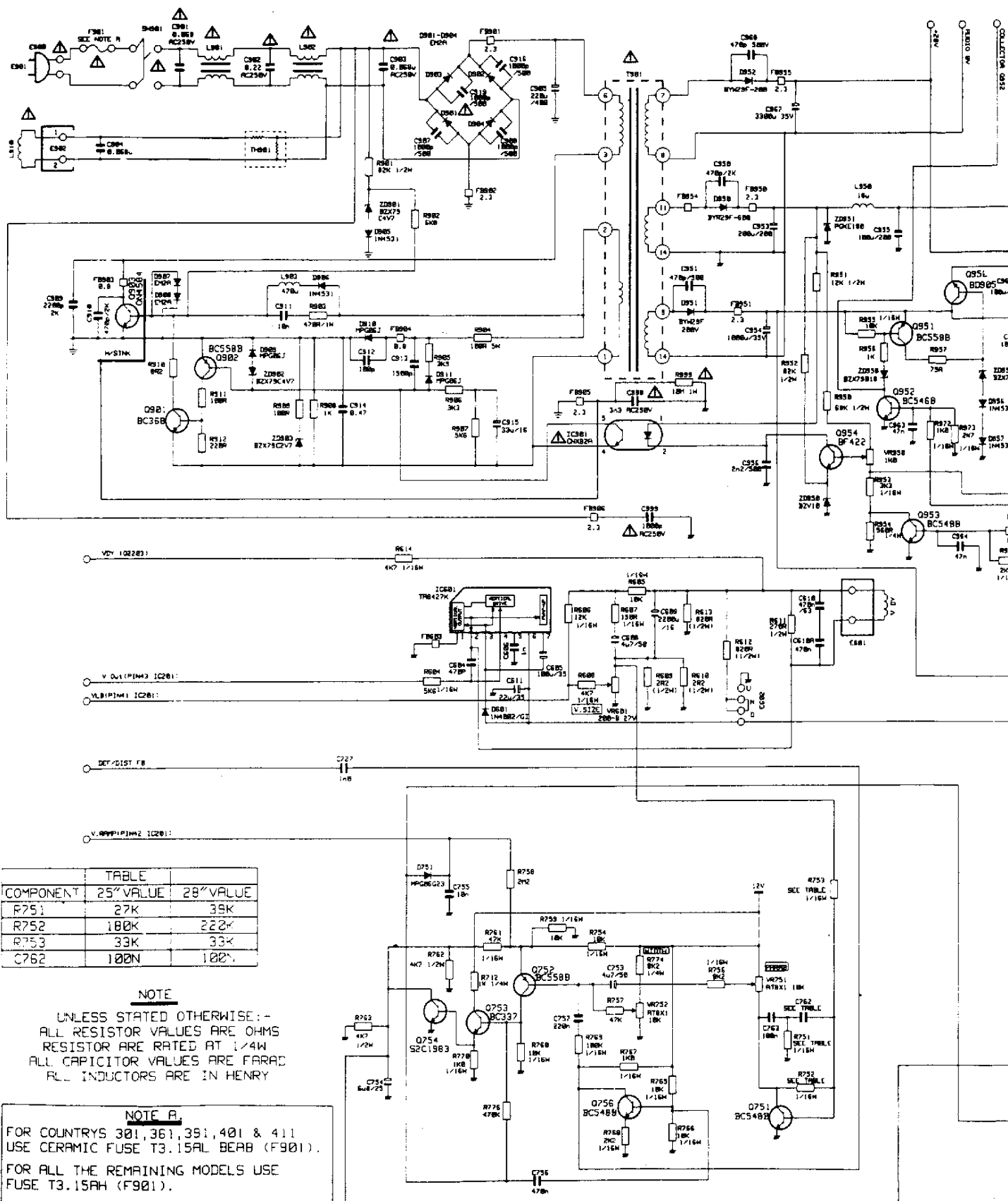


Power Deflection



Voltage Charts Cont'd.

IC402 TDA9860	
Symbol/Pin	Voltage
3	3.9
4	7.8
5	3.9
6	7.8
7	3.9
8	0
9	3.9
10	3.9
11	3.9
12	3.9
14	3.9
15	3.9
16	3.5
17	3.0
18	3.9
19	3.9
21	3.9
22	3.9
23	3.9
24	3.9
26	3.9
27	3.9
29	3.9

IC1401 TA8777N	
Symbol/Pin	Voltage
1	11.8
2	6.9
3	6.5
4	6.9
5	6.5
6	6.8
7	6.5
8	6.8
9	6.5
10	6.8
11	6.8
12	6.5
13	6.8
14	6.8
15	6.5
16	5.6
17	5.6
19	2.6
21	0.1
22	5.6
23	5.6
24	4.1
27	4.4
28	6.5
29	7.8
30	4.0
32	3.5
33	3.0
34	6.8
35	6.8
36	6.8

