



Instruction manual

Version 15.03

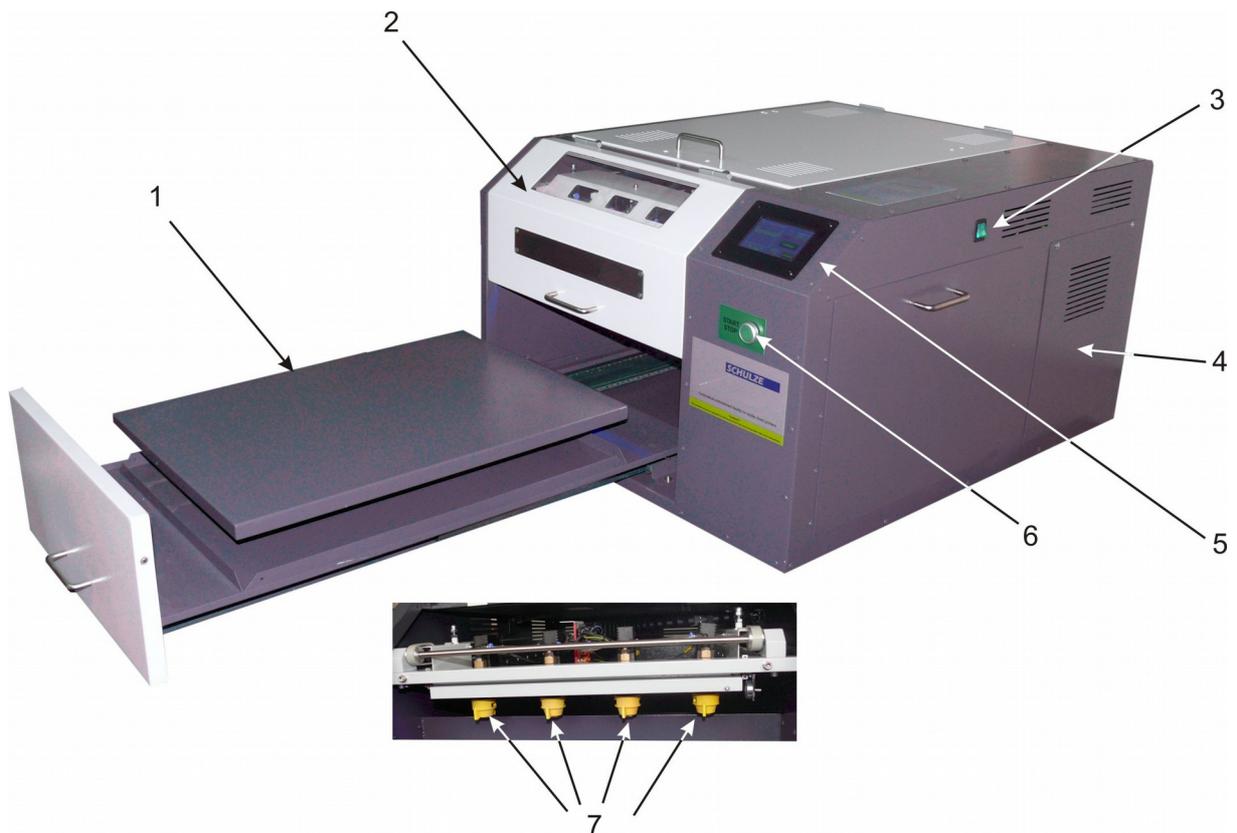
PRETREATmaker III

1. Introduction

1.1 Content

1. Introduction	17
1.1 Content	17
1.2 Construction of the machine	18
1.3 Technical Data	18
1.4 Protection of the device	19
1.5 Safety arrangements at the workspace	19
2. Initiation	20
2.1 Warranty terms and condition	20
2.2 Notes regarding transportation	20
2.3 Supply voltage	20
2.4 Preparation of the machine for operation	20
2.5 Use and example of settings	22
2.6 Pressure settings	22
3. Work with the machine	23
3.1 Setting for the pre-coat application range	23
3.2 Voltage selector switch (220V - 240V) or (110V - 120V)	23
4. Maintenance	24
4.1 Maintenance	24
4.2 Maintenance of the machine's interior	25
4.3 Instructions for replacement, cleaning and storage of the nozzles	26
4.4 Instructions for replacement of the main safety catch	26
4.5 Instructions for replacement of the electronic devices	27
4.6 Instructions for replacement of the filter	27
4.7 Connection diagram	28
4.8 Pipes connection	30
4.9 Testing Report	31
4.10 EC- Conformance declaration	31

