

**General Information**

**Also Covers**  
**DTC-14B1 VUP**  
**Daewoo CP-325**

**Matrix****Item**

CRT Purity Adjustments - See Note

**X-Ray Precautions****X-RAY RADIATION PRECAUTION**

1 Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not exceed the specified limit. The nominal value of the high voltage of this receiver is 25.5kv (14": 23.5kv) at max beam current. The high voltage must not, under any circumstances, exceed 27.5kv (14": 25.0kv). Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure. It is recommended the reading of the high voltage be recorded as a part of the service records. It is important to use an accurate and reliable high voltage metre.

2. The only source of X-RAY RADIATION in this TV receiver 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.

**Adjustments****SCREEN & WHITE BALANCE ADJUSTMENT**

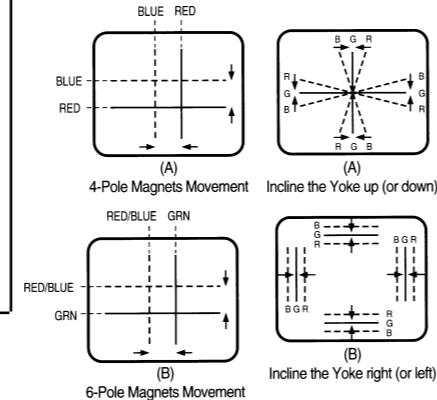
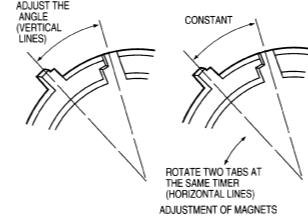
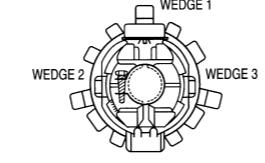
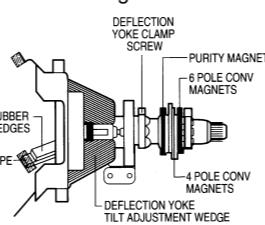
1. This adjustment is to be made only after warming up at least 15 minutes.
2. Receive B,W pattern signal
3. Set the RGB Bias VR (RJ04, RJ13, RJ24) to MINIMUM.
4. Set the G, B Drive VR (RJ1 4, RJ22) to CENTER.
5. Set the CONTRAST, BRIGHTNESS, COLOUR control to MIN, and Sub-brightness control to CENTER.
6. Connect a short P501 to GND.
7. Rotate the SCREEN control to clockwise or CCW so as to obtain dim horizontal line of one color in R, G and B.
8. Rotate the R, G and B Bias VR of the other color which did not appear on the screen clockwise, until a dim white line is obtained.
9. Rotate the Screen control gradually anti-clockwise until the last horizontal line disappears on the screen.
10. Remove the short P501 and set the CONTRAST, BRIGHTNESS, COLOR control to MAX.
11. Set the G, B Drive VR to obtain the best white uniformity on the screen.
12. Rotate the CONTRAST, BRIGHTNESS, COLOR controls until a dim raster is obtained and touch-up adjustment of RGB Bias VR to obtain the best white uniformity on the screen.

**SUB-BRIGHTNESS ADJUSTMENT**

- 1 White balance adjustment must proceed this procedure.
2. Set the CONTRAST, BRIGHTNESS, COLOR control to MIN.

**MAIN B + (+103V) ADJUSTMENT**

1. Receive RETMA pattern signal.
2. Set the picture level to NORMAL mode.
3. Connect DC voltage meter to the TP7 and adjust VR801 for +103V DC.

**Fig. 1****Fig. 1**  
Centre Convergence by Convergence Magnets**Fig. 2****Fig. 2**  
Circumference Convergence by DEF. Yoke**Fig. 3** Adjustment of magnets**Fig. 4** Rubber wedge location**Fig. 5** Picture tube neck component**Tube Size Table**

NO.	LOC.	14"			20"		
		ORION A34JLL90X ISM—01	POLKOLOR A34EFU13X CTV3240—0501	ORION A4JLL90X ISM—03	SAMSUNG A4BECCR11XI6 CTV3240—0501	POLKOLOR A4BEEV33X01	ORION A4JLL90X ISM—03
1	CRT						
2	CRT SOCKET						
3	D/COIL	DC—1450	←	DC—2050	←	←	
4	T401	DCF—2077D	FSA24006S 1142.5028	DCF—2217J	FSA—17013M	FSA26012M	
5	L404	L—125	1—76	L—102	1W 2.7ohm(F) 1/4W 390K	L—76	
6	R413	1W 4.7ohm(F)	1W 0.33ohm(F)	1/4W 240K	1W 2.7ohm(F) 1/4W 270K	1W 2ohm(F) 1/4W 240K	
7	R416	1/4W 390K	1/4W 330K	1/4W 240K	1/4W 270K	1/4W 240K	
8	R417	1/6W 4.3K	←	1/5W 22K	←	←	
9	R530	1/6W 1K	←	1/5W 56K	1.6KV 8200P	1.6KV 7500P	
10	R540	1.6KV 6000P	1.6KV 6000P	1.6KV 6900P	200V 0.47u	200V 0.51u	
11	C406	200V 0.47u	200V 0.47u	200V 0.47u	2KV 470P	200V 0.51u	
12	C421	—	—	—	—	2KV 470P	
13	C414	—	—	—	—	—	

**VCO/AFT ADJUSTMENT****1. APPARATUS CONNECTION & PRESETTING CONNECTION**

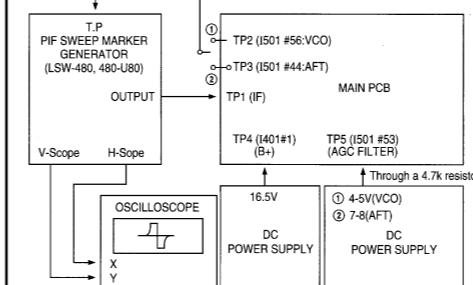
1. Connect H-out of LSW-480 to X-axis of the oscilloscope and V-out of LSW-480 to Y-axis of the oscilloscope.
2. Connect the sweep signal output to TP1.
3. Set ATTENUATOR of LSW-480 to 30dB.
4. Supply 16.5V D.C. voltage (B+) to TP4.
5. Supply 4.5V D.C. voltage to TP5:VCO.
6. Supply 7-8V D.C. voltage to TP5:AFT.