IC901 CNX82A	
Symbol/Pin	Voltage
1	125 (78.2)
2	124.3 (77.8)
4	-4.3 (0)
5	0.2

IC501 TDA4665	
Symbol/Pin	Voltage
1	5.6
5	1.1
9	5.6
11	3.1
12	3.1
14	1.3
16	1.4

IC601 TA8427K	
Symbol/Pin	Voltage
2	13.8
3	26.3
4	0.9
5	0.8
6	26.3
7	1

IC1401 TA8777N	
Symbol/Pin	Voltage
1	11.8
2	6.9
3	6.5
4	6.9
5	6.5
6	6.8
7	6.5
8	6.8
9	6.5
10	6.8
11	6.8
12	6.5
13	6.8
14	6.8
15	6.5
16	5.6
17	5.6
19	2.6
21	0.1
22	5.6
23	5.6
24	4.1
27	4.4
28	6.5
29	7.8
30	4.0
32	3.5
33	3.0
34	6.8
35	6.8
36	6.8

IC950 7805	
Symbol/Pin	Voltage
1	14.5
3	5.0

IC951 MC7808CT	
Symbol/Pin	Voltage
1	12
3	7.9

IC952 7805	
Symbol/Pin	Voltage
1	9.7
3	5.0

IC4051 TDA9802	
Symbol/Pin	Voltage
1	3.3 0.1*
2	3.3
3	0.3
4	0.2
5	3.1
6	2.4
8	7.9
9	2.0
10	1.6
11	2.6
13	1.8 3.0*
14	0.9
15	5.9
16	2.8
17	2.8
19	3.2
20	7.6

* = No signals

IC4201 SAA7823ZP	
Symbol/Pin	Voltage
3	4.9
5	2.5
7	2.5
8	2.5
11	2.5
15	2.5
16	2.5
20	2.4
21	2.4
23	2.4
26	4.9
27	2.3
28	2.4
29	2.4
30	2.5
32	2.0
33	2.4
34	2.4
35	2.5
36	4.9
39	0.5
40	3.5
41	2.6
43	2.8
46	4.9
47	4.6
48	2.8
49	3.5
50	4.9

IC4450 TDA7263	
Symbol/Pin	Voltage
1	1.7
2	1.7
3	15.8
4	1.7
5	1.7
8	13.2 - 14.3 (Volume)
9	29.5
10	13.2 - 14.3 (Volume)

Symbol/Pin	E	B
Q001	0	5.0 0 scart/S-VHS
Q002	0	0 5.0 S-VHS
Q004	0.1	0
Q011	0	0 (4.2)
Q012	0	0.4
Q302	1.7	2.3
Q501	11.9	12
Q502	2.3	3.1
Q701	0	0.4
Q702	0	0
Q703	152*	152*
Q754	0	0.6
Q756	5.4	6.1
Q801	11	11.5
Q802	10.9	11.5
Q803	11	11.5
Q811	0.5	2.0
Q812	0.5	2.0
Q813	0.5	2.0
Q901	-4.3	-4.0
Q902	0	0.2
Q903	0	0
Q950	12	12.9
Q951	14.5	13.7
Q952	0	0.7
Q953	0	0.7
Q954	6.3	6.9
Q955	3.3	3.3
Q1310	5.1	4.4
Q1320	0.8	1.4
Q1321	0.8	1.4
Q1399	2.5	3.1
Q2201	0.1	0.2 [1.6]
Q2203	0.2 [2.6]	0.9 [2.5]
Q2205	0	4.6
Q4051	1.2	1.8
Q4452	29.4	29.3
Q4453	0	0
Q4454	29.4	28.7
Q4455	0	0.7

