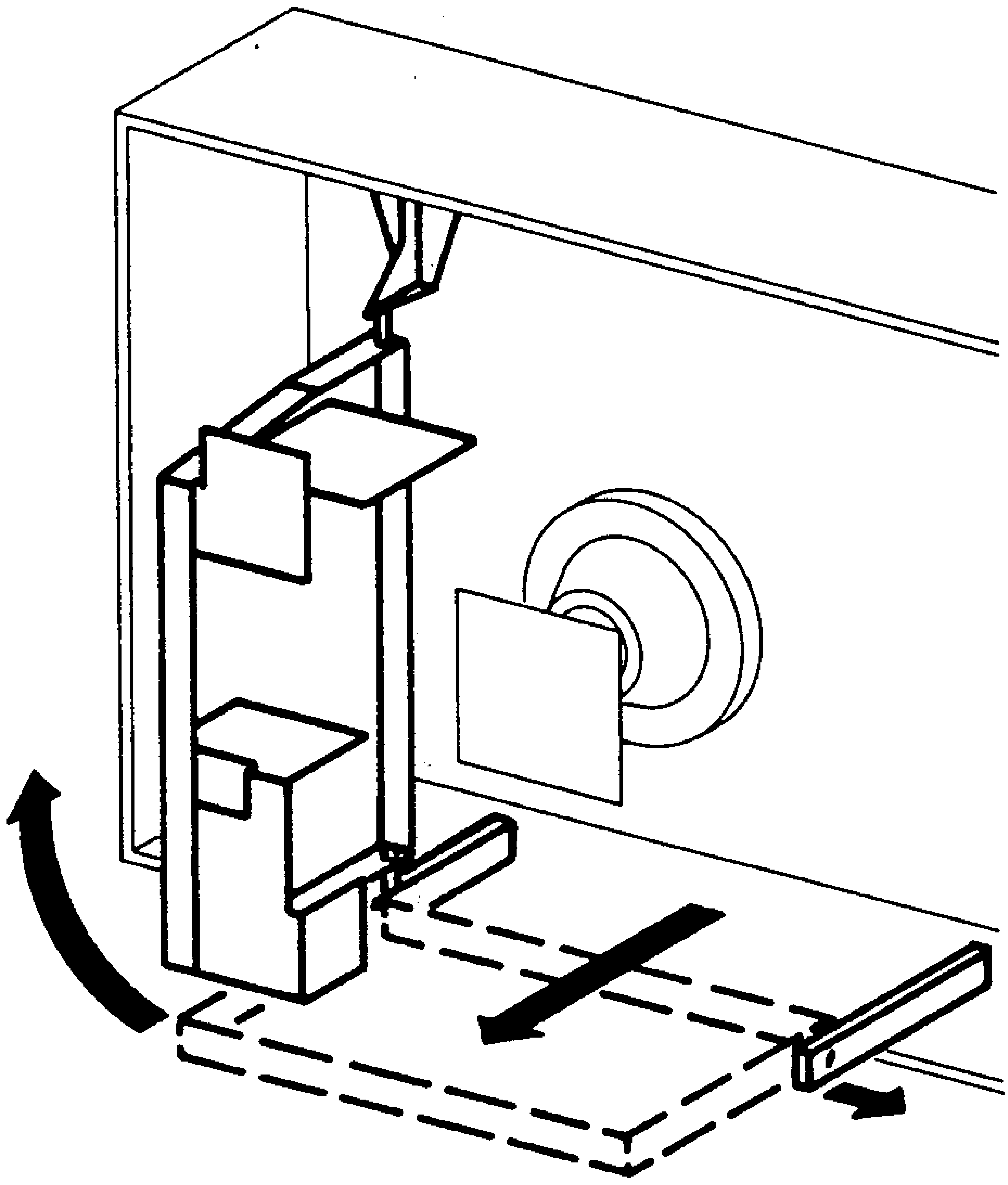
Hinweis für den Fachhandel!
Bei Ausfall von Steckkarten empfehlen wir grundsätzlich unseren Austauschdienst.

Information for dealers!
If a plug-in board becomes defective, we recommend you replace it.

Avvertenza per i rivenditori specializzati!
In caso di schede ad innesto difettose consigliamo in primo luogo di rivolgersi al nostro Servizio permuta.

Servicestellung
Service position
Posizione di servizio



GRUNDIG Color

SERVICE MANUAL
CUC 2800
CUC 2600

VERS. A
GERAETE MIT SYMM. GEHAEUSE
SETS WITH SYMM. CABINET
APP. CON MOBILE SIMMETRICO

ST 63-250 CTI	(9.25201-01)
ST 70-250 CTI	(9.25196-01)
ST 70-250 CTI	(9.25196-06)
ST 70-250/9	(9.25197-01)

Servicehinweise für Schaltnetzteil: Gerät mit Netztrenntransformator betreiben. Primärseite des Schaltnetzteiles liegt an Netzpotential. Bei fehlender Sekundärspannung oder Takten des Netzteiles Sekundärstromkreise einzeln unterbrechen und Funktion überprüfen.
Suchschema bei Nichtschwingen des Sperrwandlers.

- ⟶ Anlaufspannung (Pin 9/5) < 8 V Anlauf über Di 616 u. R 616.
- ⟶ Referenzspannung (Pin 1) ca. 6 V
- ⟶ Startimpuls (Pin 4) ①
- ⟶ Basisstromansteuerung (Pin 7) ②

C 626 muß vor Wechsel des IC 631 entladen sein! Netzteilregelbereich 160 bis 260 V~

Service hints for switch-mode power supply: operate set with mains-isolating transformer (n. b. the primary side of the SM power supply is normally not isolated, if there is no secondary voltage or the power supply pulsates, disconnect the secondary circuits individually and check operation. Fault finding scheme if blocking function prevents oscillation:

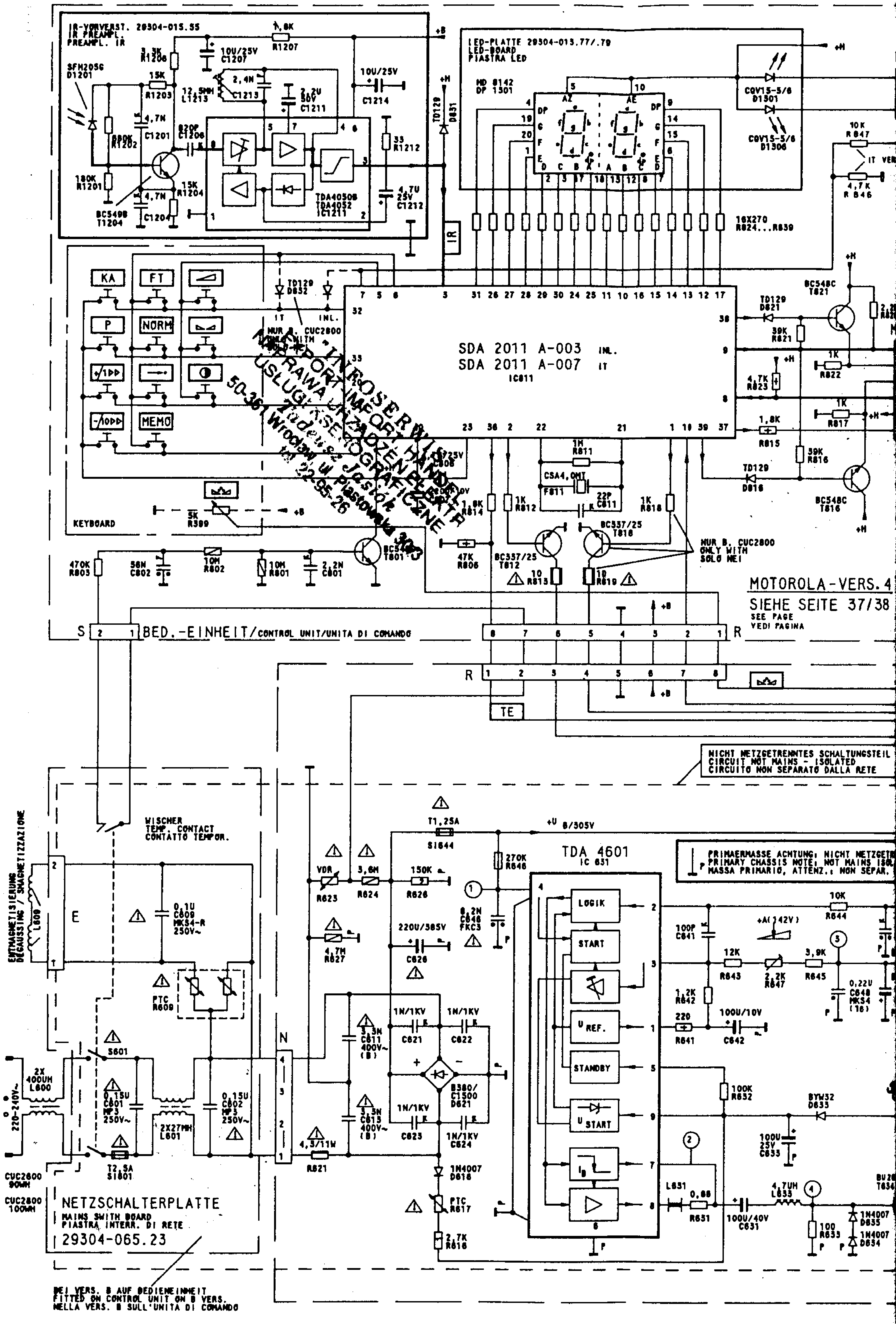
- ⟶ Starting voltage (Pin 9/5) < 8 V, starting via Di 616 and R 616
- ⟶ Reference voltage (Pin 1) approx. 6 V
- ⟶ Start pulse (Pin 4) ①
- ⟶ Base current drive (Pin 7) ②

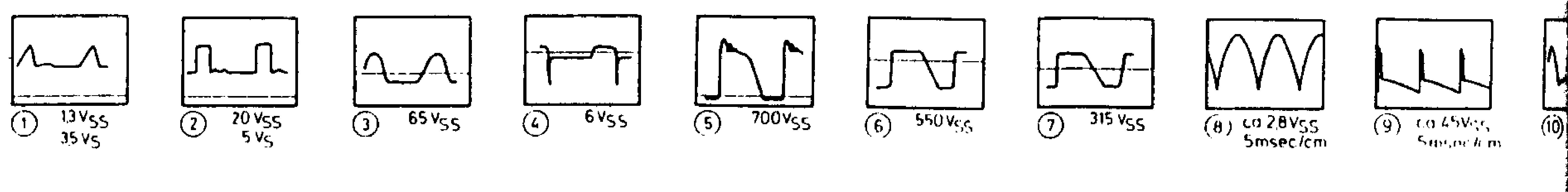
Before replacement of IC 631, C 626 must be discharged, Power supply range 160 to 260 V AC.

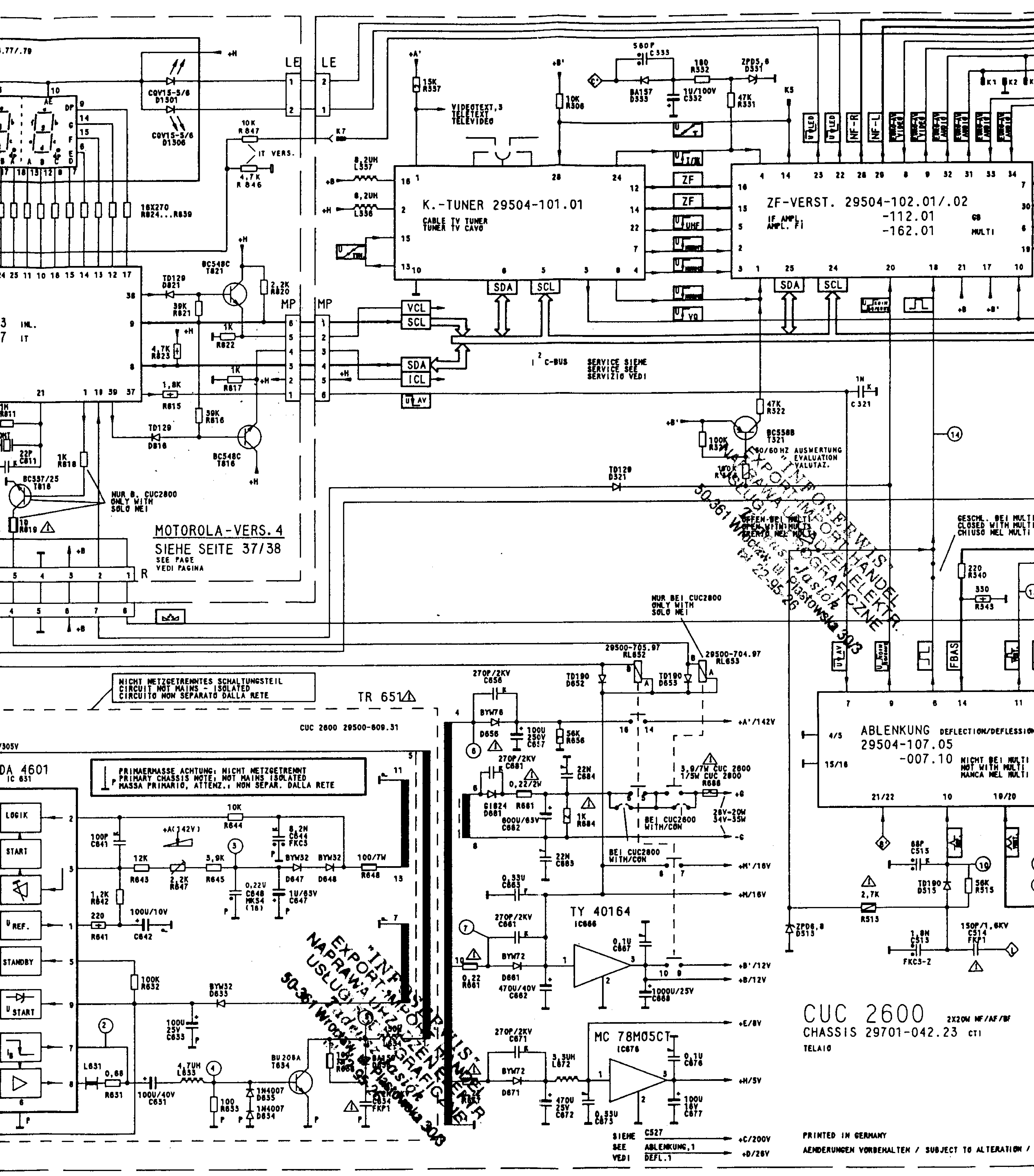
Avvertenze di Servizio dell'alimentatore: Alimentare l'apparecchio con un trasformatore separatore. Il lato primario dell'alimentatore è a potenziale di rete. Se viene a mancare la tensione del secondario o in caso di intervento ritmico dell'alimentatore, interrompere uno alla volta i circuiti dell secondario e controllarne la funzione. Se il trasduttore di interdizione non viene eccitato, ricercare il guasto secondo lo schema seguente:

- ⟶ Tensione di avviamento (pin 9/5) < 8 V. Avviamento tramite Di 616 e R 616.
- ⟶ Tensione di riferimento (pin 1) ca. 6 V.
- ⟶ Impulso di avviamento (pin 4) ①
- ⟶ Pilotaggio della corrente di base (pin 7) ②

Il C 626 deve essere scarico prima di cambiare l'IC 631! Campo di regolazione dell'alimentatore: 160 a 260 V~.







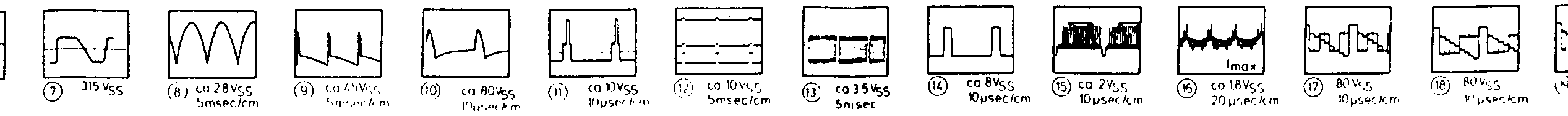
CUC 2600 2X20W NF/AF/BF

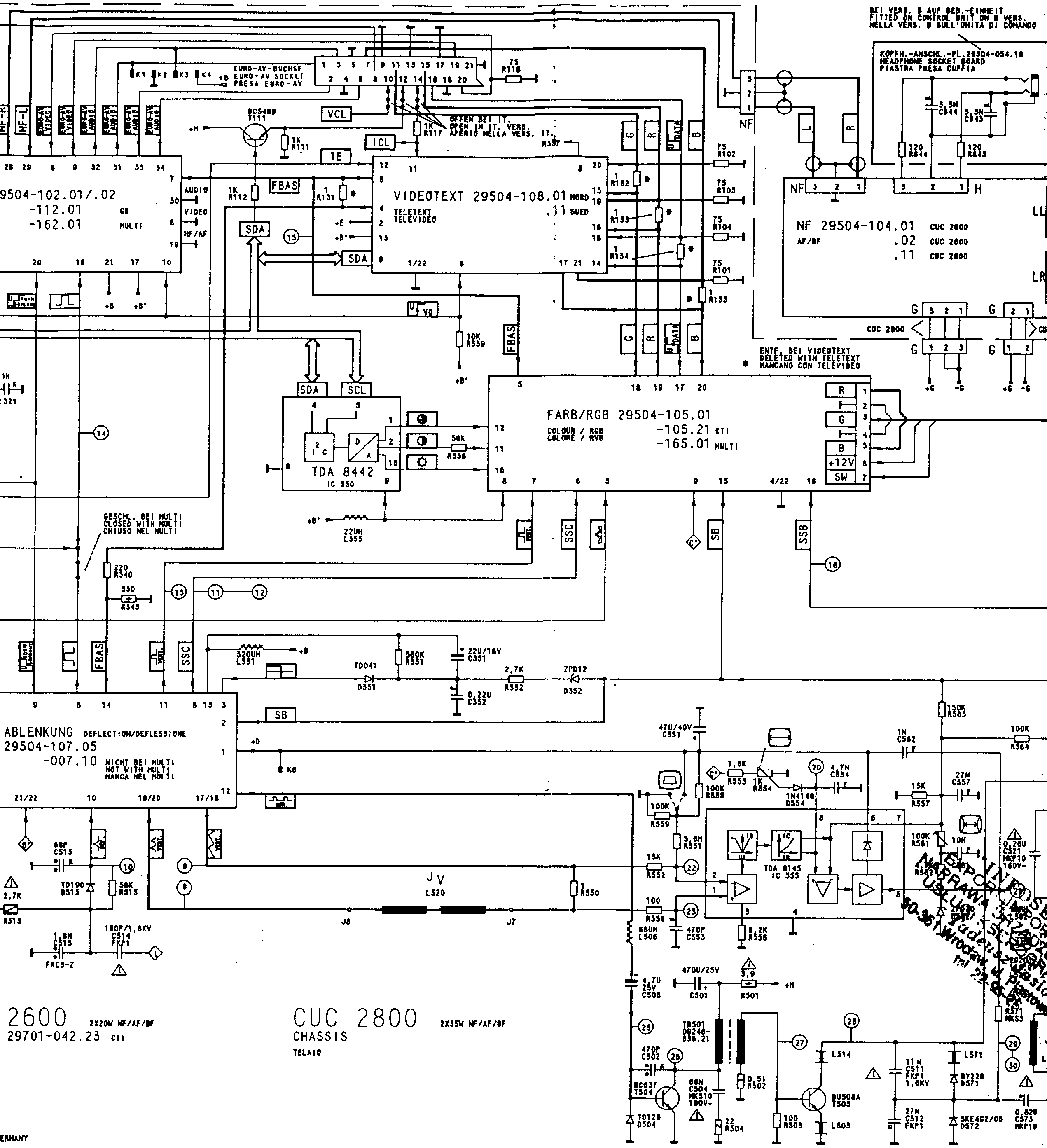
CHASSIS 29701-042.23 CTI

TELAIO

PRINTED IN GERMANY

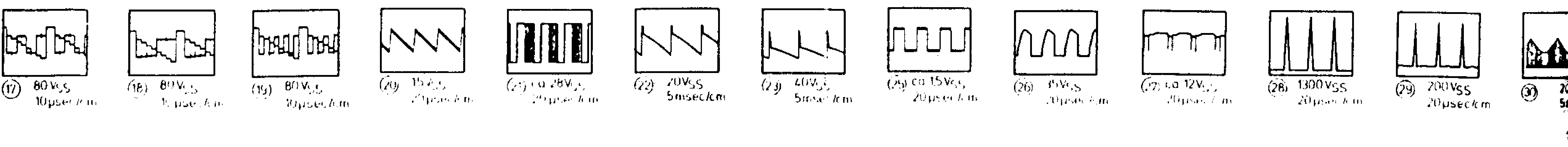
AENDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION /

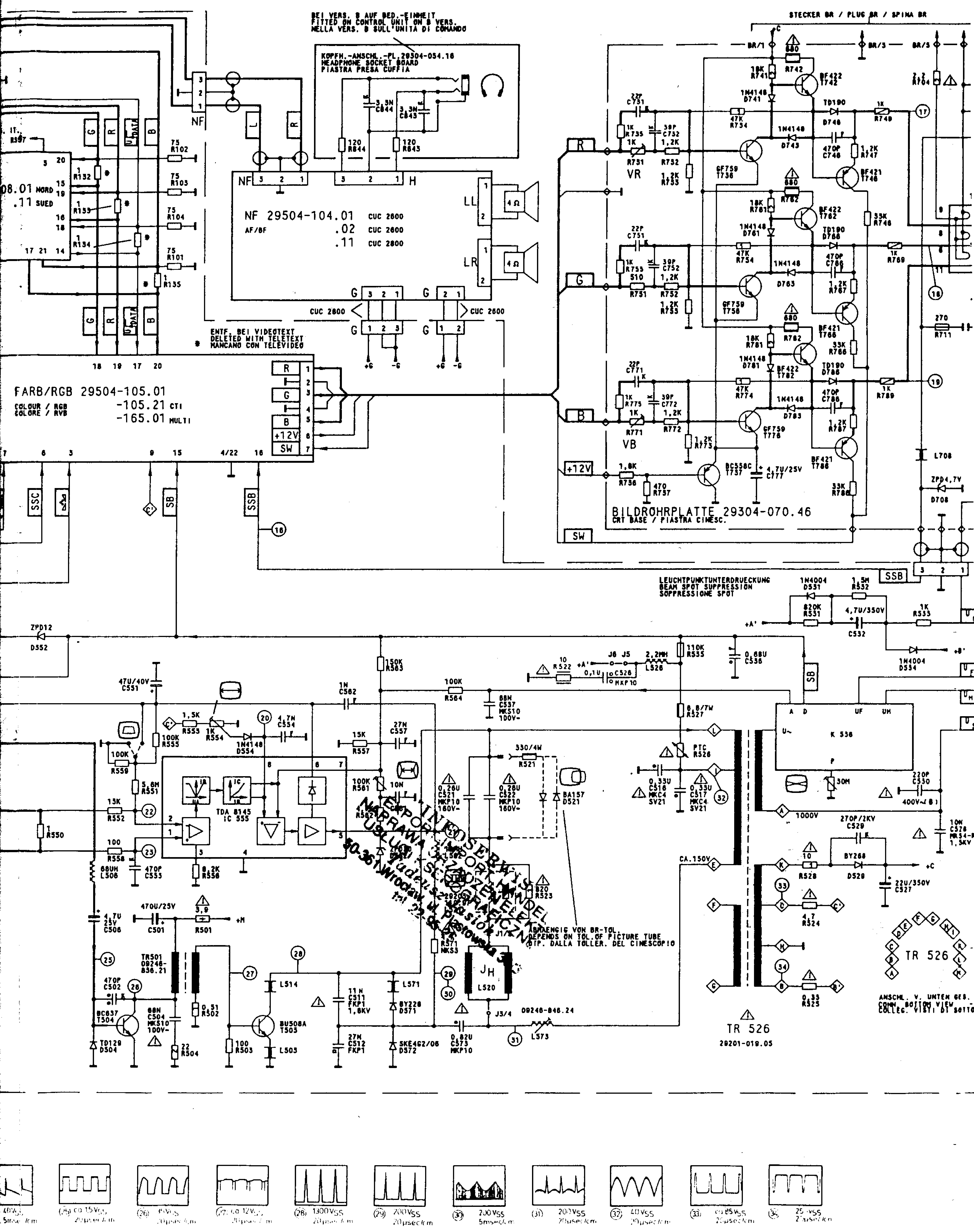


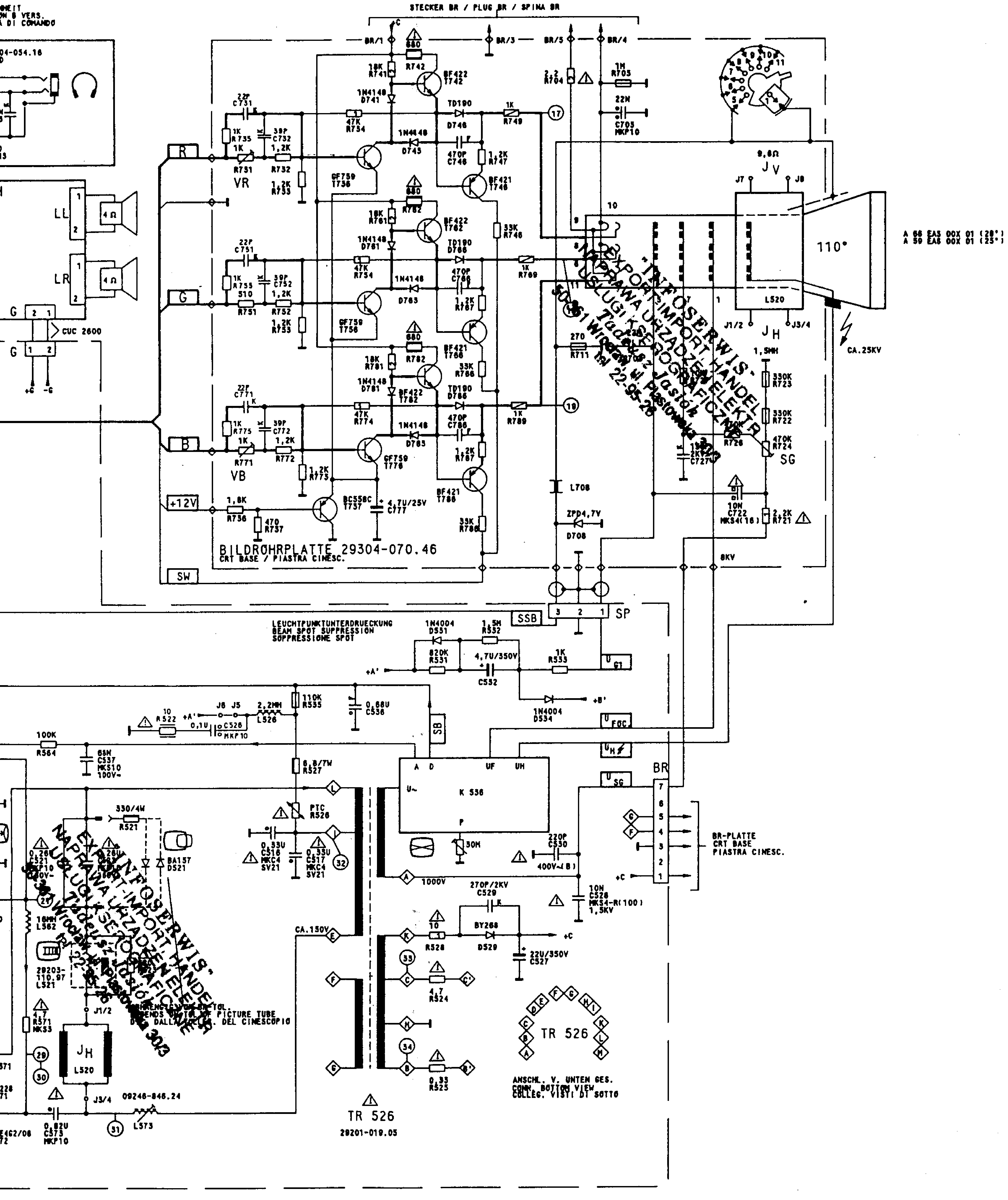


ERMANY

VORBEHALTEN / SUBJECT TO ALTERATION / CON RISERVA DI MODIFICHE




BEI VERS. B AUF BED.-EINHEIT
FITTED ON CONTROL UNIT ON B VERS.
NELLA VERS. B SULL'UNITA DI COMANDO
KOPFH.-ANSCHL.-PL. 29504-054.16
HEADPHONE SOCKET BOARD
PIASTRA PRESA CUFFIA
STECKER BR / PLUG BR / SPINA BR
NF 29504-104.01 CUC 2600
AF/BF .02 CUC 2600
.11 CUC 2800
CUC 2800
FARB/RGB 29504-105.01
COLOUR / RGB -105.21 CTI
COLORE / RVB -165.01 MULTI
ENTF. BEI VIDEOTEXT
DELETED WITH TELETEXT
MANCANO CON TELEVIDEO
08.01 NORD
.11 SUED
BILDROHRPLATTE 29304-070.46
CRT BASE / PIASTRA CINESC.
LEUCHTPUNKTUNTERDRUECKUNG
BEAM SPOT SUPPRESSION
SOPPRESSIONE SPOT
TDA 8145
IC 555
K 536
ABHAENGIG VON BR-TOL.
DEPENDS ON TOL. OF PICTURE TUBE
DIP. DALLA TOLLER. DEL CINESCOPIO
TR 526
29201-019.05
ANSCHL. V. UNTEN GES.
CONN. BOTTOM VIEW
COLLEG. VISTI DI SOTTO
TR501 09246-836.21
09246-846.24
L573
BU508A T503
BC637 T504
CA.150V
1000V
(25) ca 15Vss 20µsec/cm
(26) 6Vss 20µsec/cm
(27) ca 12Vss 20µsec/cm
(28) 1300Vss 20µsec/cm
(29) 200Vss 20µsec/cm
(30) 200Vss 5msec/cm
(31) 200Vss 20µsec/cm
(32) 40Vss 20µsec/cm
(33) ca 85Vss 20µsec/cm
(34) 25Vss 20µsec/cm



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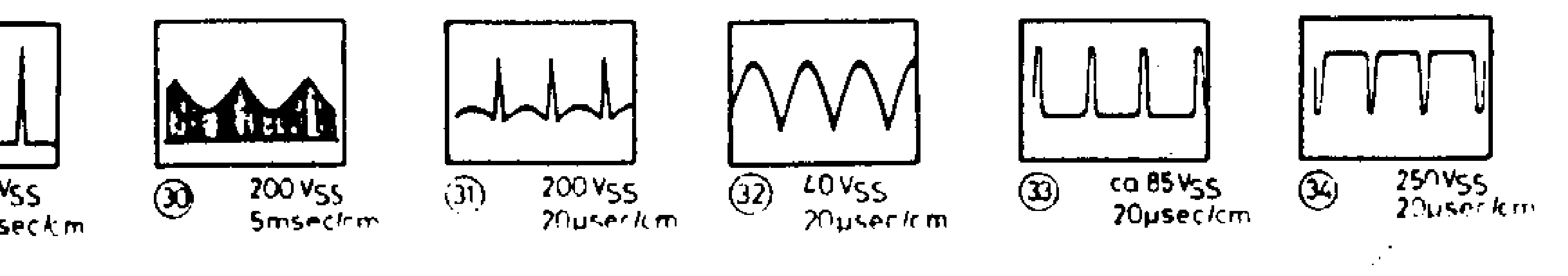


Service am I²C-Bus

Bei Fehlfunktionen des Gerätes, die nicht auf Netzteil, Hochspannung und Ablenkung zurückzuführen sind, ist der I²C-Bus gemäß Tabelle 1 zu prüfen, bevor weitere Servicearbeiten nach Tabelle 2 durchgeführt werden.

Der µComputer in der Bedieneinheit IC 811 liefert Steuerbefehle für Tuner, ZF, Videotext, Scartbuchse (Euro-AV-Buchse) inklusive VCR-Fernsteuerung und RGB-Analogwerte über den I²C Bus.

Hinweis:

Bei Modulwechsel ist das Gerät generell auszuschalten!

Auch in Stellung »Bereitschaft« darf kein Modul gezogen werden! MOS-handling beachten

Tabelle 1

Messung	Meßwert	Meßpunkt	Mögliche Fehler
+H	5 V	Pin 40, IC 811 (SIE) Pin 4, (MOT)	D 671, IC 676, IC 811
4 MHz Takt Reset	4 MHz, 3 V_{ss} 5 V_{ss} nur im Einschaltmoment	Pin 22, IC 811 (SIE) Pin 5, (MOT) Pin 23, IC 811 (SIE) Pin 2, (MOT)	F 811, IC 811 C 806, IC 811
I²C Bus	5 V_{ss}	Pin 8, 9, IC 811 (SIE) Pin 21, 23, (MOT)	Die I²C-Bus-Daten sind auch ohne TP-Bedienung oder Keyboardeingabe vorhanden. Bei fehlenden Daten: Die Leitungen SDA und SLC (Brücken auf dem Bedienteil) auftrennen. Sind dann die I²C-Bus-Daten vorhanden, liegt eine Überlastung des I²C-Bus vor. **Fehlerursache:** Tuner, ZF, Videotext, IC 350, EURO-AV-Buchse.

Tabelle 2

Mögliche Fehlerarten des Gesamtgerätes in Abhängigkeit der I²C-Bus-Steuerung.

Fehler	Mögliche Ursache	Meßwert	Meßpunkt
Keine Bedienfunktion per Keyboard	+H IC 811	5 V siehe Tabelle 1	IC 811 pin 40 (SIE) Pin 4 (MOT)
Keine Kanal-Programmumschaltung mit TP LED schaltet nicht	IR-Vorverstärker D 1201, T 1204, +B, IC 1211, D 831, +H, IC 811, T 801,	+B = 12 V 5 V_{ss} (IR-Signal) 5 V_{ss} (Einschaltvorgang)	Pin 6 IC 1211 Pin 3 IC 1211 Pin 8, 9 IC 811 (SIE) Pin 21, 23 (MOT)
	Wischerschalter der Netztaste, F 811	Übergangswiderstand 0 Ω 3 V_{ss}	am Schalter Pin 22 IC 811 (SIE) Pin 5 (MOT)
Keine Frequenzabstimmung	+A über R 337 +B, +H Daten (SDA)/Clock (SCL) I²C Bus variable Abstimmspannung in Abhängigkeit der Kanaleingabe	ca. 46 V 12 V, 5 V 5 V_{ss} 0,2 – 30 V	Tuner Stift 1 Tuner Stift 16, 2 Tuner Stift 6, 5 Tuner Stift 13, 15
Kein FBAS-Signal an ZF-Bst. Kont. 7, 9	+B, +B' I²C Bus, SDA, SCL fehlt am Tuner	12 V 5 V_{ss}	ZF 21, 17 Tuner 6, 5
Kein NF-Signal an ZF-Bst. Kont. 28/29	+B, +B' I²C Bus, SDA, SCL keine Koinzidenz	12 V 5 V_{ss} 12 V 5 V	ZF 21, 17 ZF 25, 24 ZF 20 IC 811 Pin 19 (SIE) Pin 35 (MOT)
Keine Analogwerte Keine Helligkeit Kein Kontrast Kein Farbkontrast	I²C Bus, IC 350 D/A-Converter D/A-Converter D/A-Converter	5 V_{ss} 1 – 3 V 2 – 4 V 2 – 4 V	IC 350 Pin 4/5 Farb/RGB-Baustein: Stift 10 (Helligk.) Stift 11 (Kontrast) Stift 12 (Farbkon.)
Nur bei TP-Bedienung Kein Videotext	+B', +E I²C Bus, SDA T 816 ICL	12 V, 8 V 5 V_{ss} 5 V_{ss}	VT 13, 2 VT 9 VT 11
Nur bei TP-Bedienung in Verbindung mit Video 1 Taste			
Keine VCR-Fernsteuerung	T 821, VCL T 816, ICL I²C Bus SDA/T 111	5 V 5 V_{ss} 5 V_{ss}	Euro-AV-Buchse 10 Euro-AV-Buchse 14 Euro-AV-Buchse 12

Service checks on the I²C Bus

If faults occur in the set which cannot be attrib
the I²C bus should be checked using Table
Via the I²C bus the microcomputer in the cont
(Teletext), Scart socket (Euro AV socket) inc

Note:

N.B. when a module is being changed, the s
plugged even in the "standby" mode. Obser

Table 1

Test	Test Figures
+H	5 V
4 MHz clock Reset	4 MHz, 3 V_{pp} 5 V_{pp} only at moment of switch on
I²C Bus	5 V_{pp}

Table 2

Possible faults due to I²C Bus control which

Fault	Possible Cause
No functions accepted by keyboard	+H IC 811
Channel No. cannot be changed with remote control LED does not switch	IR preamplifier D 1201, T 1204, + IC 1211, D 831, + IC 811, T 801
	Wiper switch of m button F 811
No frequency tuning	+A via R 337 +B, +H Data (SDA)/clock I²C Bus Variation of tuning tage as function o channel selection
No CCVS at IF module contacts 7, 9	+B, +B' I²C Bus, SDA, SCL absent at tuner
No AF signal at IF module contacts 28/29	+B, +B' I²C Bus, SDA, SCL no coincidence
No analog singals Brightness Contrast Colour contrast	I²C Bus, IC 350 D/A convertor D/A convertor D/A convertor
Remote control operation only	
No Videotext (Teletext)	+B', +E I²C bus, SDA T 816 ICL
Remote control operation involving video 1 b	
No VCR remote control	T 821, VCL T 816, ICL I²C bus SDA/T 111

g und Ablenkung zurückzuführen sind, ist len nach Tabelle 2 durchgeführt werden.

Tuner, ZF, Videotext, Scartbuchse (Euro- ber den I²C Bus.

MOS-handling beachten

Mögliche Fehler
D 671, IC 676, IC 811
F 811, IC 811 C 806, IC 811
Die I²C-Bus-Daten sind auch ohne TP-Bedienung oder Keyboardeingabe vorhanden. Bei fehlenden Daten: Die Leitungen SDA und SLC (Brücken auf dem Bedienteil) auftrennen. Sind dann die I²C-Bus-Daten vorhanden, liegt eine Überlastung des I²C-Bus vor. **Fehlerursache:** Tuner, ZF, Videotext, IC 350, EURO-AV-Buchse.

us-Steuerung.

	Meßpunkt
e 1	IC 811 pin 40 (SIE) Pin 4 (MOT)
nal) altvorgang)	Pin 6 IC 1211 Pin 3 IC 1211 Pin 8, 9 IC 811 (SIE) Pin 21, 23 (MOT)
iderstand	am Schalter Pin 22 IC 811 (SIE) Pin 5 (MOT)
	Tuner Stift 1 Tuner Stift 16, 2 Tuner Stift 6, 5 Tuner Stift 13, 15
	ZF 21, 17 Tuner 6, 5
	ZF 21, 17 ZF 25, 24 ZF 20 IC 811 Pin 19 (SIE) Pin 35 (MOT)
	IC 350 Pin 4/5 Farb/RGB-Baustein: Stift 10 (Helligk.) Stift 11 (Kontrast) Stift 12 (Farbkon.)
	VT 13, 2 VT 9 VT 11
	Euro-AV-Buchse 10 Euro-AV-Buchse 14 Euro-AV-Buchse 12

Service checks on the I²C Bus

If faults occur in the set which cannot be attributed to the power supply unit, the EHT or the deflection system, the I²C bus should be checked using Table 1 before further service work is carried using Table 2.

Via the I²C bus the microcomputer in the control unit IC 811 supplies control signals for the tuner, IF, Videotext (Teletext), Scart socket (Euro AV socket) including the VCR remote control, and the RGB analog signals.

Note:

N.B. when a module is being changed, the set should be switched off completely. Modules must not be unplugged even in the "standby" mode. Observe MOS handling precautions.

