



THE SERVICE PRECAUTION:
The area enclosed by this line() is directly connected with AC mains voltage.
When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

PRODUCT SAFETY NOTICE:
Product safety should be considered when a component replacement is made in any area of a receiver.
Components indicated by a mark  in this circuit diagram show components whose values have special significance to product safety. It is particularly recommended that only parts specified on the part service manual be used for components replacement pointed out by the mark.

- CIRCUIT DIAGRAM NOTICE:**
1. All resistance value are in ohms, K=1,000, M=1,000,000.
 2. All resistance rated wattages are 1/6W unless otherwise noted.
 3. Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in μ F and more than 1 are pF.
 4. All capacitance rated voltages are 50V unless otherwise noted.
 5. All inductance values are in μ H.
 6. Voltage readings take with a "VTVM" are from point indicated chassis ground. Voltage readings taken by using PAL colour bar signal are with all controls at normal position. Some voltage may vary with signal strength.
 7. Waveform were taken with PAL colour bar and controls adjusted for normal picture. Waveforms were taken by using a wide band oscilloscope and a low capacity probe.
 8. This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.
 9. Parts specified with "X" are not installed in this model.
 10. Parts specified with "J" are just jumper wires.

11. Expression of capacitance and resistance

Capacitance (Example)

1000	C	M	2000	D

Characteristic
Capacitance value
Allowable error (\pm 2)
Kind (Ceramic)
Rated voltage (1,00)

Resistance (Example)

1/2	N	J	1.2

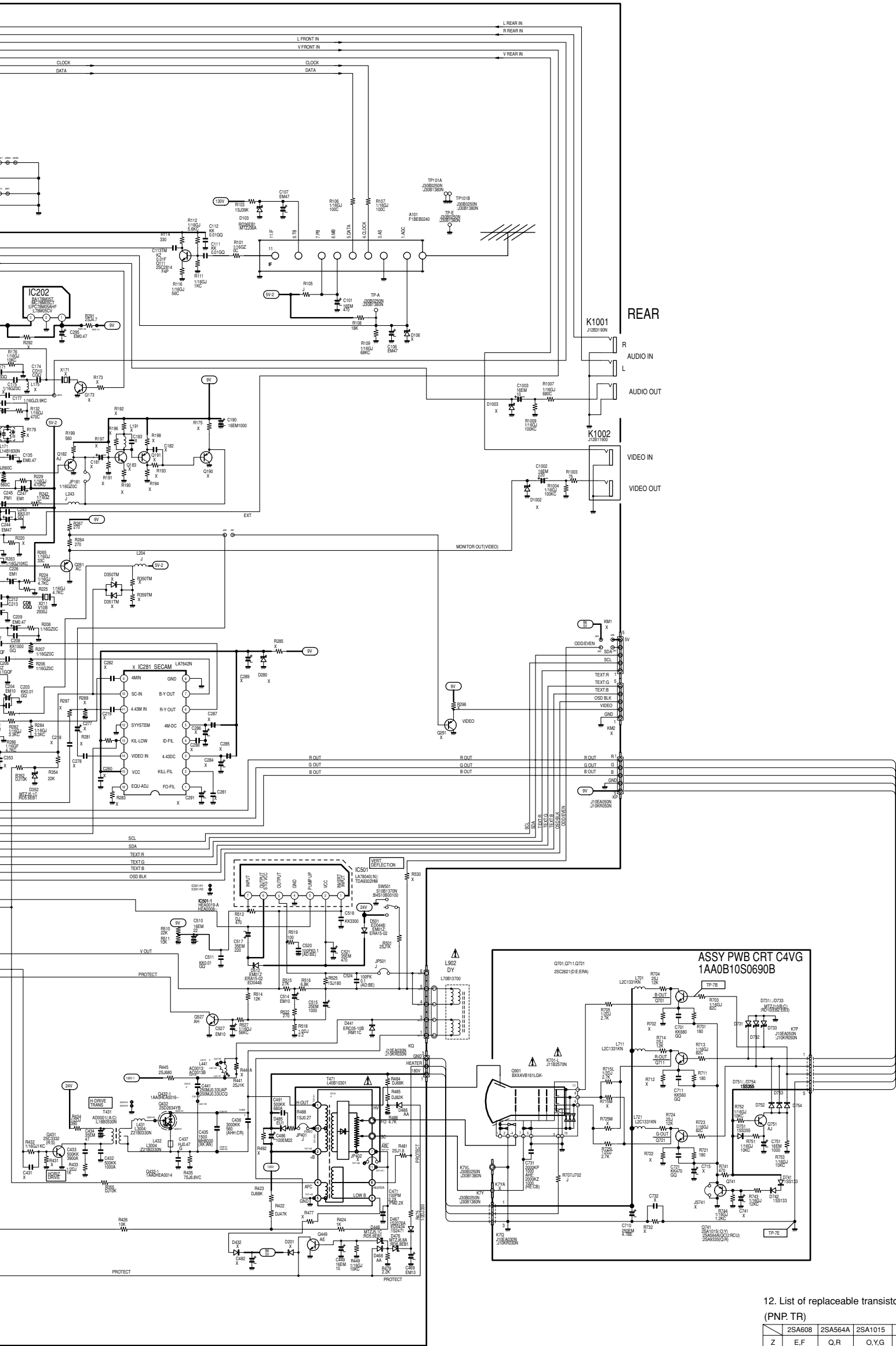
Resistance value ('
Allowable error (\pm 5)
Kind (M.carbon)
Rated wattage (1/2)



