

Servicestellung Service position

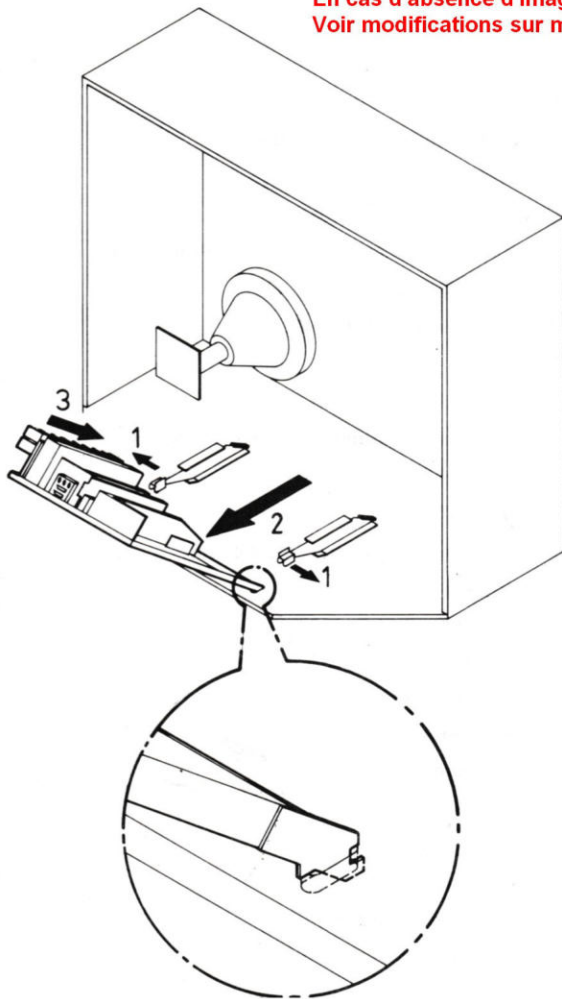
Avant d'intervenir sur ce TV particulier, toujours charger les valeurs moyennes préprogrammées dans l'EEprom via la touche F en façade + Inter M/A.

Si l'EEprom ou la RAM est HS, le TV ne démarrera pas.

Pour forcer la chroma en Pal ou en Secam, ajouter dans le logo du tableau des émetteurs un P pour du Pal ou un S pour du Secam.

En cas d'absence d'image intermittente, le CI tube est en cause...

Voir modifications sur module FI pour forts ronflements dans les HP en RF p52.



Refaire d'office toutes les soudures de l'alimentation et des balayages pour éviter une défaillance du transistor lignes ou une commutation erronée générée par le module Feature Box.

En cas de sécurité intempestive, vérifier le bon réglage du +A.

Sur les alimentations trame +K et -K, chaque sortie est équipée d'une résistance de sécurité de 1.1ohm non dessinée sur le schéma. A contrôler donc après un remplacement d'ampli trame par la seule version agréée TDA 4173AF et modifier R407 qui passe à 1Kohms, R414 à 3.3ohms et D403 devient ZPD 5V6.


La sécurité du frein de faisceau est primordiale sur ce châssis. La masse graphite ne doit jamais être à la masse secondaire du châssis.

Pour mémoriser des données, ponter le connecteur BB entre les bornes 1 et 5 à l'arrière du châssis avant de démarrer le TV par l'inter (consiste à mettre à la masse la pin 2 de EEprom pour autoriser l'écriture). Après mémorisation, éteindre le TV par l'inter et retirer le pont ensuite.

Attention, une EEprom défectueuse (IC 360) peut générer des lignes noires à l'écran.

GRUNDIG

Grundig Passion

 Btx ★ 32700 #

SERVICE MANUAL

CUC 1835

CUC 1860

CUC 1880

CUC 1890

DIGI 3



Wichtige Servicehinweise!

Das Gerät hat ein integriertes Fehlersuchprogramm. Die in diesem Programm angezeigten Fehler beziehen sich nur auf I²C Bus Defekte. Auch bei korrekter Rückmeldung kann ein Fehler im Signalverarbeitungsteil des entsprechenden Bausteines vorliegen.

Bevor die Feature Box oder das IC 360 gewechselt werden, sollten die beiden Teile mit den Daten des auf Seite 16 beschriebenen Notprogramms geladen werden.



Important Service Advice!

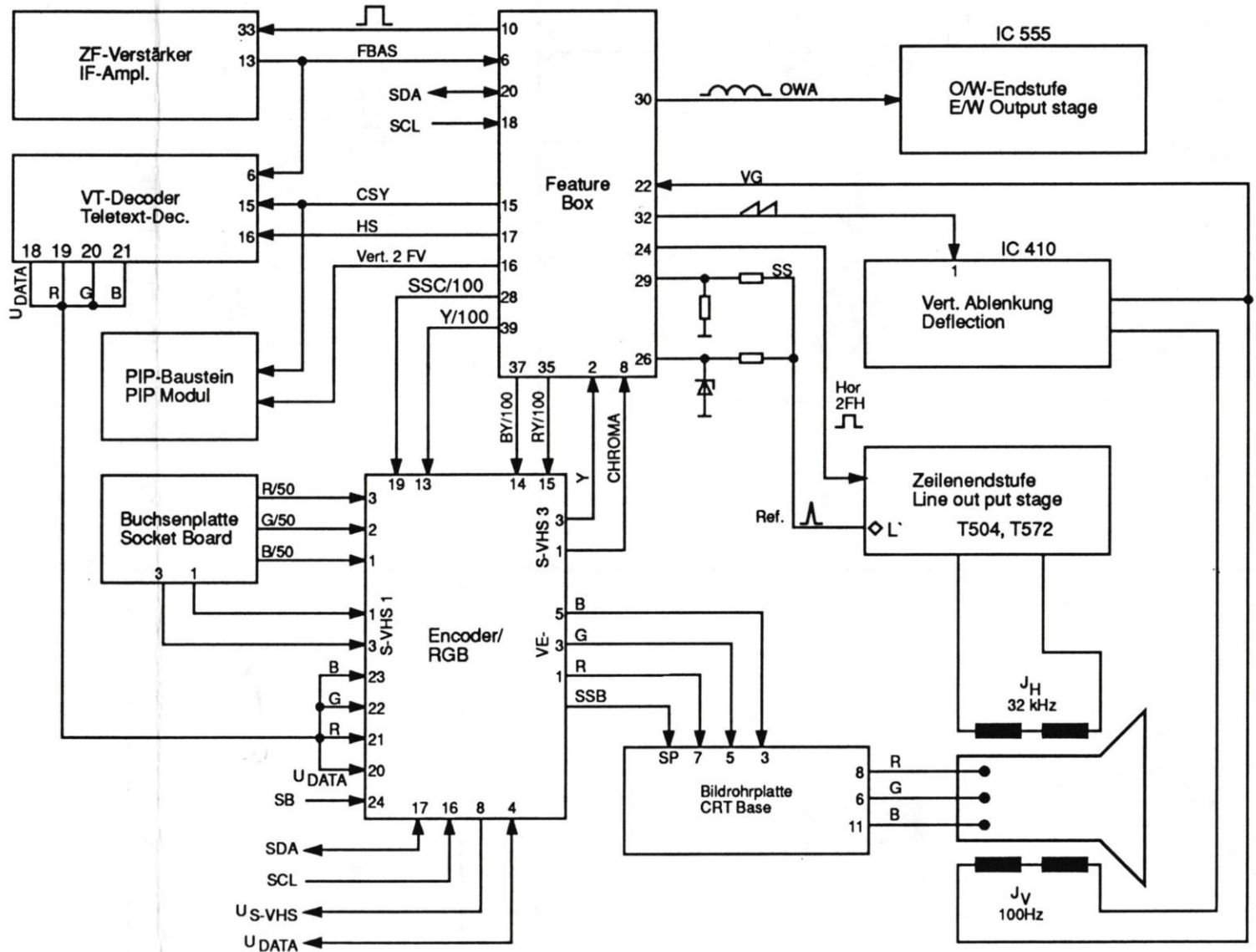
The Receiver has integrated fault tracing program. The faults located and indicated by this program refer only to faults on the I²C Bus. Even if correct feedback is indicated, a fault can still exist in the signal processing circuit of the appropriate modules.

Before the Feature Box or IC 360 is replaced, the dates of Emergency Program must be loaded into both these stages as described on page 17.

M 70 - 100 IDTV	(9.25594-01)
M 70 - 100 IDTV / (IT)	(9.25594-05)
M 70 - 100 IDTV NIC	(9.25594-68)
M 70 - 580 IDTV	(9.25660-01)
M 70 - 580 IDTV / (IT)	(9.25660-05)
M 82 - 100 IDTV	(9.25546-01)
M 82 - 100 IDTV / (IT) →	(9.25546-05)
M 95 - 100 IDTV	(9.25559-01)
M 95 - 100 IDTV / (IT)	(9.25559-05)
M 95 - 100 IDTV NIC	(9.25559-68)

Service Manual CUC 1835, 1860, 1880, 1890
Sach. - Nr. 72010 - 007.30
Service Manual CUC 1835, 1860, 1880, 1890
Order - No. 72010 - 007.30

Cheminement du signal 100Hz dans le châssis DIGI 3



Service Adjustments of Picture Geometry and Picture Position

For accurate adjustment a test generator or a transmitted test pattern must be used. For raster correction the built-in test pattern can also be used.

Sequence of operation from the Telepilot (remote control):

1. Call up the programme menu with button "i". The indication 'Info Center' is shown on the screen.
2. Call up the Service/Demo programme with button "P" (line appears red).
3. Enable with button "OK". The information "System Setup" is shown on the screen.
4. Call up Service Demo with button "AUX".
5. Call up Service Mode with button "P".
6. Depress the "OK" button and enter the number code 8500.
7. Call up the Geometry Alignment function with button "AUX".
8. When no transmitted test pattern is available, move the yellow bar with the cursor buttons to the "Test Pattern" field and switch on the built-in test pattern.
9. Move the yellow bar with the cursor buttons to the requested alignment item, eg. "Picture Height".
10. Depress the button "OK".
11. With the cursor positioning functions "+" or "-" adjust for an optimum picture.
12. For storing this value close the jumper at pin 2, IC 360 or connect contact 1 of the plug "BB" to chassis. Call up the yellow bar with button "i", set it to the field "Store" and depress the button "OK". **Attention!** The picture geometry is set to the stored value whenever the receiver is switched on.

Basic Values:

Under the field "Basic Values" the optimum picture geometry alignment data of the receiver has been stored in production.

If the geometry has been aligned wrongly during repair work, these basic values can be loaded again at any time as described under point 12. For this purpose, set the yellow bar to the field "Basic Values". Depress button "OK". When pressing the "OK" button once again the basic values for the "Picture Geometry" are selected. See point 12 for storing the data.

13. Return to normal selection mode with the button "i".

The column "Alignment List DDC, DMSD, DSD" contains internal data available only for production purposes.

Removing the Electronic Lock ("Security System")

For clearing the function "PROGRAMME locked" enter the following code with the teletext (videotext) buttons on the remote control:

VIDEOTEXT - PAGE - CANCEL - PAGE - OK



Service Mode Programme

In this fault finding programme the microprocessor in the operating control unit calls up the individual modules which are connected to the I²C bus and indicates them in the form of a code number on the display. If no acknowledgement occurs the module or peripheral unit is defective (eg. connection is interrupted, no operating voltage). With a receiver which is defective due to a breakdown of the ICs driven by the I²C bus very fast fault location can be carried out by calling up the following fault finding programme:

1. Switch off the receiver with the mains switch.
2. When the receiver is switched on with the mains switch, depress and hold the search button "→" on the operating control unit. Three points ... appear in the display. After approx. 5 seconds a code, eg. "E02" will be indicated in the display if a fault is found. The defective plug-in module or peripheral unit can be established from the fault table; "E02" is the IF memory. Additional faults which are possible, can be indicated by depressing the "+" button on the operating control unit. If no additional faults are indicated, the display shows "P1".
3. If no fault is found in the I²C bus communication the display shows three points ... when the receiver is switched on, and after 5 seconds "P1".

Indication

"E 01" --> NVM (digital store; SDA 3526, IC 360; chassis)	no ack
"E 02" --> NVM 1 (IF memory; SDA 3526)	no ack
"E 03" --> NVM 2 (tuner memory; SDA 2586, 24 C 16)	no ack
"E 04" --> DDC (Feature Box; SDA 9064)	no ack
"E 05" --> DMSD (Feature Box; SAA 9051)	no ack
"E 06" --> DSD (Feature Box; SAA 9056)	no ack
"E 07" --> PLL (tuner; SDA 3202)	no ack
"E 08" --> stereo sound (IF; TDA 6611)	no ack
"E 09" --> MSC (Feature Box; SDA 9099)	no ack
"E 10" --> MOIF (Feature Box; SDA 9093)	no ack
"E 11" --> DA converter (encoder; TDA 8442, IC 940)	no ack
"E 12" --> VT MII (Feature Box; SDA 9090)	no ack
"E 14" --> VTP (VT decoder; SDA 9241)	no ack

Emergency Data Base

This receiver is fitted with a non-volatile memory (IC 360) in which all important parameters, such as, eg. colour decoder data or picture geometry, are stored.

In case of a fault or altered data of this IC it is possible to load a complete programme with average values from the EPROM of the operating control unit into the Feature Box. When carrying out services this provides a means of establishing a possible fault in the Feature Box.

Emergency Data Base Storage

Depress and hold the Fine Tuning button and switch the receiver on with the mains button. By this action the average values of the colour decoder data and picture geometry are read from the operating control into the Feature Box. Select the Service Mode Programme, set the bar to field "Basic Values" and store with the "OK" button.

