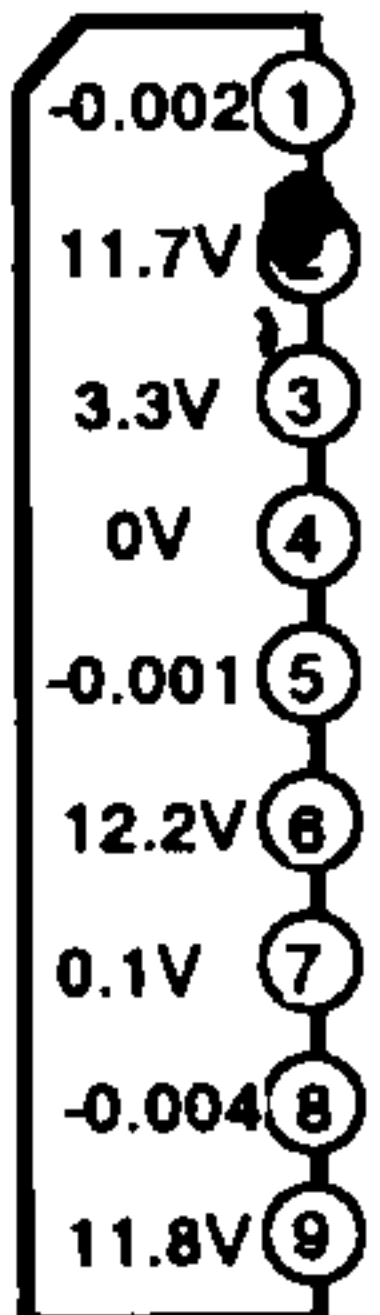
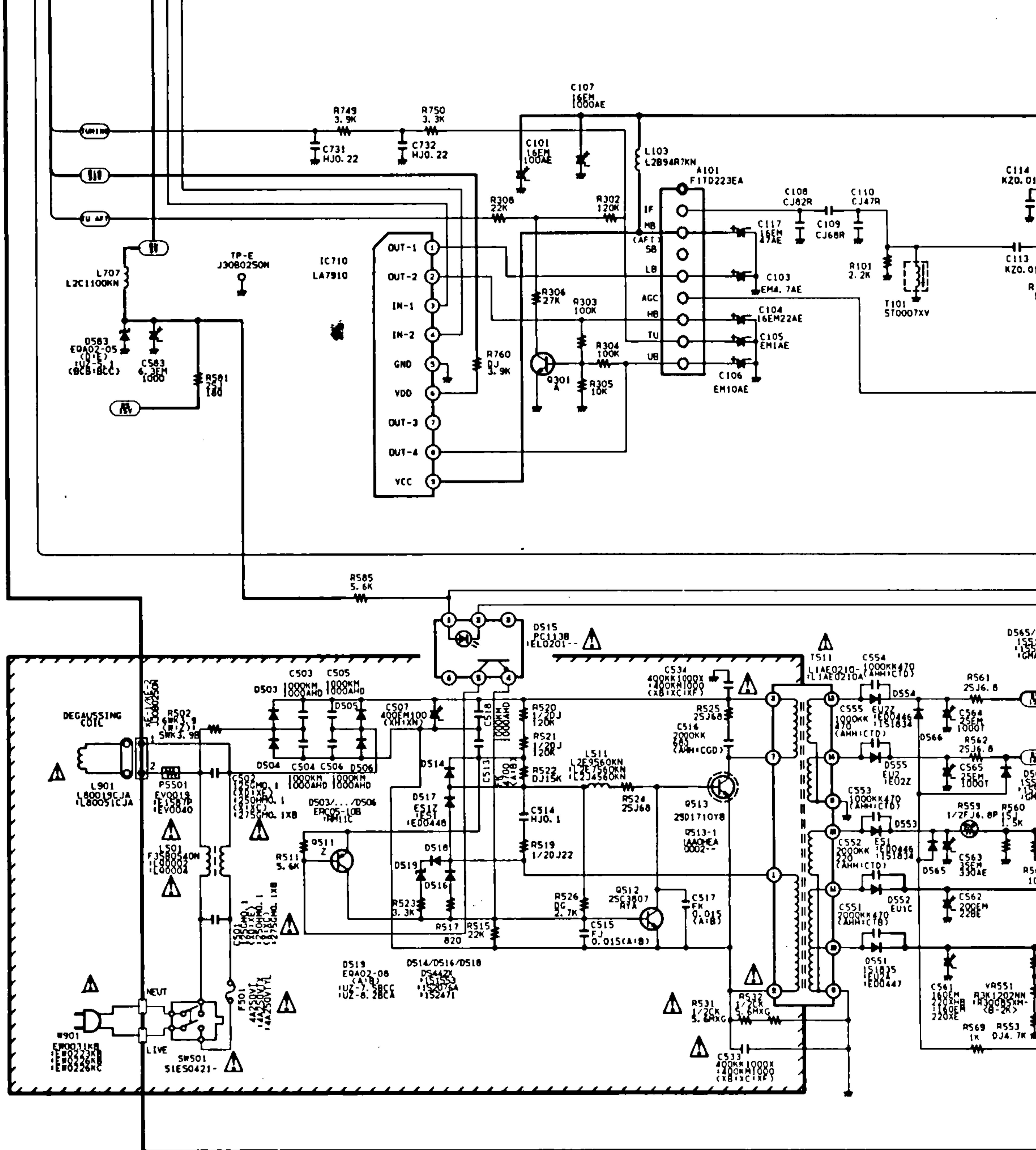


IC710 BAND SWITCH



Q101	
	VOLT.
B	1.2V
C	0.4V
E	6.2V



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.

Q511	
	VOLT.
B	13.5V
C	0.8V
E	13.5V

Q512		
	VOLT.	WAVEFORM
B	-0.1V	
		4.2Vp-p
C	-0.1V	
		4.4Vp-p
E	0V	---

Q513		
	VOLT.	WAVEFORM
B	-0.8V	
		5.0Vp-p
C	315V	
		600Vp-p
E	0V	---

Q553	
	VOLT.
B	6.7V
C	35.5V
E	6.2V

SANYO

COLOUR TELEVISION

A7-A

CHASSIS
SERIES

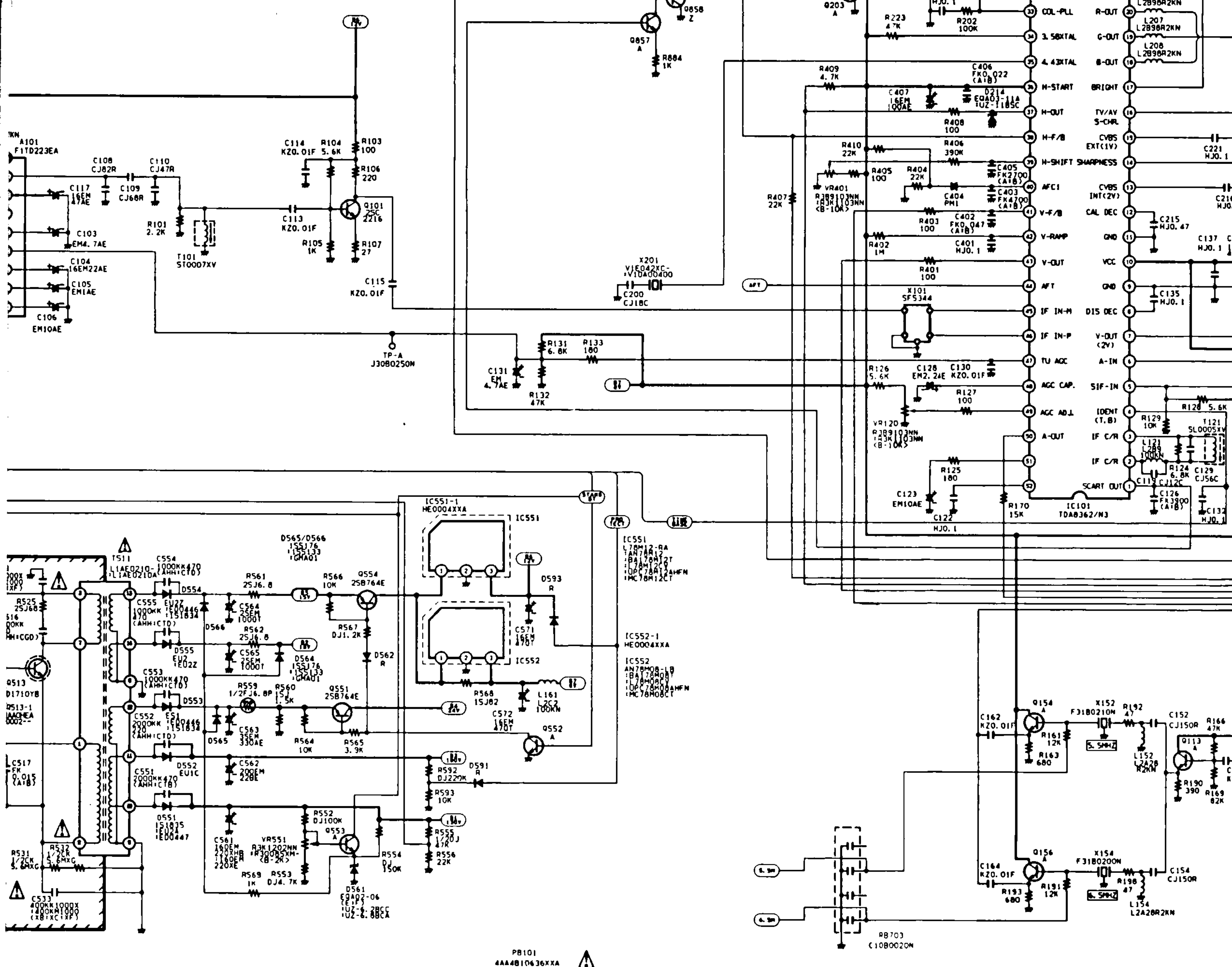
SERVICE REF. NO. **C21EF63EXH - 00**
C21EF97EXH - 00

