

C o l e n t a 30 A

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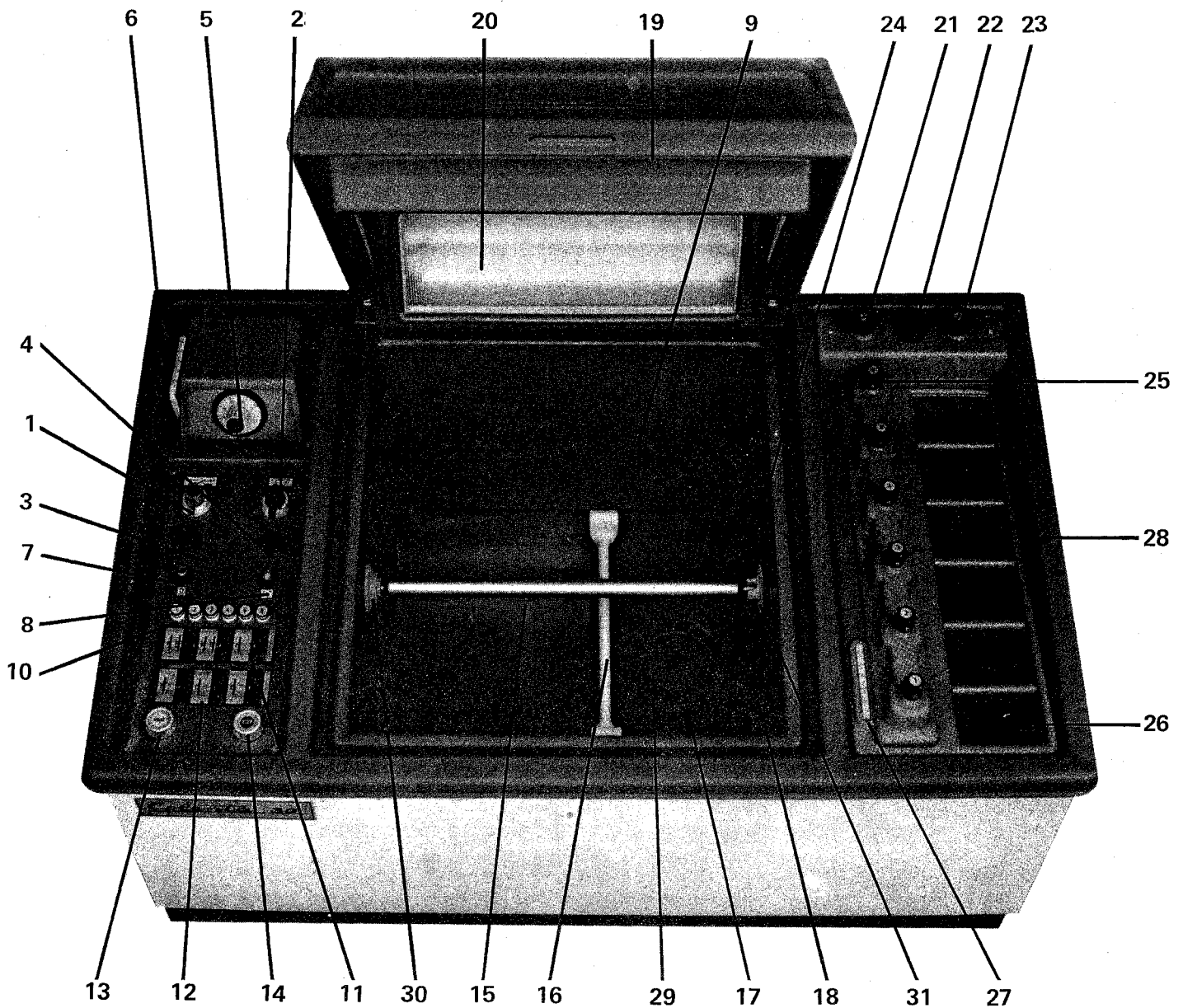
Colenta 30 A

Table model

Technical data:

Diameter of processing spools	30 cm / 12 "
Maximum working width:	35 cm / 14 "
Maximum working length:	150 cm (Paper developer) / 70 "
Water jacket:	50 litres / 15 gal.
Content of chemical tanks:	1150 xcc
Constancy fo temperature:	$\pm 0.1^{\circ} C$
Mains voltage:	220 V (110 V) 50 cycles (60)
Connected load:	2200 watts (10 amp delayed action)
Water connection:	1/2" diametre
Drain diametre:	30 mm / 1 1/4"
Length of machine:	91 cm / 36 "
Heigth:	48 cm / 19 "
Depth:	53 cm / 21 "
Empty weight:	32 kg (A) 70 lbs.

A-model (automatic) with digital programming 24 V (as well as reserve automatic and re-exposure facilities)



- | | |
|---------------------------------|---------------------------------|
| 1. Mainswitch | 17. Trough drain |
| 2. Rotation direction switch | 18. Overflow |
| 3. Fuse temp-control | 19. Cover |
| 4. Fuse motor | 20. Re-exposure light |
| 5. Temp-control-heater assembly | 21. Wash valve |
| 6. Thermometer | 22. Water jacket drain valve |
| 7. Switch re-exposure | 23. Knob for trough drain valve |
| 8. Switch alternating rotation | 24. Inlet chemicals and water |
| 9. Processing trough | 25. Receptacle valves 1-6 |
| 10. Control Lamps | 26. Cover for receptacle |
| 11. Digital switches chemicals | 27. Thermometer |
| 12. Digital switches washes | 28. Receptacles 1-6 |
| 13. Start button | 29. Trough drain valve |
| 14. Stop button | 30. Axle bearing left |
| 15. Axle for spools | 31. Axle bearing right |
| 16. Trough divider | |

Description of the Machine

The Colenta is a fully automatic universal processor operating on the basis of one shot development with fresh solutions.

All common processes in photography, in colour and black and white, can be carried out in the Colenta without difficulty. Any desired operation can be set on the program unit by means of digital switches within seconds.

A high degree of quality and reproduction is achieved by the use of fresh chemical solutions. The amount of chemicals used is determined by the quantity of material to be developed.

The machine can be operated under daylight conditions except when loading spoons.

The external housing of the Colenta is made of impact resistant thermoplastic and contains the control section on the left side and the processing chamber on the right. The housing itself acts as a water jacket containing approximately 15 gallons. The connections for water inlet, drainage, overflow, valve and the circulation pump are fitted underneath the housing.

The processing chamber with the chemical receptacles are arranged at the right. The water in the jacket is thermostatically controlled and circulated around the processing chamber and the chemical receptacles, which are immersed in the jacket.

The water required for wash steps is drawn from the jacket in which the level of the water is kept at the same height by an automatic solenoid valve.

There is a groove on each of the interior side walls of the processing chamber for positioning of the divider (16). The floor of the processing chamber is sloped to the right where the drain (17) for the chamber is situated. Operation of the drainage valve is automatic during operation. During or after cleaning of the machine, the drain valve can be operated manually by pulling the valve knob (23) up for the duration of the opening period. Immediately to the left of the chamber drain valve is the jacket drain valve (22) which is opened by turning to the left and closed by turning to the right (screw thread).