Baustein - Übersicht

Module list

Vue d'ensemble composantes

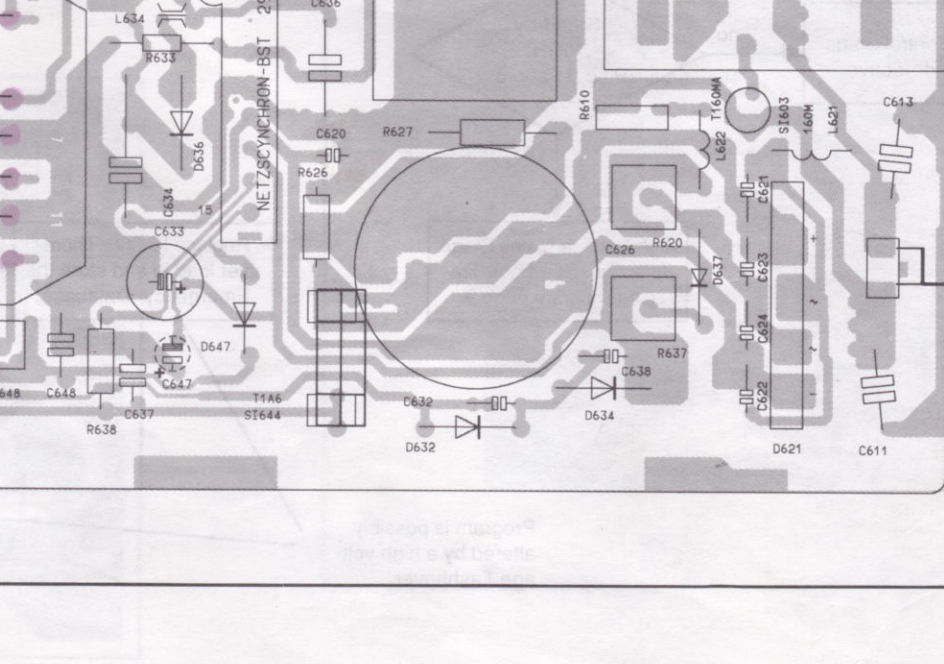
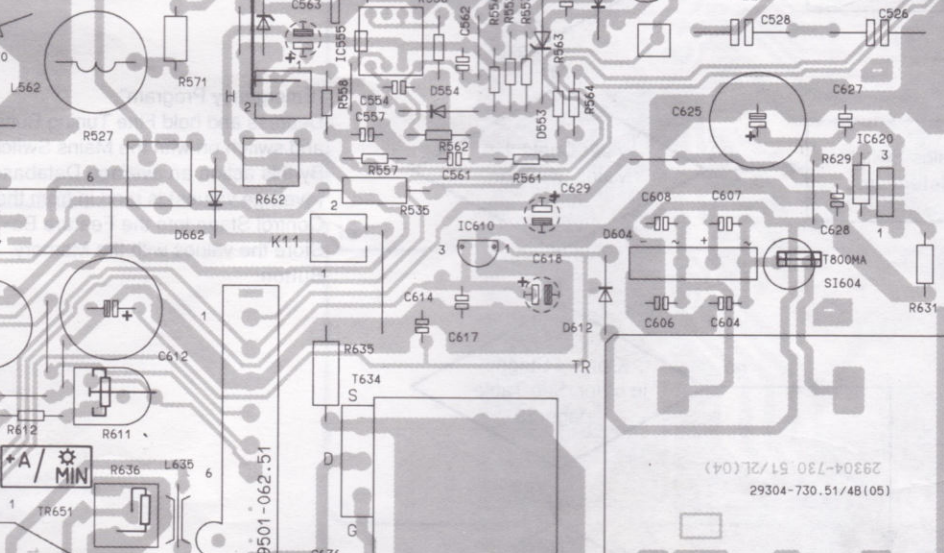
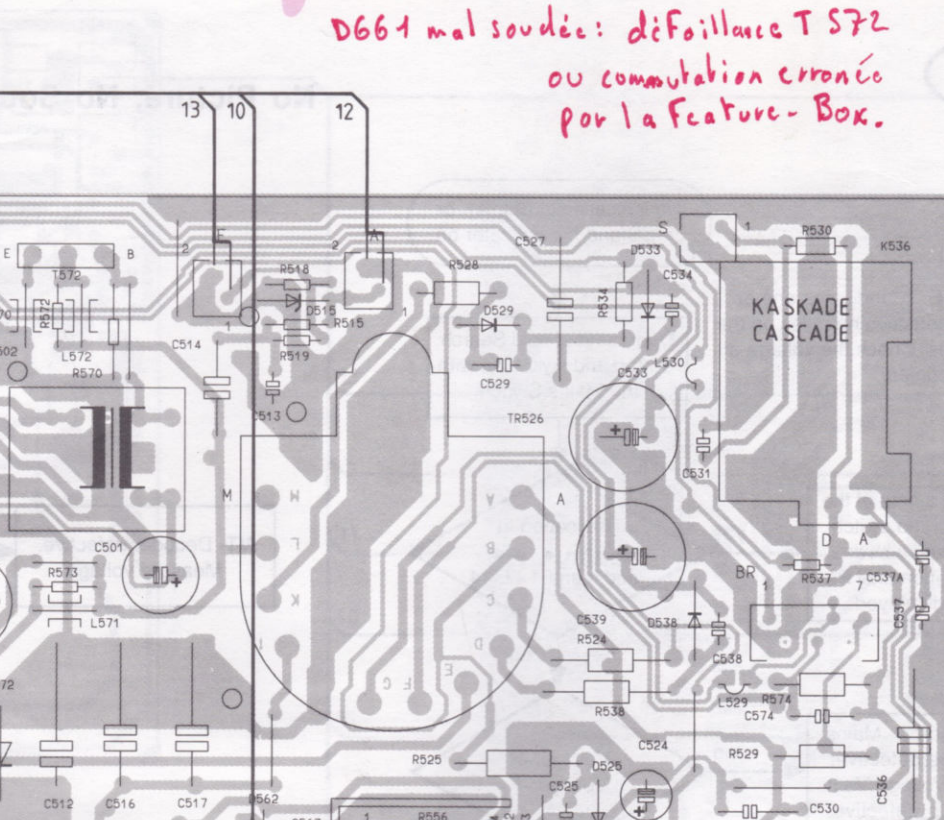
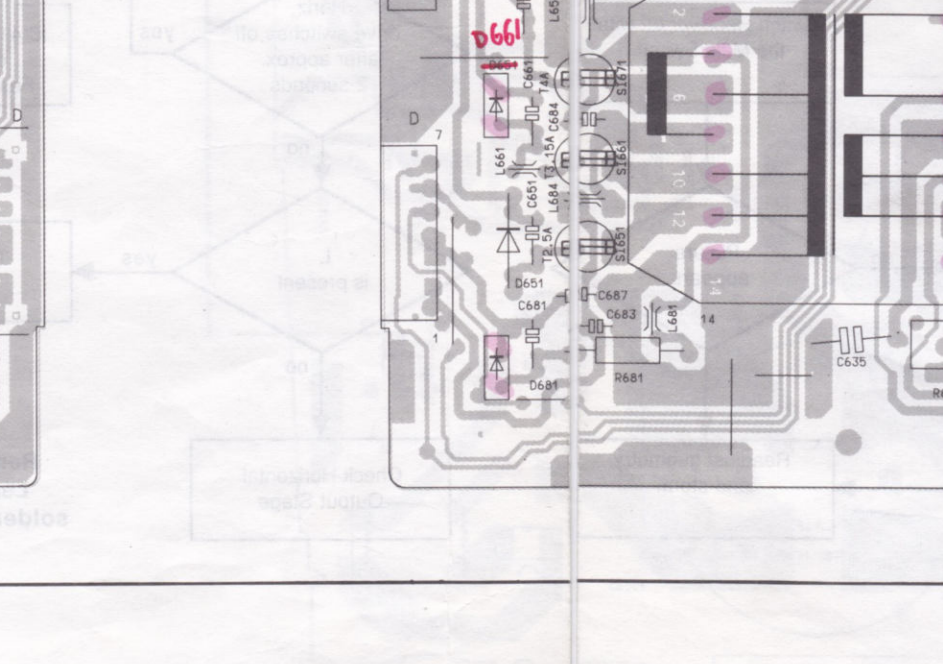
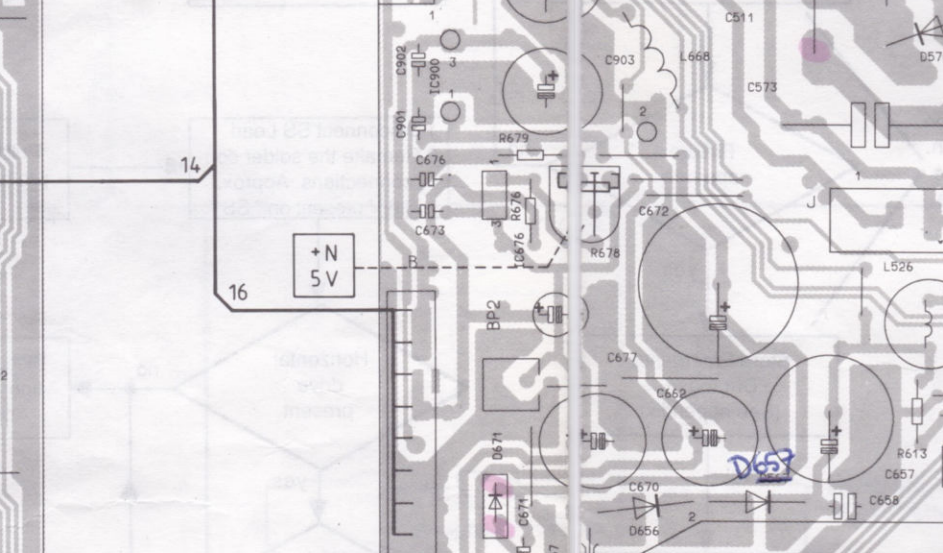
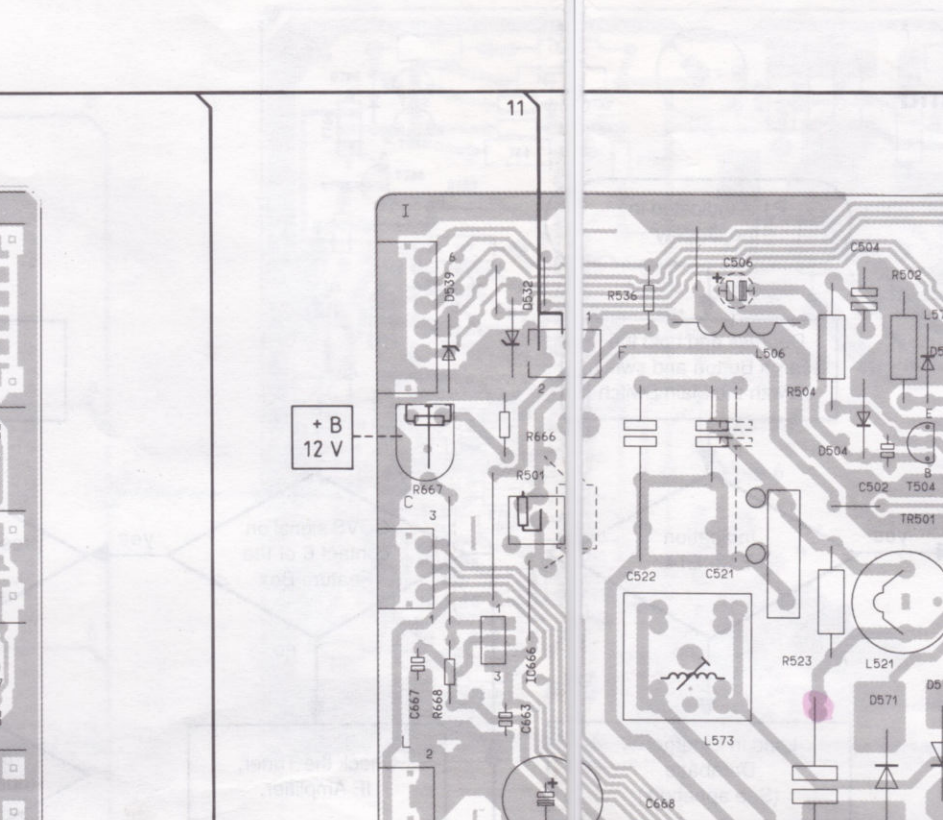
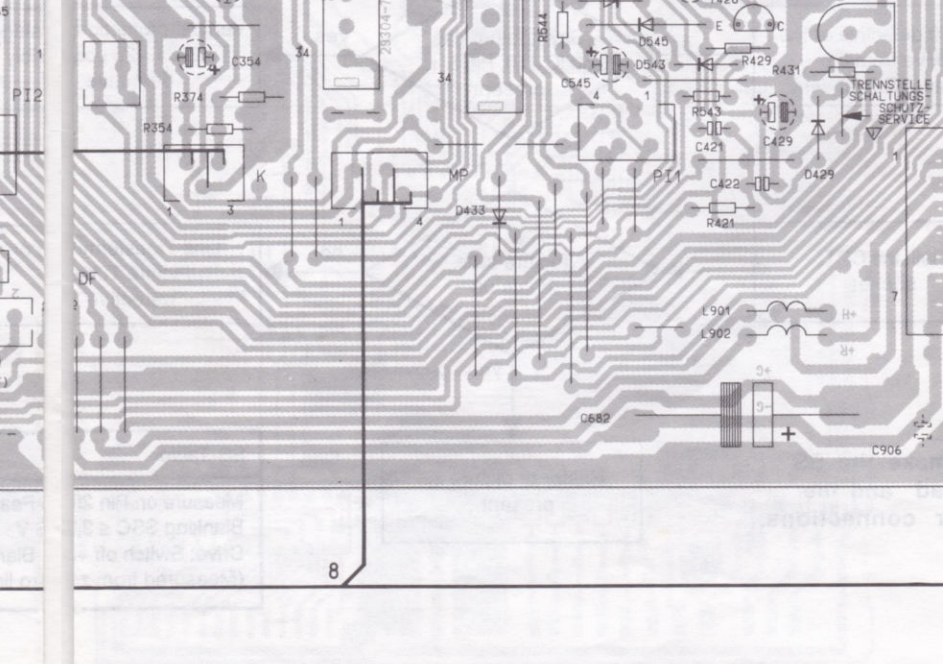
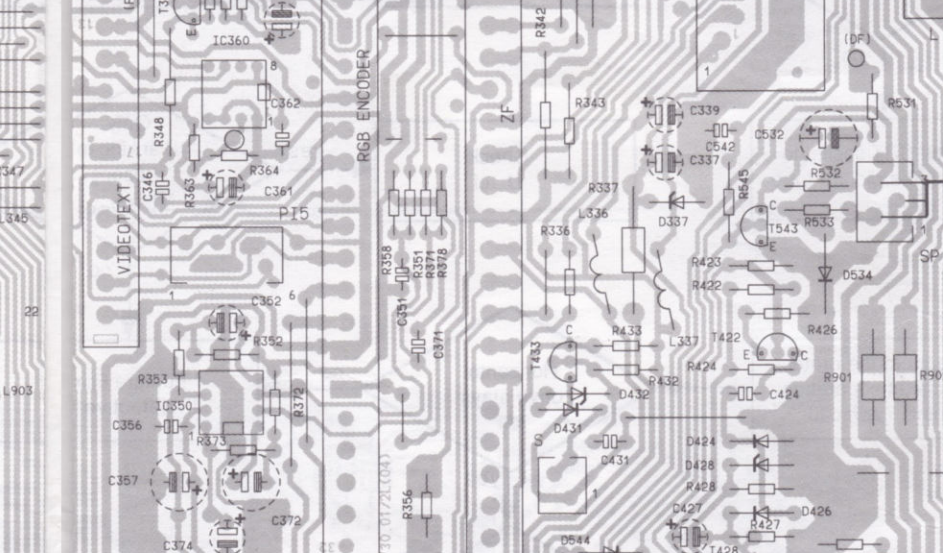
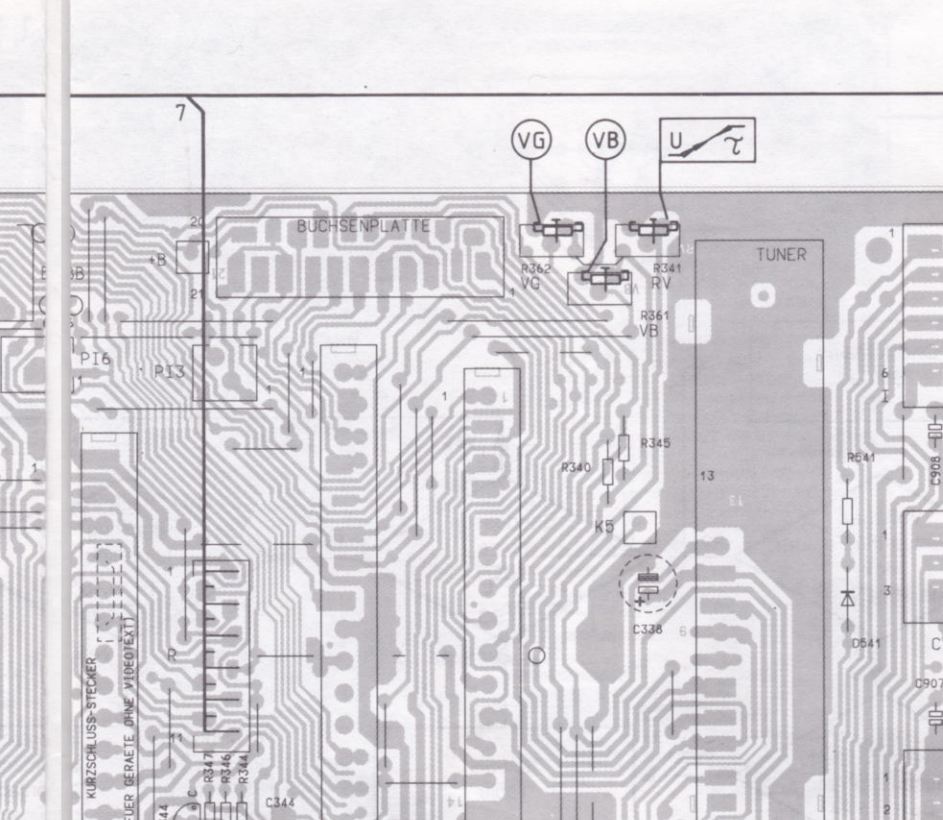
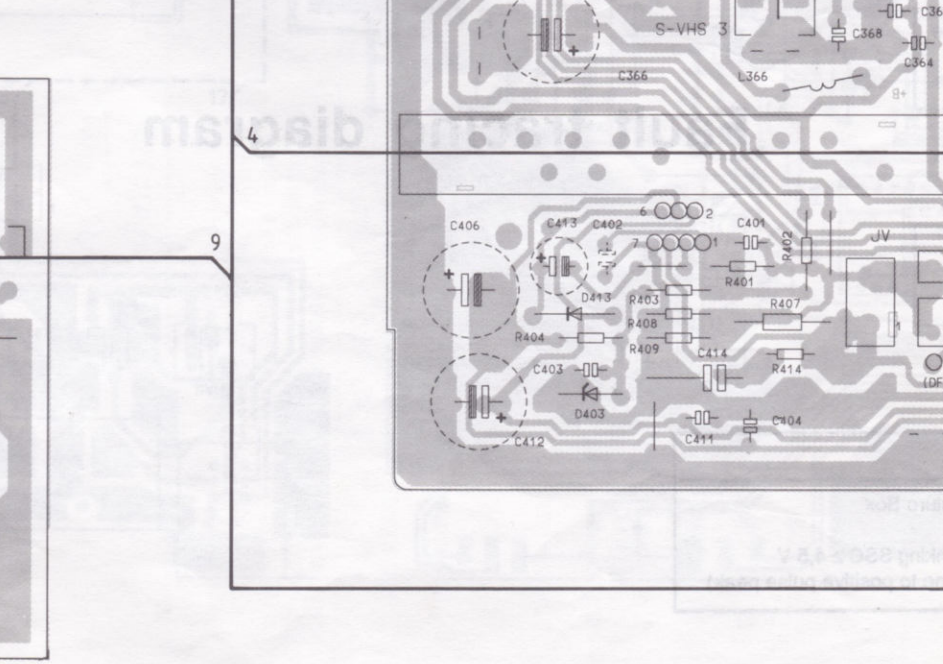
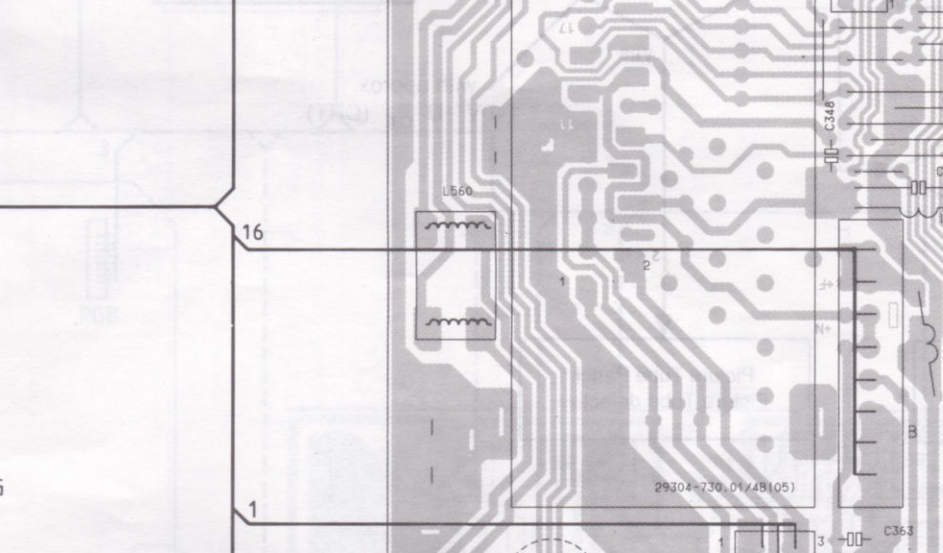
