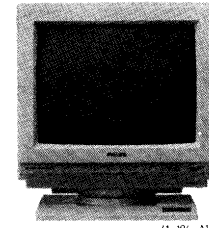


Service  
Service  
Service



41 104 A12

# Service Manual

**(GB)**

- Mains voltage
- Power consumption at 230 Vac
- EHT
- Loudspeaker impedance
- LF output power
- Input spec's
- CVBS
- RGB-Linear (scart)
  - Comp. Sync.
- RGB-TTL
  - Low
  - High
  - H + V-Sync.
  - Comp. Sync.
- Audio (L), (R)
- Character display
- Bandwidth
- Picture tube

**(NL)**

- Bedrijfsspanning
- Verbruik bij 230 V ~
- Hoogspanning
- Luidspreker impedantie
- LF uitgangsvermogen
- Ingangsspecificaties
- CVBS
- RGB-lineair (scart)
  - Comp. sync.
- RGB-TTL
  - Laag
  - Hoog
  - H + V-sync.
  - Comp. sync.
- Audio (L), (R)
- Karakter uitlezing
- Bandbreedte
- Beeldbuis

**(F)**

- Tension de travail
  - Consommation à 230 V ~
  - Haute tension
  - Impédance H.P.
  - Puissance de sortie BF
  - Données d'entrée
  - CVBS
  - (Scart) RVB linéaire
    - Sync. comp.
  - RVB-TTL
    - Bas
    - Haut
    - Sync. H+V
    - Sync. compos.
  - Audio (L), (R)
  - Affichage caractère
  - Largeur de bande
  - Tube image
- 230 V ~ ± 15%-50 Hz  
75 W  
25 kV  
16 Ω  
2 x 1 W  
1 Vtt ± 0.5 Vtt  
0.7 V-75 V  
0.3 V-5 V  
TTL-Level  
0 V-0.8 V  
2.4 V-5 V  
177 mV-10 kΩ  
80 x 25  
≥12 MHz  
M34EAQ10X

**(D)**

- Betriebsspannung
- Verbrauch bei 230 V ~
- Hochspannung
- Lautsprecherimpedanz
- NF-Ausgangsleistung
- Eingangsspezifikationen
- FBAS
- RGB-lineair (Scart)
  - Comp. sync.
- RGB-TTL
  - Tief
  - Hoch
  - Hor.-+Vert.-Synchr.
  - Comp. sync.
- Audio (L), (R)
- Zeichenauslesung
- Bandbreite
- Bildröhre

**(I)**

- Tensione di funz.
  - Consumo a 230 V ~
  - Alta tensione
  - Impedenza altoparl.
  - Potenza uscita BF
  - Dati ingresso
  - CVBS
  - Scart RVB-lineare
    - Sinc. compos.
  - RVB-TTL
    - Basso
    - Alto
    - Sinc. O+V
    - Sinc. compos.
  - Audio (L), (R)
  - Display carattere
  - Larghezza di banda
  - Cinescopio
- 230 V ~ ± 15%-50 Hz  
75 W  
25 kV  
16 Ω  
2 x 1 W  
1 Vtt ± 0.5 Vtt  
0.7 V-75 V  
0.3 V-5 V  
TTL-Level  
0 V-0.8 V  
2.4 V-5 V  
177 mV-10 kΩ  
80 x 25  
≥12 MHz  
M34EAQ10X

DocumentationTechnique Service Dokumentation Documentazione di Servizio Huolto-Ohje Manual de Servicio Manual de Servicio

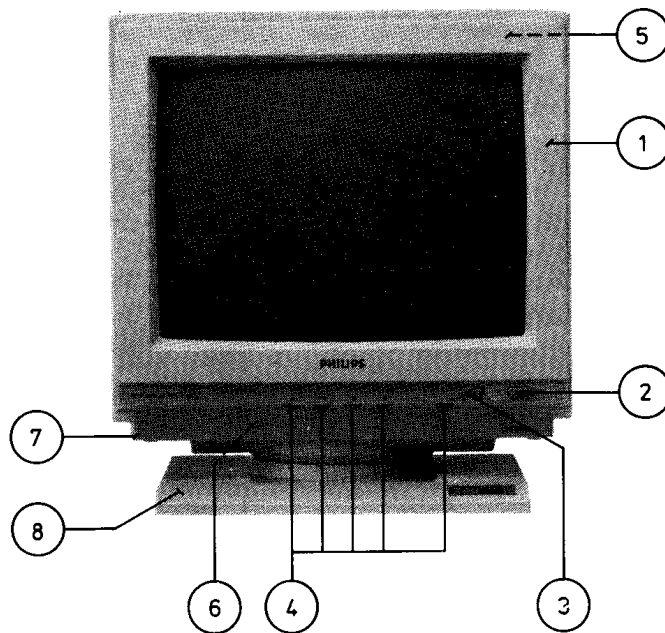


\*Pour votre sécurité, ces documents  
doivent être utilisés par des spécia-  
listes agréés, seuls habilités à réparer  
votre appareil en panne.

Subject to modification  
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**PHILIPS** Published by Service  
Consumer Electronics



41 103 A12

1	4822 430 70433	Cabinet - /00G/05G/16G
1	4822 430 70443	Cabinet - /00S/05S
2	4822 410 25285	Power push button - /00G/05G/16G
2	4822 410 25442	Power push button - /00S/05S
3	4822 413 31421	Push button green switch (SK4) and input switch (SK2) -/00G/05G/16G
3	4822 410 25458	Push button green switch (SK4) and input switch (SK2) -00S/05S
4	4822 413 31407	Knobs for vol/col/cont/brith/hor. centr -/00G/05G/16G
4	4822 413 31425	Knobs for vol/col/cont/brith/hor. centr -/00S/05S
5	4822 432 92046	Rear cover -/00G/05G
5	4822 438 10218	Rear cover -/00S/05S
5	4822 438 10219	Rear cover -/16G
6	4822 462 10269	Foot -/00G/05G/16G
6	4822 462 10276	Foot -/00S/05S
7	4822 462 40831	Pad (4x)
8	AV7202/00G	Rotary table with clock
8	AV7202/00R	Rotary table with clock
	4822 535 91695	Adjust rod (3x)
	4822 410 24178	Knobs for VCR switch (SK5) and RGB status switch (SK3)

## GB CAUTION

- 1) Safety requirements stipulate that, during repair, the set should be restored in its original state and that parts, identical to the specified ones, should be applied.
- 2) For safety reasons, the parts provided with the sign **▲** should be replaced by identical parts (for code numbers see electrical parts lists).
- 3) To avoid damages to ICs and transistors, flash-over of the high-tension should be avoided.
- 4) Be careful when performing measurements in the high-tension section and on the picture tube.
- 5) Never change parts when the set is still switched on.
- 6) Safety goggles must be worn during replacement of the picture tube.

## REMARKS

- 1) The direct voltages indicated in the circuit diagram are average voltages. They have been measured under the following conditions:  
Volume, contrast, colour saturation and brightness to minimum.
- 2) The oscillograms have been measured under the following conditions:  
Signal from a pattern generator (PM5515) on colour bar pattern (bar) with 1 V video amplitude and 50% chroma amplitude.  
Adjust brightness, contrast and colour saturation until the oscillogram shown in Fig. ① appears on the collector of TS713.  
Volume to minimum.

## MECHANICAL INSTRUCTIONS

### Removing the chassis

Remove the rear cover.  
The chassis can now be slid out.

### Removing the supply panel

Undo the screw on the side of the panel and unlock the supply PCB from the holder.  
After repair, the connecting cables of the chassis and the supply panel must be fixed again in the original way.

## ADJUSTMENTS AFTER REPAIR

### 1) +125 V supply voltage

Connect the voltmeter (DC position) between C494 and ground.  
Adjust R114 until the voltmeter indicates 125 V.

### 2) Synchronisation

Apply a cross-hatch pattern and short C434.

#### Horizontal synchronisation

Now adjust R437 until the picture is straight.  
Then remove the short-circuit.

#### Vertical synchronisation

Adjust R331 until the picture is straight.  
Then remove the short-circuit.

### 3) Adjusting the picture geometry

Apply a cross-hatch pattern and put brightness and contrast in the mechanical mid-position.

#### Horizontal amplitude

Adjust R485 until 14 blocks correspond with a width of 26 cm.  
The horizontal centring can be adjusted with R450.

#### Vertical amplitude

Adjust R353 until 10 blocks correspond with a height of 18.5 cm.

The vertical centring can be adjusted with R364.

### 4) VG2 adjustment and cut-off points in picture tube

- Set brightness to  $\frac{1}{4}$  of its range and adjust contrast for minimum value.
- Set potentiometers R605-R606-R704-R705 and R706 to mechanical mid-position.
- Adjust R727 for minimum value.
- Set the signal generator to position "pur" and enter the colours red - green - blue, respectively.
- Using potentiometers R704-R705 and R706 with the corresponding colour pattern, adjust the voltage on the collectors of TS711 - TS712 and TS713 for 110 V.
- Apply a white frame and adjust R727 until **one** colour becomes visible.
- Set the pattern generator to purity with the colour that was first visible.
- Readjust R727 to just visible light.
- Adjust the 2 remaining colours with their corresponding purity colour for the same light output using potentiometers R704, R705 or R706.
- Now return the signal generator to white frame and adjust potentiometers R704, R705 and R706 until an optimum background colour is formed.
- Using potentiometers R605 and R606 (with white frame), adjust the background colour such that at minimum brightness and maximum brightness the background colour is the same.

### 5) Chrominance adjustments

#### The 4.43 MHz blanking circuit in the luminance circuit

Use a colour bar pattern and adjust the monitor normally. Connect an oscilloscope to pin 15 of IC502 and adjust S533 for minimum amplitude of the chrominance signal that is present on the various brightness steps of the luminance signal.

#### The subcarrier oscillator

Use a colour bar pattern and adjust the monitor normally. Connect point 11-IC501 to ground via a resistor of 470  $\Omega$ . Adjust C567 until the colour on the screen has practically come to a halt.  
Remove the short-circuit.

