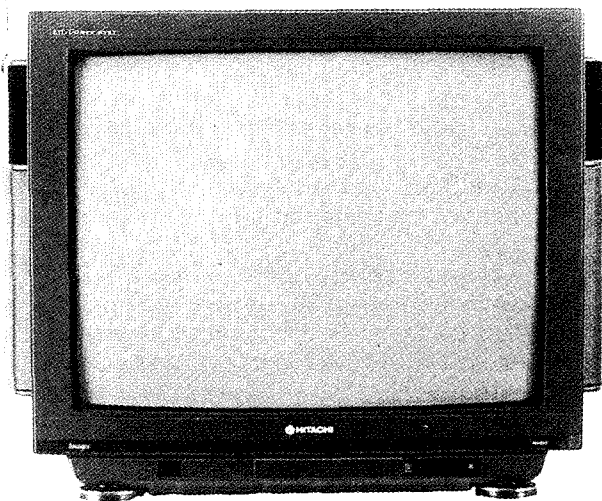


SERVICE MANUAL

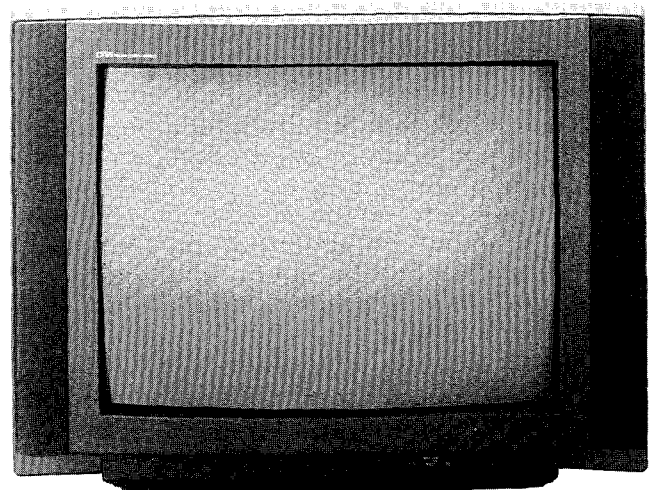
CAUTION:

Before servicing this chassis, it is important that the service technician read the "Safety Precautions" and "Product Safety Notices" in this service manual.

CL2560TAN
CL2860TAN



CL2564TAN
CL2864TAN



TECHNICAL SPECIFICATIONS

TV Standard 625 lines (PAL)
525 lines (NTSC)
Channel coverage BAND 1 VHF, channels 2-4
BAND 3 VHF, channels 5-12
UHF, channels 21-68
S-BAND, S01-S40
Aerial Input impedance 75 ohm unbalanced
Intermediate Frequencies
I.F. Luminance 38.9 MHz
I.F. Sound 33.4 MHz
I.F. Chrominance 34.47 MHz
FM Sound 5.5 MHz-5.74 MHz
Colour sub carrier 4.43 MHz
Focusing Electro static
Mains Voltage 220-240 V 50 Hz
Fusibles T3.15A, 630 mA
Picture Tubes 59 cm and 66 cm Type

Programme Selectors Channel UP/DOWN buttons
with 59 programme remote control
Speakers CL25/2860 10 cm and 5 cm
CL25/2864 13 cm and 7 x 13 cm

Power Consumption Approximately 95 W

Dimensions:	CL2560	CL2860	CL2564	CL2864
Width	662 mm	772 mm	701 mm	772 mm
Height	511 mm	549 mm	520 mm	576 mm
Depth	439 mm	467 mm	464 mm	500 mm
Weight	30 kg	35 kg	32 kg	37 kg

● Use this Service Manual in conjunction with "Technical Book" part No. X830788.

SAFETY PRECAUTIONS

WARNING: The following precautions should be observed.

1. Do not install, remove, or handle the picture tube in any manner unless shatter proof goggles are worn. People not so equipped should be kept away while picture tubes are handled. Keep the picture tube away from the body while handling.
2. When service is required, an isolation transformer should be inserted between power line and the receiver before any service is performed on the chassis.
3. When replacing the chassis in the cabinet, ensure all the protective devices are put back in place, such as barriers, non-metallic knobs, adjustment or compartment covers or shields, isolation resistors/capacitors, etc.
4. When service is required, observe the original lead dressing. Extra precaution should be taken to assure correct lead dressing in the high voltage circuitry area. Particularly note the R.G.B. lead dressing. Ensure they are dressed well away from the horizontal scan and F.B.T. circuitry.
5. Always use the manufacturer's replacement component. Always replace original spacers and maintain lead lengths. Especially critical components are indicated thus \triangle on the parts list and should not be replaced by other makes. Furthermore, where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the instrument by the manufacturer has become defective, or inadvertently damaged during servicing.
Therefore, the following checks are recommended for the continued protection of the customers and service technicians.

INSULATION

Insulation resistance should not be less than $10M\Omega$ at 500V DC between the mains poles and any accessible metal parts.

Also, no flashover or breakdown should occur during the dielectric strength test, applying 3kV AC or 4.25kV DC for two seconds between the main poles and accessible metal parts.

HIGH VOLTAGE

High voltage should always be kept at the rated value of the chassis and no higher. Operating at higher voltages may cause a failure of the picture tube or high voltage supply, and also, under certain circumstances could produce X-radiation moderately in excess of design levels. The high voltage must not, under any circumstances, exceed 27kV on the chassis.

X-RADIATION

TUBES: The primary source of X-radiation in this receiver is the picture tube. The tube utilised for the above mentioned function in this chassis is specially constructed to limit X-radiation.

For continued X-radiation protection, replace tube with the same type as the original HITACHI approved type.

PRODUCT SAFETY NOTICE

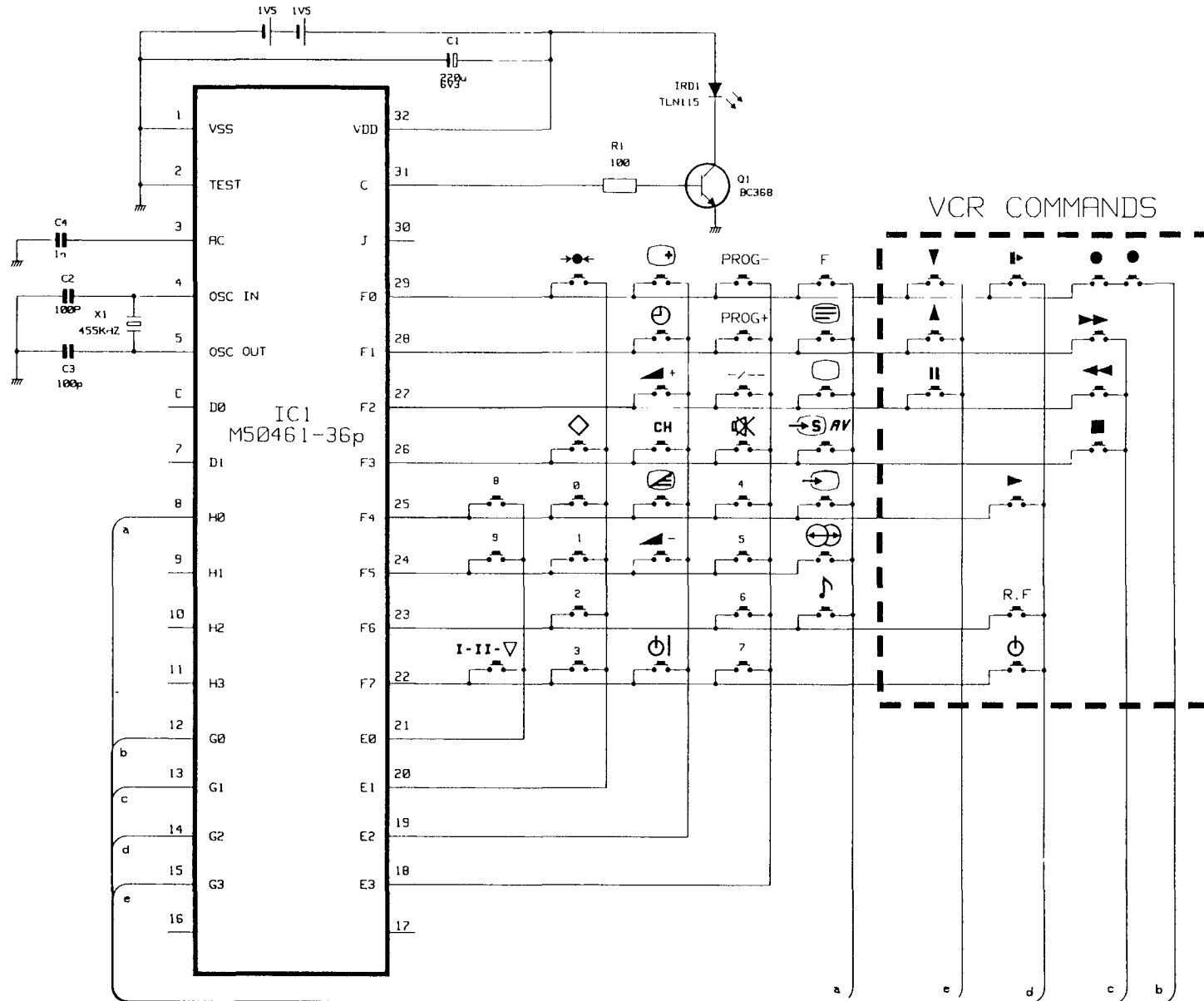
Many electrical and mechanical parts in HITACHI television receivers have special safety related characteristics. These characteristics are often not evident from visual inspection, nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified by marking with a \triangle on the schematics and replacement parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in this Service Manual, may create electrical shock, fire, X-radiation, or other hazards.

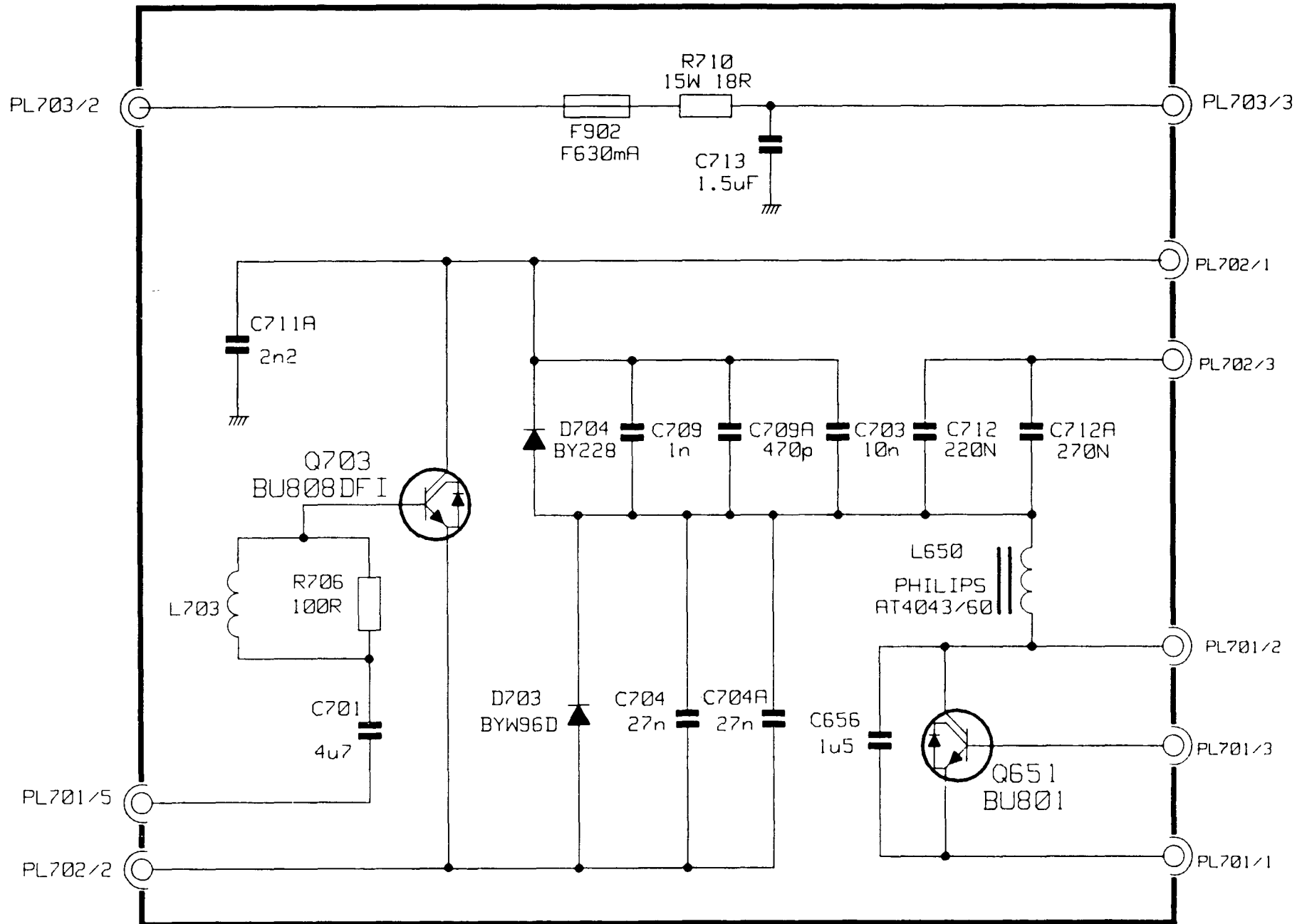
Product Safety is continuously under review, and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of HITACHI Service Manuals, may be obtained at a nominal charge from your HITACHI SALES CORPORATION.

TUBE DISCHARGE

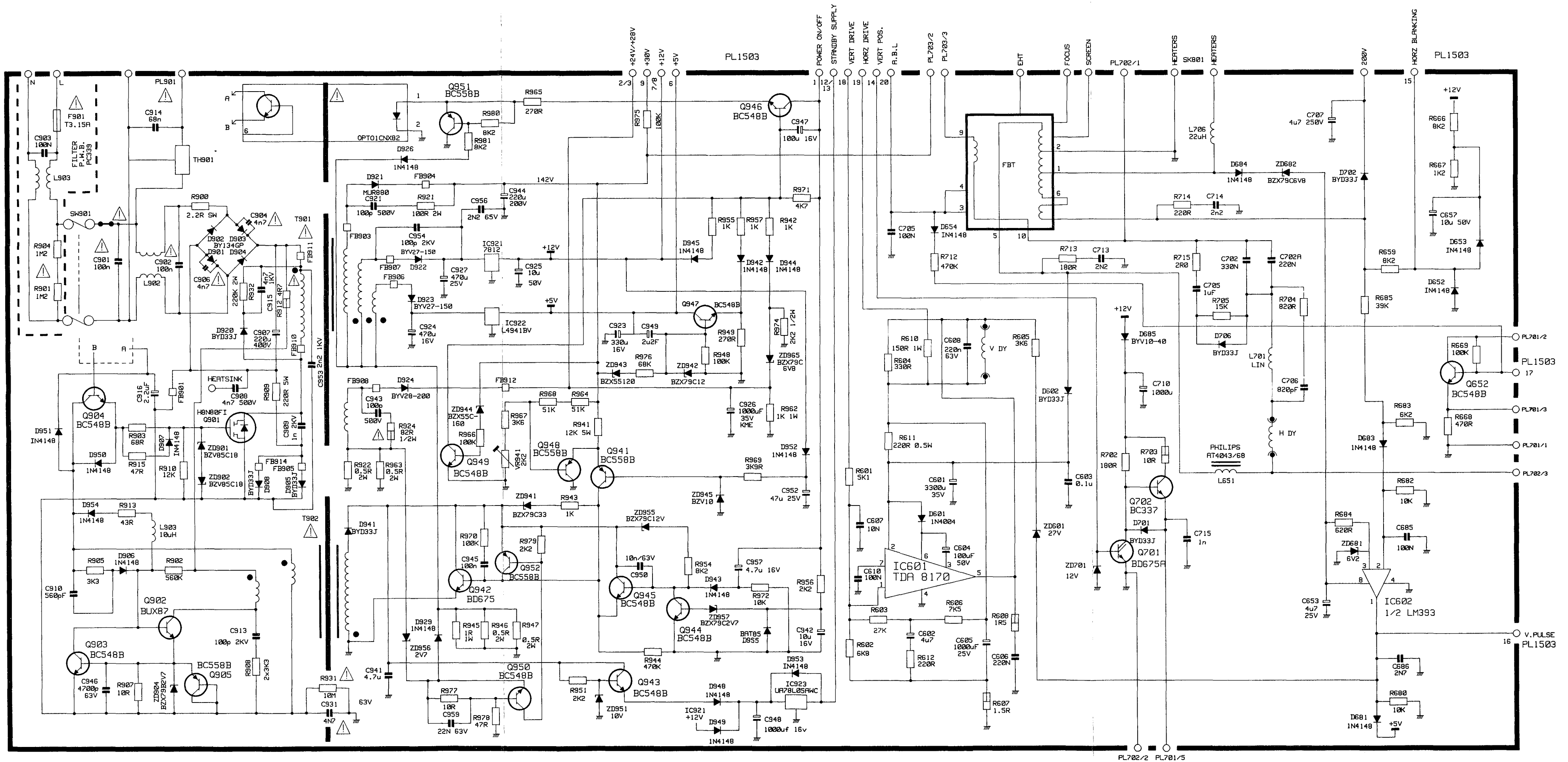
The line output stage can develop voltages in excess of 25kV; if the E.H.T. cap is required to be removed, discharge the anode cap to chassis via a high value resistor, prior to its removal from the tube.