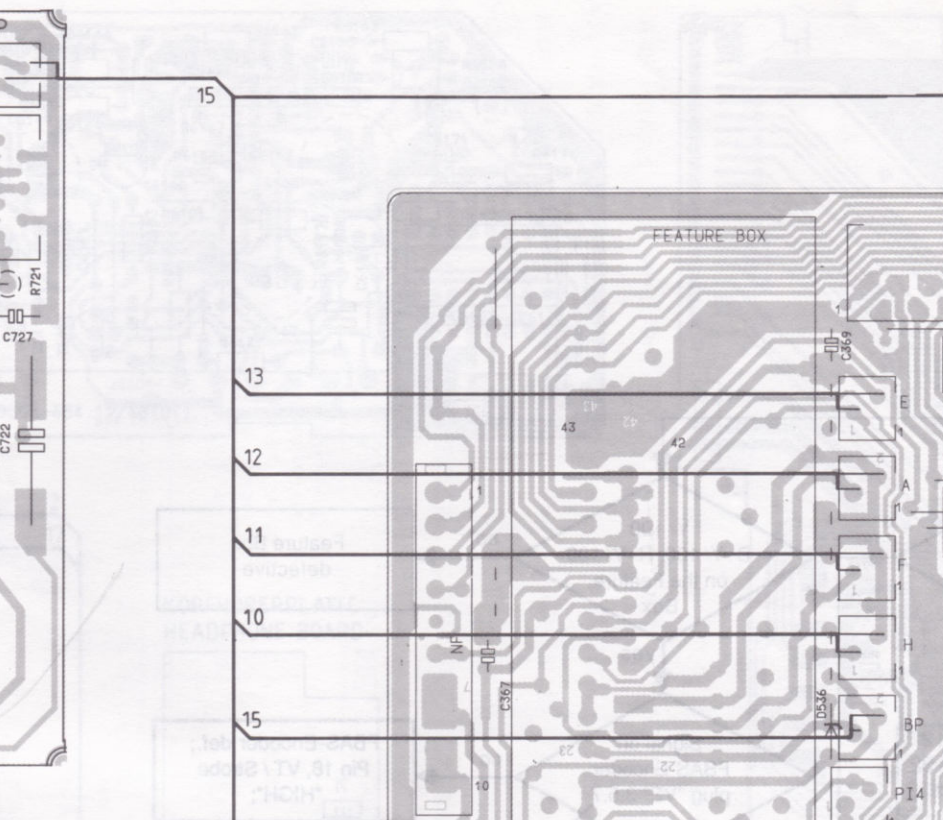
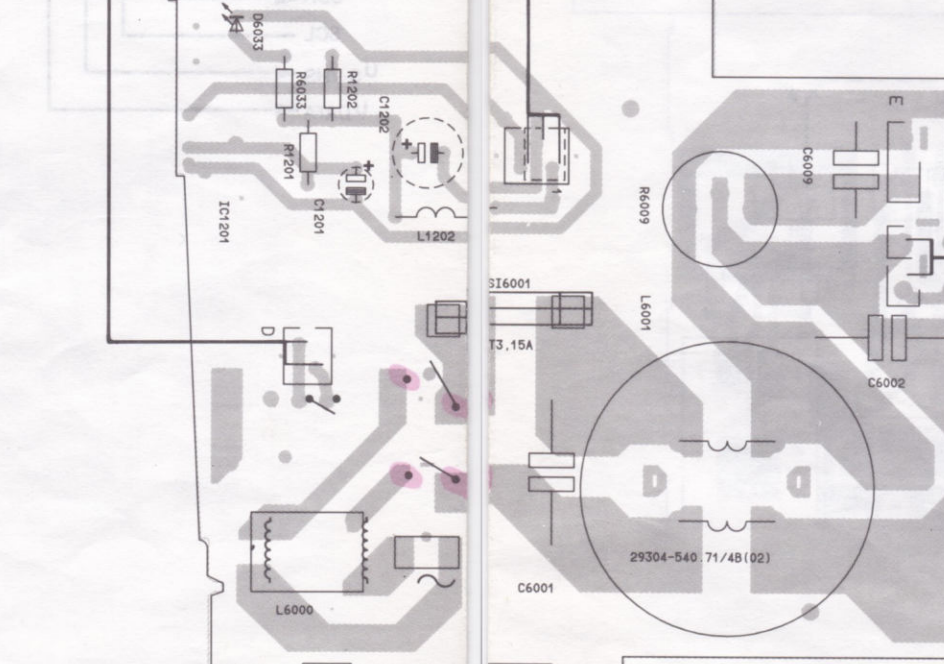
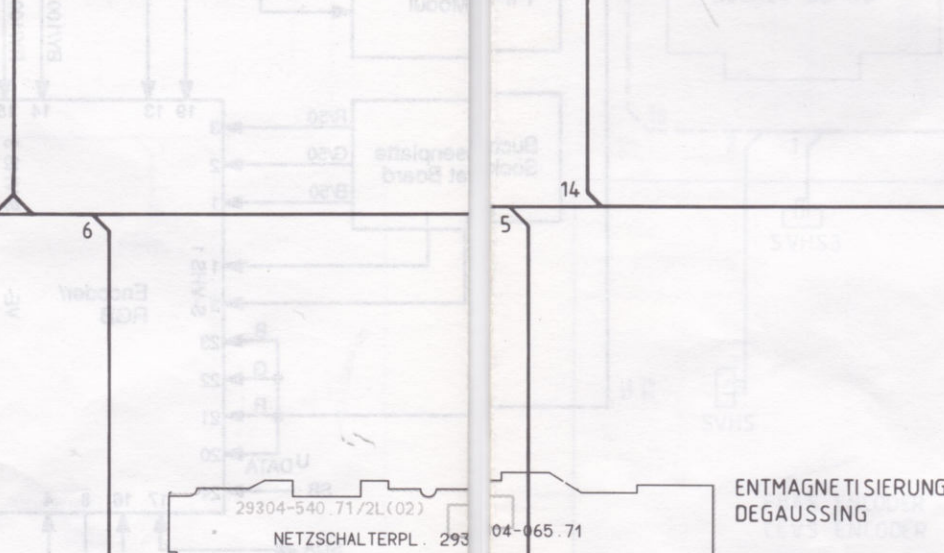
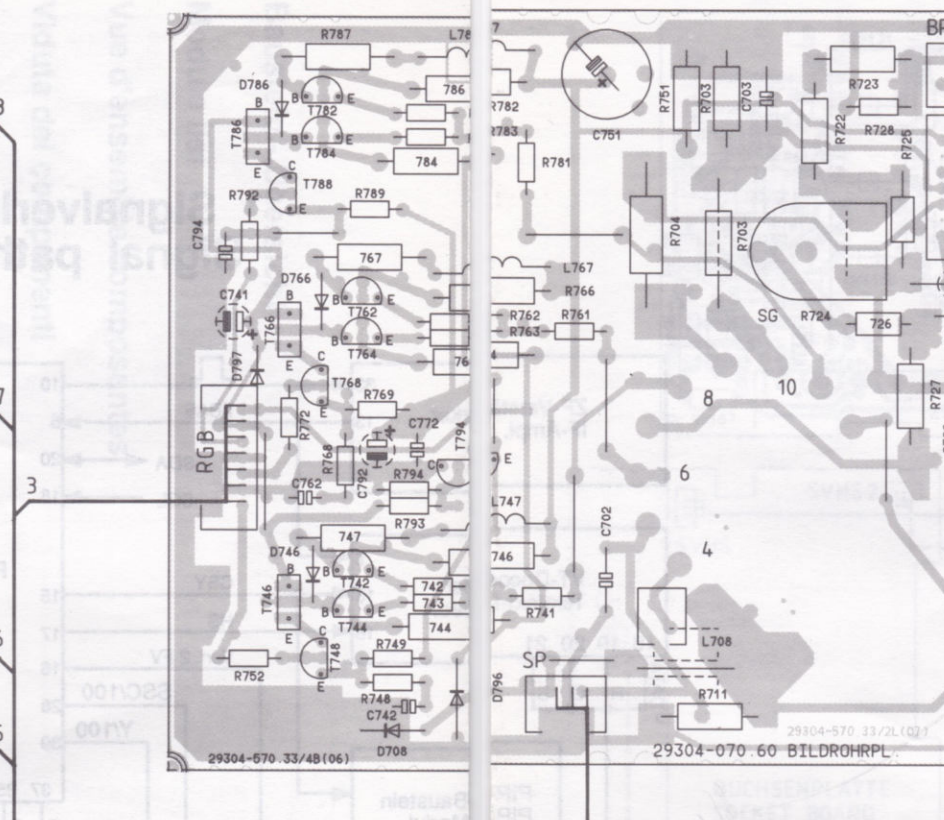
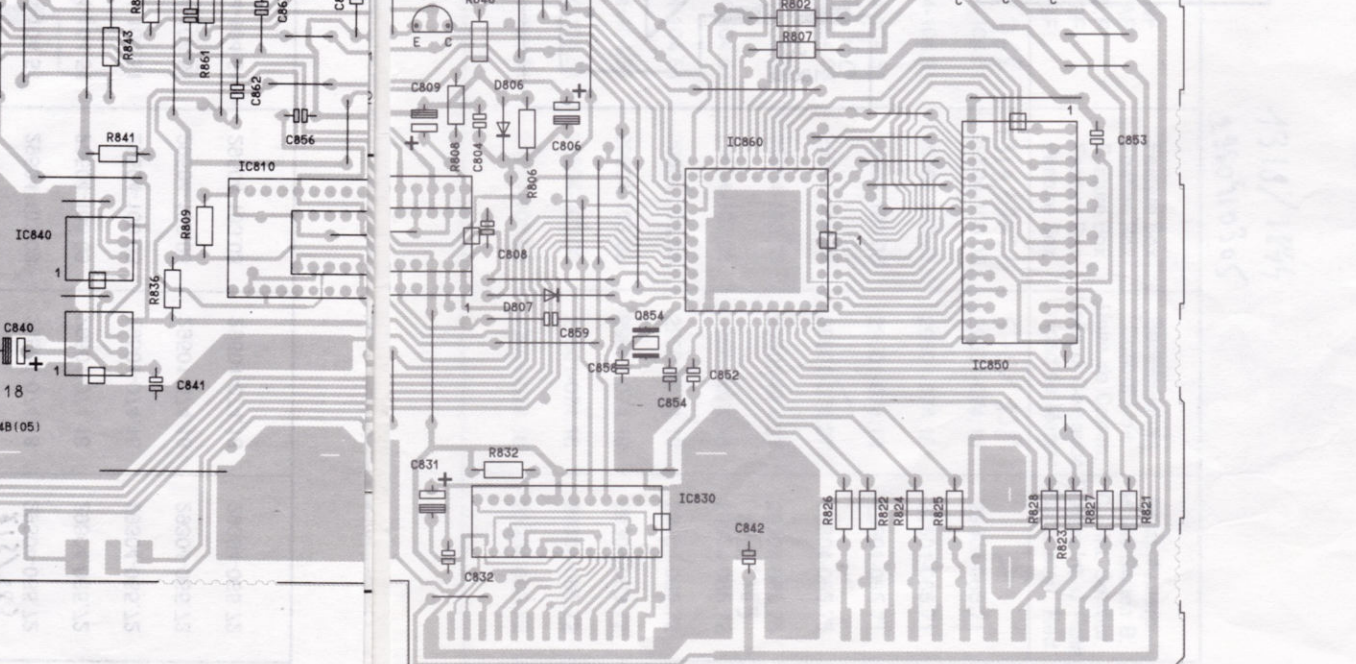
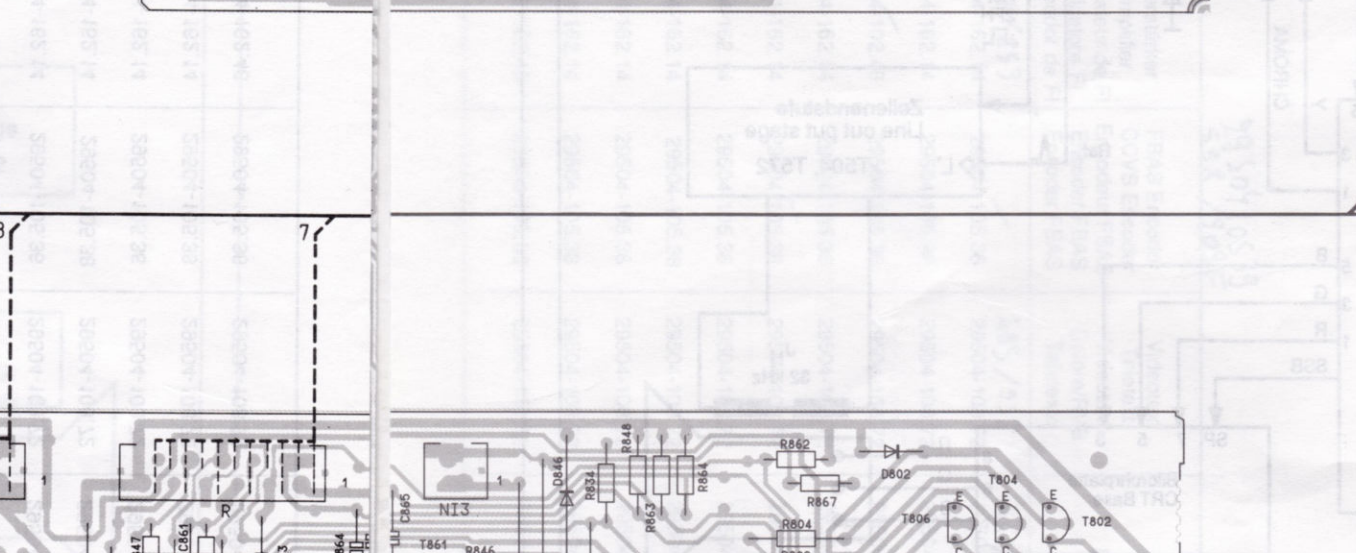
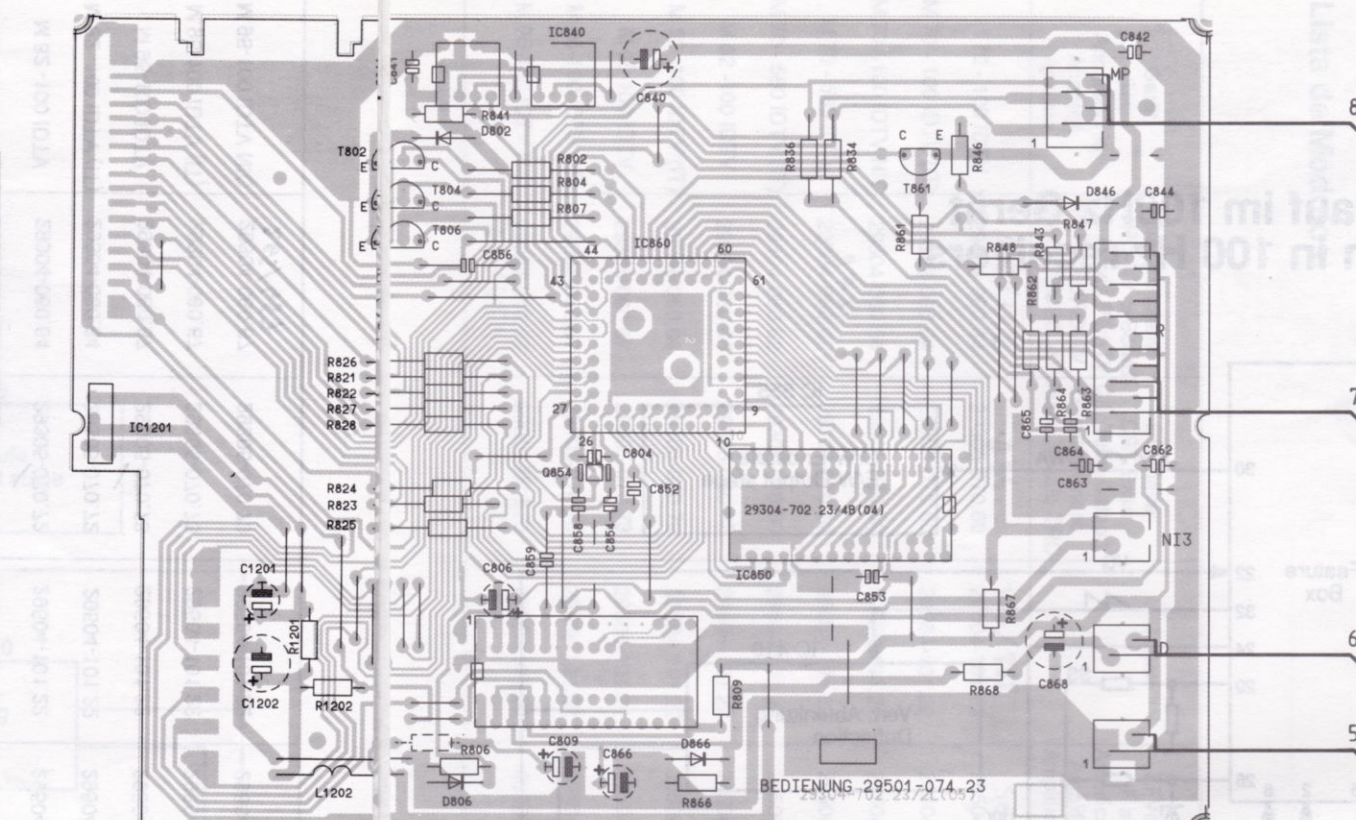
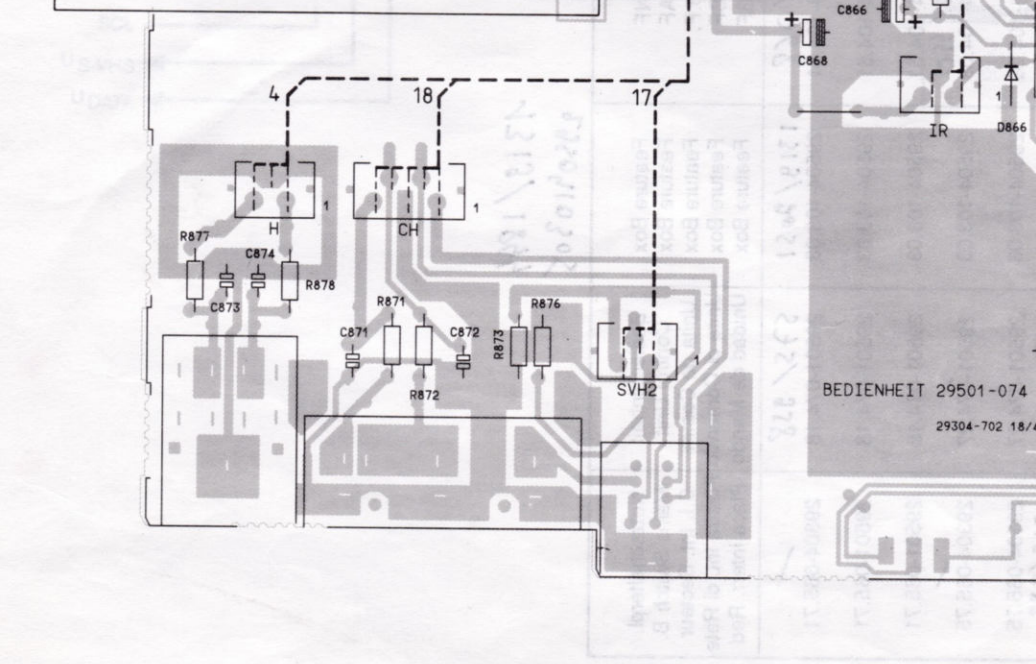
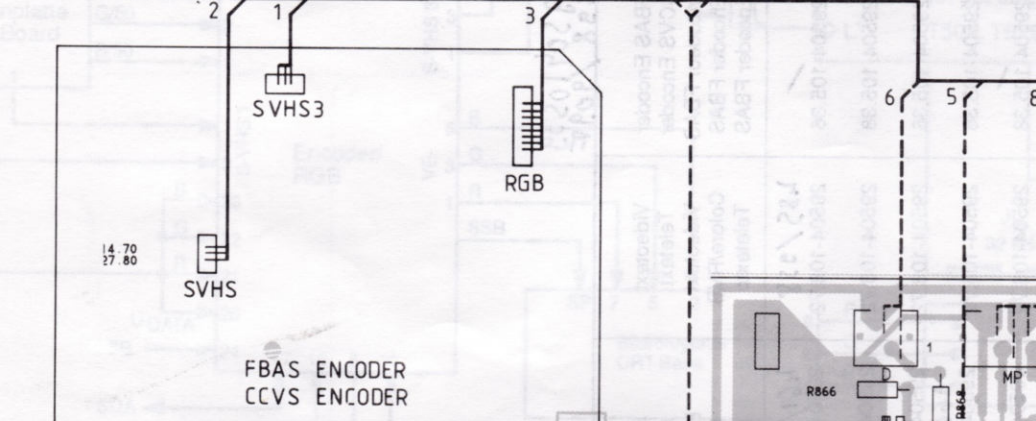
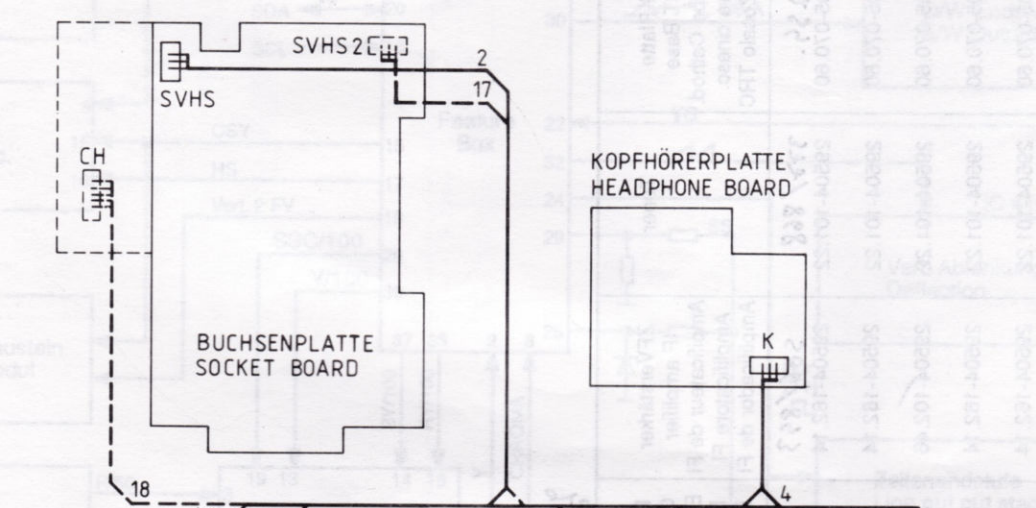
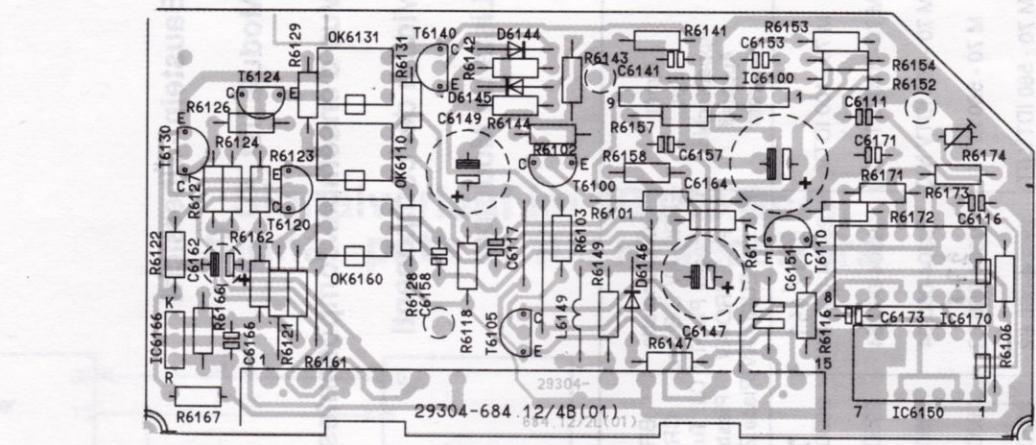
Viduta dei componenti