The wash water valve (21) is also automatically activated during processing. Manual operation is possible by lifting of the valve knob for as long as water is required to flow into the processing chamber.

Six chemical receptacles with automatic solenoid valves (25), a control thermometer (27) and a plexiglas cover (26) are at the right of the processor housing.

The receptacles are immersed in the water jacket so that the chemicals filled into these receptacles are kept at constant processing temperature. The valve for each receptacle can be operated manually by lifting of the valve knob.

Chemicals and wash water flow through a joint inlet (24) into the processing chamber. The inlet system is cleaned during each wash step.

An overflow (18) is fitted within the processing chamber on the right wall which prevents overflowing of the water during wash steps over the divider in to the unused part of the processing area. If the level in the processing area rises to the upper edge of the overflow, the fluid is siphoned off within moments.

The processing chamber is closed by a light-proof, self-locking cover (19). A re-exposure light (20) is incorporated into the cover.

The thermostat unit and the controls are located to the left of the processing chamber.

The thermostat unit can be set to the desired process temperature ranging from 20° to 45° C, by turning the dial (5). The temperature control is accurate during operation to $\pm 0,1$ centigrade.

The red main on-off switch (1) is located on the upper left of the operating console. The fuse (3) for the temperature control unit is inserted below the main switch.

Please note! The machine must be disconnected before changing fuses!

Another fuse located to the right is protecting the drive motor and the solenoid valves as well as the exposure light.

The drive switch (2) is located to the right of the main switch. Rotation starts only after activation of the start button (13). In case alternating rotation is desired push button (8) located below the the right hand fuse has to be pressed. When activated a pale green circle (9) becomes visible. For manual rotation of the axle, (cleaning the machine), the drive switch can be turned to the right. Rotation takes place in a forward direction only with the switch in this position. The re-exposure light is switched on/off as required by the push button (7) at the left below the temperature control fuse. Re-exposure light switches on-off automatically during the second wash step when the pale green circle is visible. No re-exposure takes place when the green circle is not visible. The re-exposure light cannot be turned on manually.

The digital timers are situated in the lower part of the operating console and consist of 6 control lamps (1), digital switches (11,12), and the start (13) stop (14) buttons. The digital switches are arranged in two rows one below the other and divided for easier surveillance into grey and black sections. The timers for the chemical receptacles 1–6 are located in the upper row, to be read from left to right (11). The timers in the lower row are for regulation of the wash steps from 1–6 (12).

The digital timers operate in the following sequence:

1. Tank	=	1. grey sector of the upper row with 2 time wheels.
1. Wash	=	1. grey sector of the lower row with 1 time wheel.
2. Tank	=	1. black sector of the upper row with 2 time wheels.
2. Wash	=	1. black sector of the lower row with 1 time wheel.
3. Tank	=	2. grey sector of the upper row with 2 time wheels.
3. Wash	=	2. grey sector of the lower row with 1 time wheel.
4. Tank	=	2. black sector of the upper row with 1 time wheel.
4. Wash	=	2. black sector of the lower row with 1 time wheel.
5. Tank	=	3. grey sector of the upper row with 1 time wheel.
5. Wash	=	3. grey sector of the lower row with 1 time wheel.
6. Tank	=	3. black sector of the upper row with 1 time wheel.
6. Wash	=	3. black sector of the lower row with 1 time wheel.

The timing wheels of the digital timers can be set from 0–15 minutes whereby the markings from 1–9 equal minutes. Additional minutes are signified by letters (e.g. A = 10 minutes, G = 12 minutes, F = 15 minutes).

The first three timers of the upper row have an additional timing wheel with the numbers from 0 to 3. The time values are as follows:

setting at 1	=	additional 15 seconds
setting at 2	=	additional 30 seconds
setting at 3	=	additional 45 seconds

Example: Tank no. 3 (colour developer for reversal process) is to be set for 13 1/2 mins. The second grey sector of the upper row is set: first time wheel at D and on the second time wheel at 2. Rotation of the time wheels can take place in both directions.

If certain wash steps (or chemical steps) are to be omitted, the timing wheels of the respective digital timer are positioned at 0.

Upon programming the operation can be started by pressing the start button. During processing the appropriate control lamps indicate which digital timer is in use, thus showing the progress in the process step by step. Settings on the digital timers can be changed during the process. A buzzer sounds upon completion of a processing cycle and is stopped by pressing the stop button.

Do not press stop button during a process, since hereby the programme is cancelled and not re-instated by re-starting.

Installation of the Machine

It is advisable that the machine be placed on a work table with a surface of 105 x 55 centimetres, 60 to 65 centimetres high. (42" x 22", 25" high).

Care must be taken during mounting that the machine is level in all directions (to be checked with a spirit or air level). The half inch pressure hose, supplied, is pushed over the hose socket underneath the machine and tightened with a hose clamp. The length of the pressure hose has to permit connecting to the water supply without kinks. A half inch stop cock with a hose socket should be fitted at the cold or tempered water supply to which the hose from the machine is fitted and secured with a hose clamp.

The 30mm Ø drain nipple and the 1/2" drain nipple for the water jacket drainage are also located underneath the machine and should be connected with the hose supplied with adequate gradation to an existing sink or floor drain. Care should be used that there are no kinks in the line. Hose clamps are not necessary.

Operating Instructions

1. Plug the machine into the correct electrical outlet.
2. Open the stop cock of the water main to the machine.
3. Set the dial of the temperature control at 15° C.
4. Switch the machine on by the red main switch. Water now flows into the water jacket through a solenoid valve.
After approx. 20 mins. the water jacket is filled with approximately 50 litres (15 Gal) and the float switch automatically shuts off the water supply.
At a certain level during filling the water jacket circulation pump switches on by a safety pressure switch. The circulation pump operates continuously during the total period of operation.

5. The desired working temperature can be set on the thermostat upon completion of filling. If the temperature of the water jacket is below that of the working temperature set on the thermostat, the heating goes into action automatically. The heater switches off after the working temperature is reached in the water jacket.

6. **Filling of the Chemical Receptacles**

The 6 receptacles have each a capacity of 1150 cc and serve as receptacles for the solutions required for each process cycle. The amount used depends on the number or quantity of films or paper to be developed, and on the recommendation of the manufacturer of the sensitized goods. Each processing spool shows a "cc" value, which should be taken as a guide to the minimum amount of solution needed for this particular spool.

Please ensure that the tanks are clean before filling and that the magnetic valves are seated properly. Fill the pre-tempered solutions into the tanks and avoid splashing. After completion of filling the plexiglass cover is cleaned and positioned over the tanks. The temperature of the solutions can be controlled by the thermometer in tank No. 1.

7. **Programming of the Controls**

Place the rotation switch in the center position. Please take into consideration upon setting whether re-exposure and/or alternating rotation are required during processing. If so, press the appropriate buttons in such a way that the pale green circles are visible in the switches.