1.2 Construction of the machine



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|---------------------|--|
| 1. Drawer | 5. Touch screen display of electronics |
| 2. Cover of nozzles | 6. START push-button |
| 3. Main switch-key | 7. Nozzles |
| 4. Pump | |

1.3 Technical Data

Dimension of the machine	720 x 900 x 480 mm
Dimension of the machine for transport	800 x 950 x 610 mm
Weight	70 kg
Weight for transport	90 kg
Hanging length drawers	80 cm
Supply voltage	110/120 or 220/240 VAC
Rated power	150 W
Power consumption	1 A
Pressure nozzle	max 7,0 bar
Number of nozzles.....	4 pcs
Main fuse	6A

1.4 Protection of the device

In order to secure maximum safety of operation, the PRETREATmaker III has been equipped with several independent protections.

Main safety catch - 6A

The main safety catch of 6A is located on the back side of the machine. In case of overload, it protects the press against damage. If the safety catch has been damaged, it should be replaced. Instructions for replacement of the safety catch are given in chapter 4.3.

Installation - 12VAC

All control element of the machine are supplied with safe voltage of 12VAC. Voltage of 230 VAC is present only in the back part of the device.

1.5 Safety arrangements at the workspace

Set-up and installation of the machine

The set-up and installation of the machine has to be done under supervision of an authorized person. The installation has to be done by 2 or more persons following the instructions of this manual.

Testing the machine

After a correct installation of the machine it is important to ensure that the machine works properly, isn't damaged and has no safety defects. The testing can only be done by the employer or other authorized persons and is mandatory to guarantee correct installation and safe usage of the machine. The testing should be protocolled. If any irregularities regarding functionality or safety are found during the testing, these have to be noted and reported to Walter Schulze GmbH in written form within 7 days. Until clarification the machine can not be used.

Information and Education

According to § 81 industrial relations law and § 14 employment protection law the employer has to make arrangements to give all information about the function and the range of application to the user. In particular the user needs to be acquainted with the complete manual and be explicitly informed of the dangers of working with the machine. The details have to be explained in a coherent form and language.

Safety instruction

- The machine should only be used by trained personal after notice of this manual.
- Only one person is allowed to work on the machine at a time.
- The plug has to be pulled out of the power outlet while maintenance.
- **Caution:** please do not connect this machine to any other outlet (socket) than those equipped with *ground-fault protection* ELCB (earth leakage circuit breaker).

2. Initiation

2.1 Warranty terms and conditions

Solely the liquid recommended by POLYPRINT company may be used in the machine. It is a P5002 colourless primer. Using different primers may result in pump damage or damage to other subassemblies of the PRETREATmaker III and shall cause the loss of warranty rights.

PRETREATmaker III machine is covered by a 24-month warranty.

The warranty covers the whole machine, its mechanical elements, electronics and elements of the drawer including the guides and enclosure. Other PRETREATmaker III parts are covered by a 12-month warranty.

These include: pumps, gaskets, solenoid valves in nozzles, containers, conduits and check valves.

Brass nozzles, rubber seals and filters are considered consumables and are not covered by the guarantee.

2.2 Notes regarding transportation

The PRETREATmaker III is packed with protective film and fastened to a pallet. Right after receipt of the machine, condition of the packaging and the machine itself should be controlled. If the machine is to be sent to another place later on, it should be packed and placed on the pallet in the same way. The device must be cleaned for further transportation and containers for water and pre-coating liquid – emptied.

