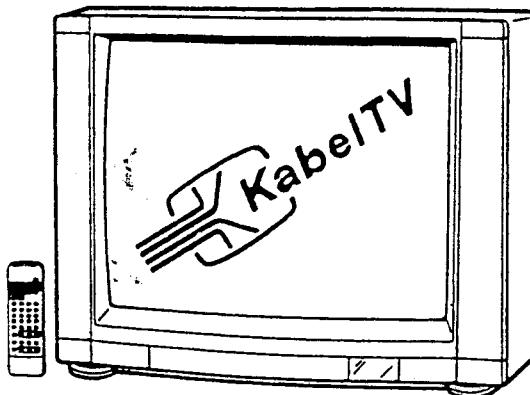


# COLOR TELEVISION RECEIVER

PAL/SECAM

## ORION COLOR 711 VT



Chassis Code:

A

Bestell-Nr.:

4691

Bei technischen Änderungen können Ergänzungsblätter angefordert werden.

Specifications are subject to change without notice.

# SPECIFICATIONS

PICTURE SIZE .....	28 inch
SYSTEM .....	PAL/SECAM
FREQUENCY RANGE: VHF(L)	2 - 4, 13 - 15, X - S1 ch
VHF(H)	5 - 12, 16 - 20, S2 - S20 ch
UHF	21 - 69 ch
MAXIMUM SENSITIVITY: VHF .....	20 dB
UHF .....	25 dB
INTERMEDIATE FREQUENCY:	
Picture IF Carrier Frequency .....	38.9 MHz
Color Sub Carrier Frequency .....	34.47 MHz
Sound IF Carrier Frequency .....	32.4 MHz
SOUND INTERMEDIATE FREQUENCY .....	6.5 MHz
MAXIMUM OUTPUT POWER .....	5.0 W
SPEAKER .....	4 ohm x 2
POWER SOURCE .....	AC 220V

## IMPORTANT

- \*USE AN ISOLATION TRANSFORMER WHEN PERFORMING ANY SERVICE ON THIS CHASSIS.
- \*WHEN REMOVING A PCB OR RELATED COMPONENT, AFTER UNFASTENING OR CHANGING WIRE, BE SURE TO PUT WIRE BACK IN ITS ORIGINAL POSITION.
- \*INFERIOR SILICON GREASE CAN DAMAGE IC's AND TRANSISTORS.  
WHEN REPLACING AN IC's OR TRANSISTORS, USE ONLY SPECIFIED SILICON GREASE (YG6260M).  
REMOVE ALL OLD SILICON BEFORE APPLYING NEW SILICON.

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# ELECTRICAL ADJUSTMENTS

## 1. BEFORE MAKING ELECTRICAL ADJUSTMENT

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

- 1-1: Prepare the following measurement tools for electrical adjustments.

1. Oscilloscope (2 Channel Type)
2. Digital Voltmeter
3. Color Bar Generator
4. Sweepmarker Generator
5. VIF Unit
6. AC Voltmeter
7. Frequency Counter

## 2. BASIC ADJUSTMENTS

### 2-1: VIF AND TRAP

#### NOTE

Connect input and output terminal of the Sweepmarker Generator to circuit as shown in Fig. 2-1-a, then adjust it.

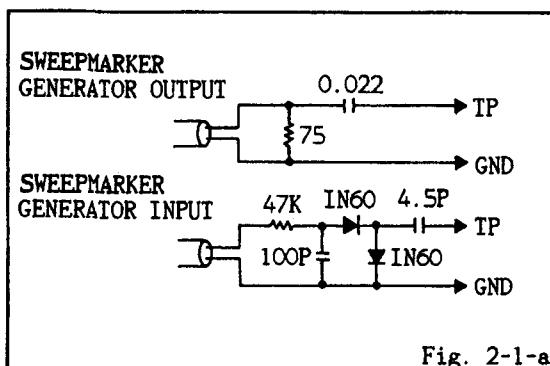
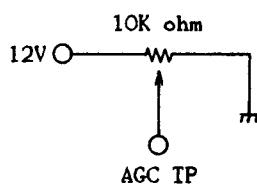


Fig. 2-1-a

1. Connect output terminal of the Sweepmarker Generator to TP202.
2. Connect input terminal of the Sweepmarker Generator to TP203.
3. Connect the 10K ohm variable resistor to IF AGC terminal (TP201), 12V line and ground, then adjust to make the waveform of the oscilloscope readable.



4. Adjust L201 until the waveform marker (38.9MHz) becomes as shown in Fig. 2-1-b.

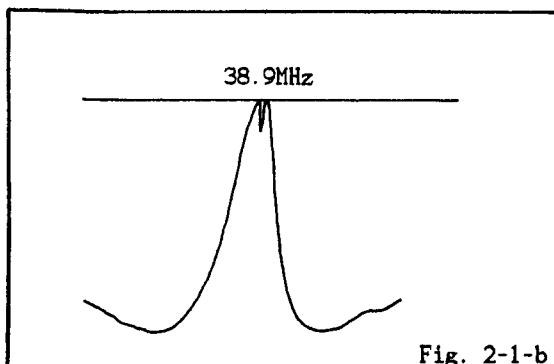


Fig. 2-1-b

5. Disconnect output terminal of the Sweepmarker Generator from TP202, then connect it to TP of the Tuner Pack. (Connect the 2.7K ohm resistor between them.)
6. Disconnect input terminal of the Sweepmarker Generator from TP203, then connect it to TP208.
7. Adjust L211 and L216 until the waveform markers (32.4MHz, 40.4MHz) becomes as show in Fig. 2-1-c.

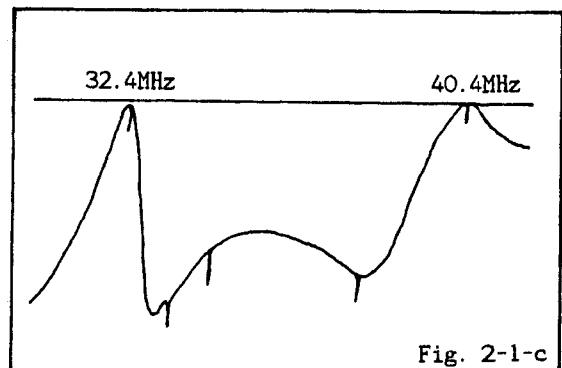


Fig. 2-1-c

8. Disconnect input terminal of the Sweepmarker Generator from TP208, then connect it to TP203.
9. Connect the 1K ohm resistor between TP204 and ground.
10. Confirm the waveform should be as shown in Fig. 2-1-d. (If the waveform is deviated from the standard, adjust the coil of tuner pack.)

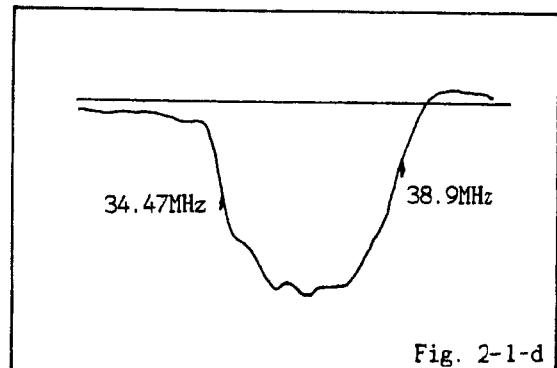


Fig. 2-1-d

11. Disconnect the 10K ohm variable resistor and 1K ohm resistor.

### 2-2: BELL FILTER

#### NOTE

Connect input and output terminal of the Sweepmarker Generator to circuit as shown in Fig. 2-2-a, then adjust it.

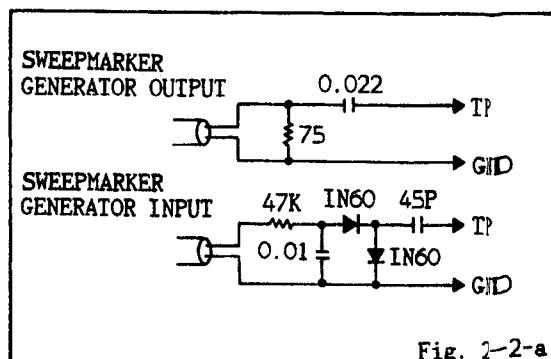
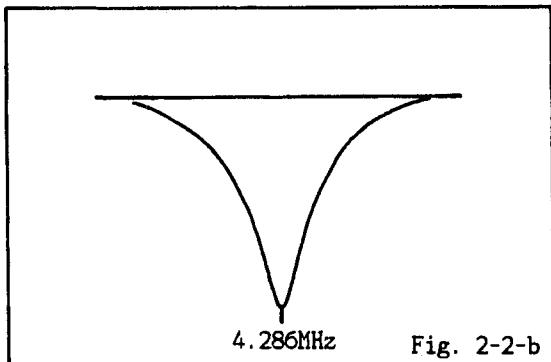


Fig. 2-2-a

# ELECTRICAL ADJUSTMENTS

1. Connect output terminal of the Sweepmarker Generator to TP of the Tuner Pack.
2. Connect input terminal of the Sweepmarker Generator to TP966.
3. Adjust L956 until the waveform becomes as shown in Fig. 2-2-b.



## 2-3: SECAM IDENT

1. Receive the SECAM Color Bar Pattern.
2. Connect the pin 31 of IC951 to earth pattern.
3. Connect the pin 9 of IC951 to earth pattern.
4. Connect the digital voltmeter to TP963.
5. Measure the voltage in TP963.
6. Disconnect the SECAM Color Bar Pattern.
7. Disconnect the pin 9 of IC951 from earth pattern.
8. Input a 4.34MHz (100dB) signal to pin 9 of IC951.
9. Adjust L957 until the voltage in TP963 is as same as the voltage in step 5.
10. Disconnect the pin 31 of IC951 from earth pattern.

## 2-4: SECAM PLL

1. Receive the SECAM Color Bar Pattern.
2. Connect the oscilloscope to TP965.
3. Adjust VR953 until the voltage is DC3V.

## 2-5: SECAM PHASE

1. Receive the SECAM Color Bar Pattern.
2. Set the PAL/SECAM switch to SECAM position.
3. Connect CH-1 on the oscilloscope to pin 12 of IC951 and CH-2 to pin 14 of IC951.
4. Adjust VR951 and VR952 until white part of the pattern is not changed even though you turn Color control from minimum to maximum.

## 2-6: SECAM LEVEL

1. Receive the SECAM Color Bar Pattern.
2. Connect CH-1 on the oscilloscope to pin 20 of IC951 and CH-2 to pin 23 of IC951.
3. Adjust VR954 until the waveform size of CH-1 is as same as the waveform size of CH-2.

## 2-7: RF AGC

### NOTE

Adjust after performing adjustments in section 2-1.

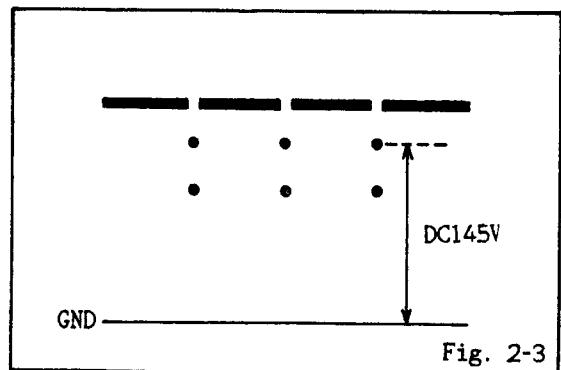
## 2-7-A: In case of weak electric field.

1. Receive the noisy channel.
2. Adjust VR201 until noise is at minimum.
3. Change the channel, confirm other channels are normal.

- 2-7-B: In case of strong electric field.**  
(Diagonal streaks indicate radio frequency interference.)
- 1. Adjust VR201 until diagonal streaks are at minimum.
  - 2. If there is still a problem after adjusting VR201, install an attenuator to the antenna terminals, then repeat step 1.
  - 3. Confirm noise will appear.
  - 4. Change the channel, confirm other channels are normal.

## 2-8: CUT OFF

1. Receive the Color Bar Pattern.
2. Adjust remote control until the bright and contrast controls are at minimum position.
3. Connect the oscilloscope to TP24.
4. Adjust the Screen control until voltage is DC145V. (Refer to Fig. 2-3)



## 2-9: FOCUS

1. Receive the broadcasting signal.
2. Adjust the Focus control until is distinct.

## 2-10: VERTICAL AND HORIZONTAL SIZE

1. Receive the Crosshatch Pattern from the Color Bar Generator.
2. Adjust the Bright and Contrast controls until the crosshatch pattern is distinct.
3. Adjust VR401 (V) and VR471 (H) until the center of crosshatch is square.
4. Receive broadcasting signal, then confirm picture is normal

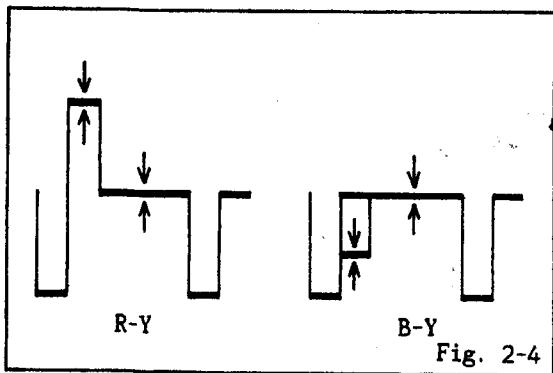
## 2-11: HORIZONTAL POSITION

1. Receive the Color Bar Pattern.
2. Adjust VR402 until the color width of both of screen edges are equal.
3. Receive broadcasting signal, then confirm picture is normal.

## 2-12: HUE DELAY

1. Receive the DEM Pattern.
2. Connect CH-1 on the oscilloscope to pin 8 of CP951 and CH-2 to pin 10 of CP951.
3. Adjust L958 and VR955 until the waveform is straight line. (Refer to Fig. 2-4)

# ELECTRICAL ADJUSTMENTS



## 2-13: SIDE PCC

1. Receive the Crosshatch Pattern from the Color Bar Generator.
2. Adjust VR472 until the right and left 3rd vertical line is straight.

## 2-14: SUB BRIGHT

1. Receive the Monochrome Pattern.
2. Press the NORMAL button on the remote control unit.
3. Adjust VR612 until 0% of gray scale will begin to lighten.
4. Receive the T' TEXT Pattern.
5. Adjust VR901 until the RGB black level is as same as the RF black level.

## 2-15: SUB COLOR

### 2-15-A: For PAL

1. Receive the Color Bar Pattern.
2. Press the NORMAL button on the remote control unit.
3. Connect the oscilloscope to TP22.
4. Adjust VR602 until red color level is 75%.

### 2-15-B: For SECAM

1. Receive the SECAM Color Bar Pattern.
2. Press the NORMAL button on the remote control unit.
3. Connect the oscilloscope to TP22.
4. Adjust VR614 until red color level is 75%.

## 2-16: T' TEXT FREQUENCY

1. Receive the noise signal.
2. Connect the frequency counter to TP003.
3. Adjust TC851 until the counter is 6.0000MHz.

## 2-17: SOUND IF DETECTION

### 2-17-A: For 5.5MHz

1. Receive the Mult-channel TV broadcasting signal.
2. Connect the oscilloscope to TP033.
3. Adjust L034 until the waveform is maximum.
4. Connect the distortion meter to pin 1 of J705.
5. Adjust L034 until the distortion rate is minimum.

### 2-17-B: For 5.74MHz

1. Receive the Mult-channel TV broadcasting signal.
2. Connect the oscilloscope to TP034.
3. Adjust L032 until the waveform is maximum.
4. Connect the distortion meter to pin 3 of J705.
5. Adjust L032 until the distortion rate is minimum.

## 2-18: PILOT DETECTION

1. Receive the Mult-channel TV broadcasting signal.
2. Connect the oscilloscope to TP037.
3. Adjust L033 and L035 until the waveform is maximum.

## 2-19: PILOT TONE

1. Receive the stereo broadcasting signal.
2. Connect the oscilloscope to TP031.
3. Adjust VR033 until the waveform is maximum. (From 100mVp-p to 280mVp-p.)
4. Adjust VR034 until the waveform is maximum. (From 100mVp-p to 280mVp-p.)

## 2-20: PLL CENTER FREQUENCY

1. Receive the Monochrome Pattern.
2. Input a sine wave of 196Hz (100mVp-p) to TP031. (Connect 50V1μF capacitor between them.)
3. Connect the digital voltmeter to pin 10 of IC031.
4. Adjust VR031 until the voltage is DC6.5V.