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 Δ 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:

- All resistance value are in ohms, K=1,000, M=1,000,000.
- All resistance rated wattages are 1/8W unless otherwise noted.
- Excepting electrolytic capacitors, all capacitance values are expressed in μ F and more than 1 are pF.
- All capacitance rated voltages are 50V unless otherwise noted.
- All inductance values are in μ H.
- Voltage readings taken with a "VTVM" are from point in ground. Voltage readings taken by using a colour bar signal controls at normal position. Some voltages may vary with picture.
- Waveforms were taken with colour bar and controls adjusted for picture. Waveforms were taken by using a wide band oscilloscope with low capacity probe.
- This circuit diagram covers a basic or representative chassis. There may be some components or partial circuit differences between chassis and the circuit diagram.



CIRCUIT DIAGRAM NOTICE:

All resistance value are in ohms. K=1,000, M=1,000,000.
 All resistance rated wattages are 1/8W unless otherwise noted.
 Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in μ F and more than 1 are pF.
 All capacitance rated voltages are 50V unless otherwise noted.
 All inductance values are in μ H.
 Voltage readings taken with a "VTVM" are from point indicated chassis ground. Voltage readings taken by using a colour bar signal are with all controls at normal position. Some voltages may vary with signal strength.
 Waveforms were taken with colour bar and controls adjusted for normal picture. Waveforms were taken by using a wide band oscilloscope and a low capacity probe.
 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.

Q203	
VOLT.	
B	0.02V
C	1.6V
E	0.01V

Q202	
VOLT.	
B	0.6V
C	0.07V
E	-

Q154	
VOLT.	
B	4.7V
C	7.8V
E	4.0V

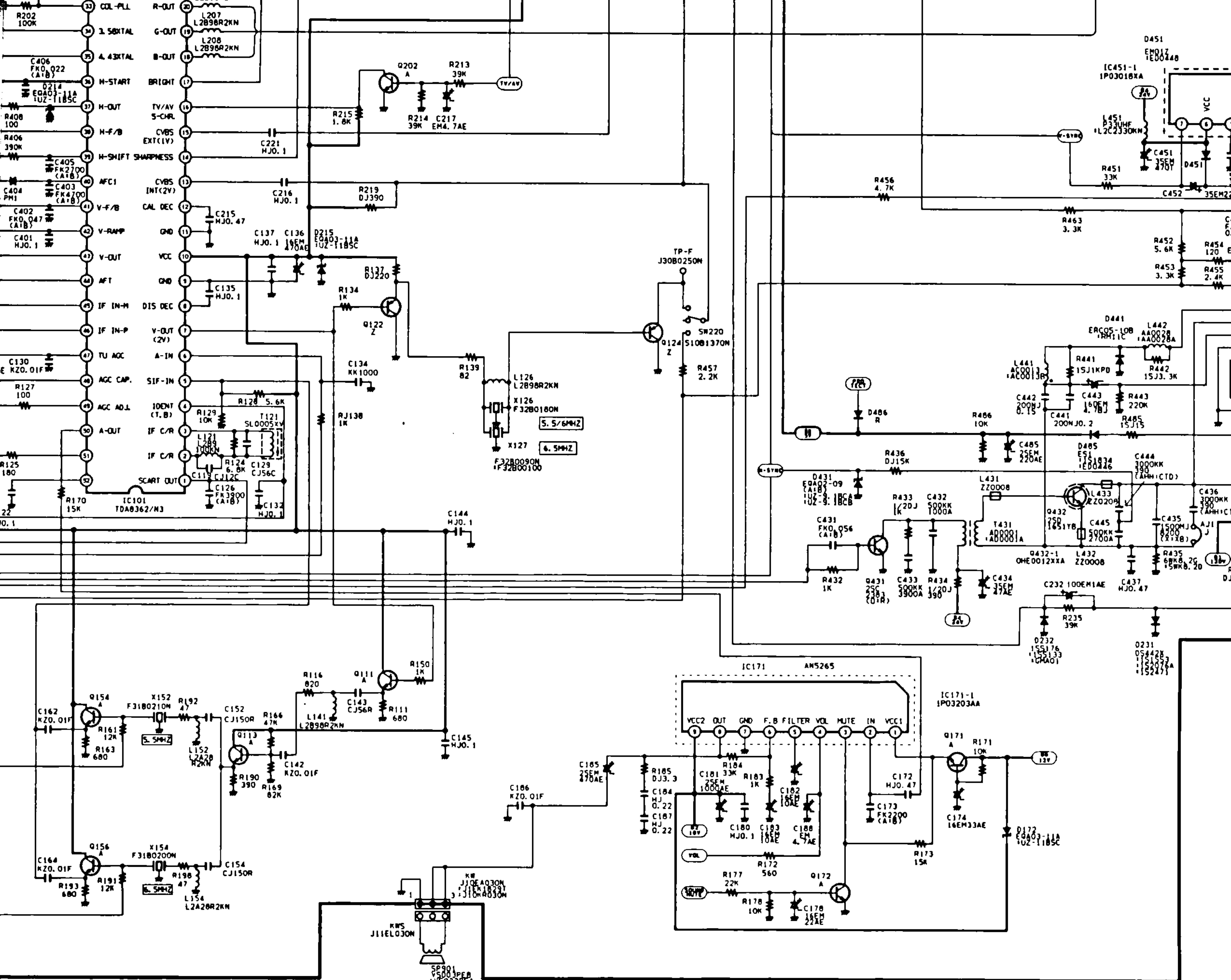
Q156	
VOLT.	
B	4.7V
C	7.8V
E	4.1V

9. Expression of capacitance and resistance in circuit diagram.

Capacitance(Example)
1000 C M 2000 D
 Characteristic
 Capacitance value(220pF)
 Allowable error ($\pm 20\%$)
 Kind (Ceramic)
 Rated voltage (1,000V)

Resistance(Example)
1/2 N J 1.2
 Resistance value(1.2 Ω)
 Allowable error($\pm 5\%$)
 Kind(M.carbon)
 Rated wattage(1/2W)

- J= $\pm 5\%$
- K= $\pm 10\%$
- M= $\pm 20\%$
- T.A.U.D:
 Electrolytic
 C,K,B,Ceramic
 F: Mylar film
 M,N: Polypropylene
 Z: Metalized paper
- D: Carbon
 N: Metaliz carbon
 S: Oxide metalized
 W: Wire wounding
 C: Solid