2.3 Supply voltage

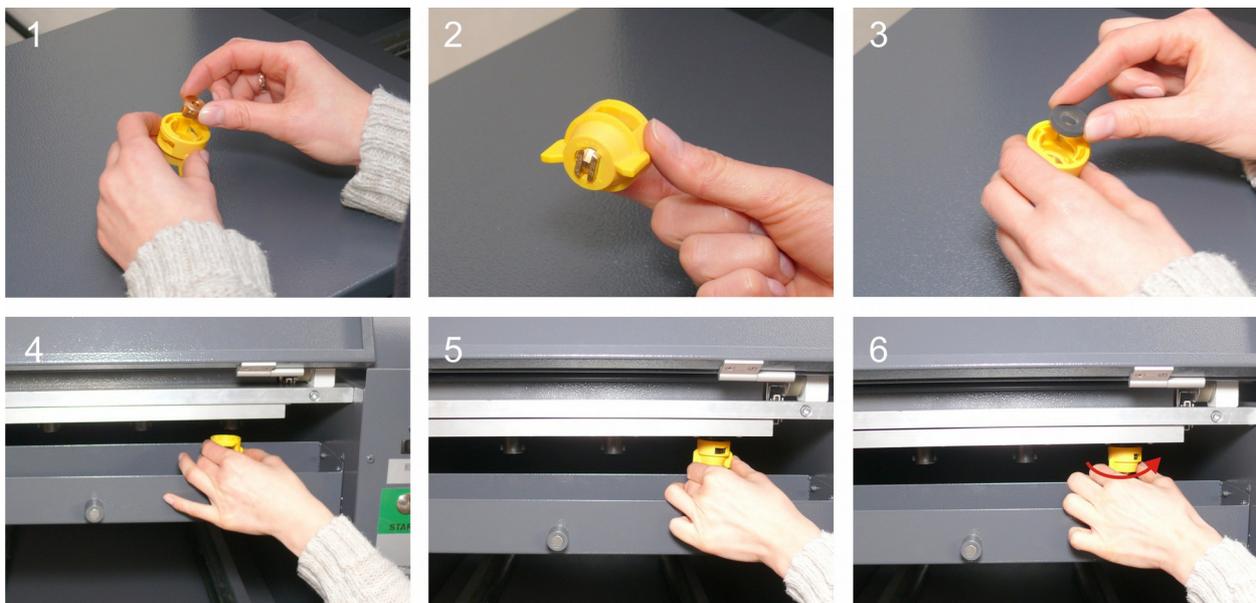
The device is equipped with a plug. Special attention should be paid to good condition of a socket and presence of connected safety circuit inside.

Very important! The machine may be connected only to an installation provided with a protection against electric shock.

2.4 Preparation of the machine for operation

The device may be operated by a person trained and acquainted with a service manual.

After removing the unit from the pallet, and remove the protective film should be mounted nozzles. The nozzles are attached to the machine with the power cord, filter and washer. The nozzles must be put together and install into the machine (**picture below**).



Prior to switching the machine on for the first time, one should check whether the protective cable is correctly connected. All containers (**picture 1**) should be controlled before starting operation. The container with pre-coating liquid should be shaken every day (**picture 2**). Connect the deposit tank. Cut the hose to the desired length. Do not bend the hose. Do not make a loop. Do not place the tank above the outlet.



1. Fill the water container up with distilled water.
2. Fill the pre-coating container up with the liquid. This container must be shaken every day (**picture 2**).
3. Make sure the waste-water container is empty.
4. Take the nozzles off (**picture 6**)
5. Turn the machine on. Turn all nozzles on (**picture 3**).
6. Press the pre-coating button on the touch screen display and hold it until the pre-coating liquid starts flowing from the nozzles (**picture 4**).
7. Turn the first nozzle on the left on and press the PRETREATMENT button on the touch screen display again.
8. Turn the first nozzle off and the second one – on. Press the PRETREATMENT button on the touch screen display again.
9. Proceed with the nozzles 3 and 4 in similar way. This process removes air bubbles from the ducts.
10. If all nozzles don't work identically, press the water button on the touch screen display (**picture 5**) and hold it until the water starts flowing from the nozzles and next repeated the procedure given in points 7-8. The procedure given in point 7-8 must also be repeated if the pre-coating container has been empty, so the pump must fill in the ducts again.

