

**Table of Contents:
General Assembly**

Topic	Chapter
General Assembly	1
Removing the inner casing	1.1
Opening the unit	1.2
Closing the unit	1.3
Disassembling the control panel	1.4
Servicing the housing cover	2
Disassembling the cover	2.1
Disassembling the cover closure	2.2
Closure adjustment	2.3
Disassembling the cover panel	2.4
Servicing the chemistry bottles	3
Exchanging the bottles	3.1
Exchanging the bottle lid panel	3.2
Servicing the circulation pump	4
Exchanging the pump	4.1
Exchanging the temperature sensor	5
Disassembling the temperature limiter	6
Replacing the chemistry hoses	7
Removing the chemistry hoses	7.1
Installing the new chemistry hose	7.2
Exchanging the heater	8
Servicing the float	9
Exchanging the sensors	10
Replacing the level sensors	10.1
Exchanging the upper lift arm sensor	10.2
Exchanging the lower lift arm sensor	10.3
Exchanging the air distributor sensor	10.4
Exchanging the cover sensor	10.5

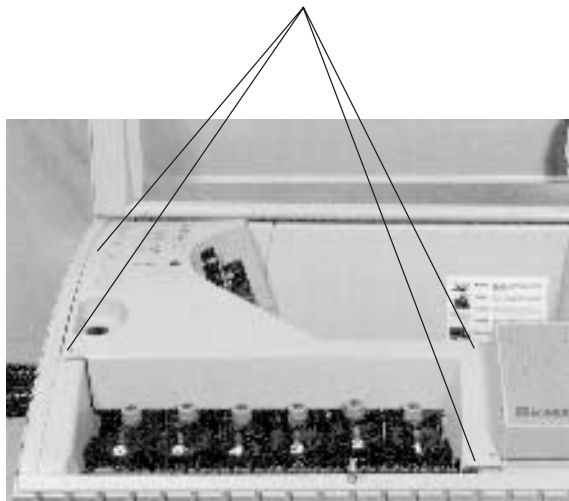
**Table of Contents:
General Assembly**

Topic	Chapter
Servicing the motors	11
Disassembling the lift arm motor	11.1
Disassembling the drive motor	11.2
Disassembling the air distributor motor	11.3
Servicing the base	12
Disassembling the air distributor	12.1
Chemistry router	12.2
Membrane pump	12.3
Drain valve	12.4
Disassembling the gas-loaded spring	13
Servicing the lift arm	14
Disassembling the lift arm	14.1
Replacing the gears with lift arm removed	14.2
Servicing the control panel	15
Replacing the EPROM	15.1
Exchanging the power switch	15.2
Disassembling switch and display PC-board	15.2.1
Disassembling the main PC-board	15.3

1. GENERAL ASSEMBLY

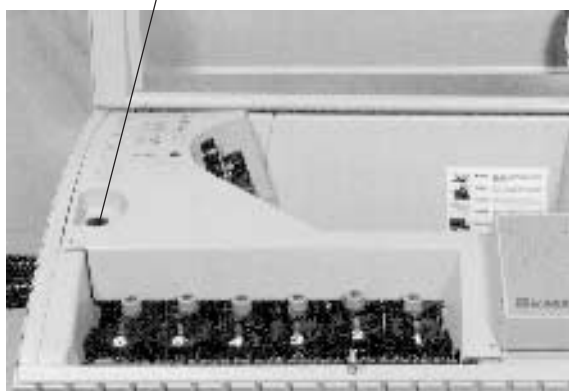
1.1 Removing the inner casing

- 1.1.1 Remove mounting screws with Phillips screw driver and pull out drain valve



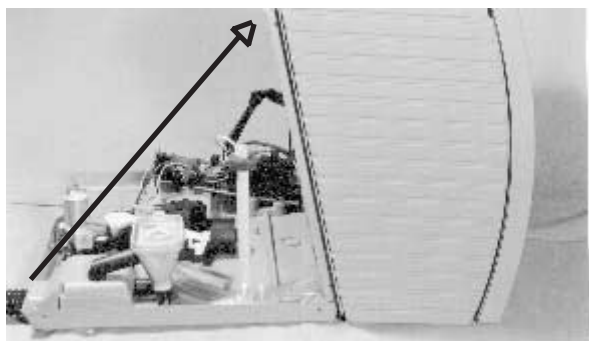
1.2 Opening the unit

- 1.2.1 Empty the unit (see BA page 34, section 12.5)



1.2.2 Pull out drain valve knob

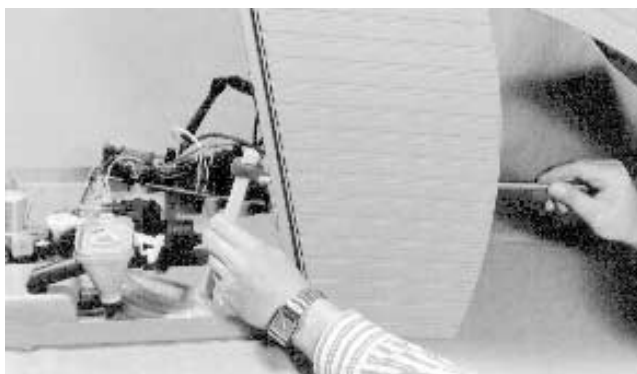
1.2.3 Remove Phillips screws from base



1.2.4 Tilt top of unit forward

1.3 Closing the unit

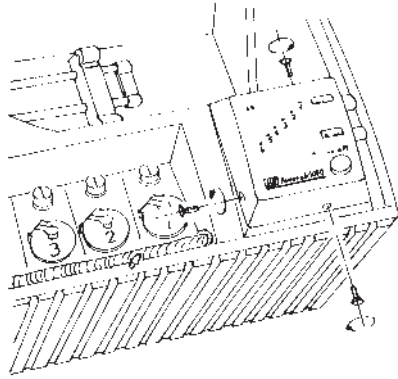
- 1.3.1 Before closing the unit, guide connecting pipe for drain valve into opening



Assembly advice: The drain valve knob must positively lock when pushed in (snapping sound)

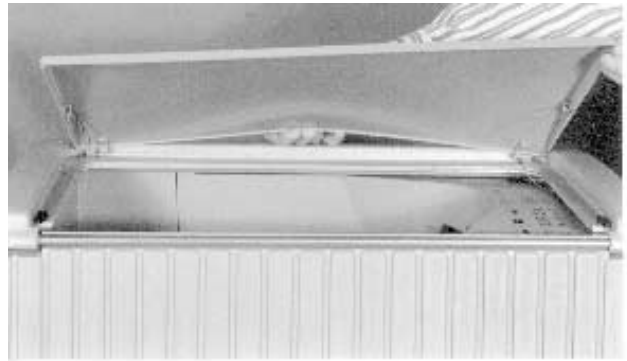
1.4 Disassembling the control panel (95436)**1.4.1 Open unit cover****1.4.2 Loosen marked screws**

Carefully lift and turn around control head housing.

**2.3 Closure adjustment**

Loosen lock nut, turn closure pin until distance to hex nut approximates 3 thread turns. Check closing performance.

Housing cover must press down all bottle lids.

2.4 Disassembling the cover panel**2.4.1 Disengage cover panel****2. SERVICING THE HOUSING COVER****2.1 Disassembling the cover**

First disengage gas-loaded spring then disassemble housing cover.

2.2 Disassembling the cover closure

Remove screws on inside of lid and lift out cover closure.

3. SERVICING THE CHEMISTRY BOTTLES**3.1 Exchanging the bottles**

Remove inner casing as explained in section 1.1. Pull out bottle temperature sensor and remove bottle.

