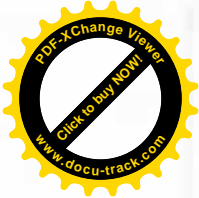
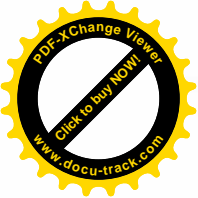


**ROHDE & SCHWARZ**

**SERVICE DOCUMENTATION**

Monitor

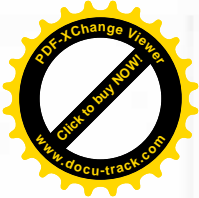
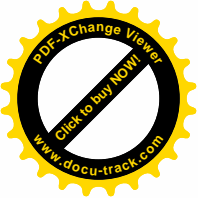
805.7317.02



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6.2	Testing and Adjustment	6.2
6.3	Troubleshooting	6.3

Parts lists  
Circuit diagrams  
Component location plans



## 6 Service Instructions Monitor

(See circuit diagram 805.7317 S)

### 6.1 Function Description

The monitor module generates the synchronized horizontal and vertical deflection voltages as well as the operating voltages required for the monitor tube.

V31 conducts if the signal DISPON is applied to X32/7. This applies P4 of the horizontal component N1 to ground if the horizontal deflection unit is plugged onto X24.

The horizontal synchronization pulses are applied from X32/9 to N1/9 via a differentiating network.

The circuitry of pins 13 and 15 determines the horizontal frequency (C13) of approx. 29 kHz which is adjusted using R21.

R6 can be used to adjust the horizontal phase in order to set the picture into the centre of the monitor tube.

N1/3 controls the driver transistor V30 which, together with T30 in the collector circuit, drives the line output stage transistor V31.

The horizontal deflection coils, the linearity controller L40 and the S-correction capacitor C40 are in series and are arranged directly in the output circuit of the output stage transistor.

The line transformer is connected to +85 V via R70 and C70. This filter element protects the remaining circuit from line-frequency currents and enables stabilization of the picture width.

The other voltages for operating the monitor tube are obtained using the line transformer.

The high-voltage cascade integrated in the line transformer generates the anode voltage of approx. 18.5 kV and the focussing voltage which is adjusted using R81.

The voltage for graticule 2 is generated during the line flyback by V90, C90 and is adjusted using R91.

V185 generates a negative voltage at C83 which is applied to graticule 1 via R85.

If the beam current (anode current) reaches excessively high values with a high intensity, the voltage doubling circuit (C81, C82, V80, V81) limits the beam current at graticule 1 by the current flowing at the base of the high-voltage cascade.

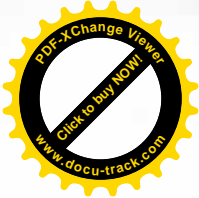
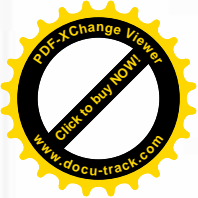
The circuitry of V120 and V121 controls the picture intensity by adjusting the voltage at graticule 1. The control voltage in the range from 0 to 10 V is applied via R120 of the amplifier circuit.

V187 generates approx. +24 V with which the vertical deflection stage is powered.

X32/1 is used to apply the horizontal synchronization pulses to the integrated vertical deflection circuit whose output stage is short-circuit-proof and overload-proof. The circuitry enables the vertical frequency, amplitude, linearity and position to be adjusted.

The inputs of amplifier V180, V181 are in parallel with the vertical deflection coils. This circuitry enables graticule correction (parabolic correction, trapezoidal correction) and adjustment of the horizontal amplitude in that direct current is derived by V181 which charges capacitor C60 via L45.

The monitor tube is heated using the +12-V supply via the series resistor R110.



## 6.2 Testing and Adjustment

The following voltages must be present in order to operate and adjust the monitor:

X41/5: +85 V  $\pm$  1 % Approx. 300 to 400 mA, depending on picture contents and intensity

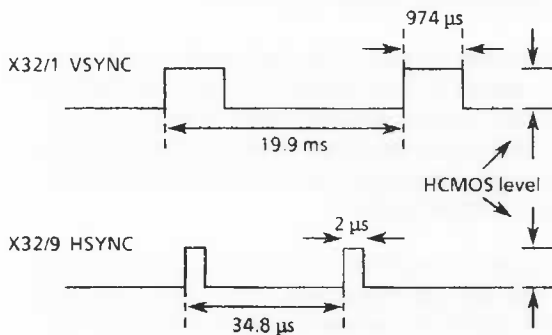
X41/3: +12 V  $\pm$  5 % Max. approx. 1 A including monitor tube heating

The adjustment (see Service Manual Display Unit) is carried out in the instrument with the following units connected:

Video board	805.7817
Socket board	805.7017
Monitor (9")	805.8007

The monitor is driven by the graphics processor.

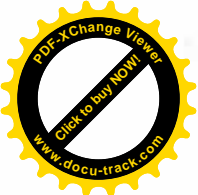
The synchronization signals must be applied as follows:



These signals as well as the intensity setting and the switch-on command are applied to the following pins:

X32/2,4,6,8,10	GNDD	Ground
X32/1	VSYNC	Vertical synchronization
X32/5	BRIGHT	Intensity 0 to 10 V
X32/7	DISPON	Monitor on (+5 V, HCMOS level)
X32/9	HSYNC	Horizontal synchronization

The R, G and B signals are applied to the video board.



## 6.3 Troubleshooting

### **CAUTION: HIGH TENSION !**

The monitor tube is dark and shows no response:

- Check fuse F1 and measure current if possible (approx. 330 mA  $\pm$  20 %).
- Check X41/5 (85 V  $\pm$  1 %) and X41/3 (12 V  $\pm$  5 %).
- X32/7 (DISPON) must be High (HCMOS level).
- X24 (horizontal deflection) is not plugged in or has no contact; the component N1 cannot be switched on by V1.
- X32/5 (intensity) must be set brightly enough.

The vertical deflection obtains its supply of approx. 24 V from the horizontal output stage and can therefore only operate if the latter functions correctly.

If the horizontal output stage does not function correctly, check the horizontal control and the horizontal output stage using the following oscillograms (Figs. 6-1 to 6-5).

If F1 is broken or if the current is unexpectedly high, it is recommendable to check the control by first disconnecting the horizontal output stage from the power supply (desolder R74 or R71). The control can then be checked back to the base of V31 using an oscilloscope (Figs. 6-1 to 6-3).

**Caution when making measurements on the horizontal output stage: use a high-voltage probe!**

The vertical deflection is obtained from N2. This IC is protected against a short-circuit at the output and thermal overloading. V181 operates as a width modulator (Fig. 6-4).

If the voltage at the collector of V181 no longer shows the sag and if V181 is switched through continuously, R181 (horizontal amplitude), R172 (trapezoidal) and R183 (parabolic) can no longer be set. Because of the feedback from L40 (HLIN), V181 can be corrected again by adjusting the former (Fig. 6-5).

### Oscillograms

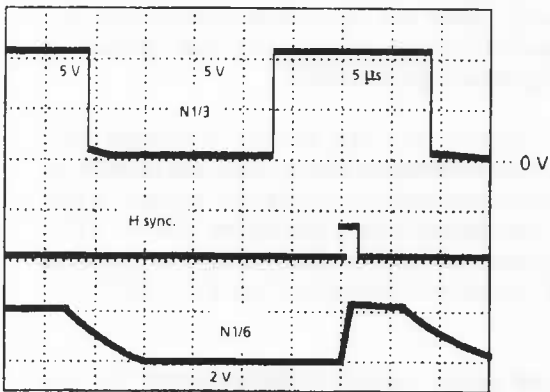


Fig. 6-1

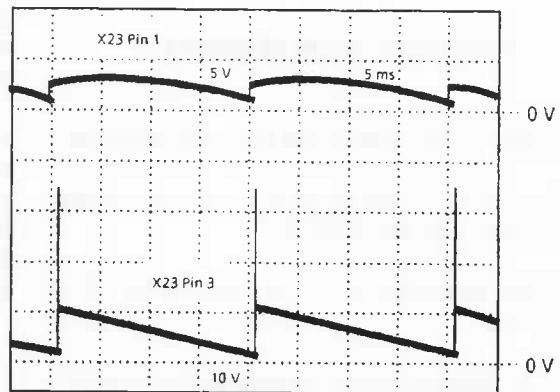


Fig. 6-4

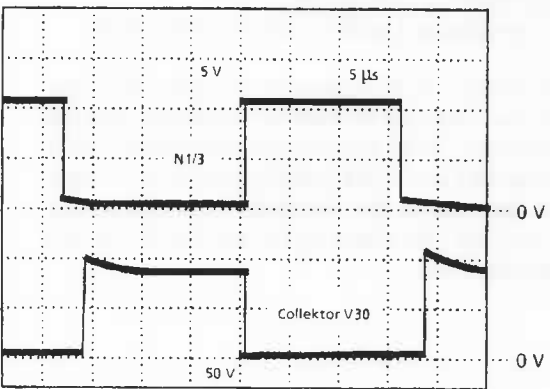


Fig. 6-2

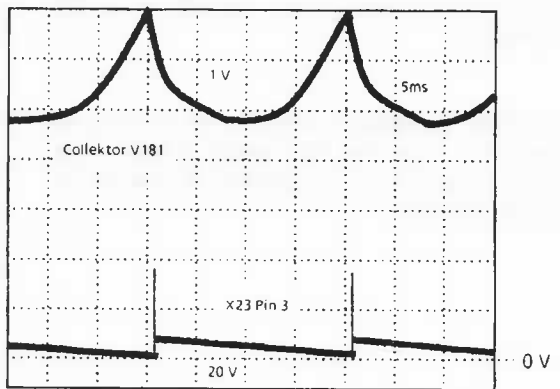


Fig. 6-5

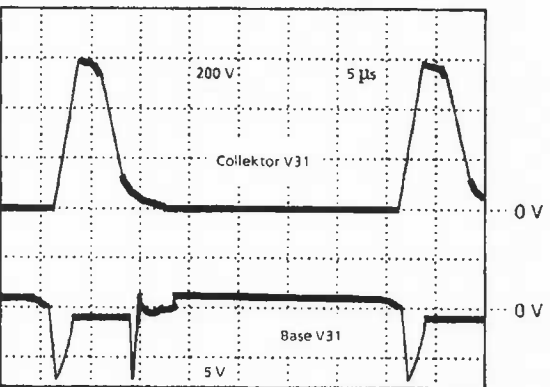
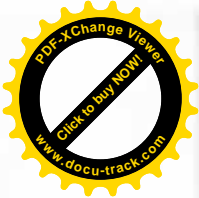
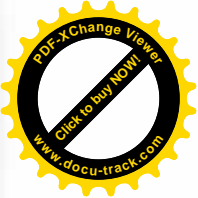
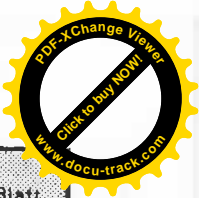
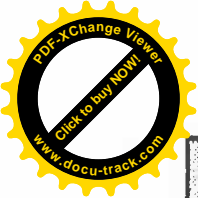