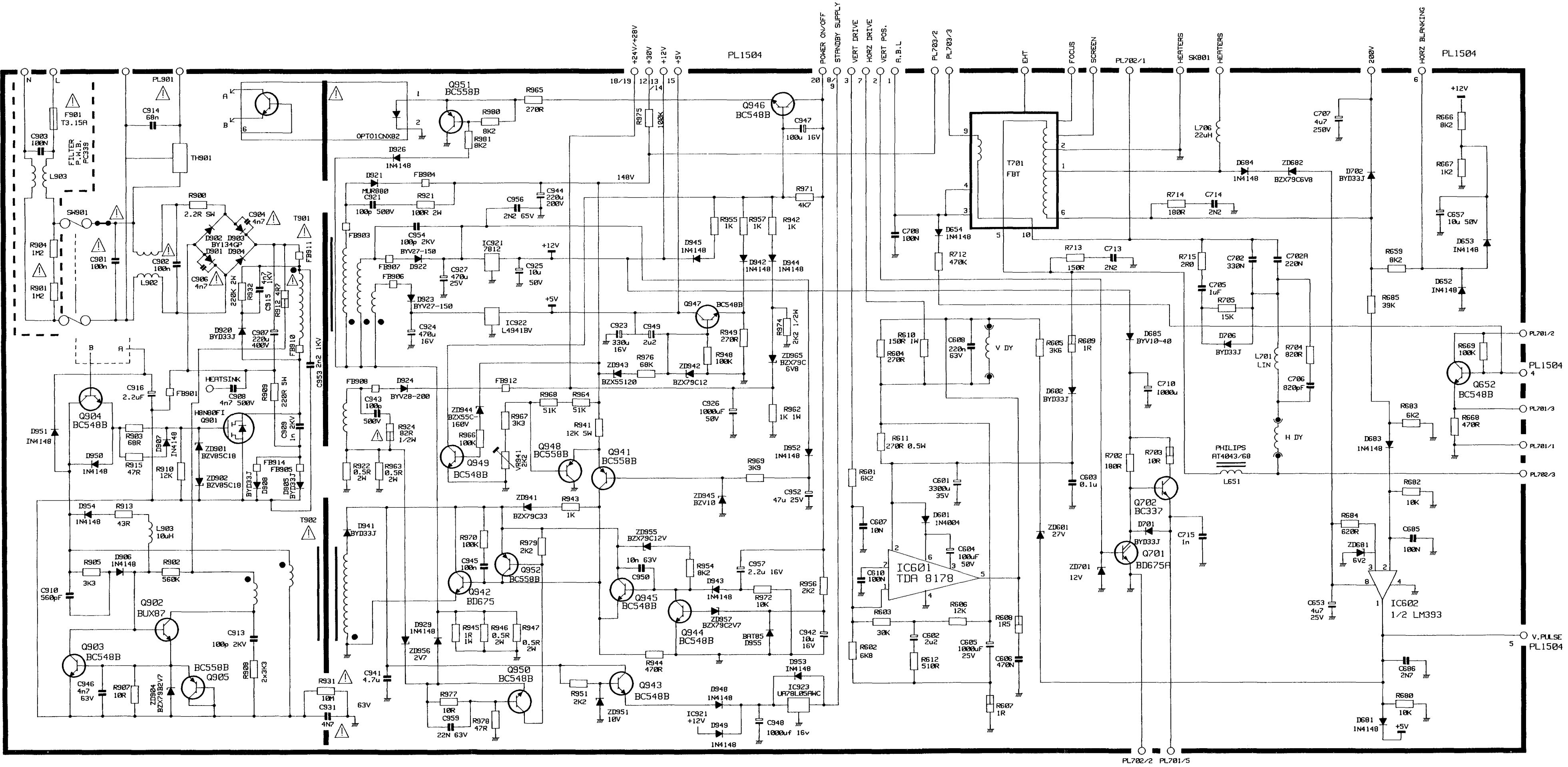
REMOTE CONTROL HANDSET CIRCUIT



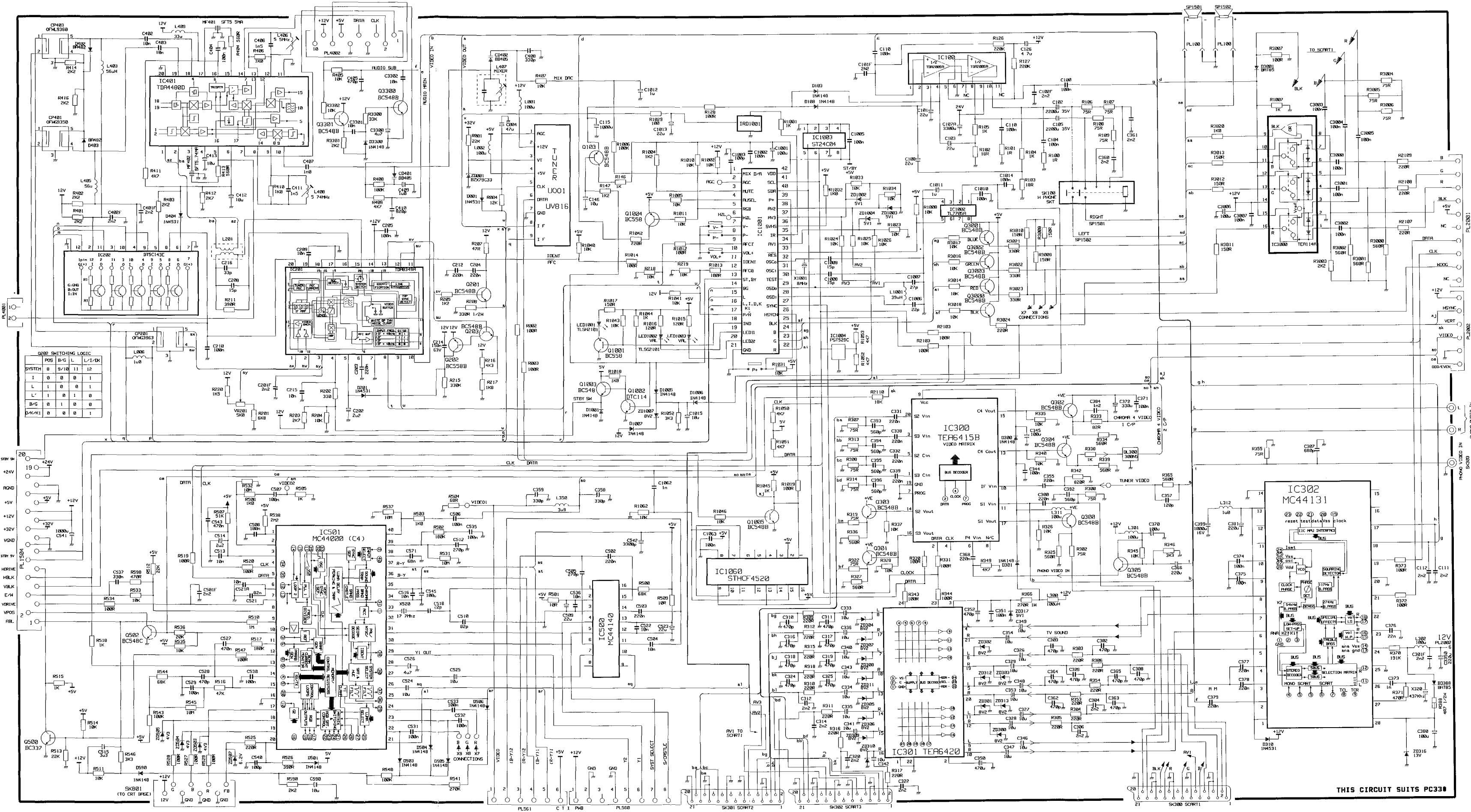
EAST/WEST CORRECTION CIRCUIT



POWER SUPPLY AND DEFLECTION CIRCUIT
(CL25/2860TAN)



POWER SUPPLY AND DEFLECTION CIRCUIT
(CL25/2864TAN)

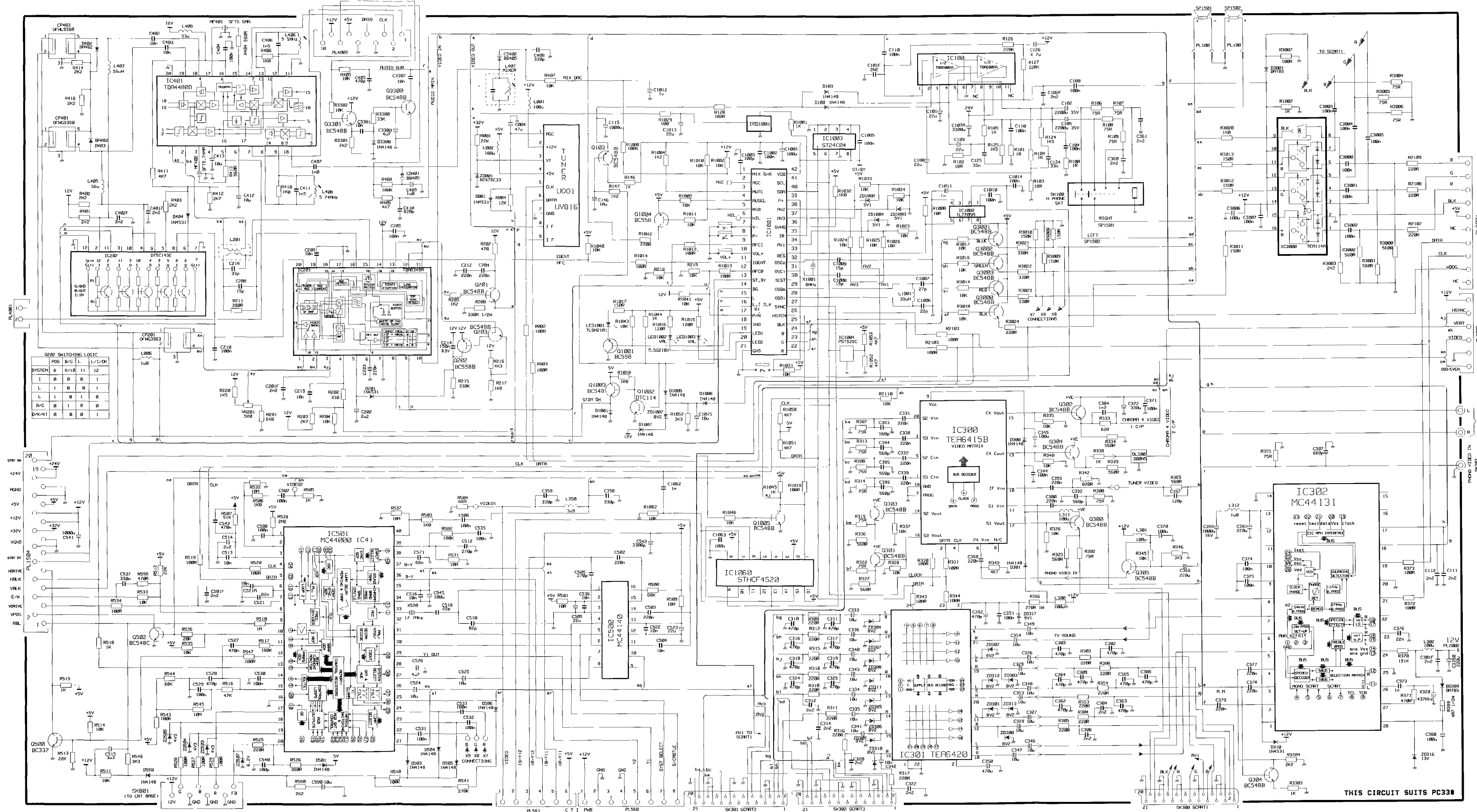


0202 SWITCHING LOGIC

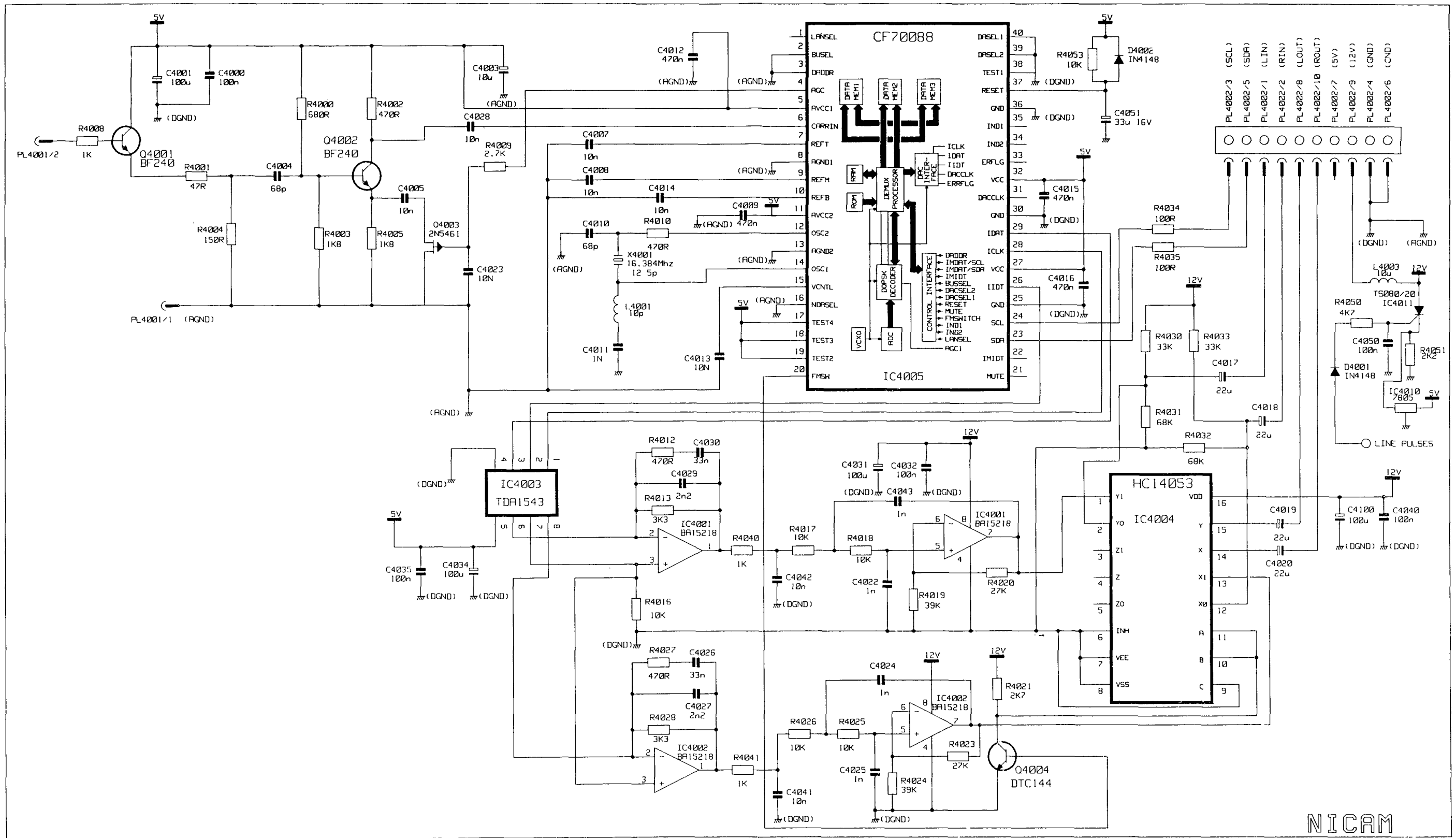
SYSTEM	0	9/10	11	12
I	0	0	0	1
L	1	0	0	1
L'	1	0	1	0
B/G	0	1	0	0
B/G'	0	0	0	1

SIGNAL AND CONTROL CIRCUIT
(CL25/2860TAN)