3.2 Exchanging the bottle lid panel

Remove inner casing according to section 1.1 of service documentation.

- Remove screw.
- Pull fastening ring apart.
- During assembly, the fastening ring must lock in place at bottle neck.

4. SERVICING THE CIRCULATION PUMP

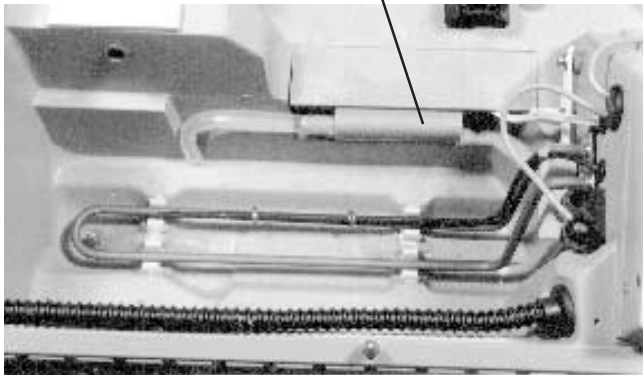
4.1 Exchanging the pump

- Disassemble inner casing.
- Pull bottle temperature sensor out of bottle (Careful! Temperature sensor is made of glass. Danger of breakage!)
- Remove bottles 1 through 4
- Disengage submersion pump from mounting bracket
- Cut tie wrap.
- Disassemble control panel. (according section 1.1 of service documentation)
- Cut connecting cord at grommet.
- Exchange pump.
- Attach new cord with clamping pliers or solder.

Attention: Do not confuse cords! + -

Assembly in reverse sequence.

Pump



5. EXCHANGING THE TEMPERATURE SENSOR

- Open unit.
- Pull connector off main PC-board.
- Disassemble control panel (according section 1.4.)
- Pull cord out of opening.

Assembly in reverse sequence.

Advice: Seal cord opening with additional silicon.

6. DISASSEMBLING THE TEMPERATURE LIMITER

Remove inner casing and disassemble control panel.

Pull bottle sensor out of bottle and remove bottles. Cut tie wrap, loosen holding bracket of heater and detach temperature limiter from heater. Remove mounting screw of temperature limiter. Pull off connectors. Pull limiter out of grommet.

Assembly in reverse sequence.

Advice: Seal cord opening with additional silicon.

7. REPLACING THE CHEMISTRY HOSES

Remove unit cover and inner casing.

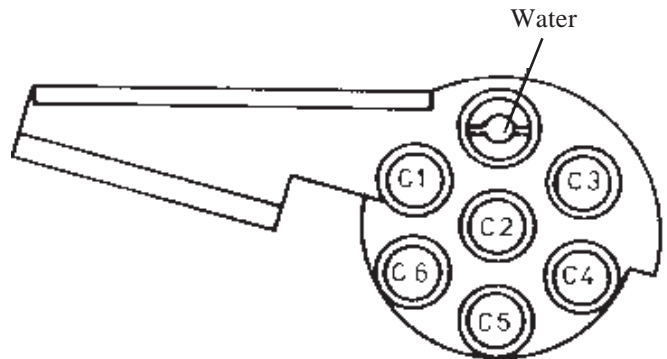
7.1 Removing the chemistry hoses

Pull chemistry hose off bottle and hose collector.

7.2 Installing the new chemistry hose

Glue new hose with 'Sekunden-glue' to hose collector and seal with silicon.

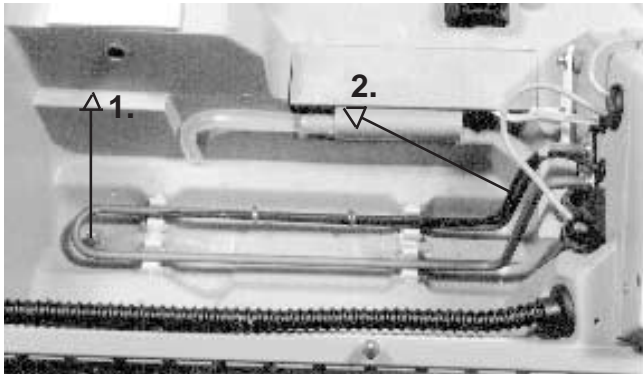
Hose position according to illustration.



8. EXCHANGING THE HEATER

Disassemble inner casing and control panel. Pull bottle temperature sensor out of bottle and remove bottle. Disengage holding spring for heater and temperature limiter from heater. Apply pull to power cord and loosen mounting nuts with ratchet (7mm). Lift heater at its left corner and pull out of housing.

Assembly in reverse sequence.



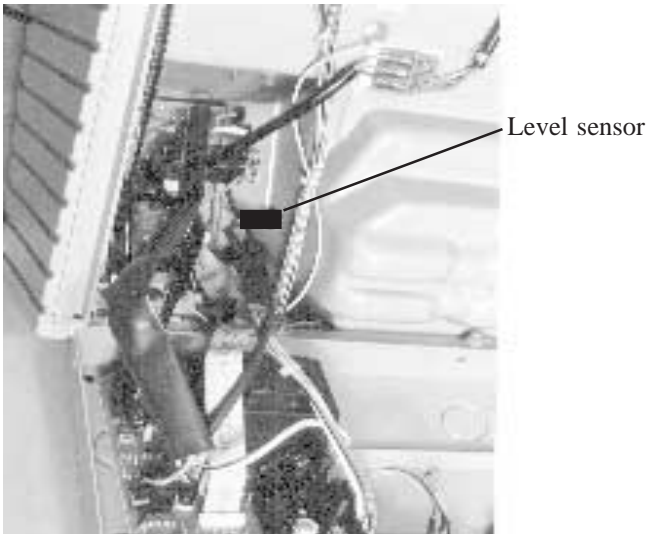
9. SERVICING THE FLOAT

The mounting screw must not be over-tightened in order to assure smooth operation.

10. EXCHANGING THE SENSORS

10.1 Replacing the level sensors

- Disassemble control unit
- Pull push-on connectors off main PC-board.
- Remove sensor.



10.2 Exchanging the upper lift arm sensor

Remove inner casing.

- Remove sensor
- Cut wire
- Attach new sensor with silicon
- Solder connections and insulate solder point.

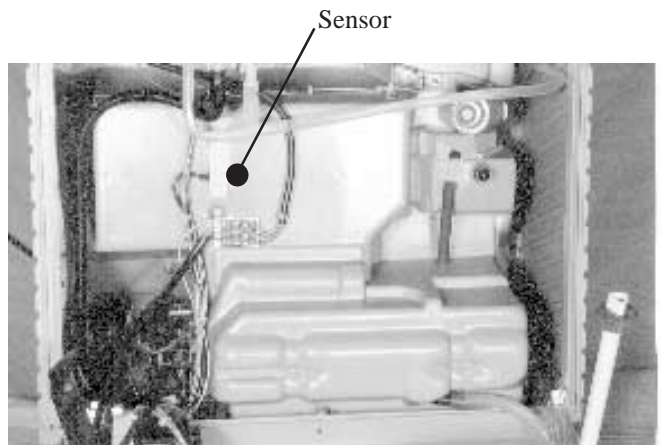
Upper lift arm sensor



10.3 Exchanging the lower lift arm sensor

Open unit as explained in section 1.2.

- Pull sensor out of mounting bracket and cut wire.
- Attach new sensor with silicon
- Solder connections and insulate solder point.



10.4 Exchanging the air distributor sensor

Open unit

- Remove sensor at air distributor, cut wire.
- Attach new sensor, solder wire and insulate solder point.