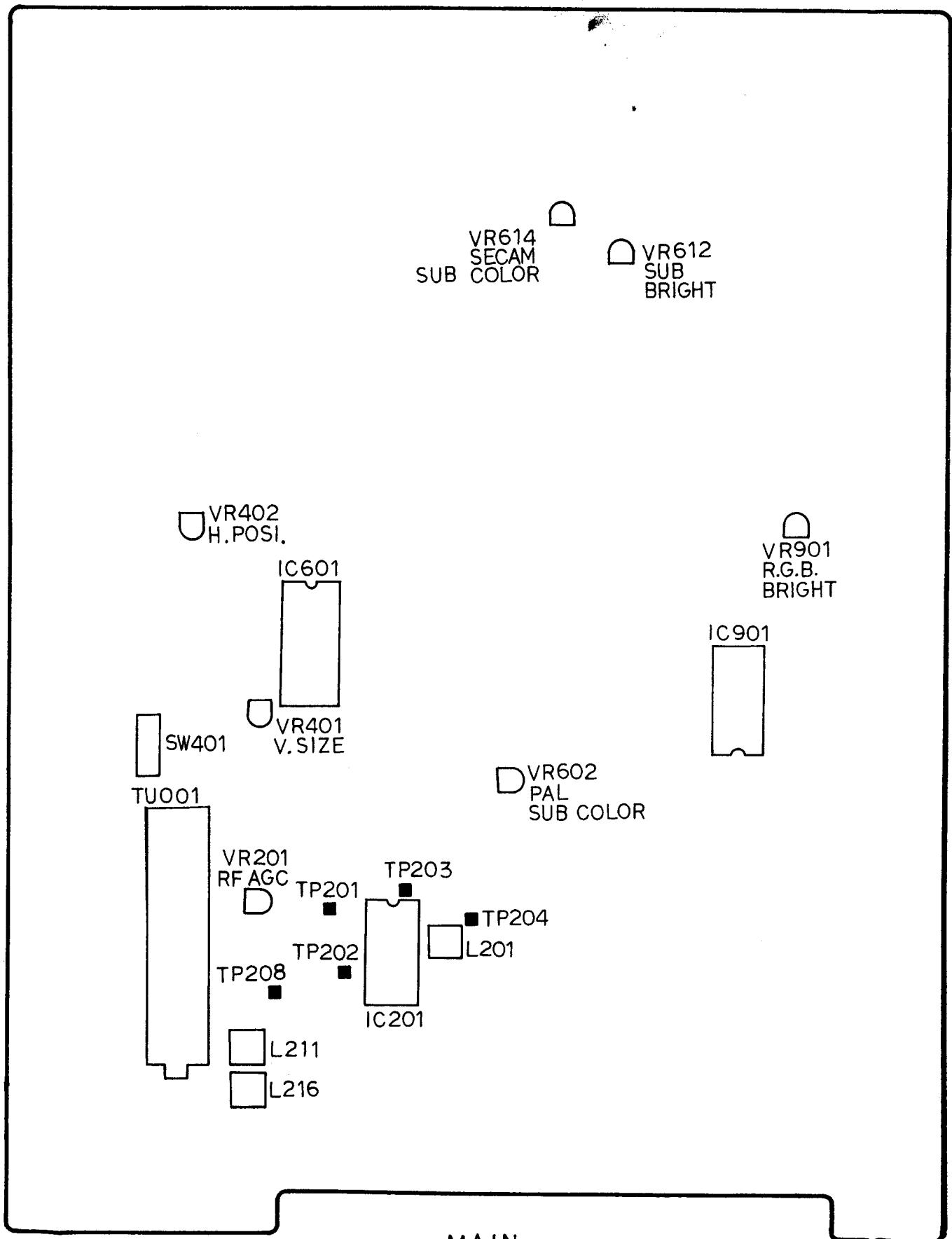
## 2-21: STEREO SEPARATION

1. Receive the stereo broadcasting signal.
2. Connect the AC voltmeter to L-ch of the audio out.
3. Adjust VR032 until output of L-ch is minimum.

## 2-22: VERTICAL POSITION

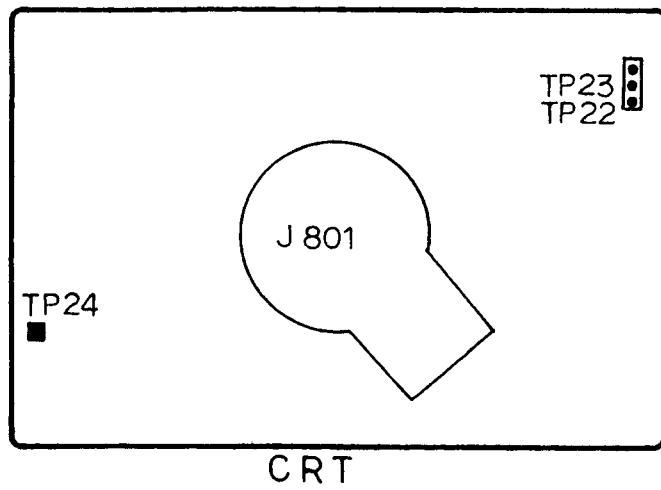
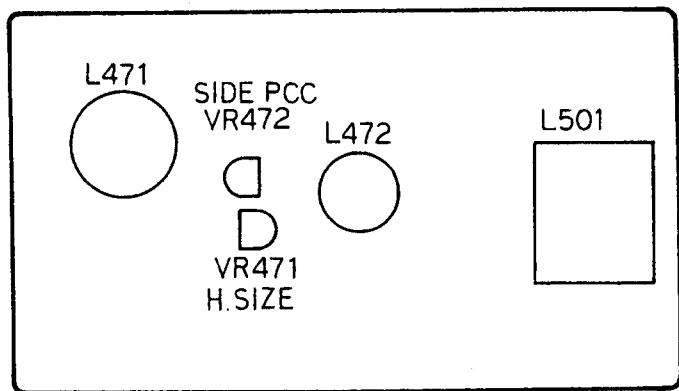
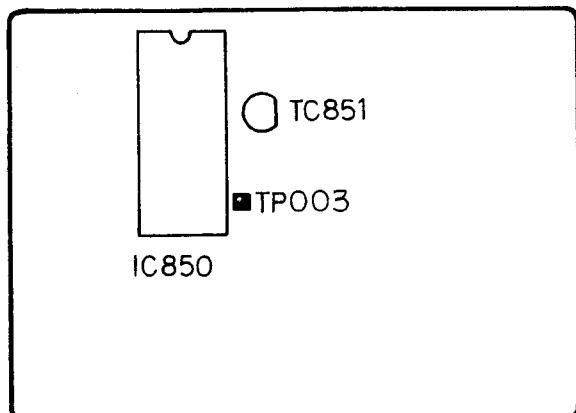
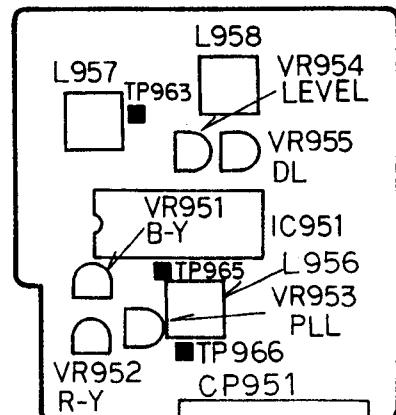
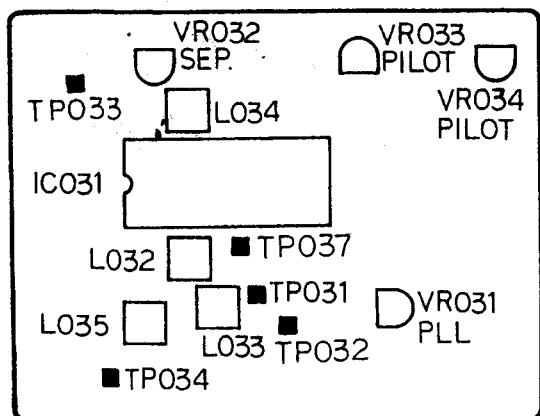
1. Receive the color bar pattern.
2. Adjust SW401 until horizontal line of the color bar comes to approximate center of the CRT.