If the switches do not show the green circle, neither reversing nor re-exposure will take place.

Finally the digital switches are set in sequence to the times required for each chemical solution and each wash step in the process.

8. **Fitting the Axle with the Spools**

Care must be taken that the processing chamber and the inside cover are clean and dry. The spools are fitted into the axle in such a way that the lettered or arrowed side of the spool shows pointing to the left to the squared axle end. The axle with the spools is now fitted into the left drive bushing.

Care should be taken that the squared lug of the axle fits snugly into the drive bushing. The axle can then be fitted into the right hand bushing by exerting slight pressure. The spools are then pushed to the right end of the processing housing and locked into position on the axle by a quick sharp twist. A divider should be inserted if the developing trough is not fully utilized. Care should be taken that the divider is not angled during insertion. The divider is hooked first under the groove and then pushed into the opposite groove by exerting slight pressure on the rubber lip. There should be a minimum of 2 cm (1")

clearance to the spool. Loading the spools has to be carried out in complete darkness. After loading, the cover is closed with an audible click. All further work can be carried out in daylight.

9. **Rotational Direction of the Axle with the Spools**

The correct setting of the axle rotation is of decisive importance to the even and streak-free development of the diverse materials. Sheet films, miniature and roll films as well as positive films in sheets are developed with alternating rotation. Alternating rotation is pre-set by the right hand push button on which the green circle is visible. This button should not be pressed for the development of paper and positive films in large sizes in universal paper spools.

NOTE: In order to check if the spools are turning freely before the start of each process, one can turn on the axle rotation by turning the rotation switch to the right of center position.

Faultless rotation is clearly audible. Return switch to center position.

Now upon setting all previously mentioned controls and as soon as the temperature in the chamber is correct, the process can be started by pressing the start button.

10. A buzzer sounds after completion of the developing process until the stop button is pressed. The cover of the machine can now be opened and the developed material removed from the spools.

11. **Cleaning of the Machine after Processing**

Axle, partition and spools as well as the plexiglass cover are to be removed from the machine after use and cleaned under running water in a suitable container, (not exceeding 35° C). The spools can be rubbed with a dish towel to speed up drying and then placed in a hot air cabinet (not exceeding 35° C) (100° F).

The chemical receptacles are filled with clean water and then drained, thus at the same time cleaning the inlet channel. Finally the processor housing and the interior cover are carefully cleaned with water and dried. After cleaning a check should be made to ensure that the valve plugs are firmly positioned in the outlets of the receptacles. The numbers on the valve knobs should always be in a vertical position.

12. **Loading of the Processing Spools**

a) Universal Paper Spools

These spools are intended for paper and positive films, whereby varying sizes can be inserted. The material to be developed should never protrude by more than 1 cm (1/4") over the segment edge at the sides. On each segment steel clips are fitted at intervals of approximately 7 cm (3") into which films and paper can be inserted, emulsion side out. Overlapping of film and paper is possible, but it depends on the brand and type to what extent. With universal paper the rotation is forward only.

b) Spools for Sheet Papers

These spools are designed solely for sheet papers and accept only one sheet per paddle segment. Papers should be inserted with the emulsion side facing the axle.

c) Spools for Roll and Miniature Films

Roll film spools are fitted with spring steel clips to hold the roll film at both ends. The leading end of the film should be inserted into one of the two clips first, and by slow turning of the spool, the film can be rolled easily over the guides on the rods. The end of the film is then inserted into the second clip and tightened slightly to prevent slipping. Care must be taken that the films are not pulled to tightly. The emulsion side of the film should be out. Rotational direction in the processing of roll and miniature films can be with or without reverse operation.

d) Sheet Film Spools

These spools are intended exclusively for the development of sheet films. Only one sheet film can be inserted into each segment whereby the emulsion side of the film has to be towards the axle. Spools with open and overlapping paddles are available for the development of sheet films. The overlapping spools offer greater capacity but loading with sheet film larger than 9 x 12 cm (4 x 5") is not recommended for all film types.

13. **Re-adjustment of the Thermostat:** By frequent changes and too vigorous turning of the thermostat dial beyond the limit it is possible that the adjustment screw on the dial becomes loose and inaccuracies in the temperature become noticeable. Proceed as follows:

The black cap is lifted off the dial by means of a small screw driver. The slotted screw behind the cap is loosened by turning to the left. Then turn the grey scale to the value shown on the control thermometer. The slotted screw is then tightened without moving the grey scale and the cap replaced.

14. **Replacing valve stoppers**

Unscrew the circular handles 23 (drainage valve) and 21 (washing valve) by turning them to the left. The circular handle 22 (emptying of the water jacket) can be loosened and removed by unscrewing the screw beneath the circular handle. The cap can then be lifted off over the valves. Disconnect the twelve-pole cable and unscrew the 3 screws on the tank valve cover. The entire valve group can then be lifted out and the valve stoppers exchanged without any difficulty.

Reassembly is as described above, reversing the procedure.

15. **Reversal Processing requiring Pre-washing**

Development of Agfachrome film in accordance with process 41.

- a) The processing times are set on the digital programme switches.
- b) After loading of the spools and closure of the cover the rotation switch is turned to the right and rotation starts.
- c) The wash water valve is pulled manually for the duration of 10 seconds and at the same time a laboratory timer set for 5 minutes.
- d) After 5 minutes (laboratory timer) the drain valve is pulled for 10 seconds and the drive switch set at automatic (center position) and processing begun by pushing the start button. After completion of the process the buzzing tone is switched off by pressing the stop button. The developed material can be removed and dried now.

16. **Pre-washing of Colour Papers**

In order to guarantee even development of difficult work pre-washing is recommended for up to 1 1/2 minutes. The course of the process is altered in such a way that tank 1 is utilized for pre-washing. The remaining tanks are filled as usual with the successive solutions.

17. **Extension of the First Development (Pushing)**

If it becomes necessary to extend the first development time beyond 15 minutes (tank No. 1) one takes the following action:

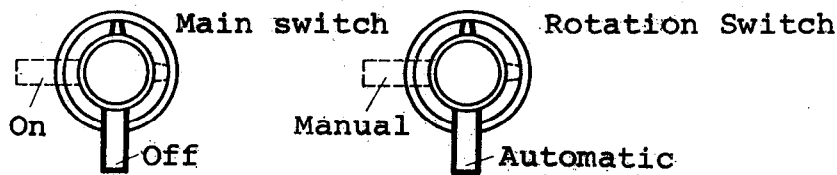
After loading the machine and programming the controls a laboratory timer is set at the desired time in excess of 15 mins., and started simultaneously with the start of the processing cycle. Shortly before expiration of the time set on the timer the rotation switch No. 2 is to be set to right of center position. The stop button is then pressed and shortly afterwards the start button is re-activated. Finally the switch No. 2 is to be placed back into center position.