Fig. 6-3



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Schaltteillisten  
Stromläufe  
Bestückungspläne  
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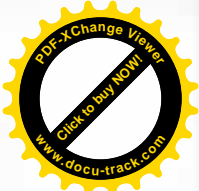
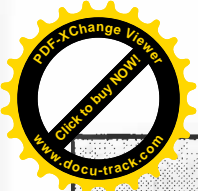


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	13	0987			

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
.	ZUGEH.STROML./CIRC.DIAGR. 805.7317 S		
C1	CK 470NF+-20%63V QUADER CAPACITOR	CK 087.0943	
C2	ROEDERST MKC1862-447/06 CC 100PF+-2%6X9NPO CAPACITOR	CC 087.6541	
C3	VALVO 2222 678 10101 CK 68NF+-20%400V 7X13X18 CAPACITOR	CK 087.4461	
C4	ROEDERST MKC1862-368/4 CK 220NF+-20%100V QUADER CAPACITOR	CK 087.4049	
C5	ROEDERST MKC1862-422/0 CE 2,2UF-10+50% 63V 9X13 ELECTROLYTIC CAPACITOR	CE 022.7637	
C6	ROEDERST ELKO EK 2/63 CE 100UF-10+50% 63V 15X20 ELECTROLYTIC CAPACITOR	CE 086.4300	
C7	SIEMENS ELKOB 41316-A8107-Z TRIMMWERT / SELECTED		
C10	CK 3,3NF+-2,5%63V RM5 KP POLYPROPYLENE CAPACITOR	CK 099.6158	
C11	WIMA FKP2 3300/2,5%/63V CK 680NF+-20%63V QUADER CAPACITOR	CK 099.2200	
C12	ERO MKC 1862-468-06-6 CE 4,7UF-10+50% 40V 9X13B ELECTROLYTIC CAPACITOR	CE 086.4397	
C13	ROEDERST ELKO EKU 4/40 CK 10NF+-2,5%63V RM5 KP POLYPROPYLENE CAPACITOR	CK 099.6187	
C30	WIMA FKP2 10NF/2,5%/63V CK 150NF+-20%100V QUADER PLASTIC-FOIL CAPACITOR	CK 087.4032	
C31	ROEDERST MKC1862-415/0 CK 470NF+-20%63V QUADER CAPACITOR	CK 087.0943	
C32	ROEDERST MKC1862-447/06 CK 6,8NF+-20%160V RM10 PLASTIC-FOIL CAPACITOR	CK 006.4643	
C35	ROEDERST KC1849-268/1 CK 1,5UF+-10% 63V QUADER CAPACITOR	CK 087.0972	
C38	ROEDERSTEI MKC 1862 515/06 CK 1,0NF+-2,5%630V 8,5RD NUR VAR : 03 CAPACITOR	060.6470	
C39	SIEMENS B31063-A 6102-H CK 1,0NF+-2,5%630V 8,5RD NUR VAR : 03 CAPACITOR	060.6470	
	SIEMENS B31063-A 6102-H		

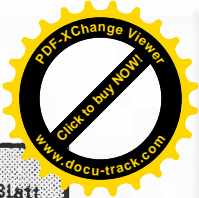
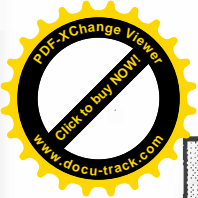
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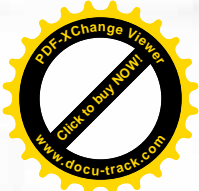
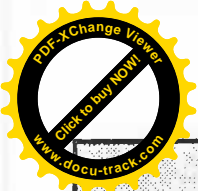
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C40	MODEL 03 ONLY CK 1,0UF+-10%250V QUADER NUR VAR : 02 30 CAPACITOR ITT MKC42544/24110	CK 087.4255	
C40	MODEL 02 30 ONLY CK 470NF+-20%250V QUADER NUR VAR : 03 CAPACITOR ITT 42544-14047	CK 087.4232	
C50	TRIMMWERT / SELECTED		
C51	CK 15NF+-10%1KV CAPACITOR	805.7617	
C52	WIMA FKP1 0,015UF 1000V CK 4,7NF+-10%1,5KV7X17X27 POLYPROPYLENE CAPACITOR	375.6573	
C60	WIMA FKP1 4700PF+-10% 1,5 CK 6,8UF+-10% 63V QUADER CAPACITOR	CK 087.4010	
C70	ROEDERST MKC1862-568/06+10% CK 4,7UF+-10%100V QUADER PLASTIC-FOIL CAPACITOR	CK 087.4126	
C81	ROEDERST MKC1862-547/0+10% CK 150NF+-20%100V QUADER PLASTIC-FOIL CAPACITOR	CK 087.4032	
C82	ROEDERST MKC1862-415/0 CK 220NF+-20%100V QUADER CAPACITOR	CK 087.4049	
C83	ROEDERST MKC1862-422/0 CE 22UF-10+50%160V12RDX30 ELECTROLYTIC CAPACITOR	CE 518.0913	
C86	SIEMENS B 43588-C 1226-T CK 470NF+-20%250V QUADER PLASTIC-FOIL CAPACITOR	CK 006.5191	
C87	VALVO MKT344/0,47/20/250 CK 150NF+-20%100V QUADER PLASTIC-FOIL CAPACITOR	CK 087.4032	
C90	ROEDERST MKC1862-415/0 CK 10 NF+-20% 1000V QUAD PLASTIC-FOIL CAPACITOR	CK 065.7939	
C110	ROEDERST MKT1822/310/10 CE 470UF-10+50% 16V 15X20 ELECTROLYTIC CAPACITOR	CE 087.0420	
C130	ROEDERST ELKO EK 470/16 CE 22UF-10+50%160V12RDX30 ELECTROLYTIC CAPACITOR	CE 518.0913	
C150	SIEMENS B 43588-C 1226-T CK 10NF+-20%400V5X10X13 CAPACITOR	CK 087.4655	
C151	ROEDERST MKC-1862-310/4 CE 10UF -10+50% 63V 9X13 ELECTROLYTIC CAPACITOR	CE 022.7650	
C152	ROEDERST ELKOEK10/63 CE 100UF-10+50% 25V 13X13 ELECTROLYTIC CAPACITOR	CE 208.4007	
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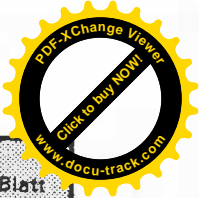
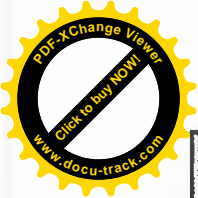
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C153	CE 1MIF-10+50%40V16,5X30 ELECTROLYTIC CAPACITOR	379.4552	
C154	ROEDERSTEI EKM00 JJ 410G CE 1MIF-10+50%40V16,5X30 ELECTROLYTIC CAPACITOR	379.4552	
C155	ROEDERSTEI EKM00 JJ 410G CK 470NF+-20%63V QUADER CAPACITOR	CK 087.0943	
C156	ROEDERST MKC1862-447/06 CK 150NF+-20%100V QUADER PLASTIC-FOIL CAPACITOR	CK 087.4032	
C157	ROEDERST MKC1862-415/0 CK 150NF+-20%100V QUADER PLASTIC-FOIL CAPACITOR	CK 087.4032	
C158	ROEDERST MKC1862-415/0 CK 470NF+-20%63V QUADER CAPACITOR	CK 087.0943	
C159	ROEDERST MKC1862-447/06 CC 3,3PF+-0,25PF3X4NPO CAPACITOR	CC 087.6364	
C160	VALVO 2222 678 09338 CE 47UF-10+50% 40V 9X13 ELECTROLYTIC CAPACITOR	CE 006.7142	
C161	ROEDERST EK 00 CB 247 G CK 150NF+-20%100V QUADER PLASTIC-FOIL CAPACITOR	CK 087.4032	
C170	ROEDERST. MKC1862-415/0 CE 1MIF-10+50%40V16,5X30 ELECTROLYTIC CAPACITOR	379.4552	
C171	ROEDERSTEI EKM00 JJ 410G CE 470UF-10+50% 40V 15X30 ELECTROLYTIC CAPACITOR	CE 087.0572	
C180	ROEDERST ELKO EK470/40 CK 330NF+-20%100V QUADER CAPACITOR	CK 087.4055	
C195	ROEDERST MKC1862-433/0 CE 10UF -20+50%100V8,5X20 ELECTROLYTIC CAPACITOR	CE 022.7943	
F1	ROEDERST ELKOEBS-IS-10/100 SS SCHMELZ.T1,25 DIN41662 FUSE	SS 020.7475	
L40	WICKMANN T1,25 DIN 41662 TROP AZ AT4042/26 LIN.REGLER LINEARITY CONTROL	375.6509	
L45	VALVO 3113 258 5286 LD BRUECKENSPULE 520UH COIL	805.7346	
N1	VALVO 3122 138 9655 BO TDA2593 FS-HORIZ.KOMB MONOL.TV-HORIZONT.KOMBIN.	375.6344	
N2	VALVO TDA 2593 BO TDA2653A FS-VERTIKKOMB TDA2653A	375.6350	
	VALVO TDA 2653 A		

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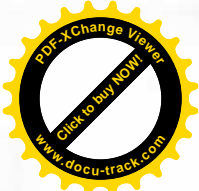
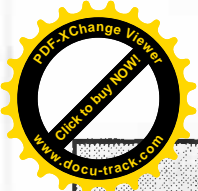
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P180	VL WIRE-WRAP PIN WIRE-WRAP PIN BERG NR. 75 403-001	VL 088.4507	
R1	RL 0,35W 1,50KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/1,50K-F-D	RL 083.0732	
R3	RL 0,35W1,82MOHM+-1%TK50 METALFILMRESISTOR RESISTA MK2 1,82MOHM 1% TK50	RL 099.8150	
R4	RL 0,35W 33,2KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/33,2K-F-C	RL 083.1674	
R5	RL 0,35W 47,5KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/47,5K-F-C	RL 083.1800	
R6	RS 0,5W10KOHM+-10%10X10X5 CERMET POTENTIOMETER T BOURNS 3386X1-103	RS 247.7526	
R7	RL 0,35W12,10 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/12,10HM-F-D	RL 082.8930	
R8	RL 0,35W 10,0 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/10OHM-F-D	RL 082.8852	
R9	RL 0,35W 22,1KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/22,1K-F-C	RL 083.1545	
R10	RL 0,35W 18,2KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/18,2K-F-C	RL 083.1480	
R12	RL 0,35W 2,21KOHM+-1%TK50 RESISTOR DRALORIC SMA 0207/2,21K-F-C	RL 082.2477	
R13	RL 0,35W 1KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/1K-F-C	RL 082.2160	
R16	RL 0,35W 3,32KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/3,32K-F-D	RL 083.0990	
R17	RL 0,35W 2,74KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/2,74K-F-D	RL 083.0926	
R18	RL 0,35W 82,5KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/82,5K-F-C	RL 082.2302	
R19	RL 0,35W 9,09KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/9,09K-F-C	RL 082.2177	
R20	RL 0,35W 121KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/121K-F-C	RL 083.2070	
R21	RS 0,5W10KOHM+-10%10X10X5 CERMET POTENTIOMETER T BOURNS 3386X1-103	RS 247.7526	



