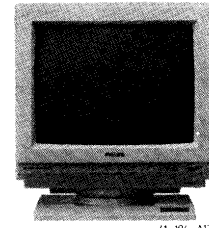


Service
Service
Service



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

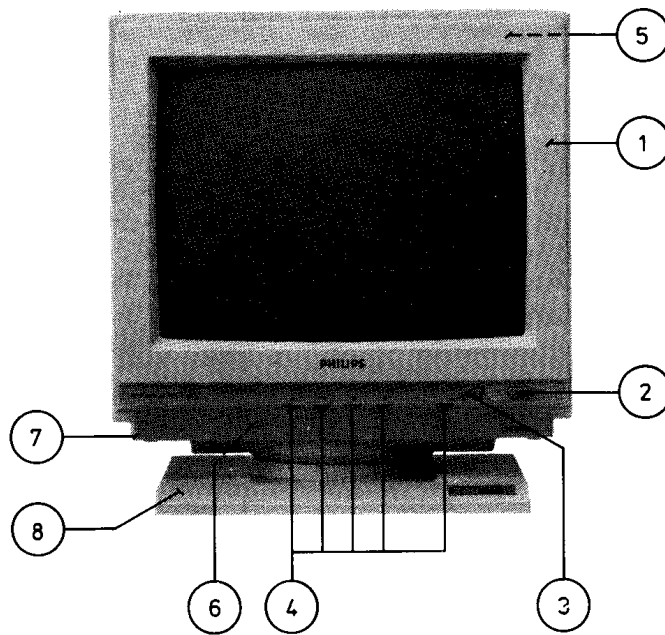


*Pour votre sécurité, ces documents
doivent être utilisés par des spécia-
listes agréés, seuls habilités à réparer
votre appareil en panne.

Subject to modification
4822 727 15714

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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 Ω . 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.

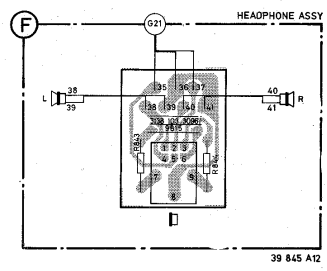
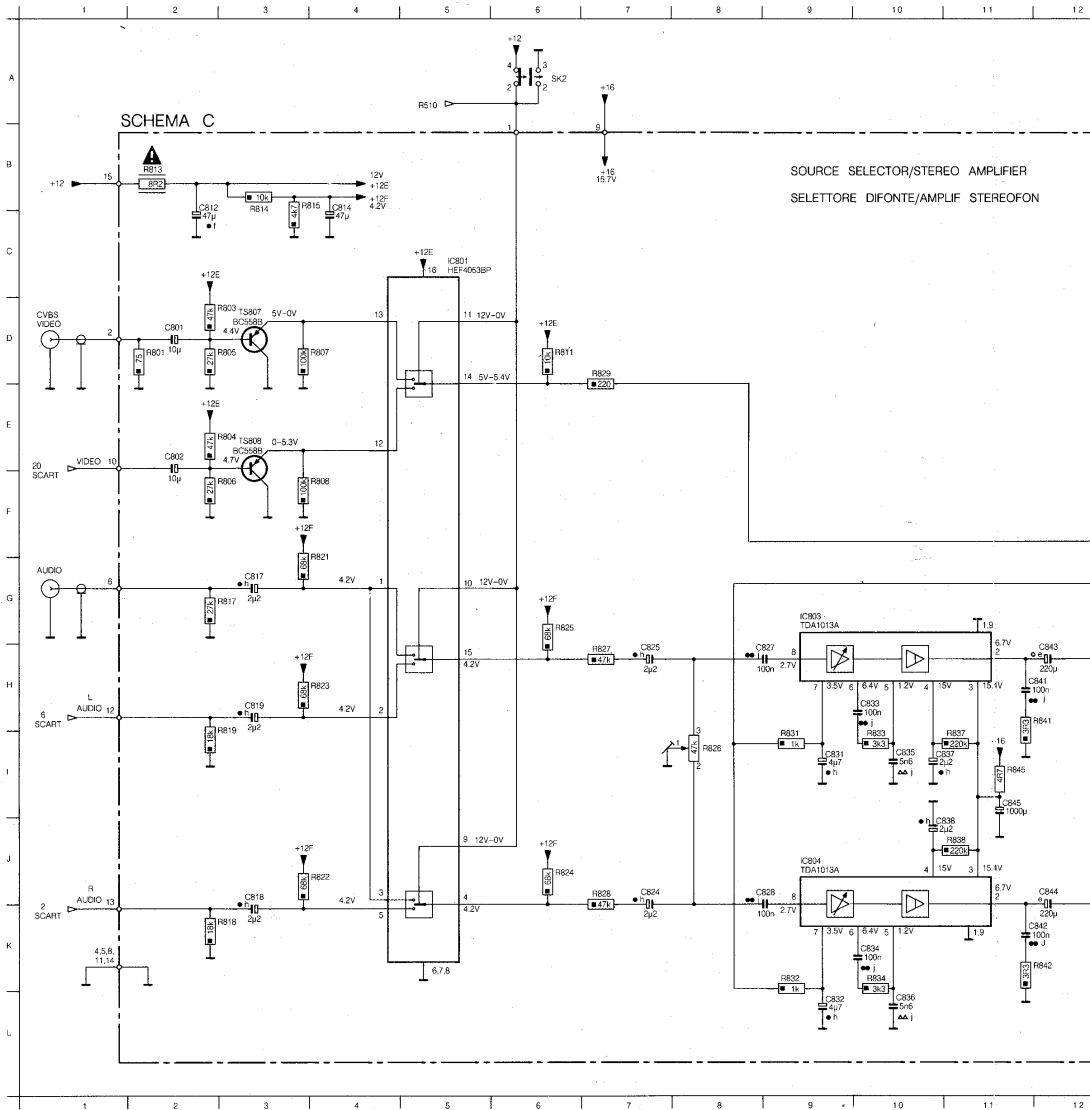
2. Switch-off the green gun by loosening resistor R723 and turn locking ring "B" anti-clockwise.
3. By turning the four-pole rings with tags "C", the red and blue cross-hatch patterns in the centre of the screen are placed on top of each other.
4. Switch-on the green gun with R723 and switch-off the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

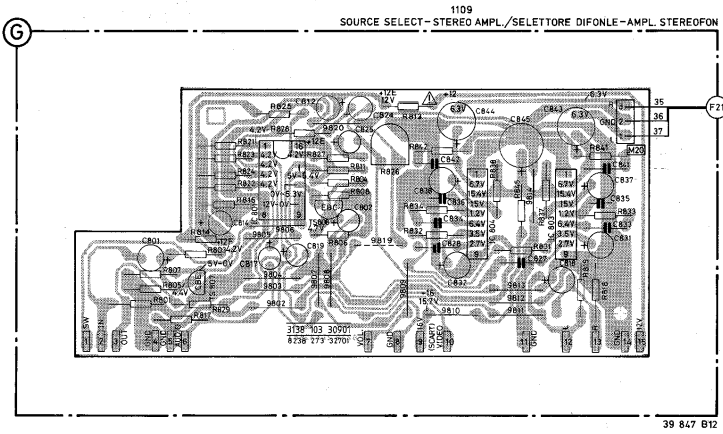
1. First check the colour purity and the static convergence.
2. Supply a cross-hatch pattern and switch-off the green gun by loosening resistor R723.
3. Eliminate the crossing of the central horizontal blue and red line and the crossing of the central vertical blue and red line, by vertical tilting of 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.