THIS CIRCUIT SUITS PC338

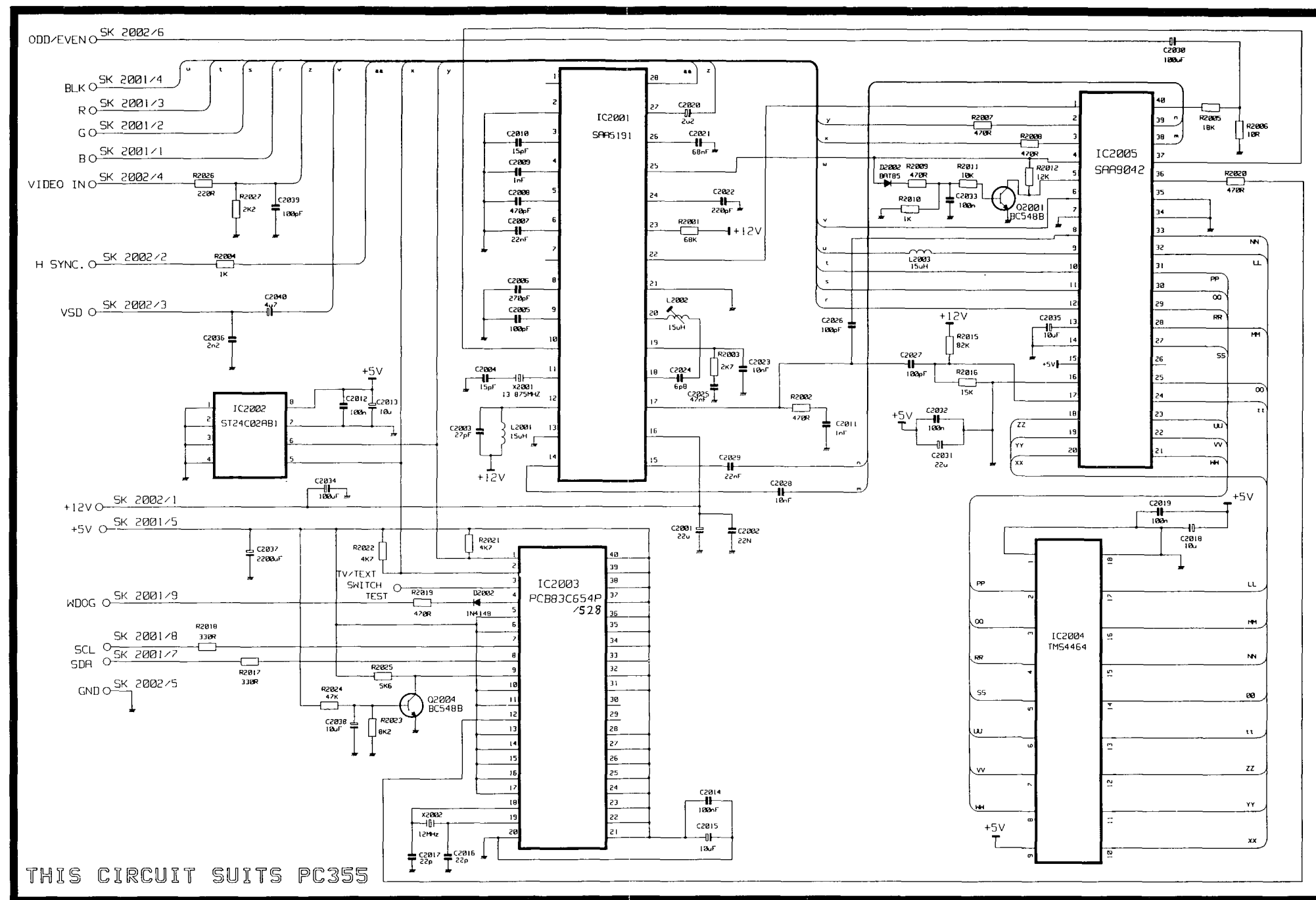


SIGNAL AND CONTROL CIRCUIT
(CL25/2864TAN)



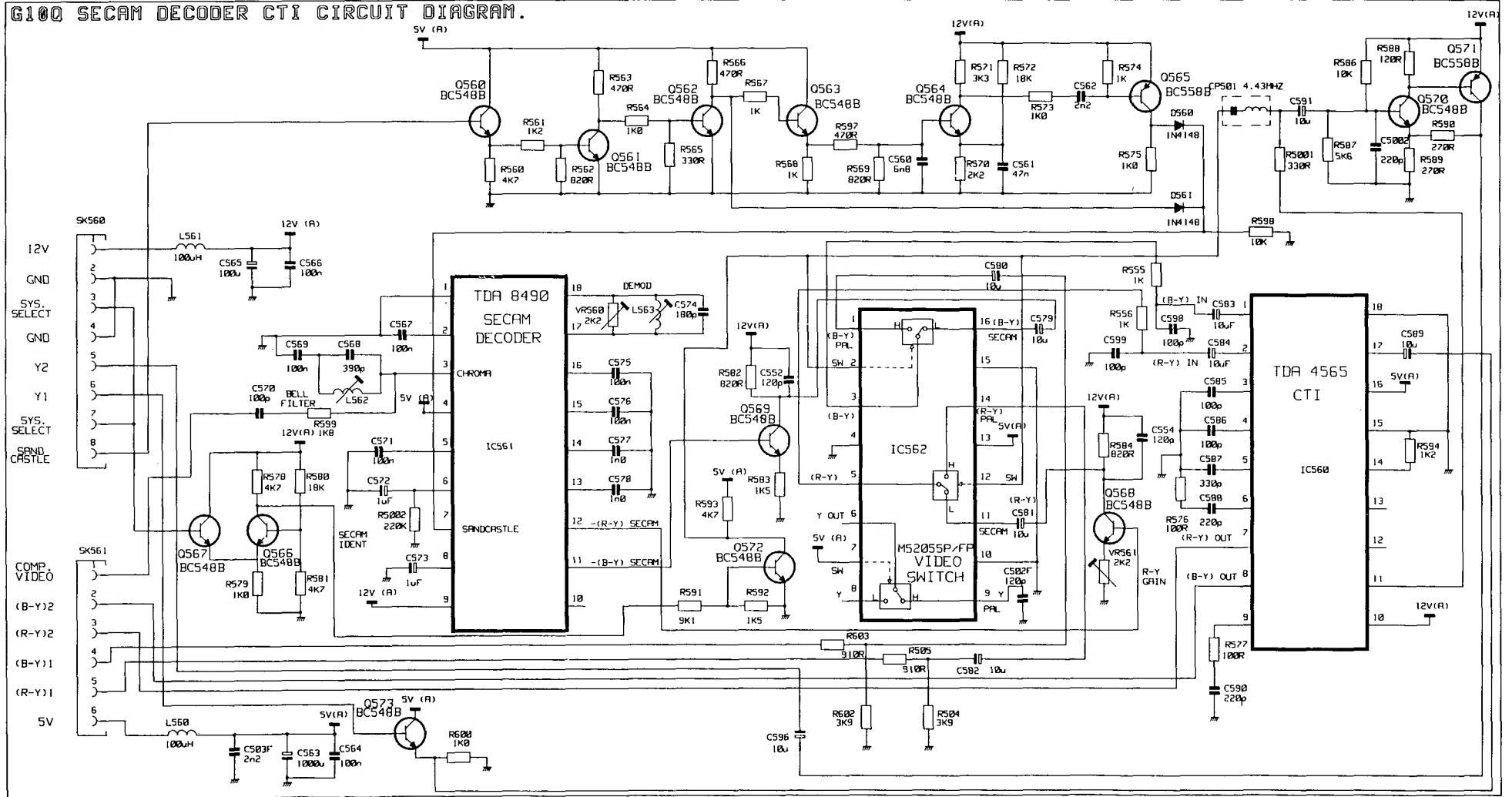
NICAM CIRCUIT

NICAM

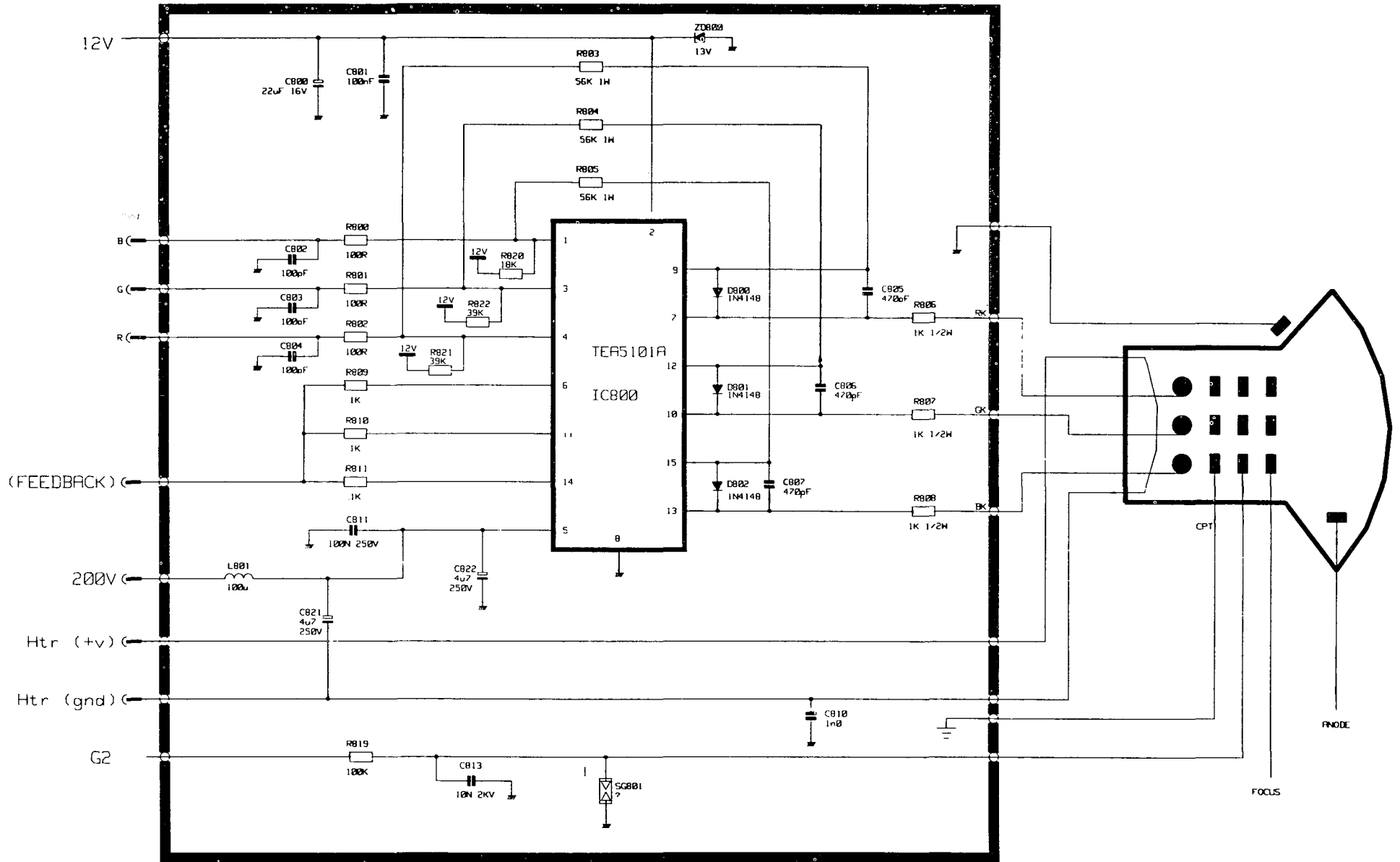


TELETEXT CIRCUIT

G100 SECAM DECODER CTI CIRCUIT DIAGRAM.



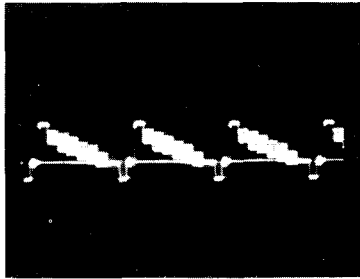
SECAM/CTI CIRCUIT



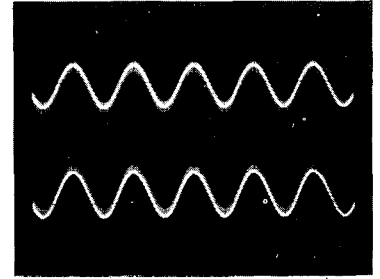
CRT BASE CIRCUIT

SOME WAVEFORMS FOR THE G10Q CHASSIS. TAKEN ON COLOUR BAR SIGNAL USING A 10:1 PROBE, WITH OSCILLOSCOPE SET TO 20μ SECS/CM UNLESS OTHERWISE STATED.

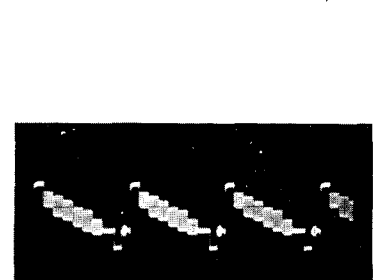
IC201
pin 13
2v0 p p



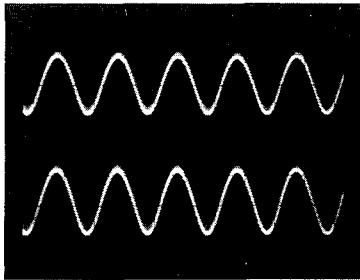
IC100
pin 1
0v7 p p at
0 5m secs/cm



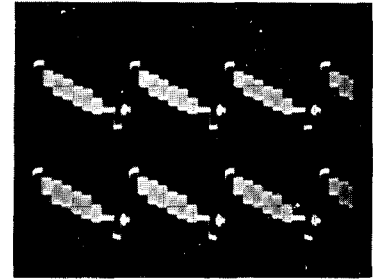
IC100
pin 5
0v7 p.p at
0 5m secs/cm



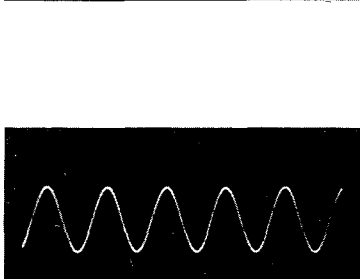
IC100
pin 8
24v p p at
0.5m secs/cm



IC300
pin 10
1 2v p.p.

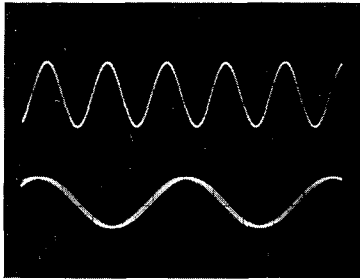


IC100
pin 10
24v p p at
0.5m secs/cm

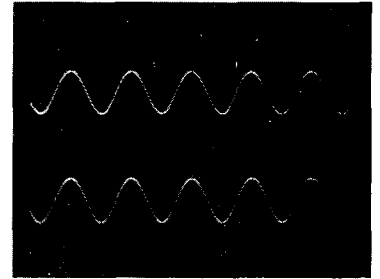


IC300
pin 15
2v4 p p.

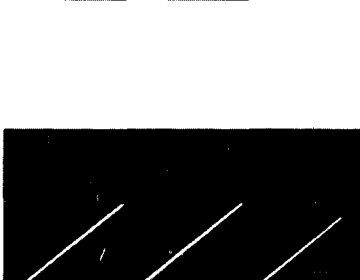
IC302
pin 2
2v2 p p at
0.5m secs/cm
(Two-Tone NICAM.)



IC302
pin 17
0v75 p.p. at
0 5m secs/cm.

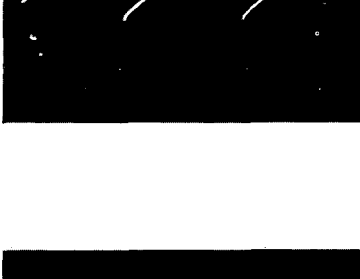


IC302
pin 3
2v2 p p. at
0.5m secs/cm
(Two-Tone NICAM)

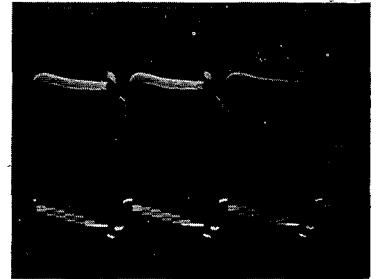


IC302
pin 18
0v75 p p. at
0 5m secs/cm

IC501
pin 7
1 6v p p. at
5m secs/cm

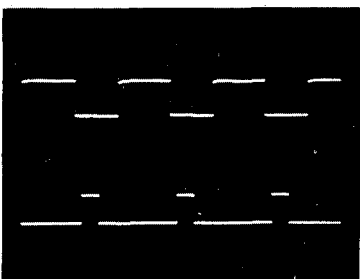


IC501
pin 8
1v5 p p

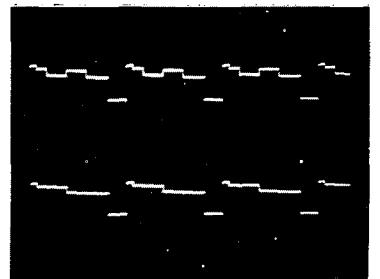


IC501
pin 40
1v3 p.p

IC501
pin 12
0v6 p.p



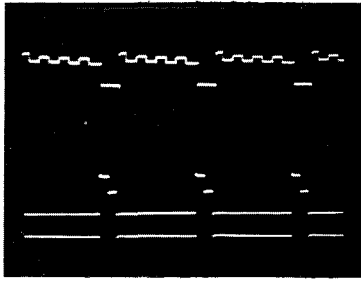
IC501
pin 17
2v4 p p



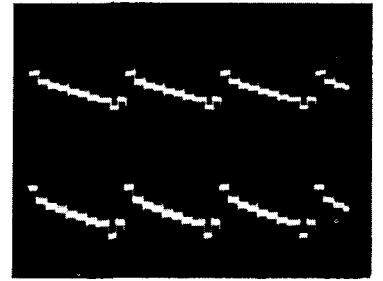
IC501
pin 13
5v0 p p

IC501
pin 18
2v4 p.p

IC501
pin 19
2v4 p.p



IC501
pin 25
1v2 p.p.



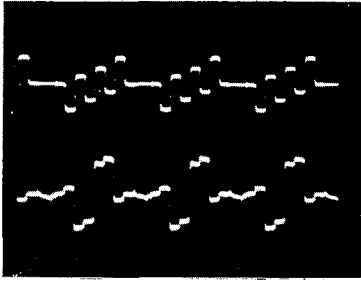
IC501
pin 31
4v2 p.p.



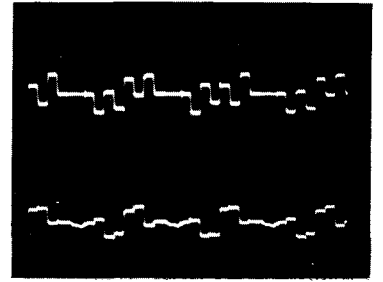
IC501
pin 29
0v9 p.p



IC501
pin 26
1v0 p.p.



IC501
pin 36
1v4 p.p.