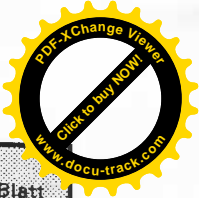
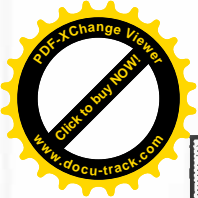
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R30	RL 0,35W 221 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/221OHM-F-D	RL 083.0084				
R31	RL 0,35W 221 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/221OHM-F-D	RL 083.0084				
R32	RL 0,35W 1,21KOHM+-1%TK50 NUR VAR : 02 30 RESISTOR DRALORIC SMA0207/1,21K-F-D	RL 083.0655				
R32	MODEL 02 30 ONLY RL 0,35W 2,21KOHM+-1%TK50 NUR VAR : 03 RESISTOR DRALORIC SMA 0207/2,21K-F-C	RL 082.2477				
R33	RD 9W1,2KOHM+-5%Q9X09XL38 NUR VAR : 02 30 WIRE WOUND RESISTOR VITROHM 214-8 1,2 KOHM 5%	805.7475				
R33	RD 9W 1KOHM+-5% Q9XQ9XL38 NUR VAR : 03 WIRE WOUND RESISTOR VITROHM 214-8 1KOHM 5%	805.7930				
R34	MODEL 03 ONLY RL 0-WIDERSTAND DIN 0204 0-OHM RESISTOR DRALORIC OMA 0204	RL 069.0000				
R35	RD 5W 1,2OHM+-5%Q9XQ9XL25 WIRE WOUND RESISTOR VITROHM 208-8 1,2OHM 5%	805.7481				
R36	RL 0,35W 39,2 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/39,2OHM-F-D	RL 082.9420				
R40	RL 1W 1 KOHM+-1%TK100 NUR VAR : 02 30 METAL FILM RESISTOR RESISTA MK5 1 KOHM 1%TK100	RL 006.4943				
R40	MODEL 02 03 ONLY RL 1W 121 OHM+-1%TK100 NUR VAR : 03 METAL FILM RESISTOR RESISTA MK5 121 OHM 1% TK100	RL 006.3776				
R41	MODEL 03 ONLY RL 0-WIDERSTAND DIN 0204 0-OHM RESISTOR DRALORIC OMA 0204	RL 069.0000				
R44	RL 0-WIDERSTAND DIN 0204 NUR VAR : 02 30 0-OHM RESISTOR DRALORIC OMA 0204	RL 069.0000				
R45	MODEL 02,30 ONLY RL 0-WIDERSTAND DIN 0204 NUR VAR : 03 0-OHM RESISTOR DRALORIC OMA 0204	RL 069.0000				

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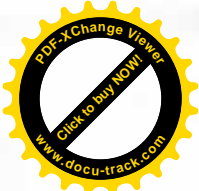
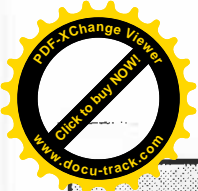


ROHDE&SCHWARZ	AZ	Datum	Schaltteilleiste für	Sachnummer	Blatt
	13	0987	Parts list for	Stock Nr.	Page
			ED MONITOR	805.7317.01 SA	6

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R46	MODEL 03 ONLY RL 0-WIDERSTAND DIN 0204 0-OHM RESISTOR DRALORIC OMA 0204 NICHT BESTUECKT NOT ON PCB	RL 069.0000	
R50	RD 9W 5,1OHM+-5%Q9XQ9XL38 NUR VAR : 02 30 WIRE WOUND RESISTOR VITROHM 214-8 5,1 OHM 5% MODEL 02 30 ONLY	805.7469	
R50	RD 9W 100OHM+-5%Q9XQ9XL38 NUR VAR : 03 WIRE WOUND RESISTOR VITROHM 214-8 100OHM 5% MODEL 03 ONLY	805.7923	
R61	RL 0-WIDERSTAND DIN 0204 0-OHM RESISTOR DRALORIC OMA 0204	RL 069.0000	
R62	RL 0,35W 10,0KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/10K-F-D	RL 083.1297	
R70	RD 9W 18 OHM+-5%Q9XQ9XL38 WIRE WOUND RESISTOR VITROHM 214-8 18 OHM 5%	805.7452	
R71	RL 0-WIDERSTAND DIN 0204 NUR VAR : 02 30 0-OHM RESISTOR DRALORIC OMA 0204 MODEL 02 30 ONLY	RL 069.0000	
R72	RL 0-WIDERSTAND DIN 0204 NUR VAR : 03 0-OHM RESISTOR DRALORIC OMA 0204 MODEL 03 ONLY	RL 069.0000	
R80	RL 1W 2,21KOHM+-1%TK100 METAL FILM RESISTOR RESISTA MK5 2,21KOHM 1%TK100	RL 006.4989	
R81	RS 3,8W 24MOHM+-10% CERMET FOKUS POTENTIOMETER VALVO 2322 460 90022	805.7398	
R83	RL 0,35W 221 KOHM+-1%TK50 NUR VAR : 02 30 RESISTOR DRALORIC SMA0207/221K-F-C MODEL 02 30 ONLY	RL 083.2270	
R83	RL 0,35W 475 OHM+-1%TK50 NUR VAR : 03 RESISTOR DRALORIC SMA0207/475OHM-F-D MODEL 03 ONLY	RL 083.0390	
R85	RL 0,35W 475 KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/475K-F-C	RL 083.2593	
R90	RL 0,35W 22,1KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/22,1K-F-C	RL 083.1545	

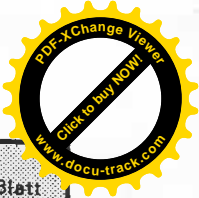
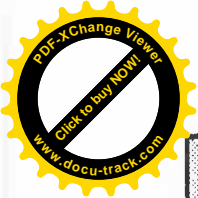


ROHDE&SCHWARZ	AZ	Datum Date	Schaltteilleiste für Parts list for	Sachnummer Stock Nr.	Blatt Page
	13	0987	ED MONITOR	805.7317.01 SA	7
Kennzeichen Component No.	Benennung/Beschreibung Designation		Sachnummer Stock No.	enthalten in contained in	
R91	RS 1W 500KOHM+-10% CERM22U TRIMMING POTENTIOMETER		805.7417		
R92	VITROHM 450-20 500KOHM 10% RL 0,35W 274 KOHM+-1%TK50 RESISTOR		RL 083.2364		
R110	DRALORIC SMA/207/274K-F-C RJ 4W 8,2 OHM+-10% TK400 NUR VAR : 02 30 METALLIC OXIDE RESISTOR		805.7430		
R111	RESISTA WK 8 8,2OHM 10% T400 MODEL 02 30 ONLY RL 0-WIDERSTAND DIN 0204 NUR VAR : 02 30 0-OHM RESISTOR		RL 069.0000		
R111	DRALORIC OMA 0204 MODEL 02 30 ONLY RL 0-WIDERSTAND DIN 0204 NUR VAR : 03 0-OHM RESISTOR		RL 069.0000		
R120	DRALORIC OMA 0204 MODEL 03 ONLY RL 0,35W 3,92KOHM+-1%TK50 NUR VAR : 02 30 RESISTOR		RL 083.1039		
R120	RESISTA MK2 MODEL 02 30 ONLY RL 0-WIDERSTAND DIN 0204 NUR VAR : 03 0-OHM RESISTOR		RL 069.0000		
R121	DRALORIC OMA 0204 MODEL 03 ONLY RL 0,35W 1KOHM+-1%TK50 NUR VAR : 02 30 RESISTOR		RL 082.2160		
R121	DRALORIC SMA0207/1K-F-C MODEL 02 30 ONLY RL 0,35W 475 OHM+-1%TK50 NUR VAR : 03 RESISTOR		RL 083.0390		
R122	DRALORIC SMA0207/475OHM-F-D MODEL 03 ONLY RL 0,35W 3,32KOHM+-1%TK50 NUR VAR : 02 30 RESISTOR		RL 083.0990		
R122	DRALORIC SMA0207/3,32K-F-D MODEL 02 30 ONLY RL 0,35W 4,32KOHM+-1%TK50 NUR VAR : 03 RESISTOR		RL 082.6572		
R123	DRALORIC SMA0207/4,32K-F-D MODEL 03 ONLY RL 0,35W 47,5KOHM+-1%TK50 RESISTOR		RL 083.1800		
R124	DRALORIC SMA/207/47,5K-F-C RL 0,35W 1,82KOHM+-1%TK50 RESISTOR		RL 082.2277		
	DRALORIC SMA0207/1,82K-F-C				



<b>ROHDE&amp;SCHWARZ</b>	<b>Az</b>	<b>Datum</b> Date	<b>Schalttafeliste für</b> Parts list for	<b>Sachnummer</b> Stock Nr.	<b>Blatt</b> Page
	13	0987	ED MONITOR	805.7317.01 SA	8

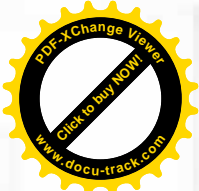
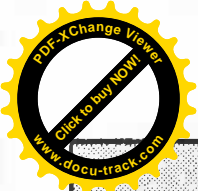
Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R125	RL 0,35W 357 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/357OHM-F-D	RL 083.0284	
R126	RL 0,35W 392 KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/392K-F-C	RL 083.2512	
R127	RL 0,35W 47,5KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/47,5K-F-C	RL 083.1800	
R128	RL 0,35W 4,75KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/4,75K-F-D	RL 083.1097	
R130	RL 0,35W22,10 OHM+-1%TK50 NUR VAR : 02 30 RESISTOR DRALORIC SMA0207/22,10HM-F-D	RL 082.9188	
R130	MODEL 02 30 ONLY RL 0,35W 100 OHM+-1%TK50 NUR VAR : 03 METALFILM-RESISTOR DRALORIC SMA0207/100/HM-F-D	RL 082.6543	
R150	MODEL 03 ONLY RL 0,35W 10,0KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/10K-F-D	RL 083.1297	
R151	RL 0,35W 10,0KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/10K-F-D	RL 083.1297	
R152	RL 0,35W 221 KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/221K-F-C	RL 083.2270	
R153	RL 0,35W 221 KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/221K-F-C	RL 083.2270	
R154	RL 0,35W 22,1KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/22,1K-F-C	RL 083.1545	
R155	RL 0,35W12,10 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/12,10HM-F-D	RL 082.8930	
R156	RL 0,35W 100KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/100K-F-C	RL 082.1764	
R157	RS 0,5W50KOHM+-10%10X10X5 CERMET POTENTIOMETER T BOURNS 3386-1-503	RS 087.7677	
R158	RL 0,35W 562 KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/562K-F-C	RL 083.2664	
R159	RS 0,5W100KOHM+-10%10X10X CERMET POTENTIOMETER T BOURNS 3386X-1-104	RS 087.7683	
R160	RL 0,35W 100KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/100K-F-C	RL 082.1764	