# MAJOR COMPONENTS LOCATION GUIDE

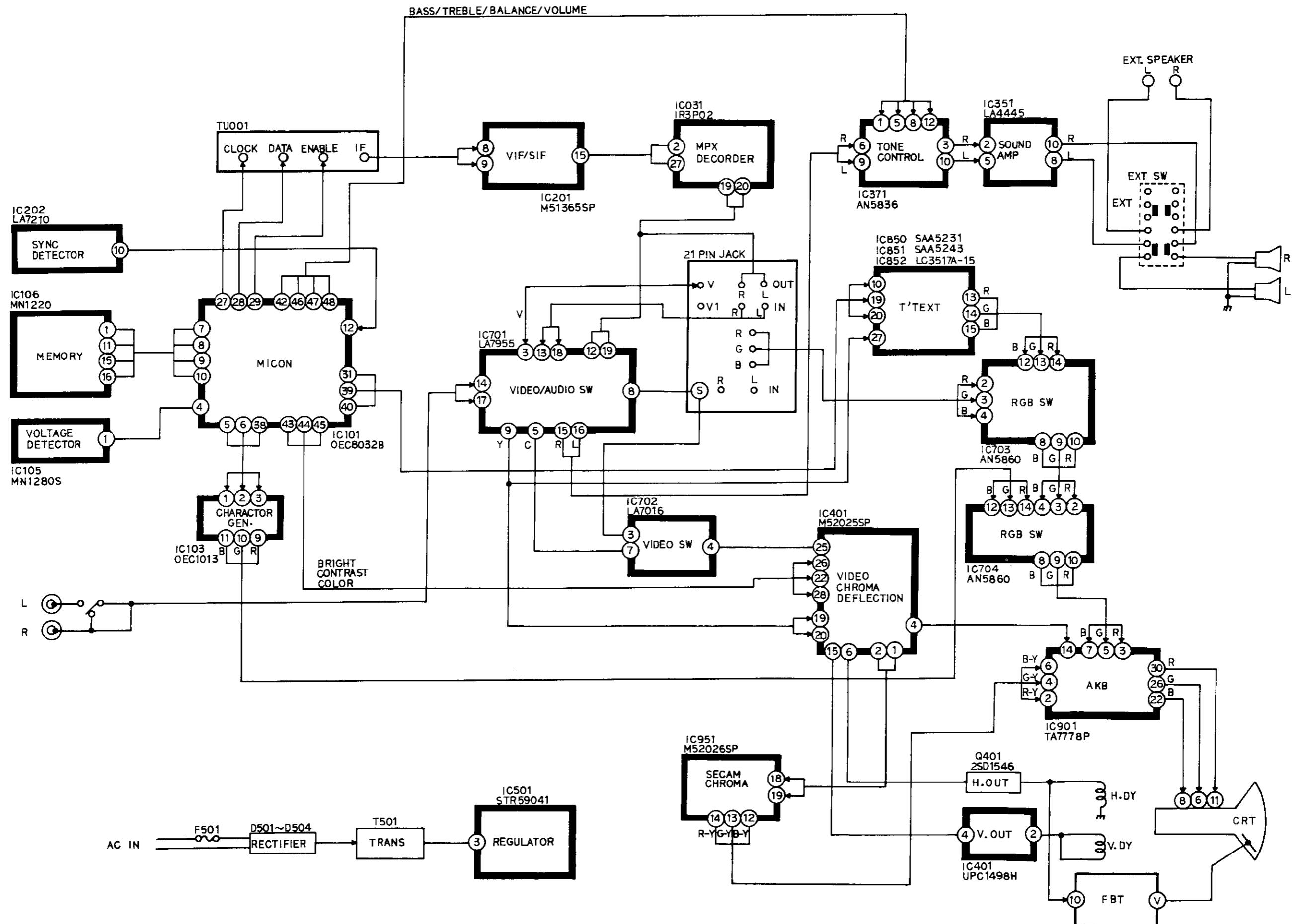


MAIN

# MAJOR COMPONENTS LOCATION GUIDE



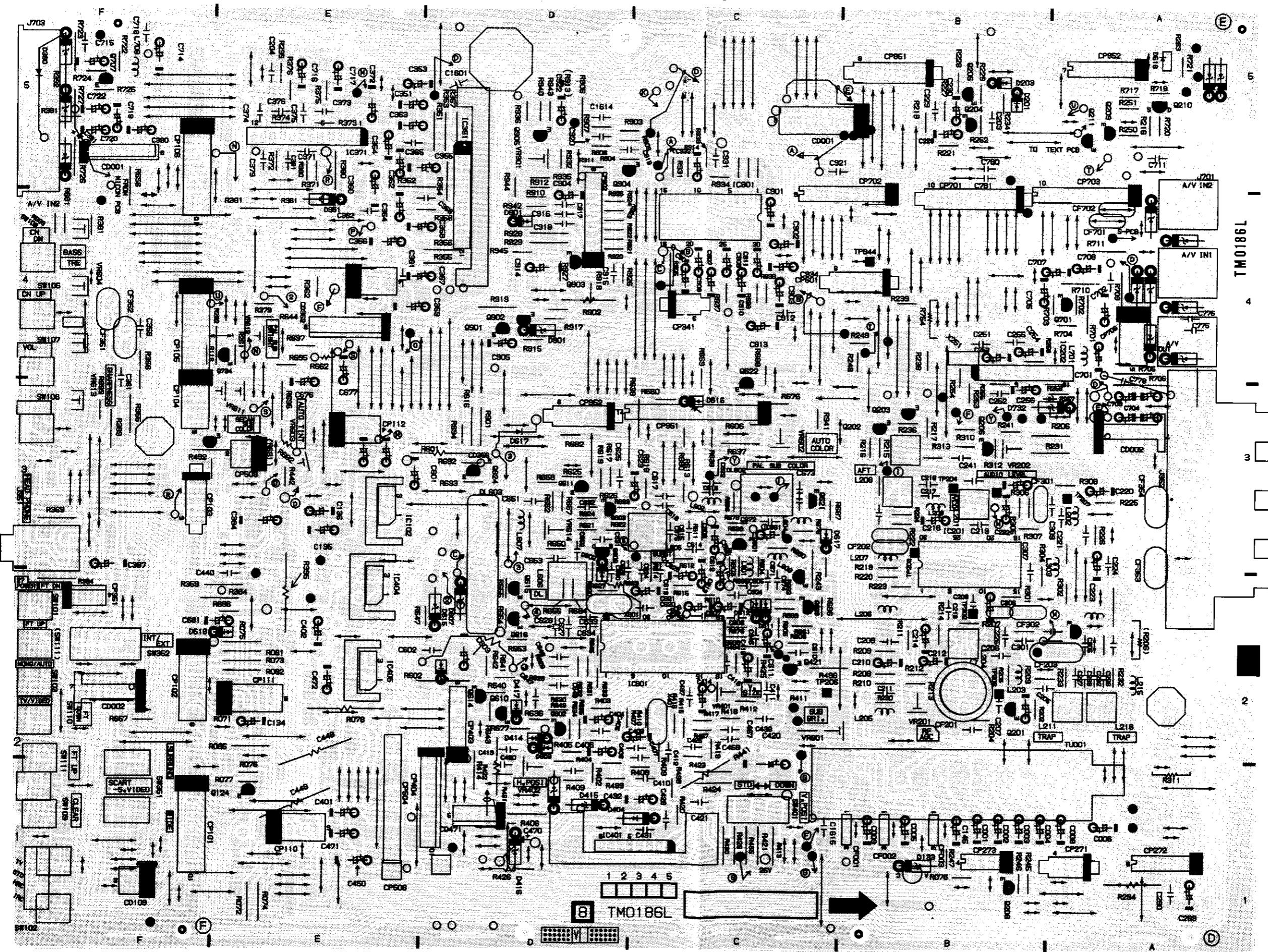
## BLOCK DIAGRAM



BLOCK DIAGRAM

2-1921

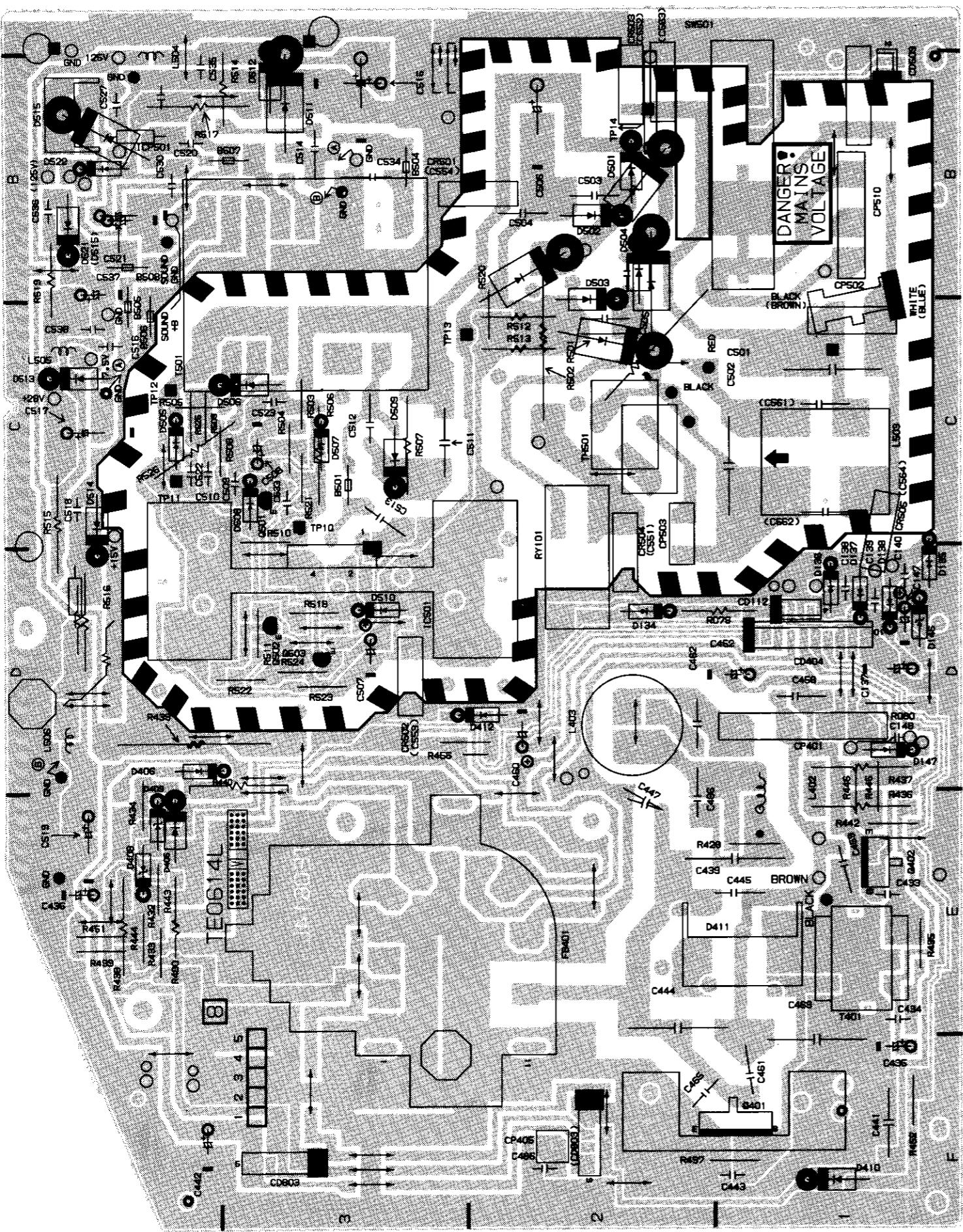
## **PRINTED CIRCUIT BOARD MAIN**



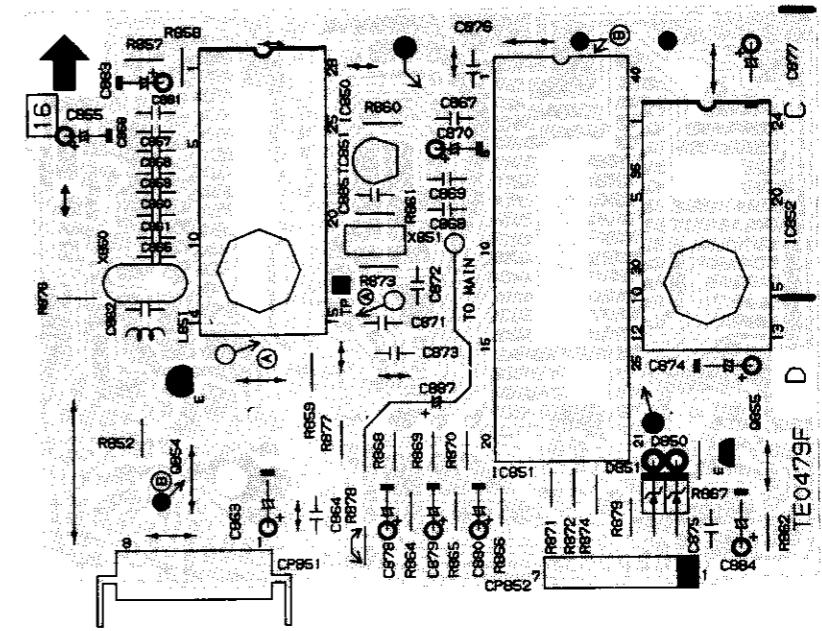
## **PRINTED CIRCUIT BOARD**

## PRINTED CIRCUIT BOARDS

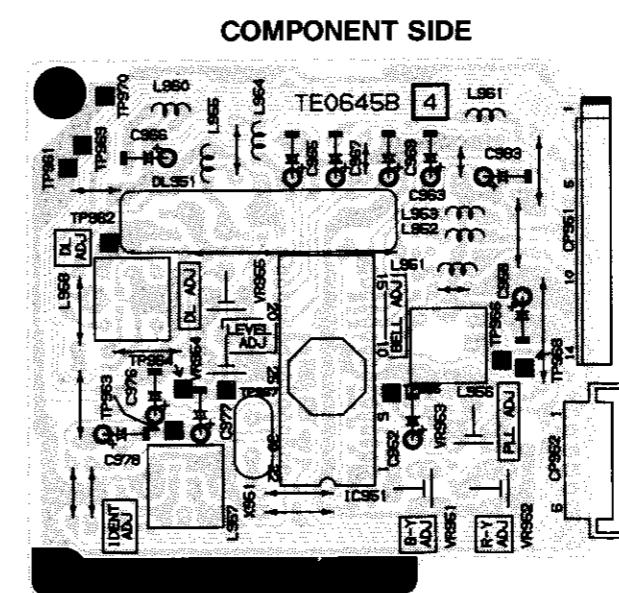
### POWER



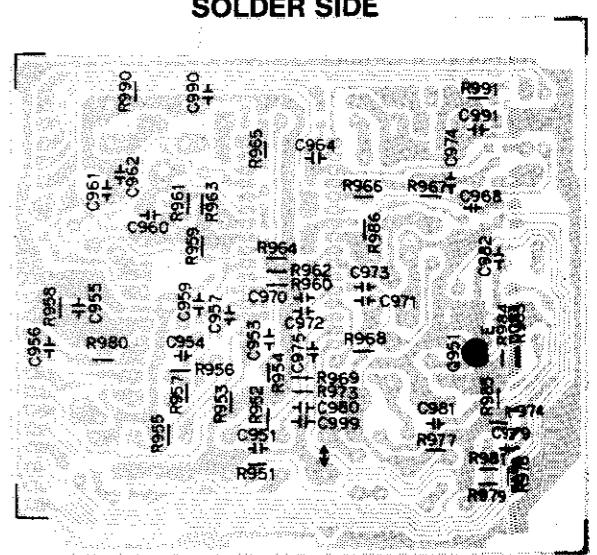
### T'TEXT



### SECAM



### SOLDER SIDE

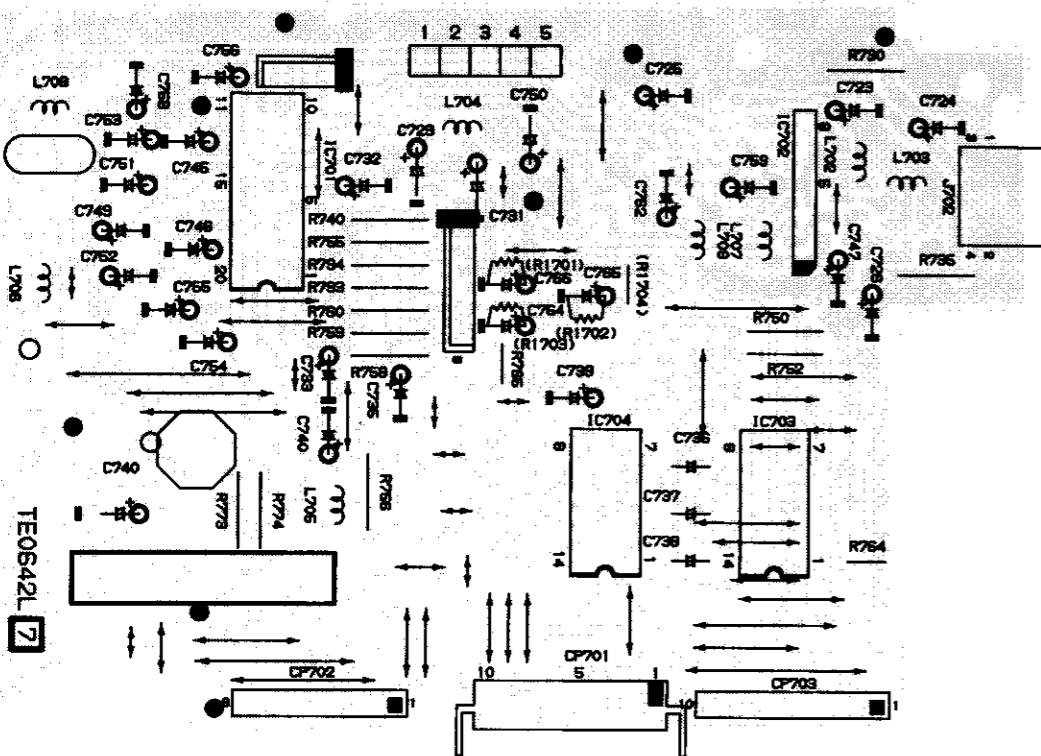


## PRINTED CIRCUIT BOARDS

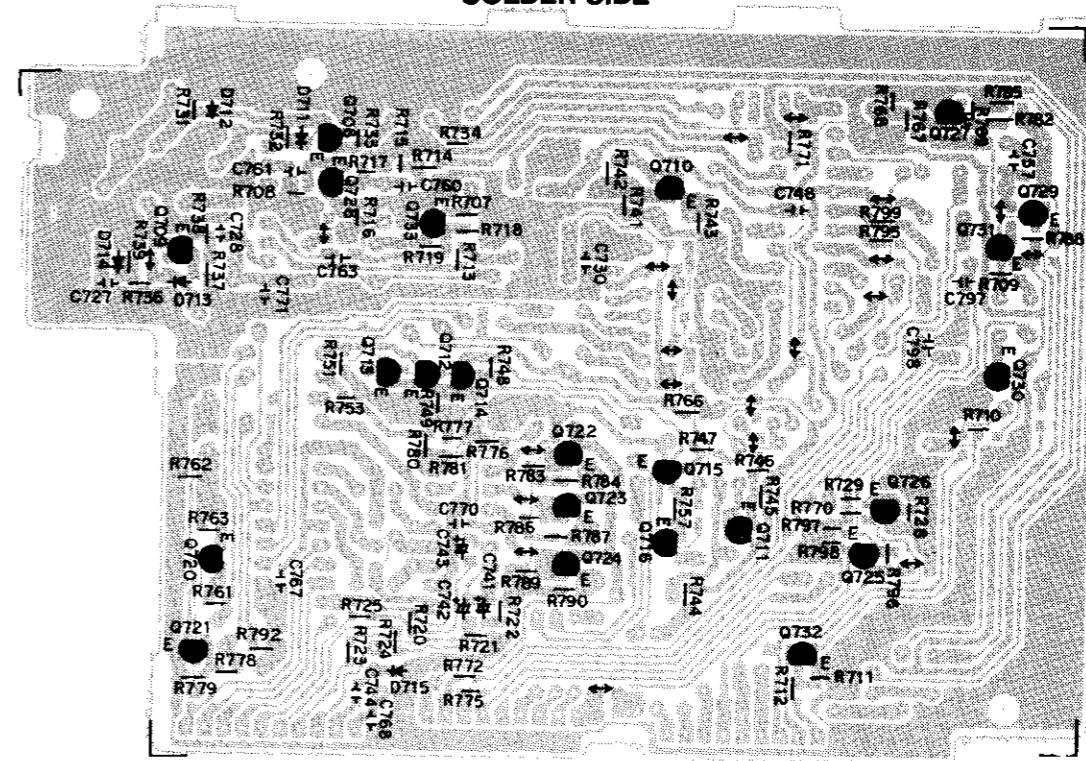
# PRINTED CIRCUIT BOARDS

## S-VHS

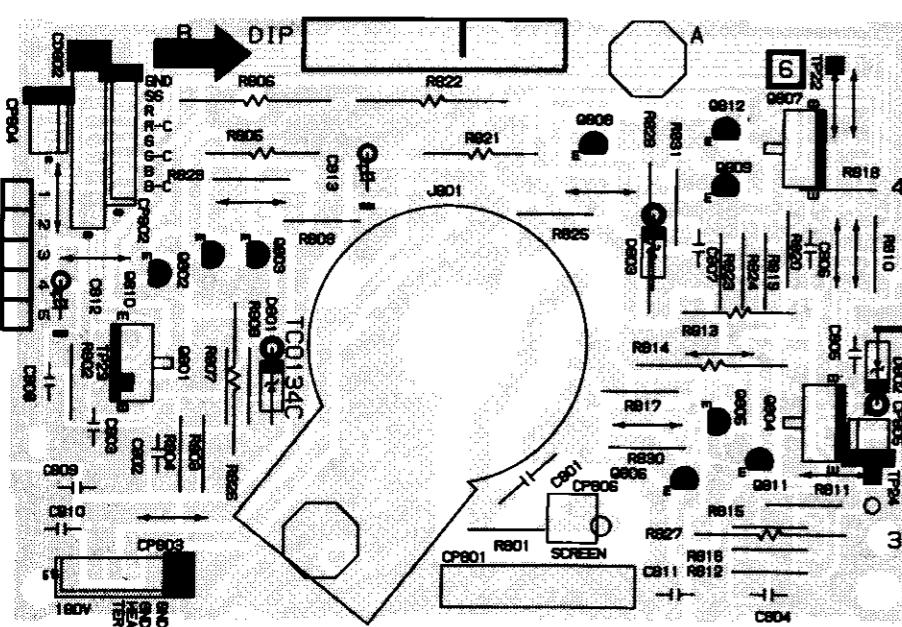
COMPONENT SIDE



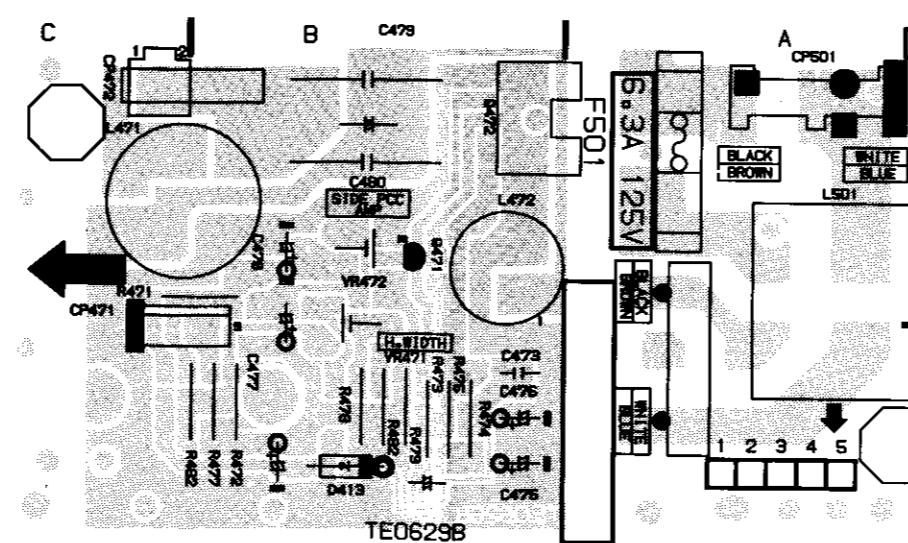
SOLDER SIDE



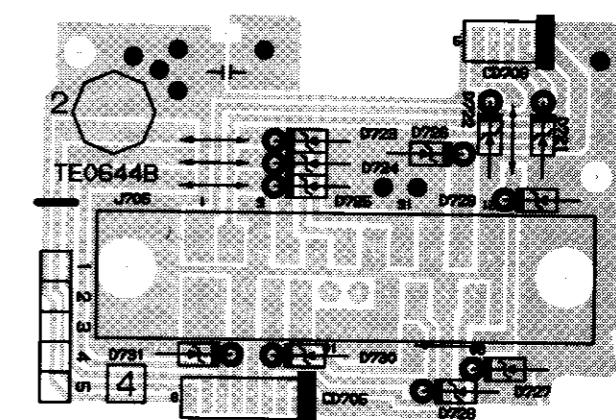
CRT



PIN CUSHION



21PIN