#### The PAL delay line

Apply a generator signal.  
Set the generator to position "DEM".  
Adjust brightness and contrast for normal values and the saturation control to  $\frac{3}{4}$  of its range.  
Adjust R569 until the venetian blinds effect in the 3rd bar disappears.  
Then adjust S560 until the venetian blinds effect in the 1st and 4th bar disappears.  
Re-adjust R569.  
Apply a colour bar pattern.  
Adjust S569 until the venetian blinds effect in the 3rd and 5th bar disappears.

### 6) Focus adjustment

Adjust R732 for optimum focus.



## ADJUSTING THE PICTURE

### Remark:

The colour purity and convergence adjustments described hereafter need only be carried out if a completely new adjustment is called for or if a new picture tube has been fitted. Otherwise, for instance after replacing the deflection unit, it will not be necessary to remove the rubber wedges (G in Fig. 3). Corrections by means of the multi-pole unit will then suffice.

### I. Colour purity, see Fig. 3

1. Loosen fixing screw "F" of the deflection unit a few turns.
2. Move the deflection unit and remove the three rubber wedges "G".
3. Slide the deflection unit forward as far as possible against the glass of the picture tube cone and turn on fixing screw "F" in such a manner that the deflection unit can be moved with some friction.
4. Place the multi-pole unit in the position drawn, turn on screw "A" and turn securing ring "B" anti-clockwise.
5. Let the apparatus face East or West and switch-on the set.  
Supply a cross-hatch pattern and set brightness control to maximum. Allow for a warming-up time of 10 minutes.
6. Adjust the static convergence, using tags "C" and "D" (if necessary, see point II).
7. Turn R364 for the vertical centring to its mid-position. Switch-off the green and the blue gun by loosening the resistors R723 and R724.
8. By turning the colour purity rings with tags "E", the vertical red bar is adjusted nearest to the centre of the screen, whilst also the central horizontal line should be as straight as possible.
9. Supply a white pattern signal and check that the red bar is in the centre of the screen indeed. If not, switch-on the cross-hatch pattern again and move the red bar in the right direction, taking care that the picture does not move too much in vertical direction.
10. Supply the white pattern signal and move the deflection unit until the whole picture surface is uniformly red.
11. Switch-on the green and the blue gun. No colour patches may occur in the white picture now obtained. In the affirmative, a minor correction can be made by slightly turning the colour purity rings "E" and/or slightly moving the deflection unit.
12. Turn on screw "F" tightly.
13. Adjust the vertical centring with R364.
14. Proceed to the static and next the dynamic convergence adjustment.

### II. Static convergence, see Fig. 3

1. Supply a cross-hatch pattern and allow for a warming-up time of 10 minutes.

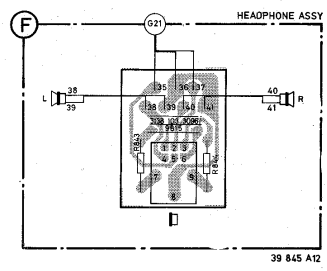
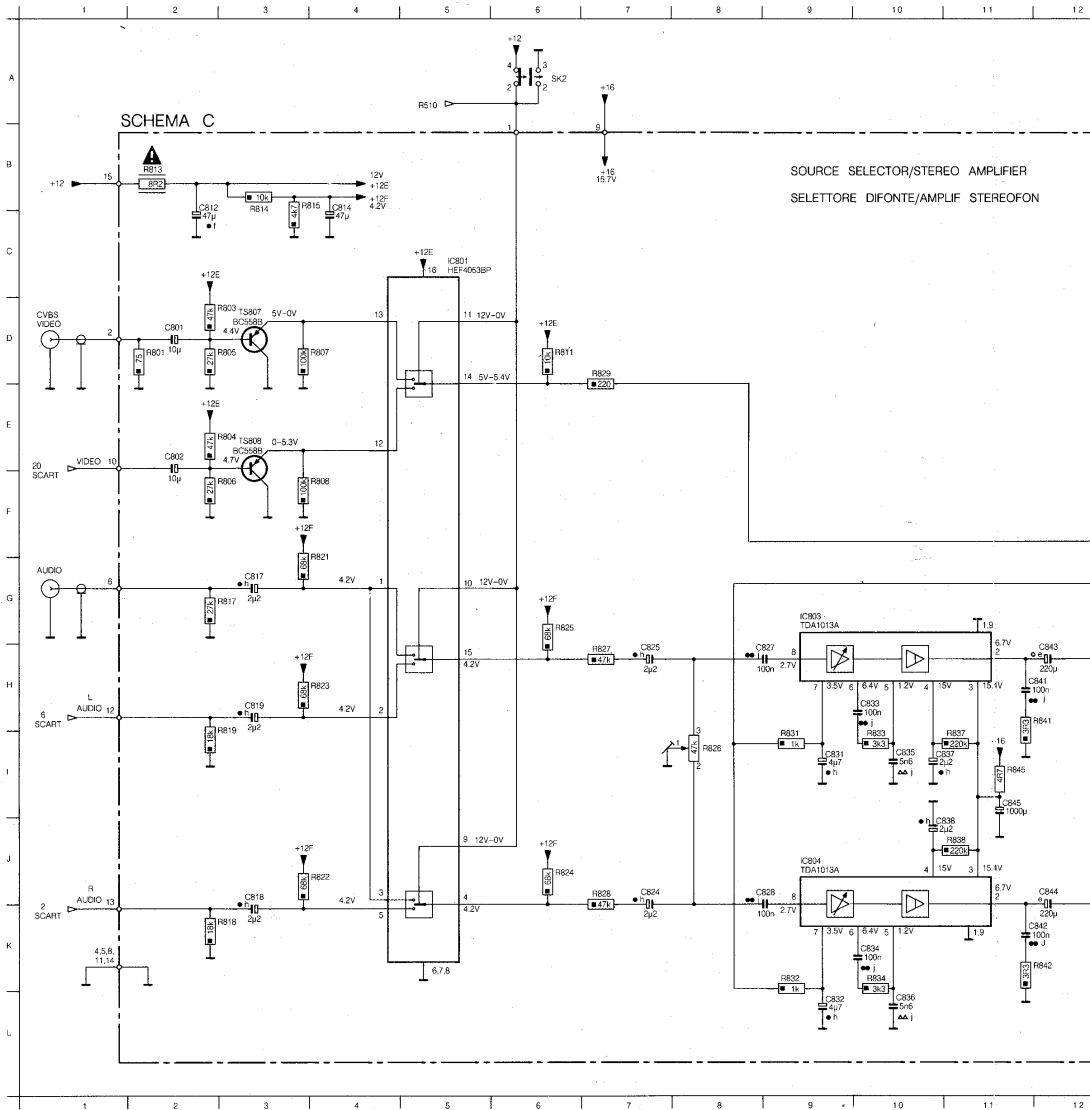
2. Switch-off the green gun by loosening resistor R723 and turn locking ring "B" anti-clockwise.
3. By turning the four-pole rings with tags "C", the red and blue cross-hatch patterns in the centre of the screen are placed on top of each other.
4. Switch-on the green gun with R723 and switch-off the blue gun by loosening resistor R724.
5. By turning the six-pole rings with tags "D" the red and green cross-hatch patterns in the centre of the screen are placed on top of each other.
6. Switch-on the blue gun again and tighten ring "B" again.

### III. Dynamic convergence

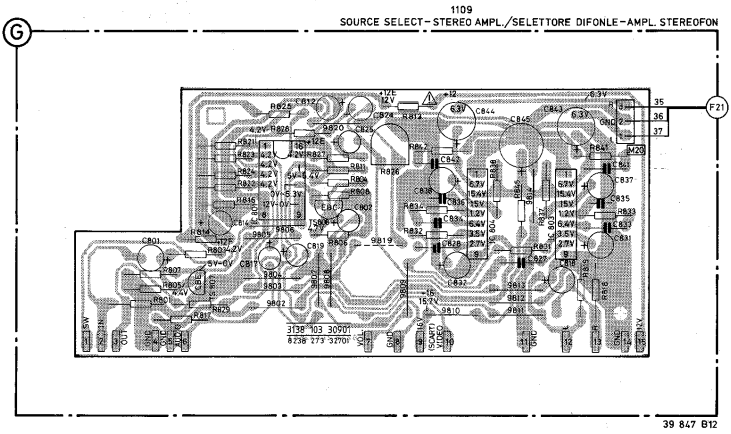
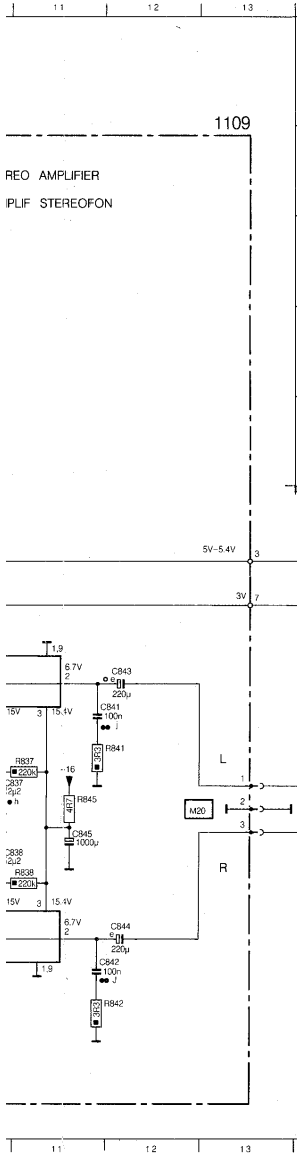
#### Remark:

The dynamic convergence is achieved by vertical and horizontal tilting of the deflection unit. To secure the right position of the deflection unit, three rubber wedges are fitted between the glass of the picture tube cone and the deflection unit, as shown in Figs. 4d or 5d. Two wedge thicknesses are available, one 7 mm thick, code 4822 462 40356, the other 11 mm thick, code 4822 462 40357.