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		13	0987	ED MONITOR	805.7317.01 SA	9
Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in			
R161	RL 0,35W 3,32KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/3,32K-F-D	RL 083.0990				
R162	RL 0,35W 47,5KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/47,5K-F-C	RL 083.1800				
R163	RL 0,35W 12,1KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/12,1K-F-D	RL 083.1351				
R164	RL 0,35W 1KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/1K-F-C	RL 082.2160				
R165	RL 0,35W 15,0KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/15K-F-D	RL 083.1400				
R166	RL 0,35W 10,0KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/10K-F-D	RL 083.1297				
R167	RS 0,75W100OHM+-10% CERMET DEPOS.-CARBON POTENTIOMET BOURNS 3006P-1-100 OHM+-10%	RS 037.7338				
R168	RL 0,35W5,62 OHM+-1% TK50 METALFILMRESISTOR RESISTA MK2 5,62 OHM 1% TK50	RL 099.8044				
R169	RL 0,35W 221 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/221OHM-F-D	RL 083.0084				
R170	RL 0,35W3,32 OHM+-1%TK50 METALFILMRESISTOR RESISTA MK2 3,32 OHM 1% TK50	RL 099.7983				
R171	RS 0,5W1KOHM+-10%10X10X5 CERMET POTENTIOMETER BOURNS 3386X-1-102	RS 247.5917				
R172	RL 0,35W 10,0KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/10K-F-D	RL 083.1297				
R180	RL 0,35W 221 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/221OHM-F-D	RL 083.0084				
R181	RS 1W 1KOHM+-10% CERMET TRIMMING POTENTIOMETER VITROHM 450-20 1KOHM 10%	805.7423				
R182	RL 0,35W 221 OHM+-1%TK50 RESISTOR DRALORIC SMA0207/221OHM-F-D	RL 083.0084				
R183	RS 0,5W1KOHM+-10%10X10X5 CERMET POTENTIOMETER BOURNS 3386X-1-102	RS 247.5917				
R184	RL 0,35W 681 OHM+-1%TK50 NUR VAR : 02 30 RESISTOR DRALORIC SMA0207/681OHM-F-D	RL 083.0490				
R184	MODEL 02 30 ONLY RL 0,35W 475 OHM+-1%TK50 NUR VAR : 03 RESISTOR DRALORIC SMA0207/475OHM-F-D	RL 083.0390				
805.7317.01 SA BL 9+						

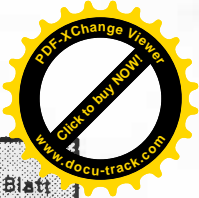
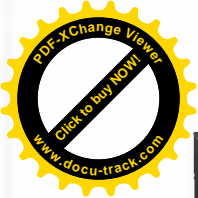
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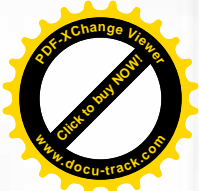
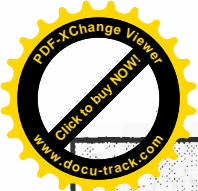
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	13	0987	Parts list for	Stock Nr.	Page
			ED MONITOR	805.7317.01 SA	10

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
R185	MODEL 03 ONLY RL 0,35W 681 OHM+-1%TK50 NUR VAR : 02 30 RESISTOR DRALORIC SMA0207/681OHM-F-D	RL 083.0490	
R185	MODEL 02 30 ONLY RL 0,35W 562 OHM+-1%TK50 NUR VAR : 03 RESISTOR DRALORIC SMA0207/562OHM-F-D	RL 083.0461	
R186	MODEL 03 ONLY RS 0,5W1KOHM+-10%10X10X5 CERMET POTENTIOMETER BOURNS 3386X-1-102	RS 247.5917	
R187	RL 0,35W 22,1KOHM+-1%TK50 RESISTOR DRALORIC SMA/207/22,1K-F-C	RL 083.1545	
R188	RL 0,35W 8,25KOHM+-1%TK50 NUR VAR : 02 30 RESISTOR DRALORIC SMA0207/8,25K-F-D	RL 083.1239	
R188	MODEL 02 30 ONLY RL 0,35W 3,92KOHM+-1%TK50 NUR VAR : 03 RESISTOR RESISTA MK2	RL 083.1039	
R189	MODEL 03 ONLY RL 0,35W 4,75KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/4,75K-F-D	RL 083.1097	
R190	RL 0,35W 1,82KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/1,82K-F-C	RL 082.2277	
R191	RL 0,35W 1KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/1K-F-C	RL 082.2160	
R195	RL 0,35W 1,21KOHM+-1%TK50 RESISTOR DRALORIC SMA0207/1,21K-F-D	RL 083.0655	
R830	RG 0,5W 10MOHM+-5% 2,5KV RESISTOR	007.3328	
R831	VALVO VR37 10MOHM 5% RG 0,5W 10MOHM+-5% 2,5KV RESISTOR VALVO VR37 10MOHM 5%	007.3328	
T30	LU TREIBERTRAF0 29:1 TRANSFORMER	805.7381	
T80	VALVO 3122 138 26060 LT ZEILENTRAF0 24/17KV TRANSFORMER VALVO 3122 138 36300	805.7369	
V1	AK BC337-40 NPN 45V 800MA TRANSISTOR INTERMETAL BC337-40	303.9524	



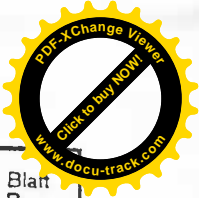
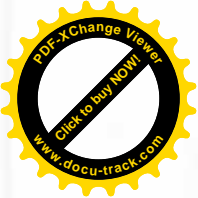
ROHDE&SCHWARZ		AZ	Datum Date	Schnittliste für Parts list for	Sachnummer Stock Nr.	Blatt Page
		13	0987	ED MONITOR	805.7317.01 SA	11
Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.		enthalten in contained in		
V30	AL BUX84 NPN 400V 2A0 TRANSISTOR VALVO BUX 84	AL 811.2436				
V31	AL BUW12A NPN 450V 8A0 POWER TRANSISTOR VALVO BUW12A	375.4758				
V32	AG BY228 GL1500V 5A0 RECTIFIER VALVO BY228	805.7575				
V33	AG BYV96E GL1000V 0A8 RECTIFIER VALVO BYV96E	AG 099.9034				
V70	AG BYV96E GL1000V 0A8 RECTIFIER VALVO BYV96E	AG 099.9034				
V80	AD BAV21 250V 0,25A UDI DIODE INTERMETAL BAV21	AD 082.6837				
V81	AD BAV21 250V 0,25A UDI DIODE INTERMETAL BAV21	AD 082.6837				
V90	AG BY584 GL1500 0A1 RECTIFIER VALVO BY584	805.7581				
V120	AK BC337-40 NPN 45V 800MA TRANSISTOR INTERMETAL BC337-40	303.9524				
V121	AL BUX84 NPN 400V 2A0 TRANSISTOR VALVO BUX 84	AL 811.2436				
V130	AG BYV96E GL1000V 0A8 RECTIFIER VALVO BYV96E	AG 099.9034				
V150	AD 1N4448 75V 0,15A UDI DIODE TEXAS INST 1N4448 GEGURTET	AD 012.0700				
V152	AD BAX12A 90V 0,80A UDI DIODE VALVO BAX12A	805.7569				
V180	AK BC327-40 PNP 45V 800MA TRANSISTOR INTERMETAL BC327-40	303.9518				
V181	AL BDX77 NPN 80V 8A0 TRANSISTOR VALVO BDX77	AL 300.6318				
V185	AG BYV96E GL1000V 0A8 RECTIFIER VALVO BYV96E	AG 099.9034				
V186	AG BYV96E GL1000V 0A8 NUR VAR : 03 RECTIFIER VALVO BYV96E	AG 099.9034				
V187	MODEL 03 ONLY AG BYV96E GL1000V 0A8 NUR VAR : 02 30 RECTIFIER VALVO BYV96E	AG 099.9034				
					805.7317	01 SA BL11+


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	13	0987	ED MONITOR	805.7317.01 SA	12

Kennzeichen Component No.	Benennung/Beschreibung Designation	Sachnummer Stock No.	enthalten in contained in
	MODEL 02 30 ONLY		
W45	DM FOCUS-KABEL FOCUS-CABLE HUENGERLE R&S.ZCHNG.805.7700	805.7700	
X21	FP EINLOETSTECKER 9POL CONNECTOR 9POL AMP 350712-1	681.1150	
X22	DX FOCUS-BUCHSENEINHEIT FOCUS FEMALE CON.	805.7717	
X23	FP EINLOETSTECKER 3POL. CONNECTOR 3POL. AMP 350789-1	805.7630	
X24	FP EINBAUSTECKER 4POL. CONNECTOR AMP P-N350211-1	344.9612	
X25	FR HOCHSPANNUNGSANSCHLUSS HIGH-VOLTAGE CONNECTOR HUENGERLE R&S.ZCHNG.805.7698	805.7698	
X26	FV FLACHSTECKER GR.6,3 FLAT-CABLE PLUG VOGT 3866A/MS-SN8	FV 530.5457	
X27	FV FLACHSTECKER GR.6,3 FLAT-CABLE PLUG VOGT 3866A/MS-SN8	FV 530.5457	
X32	DX BUCHSENEINHEIT. 2X5POL. 2X5-CONTACT FEMALE CON.	805.7681	
X41	DX BUCHSENEINHEIT 6POLIG 6-CONTACT FEMALE CON.	805.7598	
X51	FP KURZSCHL.BUCHSE OFFEN SHORTING PLUG BERG 76264-101	FP 342.1895	
X81	FP KURZSCHL.BUCHSE OFFEN SHORTING PLUG BERG 76264-101	FP 342.1895	
X50A	VL WIRE-WRAP PIN WIRE-WRAP PIN BERG NR. 75 403-001	VL 088.4507	
X50B	VL WIRE-WRAP PIN WIRE-WRAP PIN BERG NR. 75 403-001	VL 088.4507	
X50C	VL WIRE-WRAP PIN WIRE-WRAP PIN BERG NR. 75 403-001	VL 088.4507	
X80A	VL WIRE-WRAP PIN WIRE-WRAP PIN BERG NR. 75 403-001	VL 088.4507	
X80B	VL WIRE-WRAP PIN WIRE-WRAP PIN BERG NR. 75 403-001	VL 088.4507	
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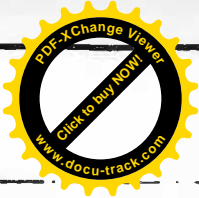
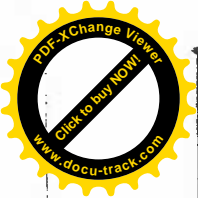


 <b>ROHDE &amp; SCHWARZ</b>	AI	Datum Date	Schaltteilliste für Parts list for EE SOCKET-BOARD	Sachnummer Stock No. 805.7017.01 SA	Blatt Page 1
	04	0187			