10.5 Exchanging the lid sensor

Disassemble control panel.
 Disassemble switch PC-board and display PC-board as explained in section 10.2. Remove sensor. Desolder wire.

11. SERVICING THE MOTORS

11.1. Disassembling the lift arm motor

Remove inner casing

- Remove bottles 5 and 6 and cover foil from under hose collector.
- Disassemble gear segment.
- Unscrew mounting screws (1 socket screw / 1 slotted-head screw below Allen screw) and open housing.
- Open cover panel, pull out drive sprocket and motor simultaneously .
- Pull of push-on connectors.

- Note connector position at motor:

connector 1: orange
 connector 2: brown

- Insert new motor and mount with screws.

Assembly in reverse sequence.

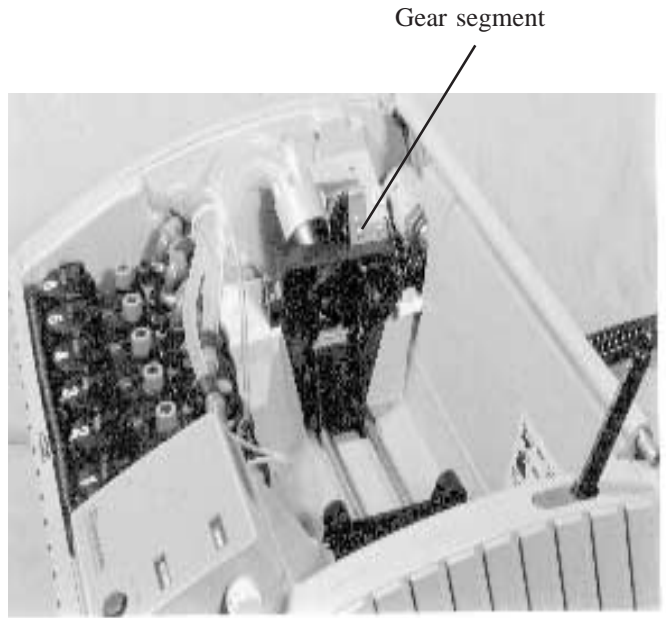
11.2 Detaching the drive motor

Remove inner casing.

- Disassemble gear segment. Loosen 4 screws of lift arm and remove lift arm.

Open unit

- Loosen 2 mounting screws of motor and remove motor.



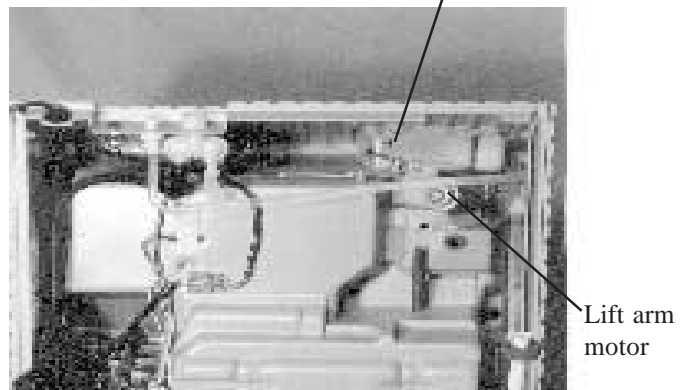
11.3. Disassembling the air distributor motor

- Open unit (see section 1.2.)
- Disengage linkage at chemistry router. Then remove 4 socket screws of air distributor.
- Cut wire harness tie wraps. Remove 4 slotted-head screws and pull off push-on connectors.

Assembly in reverse sequence.

Attention: Make sure chemistry router operates smoothly!

Mounting screws for drive motor



12. SERVICING THE BASE

12.1 Disassembling the air distributor

Remove inner casing.

- Pull air hoses out of bottles and pull off hose connector elbows.
- Open unit.
- Remove 4 socket screws at air distributor and disengage linkage of chemistry router.
- Pull air hoses out of unit top, loosen push connector.
- Be careful to route main air hose to membrane pump under guide bar!

12.2 Chemistry router

Assembly advice: Be careful to route main air hose to membrane pump under guide bar!

12.2.1 Tighten screws of linkage only firm enough to allow for full movement!

12.2.2 Position of curve plate at air distributor

- Zero position (magnet at zero sensor)

12.3. Membrane pump

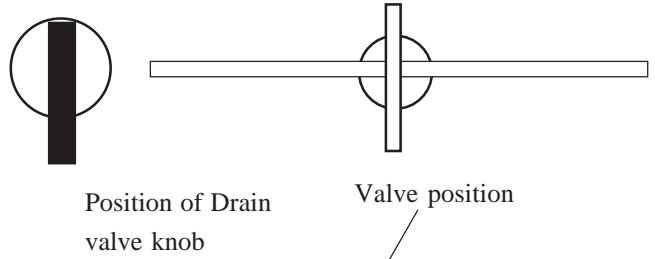
Assembly advice:
 Connection positions: red + white -
 Attachment of air hose as explained in section 12.1.

Note connector positions:

Attention: Protect base from residual water draining from pump when disassembling.

12.4 Drain valve

Note mounting direction



- Push hoses all the way up and seal with silicon.
- Attach drain valve with tie wrap to base.

13. DISASSEMBLING THE GAS-LOADED SPRING

Open unit

- Remove splash guard foil from side wall.
- Loosen mounting strip for gas-loaded spring at base.
- Disengage gas-loaded spring at cover, remove housing lid according section 2.1.
- Unscrew gas-loaded spring out of mounting blade and pull downward out of housing.

Assembly in reverse sequence

14. SERVICING THE LIFT ARM

14.1 Disassembling the lift arm

Remove inner casing.

Remove gear segment. Remove 4 Phillips screws from lift arm. The lift arm can now be easily removed.

14.2 Replacing the gears with lift arm removed

Disassemble mounting clamps.

- Loosen Phillips screw at transfer sprocket and pull out sprocket toward front.
- Pull out square shaft with pliers.

15. SERVICING THE CONTROL PANEL

15.1 Replacing the EPROM

Refer to insert sheet for EPROM 94069

15.2 Exchanging the power switch

- Pull off connections and control foil
- Push switch out

15.2.1 Disassembling switch and display PC-board

- Pull off control buttons.
- Push spacers of BCD-switches outward and pull out
- Loosen Phillips screws at PC-boards, lift PC-boards and carefully pull out of housing.

15.3 Disassembling the main PC-board

Open unit

- Loosen (5) socket screws at PC-board
- Pull off connectors
- Remove PC-board



Service menu ATL 1500

1. Start of service test

- Set BCD-Switch in position 16
- Press PLUS and ENTER-Key simultaneously and the switch unit on (SET DEF mode = setting of default values).
- Simulate a closed cover by putting a magnet to the sensor on the left side of the control unit.
- Press PLUS-Key. Display now shows: ---

2. Drum motor and filling pump test

- Set BCD-Switch in position 1. Display shows: **FPS**
- Press PLUS-Key for switching motor one step forward. Sound of working motor should now be heard.
- Press ENTER-Key for turning on the pump - green LED "TWA" is on.
- Press ENTER-Key again for turning the pump off.

3. Lift arm test

- Set BCD-Switch in position 2. Display shows: **Li**
- Press PLUS-Key. Liftarm now has to move up, green LED is on
- Press ENTER-Key. Liftarm will move down, green LED is off.

Attention: This check is only possible, if the cover is closed or a magnet is put to the sensor.