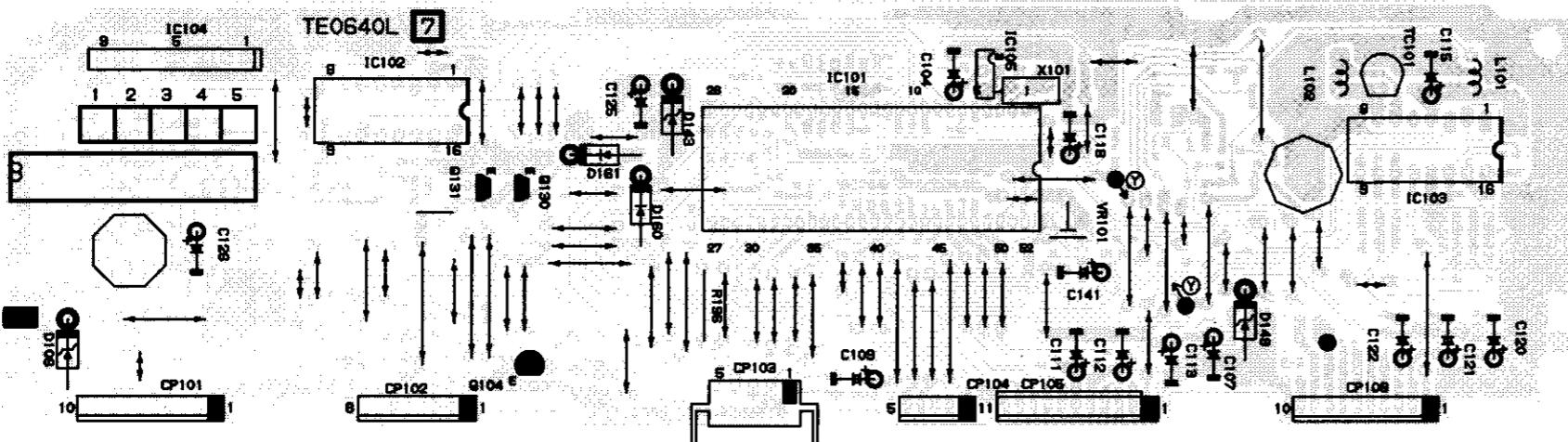


PRINTED CIRCUIT BOARDS

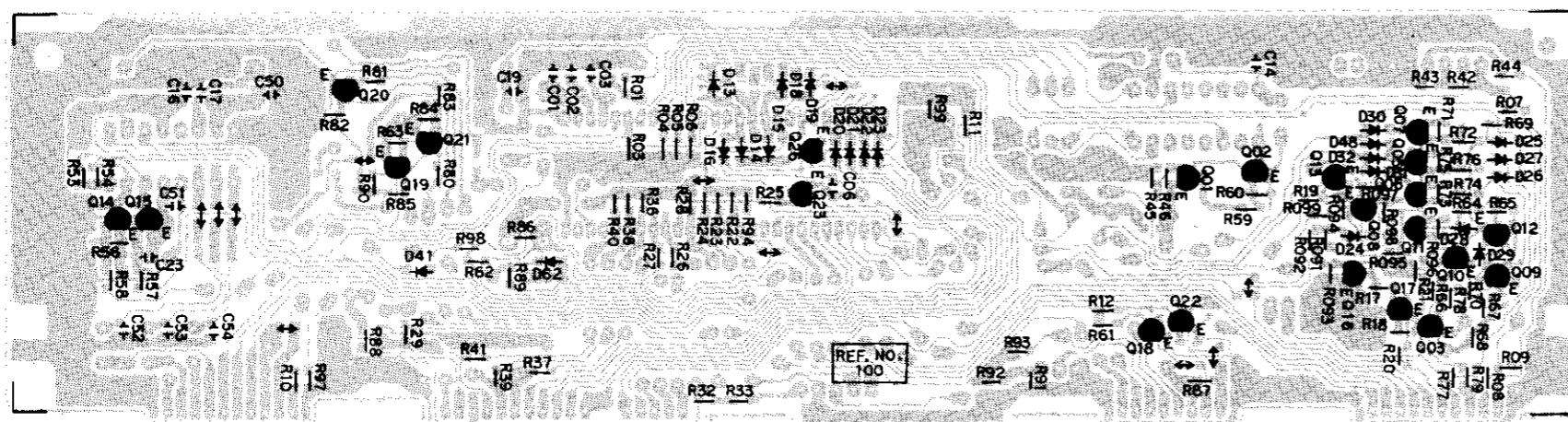
# PRINTED CIRCUIT BOARDS

MICON

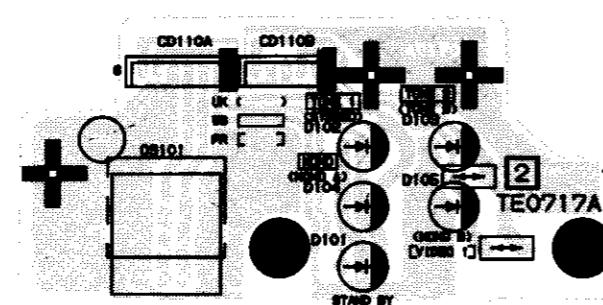
COMPONENT SIDE



SOLDER SIDE

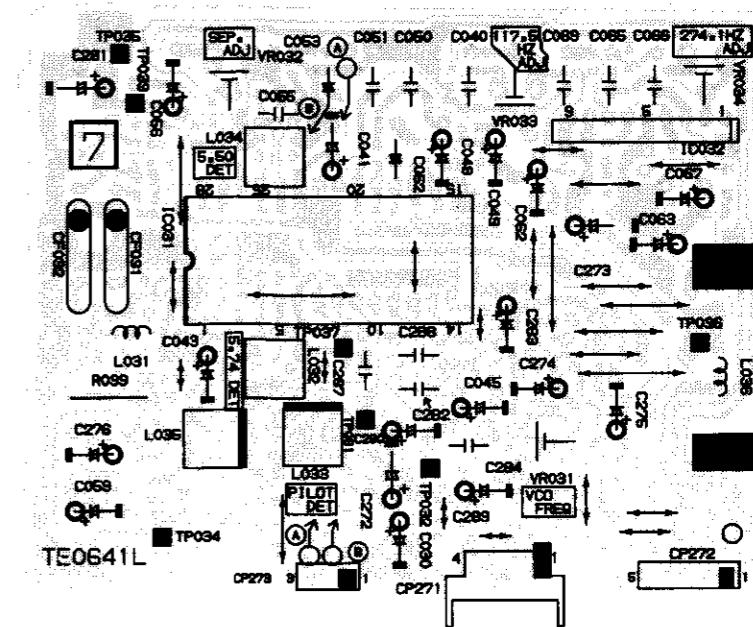


CONTROL

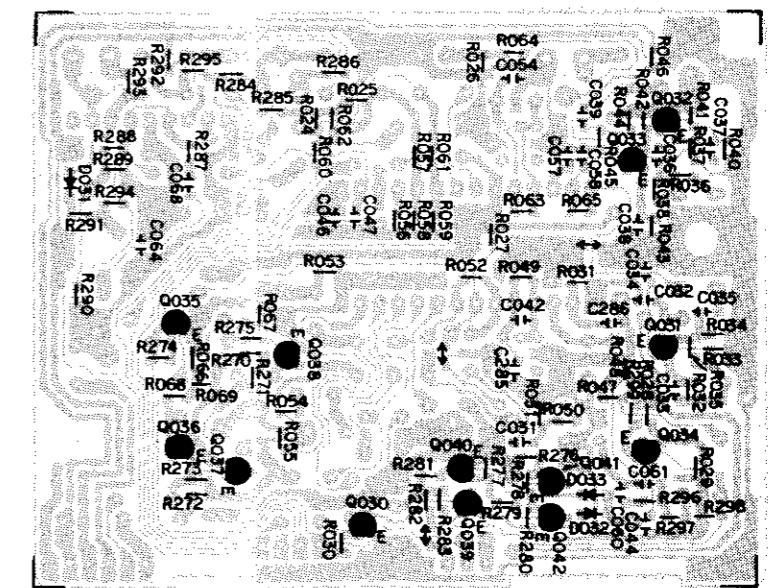


STEREO / SAP

COMPONENT SIDE

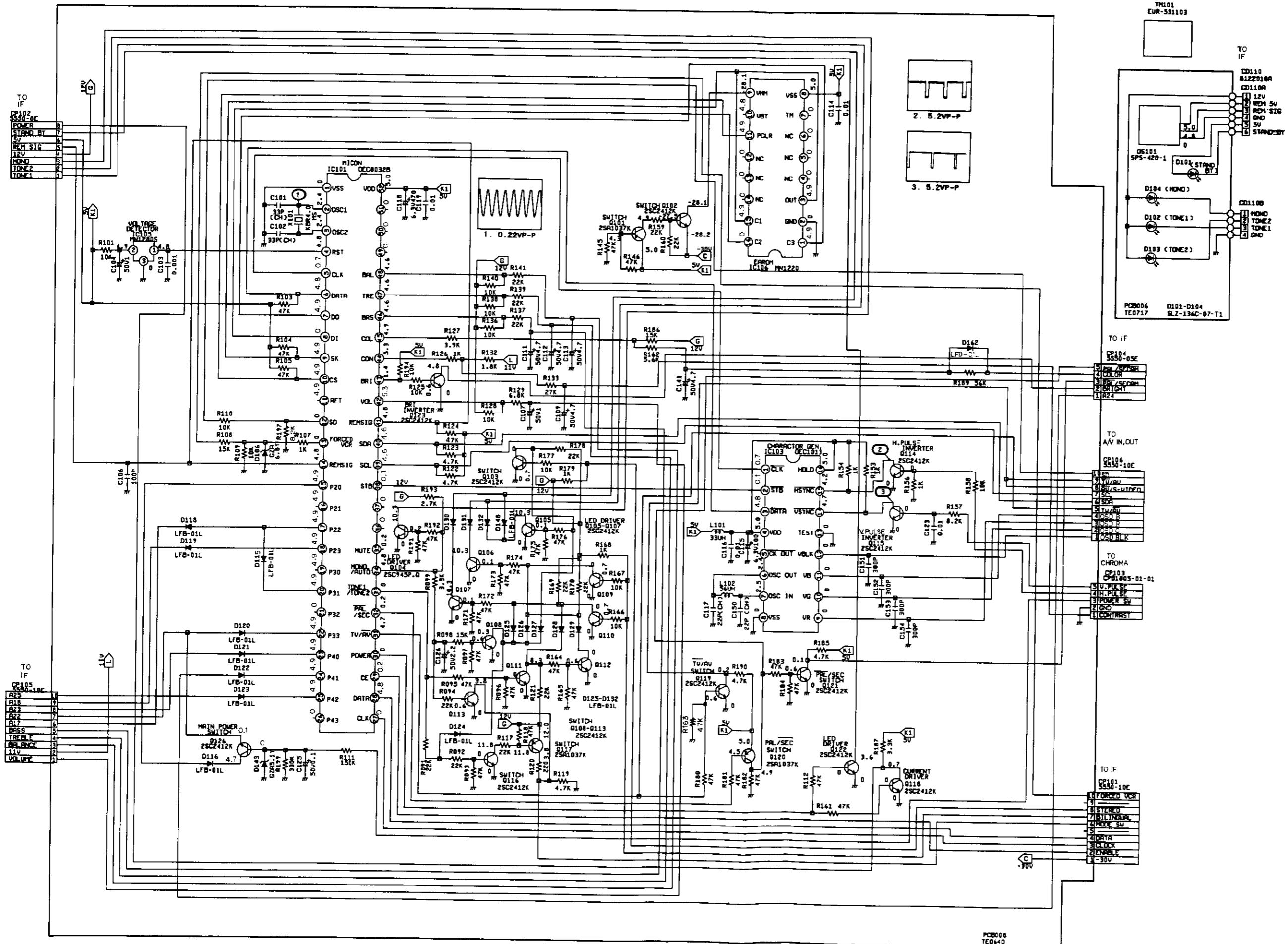


SOLDER SIDE

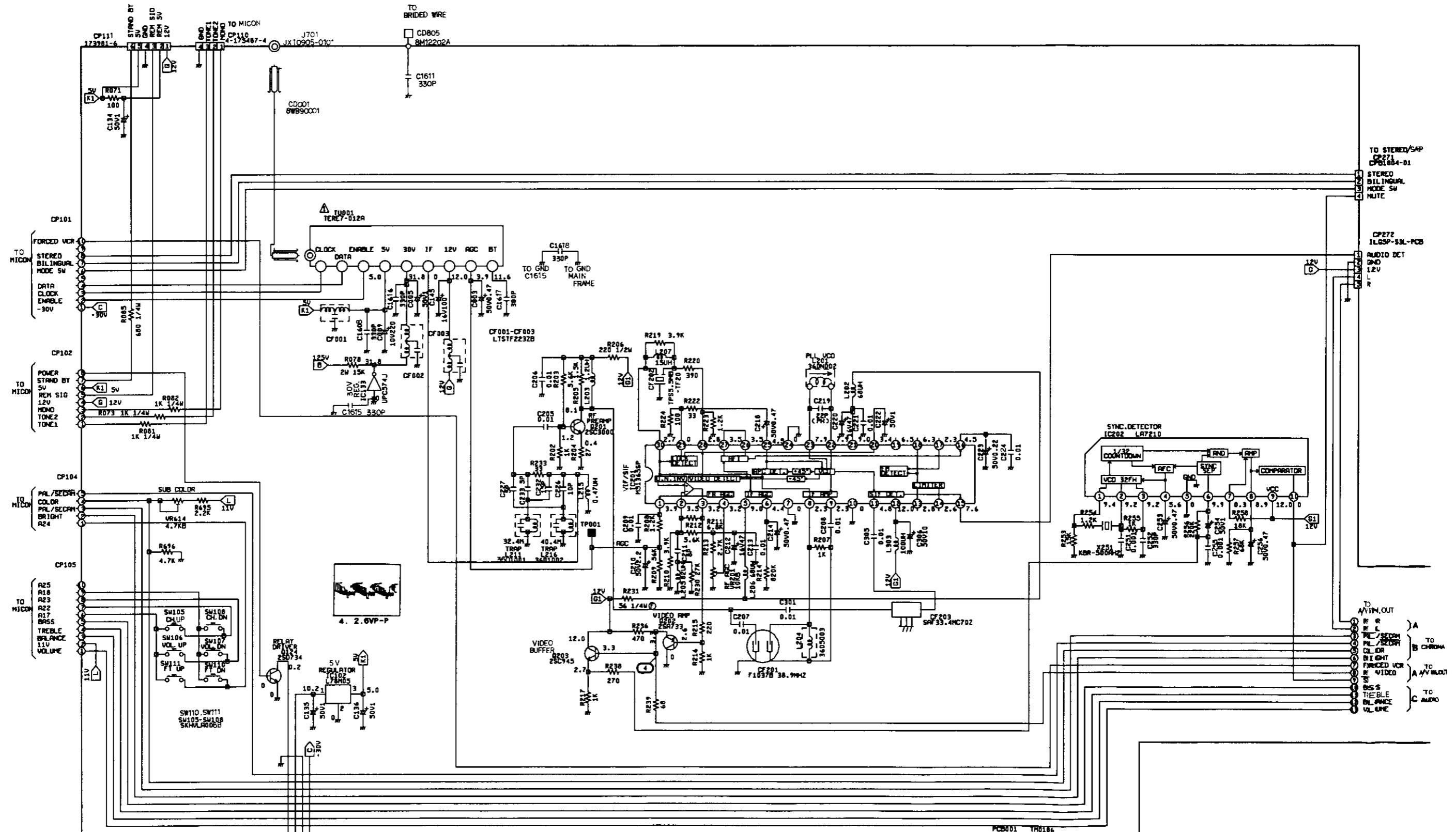


PRINTED CIRCUIT BOARDS

# MICON SCHEMATIC DIAGRAM



**IF SCHEMATIC DIAGRAM**



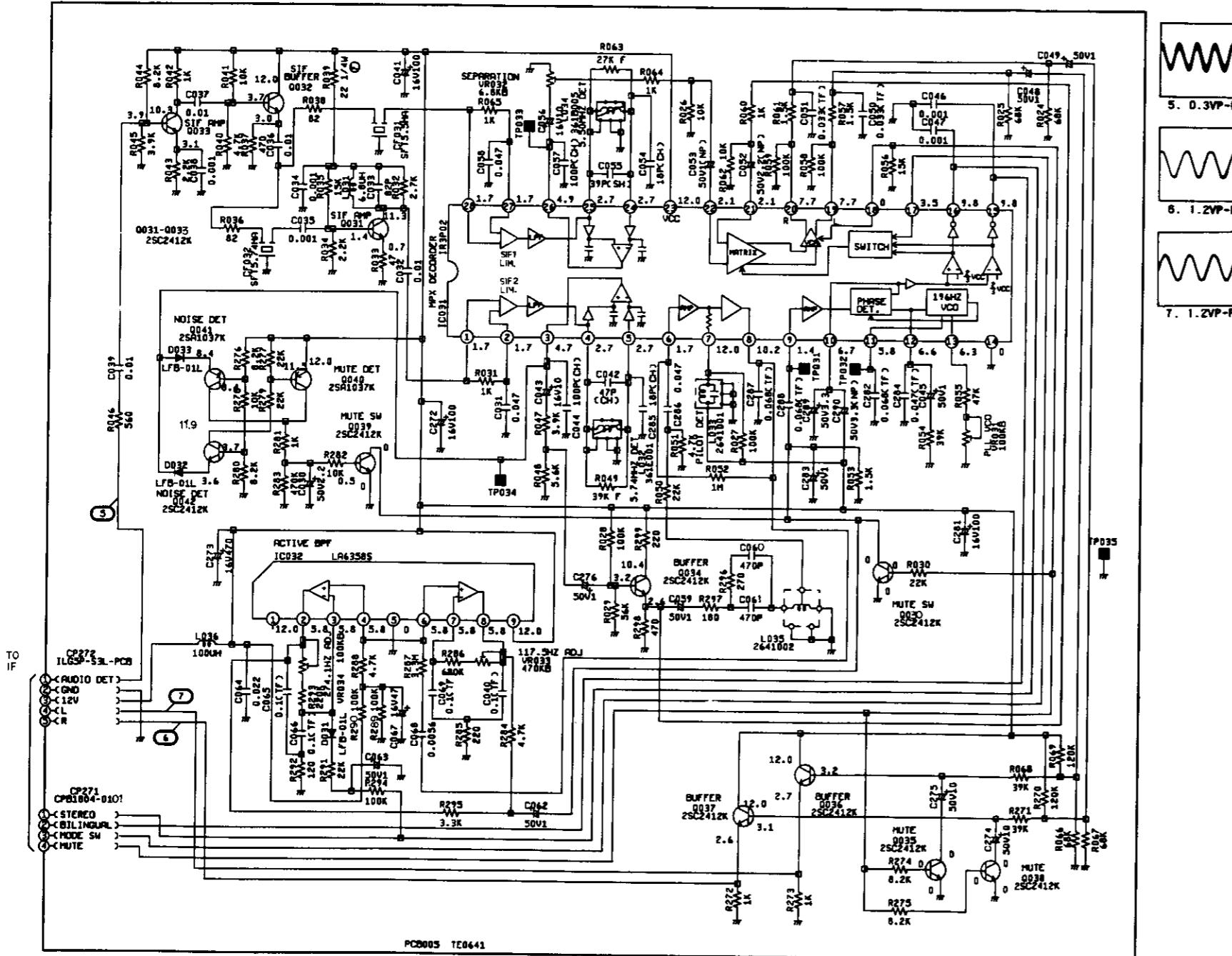
ATTENTION: LES PIECES REPARÉES PAR UN  ETANT DANGEREUSES EN POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

**NOTION: SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED ON PARTS LIST ONLY.**

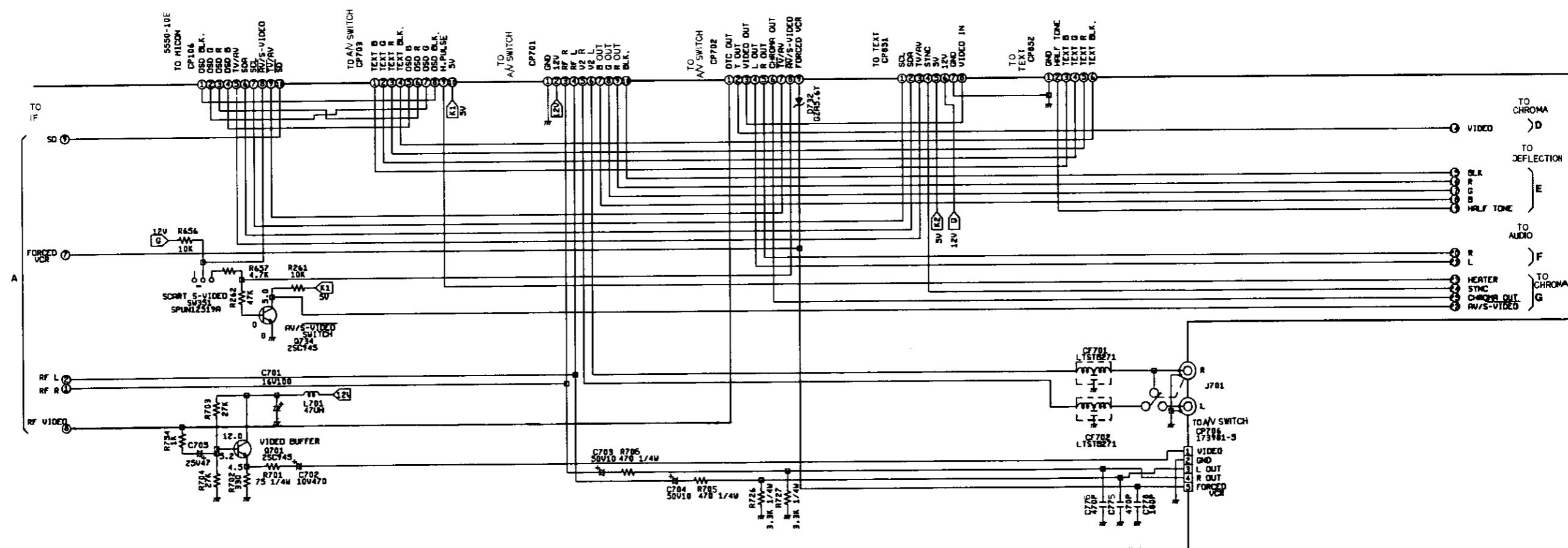
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