Faults in development	Possible reasons	Corrective measures
Spots on the film back	<ol style="list-style-type: none"> 1. Too little chemical solution 2. Sheet films too large 3. False rotation 4. Spools are not dry 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. Films to be cut slightly or segments to be widened through warming 3. Switching to alternating rotation 4. Make sure that spools are dry
Falling out of sheet films	<ol style="list-style-type: none"> 1. Sheet films too small 2. Washing too intensified 3. Improper insertion 	<ol style="list-style-type: none"> 1. Segments to be made smaller through warming 2. Washing at the beginning only at full flow then economy flow. During washing repeated operation of drainage valve. 3. Make sure films are inserted correctly.
Colour shift on sheet film	<ol style="list-style-type: none"> 1. Use of overlapping spools 2. Too little chemical solution 3. False rotational direction 	<ol style="list-style-type: none"> 1. Use open spools for reversal films 2. Higher dosage of chemicals 3. Switching to alternating rotation
Bromide run-off in the rotating direction of spools	<ol style="list-style-type: none"> 1. Too little chemical solution 2. False rotational direction 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. Switching to alternating rotation
Spots or streaks on the emulsion side	<ol style="list-style-type: none"> 1. Too little chemical solution 2. Films inserted the wrong way 3. Unclean inlet system 4. Leaking divider 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. Sheet films to face axle. Roll- and 35mm films with emulsion side out 3. Thorough cleaning and checking of the valve seats 4. To watch that divider is seated

Faults in development	Possible reasons	Corrective measures
Pre-exposure of the films	<ol style="list-style-type: none"> 1. Processor lid not properly closed 2. Incident lighting through lid 3. Static discharge of re-exposure lighting 4. Switching of re-exposure lighting by mistake 	<ol style="list-style-type: none"> 1. To watch that lid is tightly locked 2. Machine not in level position 3. Reversing of main plug
Tilt tendency	<ol style="list-style-type: none"> 1. Nonobservance of developing instructions 2. Breakdown of the temperature unit 3. Use of overlapping spools 4. Unnoticed preliminary expose through static discharge of the re-expose lighting 5. Too little chemical solution 	<ol style="list-style-type: none"> 1. Special instructions to be observed with regard to rotational developing 2. Inspection of the temperature control unit 3. Use of open spools only on reversal films 4. Reversing of main plug 5. Higher dosage of chemicals
Uneven colour density on full machine load	<ol style="list-style-type: none"> 1. Too little chemical solution 2. False rotation direction 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. Switch to alternating rotation
Faults when paper developing on universal spools	Possible reasons	Corrective Measures
On starting the motor does not pull through	<ol style="list-style-type: none"> 1. Spool does not run at start 	<ol style="list-style-type: none"> 1. When closing the lid a picture got stuck between lid and housing or pictures stick to the processing trough when running in the first solution. Pre-washing with running of the machine

Faults when paper developing on universal spools	Possible reasons	Corrective measures
The overlapping of the pictures becomes visible	<ol style="list-style-type: none"> 1. Too little chemical solution 2. Stop bath too weak 3. Developing times too short 4. Possible preliminary exposure through static discharge 5. Too little and too weak washing 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. Stop bath to be de-acidified 3. Lengthening of developing times through thinning of developer. 4. Resersing of mains plug 5. Washing to be intensified
Blue spots on the pictures	<ol style="list-style-type: none"> 1. Spools or processing trough not dry 2. Leaking tank valves 	<ol style="list-style-type: none"> 1. Spools and processing must be dry under all circumstances 2. Check valve seating and if necessary change same
After the developing residues of the bleaching bath remain at the back of the picture	<ol style="list-style-type: none"> 1. Washing after the bleaching bath too short and not intensiv enough 	<ol style="list-style-type: none"> 1. Final washing to be lengthened slightly with several drainings of the water at intervals
Undeveloped picture parts on and between the clips	<ol style="list-style-type: none"> 1. Too little chemical solution 2. Paper stretch too strong 3. Some segments too high 4. Partition inserted too far from the spool 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. The run of the paper fibre to be observed (stated on packing) 3. Change of the spools 4. Partition to be fixed 2 cm from the spool
Spots and fog all over of the picture	<ol style="list-style-type: none"> 1. Too little chemical solution 2. Stop bath too weak 3. Pictures stick at overlapping sections 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. Stop bath to be more de-acidified 3. Eventual pre-washing with Agepon or Fotoflo
Bromide run-off and streaks at the clip points	<ol style="list-style-type: none"> 1. Too little chemical solution 2. Unclean clips 3. Stop bath too weak 4. Developing time too short 	<ol style="list-style-type: none"> 1. Higher dosage of chemicals 2. Clips to be cleaned thoroughly 3. Stop bath to be more de-acidified 4. Developing time to be lengthened through thinning of the developer
Falling out of pictures	<ol style="list-style-type: none"> 1. Clips too weak 2. Pictures have uneven cutting edges 	<ol style="list-style-type: none"> 1. Clips to be tensioned 2. Clipping sides of the pictures to have straight cut edges
Reproduceability from run to run is not given	<ol style="list-style-type: none"> 1. Temperature is not stable 	<ol style="list-style-type: none"> 1. Check thermostat

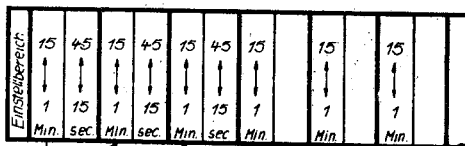
INSTRUCTIONS -- COLENTA 30 A



+ In case of power failure less than 5 seconds, the program continues automatically.

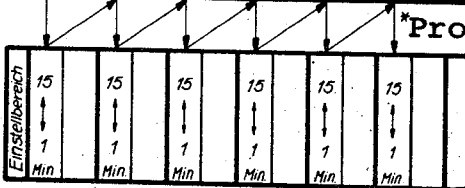
+Re-exposure +Alternating (When in down position)

Programming



Solution times settings.

To set: 0-9 Min. - figures 0-9
 10-15 Min. - letters A-F
 0,15,30,45 sec. - figures 0,



*Programserie

If set at "0", wash step is skipped.