Q122	
	VOLT.
B	3.1V
C	33.1V
E	2.4V

Q124	
	VOLT.
B	2.3V
C	0.007V
E	3.0V

Q113	
	VOLT.
B	4.6V
C	7.8V
E	3.3V

Q111	
	VOLT.
B	3.1V
C	7.8V
E	2.4V

Q172	
	VOLT.
B	0.6V
C	0.01V
E	0V

Q171	
	VOLT.
B	11.3V
C	11.8V
E	10.6V

TRANSISTOR, DIODE AND INTEGRATED CIRCUIT TERMINAL GUIDE

C:COLLECTOR
B:BASE
E:EMITTER

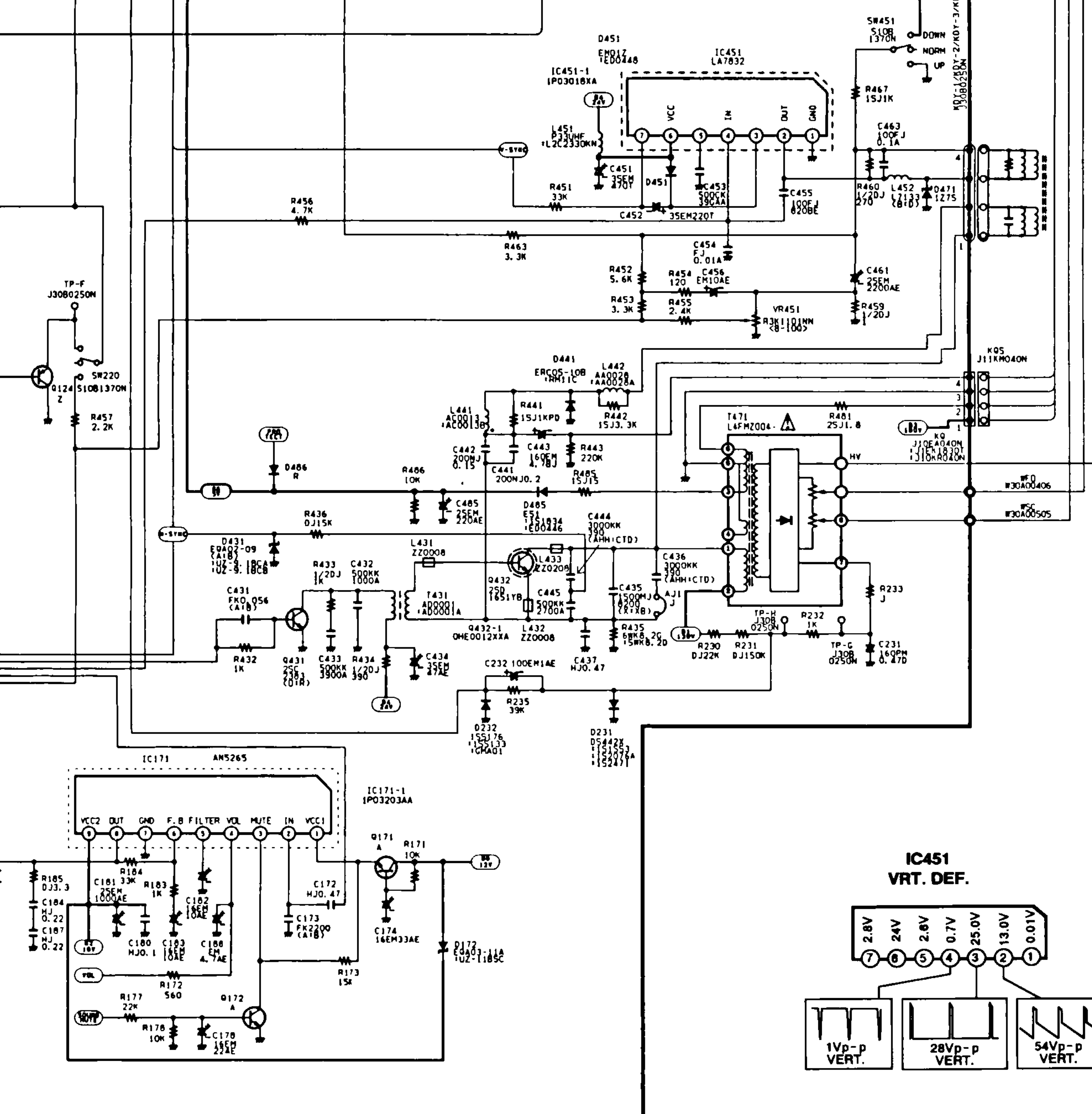
A:ANODE
K:KATHODE

PARTICULAR PARTS SYMBOL

FUSIBLE

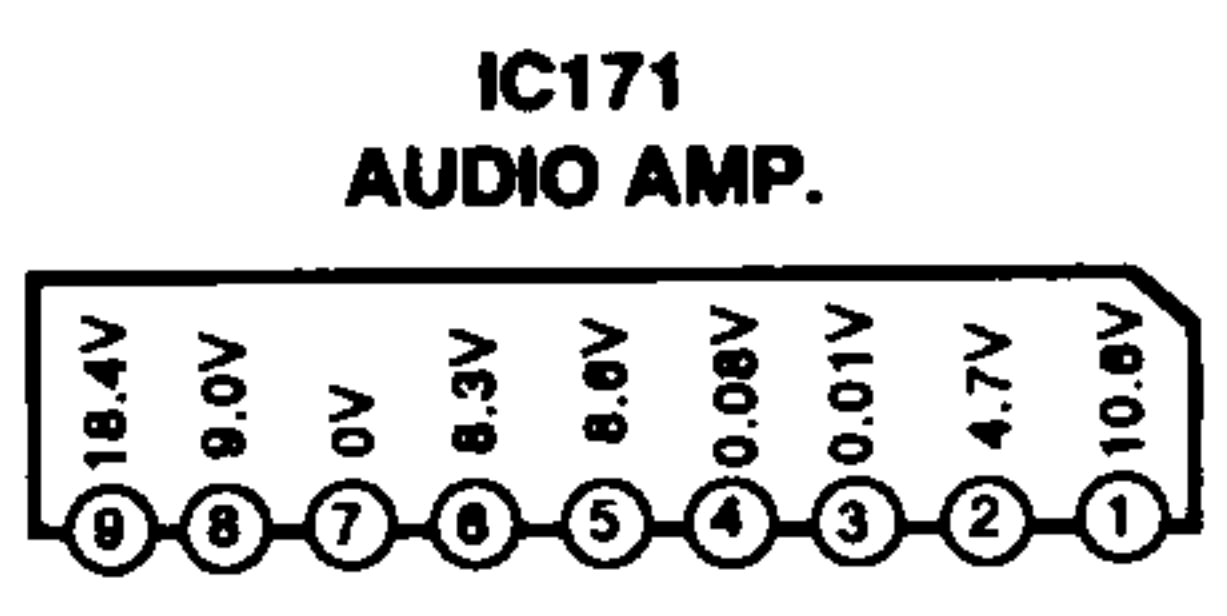
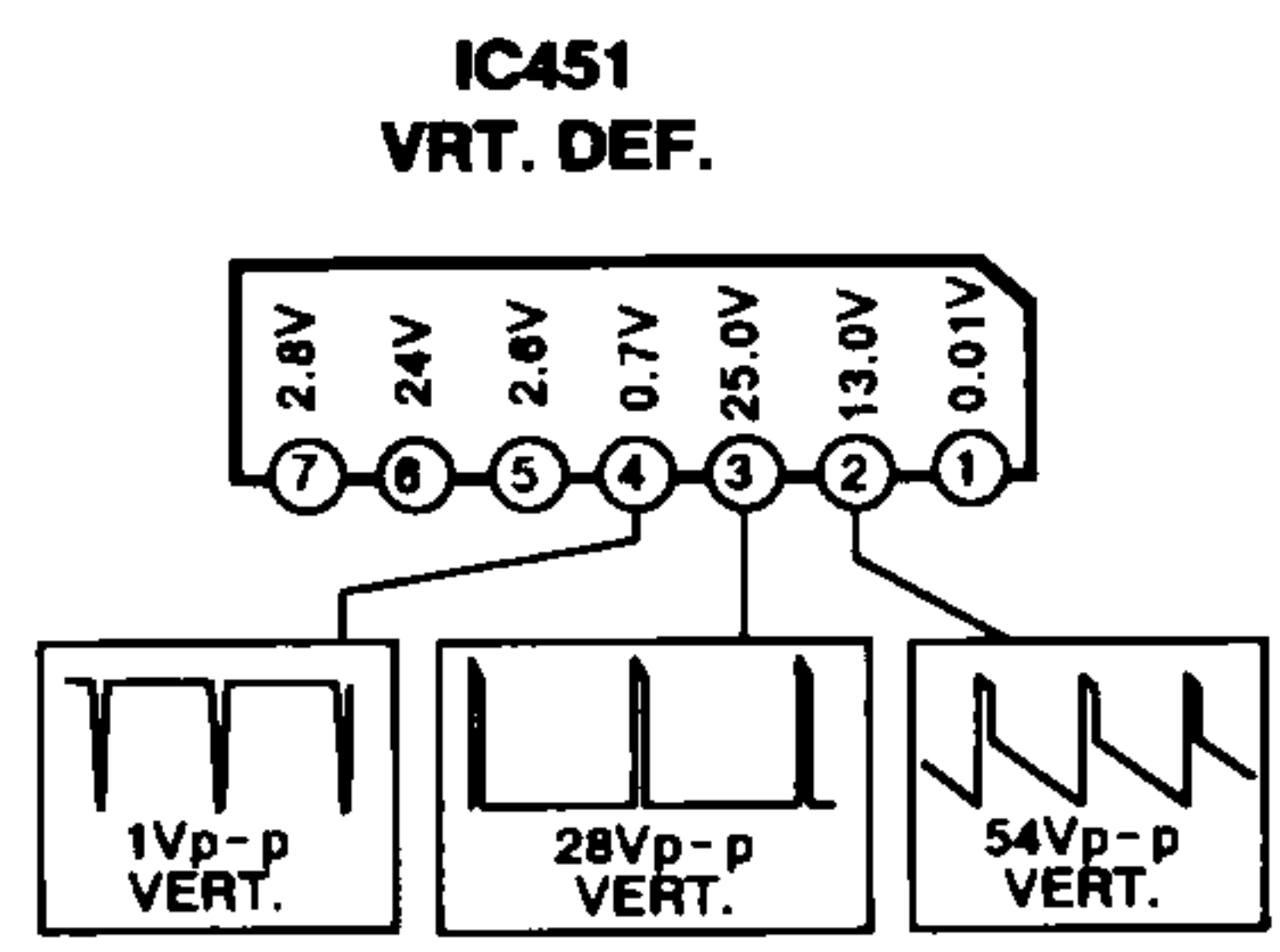
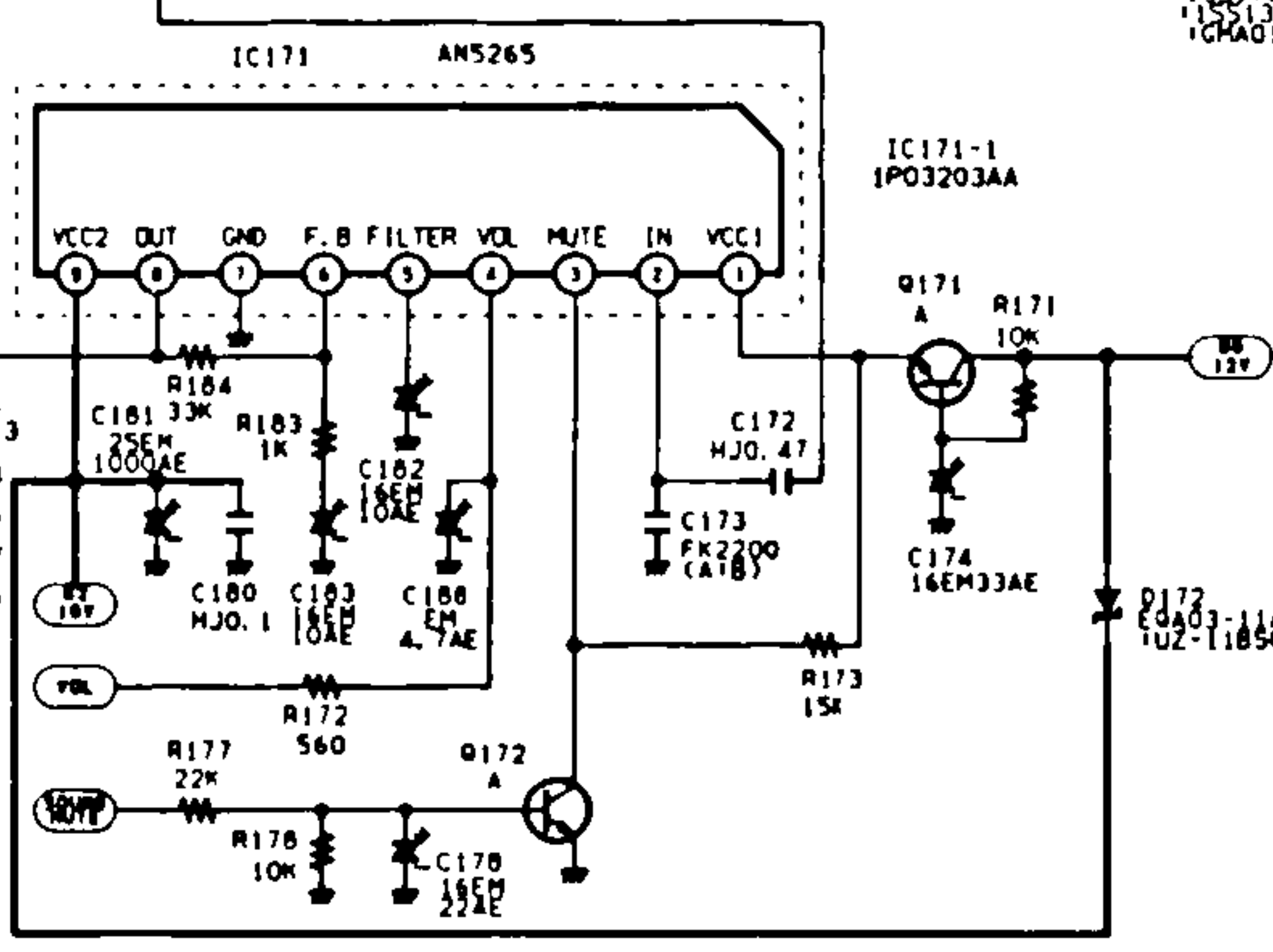
NON POLE ELECTRIC CAPACITOR