**PRESET****1) Oscilloscope Scaling**

- D.C level.  
 b) Set the horizontal time display to X-Y c) Put the horizontal axis (X) to 1V/div. and the vertical axis (Y) to 2V/div.

**2) LSW-480 MARKER FREQ. SETTING.**

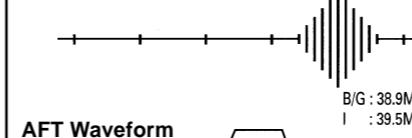
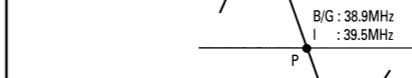
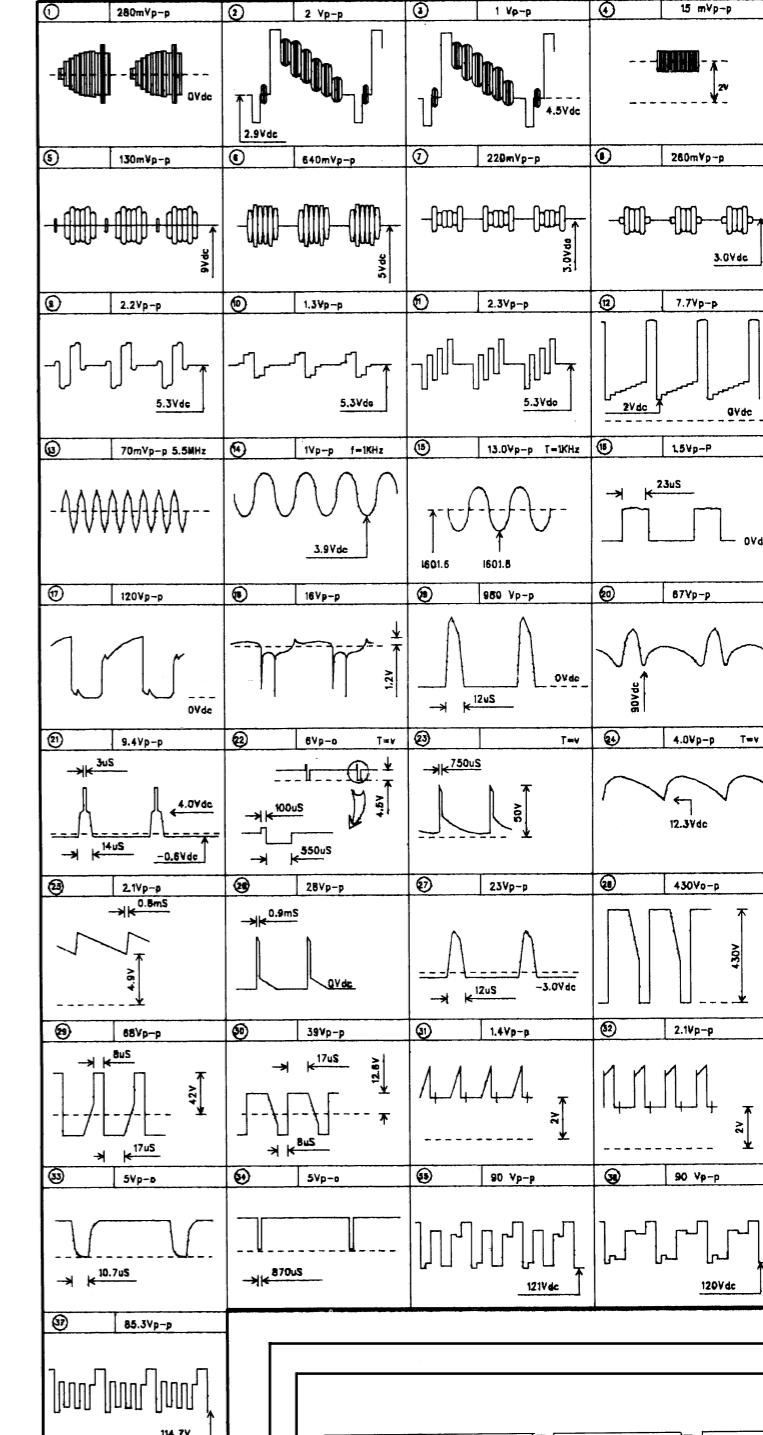
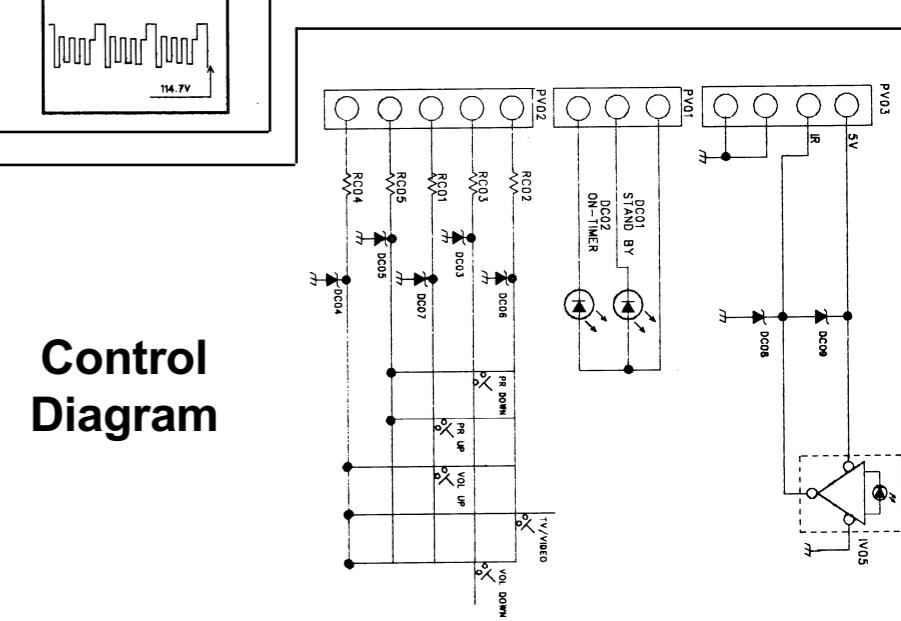
fp(n+1)	fs	fc	fp-2	fp	fs(n-1)
B/G 31.9	33.4	34.5	36.9	38.9	40.4
P-I 31.9	33.5	35.07	37.5	39.5	41