Wash time settings

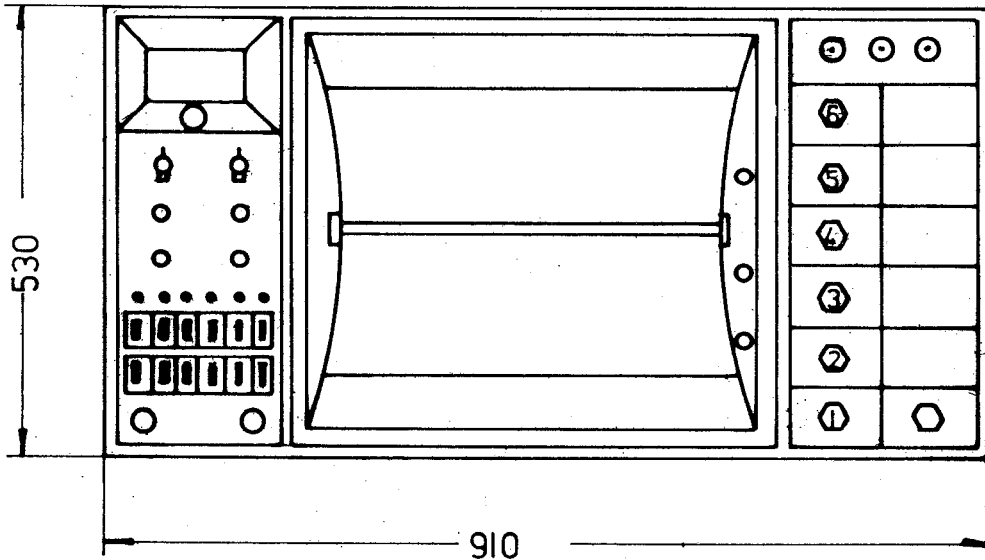
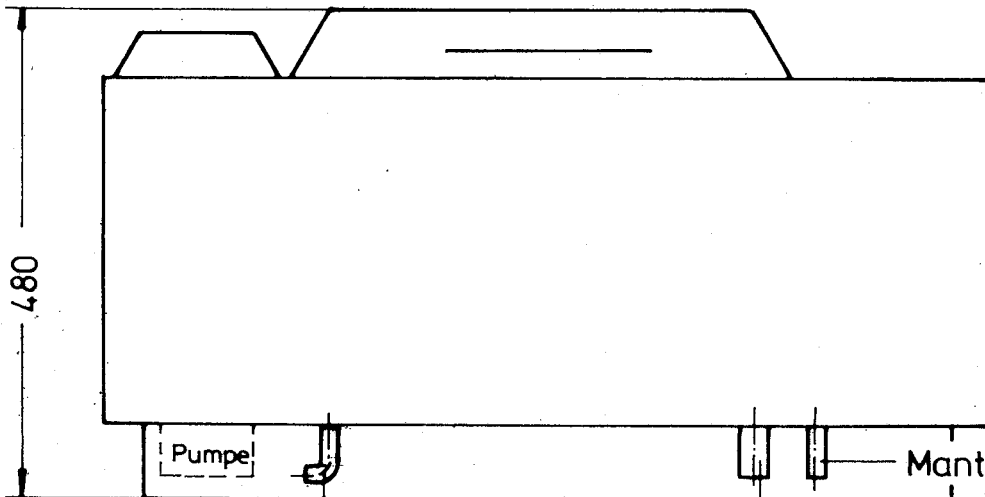
Set as above.



Hold "Stop" button at least 2 seconds. Program re-sets automatically.

Wasserhahn mit Schlauchtülle 1/2" —○

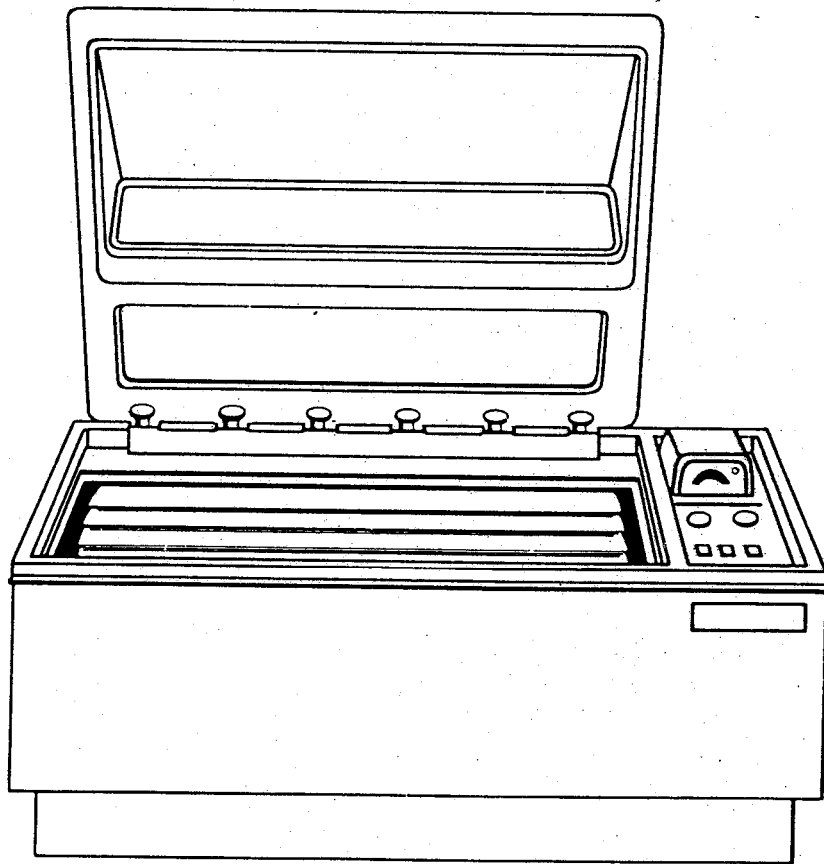
⊙ — 220V ~



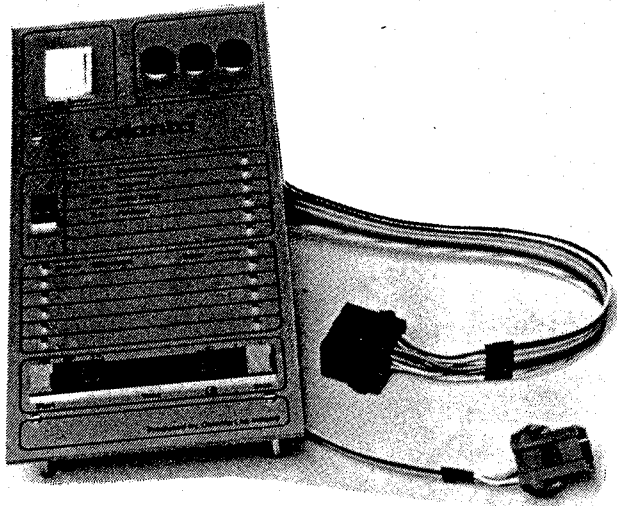
ERSATZTEILLISTE

Maschinentyp 30 AT

Code 0000 032



**Colenta® Entwicklungsmaschinen-
ausgetüftelt bis ins letzte.**



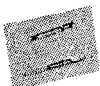
34063 Steuerung kompl.



