23103929	Ferrite Choke
L108			
L109			
<b>SEMICONDUCTORS</b>			
Q101	602082-96	B0470532	IC, TC4053BP
Q601	602082-61	A6317440	Transistor, 2SC1815-Y
<b>MISCELLANEOUS</b>			
P101	602083-64	23901787	Plug, 9P
P102	602083-19	23166235	Phono Jack, Red
P103	602083-17	23166233	Phono Jack, Yellow
P601	602083-18	23166234	Phono Jack, White
S101	602083-09	23145453	Slide Switch, 6C3P
<b>HEADPHONE JACK BOARD</b>			
U901	602083-46	23331518	Headphone Jack Board Assembly, PW5252-4
<b>MISCELLANEOUS</b>			
△P661	602083-48	23364412	Headphone Jack
<b>LED BOARD</b>			
U901	602083-47	23331518	LED Board Assembly, PW5252-5
<b>SEMICONDUCTOR</b>			
D820	602083-02	23118477	LED

LOCATION NUMBER	COMMODORE PART NUMBER	VENDOR PART NUMBER	DESCRIPTION
<b>CRT BLOCK</b>			
<b>COILS</b>			
△L462	602083-23	23227485	Coil, TDY-514EA
△L901	602083-23	23200785	Coil, TSB-2225
<b>CRT</b>			
△V901	602082-60	A6958952	CRT, E2971B22-GTHT (M1Y2)
<b>MISCELLANEOUS</b>			
V901M	602082-97	23102989	Purity Magnet, MAG1006
E901	602083-94	23198812	CRT Earth Lead
E912	602083-60	23848937	Rubber Wedge
<b>OTHERS</b>			
<b>MISCELLANEOUS</b>			
△S601	602083-10	23145534	Switch
△P811	602083-14	23164439	AG Inlet
W661	602083-12	23151534	Speaker, SPK1079