Table 1

Test	Test Figures	Test Point	Possible Faults
+H	5 V	Pin 40, IC 811 (SIE) Pin 4, (MOT)	D 671, IC 676, IC 811
4 MHz clock Reset	4 MHz, 3 V_{pp} 5 V_{pp} only at moment of switch on	Pin 22, IC 811 (SIE) Pin 5, (MOT) Pin 23, IC 811 (SIE) Pin 2, (MOT)	F 811, IC 811 C 806, IC 811
I²C Bus	5 V_{pp}	Pin 8, 9, IC 811 (SIE) Pin 21, 23, (MOT)	The I²C Bus data are present even without input from the remote control or keyboard. If data are absent, disconnect the SDA and SLC lines (links on control section). If data are then present on the I²C Bus, the I²C Bus is overloaded. **Possible Faults:** Tuner, IF, Videotext (Teletext), EURO AV socket, IC 350

Table 2

Possible faults due to I²C Bus control which can occur in any part of set.

Fault	Possible Cause	Test Figure	Test Point
No functions accepted by keyboard	+H IC 811	5 V see Table 1	IC 811 pin 40 (SIE) pin 4 (MOT)
Channel No. cannot be changed with remote control LED does not switch	IR preamplifier D 1201, T 1204, +B, IC 1211, D 831, +H IC 811, T 801	+B = 12 V 5 V_{pp} (IR signal) 5 V_{pp} (switch-on cycle)	Pin 6 IC 1211 Pin 3 IC 1211 Pin 8, 9 IC 811 (SIE) Pin 21, 23 (MOT)
	Wiper switch of mains button F 811	Contact resistance 0 ohm 3 V_{pp}	at switch pin 22 IC 811 (SIE) pin 5 (MOT)
No frequency tuning	+A via R 337 +B, +H Data (SDA)/clock (SCL) I²C Bus Variation of tuning voltage as function of channel selection	approx. 46 V 12 V, 5 V 5 V_{pp} 0.2 – 30 V	Tuner, pin 1 Tuner, pins 16, 2 Tuner, pins 6, 5 Tuner, pins 13, 15
No CCVS at IF module contacts 7, 9	+B, +B' I²C Bus, SDA, SCL absent at tuner	12 V 5 V_{pp}	IF, pins 21, 17 Tuner, pins 6, 5
No AF signal at IF module contacts 28/29	+B, +B' I²C Bus, SDA, SCL no coincidence	12 V 5 V_{pp} 12 V 5 V	IF, pins 21, 17 IF, pins 25, 24 IF, pin 20 IC 811 pin 19 (SIE) pin 35 (MOT)
No analog singals Brightness Contrast Colour contrast	I²C Bus, IC 350 D/A convertor D/A convertor D/A convertor	5 V_{pp} 1 – 3 V 2 – 4 V 2 – 4 V	IC 350, pin 4, 5 Colour/RGB module: pin 10 (brightness) pin 11 (contrast) pin 12 (colour)
Remote control operation only No Videotext (Teletext)	+B', +E I²C bus, SDA T 816 ICL	12 V, 8 V 5 V_{pp} 5 V_{pp}	VT, pin 13, 2 VT, pin 9 VT, pin 11
Remote control operation involving video 1 button only No VCR remote control	T 821, VCL T 816, ICL I²C bus SDA/T 111	5 V_{pp} 5 V_{pp} 5 V_{pp}	Euro AV socket, pin 10 Euro AV socket, pin 14 Euro AV socket, pin 12

Servizio assistenza al bus I^{2}C

Se l'apparecchio svolge erratamente le funzioni, e questo non dipende nè dall'alimentatore, nè dall'alta tensione o dalla deflessione, controllare allora il bus I^{2}C secondo la tabella 1, prima di effettuare gli altri lavori di assistenza indicati in tabella 2.

Il microcomputer nell'unità di comando IC 811 fornisce attraverso il bus I^{2}C, gli ordini di comando per tuner, FI, televideo, presa Euro/Scart, compreso telecomando VCR e valori analogici per RGB.

Nota:

Spegnere l'apparecchio quando un modulo viene sostituito! La sostituzione di un modulo non può avvenire nemmeno in posizione d'attesa (stand-by). Attenzione alle norme MOS!

Tabella 1

Misura	Valore di misura	Punto di misura	Guasto possibile
+H	5 V	Pin 40, IC811 (SIE) Pin 4, (MOT)	D 671, IC 676, IC 811
Cadenza 4 MHz	4 MHz, 3 V_{pp}	Pin 22, IC811 (SIE) Pin 5, (MOT)	F 811, IC 811
Reset	5 V_{pp} solo in accensione	Pin 23, IC811 (SIE) Pin 2, (MOT)	C 806, IC 811
Bus I^{2}C	5 V_{pp}	Pin 8, 9, IC811 (SIE) Pin 21, 23, (MOT)	I dati nel bus I^{2}C sono presenti anche senza comando TP o immissione tramite tastiera. Se i dati mancano: Interrompere le linee SDA e SLC (ponticelli sulla sezione di comando). Se i dati nel bus I^{2}C sono poi disponibili, allora è presente un sovraccarico. **Guasto possibile:** tuner, FI, televideo, EURO AV presa IC 350.

Tabella 2

Tipi di guasto possibili nell'apparecchio completo in funzione del comando bus I^{2}C.

Guasto	Causa possibile	Valore di misura	Punto di misura
Nessuna funzione di comando tramite tastiera	+H IC 811	5 V vedi tabella 1	IC 811 Pin 40 (SIE) Pin 4 (MOT)
Nessuna commutazione canale/programma tramite TP	Preamplif. ad infrarossi D 1204, +B	+B = 12 V	pin 6 IC 1211
Il LED non commuta	IC 1211, D 831, +H, IC 811, T 801,	5 V_{pp} (segnale all'infrar.) 5 V_{pp} (fase di accensione)	pin 3 IC [illegible] pin 8, 9 IC 811 (SIE) pin 21, 23 (MOT)
	Contatto temporaneo dell'interruttore di rete F 811	Resistenza di contatto 0 Ohm 3 V_{pp}	sul comando Pin 22 IC 811 (SIE) Pin 5 (MOT)
Nessuna sintonia della frequenza	+A tramite R 337 +B, +H dati (SDA)/clock (SCL) del bus I^{2}C tensione di sintonia variabile a seconda dell'immissione di canale	ca. 46 V 12 V, 5 V 5 V_{pp} 0,2–30 V	Tuner spinotto [illegible] Tuner spinotto [illegible] Tuner spinotto 6, 5 Tuner spinotto 13, 15
Nessun segnale FBAS al modulo FI cont. 7, 9	+B, +B' bus I^{2}C, SDA, SCL manca al tuner	12 V 5 V_{pp}	FI 21, 17 Tuner 6, 5
Nessun segnale BF al modulo FI cont. 28/29	+B, +B' bus I^{2}C, SDA, SCL nessuna coincidenza	12 V 5 V_{pp} 12 V 5 V	FI 21, 17 FI 25, 24 FI 20 IC 811 pin 19 (SIE) Pin 35 (MOT)
Nessun valore analogico	bus I^{2}C, IC 350	5 V_{pp}	IC 350 pin 4/5 modulo colore/RGB:
luminosità contrasto contrasto colore	convertitore D/A convertitore D/A convertitore D/A	1–3 V 2–4 V 2–4 V	spinotto 10 (luminosità) spinotto 11 (contrasto) spinotto 12 (contr. colore)
Solo con comando TP Manca la funzione Televideo	+B', +E bus I^{2}C, SDA T 816 ICL	12 V, 8 V 5 V_{pp} 5 V_{pp}	VT 13, 2 VT 9 VT 11
Solo con comando TP assieme al tasto video 1			
Telecomando VCR non possibile	T 821, VCL T 816, ICL bus I^{2}C SDA/T 111	5 V_{pp} 5 V_{pp} 5 V_{pp}	Presa Euro/Scart 10 Presa Euro/Scart 14 Presa Euro/Scart 12

Symbole und ihre Bedeutung
Symbols and their meaning
Simboli e loro significati

P	PROGR.	VERT.
P1	PROGR. TASTE PROGR. BUTTON TASTO PROGR. TOUCHE PROGR.	VERT.
MEMO	SPEICHERTASTE MEMORY BUTTON TASTO DI MEMORIA TOUCHE MEMOIRE	VERT.
NORM	NORMTASTE TV STANDARD SELECT. BUTTON COMMUT. DI NORMA TOUCHE DE NORME	HOR.
▷▷+	FEINABST. + FINE TUNING + SINT. FINE + REGLAGE FIN +	HOR.
-◁◁	FEINABST.- FINE TUNING - SINT. FINE - REGLAGE FIN -	
→• I	SUCHLAUF BD I SELF-SEEK BAND I SINT. AUTOM. BANDA I RECHERCHE AUTOM. BANDE I	
→• III	SUCHLAUF BANDWAHL III SELF-SEEK BAND III SINT. AUTOM. BANDA III RECHERCHE AUTOM. BANDE III	HOR.
→• UHF	SUCHLAUF UHF SELF-SEEK UHF SINT. AUTOM. UHF RECHERCHE AUTOM. UHF	☼
◁	LAUTSTAERKE VOLUME VOLUME SONORE	◑
FT	FEINABST. FINE TUNING SINT. FINE REGLAGE FIN	◐
KA	KANALWAHL CHANNEL SEL. SELEZ. CANALE SELECT. DE CANAUX	FBAS
▷◁	BALANCE BILANCIAM. BALANCE	SSC
→•	SUCHLAUF SELF-SEEK SINT. AUTOM. RECHERCHE AUTOM.	SB
U I/III	SCHALTSP. BANDWAHL BAND SEL. SWITCHING VOLTAGE TENS. DI COMMUT. SELEZ. BANDA TENS. DE COMMUT. SELECT. BANDE	SSB
U VHF	SCHALTSP. VHF SWITCHING VOLT. VHF TENS. DI COMMUT. VHF TENS. DE COMMUT. VHF	R
U UHF	SCHALTSP. UHF SWITCHING VOLT. UHF TENS. DI COMMUT. UHF TENS. DE COMMUT. UHF	G
U AFC	SCHALTSP. AFC SWITCHING VOLT. AFC TENS. DI COMMUT. AFC TENS. DE COMMUT. AFC	B
U AV	SCHALTSP. AV AV SWITCHING VOLT. TENS. DI COMMUT. AV TENS. DE COMMUT. AV	Y
U NORM	SCHALTSP. NORM SWITCHING VOLT. STANDARD TENS. DI COMMUT. NORMA TENS. DE COMMUT. STANDARD	F
U KOIN.	SCHALTSP. KOINZ. SWITCHING VOLT. COINC. TENS. DI COMMUT. COINC. TENS. DE COMMUT. COINC.	SW
U EURO-AV	SCHALTSP. EURO-AV SWITCHING VOLT. EURO-AV TENS. DI COMMUT. EURO-AV TENS. DE COMMUT.	NF
U VQ	SCHALTSP. VIDEO QUELLE SWITCHING VOLT. VIDEO SOURCE TENS. DI COMMUT. SORG. VIDEO TENS. DE COMMUT. SOURCE VIDEO	NF-L
U DATA	SCHALTSP. DATENBETR. SWITCHING VOLT. DATA MODE TENS. DI COMMUT. DATI TENS. DE COMMUT. FONCT. DONNEES	NF-R
U 4,5 MHZ	SCHALTSP. 4,5 MHZ SWITCHING VOLT. 4,5 MHZ TENS. DI COMMUT. 4,5 MHZ TENS. DE COMMUT. 4,5 MHZ	EURO-AV VIDEO
U τ	REGELSP. VERZOEGERT DELAYED CONTR. VOLTAGE TENS. DI CONTR. RITARD. TENS. DE REGUL. RETARDEE	EURO-AV AUDIO
U TUN.	ABSTIMMSP. TUNER TUNING VOLT. TUNER TENS. DI SINTONIA TUNER TENS. D'ACCORD TUNER	U LED
U AFC	REGELSP. AFC AFC CONTROL VOLT. TENS. DI CONTR. AFC TENS. DE REGUL. AFC	IR
MUTE	STUMMSCHALTUNG MUTING SILENZIAMENTO SILENCIEUX	U G1
⎍	TASTIMPULS GATING PULSE IMPULSO A CADENZA IMPULS. DE DECLENCHEMENT	U FOC

Bedeutung
meaning
nificati

CT. BUTTON

DA I
BANDE I

III
II
DA III
BANDE III

UHF

X

ING VOLTAGE
SELEZ. BANDA
SELECT. BANDE

VHF
VHF
VHF

UHF
UHF
UHF

AFC
AFC
AFC

T.
AV
AV

STANDARD
NORMA
STANDARD

COINC.
COINC.
COINC.

EURO-AV
EURO-AV

QUELLE
VIDEO SOURCE
SORG. VIDEO
SOURCE VIDEO

BETR.
DATA MODE
DATI
FONCT. DONNEES

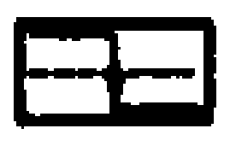
Z
4,5 MHZ
4,5 MHZ
4,5 MHZ

ERT
OLTAGE
RITARD.
RETARDEE

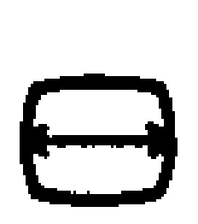
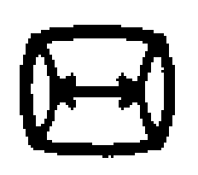
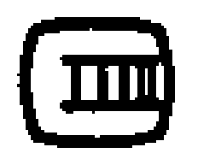
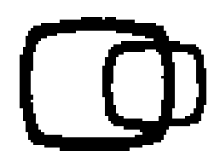
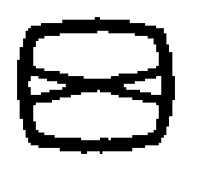
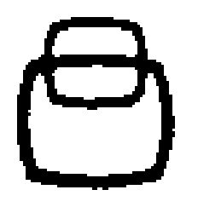
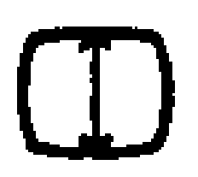
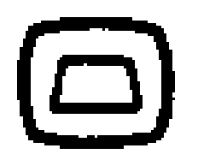
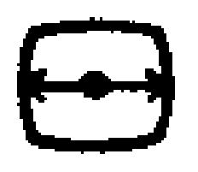
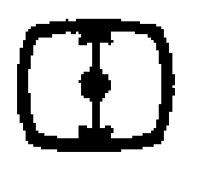
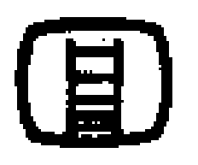
ER
A TUNER
UNER

AFC
AFC

A
NCHEMENT

VERT.	VERT. TASTIMPULS VERT. GATING PULSE IMP. A CADENZA VERT. IMP. TRAME
VERT.	VERT. PARABEL VERT. PARABOLA PARABOLA VERT. SIGNAL PARABOLIQUE
VERT.	VERT. SAEGEZAHN VERT. SAW TOOTH DENTE DI SEGA VERT. SIGNAL DENT DE SCIE
HOR.	HOR. ANSTEUERUNG HORIZ. DRIVE PILOTAGGIO ORIZZ. SYNCHR. LIGNES
REF.	REF. IMPULS REFERENCE PULSE IMP. DI RIFER. IMP. DE REFER.
	SCHUTZSCHALTUNG CIRCUIT PROTECTION CIRCUITO DI PROTEZIONE CIRCUIT DE SECURITE
	FARBTON TINT TINTA TEINTE
REF.	REF. LAUTSTAERKE VOLUME REF. VOLT. TENS. DI RIF. VOLUME TENS. DE REF. VOL. SONORE
☼	HELLIGKEIT BRIGHTNESS LUMINOSITA' LUMINOSITE
◐	KONTRAST CONTRAST CONTRASTO CONTRASTE
◕	FARBKONTRAST CONTRAST COLOUR CONTRASTO COLORE CONTRASTE COULEUR
FBAS	FBAS-SIGNAL CCVS SIGNAL SEGNALE SVCC SIGNAL VIDEO COMPOSITE
SSC	SUPERSANDCASTLE
SB	STRAHLSTR. BEGR. BEAM CURRENT LIM. CORRENTE CATODICA MEDIA LIM. COUR. DE FAISCEAU
SSB	SPITZ. STRAHLSTR. BEGR. PEAK BEAM CURRENT LIMITING CORR. CATODICA DI PICCO LIM. DE FAISCEAU CRETE
R	ROT-SIGNAL RED SIGNAL SEGNALE ROSSO SIGNAL ROUGE
G	GRUEN-SIGNAL GREEN SIGNAL SEGNALE VERDE SIGNAL VERT
B	BLAU-SIGNAL BLUE SIGNAL SEGNALE BLU SIGNAL BLEU
Y	Y-SIGNAL SEGNALE Y SIGNAL Y
F	F-SIGNAL CHROMA SIGNAL SEGNALE F SIGNAL CHROMA
SW	SCHWARZWERT BLACK LEVEL LIVELLO DEL NERO NIVEAU DU NOIR
NF	NF-SIGNAL AF SIGNAL SEGNALE BF SIGNAL BF
NF-L	NF-SIGNAL LINKS AF SIGNAL LEFT SEGNALE BF SINISTRA SIGNAL BF GAUCHE
NF-R	NF-SIGNAL RECHTS AF SIGNAL RIGHT SEGNALE BF DESTRA SIGNAL BF DROIT
EURO-AV VIDEO	VIDEO SIGNAL EURO-AV SEGNALE VIDEO EURO-AV SIGNAL VIDEO NORME FR
EURO-AV AUDIO	AUDIO SIGNAL EURO-AV SEGNALE AUDIO EURO-AV SIGNAL AUDIO NORME FR
U_{LED}	SCHALTSP. LED LED SWITCHING VOLT. LED TENS. DI COMMUT. TENS. DE COMMUT. LED
IR	IR-SIGNAL SEGNALE IR SIGNAL IR
U_{G1}	SPG. GITTER 1 VOLTAGE GRID 1 TENS. GRIGLIA 1 TENS. GRILLE G1
U_{FOC}	FOKUSSP. FOCUSSING VOLTAGE TENS. DI FOCALIZZ. TENS. DE FOCALIS.

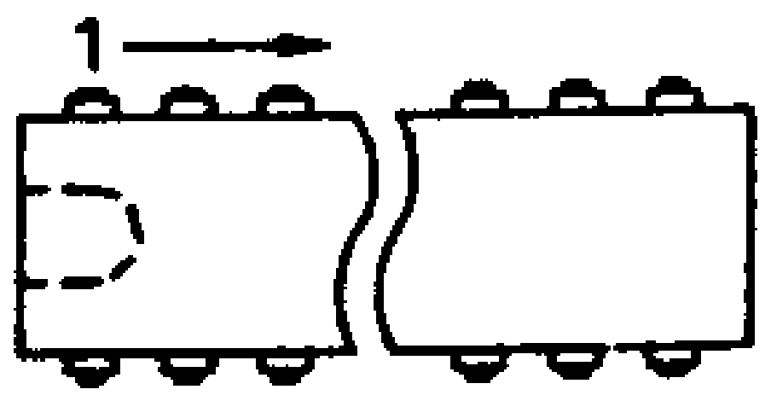
U_{H} ⚡	HOCHSPANNUNG EHT VOLTAGE ALTA TENS. HAUTE TENS.
U_{SG}	SCHIRMGITTERSP. SCREEN-GRID VOLT. TENS. GRIGLIA SCHERMO TENS. GRILLE-ECRAN
TE	TEXT ENABLE
SCL	I^{2}C-CLOCK
VCL	VCR-CLOCK
ICL	I-BUS-CLOCK
SDA	DATEN DATA DATI DONNEES
ZF	ZF-SIGNAL IF SIGNAL SEGNALE FI SIGNAL FI
PP	PAL PRIORITAET PAL PRIORITY PRIORITA' PAL PRIORITE PAL
F-DIR.	F-SIGNAL DIREKT F SIGNAL DIRECT SEGNALE F DIRETTO SIGNAL CHROMA DIRECT
F_{V}	FV-SIGNAL FV SIGNAL SEGNALE FV SIGNAL FY
F_{U}	FU-SIGNAL FU SIGNAL SEGNALE FU SIGNAL FX
F-VERZ	F-SIGNAL VERZOEGERT F SIGNAL DELAYED SEGNALE F RITARD. SIGNAL CHROMA RETARDE
DL	VERZOEGERUNGSLEITUNG DELAY LINE LINEA DI RITARDO LIGNE A RETERD
U_{SCHUTZ}	SCHALTSP./SCHUTZFUNKTION SWITCHING VOLT. /PROTECTIVE FUNCTION TENS. DI COMMUT. /FUNZ.DI PROTEZ. TENS. DE COMMUT. / SECURITE

	ZEILENBREITE LINE WIDTH LARGHEZZA DI RIGA AMPLITUDE HORIZONTALE
	OST / WEST AMPLITUDE EAST / WEST AMPLITUDE AMPIEZZA EST / OVEST AMPLITUDE EST / OUEST
	HOR. LINEARITAET HORIZ. LINEARITY LINEAR. ORIZZ. LINEAR. HORIZONT.
	BILDLAGE HOR. HORIZ. PICTURE POSITION POSIZIONE ORIZZ. D'IMMAGINE CADRAGE HORIZONT.
	FOKUSREGLER FOCUS CONTROL REGOLAT. DI FOCALIZZ. REGLAGE DE FOCALISATION
	BILDLAGE VERT. VERT. PICTURE POSITION POSIZ. VERT. D'IMMAGINE CADRAGE VERTICAL
	BILDAMPLITUDE FIELD AMPLITUDE AMPIEZZA D'IMMAGINE AMPLITUDE VERTICALE
	TRAPEZ TRAPEZIUM TRAPEZIO TRAPEZE
	HOR. FREQUENZ HOR. FREQUENCY FREQ. ORIZZ. FREQ. HORIZ.
	VERT. FREQUENZ VERT. FREQUENCY FREQ. VERT.
	VERT. LINEARITAET VERT. LINEARITY LINEAR. VERT. LINEAR. VERT.

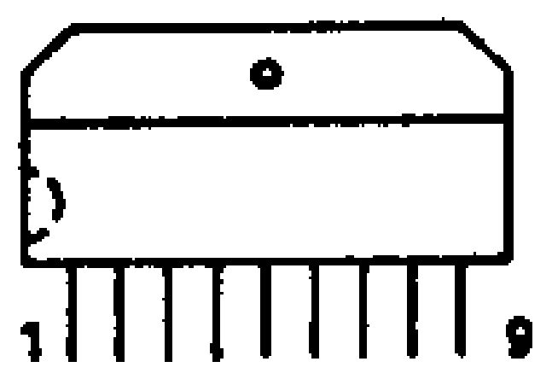
⚠ BEI ERSATZ AUS SICHERHEITSGRUENDEN NUR ORIGINALBAUTEILE VERWENDEN.
FOR REASONS OF SAFETY USE ORIGINAL PARTS ONLY WHEN REPLACING.
IN CASO DI SOSTITUZIONE UTILIZZARE PER RAGIONI DI SICUREZZA SOLAMENTE PEZZI DI RICAMBIO ORIGINALI.
EN CAS DE REMPLACEMENT N'UTILISER, POUR DES RAISONS DE SECURITE, QUE DES PIECES D'ORIGINE.

BEI EINGRIFFEN SCHUTZMASSNAHMEN FUER MOS-BAUTEILE BEACHTEN!
WHEN HANDLING MOS-CIRCUITS, ALWAYS OBSERVE THE MOS PROTECTION MEASURES!
ADOPERANDO COMPONENTI O CIRCUITI MOS OSSERVARNE LE CORRISPONDENTI MISURE DI PROTEZIONE!
LORS DE LA MANIPULATION DES CIRCUITS MOS, RESPECTER LES PRESCRIPTIONS MOS!

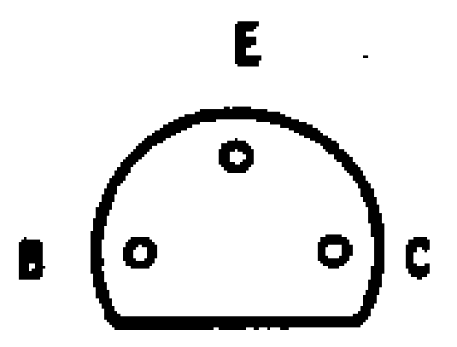
Wichtige Schaltzeichen
Important circuit simbols
Segni circuitali importanti



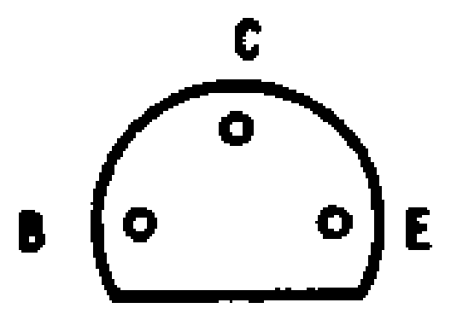
IC'S VON UNTEN GESEHEN
IC'S SEEN FROM BOTTOM
IC'S VISTI DI SOTTO
IC'S VUS DU DESSOUS



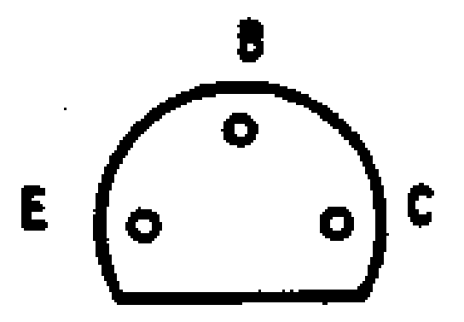
TDA 4601



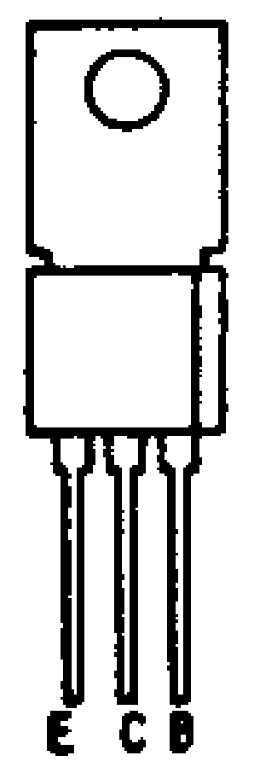
BF 199



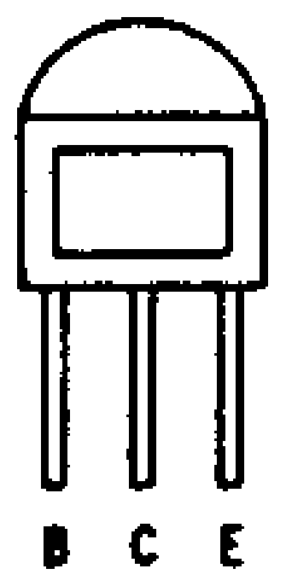
BF 421 / BF 422
BC 637



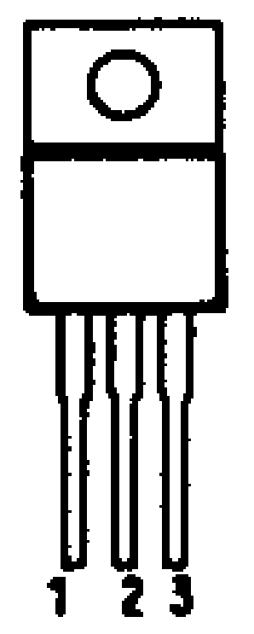
BC 548 / BC 558
BC 337/25
PH 2222
BC 338 / BC 324
BF 414



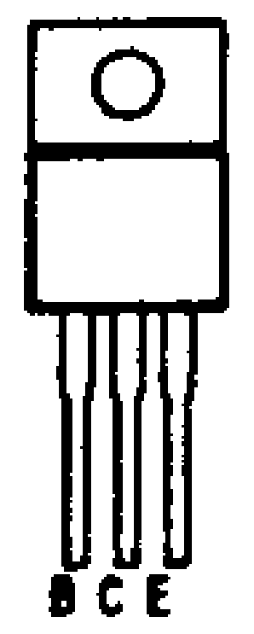
GF 759



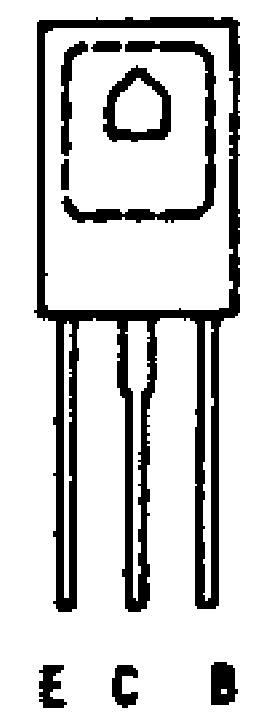
BU 508A
BU 508D



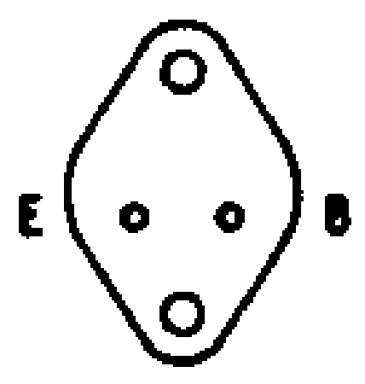
TY 40184 / MC 7505
MC78 MOS CT



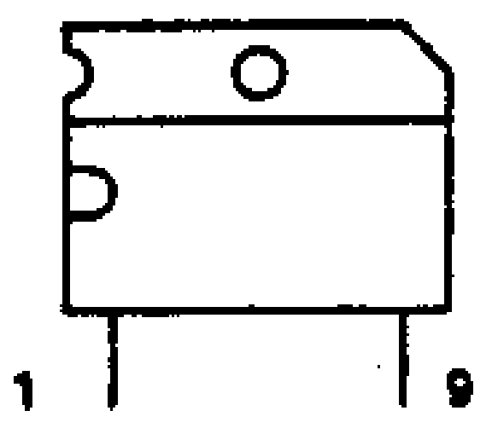
BD 561G
BU 908
BU 903



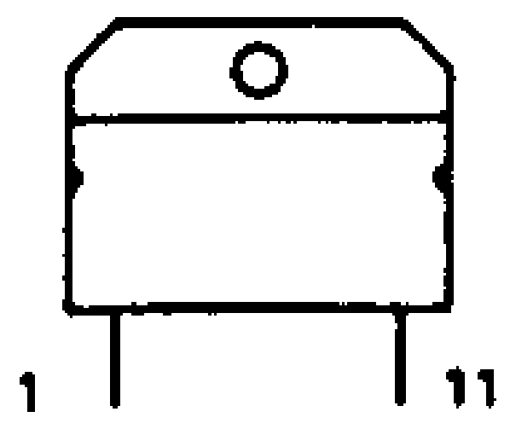
BD 561 G



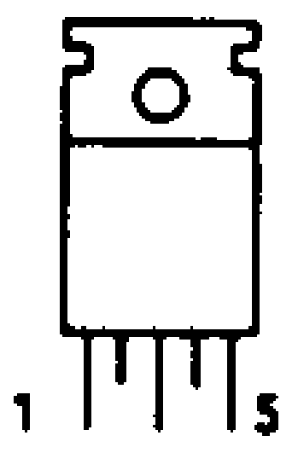
BU 208A



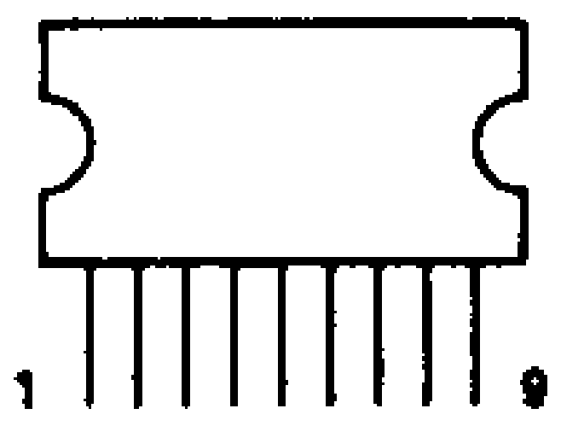
TDA 4935



DL 60292

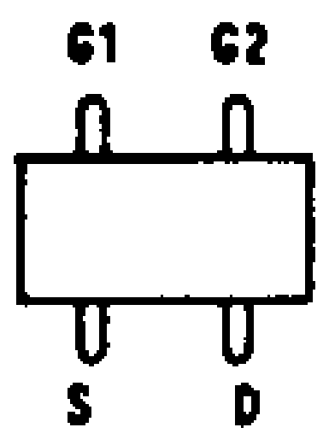


TDA 2040



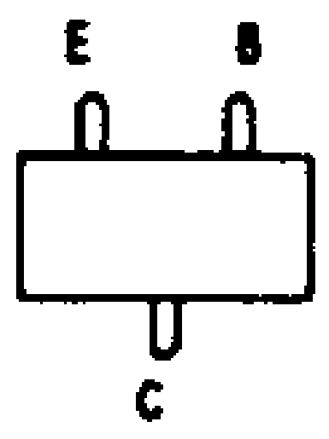
TDA 3654
TDA 3653A

SOT 143

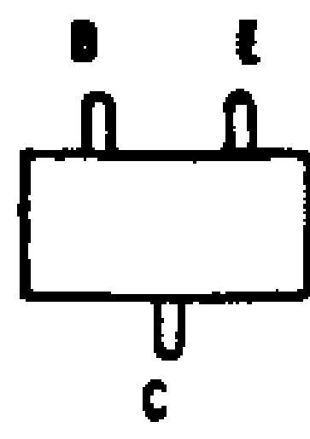


BF 994
BF 996

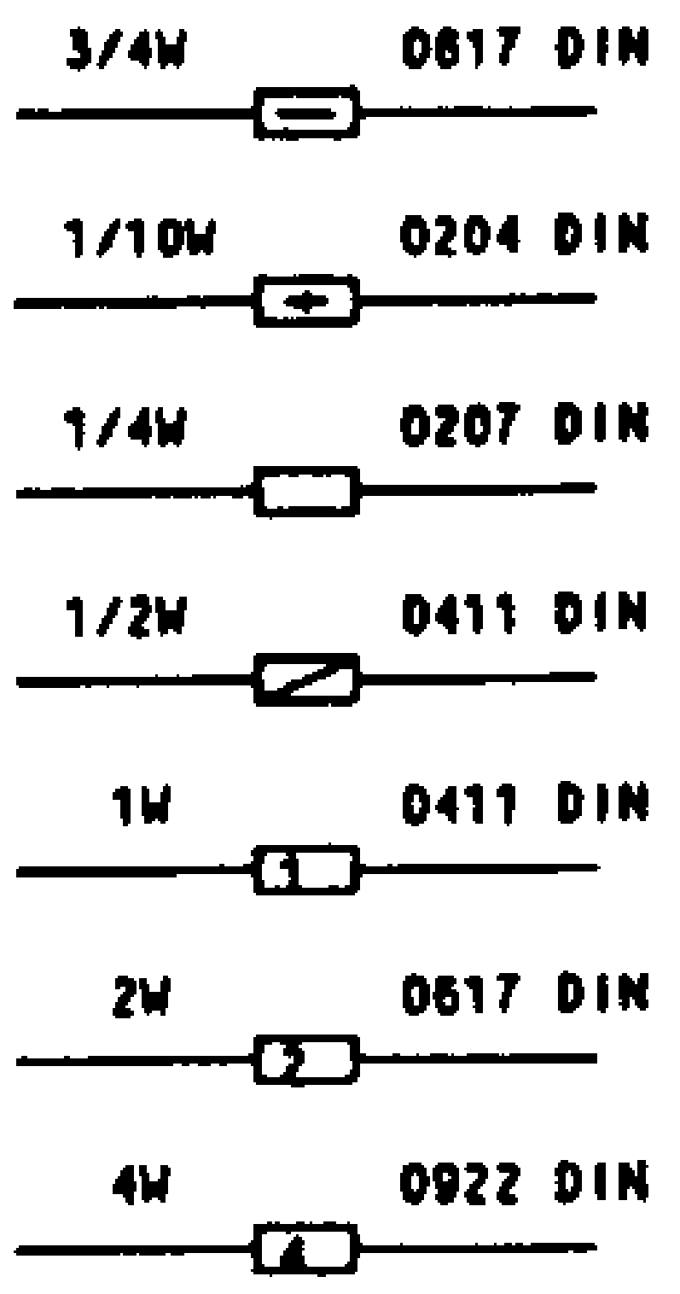
SOT 23



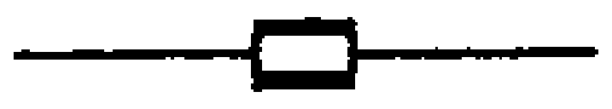
BF 569
BF 579



BC 847
BC 858



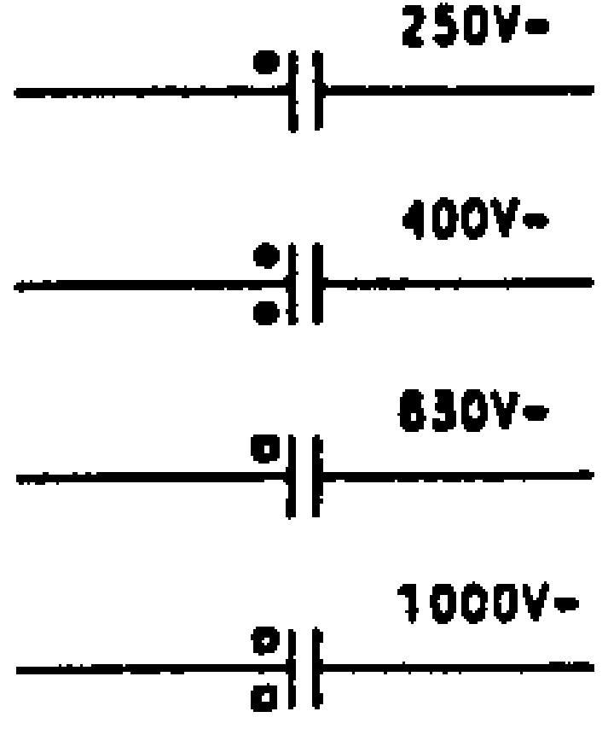
WIDERSTAND NICHT BRENNBAR
RESISTOR NOT FLAMMABLE
RESISTENZA NON INFIAMMABILE
RESISTANCE ININFLAMMABLE