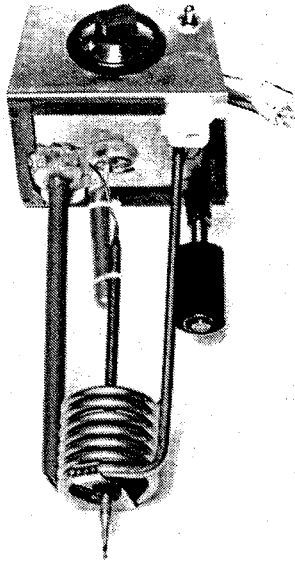
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- 05028 Sicherung 10 A
- 05647 Sicherung 4 A
- 05648 Sicherung 1 A
- 05212 Sockel



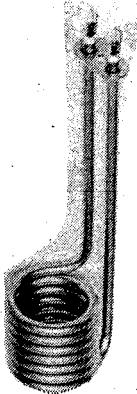
- 05639 Metrimate Stiftgehäuse 18 pol.
- 05640 Metrimate Buchsengehäuse 18 pol.
- 05641 Metrimate Stiftgehäuse 12 pol.
- 05642 Metrimate Buchsengehäuse 12 pol.
- 05643 Metrimate Stiftgehäuse 6 pol.
- 05644 Metrimate Buchsengehäuse 6 pol.



- 05645 Metrimate Buchse 0,75 - 1,5 ∇
- 05646 Metrimate Stift 0,75 - 1,5 ∇



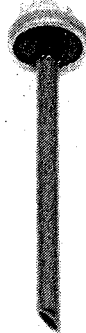
34064 Temperiereinheit



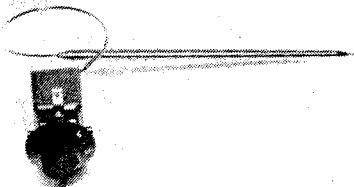
05308 Heizstab 1500 W



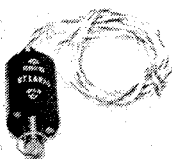
05278 Überhitzungsschutz



8147712 Druckmembranschalter



05358 Thermostat



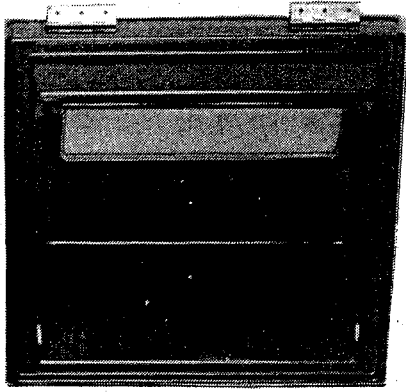
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05482 Umschalter



27017 Klammer



31054 Deckel mit Zwischenbelichtung



31044 Scharnier



05444 Buchse für Zwischenbelichtung

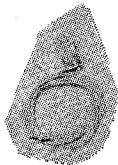
05442 Stecker für Zwischenbelichtung



05101 Leuchtstofflampe 8 W



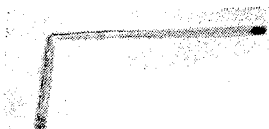
05168 Startersockel



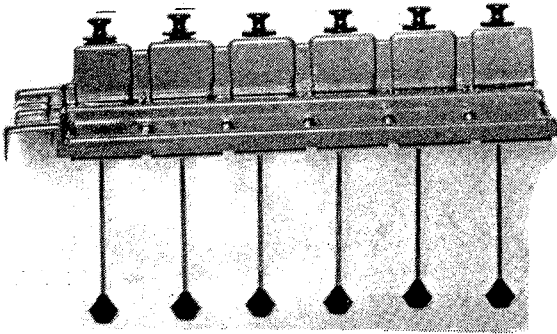
05195 Fassung



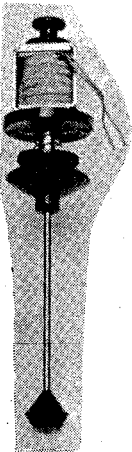
05148 Starter



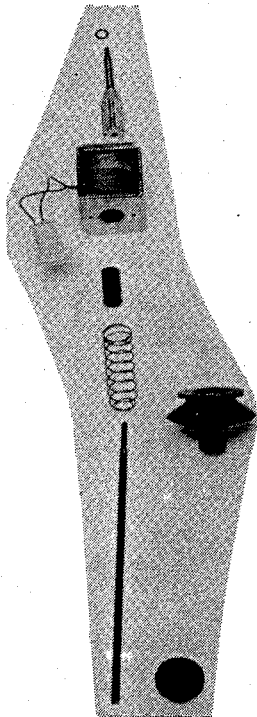
04008 Glasthermometer



31098 Ventileinheit



61004 Ventil



13012 Magnetkern

05001 Magnet

13038 Federaufnahme

13009 Feder

06029 Faltenbalg

11001 Stößel

23003 Ventilkegel

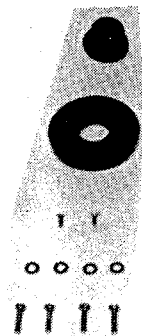
23010 Knopf

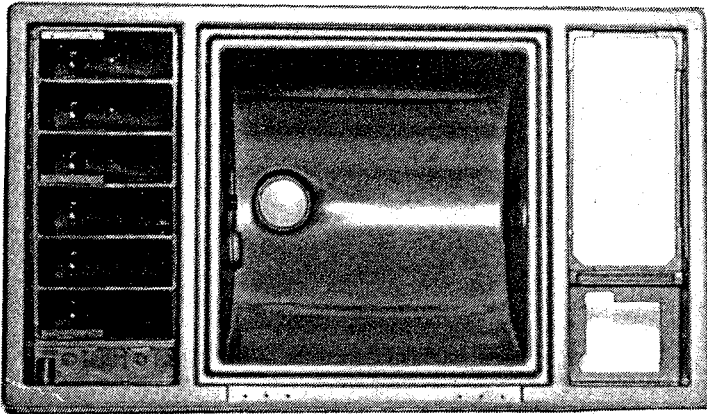
22006 Magnetsockel

03211 Schraube M 3 x 8

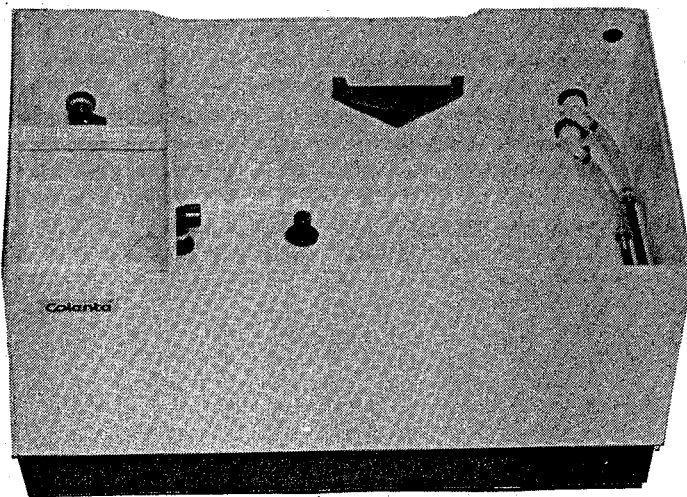
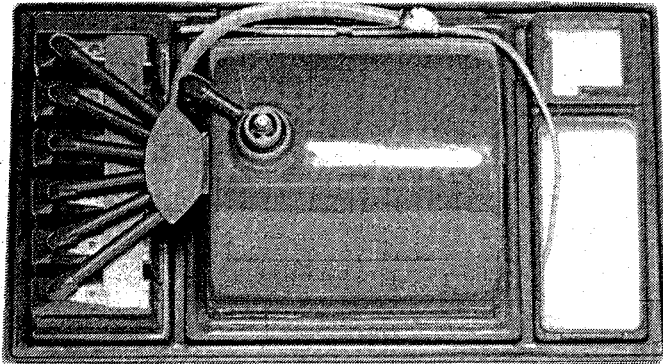
03186 Scheibe Ø 5,3