1. First check the colour purity and the static convergence.
2. Supply a cross-hatch pattern and switch-off the green gun by loosening resistor R723.
3. Eliminate the crossing of the central horizontal blue and red line and the crossing of the central vertical blue and red line, by vertical tilting of the deflection unit. If the position of the deflection unit is correct, then place rubber wedge ①, paper strip not removed, at the top (Fig. 4a) or at the bottom (Fig. 5a).  
Fig. 4a is applicable if the deflection unit is tilted upwards and Fig. 5a if the unit is tilted downwards.
4. By horizontal tilting of the deflection unit, now both the horizontal blue and red lines in the upper and lower halves of the picture and the vertical blue and red lines on the left and right hand side of the picture are placed on top of the other.  
If the position of the deflection unit is correct, then place the wedges ② and ③ with paper strips removed, as shown in Fig. 4b or 5b. Firmly press the adhesive sides of these wedges against the glass of the picture tube.
5. Now place wedge ④ as shown in Fig. 4c or 5c and press on the adhesive side firmly.
6. Remove wedge ①, so that the situation according to Fig. 4d or 5d occurs.
7. Switch-on the green gun.



CS 4 648



- C801 D 2 R834 K10
- C802 E 2 R837 I11
- C812 B 2 R838 J11
- C814 B 4 R841 H12
- C817 G 3 R842 K12
- C818 J 3 R843 I15
- C819 H 3 R844 J15
- C824 J 7 R845 I11
- C825 H 7 S112 I16
- C827 H 9 S113 J16
- C828 J 9 SK2 A 6
- C831 I 9 T807 D 3
- C832 L 9 T808 E 3
- C833 H10
- C834 K10
- C835 I10
- C836 L10
- C837 I11
- C838 J11
- C841 H12
- C842 K12
- C843 H12
- C844 J12
- C845 I11
- C801 C 5
- C803 G 9
- C804 J 9
- R801 D 2
- R803 D 3
- R804 E 3
- R805 D 3
- R806 F 3
- R807 D 4
- R808 F 4
- R811 D 6
- R813 B 2
- R814 B 3
- R815 B 4
- R817 G 3
- R818 K 3
- R819 H 3
- R821 F 4
- R822 J 4
- R823 H 4
- R824 J 6
- R825 G 6
- R826 I 6
- R827 H 7
- R828 J 7
- R829 D 7
- R831 I 9
- R832 K 9
- R833 I10

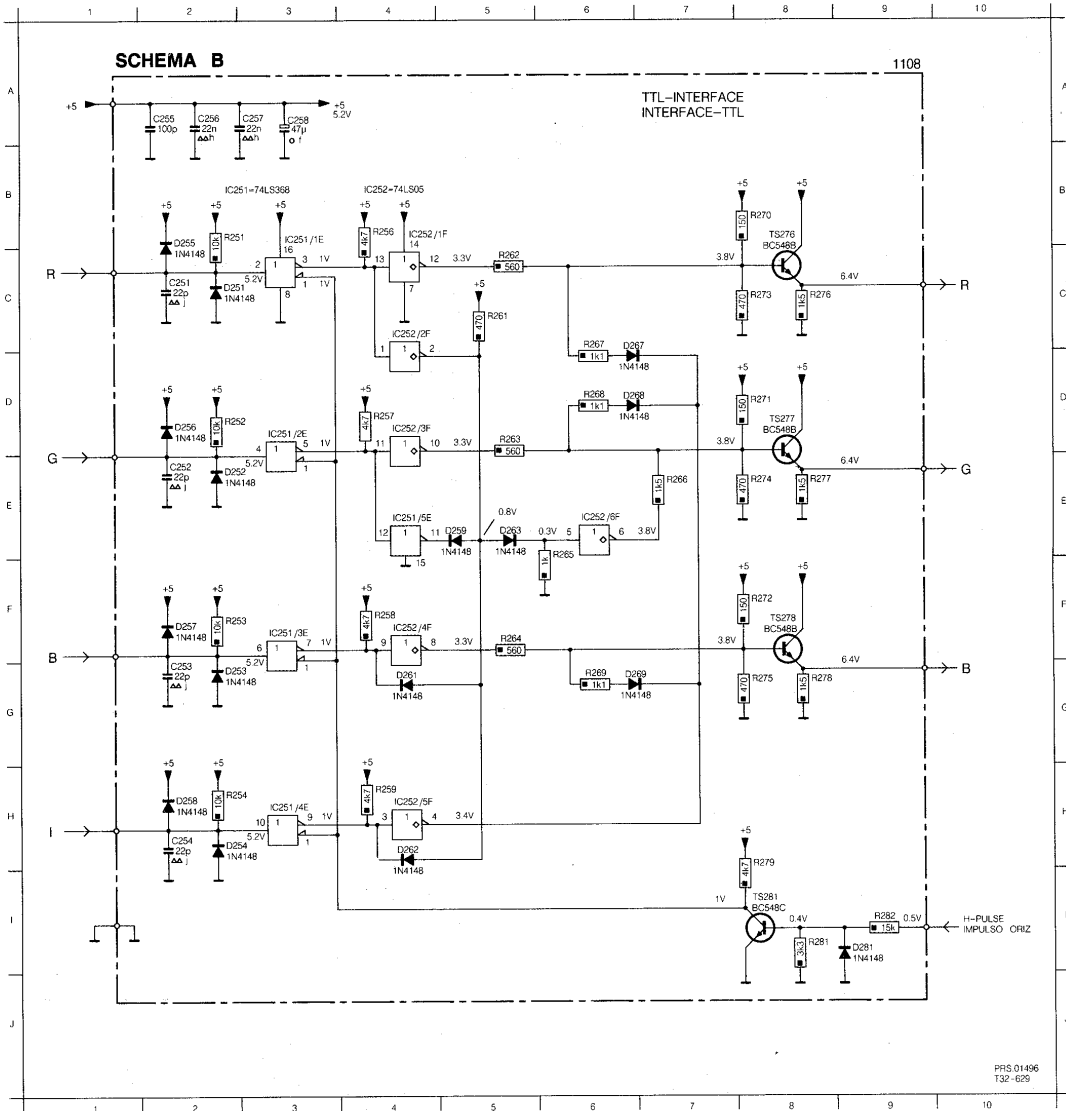
**Source selector/stereo amplifier 4822 212 22609**

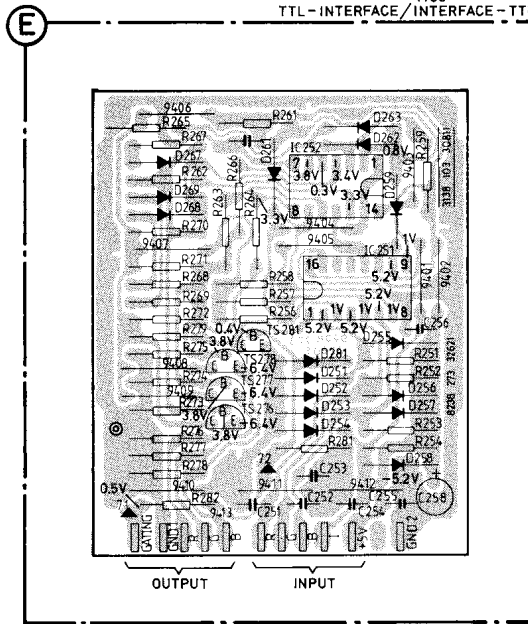
C801	10 $\mu$ F - 50 V	4822 124 40435
C802	10 $\mu$ F - 50 V	4822 124 40435
C814	47 $\mu$ F - 16 V	4822 124 22056
C845	1000 $\mu$ F - 25 V	4822 124 22016
R813	8,2 $\Omega$ - safety	4822 111 30506
R826	47 k $\Omega$ - potm	4822 100 10079
R845	4,7 $\Omega$ - 1 W	4822 116 53662
HEF4053BP		5322 209 10576
TDA1013A		4822 209 83115
BC558B		4822 130 44197

PR3 01504  
107-6389  
CV8833

Only for versions with TTL-RGBI-interface

C251	C 2	C257	A 3	D255	B 2	D262	H 4	I C251	B 3	I C252	D 4	R252	D 3	R259	H 4	R266	E 7	R272	F 8	R278	G 8	TS278	F 8
C252	E 2	C258	A 3	D256	D 2	D263	E 5	I C251	D 3	I C252	C 4	R253	F 3	R261	C 5	R267	C 6	R273	C 8	R279	H 8	TS281	I 8
C253	G 2	D251	C 2	D257	F 2	D267	C 6	I C251	F 3	I C252	E 6	R254	H 3	R262	C 5	R268	D 6	R274	E 9	R281	I 8		
C254	H 2	D252	C 2	D258	H 2	D268	D 6	I C251	E 4	I C252	F 4	R256	B 4	R263	D 5	R269	C 6	R275	G 8	R282	I 9		
C255	A 2	D253	G 2	D259	E 5	D269	G 6	I C251	H 3	I C252	H 4	R257	D 4	R264	F 5	R270	G 8	R276	C 8	TS276	B 8		
C256	A 2	D254	H 2	D261	G 4	D261	I 9	I C252	B 4	R251	B 3	R258	F 4	R265	E 6	R271	D 6	R277	E 9	TS277	D 8		





39 846 B12

**TTL-RGBI-interface**

**4822 212 22593**

C255	100pF - 50V	4822 122 32833
IN4148		4822 130 30621
BC548B		4822 130 40937
BC548C		4822 130 44196
74LS368AN		4822 209 81433
74LS05		5322 209 84994