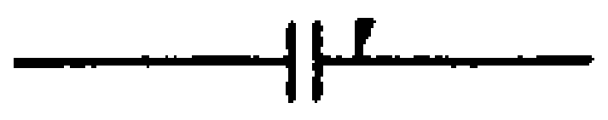
DRAHTWIDERSTAND
WIRE RESISTOR
RESISTENZA A FILO
RESISTANCE BOBINEE

SICHERUNGSWIDERSTAND
SAFETY RESISTOR
RESISTENZA DI SICUREZZA
RESISTANCE DISJONCTABLE

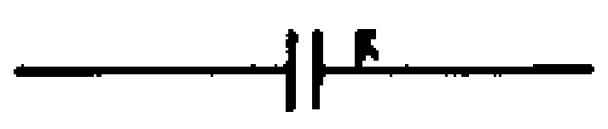
KONDENSATOR
CAPACITOR
CONDENSATORE
CONDENSATEUR



FOLIE
FOIL
A FOGLIA
FOLIO PLASTIQUE

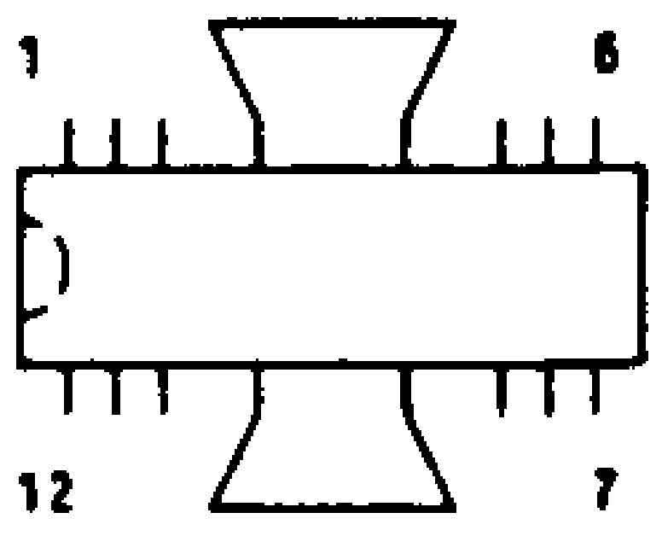


KERAMIK
CERAMIC
CERAMICO
CERAMIQUE



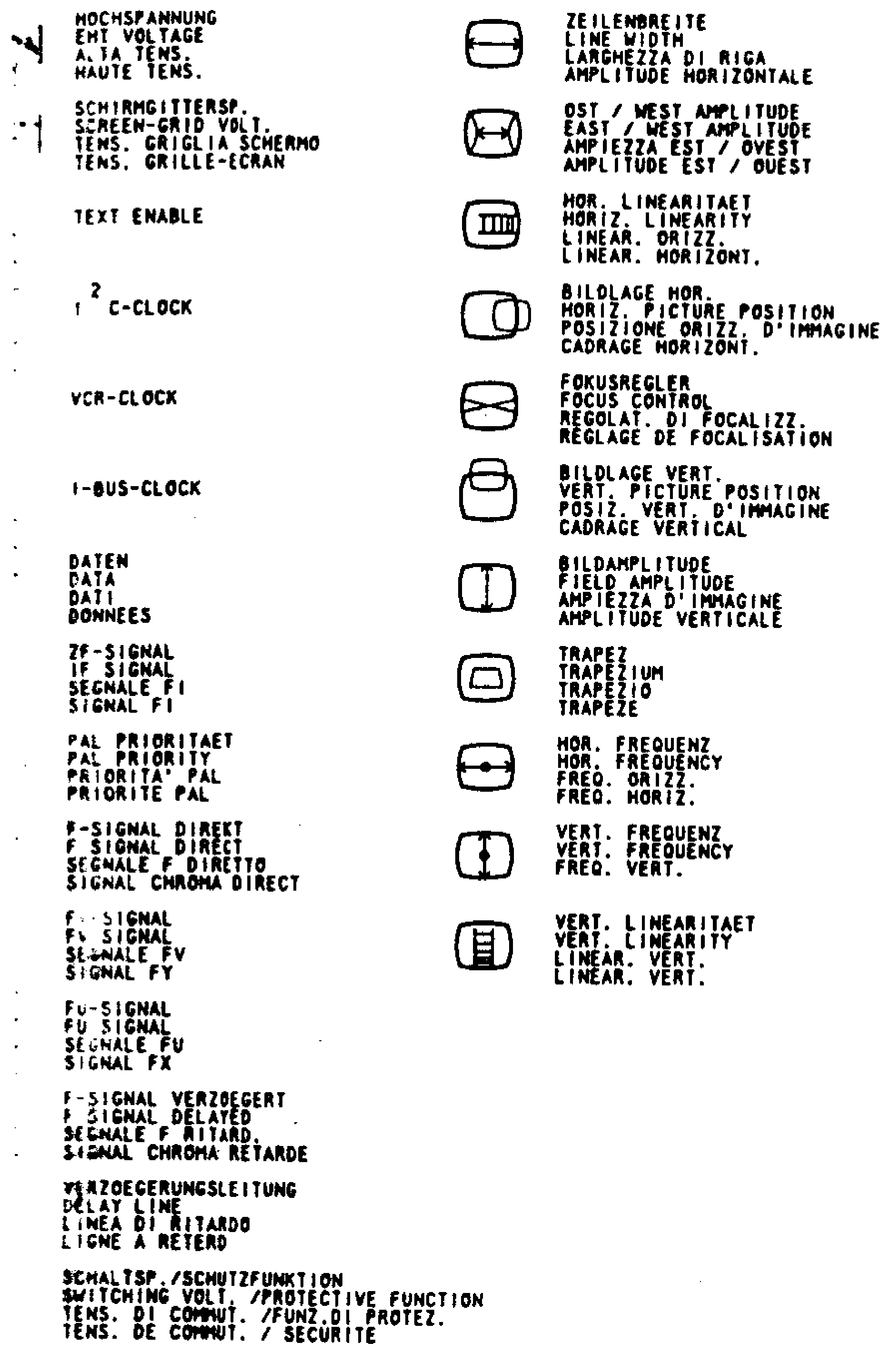
ELKO
ELECTROLYTIC
ELETTROLITICO
ELECTROLYTIQUE

TDA 2653A



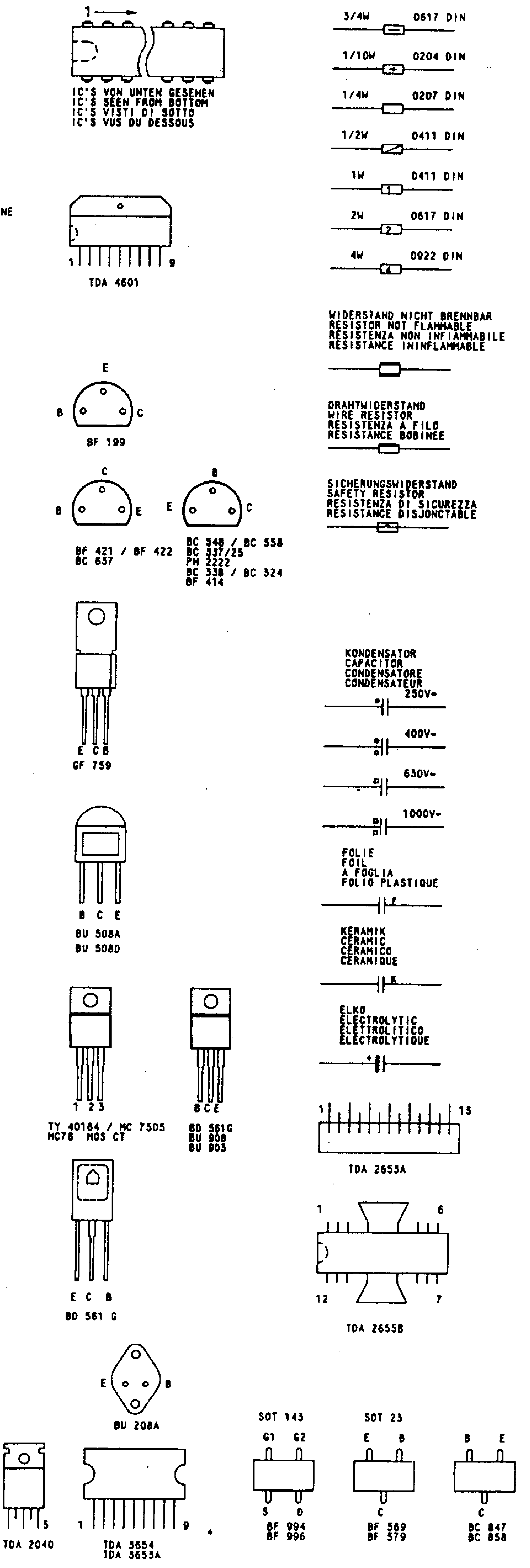
TDA 2655B

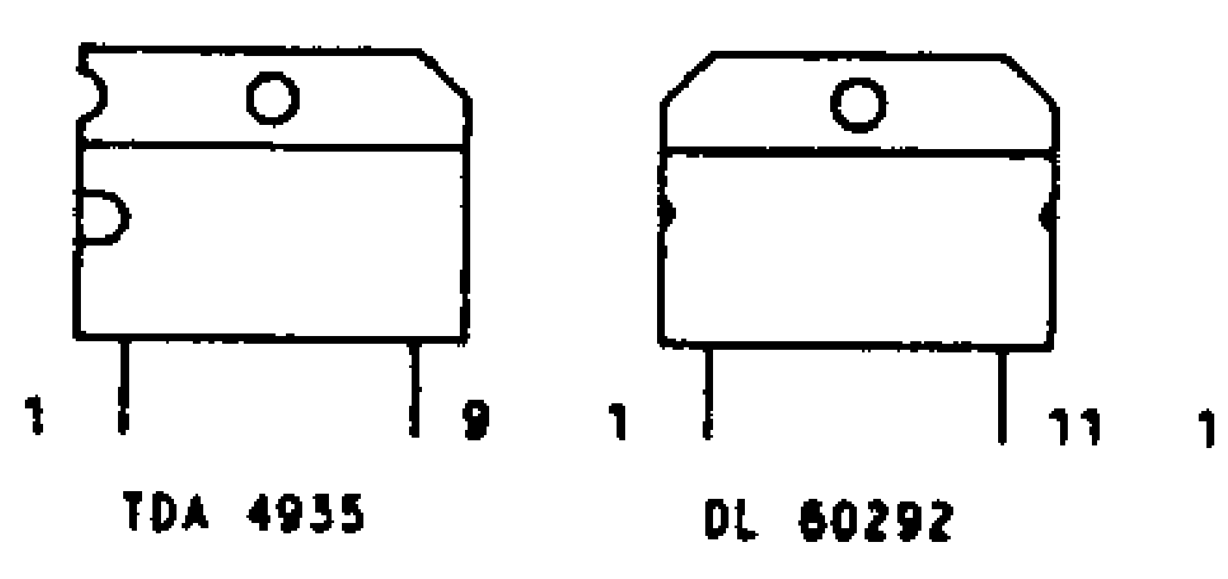
Wichtige Schaltzeichen
Important circuit simbols
Segni circuitali importanti

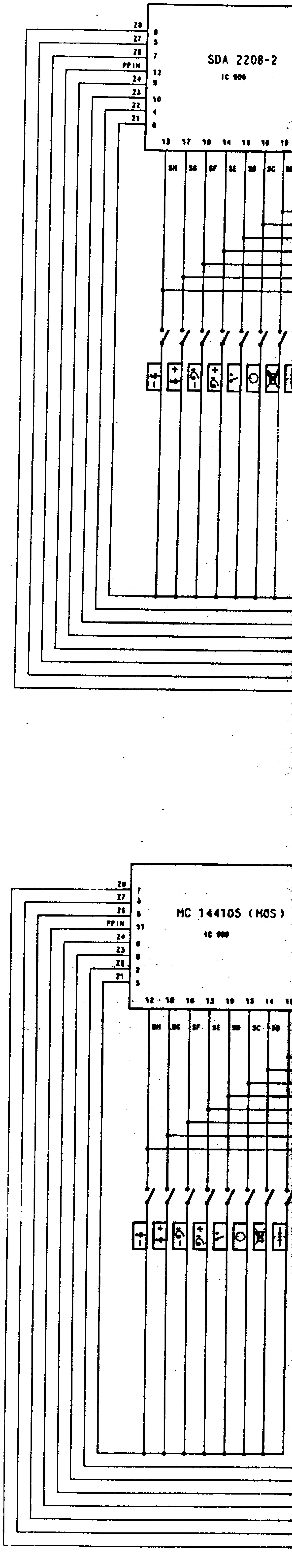


US SICHERHEITSGRUENDEN NUR ORIGINALBAUTEILE VERWENDEN.
OF SAFETY USE ORIGINAL PARTS ONLY WHEN REPLACING.
OSTITUZIONE UTILIZZARE PER RAGIONI DI SICUREZZA SOLAMENTE
AMBI ORIGINALI.
MPLACEMENT N'UTILISER, POUR DES RAISONS DE SECURITE,
ES D'ORIGINE.

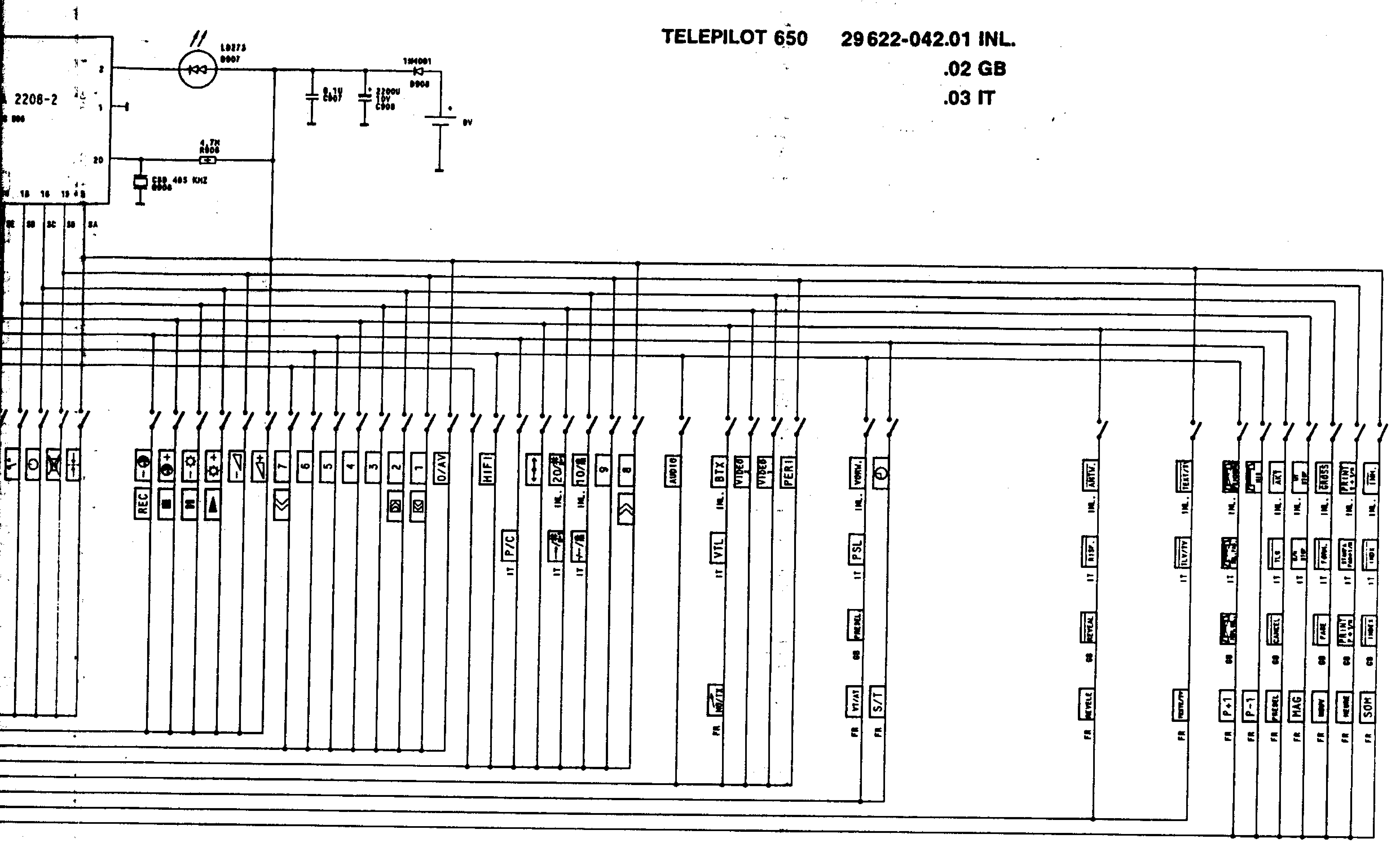
HUTZMASSNAHMEN FUER MOS-BAUTEILE BEACHTEN!
CIRCUITS, ALWAYS OBSERVE THE MOS PROTECTION MEASURES!
NENT, O CIRCUITI MOS OSSERVARNE LE CORRISPONDENTI
ONE!
LATION DES CIRCUITS MOS, RESPECTER LES



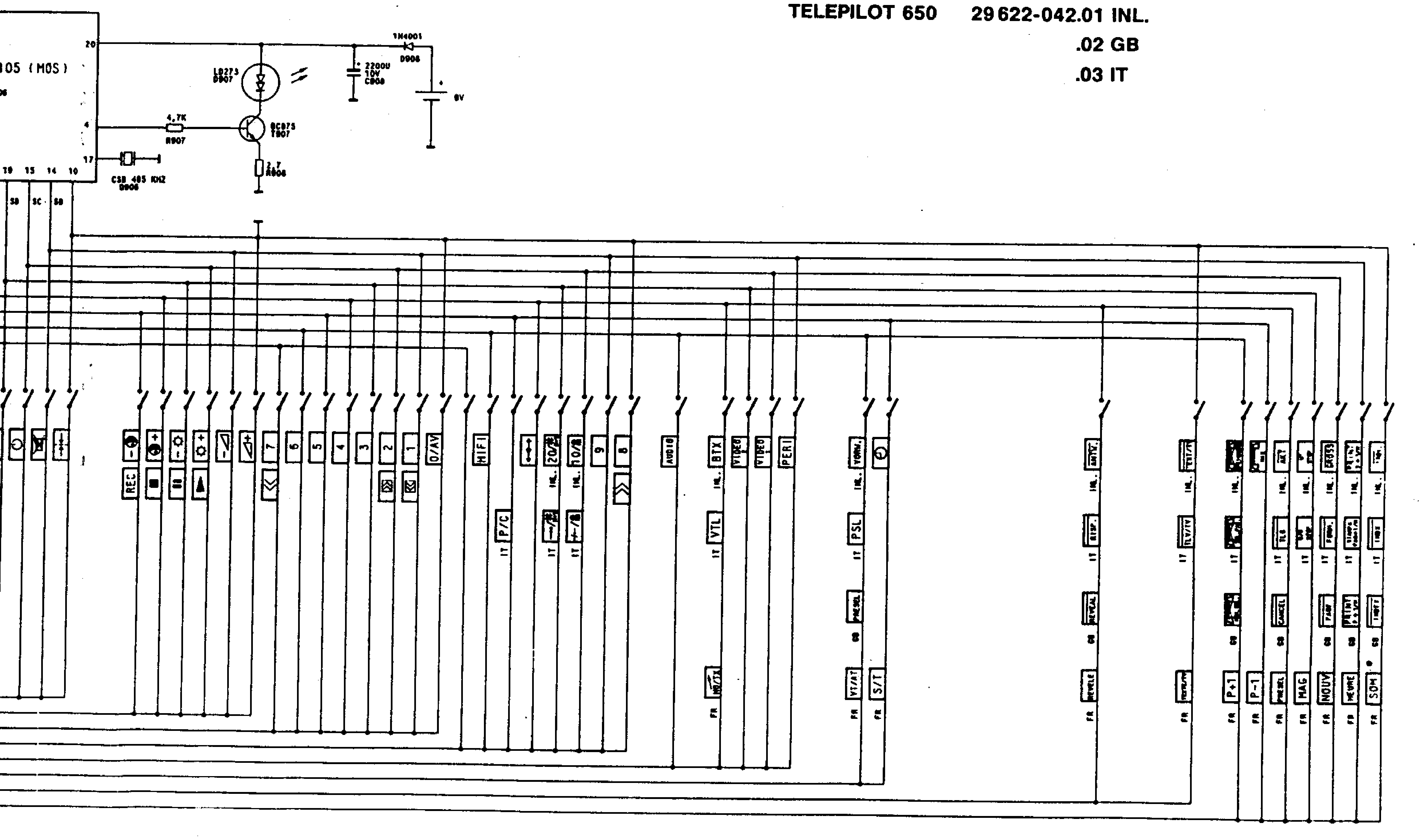


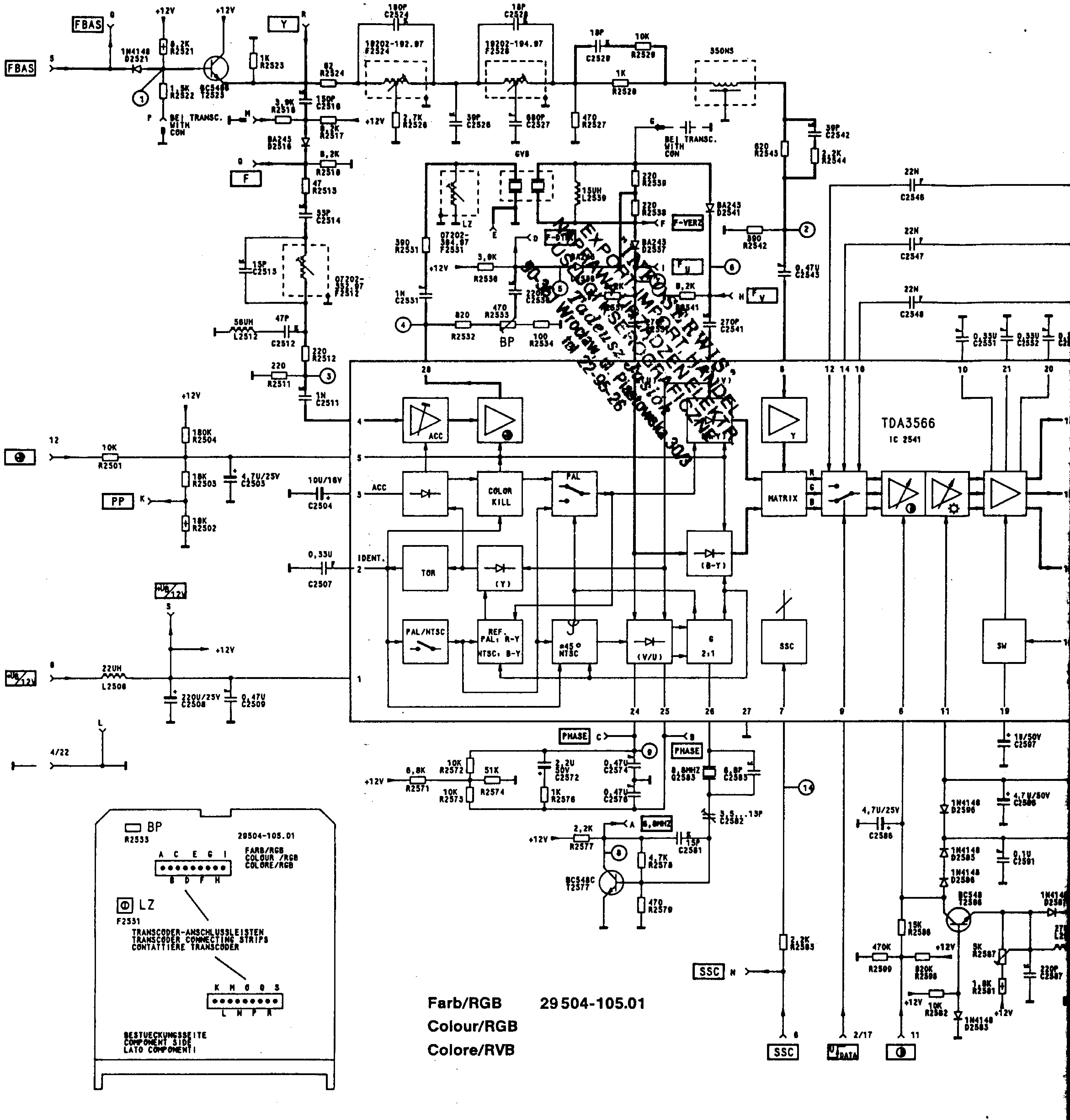


TELEPILOT 650 **29622-042.01 INL.**
.02 GB
.03 IT



TELEPILOT 650 **29622-042.01 INL.**
.02 GB
.03 IT





Farb/RGB **29504-105.01**
Colour/RGB
Colore/RVB

1. Weißabgleich
   - FuBK-Testbild einspeisen.
   - ◑min., ☼nom., ◐max., einstellen.
   - Regler VG und VB (Bildrohrplatte) so einstellen, daß keine Verfärbungen in den Grauwerten sichtbar sind.
2. Sperrpunktabgleich

   Eine manuelle Einstellung ist nicht möglich, da die Steckkarte eine automatische Dunkelstromregelung besitzt. Kontrolle des Sperrpunkts (Oszilloskop erforderlich).
   - FuBK-Testbild einspeisen.
   - ◑min., ☼nom., ◐min., einstellen.
   - Tastkopf an den Kollektoren der Transistoren T736, T756, T776 anhängen (Bildrohrplatte). Die Schwarzwerte der drei Kathodensignale liegen bei ca. 140 ... 150 V.
3. Einstellungen im Farbkanal
   - FuBK-Testbild einspeisen.
   - ◑nom., ☼nom., ◐nom. einstellen.
   - Am IC TDA 3566 Pin 1 mit Pin 5 und Pin 24 mit Pin 25 kurzschließen.
   - Mit Trimmer 2582 die durchlaufenden Farbbalken zum Stehen bringen, Kurzschlußbrücken entfernen.
   - Tastkopf am Pin 17 des IC TDA 3566 einhängen.
     Mit Regler BP und Spule LZ die Doppelbilder des B-Signals zur Deckung bringen.

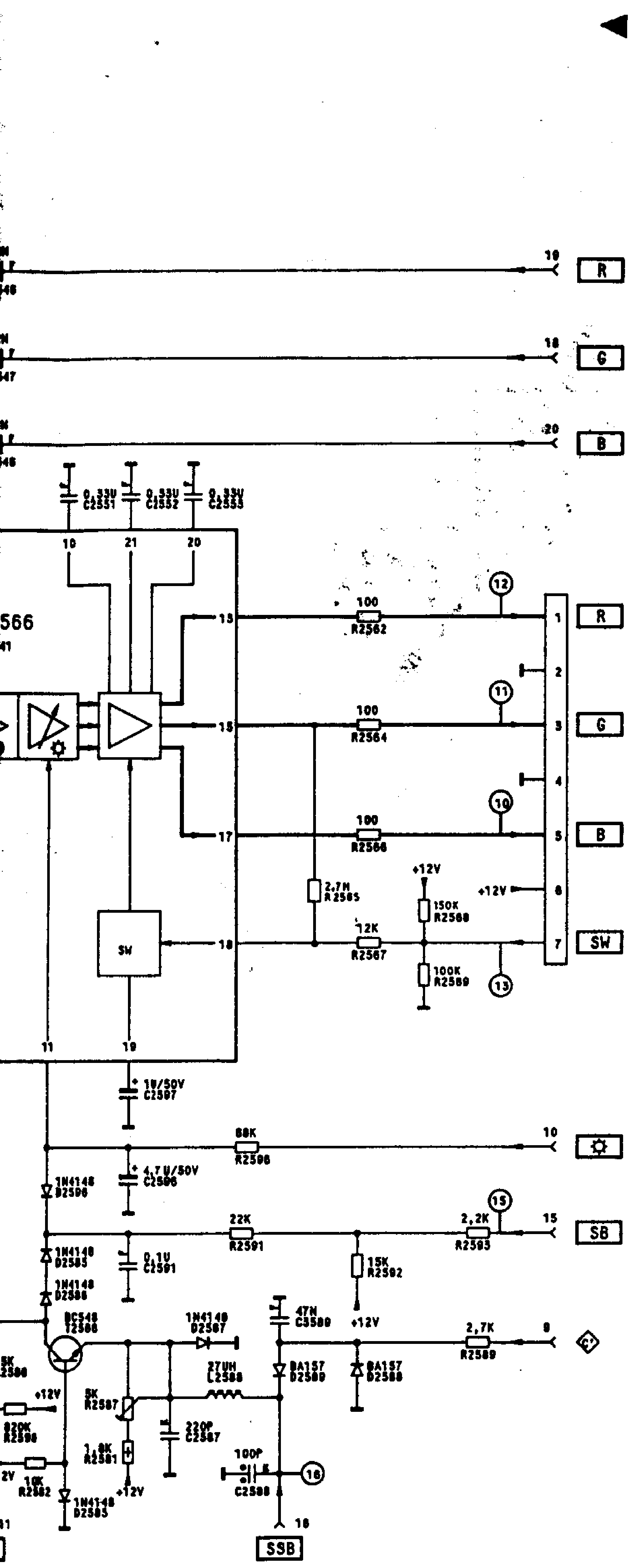
1. White level adjustment.
   - Display colour bar test pattern.
   - Set ◑ to min., ☼ to nom., ◐ to max.
   - Adjust presets VG and VB (CRT socket board) so that the picture does not show any colouration.
2. Adjustment of cut-off point.

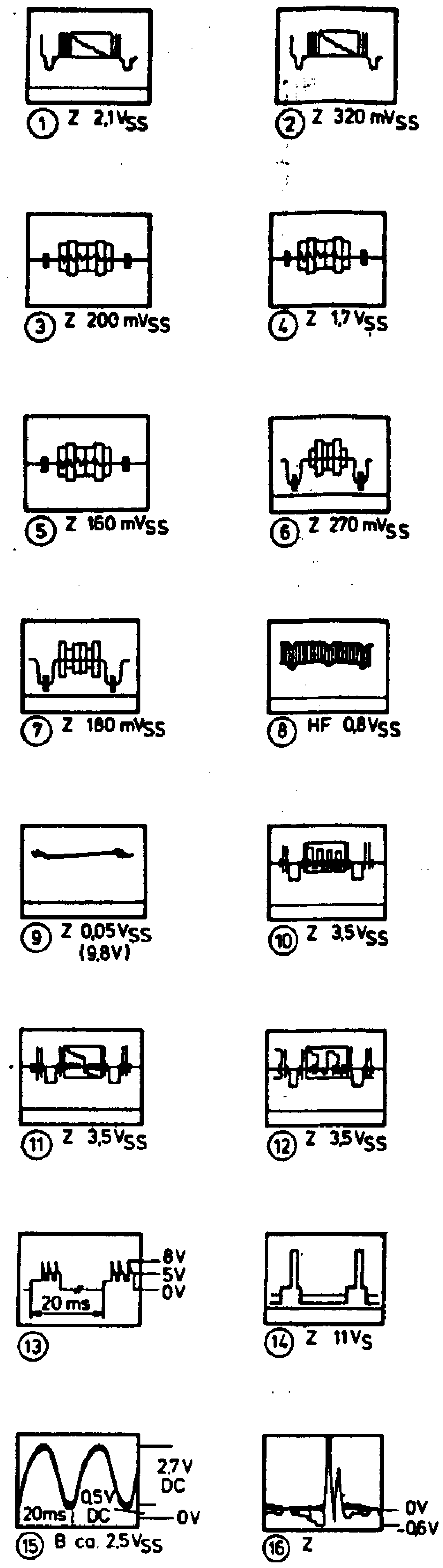
   Manual adjustment is not possible, as the circuit board employs an automatic dark current control circuit.

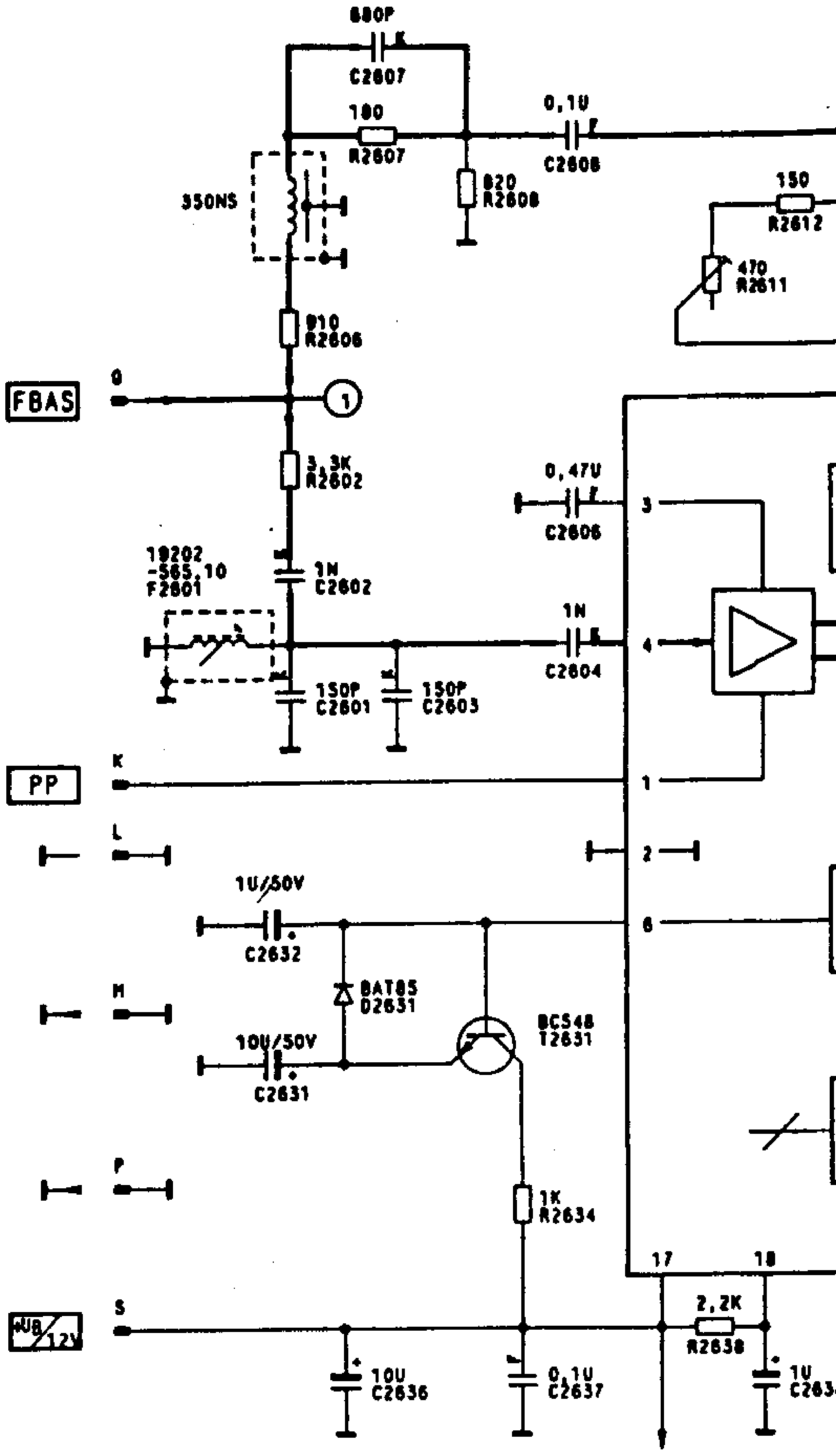
   To check cut-off point (oscilloscope required), proceed as follows:
   - Display colour bar test pattern.
   - Set ◑ to min., ☼ to nom., ◐ to min.
   - Connect test probe to collectors of T736, T756, T776 (CRT socket board).
     The black levels of the three cathode signals should be 140-150V.
3. Colour oscillator and PAL adjustments.
   - Inject colour bar test pattern.
   - Adjust to ◑, ☼, ◐ suit view conditions.
   - On the IC TDA 3566, short circuit pin 1 with pin 5 and pin 24 with 25.
   - With trimmer 2582 adjust the until colours are correct. Remove short circuits.
   - Attach probe to pin 17 of the IC TDA 3566.
   - With control BP and coil LZ, adjust the double images of the B signal to coincide.

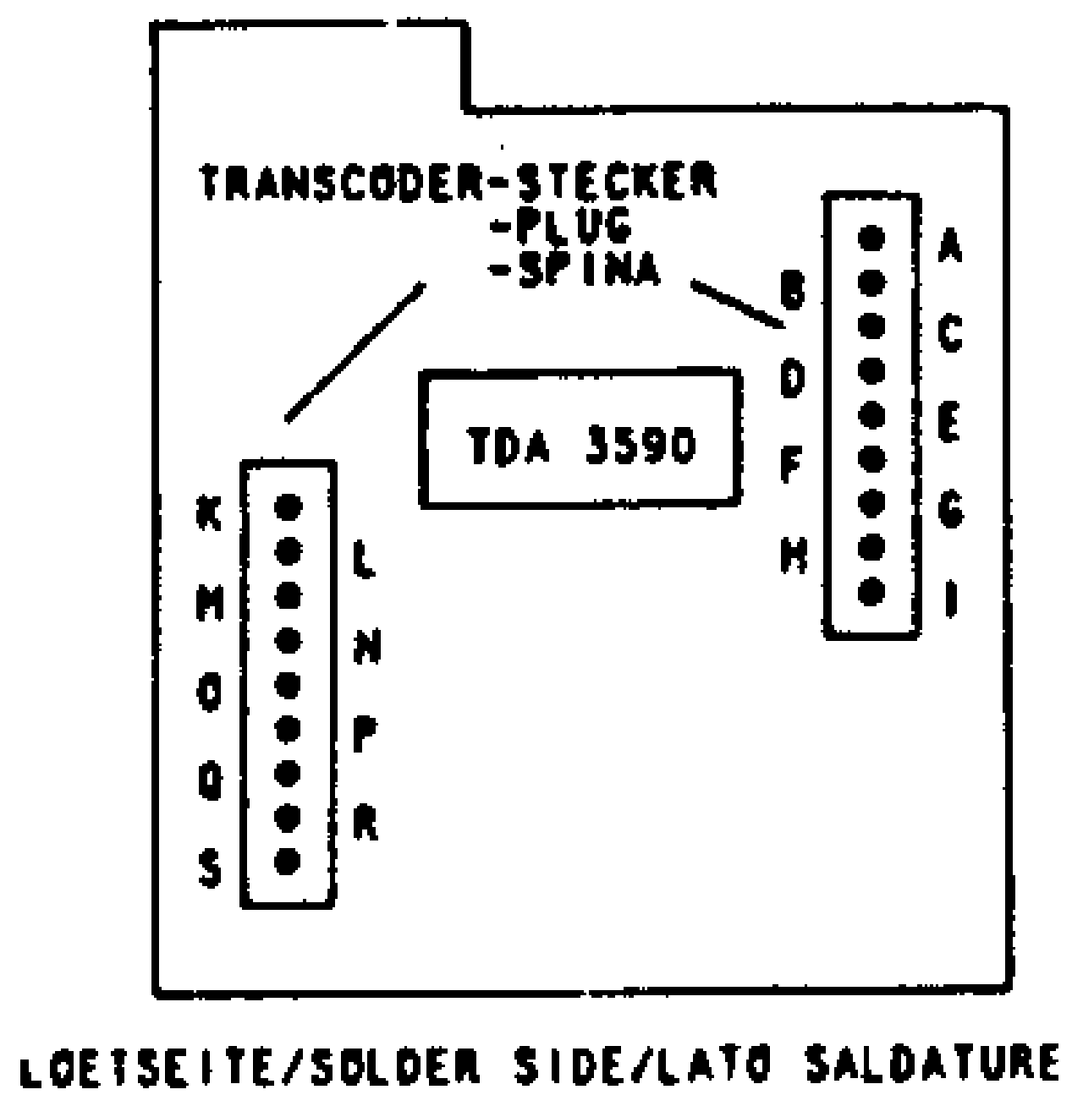
1. Taratura del bianco
   - Applicare un monoscopio F
   - Regolare ◑ al minimo, ☼
   - Con VG e VB (piastra cines
2. Taratura del punto di blocco.

   Una regolazione manuale non
   regolazione automatica della c
   Controllo del punto di blocco (
   - Applicare un monoscopio F
   - Regolare ◑ al minimo, ☼ s
   - Collegare la sonda al collett
     Valore nero dei tre segnali
3. Regolazioni dell'oscillatore colo
   - Applicare un monoscopio F
   - Regolare ◑, ☼ ed ◐ sul v
   - Cortocircuitare i terminali 1
   - Fermare le barre colorate s
   - Collegare la sonda dell'osci
     Con il regolatore BP e la bob
     gnale B.