Lista de Modulos

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598/909F

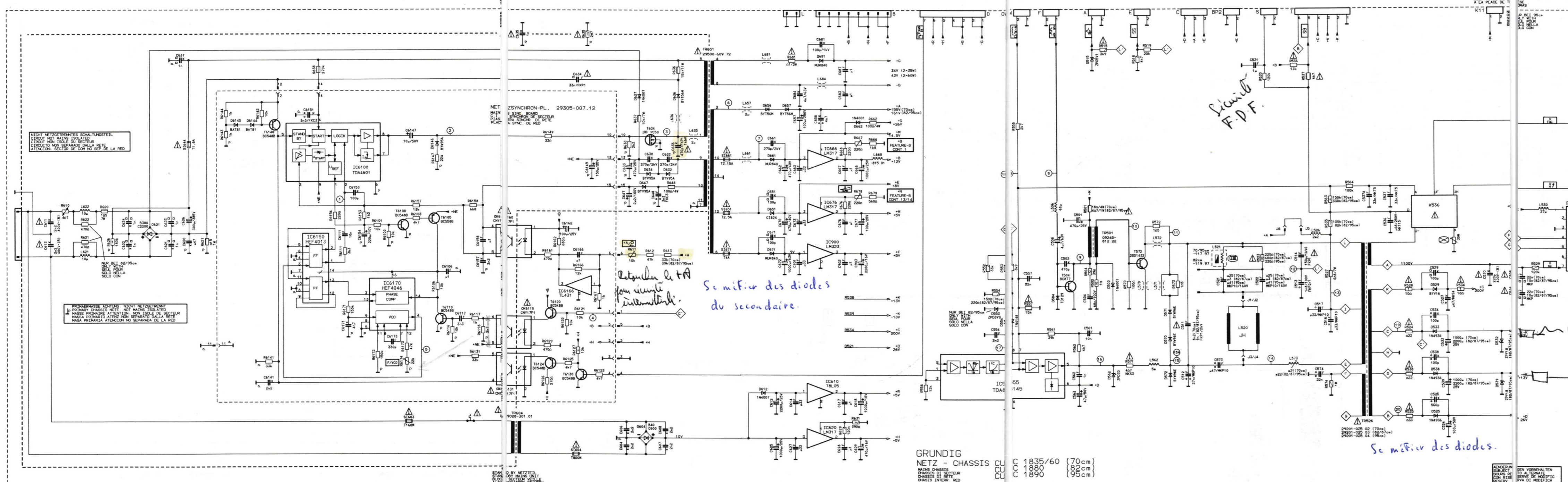
1319/1844
2950410305

Gerät Set Apparecchio Appareil Aparato	Buchsenplatte EURO-AV S.Board C.I. Prises Peri-TV P. Pr. EURO-AV Pl. con. EURO AV	BR-Platte CRT Base C.I. Tube Cathod. Piastra cinesc. Placa Zocalo TRC	Tuner	ZFVerstärker IF amplifier Ampificateur de FI Amplificatore FI Amplificador de FI	FBAS Encoder CCVS Encoder Encodeur FBAS Encoder FBAS Encoder FBAS	Videotext Teletext Videotext Colore/RVB Teletexto	NF AF B.F. BF BF	Feature Box Feature Box Feature Box Feature Box Feature Box	Bedieneinheit Control Unit Unità de Comm. Unità di Comando Unidad de Mando	Netzschalterpl. Mains Switch B. C.I. Int. Secteur Piastra Int. di Rete Placa interr. Red
M 70 - 100 IDTV	266/442 29304-060.64	254. 29305-070.60	377/868 29504-101.22	506/853 29504-162.14	29504-105.36	485/958 29504-108.72	461/768 29504-104.51	1319/2051 29504-103.03	575/958 29501-074.18	29304-065.71
M 70 - 100 IDTV (IT)	29304-060.64	29305-070.60	29504-101.22	29504-162.14	29504-105.38	29504-108.72	29504-104.51	29504-103.03	29501-074.18	29501-065.71
M 70 - 100 IDTV NIC	29304-060.64	29305-070.60	29504-101.22	29504-102.46	29504-105.36	29504-108.72	29504-104.51	29504-103.03	29501-074.18	29501-065.71
M 70 - 580 IDTV	978. 29304-060.62	29305-070.60	29504-101.22	29504-162.14	29504-105.36	29504-108.72	266/440 29504-104.08	29504-103.03	29501-074.27	29304-065.75
M 70 - 580 IDTV (IT)	29304-060.62	29305-070.60	29504-101.22	29504-162.14	29504-105.38	29504-108.72	29504-104.08	29504-103.03	29501-074.27	29304-065.75
M 82 -100 IDTV	29304-060.64	29305-070.72	29504-101.22	29504-162.14	29504-105.36	29504-108.72	29504-104.51	29504-103.03	29501-074.18	215/383 29304-065.72
M 82 -100 IDTV (IT)	29304-060.64	29305-070.72	29504-101.22	29504-162.14	29504-105.38	29504-108.72	29504-104.51	29504-103.03	29501-074.18	29304-065.72
M 95-100 IDTV	29304-060.67	29305-070.73	29504-101.22	29504-162.14	29504-105.36	29504-108.72	29504-104.51	29504-103.03	29501-074.18	29304-065.72
M 95-100 IDTV (IT)	29304-060.67	29305-070.73	29504-101.22	29504-162.14	29504-105.38	29504-108.72	29504-104.51	29504-103.03	29501-074.18	29304-065.72
M 95-100 IDTV NIC	29304-060.67 265/457	29305-070.73	29504-101.22	29504-102.46	29504-105.36	29504-108.72	29504-104.51	29504-103.03	29501-074.18	29304-065.72



Soudures à refaire d'office -
D661 mal soudée: défoiilance T 572
ou commutation erronée
par la Feature-Box.

C636 re deronde => alimentation part.



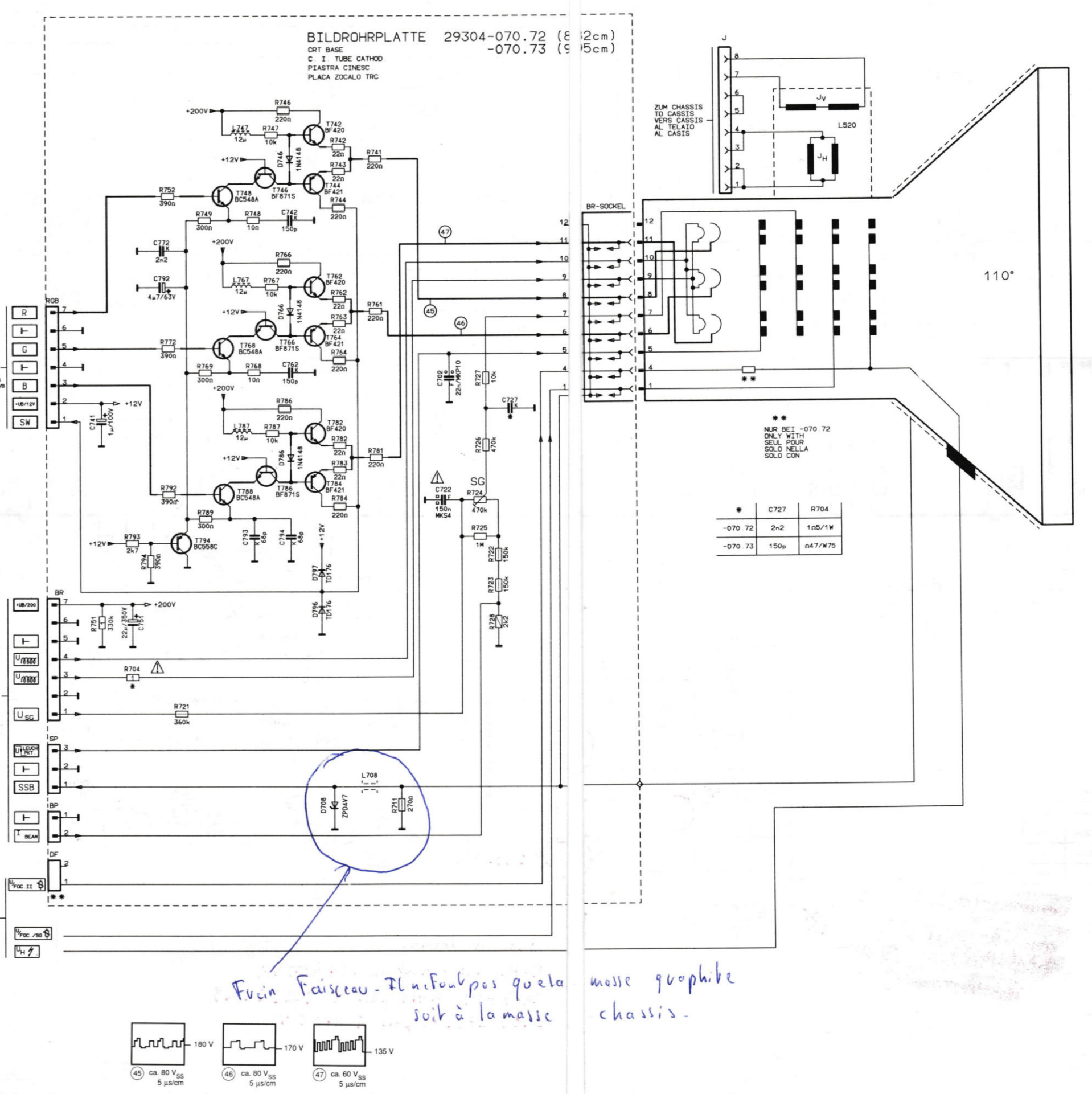
GRUNDIG
NETZ - CHASSIS
CHASSIS DE RESEAU
CHASSIS INTERNE RED

CCF 1835/60 (70cm)
0880 (65cm)
0890 (55cm)

Se modifier F.D.F.

Se modifier des diodes.

R902 (1,1A)
R901 (1,1A)

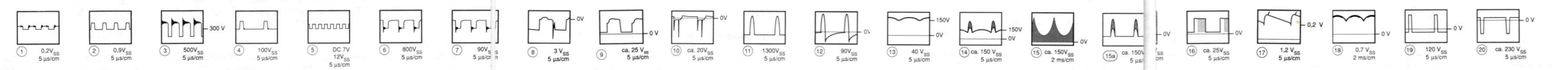


Faisceau - Pl. ni-fou pas quela soit à la masse chassis.