## **IF SCHEMATIC DIAGRAM**

## STEREO/SAP SCHEMATIC DIAGRAM



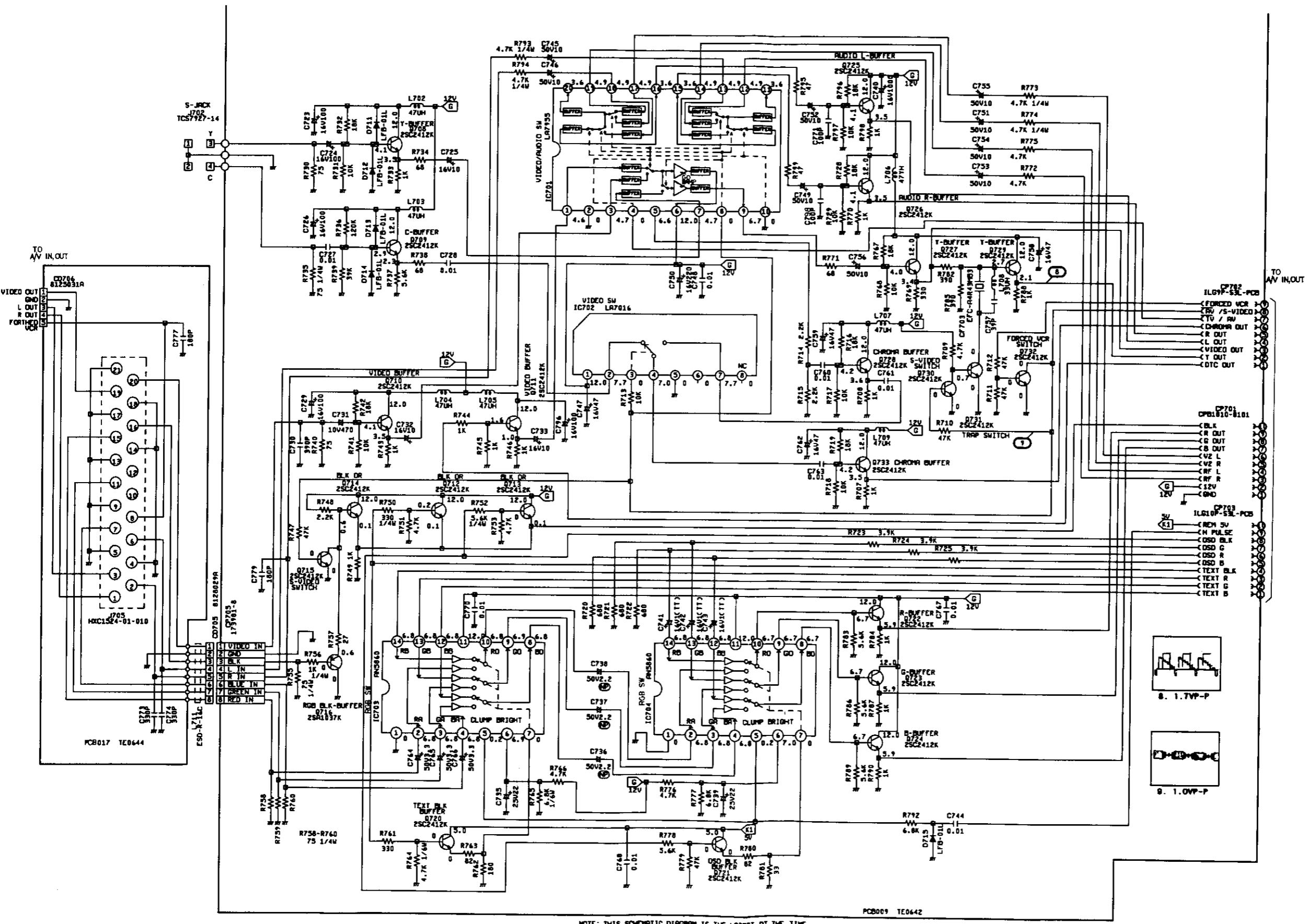
## **A/V/IN,OUT SCHEMATIC DIAGRAM**



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME  
OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

## **A/V/IN,OUT SCHEMATIC DIAGRAM**

## **A/V SWITCH SCHEMATIC DIAGRAM**

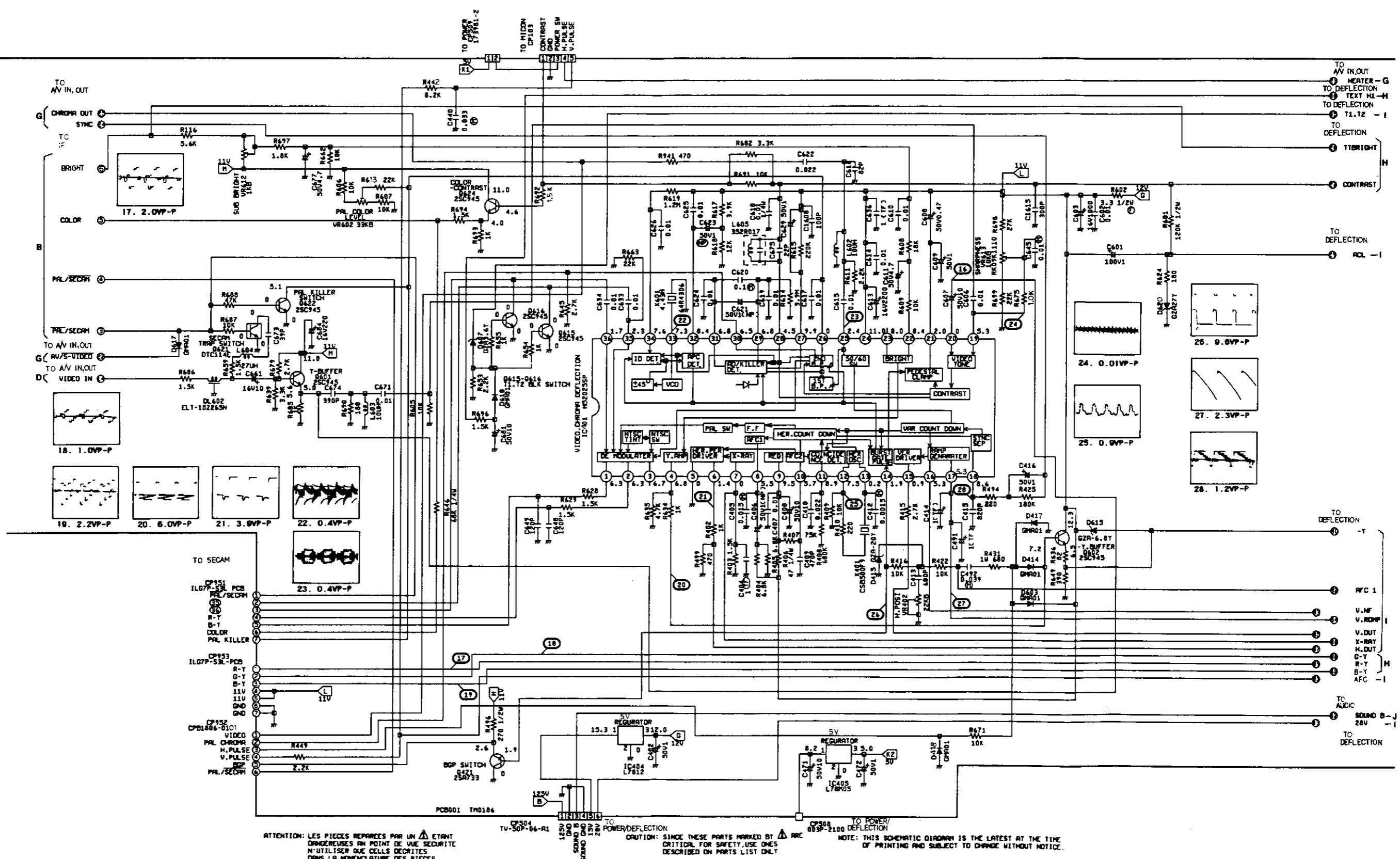


NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE

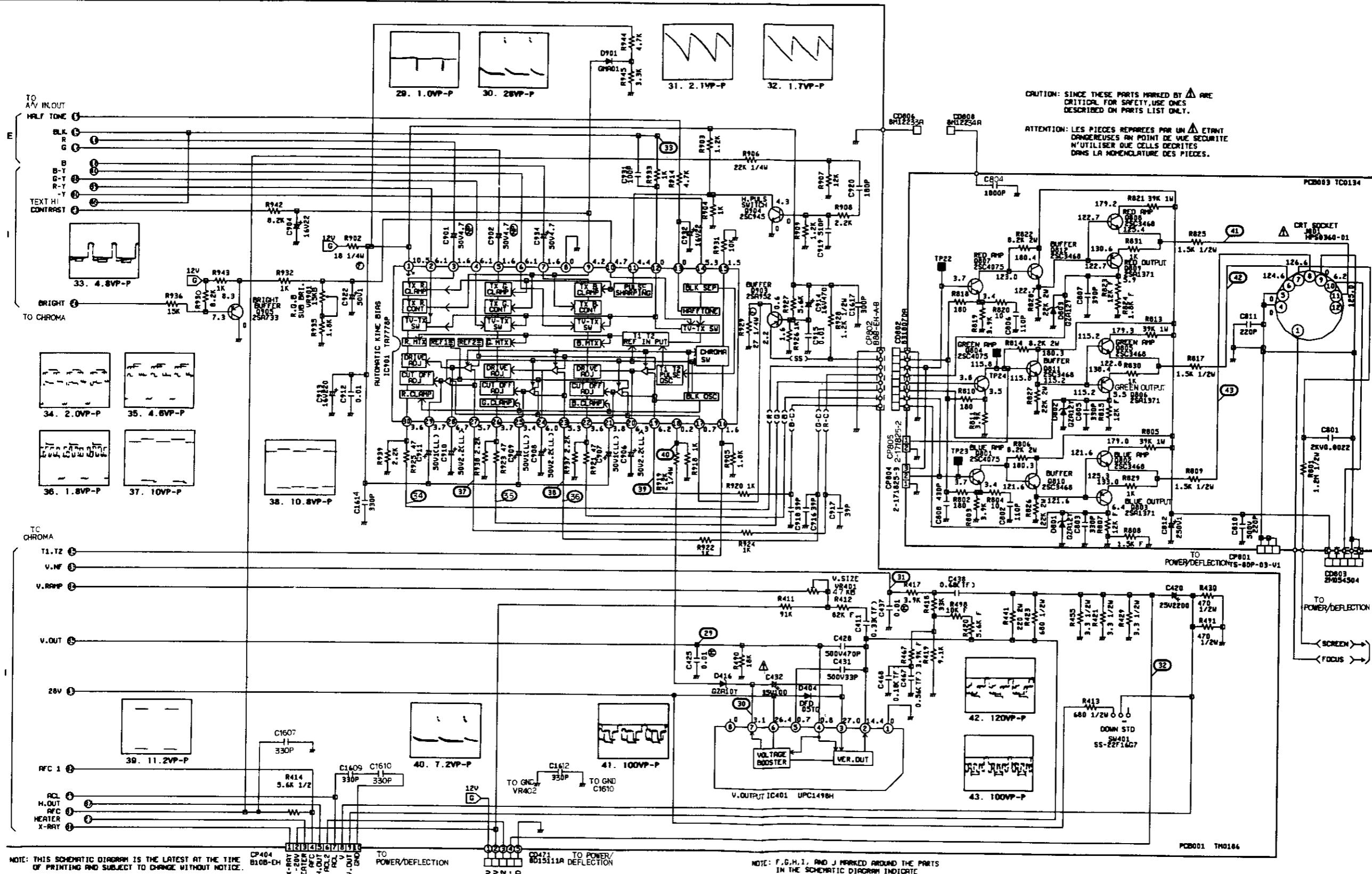
## **A/V SWITCH SCHEMATIC DIAGRAM**

**1-10833**

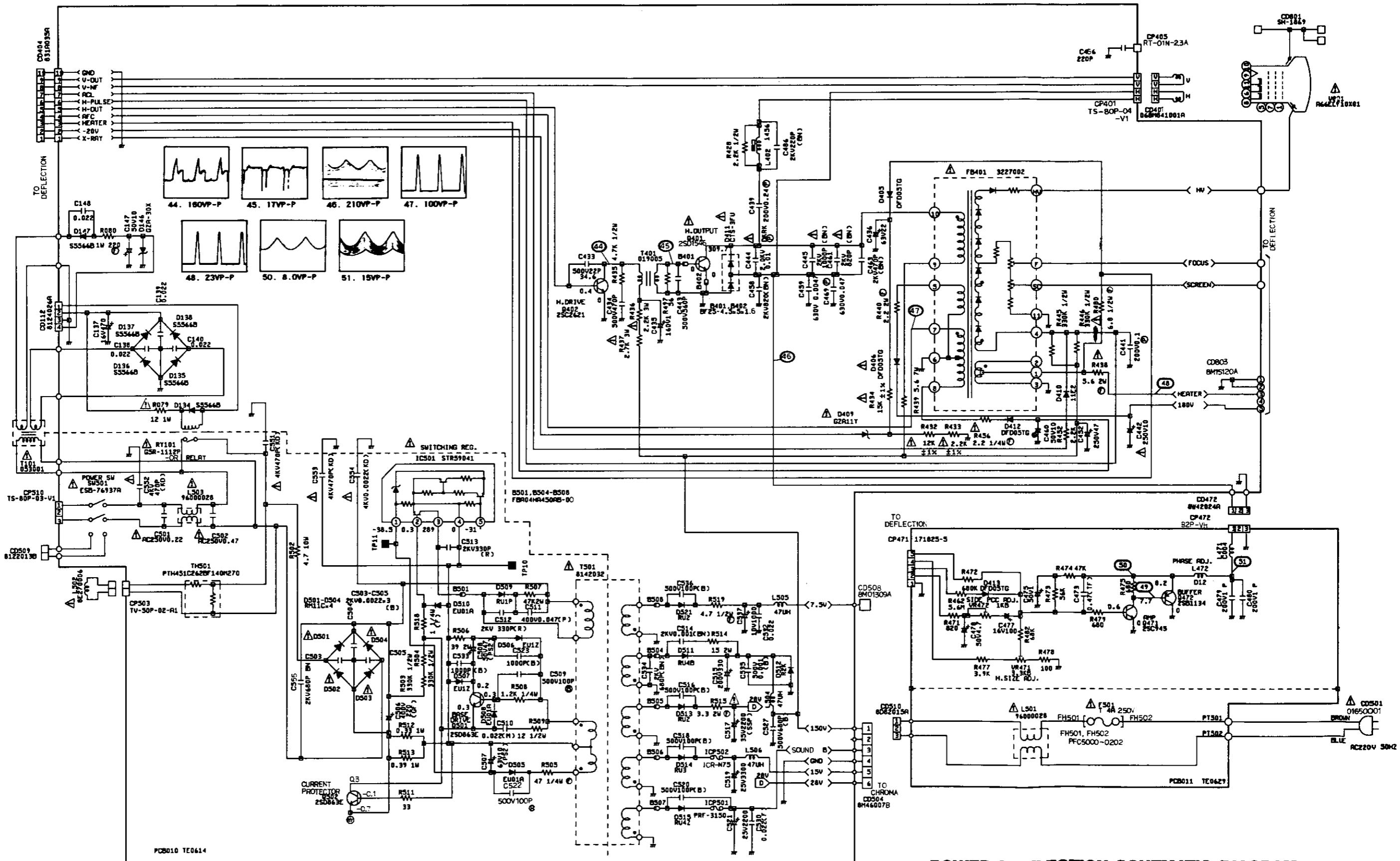
## CHROMA SCHEMATIC DIAGRAM



## DEFLECTION SCHEMATIC DIAGRAM



## **POWER/DEFLECTION SCHEMATIC DIAGRAM**



ATTENTION: LES PIECES REPARÉES PAR UN  ETANT DANGEREUSES AU POINT DE VUE SÉCURITÉ N'UTILISER QUE CELLES DÉCRITES DANS LA NOMENCLATURE DES PIÈCES.

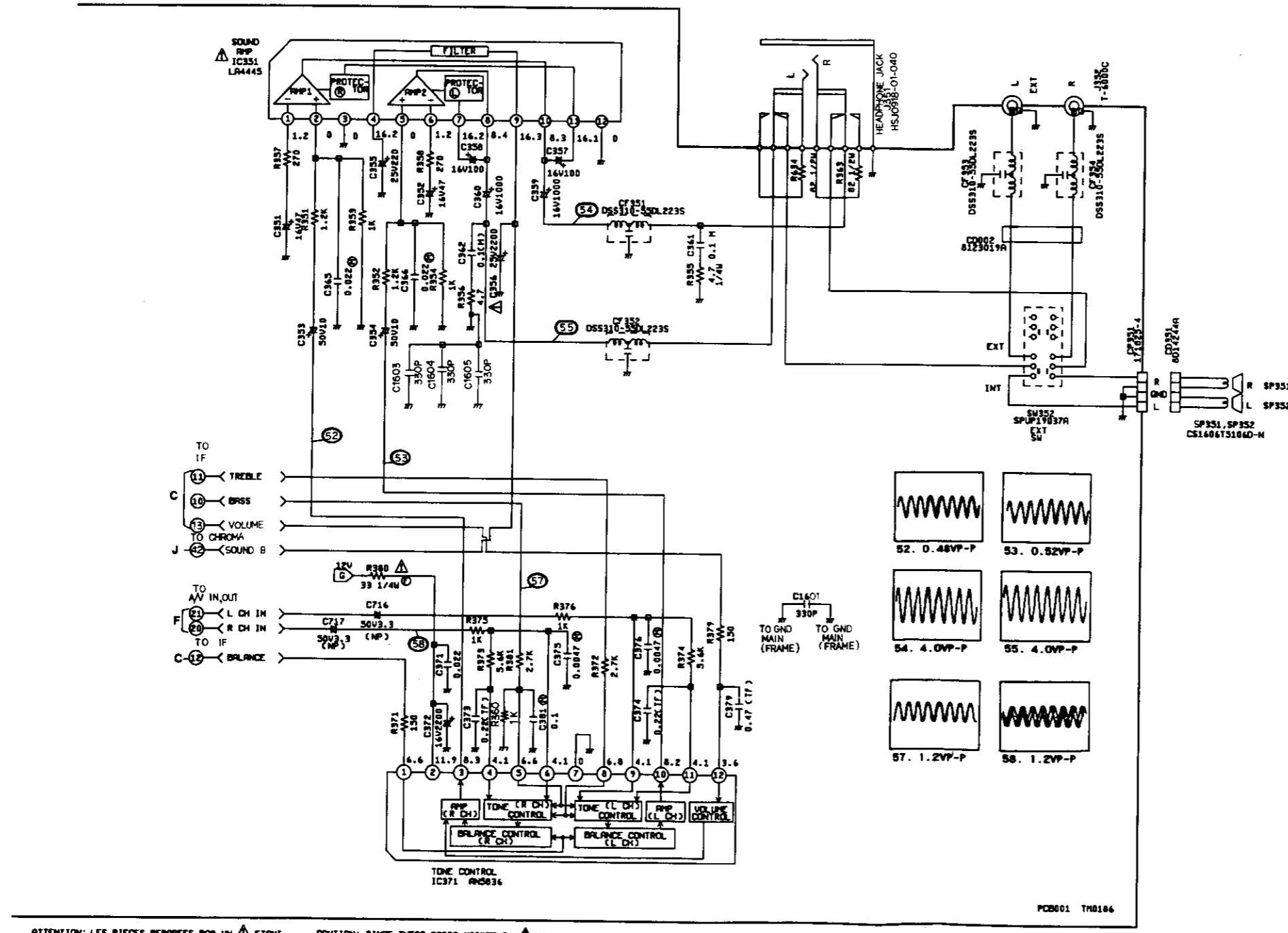
**CAUTION: SINCE THESE PARTS MARKED BY  ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED ON PARTS LIST ONLY.**