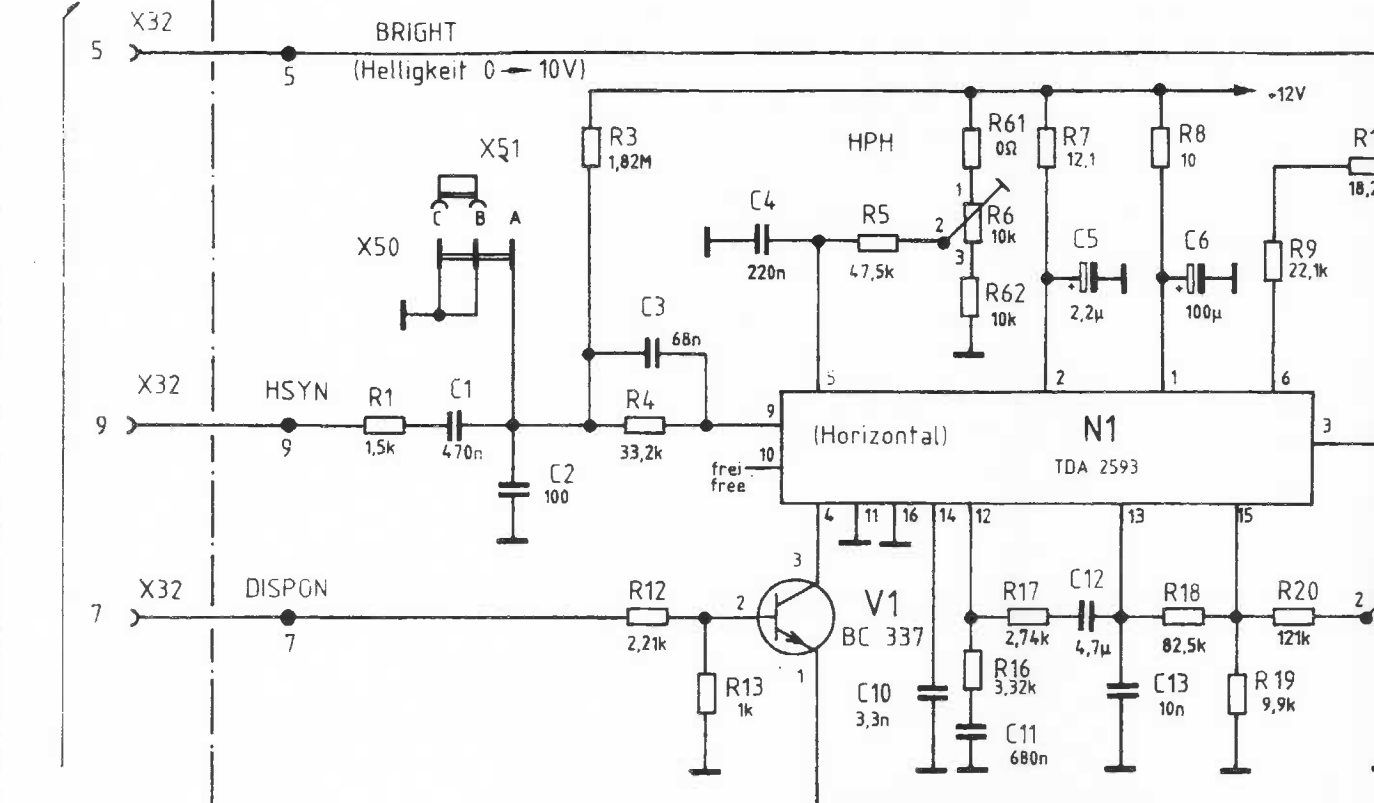
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.	ZUGEH. STROML./CIRC. DIAGR. 805.7017 S		
C531	CC 10NF+50-20% HDK6000RD19 CERAMIC CAPACITOR	CC 022.0710	
C532	RESISTA QBX619/10NF/2KV CC 10NF+50-20% HDK6000RD19 CERAMIC CAPACITOR	CC 022.0710	
L335	LD UKW-DR.Z=750 OHM 50MHZ CHOKE	LD 026.4578	
L534	VALVO 431202036641 LD UKW-DR.Z=750 OHM 50MHZ CHOKE	LD 026.4578	
L535	VALVO 431202036641 LD UKW-DR.Z=750 OHM 50MHZ CHOKE	LD 026.4578	
R531	RL 0,35W 100KOHM+-1%TK50 RESISTOR	RL 082.1764	
R532	DRALORIC SMA0207/100K-F-C RL 0,35W 100KOHM+-1%TK50 RESISTOR	RL 082.1764	
R533	DRALORIC SMA0207/100K-F-C RL 0-WIDERSTAND DIN 0204 0-OHM RESISTOR	RL 069.0000	
V530	AG 1N4007 GL1000V 1A0 RECTIFIER	AG 013.0310	
W535	AEG-TELEF 1N4007		
W535	DX MASSEKABEL W535	805.7146	
X531	FR BILDROEHRENSOCKEL 12P TUBESOCKET 12P.	805.7881	
X533	SMK S-B 0896 FV FLACHSTECKER GR.6,3 FLAT-CABLE PLUG	FV 530.5457	
X536	VOGT 3866A/MS-SN8 DX 9-POL. STECKEREINHEIT 9-CONTACT MALE CONNECTOR	805.7052	
X538	DX FOCUS-STECKEREINHEIT FOCUS MALE CONNECTOR	805.7046	
X540	DX BUCHSENEINHEIT ROT FEMALE CONNECTOR RED	805.7069	
X541	DX BUCHSENEINHEIT GRUEN FEMALE CONNECTOR GREEN	805.7075	
X542	DX BUCHSENEINHEIT BLAU FEMALE CONNECTOR BLUE	805.7081	

- ENDE -

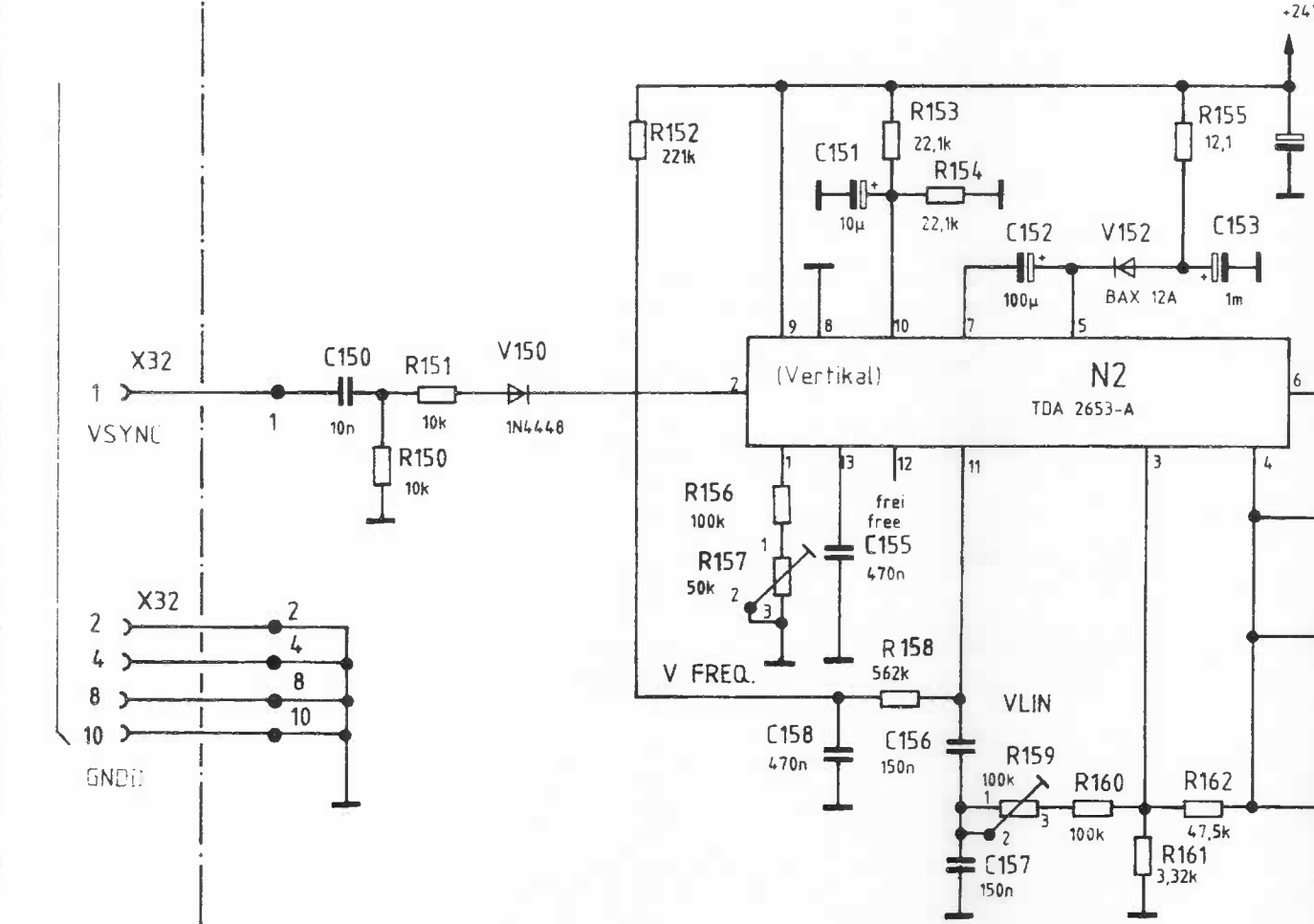
Für diese Unterlage behalten wir  
uns alle Rechte vor