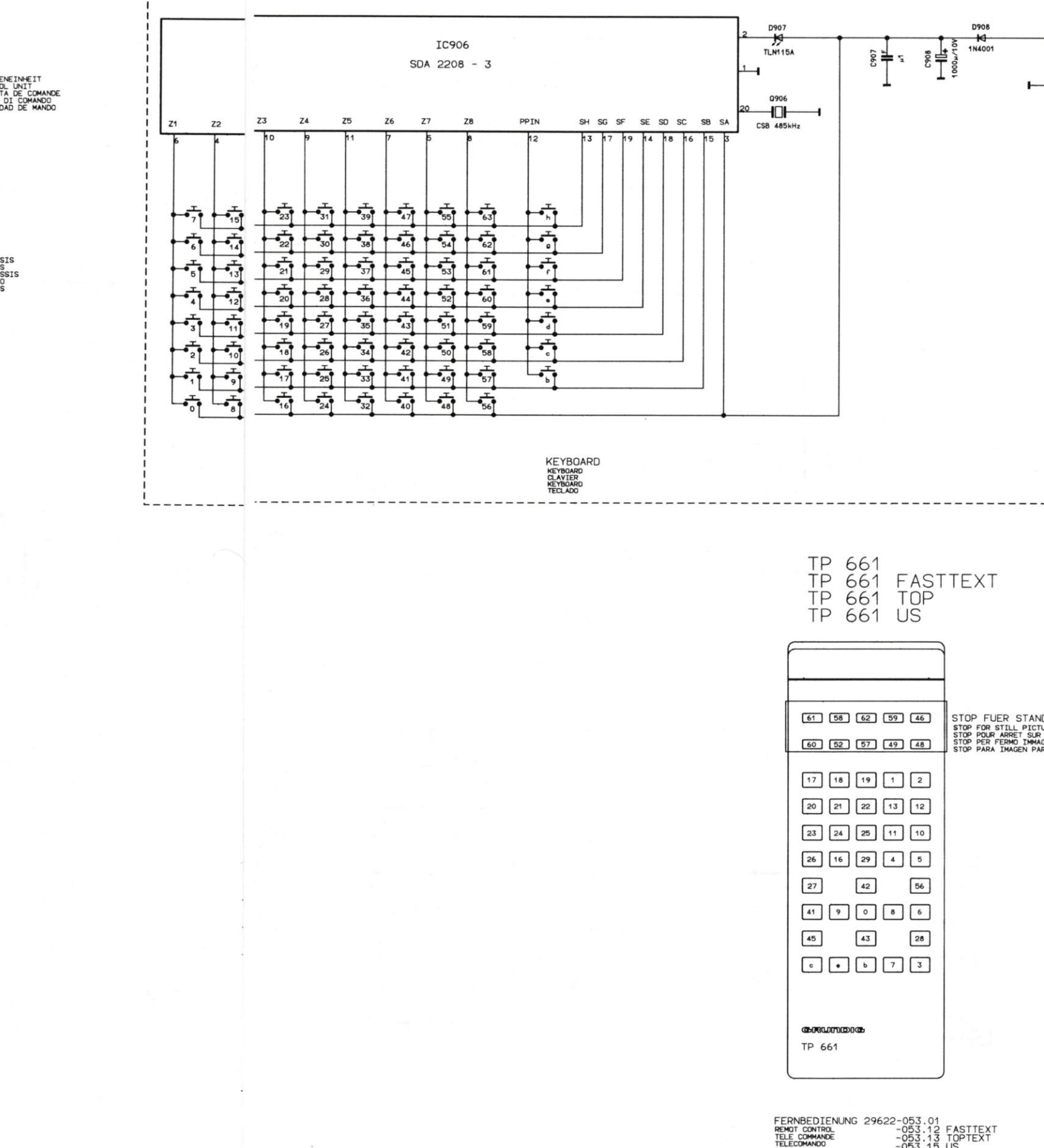
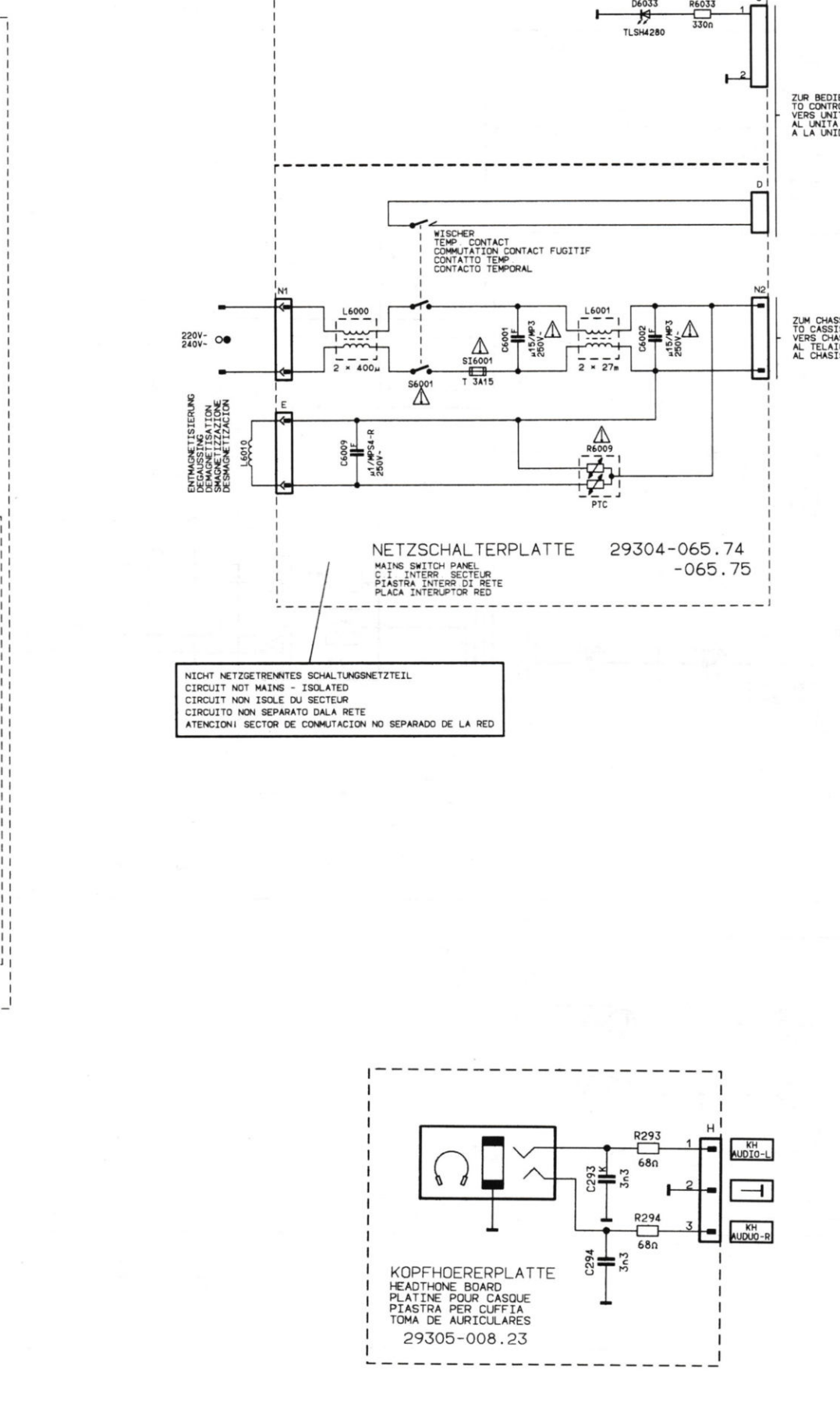
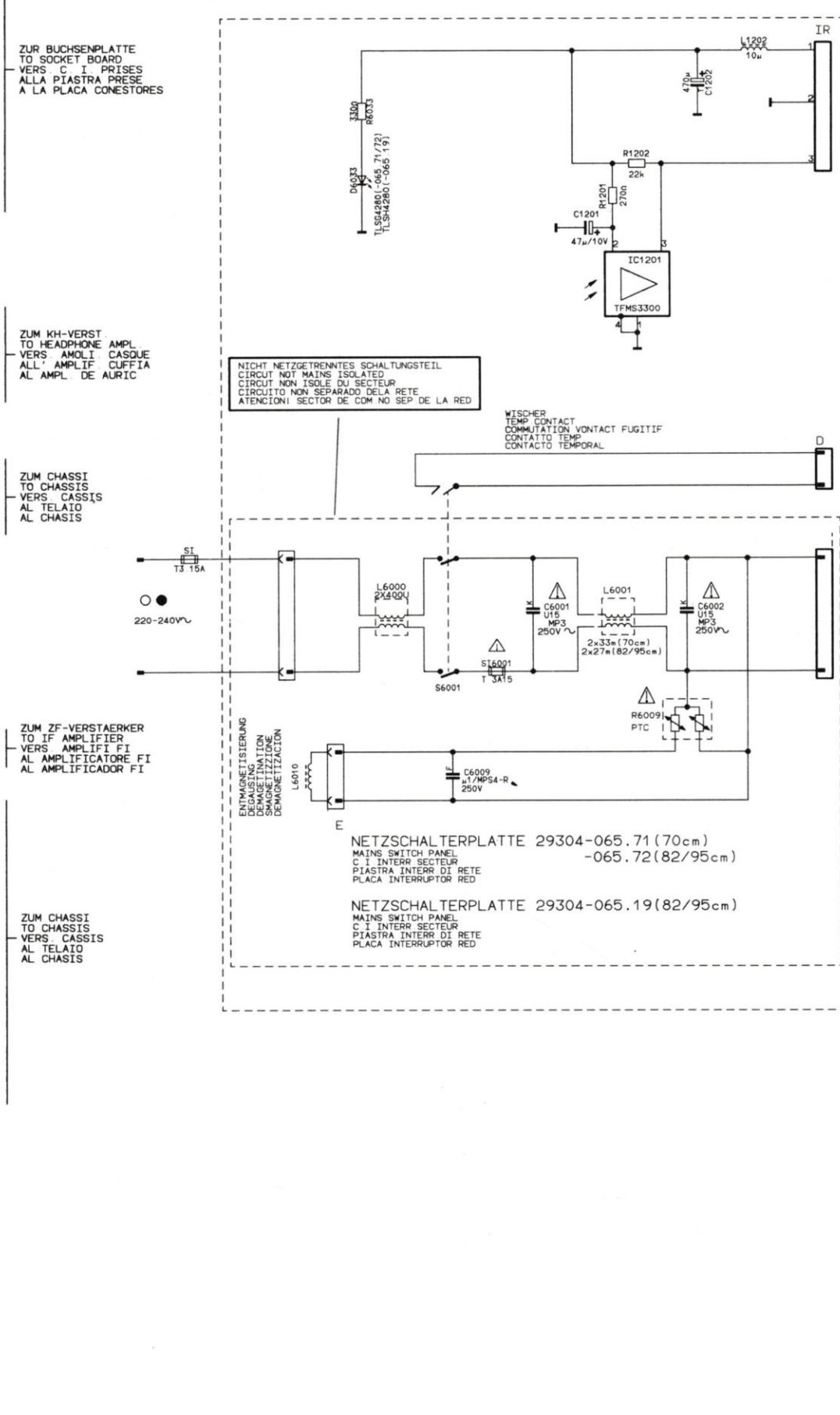
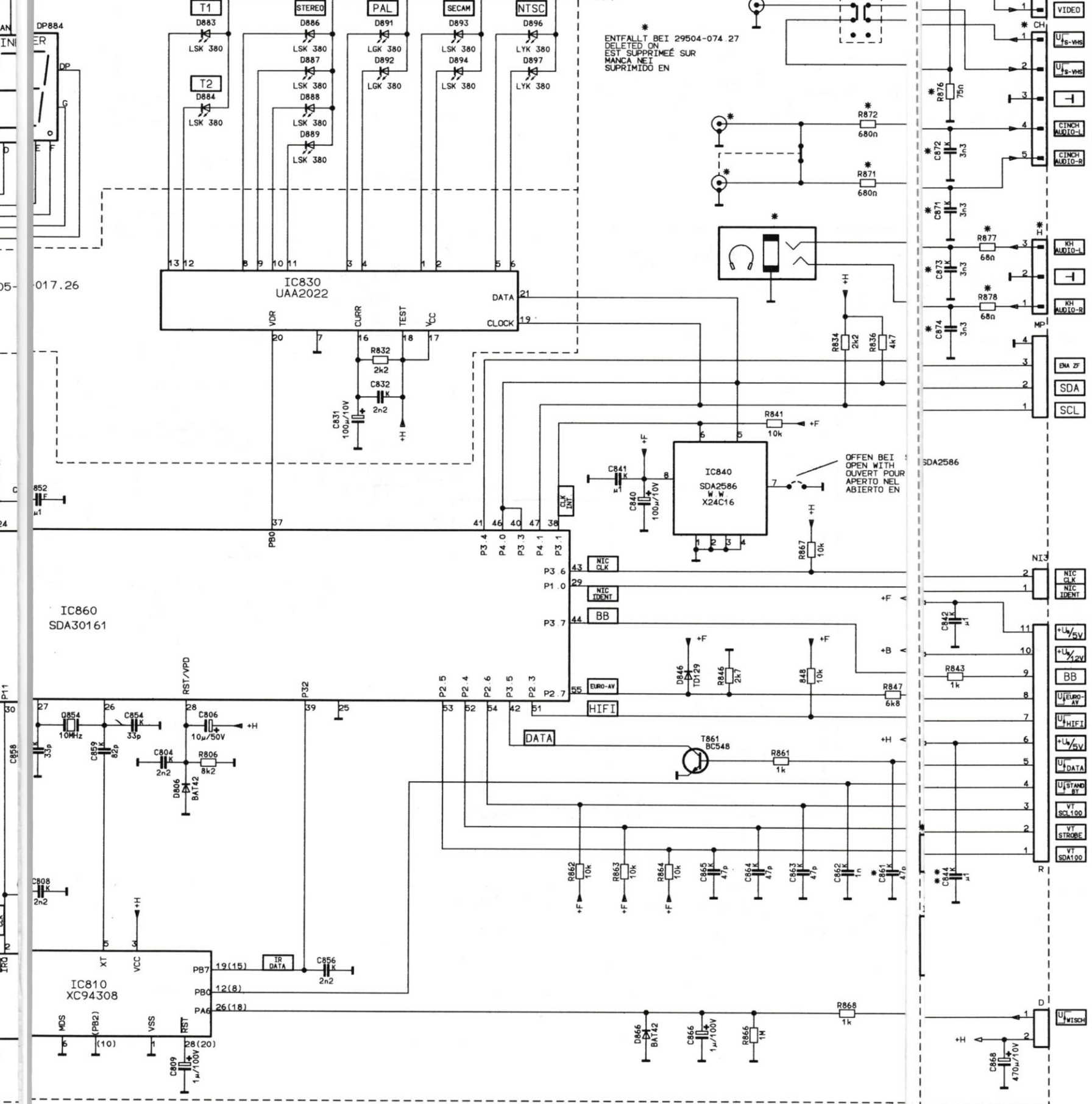
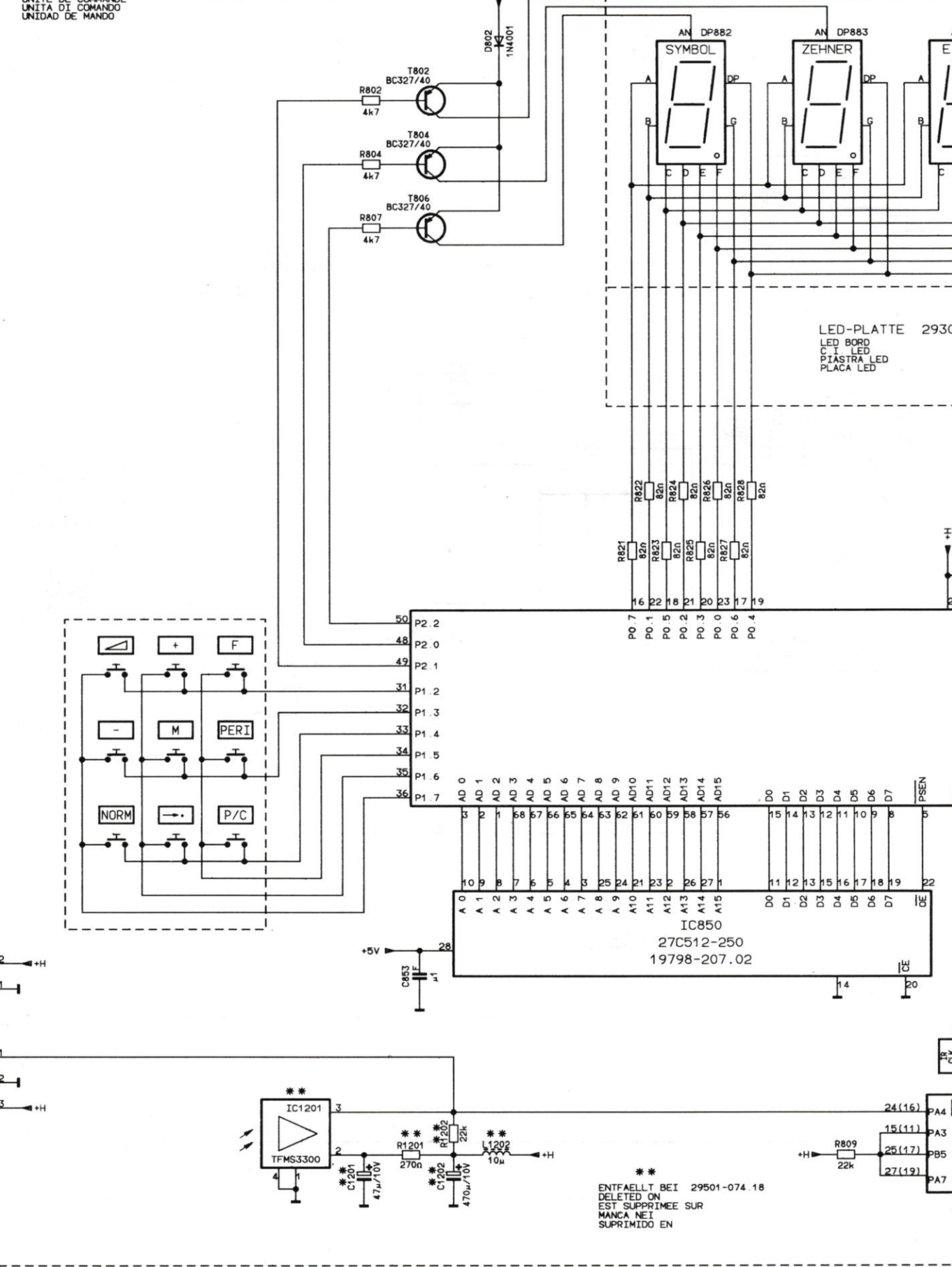
* C727	R704
-070 72	2x2 105/1W
-070 73	150w d47/7/75

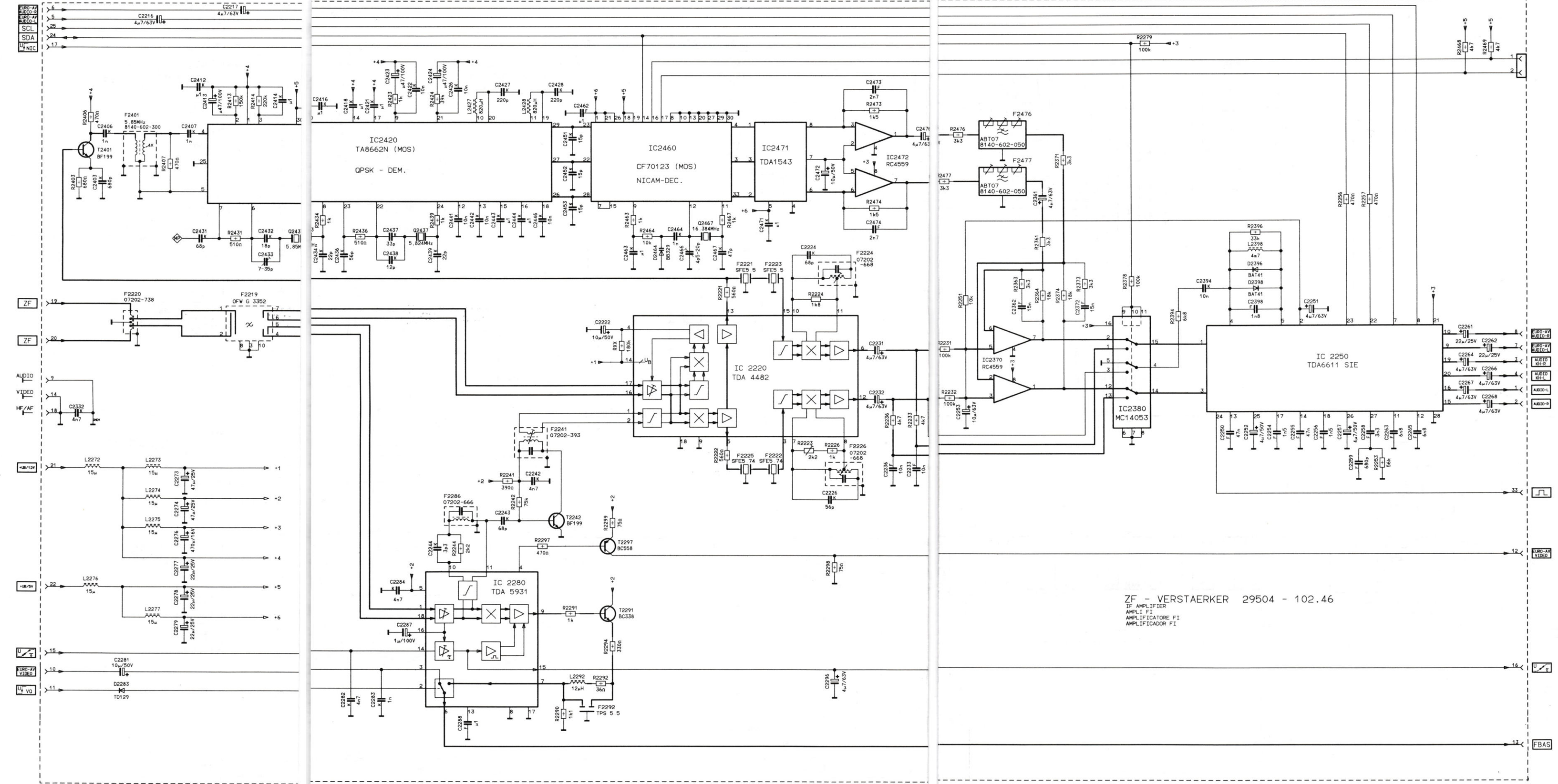
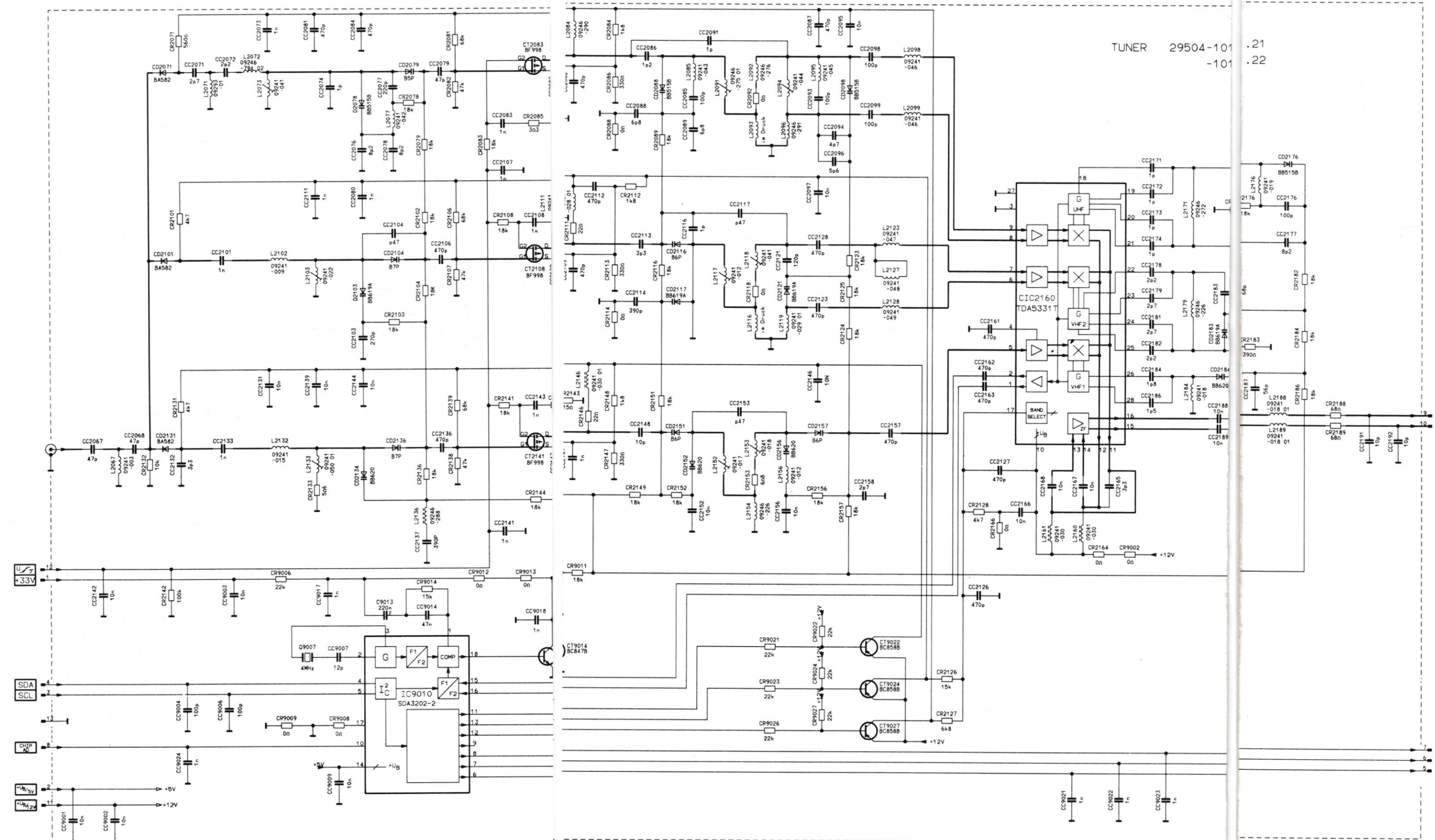
(D)
ABGLEICH DER BRÜCKENSPULE L 573
Bildbreite auf Minimum, den Tastkopf eines Zweistrahl-Oszilloskopes an den Kollektor des Transistors T 572 anhängen. Den anderen Tastkopf zwischen den Dioden D 570 und D 572 anschließen. Mit der Spule L 573 beide Oszillogramme auf gleiche Impulsbreite abgleichen.