**Connection for PIF Adjustments****II. ADJUSTMENT OF VCO (B/G, I)**

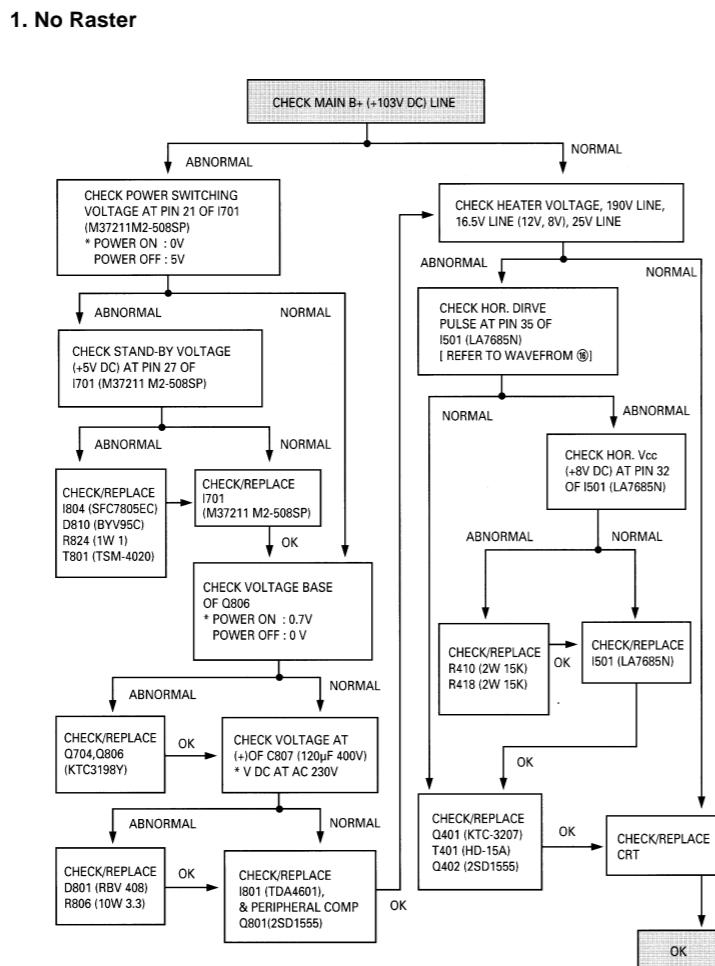
1. Connect the test point of LSW-480 to TP2.
2. Adjust L109 (ACO COIL) so that the P marker point is located on the reference level.

**III. ADJUSTMENT OF AFT B/G, I)**

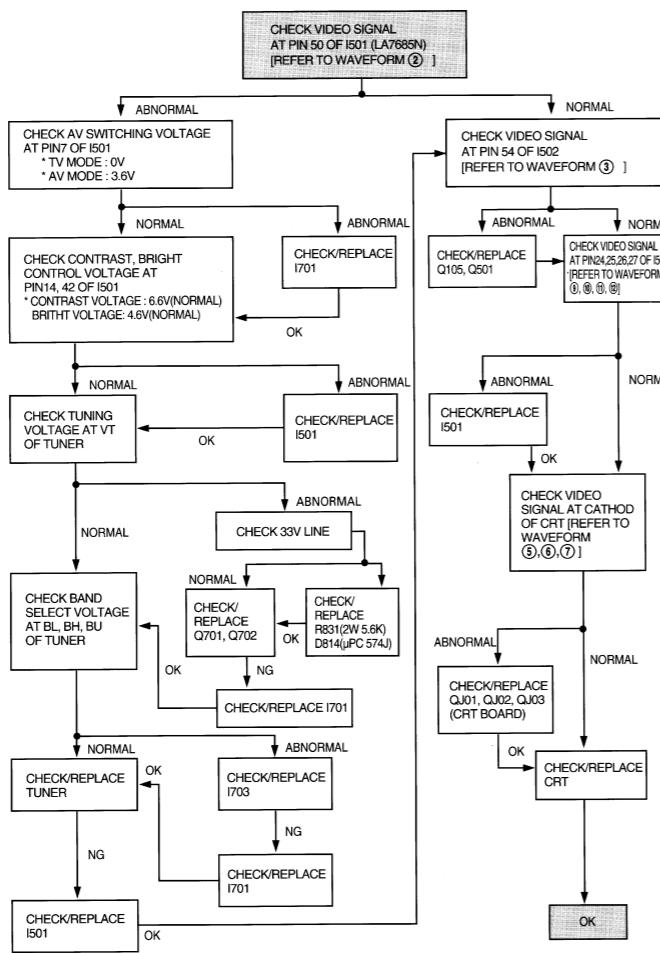
1. Connect the test point of LSW-480 to TP3
2. Adjust L108 (AFT COIL) so that the P marker point is located on the reference level.