POSISTER



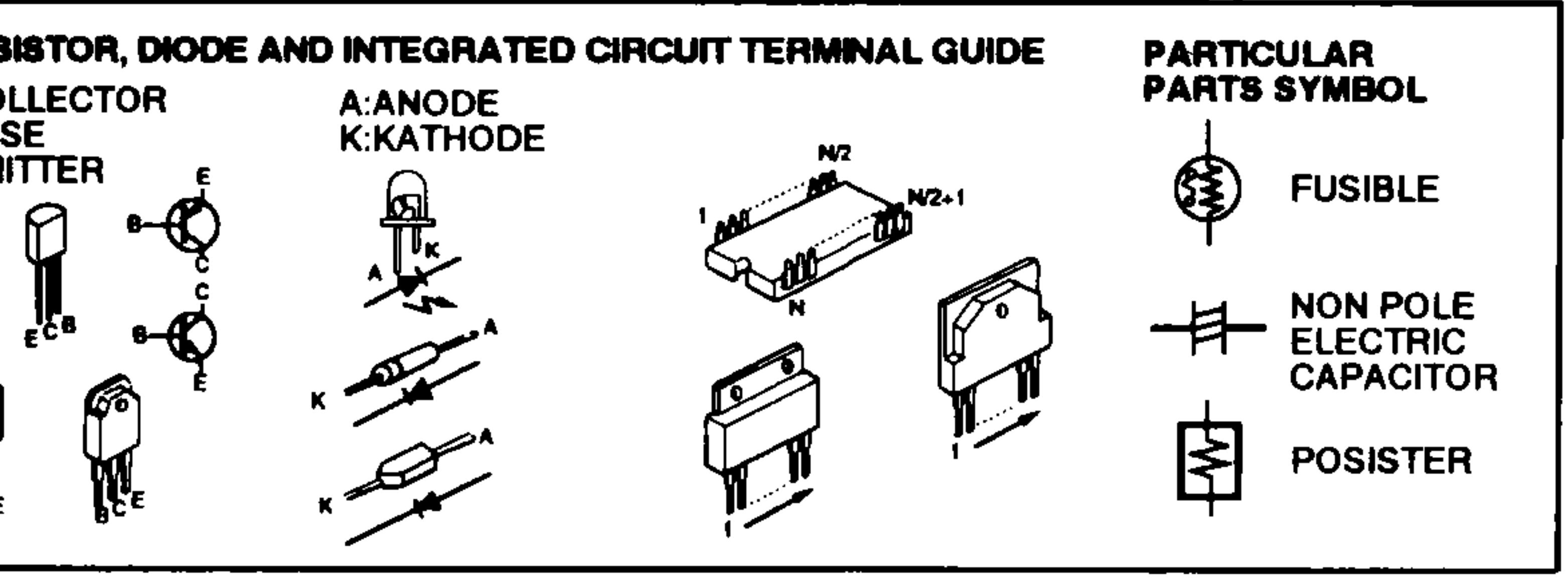
Q432		
	Volt.	Waveform
B	2.5V	12Vp-p HORIZ.
C	116V	820Vp-p HORIZ.
E	2.5V	---

Q431		
	Volt.	Waveform
B	0.3V	0.8Vp-p HORIZ.
C	13.9V	45Vp-p HORIZ.
E	0V	---



IC101	
27	2.0V
28	2.6V
29	3.3V
30	3.3V
31	3.3V
32	0.1V
33	2.7V
34	2.7V
35	2.6V
36	4.2V
37	0.07V
38	3.4V
39	3.0V
40	4.2V
41	3.2V
42	0.005V
43	7.8V
44	0.01V
45	1.7V
46	3.1V
47	3.8V
48	4.9V
49	7.7V
50	5.8V
51	5.8V
52	2.9V

Q124		Q113		Q111		Q172		Q171	
	VOLT.		VOLT.		VOLT.		VOLT.		VOLT.
B	2.3V	B	4.6V	B	3.1V	B	0.6V	B	11.3V
C	0.007V	C	7.8V	C	7.8V	C	0.01V	C	11.8V
E	3.0V	E	3.3V	E	2.4V	E	0V	E	10.6V



- 10. Parts specified with " X " are not installed in this model.
- 11. Parts specified with " J " are just jumper wires.