COLOUR TELEVISION

AC5-A CHASSIS SERIES

SERVICE REF. NO. **CP21KX2-00**



12. List of replaceable transistors and diodes.

(PNP. TR)					
	2SA608	2SA564A	2SA1015	2SA933	2SA933S
Z	E,F	Q,R	O,Y,G	Q,R	Q,R
Y	E,F	Q,R	O,Y,G	Q,R	
W	F	R	Y,G	R	
V	E,F	Q,R	O,Y,G	Q,R	Y,G
U	F	R	Y,G	R	G

(DIODE)					
	DIODE				
M	1SS176, 1SS133, GMA01				
P	1S1553, 1S2076A, 1S2471, 1N4148				
R	1S1555, 1S2473, 1S2076, DS442, 1N4148				

(NPN. TR)					
	2SC536	2SC945A	2SC1815	2SC1740	2SC1740S
A	E,F,G	P,Q,R	O,Y,G	Q,R,S	Q,R,S
B	E,F,G	P,Q,R	O,Y,G	Q,R,S	
D	F,G	P,Q	Y,G	Q,R,S	
F	F,G	P	G	R,S	
H	F,G	P,Q	Y,G	Q,R,S	Y,G
I	E,F,G	P,Q,R	O,Y,G	Q,R,S	Y,G
G	F,G	P	G	R,S	G

capacitance and resistance in circuit diagrme.

e)

- Characteristic

Capacitance value (220pF)

Allowable error (±20%)

Kind (Ceramic)

Rated voltage (1,000V)
- J= ± 5%

K= ±10%

M= ±20%

T, A, U, D: Electrolytic

C, K, B: Ceramic

F: Mylar film

M, N: Polypropylene

Z: Metalized paper
- Resistance value (1.2Ω)

Allowable error (±5%)

Kind (M.carbon)