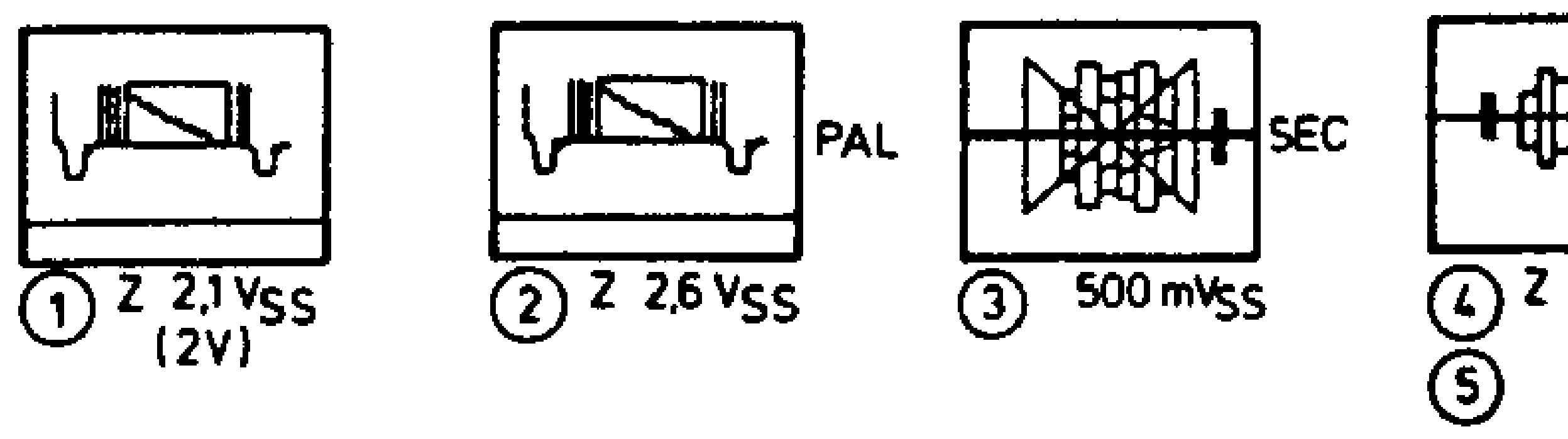








PAL/S



Wird die FARB/RGB-Steck
SECAM nachgerüstet ist k

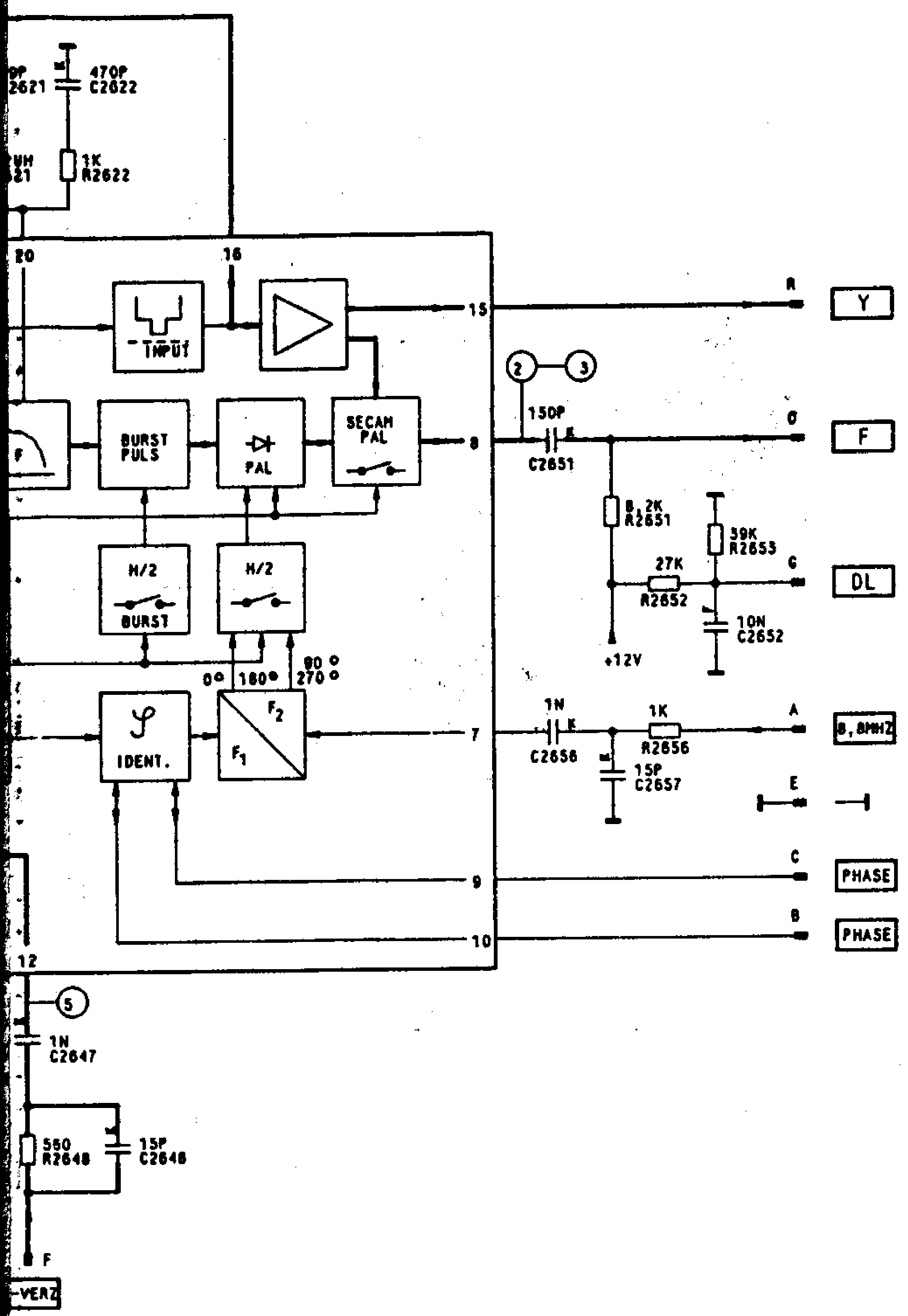
If the colour/RGB board 2
29504-146.01, no addition

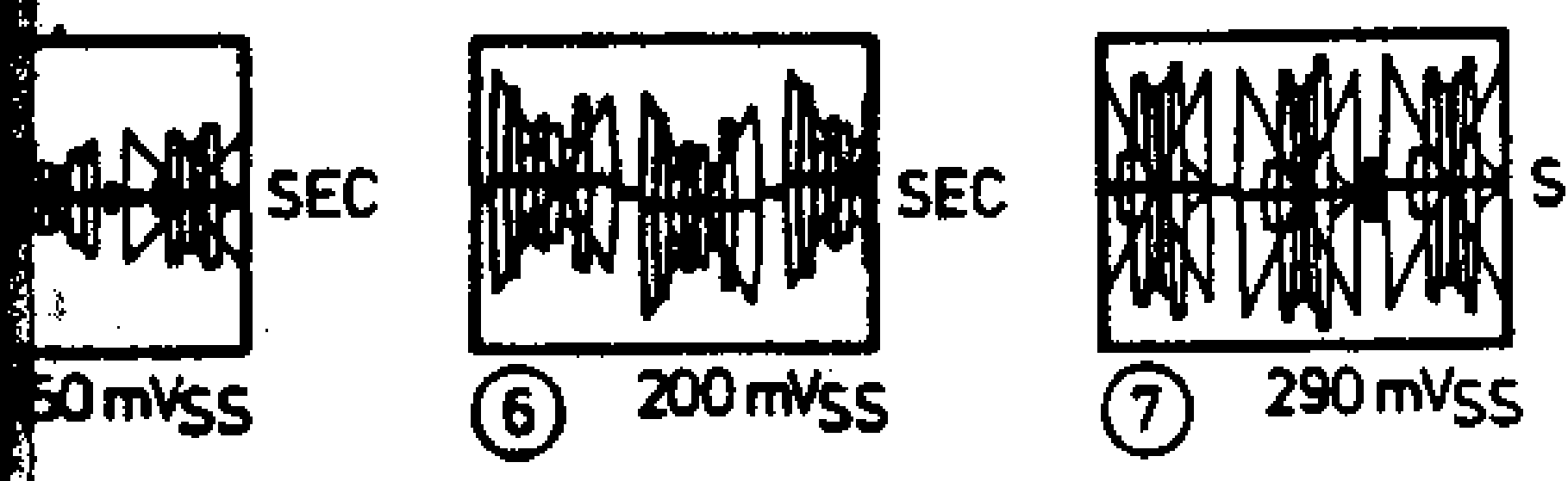
Se la scheda colore/RGB 2
29504-146.01, non occorre

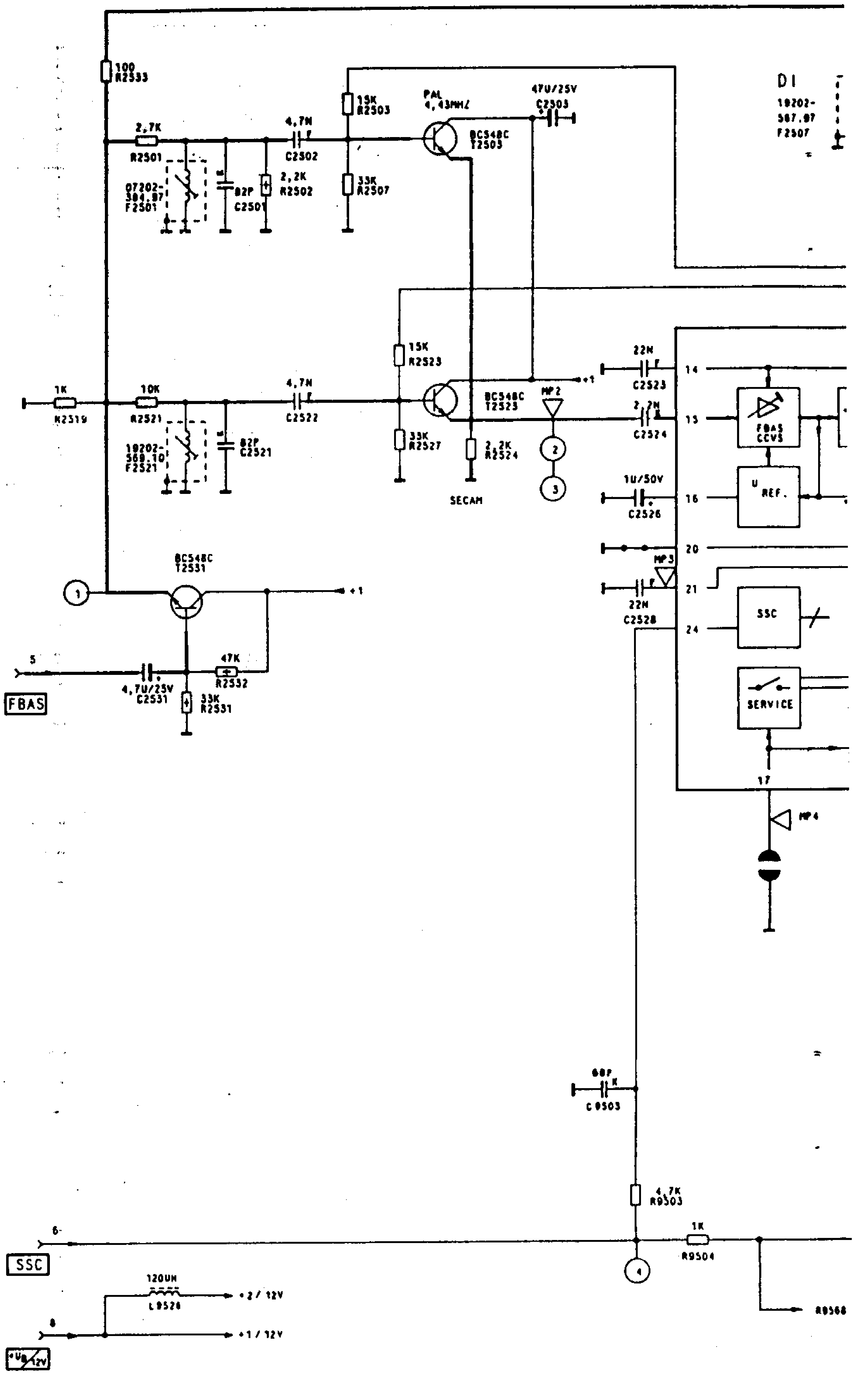
Taratura del bianco
- Applicare un monoscopio FuBK
- Regolare ◍ al minimo, ☼ sul valore nominale e ◑ al massimo.
- Con VG e VB (piastra cinescopio) eliminare eventuali macchie di colore.

Taratura del punto di blocco.
Una regolazione manuale non è possibile, poichè questa scheda incorpora una regolazione automatica della corrente d'interdizione.
Controllo del punto di blocco (è necessario un oscilloscopio):
- Applicare un monoscopio FuBK.
- Regolare ◍ al minimo, ☼ sul valore nominale e ◑ al minimo.
- Collegare la sonda ai collettori dei transistori T 736, T 756, T 776 (piastra cinescopio). Valore nero dei tre segnali catodici ca. 140...150 V.

Regolazioni dell'oscillatore colore e PAL
- Applicare un monoscopio FuBK.
- Regolare ◍, ☼ ed ◑ sul valore nominale.
- Cortocircuitare i terminali 1 e 5 ed i terminali 24 e 25 dell'IC TDA 3566.
- Fermare le barre colorate scorrevoli con il trimmer 2582 e togliere i cortocircuiti.
- Collegare la sonda dell'oscilloscopio al terminale 17 dell'IC TDA 3566. Con il regolatore BP e la bobina LZ portare a copertura le immagini doppie del segnale B.







Farb/RGB **29 504-105.21 CTI**

Colour/RGB

Colore/RVB

Transcoder 29504-146.01 auf

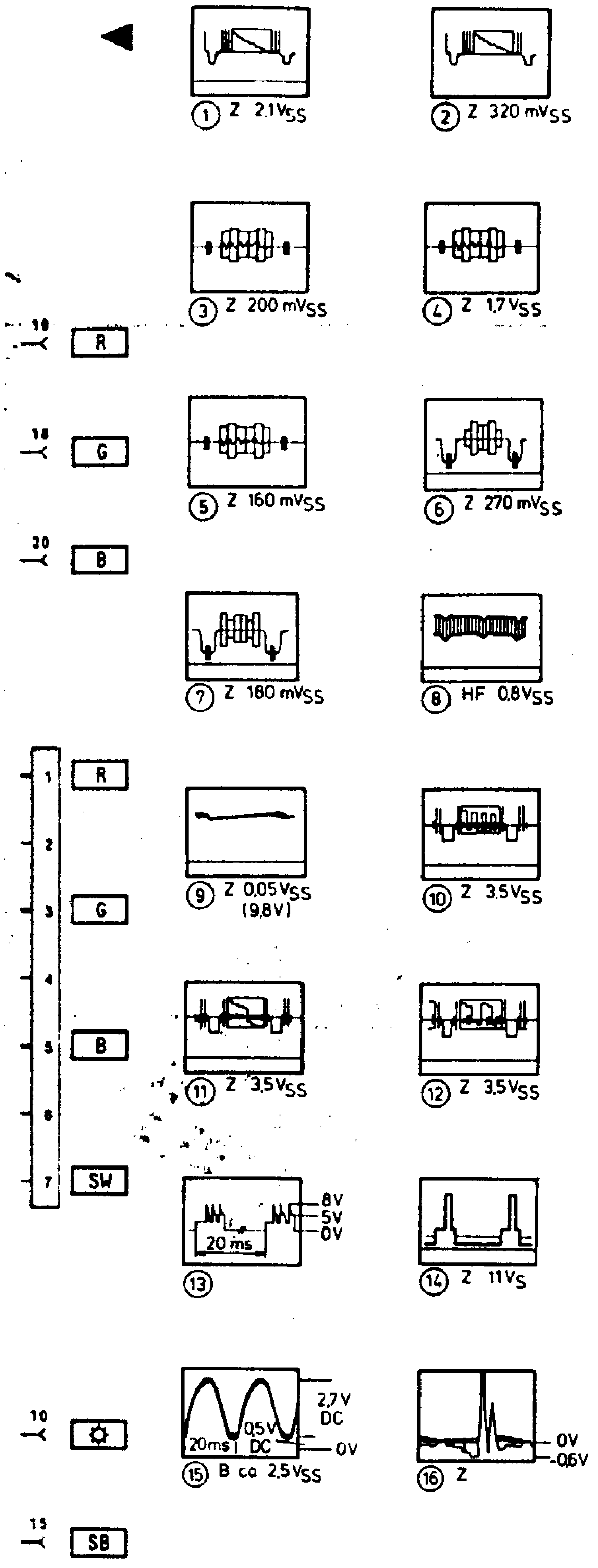
the PAL/SECAM Transcoder

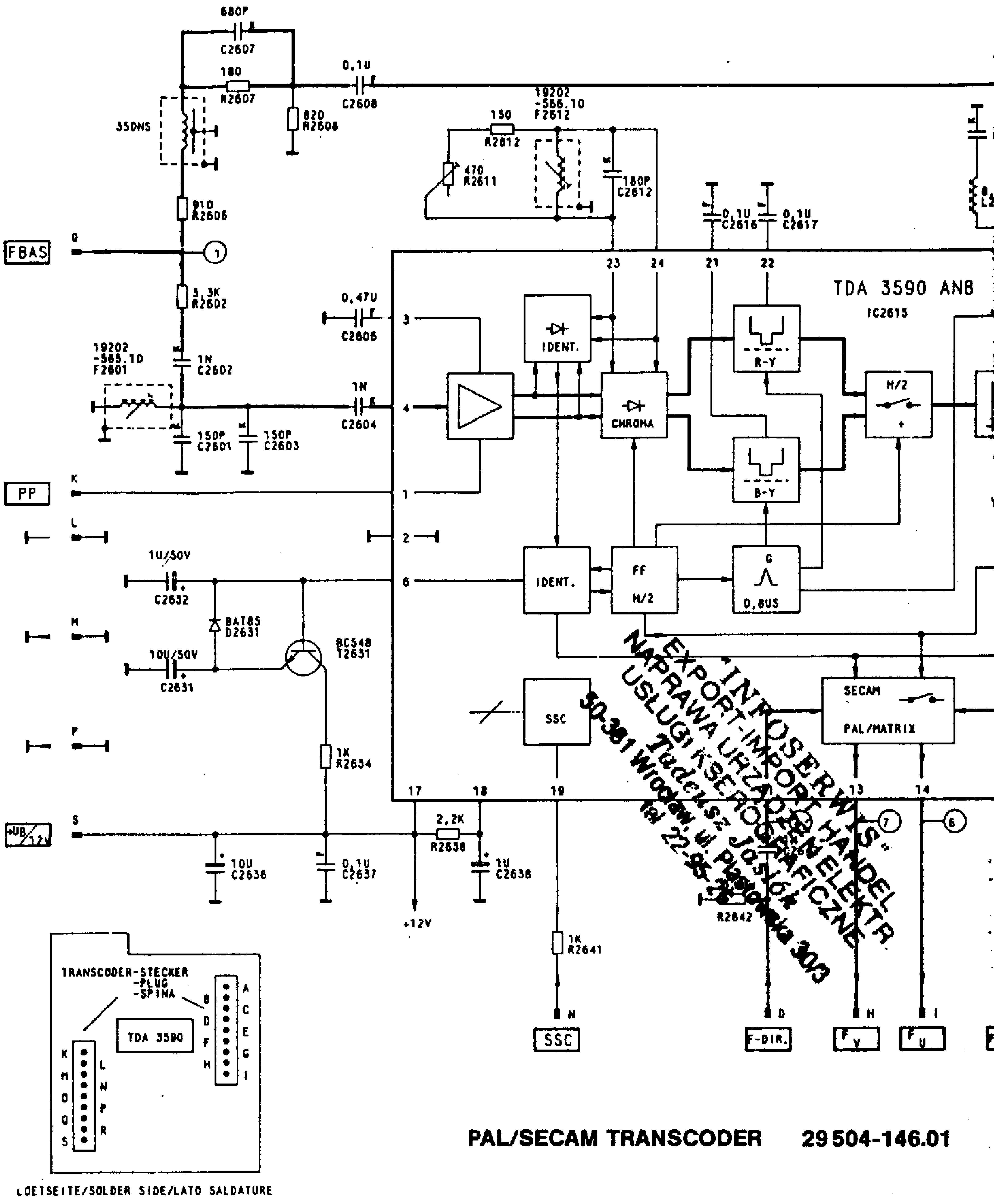
on il transcoder PAL/SECAM

4/22

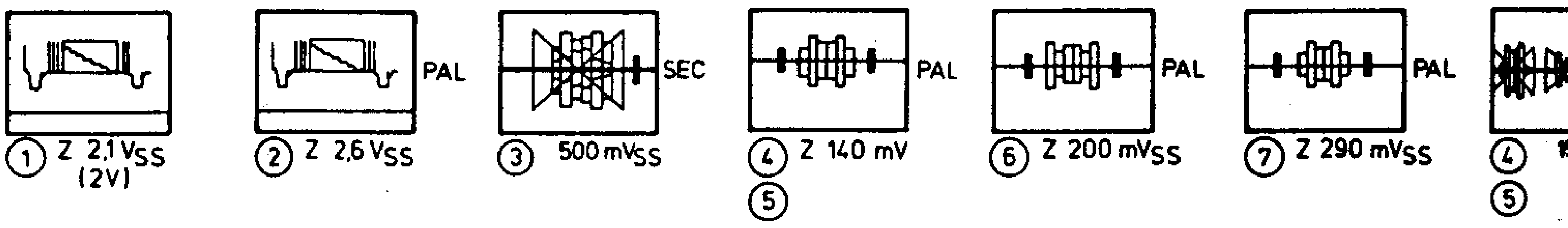
1. Weißabgleich
   - FuBK-Testbild einspeisen.
   - ◑min., ○nom., ◐max., einstellen.
   - Regler VR und VB (Bildrohrplatte) so einstellen, daß keine Verfärbungen in den Grauwerten sichtbar sind.
2. Sperrpunktabgleich
   Eine manuelle Einstellung ist nicht möglich, da die Steckkarte eine automatische Dunkelstromregelung besitzt. Kontrolle des Sperrpunkts (Oszilloskop erforderlich).
   - FuBK-Testbild einspeisen.
   - ◑min., ○nom., ◐min., einstellen.
   - Tastkopf an den Kollektoren der Transistoren T 736, T 756, T 776 anhängen (Bildrohrplatte). Die Schwarzwerte der drei Kathodensignale liegen bei ca. 140 ... 150 V.
3. Einstellungen im Farbkanal
   - PAL-Testbild einspeisen.
   - FK nom., H nom., K max. einstellen.
   - IC-Pin 28 vom TDA 4555 mit + 12 V verbinden.
   - IC-Pin 17 vom TDA 4555 mit Masse verbinden.
   - Mit Trimmer C 9516 die durchlaufenden Farbbalken zum Stehen bringen.
   - Kurzschlußbrücken entfernen.
   - Tastkopf an MP 12, mit Regler BP und Spule LZ die Doppelbilder des B -Signals zur Deckung bringen.
   - SECAM-Testbild einspeisen.
   - Tastkopf an Pin 1 vom TDA 4555 anschließen, mit Spule DR Nullinie des (R-Y)-Signals auf Zeilentastniveau bringen.
   - Tastkopf an Pin 3 vom TDA 4555 anschließen, mit Spule DB Nullinie des (B-Y)-Signals auf Zeilentastniveau bringen.
   - Spule F 2521 so einstellen, daß das (B-Y)-Signal keine Überschwinger hat.

1. White level adjustment
   - Display colour bar test pa
   - Set ◑ to min., ○ to nom,
   - Adjust presets VR and VB (
     colouration.
2. Adjustment of cut-off point
   Manual adjustment is not po
   current control circuit.
   To check cut-off point (oscil
   - Display colour bar test pa
   - Set ◑ to min., ○ to nom.
   - Connect test probe to col
     The black levels of the th
3. Adjustments in chroma chan
   - Display PAL test pattern.
   - Adjust colour level and br
   - Connect pin 28 of IC TDA
   - Connect pin 17 to IC TDA
     Adjust trimmer C 9516 for
   - Remove wire links.
   - Connect test probe to tes
     B signal to coincidence
   - Display SECAM test patte
   - Connect test probe to pin
   - Use coil DR to align zero
   - Connect test probe to pin
   - With coil DB to align zero
   - Adjust coil F 2521 so that





PAL/SECAM TRANSCODER 29504-146.01



Wird die FARB/RGB-Steckkarte 29504-105.01 durch den PAL/SECAM-
SECAM nachgerüstet ist kein zusätzlicher Abgleich notwendig.

If the colour/RGB board 29504-105.01 is converted for SECAM with
29504-146.01, no additional alignment is necessary.

Se la scheda colore/RGB 29504-105.01 viene trasformata in SECAM c
29504-146.01, non occorre effettuare nessun'altra taratura.

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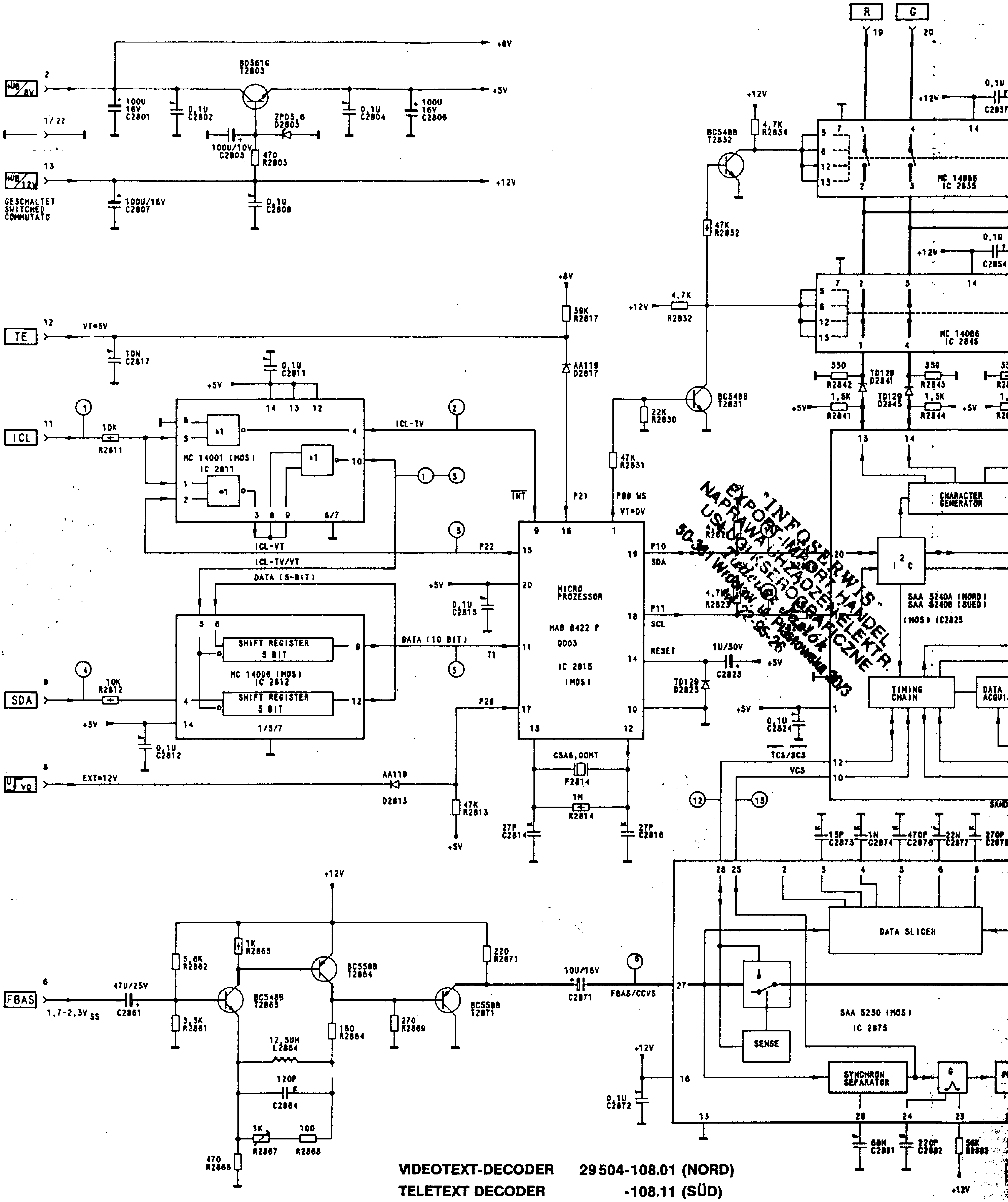
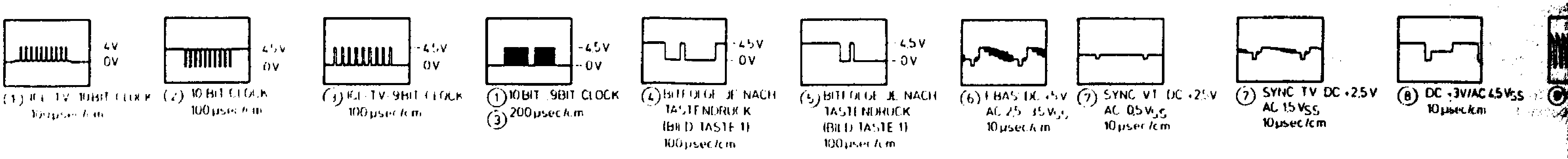
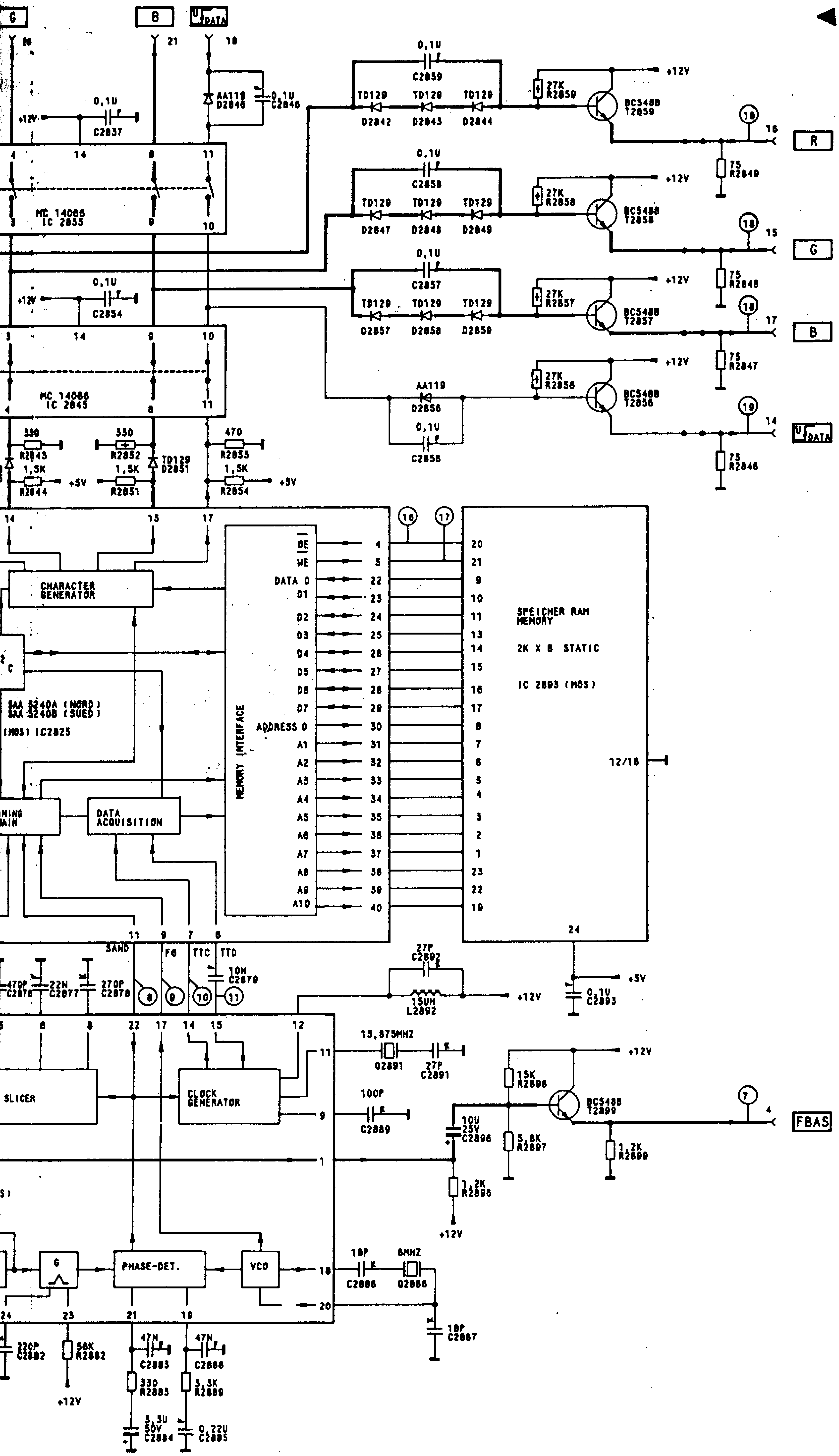
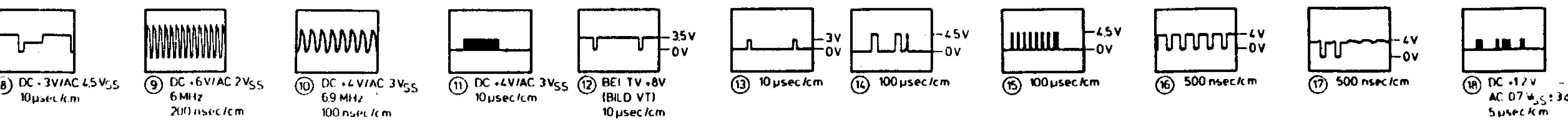


VIDEOTEXT-DECODER 29 504-108.01 (NORD)
TELETEXT DECODER -108.11 (SÜD)
DECODER TELEVIDEO







Anpassungsabgleich der Steckkarte

Während des Abgleiches ist es notwendig, die ständig neu anzuwählen, da nur so die Seite neu wird und eine Beurteilung der Fehlerschwelle mö

Der Einsteller R 2867 steht bei Auslieferung auf Lin (kleinste Höhenanhebung, ca. 2 dB). Treten trotz freiem Antennensignal Zeichenfehler auf, R 286 nach rechts verstellen, bis Fehler verschwinden. Ni drehen, da Fehlerhäufigkeit wieder zunehmen ka Beim Nachrüsten der Videotext-Steckkarte müsse zeichneten *1Ω-Wiederstände auf der Chassis- werden.

Matching adjustment of the plug-in board

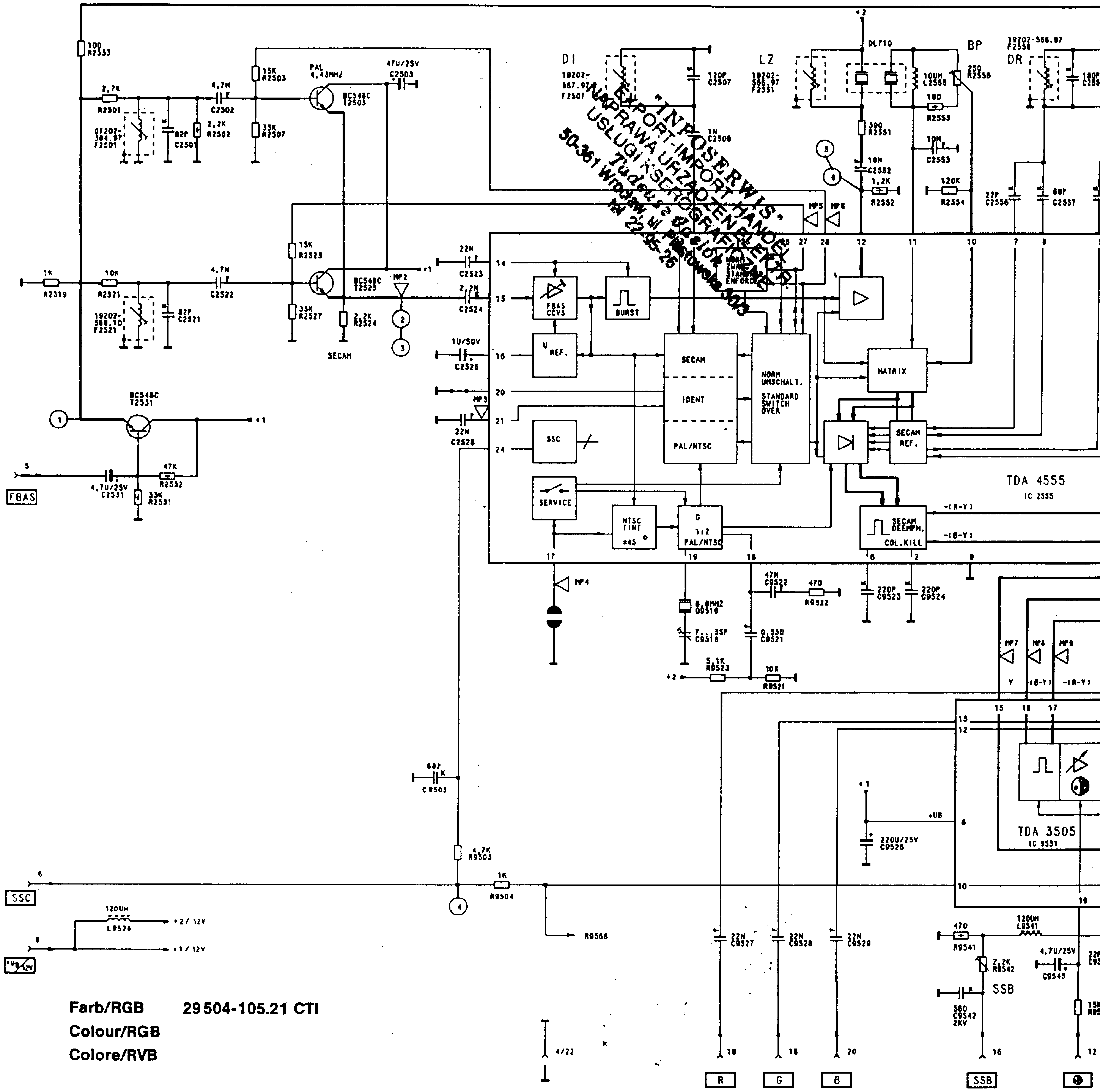
Page 199 must always be selected anew during t ment, as only this effects a new read-in of the pag possible to evaluate the error level.

The control R 2867 is set in the fully anticlockwis when the unit is delivered (smallest treble boos 2 dB). If, with a perfect aerial signal character faults R 2867 slowly clockwise until the faults disappear. R 2867 up any further as error rate may increase When fitting the Videotext (GB: Teletext) board, t resistors marked by * on the chassis have to be r

Taratura d'adattamento della scheda ad innest

Durante la taratura è necessario selezionare ripetu pagina 199, poiché solo così è possibile una nuov ne della pagina ed una valutazione della soglia d

Il regolatore R 2867 viene fornito col cursore girato mente all'estrema sinistra (minima esaltazione de quenze, ca. 2 dB). Se si manifestano errori di ca nostante un perfetto segnale d'antenna, girare le cursore di R 2867 verso destra fino ad eliminare gli girarlo oltre poiché può riaumentare la presenza Nel montare la scheda televideo togliere le resiste contrassegnate con * sul telaio.