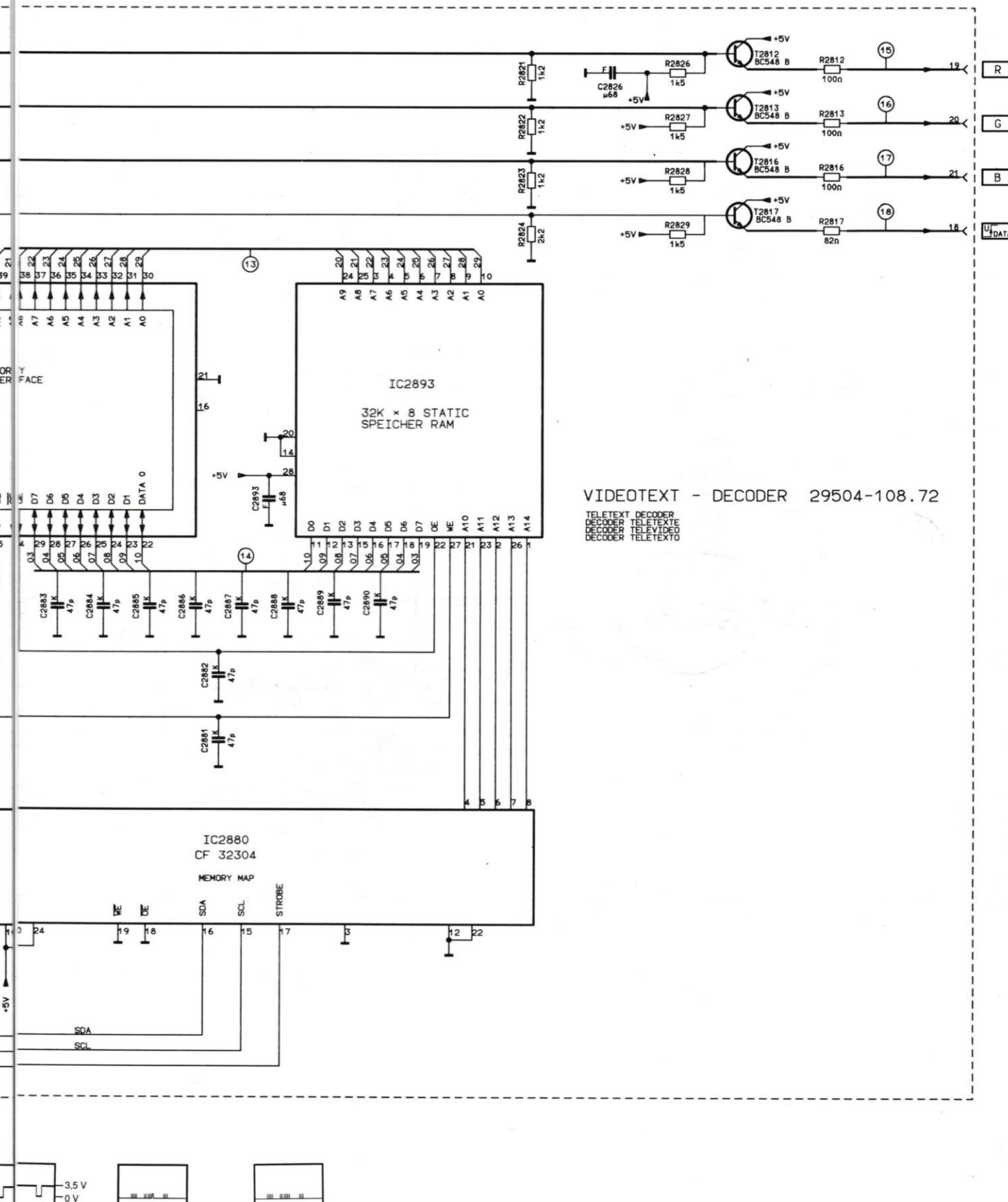
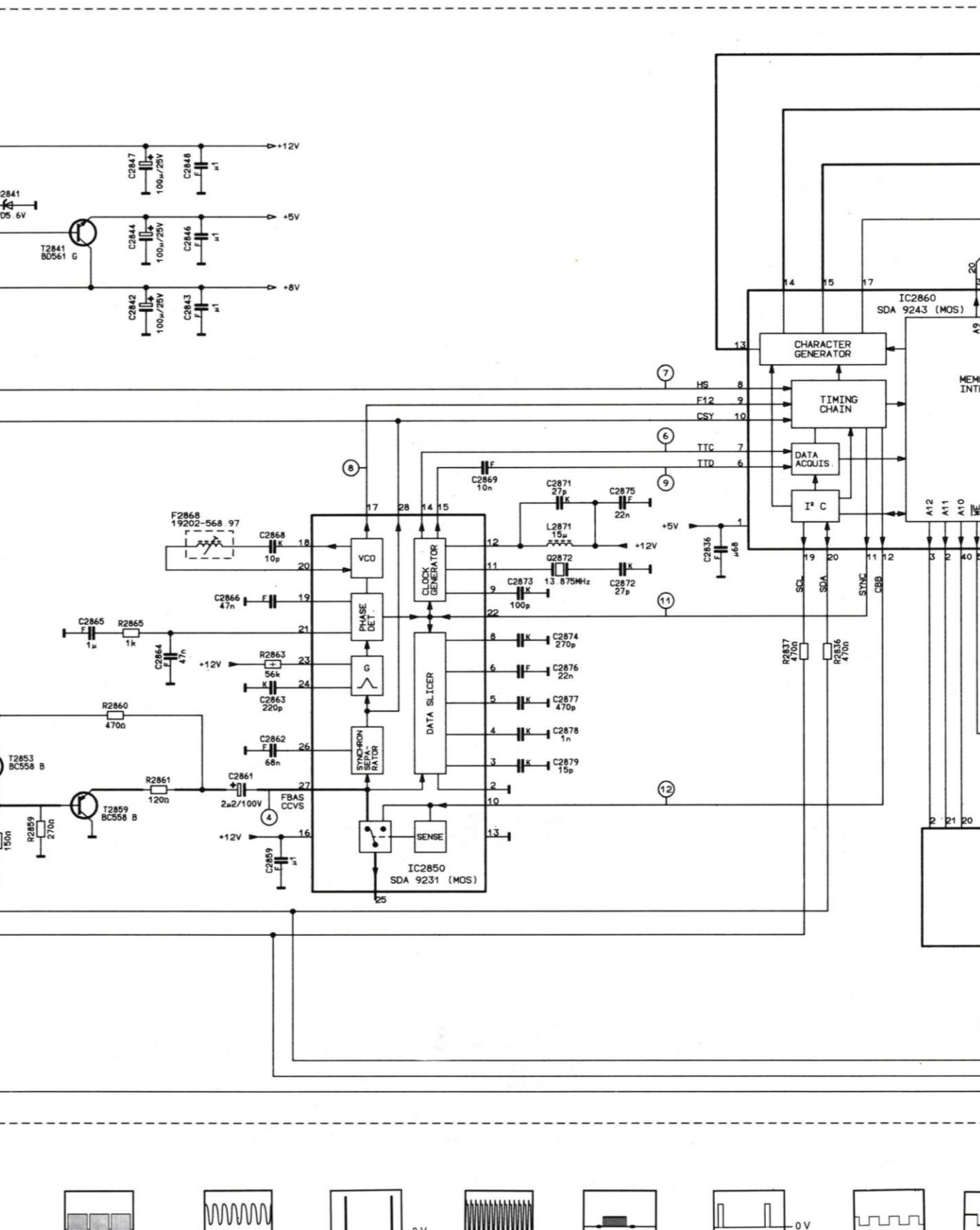
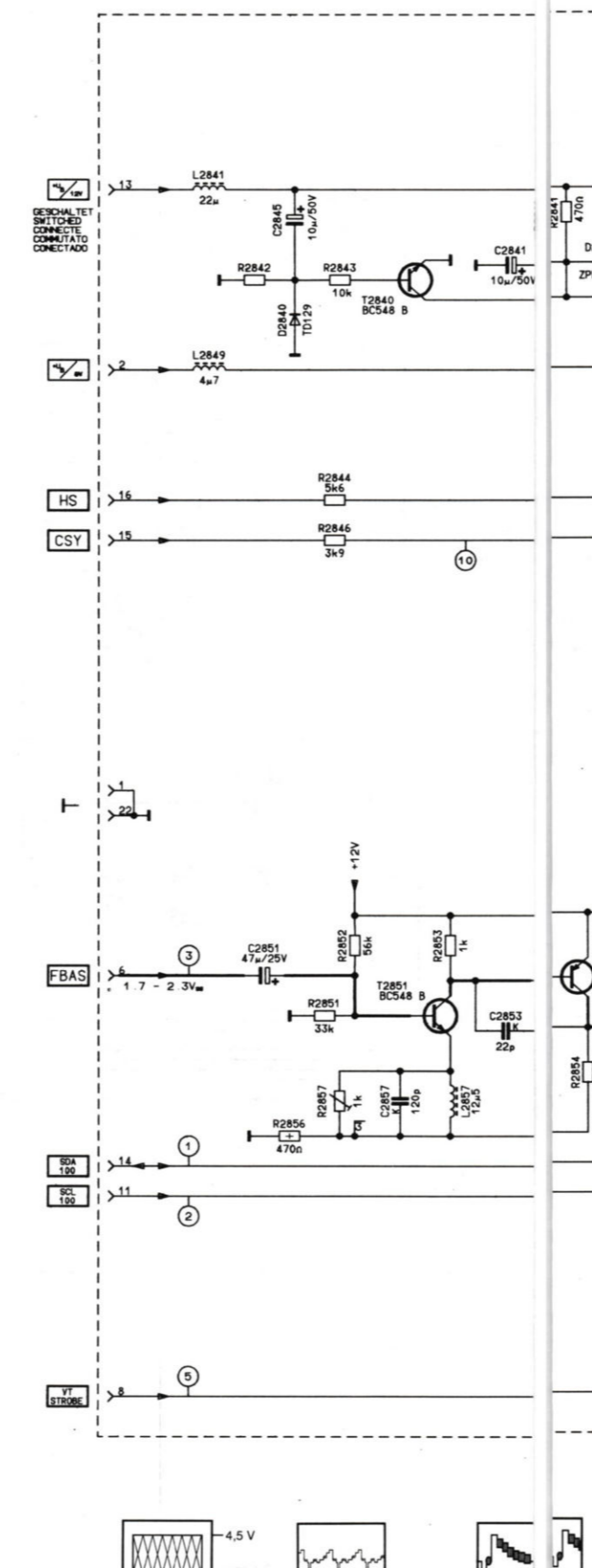
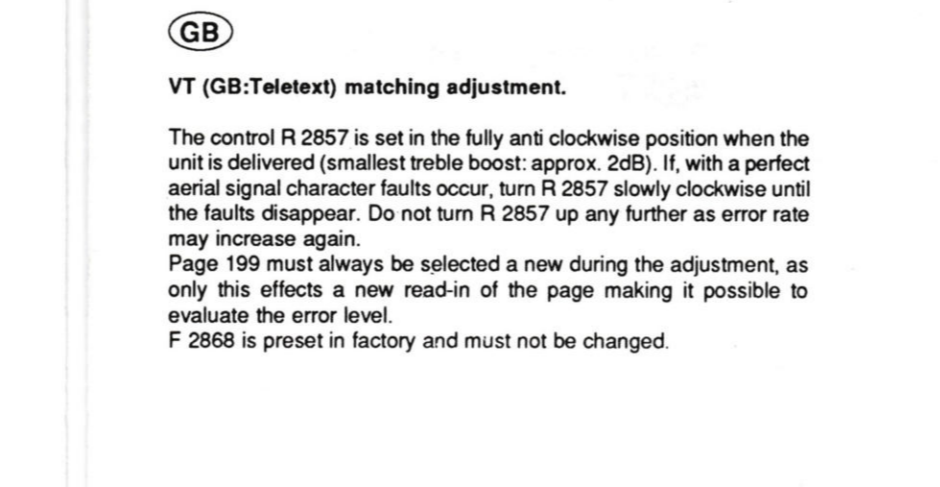
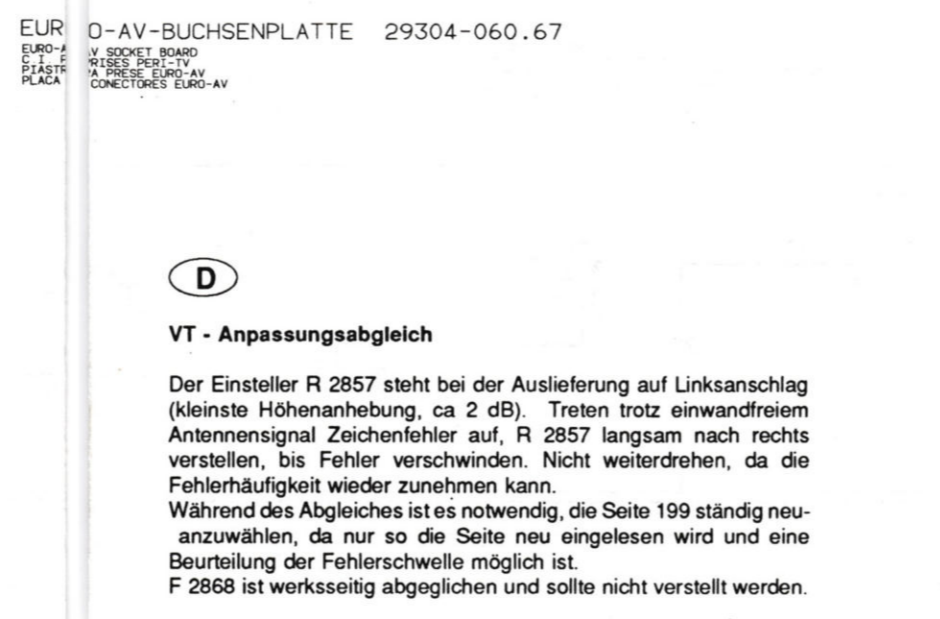
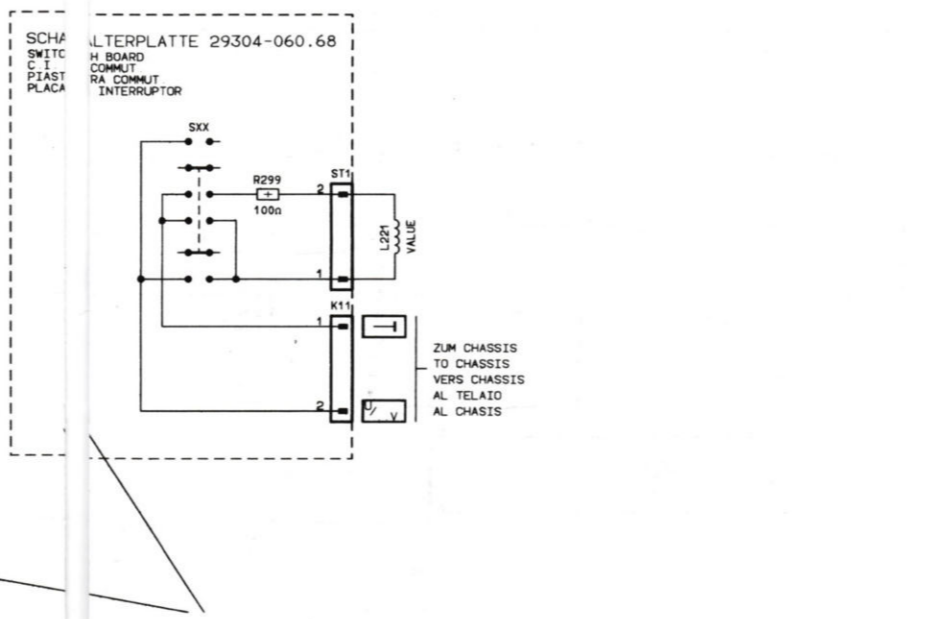
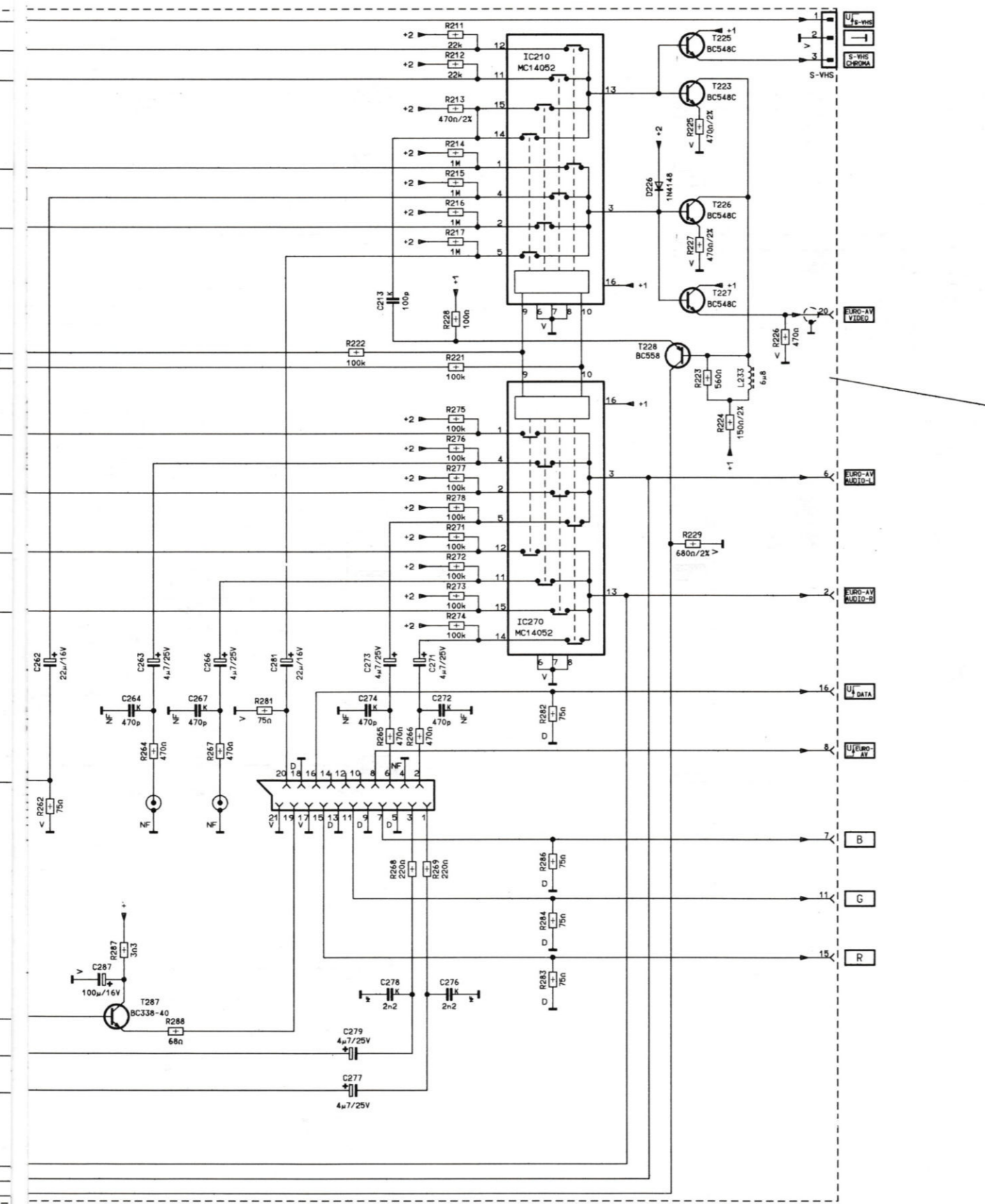
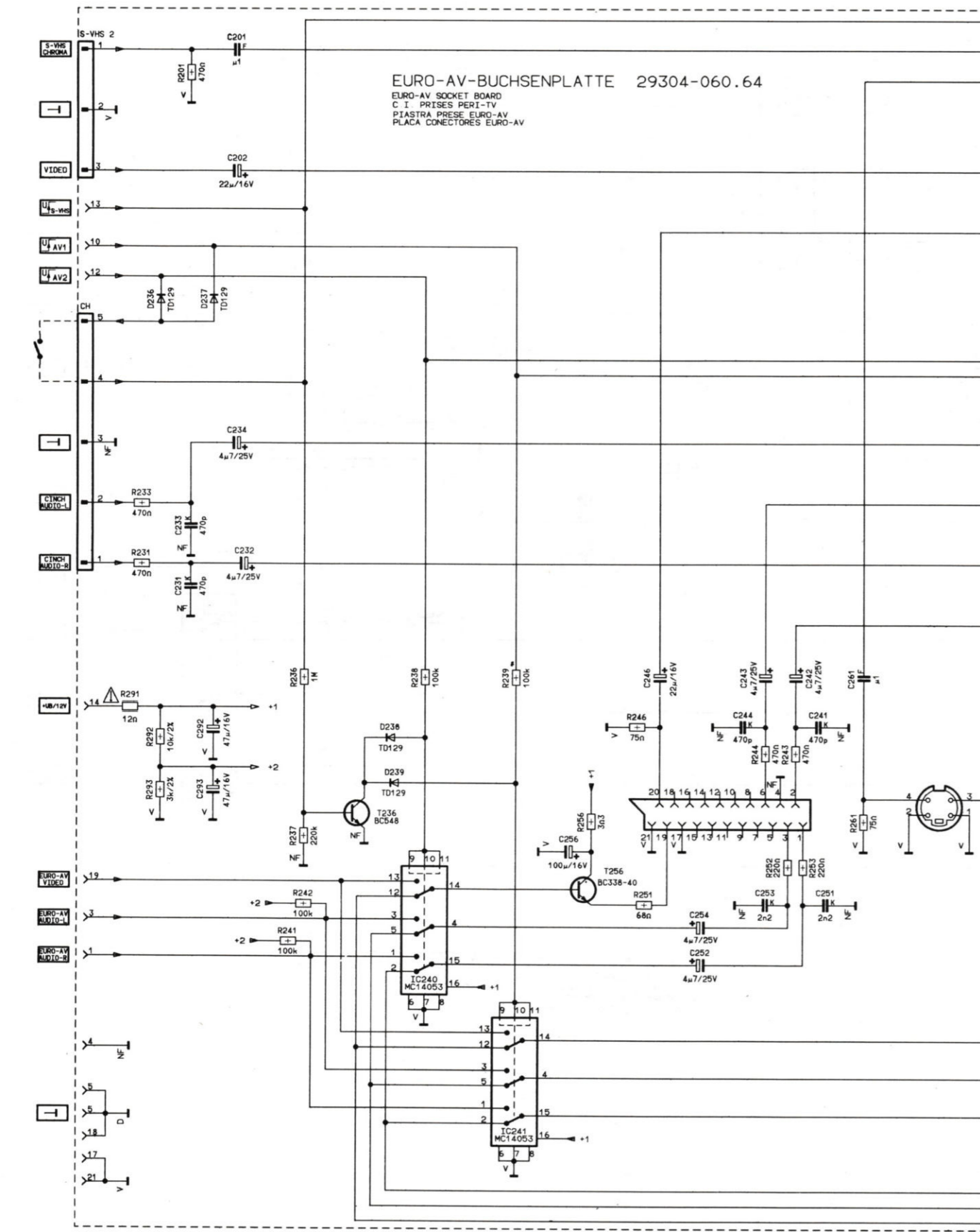
(GB)
ADJUSTMENT OF THE BRIDGE COIL L 573
Picture width to minimum, then connect one test probe of a twin beam oscilloscope to the collector of transistor T 572. Connect the other test probe to the junction of D 570, D 572.
Adjust the coil L 573 so that both oscillograms have the same pulse width.