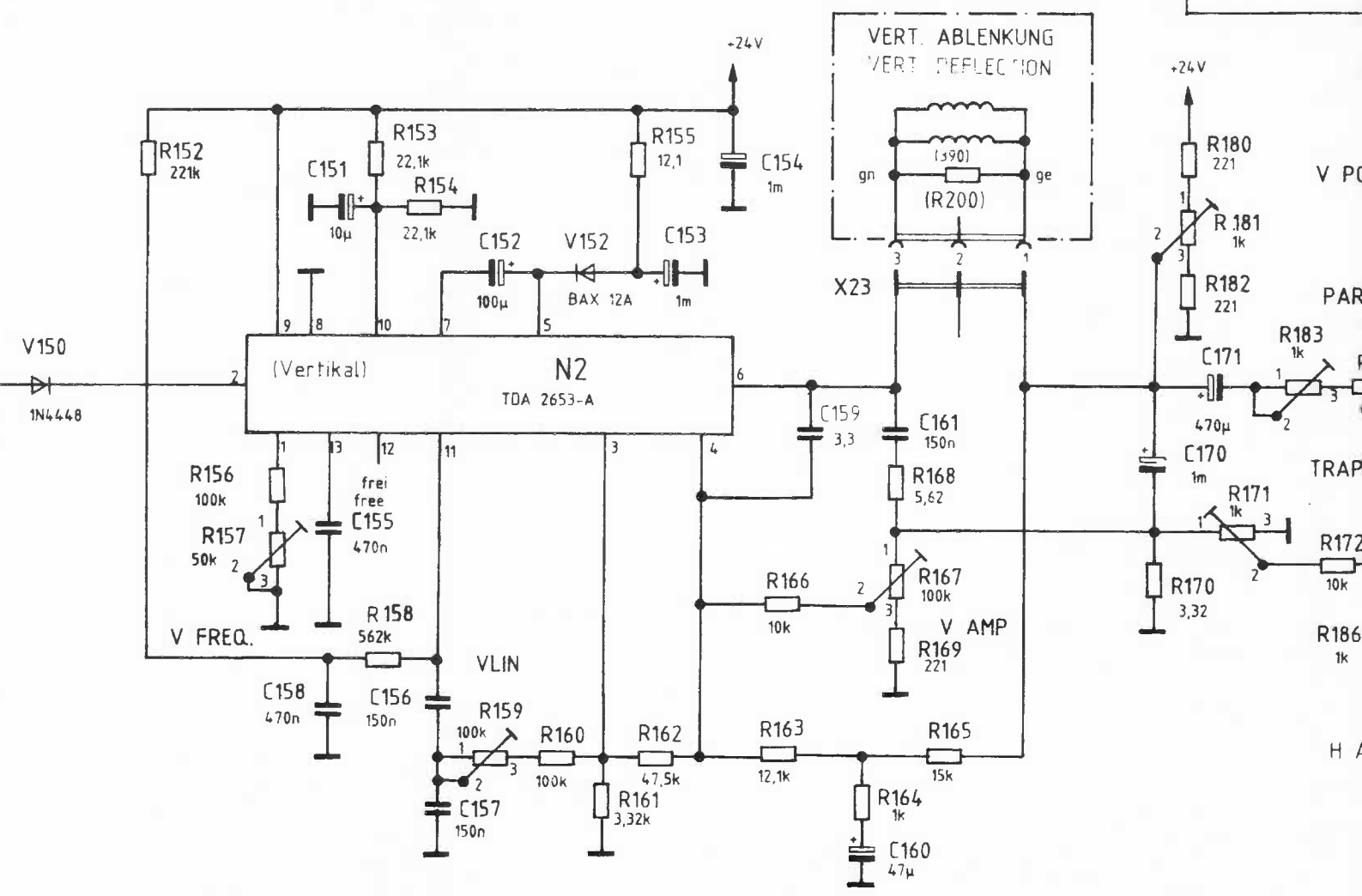
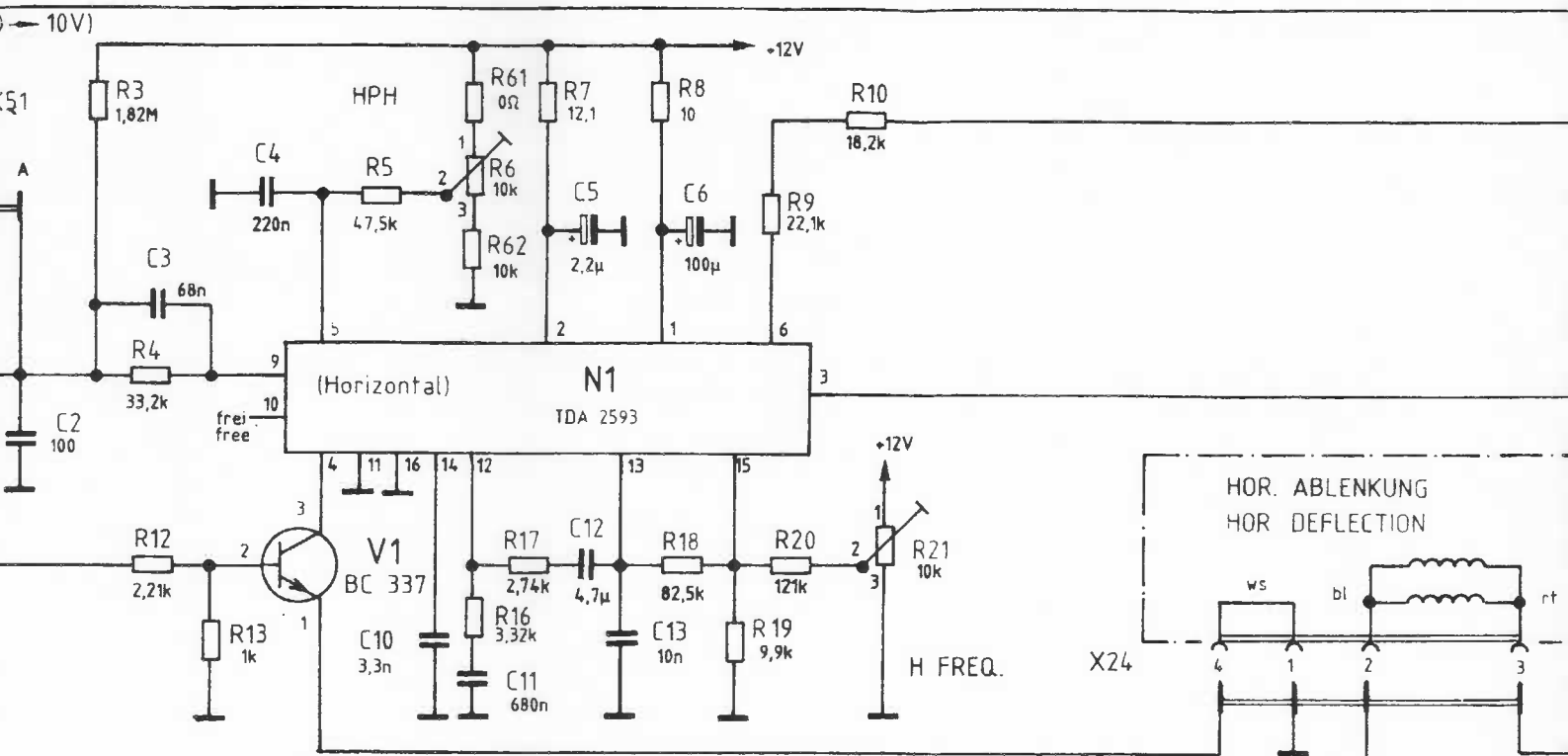
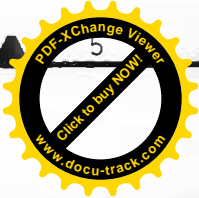
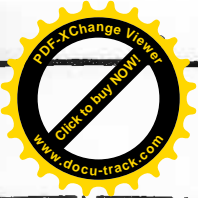
A  
B  
C  
D  
E  
F

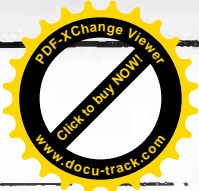


vom/from  
Motherboard

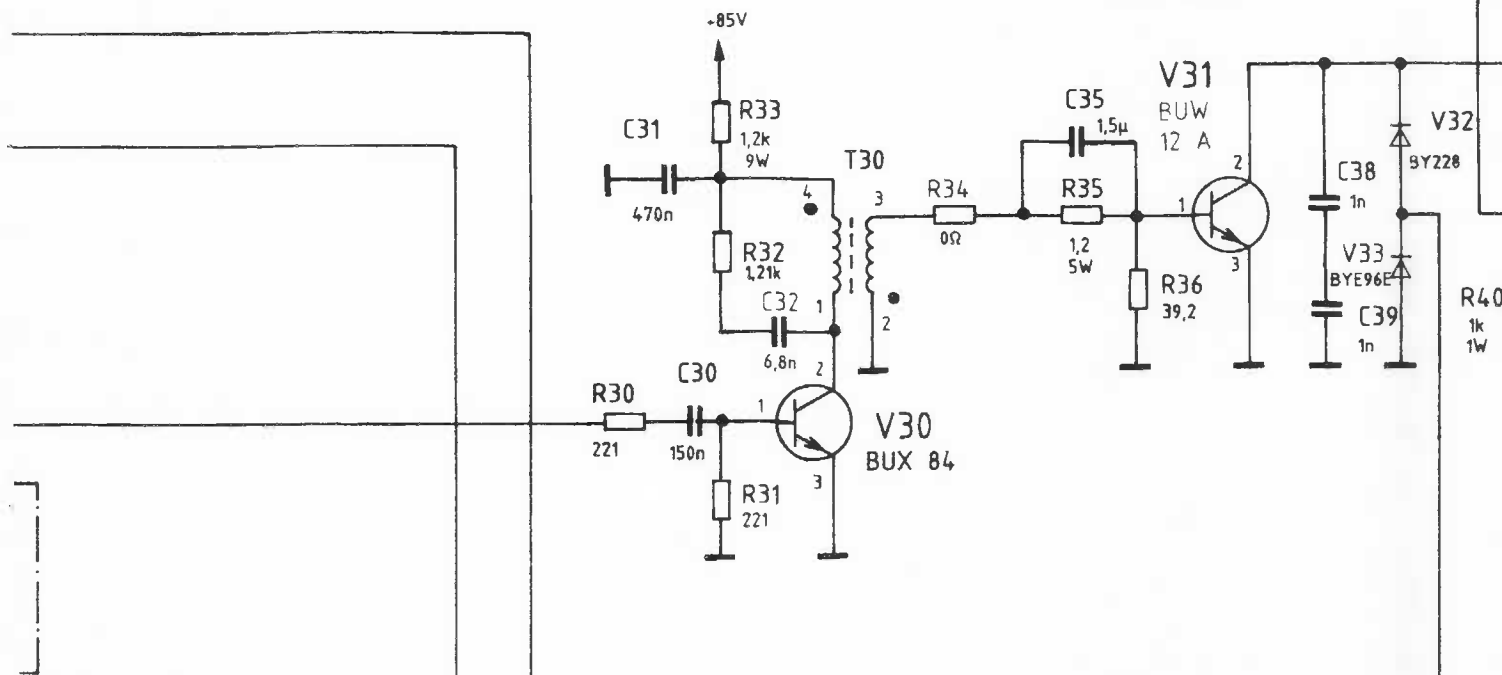


80F 7317 S  
Zeichn.-Nr.

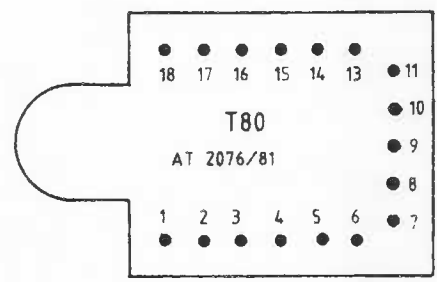
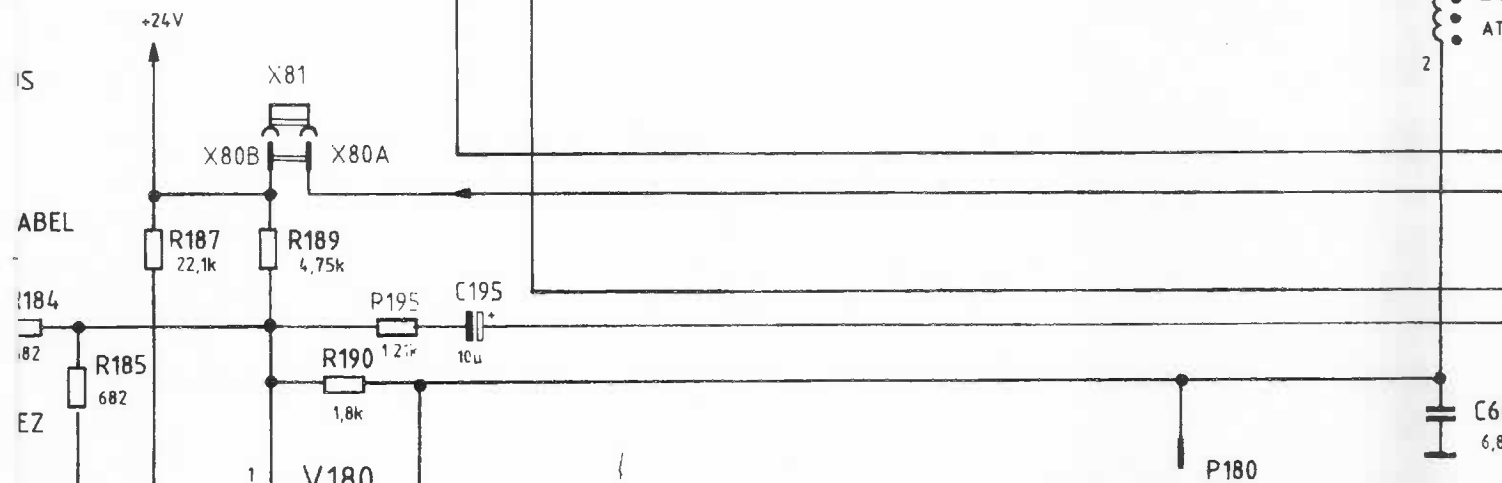