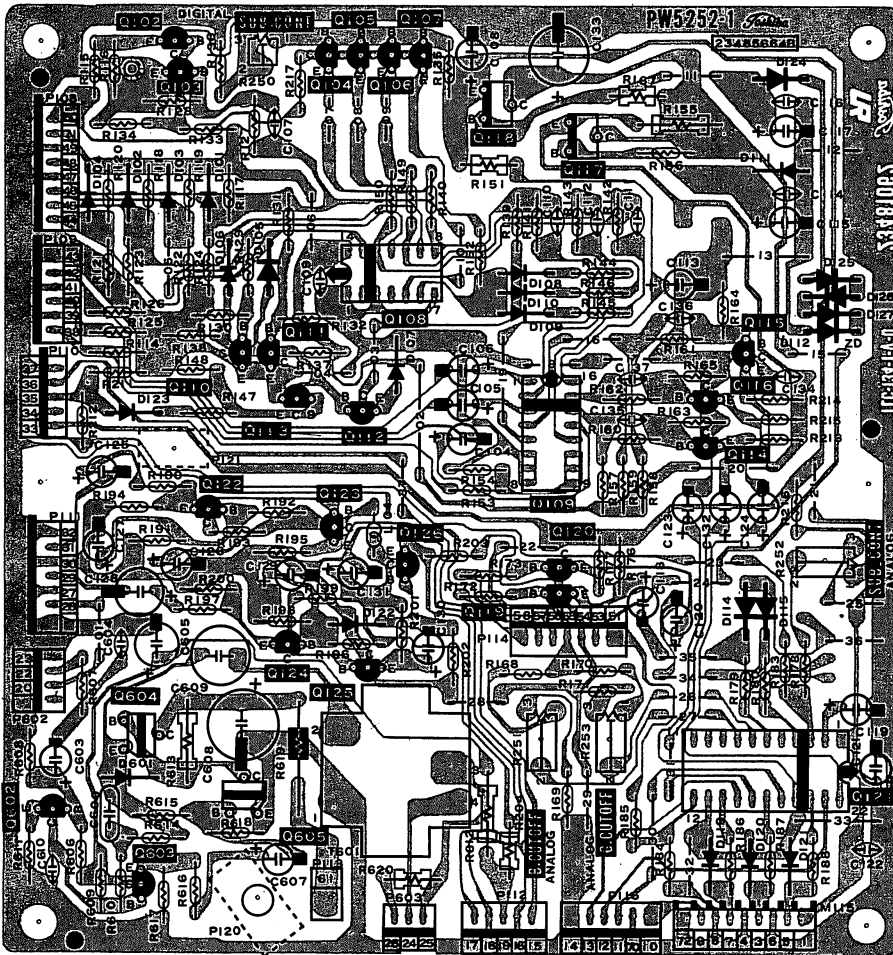
# 16. PRINTED CIRCUIT BOARD VIEW

## MAIN BOARD PW5253





# VIDEO BOARD PW5252-1



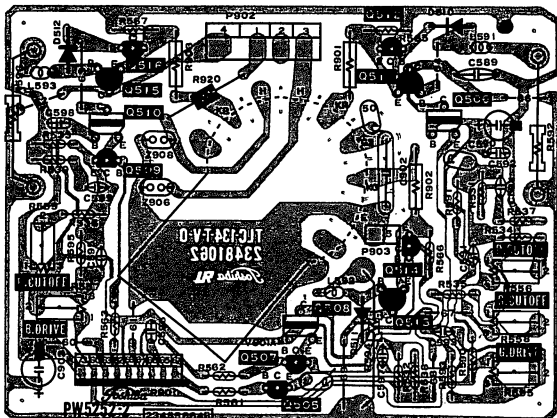
# HEADPHONE JACK BOARD PW5252-4



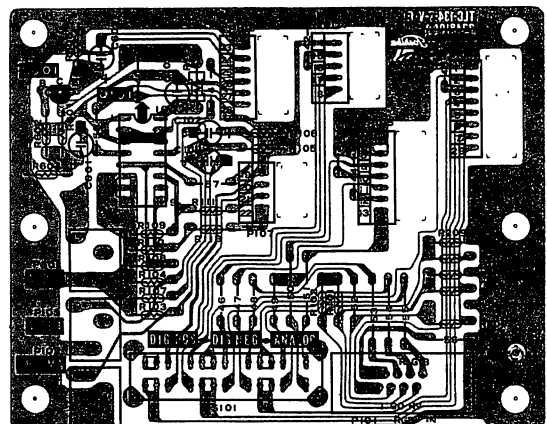
# LED BOARD PW5252-5



# CRT DRIVE BOARD PW5252-2

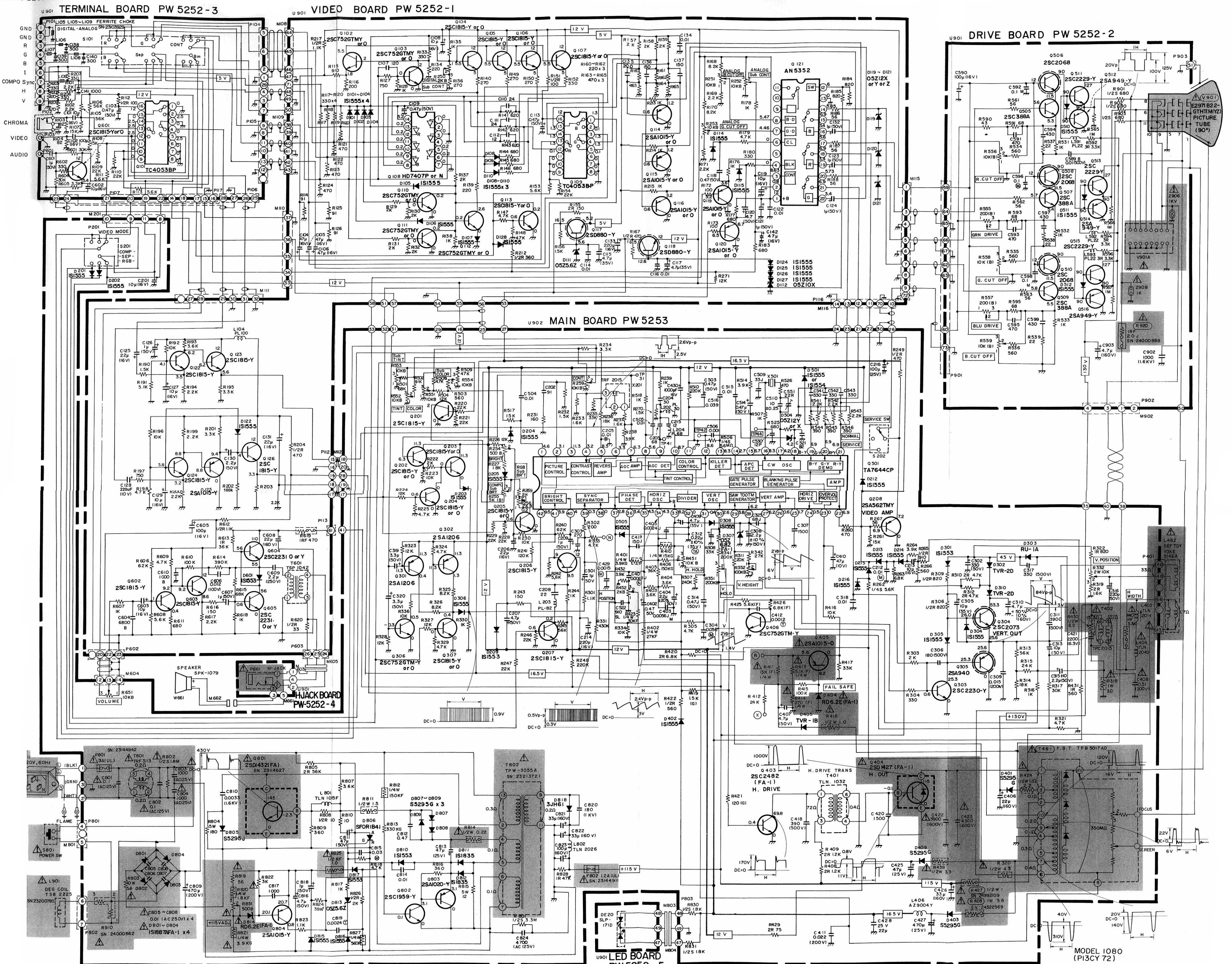


# TERMINAL BOARD PW5252-3





EMATIC DIAGRAM



MODEL 1080 (P13CY 72)