03039 Schraube M 5 x 16

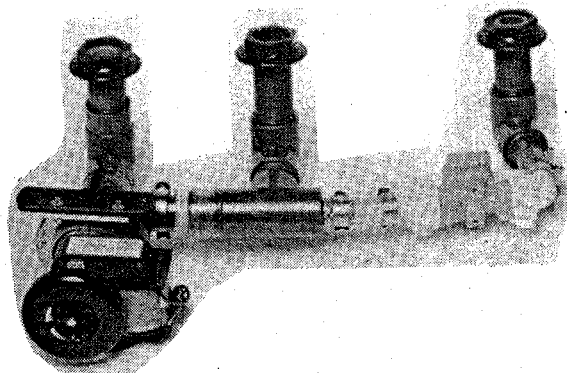




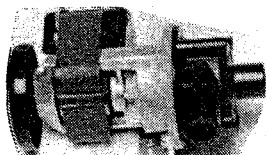
31037 Wanne



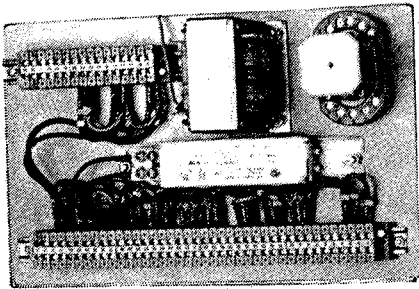
31080 Mantelbadbehälter



31526 Pumpe mit Anschlüssen kompl.



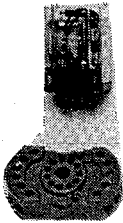
05339 Pumpe BM 25/2
mit Überhitzungsschutz



34065 Drosselplatte



05146 Vorschaltgerät 220 V, 50 Hz,
2 x 8 W

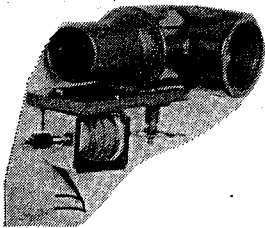


8104512 Relais 220 V - 11polig

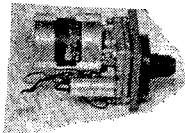
8104516 Relaissockel 11polig



05649 Transformator



31046 Ablaufventil



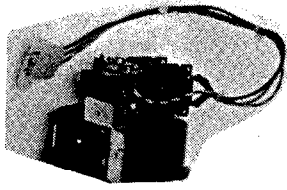
31115 Motor
komplett mit Kondensator



05115 Kondensator 0,5 μ F



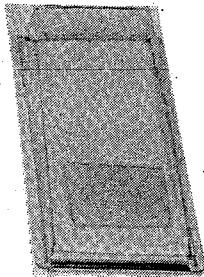
04023 Schraubflansch



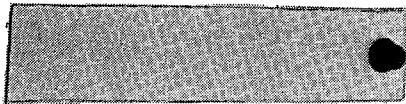
05650 Lüfter



31074 Trennwand



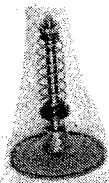
31122 Abdeckung für Steuerung



31129 Tankabdeckung



31073 Achse



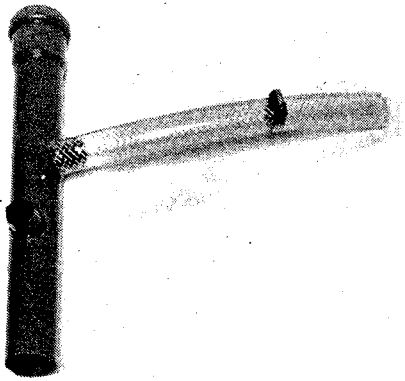
31050 Tellerventil



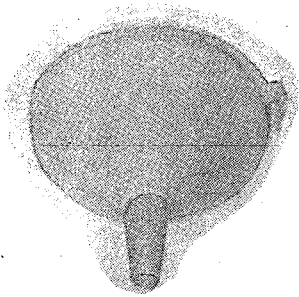
23008 Dichtung



23012 Dichtung



31527 Abflußrohr



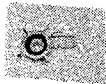
23042 Trichter



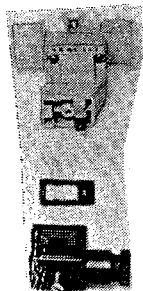
31076 Einfüllstutzen für Behälter



06008 Schlauchverschraubung R 3/4 "



06009 Winkelverschraubung R 3/4 "



04003 Magnetventil 3 Ltr.

04200 Gummidichtung für Magnetventil

04009 Gerätestecker für Magnetventil

- A 18 pol. Metrimate
- B 12 pol. Metrimate
- C 6 pol. Metrimate
- D 6 pol. Mate-n-Lok

Bu 1 6 pol. Metrimate

Steckverbindungen am Ventilblock und am Abflußventil:
2-pol Mate-n-Lok

Pos.	Stück	Benennung			Werkstoff	Teil- Nr.	Bemerkung		
			Zul. Abw.:	Oberfläche	Maßstab:	Gewicht:			
				Datum	Name	Bezeichnung:			
			Beab.			Steckverbindungen COLENTA 30AT			
			Gepr.	2.11.84	Leyp				
			Norm						
						Zeichnungsnummer:			Blatt
									Bl.
Zust. Änderung		Datum		Name					