V31 war BUS 08A  
 Neu BUW 12 A



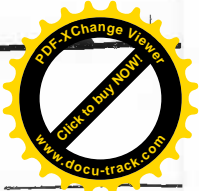
Für diese Unterlage behalten  
 wir uns alle Rechte vor



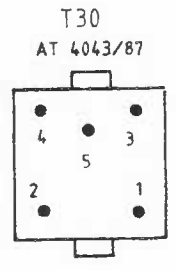
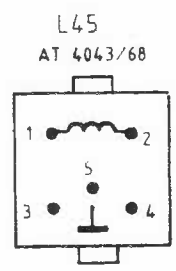
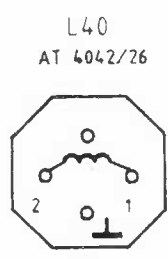
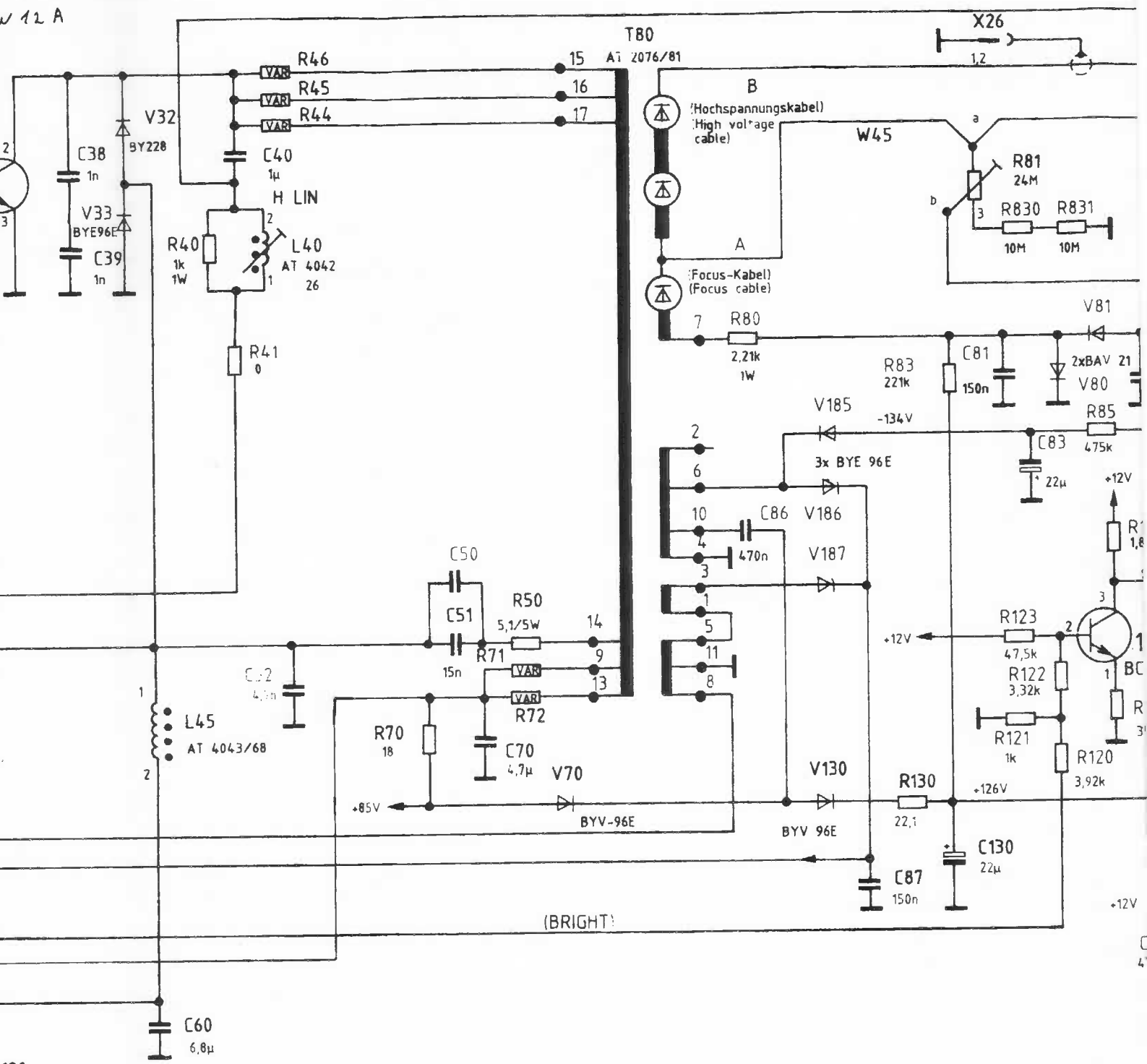
Ansicht Bauteilseite  
 Top view



Zeichn.-Nr. 805 7317 S



BU 508A

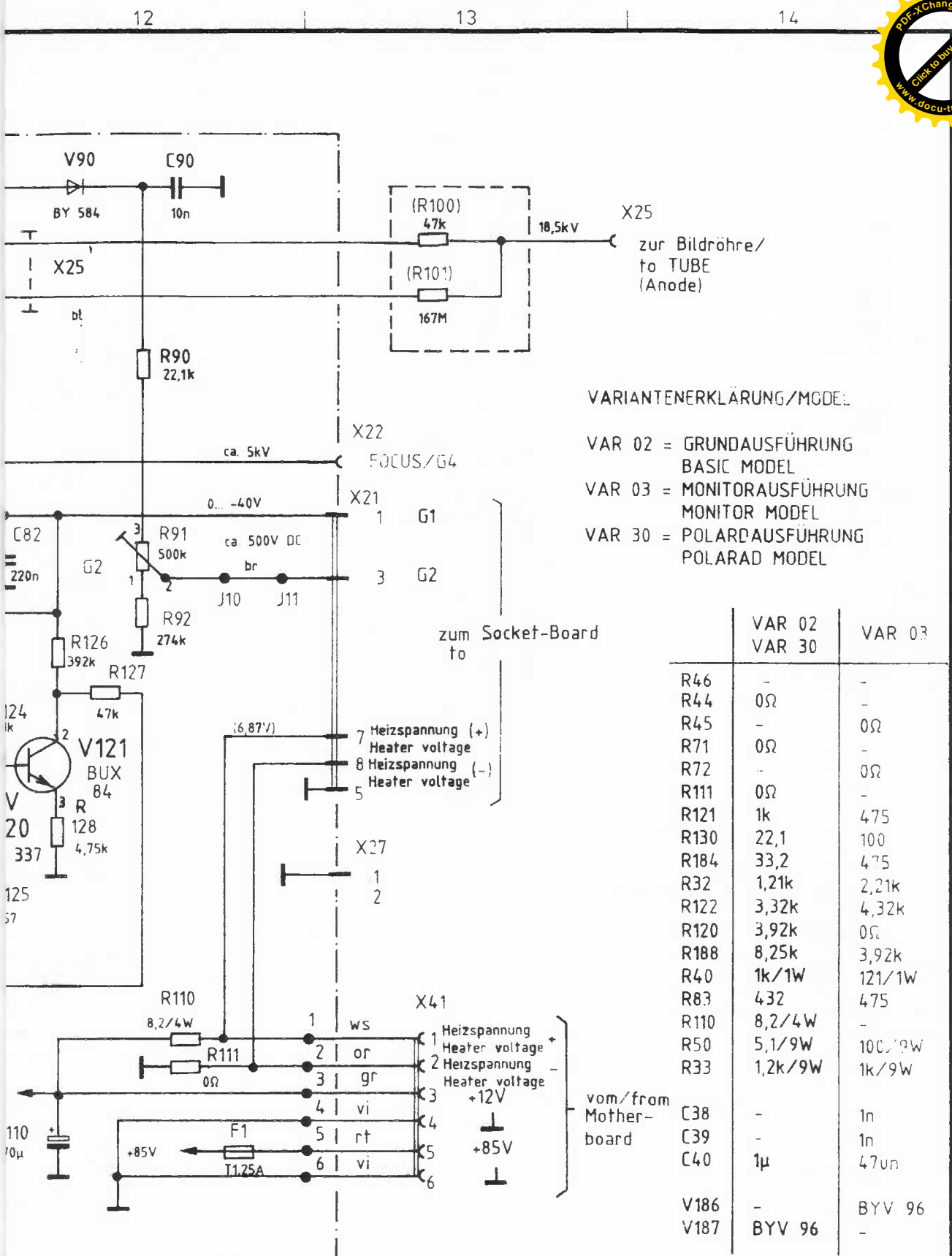
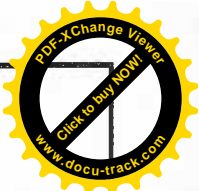


Ansicht Bauteilseite  
Top view

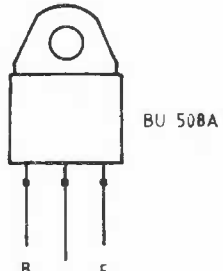
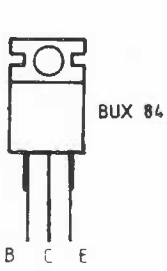
H	32 765 (2)	09.87	Pf	E	32 744 ( )	06.86	Bg	1KGF	Tag	Name	Benennung
				F	32 744 (48)	09.80	Bg	Bearb	26.4.85	BG	
				G	32 744 (96)	04.87	Bg	Gepr			
And. Zust.	Anderungs-Mittelung	Datum	Name	And. Zust.	Anderungs-Mittelung	Datum	Name	Norm			

DE & SCHWARZ





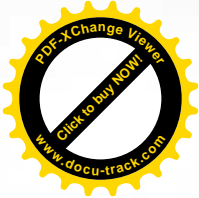
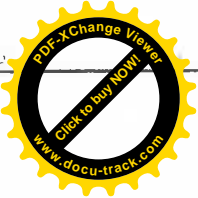
Für diese Unterlage behalten wir uns alle Rechte vor