BEDIENEINHEIT 29501-074.18
 CONTROL UNIT 29501-074.27
 UNITÉ DE COMMANDE 29501-074.27
 UNIDAD DE MANDO





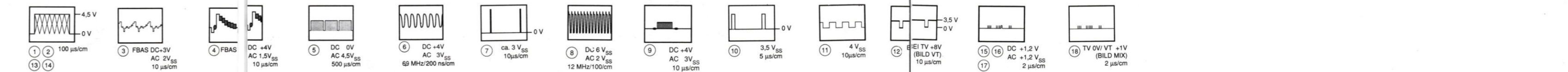


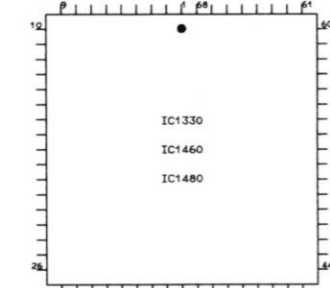
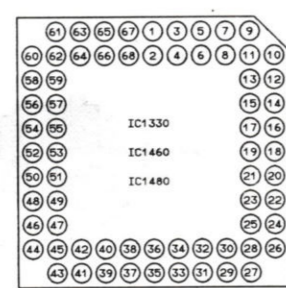
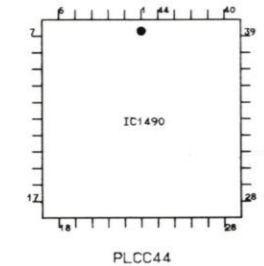
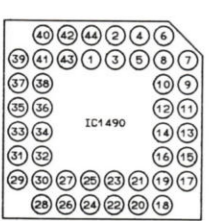
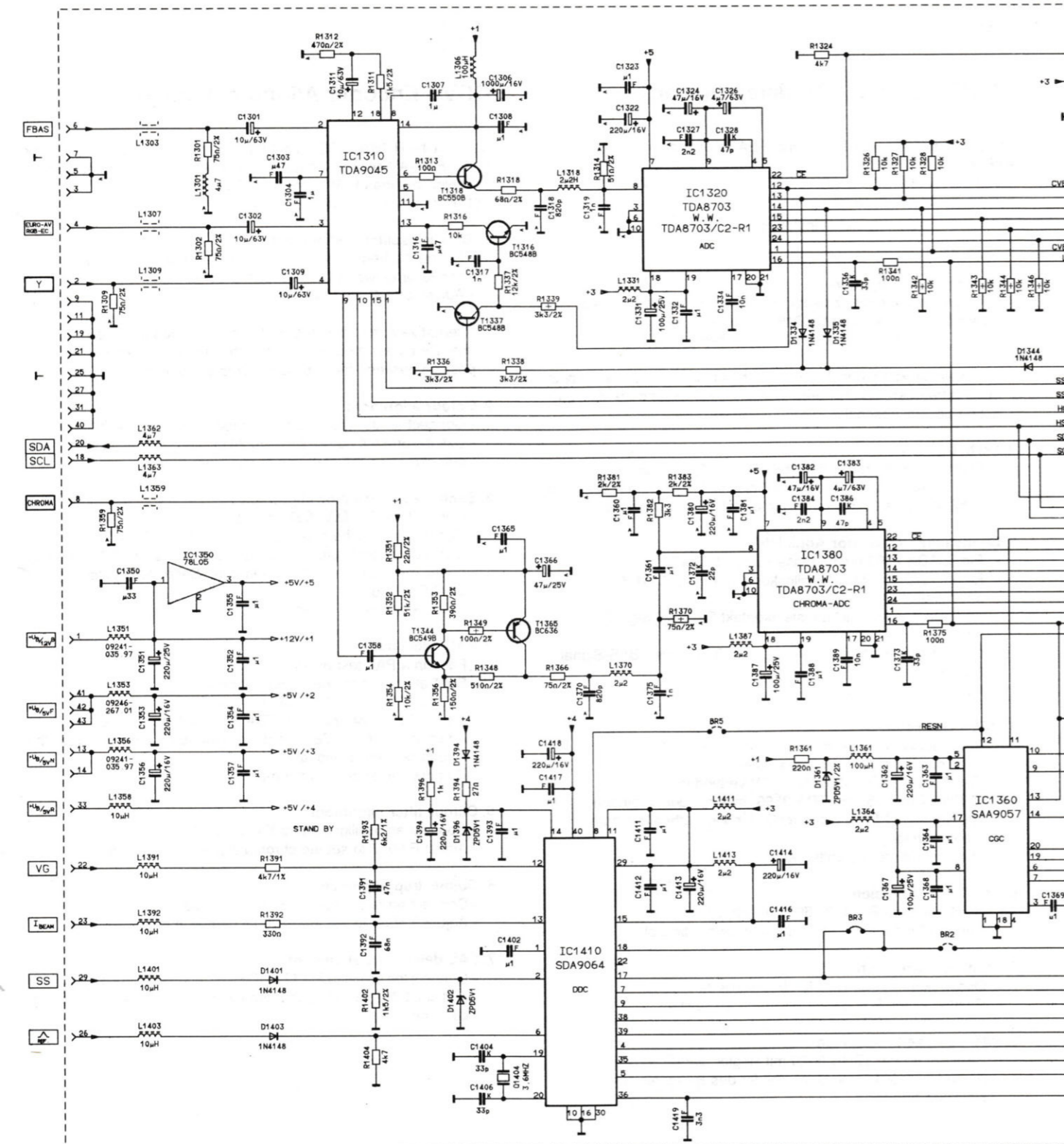
(D)

VT - Anpassungsabgleich
 Der Einsteller R 2857 steht bei der Auslieferung auf Linksanschlag (kleinste Höhenhebung, ca 2 dB). Treten trotz einwandfreiem Antennensignal Zeichenfehler auf, R 2857 langsam nach rechts verstellen, bis Fehler verschwinden. Nicht weiterdrehen, da die Fehlerhäufigkeit wieder zunehmen kann. Während des Abgleiches ist es notwendig, die Seite 199 ständig neu auszuwählen, da nur so die Seite neu eingelesen wird und eine Beurteilung der Fehlerschwelle möglich ist. F 2868 ist werksseitig abgeglichen und sollte nicht verstellt werden.

(GB)

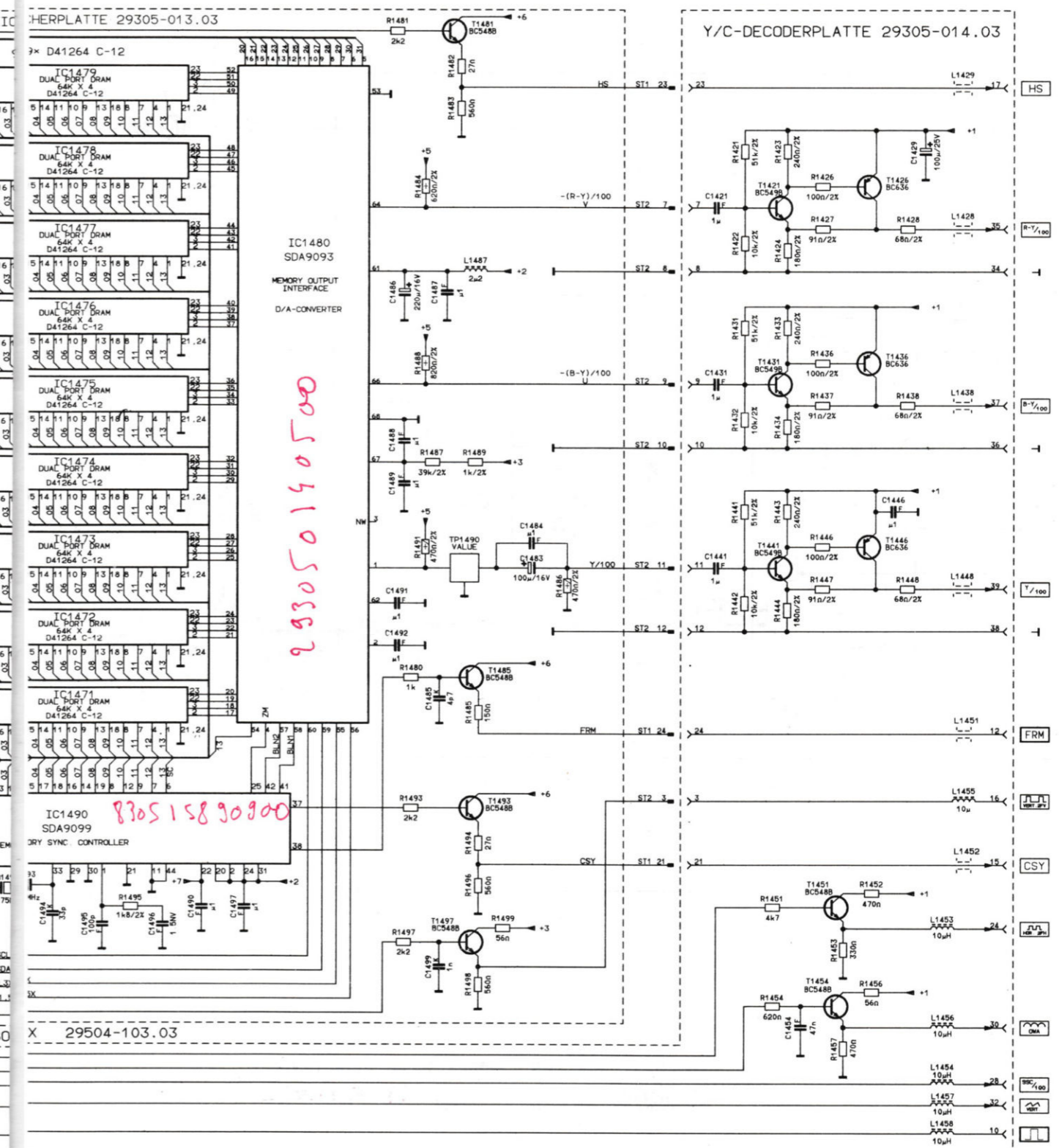
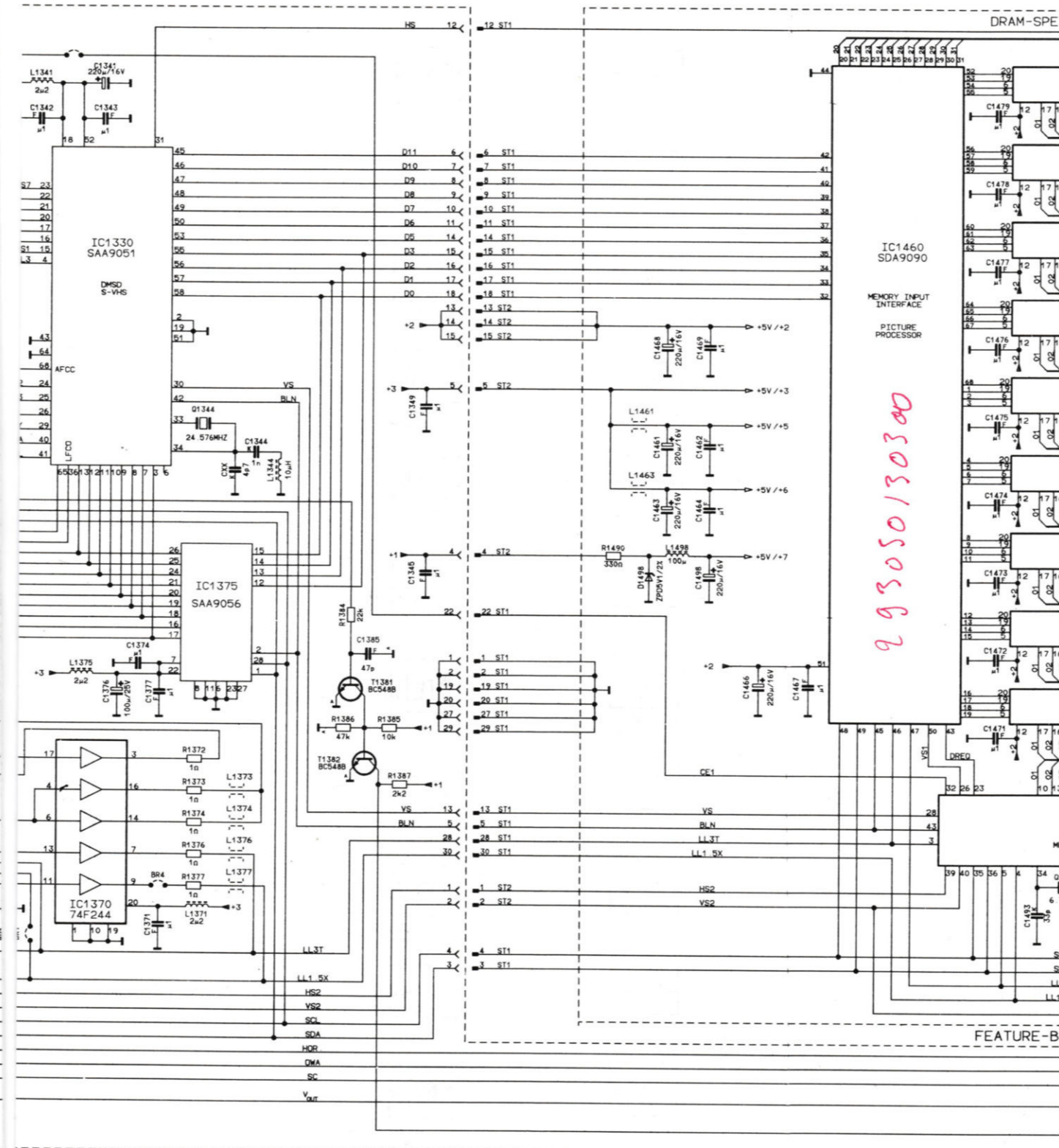
VT (GB:Teletext) matching adjustment.
 The control R 2857 is set in the fully anti clockwise position when the unit is delivered (smallest treble boost: approx. 2dB). If, with a perfect aerial signal character faults occur, turn R 2857 slowly clockwise until the faults disappear. Do not turn R 2857 up any further as error rate may increase again. Page 199 must always be selected a new during the adjustment, as only this effects a new read-in of the page making it possible to evaluate the error level. F 2868 is preset in factory and must not be changed.





IC VON UNTEN
 IC TOP VIEW
 IC VUES DE DESSOUS
 IC VEDUTO DA SOTTO
 IC VISTO PORE DEBAIXO

IC VON OBEN
 IC TOP VIEW
 IC VUES DE DESSOUS
 IC VEDUTO DA SOPRA
 IC VISTO POR ARRIBA



29305030300
 29305050500
 830515830900

FBAS - Encoder Abgleich

Farbgenerator mit den RGB- und FBAS-Ausgängen an die Euro-AV Buchse anschließen. Gerät auf AV Betrieb schalten und Schaltungsspannung 1V an Steckkontakt 16 der Buchse anlegen.

1. Farbzustellabgleich
Frequenzzähler mit Tastkopf 10:1 oder Kondensator 2-3 pF zwischen C 5044 und C 5046 anschließen. Mit C 5043 auf 4.433619 MHz abgleichen.

Ersatzweise kann der Trimmer C 5043 nach links und rechts verdreht werden, bis die Farbe ausfällt. Anschließend die Mitte zwischen beiden Abschaltpunkten einstellen.

2. Farbabgleich
Oszilloskop an Bausteinkontakt S-VHS 3; 3 anschließen. Den Farbbilsträger auf der Nulllinie mit den Reglern R 5033 und R 5034 wechselseitig auf Minimum abgleichen.