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

## **POWER/DEFLECTION SCHEMATIC DIAGRAM**

1-10836

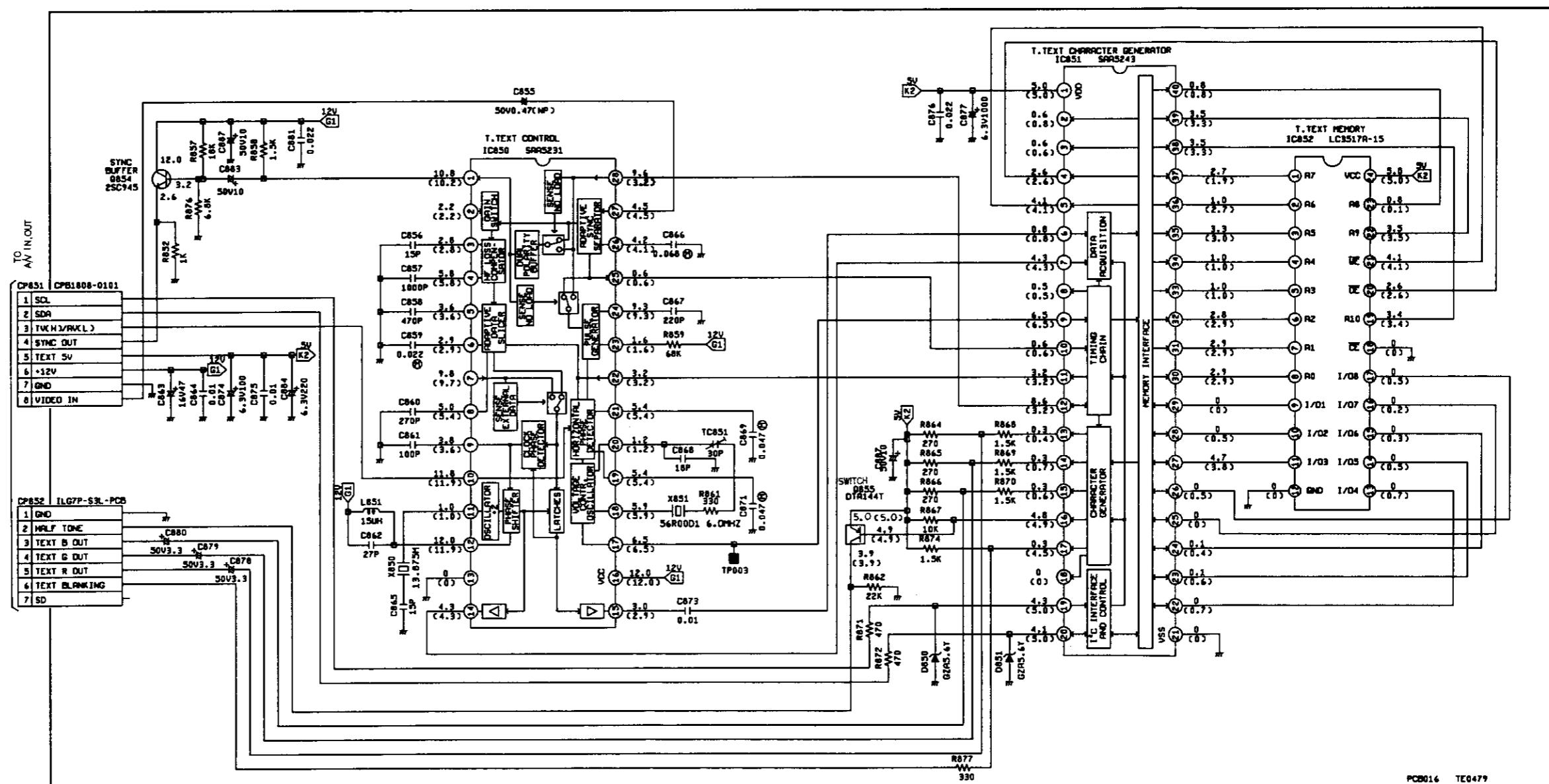
## AUDIO SCHEMATIC DIAGRAM



AUDIO SCHEMATIC DIAGRAM

1-10837

## T'TEXT SCHEMATIC DIAGRAM



CAUTION: DIGITAL TRANSISTOR



CAUTION: SINCE THESE PARTS MARKED BY  $\Delta$  ARE  
CRITICAL FOR SAFETY, USE ONES  
DESCRIBED ON PARTS LIST ONLY.

ATTENTION: LES PIECES REPÉRÉES PAR UN  $\Delta$  ETANT  
DANGEREUSES AU POINT DE VUE SÉCURITÉ,  
N'UTILISER QUE CELLES DÉCRITES  
DANS LA NOMENCLATURE DES PIÈCES.

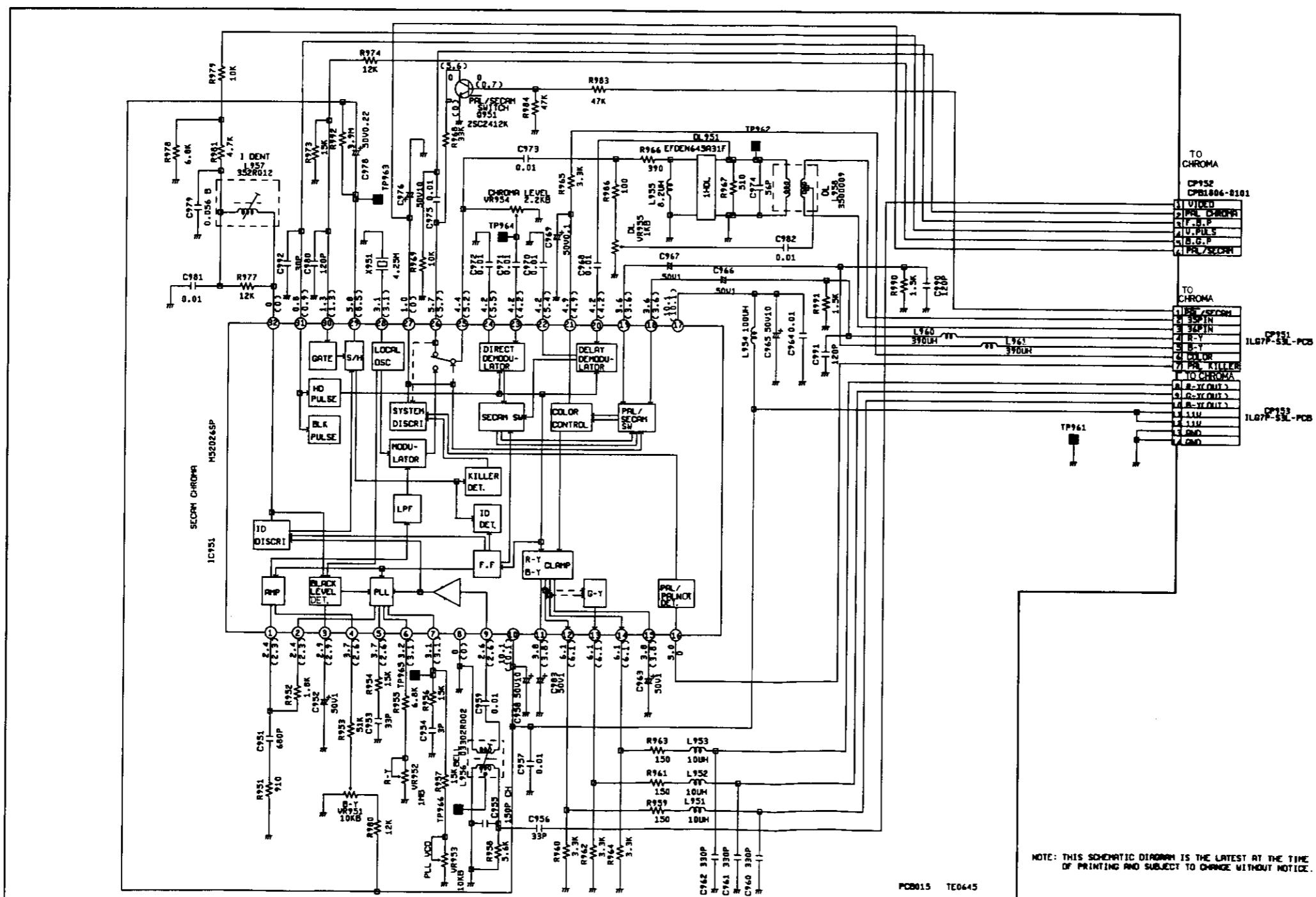
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME  
OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE FIGURE WITH  $\Delta$  IS THE VOLTAGE  
IN NORMAL TV OPERATION.  
THE FIGURE WITHOUT  $\Delta$  IS THE VOLTAGE  
IN TELETEXT OPERATION.

**T'TEXT SCHEMATIC DIAGRAM**

1-10838

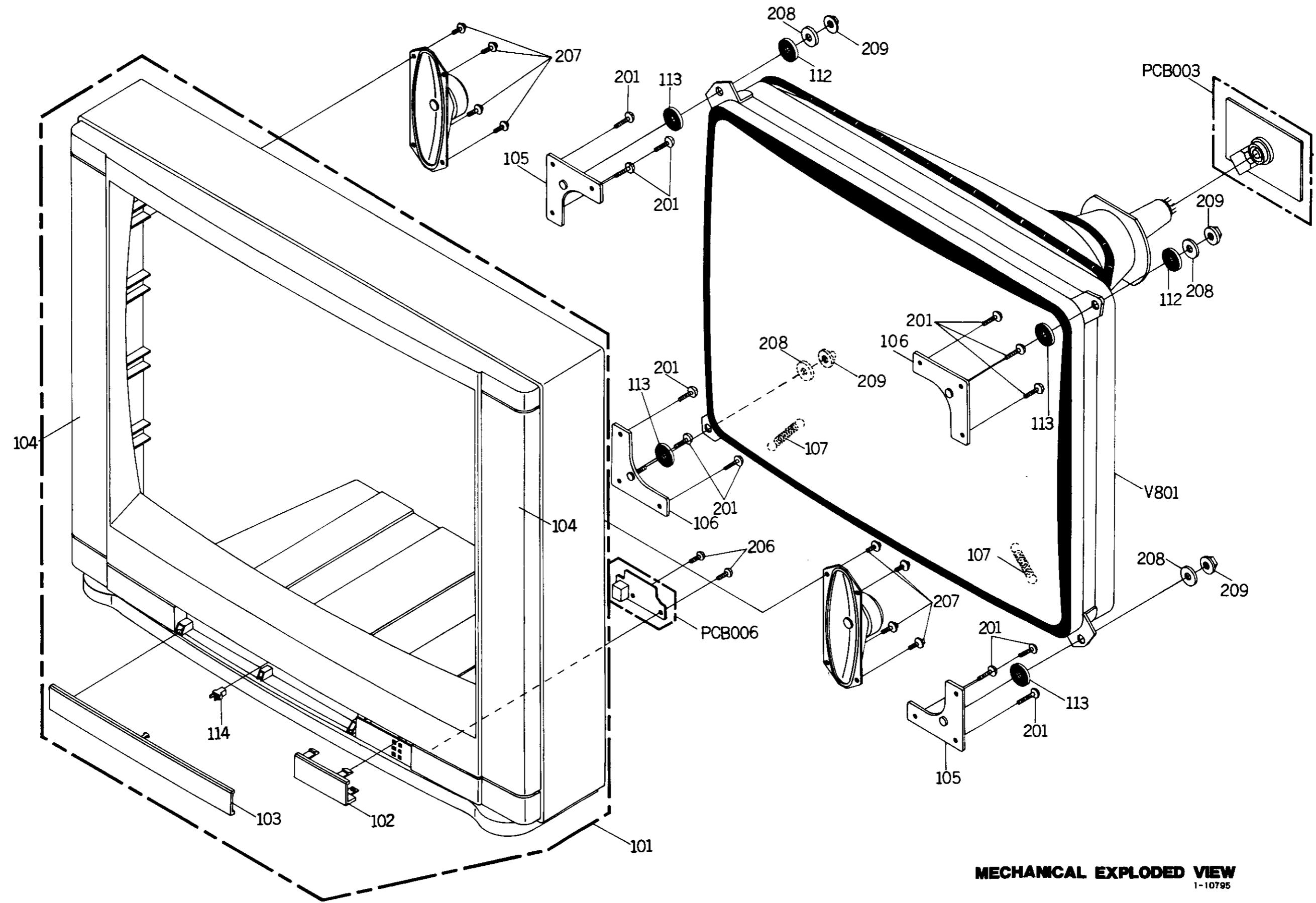
## **SECAM SCHEMATIC DIAGRAM**



NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

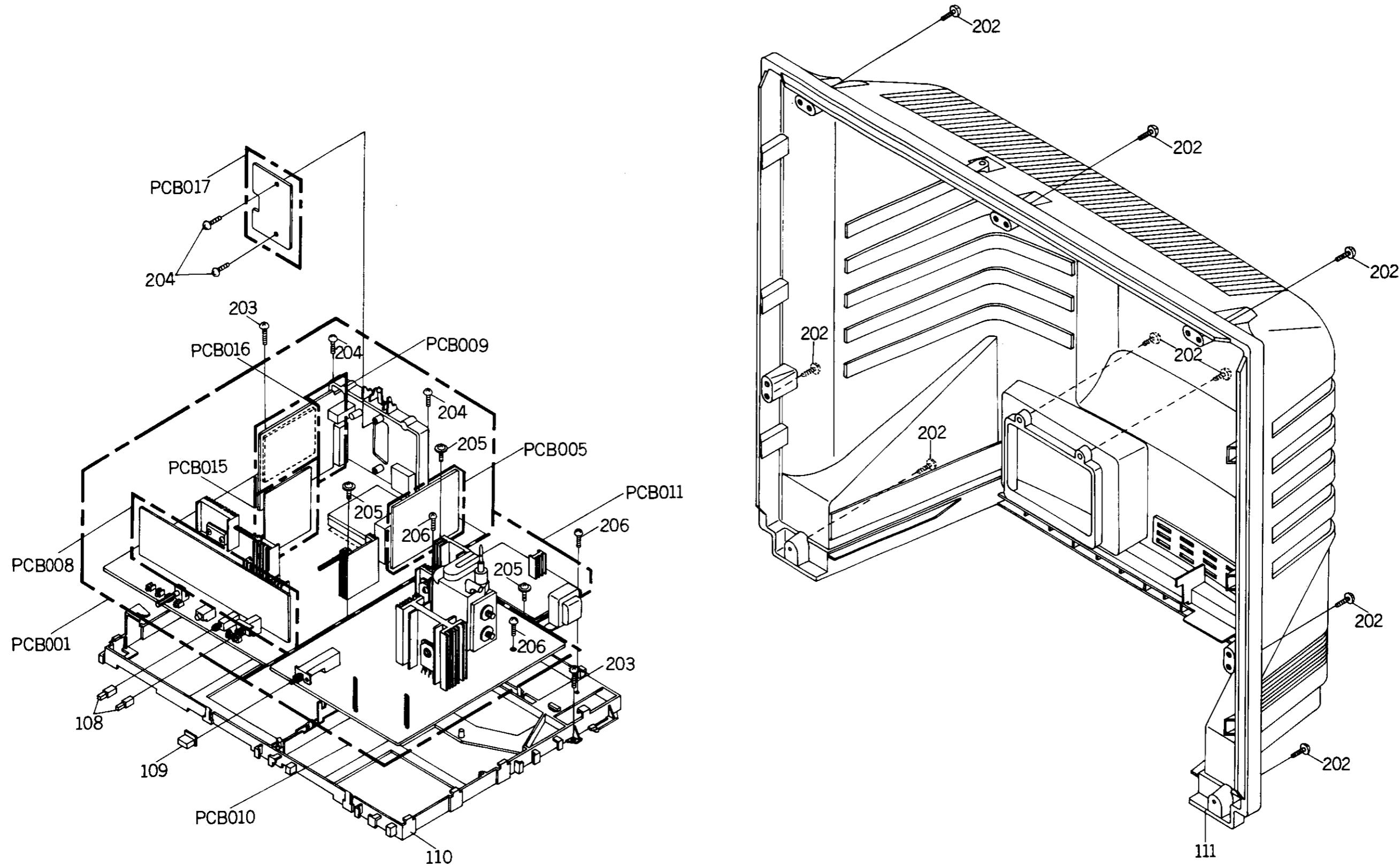
**SECAM SCHEMATIC DIAGRAM**

**MECHANICAL EXPLODED VIEW**



**MECHANICAL EXPLODED VIEW**  
1-10795

**MECHANICAL EXPLODED VIEW**



**MECHANICAL EXPLODED VIEW**  
1-10796

**MECHANICAL REPLACEMENT PARTS LIST**

REF. NO	PART NO	DESCRIPTION
101	A3A201A720 701UPB0023 7220000888 7230003990 7232020210 7240000957 711TPD0059 712TPD0020	CABINET, FRONT ASS'Y CABINET, FRONT SHEET, PTB PLATE, DOOR PLATE, BRAND SHEET, REMOCON PLATE, FRONT DOOR
103	714KSB0018	GRILL, SPEAKER
104	762USA0001	ANGLE, CRT
105	762USA0002	ANGLE, CRT
106	741TUAA0004	SPRING, EARTH
107	735TPA0085	BUTTON, PUSH
108	735TPA0101	BUTTON, POWER
110	762JPA0021	FRAME, PCB
111	A3A201A740 702UPA0057 7222021235	CABINET, BACK ASS'Y CABINET, BACK SHEET, RATING
112	600TR00003	SHEET, CRT SUPPORT
113	600TR00007	SHEET, CRT SUPPORT
114	890LA10000	NC LACH
201	8110240B04	TAP TITE(P) BIND
202	8117540A62	TAPPING(B0) TRUSS
203	8117540A24	TAPPING(B0) TRUSS
204	8110630A04	TAP TITE(P) BRAZIER
205	8117F30A04	TAPPING(B0) WH12
206	8110630804	TAP TITE(P) BRAZIER
207	8117D30804	TAPPING(B0) WH8
208	82A60B2164	WASHER
209	8300560004	SL NUT
		4*20 CH 4*16 BK 4*12 CH 3*10 CH 3*10 CH 3*8 CH 3*8 CH 6.3*22*T1.6 M6
---	J3A20101A	INSTRUCTION BOOK
---	J3A20103A	SCHEMATIC DIAGRAM
---	J3540126B	WARNING SHEET
---	J4511102C	GUARANTEE CARD
---	791SHA0032	LAMIFILM, BAG
---	792UHA0034	PACKAGE, TOP
---	792UHA0035	PACKAGE, BOTTOM
---	793UCD0368	GIFT BOX
---	795UCA0007	PAD

THIS ELECTRICAL PARTS LIST IS STANDARD PART LIST, BUT  
INTERCHANGEABLE PARTS MAY BE USED IN THE UNIT.  
SEE THE INTERCHANGEABLE PARTS LIST AFTER THE STANDARD PARTS LIST.