() = standby

[] = teletext

* = 110V 2146

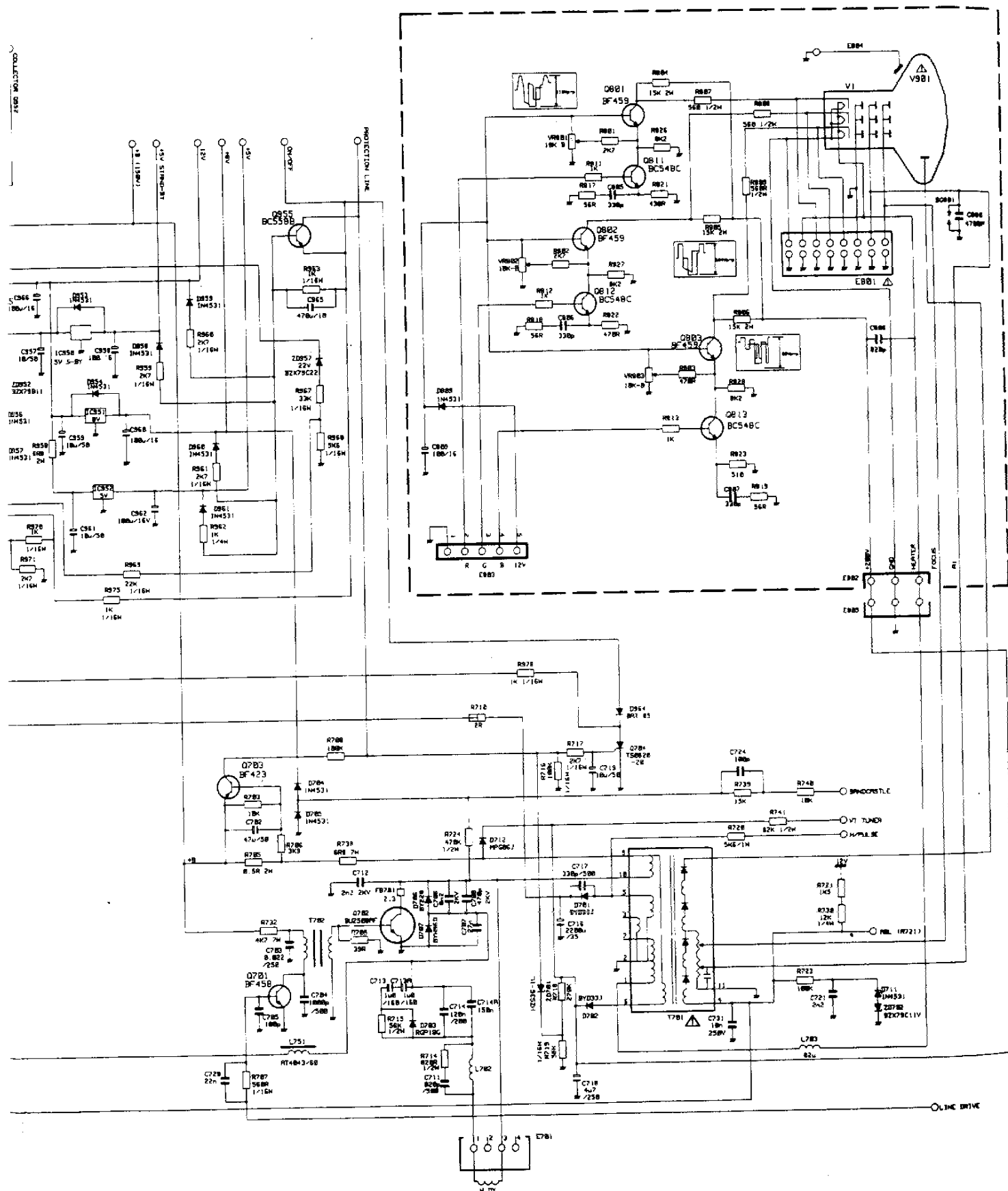
Measure Q901-903 from isolated Earth i.e. leg of FB902

Symbol/Pin	A	G
Q704	0.2	0
Q731	3.5	0.2
Q751	0	0.6
Q752	6.3	5.7
Q753	0.5	1.1

IC2203 ST24C01	
Symbol/Pin	Voltage
5	4.1
6	4.2
8	5

IC2202 PB3C654FBP	
Symbol/Pin	Voltage
7	3.5
8	3.0
16	4.1
17	4.2
18	2.2
19	2.0
31	5
40	5