**VCO Waveform****AFT Waveform****Tube Size Table****Waveforms****Control Diagram**

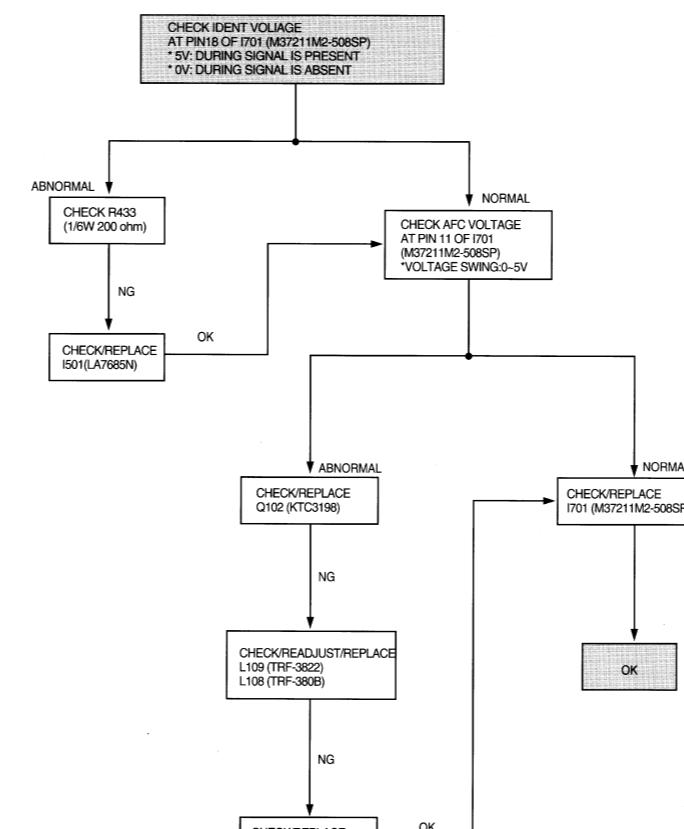
# Troubleshooting Guides



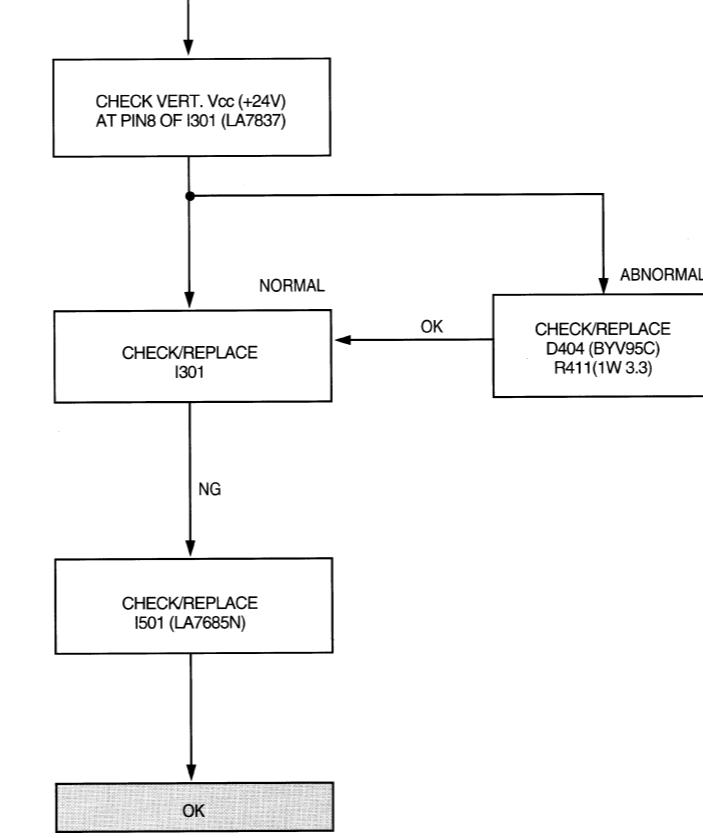
## 2. No Picture (Raster OK)



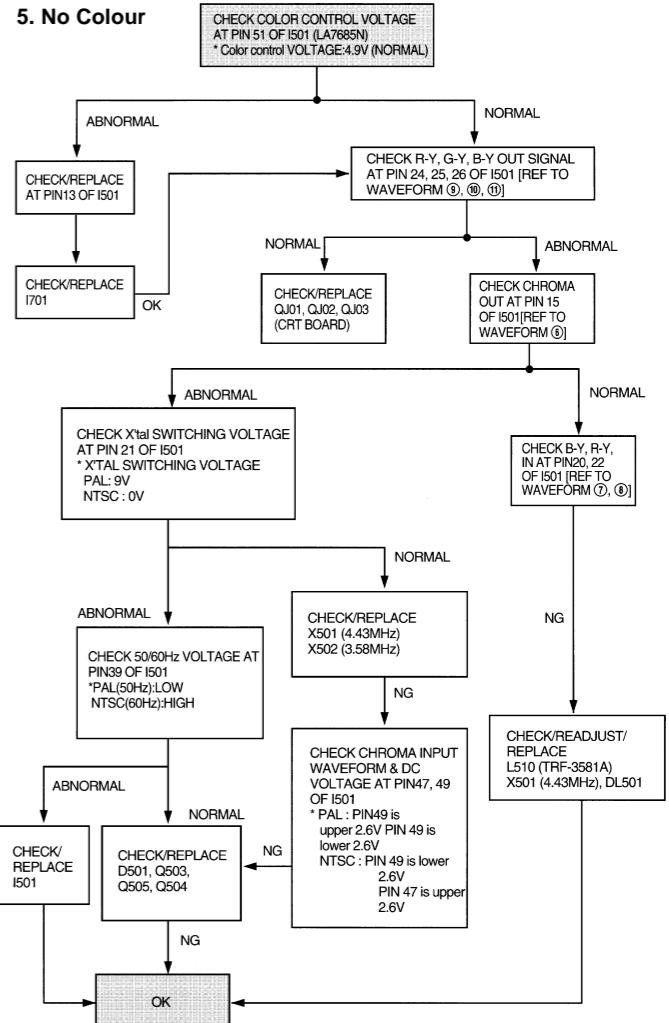
### 3. Auto Search Trouble (Channel Skip)