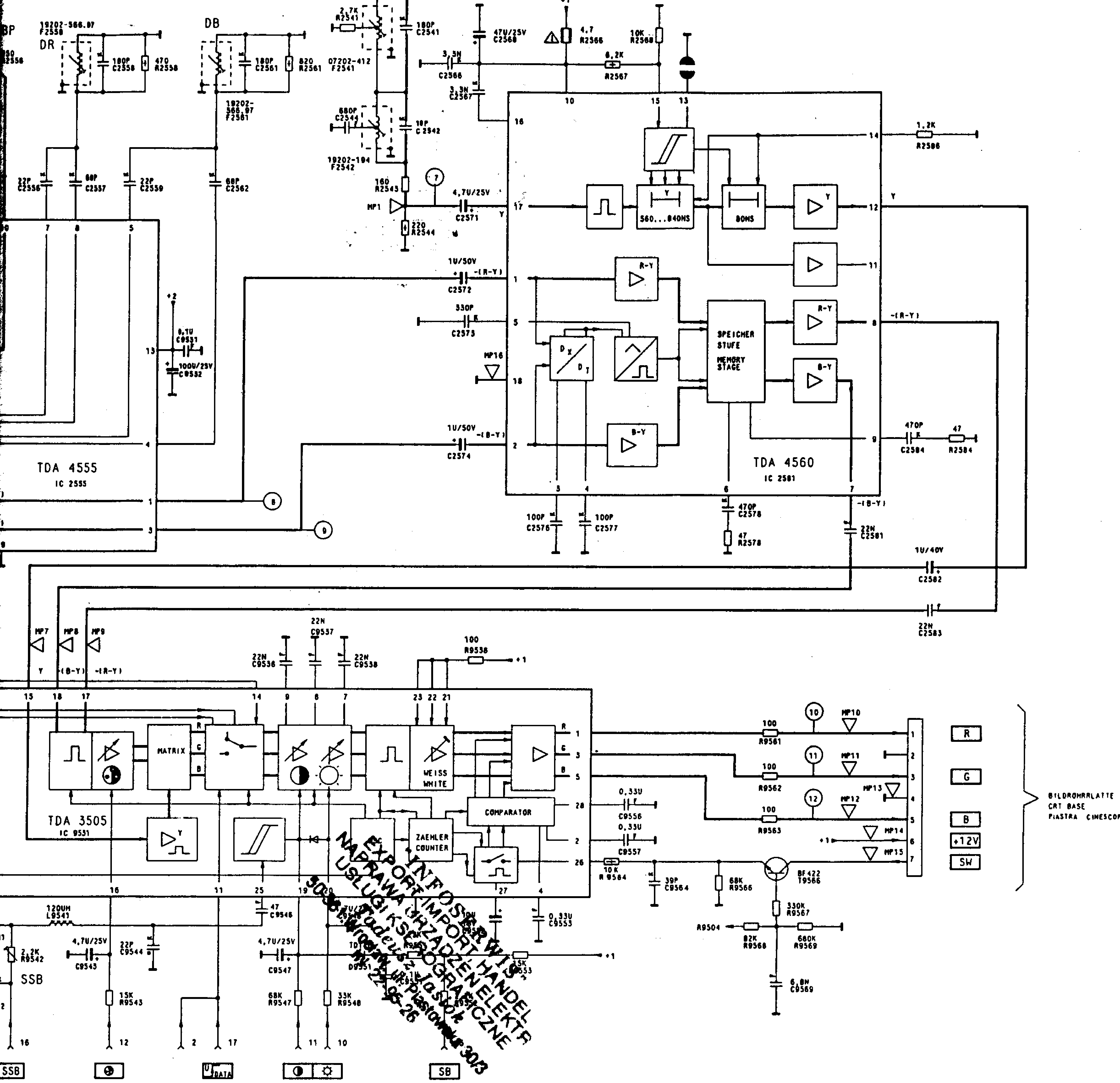


Farb/RGB 29504-105.21 CTI
Colour/RGB
Colore/RVB

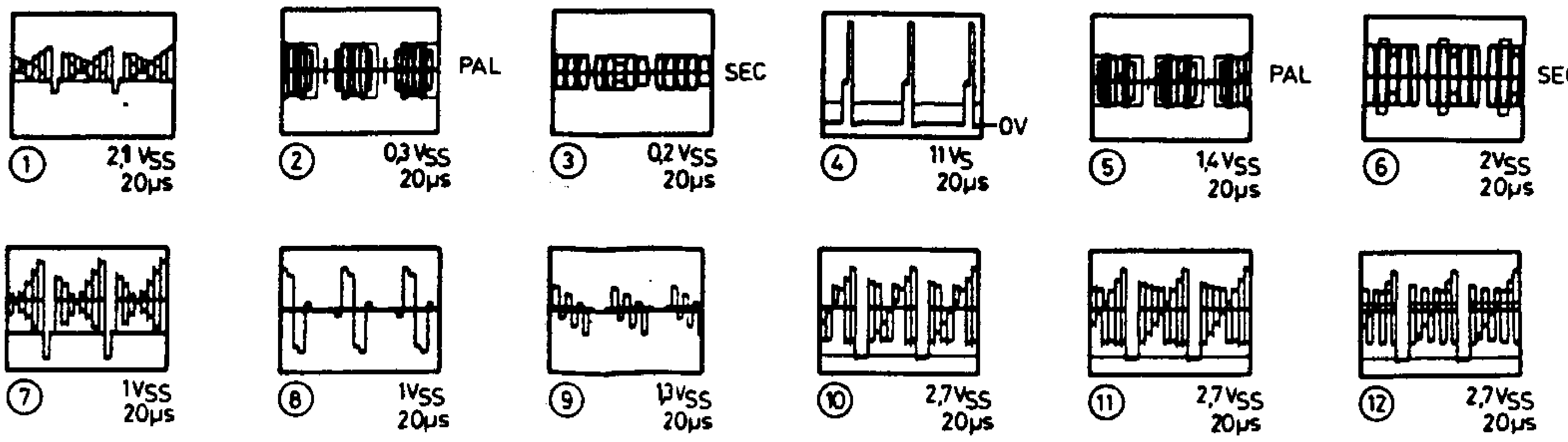
1. Weißabgleich
   - FuBK-Testbild einspeisen.
   - ◑min., ☼nom., ◐max., einstellen.
   - Regler VR und VB (Bildrohrplatte) so einstellen, daß keine Verfärbungen in den Grauwerten sichtbar sind.
2. Sperrpunktabgleich
   Eine manuelle Einstellung ist nicht möglich, da die Steckkarte eine automatische Dunkelstromregelung besitzt. Kontrolle des Sperrpunkts (Oszilloskop erforderlich).
   - FuBK-Testbild einspeisen.
   - ◑min., ☼nom., ◐min., einstellen.
   - Tastkopf an den Kollektoren der Transistoren T 736, T 756, T 776 anhängen (Bildrohrplatte). Die Schwarzwerte der drei Kathodensignale liegen bei ca. 140 ... 150 V.
3. Einstellungen im Farbkanal
   - PAL-Testbild einspeisen.
   - FK nom., H nom., K max. einstellen.
   - IC-Pin 28 vom TDA 4555 mit + 12 V verbinden.
   - IC-Pin 17 vom TDA 4555 mit Masse verbinden.
   - Mit Trimmer C 9516 die durchlaufenden Farbbalken zum Stehen bringen.
   - Kurzschlußbrücken entfernen.
   - Tastkopf an MP 12, mit Regler BP und Spule LZ die Doppelbilder des B -Signals zur Deckung bringen.
   - SECAM-Testbild einspeisen.
   - Tastkopf an Pin 1 vom TDA 4555 anschließen,
     mit Spule DR Nullinie des (R-Y)-Signals auf Zeilentastniveau bringen.
   - Tastkopf an Pin 3 vom TDA 4555 anschließen,
     mit Spule DB Nullinie des (B-Y)-Signals auf Zeilentastniveau bringen.
   - Spule F 2521 so einstellen, daß das (B-Y)-Signal keine Überschwinger hat.

1. White level adjustment.
   - Display colour bar test pattern.
   - Set ◑ to min., ☼ to nom., ◐ to max.
   - Adjust presets VR and VB (CRT socket board) so that the picture does not show any colouration.
2. Adjustment of cut-off point.
   Manual adjustment is not possible, as the circuit board employs an automatic dark current control circuit.
   To check cut-off point (oscilloscope required), proceed as follows:
   - Display colour bar test pattern.
   - Set ◑ to min., ☼ to nom., ◐ to min.
   - Connect test probe to collectors of T 736, T 756, T 776 (CRT socket board).
     The black levels of the three cathode signals should be 140-150 V.
3. Adjustments in chroma channel.
   - Display PAL test pattern.
   - Adjust colour level and brightness to nominal value, contrast to maximum.
   - Connect pin 28 of IC TDA 4555 to + 12 V supply.
   - Connect pin 17 to IC TDA 4555 to chassis.
     Adjust trimmer C 9516 for stationary pattern in colour bars.
   - Remove wire links.
   - Connect test probe to test point MP 12. Bring the double image produced by the B signal to coincidence by adjusting the preset BP and the coil LZ.
   - Display SECAM test pattern.
   - Connect test probe to pin 1 of IC TDA 4555.
   - Use coil DR to align zero level of the (R-Y) signal with the line black level.
   - Connect test probe to pin 3 of IC TDA 4555.
   - With coil DB to align zero level of the (B-Y) signal with the line black level.
   - Adjust coil F 2521 so that the (B-Y) signal is free of overshooting.

1. Taratura del bianco
   - Applicare un monoscopio FuBK
   - Regolare ◑ al minimo, ☼ sul valo
   - Con VR e VB (piastra cinescopio)
2. Taratura del punto di blocco.
   Una regolazione manuale non è poss
   regolazione automatica della corrent
   Controllo del punto di blocco (è nec
   - Applicare un monoscopio FuBK.
   - Regolare ◑ al minimo, ☼ sul valo
   - Collegare la sonda ai collettori dei t
     Valore nero dei tre segnali catodic
3. Regolazione del canale colore.
   - Applicare un monoscopio PAL.
   - Regolare FK e H sul valore nomin
   - Sull'integrato TDA 4555 collegare
   - Sull'integrato TDA 4555 collegare
     Con C 9516 fermare le barre colo
   - Togliere i cortocircuiti.
   - Collegare la sonda a MP 12, con il re
     immagini doppie del segnale B .
   - Applicare un monoscopio SECAM.
   - Collegare la sonda al pin 1 dell'int
     con la bobina DR portare la linea
     livello della frequenza di riga.
   - Collegare la sonda al pin 3 dell'int
     con la bobina DB portare la linea
     livello della frequenza di riga.
   - La bobina F 2521 applicarla così in



del bianco
care un monoscopio FuBK
lare ◍ al minimo, ☼ sul valore nominale e ◑ al massimo.
VR e VB (piastra cinescopio) eliminare eventuali macchie di colore.
del punto di blocco.
olazione manuale non è possibile, poichè questa scheda incorpora una
one automatica della corrente d'interdizione.
o del punto di blocco (è necessario un oscilloscopio):
care un monoscopio FuBK.
lare ◍ al minimo, ☼ sul valore nominale e ◑ al minimo.
gare la sonda ai collettori dei transistori T 736, T 756, T 776 (piastra cinescopio).
e nero dei tre segnali catodici ca. 140...150 V.
one del canale colore.
care un monoscopio PAL.
are FK e H sul valore nominale, K al massimo.
tegrato TDA 4555 collegare pin 28 a + 12 V.
tegrato TDA 4555 collegare pin 17 a massa.
C 9516 fermare le barre colorate scorrevoli.
re i cortocircuiti.
gare la sonda a MP 12, con il regolatore BP e la bobina LZ portare a copertura le
gini doppie del segnale B .
care un monoscopio SECAM.
gare la sonda al pin 1 dell'integrato TDA 4555,
bobina DR portare la linea zero del segnale (R-Y) sul
della frequenza di riga.
gare la sonda al pin 3 dell'integrato TDA 4555,
bobina DB portare la linea zero del segnale (B-Y) sul
della frequenza di riga.
bina F 2521 applicarla così in modo che il signale (B-Y) sia chiaro.



peisen.
max., einstellen.
(Bildrohrplatte) so einstellen, daß keine Verfärbungen in den
ar sind.

ung ist nicht möglich, da die Steckkarte eine automatische
besitzt. Kontrolle des Sperrpunkts (Oszilloskop erforderlich).
peisen.
nin., einstellen.
ollektoren der Transistoren T736, T756, T776 anhängen
Schwarzwerte der drei Kathodensignale liegen bei ca.
Geräte).
kanal
eisen.
max. einstellen.
4555 mit + 12 V verbinden.
4555 mit Masse verbinden.
die durchlaufenden Farbbalken zum Stehen bringen.
entfernen.
mit Regler BP und Spule LZ die Doppelbilder des B-Signals
n.
MHz einspeisen.
4555 mit 12 V verbinden.
4555 mit Masse verbinden.
die durchlaufenden Farbbalken zum Stehen bringen.
entfernen.
speisen.
om TDA 4555 anschließen,
ie des (R-Y)-Signals auf Zeilenniveau bringen.
om TDA 4555 anschließen,
ie des (B-Y)-Signals auf Zeilentastniveau bringen.
stellen, daß das (B-Y)-Signal keine Überschwinger hat.

est pattern.
nom., ◑ to max.
nd VB (CRT socket board) so that the picture does not show any

point.
not possible, as the circuit board employs an automatic dark

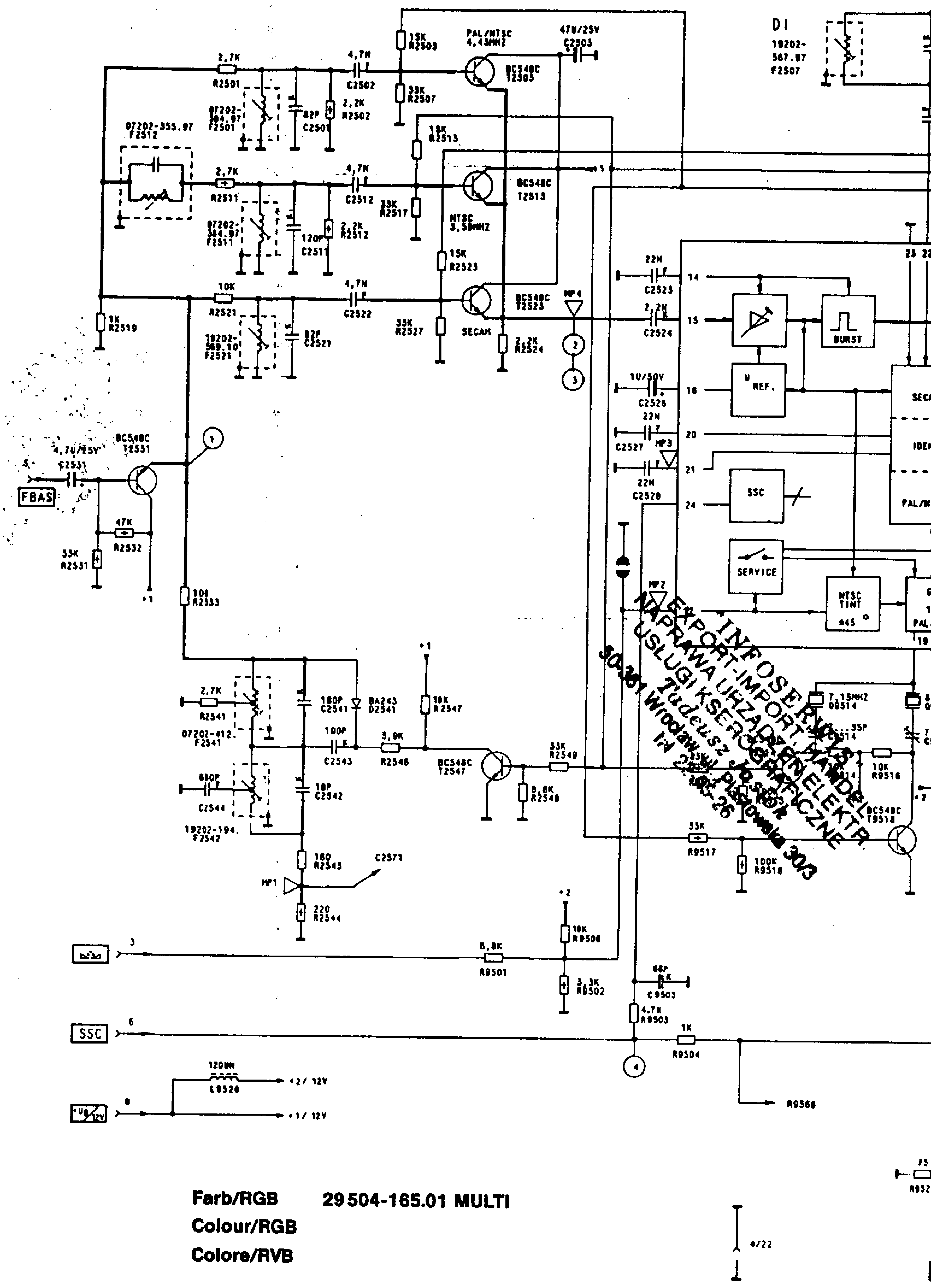
(oscilloscope required), proceed as follows:
est pattern.
nom., ◑ to min.
to collectors of T736, T756, T776 (CRT socket board).
the three cathode signals should be 140-150 V (26" sets).
channel.
tern.
nd brightness to nominal value, contrast to maximum.
C TDA 4555 to + 12 V supply.
C TDA 4555 to chassis.
16 for stationary pattern in colour bars.

to test point MP 12. Bring the double image produced by the
nce by adjusting the preset BP and the coil LZ.
SC test pattern.
C TDA 4555 to 12 V supply.
C TDA 4555 to chassis.
14 for stationary pattern in colour bars.

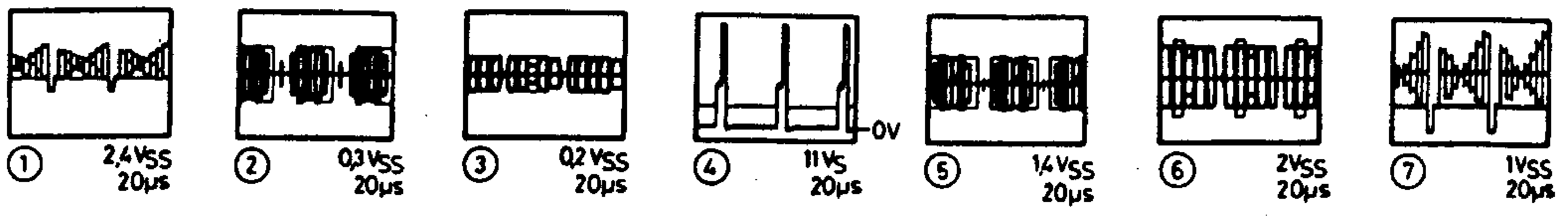
pattern.
to pin 1 of IC TDA 4555.
zero level of the (R-Y) signal with the line black level.
to pin 3 of IC TDA 4555.
zero level of the (B-Y) signal with the line black level.
that the (B-Y) signal is free of overshooting.

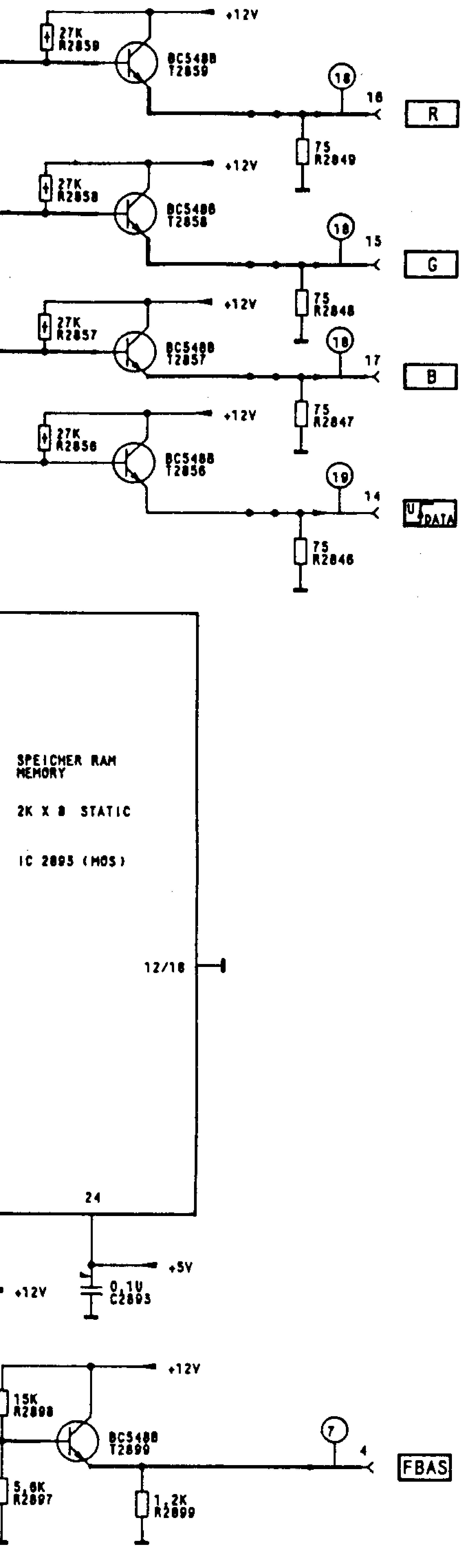
copio FuBK
o, ☼ sul valore nominale e ◑ al massimo.
VB (piastra cinescopio) eliminare eventuali macchie di colore.
occo
le non è possibile, poichè questa scheda incorpora una
della corrente d'interdizione.
locco (è necessario un oscilloscopio):
copio FuBK.
o, ☼ sul valore nominale e ◑ al minimo.
collettori dei transistori T 736, T 756, T 776 (piastra cinescopio).
egnali catodici ca. 140…150 V (apparecchi da 26").
colore.
copio PAL.
valore nominale, K al massimo.
55 collegare pin 28 a + 12 V.
55 collegare pin 17 a massa.
e barre colorate scorrevoli.
i.
MP 12, con il regolatore BP e la bobina LZ portare a copertura le
segnale B.
opio NTSC 3,5 MHz.
55 collegare pin 26 a 12 V.
55 collegare pin 17 a massa.
e barre colorate scorrevoli.

opio SECAM.
pin 1 dell'integrato TDA 4555,
tare la linea zero del segnale (R-Y) sul
di riga.
pin 3 dell'integrato TDA 4555,
tare la linea zero del segnale (B-Y) sul
di riga.
licarla così in modo che il signale (B-Y) sia chiaro.



Farb/RGB **29 504-165.01 MULTI**
Colour/RGB
Colore/RVB





Anpassungsabgleich der Steckkarte

Während des Abgleiches ist es notwendig, die Seite 199 ständig neu anzuwählen, da nur so die Seite neu eingelesen wird und eine Beurteilung der Fehlerschwelle möglich ist.

Der Einsteller R 2867 steht bei Auslieferung auf Linksanschlag (kleinste Höhenanhebung, ca. 2 dB). Treten trotz einwandfreiem Antennensignal Zeichenfehler auf, R 2867 langsam nach rechts verstellen, bis Fehler verschwinden. Nicht weiterdrehen, da Fehlerhäufigkeit wieder zunehmen kann.
Beim Nachrüsten der Videotext-Steckkarte müssen die gekennzeichneten *1Ω-Wiederstände auf der Chassis-Platte entfernt werden.

Matching adjustment of the plug-in board

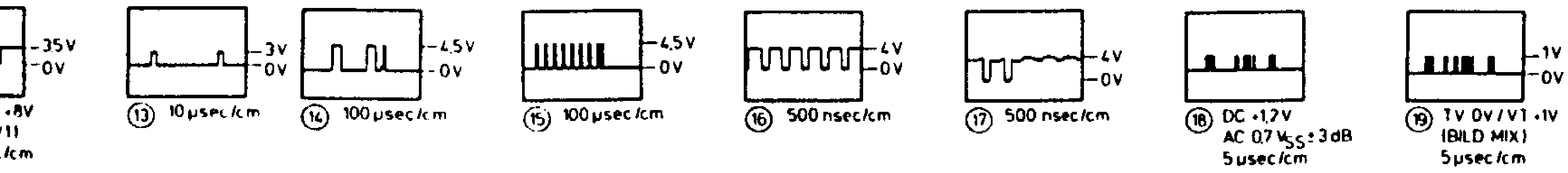
Page 199 must always be selected anew during the adjustment, as only this effects a new read-in of the page making it possible to evaluate the error level.

The control R 2867 is set in the fully anticlockwise position when the unit is delivered (smallest treble boost, approx. 2 dB). If, with a perfect aerial signal character faults occur, turn R 2867 slowly clockwise until the faults disappear. Do not turn R 2867 up any further as error rate may increase again.
When fitting the Videotext (GB: Teletext) board, the 1-ohm resistors marked by * on the chassis have to be removed.

Taratura d'adattamento della scheda ad innesto

Durante la taratura è necessario selezionare ripetutamente la pagina 199, poiché solo così è possibile una nuova immissione della pagina ed una valutazione della soglia degli errori.

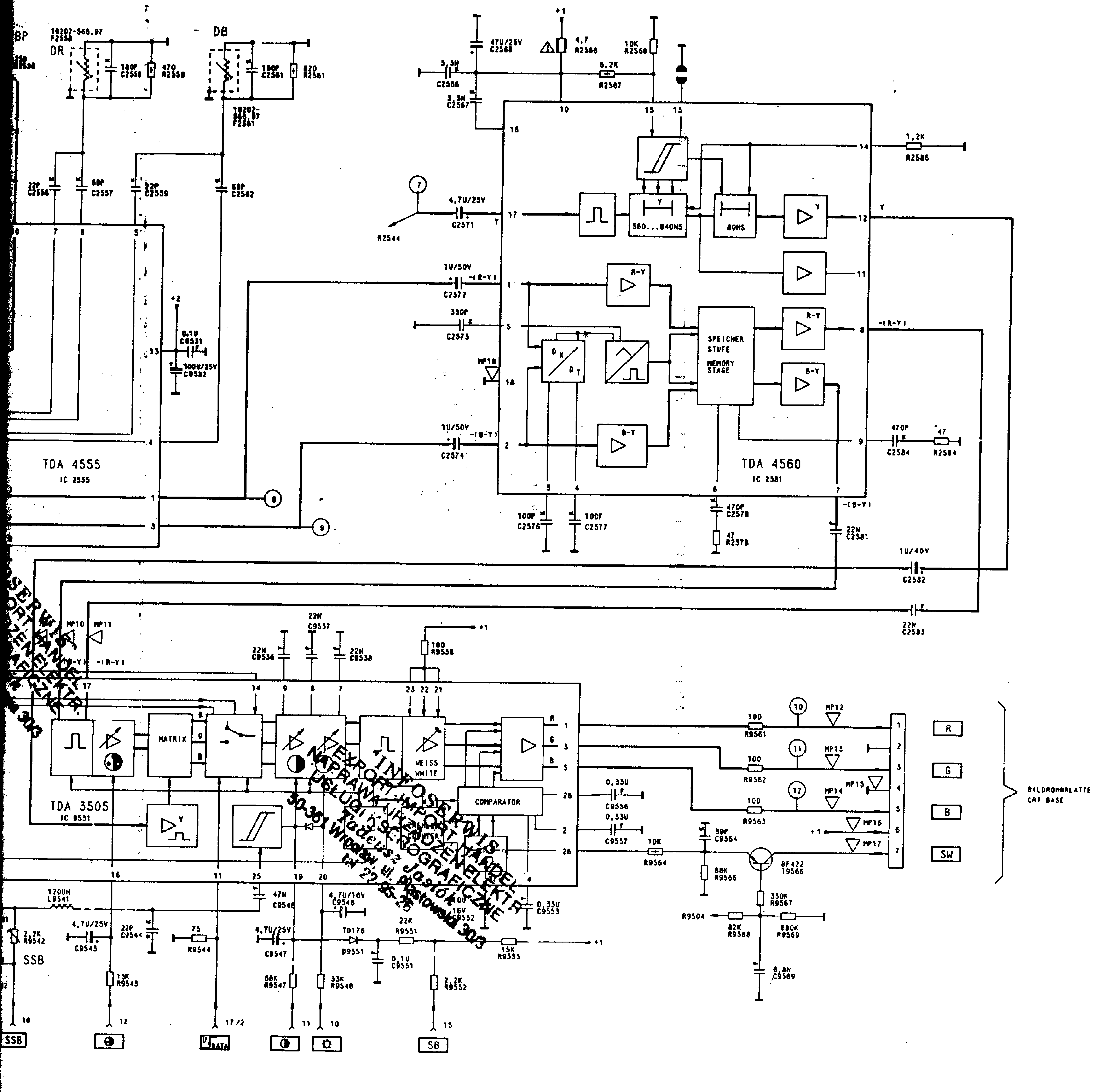
Il regolatore R 2867 viene fornito col cursore girato completamente all'estrema sinistra (minima esaltazione delle alte frequenze, ca. 2 dB). Se si manifestano errori di carattere, nonostante un perfetto segnale d'antenna, girare lentamente il cursore di R 2867 verso destra fino ad eliminare gli errori. Non girarlo oltre poiché può riaumentare la presenza degli errori.
Nel montare la scheda televideo togliere le resistenze da 1 Ω contrassegnate con * sul telaio.

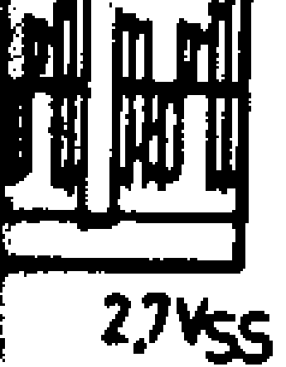


1. Weißabgleich
   - FuBK-Testbild einspeisen.
   - ◐min., ☼nom., ◑max., einstellen.
   - Regler VR und VB (Bildrohrplatte)-so einst
     Grauwerten sichtbar sind.
2. Sperrpunktabgleich
   Eine manuelle Einstellung ist nicht möglich, d
   Dunkelstromregelung besitzt. Kontrolle des S
   - FuBK-Testbild einspeisen.
   - ◐min., ☼nom., ◑min., einstellen.
   - Tastkopf an den Kollektoren der Transistore
     (Bildrohrplatte). Die Schwarzwerte der drei
     140 ... 150 V (26"-Geräte).
3. Einstellungen im Farbkanal
   - PAL-Testbild einspeisen.
   - FK nom., H nom., K max. einstellen.
   - IC-Pin 28 vom TDA 4555 mit + 12 V verbind
   - IC-Pin 17 vom TDA 4555 mit Masse verbind
   - Mit Trimmer C 9516 die durchlaufenden Fa
   - Kurzschlußbrücken entfernen.
   - Tastkopf an MP 12, mit Regler BP und Spul
     zur Deckung bringen.
   - NTSC-Testbild 3,5 MHz einspeisen.
   - IC-Pin 26 vom TDA 4555 mit 12 V verbinden
   - IC-Pin 17 vom TDA 4555 mit Masse verbind
   - Mit Trimmer C 9514 die durchlaufenden Fa
   - Kurzschlußbrücken entfernen.
   - SECAM-Testbild einspeisen.
   - Tastkopf an Pin 1 vom TDA 4555 anschließe
     mit Spule DR Nullinie des (R-Y)-Signals auf
   - Tastkopf an Pin 3 vom TDA 4555 anschließe
     mit Spule DB Nullinie des (B-Y)-Signals auf
   - Spule F 2521 so einstellen, daß das (B-Y)-S

1. White level adjustment.
   - Display colour bar test pattern.
   - Set ◐ to min., ☼ to nom., ◑ to max.
   - Adjust presets VR and VB (CRT socket board
     colouration.
2. Adjustment of cut-off point.
   Manual adjustment is not possible, as the circ
   current control circuit.
   To check cut-off point (oscilloscope required),
   - Display colour bar test pattern.
   - Set ◐ to min., ☼ to nom., ◑ to min.
   - Connect test probe to collectors of T 736, T
     The black levels of the three cathode signa
3. Adjustments in chroma channel.
   - Display PAL test pattern.
   - Adjust colour level and brightness to nomin
   - Connect pin 28 of IC TDA 4555 to + 12 V su
   - Connect pin 17 to IC TDA 4555 to chassis.
     Adjust trimmer C 9516 for stationary pattern
   - Remove wire links.
   - Connect test probe to test point MP 12. Brin
     B signal to coincidence by adjusting the pr
   - Display 3.5 MHz NTSC test pattern.
   - Connect pin 26 of IC TDA 4555 to 12 V suppl
   - Connect pin 17 of IC TDA 4555 to chassis.
   - Adjust trimmer C 9514 for stationary pattern
   - Remove wire links.
   - Display SECAM test pattern.
   - Connect test probe to pin 1 of IC TDA 4555.
   - Use coil DR to align zero level of the (R-Y) s
   - Connect test probe to pin 3 of IC TDA 4555.
   - With coil DB to align zero level of the (B-Y) s
   - Adjust coil F 2521 so that the (B-Y) signal is

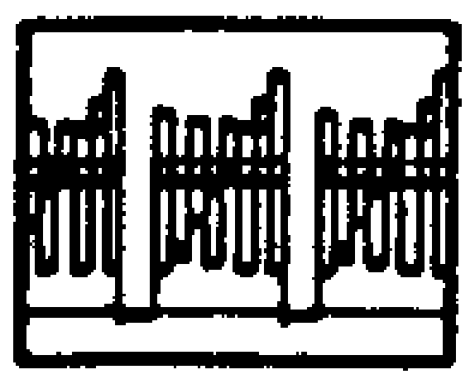
1. Taratura del bianco
   - Applicare un monoscopio FuBK
   - Regolare ◐ al minimo, ☼ sul valore nomina
   - Con i regolatori VR e VB (piastra cinescopio)
2. Taratura del punto di blocco
   Una regolazione manuale non è possibile, poic
   regolazione automatica della corrente d'interdiz
   Controllo del punto di blocco (è necessario un
   - Applicare un monoscopio FuBK.
   - Regolare ◐ al minimo, ☼ sul valore nomina
   - Collegare la sonda ai collettori dei transistori T
     Valore nero dei tre segnali catodici ca. 140...
3. Regolazione del canale colore.
   - Applicare un monoscopio PAL.
   - Regolare FK e H sul valore nominale, K al m
   - Sull'integrato TDA 4555 collegare pin 28 a +
   - Sull'integrato TDA 4555 collegare pin 17 a m
     Con C 9516 fermare le barre colorate scorre
   - Togliere i cortocircuiti.
   - Collegare la sonda a MP 12, con il regolatore B
     immagini doppie del segnale B.
   - Applicare un monoscopio NTSC 3,5 MHz.
   - Sull'integrato TDA 4555 collegare pin 26 a 12
   - Sull'integrato TDA 4555 collegare pin 17 a m
   - Con C 9514 fermare le barre colorate scorre
   - Togliere i cortocircuiti.
   - Applicare un monoscopio SECAM.
   - Collegare la sonda al pin 1 dell'integrato TDA
     con la bobina DR portare la linea zero del se
     livello della frequenza di riga.
   - Collegare la sonda al pin 3 dell'integrato TDA
     con la bobina DB portare la linea zero del se
     livello della frequenza di riga.
   - La bobina F 2581 applicarla così in modo che



