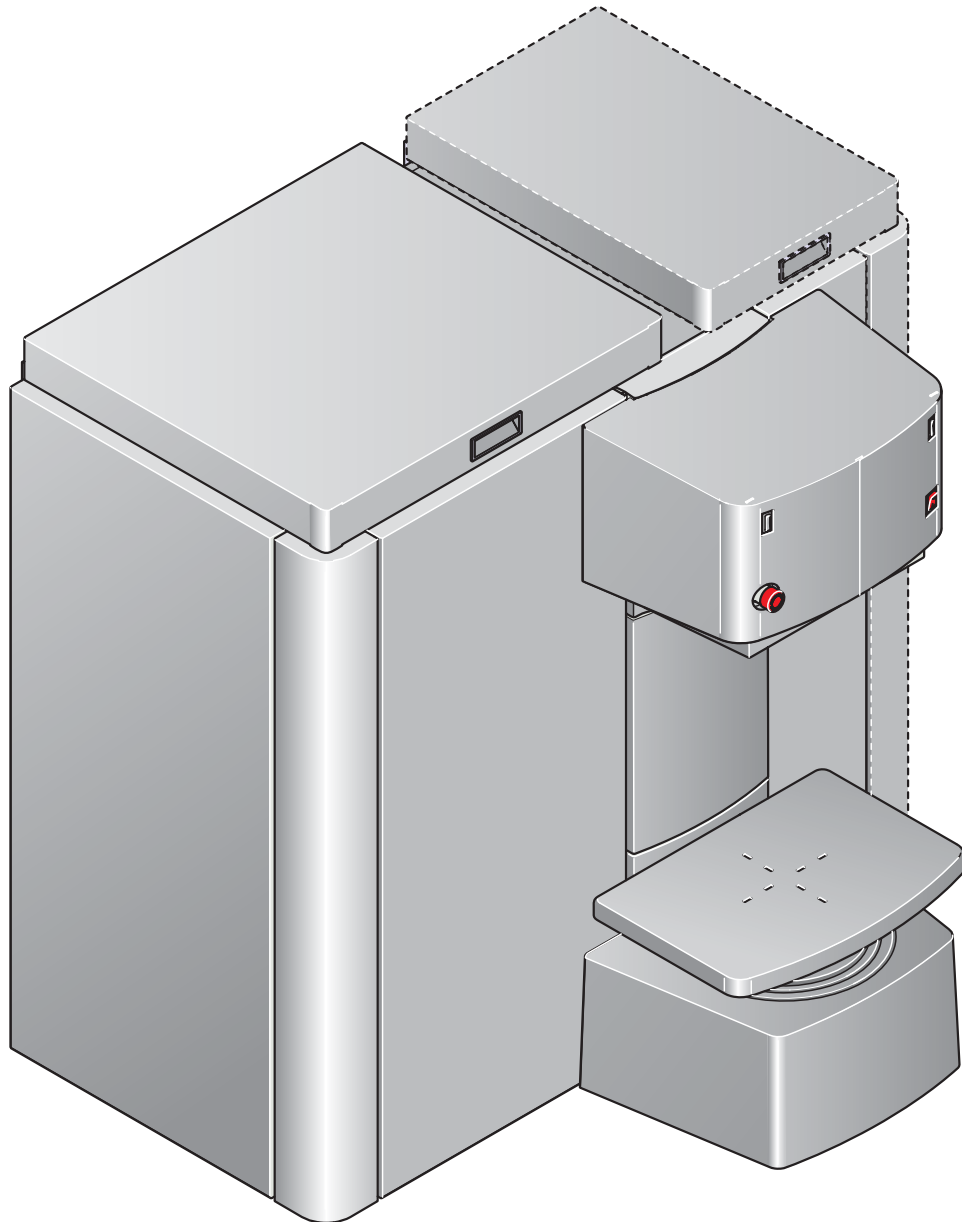


Manual HP500



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1 About this manual

The manual shows the information necessary to:

- install
- operate
- perform basic maintenance
- correct small problems.

The HP500 and all its versions are referred to in the manual as the 'machine'.

This manual contains the original instructions. The original language of the manual is English.

1.1 How to work with the manual

1. Familiarize yourself with the structure and content.
2. Read the safety chapter in detail and make sure you understand all the instructions. See § 2.
3. Carry out the actions completely and in the given sequence.

1.2 Record of changes

Edition	Editor	Check	Date	Description
1.0	TB	MB	12/2010	First edition

2 Safety

**WARNING**

Read the manual before you install or use the machine. Failure to do so can result in personal injury, death or property damage.

2.1 Intended use

The machine is designed to dispense colorants into a can. Any other use of the machine is strictly forbidden.