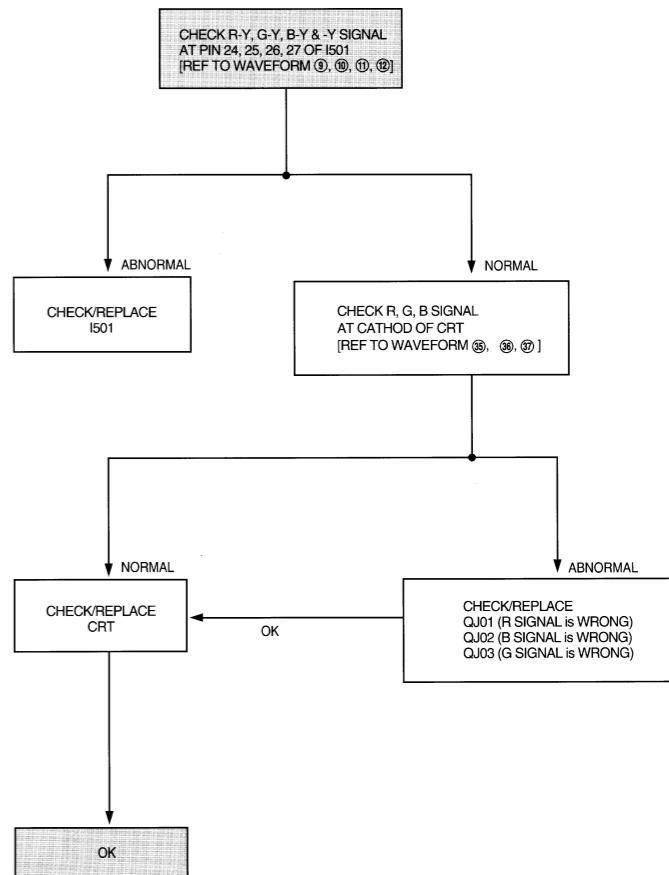
CHECK/REPLACE  
PA01 & DX



## 5. No Colour

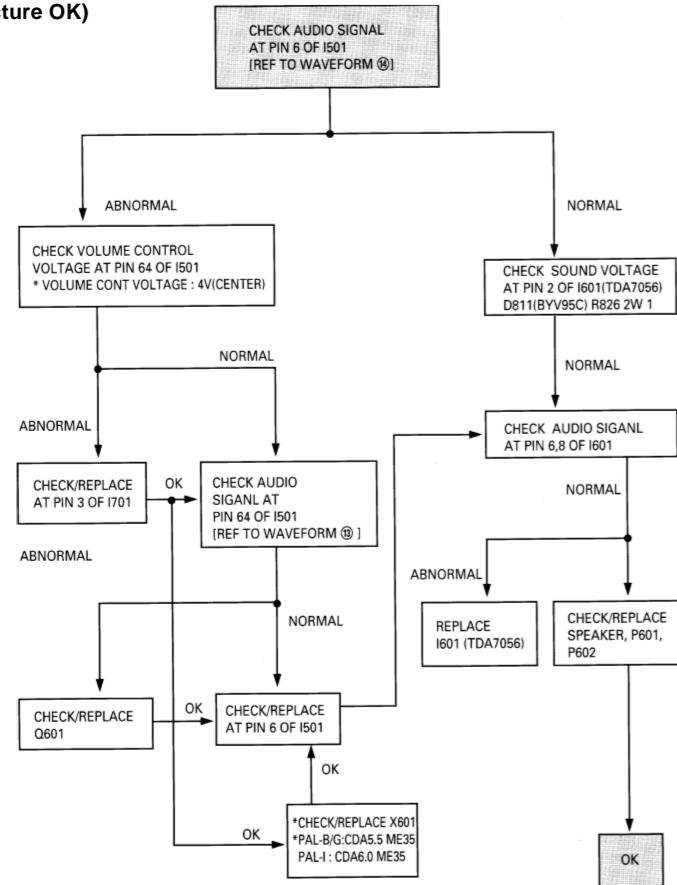


## **6. No Specific Colour**

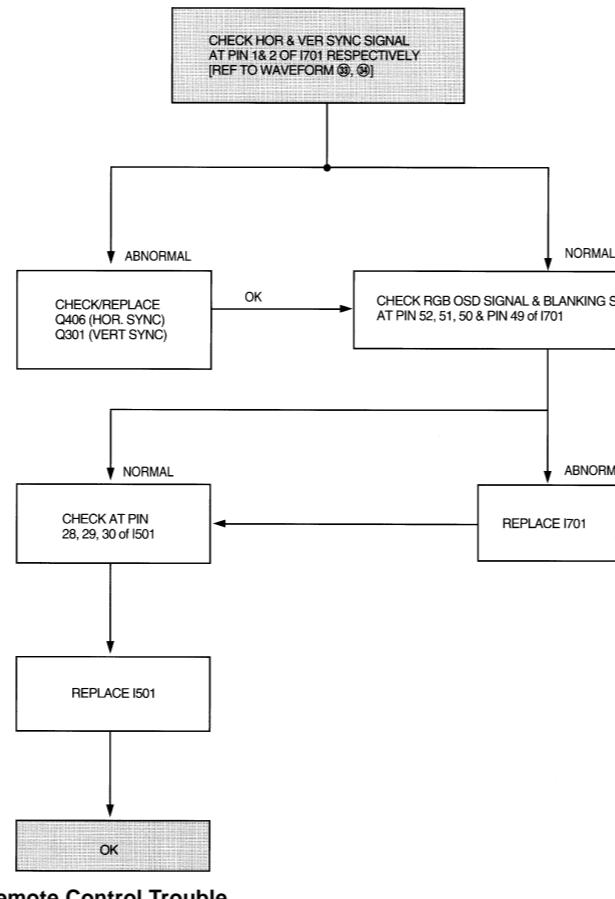