Q701	VOLT.
B	-0.1V
C	3.9V
E	0.01V

Q702	VOLT.
B	0.01V
C	5.8V
E	-0.06V

Q721	VOLT.
B	0.002V
C	5.0V
E	0.002V

Q722	VOLT.
B	0.01V
C	5.0V
E	0.01V

Q723	VOLT.
B	0.01V
C	5.0V
E	0.01V

Q714	VOLT.
B	0.01V
C	5.0V
E	0.1V

Q891	VOLT.
B	2.1V
C	-7.8V
E	1.4V

Q855	VOLT.
B	0.008V
C	5.1V
E	0.004V

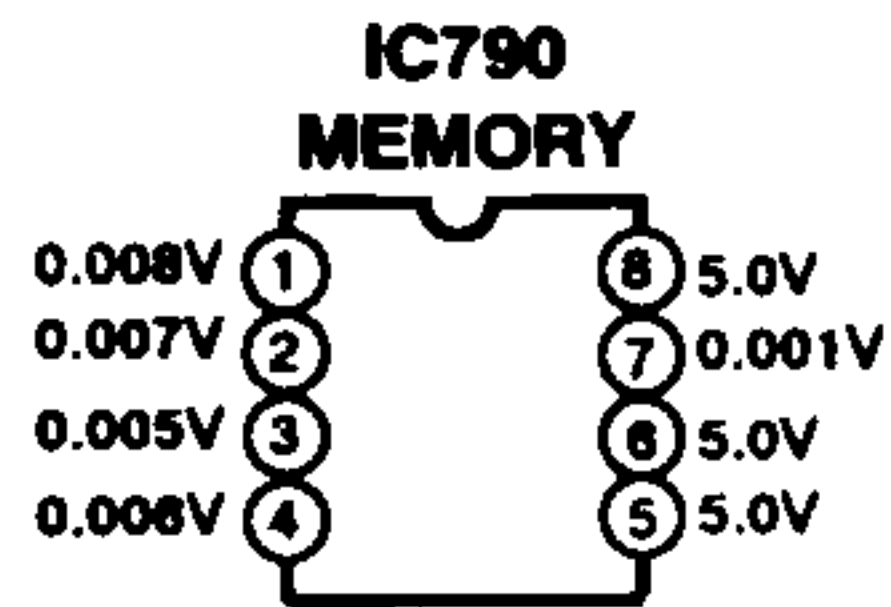
Q292	VOLT.
B	0.02V
C	11.8V
E	0.005V

Q291	VOLT.
B	3.0V
C	7.8V
E	2.3V

Q856	VOLT.
B	3.0V
C	7.8V
E	2.4V

IC290	TV/AV SWITCH
1	0.07V
2	11.8V
3	0.07V
4	11.8V
5	11.8V
6	11.8V
7	11.8V
8	11.8V
9	1.1V
10	11.8V

Q703	VOLT.
B	0.35V
C	11.8V
E	0.04V



Q713	VOLT.
B	5.0V
C	0.01V
E	5.0V

Q715	VOLT.
B	-0.05V
C	35V
E	0.007V

Q781	VOLT.
B	3.8V
C	7.8V
E	3.2V

Q716	VOLT.
B	0.6V
C	0.07V
E	0.007V

Q718	VOLT.
B	5.0V
C	0.01V
E	5.0V

Q857	VOLT.
B	2.9V
C	4.4V
E	2.2V

Q858	VOLT.
B	4.5V
C	0.002V
E	5.1V

Q706	VOLT.
B	3.7V
C	11.8V
E	3.0V

Q705	VOLT.
B	3.0V
C	0.01V
E	3.7V

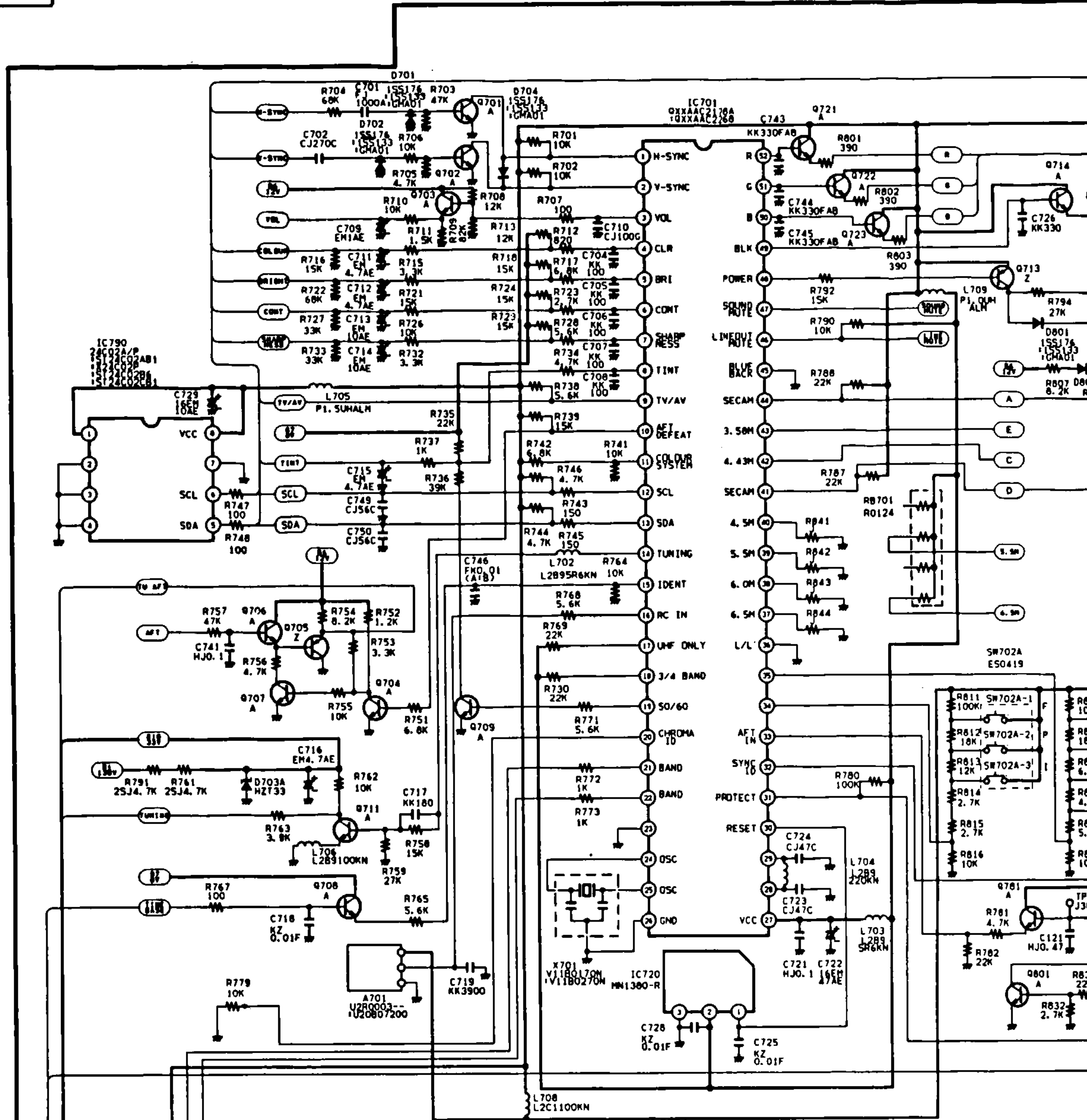
Q707	VOLT.
B	0.6V
C	0.006V
E	0.008V

Q704	VOLT.
B	0.02V
C	8.9V
E	0.004V

Q709	VOLT.
B	0.01V
C	5.8V
E	0.002V

Q711	VOLT.
B	0.4V
C	11.8V
E	0.007V

Q708	VOLT.
B	7.7V
C	7.8V
E	7.1V



MAIN PCB ASSY
 UE2798B (C21EF63EXH model)
 UE2798C (C21EF97EXH model)

Notice:
 1. On UE2798C chassis (C21EF97EXH model), push switch SW702A-3 is n
 2. A51EBV13X01 and A51EAL155X01 picture tubes are used exchangeabl
 in both models. Regarding value of components for A51EAL155X01
 please refer to Service Manual of C21EF97EXH.

