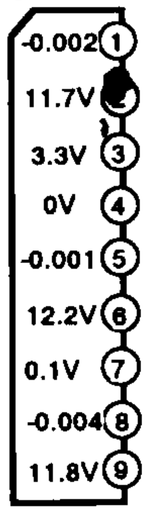
IC710 BAND SWITCH



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	6.2 V

SANYO

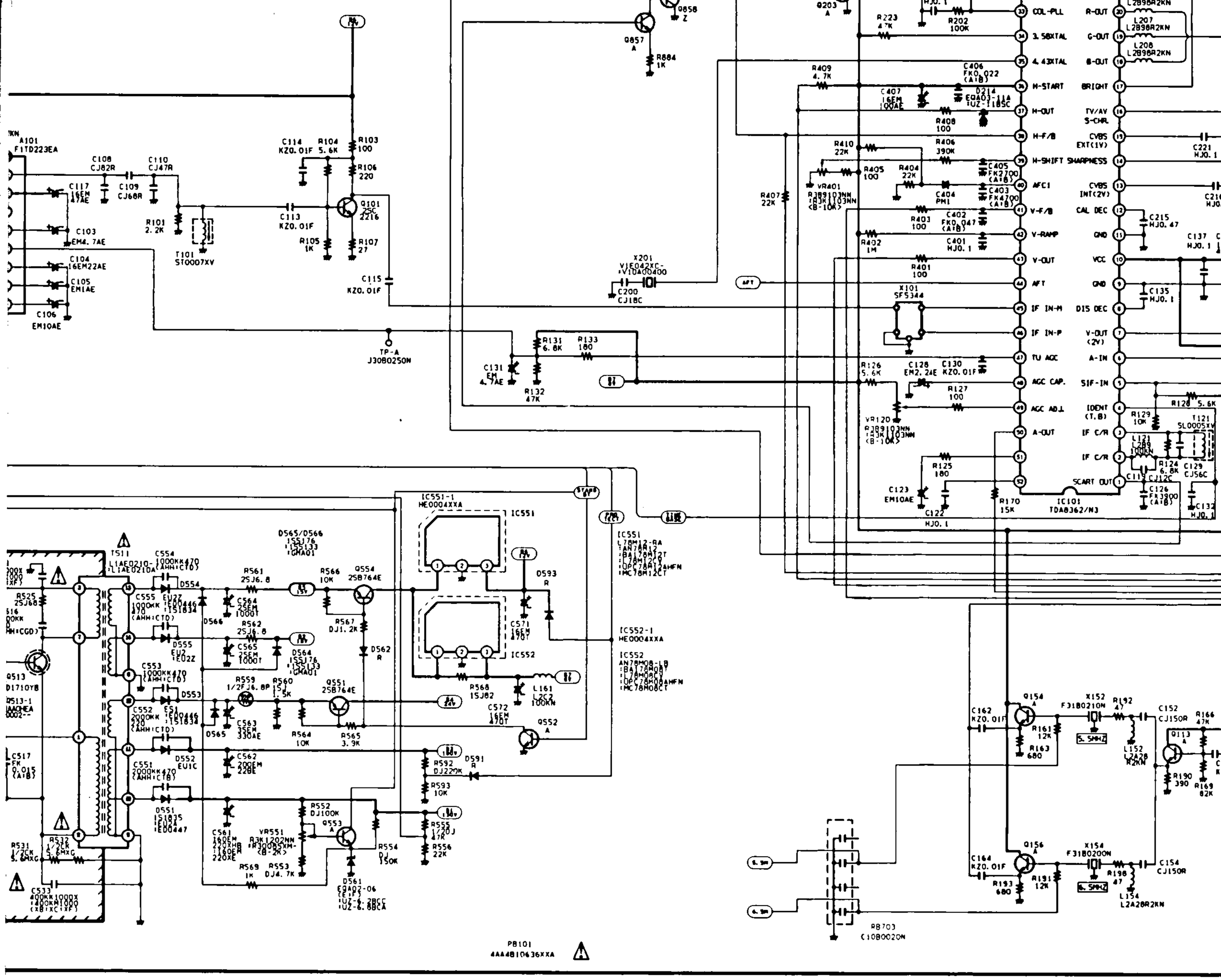
COLOUR TELEVISION

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 ⚠ 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 1/8W unless otherwise n
3. Excepting electrolytic capacitors, all capacitance values o expressed in μ F and more than 1 are pF.
4. All capacitance rated voltages are 50V unless otherwise n
5. All inductance values are in μ H.
6. Voltage readings taken with a "VTVM" are from point in ground. Voltage readings taken by using a colour bar si controls at normal position. Some voltages may vary with
7. Waveforms were taken with colour bar and controls adj picture. Waveforms were taken by using a wide band os low capacity probe.
8. This circuit diagram covers a basic or representative cha may be some components or partial circuit differences be 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

RCUIT DIAGRAM NOTICE:

All resistance value are in ohms, K=1,000, M=1.000.000.
All resistance rated wattages are 1/6W 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.