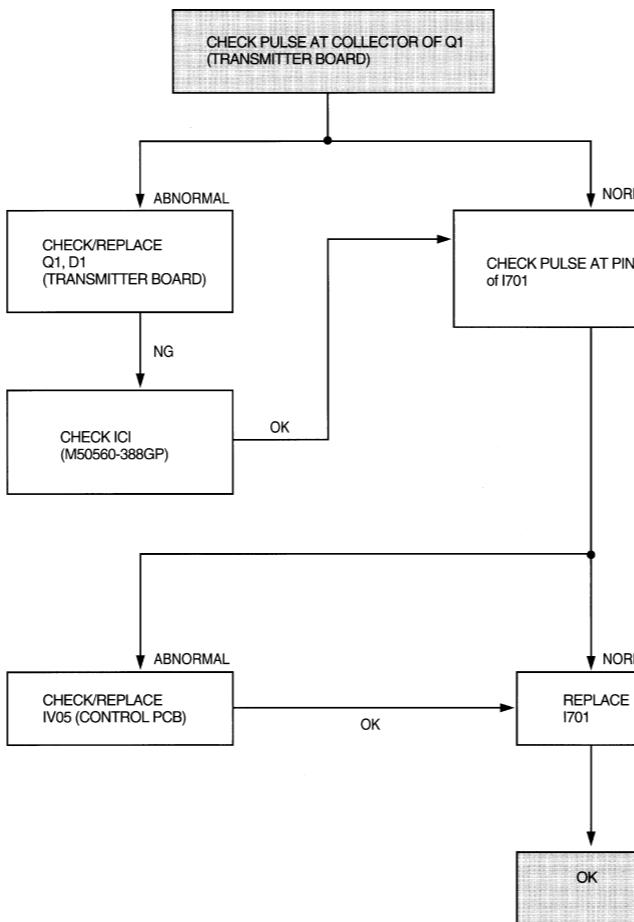


## Troubleshooting Guides Cont'd

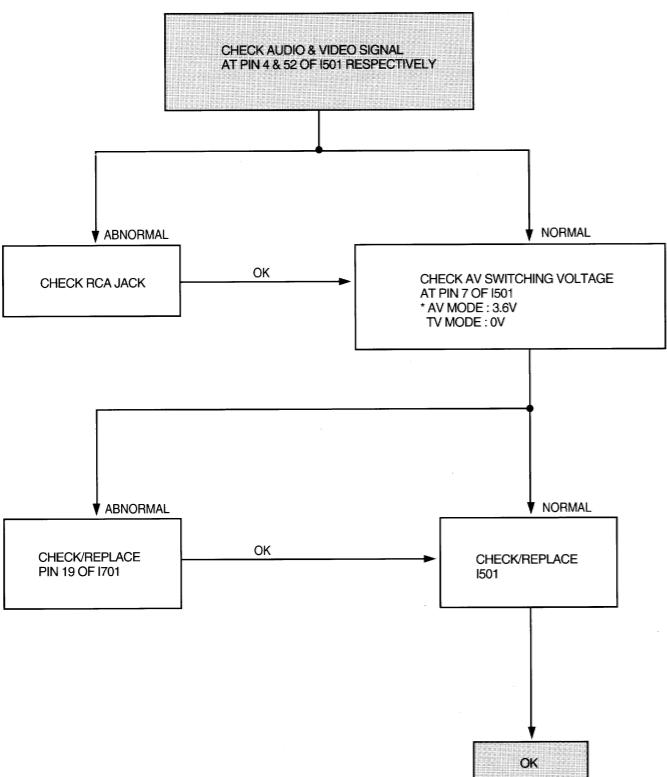
## 7. No Sound (Picture OK)