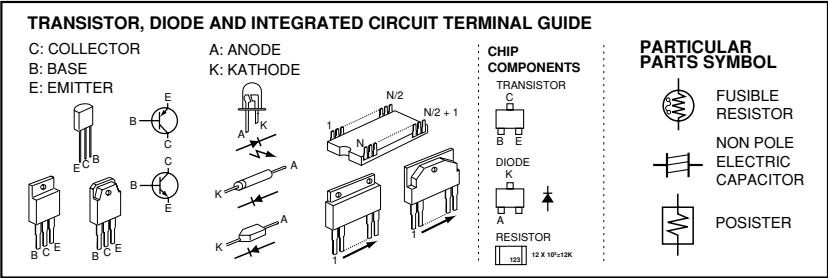
Rated wattage (1/2W)
- D: Carbon

N: Metalized carbon

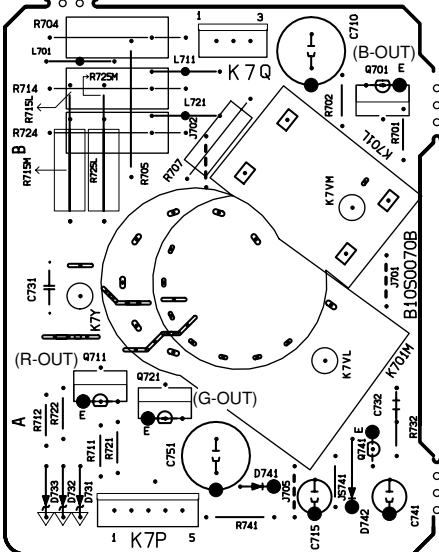
S: Oxied metalized

W: Wire wounding

C: Solid

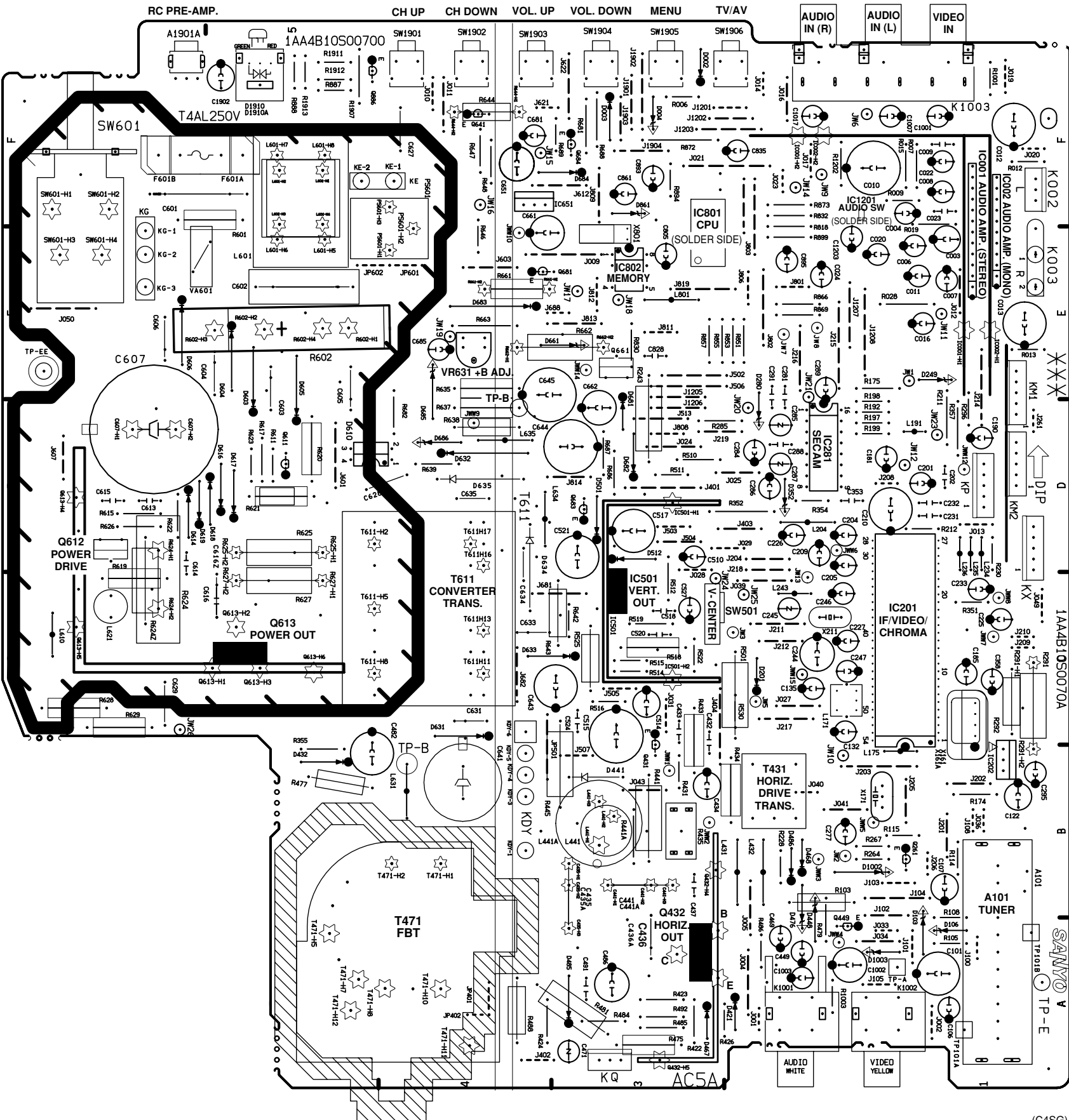


CRT BOARD (Component Location)



(C4SG)

MAIN BOARD (Component Location)



C4SG)

Waveforms & Voltages
(On the Main Board)

IC201 (IF/VIDEO/CHROMA)											
Pin-1	2.3V	2	2.2V	3	2.7V	4	3.2V	5	2.9V	6	2.9V
10	2.3V	11	4.3V	12	4.1V	13	4.3V	14	1.6V	15	1.7V
19	2.2V	20	2.1V	21	2.1V	22	2.0V	23	2.2V	24	2.7V
28	1.3V	29	1.7V	30	0.9V	31	4.5V	32	8.4V	33	0V
37	1.9V	38	2.8V	39	3.5V	40	2.5V	41	0V	42	2.5V
46	2.3V	47	3.8V	48	4.1V	49	4.1V	50	2.5V	51	2.2V
52	2.0V	53	2.2V	54	3.1V						