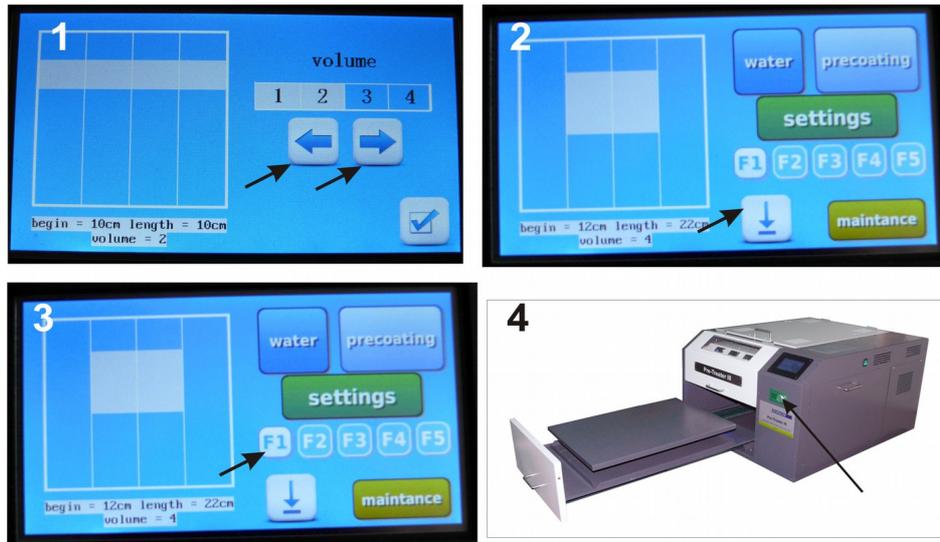
2.5 Use and example of settings

The PRETREATmaker III is destined for automatic application of pre-coat for white ink in printers directly printing on fabrics. The device is equipped with 4 nozzles.

The volume of pre-coat can be increase or decrease in settings (**picture 1**). To increase the volume of pre-coat twice press the button on the touch screen display "double pre-coat" (**picture 2**). Application of the pre-coat is executed directly over the fabric.

The containers may not be filled with other liquids.

Set the program and press "F1", "F2", "F3", "F4" or "F5" (**picture 3**). Press START button to saved all settings in memory (**picture 4**).



2.6 Pressure settings

This function is used to set up the pressure of the nozzles (**picture 1**).

The standard setting means an optimum setting for the pressure of the standard precoating liquid. If you use a fluid which is needed with a lower or higher pressure, you need to change the pressure settings.

Press the button right to increase the pressure (**picture 2**).

Press the button left to reduce the pressure (**picture 2**).

Warning:

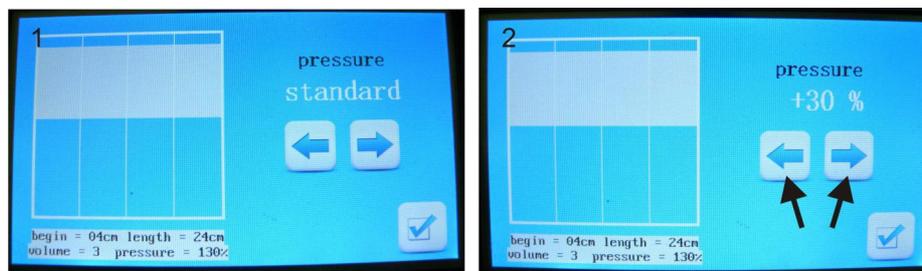
If the pressure is too high, the precoating liquid will spray too much and it causes deformations.

The angle of spraying will not be clean and the covering irregular.

If the pressure is too low, the nozzle will spray banding on the shirt.

In case of using thick liquids it is recommended to mix the liquid with distilled water and use the 800050 nozzles.

For example: Precoating GC-30P5KA should be mixed 1:1 (2 litre water and 1 litre of precoating liquid).



3. Work with the machine

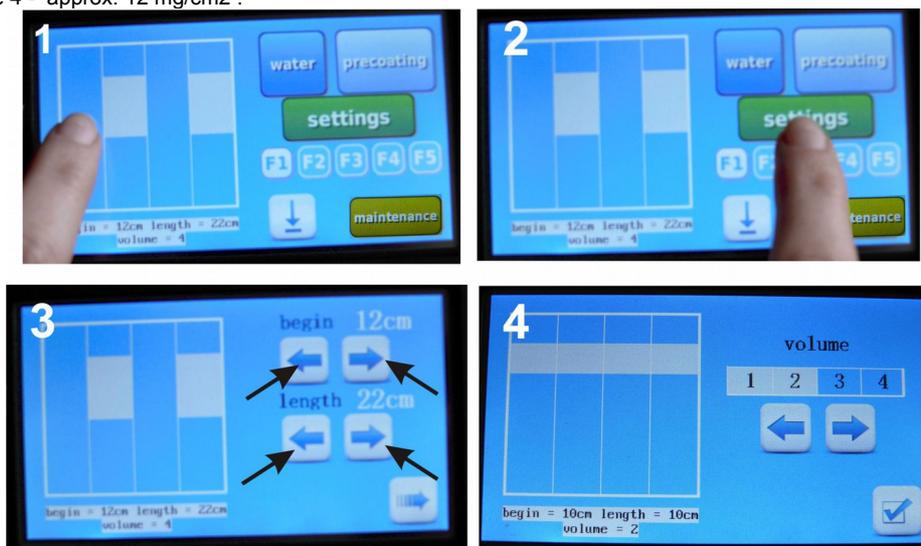
3.1 Setting for the pre-coat application range

Prior to commencement of work with the device, range of the pre-coat application should be set. This range is set by buttons on the touch screen display. (pictures 1-3).