9. Expression of capacitance and resistance in circuit diagram.

Capacitance(Example)

1000 C M 2000 D

- 1000: Rated voltage (1.000V)
- C: Kind (Ceramic)
- M: Allowable error (± 20%)
- 2000: Capacitance value(220pF)
- D: Characteristic
  - 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(Example)

1/2 N J 1.2

- 1/2: Rated wattage(1/2W)
- N: Kind(M.carbon)
- J: Allowable error(± 5%)
- 1.2: Resistance value(1.2 Ω)
  - 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

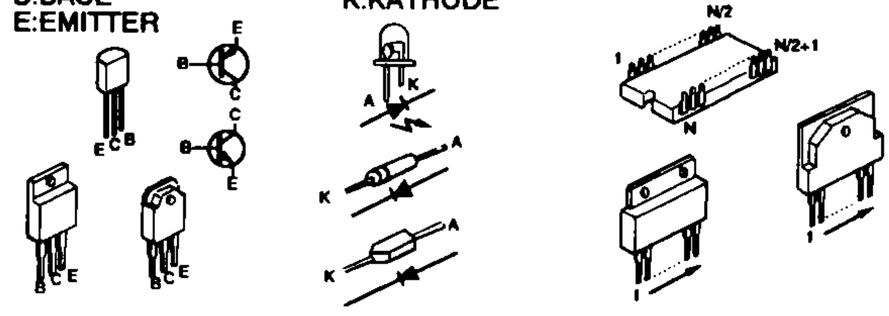
Q172	
	VOLT.
B	0.6V
C	0.01V
E	0V

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

TRANSISTOR, DIODE AND INTEGRATED CIRCUIT TERMINAL GUIDE

C:COLLECTOR
B:BASE
E:EMITTER

A:ANODE
K:KATHODE

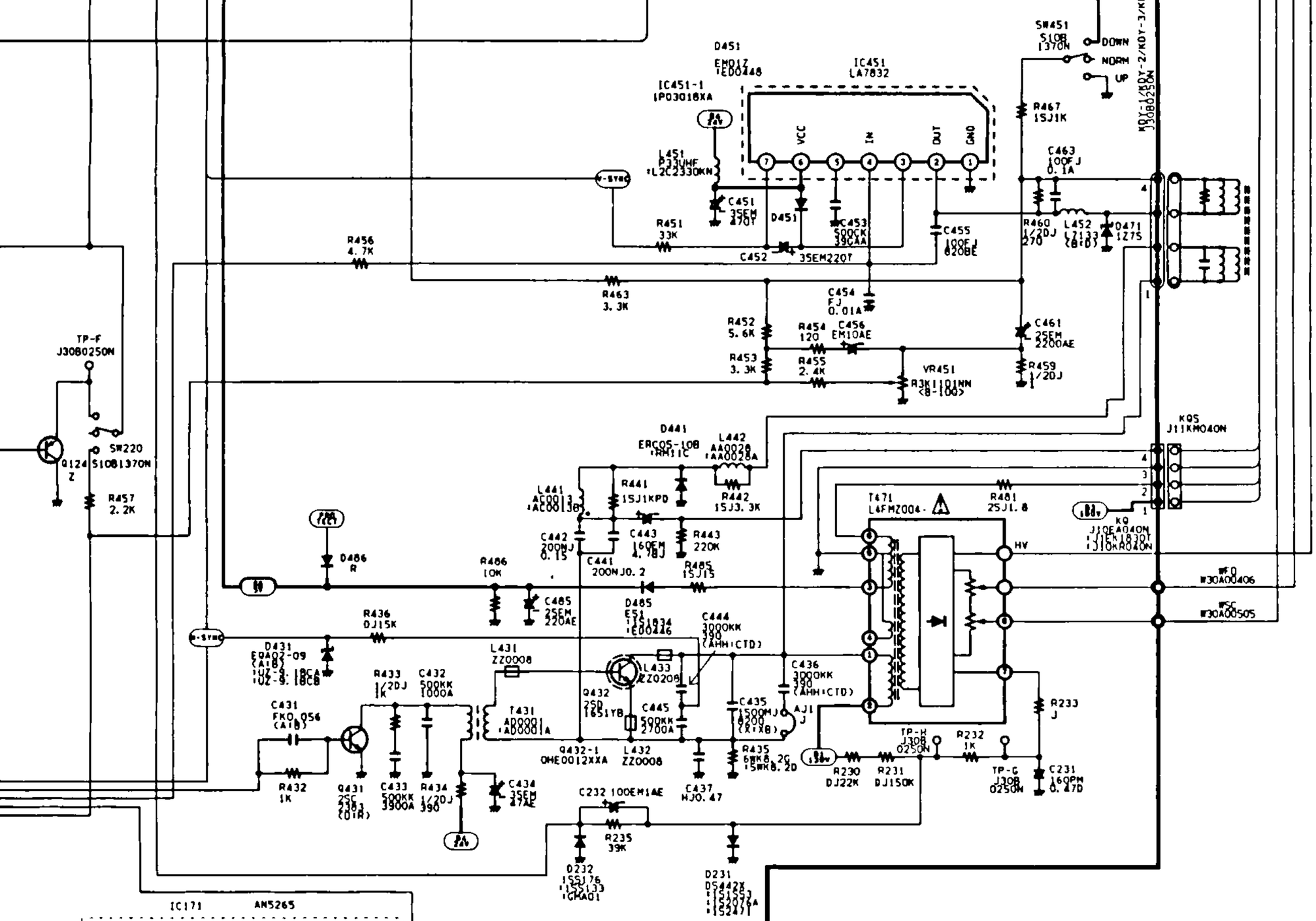


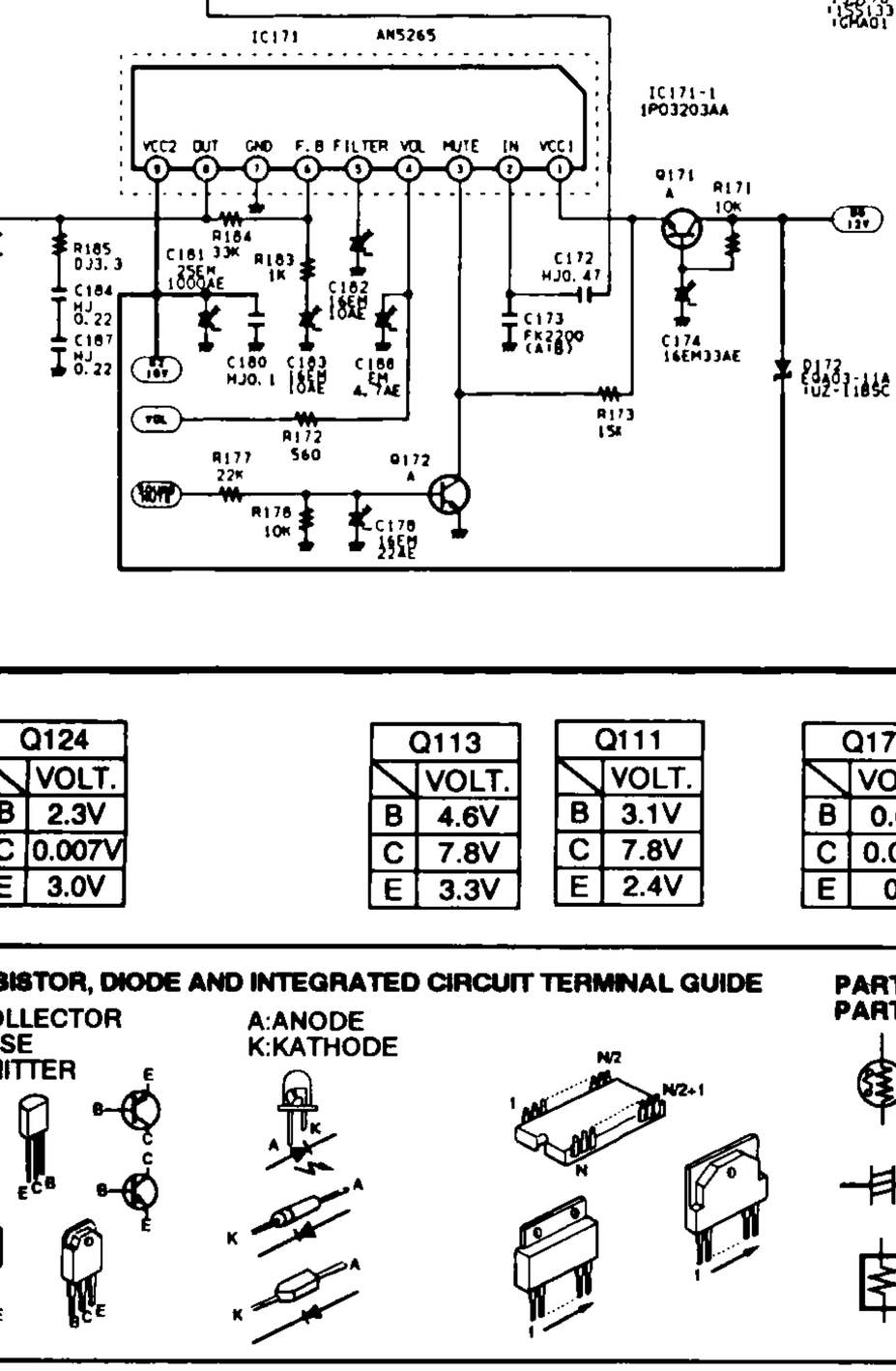
PARTICULAR PARTS SYMBOL

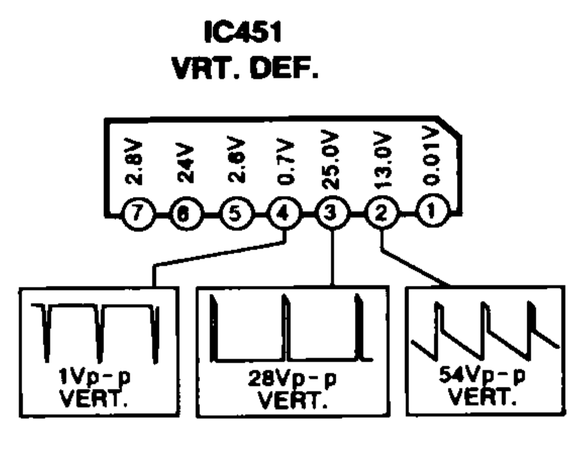
