

1500/17



110431

3000/25



110432

ENGLISH

Table of contents

1. Safety.....	28
1.1 Key to symbols	28
1.2 Safety instructions	29
1.3 Use as intended	33
1.4 Use against the intended purpose	33
2. General information	34
2.1 Liability and Warrantees	34
2.2 Copyright protection	34
2.3 Declaration of conformity	34
3. Transport, packaging and storage	35
3.1 Delivery check	35
3.2 Packaging.....	35
3.3 Storage.....	35
4. Technical data.....	36
5. Installation and operation	40
5.1 Installation	40
5.2 Operation.....	42
6. Cleaning and maintenance	47
7. Possible Malfunctions.....	50
8. Waste disposal	52

Bartscher GmbH
Franz-Kleine-Str. 28
33154 Salzkotten
Germany

phone: +49 5258 971-0
fax: +49 5258 971-120
Service-Hotline: +49 5258 971-197
www.bartscher.com



Read this instruction manual before using and keep them available at all times!

This instruction manual contains information about the installation, operation and maintenance of the device and should be consulted as an important source of information and reference guide.

Awareness of the safety instructions and instructions for use in this manual will ensure the safe and correct use of the device.

In addition to the information given here, you should comply with any local Health and safety Controls and generally applicable safety regulations.

The instruction manual forms part of the product and should be kept near the device and easily accessible for anyone carrying out the installation, servicing, maintenance or cleaning.

Please keep these instructions and give them to future owners of the device.

1. Safety

This device is designed in accordance with the presently applicable technological standards. However, the device can pose a danger if handled improperly and inappropriately.

All persons using the device must follow the recommendations and instructions in this instruction manual.

1.1 Key to symbols

In this manual, symbols are used to highlight important safety instructions and any advice relating to the device. The instructions should be followed very carefully to avoid any risk of accident, personal injury or material damage.



DANGER!

This symbol highlights hazards which could lead to injury.



WARNING!

This symbol highlights dangerous situations which could lead to injury or death.



HOT SURFACE!

This symbol is a warning that the device surface is hot when in use. Ignoring this warning may result in burns!



CAUTION!

This symbol highlights dangerous situations which could lead to light injuries, or damage, malfunction, and/or destruction of the device.



NOTE!

This symbol highlights recommendations and information aimed for effective and trouble-free device operation.

1.2 Safety instructions

- The device is not intended for use by individuals (including children) with physical or mental disabilities, insufficient experience, and/or insufficient knowledge unless such persons are under the care of a person responsible for their safety or have received instructions regarding appropriate use of the device.
- Children should be observed to ensure that they are not playing with or starting the device.
- Prevent access of children to the package materials like plastic bags and foamed polystyrene elements. **Suffocation hazard!**
- **Never** leave the device unattended when in use.
- Only use the device indoors.

- The device must be operated in correct and safe technical condition only. In case of operational problems disconnect the device from the power supply (pull the plug from the socket) and contact the service company.
- Only a qualified technician and using original spare parts and accessories should carry out repairs and maintenance of the device. **Do not attempt to repair the device yourself.**
- Do not use any accessory or spare parts that have not been recommended by the manufacturer. These can be dangerous for the user or lead to damages of the device or personal injury, and further, the warranty expires.
- To prevent hazards and to ensure optimum efficiency, no modifications or alterations to the device that are not explicitly approved by the manufacturer may be undertaken.



DANGER! Electric shock hazard!

To avoid the hazard results please follow the safety instructions below:

- Never allow the power cable to come into contact with heat sources or sharp edges. The power cable should not hang over the side of the working surface. Ensure that no one can step on or trip over the cable.
- The power cable must not be folded, bent or tangled, and must always remain fully unrolled. Never place the device or other objects on the power cable.
- Do not cover the cable. Keep away the cable from operating range and do not immerse it into water or other liquids.

- Check the power cord regularly for damage. Do not use the appliance if the power cord is damaged. If this cable is damaged, it must be replaced by customer service or a qualified electrician in order to avoid dangers.
- The supply cable must be disconnected from the socket only by pulling the plug.
- Never carry or lift the device by the supply cable.
- In any case do not open the device housing. In case of electrical or mechanical modifications the **electric shock hazard will occur**.
- Do not use any acid agents and make sure no water ingresses the device.
- **Never** operate the device with moist hands or standing on wet floor.
- Remove the plug from its socket:
 - when the device is not used,
 - in case of anomalies during operation,
 - before cleaning.



HOT SURFACE! Burn hazard!

To avoid the hazard results please follow the safety instructions below:

- During the operation of the device, the dryer's drum becomes very hot (ca. 150 °C). Never attempt to reach inside the dryer's drum.
- Before you start cleaning or moving the device elsewhere, let it cool down completely.
- Direct exposure to UV lamp may burn your eyes and skin.

1.3 Use as intended

Every use of the device for a different purpose and/or in a way that diverges from the intended use is not allowed and is assumed as the use against the intended purpose.

Any claims against the manufacturer or their authorized representatives as a consequence of experiencing damage resulting from the use against the intended purpose are inadmissible.

The liability for damage occurred during the use of the device against its intended purpose is borne solely and exclusively by the user.

Safety operation of the device is guaranteed only when it is used for its intended purpose and according to the instructions included in this manual.

The cutlery polishing machine is intended only for drying and polishing of washed cutlery made of stainless steel and silver.