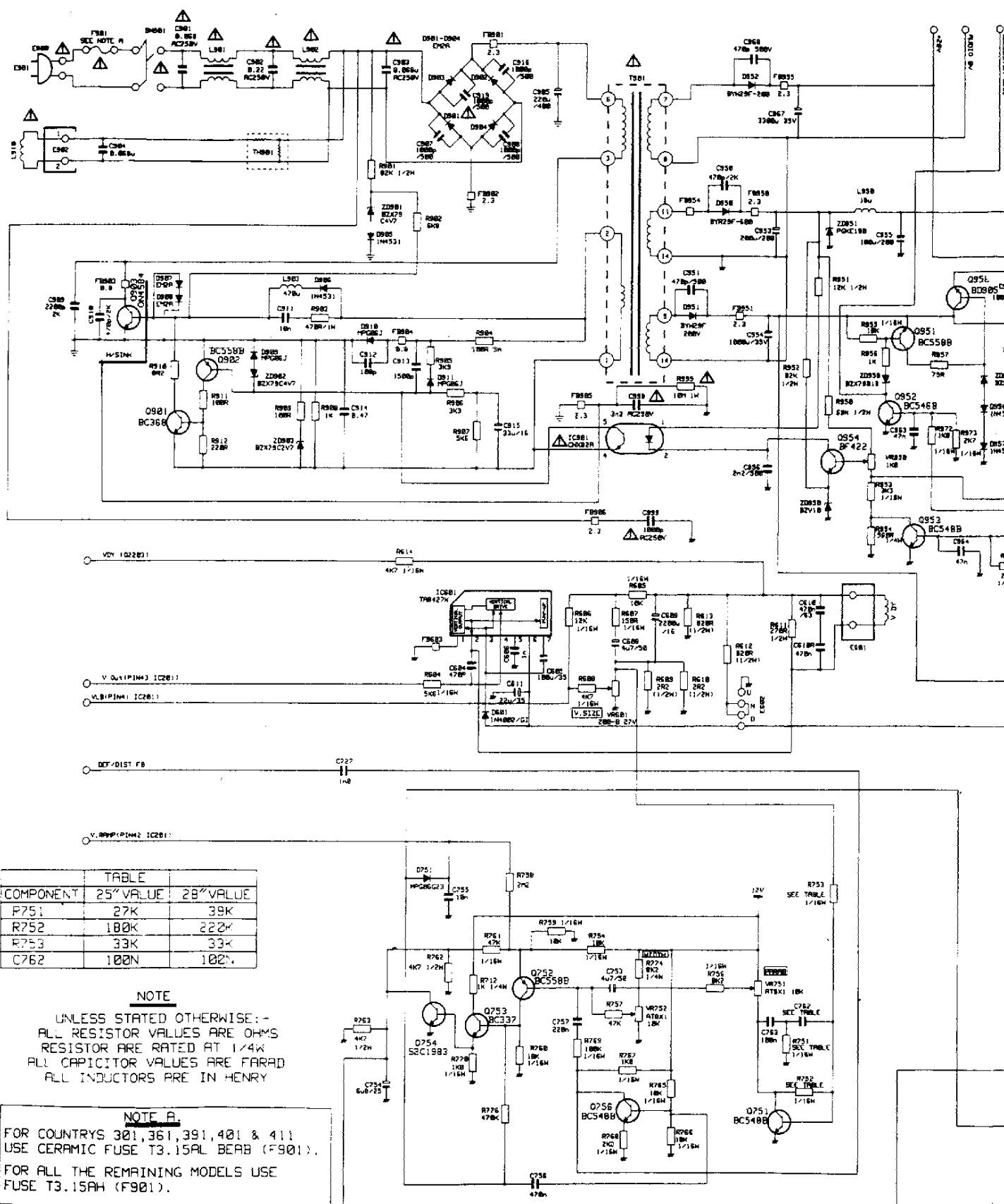
() = Standby.
Note: Pins 4 and 5 are measured using isolated earth of power supply i.e the leg of of FB902



power def 25/28"

POWER DEF 25/28"