FUSIBLE

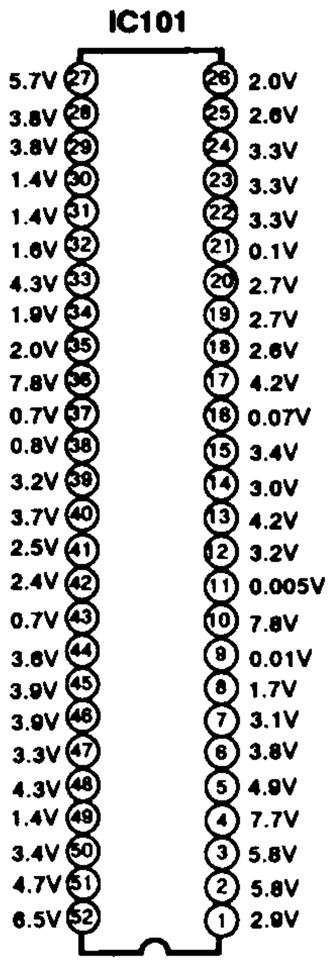
NON POLE ELECTRIC CAPACITOR

POSISTER









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

Q431		
	Volt.	Waveform
B	0.3V	0.6Vp-p HORIZ.
C	13.9V	45Vp-p HORIZ.
E	0 V	— — —

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	10.6 V

BISTOR, DIODE AND INTEGRATED CIRCUIT TERMINAL GUIDE

OLLECTOR
SE
ITTER

A:ANODE
K:KATHODE

PARTICULAR PARTS SYMBOL

- FUSIBLE
- NON POLE ELECTRIC CAPACITOR
- POSISTER

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

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

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

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

Q722	
	VOLT.
B	0.01 V
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	5.1 V
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	3.0 V
C	7.8V
E	2.4V