2.2 Liability

Fast & Fluid Management is not liable if you do not follow the rules below:

- Do not use a damaged machine. When you have doubts, contact your supplier or the service department of Fast & Fluid Management. See www.fast-fluid.com.
- Install and connect the machine according to the instructions in this manual.
- Observe all local safety regulations.
- Connect the machine to an earthed wall socket.
- Keep the machine in good condition. Make sure that defective parts are immediately replaced.
- Close the covers and make sure that all the panels are fitted.
- Replace parts only with original Fast & Fluid Management spare parts.

All maintenance beyond the scope of this manual must be carried out by a qualified service technician that Fast & Fluid Management has trained and certified.

2.3 User qualification for installation

Only install the machine if you have written permission of the supplier of the machine.

2.4 CE certification

The machine is CE certified. It means that the machine complies with the essential requirements concerning safety and hygiene. The directives that have been taken into consideration in the design are available on www.fast-fluid.com.

2.5 Safety symbols on the machine



Moving parts hazard



Pinch hazard foot



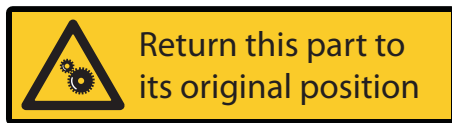
Earthing is necessary



Read the manual before you open this part. If you do not open this part, lock it.



Read the manual



Return the part to its original position.

2.6 Safety symbols in the manual



WARNING
Can cause personal injury.



WARNING
Pinch hazard for your foot.



CAUTION
Can cause damage to the machine.



Note
Shows further information.

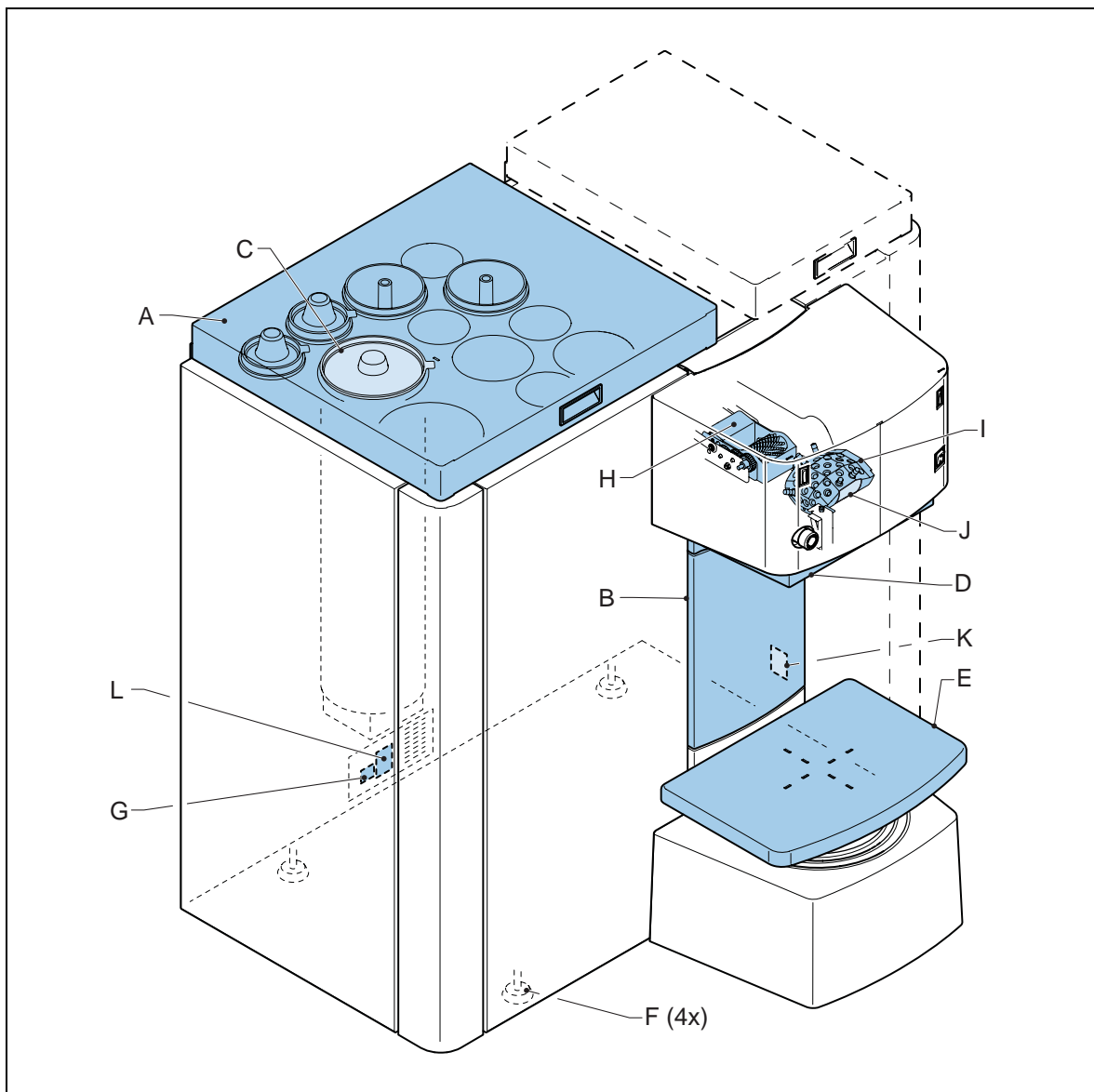
2.7 Disposal of the machine

1. Sort the machine, the accessories and the packaging for environmentally friendly recycling.
2. Do not dispose of the machine into domestic waste.
According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national right, machines that are no longer usable must be collected separately and disposed of in an environmentally friendly way.
3. Dispose of the canisters as chemical waste, according to the local regulations.