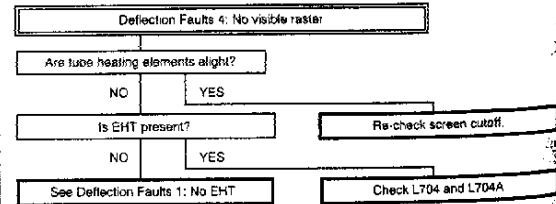
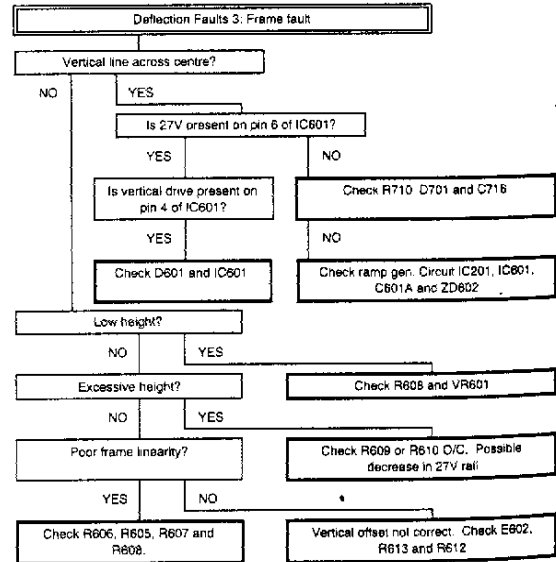
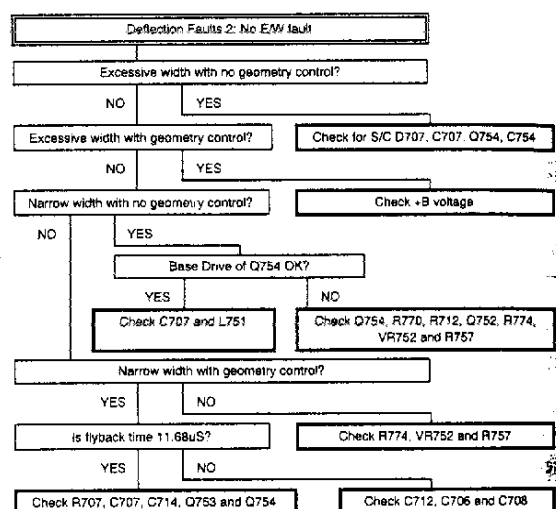
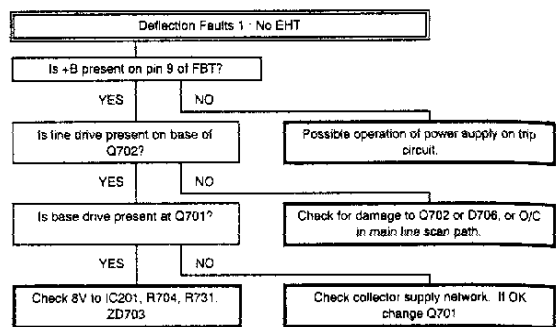
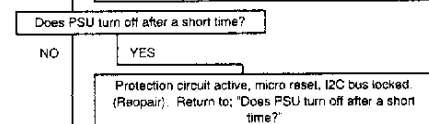
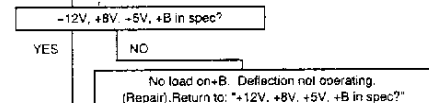
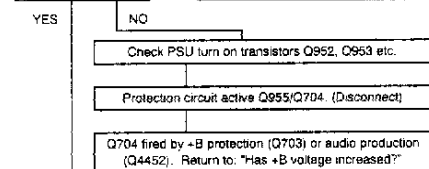
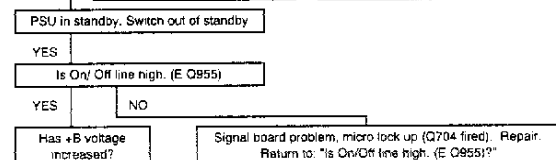
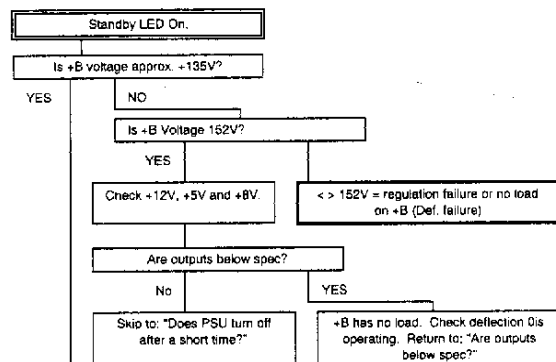
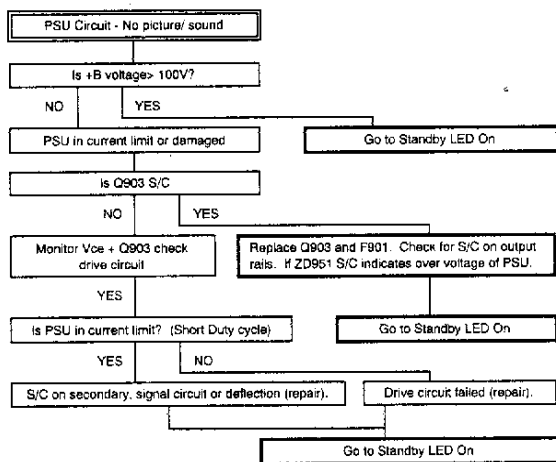
Power Deflection