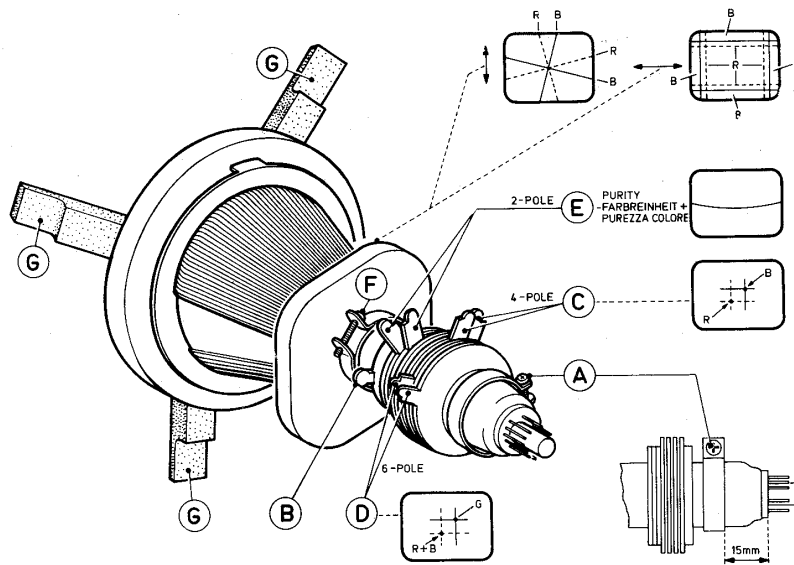
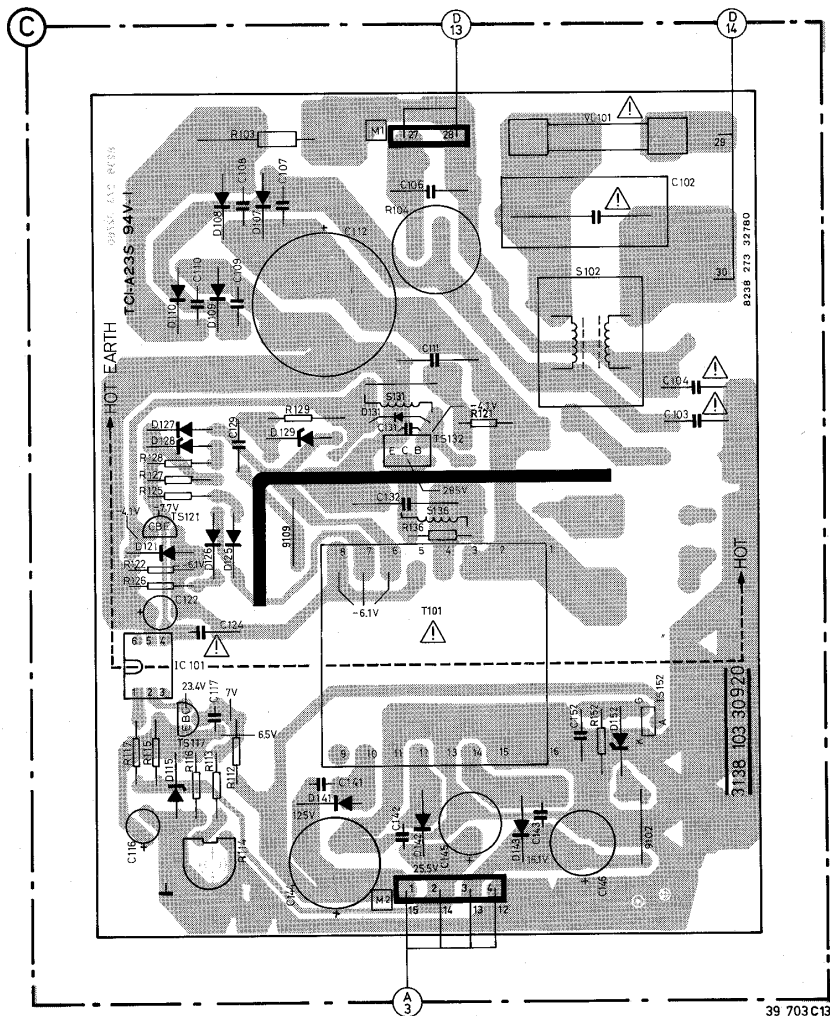
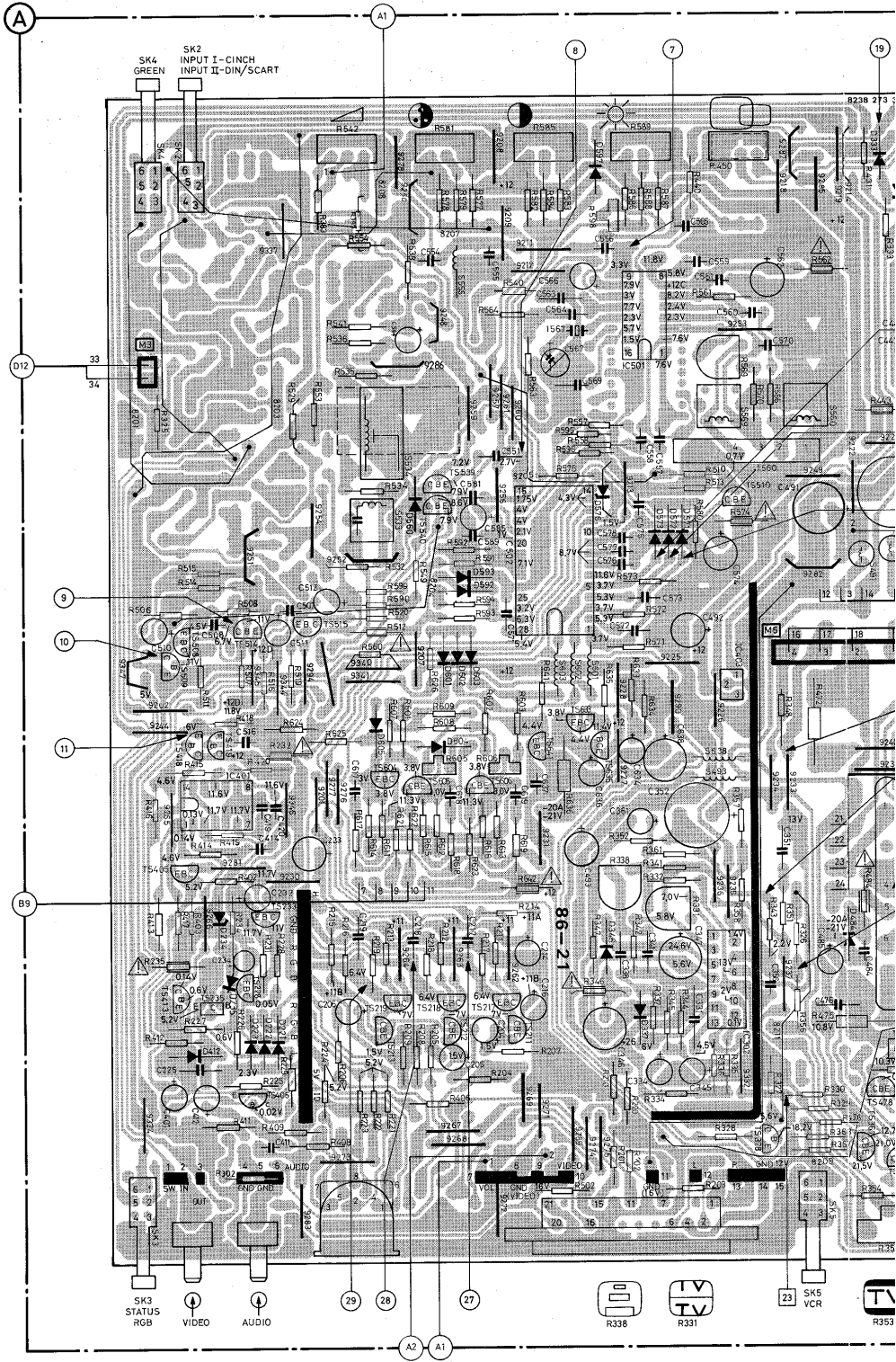
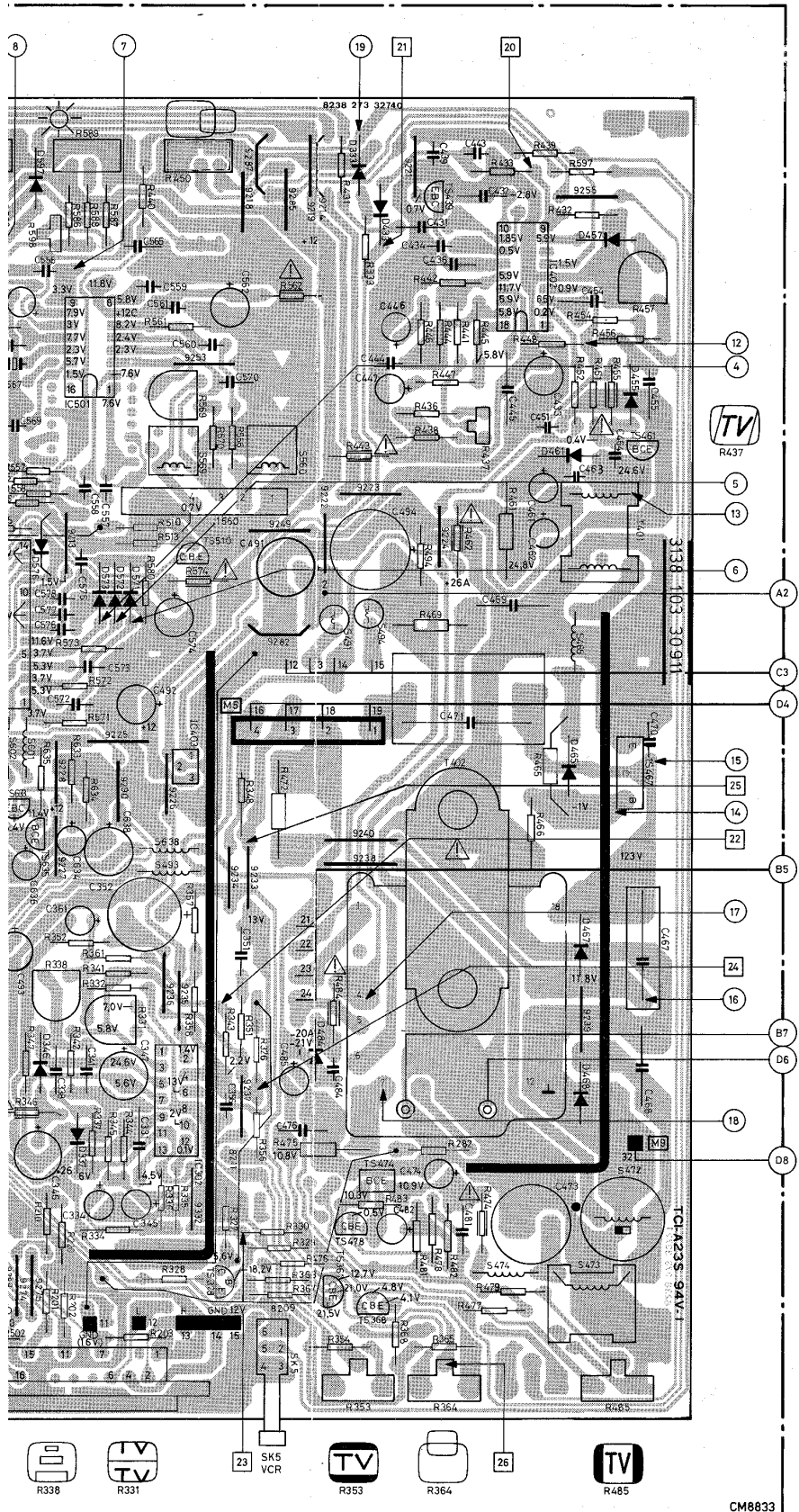
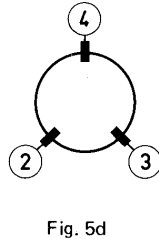
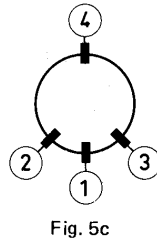
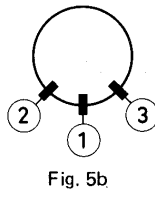
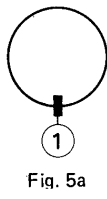
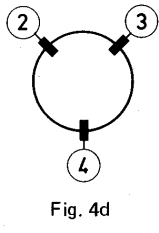
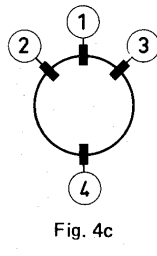
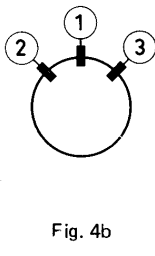
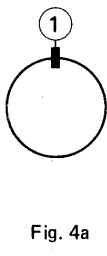