3 Operator manual

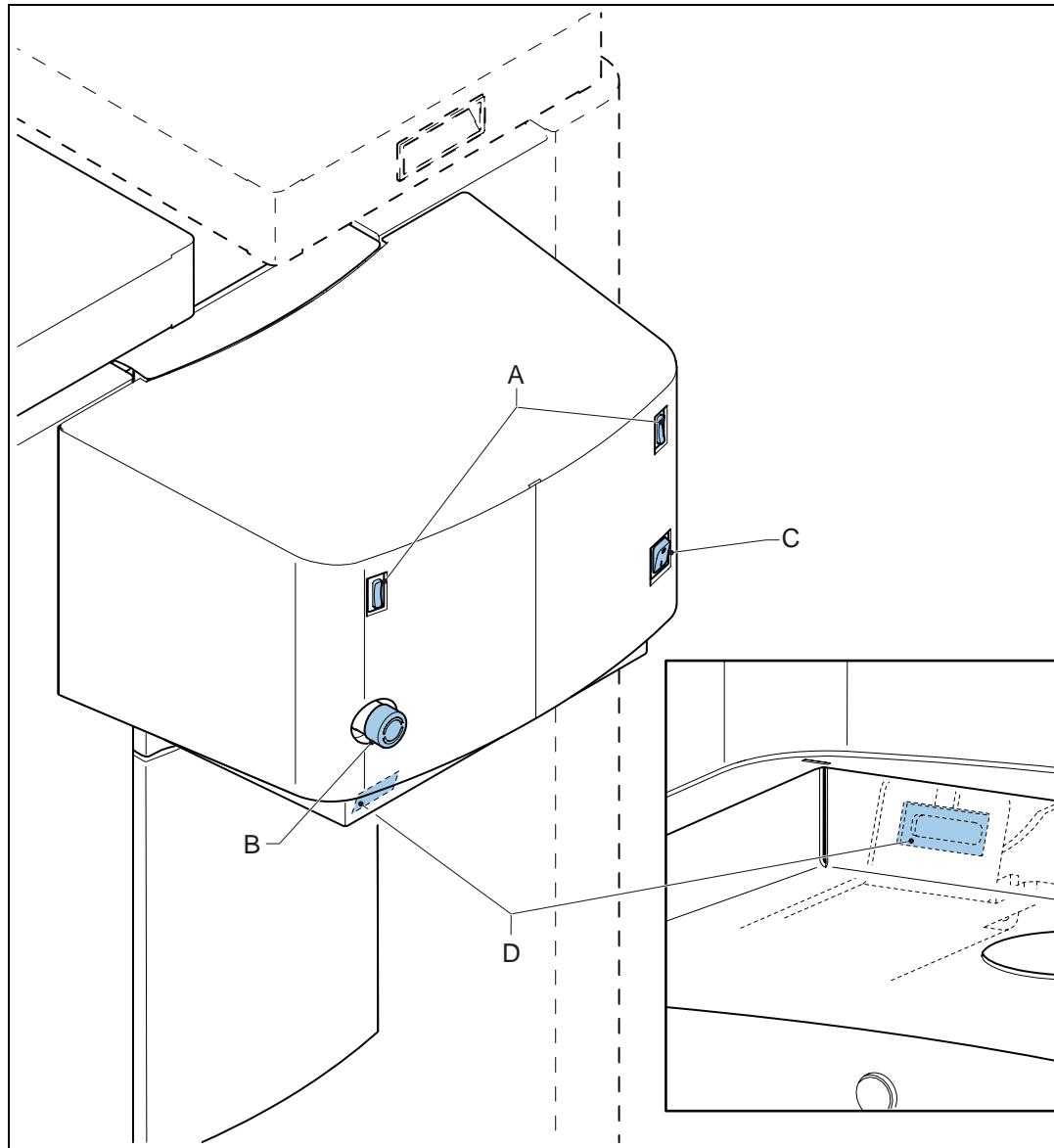
3.1 Description

3.1.1 Overview of the machine



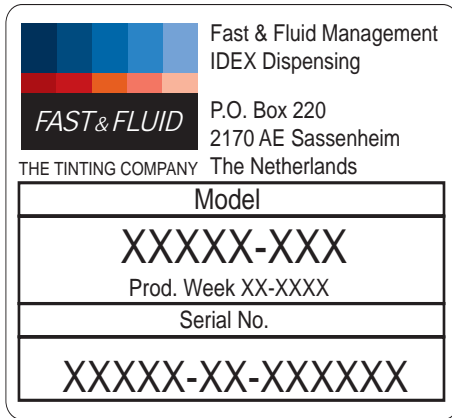
- | | |
|---------------------------|---|
| A: Top cover | H: Brush container |
| B: Computer cover | I: Nozzle |
| C: Canister | J: Nozzle blade |
| D: Switch plate | K: Type plate: serial number (at the inside of the computer compartment) |
| E: Can table | L: Type plate: details |
| F: Adjustable foot | |
| G: Net entry | |