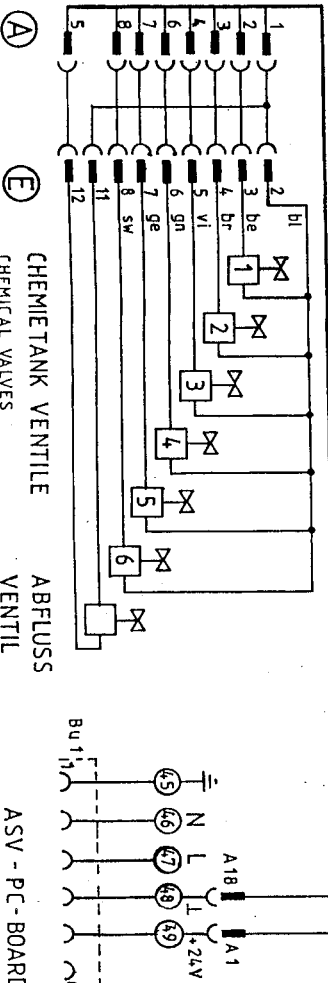
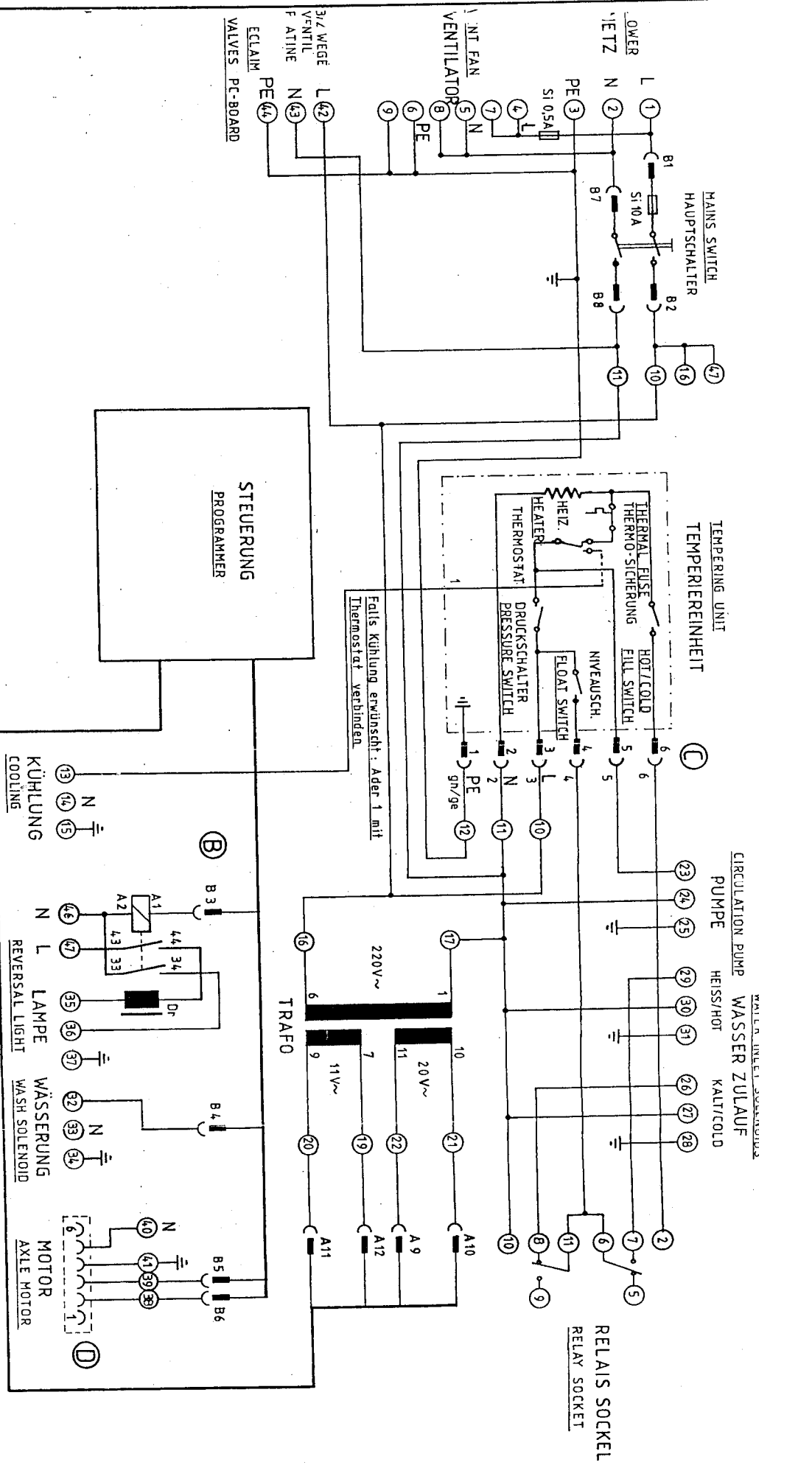
HUSS
LABORTECHNIK

26	L	
27	N	Wasserzulauf: kalt
28	PE	
29	L	
30	N	Wasserzulauf: heiss
31	PE	
32	L	
33	N	Wässerung
34	PE	
35	L	
36	N	Lampe
37	PE	
38	L	
39	L	Motor
40	N	
41	PE	
42	L	
43	N	3/2 Wege-Ventil-Platine
44	PE	
45	PE	
46	N	
47	L	Relaisplatine für Vordosierung 60 ASV
48	Masse	
49	+ 24 V	

<i>Pos.</i>	<i>Stück</i>	<i>Benennung</i>			<i>Werkstoff</i>	<i>Teil- Nr.</i>	<i>Bemerkung</i>		
				<i>Zul. Abw.:</i>	<i>Oberfläche</i>	<i>Maßstab:</i>		<i>Gewicht:</i>	
					<i>Datum</i>	<i>Name</i>	<i>Bezeichnung:</i>		
				<i>Beab.</i>			COLENTA 30 AT Klemmleiste		
				<i>Gepr.</i>	18.2.85	<i>Leyp</i>			
				<i>Norm</i>					
				HUSS			<i>Zeichnungsnummer:</i>		<i>Blatt</i>
				LABORTECHNIK					<i>Bl.</i>
<i>Zul. Änderung</i>		<i>Datum</i>	<i>Name</i>						

1	L	
2	N	Netz
3	PE	
4	L	
5	N	Ventilator 1
6	PE	
7	L	
8	N	Ventilator 2
9	PE	
10	L	
11	N	Temperiereinheit
12	PE	
13	L	
14	N	Kühlung
15	PE	
16	L	
17	N	Trafo Primärseite
18	PE	
19	11 V~	
20	11 V~	Trafo Sekundärseite
21	20 V~	
22	20 V~	
23	L	
24	N	Umwälzpumpe
25	PE	

Pos.	Stück	Benennung			Werkstoff	Teil- Nr.	Bemerkung		
				Zul. Abw.:	Oberfläche	Maßstab:	Gewicht:		
					Datum	Name	Bezeichnung:		
				Beab.			Klemmleiste COLENTA 30AT		
				Gepr.	2.11.84	Rang			
				Norm					
				HUSS		Zeichnungsnummer:		Blatt	
				LABORTECHNIK				Bl.	
Zust.	Anderung	Datum	Name						



Pos.	Stück	Bezeichnung	Zul. Abw.	Werkstoff	Teil-Nr.	Bemerkung

Bezeichnung:	VERDRÄHTUNGSPLAN
Bezeichnung:	COLENTA 30 AT
Datum:	Bsch 31.5.89
Name:	[Redacted]
Oberrichtn. Maßstab:	
Gepr. Norm:	Norm
Zeichnungsnummer:	
Blatt:	

3/2 WEGE VENTIL FÜR ATINE

ECLAIR VALVES PC-BOARD

HAUPTSCHALTER

HEIZ THERMOSTAT

HEIẞ/COLD FILL SWITCH

HEIẞ/HOT

KALT/COLD

WASSER ZULAUF

RELAYS

TRAFEO

MOTOR AXLE MOTOR

WÄSSERUNG WASH SOLENOID

REVERSAL LIGHT LÄMPE

KÜHLUNG COOLING

Chemietank Ventile

Abfluss Ventil

ASV - PC-BOARD