4. Magnet valve test

- Set BCD-Switch in position 3. Display shows: **UA**
- Press ENTER-Key magnet valve will open and fill up the unit, green LED is on.
- Press ENTER-Key again magnet valve will close, green LED is off.
- Press PLUS-Key magnet valve will open and closes automatically after 10 seconds

5. Temperature Test

- Set BCD-Switch in position 5 Display shows 38°C
- Press PLUS-Key, green Led is on heating period starts
- If temperature is reached an acoustic signal is given and the display shows END

Attention: This test can only be made if the first bottle and the water jacket is filled with water

6. Eeprom Test

- Set BCD-Switch in position 6. Display shows: **E2P**

- Press PLUS-Key for test start. After successful termination of the test green LED “TWA” is on. If the test runs with an error the LED is off.

Attention: During test execution all data in Eeprom will be erased and default data will be wrote into Eeprom.

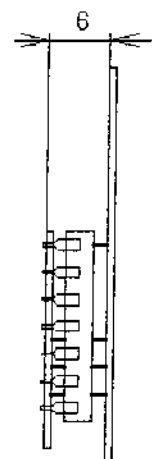
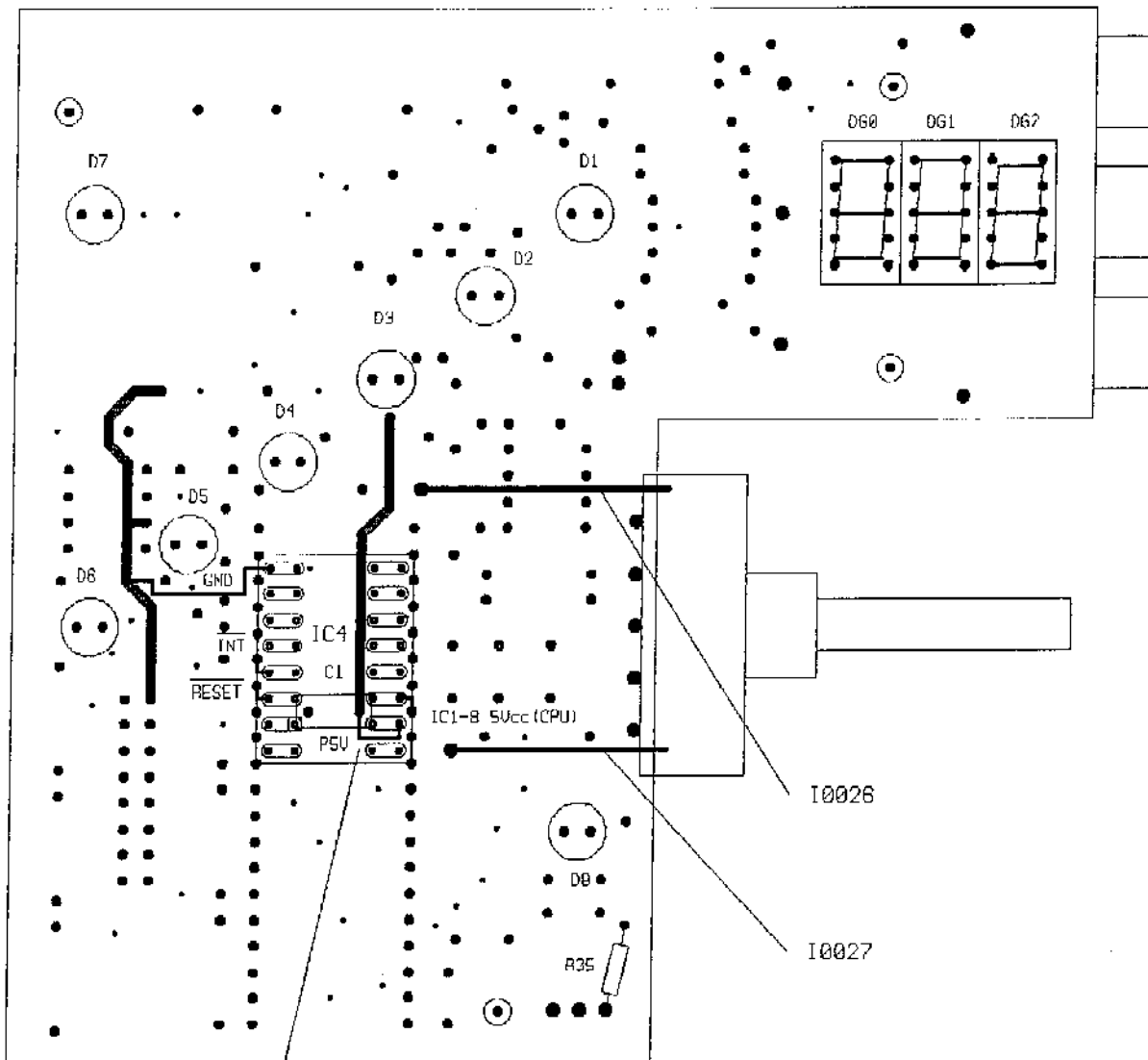
7. Test program

- Set BCD-switch in position 7. Display shows: **PRO**
- Press ENTER-Key. Test process will be started with following steps.
- Heating 24°C
- Pre Cleaning (30s)
- Chemical 1 (30s)
- Cleaning 1 (30s)
- END

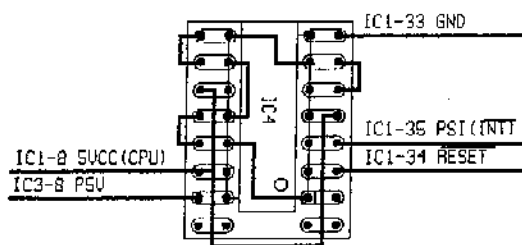
8. Cleaning test program

- Set BCD-switch in position 8. Display shows: **FIL**
- All bottles have to be filled with water
- Press ENTER-Key and close the cover
- After finishing the program display shows END