Fig. 3

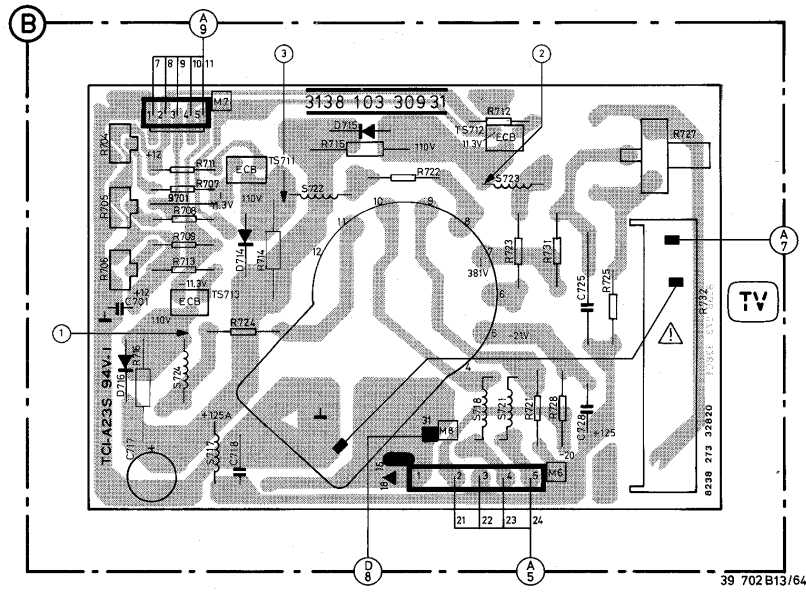


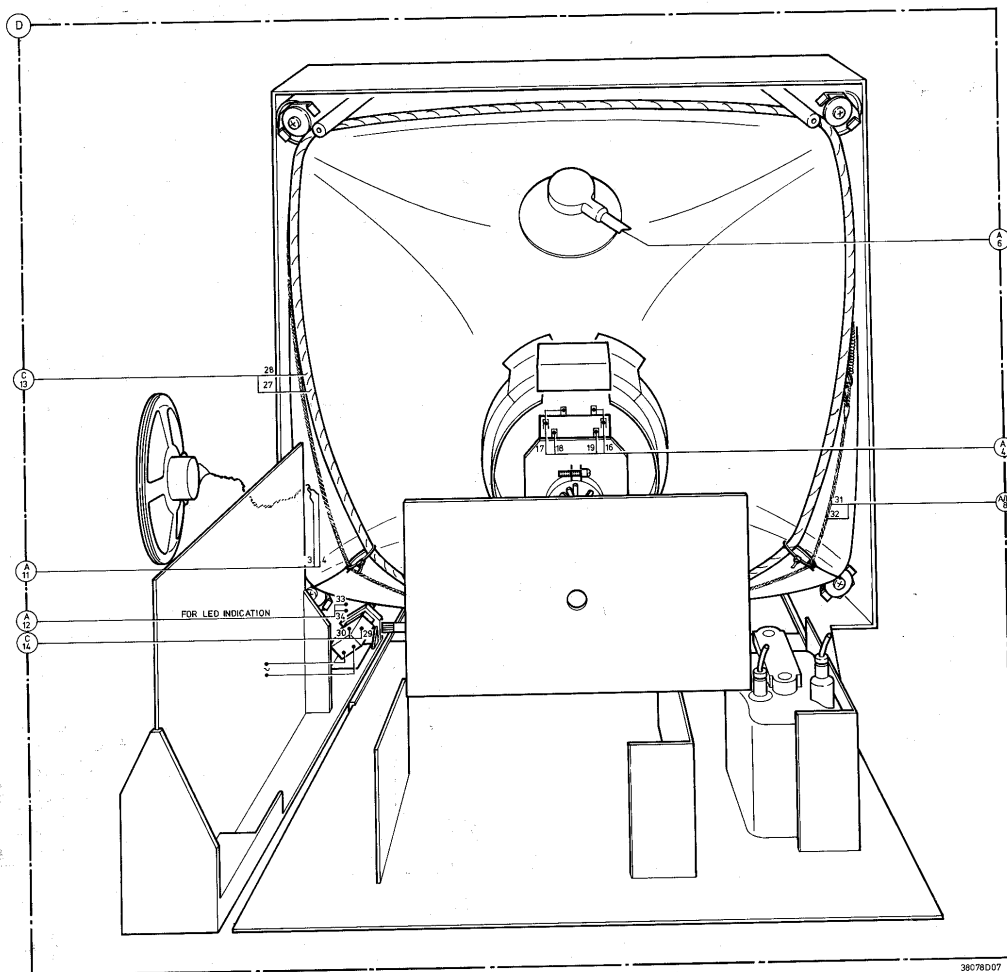






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**GB**

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

**NL**

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

**F**

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

**D**


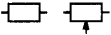


Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden, für Reparaturen sind Original-Ersatzteile zu verwenden.

**I**

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati pezzi di ricambio identici a quelli specificati.



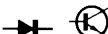
## Power supply

4822 212 22597

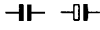
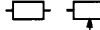
		
C102	1 $\mu$ F- 250 V	5322 121 44212
C103	2,2 nF-400 V	4822 122 32576
C104	2,2 nF-400 V	4822 122 32576
C105	1,5 nF-400 V	4822 122 32124
C107	2,2 nF- 1 kV	4822 122 40348
C108	2,2 nF- 1 kV	4822 122 40348
C109	2,2 nF- 1 kV	4822 122 40348
C110	2,2 nF- 1 kV	4822 122 40348
C111	100 nF-400 V	4822 121 41862
C112	100 $\mu$ F-400 V	4822 124 21722
C124	15 nF-400 V	4822 121 42021
C132	2,2 nF- 1 kV	4822 121 50966
C141	220 pF-500 V	4822 122 32575
C142	220 pF-500 V	4822 122 32575
C143	220 pF-500 V	4822 122 32575
C144	47 $\mu$ F-200 V	4822 124 41281
		
R103	4,7 $\Omega$ - 7 W	4822 113 80358
R104	Dual PTC	4822 116 40079
R114	1 k $\Omega$ - potm	4822 100 10037
R121	1 M $\Omega$ - VR37	4822 110 42192
		
T101	Power transformer	4822 142 60381
S102		4822 157 52228
S131		4822 157 52233
S136		4822 242 71344
1131	500-1000 $\mu$ H	4822 156 21359
		
IN5061		4822 130 31933
BZX79-C6V2		4822 130 34167
IN4148		4822 130 30621
BZX79-C9V1		4822 130 30862
BZX79-C2V4		4822 130 31253
RGP15K		4822 130 32833
RGP10D		4822 130 31607
RGP15D		5322 130 31971
BZX79-C18		4822 130 31024
CNX62		4822 130 90121
BC547C		4822 130 44503
BC337-40		4822 130 41344
BUT11A		5322 130 42087
BT151-500		5322 130 24081
<b>Various</b>		
Bracket		4822 404 30816
Power switch		4822 276 11504
Spring for fuse (2x)		4822 492 60063
Fuse		4822 253 30025