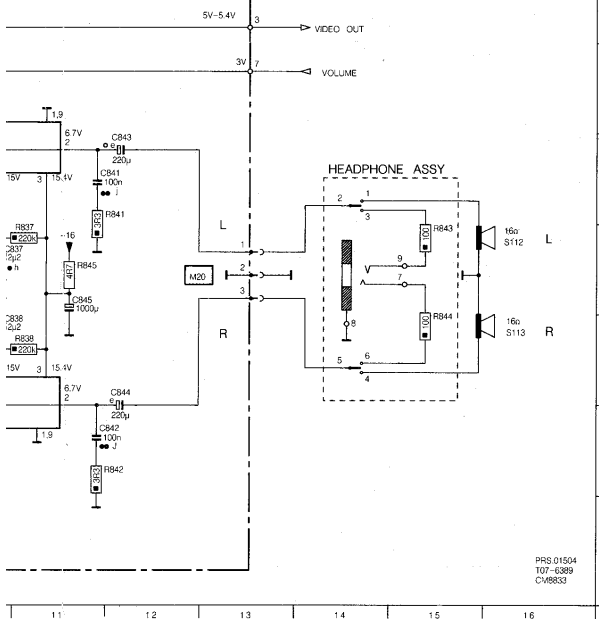
CS 4 648

11 12 13

1109
 REC AMPLIFIER
 PLIF STEREOFON



39 847 B12



PR3 01504
 107-6389
 CV8833

- 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
- R805 D 3
- R804 E 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

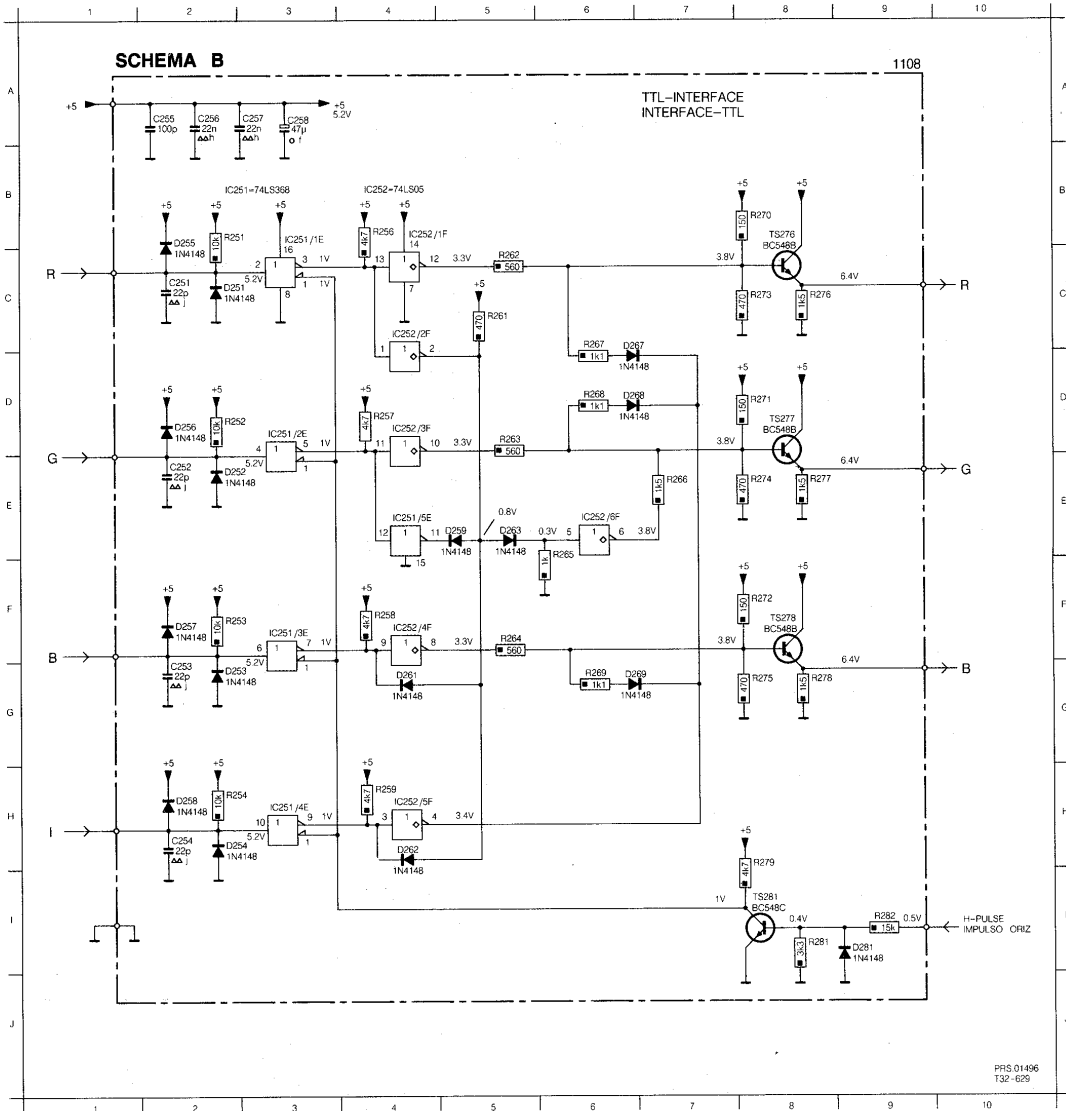
Source selector/stereo amplifier 4822 212 22609

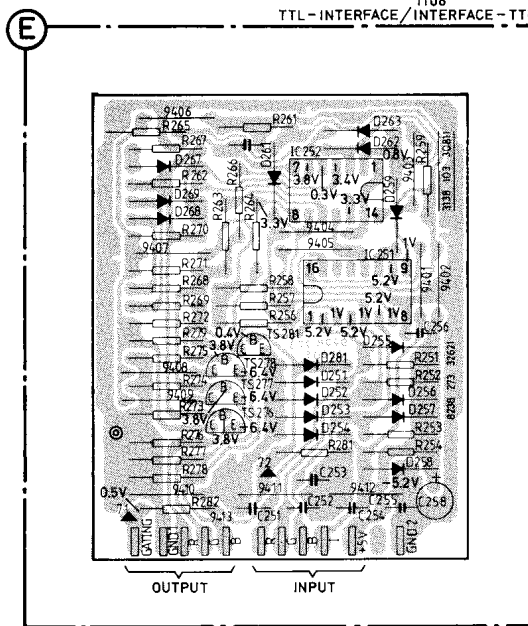
C801	10 μF - 50 V	4822 124 40435
C802	10 μF - 50 V	4822 124 40435
C814	47 μF - 16 V	4822 124 22056
C845	1000 μF - 25 V	4822 124 22016
R813	8,2 Ω - safety	4822 111 30506
R826	47 kΩ - potm	4822 100 10079
R845	4,7 Ω - 1 W	4822 116 53662
HEF4053BP		5322 209 10576
TDA1013A		4822 209 83115
BC558B		4822 130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