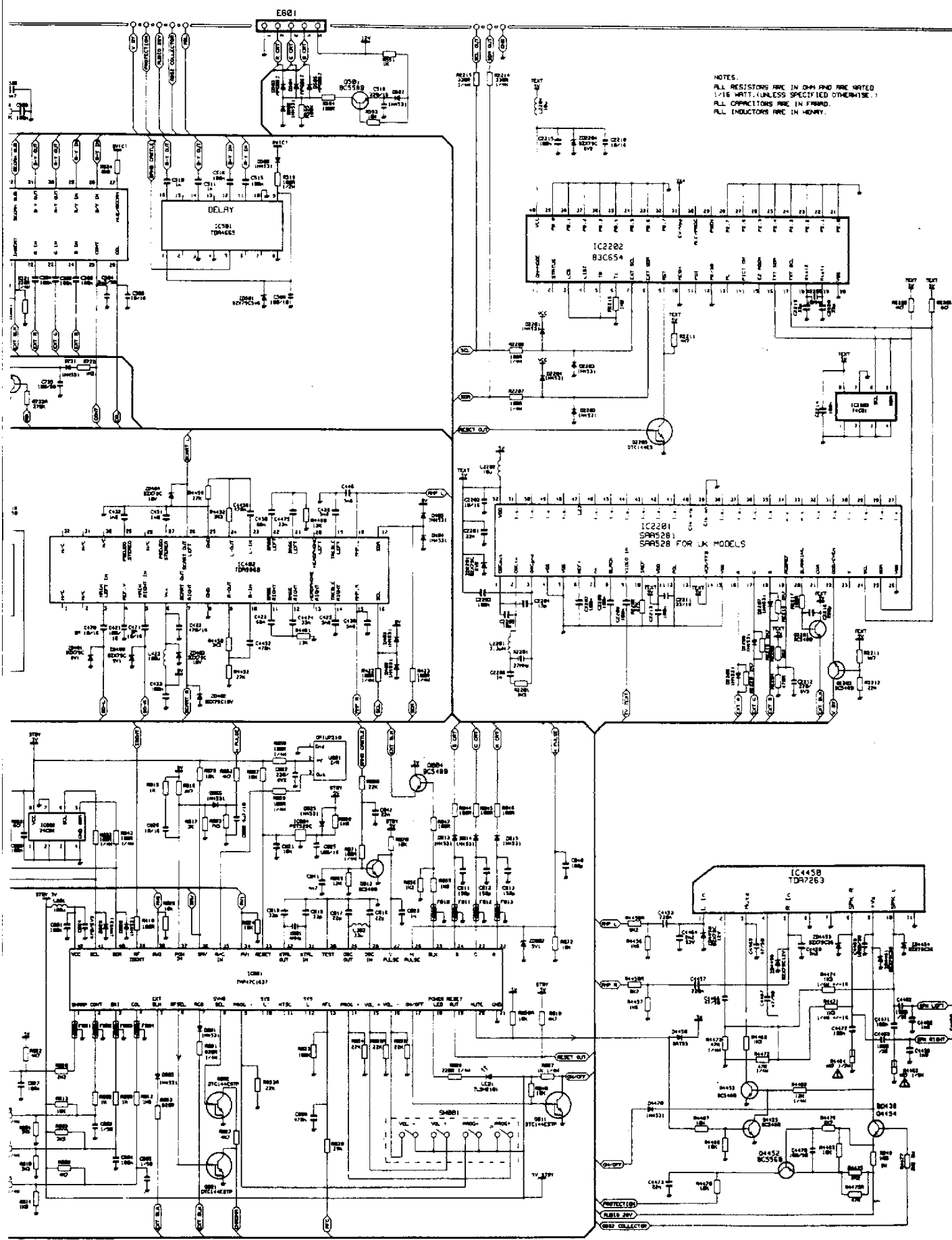
Troubleshooting Guides

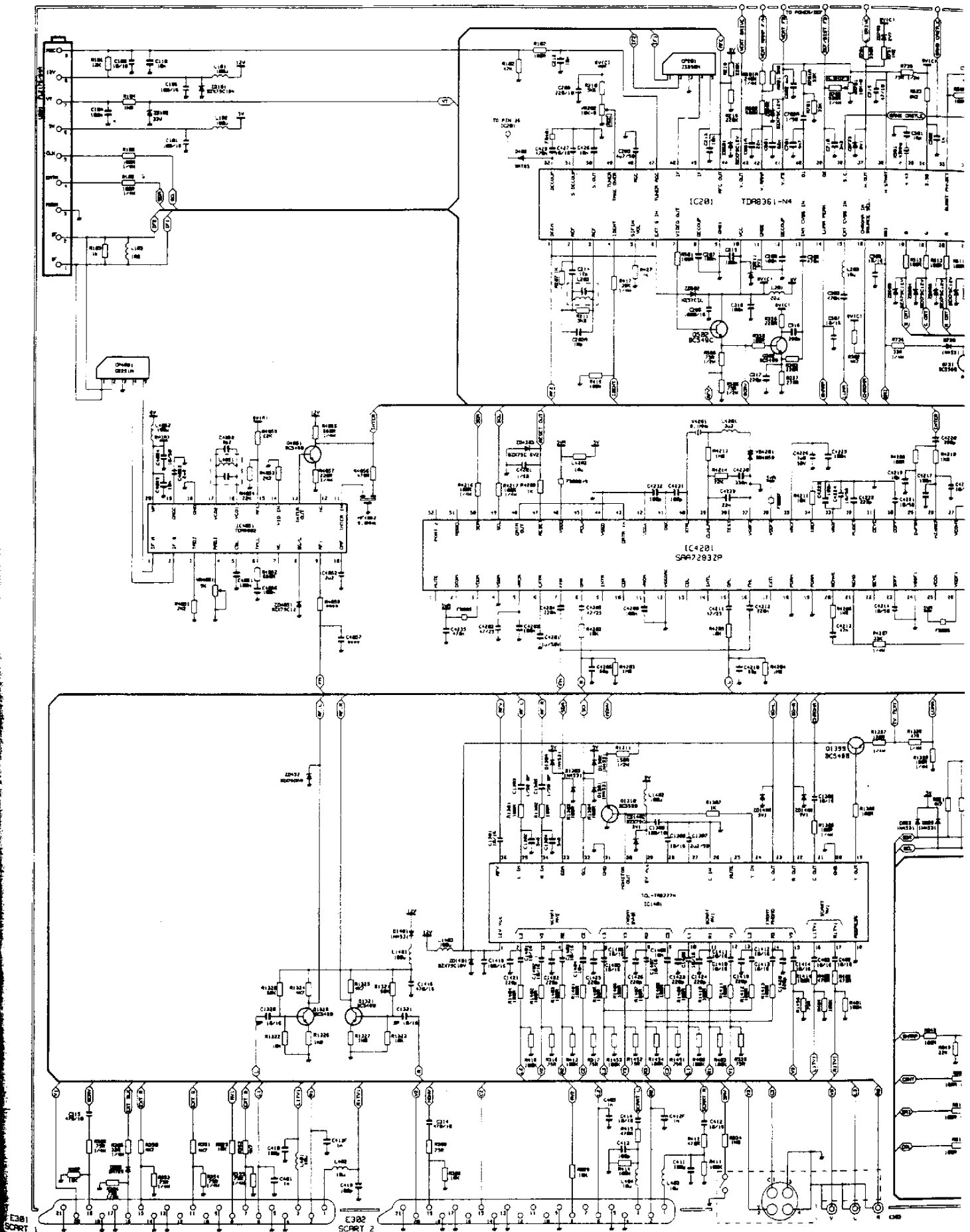
C
0 7.7 scart/3.7 S-VHS
0/7.7 scart
5
3.3 0.1
5.0
6.2
0
8.0
26.8
152 *
0
0.1
9.7
140
138
140
11.0
11.0
11.0
-2.5
-2.2
320
14.5
14.4
0.1
0.1
124.3
0
0
7.5
7.5
11.9
5.0
0.1 [7.1]
0
8.3
0.1
15.9
29.3
0