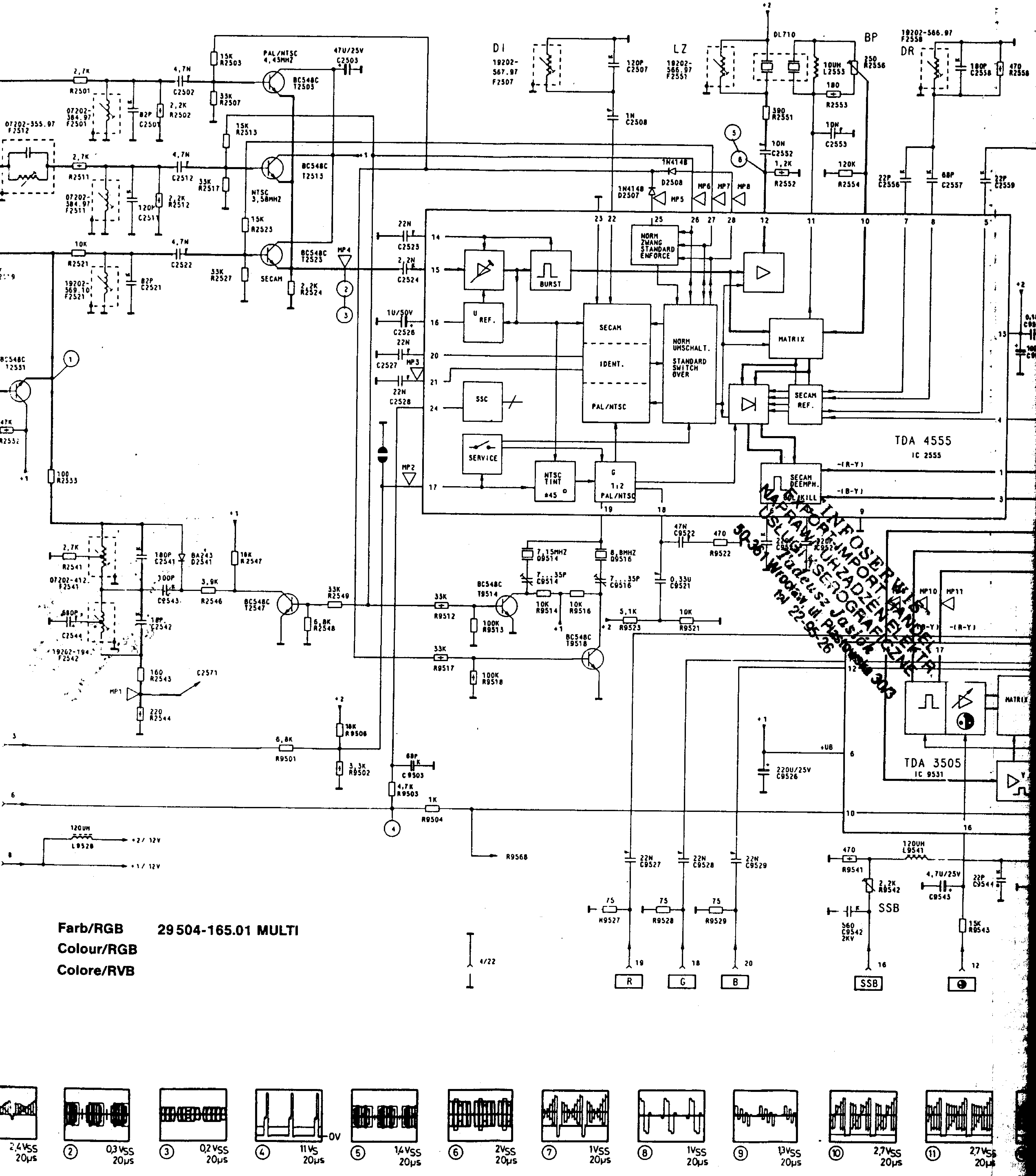


2,7Vss
20µs

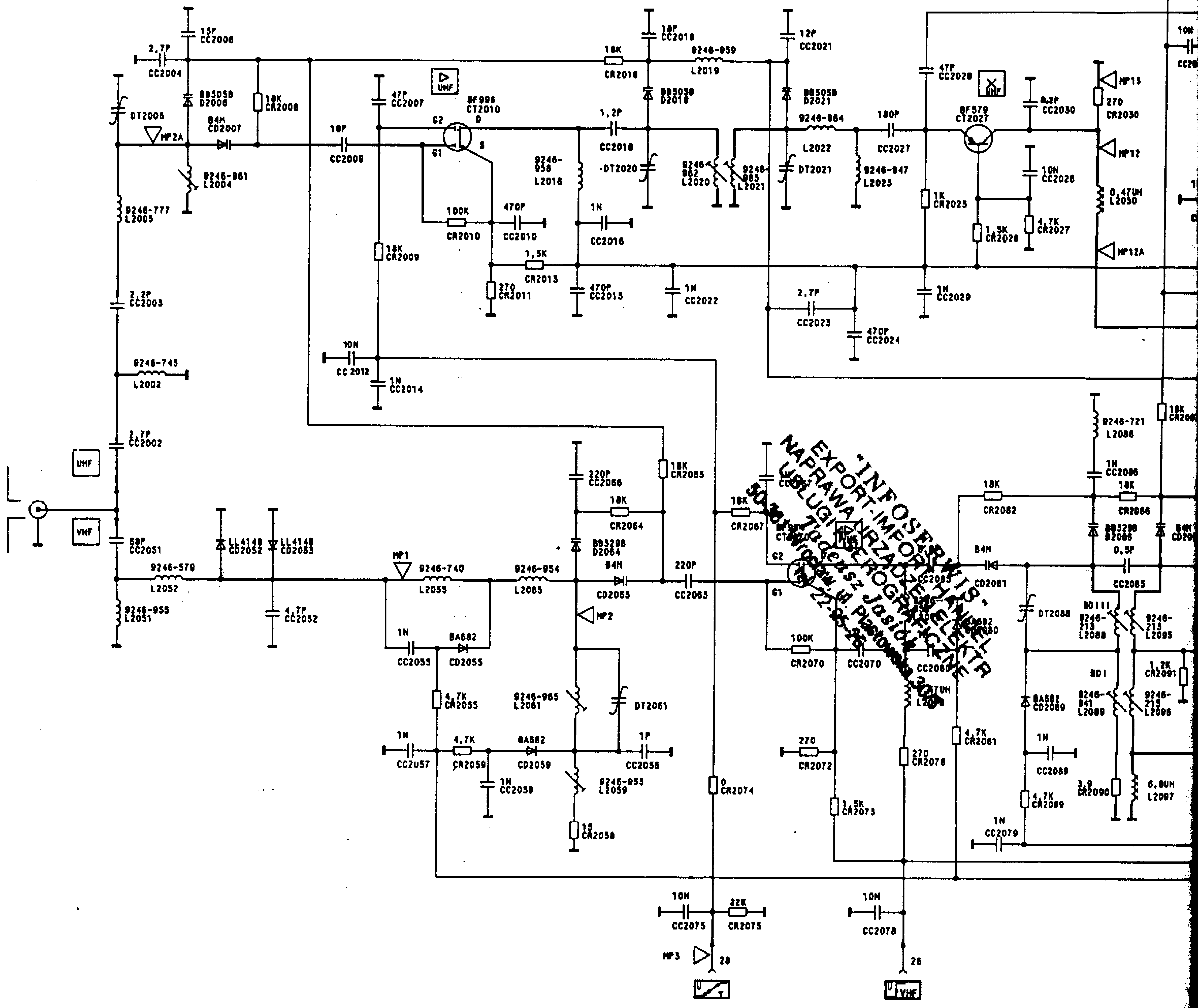
⑪ 2,7Vss
20µs

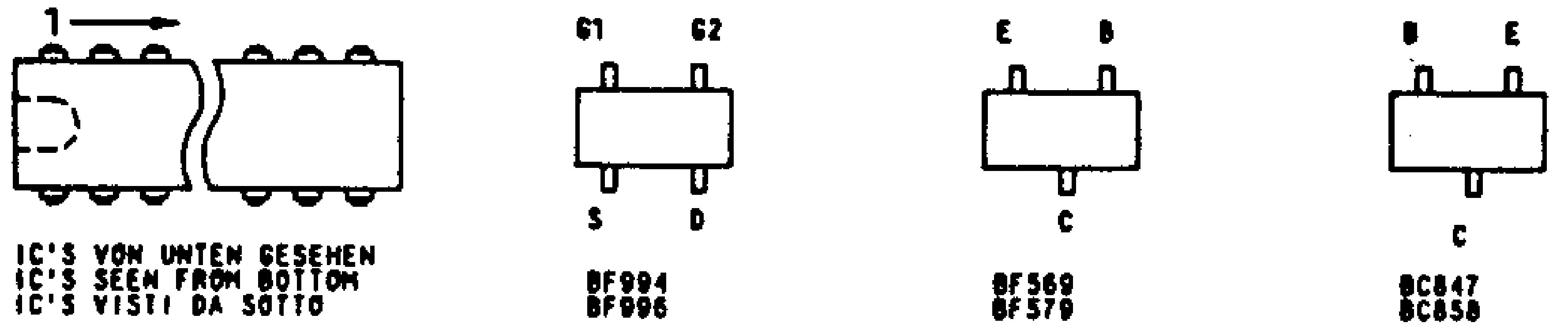


⑫ 2,7Vss
20µs

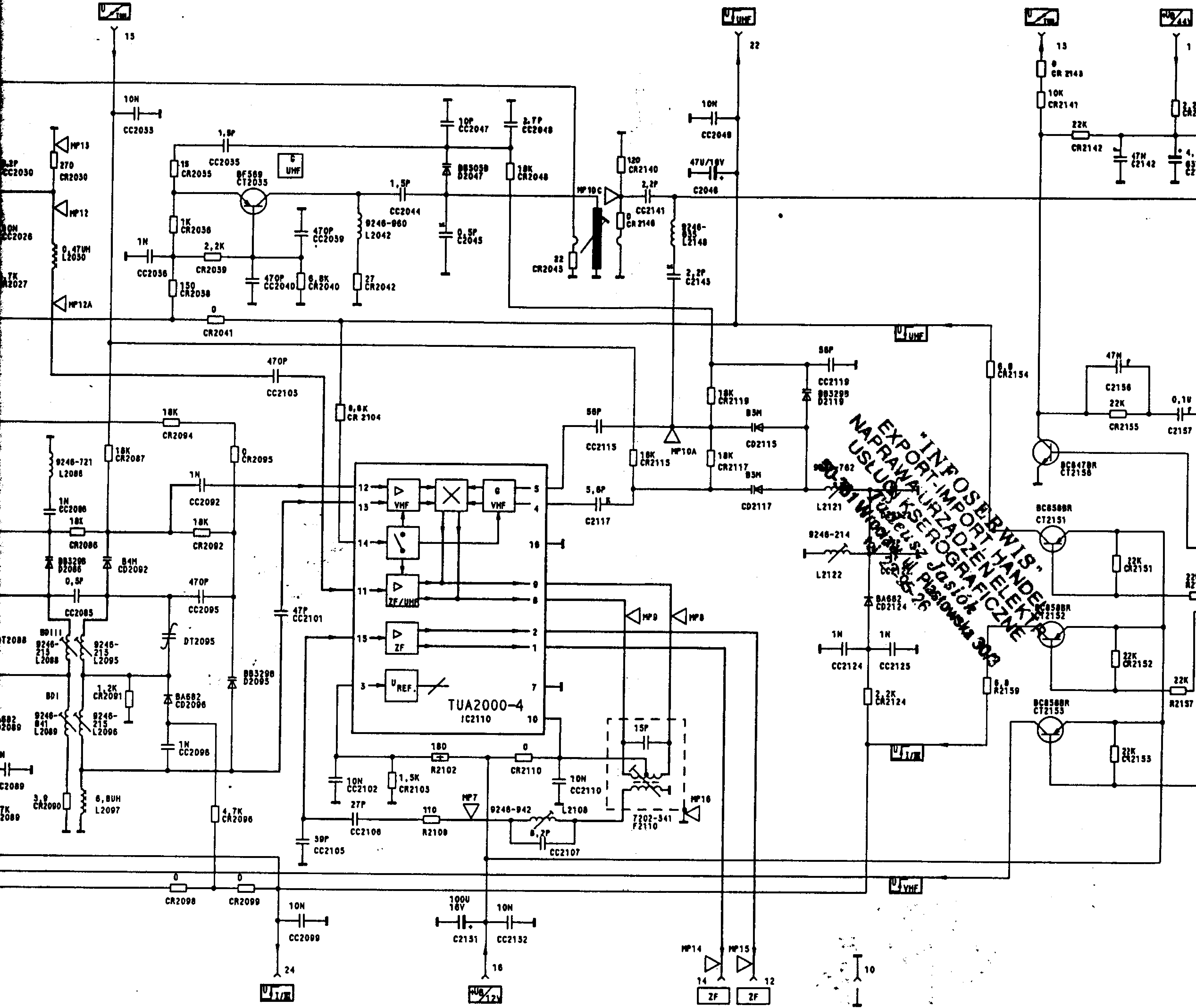


Farb/RGB 29504-165.01 MULTI
Colour/RGB
Colore/RVB





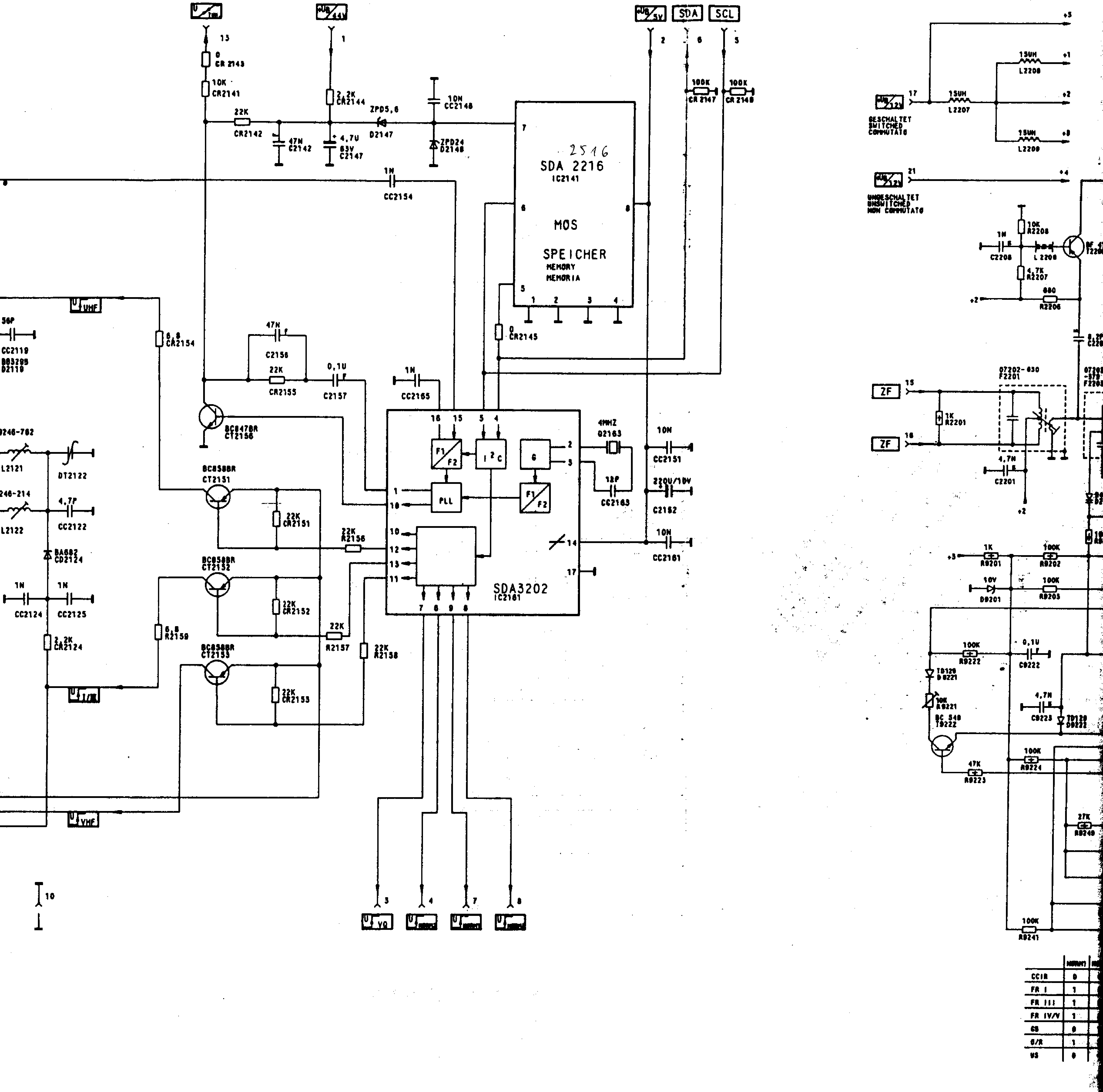
Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto



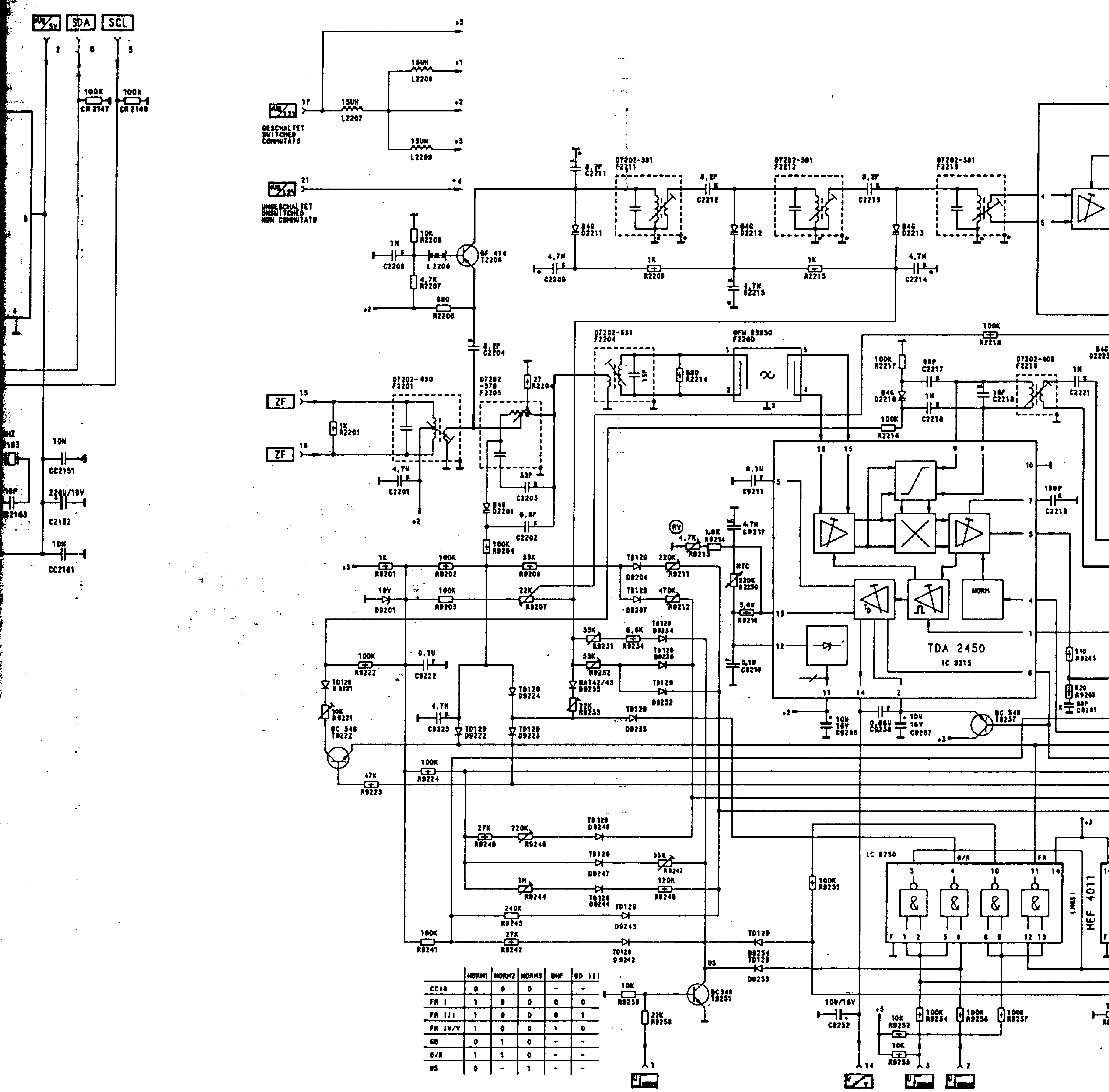
Kabeltuner 29504-101.01

Cable TV Tuner

Tuner TV cavo



Kein Anpassungsabgleich bei Austausch
When replacing the plug-in board, no alig
Non è necessaria nessuna taratura di ade
sostituzione di una scheda ad innesto



	NORM1	NORM2	NORM3	UHF	BD III
CCIR	0	0	0	-	-
FR I	1	0	0	0	0
FR III	1	0	0	0	1
FR IV/V	1	0	0	1	0
GB	0	1	0	-	-
G/R	1	1	0	-	-
US	0	-	1	-	-

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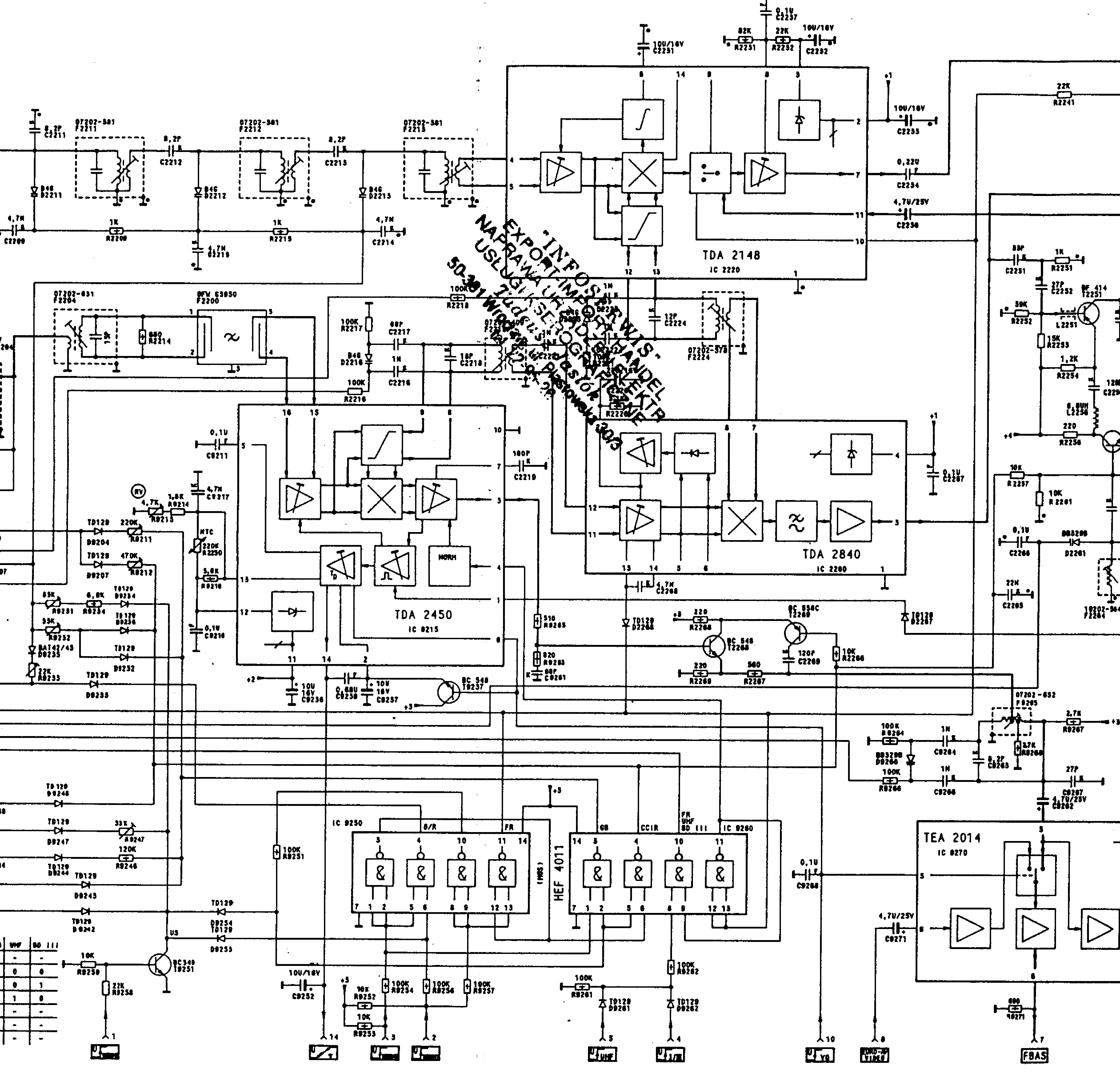
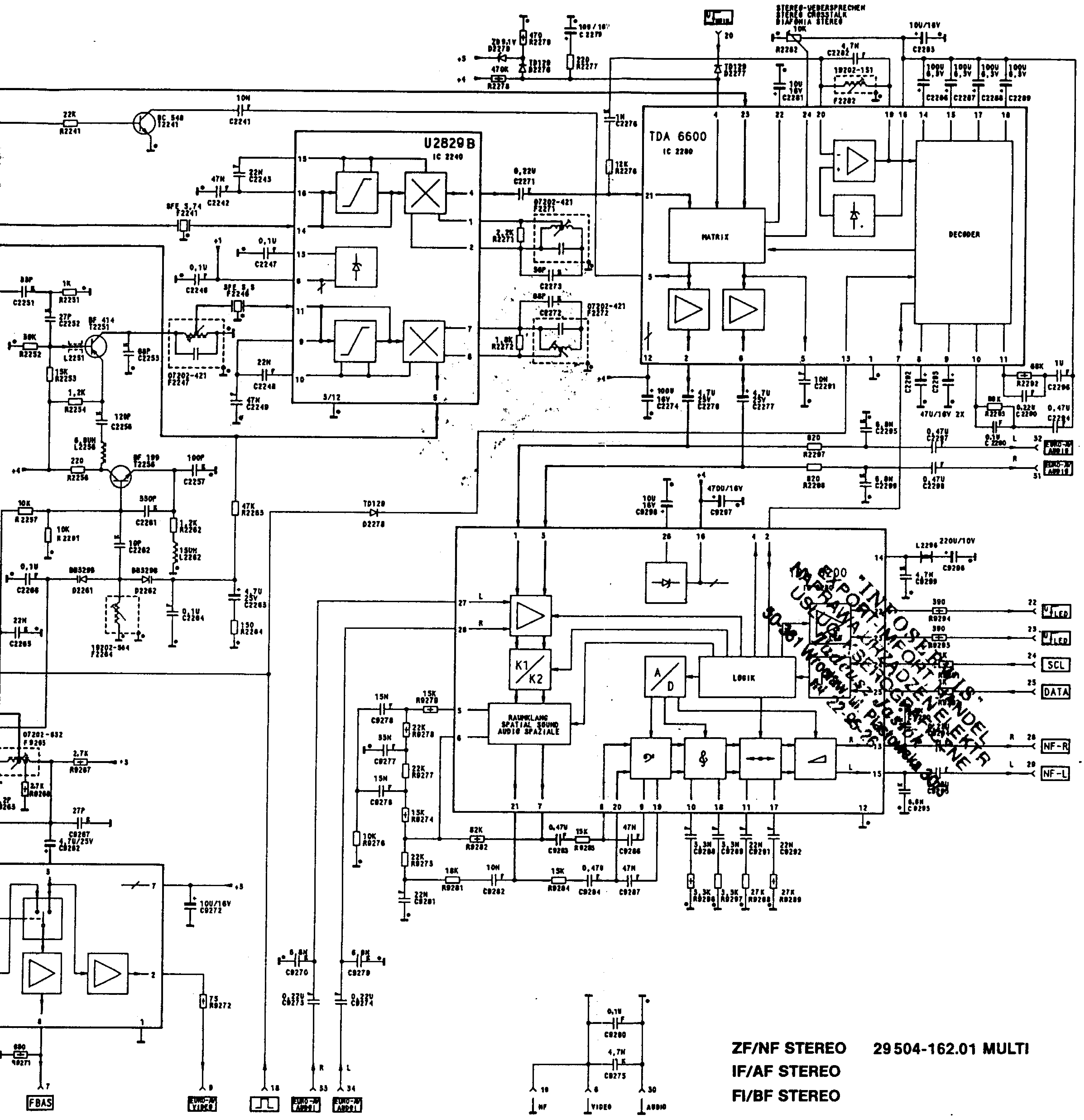


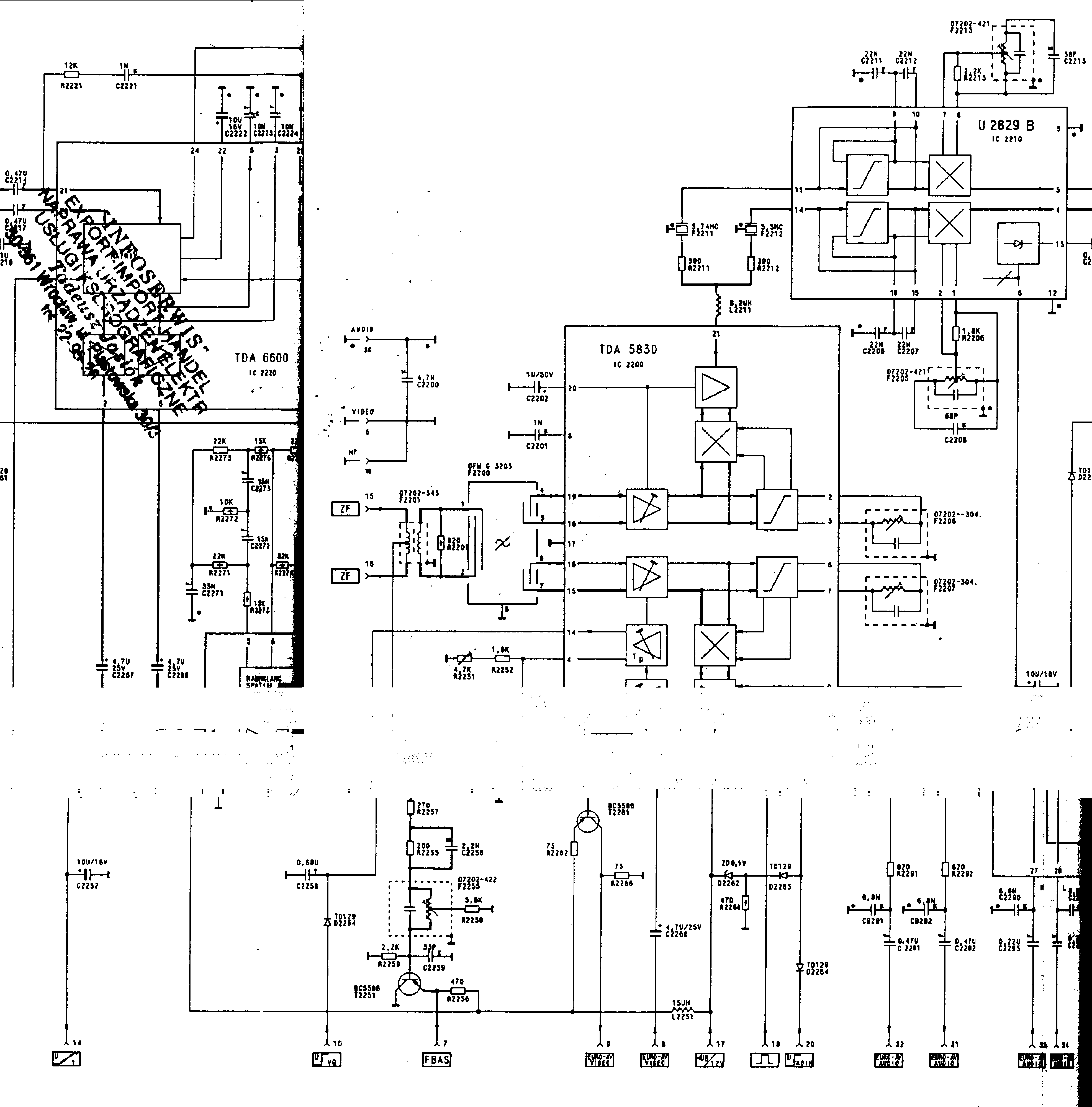
...ckkarte notwendig
...ls necessary
...to dopo la



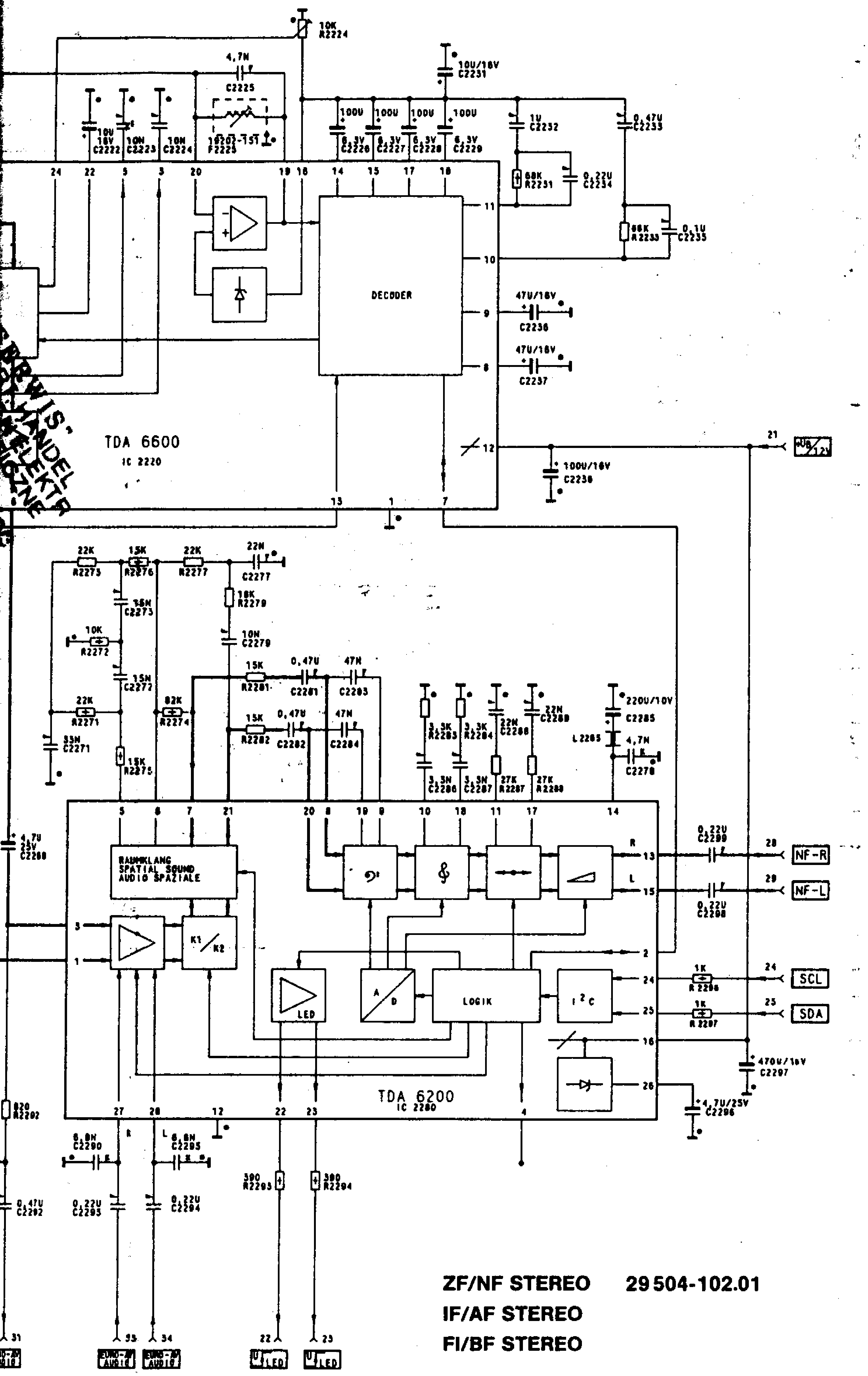
ZF/NF STEREO **29504-162.01 MULTI**

IF/AF STEREO

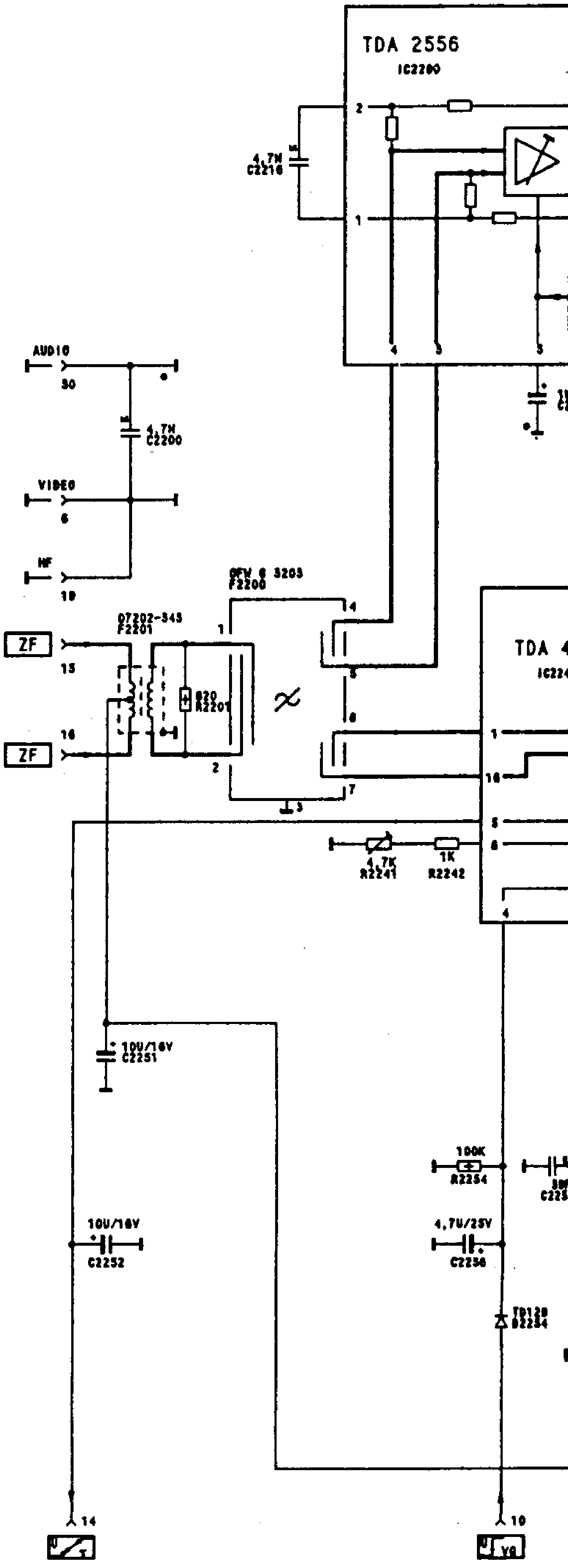
FI/BF STEREO



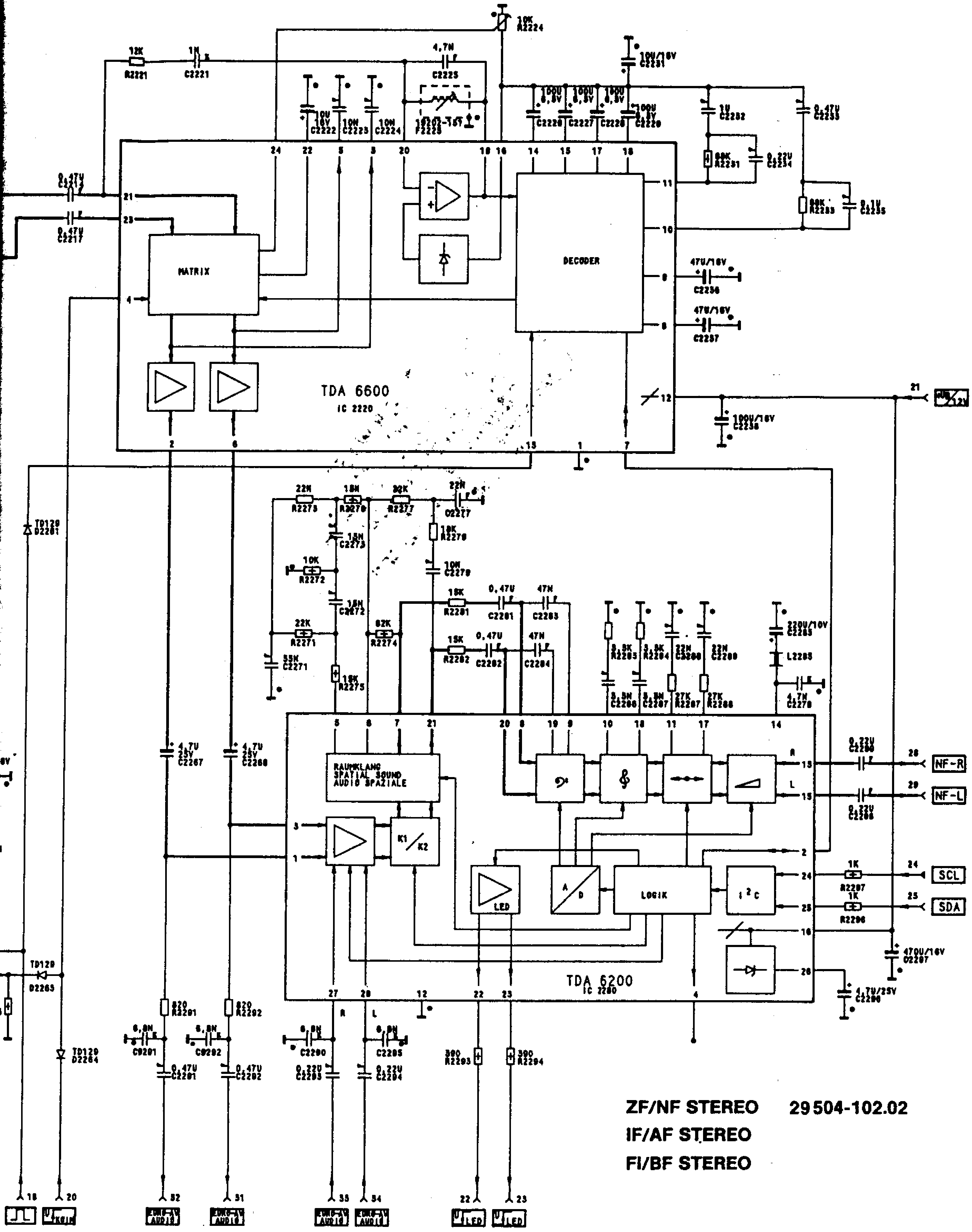
Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto



ZF/NF STEREO 29504-102.01
IF/AF STEREO
FI/BF STEREO



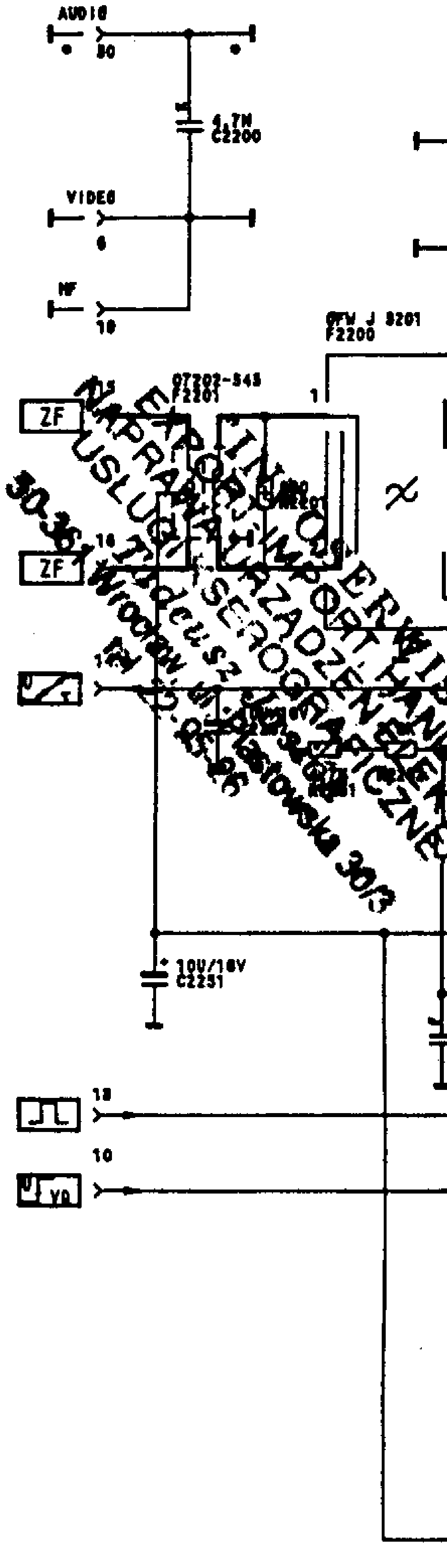
Kein Anpassungsabgleich bei Austausch der Steckkart
When replacing the plug-in board, no alignment is nec
Non è necessaria nessuna taratura di adattamento dop
sostituzione di una scheda ad innesto