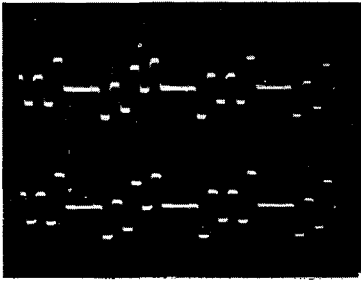
IC501
pin 27
1v2 p.p



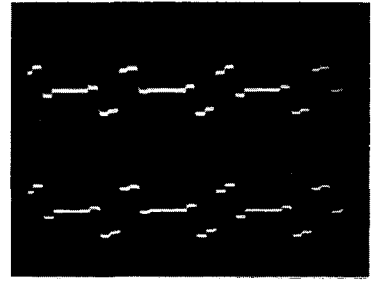
IC501
pin 37
1v2 p.p.



IC560
pin 1
1v0 p.p.



IC560
pin 2
0v9 p.p.



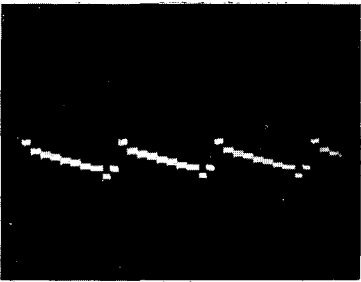
IC560
pin 8
1v1 p.p



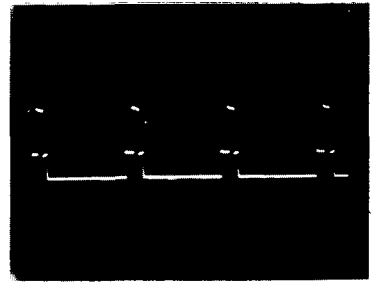
IC560
pin 7
0v9 p.p



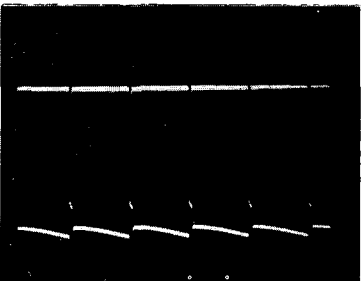
IC560
pin 11
0v7 p.p



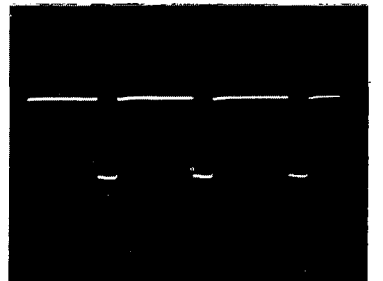
IC561
pin 7
12v p.p



IC601
pin 1
5v4 p.p. at
10m secs/cm.

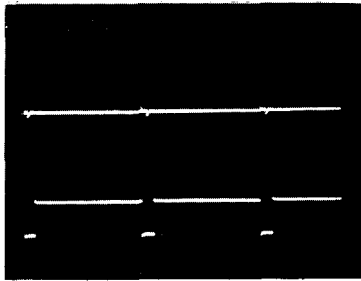


IC1060
pin 1
5v4 p.p.



IC601
pin 5
65v p.p. at
10m secs/cm

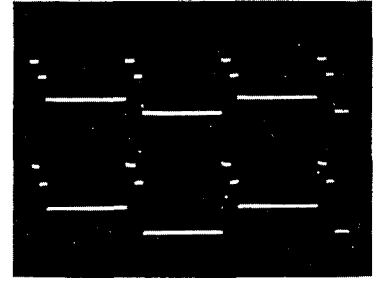
IC1060
pin 7
6v0 p p at
5m secs/cm.



IC1060
pin 9
6v0 p p at
5m secs/cm



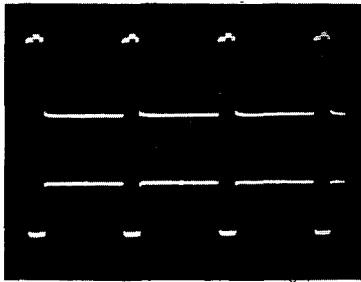
Q560
Emitter
3v9 p p



Q560
Base
4v8 p p.



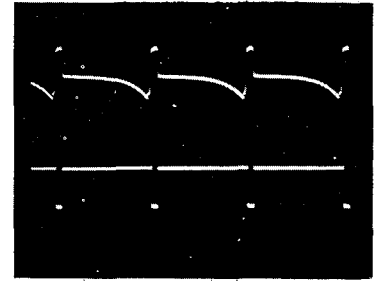
Q562
Collector
5v6 p p.



Q562
Base
0v9 p.p.



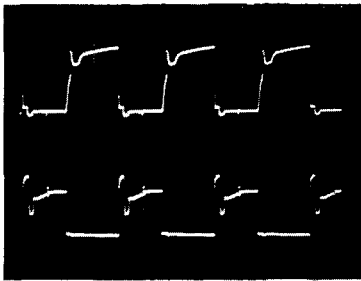
Q565
Collector
14v p.p



Q565
Base
1v8 p.p



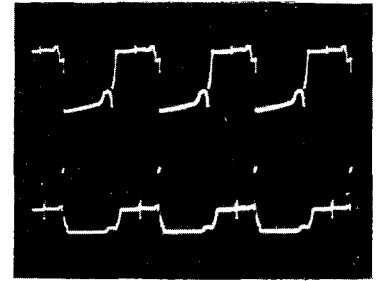
Q701
Collector
12v p p



Q701
Base
2v0 p p



Q703
Base
22v p p



Q702
Emitter
11v p.p



VOLTAGE TABLES

The following voltages were taken on a colour bar signal (System I), using a 20k Ω /volt meter, with the contrast, colour, and brightness set to give normal viewing levels.

IC100 TDA2009A			
Pin	Volts	Pin	Volts
1	1v4	7	not used
2	0v8	8	13v
3	14v5	9	27v
4	0v8	10	12v5
5	1v4	11	not used
6	0v		

IC201 TDA8349A			
Pin	Volts	Pin	Volts
1	2v6	11	3v6
2	2v6	12	3v6
3	8v7	13	3v6
4	6v6	14	11v5
5	5v0 (3v2)	15	6v0
6	7v5 (6v2)	16	6v0
7	0v	17	0v
8	4v8	18	5v0 (0v2)
9	4v8 (0v)	19	0v1 (9v5)
10	3v8 (7v0)	20	0v1 *4v5

() = No signal conditions
 * = System L

IC202 DT5C143E				
Pin	System I	System L	System DK	System BG
1	0v	0v	0v	0v
2	0v	0v	0v	4v3
3	0v9	0v8	0v8	0v8
4	4v3	4v3	4v3	0v
5	4v0	0v6	4v0	0v
6	4v4	0v	4v4	2v8
7	0v	0v	0v	0v
8	0v1	4v5	0v1	0v1
9	0v	0v	0v	4v9
10	0v	0v	0v	4v9
11	0v	0v	0v	0v
12	5v0	5v0	5v0	0v

IC300 TEA6415B			
Pin	Volts	Pin	Volts
1	3v7	11	3v7
2	4v8	12	not used
3	3v7	13	2v8
4	4v7	14	3v6
5	3v7	15	3v6
6	3v7	16	3v6
7	0v	17	3v6
8	not used	18	not used
9	10v1	19	0v
10	4v0	20	3v7

IC301 TEA6420					
Pin	Volts	Pin	Volts	Pin	Volts
1	0v	9	4v6	18	4v6
2	4v6	10	4v6	19	4v6
3	9v3	11	4v6	20	4v6
4	4v6	12	4v6	21	4v6
5	4v6	13	4v6	22	0v
6	4v6	14	4v6	23	4v7
7	4v6	15	4v6	24	4v8
8	4v6	16	4v6		

IC302 MC44131					
Pin	Volts	Pin	Volts	Pin	Volts
1	5v7	11	not used	21	4v7
2	5v7	12	not used	22	not used
3	5v7	13	5v7	23	11v1
4	5v5	14	0v	24	1v3
5	5v5	15	not used	25	0v
6	5v5	16	not used	26	6v6
7	5v0	17	5v0	27	4v7
8	5v0	18	5v0	28	11v1
9	5v5	19	4v7		
10	5v5	20	0v		

IC401 TDA4480			
Pin	Volts	Pin	Volts
1	4v6	11	0v
2	4v6	12	4v8
3	2v4	13	4v8
4	2v9	14	0v1
5	3v3	15	3v1
6	*4v0	16	11v4
7	3v6	17	2v4
8	not used	18	4v5
9	not used	19	4v5
10	not used	20	0v

IC500 MC44140			
Pin	Volts	Pin	Volts
1	2v3	9	not used
2	4v7	10	1v5
3	0v	11	1v5
4	1v2	12	0v
5	0v1	13	4v9
6	1v3	14	1v4
7	1v5	15	1v4
8	not used	16	1v2

* Pin 6 = 0v7 in system L and 2v2 in system B/G.

IC501 MC44000							
Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts
1	1v7	11	0v (0v1)	21	0v3 (1v6)	34	0v
2	0v8		(CH. 56-59)		(RGB mode)	35	4v9
3	1v3	12	0v4	22	3v0	36	2v1-2v2
4	4v7	13	0v3	23	3v0	37	1v9-2v4
5	4v7	14	1v2	24	3v0		(Colour)
6	0v9	15	1v9	25	3v2	38	0v9
7	2v0-2v3	16	0v	26	3v2	39	2v1
	(Height)	17	2v5-2v7	27	3v2	40	3v0
8	0v4-2v8	18	2v4-2v7	28	3v2		
	(Width)	19	2v4-2v6	29	1v9		
9	-1v4 - +1v9		(Bright)	30	0v4		
	(Brit/Cont)	20	1v4-3v9	31	1v2		
10	1v4-3v5		(Brit/Cont)	32	1v9		
	(Vert. pos.)			33	1v9		

IC560 TDA4565			
Pin	Volts	Pin	Volts
1	4v2	10	11v7
2	4v2	11	2v5
3	3v4	12	not used
4	3v5	13	not used
5	2v5	14	1v3
6	4v9	15	0v
7	4v2	16	5v0
8	4v3	17	2v7
9	5v0	18	0v

IC561 TDA8490			
Pin	Volts	Pin	Volts
1	0v	10	not used
2	2v9	11	0v7 (3v6)
3	2v9	12	3v6
4	5v0	13	4v0
5	9v8 (9v3)	14	4v0
6	9v9 (7v7)	15	6v9
7	1v4	16	6v5
8	11v8	17	2v2
9	12v	18	2v2

() = SECAM Mode

IC562 M52055P			
Pin	Volts	Pin	Volts
1	2v9	9	2v9
2	4v8 (0v)	10	0v
3	1v5	11	2v9
4	0v	12	4v8 (0v)
5	1v5	13	5v0
6	not used	14	2v9
7	5v0	15	0v
8	not used	16	2v9

IC601 TDA8170/8S			
Pin	Volts	Pin	Volts
1	2v3	5	16v2-18v4
2	27v		(Vert. size)
3	1v9-2v8	6	28v
	(Vert. size)	7	2v3
4	0v		

() = SECAM Mode

IC602 LM393			
Pin	Volts	Pin	Volts
1	0v3	5	not used
2	4v4-4v6	6	not used
	(Width)	7	not used
3	6v2	8	12v7
4	0v		

IC800 TEA5101A			
Pin	Volts	Pin	Volts
1	3v2	9	97v-147v
2	11v7	10	138v-110v
3	3v2	11	4v4-1v4
4	3v2	12	104v-148v
5	187v	13	107v-137v
6	1v4-3v5	14	1v4-4v4
7	101v-135v	15	103v-148v
8	0v		

Variable voltages change with contrast and brightness levels

IC921 7812	
Pin	Volts
1	15v6
2	0v
3	11v8

IC922 L4941BV	
Pin	Volts
1	5v0
2	0v
3	11v0

IC923 UA78L05AWC	
Pin	Volts
1	5v0
2	0v
3	11v0

IC1001 ST6385							
Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts
1	not used	11	4v9 (0v2)	21	0v	34	0v (4v2)
2	not used	12	4v8 (0v1)	22	0v (0v1)		(AV1 input)
3	0v3 (5v0) (Mute)	13	(No signal) 0v4 (4v8)	23	0v (0v1)	35	4v8
4	0v1		(Standby)	24	0v (0v1)	36	5v0
5	5v0 (0v1) (RGB mode)	14	** 0v	25	(on-screen display) 0v	37	0v (4v2)
6	not used	15	** 0v	26	4v0	38	(AV3 input) 0v (4v2)
7	4v9	16	** 5v0	27	4v5		(AV2 input)
8	4v9	17	0v1	28	4v6	39	5v0
9	4v8	18	5v0 (0v) (Standby)	29	4v6	40	4v8
10	4v9	19	4v4 (0v3)	30	not used	41	4v7
		20	4v4 (0v3) (Stereo)	31	*	42	5v0
				32	2v8		
				33	*		

* set trips when pin touched

** Pin 14 = 5v0 in system B/G Pin 15 = 5v0 in system L'
Pin 16 = 0v in system B/G.

IC1002 TL7705A			
Pin	Volts	Pin	Volts
1	2v6	5	*
2	3v5	6	not used
3	3v2	7	5v0
4	0v5	8	5v0

* Set resets when pin touched

IC1060 HCF4520B			
Pin	Volts	Pin	Volts
1	4v0	9	4v5
2	5v0	10	2v4
3	not used	11	not used
4	not used	12	4v5
5	not used	13	4v5
6	2v4	14	not used
7	0v	15	0v
8	0v	16	5v0

OPT01 CNX82			
Pin	Volts	Pin	Volts
1	0v1	4	0v7 (-4v4)
2	0v1	5	11v9 (15v2)
3	not used	6	not used

() = Standby mode

IC2001 SAA5191					
Pin	Volts	Pin	Volts	Pin	Volts
1	not used	11	1v0	21	0v
2	0v	12	11v7	22	2v4
3	2v8	13	0v	23	1v6
4	5v8	14	4v0	24	8v7
5	3v9	15	3v1	25	0v5
6	2v9	16	11v7	26	4v9
7	not used	17	6v7	27	4v2
8	5v3	18	6v3	28	4v0
9	3v0	19	5v0		
10	3v1	20	1v3		

IC2004 TMS4464			
Pin	Volts	Pin	Volts
1	0v	10	3v5
2	0v7-1v7	11	1v5
3	0v4 (0v6)	12	1v5
4	4v8	13	2v7 (0v6)
5	1v2	14	2v6
6	3v5	15	1v7 (2v7)
7	3v3 (1v4)	16	4v7
8	1v4 (3v3)	17	0v2 (0v5)
9	4v9	18	0v

() = teletext mode

IC2003 PCB83C654/528P							
Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts
1	4v5	11	4v9	21	4v9	31	4v9
2	4v5	12	4v9	22	4v9	32	4v9
3	not used	13	4v9	23	4v9	33	4v9
4	0v	14	4v9	24	4v9	34	4v9
5	4v9	15	4v9	25	4v9	35	4v9
6	4v9	16	4v9	26	4v9	36	4v9
7	4v7	17	4v9	27	4v9	37	4v9
8	4v7	18	2v5	28	4v9	38	4v9
9	0v1	19	2v2	29	not used	39	4v9
10	4v9	20	0v	30	not used	40	4v9

IC2005 SAA9042							
Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts
1	2v4	11	0v (0v5)	21	1v5	31	1v7 (2v7)
2	4v5	12	0v	22	1v4 (3v3)	32	0v4 (0v6)
3	4v4	13	0v	23	3v3 (1v4)	33	0v
4	0v5	14	0v	24	3v5	34	0v
5	0v5	15	0v1	25	3v5	35	0v
6	0v	16	0v	26	not used	36	4v9
7	0v	17	1v8	27	1v2	37	3v1
8	1v5	18	2v6	28	4v7	38	0v
9	0v (1v5)	19	2v5 (0v6)	29	4v8	39	0v7
10	0v (1v5)	20	1v5	30	0v2 (0v5)	40	0v

() = teletext mode

IC3000 TEA5114A			
Pin	Volts	Pin	Volts
1	3v8	9	0v2 (1v5)
2	0v	10	0v (2v6)
3	3v8	11	3v2
4	3v8	12	0v (2v6)
5	3v8	13	3v2
6	3v8	14	11v7
7	3v8	15	0v (2v6)
8	0v	16	3v2

() = RGB mode

IC4001 BA15218			
Pin	Volts	Pin	Volts
1	4v4	5	4v5
2	2v2	6	4v5
3	2v2	7	7v6
4	0v	8	11v7

IC4002 BA15218			
Pin	Volts	Pin	Volts
1	4v5	5	4v4
2	2v2	6	4v4
3	2v2	7	7v5
4	0v	8	11v7

IC4003 TDA1543			
Pin	Volts	Pin	Volts
1	2v5	5	5v0
2	2v5	6	2v2
3	0v (1v0)	7	2v2
4	0v	8	2v2

() = NICAM mode

IC4004 HCF4053			
Pin	Volts	Pin	Volts
1	7v6	9	0v
2	7v9	10	0v1 (11v7)
3	not used	11	0v1 (11v7)
4	not used	12	7v8
5	not used	13	7v5
6	0v	14	7v8 (7v5)
7	0v	15	7v8 (7v5)
8	0v	16	11v7