K
14.5
0
4.4
1.1
12

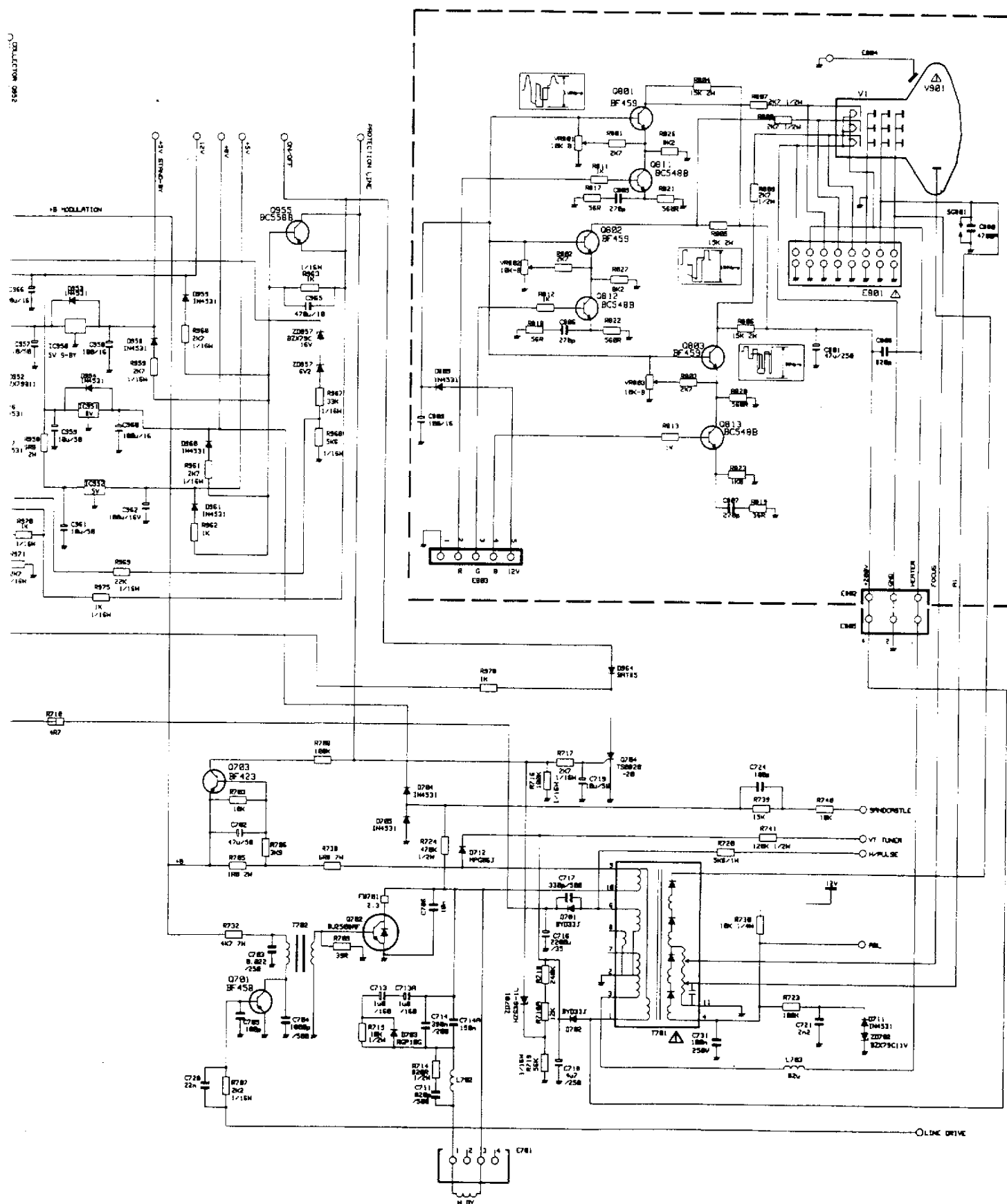


Diagram





COLLECTOR 005



White Balance

Preparation

- 1: Set the customer controls as follows:
Contrast = 0
Colour = 0
- 2: Receive the white raster pattern.
- 3: Obtain and set up a combined colour analyser and light meter, e.g. MINOLTA CA100.

Method

- 1: Adjust brightness customer control so that the light output from the white raster reads $Y = 1 \pm 2 \text{ cdm}^{-2}$ on the light meter.
- 2: Next adjust the red and blue background controls to obtain the colour chromaticity co-ordinates of $X = 283$, $Y = 299$.
The above co-ordinates represent a colour temperature of 9300k.

Protection Checks

High Voltage Limit Check

- 1: Switch TV on, and set contrast and brightness levels to maximum.
- 2: Connect a 470k resistor in parallel with R718/R718A and ensure that picture and sound disappear instantly.
- 3: Switch off TV, remove resistor and wait 10 - 15 seconds.
- 4: Switch TV on again, check that normal operation is resumed, then return contrast and brightness levels to their original levels.

Anode/Focus S/C Check

- 1: Switch TV on and set contrast and brightness levels to maximum.
- 2: Connect a 270R (20 - 30 Watt) resistor from pin (9) of the flyback transformer to ground.
Note: use a 390R resistor for 2546/2846 models.
- 3: Check that the picture and sound disappear instantly.
- 4: Switch TV off, remove resistor and wait 10 - 15 seconds.
- 5: Switch TV on again, and check that normal operation is resumed, then return contrast and brightness levels to their original levels.