Soldering side

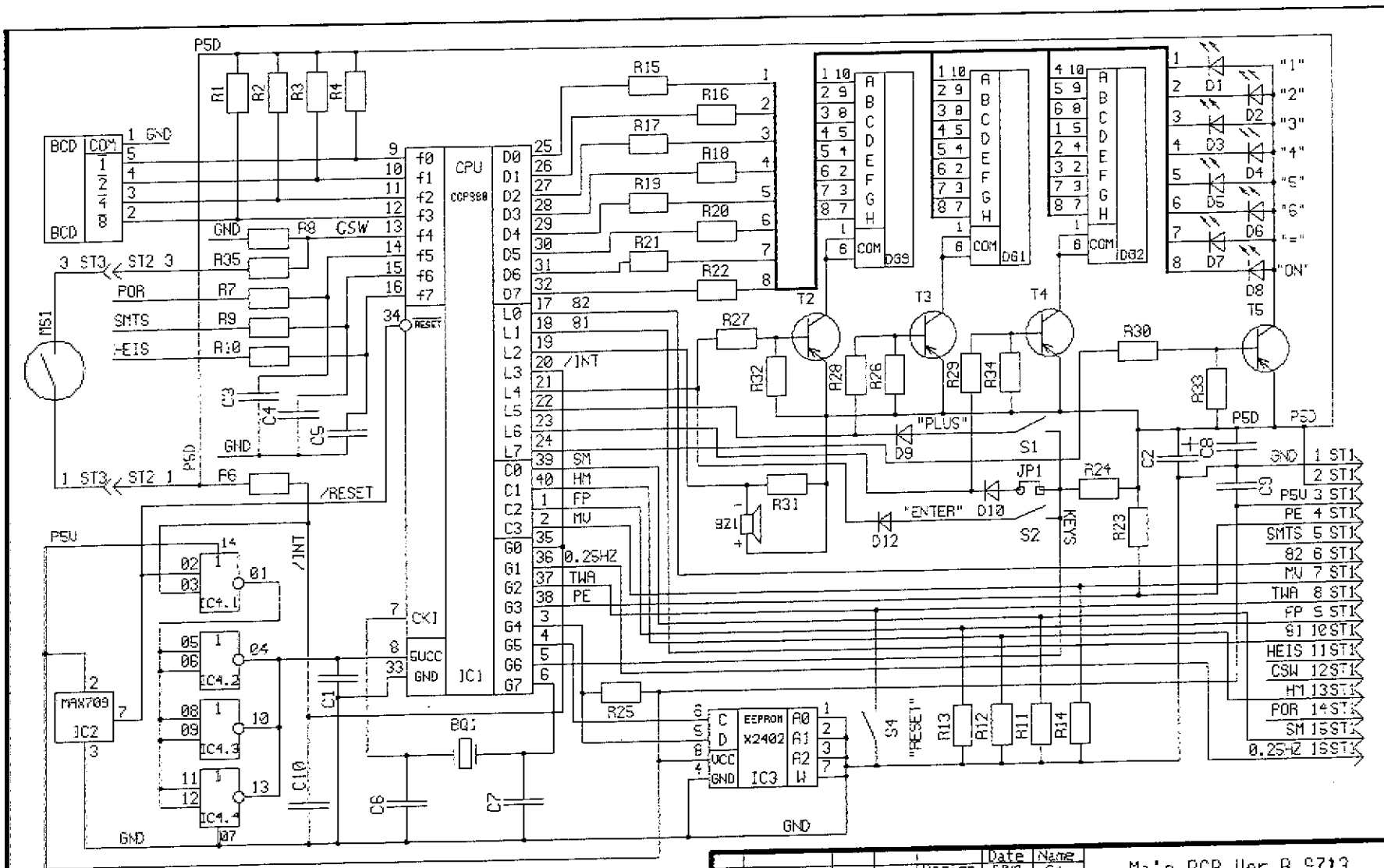


Component side



C1 excluded
IC4, R35 installed

Rev	Changes	Date	Name	Date	Name
				Design	9713 Gr
				Check	9210 VV
				Norm	9716 WR
				JOB0	94407
					B0028
				MAIN PCB Ver. B 9713	
				Assembling	
				ATL 1500 CONTROL UNIT	Page
				Title	694407ad.pcb
					2

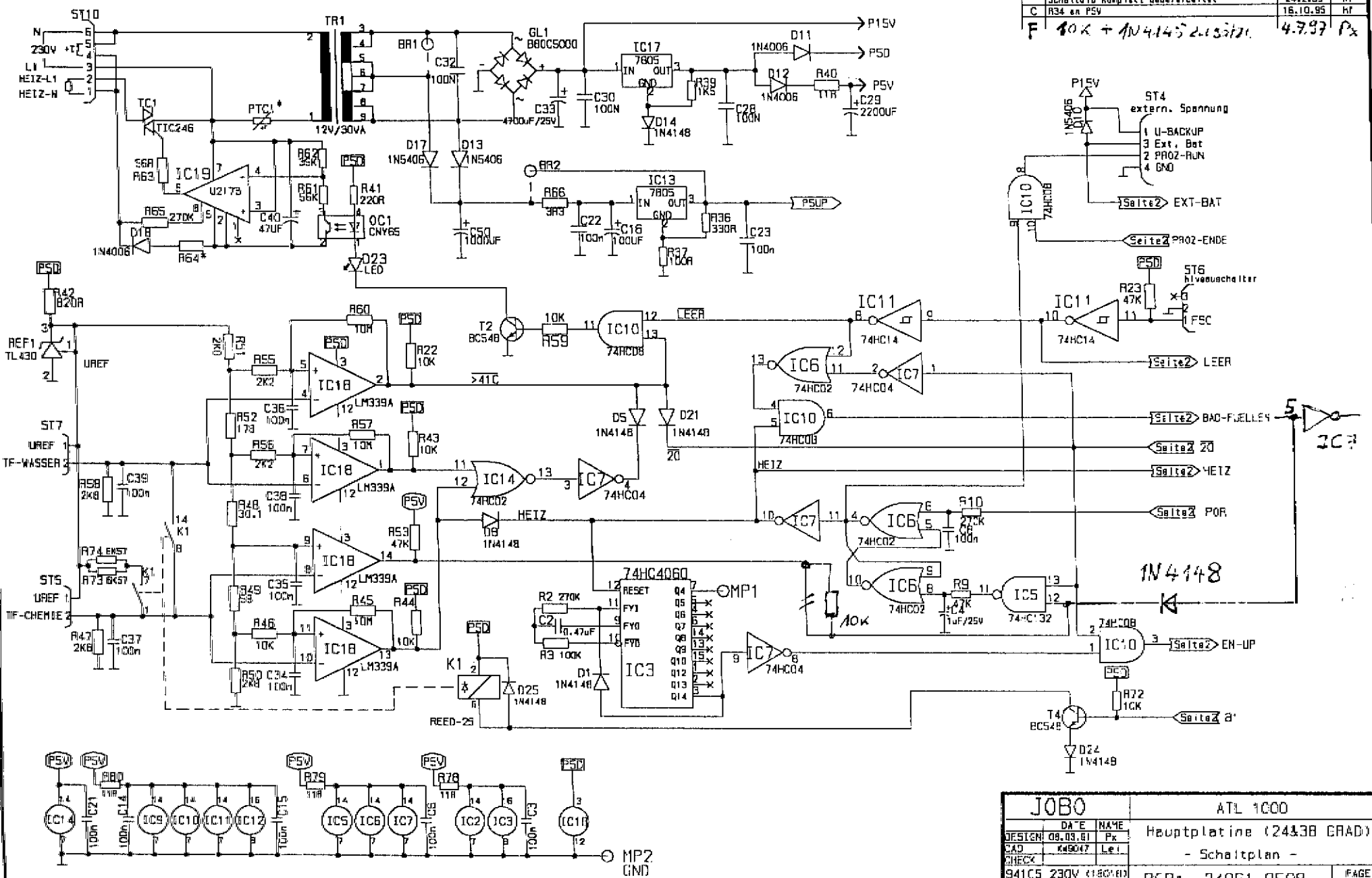


C1 excluded
R1...R4, R31 excluded

Rev.	Changes	Date	Name
	Design	9713	Sr
	Check	9719	VV
	Norm.	9719	WR

JOB0	94407 B0028	Main PCB Ver.B 9713 Circuit diagram	Page 1
File		p94407cd.sch	

Ind	REVISIONS	Date	Name
A	Tochterplat. f. 24Grad, 023 neu, LP9922	12.4.94	Hf
B	Umacht 24Grad auf Hauptplat realisiert, Tochterplat. entfällt, LP 9508		
C	Schaltbild komplett überarbeitet	24.2.95	Hf
	R34 an PSV	16.10.95	Hf
F	10K + 1N4148 2.13.97	4.7.97	Px