11 12 13 14 15 16

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		

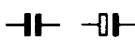







39 846 B12

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

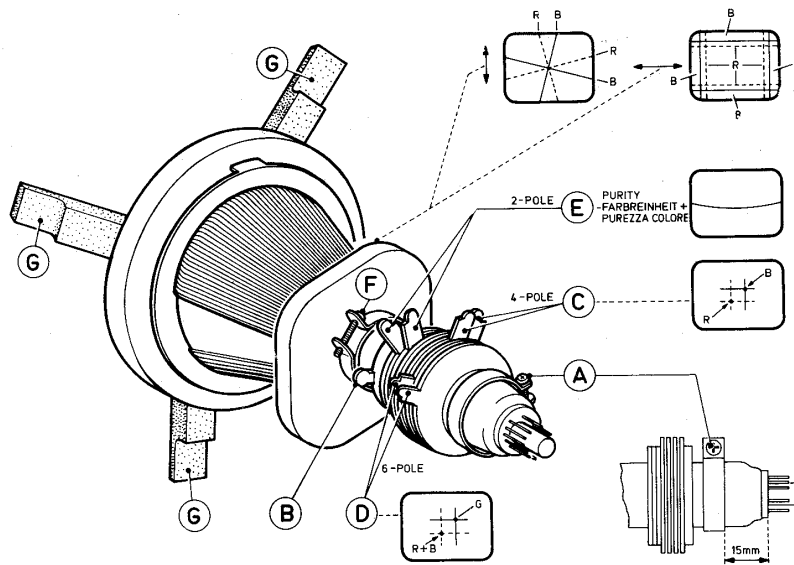
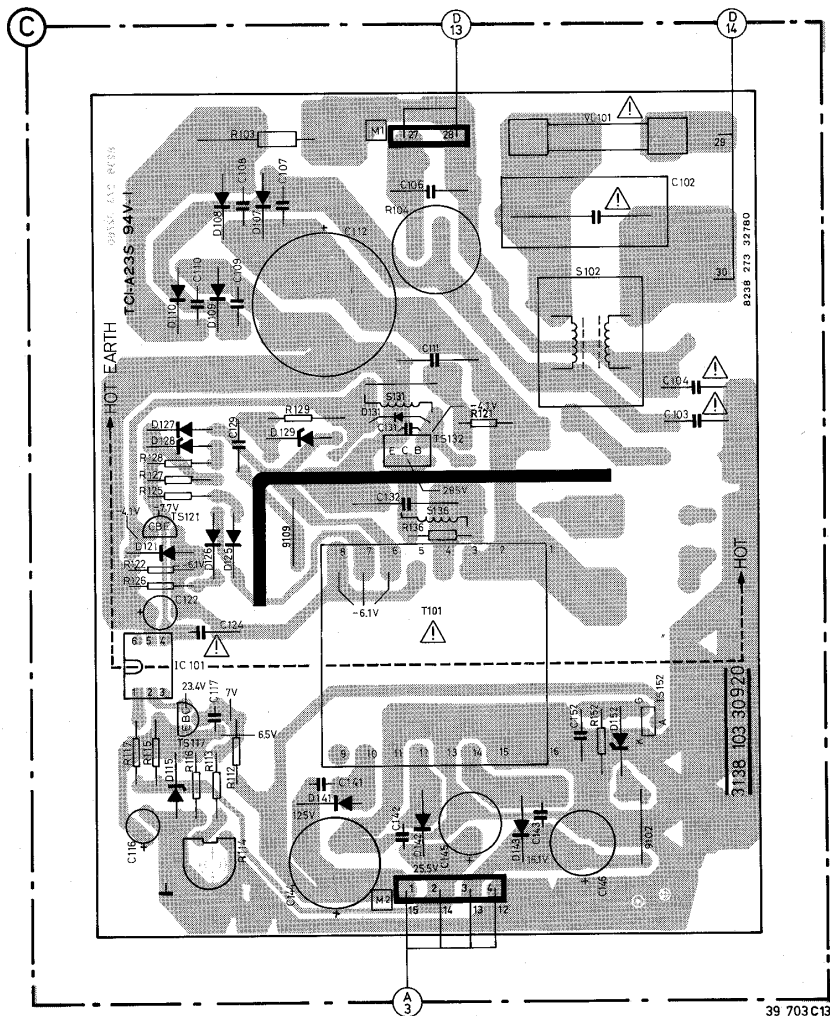
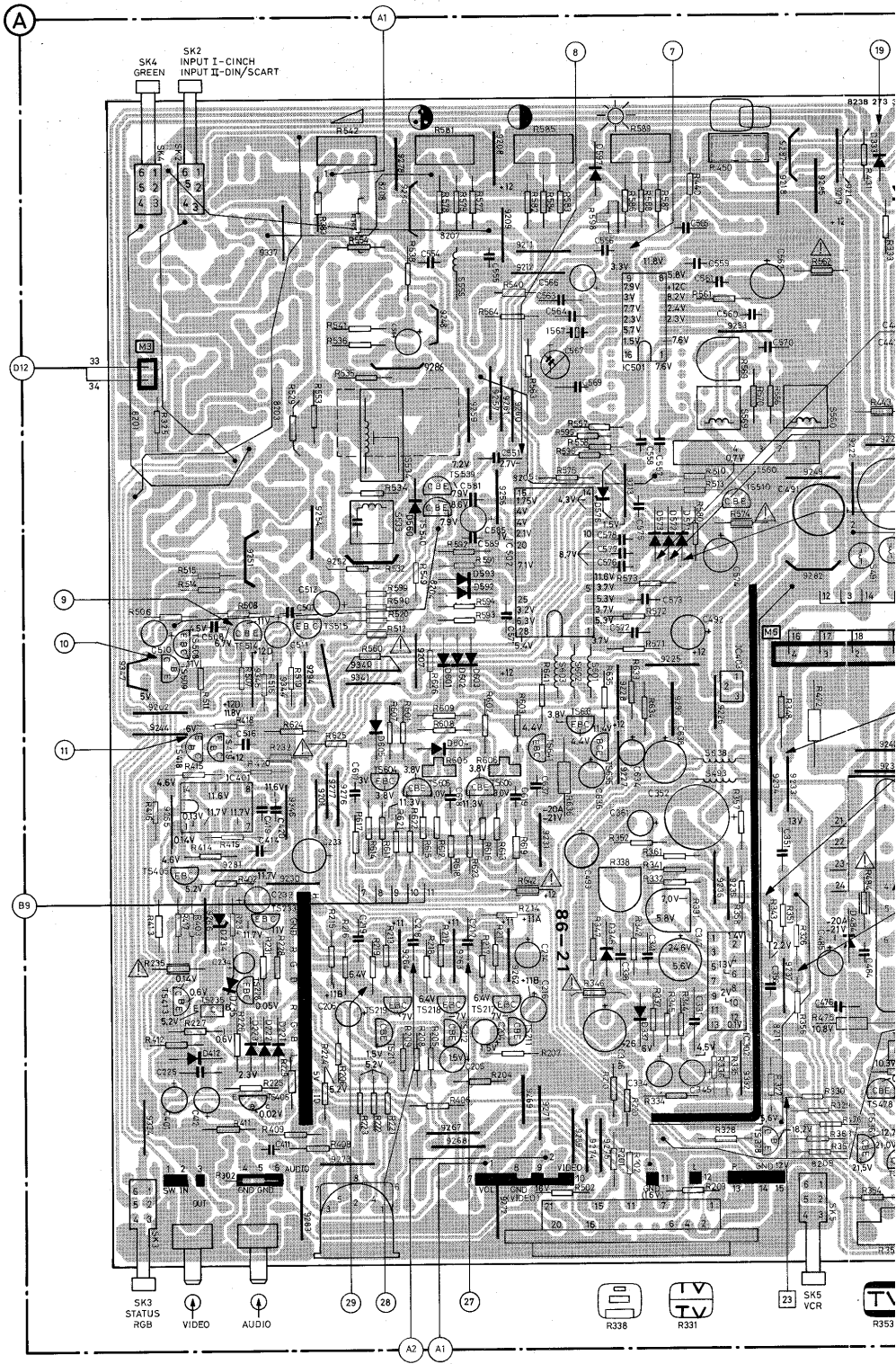