IC4005 CF70088							
Pin	Volts	Pin	Volts	Pin	Volts	Pin	Volts
1	not used	11	5v0	21	not used	31	not used
2	0v	12	1v9	22	not used	32	5v0
3	0v	13	0v	23	4v7	33	not used
4	0v (1v2)	14	2v5	24	4v7 (3v7)	34	not used
5	5v0	15	2v4	25	0v	35	not used
6	0v1	16	0v	26	2v5	36	0v
7	1v5	17	5v0	27	5v0	37	5v0
8	0v	18	5v0	28	2v9 (1v9)	38	0v
9	0v1	19	5v0	29	0v1 (1v0)	39	0v
10	0v5	20	5v0 (0v)	30	0v	40	0v

() = NICAM mode

IC4010 7805	
Pin	Volts
1	5v0
2	5v0
3	10v7

	Q103	Q201	Q202	Q203	Q300	Q301	Q302	Q303
E	1v0 (4v2)	2v9	11v7	3v5	3v0	3v0	3v0	3v0
B	0v3 (4v8)	3v1	11v4	3v6	3v6	3v6	3v6	3v6
C	5v0 (4v3)	11v1	10v7	11v5	10v8	10v8	10v8	10v8

() = Standby mode

	Q304	Q305	Q500	Q502	Q560	Q561	Q562
E	2v1	2v3	0v	0v	0v9	0v	0v
B	2v8	2v9	0v4	0v5-0v6	1v2	0v3	0v6
C	10v8	11v7	0v6	12v3-6v0	4v9	2v0	0v9

Varies with
vert. position

	Q563	Q564	Q565	Q566	Q567	Q568
E	0v8	1v8	11v8	1v8 (2v4)	1v8 (2v4)	3v0
B	0v9	0v5	11v9	2v4 (2v5)	0v (3v0)	3v7
C	4v9	11v0	0v8	2v3 (8v0)	11v8	9v8

() = Secam mode

	Q569	Q570	Q571	Q572	Q573
E	0v1 (3v0)	5v6	0v	0v	1v2
B	0v7 (3v6)	6v3	4v2	0v3 (0v7)	1v8
C	11v7 (10v2)	11v1	11v0	3v8 (0v)	4v9

() = Secam mode

() = Secam mode

	Q651	Q652	Q701	Q702	Q703
E	0v	1v1-1v5	0v	5v4	0v
B	1v1-1v5	1v7-2v2	0v6	5v4	-1v8
C	16v4-1v8	16v4-1v8	5v5	10v3	148v

Min. - Max. width

	Q901		Q902	Q903	Q904	Q905	Q941	Q942
S	0v	E	0v1	0v	0v	0v1	7v0	0v
D	320v	B	-0v4	0v1	0v7	0v	6v4	1v3 (1v2)
G	0v2	C	320v	-0v4	0v	0v	1v3	3v9 (13v7)

() = Standby mode

	Q943	Q944	Q945	Q946	Q947	Q948	Q949
E	4v5 (9v3)	0v	3v9 (13v7)	3v4 (0v)	4v8	7v0	0v
B	3v9 (10v)	0v7 (0v)	0v (1v8)	4v1 (0v)	5v6	6v3	-2v1
C	3v9 (13v7)	0v (1v8)	1v3 (1v2)	4v3 (0v)	5v0	0v	4v1

() = Standby mode

	Q950	Q951	Q952	Q1001	Q1002	Q1003
E	-0v1 (0v1)	1v0 (0v)	3v9 (13v6)	4v2	0v	4v3 (0v)
B	-0v1 (0v1)	0v5 (0v)	3v9 (13v6)	5v0	0v4 (4v8)	5v0 (0v)
C	3v9 (13v7)	0v (0v)	1v3 (1v3)	0v	5v0 (0v)	5v0

() = Standby mode

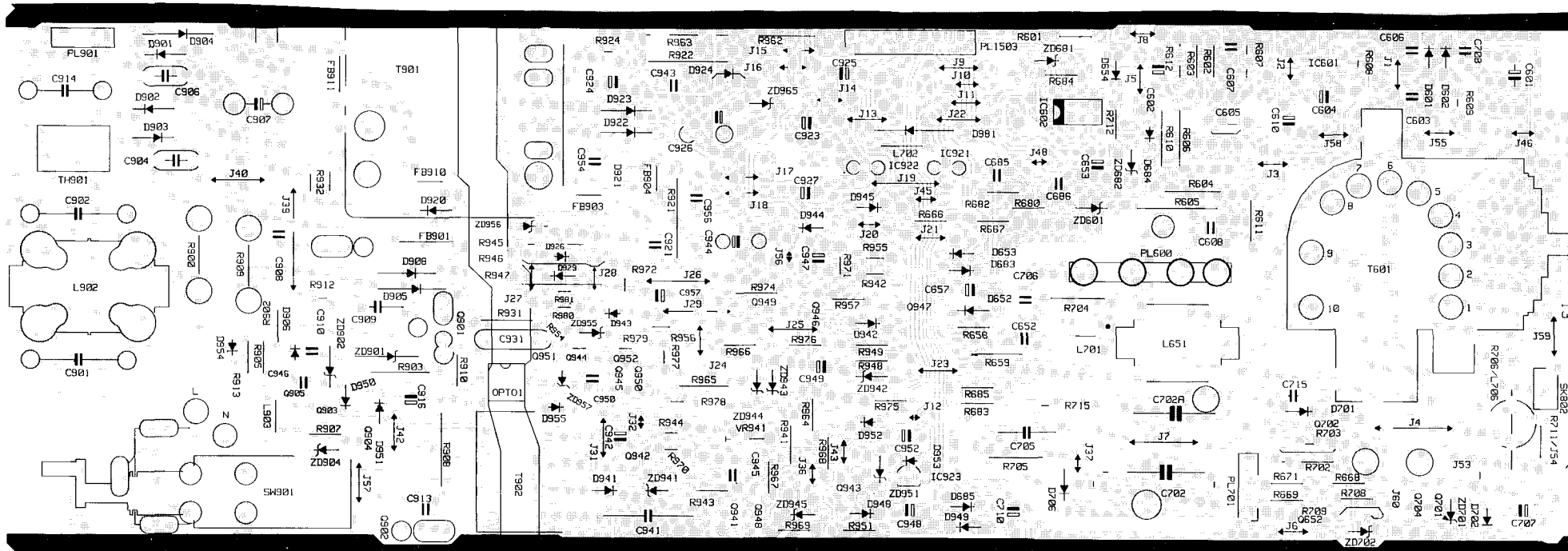
() = Standby mode

	Q1004	Q1005	Q2005	Q3000	Q3001	Q3002	Q3003	Q3300
E	4v9	0v	0v	0v3	1v6	1v6	1v6	0v
B	5v0 (4v2)	-0v4	0v6	0v1	0v	0v	0v	0v1
C	0v1 (4v9)	4v0	0v1	4v9	4v9	4v9	4v9	0v2

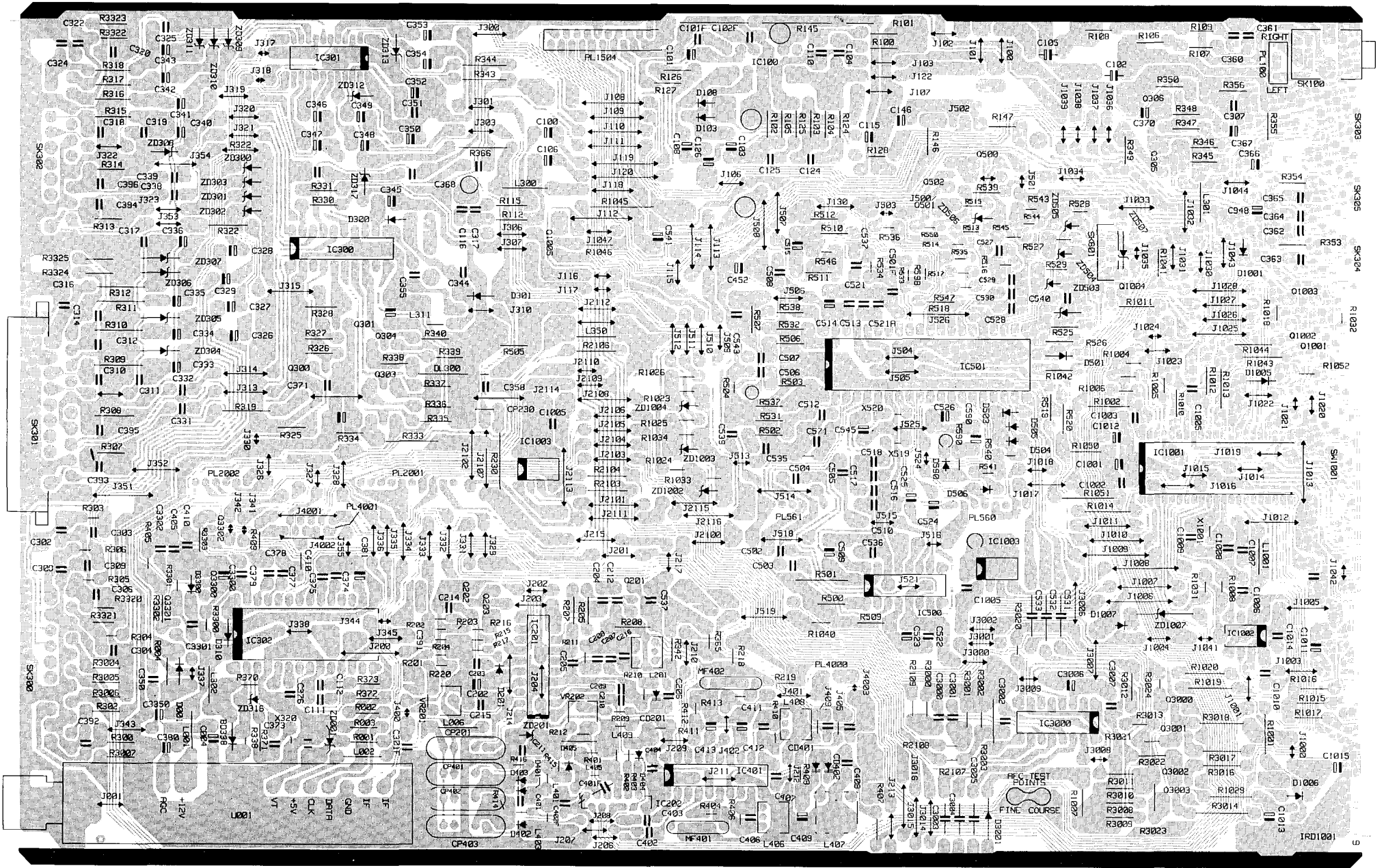
() = RGB mode

	Q3301	Q3302	Q4001	Q4002	Q4003	Q4004
E	3v3	2v2	2v3	2v9	0v	0v
B	4v0	2v8	3v1	3v6	0v (0v1)	5v0 (0v)
C	11v3	6v5	5v0	4v3	0v	0v1 (11v7)

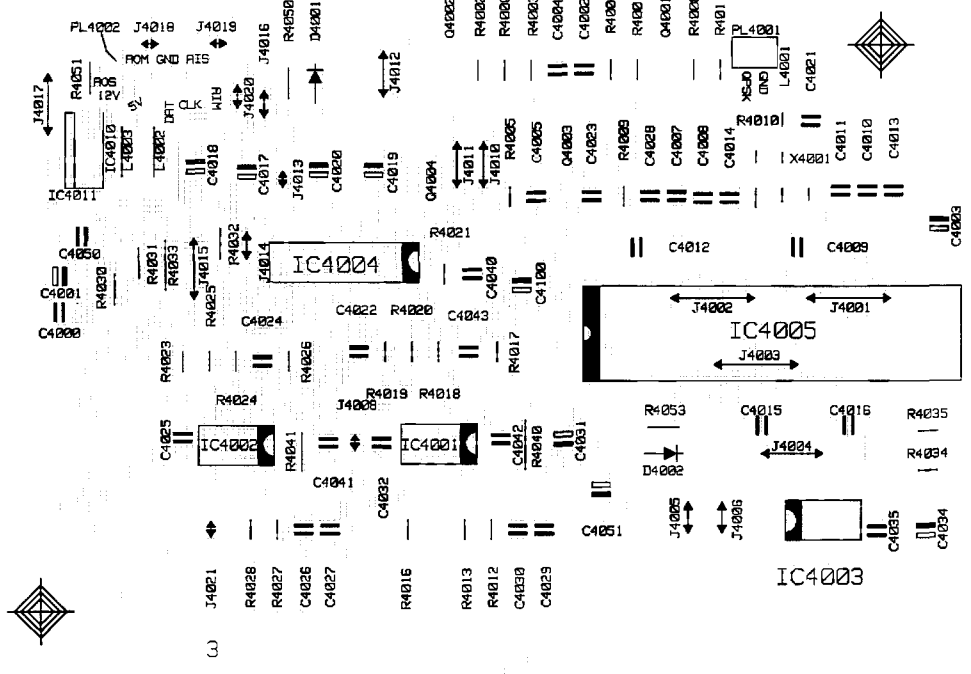
() = NICAM signal received



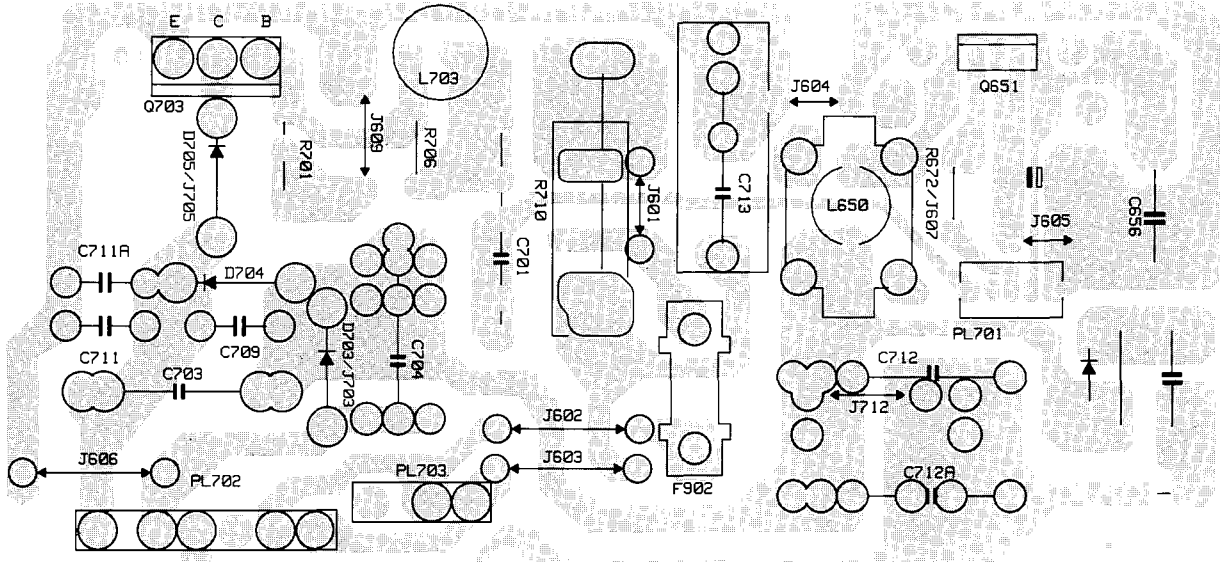
POWER SUPPLY AND DEFLECTION PCB—PRINT SIDE