3.1.2 Overview of the controls

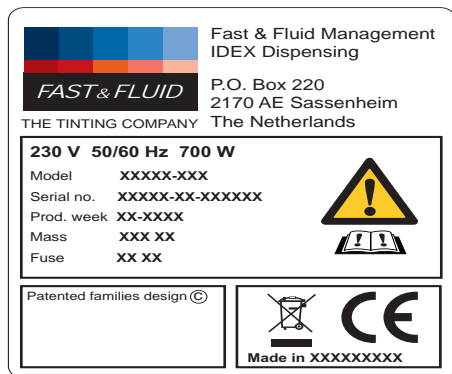


- A: Can table switch
- B: Emergency
- C: Computer switch
- D: Brush maintenance switch

3.1.3 Type plate: serial number



3.1.4 Type plate: details



3.2 Operation



WARNING

Only push the emergency stop in the case of a safety emergency.

Make sure that the problem is solved before you reset the emergency stop.

When you reset the emergency stop, the machine restarts automatically. When the machine is operational, you hear 'beep beep'.



CAUTION

Do not remove the power from the machine. See § 4.4. The machine must stir the colorants periodically.



Note

The computer switch only sets the computer on and off.

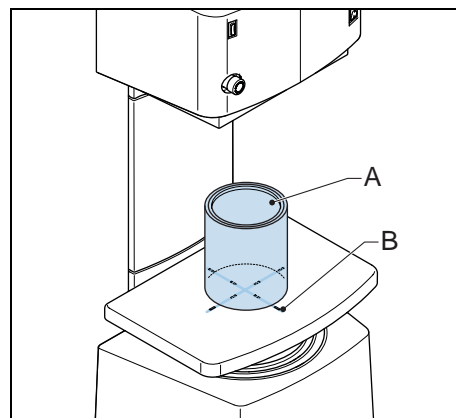
3.2.1 General dispensing procedure

For all the software instructions: see the software documentation.

1. Place the can. See § 3.2.2.
2. Move the can table up. See § 3.2.3.
3. Choose the recipe and dispense. See the software.
4. Move the can table down. See § 3.2.4.
5. Remove the can.

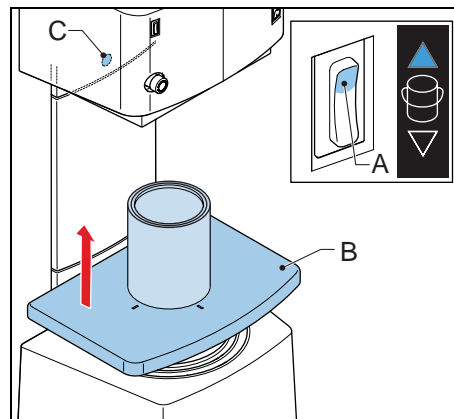
3.2.2 Place the can

1. Put the can (A) at the centre of the mark (B) on the can table.



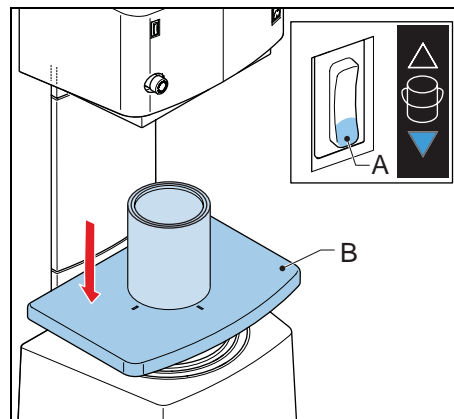
3.2.3 Move up the can table

1. Push and hold the upper part of the can table switch (A). *The can table (B) moves up and stops when the can is in front of the sensor (C).*
2. After the can table stops, release the can table switch.



3.2.4 Move down the can table

1. Push and hold the lower part of the can table switch (A). *The can table (B) moves down.*
2. When you can remove the can, release the can table switch. If you hold the can table switch, the can table moves down to a halt.



WARNING

Do not put your foot below the can table.

3.3 Maintenance

3.3.1 General cleaning: after every dispensing operation

1. Clean the machine with a cloth and remove all spilled colorant or other liquid.



CAUTION

Do not use cleaning agents based on organic solvents to clean painted or plastic parts of the machine.