1. To set width of the pre-coat application, turn adequately the nozzles 1, 2, 3 or 4 on (picture 1).
2. To set length of the pre-coat application, use adequately the button on the touch screen display in "settings" (pictures 2-3).
3. To set the quantity of the pre-coat application, set the volume between 1 and 4 (picture 4).

Example settings for nozzles 650025:

- volume 1 - approx 9,5 mg/cm²,
- volume 2 - approx. 11 mg/cm²,
- volume 3 - approx. 11,5 mg/cm²,
- volume 4 - approx. 12 mg/cm².



The button "double pre-coat" allows selecting single or dual application of the pre-coat on the fabric (picture below). Select the right setting.



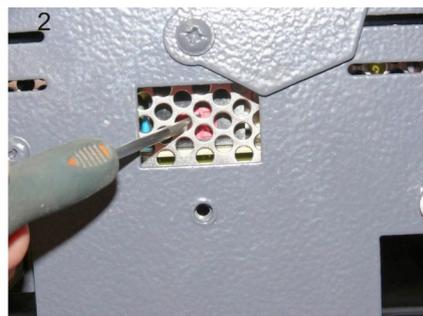
3.2 Voltage selector switch (220V - 240V) or (110V - 120V)

If the preset setting of the switch is incorrect, set the switch to the proper voltage range of your area 220V/240V or 110V/120V.

Consult your dealer if you are unsure of the setting.

The switch is located in the power pack inside the machine (see the Photos).

Switch off and unplug the machine first.

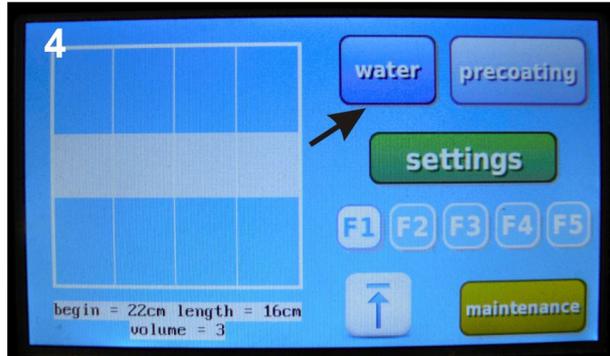


4. Maintenance

4.1 Maintenance

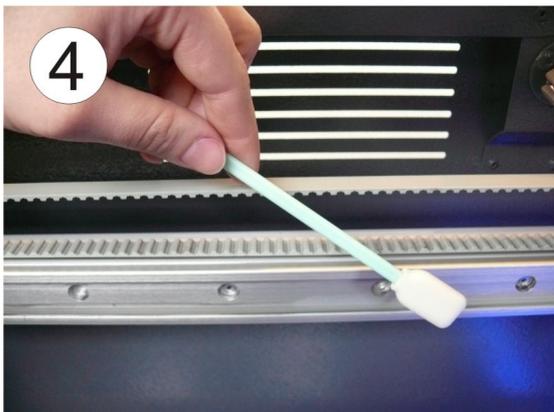
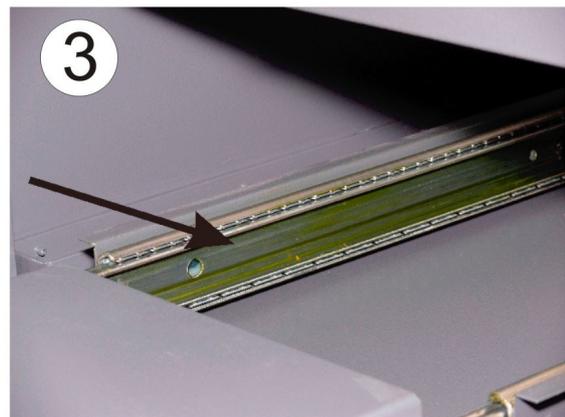
The device should be cleaned with a dry cotton cloth every day. The containers must be controlled many times during operation of the machine (**picture 1**).