IC290
TV/AV SWIT

0.07V 9
11.8V 10
0.07V 11
11.8V 12
11.8V 13
11.8V 14
1.1V 15
11.8V 16

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

IC790
MEMORY

0.008V 1
0.007V 2
0.005V 3
0.006V 4
8 5.0V
7 0.001V
6 5.0V
5 5.0V

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

Q715	
	VOLT.
B	-0.05V
C	35 V
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	3.7 V
C	11.8 V
E	3.0V

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

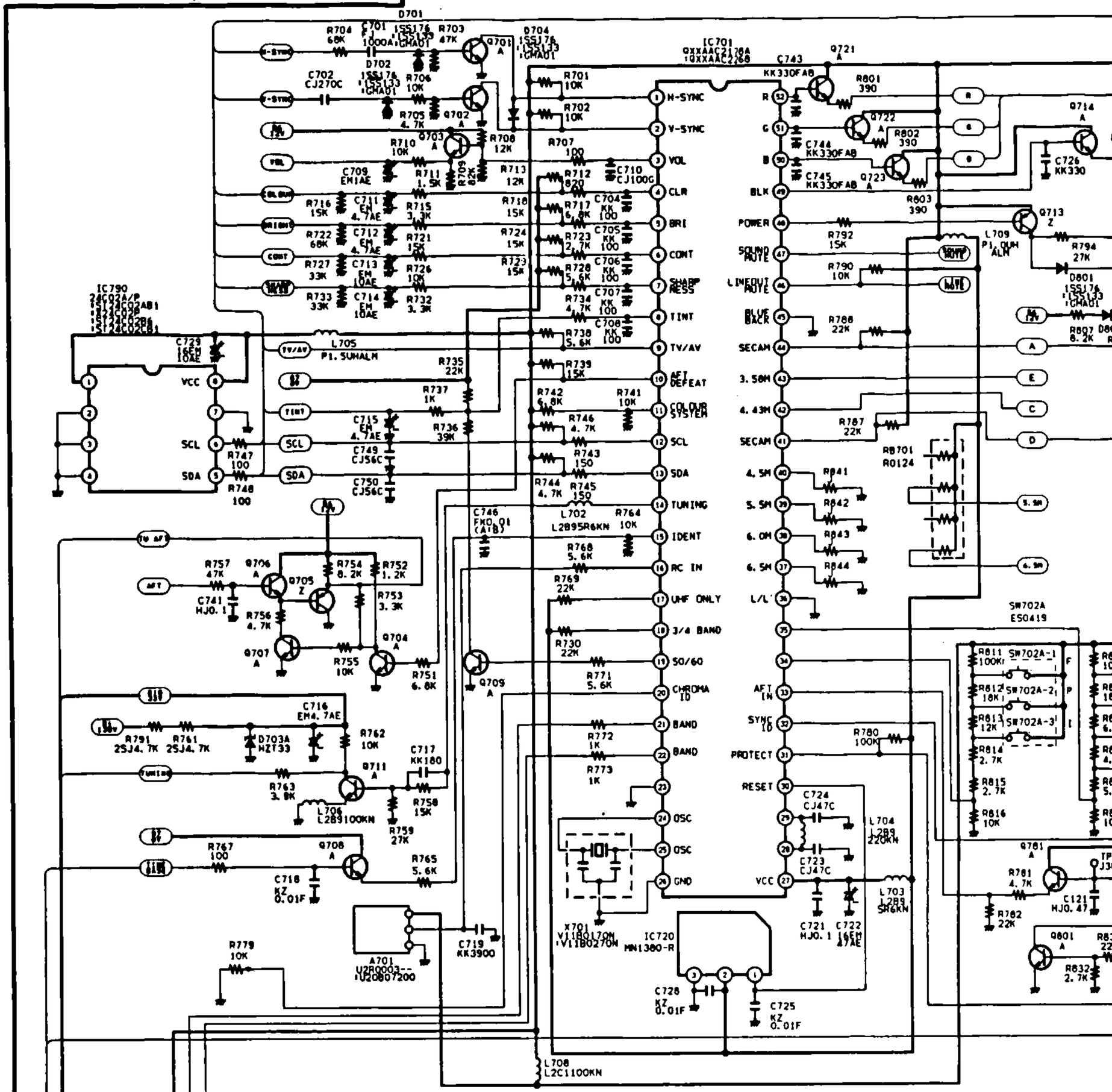
Q707	
	VOLT.
B	0.6 V
C	0.006V
E	0.008V

Q704	
	VOLT.
B	0.02V
C	8.9 V
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:

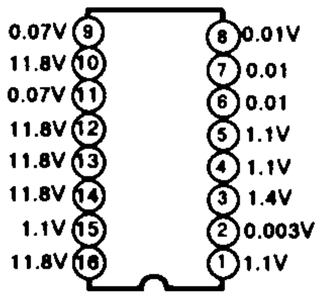
1. On UE2798C chassis (C21EF97EXH model), push switch SW702A-3 is n
2. A51EBV13X01 and A51EAL155X01 picture tubes are used exchangeabl in both models. Regarding value of components for A51EAL155X01 please refer to Service Manual of C21EF97EXH.