Q291	
VOLT.	
B	3.0V
C	7.8V
E	2.3V

Q856	
VOLT.	
B	3.0V
C	7.8V
E	2.4V

Q858	
VOLT.	
B	4.5V
C	0.002V
E	5.1V

**IC290
TV/AV SWITCH**

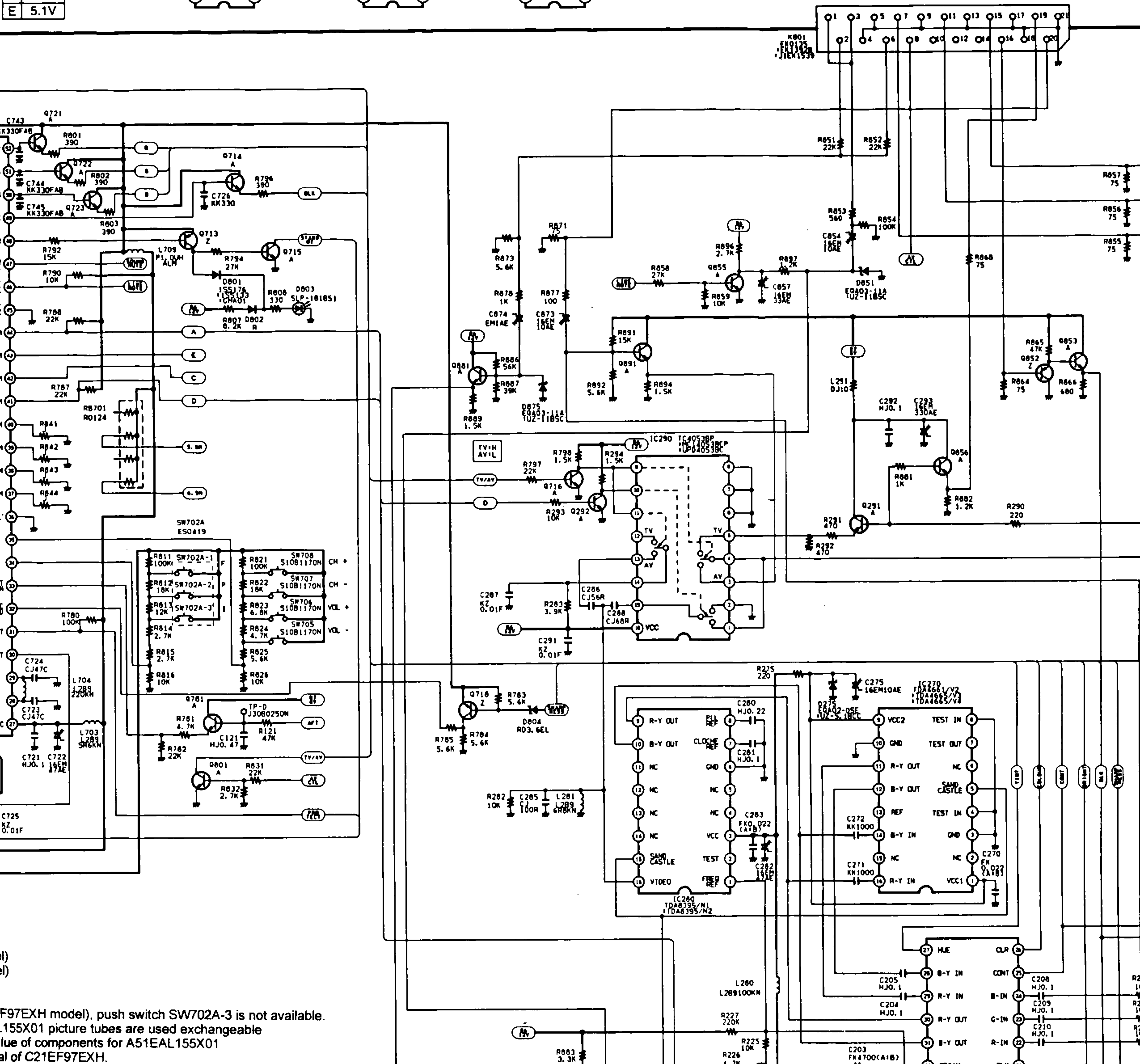
0.07V	9	8	0.01V
11.8V	10	7	0.01
0.07V	11	6	0.01
11.8V	12	5	1.1V
11.8V	13	4	1.1V
11.8V	14	3	1.4V
1.1V	15	2	0.003V
11.8V	16	1	1.1V

**IC280
SECAM**

1.4V	9	8	4.1V
1.4V	10	7	3.0V
1.3V	11	6	0.014V
1.2V	12	5	0.07V
1.1V	13	4	- V
1.1V	14	3	7.7V
0.8V	15	2	1.1V
0.007V	16	1	1.6V

**IC270
1H DELAY**

4.9V	9	8	0.008V
0.01V	10	7	0.7V
3.1V	11	6	0.7V
3.1V	12	5	0.8V
-	13	4	0.01V
1.3V	14	3	0.005V
1.2V	15	2	-
1.3V	16	1	4.9V



F97EXH model), push switch SW702A-3 is not available.
 155X01 picture tubes are used exchangeable
 value of components for A51EAL155X01
 al of C21EF97EXH.

Teletext Decoder is an optional extra.

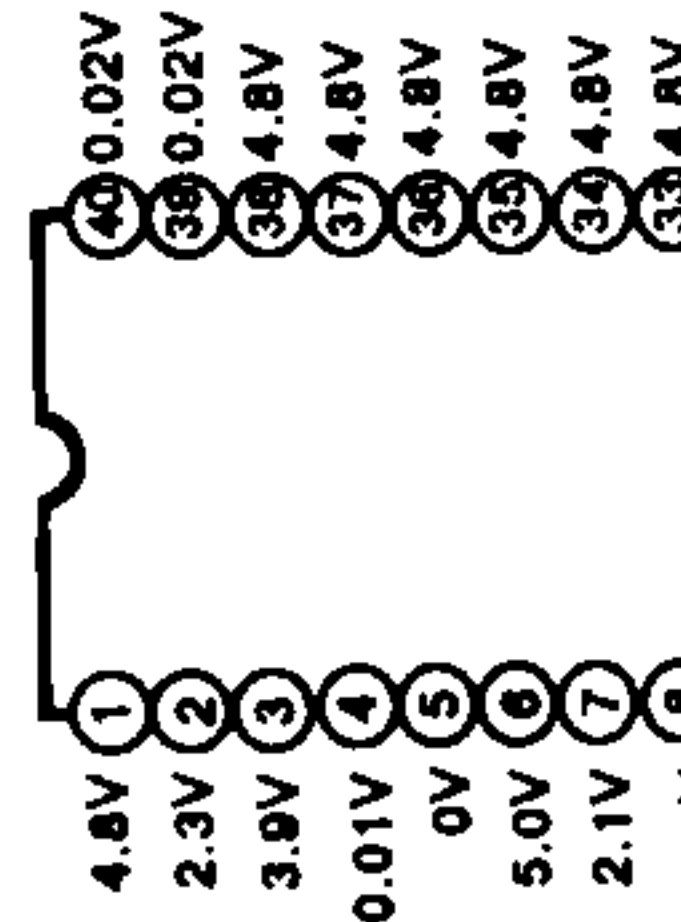
Q1001	
	VOLT.
B	0.3V
C	4.9V
E	0.5V

Q1003	
	VOLT.
B	1.5V
C	4.9V
E	1.1V

Q1002	
	VOLT.
B	0.2V
C	4.9V
E	0.5V

Q1004	
	VOLT.
B	4.2V
C	4.9V
E	3.6V

Note: Voltage rating in decoder unit taken using teletext signal.

