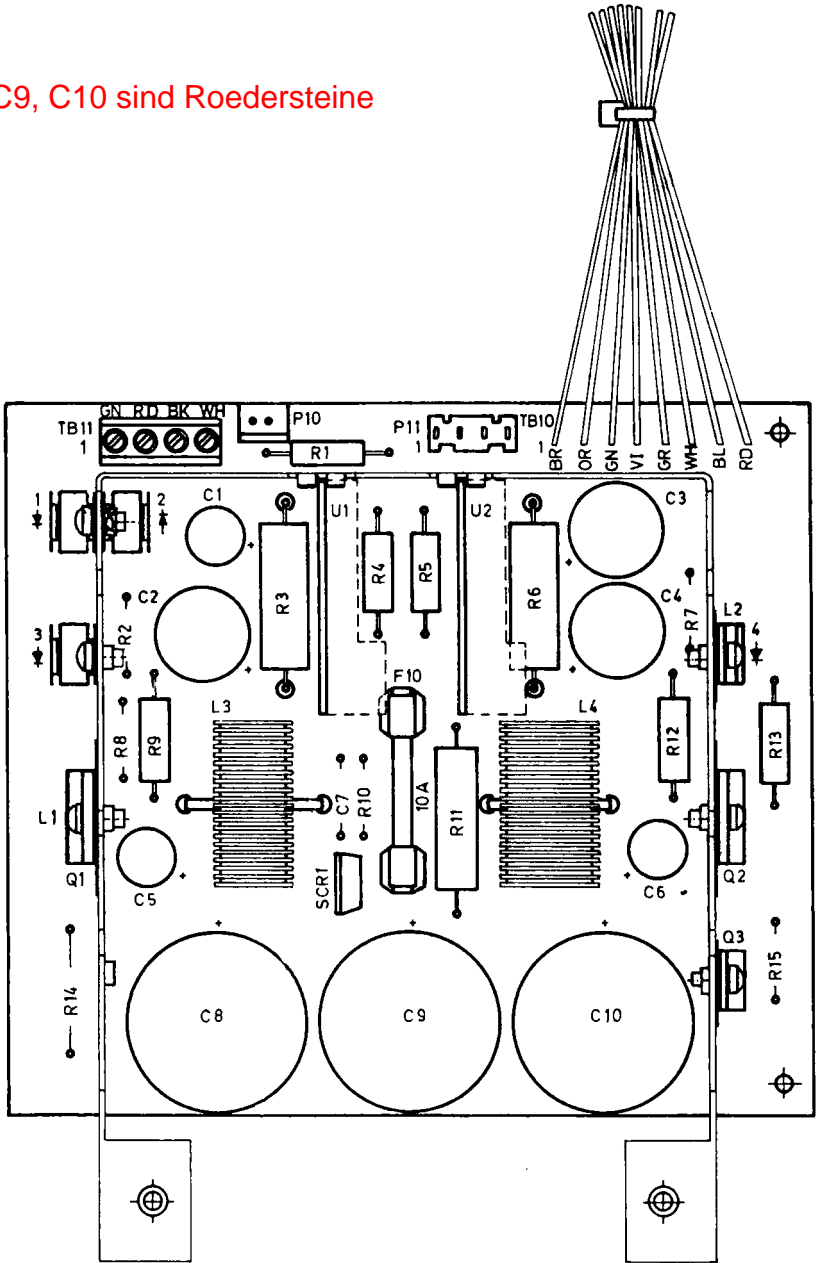
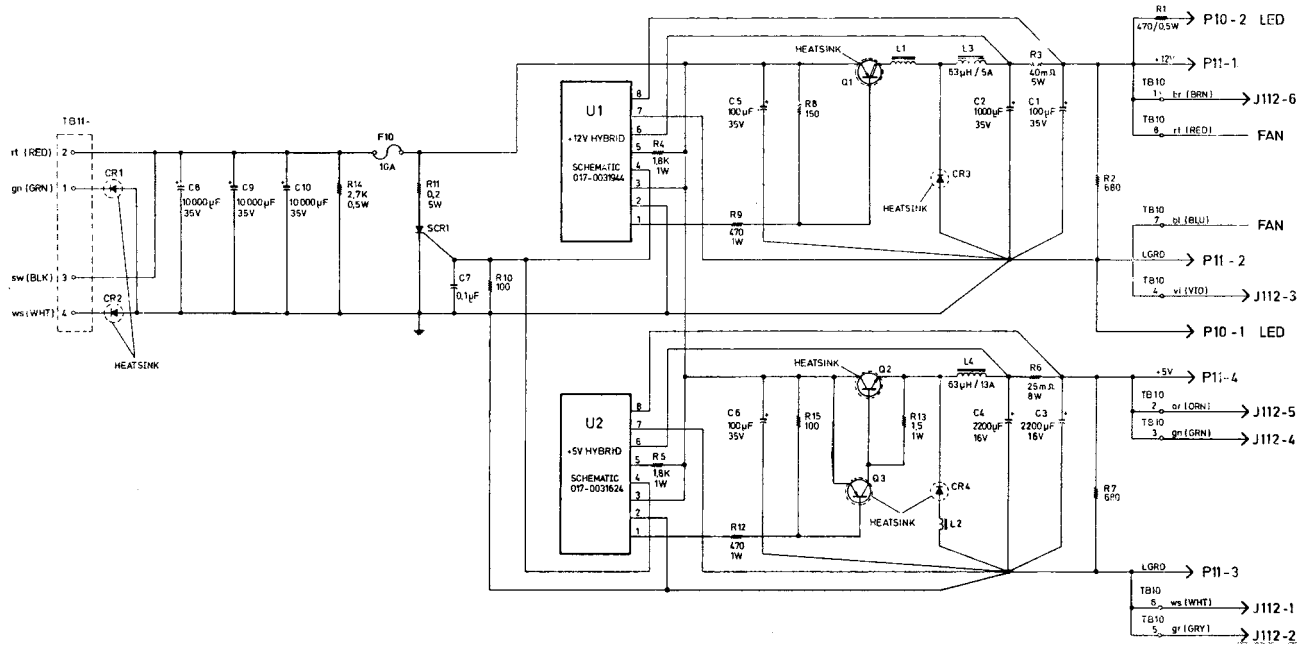