Fig. 3





SK3
STATUS
RGB

VIDEO

AUDIO

R338

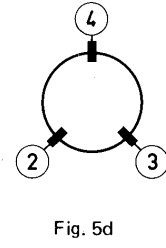
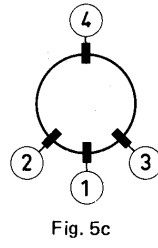
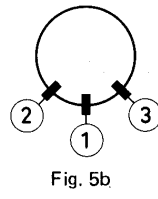
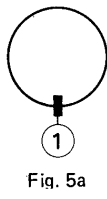
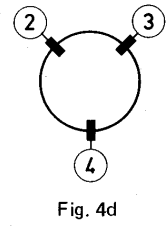
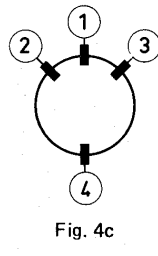
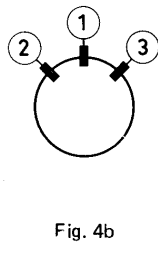
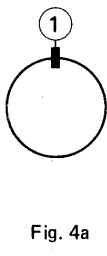
R331

SK5
VCR

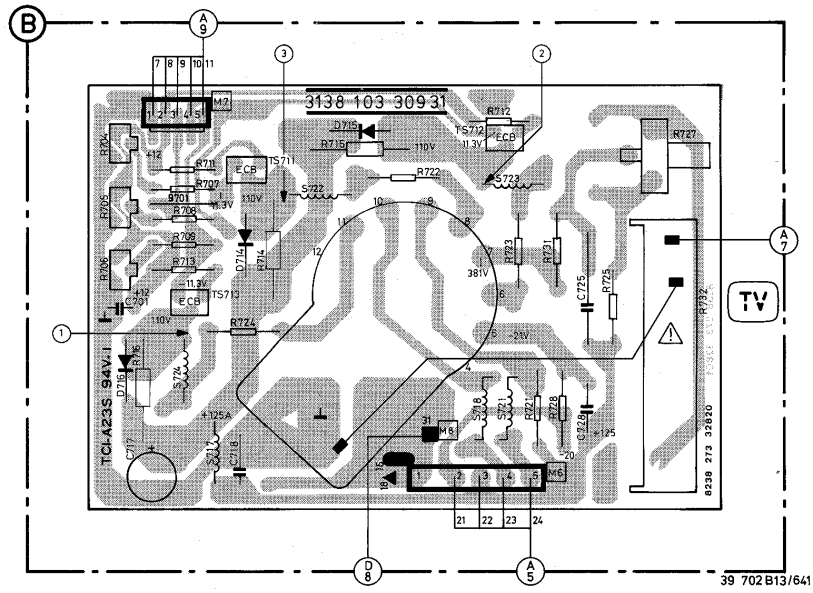
R353

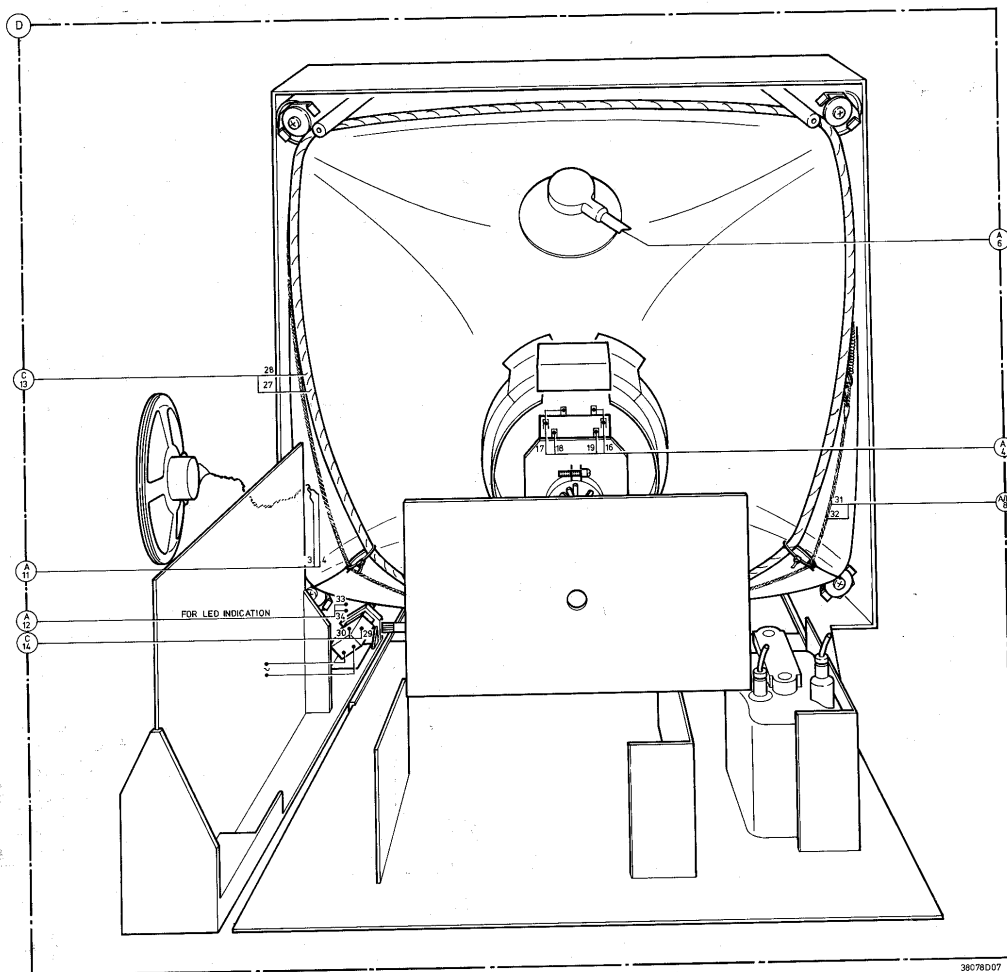
A2

A1



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38078D07

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


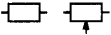


Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden, für Reparaturen sind Original-Ersatzteile zu verwenden.

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.



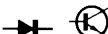
Power supply

4822 212 22597

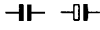
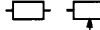
		
C102	1 μ F- 250 V	5322 121 44212
C103	2,2 nF-400 V	4822 122 32576
C104	2,2 nF-400 V	4822 122 32576
C105	1,5 nF-400 V	4822 122 32124
C107	2,2 nF- 1 kV	4822 122 40348
C108	2,2 nF- 1 kV	4822 122 40348
C109	2,2 nF- 1 kV	4822 122 40348
C110	2,2 nF- 1 kV	4822 122 40348
C111	100 nF-400 V	4822 121 41862
C112	100 μ 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 μ F-200 V	4822 124 41281
		
R103	4,7 Ω - 7 W	4822 113 80358
R104	Dual PTC	4822 116 40079
R114	1 k Ω - potm	4822 100 10037
R121	1 M Ω - 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 μ 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
Various		
Bracket		4822 404 30816
Power switch		4822 276 11504
Spring for fuse (2x)		4822 492 60063
Fuse		4822 253 30025