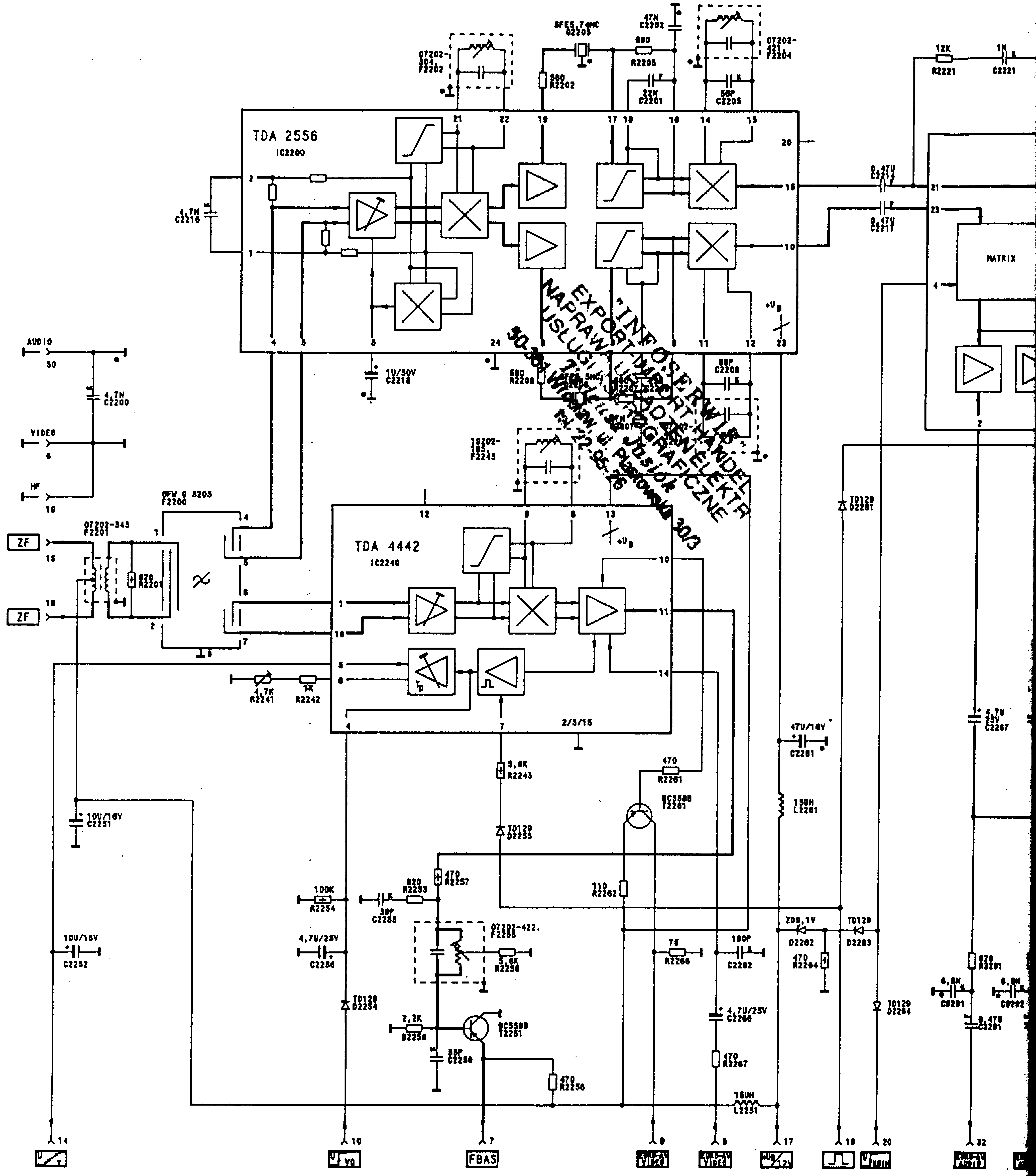
ZF/NF STEREO 29504-102.02

IF/AF STEREO

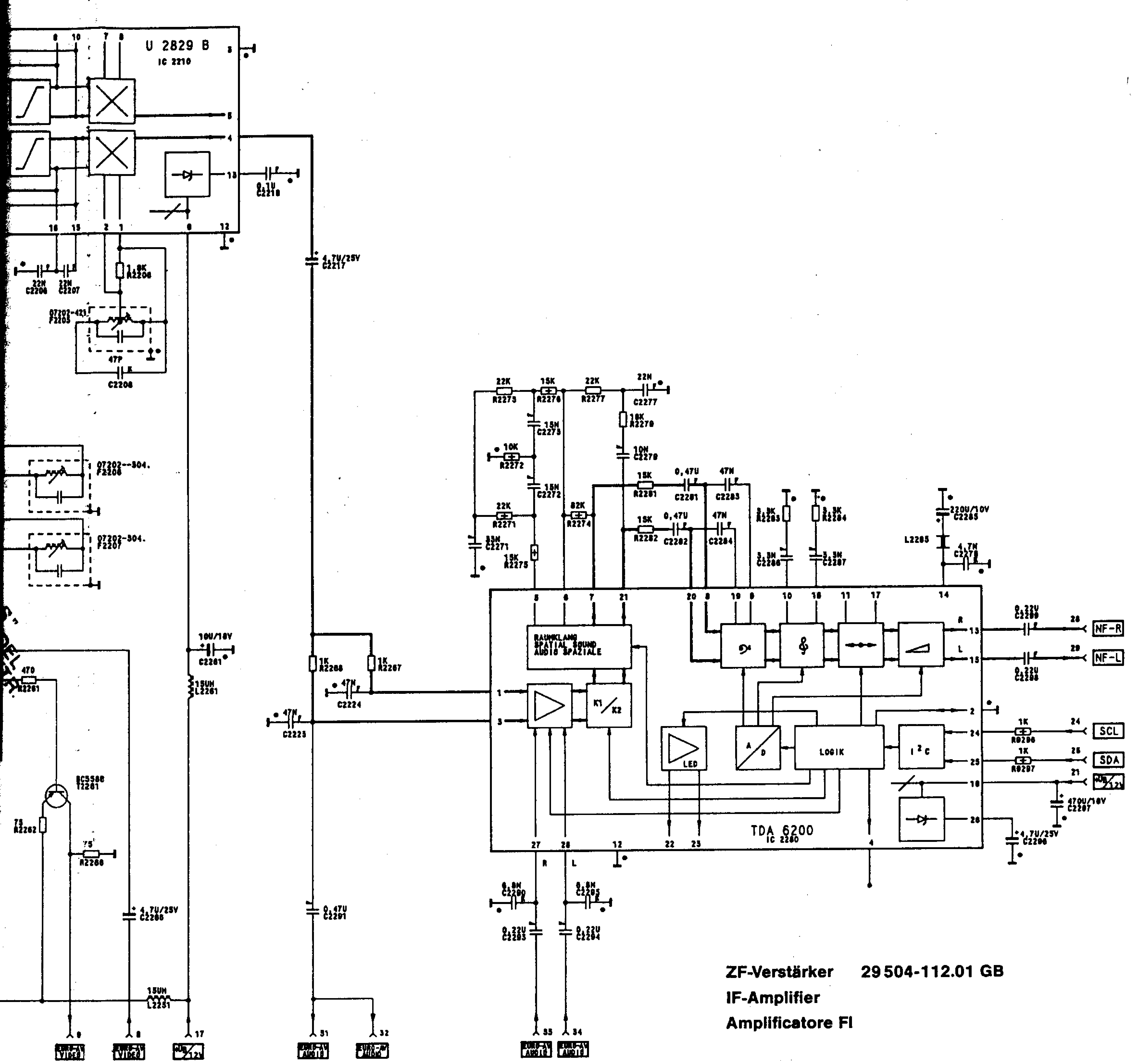
FI/BF STEREO



Kein Anpassungsabgleich bei Aust
When replacing the plug-in board,
Non è necessaria nessuna taratura
sostituzione di una scheda ad inne



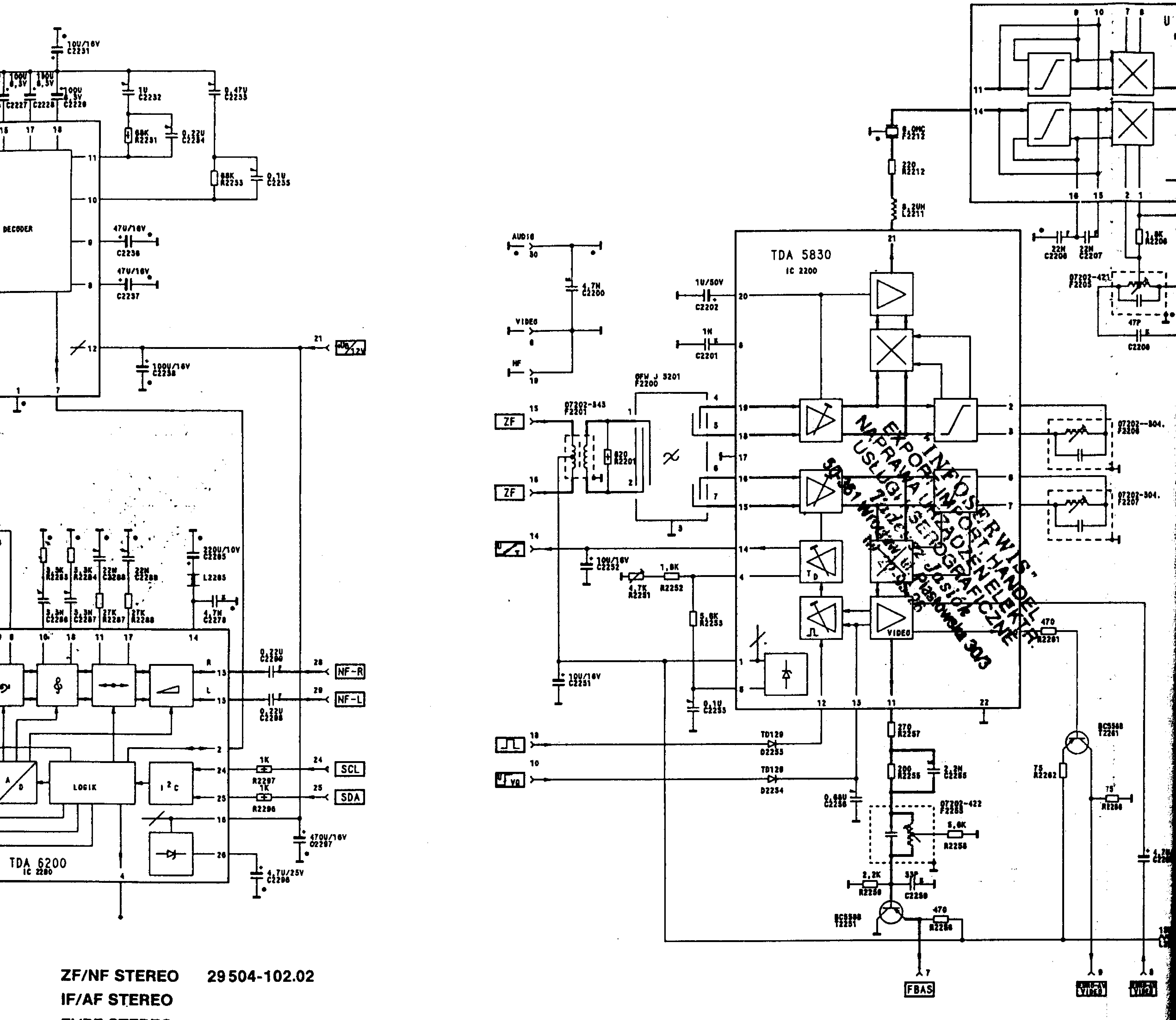
Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto



ZF-Verstärker **29504-112.01 GB**

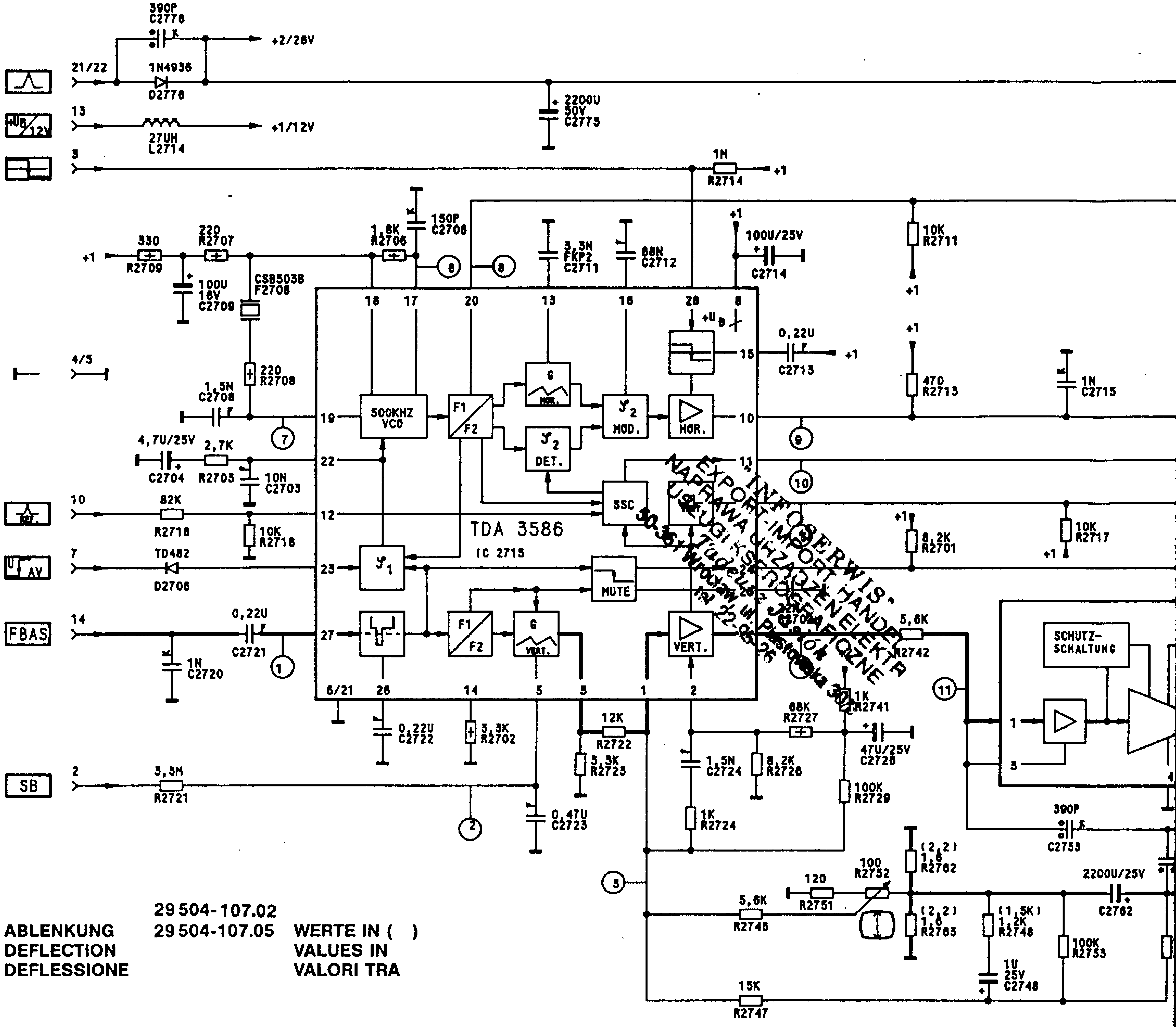
IF-Amplifier

Amplificatore FI



ZF/NF STEREO 29504-102.02
IF/AF STEREO
FI/BF STEREO

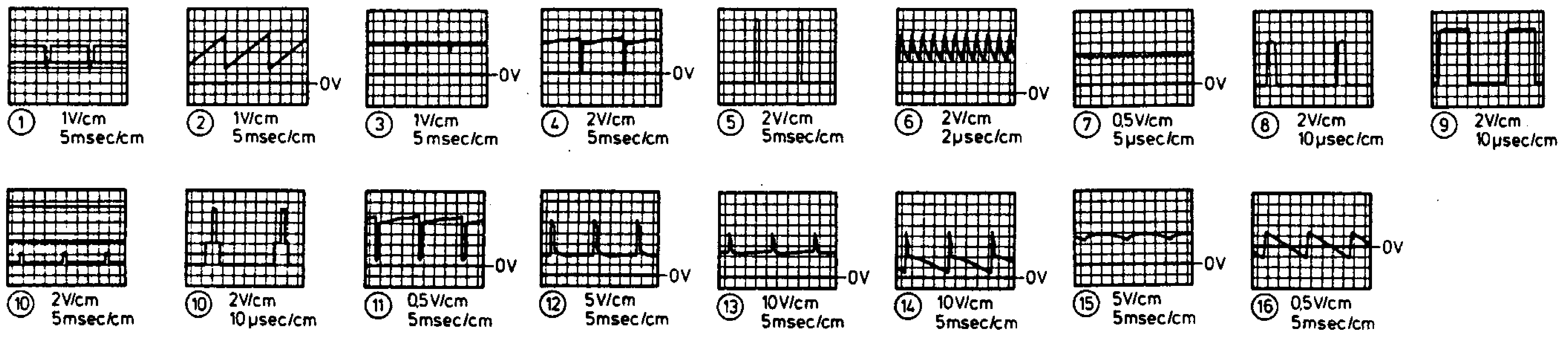
Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto

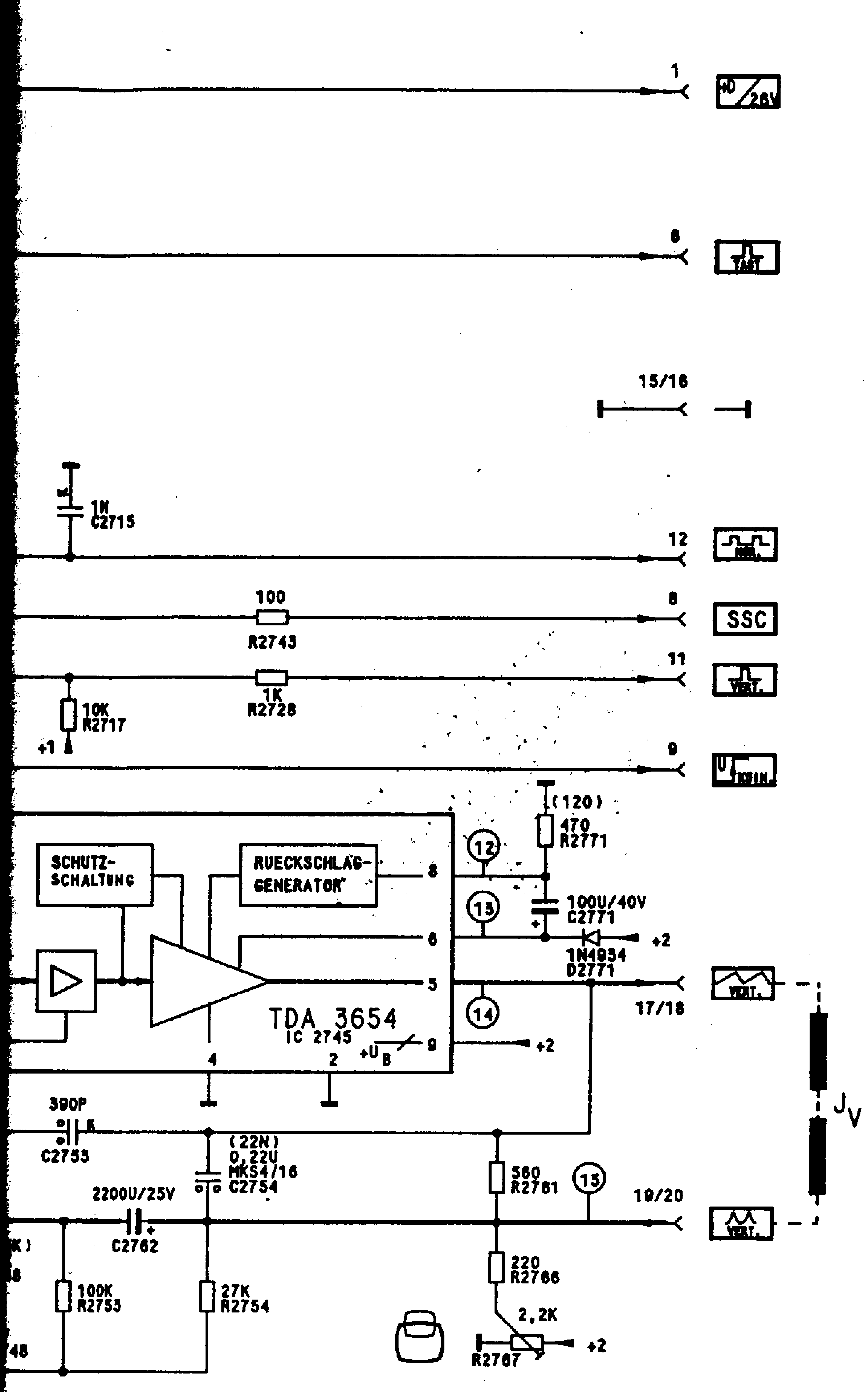


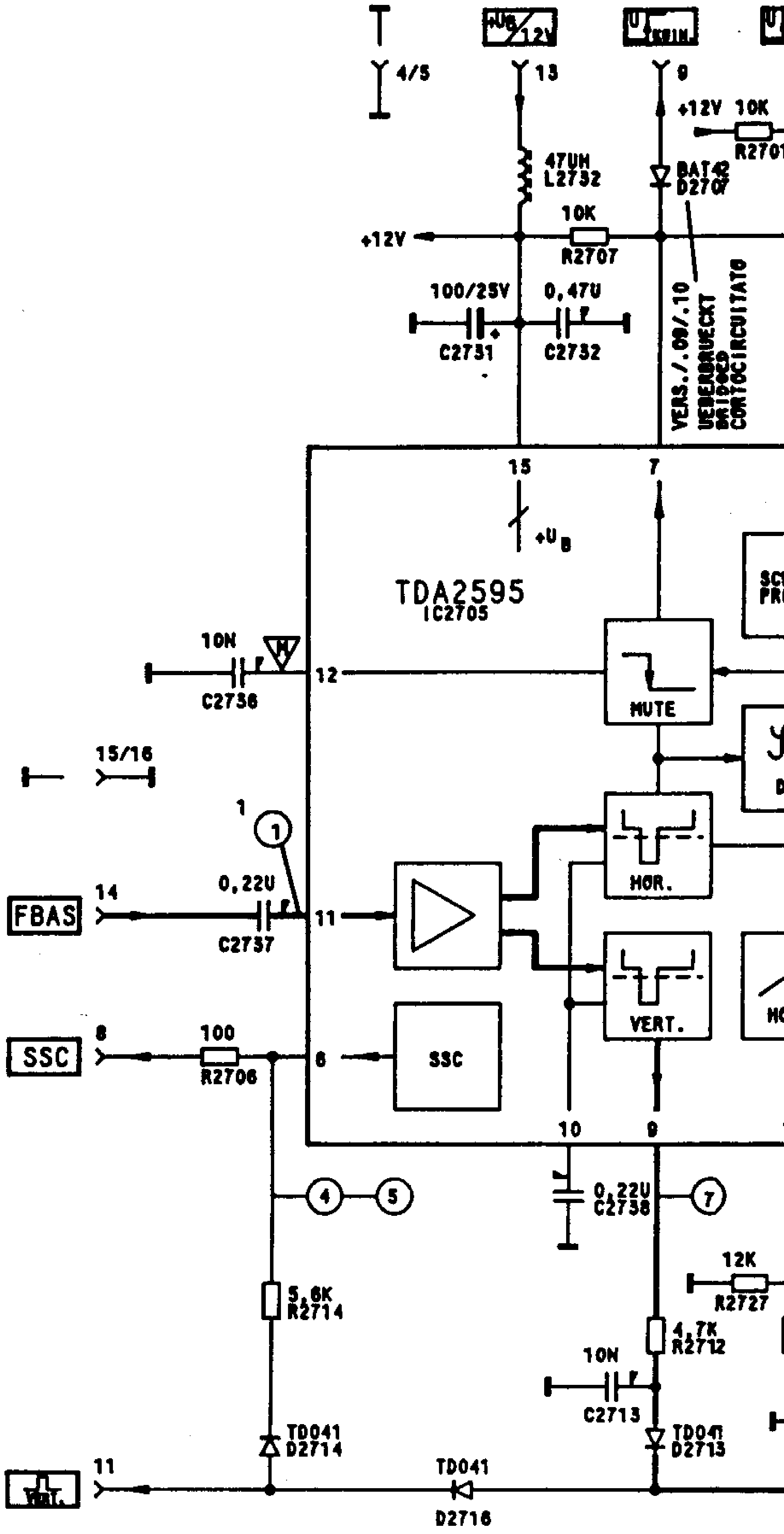
29 504-107.02
29 504-107.05

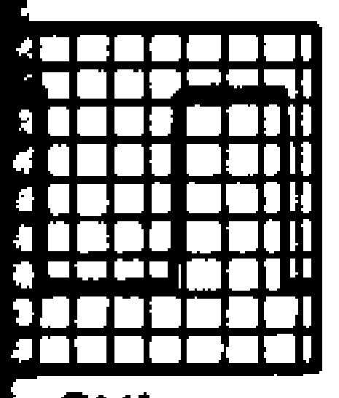
ABLENKUNG
DEFLECTION
DEFLESSIONE

WERTE IN ( )
VALUES IN
VALORI TRA



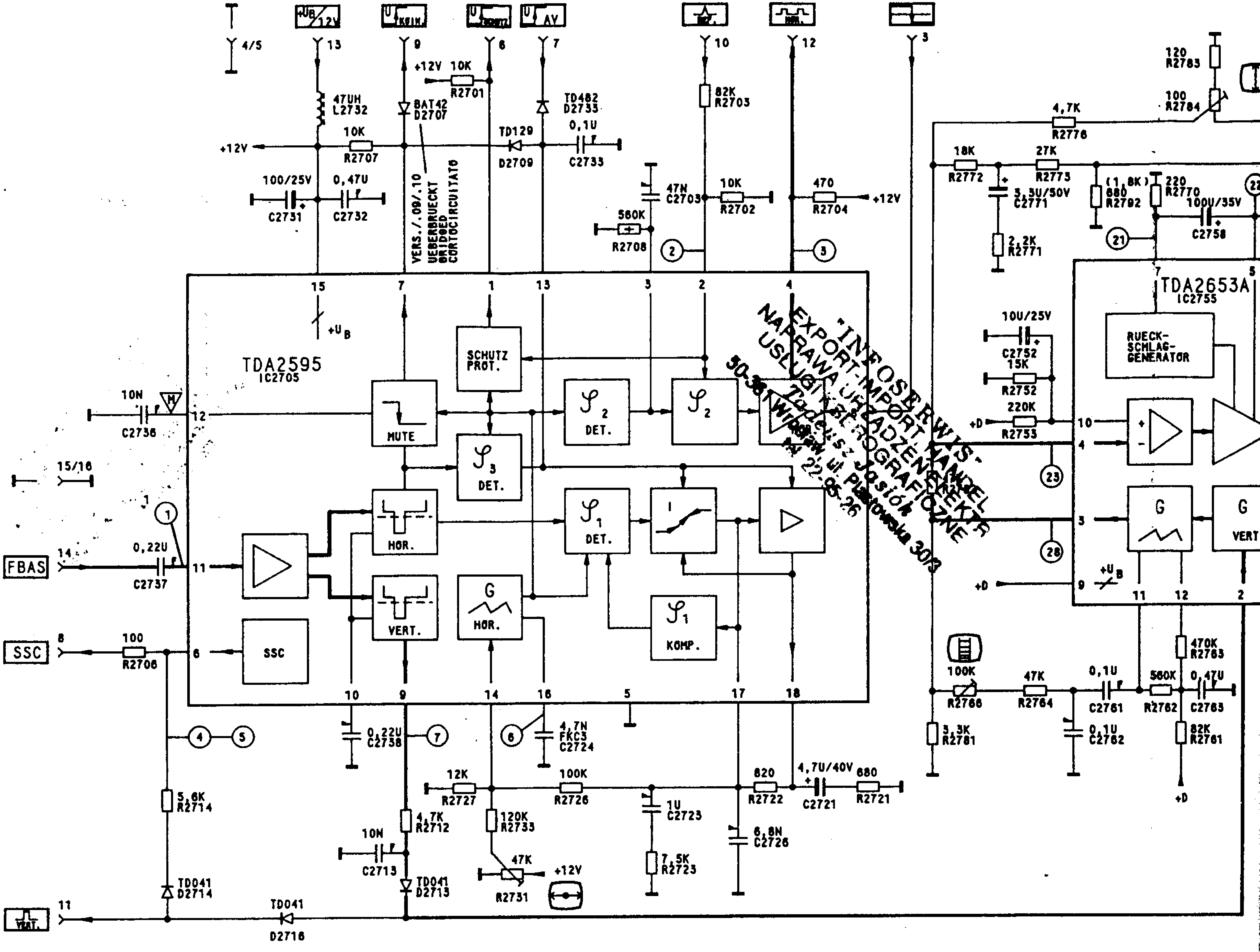






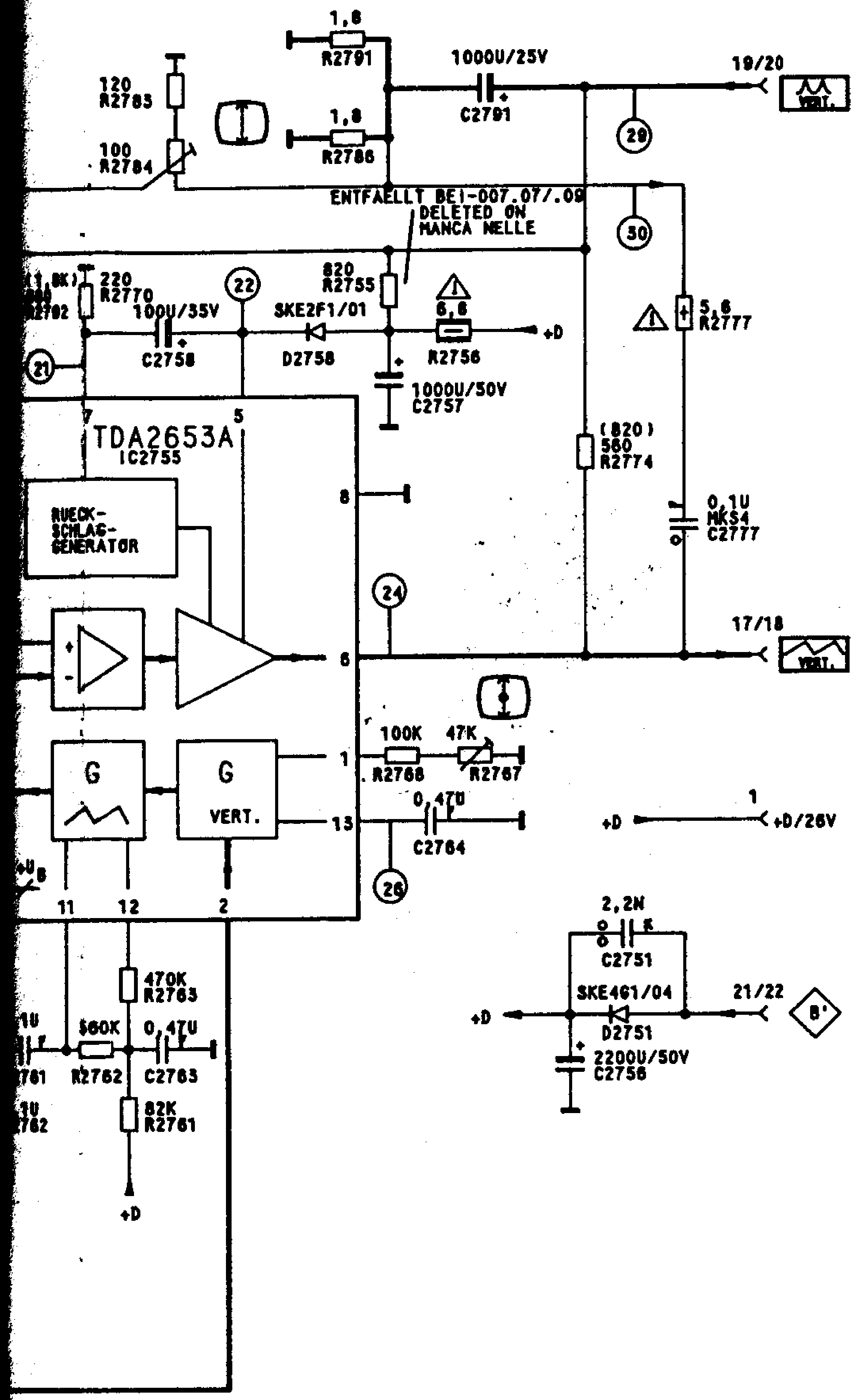
2V/cm
10µsec/cm

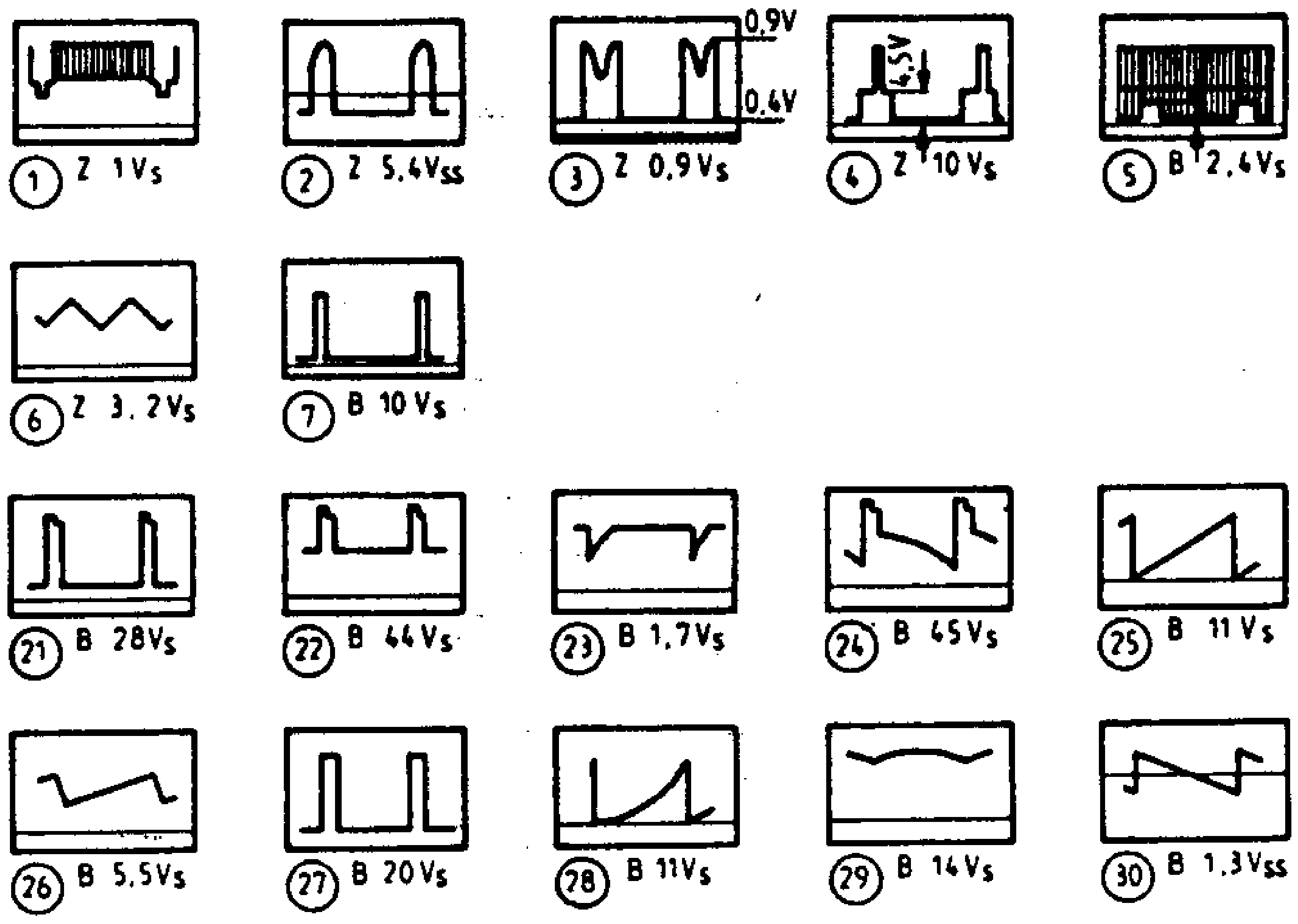
Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto



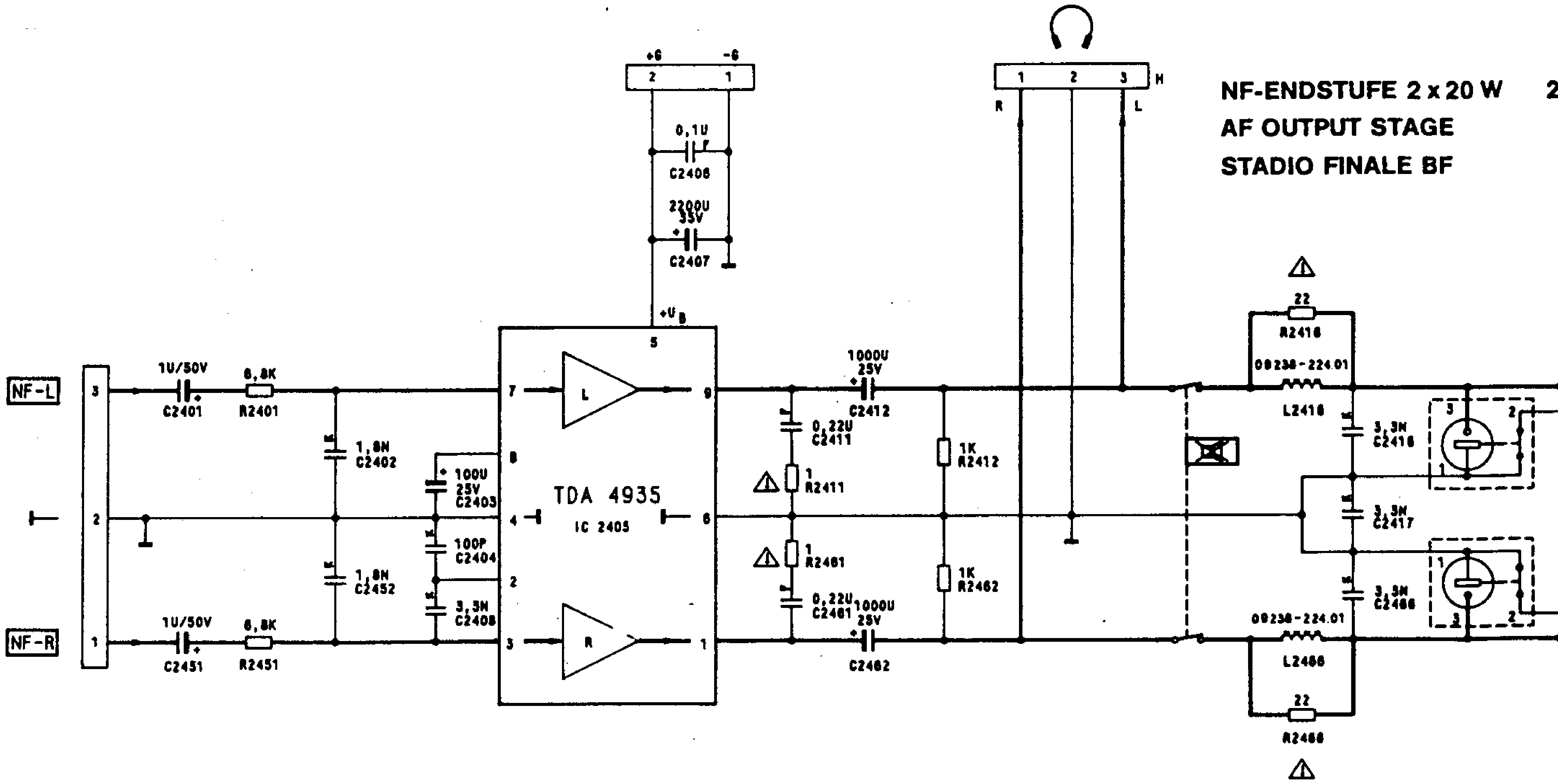
29 504-007.07/09

ABLENKUNG	**29 504-007.10**	**WERTE IN ( )**
DEFLECTION		**VALUES IN**
DEFLESSIONE		**VALORI TRA**



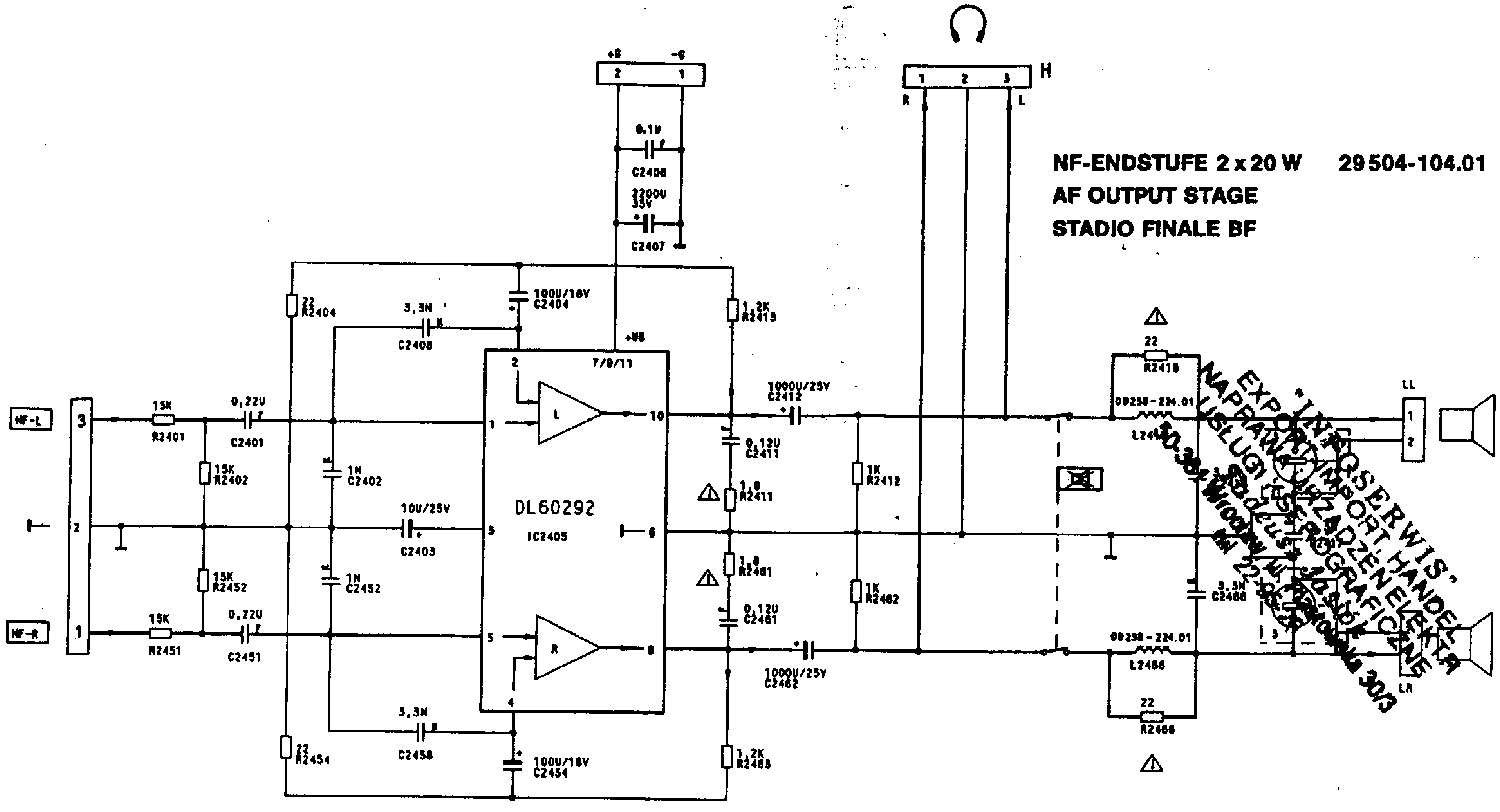


NF-ENDSTUFE 2 x 20 W
AF OUTPUT STAGE
STADIO FINALE BF



Kein Anpassungsabgleich bei Austausch der Stec
When replacing the plug-in board, no alignment is
Non è necessaria nessuna taratura di adattament
sostituzione di una scheda ad innesto