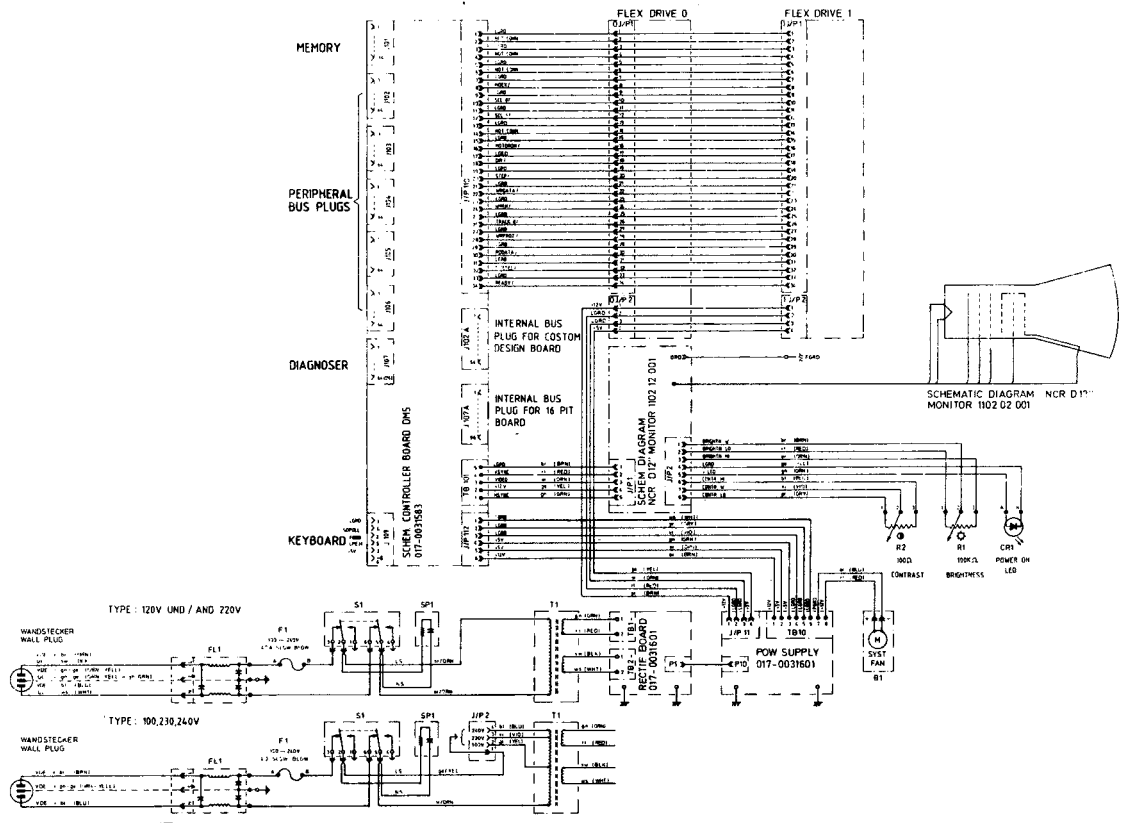
### POWER SUPPLY

C2, C8, C9, C10 sind Roedersteine



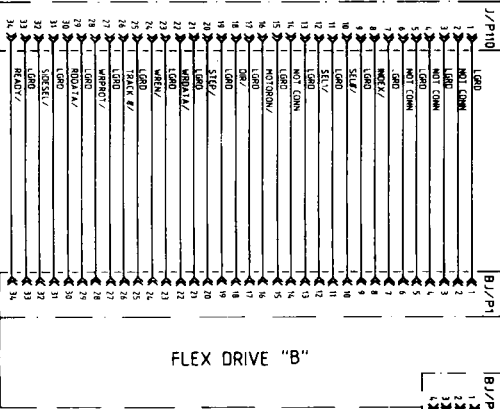


AC/DC WIRING

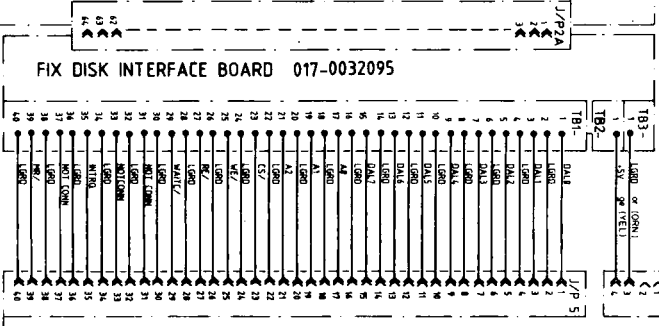


CONTROLLER BOARD DM V

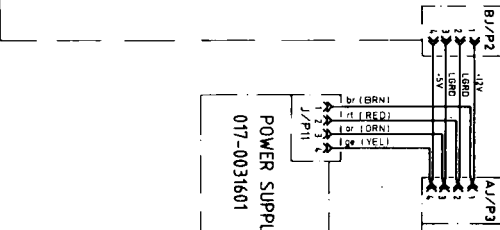
017 0032012



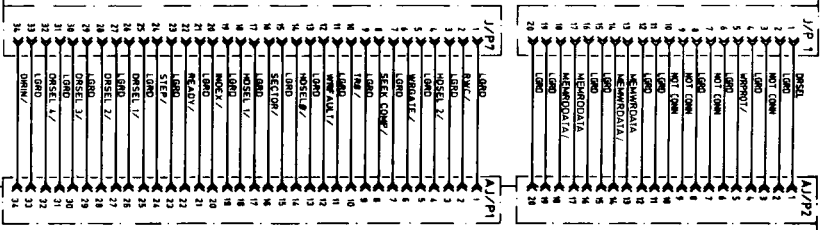
FIX DISK INTERFACE BOARD 017-0032095



FLEX DRIVE "B"

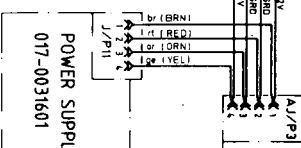


FIX DISK CONTROLLER BOARD



FIX DISK DRIVE "A"

POWER SUPPLY  
017-0031601



	a	b	c
1	+5 V	+5 V	+5 V
2	OPT 2		+12 V
3	RESET/		RESETIN/
4	IOW/		IOR/
5	MEMW/		MEMR/
6	D1		D0
7	D3		D2
8	D5		D4
9	D7		D6
10	READYDMA	READYP	ABTRI/
11	EOP/	HOLD	
12	INTACK/	SWITCH 16/	IFSEL4/
13	AUTO/	HLDA 16	DIR/
14	THOLD/	16 BITAV/	HLDA
15	PCLK/	STDMARQ/	CLK1
16	LGRD	LGRD	TRAMD/
17	BA19	16 BITSET /	BA18
18	BA17		BA16
19	A15		A14
20	A13	MEMRQ/	A12
21	A11		A10
22	A9		A8
23	A7		A6
24	A5		A4
25	A3		A2
26	A1		A0
27	IFSEL3/		IFSEL2/
28	IFSEL1/		IFSEL0/
29	DRQ1		DRQ0
30	DACK1/		DACK0/
31	WAIT/		INT/
32	LGRD	LGRD	LGRD

Figure 2.14 16-bit processor pin assignments

## POWER SUPPLY

The power supply comprises the following modules:

- Power connector
- Primary fuse
- Transformer
- Rectifier
- Switcher (+5V, +12V)
- 1 Secondary Fuse for unregulated output voltage

The power supply is capable of operating with the following ac power sources.