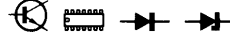
## CRT assy

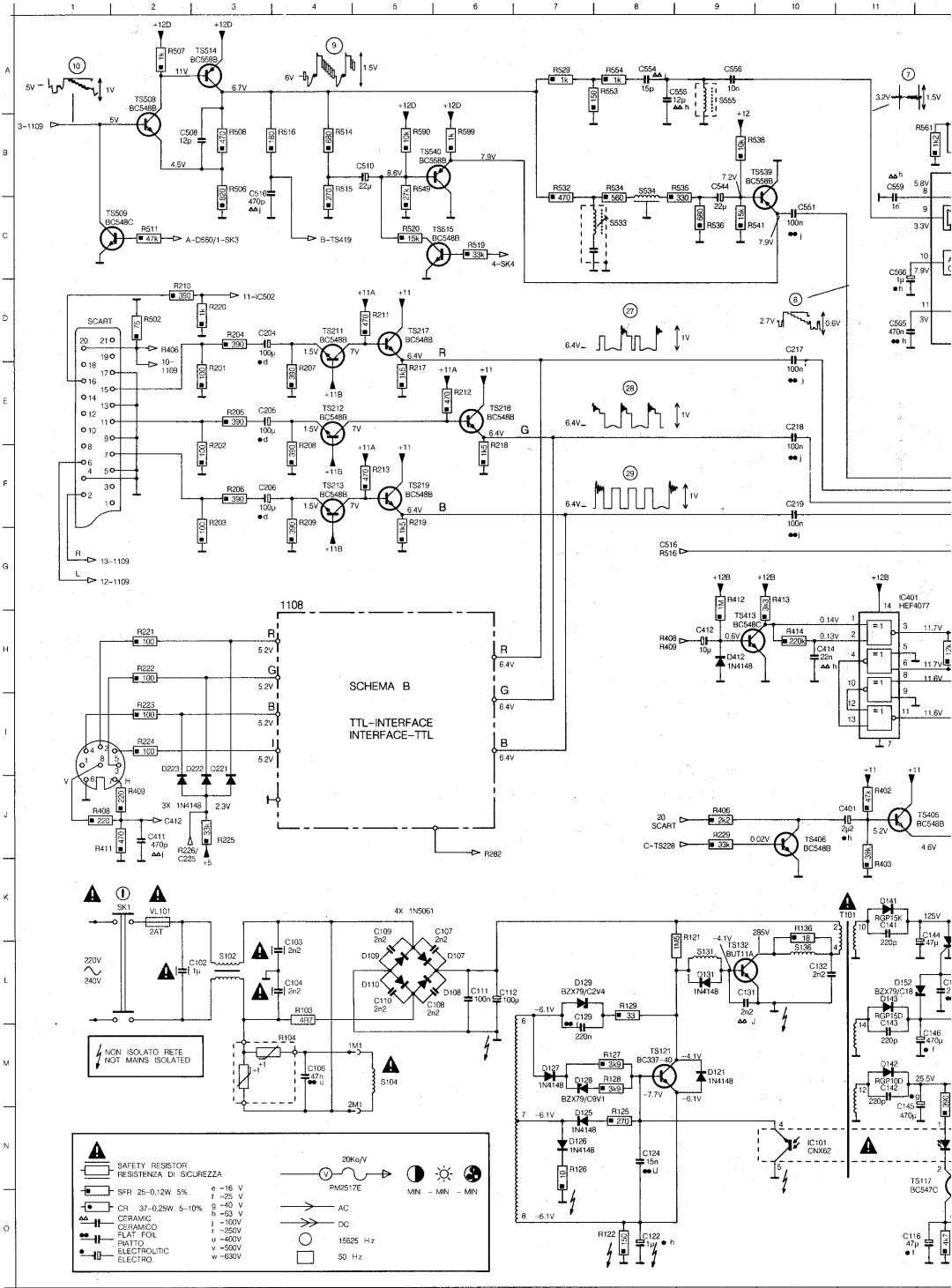
4822 212 22596

		
C717	4,7 $\mu$ F - 200 V	4822 124 22023
C718	10 nF - 500 V	4822 121 42191
R704	4,7 k $\Omega$ - potm	4822 100 10236
R705	4,7 k $\Omega$ - potm	4822 100 10236
R706	4,7 k $\Omega$ - potm	4822 100 10236
R714	3,9 k $\Omega$ - 3 W	4822 116 60241
R715	3,9 k $\Omega$ - 3 W	4822 116 60241
R716	3,9 k $\Omega$ - 3 W	4822 116 60241
R721	1 M $\Omega$ - 0,5 W	4822 116 52493
R722	470 $\Omega$ - 0,5 W	4822 111 90802
R723	470 $\Omega$ - 0,5 W	4822 111 90802
R724	470 $\Omega$ - 0,5 W	4822 111 90802
R725	330 k $\Omega$ - 0,5 W	4822 111 90801
R727	5 M $\Omega$ - potm	4822 100 10869
R728	1,5 k $\Omega$ - 0,5 W	4822 116 52399
R731	1,5 k $\Omega$ - 0,5 W	4822 116 52399
R732	59 M $\Omega$ - potm	4822 101 20821
		
S717	8,2 $\mu$ H	4822 157 52261
S718	10 $\mu$ H	4822 157 52233
S721	10 $\mu$ H	4822 157 52233
S722	4,7 $\mu$ H	4822 157 52232
S723	4,7 $\mu$ H	4822 157 52232
S724	4,7 $\mu$ H	4822 157 52232
		
BAV21		4822 130 30842
BF869		4822 130 41773
<b>Various</b>		
CRT-socket		4822 255 70217
5 pole micro plug		4822 267 40594
5 pole plug		4822 265 30376
Focus cap		4822 462 40794
<b>Led assy</b>		
2 pole micro connector		4822 267 30636
CQW11B (green)		4822 130 42242
<b>Headphone assy</b>		
Headphone jack		4822 267 30758
3 pole connector		4822 267 40679

**Chassis**

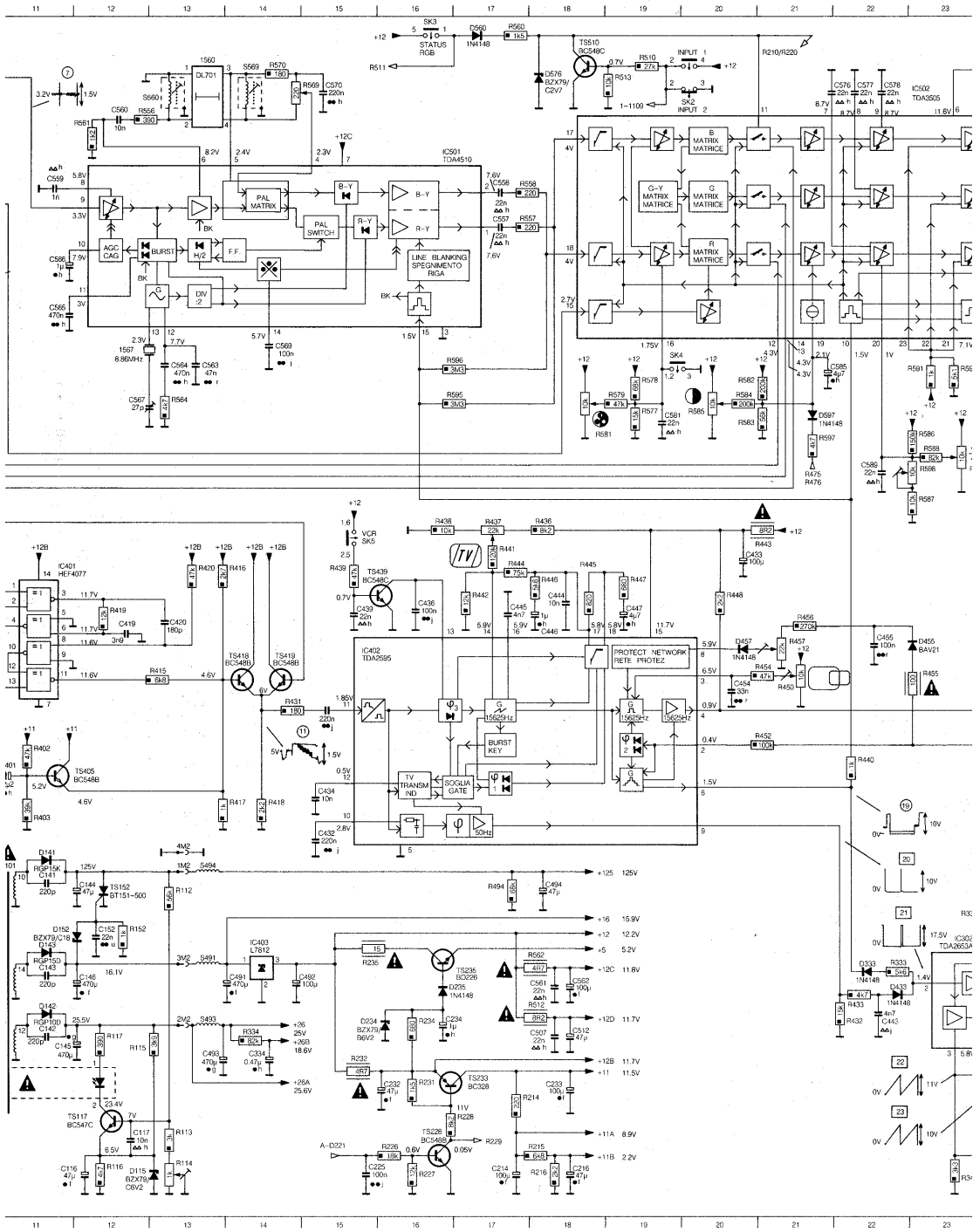
		
C345	10 µF- 50 V	4822 124 40435
C347	100 µF- 35 V	5322 124 21362
C412	10 µF- 25 V	4822 124 22058
C419	3,9 nF- 50 V	4822 122 32012
C420	180 pF- 50 V	4822 122 40385
C433	100 µF- 35 V	5322 124 21362
C434	10 nF- 50 V	4822 122 30043
C444	10 nF- 50 V	4822 122 30043
C445	4,7 nF- 63 V	4822 121 50539
C446	1 µF- 50 V	4822 124 22051
C467	8,2 nF-1,5 kV	4822 121 40249
C468	22 nF-400 V	4822 122 20237
C470	470 pF- 2 kV	4822 122 40427
C471	470 nF-250 V	4822 121 42464
C473	4,7 µF- 50 V	4822 124 90034
C482	1 µF- 50 V	4822 124 22051
C484	470 pF-400 V	4822 122 32577
C485	22 µF- 35 V	4822 124 40434
C492	100 µF- 35 V	5322 124 21362
C494	47 µF-200 V	4822 124 41281
C508	12 pF-50 V	4822 122 40383
C510	22 µF-35 V	4822 124 40434
C512	47 µF-16 V	4822 124 22056
C544	22 µF-35 V	4822 124 40434
C560	10 nF-50 V	4822 122 30043
C567	27 pF-trimmer	4822 125 50088
C634	22 µF- 35 V	4822 124 40434
C636	22 µF- 35 V	4822 124 40434
C638	100 µF- 35 V	4822 124 22057
		