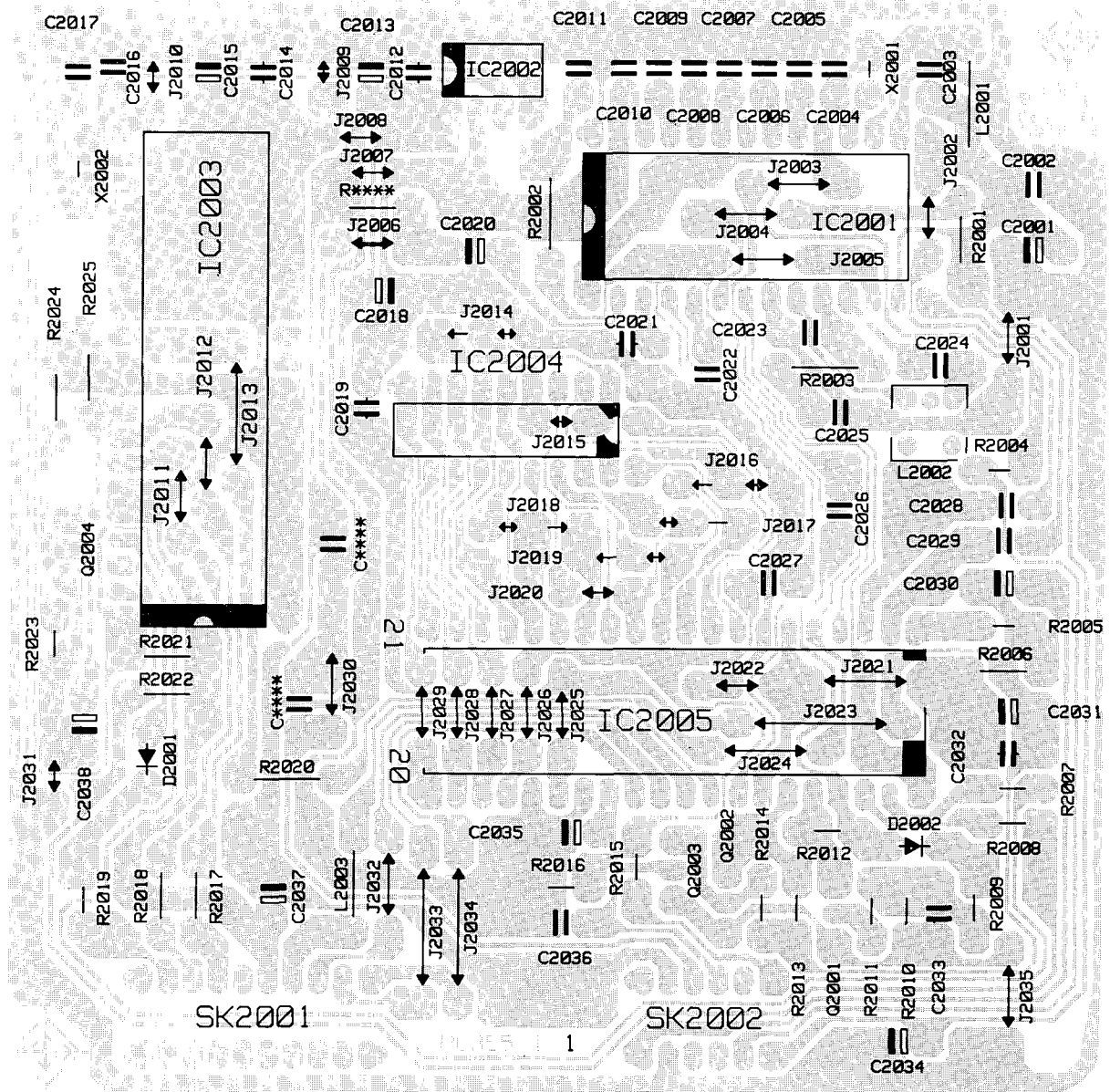
SIGNAL AND CONTROL PCB - PRINT SIDE



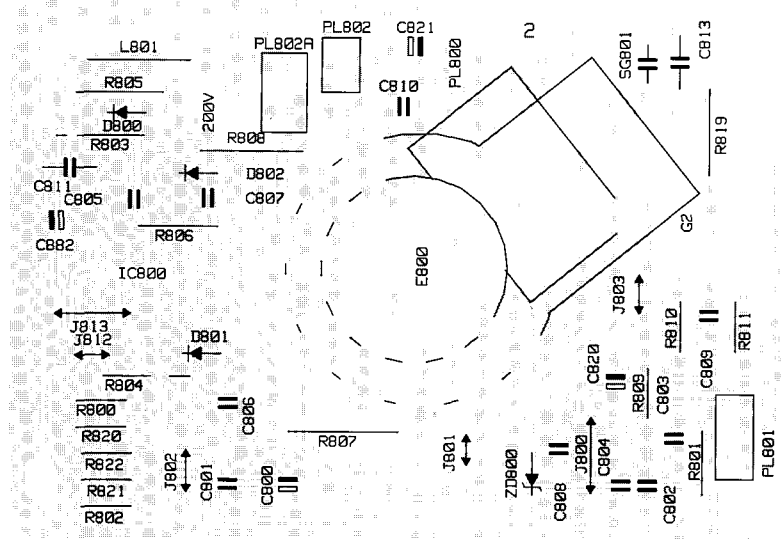
NICAM PCB—PRINT SIDE



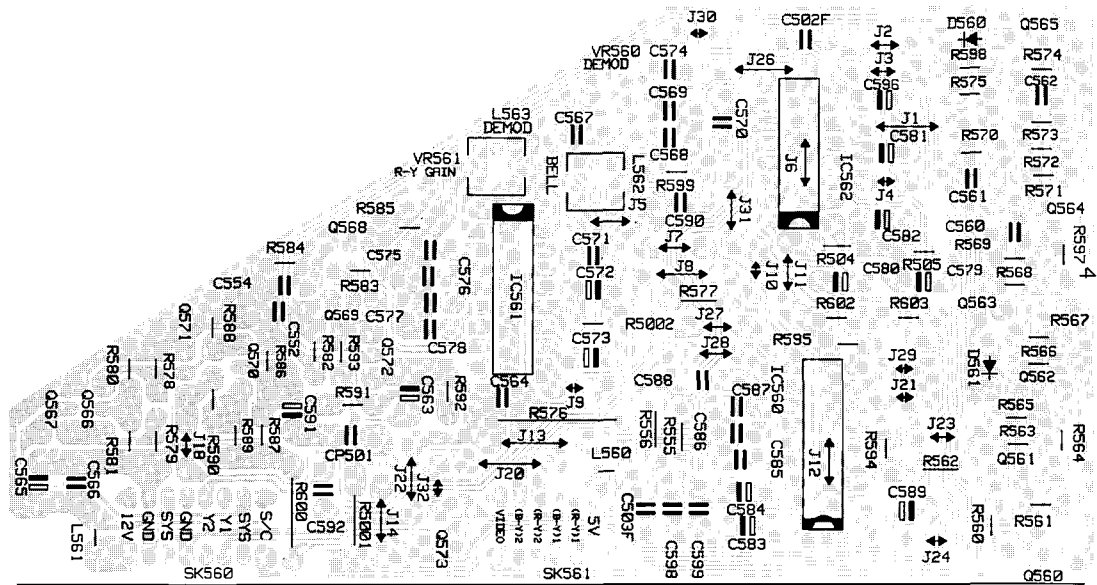
EAST/WEST CORRECTION PCB—PRINT SIDE



TELETEXT PCB—PRINT SIDE



CRT BASE PCB—PRINT SIDE



SECAM/CTI PCB—PRINT SIDE

PRESENTATION PARTS

△ CRT Type A59ECY13X01	CL2560	T159011
	CL2564	T159006
△ A66ECY13X01	CL2860	T166015
	CL2864	T166012
△ Cabinet Back	CL2560	X263006
	CL2860	X263026
	CL2564	X240331
	CL2864	X263102
△ Cabinet Front Frame	CL2560	X254096
	CL2860	X254134
	CL2564	X240373
	CL2864	X212373
Control Door	CL25/2860	X262081
	CL25/2864	X263142
HITACHI Badge	CL25/2860	X640231
	CL25/2864	X640242
Remote Control Window (Cabinet)	CL25/2860	X420753
I.R. Lens (Cabinet)	CL25/2864	X425051
△ Mains Lead	CL25/2864 (SPAIN)	E846635
	ALL OTHER MODELS	2972374
Mains Switch Knob	CL25/2860	X321001
	CL25/2864	X321031
Operating Guide	CL25/2860 + CL25/2864 (SPAIN/BELGIUM)	X830669
	CL25/2864 (NORWAY, FINLAND, DENMARK)	X830815
	CL25/2864 (SWEDEN)	X830810
Remote Control Handset	CLE-876D	X100023

MISCELLANEOUS PARTS

△ CRT Socket	2698351
△ Degaussing Coil	CL2560/64 2274361
	CL2860/64 2274362
△ Fuse Type T3.15A	F901 E882368
△ Fuse Type F630mA	F902 E882371
Fuse Holder	F901 2721791
Fuse Holder	F902 2721793
Headphone Socket	2671351
△ ON/OFF Switch	2633391
Phono Socket (Red)	E826138
Phono Socket (White)	E826139
Phono Socket (Yellow)	E826140
21 Pin Scart Socket	E826923
Speaker (Tweeter)	CL25/2860 E511111
(Woofers)	CL25/2860 E511110
Speakers	CL25/2864 2413131
(Sub Woofers)	CL25/2864 E511113
Touch Button Block	E139407
Tuner	E710030

PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE at the beginning of this service manual. Don't degrade the safety of this receiver through improper servicing.

Resistor Abbreviation	Type
CF	Carbon Film
MO	Metal Oxide
FF	Fusible Film
VR	Variable Control
MF	Metal Film
WW	Wire Wound

Capacitor Abbreviation	Type
C	Ceramic
PF	Plastic Film
FT	Feed Through
MPO	Met Polyester
MPS	Mica/Polystyrene
MP	Metallised Paper
TA	Tantalum
MPP	Met Polypropylene

Parts marked * in this list are unique to models CL25/2864TAN.

Ref No	Part No.	Value	Type	Tol %	Wattage
R001	0700058M	22K	CF	5	1/16
R002	0700027M	100R	CF	5	1/16
R003	0700027M	100R	CF	5	1/16
R004	0700055M	12K	CF	5	1/16
R100	R100330	1R0	CF	5	1/4
R101	R100330	1R0	CF	5	1/4
R102	R118330	18R	CF	5	1/4
R103	R118330	18R	CF	5	1/4
R104	0700041M	1K0	CF	5	1/16
*R104	0700038M	680R	CF	5	1/16
R105	0700041M	1K0	CF	5	1/16
*R105	0700038M	680R	CF	5	1/16
R106 - 09	R715330	75R	CF	5	1/4
R124	0700043M	1K5	CF	5	1/16
R125	0700043M	1K5	CF	5	1/16
R126	0700072M	220K	CF	5	1/16
R127	0700072M	220K	CF	5	1/16
R128	0700027M	100R	CF	5	1/16
R146	0700041M	1K0	CF	5	1/16
R147	0700042M	1K2	CF	5	1/16
VR201	0160214	5K0	VR	AGC	CONTROL
R201	0700052M	6K8	CF	5	1/16
R202	0700034M	330R	CF	5	1/16
R203	0700046M	2K7	CF	5	1/16
R204	0700054M	10K	CF	5	1/16
R205	0700042M	1K2	CF	5	1/16
R207	R417330	47R	CF	5	1/4
R208	R323319	330R	CF	5	1/2
R211	0700035M	390R	CF	5	1/16
R215	0700074M	330K	CF	5	1/16
R216	0187080M	4K3	CF	5	1/16
R217	0700044M	1K8	CF	5	1/16
R218	0700054M	10K	CF	5	1/16
R219	0700054M	10K	CF	5	1/16
R220	0700043M	1K5	CF	5	1/16
R300	R715330	75R	CF	5	1/4
R302	R715330	75R	CF	5	1/4
R303 - 06	0700032M	220R	CF	5	1/16
R307	0187038M	75R	CF	5	1/16
R308	0187038M	75R	CF	5	1/16
R309 - 12	R222330	220R	CF	5	1/4
R313	0187038M	75R	CF	5	1/16
R314	0187038M	75R	CF	5	1/16
R315 - 18	R222330	220R	CF	5	1/4
R319	R715330	75R	CF	5	1/4
R322	R715330	75R	CF	5	1/4
R325	R526330	560R	CF	5	1/4
R326	R140330	10K	CF	5	1/4
R327	R526330	560R	CF	5	1/4
R328	R140330	10K	CF	5	1/4
R330	R120330	100R	CF	5	1/4
R331	R120330	100R	CF	5	1/4
R333	R812330	82R	CF	5	1/4
R334	R526330	560R	CF	5	1/4
R335	R140330	10K	CF	5	1/4
R336	R526330	560R	CF	5	1/4
R337	R140330	10K	CF	5	1/4
R338	0700041M	1K0	CF	5	1/16
R339	R526330	560R	CF	5	1/4
R340	R140330	10K	CF	5	1/4
R342	0700039M	820R	CF	5	1/16

Ref No.	Part No.	Value	Type	Tol %	Wattage
R343	R120330	100R	CF	5	1/4
R344	R120330	100R	CF	5	1/4
R345	R140330	10K	CF	5	1/4
R346	R333330	3K3	CF	5	1/4
R349	R427330	4K7	CF	5	1/4
R353	R222330	220R	CF	5	1/4
R354	R222330	220R	CF	5	1/4
R355	R715330	75R	CF	5	1/4
R365	0700037M	560R	CF	5	1/16
R366	R227542	270R	MO	5	1
R370	R000304	191K	MF	1	1/5
R371	0700036M	470R	CF	5	1/16
R372	0700027M	100R	CF	5	1/16
R373	0700027M	100R	CF	5	1/16
R388	R407551	4R7	FF	5	1/2
R401	0700045M	2K2	CF	5	1/16
R402	0700045M	2K2	CF	5	1/16
R403	0700045M	2K2	CF	5	1/16
R404	0700037M	560R	CF	5	1/16
R405	0700054M	10K	CF	5	1/16
R406	0700041M	1K0	CF	5	1/16
R407	0700054M	10K	CF	5	1/16
R408	0700067M	100K	CF	5	1/16
R409	0700049M	4K7	CF	5	1/16
R410	0700041M	1K0	CF	5	1/16
R411	0700049M	4K7	CF	5	1/16
R412	0700046M	2K7	CF	5	1/16
R413	0700043M	1K5	CF	5	1/16
R414	0700045M	2K2	CF	5	1/16
R416	0700045M	2K2	CF	5	1/16
R500	R648330	68K	CF	5	1/4
R501	R110330	10R	CF	5	1/4
R502	R158330	180K	CF	5	1/4
R503	R130330	1K0	CF	5	1/4
R504	0700025M	68R	CF	5	1/16
R504	0700048M	3K9	CF	5	1/16
R505	R130330	1K0	CF	5	1/4
R505	0187064M	910R	CF	5	1/16
R506	R130330	1K0	CF	5	1/4
R507	R541330	51K	CF	5	1/4
R509	R110330	10R	CF	5	1/4
R510	R160330	1M0	CF	5	1/4
R511	0700054M	10K	CF	5	1/16
R512	R242330	22K	CF	5	1/4
R513	0700058M	22K	CF	5	1/16
R514	0700054M	10K	CF	5	1/16
R515	0700041M	1K0	CF	5	1/16
R516	0700063M	47K	CF	5	1/16
R517	0700071M	180K	CF	5	1/16
R518	R130330	1K0	CF	5	1/4
R519	R120330	100R	CF	5	1/4
R520	R120330	100R	CF	5	1/4
R525	R222330	220R	CF	5	1/4
R526	R329330	390R	CF	5	1/4
R527	0700027M	100R	CF	5	1/16
R528	0700027M	100R	CF	5	1/16
R529	0700027M	100R	CF	5	1/16

PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE at the beginning of this service manual. Don't degrade the safety of this receiver through improper servicing.

Ref No	Part No	Value	Type	Tol %	Wattage
R531	R170330	10M	CF	5	1/4
R532	R170330	10M	CF	5	1/4
R533	0700054M	10K	CF	5	1/16
R534	0700027M	100R	CF	5	1/16
R535	0700054M	10K	CF	5	1/16
R536	R240360	20K	CF	5	1/16
R537	R170330	10M	CF	5	1/4
R538	R262330	2M2	CF	5	1/4
R540	0700067M	100K	CF	5	1/16
R541	0700073M	270K	CF	5	1/16
R543	0700067M	100K	CF	5	1/16
R544	0700065M	68K	CF	5	1/16
R545	R170360	10M	CF	5	1/16
R546A	0700041M	1K0	CF	5	1/16
R546B	0700041M	1K0	CF	5	1/16
R547	0700027M	100R	CF	5	1/16
R555	0700041M	1K0	CF	5	1/16
R556	0700041M	1K0	CF	5	1/16
VR560	E311069	2K2	VR	DEMOM	ADJUSTMENT
R560	0700049M	4K7	CF	5	1/16
VR561	E311069	2K2	VR	R - Y	GAIN
R561	0700042M	1K2	CF	5	1/16
R562	0700039M	820R	CF	5	1/16
R563	0700036M	470R	CF	5	1/16
R564	0700041M	1K0	CF	5	1/16
R565	0700034M	330R	CF	5	1/16
R566	0700036M	470R	CF	5	1/16
R567	0700041M	1K0	CF	5	1/16
R568	0700041M	1K0	CF	5	1/16
R569	0700039M	820R	CF	5	1/16
R570	0700045M	2K2	CF	5	1/16
R571	0700047M	3K3	CF	5	1/16
R572	0700057M	18K	CF	5	1/16
R573	0700041M	1K0	CF	5	1/16
R574	0700041M	1K0	CF	5	1/16
R575	0700041M	1K0	CF	5	1/16
R576	0700027M	100R	CF	5	1/16
R577	0700027M	100R	CF	5	1/16
R578	0700049M	4K7	CF	5	1/16
R579	0700041M	1K0	CF	5	1/16
R580	0700057M	18K	CF	5	1/16
R581	0700049M	4K7	CF	5	1/16
R582	0700039M	820R	CF	5	1/16
R583	0700043M	1K5	CF	5	1/16
R584	0700039M	820R	CF	5	1/16
R586	0700054M	10K	CF	5	1/16
R587	0700051M	5K6	CF	5	1/16
R588	0700028M	120R	CF	5	1/16
R589	0700033M	270R	CF	5	1/16
R590	0700045M	2K2	CF	5	1/16
R590	0700033M	270R	CF	5	1/16
			(CTI/	SECAM	PANEL)
R591	0187088M	9K1	CF	5	1/16
R592	0700043M	1K5	CF	5	1/16
R593	0700049M	4K7	CF	5	1/16
R594	0700042M	1K2	CF	5	1/16
R597	0700036M	470R	CF	5	1/16
R598	0700036M	470R	CF	5	1/16
R598	0700054M	10K	CF	5	1/16
			(CTI/	SECAM	PANEL)
R599	0700044M	1K8	CF	5	1/16
R600	0700041M	1K0	CF	5	1/16
R601	R531330	5K1	CF	5	1/4
*R601	R632330	6K2	CF	5	1/4
R602	R638725	6K8	MF	1	1/2
R602	0700048M	3K9	CF	5	1/16
			(CTI/	SECAM	PANEL)
R603	R247330	27K	CF	5	1/4
R603	0187064M	910R	CF	5	1/16
			(CTI/	SECAM	PANEL)
*R603	R340330	30K	CF	5	1/4
R604	R323319	330R	CF	5	1/2
*R604	R227319	270R	CF	5	1/2
R605	R336330	3K6	CF	5	1/4
R606	R735330	7K5	CF	5	1/4
*R606	R142330	12K	CF	5	1/4
R607	R100551	1R0	FF	5	1/2