1. Don't let the liquid flow over the waste-water container. The container should be emptied if the need arises (**picture 2**).
2. The container with pre-coating liquid should be shaken every day and filter in the container must always be immersed in the liquid (**picture 3**).
3. Check the container with distilled water every day.
4. The nozzles must be kept clean. Instructions for cleaning of the nozzles are given in chapter 4.2.
5. Every day after completion of the work press and hold (6 sec.) the WATER button on the touch screen display. This shall rinse the valves and nozzles with water (**picture 4**).
6. After rinsing, disassemble the nozzles. Instruction – in chapter 4.2.
7. Prior to commencement of the work, install the nozzles.
8. Press and hold (6 sec.) the PRETREATMENT button on the touch screen display until the nozzles start working at a uniform rate (**picture 5**).
9. Definitely, after completion of the work, dry the drawer, table and interior of the machine. Make sure there are no effluents in the chamber with the containers.



4.2 Maintenance of the machine's interior

Following the completion of work, the machine's interior must be dried using soft cloth (**pictures 1-2**). Dry the drawer, the table and the inside walls of the machine. Always remove all precoating residues. It must be remembered that the guide rails of the drawer should always be greased (**picture 3**). The guides may not remain ungreased. Clean the carriage rails with a silicone spray (**pictures 4-5**).



4.3 Instructions for replacement, cleaning and storage of the nozzles

Replacement:

- 1) Open the front cover (**picture 1**).
- 2) Turn the nozzle left and then pull it out down (**picture 2**).
- 3) Place a new nozzle and fix it in the machine.

Cleaning:

- 1) The nozzle may be cleaned in an ultrasonic cleaner (**pictures 3-4**).
- 2) To clean the nozzles please use the fluid EM-700.
- 3) Mix it 1:1 with distilled water.
- 4) Refill a small plastic bottle to the half with this mixture.
- 5) Put the unclean nozzles into the bottle.
- 6) Put the bottle with the nozzles inside the cleaning machine and turn it on for 7 minutes.
- 7) After that please take them out to dry.

Storage:

To storage the nozzles please use EM-80 with a 1:1 mixture with water (**picture 5**). Store the nozzle in a bath of this mixture to avoid oxidation.



4.4 Instructions for replacement of the main safety catch

If the machine does not work after it has been turned on, the main switch-key shines and the display does not show any values, check the main safety catch.

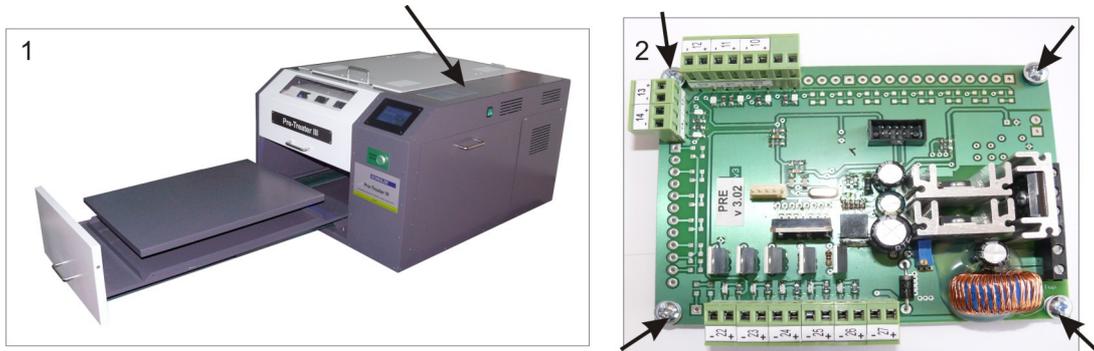
The main safety catch of 6A is located on the back side of the machine. To replace the safety catch, turn the machine off and pull the plug out of the socket.

Then, unscrew the safety catch keeper (**picture 1**). Pull out the safety catch (**picture 2**). Replace the safety catch (**picture 3**) and again screw the safety catch keeper in.



4.5 Instructions for replacement of the electronic devices

To replace the electronics, first turn off the machine and remove the plug from the socket. Pull the cover (**picture 1**). Then pull out all the plugs off the electronics and unscrew four screws (**picture 2**). Replace the electronics and tighten the cover of the machine.