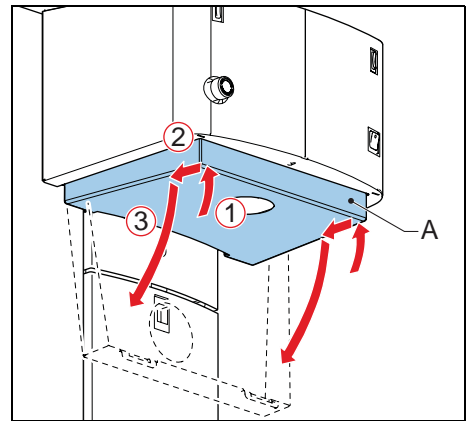
3.3.2 Cleaning of the nozzle and the brush container: daily

**CAUTION**

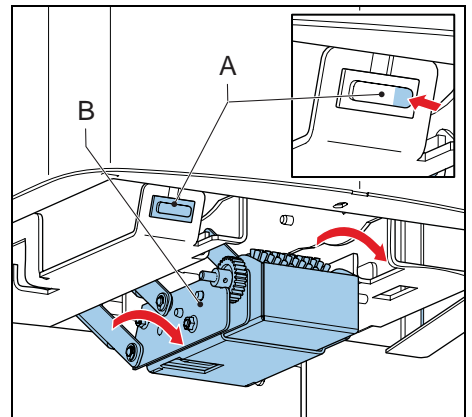
If you do not clean these items daily, severe pollution will occur.

Open the switch plate

1. Move the front of the switch plate (A) upwards.
2. Push the switch plate backwards.
3. Turn the switch plate down.

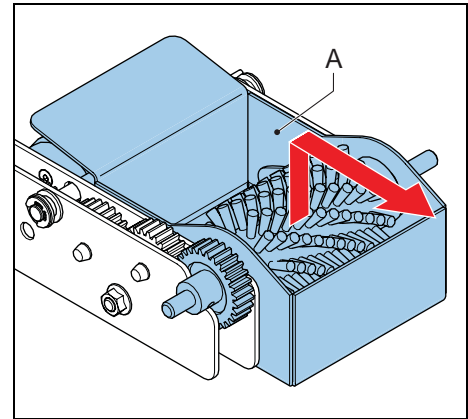
**Move down the brush unit**

1. Push and hold the right part of the brush maintenance switch (A). The brush unit (B) moves down.
2. After the brush unit stops, release the brush maintenance switch.



Remove the brush container

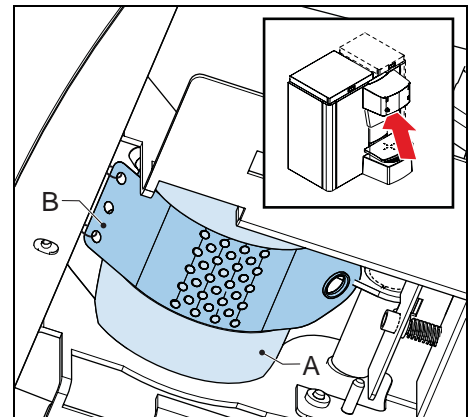
1. Remove the brush container (A).

**Clean the brush container**

1. Remove the liquid from the brush container. For the disposal of the liquid, follow the local regulations.
2. Fill the brush container, with the liquid that your paint supplier indicates, between the minimum and maximum level mark.

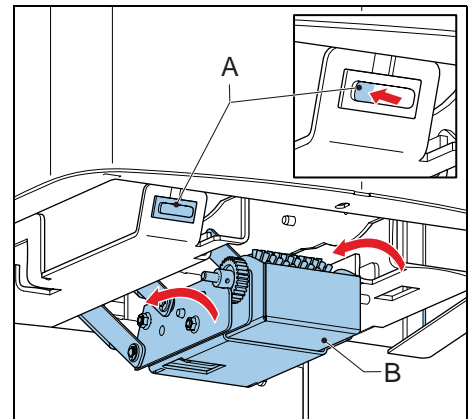
Examine the nozzle and clean if necessary

1. Examine the nozzle for contamination.
2. If necessary, clean the surface of the nozzle (A) and the nozzle blade (B). *Use a cloth.*

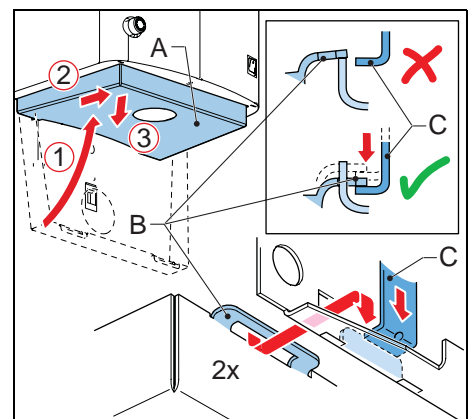


Move up the brush unit

1. Install the brush container.
2. Push and hold the left part of the brush maintenance switch (A). *The brush unit moves up.*
3. After the brush unit stops, release the brush maintenance switch.