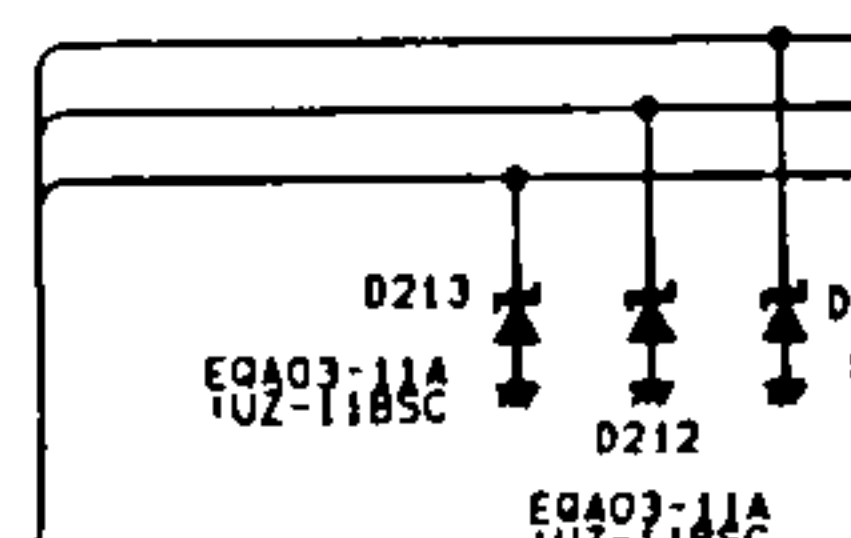
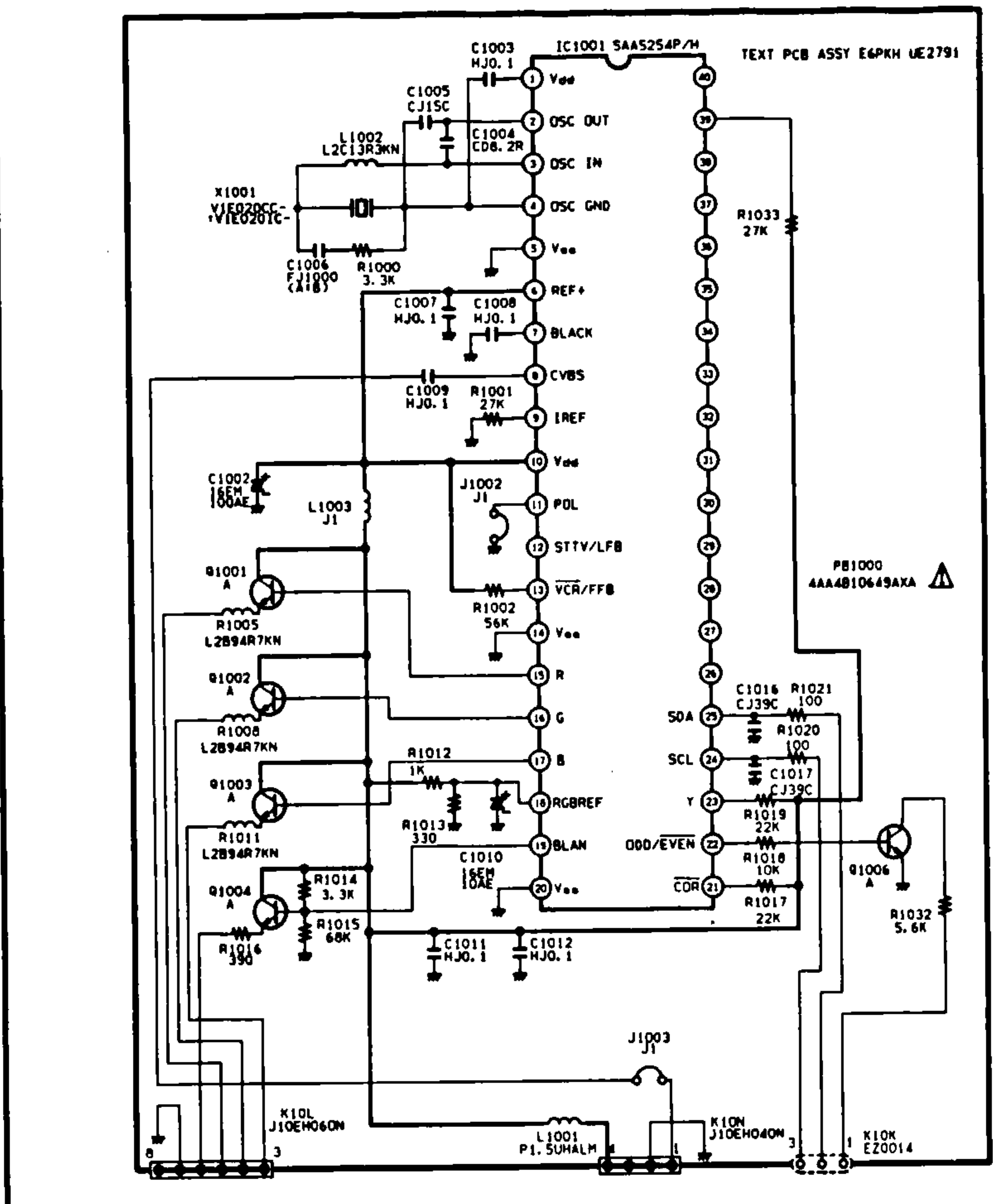
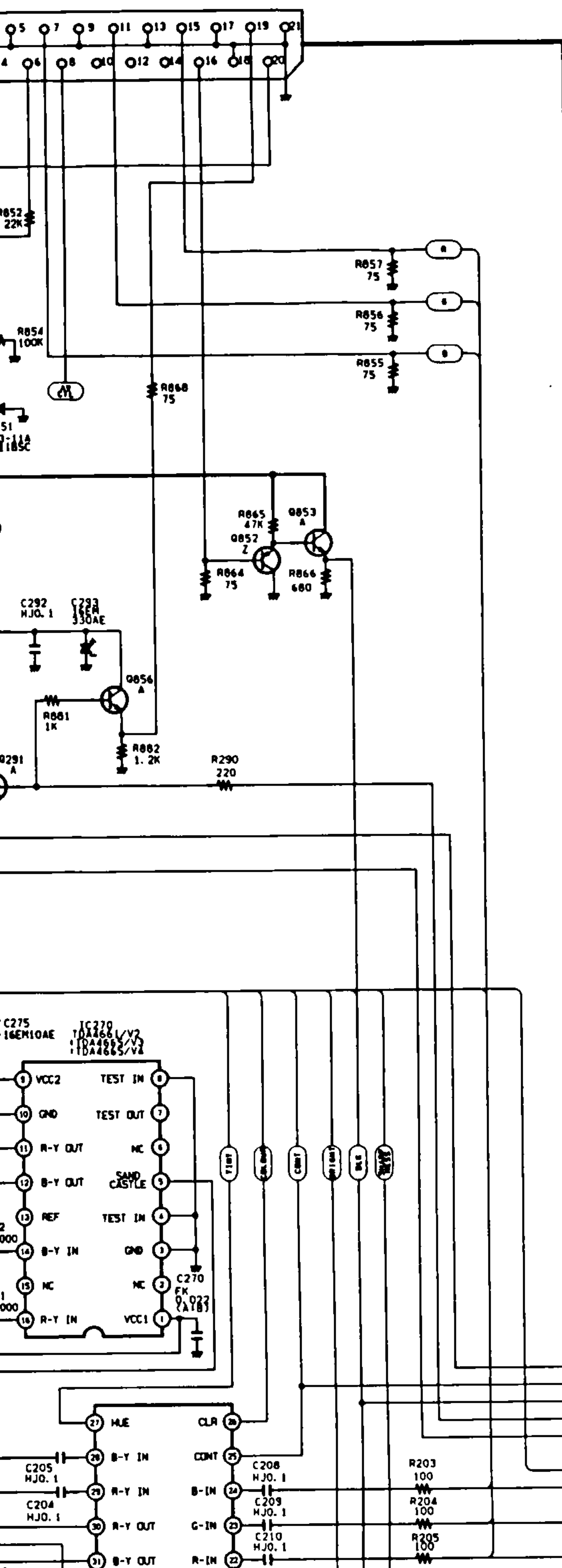


NOTES:
LIST OF REPLACEABLE PARTS.

(DIODE)	
SANYO CODE	DIODE
R	70D00019 1S1555, 1S2473, 1S2076, DS442, 1N4148

(NPN TR)					
SANYO CODE	Z5C536	Z5C945A	Z5C1815	Z5C1740	Z5C1740S
A	70T00214	E, F, G	P, Q, R	Q, Y, G	Q, R, S

(PNP TR)					
SANYO CODE	Z5A608	Z5A564A	Z5A1015	Z5A933	Z5A933S
Z	70T00418	E, F	Q, R	Q, Y, G	Q, R



Teletext Decoder is an optional extra.

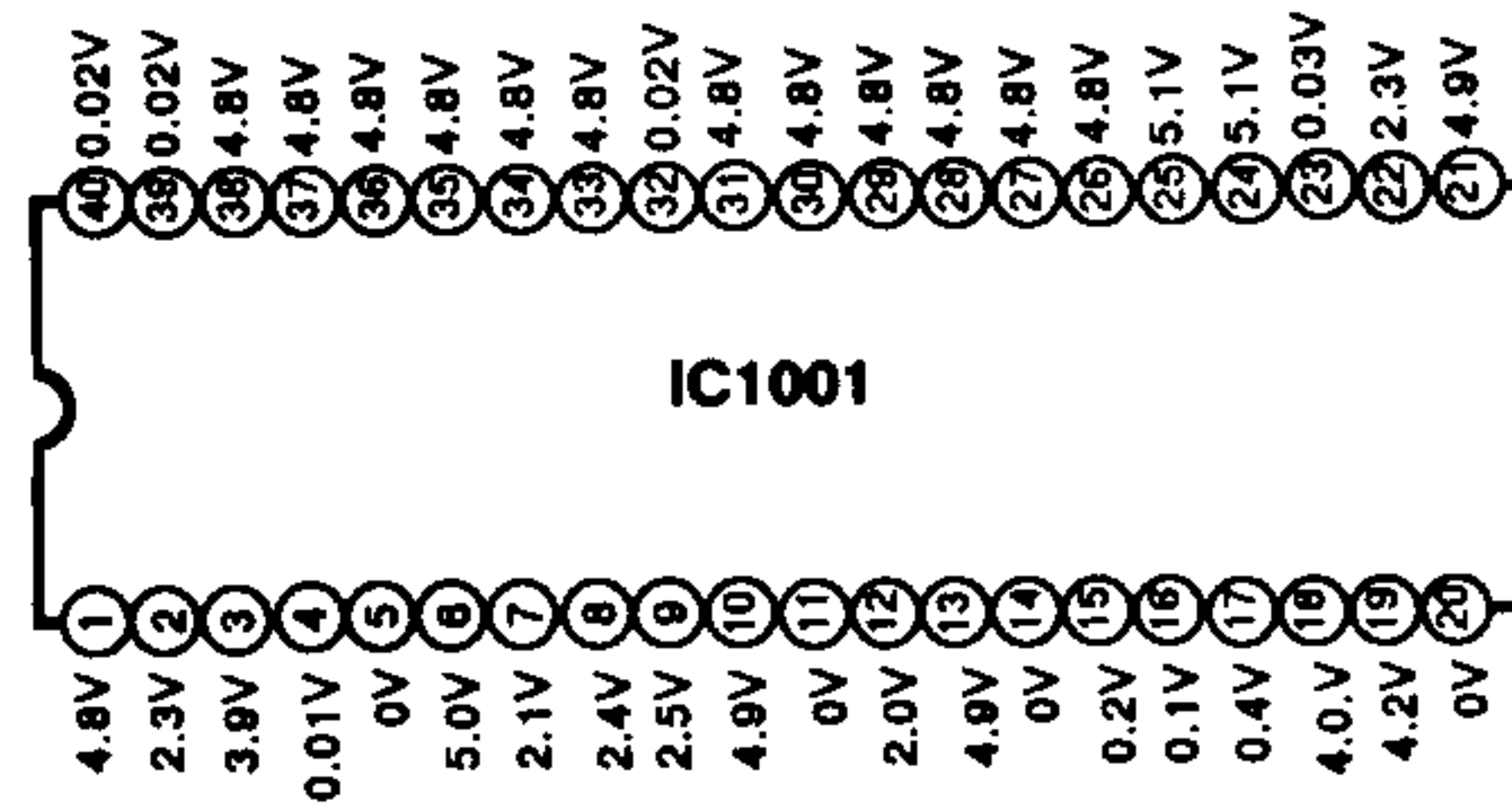
Note: Voltage rating in decoder unit taken using teletext signal.