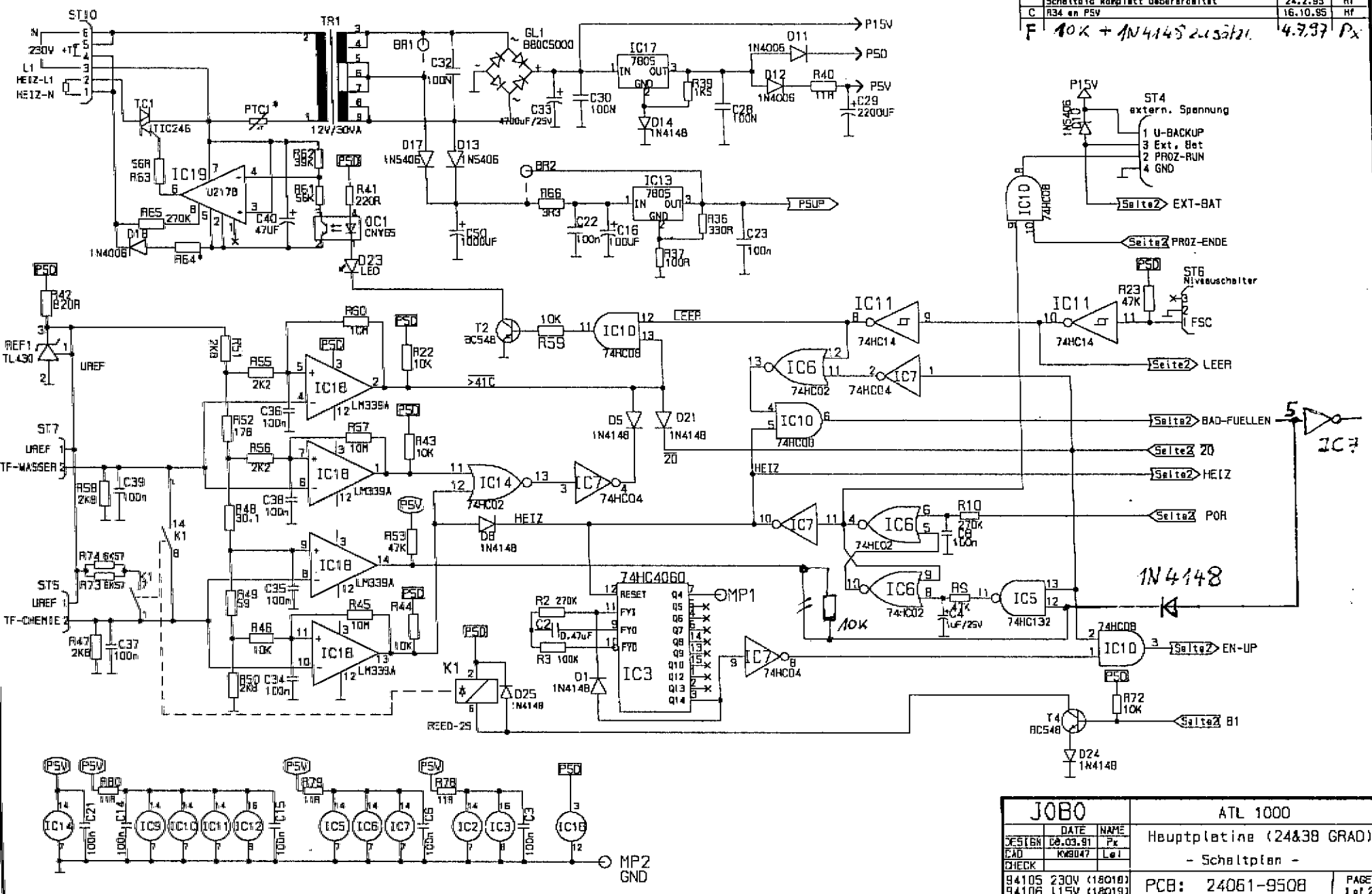
JOB0		ATL 1000	
DESIGNER	09.03.81	NAME	Hauptplatine (2438 BRAD)
CAD	K48047	Leit	- Schaltplan -
CHECK			
941C5	230V (18018)	PCB:	24061-9508
941C6	115V (18019)		

Pos	Part No	Ref	Value	Description		Tol % +/-
1				RESISTORS		
2		R1..R4				
3	R0087	R6	1 k	CF	1/8 W / C2-33H-0.125-1 kOm +/- 10%	10
4	R0087	R7	1 k	CF	1/8 W / C2-33H-0.125-1 kOm +/- 10%	10
5	R0067	R8	10 k	CF	1/8 W / C2-33H-0.125-10 kOm +/- 10%	10
6	R0087	R9	1 k	CF	1/8 W / C2-33H-0.125-1 kOm +/- 10%	10
7	R0087	R10	1 k	CF	1/8 W / C2-33H-0.125-1 kOm +/- 10%	10
8	R0067	R11	10 k	CF	1/8 W / C2-33H-0.125-10 kOm +/- 10%	10
9	R0067	R12	10 k	CF	1/8 W / C2-33H-0.125-10 kOm +/- 10%	10
10	R0067	R13	10 k	CF	1/8 W / C2-33H-0.125-10 kOm +/- 10%	10
11	R0067	R14	10 k	CF	1/8 W / C2-33H-0.125-10 kOm +/- 10%	10
12	R0076	R15	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
13	R0076	R16	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
14	R0076	R17	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
15	R0076	R18	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
16	R0076	R19	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
17	R0076	R20	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
18	R0076	R21	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
19	R0076	R22	200	CF	1/8 W / C2-33H-0.125-200 Om +/- 10%	10
20	R0067	R23	10 k	CF	1/8 W / C2-33H-0.125-10 kOm +/- 10%	10
21	R0067	R24	10 k	CF	1/8 W / C2-33H-0.125-10 kOm +/- 10%	10
22	R0107	R25	51 k	CF	1/8 W / C2-33H-0.125-51 kOm +/- 10%	10
23	R0106	R26	5 k 6	CF	1/8 W / C2-33H-0.125-5.6 kOm +/- 10%	10
24	R0101	R27	430	CF	1/8 W / C2-33H-0.125-430 Om +/- 10%	10
25	R0101	R28	430	CF	1/8 W / C2-33H-0.125-430 Om +/- 10%	10
26	R0101	R29	430	CF	1/8 W / C2-33H-0.125-430 Om +/- 10%	10
27	R0101	R30	430	CF	1/8 W / C2-33H-0.125-430 Om +/- 10%	10
28		R31				
29	R0106	R32	5 k 6	CF	1/8 W / C2-33H-0.125-5.6 kOm +/- 10%	10
30	R0106	R33	5 k 6	CF	1/8 W / C2-33H-0.125-5.6 kOm +/- 10%	10
31	R0106	R34	5 k 6	CF	1/8 W / C2-33H-0.125-5.6 kOm +/- 10%	10
32	R0019	R35	3 k	CF	1/8 W / C2-33H-0.125-3 kOm +/- 10%	10
33						
34						
35						
				Date	Name	MAIN PCB Ver. B 9713 Components list
				Desig	9713 Gr	
				Check	9718 VV	
				Norm	9719 WR	
				JOBO	94407 B0028	ATL 1500 CONTROL UNIT
						Page 1/3
Rev	Changes	Date	Name	File b94407cl.doc		