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

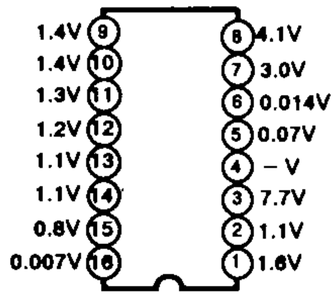
Q856	
	VOLT.
B	3.0 V
C	7.8V
E	2.4V

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

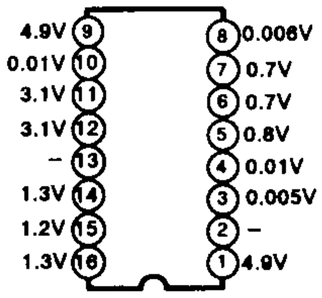
IC290
TV/AV SWITCH



IC280
SECAM



IC270
1H DELAY



F97EXH model), push switch SW702A-3 is not available.
L155X01 picture tubes are used exchangeable
lue of components for A51EAL155X01
al of C21EF97EXH.

Teletext Decoder is an optional extra.

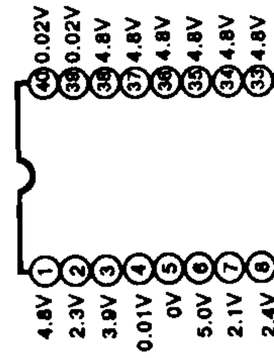
Note: Voltage rating in decoder unit taken using teletext signal.

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



NOTES:

LIST OF REPLACEABLE PARTS.

(DIODE)

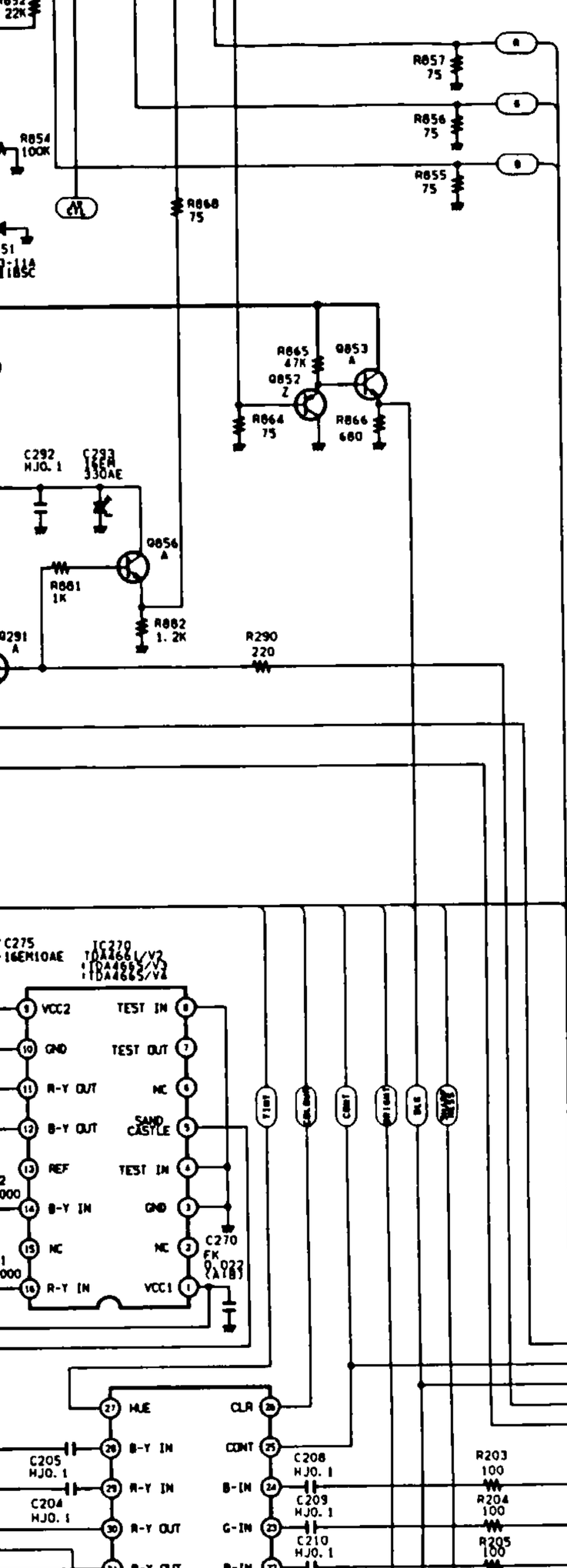
	SANYO CODE	DIODE
R	70000019	1S1555, 1S2473, 1S2076, DS442, 1N4148