**Close the switch plate**

1. Turn the switch plate (A) upwards.
2. Move forwards the switch plate.
3. Put the brackets of the switch plate (B) on the brackets (C) of the sensor.



3.3.3 Refilling of a canister

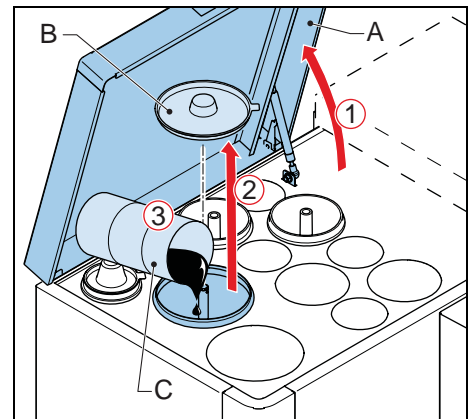
**CAUTION**

Make sure that the colorant level in the canister is correct. If a canister is empty, this can cause an inaccurate dispensing and/or a recipe fault.

**Note**

The software checks the level of colorant in each canister. The software on the machine shows when you need to refill a canister.

1. In the software, activate the fill canister option.
2. Open the top cover (A).
3. Remove the lid of the canister (B).
4. Add the colorant (C). Do not spill.

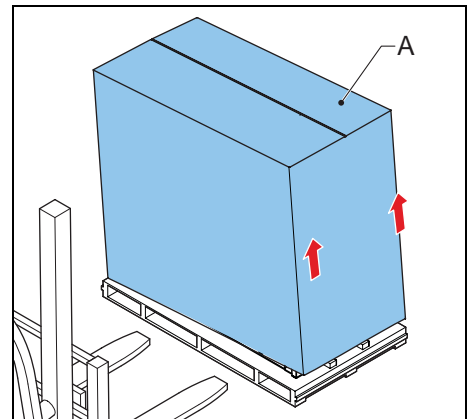


4 Installation

4.1 Unpack the machine

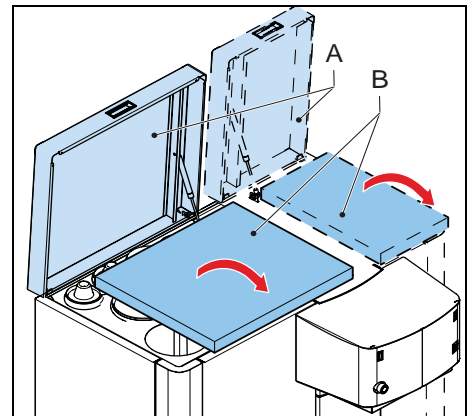
4.1.1 Remove the cardboard

1. Remove the cardboard and the plastic (A) from the outside of the machine.



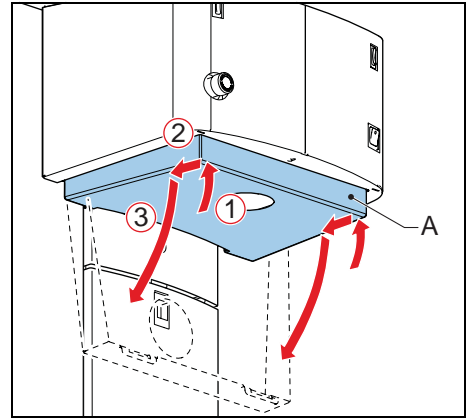
4.1.2 Remove the plastic protection on the canisters

1. Open the top cover (A).
2. Remove the plastic protection (B).



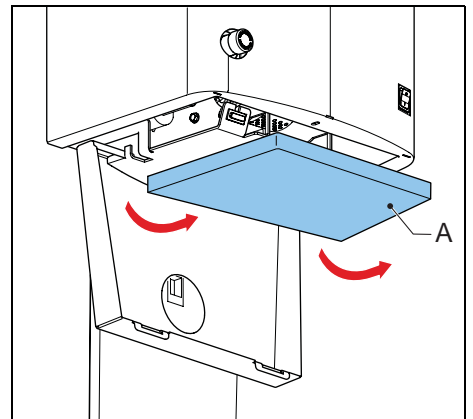
4.1.3 Open the switch plate

1. Move up the front of the switch plate (A).
2. Push backwards the switch plate.
3. Turn down the switch plate.



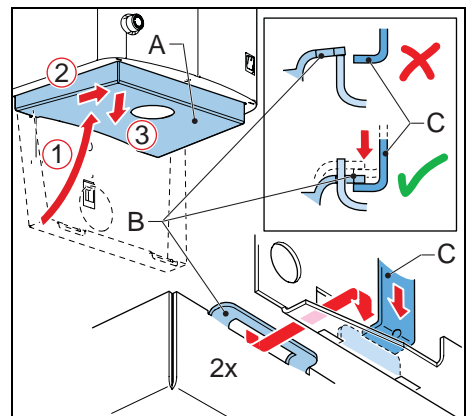
4.1.4 Remove the plastic protection on the switch plate