R232	4,7 Ω - safety	4822 111 30499
R235	15 Ω - safety	4822 111 30513
R331	47 kΩ - potm-vert. hold	4822 100 10079
R338	100 kΩ - potm-vert. lin	4822 100 10052
R346	4,7 Ω - NFR30	4822 116 52448
R353	220 Ω - potm-vert size	4822 100 10915
R364	10 kΩ - potm-vert shift	4822 101 10547
R437	22 kΩ - potm-hor. hold	5322 101 44041
R443	8,2 Ω - safety	4822 111 30506
R450	10 kΩ - potm-hor. shift	4822 100 20546
R455	100 Ω - safety	4822 111 30535
R457	22 kΩ - potm	4822 100 10051
R461	1 kΩ - 2 W	4822 116 60239
R462	8,2 Ω - safety	4822 111 30506
R465	3,3 Ω - 2 W	4822 116 60231
R469	12 Ω - 5 W	4822 113 80378
R472	1 kΩ - 2 W	4822 116 60239
R474	5,6 Ω - safety	4822 111 30502
R475	3,3 kΩ - 1 W	4822 116 53663
R484	1,5 Ω - safety	4822 111 30487
R485	10 kΩ - potm-hor. size	4822 101 10547
R512	8,2 Ω - safety	4822 111 30506
R542	10 kΩ - potm-volume	4822 100 20546
R562	4,7 Ω - safety	4822 111 30499
R569	220 Ω - potm	4822 100 10019
R574	4,7 Ω - safety	4822 111 30499
R581	10 kΩ - potm-colour	4822 100 20548
R585	10 kΩ - potm-contrast	4822 100 20548
R589	10 kΩ - potm-brightness	4822 100 20548
R598	10 kΩ - potm-sub. brightness	4822 100 10024
R605	1 kΩ - potm	4822 100 10021
R606	1 kΩ - potm	4822 100 10021
R633	2,7 kΩ - 0,6 W	4822 116 52918
R634	1,5 kΩ - 0,6 W	5322 116 53478
R636	680 Ω - 2 W	4822 116 60236
R642	8,2 Ω - safety	4822 111 30506

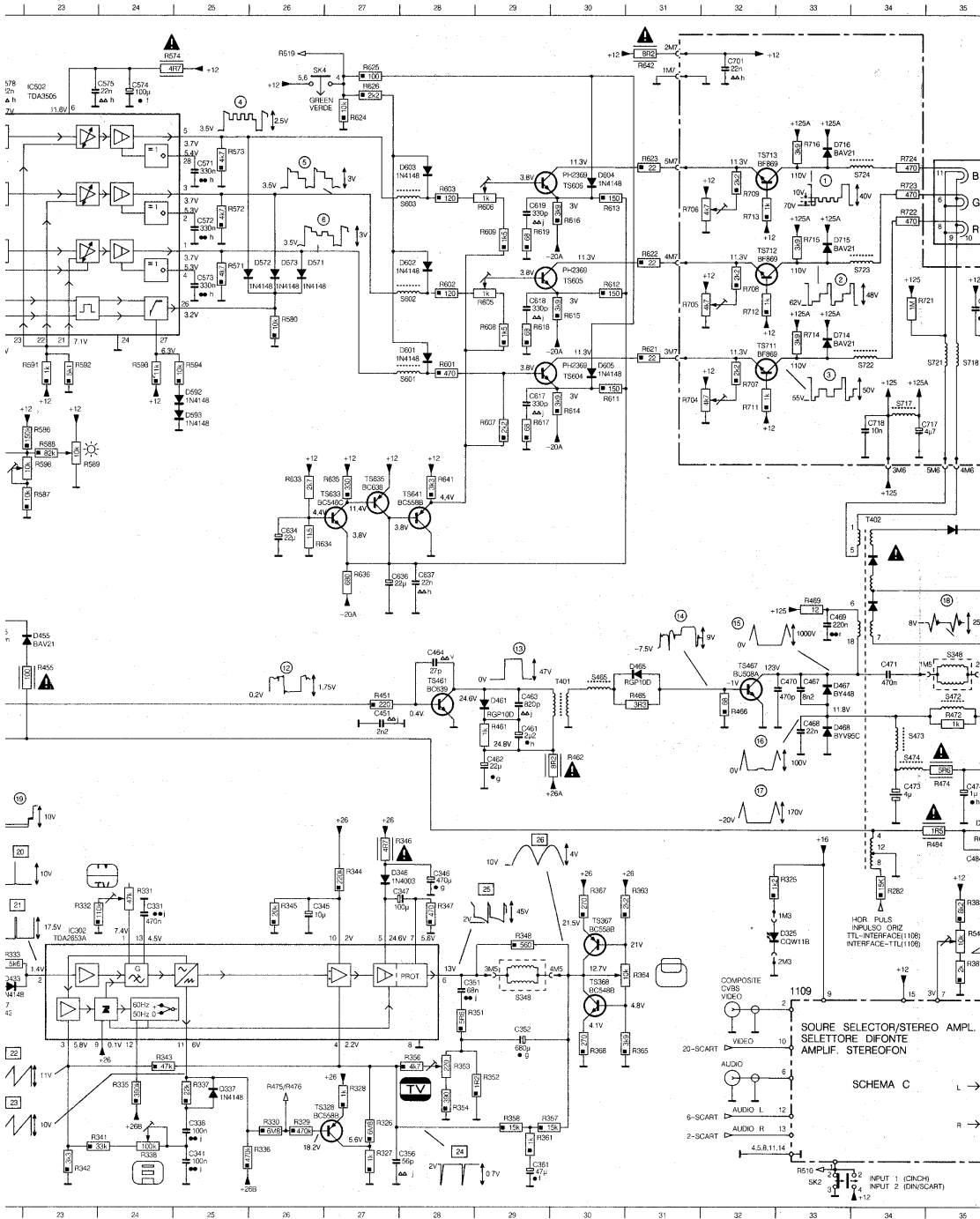
		
T401	Hor. driver transformer	4822 146 21019
T402	L.O.T.	4822 140 10275
S465		4822 152 20587
S472		4822 157 52236
S473		4822 157 52235
S474		4822 157 52237
S491		4822 157 52234
S493		4822 157 52231
S494		4822 157 52234
S533	4,43 MHz	4822 156 70064
S534	Delay line 330nS	4822 157 51056
S555		4822 156 21351
S560		4822 156 70063
S569		4822 156 70063
S601		4822 156 21349
S602		4822 156 21349
S603		4822 156 21349
S638		4822 157 52231
		
IN4148		4822 130 30621
IN4003		4822 130 31878
BZX79-B6V2		4822 130 34167
BAV21		4822 130 30842
RGP10D		4822 130 31607
BY448		5322 130 31559
BYV95C		4822 130 41487
RGP10G		4822 130 31201
BZX79-C2V4		4822 130 31253
BC548B		4822 130 40937
BC328		4822 130 44104
BD226		5322 130 44244
BC558B		4822 130 44197
BC548C		4822 130 44196
BC639		4822 130 41053
BU508A		4822 130 42164
BD826		4822 130 41774
PH2369		4822 130 41594
BC638		4822 130 41087
TDA2653A		5322 209 82945
HEF4077BP		4822 209 10223
TDA2595/V4		4822 209 83227
L7812CV		5322 209 86176
TDA3505/V4		4822 209 83272
TDA4510V2		4822 209 70019
<b>Various</b>		
Focus cap		4822 462 40794
High voltage cable		4822 320 20134
Focus cable		4822 320 20127
Degaussing coil		4822 157 52254
Picture tube + deflex.		4822 131 20149
Switch SK2 - SK3 - SK4 - SK5		4822 276 11505
DIN socket 8-pole		4822 267 50697
Scart (euro) socket 21-pole		4822 267 60159
4p connector male		4822 265 30375
5p micro connector female		4822 321 21177
5p connector female		4822 321 21278
4p connector		4822 321 21179
2p connector to speaker		4822 267 20277
2p connector to led		4822 265 20235
RCA jack for audio/video		4822 267 20241
Speaker (2x) 3 inch		4822 240 30296
1560 DL701-64µs		4822 320 40096
1567 8,86 MHz		4822 242 70304