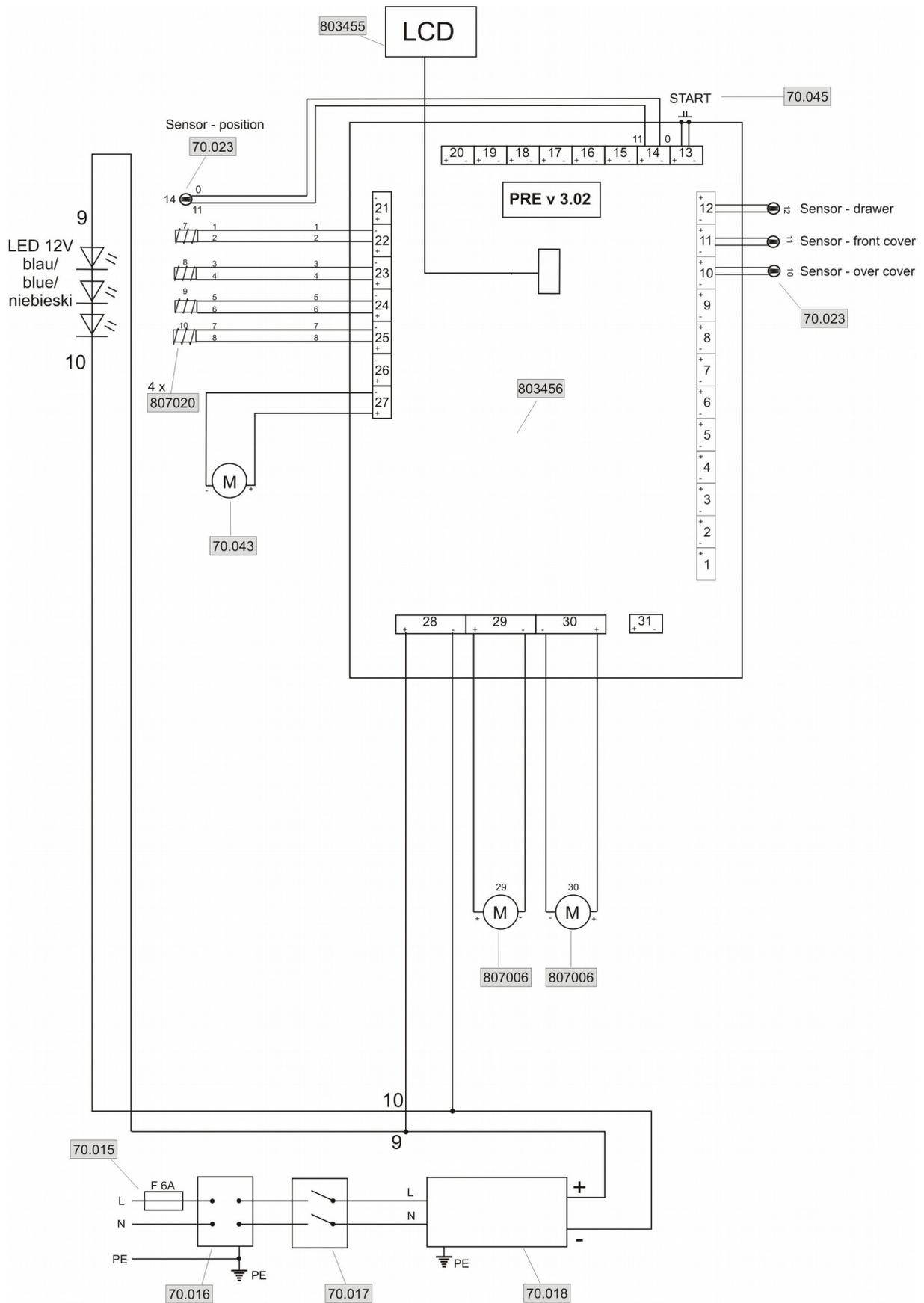


4.6 Instructions for replacement of the filter

If the dosage precoating or water is not smoothly carried out, check the filter, and if necessary it must be replaced. Open the cover. The filter is in a container with liquid (**picture 1**). Remove the dispenser from the container (**picture 2**) and replace the filter (**picture 3**).