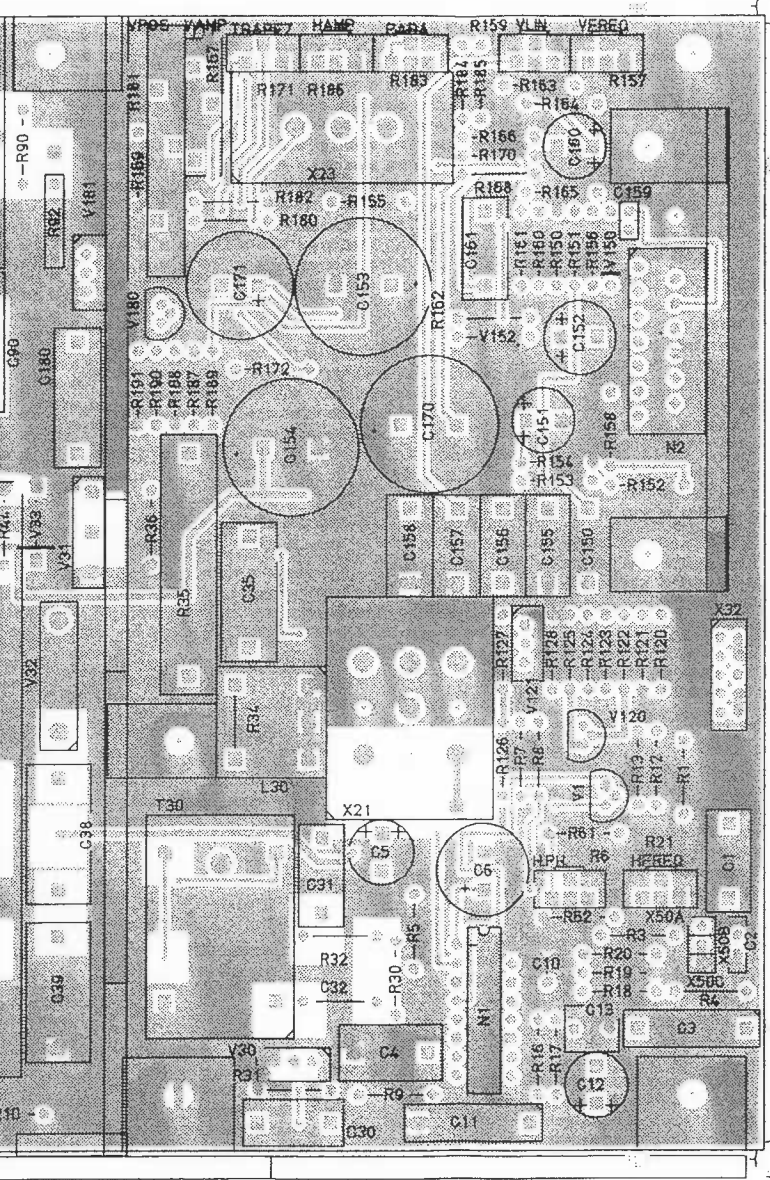
805 7317 S  
Zeichn-Nr

MONITOR		Zeichn-Nr	805. 7317 S	Blatt-Nr	1
zu Gerät FSA		reg i V	804. 9516 V	1	1 Bl
		erste Z	804. 9516		



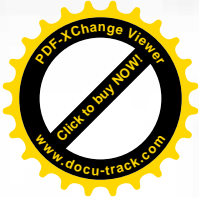
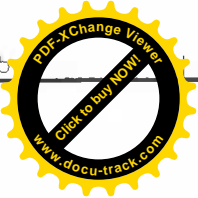


ung Bauteilserte  
ent side

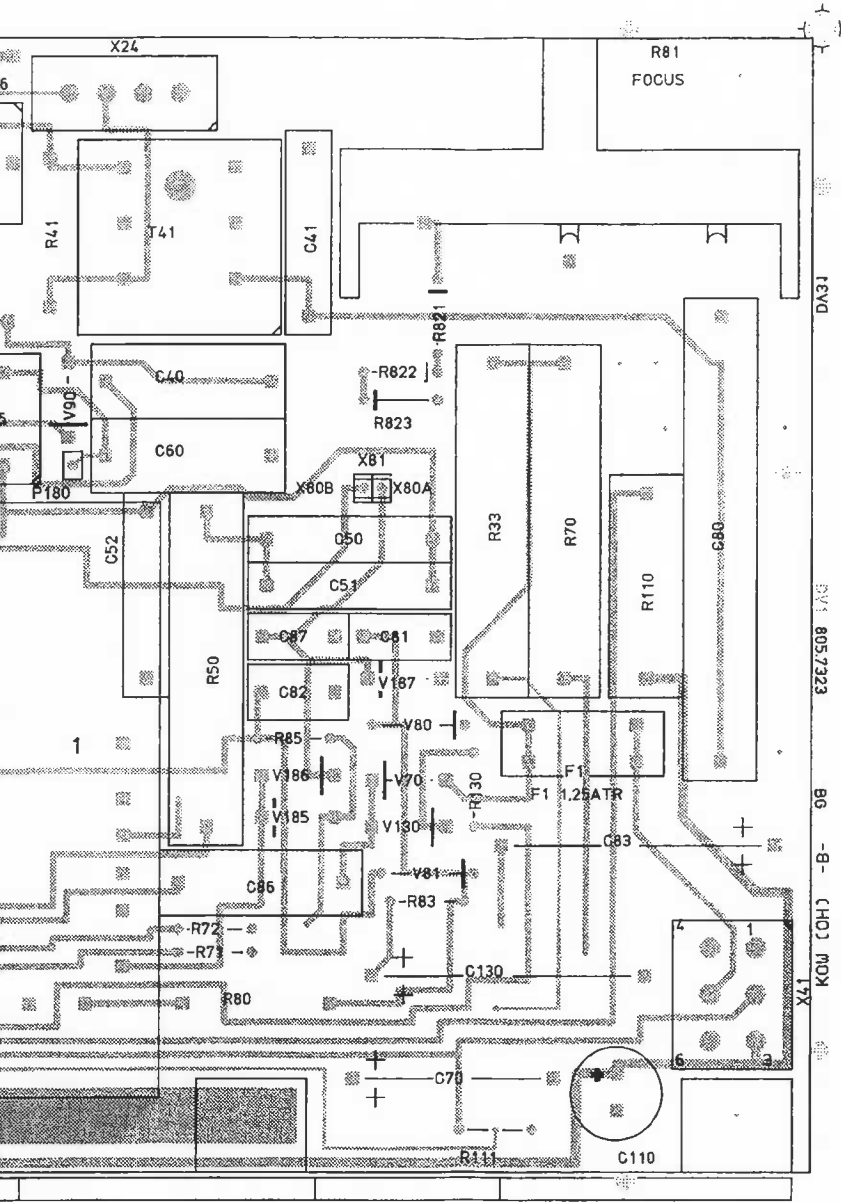


274.4	06.86	BG	Mafie ohne Toleranzangabe	Maßstab 1:1	
				Halbzeug Werkstatt	
1KGF	Tag	Name	Benennung		Z
Bearb	06.86	BG	MONITOR		F
Gepr					
Norm					
	Firma: Nr.		805.7317.01 ED	Blatt-Nr.	2
nderungs Mitteilung	Tau	Name	zu Gerät: FSA	804.9516 V	erste 2 804.9516



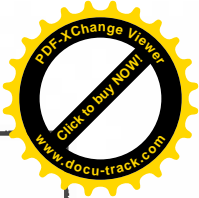
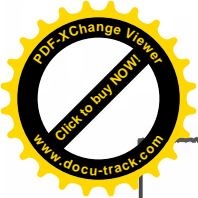


ung Lötseite  
side



2744	06.86	BG	Maße ohne Toleranzangabe	Maßstab 1:1	
				Halbzeug, Werkstoff	
			1KGF	Tag	Name
			Bearb	06.86	BG
			Gepr		
			Norm		
				Benennung	Z
				MONITOR	
				Zeichn.-Nr	Blatt-Nr
				805.7317.01 ED	3
				reg v 804.9516 V	v Bl
				erste z 804.9516	
Änderungs-Mitteilung	Tag	Name	zu Gerät FSA		





vom/from Video-Board

ROT RED  
GRÜN GREEN  
BLAU BLUE

X540 040  
X541 041  
X542 042

W535

(X535)

C 531 10n  
C532 10n

V 530 1N4004  
R 533 0Ω  
L 534  
L 535  
R 531 100k  
R 532 100k

grau

or

sw

br

vi

X536

8

7

1

3

5

Heizspannung  
Heater voltage

vom/from Monitor

X533

X531

8 ROT RED

12 GRÜN GREEN

4 BLAU BLUE

13

6 Heizspannung  
Heater voltage

7 Heizspannung  
Heater voltage

9 G1

10 G2

14 G4/FOCUS

X538

FOCUS

zur/to Bildröhre/tube

Varianteerklärung/Model

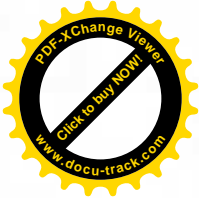
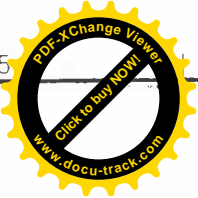
VAR 02 = Grundaussführung  
Basic model  
VAR 30 = Polaradaussführung  
Polarad model

Für diese Unterlage behalten wir uns die Rechte vor.

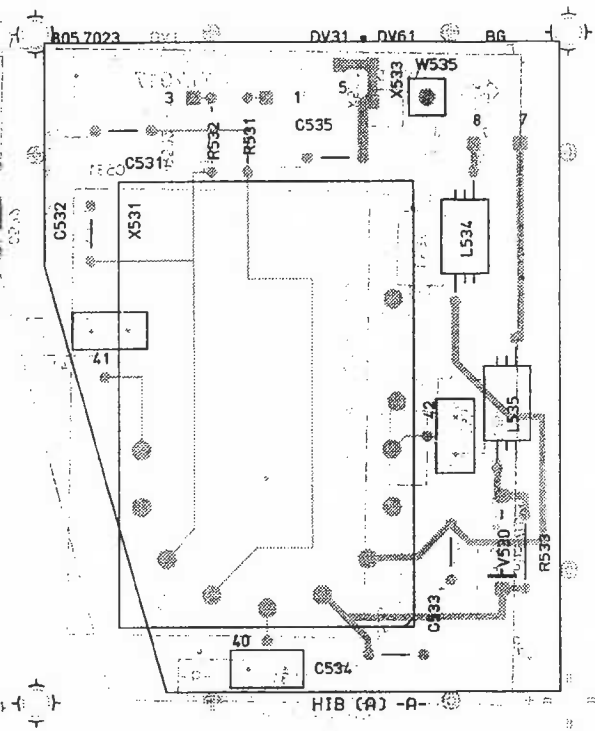
A	32 744 (23)	02.86	BG	1KGF	Tag	Name	Benennung
					07.85	BG	SOCKET BOARD
							Zeichn Nr
							805. 7017 S
							Blatt Nr
							1
							v. 1 B.
And Zust	Anderungs-Mitteilung	Tag	Name	zu Gerät	FSA	reg. V	804. 9516 V
							erste Z 804. 9516







Sicht und Leitungsführung, Lötseite  
 View of tracks on solder side



VARIANTENERKLÄRUNG / VERSION  
 VAR 02 - GRUNDAUSFÜHRUNG / BASIC MODEL

2744	06.86	BG	Maße ohne Toleranzangabe		Maßstab 1 : 1	
					Halbzeug, Werkstoff	
			1KGF	Tag	Name	Benennung  SOCKET BOARD  Z
			Bearb	06.86	BG	
			Gepr			
			Norm			
			 <b>ROHDE &amp; SCHWARZ</b>		Zeichn.-Nr.	805.7017.01 ED
					Blatt-Nr.	
Anderungs-Mitteilung	Tag	Name	zu Gerät	FSA	reg. v.	804.9516 V
						erste Z
						v. Bl.