Pos	Part No	Ref	Value	Description	Tol % +/-
1				CAPACITORS	
2		C1			
3	41001	C2	10 mkF	ELKO 10.0 mkF x 16 V RM 2.5	
4	C0002	C3	100 nF	Ker 50 V / K10-17-H90-0.1 mkΦ +/- 20%	
5	C0002	C4	100 nF	Ker 50 V / K10-17-H90-0.1 mkΦ +/- 20%	
6	C0002	C5	100 nF	Ker 50 V / K10-17-H90-0.1 mkΦ +/- 20%	
7	41290	C6	33 pF	Ker 50 V	
8	41290	C7	33 pF	Ker 50 V	
9	C0002	C8	100 nF	Ker 50 V / K10-17-H90-0.1 mkΦ +/- 20%	
10	C0002	C9	100 nF	Ker 50 V / K10-17-H90-0.1 mkΦ +/- 20%	
11	C0002	C10	100 nF	Ker 50 V / K10-17-H90-0.1 mkΦ +/- 20%	
12					
13				DIODES	
14	26011	D1		LED 3 mm YELLOW	
15	26011	D2		LED 3 mm YELLOW	
16	26011	D3		LED 3 mm YELLOW	
17	26011	D4		LED 3 mm YELLOW	
18	26011	D5		LED 3 mm YELLOW	
19	26011	D6		LED 3 mm YELLOW	
20	26010	D7		LED 3 mm GREEN	
21	26004	D8		LED 3 mm RED	
22	V0002	D9		1N4148 / КД 522 Б	
23	V0002	D10		1N4148 / КД 522 Б	
24	V0002	D12		1N4148 / КД 522 Б	
25					
26				TRANSISTORS	
27	V0006	T2		p-n-p BC557 / KT 3107	
28	V0006	T3		p-n-p BC557 / KT 3107	
29	V0006	T4		p-n-p BC557 / KT 3107	
30	V0006	T5		p-n-p BC557 / KT 3107	
31					
32				INTEGRAL CIRCUITS	
33	46205	IC1		IC COP8 SAC 740N9	
34	46409	IC2		IC MAX 709 S	
35	46608	IC3		IC EEPROM 24 C 02 A	
36	46712	IC4		IC 74 HC 02	
37					
38					
39					
				JOBO 94407 B0028	MAIN PCB Ver. B 9713 Component list ATL1500 CONTROL UNIT
					Page 2 / 3
Rev	Changes	Date	Name	File b94407cl.doc	

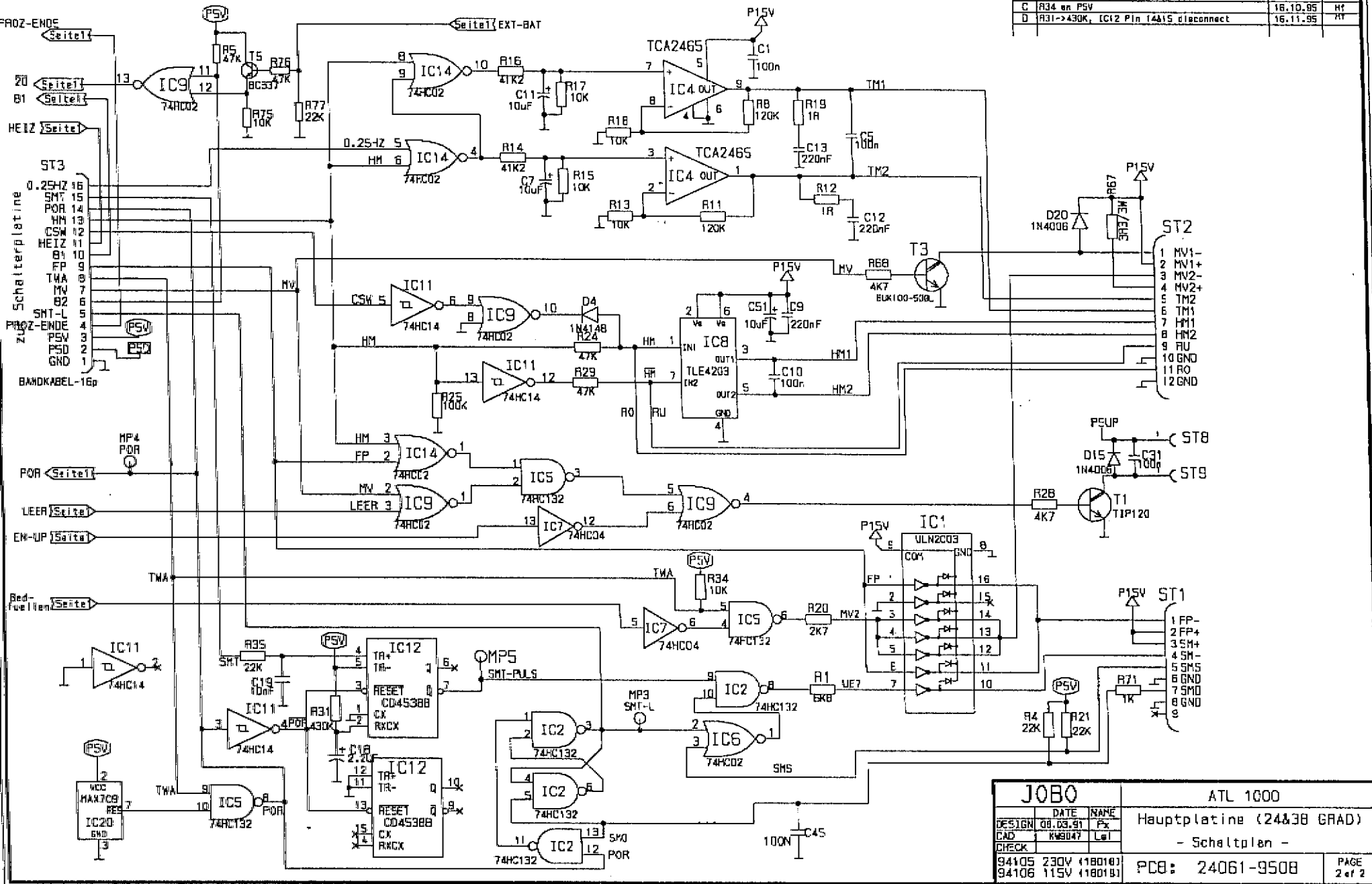
Pos	Part No	Ref	Value	Description	Tol % +/-
1				CONNECTORS	
2	25088	(IC1)		Plazisions - IC - Fassung 40 - polig	
3	25332	ST1		Steck. Pfosten 16 p M PCB 180	
4	25348	ST2		Steckv. SiL Mini-Elnic 3 P V PCB	
5	25354	ST3		Steckv. BL Mini-Elnic 3 P V	
6	25365	(ST3)		Buchsenkontakt Mini-Elnic A. Rolle	
7	25363	(DG1)		Praz. Buchsenleiste 16 pin 1 r V (cut in three)	
8		(DG2)			
9		(DG3)			
10					
11				KEYS AND SWITCHES	
12	20028	BCD		Leiterplattendrensch. 16 BCD Kompl	
13	20045	S1		Taster D6 rund 16 mm, SW	
14	20045	S2		Taster D6 rund 16 mm, SW	
15	20045	S4		Taster D6 rund 16 mm, SW	
16	20200	MS1		Reedsch. 59025 - 522 Blau 18	
17					
18				MISCELLANEOUS	
19	26102	BZ1		Buzzer D = 14 mm RM = 7.6 mm	
20		BQ1		Quarz 4 MHz	
21	43200	DG1		LED - Display 7 segm 9 mm ROT, CA	
22	43200	DG2		LED - Display 7 segm 9 mm ROT, CA	
23	43200	DG3		LED - Display 7 segm 9 mm ROT, CA	
24					
25		JP1		Jumper PCB	
26		(JP1)		Jumper	
27					
28					
29					
30					
31					
32					
33					
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36					
37					
38					
39					
				JOBO 94407 B0028	Page
				MAIN PCB Ver. B 9713 Component list ATL1500 CONTROL UNIT	3/3
Rev	Changes	Date	Name	File b94407cl.doc	

Ind	REVISIONS	Date	Name
A	Techtarplat. f. 24Grad, D23 neu, LP9322	12.4.94	Hf
B	Umcht 24Grad auf Hauptplat reillert, Techtarplat entfällt, LP 9508		
C	Schaltbild komplett ueberarbeitet	24.2.95	Hf
	R34 en PSV	16.10.95	Hf
F	10K + 1N4148 Zusatzl.	4.7.97	Px