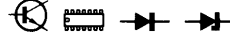
CRT assy

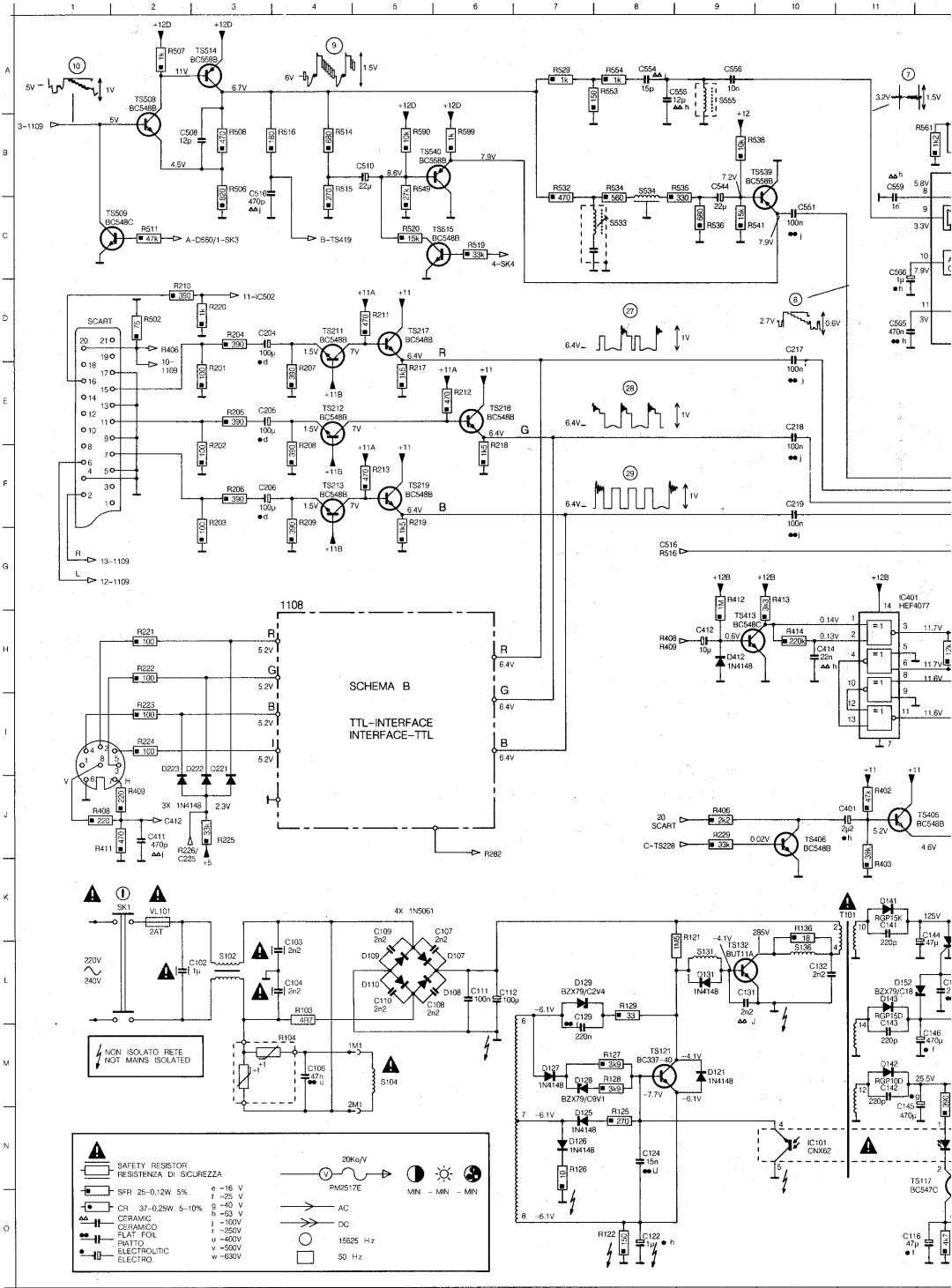
4822 212 22596

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

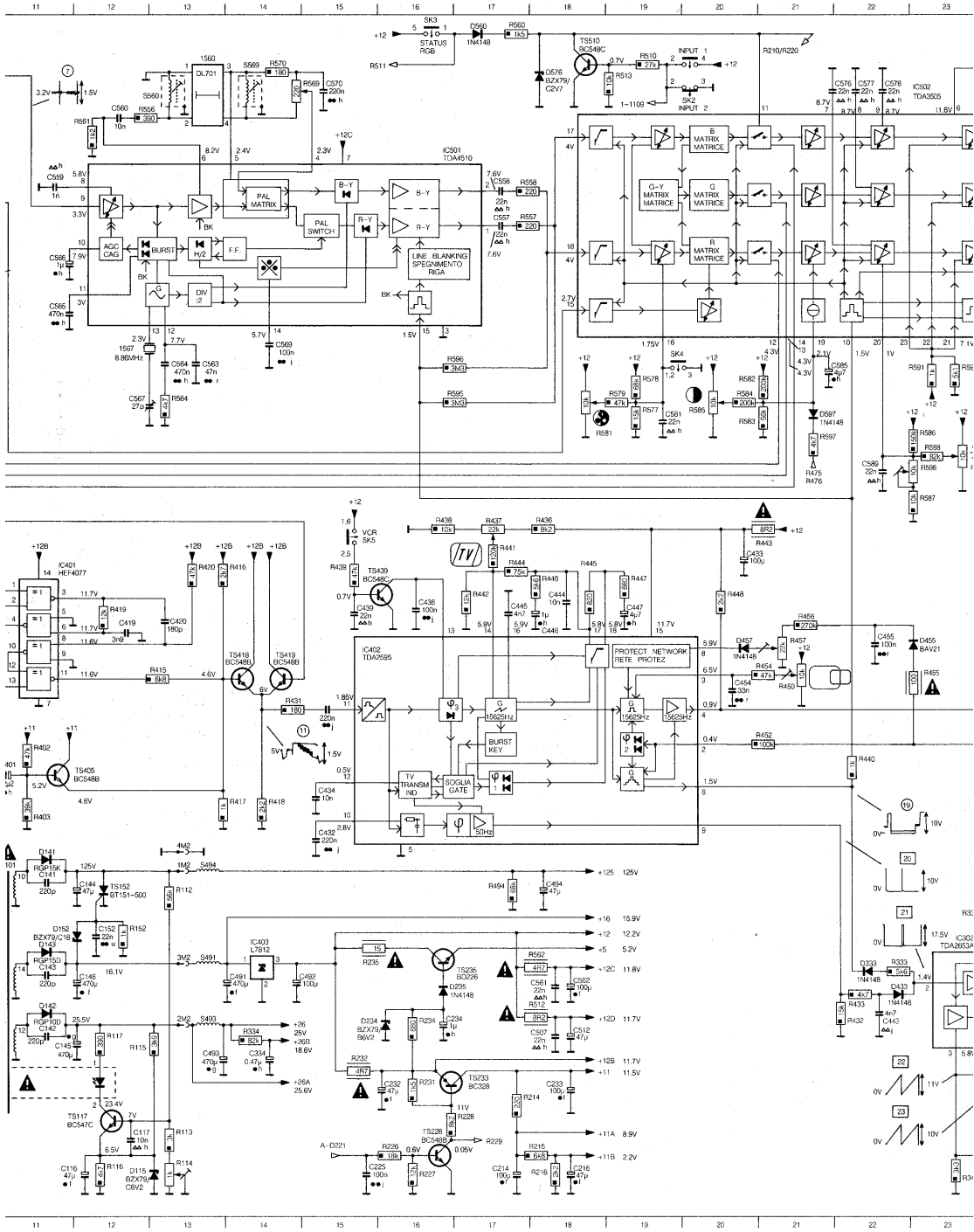
Chassis

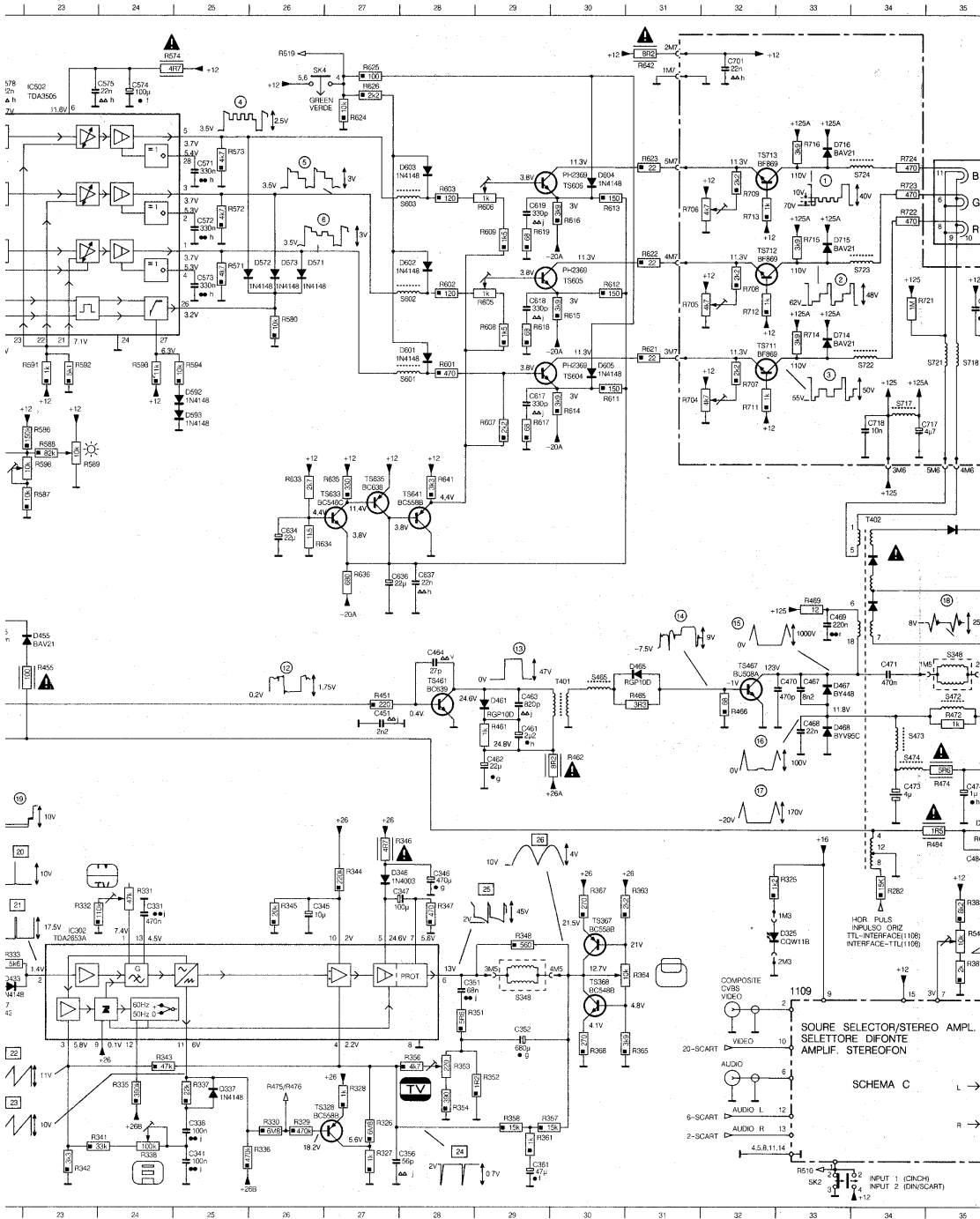
		
C345	10 µF- 50 V	4822 124 40435
C347	100 µF- 35 V	5322 124 21362
C412	10 µF- 25 V	4822 124 22058
C419	3,9 nF- 50 V	4822 122 32012
C420	180 pF- 50 V	4822 122 40385
C433	100 µF- 35 V	5322 124 21362
C434	10 nF- 50 V	4822 122 30043
C444	10 nF- 50 V	4822 122 30043
C445	4,7 nF- 63 V	4822 121 50539
C446	1 µF- 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