1. Remove the plastic protection (A).



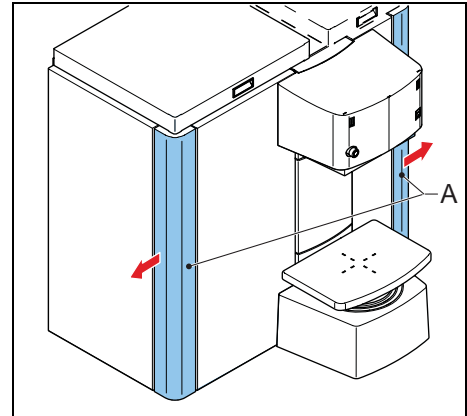
4.1.5 Close the switch plate

1. Turn the switch plate (A) upwards.
2. Move forwards the switch plate.
3. Put the brackets of the switch plate (B) on the brackets (C) of the sensor.

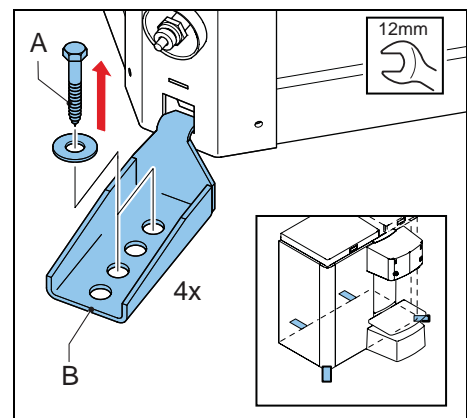


4.1.6 Remove the corner panels

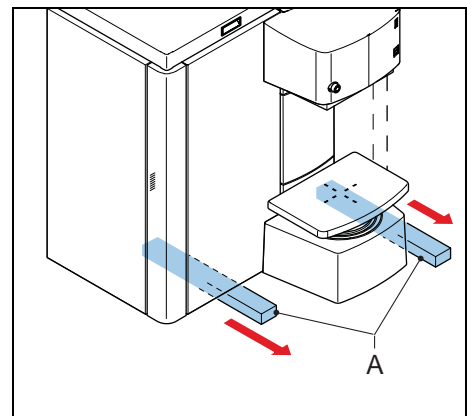
1. Pull and remove the corner panels (A).

**4.1.7 Remove the transport brackets**

1. Remove the screws (A).
2. Remove the transport brackets (B).
3. Install the corner panels.

**4.1.8 Remove the wooden beams**

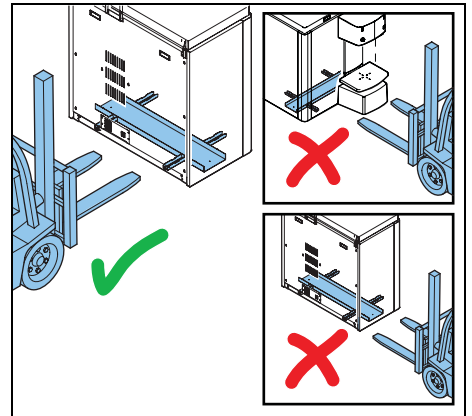
1. Remove the wooden beams (A).



4.2 Put the machine in position

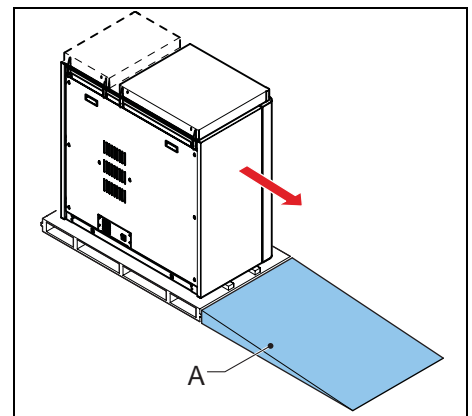
4.2.1 Move the machine to the final location, with a forklift

1. Remove the machine from the pallet. *Use a forklift.*
2. Move the machine to the final location.
3. Connect the power cable to the net entry. Do not connect the power cable to the wall socket.
4. Put down the machine.



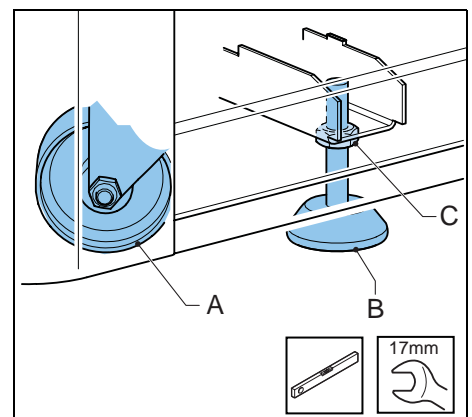
4.2.2 Move the machine to the final location, with a ramp (optional)

1. Place the ramp (A).
2. Move the machine from the pallet on to the ground.
3. Move the machine to the final location.
4. Connect the power cable to the net entry. Do not connect the power cable to the wall socket.