IC501 (VERT. OUT)													
Pin-1	2.9V	2	26.4V	3	1.6V	4	0V	5	18.0V	6	27.0V	7	2.9V

IC001 (AUDIO AMP.)									
Pin-1	0.3V	2	6.7V	3	3.7V	4	10.9V	5	6.7V
10	20V	11	9.0V	12	8.9V	6	15.4V	7	9.2V
8	9.2V	9	GND						

IC1201 (AUDIO SW)							
Pin-1	4.8V	2	0V	3	4.8V	4	N.C.
5	N.C.	6	9.2V	7	4.0V	8	GND

IC202				IC651			
Pin-1	7.8V	2	0V	3	5.0V		
Pin-1	12.5V	2	0V	3	5.0V		

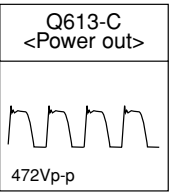
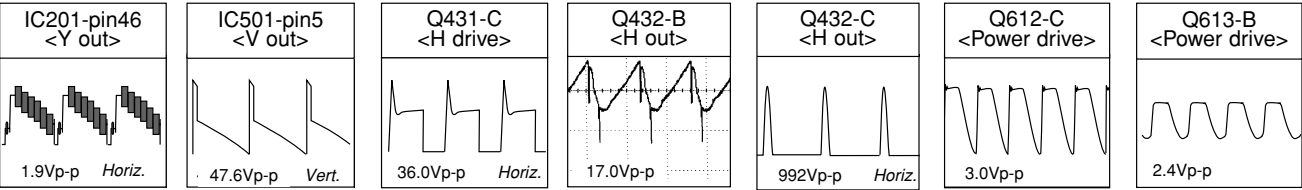
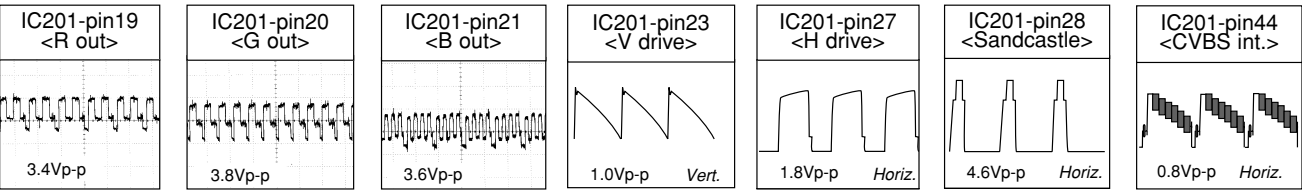
IC802 (MEMORY)							
Pin-1	GND	2	GND	3	GND	4	GND
5	5.0V	6	5.0V	7	GND	8	5.0V

IC801 (CPU)									
Pin-1	4.3V	2	4.1V	3	5.0V	4	5.0V	5	0V
10	2.3V	11	3.4V	12	0V	13	5.0V	14	3.4V
19	0V	20	0V	21	0V	22	0V	23	5.0V
28	5.0V	29	0V	30	5.0V	31	4.9V	32	5.0V
33	5.0V	34	0V	35	5.0V	36	5.0V		
7	2.3V	8	5.0V	9	5.0V	15	5.0V	16	0V
17	4.8V	18	4.2V	24	0V	25	0V	26	0.2V
27	4.4V								

Q111 B 1.3V C 6.0V E 0.5V	Q171 B 7.3V C 9.2V E 6.6V	Q172 B 2.2V C 7.2V E 1.6V	Q182 B 1.3V C 0V E 1.9V	Q1902 B 5.0V C -0.4V E 5.0V	Q261 B 2.3V C 0V E 3.0V	Q431 B 0V C 17.5V E 0V
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Q432 B 2.1V C 133.7V E 2.2V	Q449 B 0.1V C 4.4V E 0V	Q527 B 0V C 4.4V E 0V	Q611 B 15.0V C 0V E 15.2V	Q612 B 0V C -0.3V E 0V	Q613 B -0.3V C 314V E 0V	Q631 B 0.2V C 18.5V E 3.3V	Q661 B 16.0V C -1.0V E 14.9V	Q681 B 0V C 5.1V E 0V	Q683 B 11.6V C 11.8V E 11.8V	Q684 B 0.1V C 0V E 0V	Q685 B 0.3V C 19.0V E 0.2V	Q686 B 19.0V C 0V E 18.5V
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Q861 B 4.4V C 5.0V E 5.0V	Q871 B -8.6V C 4.8V E 0V	Q881 B -0.4V C 4.2V E 0V	Q886 B 0.7V C 0V E 0V
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(On the CRT Board)

Q701 B 2.5V C 141V E 2.3V	Q711 B 2.5V C 141V E 2.3V	Q721 B 2.5V C 141.8V E 2.3V	Q741 B 0.7V C GND E 1.4V	Q751 B 9.3V C 0V E 9.2V
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