JOB0			ATL 1000	
DESIGN	DATE	NAME	Hauptplatine (24&38 GRAD)	
CAD	08.03.91	Px		
CHECK	KMB047	Lej	- Schaltplan -	
94105	230V (18010)		PCB: 24061-9508	
94106	115V (18019)		PAGE 1 of 2	

Ind	REVISIONS	Date	Name
A	Tochterplat. f. 24Red, 023 neu, LP9322	12.4.94	HF
B	Umwcht 24Red auf Hauptplat realisiert, Tochterplat entfällt, LP 9508		
C	Schaltbild komplett ueberarbeitet	24.2.95	HF
D	R34 on P5V	16.10.95	HF
D	R31->430K, IC12 Pin 14&15 disconnect	16.11.95	HY



JOB0			ATL 1600	
DESIGN	08.03.91	FX	Hauptplatine (24&38 GRAD)	
END	RWS047	Lei	- Schaltplan -	
CHECK			PCB: 24061-9508	PAGE 2 of 2
94105	230V (18018)			
94106	115V (18018)			

Liefereinheit: 18018 ATL1000 Hauptplatine 230V 24&38" INDEX E
Leiterplatte : 24061-9508

1	**	entfällt	2
2	33105	Leiterplatten Netzfilter	1 (Nur Beistellen)
3	21017	Reed Relais / 5V / 2S / DIP	1
4	23376 23300	BANDKABELSTECKVERBINDER 16p 400KG. Clips	1 12.3 17 / Px
5	25004	LÖTSTIFT RTM 1,3	4
6	25005	FLACHSTECKZUNGE 6,3mm	2
7	25036	STECKV.MINIMOD 12P M 2,5x3,5 180°	1
8	25047	STECKV.MINMOD 3P RM2,5 1reih 180°	1
9	25060	STECKV.MINMOD 4P RM2,5*3,5 180°	1
10	25096	STECKV.MINMOD 9P RM2,5*3,5 180°	1
11	25110	STECKV.MINIMOD 2P RM2,5 180° rast	2
12	25147	SOCKELGEHÄUSE Gpm.St	1
13	26004	LED D 3mm ROT	1
14	34116	ZYL.SCHR.M3x6 DIN 84 V2A	4
15	34401	MUTTER M3 V2A DIN 934	3
16	35106	LÖTMUTTER M3	1
17	40001	WIDERSTAND 1 OHM 10%	2
18	40010	WIDERSTAND 11 OHM 1/4 W	4
19	40018	WIDERSTAND 100 OHM 1/4 W	1
20	40023	WIDERSTAND 220 OHM 1/4 W	1
21	40028	WIDERSTAND 330 OHM 1/4W	1
22	40029	WIDERSTAND 56 OHM 1/4W	1
23	40034	WIDERSTAND 3,3OHM/3W/MAX.Dx1=6x1	1
24	40035	WIDERST.3,3 OHM/5W/MAX.dxl=10x27	1
25	40050	WIDERSTAND 820 OHM 1/4 W	1
26	40060	WIDERSTAND 1 K OHM 1/4 W	1
27	40075	WIDERSTAND 1,5 KOHM	1
28	40083	WIDERSTAND 2,2 K OHM 1/4 W	2
29	40086	WIDERSTAND 2,7 KOHM 1/4 W	1
30	40100	WIDERSTAND 4,7 K OHM 1/4 W	2
31	40106	WIDERSTAND 6,8 K OHM 1/4 W	1
32	40110	WIDERSTAND 10 K OHM 1/4 W	8
33	40115	WIDERSTAND 22 K OHM 1/4 W	4
34	40119	WIDERSTAND 2W 18 KOHM	1
35	40122	WIDERSTAND 39 KOHM 1/4 W	1
36	40124	WIDERSTAND 47 K OHM 1/4 W	7
37	40125	WIDERSTAND 56 KOHM 1/4 W	1
38	40128	WIDERSTAND 100 K OHM 1/4 W	2
39	40133	WIDERSTAND 270 K OHM 1/4 W	3
(40)	40136	WIDERSTAND 470 K OHM 1/4 W	1)
(41)	40137	Widerstand 430KOhm 1/4W 5%	1)
42	40153	WIDERSTAND 10 M OHM 1/4 W	3
43	40305	WIDERSTAND 120 K OHM 1/4 W 1%	2
44	40307	WIDERSTAND 10 K OHM 1/4 W 1%	4
45	40328	WIDERSTAND 41,2 K OHM 1/4 0,1%	2
46	40335	WIDERSTAND 1/4W 2,8 KOHM +/-0,1%	4
47	40336	WIDERSTAND 1/4W 30,1 OHM +/-1%	1
48	40337	WIDERSTAND 1/4W 59 OHM +/-1%	1
49	40338	WIDERSTAND 1/4W 178 OHM +/-1%	1
50	40346	Widerstand 6,57 KOHM ±0.1% (0207)	2
51	40383	PTC-ÜBERLASTUNGSSCHUTZ 260mA/265	1
52	41010	ELKO 100 UF 40 V RM 5 STEH.	1

Liefereinheit: 18018 AT11000 Hauptplatine 230V 24&38" INDEX E
Leiterplatte : 24061-9508

53	41020	ELKO 10uF/63V/max.6,5x12/RM 2,5	1
54	41034	ELKO 1000 MIKROF./25V/dxh=10x23	1
55	41035	ELKO 2200uF6,3V/max.dhx=10x25/RM	1
56	41036	ELKO 47uF 16V RM2.5	1
57	41037	ELKO 4700uF/25V/max.20x38 RM 7,5	1
58	41100	TANT.TROPFEN ELKO 1 UF 25V RM 2,	1
59	41103	TANT.TROPFEN ELKO 2,2 UF25VRM 2,	1
60	41105	ELKO 10 UF 16V (TANTAL)	2
61	41261	KONDENSATOR 0,22 MIKROF./50V/MKS	3
62	41267	KONDENSATOR 0,47uF/MKS2/50V/RM5	1
63	41301	KONDENSATOR KER. 10 nF 50V	1
64	41303	KONDENSATOR KER 100 nF;50 V	22
65	42001	DIODE 1 N 4148	8
66	42004	DIODE 1 N 4006	5
67	42005	DIODE 3A 1N 5406	3
68	42312	GLEICHRICHTER 5A B 80C 5000/3300	1
69	43004	OPTO-KOPPLER 0730	1
70	44001	TRANSISTOR BC548	2
71	44009	TRANSISTOR BC 337-40	1
72	44010	TRANSISTOR TIP 120	1
73	44045	KÜHLKÖRPER 6098 B-P2 SK104/25mm	1
74	44048	KÜHLKÖRPER SK 75-25 mm	1
75	44050	KÜHLKÖRPER 11 K/W F.TU 220; LÖTB	2
76	44101	TRIAC 600 V / 12 A	1
77	45014	LM 339 AN	1
78	45015	IC U 217 B	1
79	45201	FESTSPANNUNGSREGLER 7805 5V	2
80	45205	PARALLEL-SPANNUNGSREGLER TL 430	1
81	45300	IC TCA 2465	1
82	45302	IC TLE 4203	1
83	45304	TOPFET 50V/13,5A BUK100-50GL	1
84	46124	CD 4538 B	1
85	46404	IC ULN 2003 AN	1
86	46409	IC MAX 709T SUPERVISOR 3,08V	1
87	46712	IC 74 HC 02	3
88	46714	IC 74 HC 04	1
89	46716	IC 74 HC 08	1
90	46717	IC 74 HC 14	1
91	46732	IC 74 HC 132	2
92	46770	IC 74 HC 4060	1

Pos 1: Netzfilter besitellen , siehe auch Steckbrief und Bestückungsplan
Pos 40 & 41: R31 Alternativen, siehe auch Steckbrief