NF-ENDSTUFE 2 x 20 W 29504-104.01
AF OUTPUT STAGE
STADIO FINALE BF



Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
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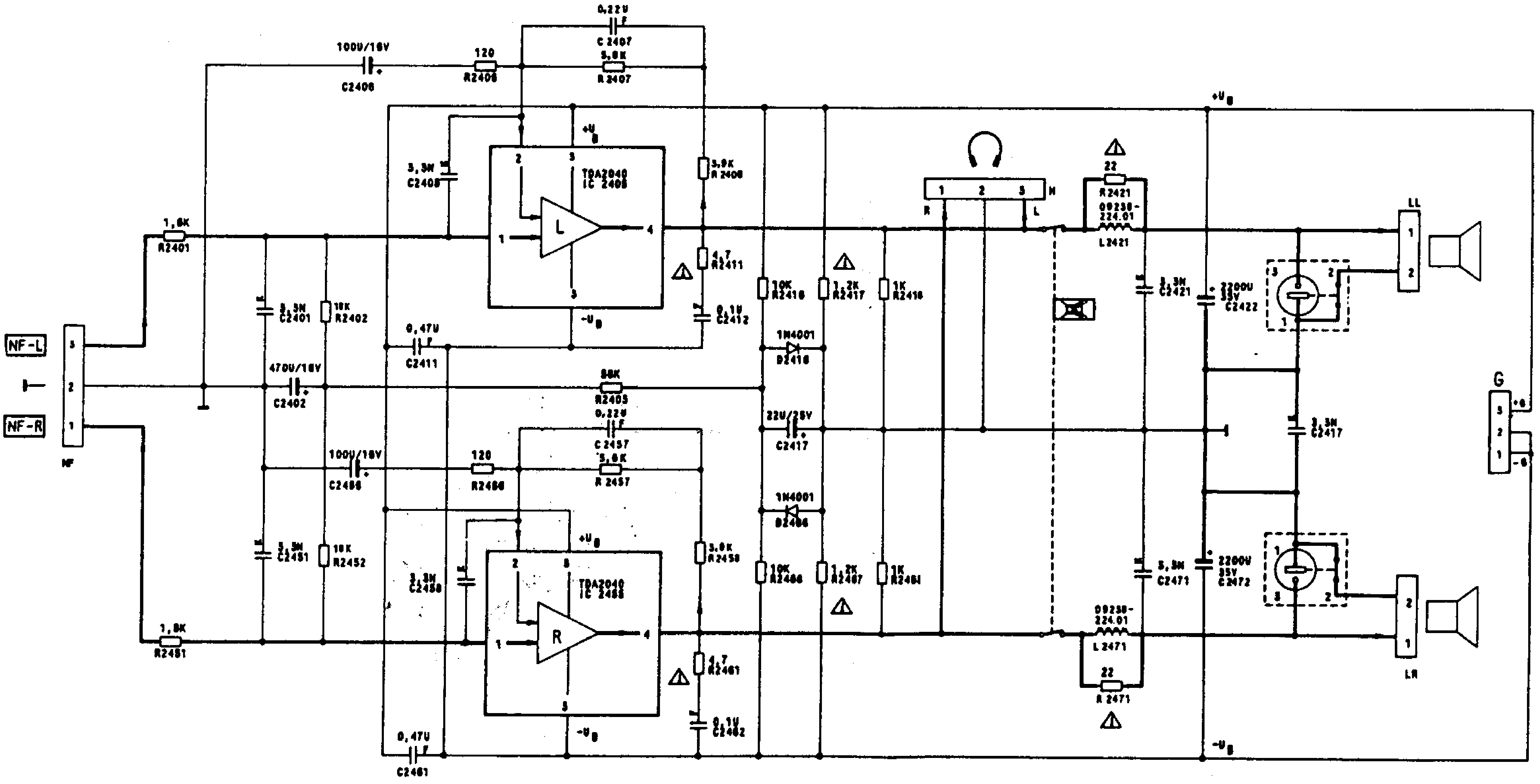
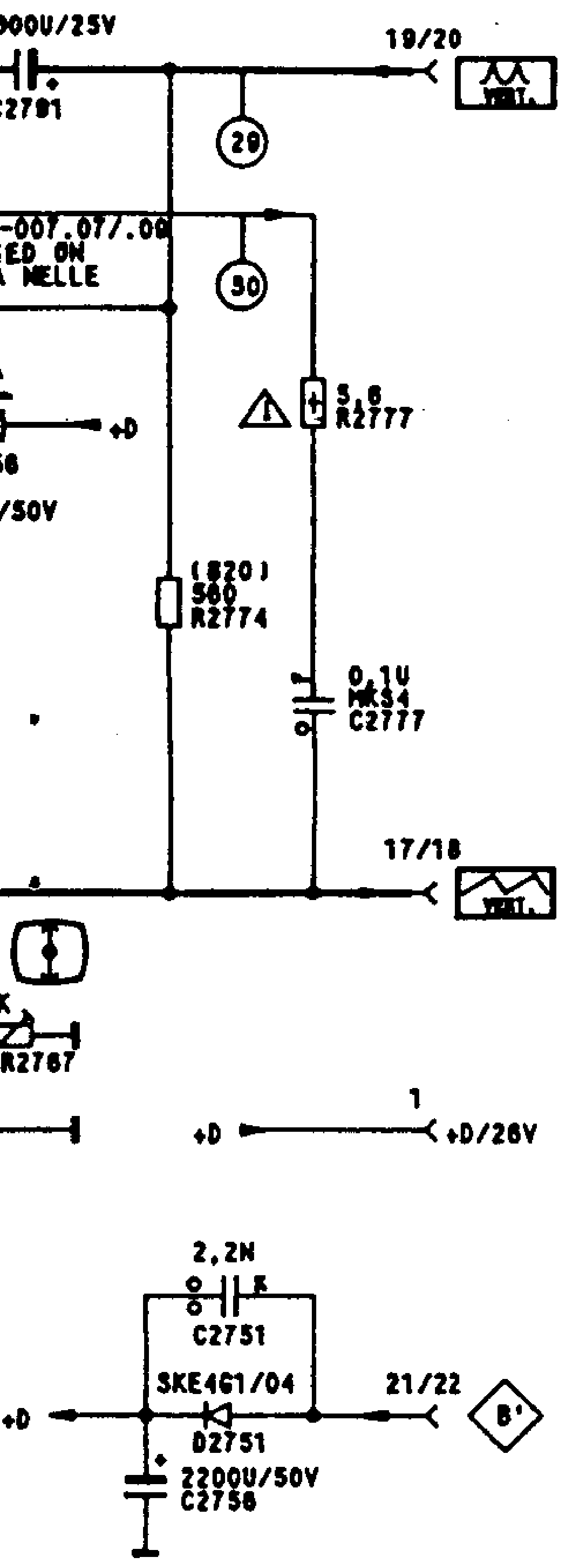
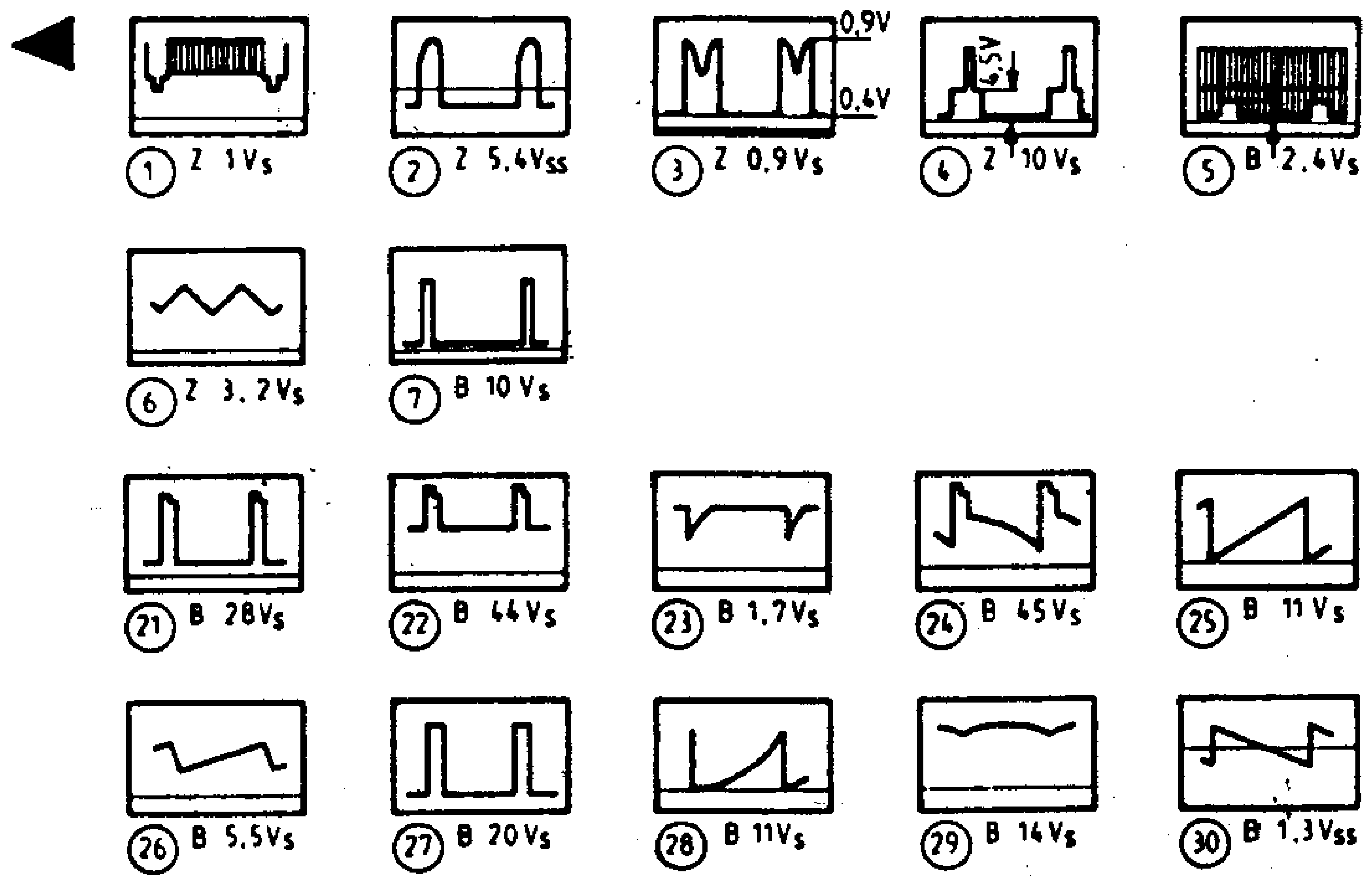
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto

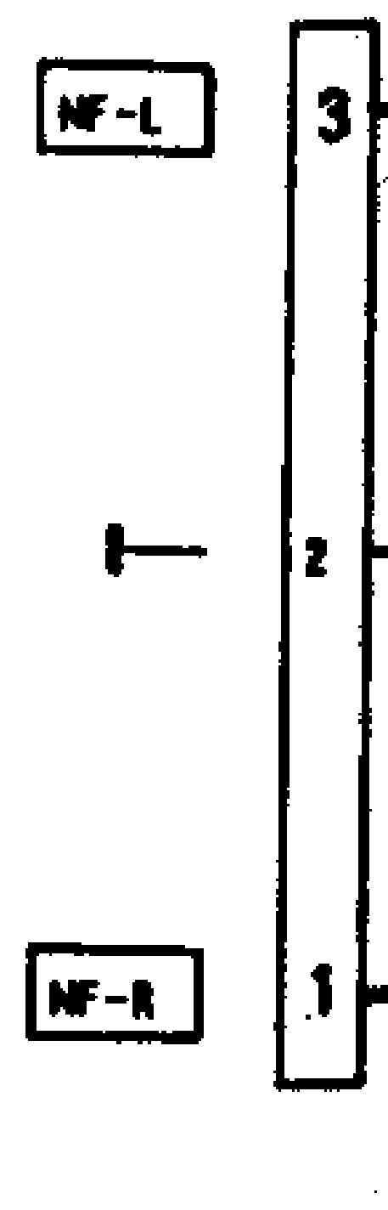


NF-ENDSTUFE 2 x 35 W 29504-104.11
AF OUTPUT STAGE
STADIO FINALE BF

Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto



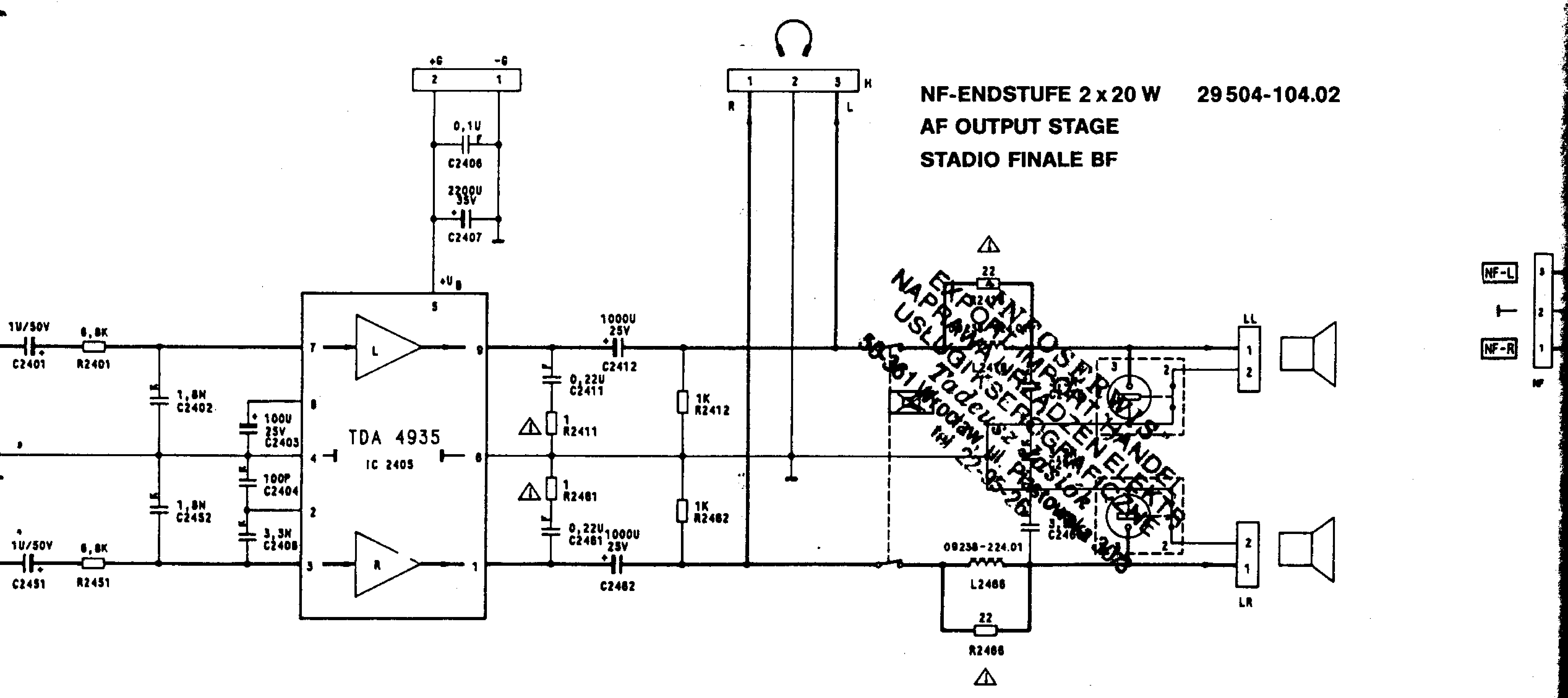




NF-ENDSTUFE 2 x 20 W 29504-104.02

AF OUTPUT STAGE

STADIO FINALE BF



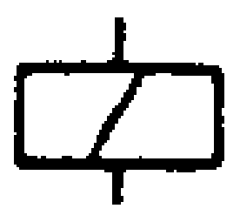
Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto

Ersatzteilliste (Auszug) · List of Spare-Parts (extract) · Lista ricambi (estratto)
CUC 2600

Pos. No.	Fig. No.	Bestell-Nr./Part No. Réf./Nr. d'ordinazioni	Benennung	Description
			Steckkarten	Plug-in Circuit Boards
1		29504-101.01	Kabeltuner	Cable tuner
2		29504-102.01	ZF-Verstärker	IF-amplifier
oder				or:
2		29504-102.02	ZF-Verstärker	IF-amplifier
2		29504-162.01	ZF-Verstärker(Multi)	IF-amplifier(Multi)
4		29504-104.01	NF-Stereo	AF-stereo
oder				or:
4		29504-104.02	NF-Stereo	AF-stereo
5		29504-105.21	Farb/RGB	Colour-RGB
5		29504-165.01	Farb/RGB (Multi)	Colour-RGB (Multi)
7		•29504-007.10	Ablenkung	Deflection
7		•29504-107.05	Ablenkung	Deflection
			Mechanische Teile	Mechanical Parts
10		•29304-070.46	Bildrohrplatte kpl.	CRT socket board compl.
10.1		•29303-754.97	Bildrohrfassung	Picture tube socket
12		29700-284.01	Bausteinhalter	Circuit board holder
13		29500-807.01	Koax-Buchsen-Abdeckung	Coaxial-socket cover
14	2x	09621-113.02	Sicherungshalter	Fuse holder
15	2x	29303-153.12	Montageclip für IC	Mounting clip for IC
16		29303-153.02	Montageclip für Trans.	Mounting clip for trans.
18		29303-119.03	Euro-AV-Buchse	Euro-AV-socket
19		29500-503.05	AV-Buchsen-Abdeckung	AV-socket cover
20		29700-280.01	NF-Aufnahme	AF-holder
			Elektrische Teile	Electrical Parts
K 536		8324-800-040	Kaskade BG2087/642-1006	EHT-tripler
		72008-090.02	Fokusregler	Focus control

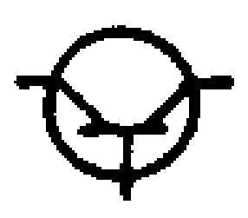
TR 501		09246-836.21
TR 526		29201-019.05
TR 651		29500-609.31

L 336		8140-526-451
L 337		8140-526-451
L 355		8140-526-312
L 356		09240-113.21
L 503		29500-806.96
L 506		8140-525-884
L 514		8104-982-002
L 521		29203-110.97
L 526		09240-110.21
L 562		09245-804.21
L 571		29500-806.96
L 573		09246-846.24
L 631		29500-806.96
L 633		8140-525-266
L 634		09273-309.01
L 672		8140-526-320



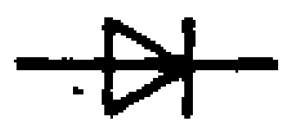
Rel.652		29500-705.97

IC 350		8305-338-442	TDA 8442 (MOS)
IC 555		8305-338-145	TDA 8145
IC 631		8305-302-459	TDA 4601
IC 666		8305-205-765	7812/3%
IC 676		8305-205-701	78 M 05



T 111		8302-202-543	BC 548 B
T 321		8302-200-559	BC 558 B
T 503		8302-260-507	BU 508 A
T 504		8302-200-637	BC 637
T 634		8302-260-903	BU 903
T 736		8302-411-759	GF 759
T 737		8302-202-560	BC 556 C
T 742		8302-222-422	BF 422
T 746		8302-220-421	BF 421
T 756		8302-411-759	GF 759
T 762		8302-222-422	BF 422
T 766		8302-220-421	BF 421
T 776		8302-411-759	GF 759
T 782		8302-222-422	BF 422
T 786		8302-220-421	BF 421

Pos. No.	Fig. No.	Bestell-Nr./Part No. Réf./Nr. d'ordinazioni	Benennung Description Désignation Denominazione

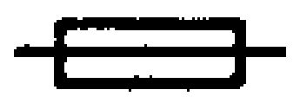


D 321		8309-214-114	TD 129
D 331		8309-715-008	ZPD 5,6
D 333		8309-201-033	BA 157
D 351		8309-214-003	TD 041
D 352		8309-707-107	ZPD 12
D 504		8309-214-114	TD 129
D 513		8309-707-110	ZPD 6,8
D 529		8309-204-268	BY 268
D 531		8309-215-020	1N 4004
D 534		8309-215-020	1N 4004
D 554		8309-215-050	1N 4148
D 571		8309-204-228	BY 228
D 572		8309-210-144	SKE 4 G 2/06
D 616		8309-215-013	1N 4007
D 621		8309-560-384	SKB 380/C 1500 L 5 B
D 633		8309-517-033	BYW 32
D 634		8309-215-013	1N 4007
D 635		8309-215-013	1N 4007
D 647		8309-517-033	BYW 32
D 648		8309-517-033	BYW 32
D 652		8309-214-018	TD 190
D 653		8309-214-018	TD 190
D 656		8309-517-076	BYW 76
D 661		8309-517-072	BYW 72
D 671		8309-517-072	BYW 72
D 681		8309-712-822	MR 824-400
D 708		8309-707-109	ZPD 4,7
D 741		8309-215-050	1N 4148
D 743		8309-215-050	1N 4148
D 746		8309-214-018	TD 190
D 761		8309-215-050	1N 4148
D 763		8309-215-050	1N 4148
D 766		8309-214-018	TD 190
D 781		8309-215-050	1N 4148
D 783		8309-215-050	1N 4148
D 786		8309-214-018	TD 190

C 504		8563-720-206	0,068µF/100 V
C 511		8515-911-711	0,0115µF/1600 V
C 512		8515-911-424	0,027µF/400 V
C 513		8523-631-218	1800pF/400 V
C 514		8515-911-001	150pF/1600 V
C 516		8525-040-819	0,33µF/250 V
C 517		8525-040-819	0,33µF/250 V
C 521		8515-722-231	0,26µF/160 V
C 522		8515-722-231	0,26µF/160 V
C 528		8563-731-611	0,01µF/1500 V
C 529		8650-090-477	270pF/2 KV
C 530		8660-097-219	220pF/400 V
C 537		8563-720-206	0,068µF/100 V
C 573		8515-721-253	0,82µF/250 V
C 611		8660-097-241	3300pF/400 V
C 613		8660-097-241	3300pF/400 V
C 621		8650-090-510	1000pF/ 1 KV
C 622		8650-090-510	1000pF/1 KV
C 623		8650-090-510	1000pF/1 KV
C 624		8650-090-510	1000pF/1 KV
C 626		8443-306-055	220µF/385 V
C 634		8515-911-091	2200pF/2000 V
C 644		8525-033-487	8200pF/400 V
C 646		8525-033-487	8200pF/400 V
C 648		8563-731-409	0,047µF/400 V
C 656		8650-090-477	270pF/2 KV
C 657		8451-997-090	100µF/250 V
C 661		8650-090-477	270pF/2 KV
C 668		8415-166-147	1000µF/25 V
C 671		8650-090-477	270pF/2 KV
C 681		8650-090-477	270pF/2 KV
C 703		8515-722-467	0,022µF/400 V
C 722		8563-731-611	0,01µF/1500 V
C 727		8650-131-012	150pF/2 KV

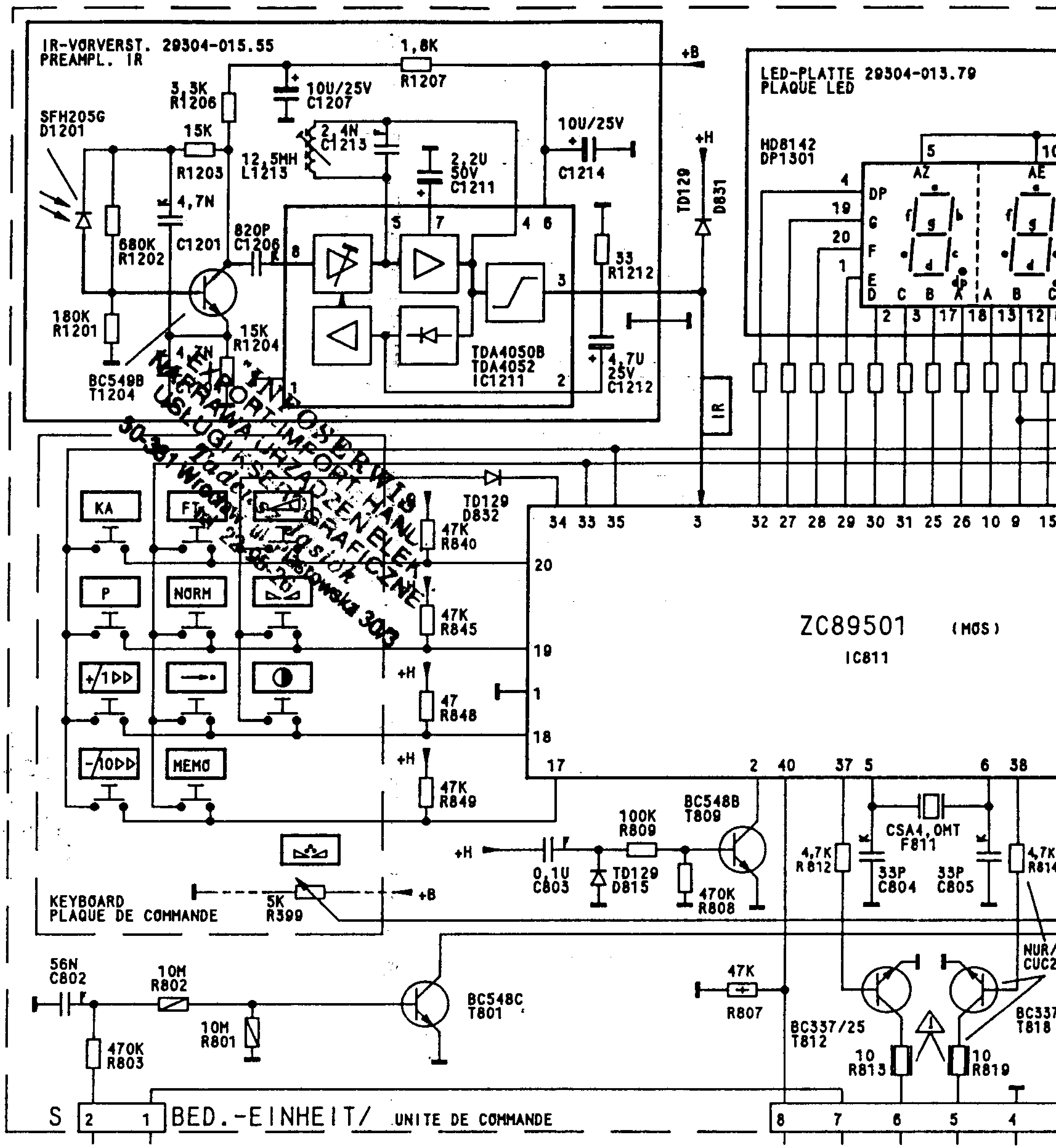
R 337		8705-269-301	15 KΩ
R 501		8700-014-015	3,9 Ω
R 502		8705-328-993	0,51 Ω
R 504		8705-269-033	22 Ω
R 513		8700-249-083	2,7 KΩ NB
R 523		8705-221-271	820 Ω
R 524		8700-119-017	4,7 Ω
R 525		8735-003-033	0,33 Ω
R 526		8311-201-073	PTC 2 G P 2390-J 146

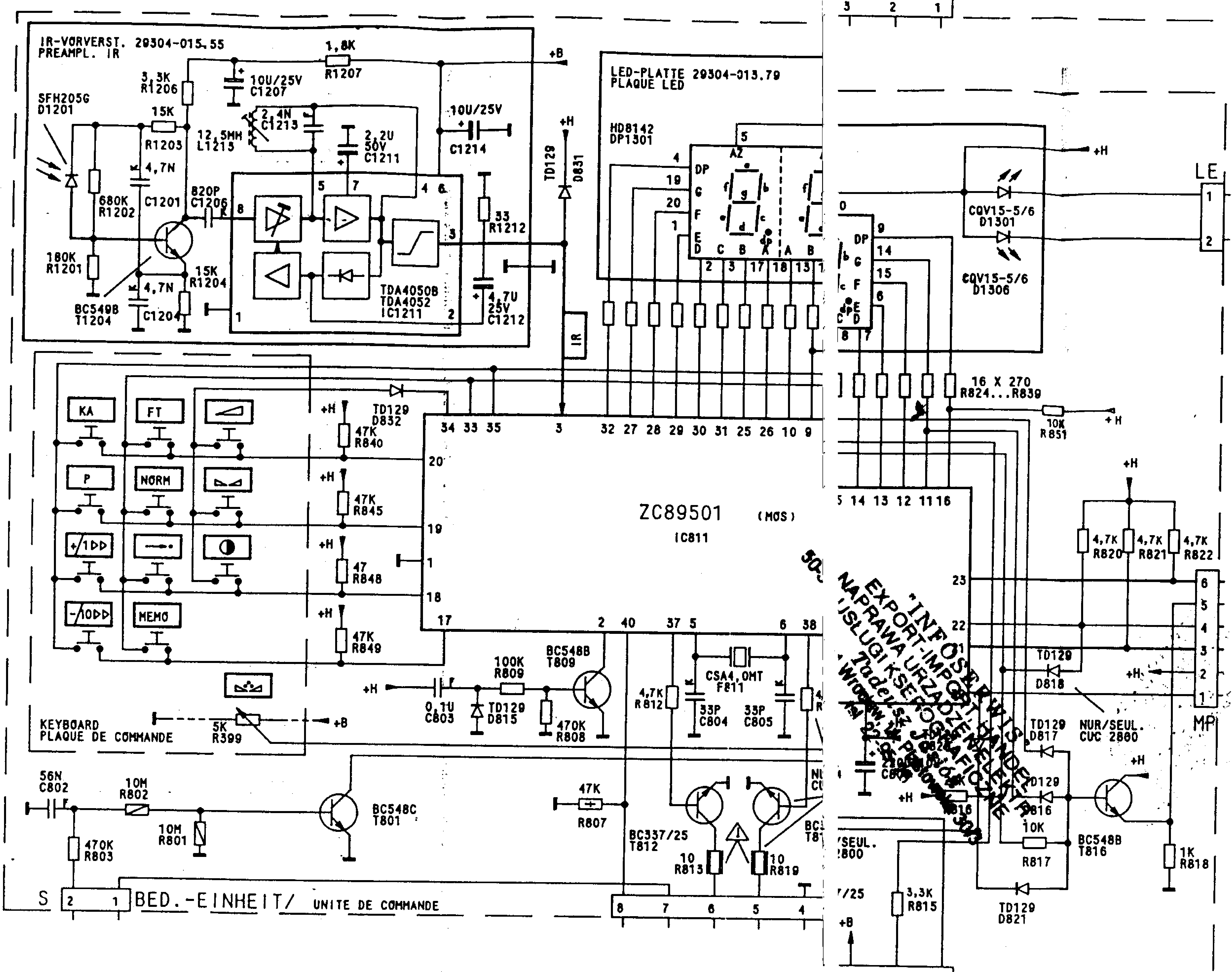
Pos. No.	Fig. No.	Bestell-Nr./Part No. Réf./Nr. d'ordinazioni	Benennung Description Désignation Denominaz
R 527		8730-179-221	7W/6,8 Ω
R 528		8705-221-225	10 Ω
R 531		8700-201-081	2,2 KΩ NB
R 533		8700-000-073	1 KΩ
R 550		8765-098-001	1 Ω
R 554		8790-047-135	1 KΩ
R 561		8790-047-164	100 KΩ
R 571		8701-230-817	4,7 Ω
R 616		8705-321-083	2,7 KΩ
R 617		8311-201-462	PTC 1 G D
R 621		8730-199-016	11W/4,3 Ω
R 623		8311-400-125	VDR VZA 27
R 624		8716-250-158	3,6 MΩ VD
R 626		8705-369-325	150 KΩ
R 627		8718-250-014	4,7 MΩ VDE
R 631		8766-326-996	0,68 Ω
R 646		8700-161-131	270 KΩ
R 647		8796-101-142	2,5 KΩ
R 648		8750-210-049	7W/100 Ω
R 656		8705-329-315	56 KΩ
R 661		8735-003-022	0,22 Ω
R 671		8735-003-022	0,22 Ω
R 681		8735-002-022	2W/0,22 Ω
R 684		8705-369-271	820 Ω
R 686		8730-271-215	7W/3,9 Ω
R 704		8705-269-209	2,2 Ω
R 721		8705-226-281	2,2 KΩ
R 724		8797-215-674	470 KΩ
R 731		8790-047-135	1 KΩ
R 734		8705-329-113	47 KΩ
R 741		8705-369-103	18 KΩ
R 742		8700-201-069	680 Ω NB
R 754		8705-329-113	47 KΩ
R 761		8705-369-103	18 KΩ
R 762		8700-201-069	680 Ω NB
R 771		8790-047-135	1 KΩ
R 774		8705-329-113	47 KΩ
R 781		8705-369-103	18 KΩ
R 782		8700-201-069	680 Ω NB



Si 644		8315-618-002	1,25 A

Fig. No.	Bestell-Nr./Part No. Réf./Nr. d'ordinazioni	Benennung Description Désignation Denominazione
	8730-179-221	7W/6,8 Ω
	8705-221-225	10 Ω
	8700-201-081	2,2 KΩ NB
	8700-000-073	1 KΩ
	8765-098-001	1 Ω
	8790-047-135	1 KΩ
	8790-047-164	100 KΩ
	8701-230-817	4,7 Ω
	8705-321-083	2,7 KΩ
	8311-201-462	PTC 1 G Q 63100-P 2462-J 29
	8730-199-016	11W/4,3 Ω
	8311-400-125	VDR VZA 275
	8716-250-158	3,6 MΩ VDE
	8705-369-325	150 KΩ
	8718-250-014	4,7 MΩ VDE
	8766-326-996	0,68 Ω
	8700-161-131	270 KΩ
	8796-101-142	2,5 KΩ
	8750-210-049	7W/100 Ω
	8705-329-315	56 KΩ
	8735-003-022	0,22 Ω
	8735-003-022	0,22 Ω
	8735-002-022	2W/0,22 Ω
	8705-369-271	820 Ω
	8730-271-215	7W/3,9 Ω
	8705-269-209	2,2 Ω
	8705-226-281	2,2 KΩ
	8797-215-674	470 KΩ
	8790-047-135	1 KΩ
	8705-329-113	47 KΩ
	8705-369-103	18 KΩ
	8700-201-069	680 Ω NB
	8705-329-113	47 KΩ
	8705-369-103	18 KΩ
	8700-201-069	680 Ω NB
	8790-047-135	1 KΩ
	8705-329-113	47 KΩ
	8705-369-103	18 KΩ
	8700-201-069	680 Ω NB
	8315-618-002	1,25 A




IR-VORVERST. 29304-015.55
PREAMPL. IR
SFH205G
D1201
3,3K
R1206
15K
R1203
680K
R1202
180K
R1201
4,7N
C1201
4,7N
C1204
BC549B
T1204
15K
R1204
820P
C1206
10U/25V
C1207
1,8K
R1207
2,4N
C1213
12,5MH
L1215
2,2U
50V
C1211
10U/25V
C1214
TDA4050B
TDA4052
IC1211
33
R1212
4,7U
25V
C1212
+B
+H
TD129
D831
IR
LED-PLATTE 29304-013.79
PLAQUE LED
HD8142
DP1301
DP
G
F
E
D
C
B
A
AZ
dp
CQV15-5/6
D1301
CQV15-5/6
D1306
LE
16 X 270
R824...R839
10K
R851
KA
FT
P
NORM
+/1▷▷
-/10▷▷
MEMO
47K
R840
47K
R845
47
R848
47K
R849
TD129
D832
ZC89501
(MOS)
IC811
KEYBOARD
PLAQUE DE COMMANDE
5K
R399
0,1U
C803
TD129
D815
100K
R809
470K
R808
BC548B
T809
4,7K
R812
CSA4,0MT
F811
33P
C804
33P
C805
56N
C802
10M
R802
10M
R801
470K
R803
BC548C
T801
47K
R807
BC337/25
T812
10
R813
10
R819
4,7K
R820
4,7K
R821
4,7K
R822
TD129
D818
NUR/SEUL.
CUC 2880
TD129
D817
TD129
D816
10K
R817
BC548B
T816
1K
R818
3,3K
R815
TD129
D821
MP
S
BED.-EINHEIT/ UNITE DE COMMANDE