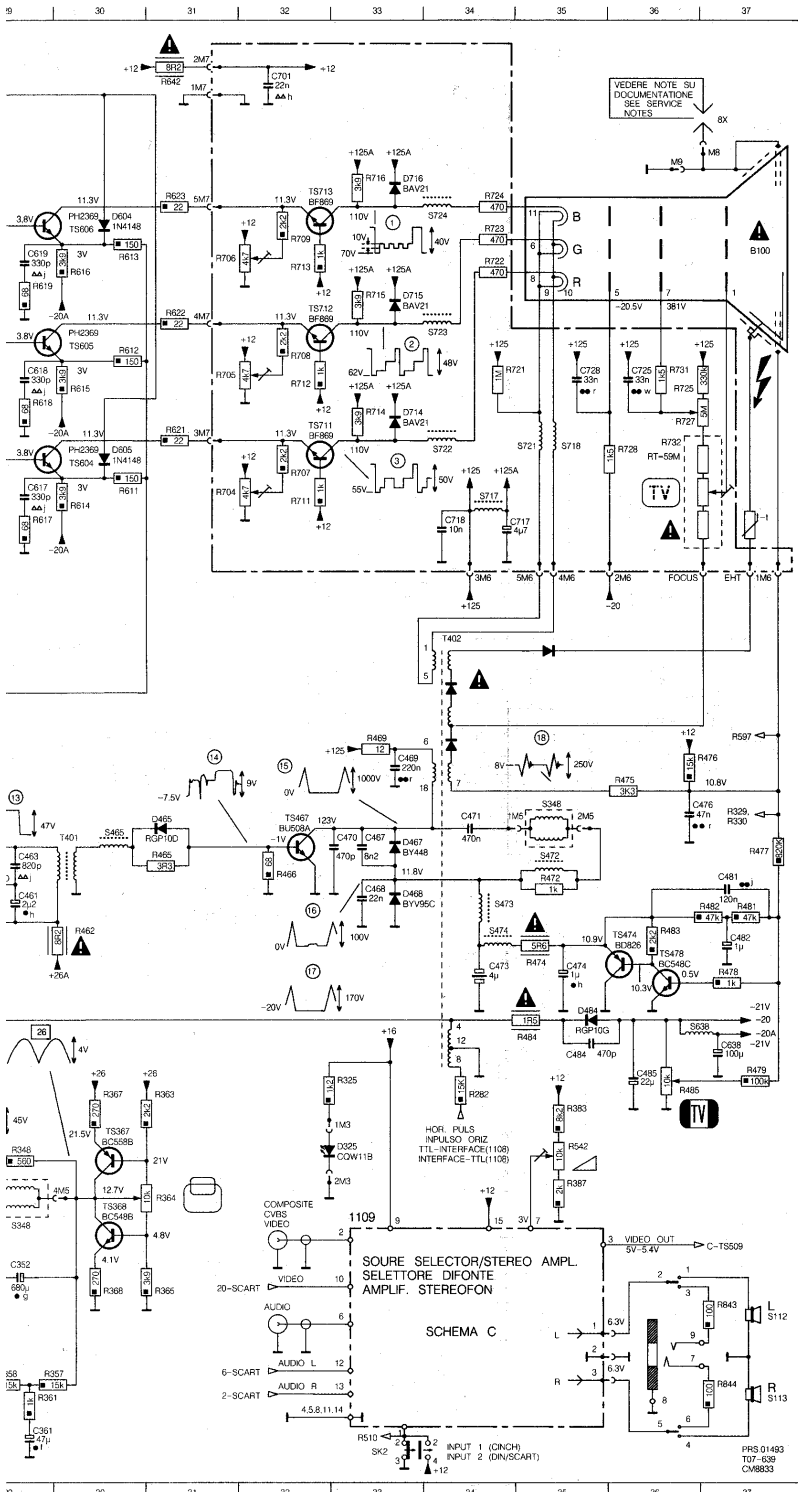


	SAFETY RESISTOR		20K6V		AC
	RESISTENZA DI SICUREZZA		f = 16 V		DC
	SPR 25-0,12W 5%		f = 25 V		MIN - MIN - MIN
	CR 37-0,25W 5-10%		f = 40 V		
	CERAMIC		f = 50 V		
	FLAT FOL		f = 100V		
	PLATO		f = 250V		
	ELECTROLYTIC		u = 400V		
	ELECTRO		u = 500V		
			w = 800V		









1108 G 4 D115 D12 R387 M55 R633 F26  
 1109 M3 D121 M 9 R402 J11 R634 G27  
 1560 A13 D126 N 7 R403 K11 R635 F27  
 1567 E12 D126 N 7 R406 J 9 R636 H27  
 C102 L 4 D127 M 7 R408 J 1 R641 F28  
 C103 L 4 D128 M 7 R409 J 2 R642 A31  
 C104 L D129 L 7 R411 J R704 E31  
 C106 M 4 D131 L 9 R412 G 9 R705 D31  
 C107 K 6 D143 K11 R413 G10 R706 C31  
 C108 L 6 D142 M11 R414 H10 R707 E32  
 C109 K 5 D143 L11 R415 I13 R708 D32  
 C110 L2 D152 L11 R416 G18 R709 C32  
 C111 L 6 D221 J 3 R417 J14 R711 E32  
 C112 L 6 D222 I 3 R418 J14 R712 D32  
 C116 O11 D223 L 2 R419 H12 R713 C32  
 B C117 O12 D234 M55 R420 G13 R714 D33  
 C123 O 8 D235 M7 R431 I14 R715 C33  
 C124 N 8 D325 L33 R432 M22 R716 B33  
 C129 L 7 D333 L22 R433 M22 R721 D35  
 C131 L 9 D337 N25 R436 G18 R722 C34  
 C132 L10 D346 K28 R437 G17 R723 B34  
 C141 K11 D112 I 9 R438 O18 R724 R34  
 C142 M11 D433 M22 R439 G15 R725 D36  
 C143 L11 D455 H23 R440 J22 R727 E36  
 C144 K12 D465 H23 R441 G17 R728 E36  
 C145 M1 D461 J29 R442 H17 R731 D36  
 C146 M2 D465 I31 R443 O21 R732 E36  
 C152 L12 D467 J33 R444 G17 R443 N37  
 C204 D 3 D488 J33 R445 G18 R444 O37  
 C205 E 3 D484 R63 R446 H18 S104 L 3  
 C206 F 3 D560 A17 R447 H19 S104 M 5  
 C214 O17 D571 C28 R448 H23 S111 J 2  
 C216 O18 D572 C28 R450 J21 S113 O37  
 C217 D10 D573 C28 R451 J21 S131 L 9  
 C418 H10 D574 A18 R452 J21 S131 O37  
 C1910 F10 D582 E28 R454 J21 S348 M29  
 C225 O18 D583 E28 R455 J23 S478 E36  
 C232 N16 D597 E21 R456 H21 S465 I30  
 C233 N18 D601 E28 R457 H21 S472 I35  
 C234 M17 D602 C28 R461 J21 S478 E36  
 C331 L24 D603 B28 R462 J30 S474 J34  
 C334 N14 D604 B30 R465 J31 S488 L13  
 C338 L24 D605 B30 R466 J31 S493 M16  
 C341 O25 D714 D33 R469 H33 S494 K13  
 C345 L26 D715 C33 R470 H33 S521 A13  
 C346 K28 D716 R33 R474 J35 S534 B 8  
 C347 L28 IC101 N10 R476 H36 S555 J 9  
 C351 M28 IC302 L23 R478 H37 S580 A13  
 C352 M29 IC401 G11 R477 J37 S589 A14  
 C356 O28 IC402 H15 R478 J37 S602 E28  
 C361 O29 IC403 L14 R479 K37 S602 D28  
 C401 J11 IC501 B17 R481 J37 S603 C28  
 C411 2 IC502 A23 R482 J37 S636 K36  
 C412 H 9 R103 L 4 R483 J36 S718 E35  
 C414 H10 R104 M18 R484 K35 S721 E35  
 F D419 H12 R112 L13 R485 L36 S722 E34  
 C420 H13 R113 O13 R494 K17 S723 D34  
 C432 K15 R114 O13 R502 D 2 S724 S44  
 C433 G20 R115 N12 R506 B 3 SK1 K 2  
 C434 J15 R116 O12 R507 A 2 SK2 A20  
 C436 R19 R117 M15 R508 B 3 SK3 B16  
 C439 H15 R121 K 9 R510 A19 SK4 E19  
 G C441 M21 R122 O 9 R511 C 7 SK5 G15  
 C444 H18 R125 N 8 R512 M18 T101 K11  
 C445 H17 R126 N 7 R513 A16 T401 I30  
 C446 H18 R127 M 8 R514 B 4 T402 Q34  
 C447 H19 R128 M 8 R515 B 4 T5117 N12  
 C451 I27 R129 L 8 R516 B 4 T5121 M 8  
 C454 I20 R136 K10 R519 C 6 T5132 L 9  
 C455 H22 R152 L12 R520 C 5 T5152 K12  
 C461 I28 R201 E 3 R529 A 7 T8211 D 4  
 C462 J29 R202 F 3 R532 B 7 T8212 E 4  
 C463 I28 R203 F 3 R534 B 7 T8213 F 4  
 H C464 J28 R204 D 3 R535 B 6 T8217 D 5  
 C467 I33 R205 E 3 R536 C 9 T8218 E 6  
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 C469 H33 R207 E 4 R541 C10 T8228 O16  
 C470 I33 R208 E 4 R542 L3 T8233 N17  
 C471 J34 R209 D 2 R553 A 8 T8328 M7  
 C473 J34 R210 E 2 R554 A 8 T8329 M7  
 C474 J35 R211 D 8 R554 A 8 T8329 M7  
 C476 I37 R212 E 6 R556 B12 T8388 M30  
 I C481 I37 R213 E 5 R557 C17 T8405 J12  
 C482 I37 R214 N18 R560 A13 T8406 J10  
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 C491 M14 R217 E 5 R562 L18 T8419 I14  
 C492 M13 R215 E 6 R564 E11 T8439 G16  
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 C503 M18 R221 H 2 R571 D25 T8474 J36  
 C508 H 2 R222 H 2 R572 C25 T8478 J36  
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 C544 B 8 R226 O18 R578 E19 T8514 A 3  
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 C556 A 9 R231 N16 R582 E20 T8604 E30  
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 K C559 B11 R235 L15 R585 E20 T8633 F27  
 C560 A12 R282 L34 R586 F23 T8635 F27  
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 C562 M18 R326 O27 R588 F23 T8711 E32  
 C563 E13 R327 O27 R589 F23 T8712 C32  
 C564 E13 R328 N27 R590 B 5 T8713 B32  
 C565 D11 R328 O28 R591 E23 VL101 K 2  
 C566 C14 R330 O28 R592 E23  
 C567 E12 R331 L24 R593 E24  
 C569 E14 R332 L23 R594 E25  
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 C572 C25 R335 N24 R597 F17  
 C573 O25 R336 O28 R598 F23  
 C574 A24 R337 N25 R599 B 8  
 C575 A24 R338 O24 R601 E28  
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 C577 A22 R342 O23 R603 C28  
 M C578 A22 R343 N24 R605 D29  
 C581 E19 R344 K27 R606 C28  
 C585 E22 R345 L26 R607 F29  
 C589 F22 R346 K28 R608 D29  
 C617 E28 R347 L28 R609 C29  
 C618 D29 R348 L28 R611 E30  
 C619 C28 R351 M29 R612 D30  
 C620 E28 R352 L31 R613 E30  
 C636 H28 R353 N28 R614 E30  
 C637 H28 R354 N28 R615 D30  
 C638 K37 R356 N28 R616 C30  
 N C701 A32 R357 O20 R617 F29  
 C717 E36 R358 O23 R618 D29  
 C718 F34 R361 O20 R619 C29  
 C725 D36 R362 L31 R621 E31  
 C728 D35 R364 M18 R622 C31  
 D107 L 6 R365 N31 R623 B31  
 D108 L 6 R367 L30 R624 R27  
 D109 L 5 R368 N30 R625 A27  
 D110 L 5 R369 L33 R626 A27  
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