4.2.3 Level the machine

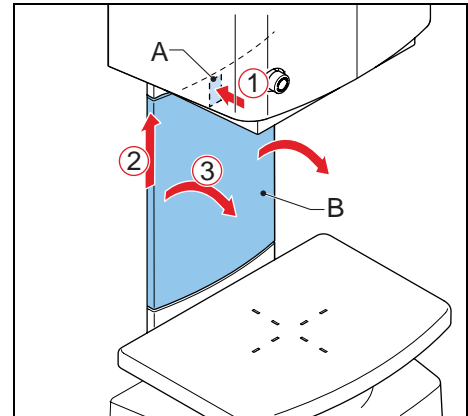
1. Move down the adjustable feet (B) until the wheels (A) are off the ground.
2. Adjust the height of the feet and make sure that the machine is level.
3. Tighten the nuts (C) to lock the feet.



4.3 Install the computer

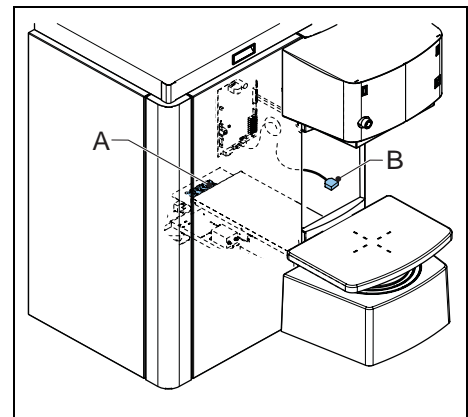
4.3.1 Open the computer cover

1. Press the latch (A).
2. Move up the computer cover (B).
3. Open the computer cover.



4.3.2 Install the computer

1. Connect the power cables of the computer and the screen to the 4-way socket (A).
2. Connect the USB cable (B) to the computer.
3. Connect the keyboard, the mouse and the screen to the computer.



4.4 Turning on the machine

1. Connect the power cable to the wall socket. When the machine is operational, you hear two 'beeps'.
2. Make sure that the emergency stop is released.
3. Set the computer switch to 'ON'.

4.5 First use

1. Fill the brush container. See § 3.3.2.
2. Fill the canisters correctly. See § 3.3.3.
3. Dispense approximately 120 ml colorant into a can. See § 3.2.1.
4. Do step 3 again for all canisters.

**Note**

First the air will come out of the nozzle. When the output is continuous, the tube is filled.

5 Troubleshooting

For all error messages on the computer: see the help topic in the software.

5.1 Contact service

1. Find the type plate on the rear of the machine. See § 3.1.4.
2. Take a note of the model number and the serial number of the machine.
3. Contact your supplier or manufacturer. See www.fast-fluid.com.

5.2 Troubleshooting guide

Problem	Possible cause	Possible solution
Main power supply is present but the machine does not work.	Switch plate is not positioned correctly.	Open and close the switch plate. See § 3.3.
	Emergency stop is active.	Reset the emergency stop.
	A fuse is broken.	Contact service. See § 5.1.

6 Technical data

6.1 General specifications

Parameter	Specification
Number of canisters	16 to 32
Dispensing	Sequential or full simultaneous
Canister sizes [L]	3, 6, 10
Pump type	Harbil piston pump
Accuracy [mL/step]	+/- 0.005
Flow rate [L]	0.3 to 0.5 L per minute
Minimum dispensing [mL]	0.05 mL
Nozzle	Rotary nozzle closure (RNC)
Cleaning system	Full automatic brush
Materials used are suitable for	Water-, universal- and solvent colorants

6.2 Dimensions and mass

Parameter	Specification		
	S	M	L
Name			
Dimensions, height x width x depth [cm]	118x92x95	118x111x95	118x138x95
Net mass [kg]	300	350	400
Packed mass [kg]	320	370	470
Filling height [cm]	113		
Maximum height of the can [cm]	48		
Can table dimensions [cm]	44 x 31		
Can table loading height [cm]	34.5		

6.3 Ambient conditions

Parameter	Specification
Temperature [°C]	+15 to +40
Altitude above sea level [m], operational	-0.5 to 3000
Altitude above sea level [m], out of operation	-0.5 to 12000
Relative humidity, without condensation [%]	20 to 90

6.4 Noise level

Parameter	Specification
Maximum noise level [dB(A)]	70

6.5 Safety classifications

Parameter	Specification
IP (Ingress Protection) classification	54
EMC (ElectroMagnetic Compliancy) classification	Class B

6.6 Electrical specifications

Parameter	Specification
Power consumption, maximum [W]	500
Leakage current [mA]	4.8
Fuse specifications [A]	T10
Country specific net cables	European