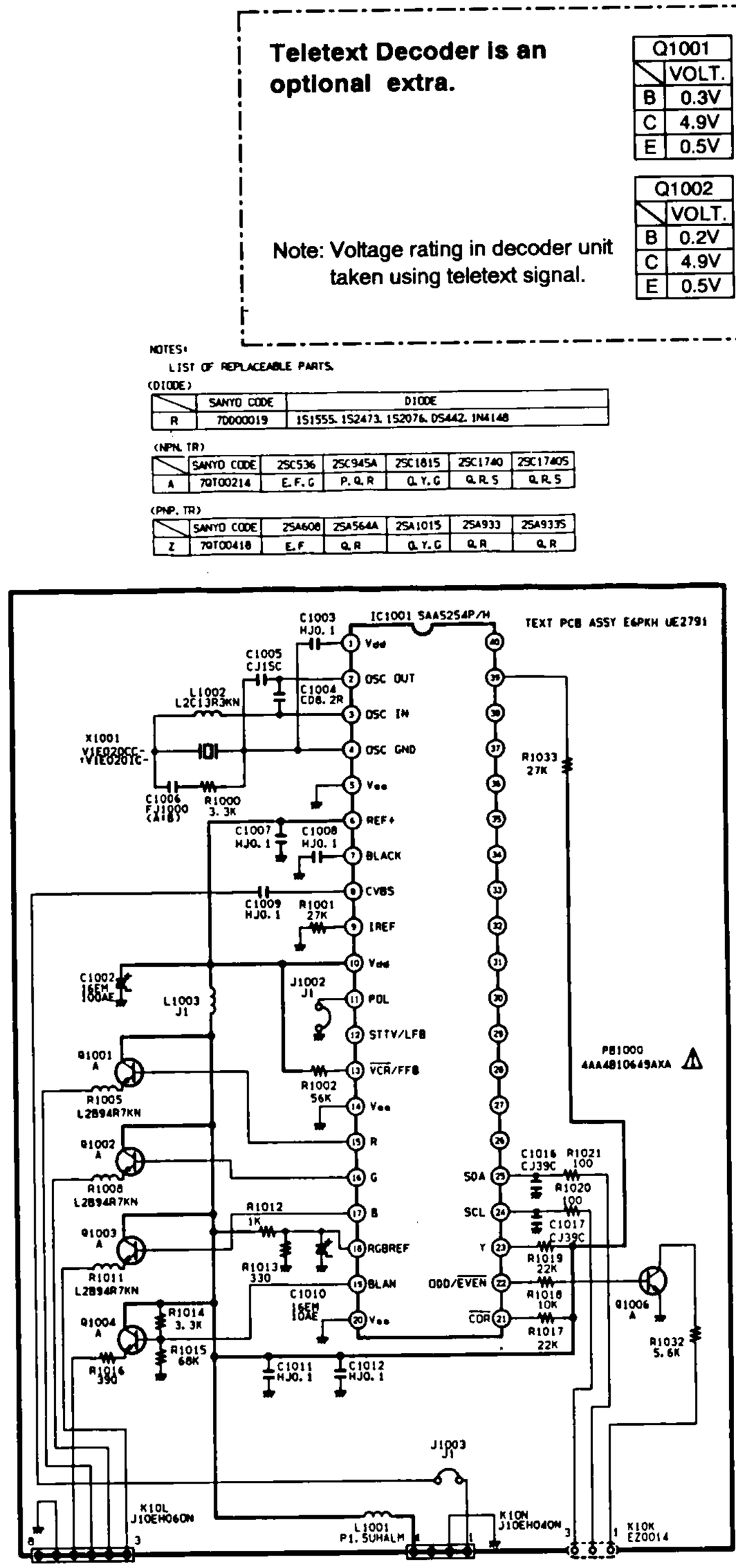
(NPN, TR)

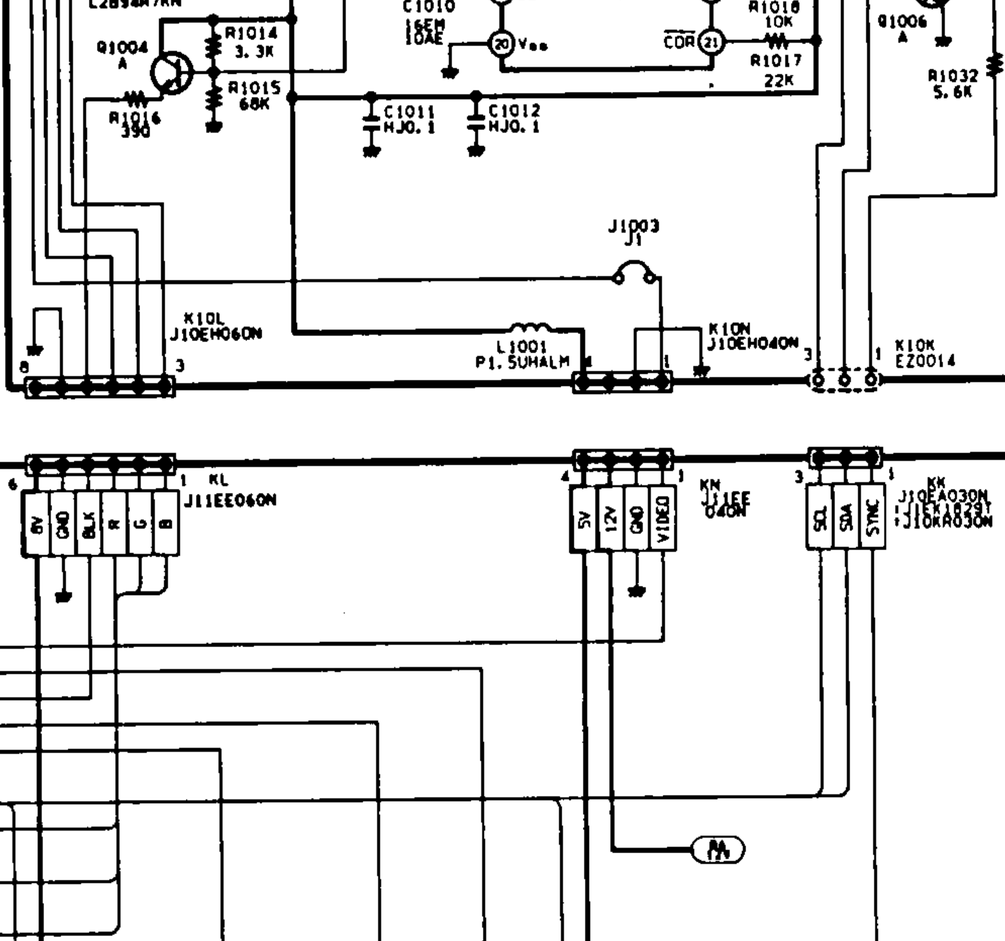
	SANYO CODE	2SC536	2SC945A	2SC1815	2SC1740	2SC1740S
A	70T00214	E, F, G	P, Q, R	O, Y, G	Q, R, S	Q, R, S