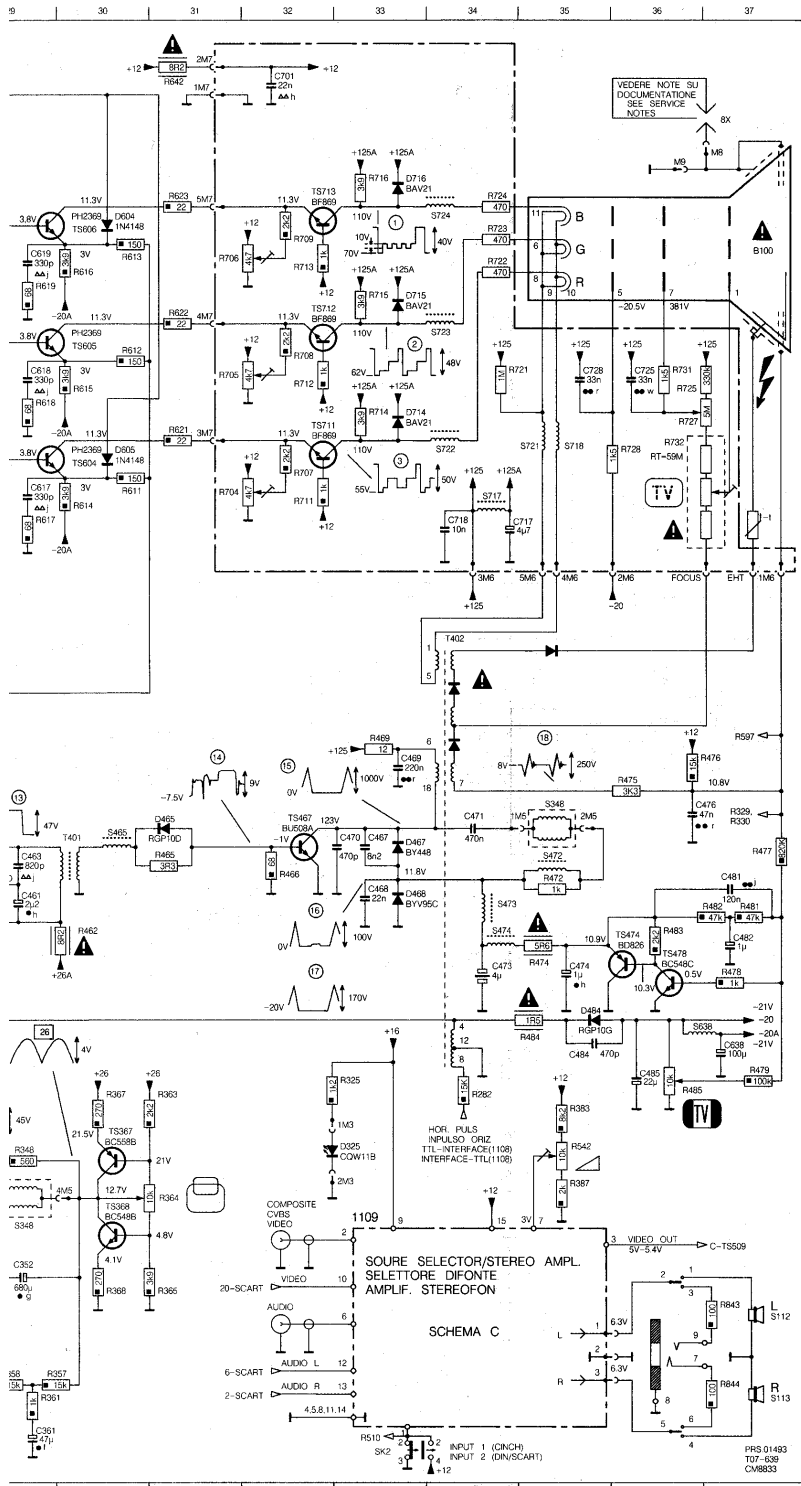
		
T401	Hor. driver transformer	4822 146 21019
T402	L.O.T.	4822 140 10275
S465		4822 152 20587
S472		4822 157 52236
S473		4822 157 52235
S474		4822 157 52237
S491		4822 157 52234
S493		4822 157 52231
S494		4822 157 52234
S533	4,43 MHz	4822 156 70064
S534	Delay line 330nS	4822 157 51056
S555		4822 156 21351
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
Various		
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		20K Ω /V		AC
	RESISTENZA DI SICUREZZA		f = 16 V		DC
	5% CR 25-0.12W		f = 25 V		MIN - MIN - MIN
	10% CR 37-0.25W		f = 40 V		
	CERAMIC		f = 50 V		
	FLAT FOL		f = 100V		
	PLASTIC		f = 250V		
	ELECTROLYTIC		u = 400V		
	ELECTRO		u = 500V		
			w = 300V		