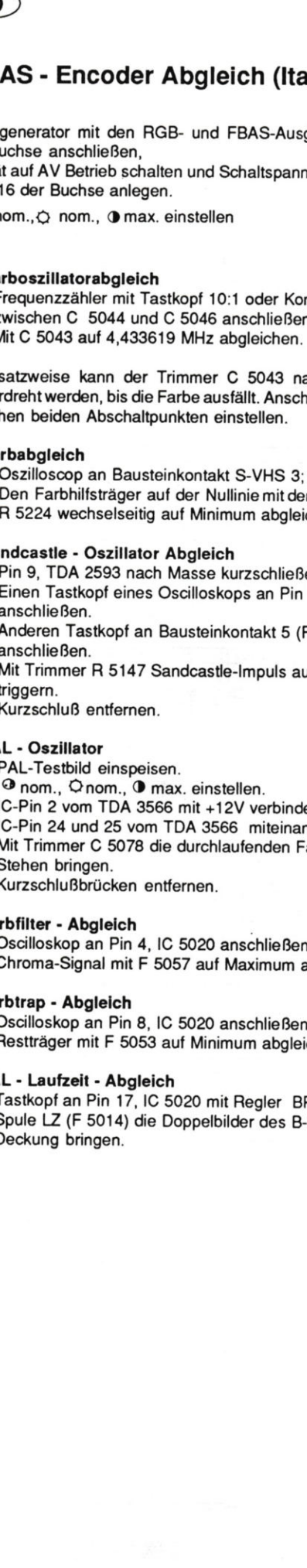
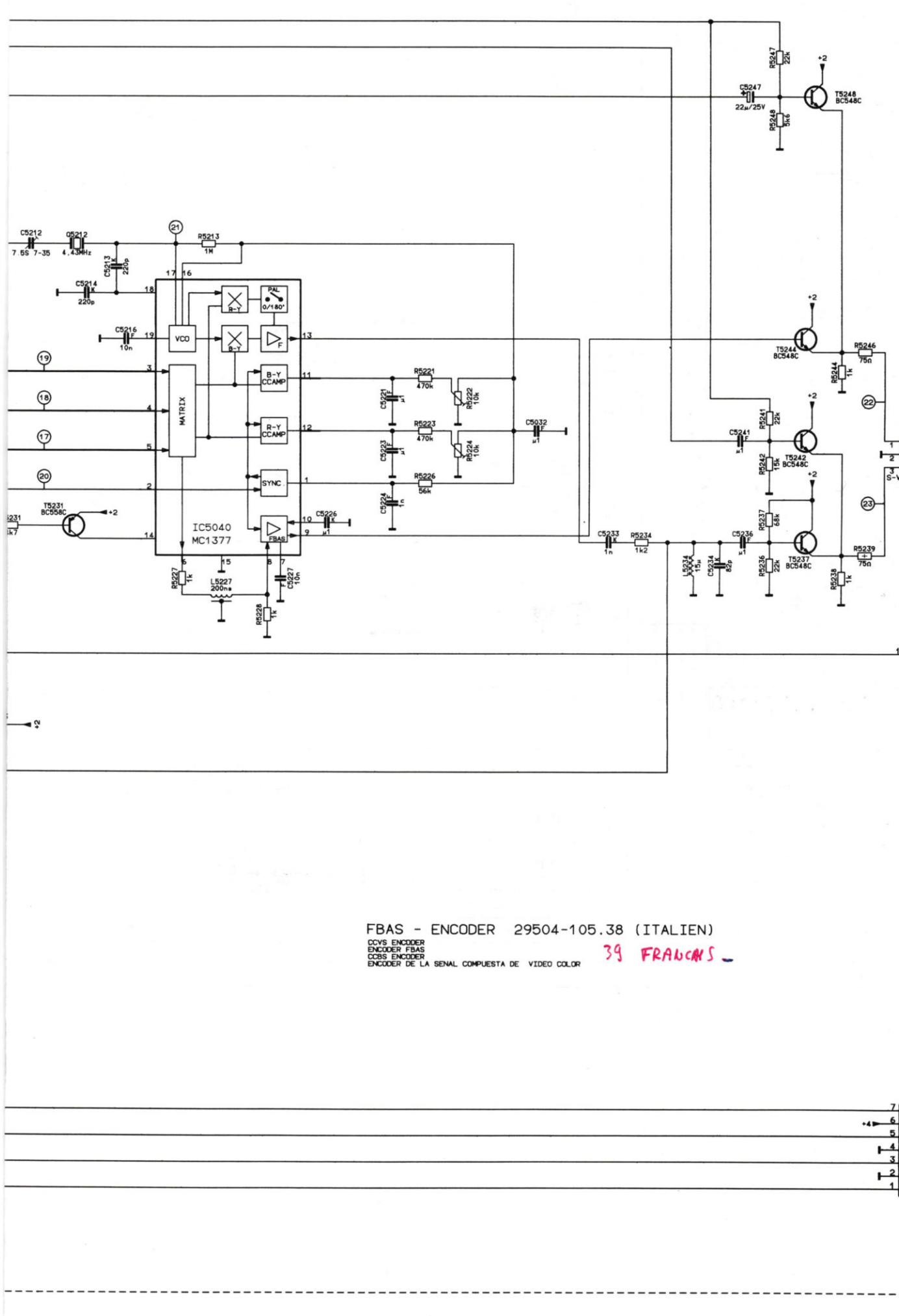
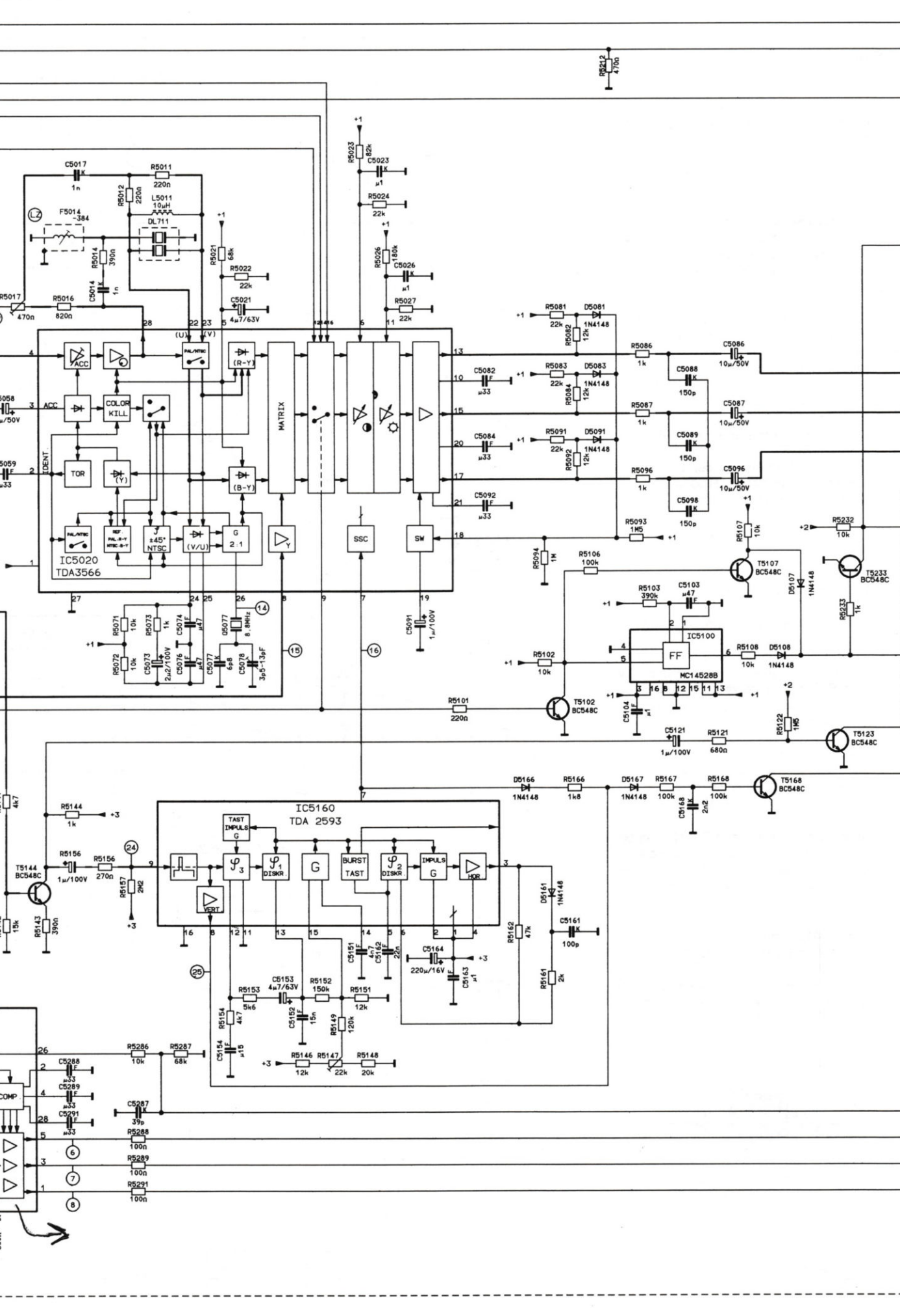
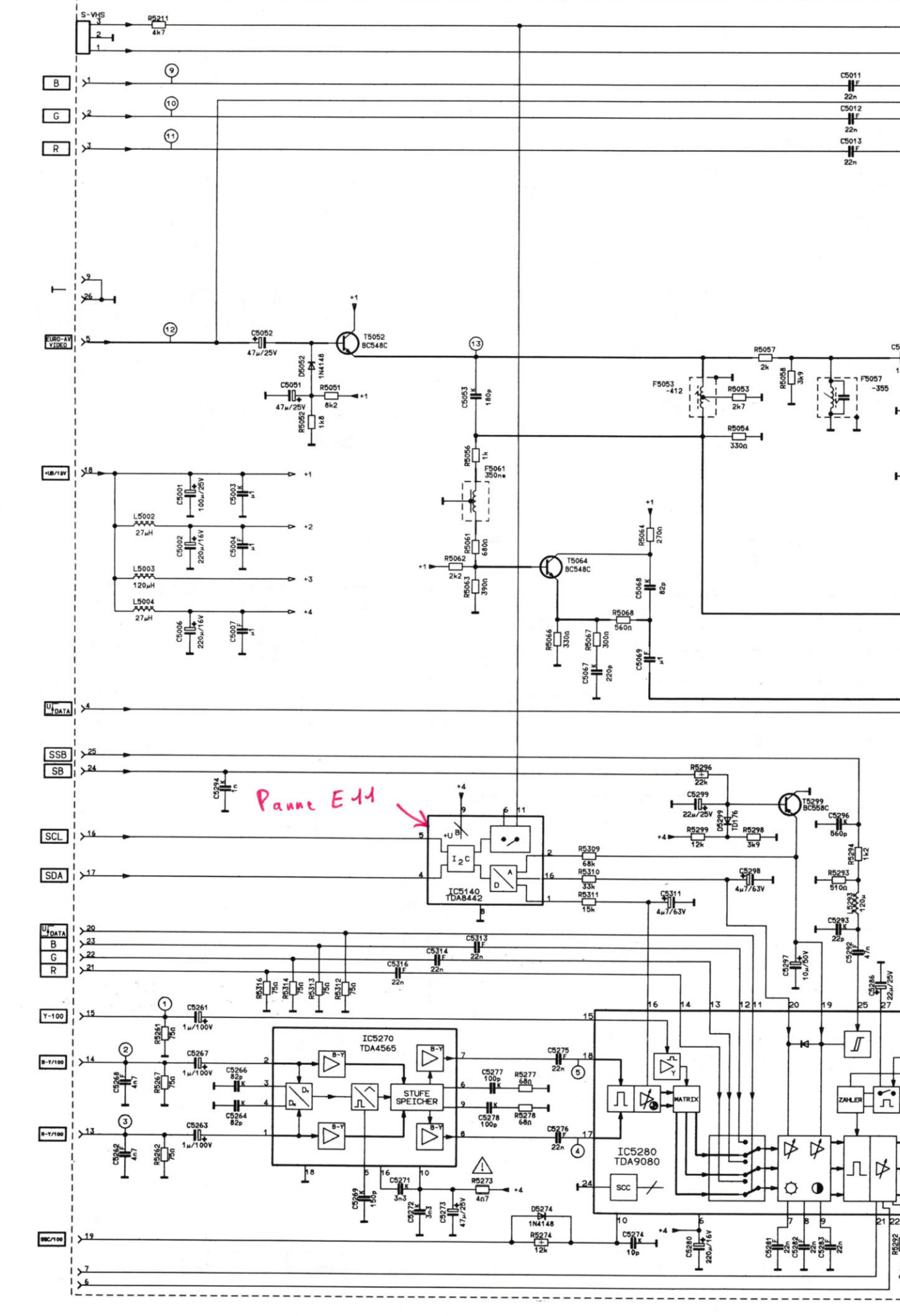
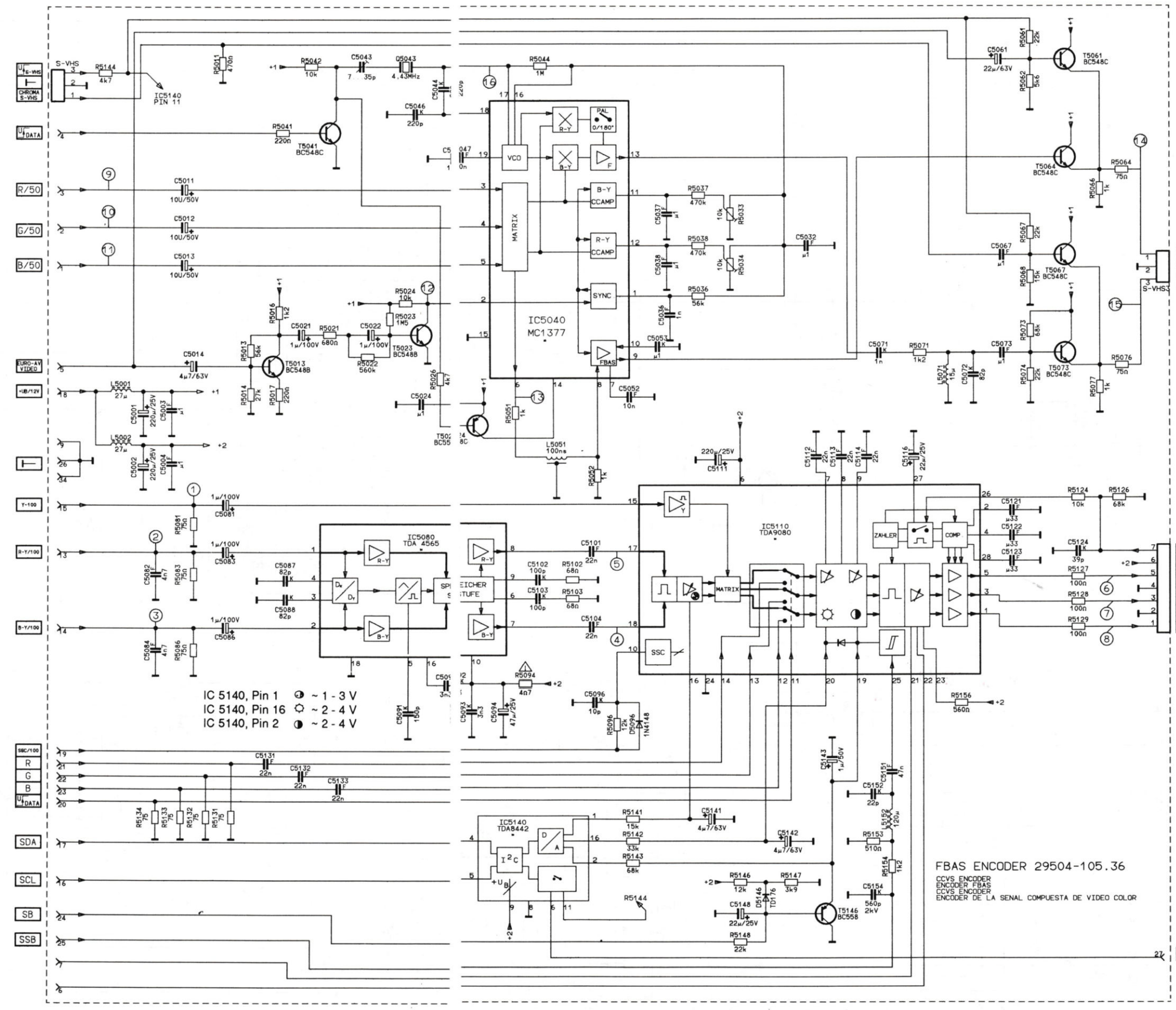
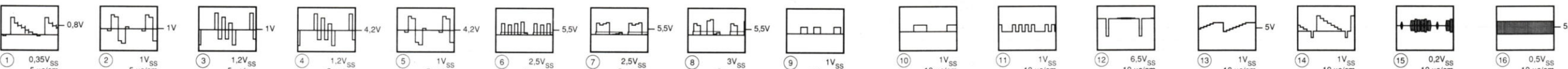
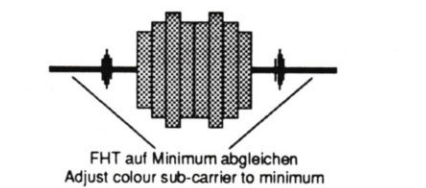
CCVS Encoder Alignment

1. Colour Oscillator Alignment
Connect the RGB and CCVS output terminals of the colour generator to the EURO-AV socket. Switch the receiver to AV mode and apply a switching voltage of 1 V to plug contact 16 of the socket.

1. Connect a frequency counter via a 10:1 test probe or via a ca-pacitor 2-3 pF between C 5044 and C 5046. Adjust for 4.433619 MHz with C 5043.

Alternatively, the trimmer C 5043 can be turned to the left and right until the colour drops out. Thereafter, set the trimmer to the mid-position between the two colour drop-out points.

2. Colour Alignment
Connect an oscilloscope to the module, contact S-VHS 3,3. Use the presets R 5033 and R 5034 to alternately adjust the colour sub-carrier on the zero line to minimum.



FBAS - Encoder Abgleich (Italien)

Farbgenerator mit den RGB- und FBAS-Ausgängen an die Euro-AV Buchse anschließen. Gerät auf AV Betrieb schalten und Schaltungsspannung 1V an Steckkontakt 16 der Buchse anlegen.

1. Farbzustellabgleich
Frequenzzähler mit Tastkopf 10:1 oder Kondensator 2-3 pF zwischen C 5044 und C 5046 anschließen. Mit C 5043 auf 4.433619 MHz abgleichen.

Ersatzweise kann der Trimmer C 5043 nach links und rechts verdreht werden, bis die Farbe ausfällt. Anschließend die Mitte zwischen beiden Abschaltpunkten einstellen.

2. Farbabgleich
Oszilloskop an Bausteinkontakt S-VHS 3; 3 anschließen. Den Farbbilsträger auf der Nulllinie mit den Reglern R 5222 und R 5224 wechselseitig auf Minimum abgleichen (Fig. 1).

3. Sandcastle - Oszillator Abgleich
Pin 9, TDA 2593 nach Masse kurzschließen. Einen Tastkopf eines Oszilloskops an Pin 7, IC 5160 anschließen. Ändern Tastkopf an Bausteinkontakt 5 (FBAS-Signal) anschließen.

4. PAL - Oszillator
PAL-Testbild einspeisen. nom., C nom., max. einstellen. IC-Pin 2 vom TDA 3566 mit +12V verbinden. IC-Pin 24 und 25 vom TDA 3566 miteinander verbinden.

5. Farbfilter - Abgleich
Oszilloskop an Pin 4, IC 5020 anschließen. Chroma-Signal mit F 5057 auf Maximum abgleichen.

6. Farbtrap - Abgleich
Oszilloskop an Pin 8, IC 5020 anschließen. Restträger mit F 5053 auf Minimum abgleichen.

7. PAL - Laufzeit - Abgleich
Tastkopf an Pin 17, IC 5020 mit Regler BP (R 5017) und Spule LZ (F 5014) so die Doppelbilder des B-Signals zur Deckung bringen.



CCVS Encoder Alignment (Italy)

Connect the RGB and CCVS output terminals of the colour generator to the Euro-AV socket. Switch the receiver to AV mode and apply a switching voltage of 1V to contact 16 of the socket.

1. Colour oscillator alignment
Connect a frequency counter with a 10:1 probe or via a 2-3pF capacitor between C 5044 and C 5046. Adjust for 4.433619 MHz with C 5043.

Alternatively, the trimmer C 5043 can be turned to the left and right until the colour drops out. Thereafter, set the trimmer to the mid-position between the two colour drop-out points.

2. Colour alignment
Connect an oscilloscope to the module, contact S-VHS 3,3. Use the presets R5222 and R 5224 to alternately adjust the colour sub-carrier on the zero line to minimum (Fig. 1).

3. Sandcastle oscillator alignment
Connect Pin 9, TDA 2593, to chassis. Connect one probe of an oscilloscope to Pin 7, IC 5160. Connect the other probe to the module, contact 5 (CCVS signal). Adjust the trimmer R 5147 so that the Sandcastle pulse triggers the CCVS signal.

4. PAL oscillator
Feed in a PAL test pattern. Set * at nom., * at max. and * at min. Connect Pin 2 of TDA 3566 to +12V. Connect Pins 24 and 25 of TDA 3566 with each other. Adjust trimmer C 5078 so that the colour bars running across the screen become stationary.

5. Colour filter alignment
Connect an oscilloscope to Pin 4, IC 5020. Adjust F 5057 to set the chroma signal at maximum. Remove the short-circuit jumpers.

6. Colour trap alignment
Connect an oscilloscope to Pin 8, IC 5020. Adjust F 5053 to set the residual carrier at minimum.

7. PAL delay time alignment
Connect the probe to Pin 17 of IC 5020; adjust control BP (R 5017) and coil LZ (F 5014) so that the two displays of the video signal coincide.