Ref No.	Part No	Value	Type	Tol %	Wattage
Δ R608	R105551	1R5	FF	5	1/2
Δ R609	R100551	1R0	FF	5	1/2
R610	R125542	150R	MO	5	1
R611	R222319	220R	CF	5	1/2
*R611	R227319	270R	CF	5	1/2
R612	R222330	220R	CF	5	1/4
*R612	R521330	510R	CF	5	1/4
R659	R832542	8K2	MO	5	1
R666	R832330	8K2	CF	5	1/4
R667	R132330	1K2	CF	5	1/4
R668	R427330	470R	CF	5	1/4
*R669	R150330	100K	CF	5	1/4
R680	R140330	10K	CF	5	1/4
R682	R140721	10K	MF	1	1/4
R683	R632721	6K2	MF	1	1/4
R684	R622330	620R	CF	5	1/4
R685	R349330	39K	CF	5	1/4
R702	R128319	180R	CF	5	1/2
Δ R703	R110551	10R	FF	5	1/2
R704	R822546	820R	MO	5	1
R705	R145542	15K	MO	5	1
R706	R120330	100R	CF	5	1/4
R710	0147837	18R	WW	5	15
R710A	R516539	56R	MO	5	2
R712	R457716	470K	MF	5	1/4
*R713	R222547	220R	MO	5	1/2
*R714	R128547	180R	MO	5	1/2
Δ R715	R200551	2R0	FF	5	1/2
R800	R120330	100R	CF	5	1/4
R801	R120330	100R	CF	5	1/4
R802	R120330	100R	CF	5	1/4
R803	R349542	39K	MO	5	1
R804	R349542	39K	MO	5	1
R805	R349542	39K	MO	5	1
R806	R130319	1K0	CF	5	1/2
R807	R130319	1K0	CF	5	1/2
R808	R130319	1K0	CF	5	1/2
R809	R130330	1K0	CF	5	1/4
R810	R130330	1K0	CF	5	1/4
R811	R130330	1K0	CF	5	1/4
R819	R150714	100K	MF	5	1/2
R820	R148330	18K	CF	5	1/4
R821	R349330	39K	CF	5	1/4
R822	R349330	39K	CF	5	1/4
R900	0147524	2R2	WW	10	5
Δ R901	R162714	1M2	MF	5	1/2
R902	R556716	560K	MF	5	1/4
R903	R618330	68R	CF	5	1/4
Δ R904	R162714	1M2	MF	5	1/2
R905	R333330	3K3	CF	5	1/4
R907	R110721	10R	MF	1	1/4
R908	R333549	3K3	MO	5	2
R909	0147572	220R	MO	5	5
Δ R910	R142330	12K	CF	5	1/4
R912	R407551	4R7	FF	5	1/2
R913	R413330	43R	CF	5	1/4
R914	R333549	3K3	MO	5	2
R915	R417330	47R	CF	5	1/4
R921	0110221S	100R	MO	5	1
R922	R000505	0R5	MO	5	7
Δ R924	R812551	82R	FF	5	1/2
Δ R931	R170714	10M	MF	5	1/2
R932	R252726	220K	MF	5	2
VR941	E311036	2K2	VR	HT	PRESET
R941	R142562	12K	MO	5	5
R942	0700041M	1K0	CF	5	1/16
R943	R130330	1K0	CF	5	1/4
R944	0700036M	470R	CF	5	1/16
R945	R100542	1R0	MO	5	1
R946	R000505	0R5	MO	5	7
R947	R000505	0R5	MO	5	7
R948	0700067M	100K	CF	5	1/16
R949	R227330	270R	CF	5	1/4
R951	0700045M	2K2	CF	5	1/16
R954	0700053M	8K2	CF	5	1/16
R955	0700041M	1K0	CF	5	1/16
R956	0700045M	2K2	CF	5	1/16
R957	0700041M	1K0	CF	5	1/16

PRODUCT SAFETY NOTE: Components marked with a \triangle have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE at the beginning of this service manual. Don't degrade the safety of this receiver through improper servicing.

Ref No.	Part No.	Value	Type	Tol %	Wattage
R962	R132542	1K2	MO	5	1
R963	R000505	0R5	MO	5	7
R964	R541330	51K	CF	5	1/4
R965	R227330	270R	CF	5	1/4
R966	R150716	100K	MF	5	1/4
R967	0700047M	3K3	CF	5	1/16
R968	R541330	51K	CF	5	1/4
R969	R339330	3K9	CF	5	1/4
R970	0700067M	100K	CF	5	1/16
R971	0700049M	4K7	CF	5	1/16
R972	0700054M	10K	CF	5	1/16
R974	R232319	2K2	CF	5	1/2
R975	R150716	100K	MF	5	1/4
R976	R648728	68K	MF	5	1/2
R977	0700014M	10R	CF	5	1/16
R978	0700023M	47R	CF	5	1/16
R979	0700045M	2K2	CF	5	1/16
R980	0700053M	8K2	CF	5	1/16
R981	0700053M	8K2	CF	5	1/16
R1001	R130330	1K0	CF	5	1/4
R1002	R140330	10K	CF	5	1/4
R1004	0700042M	1K2	CF	5	1/16
R1005	0700054M	10K	CF	5	1/16
R1006	0700067M	100K	CF	5	1/16
R1007	R130330	1K0	CF	5	1/4
R1008	0700054M	10K	CF	5	1/16
R1010	R140330	10K	CF	5	1/4
R1011	R140330	10K	CF	5	1/4
R1012	R120330	100R	CF	5	1/4
R1013	R120330	100R	CF	5	1/4
R1014	R120330	100R	CF	5	1/4
R1015	R122330	120R	CF	5	1/4
R1016	R122330	120R	CF	5	1/4
R1017	R125330	150R	CF	5	1/4
R1018	0700044M	1K8	CF	5	1/16
R1019	R120330	100R	CF	5	1/4
R1023-06	0700054M	10K	CF	5	1/16
R1029	R120330	100R	CF	5	1/4
R1031	0700054M	10K	CF	5	1/16
R1032	0700041M	1K0	CF	5	1/16
R1033	0700054M	10K	CF	5	1/16
R1034	0700054M	10K	CF	5	1/16
R1040	0700054M	10K	CF	5	1/16
R1041	0700054M	10K	CF	5	1/16
R1042	R222330	220R	CF	5	1/4
R1043	R140330	10K	CF	5	1/4
R1044	R130330	1K0	CF	5	1/4
R1045	R130330	1K0	CF	5	1/4
R1046	R140330	10K	CF	5	1/4
R1050	0700049M	4K7	CF	5	1/16
R1051	0700049M	4K7	CF	5	1/16
R1052	0700047M	3K3	CF	5	1/16
R1053	0700049M	4K7	CF	5	1/16
R1062	R140330	10K	CF	5	1/4
R2001	0700065M	68K	CF	5	1/16
R2002	0700036M	470R	CF	5	1/16
R2003	0700046M	2K7	CF	5	1/16
R2004	0700041M	1K0	CF	5	1/16
R2005	0700057M	18K	CF	5	1/16
R2006	0700014M	10R	CF	5	1/16
R2007	0700036M	470R	CF	5	1/16
R2008	0700036M	470R	CF	5	1/16
R2009	0700036M	470R	CF	5	1/16
R2010	0700041M	1K0	CF	5	1/16
R2011	0700054M	10K	CF	5	1/16
R2012	0700055M	12K	CF	5	1/16
R2015	0700066M	82K	CF	5	1/16
R2016	0700056M	15K	CF	5	1/16
R2017	0700034M	330R	CF	5	1/16
R2018	0700034M	330R	CF	5	1/16
R2019	0700036M	470R	CF	5	1/16
R2020	0700036M	470R	CF	5	1/16
R2021	0700049M	4K7	CF	5	1/16
R2022	0700049M	4K7	CF	5	1/16
R2023	0700053M	8K2	CF	5	1/16
R2024	0700063M	47K	CF	5	1/16

Ref No	Part No	Value	Type	Tol %	Wattage
R2025	0700051M	5K6	CF	5	1/16
R2026	0700032M	220R	CF	5	1/16
R2027	0700045M	2K2	CF	5	1/16
R2103	R120330	100R	CF	5	1/4
R2104	R120330	100R	CF	5	1/4
R2107	0700032M	220R	CF	5	1/16
R2108	0700032M	220R	CF	5	1/16
R2109	0700032M	220R	CF	5	1/16
R2110	0700057M	18K	CF	5	1/16
R3000	0700037M	560R	CF	5	1/16
R3001	0700037M	560R	CF	5	1/16
R3002	0700037M	560R	CF	5	1/16
R3003	0700045M	2K2	CF	5	1/16
R3004	R715330	75R	CF	5	1/4
R3005	R715330	75R	CF	5	1/4
R3006	R715330	75R	CF	5	1/4
R3007	R120330	100R	CF	5	1/4
R3008	R125330	150R	CF	5	1/4
R3009	R125330	150R	CF	5	1/4
R3010	R125330	150R	CF	5	1/4
R3011	0700029M	150R	CF	5	1/16
R3012	0700029M	150R	CF	5	1/16
R3013	0700029M	150R	CF	5	1/16
R3014	0700054M	10K	CF	5	1/16
R3016	0700054M	10K	CF	5	1/16
R3017	0700054M	10K	CF	5	1/16
R3018	0700054M	10K	CF	5	1/16
R3020	0700041M	1K0	CF	5	1/16
R3021	0700034M	330R	CF	5	1/16
R3022	0700034M	330R	CF	5	1/16
R3023	0700034M	330R	CF	5	1/16
R3024	0700032M	220R	CF	5	1/16
R3300	0700061M	33K	CF	5	1/16
R3301	0700045M	2K2	CF	5	1/16
R3302	0700054M	10K	CF	5	1/16
R4000	0700038M	680R	CF	5	1/16
R4001	0700023M	47R	CF	5	1/16
R4002	0700036M	470R	CF	5	1/16
R4003	0700044M	1K8	CF	5	1/16
R4004	0700029M	150R	CF	5	1/16
R4005	0700044M	1K8	CF	5	1/16
R4008	0700041M	1K0	CF	5	1/16
R4009	0700046M	2K7	CF	5	1/16
R4010	0700036M	470R	CF	5	1/16
R4012	0700036M	470R	CF	5	1/16
R4013	0700047M	3K3	CF	5	1/16
R4016	0700054M	10K	CF	5	1/16
R4017	0700054M	10K	CF	5	1/16
R4018	0700054M	10K	CF	5	1/16
R4019	0700062M	39K	CF	5	1/16
R4020	0700059M	27K	CF	5	1/16
R4021	0700046M	2K7	CF	5	1/16
R4023	0700059M	27K	CF	5	1/16
R4024	0700062M	39K	CF	5	1/16
R4025	0700054M	10K	CF	5	1/16
R4026	0700054M	10K	CF	5	1/16
R4027	0700036M	470R	CF	5	1/16
R4028	0700047M	3K3	CF	5	1/16
R4030	0700067M	100K	CF	5	1/16
R4031	0700062M	39K	CF	5	1/16
R4032	0700062M	39K	CF	5	1/16
R4033	0700067M	100K	CF	5	1/16
R4034	0700027M	100R	CF	5	1/16
R4035	0700027M	100R	CF	5	1/16
R4040	0700041M	1K0	CF	5	1/16
R4041	0700041M	1K0	CF	5	1/16
R4042	0700039M	820R	CF	5	1/16
R4043	0700039M	820R	CF	5	1/16
R4051	0700045M	2K2	CF	5	1/16
R4053	0700054M	10K	CF	5	1/16
R5001	0700034M	330R	CF	5	1/16
R5002	0700072M	220K	CF	5	1/16

PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE at the beginning of this service manual. Don't degrade the safety of this receiver through improper servicing.

Ref No.	Part No.	Value	Type	Tol %	Voltage
C004	0800041R	47u	EL	-	16
C100	C150715	100n	MPO	10	63
C101	0800027R	22u	EL	-	6.3
C101F	0244105R	2n2	C	10	50
C102	0253934	2200u	EL	-	31.5
C102F	0244105R	2n2	C	10	50
C103	0800026R	22u	EL	-	50
*C103	0800061	220u	EL	-	31.5
C104	C150877	100n	C	10	25
C105	0253934	2200u	EL	-	31.5
C106	C150715	100n	MPO	10	63
C107	0253935	3300u	EL	-	35
C108	0800026R	22u	EL	-	50
*C108	0800061	220u	EL	-	31.5
C110	C150877	100n	C	10	25
C111	C232877	2n2	C	10	25
C112	C232877	2n2	C	10	25
C115	0800079R	1000u	EL	-	6.3
C124	0880051R	33n	PF	10	50
C125	0880051R	33n	PF	10	50
C126	0800009R	4u7	EL	-	25
C146	0800015R	10u	EL	-	16
C202	0800005R	2u2	EL	-	50
C203	C252715	220n	MPO	10	63
C204	C252715	220n	MPO	10	63
C205	C150877	100n	C	10	25
C208	C115182	15p	C	2	50
C209	C140877	10n	C	10	25
C210	C150877	100n	C	10	25
C212	C252715	220n	MPO	10	63
C214	C155715	150n	MPO	10	63
C215	C140877	10n	C	10	25
C216	C313345	33p	C	10	100
C300	C252715	220n	MPO	10	63
C301F	0244105R	2n2	C	10	50
C302	0244118R	470p	C	10	50
C303	0244118R	470p	C	10	50
C304	C232877	2n2	C	10	25
C306	C232877	2n2	C	10	25
C307	0244117	680p	C	10	50
C308-11	0244118R	470p	C	10	50
C312	C232877	2n2	C	10	25
C314	C232877	2n2	C	10	25
C316-19	0244118R	470p	C	10	50
C320	C232877	2n2	C	10	25
C322	C232877	2n2	C	10	25
C324	0244118R	470p	C	10	50
C325	0244118R	470p	C	10	50
C326-29	0800015R	10u	EL	-	16
C331	C252715	220n	MPO	10	63
C332	C252715	220n	MPO	10	63
C333-36	0800015R	10u	EL	-	16
C338	C252715	220n	MPO	10	63
C339	C252715	220n	MPO	10	63
C340-43	0800015R	10u	EL	-	16
C344	C150877	100n	C	10	25
C345	0800049R	100u	EL	-	16
C346-49	0800015R	10u	EL	-	16
C350	0800074	470u	EL	-	16
C351	C150877	100n	C	10	25
C352	0800041R	47u	EL	-	16
C353	0800015R	10u	EL	-	16
C354	0800015R	10u	EL	-	16
C355	C252715	220n	MPO	10	63
C357	C122182	120p	C	2	50
C358	C323182	330p	C	2	50
C359	C323182	330p	C	2	50
C360	C232877	2n2	C	10	25
C361	C232877	2n2	C	10	25
C362-65	0244118R	470p	C	10	50
C366	0800058R	220u	EL	-	16
C368	C252715	220n	MPO	10	63
C370	0800049R	100u	EL	-	16
C371	C150877	100n	C	10	25
C372	0800066R	330u	EL	-	16
C373	C130877	1n0	C	10	25

Ref No	Part No.	Value	Type	Tol %	Voltage
C374	C150877	100n	C	10	25
C375	C150877	100n	C	10	25
C376-79	C252715	220n	MPO	10	63
C380	0800049R	100u	EL	-	16
C381	0800058R	220u	EL	-	16
C384	0890088R	1n2	C	10	50
C392-6	0244115R	560p	C	10	50
C399	0800082	1000u	EL	-	16
C401F	0244105R	2n2	C	10	50
C402	C140877	10n	C	10	25
C402F	0244105R	2n2	C	10	50
C403	C140877	10n	C	10	25
C404	C150877	100n	C	10	25
C405	0244118R	470p	C	10	50
C406	0299005R	1n5	PF	2	100
C407	C130877	1n0	C	10	25
C408	C323182	330p	C	2	50
C409	0800003R	1u0	EL	-	50
C410	0890086R	820p	C	10	50
C411	0299005R	1n5	PF	2	100
C412	0800015R	10u	EL	-	16
C413	0800015R	10u	EL	-	16
C501F	0244105R	2n2	C	10	50
C502	C252715	220n	MPO	10	63
C502F	C122182	120p	C	2	50
C503	C252715	220n	MPO	10	63
C503F	0244105R	2n2	C	10	50
C504	C140877	10n	C	10	25
C505	C227130	270p	C	5	50
C506	C150877	100n	C	10	25
C507	C150877	100n	C	10	25
C508	C150877	100n	C	10	25
C509	0800023R	22u	EL	-	16
C510	0248682R	82p	C	5	50
C512	0248694R	270p	C	5	50
C513	C140877	10n	C	10	25
C514	0800005R	2u2	EL	-	50
C515	0800007R	3u3	EL	-	50
C516	C140877	10n	C	10	25
C518	C212182	22p	C	2	50
C521	C842715	82n	MPO	10	63
C521A	C140877	10n	C	10	25
C522	C140877	10n	C	10	25
C523	0800023R	22u	EL	-	16
C524	0800015R	10u	EL	-	16
C525	0800015R	10u	EL	-	16
C526	0800009R	4u7	EL	-	25
C527	C457715	470n	MPO	10	63
C528	0244118R	470p	C	10	50
C529	C150877	100n	C	10	25
C530	C150877	100n	C	10	25
C531	C150422	100n	C	-	50
C532	C150422	100n	C	-	50
C533	C150422	100n	C	-	50
C535	C150877	100n	C	10	25
C536	C140877	10n	C	10	25
C537	C353715	330n	MPO	10	63
C537A	C457715	470n	MPO	10	63
C540	0246464R	100p	C	5	50
C541	0800082	1000u	EL	-	16
C542	0800089	3300u	EL	-	10
C543	C457715	470n	MPO	10	63
C545	0800048R	100u	EL	-	10
C552	C122182	120p	C	2	50
C554	C122182	120p	C	2	50
C560	C638715	6n8	MPO	10	63
C561	C447715	47n	MPO	10	63
C562	C232715	2n2	MPO	10	63
C563	0800079	1000u	EL	-	6.3
C564	C150877	100n	C	10	25
C565	0800049R	100u	EL	-	16
C566	C150877	100n	C	10	25
C567	C150877	100n	C	10	25
C568	0248699R	390p	C	5	50
C569	C150715	100n	MPO	10	63
C570	C120145	100p	C	2	100

PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE at the beginning of this service manual. Don't degrade the safety of this receiver through improper servicing.