VEDERE NOTE SU DOCUMENTAZIONE SEE SERVICE NOTES

1108	G	4	D115	D12	R387	M55	R633	F28		
1109	M3	D121	M	9	R402	J11	R634	G27		
1560	A13	D126	N	7	R403	K1	R635	F27		
1567	E12	D128	M	8	R406	J	R636	H27		
C102	L	3	D127	M	7	R408	J	R641	F28	
C103	L	4	D128	M	8	R409	J	R642	A31	
C104	L	D129	L	7	R411	J	R704	E31		
C106	M	D131	L	9	R412	G	R705	D31		
C107	K	D143	K11	R413	G10	R706	C31			
C108	L	D142	M11	R414	H10	R707	E32			
C109	K	D143	L11	R415	I	R708	D32			
C110	L	D152	L11	R416	G18	R709	C32			
C111	L	D221	3	R417	J14	R711	E32			
C112	L	D222	3	R418	J14	R712	D32			
C116	O11	D223	2	R419	H12	R713	C32			
C117	O12	D234	M5	R420	G13	R714	D33			
C122	O	D235	M7	R431	I14	R715	C33			
C124	N	D325	L33	R432	M22	R716	B33			
C129	L	D333	L22	R433	M22	R721	D35			
C131	L	D337	N25	R436	G18	R722	C34			
C132	L10	D346	K28	R437	G17	R723	B34			
C141	K11	D112	H	9	R438	G18	R724	B34		
C142	M11	D433	M22	R439	G15	R725	D36			
C143	L11	D455	H23	R440	J22	R727	E36			
C144	K12	D457	H23	R441	G17	R728	E36			
C145	M11	D461	29	R442	H17	R731	D36			
C146	M12	D465	131	R443	Q21	R732	E36			
C152	L12	D467	33	R444	G17	R843	N37			
C204	D	3	R448	33	R445	G18	R844	O37		
C205	S	3	R494	R63	R445	H19	S104	M	5	
C206	F	3	D660	A17	R447	H19	S104	M	5	
C214	O17	D571	C28	R448	H19	S111	O	7		
C216	O18	D572	C28	R450	I	S113	O37			
C217	D10	D573	C28	R451	I	S131	L	9		
C218	H10	D574	A18	R452	H19	S131	O	7		
C219	F10	D582	E22	R454	I	S348	M29			
C225	O18	D583	E22	R455	I	S348	M29			
C232	N16	D597	E21	R456	H21	S465	I30			
C233	N18	D601	E28	R457	H21	S472	I35			
C234	M17	D602	C28	R461	I	S473	M13			
C331	L24	D603	B28	R462	J30	S474	J34			
C334	N14	D604	B30	R465	I	S48	L13			
C338	N14	D604	B30	R465	I	S48	L13			
C341	Q25	D714	D33	R469	H33	S494	K13			
C345	L26	D715	C33	R470	H33	S494	K13			
C346	K28	D716	B33	R474	J35	S534	B	8		
C347	L28	C101	N10	R475	H36	S555	9			
C351	M28	I	C302	L23	R476	H36	S555	9		
C352	M29	I	C401	G11	R477	I37	S569	A14		
C356	O28	I	C402	H15	R478	J37	S601	E28		
C361	O29	I	C403	L14	R479	K37	S602	D28		
C401	J11	I	C501	B17	R481	J37	S603	C28		
C411	H	9	I	103	L	4	R483	J36	K36	
C412	H	9	I	103	L	4	R483	J36	K36	
C414	H10	R104	M	4	R484	K35	S721	E35		
C419	H12	R112	L13	R485	L36	S722	E34			
C420	H13	R113	O13	R484	K17	S723	O34			
C432	K15	R114	O13	R502	D	2	S724	A4		
C433	G20	R115	N12	R506	B	3	SK1	K	2	
C434	J15	R116	O12	R507	A	2	SK2	A	20	
C436	H19	R117	M5	R508	B	3	SK3	B	6	
C439	H15	R121	K	9	R510	A19	SK4	E19		
C441	M21	R122	O	R511	C	7	SK5	G15		
C444	H18	R125	N	8	R512	M18	T101	K11		
C445	H17	R126	N	7	R513	A18	T401	L30		
C446	H18	R127	M	8	R514	B	T402	O34		
C447	H19	R128	M	8	R515	B	T402	O34		
C451	I27	R129	L	8	R516	B	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	R201	D	4
C462	J29	R202	F	3	R532	B	7	R212	E	4
C463	I28	R203	F	3	R534	B	7	R212	E	4
C464	J28	R204	D	3	R535	B	7	R212	D	5
C467	I33	R205	E	4	R536	C	9	T5128	E	6
C468	I33	R206	E	4	R538	C	9	T5128	E	6
C469	H33	R207	E	4	R541	C10	T5228	O16		
C470	I33	R208	E	4	R442	L35	T5233	N17		
C471	J34	R210	D	5	R553	A	8	T5328	M17	
C473	J34	R210	D	5	R553	A	8	T5328	M17	
C474	J35	R211	D	5	R554	A	8	T5328	M17	
C476	I37	R212	E	6	R556	B12	T5388	M30		
C481	I37	R213	E	6	R557	C17	T5405	J12		
C482	I37	R214	N18	R558	B1	T5406	J10			
C484	K35	R215	O18	R560	A17	T5413	H	9		
C486	K35	R216	O18	R561	B1	T5418	H	9		
C491	M14	R217	E	5	R562	L18	T5419	I14		
C492	M13	R215	F	6	R564	E1	T5439	G16		
C493	M13	R215	F	6	R569	A13	T5439	G16		
C494	K18	R220	D	3	R570	A14	T5467	I32		
C507	M18	R221	H	2	R571	O25	T5474	J36		
C508	H	2	R572	H	2	R578	J36			
C509	B	3	R223	J	3	R573	R25	T5508	A	2
C512	M18	R224	O	18	R574	A24	T5509	C	2	
C516	B	3	R225	J	3	R577	E19	T5510	A18	
C544	B	3	R226	O18	R578	E19	T5514	A	18	
C551	O10	R227	O18	R579	E19	T5515	B	3		
C554	A	8	R228	N17	R580	D28	T5539	B10		
C555	A	9	R229	J	9	R581	F18	T5540	B	5
C556	A	9	R231	N16	R582	E20	T5604	E30		
C557	C17	R232	N15	R583	F20	T5605	D30			
C558	B17	R234	M16	R584	E20	T5633	F30			
C559	B11	R235	L15	R585	E20	T5633	F30			
C560	A12	R282	L4	R586	F23	T5635	F27			
C561	M18	R325	K33	R587	F23	T5641	F28			
C562	M18	R326	O27	R588	F23	T5711	E32			
C563	E13	R327	O27	R589	F23	T5712	C32			
C564	E13	R328	N27	R590	B	5	T5713	B32		
C565	D11	R328	O28	R591	E23	VL101	K	2		
C566	C14	R330	O28	R592	E23	VL101	K	2		
C567	E12	R331	L24	R593	E24					
C569	E14	R332	L23	R594	E25					
C570	A15	R333	L22	R595	E17					
C571	B25	R334	M4	R596	E17					
C572	O25	R335	N24	R597	F21					
C573	O25	R336	O28	R598	F23					
C574	A24	R337	N25	R599	B	6				
C575	A24	R338	O24	R601	E28					
C576	A22	R341	O24	R602	D28					
C577	A22	R342	O23	R603	D28					
C578	A22	R343	N24	R605	D29					
C581	E19	R344	K27	R606	C28					
C585	E22	R345	L26	R607	F29					
C589	E22	R346	K28	R608	D29					
C617	E28	R347	L28	R609	O29					
C618	D29	R348	L28	R611	D30					
C619	C28	R351	M29	R612	D30					
C620	E19	R352	L27	R613	D30					
C636	H28	R353	N28	R614	D30					
C637	H28	R354	N28	R615	D30					
C638	K37	R356	N28	R616	C30					
C701	A32	R357	O30	R617	F29					
C717	F36	R358	O23	R618	O29					
C718	F34	R361	O29	R619	C29					
C725	O36	R362	L31	R621	E31					
C728	O35	R364	M31	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	L35	R626	A27				

CS 4 650