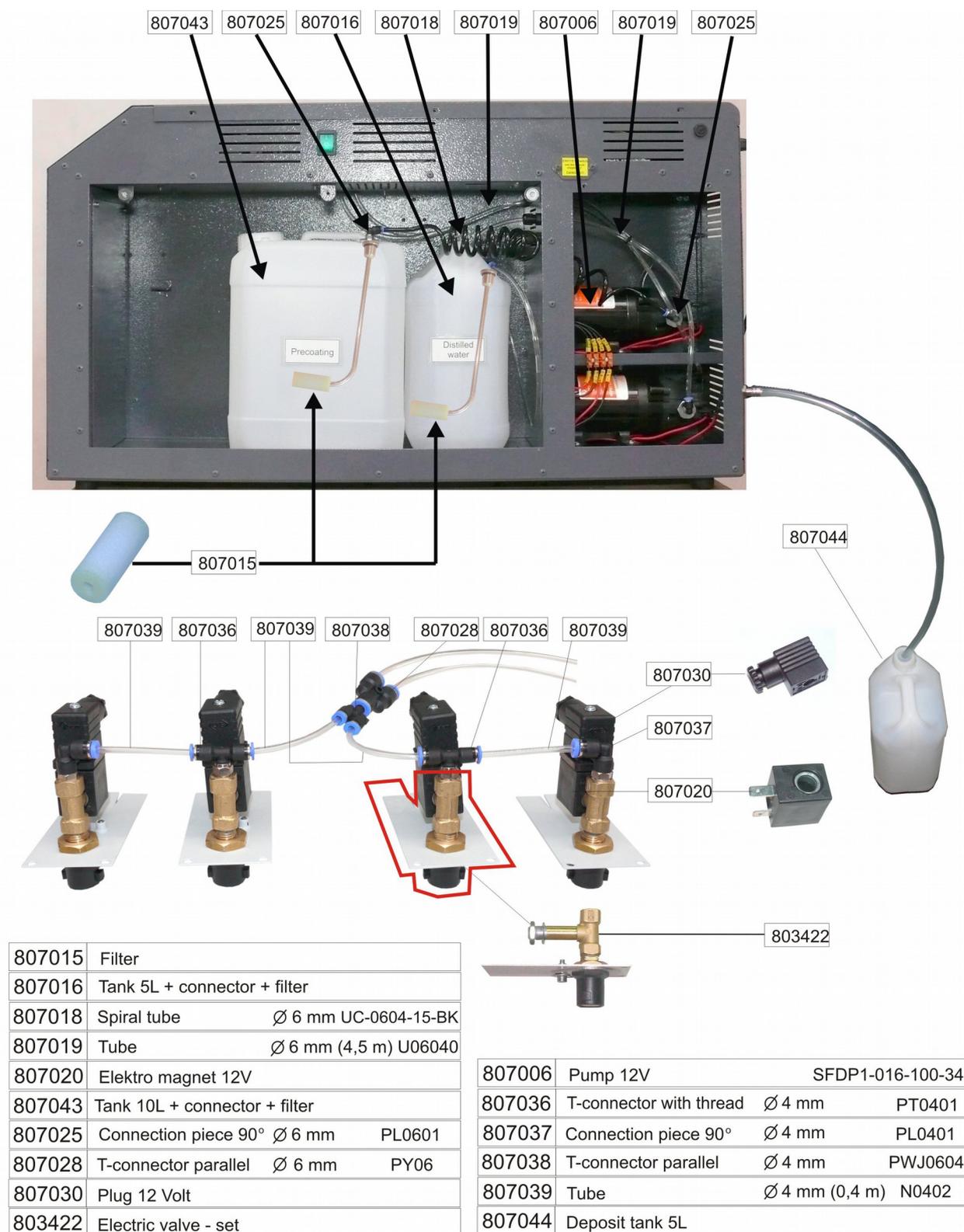


4.7 Connection diagram



803455	Display LCD
803456	Electronic PRE v 3.02
803499	Belt 10 T-5 lenght 1740 mm
807006	Water pump Pre-coating pump SFDP1-016-100-34
807020	Elektro magnet 12V
70.015	Socket with Fuse
70.016	Filter
70.017	Switch
70.018	Power supply
70.023	Sensor
70.043	Engine 12V (PRETREATmaker III)
70.045	Switch START

4.8 Pipes connection



4.9 Testing Report

final check of the PRETREATmaker III :

- - base, paint
- - nozzles x 5 pcs.
- - the pre-coat application
- - electronic connection, safety wire, power cable
- - electronic
- - test on a shirt
- - caution labels
- - ultrasonic cleaner
- - filter x 2 pcs.

Serial number Date Signature

4.10 EC- Conformance declaration

The Walter Schulze GmbH
Haberstraße 15 - 19
12057 Berlin



as European representative of the manufacturer company ROMANIK hereby declares that the following machine:

PRETREATmaker III Serial number

is compliant with the specifications of the following EC directives:

Machinery (2006/46/WE)
Low Voltage (2006/95/WE)
EMC (2004/108/WE)

used norms and technical specifications:

EN ISO 12100-1 EN ISO 12100-2 safety of machines
EN 60204-1 electrical equipment of machines

Berlin ,

Peter Meidinger
President

A handwritten signature in blue ink, appearing to read 'P. Meidinger'.

All SCHULZE machines are exempt from the waste disposal law under reg. no. DE 231060054.