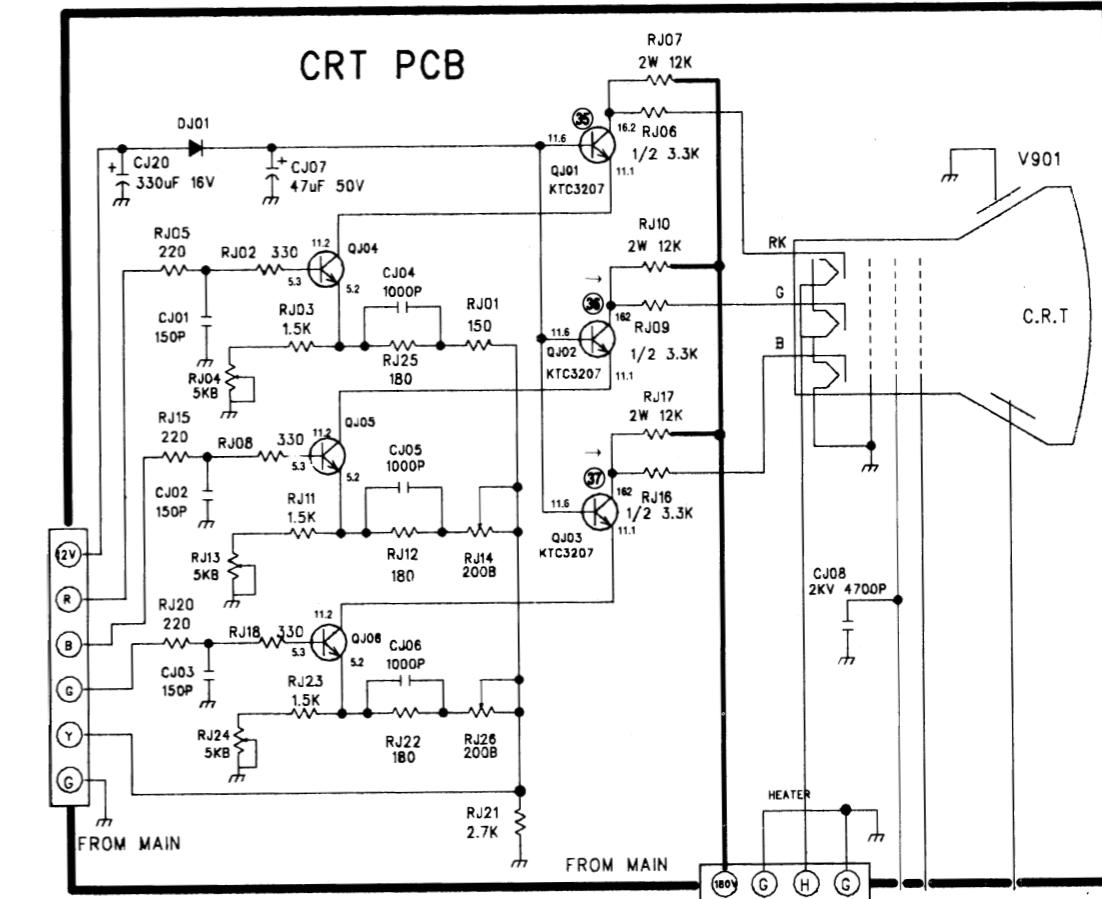
## 9. No On-Screen Display

10. Remote Control Trouble  
(Local Control OK)

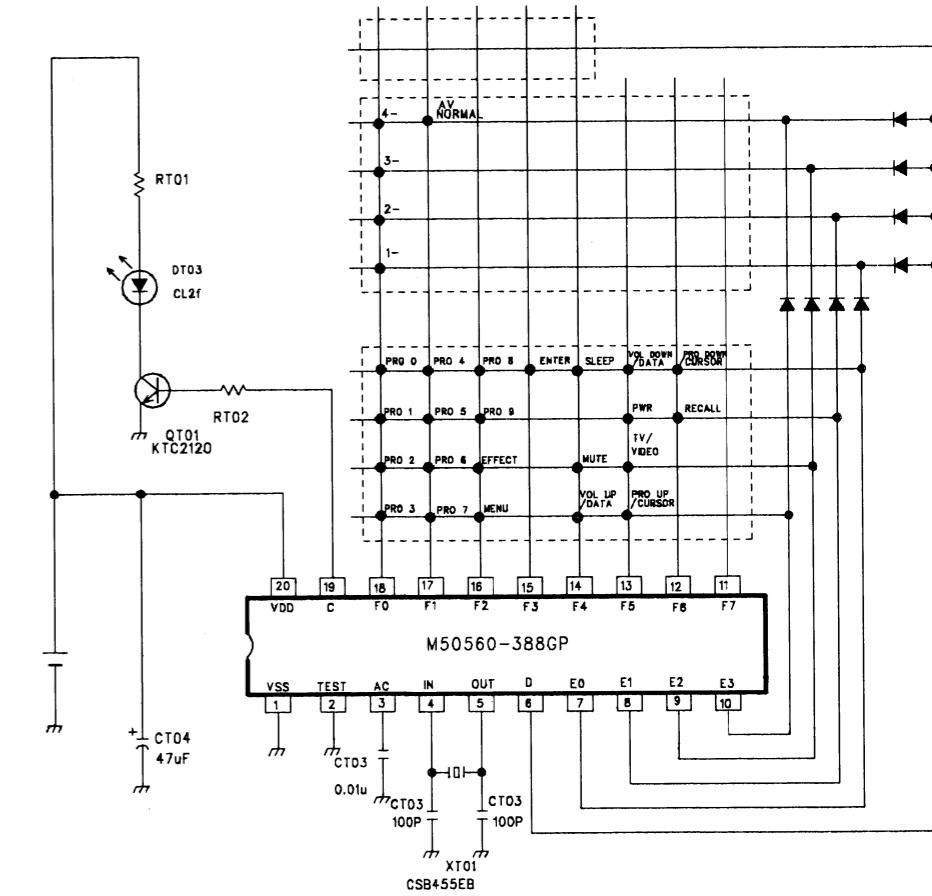
## 8. No External AV



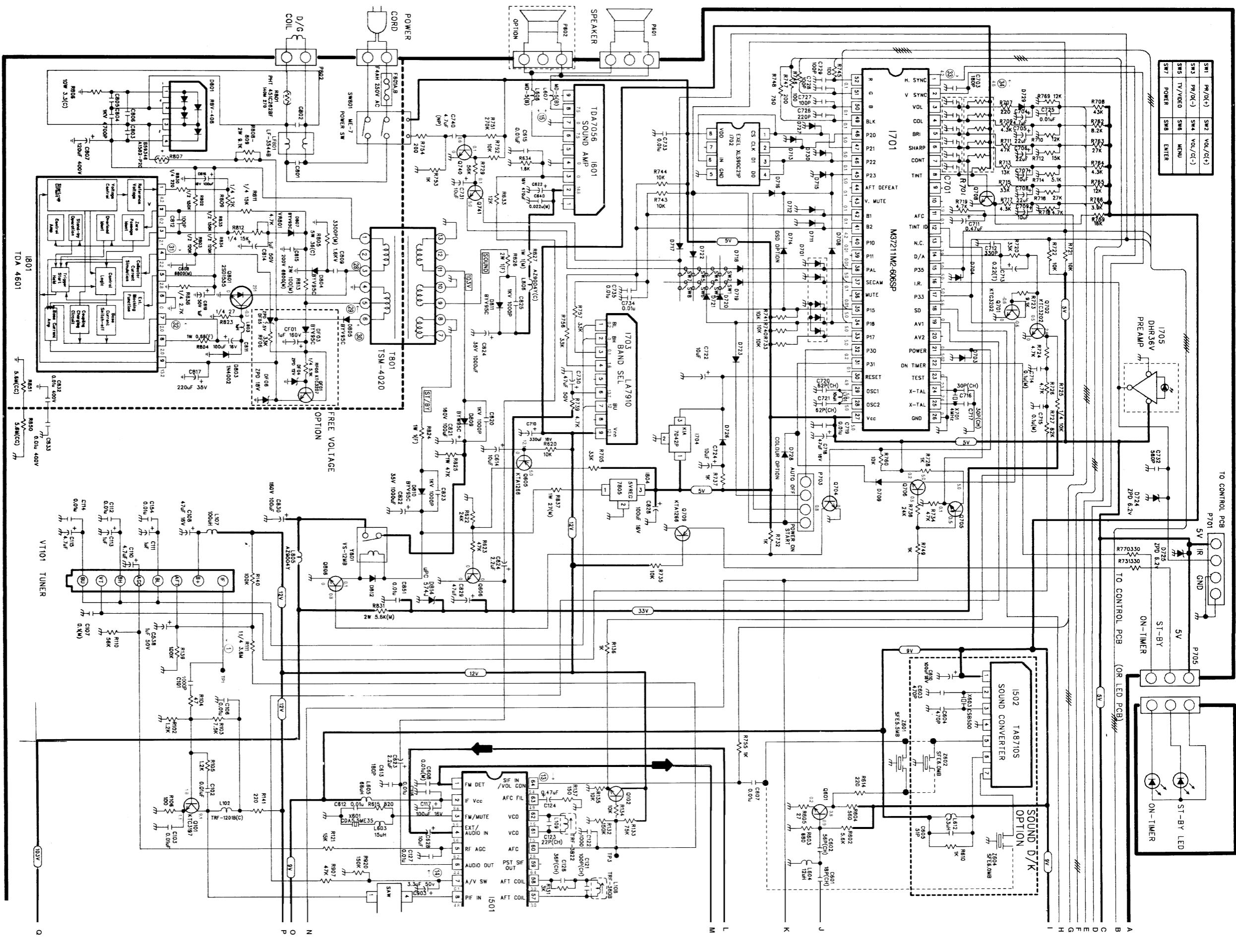
## CRT Diagram



## Remote Control Diagram



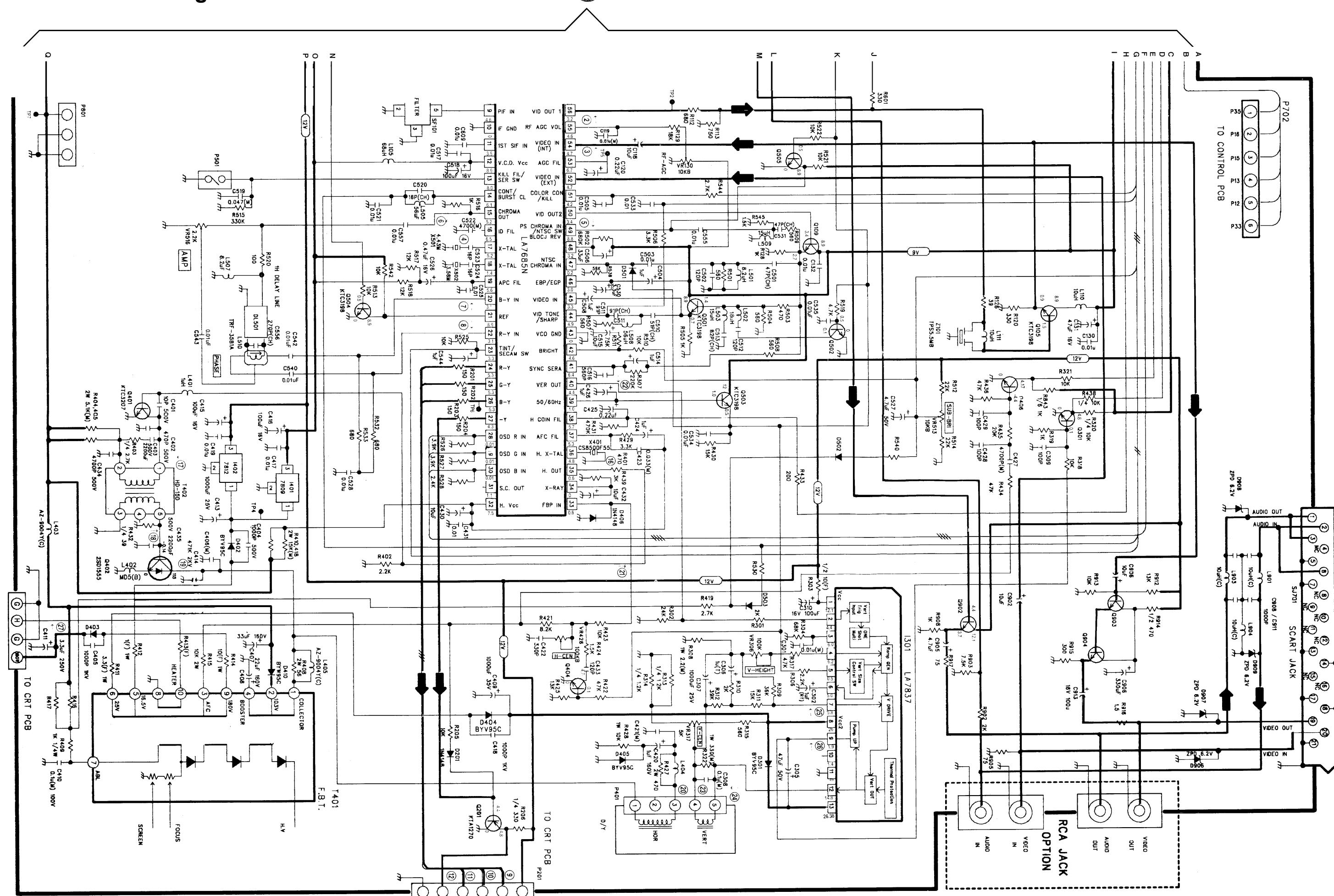
## Main Diagram



**Continued at 1**

## Main Diagram Cont'd

1



X-Ray Precautions / Adjustments / Tube Size Table / Waveforms / Control Diagram / Troubleshooting / Troubleshooting Cont'd

CRT Diagram / Remote Control Diagram / Main Diagram / Main Diagram Cont'd