Voltage Charts

IC001 TMP47C1637N	
Symbol/Pin	Voltage
1	0-5 (Sharpness)
2	0-5 (Contrast)
3	0-5 (Brightness)
4	0-5 (Colour)
6	5 (0 Scart/S-VHS socket inputs)
13	3.1
14	0 (5.0 PROG+)
15	0 (5.0 VOL+)
16	0 (5.0 VOL-)
17	0 (4.2 Standby)
18	3.9 (0 Standby)
19	4.6
20	2.9
26	4.0
27	4.9
28	4.5
29	4.5
31	2.1
32	2.3
33	5.1
34	0 (5.8 Scart 1 input)
35	4.8
36	5.0 (0.4 S-VHS socket input)
37	4.7
38	0 (5.8 Scart 2 input)
39	4.8 (0.3 no sigs)
40	3.2
41	3.7
42	5.0

IC002 ST24C04	
Symbol/Pin	Voltage
5	3.2
6	3.5
8	5.0

IC004 TDA9860	
Symbol/Pin	Voltage
1	5.1
2	0
3	5.1

IC201 TDA8361	
Symbol/Pin	Voltage
1	3.0
2	5.8
3	5.8
4	6.6
	(0.1 no signals)
5	0
7	2.9
8	1.7
9	0
10	7.8
11	0
12	3.2
13	4.0
14	1.5-4.7
	(Sharpness)
15	3.7
16	0 (7.7 scart/3.7 S-VHS)
17	0.9-2.5
	(Brightness)
18	1.9
19	1.9
20	1.9
21	0.1
22	3.5
23	3.5
24	3.5
25	0.4-3.2 (Contrast)
26	0.6-6.1 (Colour)
27	5.9
28	3.9
29	3.9
30	1.5
31	1.5
32	1.7
33	4.4
34	2.8
35	2.0
36	0.1
37	1.3
38	1.1
39	3.4
40	3.7
41	2.5
42	2.6
43	0.9
44	5.4
45	4.0
46	4.0
47	9.1
48	3.9
49	0.6
50	3.5
51	5.1
52	6.6

Recommended Safety Parts

Description

ON/OFF Switch
8n Plastic Film 20% 250ACV
20n Plastic Film 20% 250ACV
n3 Ceramic 250AC
n0 Ceramic 250AC
line Filter
line Filter
R7 Fusible Film 5% 1/2W
R7 Fusible Film 5% 1/2W

Item

Part No.

Description

R710	R200551	2R0 Fusible Film 5% 1/2W
R999	R170727	10M Metal Film 5% 1W
T701	2435066	Flyback Transformer
T701	2436795	Flyback Transformer
T901	L380100	Switch Mode Transformer
T901	L380099	Switch Mode Transformer