Q1001	
	VOLT.
B	0.3V
C	4.9V
E	0.5V

Q1003	
	VOLT.
B	1.5V
C	4.9V
E	1.1V

Q1002	
	VOLT.
B	0.2V
C	4.9V
E	0.5V

Q1004	
	VOLT.
B	4.2V
C	4.9V
E	3.6V

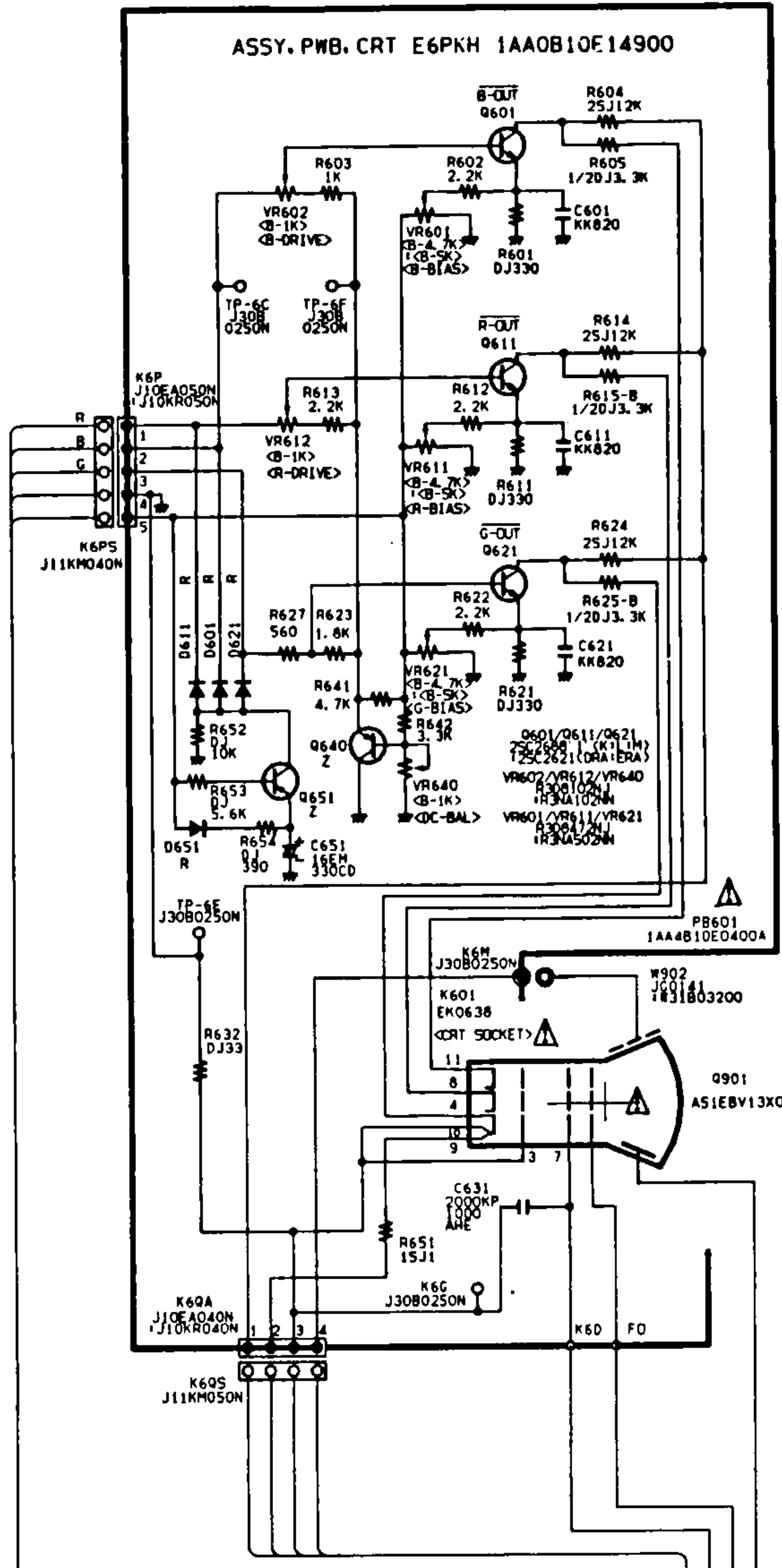
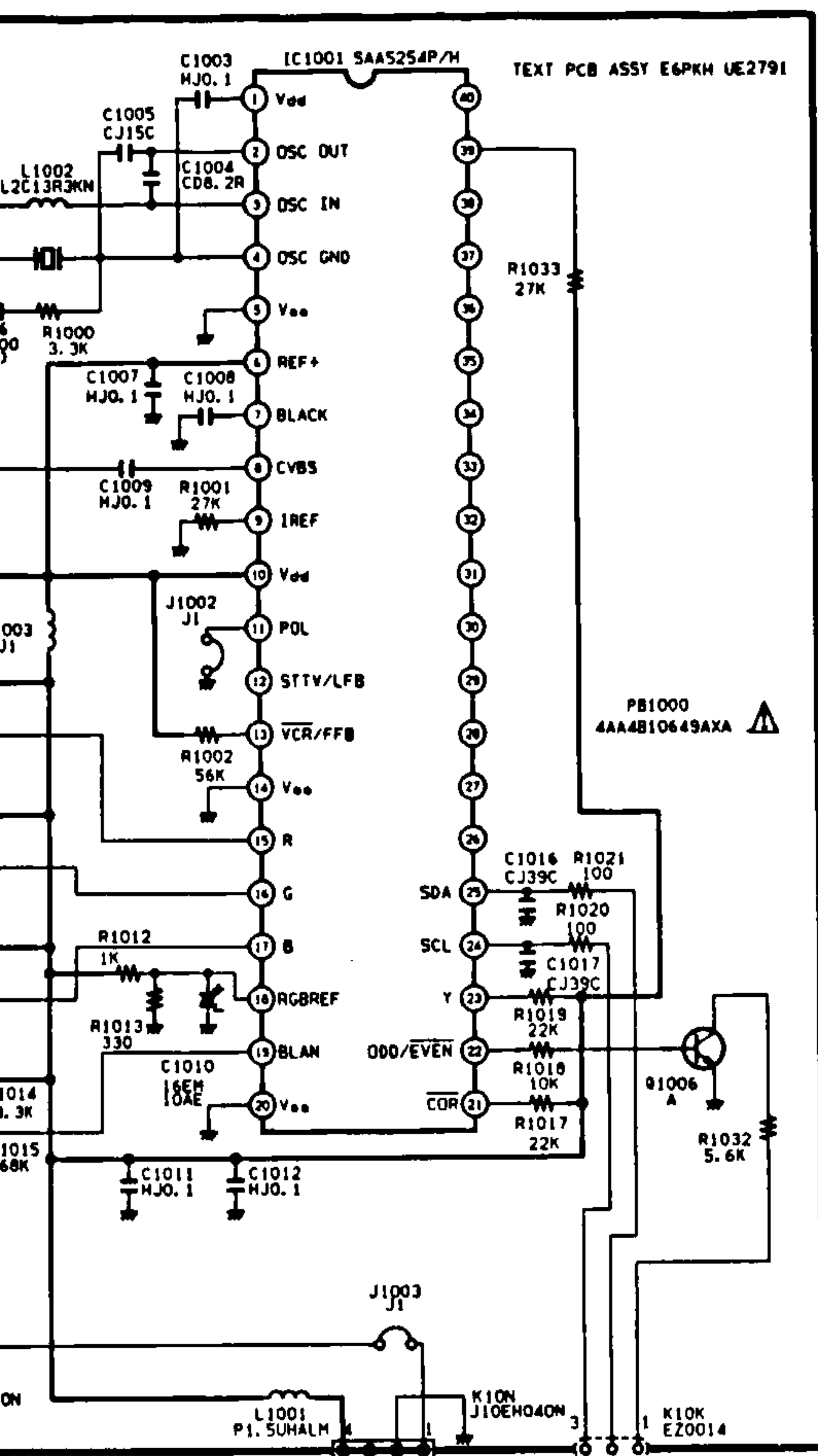


Q1006	
	VOLT.
B	0.6V
C	0.02V
E	-V

SANYO CODE		DIODE				
70000019	IS1555, IS2473, IS2076, OS442, IN4148					

SANYO CODE		25C536	25C945A	25C1815	25C1740	25C1740S
70T00214	E, F, G	P, Q, R	Q, Y, G	Q, R, S	Q, R, S	

SANYO CODE		25A608	25A564A	25A1015	25A933	25A933S
70T00418	E, F	Q, R	Q, Y, G	Q, R	Q, R	Q, R



Q640	
	VOLT.
B	1.5V
C	0.01V
E	2.0V

Q601	
	VOLT.
B	2.4V
C	133V
E	1.9V

Q611	
	VOLT.
B	2.0V
C	132V
E	2.5V

Q621	
	VOLT.
B	2.0V
C	128V
E	2.5V