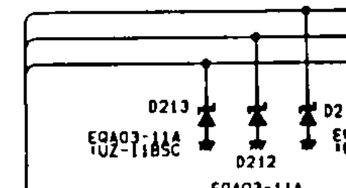
(PNP, TR)

	SANYO CODE	2SA608	2SA564A	2SA1015	2SA933	2SA933S
Z	70T00418	E, F	Q, R	O, Y, G	Q, R	Q, R









Teletext Decoder is an optional extra.

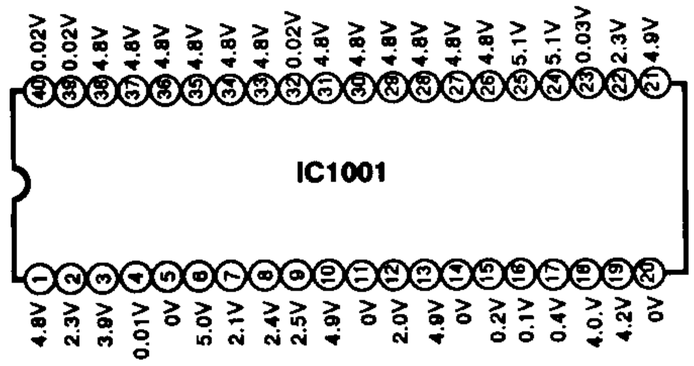
Note: Voltage rating in decoder unit taken using teletext signal.

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

IST OF REPLACEABLE PARTS.

DE)

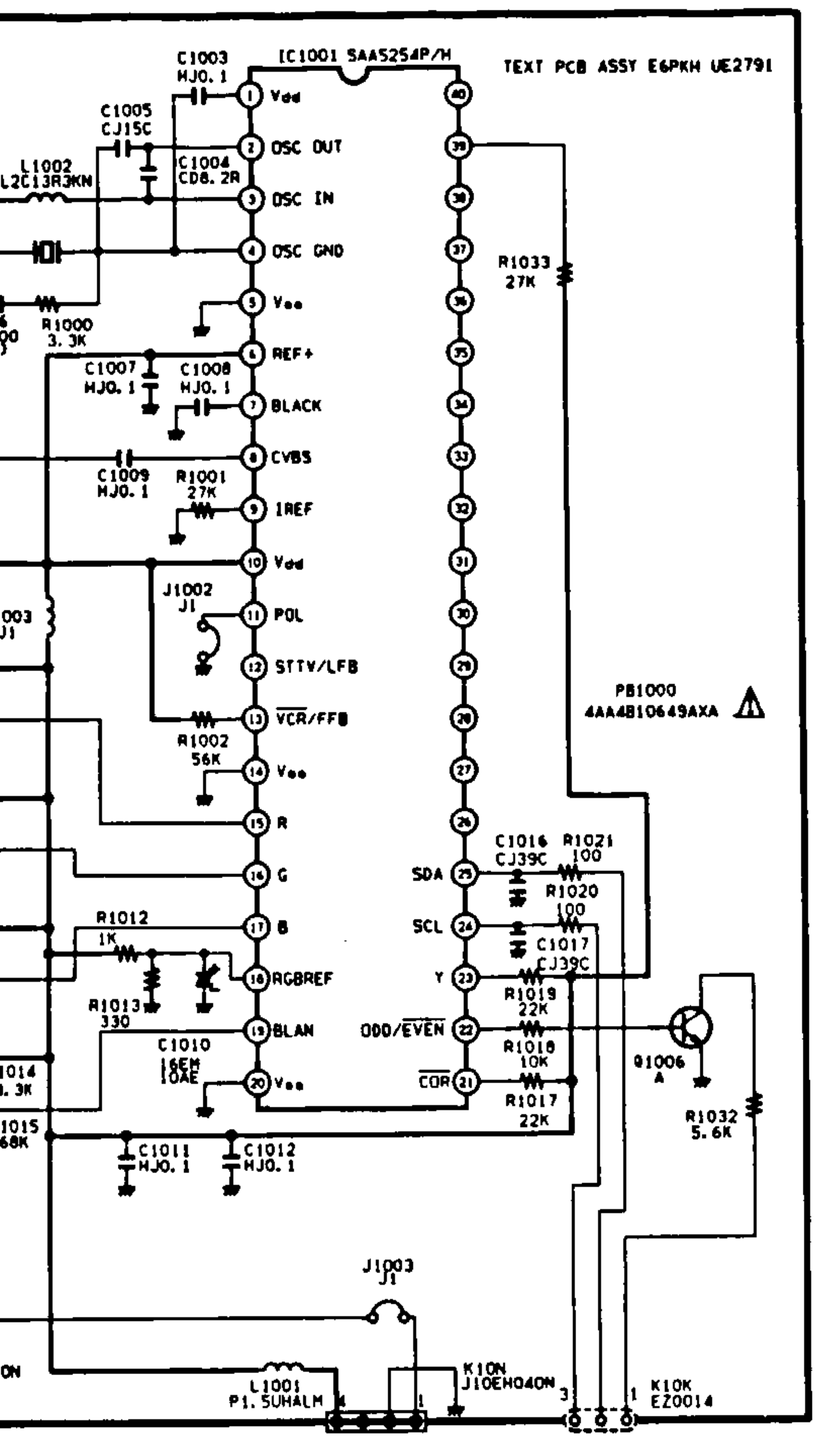
	SANYO CODE	DIODE
	7D000019	1S1555. 1S2473. 1S2076. DS442. IN4148