### ELECTRICAL REPLACEMENT PARTS LIST

REF. NO	PART NO	DESCRIPTION	REF. NO	PART NO	DESCRIPTION				
RESISTORS			CAPACITORS (CONT)						
R039	R61584220J	R.FUSE	22	OHM 1/4W	C507	E02QF6100M	CE	10	UF 63V
R078	R3126A153J	R.METAL OXIDE	15K	OHM 2W	C508	E02QF5470M	CE	47	UF 50V
R080	R61581221J	R.METAL OXIDE	12	OHM 1W	C511	P341F4473J	CPP	0.047	UF 400V
R231	R61584560J	R.FUSE	220	OHM 1W	C512	C03FOR7L2K	CC	330	PF 2KV
R380	R61584330J	R.FUSE	56	OHM 1/4W	C513	C03FOR7L2K	CC	330	PF 2KV
R406	R61584470J	R.FUSE	33	OHM 1/4W	C514	C0D4BN713K	CC	1000	PF 2KV BN
R430	R00202471J	RC	47	OHM 1/4W	C515	E02KFV331M	CE	330	UF 200V
R431	R31181681J	R.METAL OXIDE	470	OHM 1/2W	C517	E02TF4222M	CE	2200	UF 35V
R436	R3126B222J	R.METAL OXIDE	680	OHM 1W	C519	E02SF3332M	CE	3300	UF 25V
R437	R3126B272J	R.METAL OXIDE	2.2K	OHM 3W	C521	E02TF3222M	CE	2200	UF 25V
R438	R6158A5R6J	R.FUSE	2.7K	OHM 3W	C534	C0D4BN7U2K	CC	680	PF 2KV BN
R439	R5A2CE5R6K	R.CEMENT	5.6	OHM 7W	C551	CA1030KQ2M	CC	470	PF 400V AC
R440	R6158A2R2J	R.FUSE	2.2	OHM 2W	C552	CA1030KQ2M	CC	470	PF 400V AC
R441	R3126A221J	R.METAL OXIDE	220	OHM 2W	C553	CA1030KQ2M	CC	470	PF 400V AC
R456	R615842R2J	R.FUSE	2.2	OHM 1/4W	C554	CA1030KH3M	CC	2200	PF 400V AC
R480	R635826R8J	R.FUSE	6.8	OHM 1/2W	C555	C0DOBNTU2K	CC	680	PF 2KV
R491	R00202471J	RC	470	OHM 1/2W	C613	E02702222M	CE	2200	UF 16V
R502	R5A2CF4R7K	R.CEMENT	4.7	OHM 1W	C621	E02E05010M	CE	1	UF 50V
R505	R63584470J	R.FUSE	47	OHM 1/4W	C636	P61300105J	CMPL	1.0	UF 50V
R506	R3118A390J	R.METAL OXIDE	39	OHM 2W	C645	P13300103J	CP	0.01	UF 50V
R507	R3118A473J	R.METAL OXIDE	47K	OHM 2W	C677	E027054R7M	CE	4.7	UF 50V
R512	R31181R33J	R.METAL OXIDE	0.33	OHM 1W	C682	P61300684J	CMPL	0.68	UF 50V
R513	R31181R39J	R.METAL OXIDE	0.39	OHM 1W	C684	E02702221M	CE	220	UF 16V
R514	R3126A180J	R.METAL OXIDE	15	OHM 2W	C778	C020SL4G2J	CC	180	PF 50V SL
R515	R6158A3R3J	R.FUSE	3.3	OHM 2W	C779	C020SL4G2J	CC	180	PF 50V SL
R518	R63584010J	R.FUSE	1	OHM 1/4W	C801	C02BB07H3K	CC	0.0022UF	2KV B
R519	R635824R7J	R.FUSE	4.7	OHM 1/2W	C875	C0AOFO414Z	CC	0.01	UF 50V F
R601	R00202124J	RC	120K	OHM 1/2W	C877	E01IF0102M	CE	1000	UF 6.3V
R602	R615823R3J	R.FUSE	3.3	OHM 1/2W	C887	E02705100M	CE	10	UF 50V
R603	R615823R3J	R.FUSE	3.3	OHM 1/2W	C1601	C020SL4L2J	CC	330	PF 50V SL
R624	R00106161J	RC	180	OHM 1/6W	C1603	C020SL4L2J	CC	330	PF 50V SL
R659	R00106152J	RC	1.5K	OHM 1/6W	C1604	C020SL4L2J	CC	330	PF 50V SL
R663	R00106223J	RC	22K	OHM 1/6W	C1605	C020SL4L2J	CC	330	PF 50V SL
R671	R00106103J	RC	10K	OHM 1/6W	C1607	C020SL4L2J	CC	330	PF 50V SL
R682	R00106332J	RC	3.3K	OHM 1/6W	C1608	C020SL4L2J	CC	330	PF 50V SL
R691	R00106103J	RC	10K	OHM 1/6W	C1609	C020SL4L2J	CC	330	PF 50V SL
R692	R00106152J	RC	1.5K	OHM 1/6W	C1610	C020SL4L2J	CC	330	PF 50V SL
R805	R31181393J	R.METAL OXIDE	39K	OHM 1W	C1611	C020SL4L2J	CC	330	PF 50V SL
R806	R3118A822J	R.METAL OXIDE	8.2K	OHM 2W	C1612	C020SL4L2J	CC	330	PF 50V SL
R813	R31181393J	R.METAL OXIDE	39K	OHM 1W	C1616	C020SL4L2J	CC	330	PF 50V SL
R814	R3118A822J	R.METAL OXIDE	8.2K	OHM 2W	C1618	C020SL4L2J	CC	330	PF 50V SL
R821	R31181393J	R.METAL OXIDE	39K	OHM 1W					
R822	R3118A822J	R.METAL OXIDE	8.2K	OHM 2W					
R826	R3118A223J	R.METAL OXIDE	22K	OHM 2W					
R827	R3118A223J	R.METAL OXIDE	22K	OHM 2W					
R828	R3118A223J	R.METAL OXIDE	22K	OHM 2W					
R902	R61584180J	R.FUSE	18	OHM 1/4W					
R929	R61582270J	R.FUSE	27	OHM 1/2W					
CAPACITORS			SEMI CONDUCTORS						
C148	C0A0F04H4Z	CC	0.022	UF 50V F	D031	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C356	E02703222M	CE	2200	UF 25V	D032	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C359	E027F2102M	CE	1000	UF 16V	D033	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C372	E027F2222M	CE	2200	UF 16V	D101	002132Q010	LED	SLZ-136C-07-T1	
C404	P61300105J	CMPL	1.0	UF 50V	D102	002132Q010	LED	SLZ-136C-07-T1	
C414	P61300106J	CMPL	1.0	UF 50V	D103	002132Q010	LED	SLZ-136C-07-T1	
C420	E027F3222M	CE	2200	UF 25V	D104	002132Q010	LED	SLZ-136C-07-T1	
C439	P441F2244J	CMPP	0.24	UF 200V	D106	D93T06R80Y	DIODE, ZENER	GZA6.8 Y BT	
C441	P441F2104J	CMPP	0.1	UF 200V	D115	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C442	E031FD100M	CE	10	UF 250V	D116	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C444	P46HFG103H	PMH-COM	0.01	UF 2KV	D118	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C445	C034BN713K	CC	0.001	UF 2KV	D119	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C452	E0250D470M	CE	47	UF 250V	D120	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C458	C0D4BN7W2K	CC	820	PF 2KV BN	D121	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C459	P341F5472J	CPP	0.0047UF	630V	D122	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C461	C0D4BN7W2K	CC	820	PF 2KV BN	D123	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C463	C0D4BN702K	CC	470	PF 2KV BN	D124	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C467	P613F0184J	CMPL	0.18	UF 50V	D125	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C469	P341F5473J	CPP	0.047	UF 630V	D126	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C479	P441F2105J	CMPP	1	UF 200V	D127	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C480	P441F2105J	CMPP	1	UF 200V	D134	D25T5566B0	DIODE, RECTIFIER	S5566B(TPA3)	
C486	C0D0BN7H2K	CC	220	PF 2KV	D135	D25T5566B0	DIODE, RECTIFIER	S5566B(TPA3)	
C491	P61300105J	CMPL	1.0	UF 50V	D136	D25T5566B0	DIODE, RECTIFIER	S5566B(TPA3)	
C492	P13300393J	CP	0.039	UF 50V	D137	D25T5566B0	DIODE, RECTIFIER	S5566B(TPA3)	
C501	P2160B224M	CPP	0.22	UF 250V	D138	D25T5566B0	DIODE, RECTIFIER	S5566B(TPA3)	
C502	P2160B474M	CPP	0.47	UF 250V	D143	D93T05R10Y	DIODE, ZENER	GZA5.1 Y BT-T	
C503	COABB07H3K	CC	2200	PF 2KV B	D146	D93T03000X	DIODE, ZENER	GZA30 X BT	
C504	COABB07H3K	CC	2200	PF 2KV B	D147	D25T5566B0	DIODE, RECTIFIER	S5566B(TPA3)	
C505	COABB07H3K	CC	2200	PF 2KV B	D148	DD3RLFB01L	DIODE, SILICON	LFB-01L	
C506	E03SFH221M	CE	220	UF 400V	D162	DD3RLFB01L	DIODE, SILICON	LFB-01L	
				D404	D23TFD05TG	DIODE, RECTIFIER	DFD05TG-BT		
				D405	D23TFD05TG	DIODE, RECTIFIER	DFD05TG-BT		
				D406	D23TFD05TG	DIODE, RECTIFIER	DFD05TG-BT		
				D409	D93T01100Y	DIODE, ZENER	GZA11 Y BT		
				D410	D28T011E20	DIODE, SILICON	11E2TA1		

**ELECTRICAL REPLACEMENT PARTS LIST**

REF. NO	PART NO	DESCRIPTION	REF. NO	PART NO	DESCRIPTION		
SEMICONDUCTORS (CONT)			SEMICONDUCTORS (CONT)				
D411	DCBFTS3FU0	DIODE, STACK	CTS-3FU	Q103	TRANSISTOR, SILICON	2SC2412KT147	
D412	D23TFD05TG	DIODE, RECTIFIER	DFD05TG-BT	Q104	TRANSISTOR, SILICON	2SC945-T	
D413	D23TFD05TG	DIODE, RECTIFIER	DFD05TG-BT	Q105	TRANSISTOR, SILICON	2SC2412KT147	
D414	D13TGMA010	DIODE, SILICON	GMA-01-BT	Q106	TRANSISTOR, SILICON	2SC2412KT147	
D415	D93T02000Y	DIODE, ZENER	GZA20 Y BT	Q107	TRANSISTOR, SILICON	2SC2412KT147	
D416	D93T01000X	DIODE, ZENER	GZA10 X BT	Q108	TRANSISTOR, SILICON	2SC2412KT147	
D417	D13TGMA010	DIODE, SILICON	GMA-01-BT	Q109	TRANSISTOR, SILICON	2SC2412KT147	
D418	D130GMA010	DIODE, SILICON	GMA-01	Q110	TRANSISTOR, SILICON	2SC2412KT147	
D501	D2BHRM11C0	DIODE, RECTIFIER	RM11C	Q111	TRANSISTOR, SILICON	2SC2412KT147	
D502	D2BHRM11C0	DIODE, RECTIFIER	RM11C	Q112	TRANSISTOR, SILICON	2SC2412KT147	
D503	D2BHRM11C0	DIODE, RECTIFIER	RM11C	Q113	TRANSISTOR, SILICON	2SC2412KT147	
D504	D2BHRM11C0	DIODE, RECTIFIER	RM11C	Q114	TRANSISTOR, SILICON	2SC2412KT147	
D505	D2BTOEU01A	DIODE, SILICON	EU01AV0	Q115	TRANSISTOR, SILICON	2SC2412KT147	
D506	D2BHOEU1Z	DIODE, RECTIFIER	EU1Z	Q116	TRANSISTOR, SILICON	2SC2412KT147	
D507	D2BHOEU1Z	DIODE, RECTIFIER	EU1Z	Q117	TRANSISTOR, SILICON	2SA1037KT147	
D508	D2BTOEU01A	DIODE, SILICON	EU01AV0	Q118	TRANSISTOR, SILICON	2SC2412KT147	
D509	D2BTOEU01A	DIODE, RECTIFIER	EU1P	Q119	TRANSISTOR, SILICON	2SC2412KT147	
D510	D2BTOEU01A	DIODE, SILICON	EU01AV0	Q120	TRANSISTOR, SILICON	2SA1037KT147	
D511	D2BF0RU480	DIODE, SILICON	RU4B	Q121	TRANSISTOR, SILICON	2SC2412KT147	
D512	D2B000R2K0	DIODE, AVALANCHE	R2K	Q122	TRANSISTOR, SILICON	2SC2412KT147	
D513	D2BFO0RU20	DIODE, SILICON	RU-2	Q123	TRANSISTOR, SILICON	2SC2412KT147	
D514	D2BFO0RU30	DIODE, SILICON	RU 3	Q124	TD3T007340	TRANSISTOR, SILICON	2SD754-AA
D515	D2BFO0RU42	DIODE, RECTIFIER	RU4Z	Q126	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
D521	D2BFO0RU20	DIODE, SILICON	RU-2	Q201	TC3T030000	TRANSISTOR, SILICON	2SC3000-AA
D803	D13TGMA010	DIODE, SILICON	GMA-01-BT	Q202	TA2T007330	TRANSISTOR, SILICON	2SA733-T
D807	D93T03R60X	DIODE, ZENER	GZA3.6 X BT	Q203	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D615	D93T06R80Y	DIODE, ZENER	GZA6.8 Y BT	Q401	TD5Q015460	TRANSISTOR, SILICON	2SD1546
D617	D13TGMA010	DIODE, SILICON	GMA-01-BT	Q402	TC3Q026210	TRANSISTOR, SILICON	2SC2621-RAC
D618	D130GMA010	DIODE, SILICON	GMA-01	Q421	TA2T007330	TRANSISTOR, SILICON	2SA733-T
D620	D93T02700Y	DIODE, ZENER	GZA27 Y BT	Q471	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D711	DD3RLFB01L	DIODE, SILICON	LFB-01L	Q472	TB3G01134R	TRANSISTOR, SILICON	2SB1134R-SA
D712	DD3RLFB01L	DIODE, SILICON	LFB-01L	Q501	TD3T00663E	TRANSISTOR, SILICON	2SD863E-EE
D713	DD3RLFB01L	DIODE, SILICON	LFB-01L	Q502	TD3T00663E	TRANSISTOR, SILICON	2SD863E-AE
D714	DD3RLFB01L	DIODE, SILICON	LFB-01L	Q601	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D715	DD3RLFB01L	DIODE, SILICON	LFB-01L	Q602	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D732	D93T05R60Y	DIODE, ZENER	GZA5.6 Y BT	Q615	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D801	D93T01200Y	DIODE, ZENER	GZA12 Y BT	Q616	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D802	D93T01200Y	DIODE, ZENER	GZA12 Y BT	Q621	TN7T003001	COMPOUND TRANSISTOR	DTC114ESTP
D803	D93T01200Y	DIODE, ZENER	GZA12 Y BT	Q622	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D850	D93005R60Y	DIODE, ZENER	GZA5.6 Y	Q624	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D851	D93005R60Y	DIODE, ZENER	GZA5.6 Y	Q701	TC2T009450	TRANSISTOR, SILICON	2SC945-T
D901	D13TGMA010	DIODE, SILICON	GMA-01-BT	Q708	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0031	I0GDF3P020	IC	IR3P02	Q709	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0032	I03S063580	IC	LA6358S	Q710	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0101	I51D080328	IC	OEC8032B	Q711	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0102	I03B98M050	IC	L78M05-SA	Q712	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0103	I52D010130	IC	OEC1013	Q713	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0105	I01901280S	IC	MN1280S	Q714	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0106	IAD1N2200	IC	MN1220	Q715	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0133	I02190574J	IC	UPC574J-T	Q716	T67A1037K0	TRANSISTOR, SILICON	2SA1037KT147
I2001	I06DA3655P	IC	M513655P	Q720	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I2002	I03S072100	IC	LA7210	Q721	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0351	I03SP44450	IC	LA4445	Q722	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0371	I01S058360	IC	AN5836	Q723	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0401	I02SD14980	IC	UPC1498H	Q724	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0404	I03B97812V	IC	L7812V-SA	Q725	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0405	I03B98M050	IC	L78M05-SA	Q726	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0501	I2B4990410	IC	STR59041	Q727	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0601	I06DE20250	IC	M520255P	Q728	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0701	I03DE79550	IC	LA7955	Q729	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0702	I03S070160	IC	LA7016	Q730	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0703	I01D058600	IC	AN5860	Q731	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0704	I01D058600	IC	AN5860	Q732	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0850	I9KDF52310	IC	SAA5231	Q733	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147
I0851	I4KDF52430	IC	SAA5243	Q734	TC2T009450	TRANSISTOR, SILICON	2SC945-T
I0852	I53D03517C	IC	LC3517A-15	Q801	TC3Q040750	TRANSISTOR, SILICON	2SC4075-YAC
I0901	I05DE77780	IC	TA7778P	Q802	TC3T034680	TRANSISTOR, SILICON	2SC3468-AE
I0981	I06DE20260	IC	M52026SP	Q803	TA3T1371A0	TRANSISTOR, SILICON	2SA1371-AE
Q030	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q804	TC3Q040750	TRANSISTOR, SILICON	2SC4075-YAC
Q031	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q805	TC3T034680	TRANSISTOR, SILICON	2SC3468-AE
Q032	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q806	TA3T1371A0	TRANSISTOR, SILICON	2SA1371-AE
Q033	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q807	TC3Q040750	TRANSISTOR, SILICON	2SC4075-YAC
Q034	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q808	TC3T034680	TRANSISTOR, SILICON	2SC3468-AE
Q035	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q809	TA3T1371A0	TRANSISTOR, SILICON	2SA1371-AE
Q036	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q810	TC3T034680	TRANSISTOR, SILICON	2SC3468-AE
Q037	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q811	TC3T034680	TRANSISTOR, SILICON	2SC3468-AE
Q038	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q812	TC3T034680	TRANSISTOR, SILICON	2SC3468-AE
Q039	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q854	TC2T009450	TRANSISTOR, SILICON	2SC945-T
Q040	T67A1037K0	TRANSISTOR, SILICON	2SA1037KT147	Q855	TP7TD03002	COMPOUND TRANSISTOR	DTA144TSTP
Q041	T67A1037K0	TRANSISTOR, SILICON	2SA1037KT147	Q903	TA2T00952L	TRANSISTOR, SILICON	2SA952LT
Q042	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q904	TC2T009450	TRANSISTOR, SILICON	2SC945-T
Q101	T87A1037K0	TRANSISTOR, SILICON	2SA1037KT147	Q905	TA2T007330	TRANSISTOR, SILICON	2SA733-T
Q102	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147	Q951	T87A02412K	TRANSISTOR, SILICON	2SC2412KT147