Ref No.	Part No.	Value	Type	Tol %	Voltage
C571	C648715	68n	MPO	10	63
C571	C150877	100n	C	10	25
			(CTI/ SECAM PANEL)		
C572	0800003R	1u0	EL	-	50
C573	0800003R	1u0	EL	-	50
C574	C128145	180p	C	2	100
C575	C150877	100n	C	10	25
C576	C150877	100n	C	10	25
C577	C130863	1n0	C	10	100
C578	C130863	1n0	C	10	100
C579-82	0253046R	10u	EL	-	16
C583	0800015R	10u	EL	-	16
C584	0800015R	10u	EL	-	16
C585	0248054R	100p	C	10	50
C586	0248054R	100p	C	10	50
C587	C323182	330p	C	2	50
C588	0248692R	220p	C	5	50
C589	0253046R	10u	EL	-	16
C590	0800015R	10u	EL	-	16
C590	0248692R	220p	C	5	50
			(CTI/ SECAM PANEL)		
C591	0253046R	10u	EL	-	16
C596	0253046R	10u	EL	-	16
C598	0248054R	100p	C	10	50
C599	0248054R	100p	C	10	50
C601	0253935	3300u	EL	-	35
C602	0800009R	4u7	EL	-	25
*C602	0800005R	2u2	EL	-	50
C603	C150715	100n	MPO	10	63
C604	0800053R	100u	EL	-	50
C605	0800084	1000u	EL	-	31.5
C606	C252715	220n	MPO	10	63
*C606	C457715	470n	MPO	10	63
C607	C140877	10n	C	10	25
C608	C150715	100n	MPO	10	63
*C608	C252715	220n	MPO	10	63
C610	C150715	100n	MPO	10	63
C653	0800009R	4u7	EL	-	25
C656	D546006	1u5	EL	-	22.5
C657	0800018R	10u	EL	-	50
C685	C150877	100n	C	10	25
C686	C237877	2n7	C	10	25
C701	C472733	4u7	MPO	10-27	63
C702	0299932	330n	PF	10	200
C702A	0299930	220n	PF	10	200
C703	0262441	10n	C	2	1600
C704	0299995F	27n	PF	5	630
C704A	0299995F	27n	PF	5	630
C705	C160736	1u0	PF	5	100
C706	0243512R	820p	C	10	500
C707	0257540F	4u7	EL	-	250
C708	C150711	100n	MPO	10	100
*C709	0244211	1n0	C	10	2000
*C709A	0244202	470p	C	10	2000
C710	0800082	1000u	EL	-	16
C711	0244215	2n2	C	10	2000
*C711A	0244215	2n2	C	10	2000
C712	0299930F	220n	PF	10	200
C712A	0299931F	270n	PF	10	200
C713	C165735	1u5	PF	10	250
*C713	0244505R	2n2	C	10	500
*C714	0244505R	2n2	C	10	500
C715	C130877	1n0	C	10	25
C800	0800023R	22u	EL	-	16
C801	C150877	100n	C	10	25
C802	0248054R	100p	C	5	50
C803	0248054R	100p	C	5	50
C804	0248054R	100p	C	5	50
C805	0243509R	470p	C	10	500
C806	0243509R	470p	C	10	500
C807	0243509R	470p	C	10	500
C810	C130877	1n0	C	10	25
C811	C150710	100n	MPO	10	250
C813	E884110	10n	SPARK	GAP	2000
C821	0257540	4u7	EL	-	250
C822	0257540	4u7	EL	-	250

Ref No.	Part No.	Value	Type	Tol %	Voltage
Δ C901	C150712	100n	MP	20	275 AC
Δ C902	C150712	100n	MP	20	275 AC
Δ C903	C150712	100n	MP	20	275 AC
Δ C904	0249395	4n7	C	-	400
Δ C906	0249395	4n7	C	-	400
C907	C001544	220u	EL	-	400
C908	0244509R	4n7	C	10	500
C909	0244211	1n0	C	10	2000
C910	0890084R	560p	C	10	50
C913	0246344	100p	C	10	2000
Δ C914	C648712	68n	MP	20	275 AC
C915	0245612	4n7	C	10	1000
C916	0800005R	2u2	EL	-	50
C921	0246344	100p	C	10	2000
C923	0800066R	330u	EL	-	16
C924	C001542	470u	EL	-	16
C925	0800018R	10u	EL	-	50
C926	0258116F	1000u	EL	-	50
C927	C001541	470u	EL	-	25
Δ C931	0249499	4n7	C	20	4000
C941	C472733	4u7	MPO	10-27	63
C942	0800018R	10u	EL	-	50
C943	0246344	100p	C	10	2000
C944	0259431	220u	EL	-	200
C945	C150877	100n	C	10	25
C946	C437715	4n7	MPO	10	63
C947	0800049R	100u	EL	-	16
C948	0800082	1000u	EL	-	16
		(SIGNAL AND CONTROL PANEL)			
C948	0800049R	100u	EL	-	16
C949	0800005R	2u2	EL	-	50
C950	C140715	10n	MPO	10	63
C952	0800044R	47u	EL	-	50
Δ C953	0247975	3n3	C	-	50
C954	0246344	100p	C	10	2000
C956	0244105R	2n2	C	10	50
C957	0800005R	2u2	EL	-	50
C959	C242877	22n	C	10	25
C960	0800074	470u	EL	-	16
C1001	0800049R	100u	EL	-	16
C1002	C150877	100n	C	10	25
C1003	0248684R	100p	C	5	50
C1005	C150877	100n	C	10	25
C1006	C212182	22p	C	2	50
C1007	C217182	27p	C	2	50
C1008	C115182	15p	C	2	50
C1009	C115182	15p	C	2	50
C1010	C150877	100n	C	10	25
C1011	0800003R	1u0	EL	-	50
C1012	0800003R	1u0	EL	-	50
C1013	0800023R	22u	EL	-	16
C1014	C150877	100n	C	10	25
C1015	0800015R	10u	EL	-	16
C1062	C437877	4n7	C	10	25
C1063	C150877	100n	C	10	25
C2001	0800023R	22u	EL	-	16
C2002	C242877	22n	C	10	25
C2003	C217145	27p	C	2	100
C2004	C115182	15p	C	2	50
C2005	C120182	100p	C	2	50
C2006	0890079R	270p	C	10	50
C2007	C242877	22n	C	10	25
C2008	0890083R	470p	C	10	50
C2009	C130877	1n0	C	10	25
C2010	C115182	15p	C	2	50
C2011	C130877	1n0	C	10	25
C2012	C150877	100n	C	10	25
C2013	0800018R	10u	EL	-	50
C2014	C150877	100n	C	10	25
C2015	0800018R	10u	EL	-	50
C2016	C212182	22p	C	2	50
C2017	C212182	22p	C	2	50
C2018	0800018R	10u	EL	-	50
C2019	C150877	100n	C	10	25
C2020	0800005R	2u2	EL	-	50
C2021	C648877	68n	C	10	25

PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE at the beginning of this service manual. Don't degrade the safety of this receiver through improper servicing.

Ref. No.	Part No.	Description
OPT01	T548009	CNX82/TLP731LF2
IC100	T900523	TDA2009A
IC201	T900525	TDA8349A
IC202	T900527	DT5C143E
IC300	T900517	TEA6415B
IC301	T900516	TEA6420
IC302	T900537	MC44131
IC401	T900557	TDA4480 - D
IC500	T900519	MC44140
IC501	T900559	MC44000
IC560	T900533	TDA4565
IC561	T900532	TDA8490
IC562	T900501	M52055P
IC601	T900522	TDA8170
*IC601	T900556	TDA8178S
IC602	T900508	LM393
IC800	T900509	TEA5101A
IC921	T900326	12V REGULATOR
IC922	T900515	L4941BV
IC923	T900536	5V REGULATOR
IC1001	T900565	ST6385
IC1002	T900529	TL7705 ACP
IC1003	T900528	X24C04 512X8EEPR
IC1004	2009401R	PST529C
IC1060	T900548	HCF4520B
IC2001	T900505	SAA5191
IC2002	E740007	ST24C02 - P
*IC2002	T900539	ST24C02 AB1
IC2003	T900566	PCB83C654 V2.6
*IC2003	T900555	PCB83C528 P
IC2004	T900460	TMS4464/KM41C64P
IC2005	T900506	SAA9042
IC3000	T900512	TEA5114A
IC4001	T900545	BA15218
IC4002	T900545	BA15218
IC4003	T900483	TDA1543
IC4004	T900546	HCF4053BE
IC4005	T900543	CF70088
IC4010	T900345	5V REGULATOR
IC4011	T732013	TS0820 - 20
Q103	T631275	BC548B
Q201	T631275	BC548B
Q202	T631276	BC558B
Q203	T631275	BC548B
Q300 - 05	T631275	BC548B
Q500	T631247	BC337
Q502	T631286	BC548C
Q560 - 64	T631275	BC548B
Q565	T631276	BC558B
Q566 - 70	T631275	BC548B
Q571	T631276	BC558B
Q572	T631275	BC548B
Q573	T631275	BC548B
Q651	T636046	BU801
Q652	T631275	BC548B
Q701	T636045	BD675A
Q702	T631247	BC337
Q703	T636050	BU808
Q901	T636054	H8N80FI
Q902	T636043	BUX87
Q903	T631275	BC548B
Q904	T631275	BC548B
Q905	T631275	BC548B
Q941	T631276	BC558B
Q942	T636052	BD675
Q943 - 47	T631275	BC548B
Q948	T631276	BC558B
Q949	T631275	BC548B
Q950	T631275	BC548B
Q951	T631276	BC558B
Q952	T631276	BC558B
Q1001	T631276	BC558B
Q1002	T631292	DTC 114 ES
Q1003	T631275	BC548B
Q1004	T631276	BC558B
Q1005	T631275	BC548B

Ref. No.	Part No.	Description
Q2001	T631275	BC548B
Q2004	T631275	BC548B
Q3000 - 03	T631275	BC548B
Q3300	T631275	BC548B
Q3301	T631275	BC548B
Q4001	T633134	BF240
Q4002	T633134	BF240
Q4003	T633141	2N5461
Q4004	2326873R	DTC 144 EST
CD401	T532017	BB405B VARICAP DIODE
CD402	T532017	BB405B VARICAP DIODE
D001	T531057	1N4531
D103	T531053	IN4148
D108	T531053	IN4148
D201	T531057	1N4531
D300	T531053	IN4148
D301	T531053	IN4148
D310	T531057	1N4531
BD388	T531055	BAT85
D402	T531058	BA482
D403	T531058	BA482
D404	T531057	1N4531
D501	T531053	IN4148
D503 - 06	T531053	IN4148
D560	T531053	IN4148
D561	T531053	IN4148
D590	T531053	IN4148
D601	T431040	1N4004
D602	T431113	BYD33J
D652	T531053	IN4148
D653	T531053	IN4148
D654	T531053	IN4148
D681	T531053	IN4148
D683	T531053	IN4148
D684	T531053	IN4148
D685	T531056	BYV10 - 40
D701	T431113	BYD33J
D702	T431113	BYD33J
D703	T431116	BYW96D
D704	T431117	BY228
D706	T431113	BYD33J
D800	T531053	IN4148
D801	T531053	IN4148
D802	T531053	IN4148
D901 - 04	2344111M	BY134GP
D905	T431113	BYD33J
D906	T531053	IN4148
D907	T531053	IN4148
D908	T431113	BYD33J
D920	T431113	BYD33J
D921	T431121	MUR880
D922	T431120	BYV27 - 150
D923	T431120	BYV27 - 150
D924	T431122	BYV28 - 200
D926	T531053	IN4148
D929	T531053	IN4148
D941	T431113	BYD33J
D942 - 45	T531053	IN4148
D948 - 54	T531053	IN4148
D955	T531055	BAT85
D1001	T531053	IN4148
LED1001	T547041	TL5H2101
LED1002	T547046	TL5G 2101
LED1003	T547046	TL5G 2101
D1005	T531053	IN4148
D1006	T531053	IN4148
D1007	T531053	IN4148
D2001	T531053	IN4148
D2002	T531055	BAT85
D3001	T531055	BAT85
D3300	T531053	IN4148
D4002	T531053	IN4148
ZD001	T536215	BZX79C33V
ZD300 - 13	T536186	BZX79C8V2
ZD316	T536181	BZX79C13V
ZD317	T536229	BZX79B9V1

PRODUCT SAFETY NOTE: Components marked with a Δ have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE at the beginning of this service manual. Don't degrade the safety of this receiver through improper servicing.

Ref. No.	Part No.	Description
ZD503	T536213	BZX79C4V3
ZD504	T536213	BZX79C4V3
ZD505	T536213	BZX79C4V3
ZD507	T536225	BZX79B6V2
ZD601	T536172	BZX79C27V
ZD681	T536077	BZX79C6V2
ZD701	T536177	BZX79C12V
ZD800	T536181	BZX79C13V
ZD901	T536246	18V ZENER 1 3W
ZD902	T536246	18V ZENER 1 3W
ZD904	T536217	BZX79B2V7
ZD941	T536172	BZX79C27V
ZD942	T536177	12V ZENER 500mW
ZD943	T536247	BZX55C120
ZD944	T536248	BZX55C160
ZD945	T536207	BZV10
ZD951	T536230	BZX79B10
ZD955	T536177	BZX79C12V
ZD956	T536089	BZX79C6V8
ZD957	T536217	BZX79B2V7
ZD965	T536089	BZX79C6V8
ZD1002	T536201	BZX79B5V
ZD1003	T536201	BZX79B5V
ZD1004	T536201	BZX79B5V
ZD1007	T536186	BZX79C8V2
L001	2122253M	100uH AXIAL COIL
L002	2122253M	100uH AXIAL COIL
L006	2122299M	1uH AXIAL COIL
L201	L410164	VISION DETECTOR COIL
L300	2122253M	100uH AXIAL COIL
L301	2122253M	100uH AXIAL COIL
L302	2122253M	100uH AXIAL COIL
L311	2122253M	100uH AXIAL COIL
L312	2122299M	1uH AXIAL COIL
L350	2122234M	3.9uH AXIAL COIL
L403	2125221R	56uH FILTER COIL
L405	2125221R	56uH FILTER COIL
L406	L410154	5 5MHz SOUND DETECTOR COIL
L407	L410156	11 5MHz SOUND FREQ. CHANGE COIL
L408	L410154	5 5MHz SOUND DETECTOR COIL
L409	2123109M	33uH FILTER COIL
L560	2123781R	100uH FILTER COIL
L561	2123781R	100uH FILTER COIL
L562	2143191	BELL FILTER COIL
L563	2143192	DISCRIMINATOR COIL
L650	2220641	E - W CORRECTION COIL
L651	2220642	FILTER COIL
L701	2161371	LINEARITY COIL
L703	2121211	FILTER COIL
L706	2122094	22uH FIXED COIL
L801	2122253M	100uH AXIAL COIL
L901	2124531	LINE FILTER
L902	L210061	MAINS FILTER CHOKE
L903	2122239M	10uH AXIAL COIL
L1001	2122247M	39uH AXIAL COIL
L2001	2122945M	15uH AXIAL COIL
L2002	L410165	15uH VARIABLE COIL
L2003	2122945M	15uH AXIAL COIL
L4001	2122943M	10uH AXIAL COIL
L4003	2122239M	10uH AXIAL COIL
Δ T701	2436792	FLYBACK TRANSFORMER
Δ *T701	2436796	FLYBACK TRANSFORMER
Δ T901	L380086	SWITCH MODE TRANSFORMER
Δ *T901	L380091	SWITCH MODE TRANSFORMER
Δ T902	L380090	START UP TRANSFORMER

CRYSTALS, FILTERS, DELAY LINES etc		
X320	E518030	CERAMIC RESONATOR
X520	E516038	17 734MHz CRYSTAL
X1001	E516034	8MHz CRYSTAL
X2001	2940251	13 875MHz CRYSTAL
X2002	E516030	12MHz CRYSTAL
X4001	E516046	16.384MHz CRYSTAL
MF401	2142782	5.5MHz CERAMIC FILTER
MF402	2142783	5 74MHz CERAMIC FILTER
CP201	E518042	SAW FILTER
CP401	E518041	SAW FILTER
CP403	E518040	SAW FILTER
CP501	2143891	4.43MHz TRAP
DL300	2165903	300nS DELAY LINE
TH901	E441034	THERMISTOR
IR1001	T549010	INFRA RED AMPLIFIER ASSEMBLY
SG801	2340037	SPARK GAP