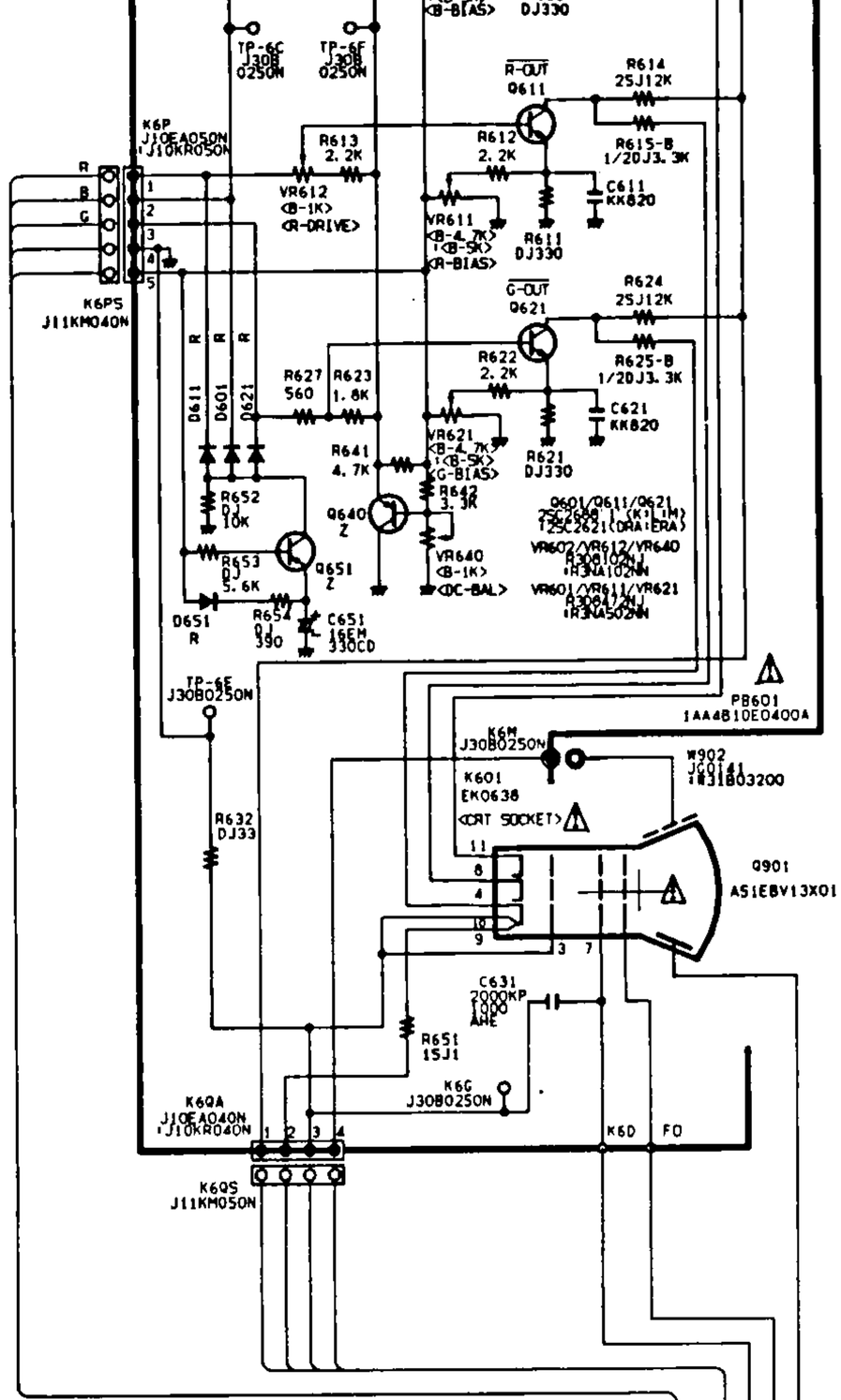
L TR)

	SANYO CODE	2SC536	2SC945A	2SC1815	2SC1740	2SC1740S
	7QT00214	E.F.G	P.Q.R	Q.Y.G	Q.R.S	Q.R.S

TR)

	SANYO CODE	2SA608	2SA564A	2SA1015	2SA933	2SA933S
	7QT00418	E.F	Q.R	Q.Y.G	Q.R	Q.R





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

Q601		
	VOLT.	WAVEFORM
B	2.4V	2.7Vp-p(HORIZ.)
C	133V	91Vp-p(HORIZ.)
E	1.9V	— — — ·

Q611		
	VOLT.	WAVEFORM
B	2.0V	3.1Vp-p(HORIZ.)
C	132V	100Vp-p(HORIZ.)
E	2.5V	— — — ·

Q621		
	VOLT.	WAVEFORM
B	2.0V	3.0Vp-p(HORIZ.)
C	128V	94Vp-p(HORIZ.)
E	2.5V	— — — ·