Frequency	Nominal Voltage	Range
49 to 61 Hz	100	90 – 107
	120	104 – 127
	220	198 – 235
	230	207 – 246
	240	216 – 257

The average ac input wattage is 70W (Basic Model w/o peripherals). The outputs of the standard power supply are:

Supply	Regulated	Max. Current	Ripple
+18V to +35V	+ 5.1V± 3%	10.0 A	< 50mVpp
+18V to +35V	+12.2V± 3%	3.2 A	< 120mVpp

Models with hard/flexible disk combination require a larger transformer and switcher assembly. The outputs of these are:

Supply	Regulated	Max. Current	Ripple
+18V to +35V	+ 5.1V± 3%	13.0 A	< 50mVpp
+18V to +35V	+12.2V± 3%	4.1 A	< 120mVpp

The color CRT also requires a larger transformer, but the standard switcher and rectifier can be used for controller board, flexible disks, keyboard, and I/Fs. The rectifier and switcher for the color CRT are placed on the CRT board.

Output power requirements for the color CRT are:

Regulated	Max. Current	Ripple
107V± 2V	0.5 A	< 400mVpp

Current limiting and over voltage protection are provided. The electrical power is enough for both the computer and its interfaces and options, but printers and free-standing disk drives require their own ac power source. The following power line transients should not affect the specified performance:

Input Voltage	Duration	Frequency of Occurrence
50% of nominal	1/2 cycle	Once in 10 seconds

The power supply assembly is available in three models:

- For a power source with a nominal voltage of 120 Vac
- For a power source with a nominal voltage of 220 Vac
- A model that can be strapped to suit power sources with nominal voltages of 100, 230, or 240 Vac

These different models of the power supply are identified by the "Power Code," which is a part of the model number.

Power Code	Nominal Voltage
60	120 Vac
65	220 Vac
70*	100 Vac
74*	230 Vac
75*	240 Vac

\* Selectable by transformer strapping

The strapping of the transformer for power supplies with power codes 70, 74, and 75 is shown in Figure 2.15.

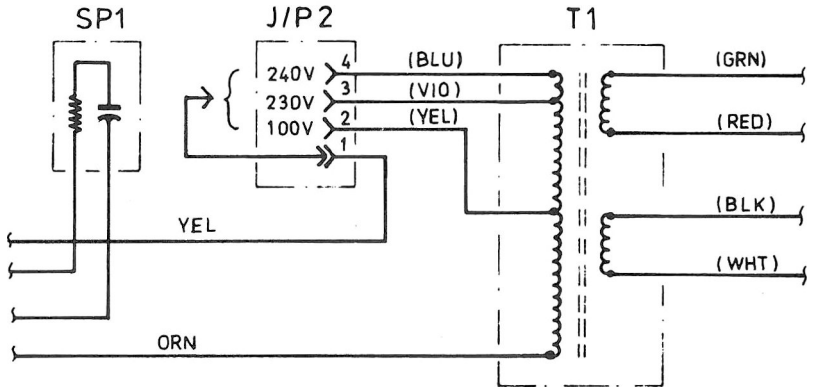


Figure 2.15 Transformer connections

## FLEXIBLE DISK DRIVES

Integrated in the computer are one or two 5 1/4-inch flexible disk drives to provide mass storage of programs and data for the computer. The drives contain read/write electronic controller electronics, driver mechanics, read/write heads, and headpositioning mechanism. The disk drive on the left is called A, the second drive on the right side is called B. For maximum motor life, if no commands have been issued to the drives within 15 seconds after completion of a previous command, the drive motor is turned off. The head load mechanism is coupled with motor on signal.

Systems with an integrated fixed disk have only one flexible disk drive, this is mounted on the rightmost side of the computer and is called drive A.

Power requirements for the flexible disk drive are given in Figure 2.16, and technical data in Figure 2.17.

Voltage	Current	Ripple
+ 5V +5%	Typical 0.5 A max. 0.8 A	<100 mVpp
+12V +5%	Typical 0.25 A max. 0.9 A	<200 mVpp
Max. power dissipation: less than 10W.		

Figure 2.16 Power requirements