# ELECTRICAL REPLACEMENT PARTS LIST

REF. NO	PART NO	DESCRIPTION		REF. NO	PART NO	DESCRIPTION			
<b>VARIABLE RESISTORS (CONT)</b>									
L031	0216736R8K	COIL	6.8 UH	VR201	V116314BT6	VR.SEMIFIXED	EVNDXAA03B14		
L032	03361E001	COIL.SOUND IFT	361E001	VR401	V1263Q4B03	VR.SEMIFIXED	RH0624CS4J0A		
L033	032641001	COIL.TRAP	2641001	VR402	V1163H4BT6	VR.SEMIFIXED	EVNDXAA03BE4		
L034	03361B005	COIL.SOUND IFT	361B005	VR471	V1163L3BT6	VR.SEMIFIXED	EVNDXAA03BY3		
L035	032641002	COIL.TRAP	2641002	VR472	V116313BT6	VR.SEMIFIXED	EVNDXAA03B13		
L036	021673101K	COIL	100 UH	VR602	V1163L4BT6	VR.SEMIFIXED	EVNDXAA03BY4		
L101	021673330K	COIL	33 UH	VR612	V126213B01	VR.SEMIFIXED	RH0614C13J0B		
L102	021673560K	COIL	56 UH	VR613	V029200005	VR.ROTARY	RK09K1110		
L201	03360N0028	COIL.DET	360N002	VR614	V1262Q3B01	VR.SEMIFIXED	RH0614CS3J09		
L202	021673680K	COIL	68 UH	VR901	V116313BT6	VR.SEMIFIXED	EVNDXAA03B13		
L203	0216731R2K	COIL	1.2 UH	VR951	V116314BT6	VR.SEMIFIXED	EVNDXAA03B14		
L204	0336050038	COIL.MATCHING	3605003	VR952	V126316B03	VR.SEMIFIXED	RH0624C16J		
L205	021673820K	COIL	82 UH	VR953	V126314B03	VR.SEMIFIXED	RH0624C14J0D		
L206	021673680K	COIL	68 UH	VR954	V1163H3BT6	VR.SEMIFIXED	EVNDXAA03BE3		
L207	021JA6150K	COIL	15 UH	VR955	V116313BT6	VR.SEMIFIXED	EVNDXAA03B13		
L211	03360L0018	COIL.TRAP	360L001	<b>P. C. BOARDS ASS'Y</b>					
L215	021JA6474M	COIL	0.47 UH	PCB001	A3A201A01A1	PCB ASS'Y	TM0186-1		
L216	0336010028	COIL.DET	3601002	PCB003	A3A201A11A	PCB ASS'Y	TC0134		
L303	021673101K	COIL	100 UH	PCB005	A3A201A18A	PCB ASS'Y	TE0641		
L402	0221000003	COIL.LINEARITY	1456MS	PCB006	A3A201A03A	PCB ASS'Y	TE0717		
L471	02C8000004	SIDE PIN MODULATOR COIL	C8000004	PCB008	A3A201A29A	PCB ASS'Y	TE0640		
L472	02D8000012	TIB PIN PHASE COIL	D8000012	PCB009	A3A201A32A	PCB ASS'Y	TE0642		
L501	0296000028	COIL.LINE FILTER	96000028	PCB010	A3A201A02A	PCB ASS'Y	TE0614		
L502	028E2T0006	COIL DEGAUSS	8E270006	PCB011	A3A201A09A	PCB ASS'Y	TE0629		
L503	0296000028	COIL.LINE FILTER	96000028	PCB015	A3A201A14A	PCB ASS'Y	TE0645		
L504	02186D470K	COIL	47 UH	PCB016	A3A201A15A	PCB ASS'Y	TE0479		
L505	021J74470K	COIL	47 UH	PCB017	A3A201A28A	PCB ASS'Y	TE0644		
L506	02186D470K	COIL	47 UH	<b>MISCELLANEOUS</b>					
L603	021JA6100K	COIL	10 UH	B401	0246451652	CORE.BEADS	BF25-4.5*5*1.6		
L604	021J96270K	COIL	27 UH	B402	0246451652	CORE.BEADS	BF25-4.5*5*1.6		
L605	03352R0177	COIL.CHROMA	352R017	B501	0244T03551	CORE.BEADS	FBA04HA450AB-00		
L701	021JA6470K	COIL	47 UH	B504	0244T03551	CORE.BEADS	FBA04HA450AB-00		
L702	021JA6470K	COIL	47 UH	B505	0244T03551	CORE.BEADS	FBA04HA450AB-00		
L703	021JA6470K	COIL	47 UH	B506	0244T03551	CORE.BEADS	FBA04HA450AB-00		
L704	021JA6470K	COIL	47 UH	B507	0244T03551	CORE.BEADS	FBA04HA450AB-00		
L705	021JA6470K	COIL	47 UH	B508	0244T03551	CORE.BEADS	FBA04HA450AB-00		
L706	021JA6470K	COIL	47 UH	BT001	141T004003	BATTERY.MANGAN	UM-4		
L707	021JA6470K	COIL	47 UH	BT002	141T004003	BATTERY.MANGAN	UM-4		
L708	021JA6330K	COIL	33 UH	CD001	068WB90001	CORD.COAXIAL	8WB90001		
L709	021JA6470K	COIL	47 UH	CD002	068123019A	CORD.CONNECTOR	8123019A		
L711	02AXA509C1	FILTER.LINE	ESD-R-16C	CD110	068122018A	CORD.CONNECTOR	8122018A		
L801	02AX2614F2	FILTER.LINE AC	ESD-R-25D-B1	CD112	068124026A	CORD.CONNECTOR	8124026A		
L851	021673150K	COIL	15 UH	CD351	068D14244A	CORD.CONNECTOR	8D14244A		
L951	021JA6100K	COIL	10 UH	CD354	068DG09001	CORD.CONNECTOR	8DG09001		
L952	021JA6100K	COIL	10 UH	CD355	068DG09001	CORD.CONNECTOR	8DG09001		
L953	021JA6100K	COIL	10 UH	CD401	068M84001A	CORD.CONNECTOR	868M84001A		
L954	021JA6101K	COIL	100 UH	CD404	06831A035A	CORD.CONNECTOR	831A035A		
L955	021JA68R2K	COIL	8.2 UH	CD471	068M15111A	CORD.CONNECTOR	8M15111A		
L956	03302R0028	COIL.CHROMA	302R002	CD472	068W52007A	CORD.CONNECTOR	8W52007A		
L957	03352R0128	COIL.CHROMA	352R012	CD501	1201650001	CORD.AC	01650001		
L958	0335000098	COIL.MATCHING	3500009	CD504	068M46007B	CORD.CONNECTOR	8M01309A		
L960	021673391K	COIL	390 UH	CD508	068122013B	CORD.CONNECTOR	8122013B		
L961	021673391K	COIL	390 UH	CD510	068D82015A	CORD.CONNECTOR	8D82015A		
▲ T101	040530001Z	REMOCON TRANS	0530001	CD705	068128029A	CORD.CONNECTOR	8128029A		
T401	0450190051	TRANS., HORIZONTAL DRIVE	019005	CD706	068125031A	CORD.CONNECTOR	8125031A		
▲ T501	0481420325	CONVERTER TRANS	8142032	CD801	127A260002	BRAIDED WIRE	SH-1869		
		<b>JACKS</b>							
J351	0602131001	JACK.RCA 3.5	HSJ0918-01-040	CD802	068318070A	CORD.CONNECTOR	8318070A		
J352	063P00047	PUSH.TERMINAL	T-6000C	CD803	068M15120A	CORD.CONNECTOR	8M15120A		
J701	0632000055	JACK.PLATE	JXT0905-010110	CD805	068M12202A	CORD.CONNECTOR	8M12202A		
J702	0622740004	JACK.S-VHS	TCS7927-14	CD806	068M12333A	CORD.CONNECTOR	8M12333A		
J705	0632100014	SOCKET.21PIN	HXC1524-01-010	CD808	068M12334A	CORD.CONNECTOR	8M12334A		
▲ J801	0662130010	SOCKET.CRT	HPS2360-01-020	CF001	116F3TH4Z1	FILTER.EMI	LTSTF223ZBTB		
		<b>SWITCHES</b>							
SW105	0504201T30	SWITCH.TACT	SKHVLH006B	CF002	116F3TH4Z1	FILTER.EMI	LTSTF223ZBTB		
SW106	0504201T30	SWITCH.TACT	SKHVLH006B	CF003	116F3TH4Z1	FILTER.EMI	LTSTF223ZBTB		
SW107	0504201T30	SWITCH.TACT	SKHVLH006B	CF031	101205R504	FILTER.CERAMIC	SFT5.5MA		
SW108	0504201T30	SWITCH.TACT	SKHVLH006B	CF032	101205R743	FILTER.CERAMIC	SFT5.74MA		
SW110	0504201T30	SWITCH.TACT	SKHVLH006B	CF201	1027038R95	FILTER.SAW	F1037B		
SW111	0504201T30	SWITCH.TACT	SKHVLH006B	CF202	1012T5R503	FILTER.CERAMIC TRAP	TPS5.5MB-TF20		
SW351	0500201022	SWITCH.PUSH	SPUN12519A	CF203	1022133R42	FILTER.SAW	SAF33.4MC70Z		
SW352	0500201021	SWITCH.PUSH	SPUP19037A	CF351	11624223S3	FILTER.EMI	DSS310-55DL223S		
SW401	0510B22001	SWITCH.SLIDE	SS-22F16G7	CF352	11624223S3	FILTER.EMI	DSS310-55DL223S		
▲ SW501	0530102008	SWITCH.PUSH	ESB-76937A	CF353	11624223S3	FILTER.EMI	DSS310-55DL223S		
		<b>VARIABLE RESISTORS</b>							
VR031	V126315B03	VR.SEMIFIXED	RH0624C15J0E	CF354	11624223S3	FILTER.EMI	DSS310-55DL223S		
VR032	V1163U3BT6	VR.SEMIFIXED	EVNDXAA03B3	CF701	116T4271K1	FILTER.EMI	LTSTB271KBTB		
VR033	V1163Q5BT6	VR.SEMIFIXED	EVNDXAA03B05	CF702	116T4271K1	FILTER.EMI	LTSTB271KBTB		
VR034	V116315BT6	VR.SEMIFIXED	EVNDXAA03B15	CF703	1011A4R401	CERAMIC TRAD	EFC4434BF		
				CP101	069R2A0359	CONNECTOR PCB SIDE	5550-10E		
				CP102	069R280359	CONNECTOR PCB SIDE	5550-08E		
				CP103	069Q150179	CONNECTOR PCB SIDE	CPB1805-0101		
				CP104	069R250359	CONNECTOR PCB SIDE	5550-05E		

## ELECTRICAL REPLACEMENT PARTS LIST

REF. NO	PART NO	DESCRIPTION	
<b>MISCELLANEOUS (CONT)</b>			
CP105	069R2A0359	CONNECTOR PCB SIDE	5550-10E
CP106	069R2A0359	CONNECTOR PCB SIDE	5550-10E
CP110	0694240274	CONNECTOR PCB SIDE	4-175487-4
CP111	0694260129	CONNECTOR PCB SIDE	173981-6
CP112	0694240129	CONNECTOR PCB SIDE	173981-4
CP271	0690140179	CONNECTOR PCB SIDE	CPB1804-0101
CP272	069H150209	CONNECTOR PCB SIDE	ILG5P-S3L-PCB-S
CP351	0694140019	CONNECTOR PCB SIDE	171825-4
CP401	069D340018	CONNECTOR PCB SIDE	TS-80P-04-V1
CP404	069X1A0109	CONNECTOR PCB SIDE	B10B-EH
CP405	069Z010010	CONNECTOR PIN CENTER	RT-01N-2.3A
CP471	0694150019	CONNECTOR PCB SIDE	171825-5
CP472	069X520019	CONNECTOR PCB SIDE	B2P-VH
CP501	0694430100	CORD.DUX CONNECTOR	2-173270-3
CP503	069D420029	CONNECTOR PCB SIDE	TV-50P-02-A1
CP504	069M460029	CONNECTOR PCB SIDE	TV-50P-06-A1
CP508	069D01001A	CONNECTOR PCB SIDE	003P-2100
CP509	0694220129	CONNECTOR PCB SIDE	173981-2
CP510	069D330018	CONNECTOR PCB SIDE	TS-80P-03-V1
CP701	069Q1A0179	CONNECTOR PCB SIDE	CPB1810-0101
CP702	069H190209	CONNECTOR PCB SIDE	ILG9P-S3L-PCB-S
CP703	069H1A0209	CONNECTOR PCB SIDE	ILG10P-S3L-PCB-S
CP705	0694260129	CONNECTOR PCB SIDE	173981-8
CP706	0694250129	CONNECTOR PCB SIDE	173981-5
CP801	069D330018	CONNECTOR PCB SIDE	TS-80P-03-V1
CP802	069X180190	CONNECTOR PCB SIDE	B8B-EH-A-B
CP803	069X150190	CONNECTOR PCB SIDE	B5B-EH-A-B
CP804	0694130010	CONNECTOR PCB SIDE	2-171825-3
CP805	0694120010	CONNECTOR PCB SIDE	2-171825-2
CP806	069D010010	CONNECTOR PCB SIDE	005P-2100
CP851	069Q180179	CONNECTOR PCB SIDE	CPB1808-0101
CP852	069H170209	CONNECTOR PCB SIDE	ILG7P-S3L-PCB-S
CP951	069H170209	CONNECTOR PCB SIDE	ILG7P-S3L-PCB-S
CP952	069Q160179	CONNECTOR PCB SIDE	CPB1806-0101
CP953	069H170209	CONNECTOR PCB SIDE	ILG7P-S3L-PCB-S
DL602	103S0R6501	DELAY LINE	ELT-10Z265N
DL951	104114R43G	DELAY LINE GLASS	EFDEN645A31F
△ F501	0808T04002	FUSE	4 A 250V
△ FB401	0432270042	TRANSFORMER,FLAYBACK	3227004
FH501	06760T0001	HOLDER FUSE	PFC5000-0202
FH502	06760T0001	HOLDER FUSE	PFC5000-0202
ICP501	084E03R101	IC PROTECTOR	PRF-3150
ICP502	084702R702	IC PROTECTOR	ICP-N75
MS401	128F000003	MICA.SHEET	1S-3MPC
MS501	1283200020	SILICON.SHEET	3200020
OS101	077S012001	REMOTE RECEIVER	SPS-420-1
RY101	0560710103	RELAY	G5R-1112P-OR
SP351	070A166001	SPEAKER	CS160675106D-N
SP352	070A166001	SPEAKER	CS160675106D-N
TC851	0100514005	C.CERAMIC TRIMMER	TZ03R300YR
TH501	D8R0F140M0	DEGAUSS ELEM.	PTH451C262BF140M270
TM001	076G013010	TRANSMITTER	EUR-531103
△ TU001	0145611007	TUNER UHF-VHF	TERET-012A
△ V801	09BU260602	COLOR PICTURE TUBE	A66ECF10X01
X101	1003T4R001	CERAMIC OSCILLATOR	KBR-4.0MSTF
X251	1003R50001	CERAMIC OSCILLATOR	KBR-500AH2
X401	1002R50004	CERAMIC OSCILLATOR	CSB500F9
X601	10064R4306	CRYSTAL HC-49/U	4433.619KHZ
X850	100613R601	CRYSTAL HC49/U	13.875MHZ
X851	10056R0001	CRYSTAL	NR-18 6.0MHZ
X951	100D4R2501	CRYSTAL	4R2501

RESISTOR  
RC.....CARBON RESISTOR

CAPACITORS  
 CC.....CERAMIC CAPACITOR  
 CE.....ALUMI ELECTROLYTIC CAPACITOR  
 CP.....POLYESTER CAPACITOR  
 CPP.....POLYPROPYLENE CAPACITOR  
 CPL.....PLASTIC CAPACITOR  
 CMP.....METAL POLYESTER CAPACITOR  
 CMPL.....METAL PLASTIC CAPACITOR  
 CMPF.....METAL POLYPROPYLENE CAPACITOR  
 CST.....STYROL CAPACITOR

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