1.4 Use against the intended purpose

Any use other than those mentioned in point “**1.3 Use as intended**” is assumed as the use against the intended purpose and is not allowed.

The use against the intended purpose may lead to severe injury or damage caused by hazardous voltage, fire or high temperature. It is allowed to use the device to perform only the work described in the instruction manual. Improper use may cause the device damage.

Any manipulation with the device, assembly or maintenance work may be performed exclusively by the authorized service staff.

2. General information

2.1 Liability and Warrantees

All the information and instructions in this manual take into account standard safety regulations, current levels of technical engineering as well as the expertise and experience we have developed over the years.

The instruction manual was translated with all due care and attention. However, we do not accept liability for any translation errors. The German version of this instruction manual is definitive.

If the delivery consists of a special model, the actual scope of delivery may differ from the descriptions and illustrations in this manual. This is also the case for special orders or when the device has been modified in line with new technology.



CAUTION!

Read this manual carefully and thoroughly before any operation of the device, and especially before turning it on!

Manufacturer is **not liable** for any damages or faults caused by:

- violation of advice concerning operation and cleaning;
- use other than designed;
- alterations made by user;
- use of inadequate spare parts.

We reserve the right to make technical changes for purposes of developing and improving the useful properties.

2.2 Copyright protection

The instruction manual including any texts, drawings, images or other illustrations is copyright. No part of this publication may be reproduced, transmitted or used in any form or by any means without permission in writing from the manufacturer. Any person who commits any unauthorized act in relation to this publication shall be liable to claims for damages. All rights reserved.



NOTE!

The contents, texts, drawings, pictures and any other illustrations are copyright and subject to other protection rights. Any person unlawfully using this publication is liable to criminal prosecution.

2.3 Declaration of conformity



The device complies with the current standards and directives of the EU. We certify this in the EC declaration of conformity. If required we will be glad to send you the according declaration of conformity.

3. Transport, packaging and storage

3.1 Delivery check

Please check the delivery upon completeness and transport damage immediately after receipt. In case of visible damage do not accept or accept the delivery with reservation only.

Note the extent of damage on the carrier's bill of delivery. Trigger off the complaint.

Hidden damages should be reclaimed immediately after notice, as claims for damages can only be asserted within the effective period for complaints.

3.2 Packaging

Please do not throw away the covering carton of your device as it might be useful for storage purposes, when moving or, in case of damages, when the device must be sent back to a repair center. The outer and inner packing material should be removed completely from the device before installation.



If you liked to dispose the packing, consider the regulations applicable in your country. Supply re-usable packing materials to the recycling.

Please inspect the device upon completeness. In case any part is missing please contact our customer service center immediately.

3.3 Storage

Keep the package closed until installation and under consideration of the outside indicated positioning- and storage markings.

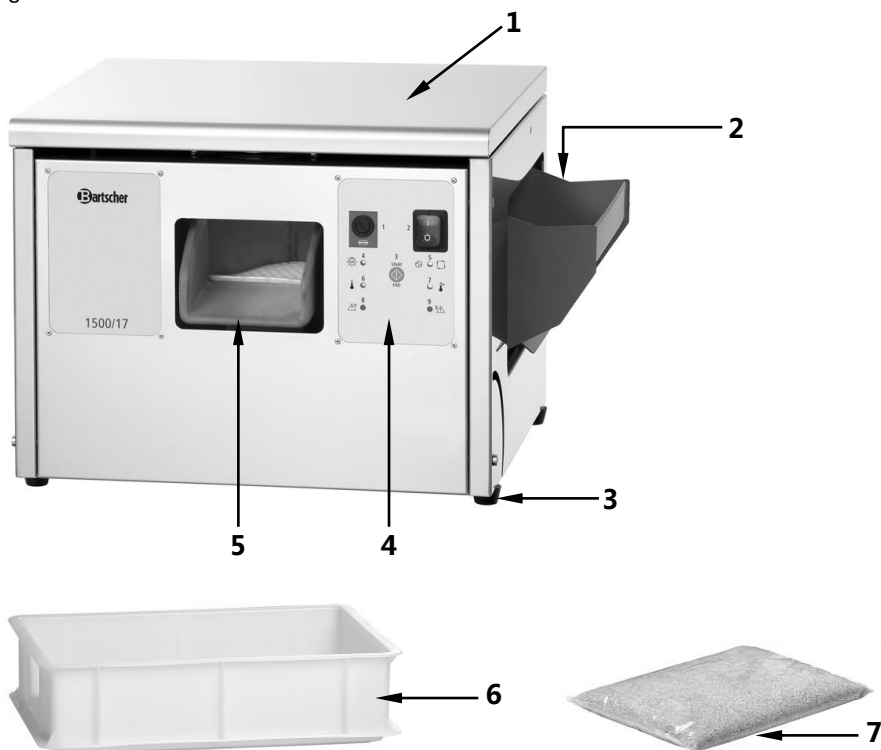
Packages should be stored under consideration of the following:

- do not store outdoors,
- keep it dry and dust-free,
- do not expose it to aggressive media,
- do not expose it to direct sunlight,
- avoid mechanical shocks and vibration,
- in case of longer storage (> 3 months) make sure you check the state of the packaging and the parts regularly, if required refresh or renew.

4. Technical data

List of components 110431

Fig. 1



- 1 Housing
- 2 Cutlery input
- 3 Feet
- 4 Control panel
- 5 Cutlery output
- 6 Cutlery collection basket
- 7 Maize granulate

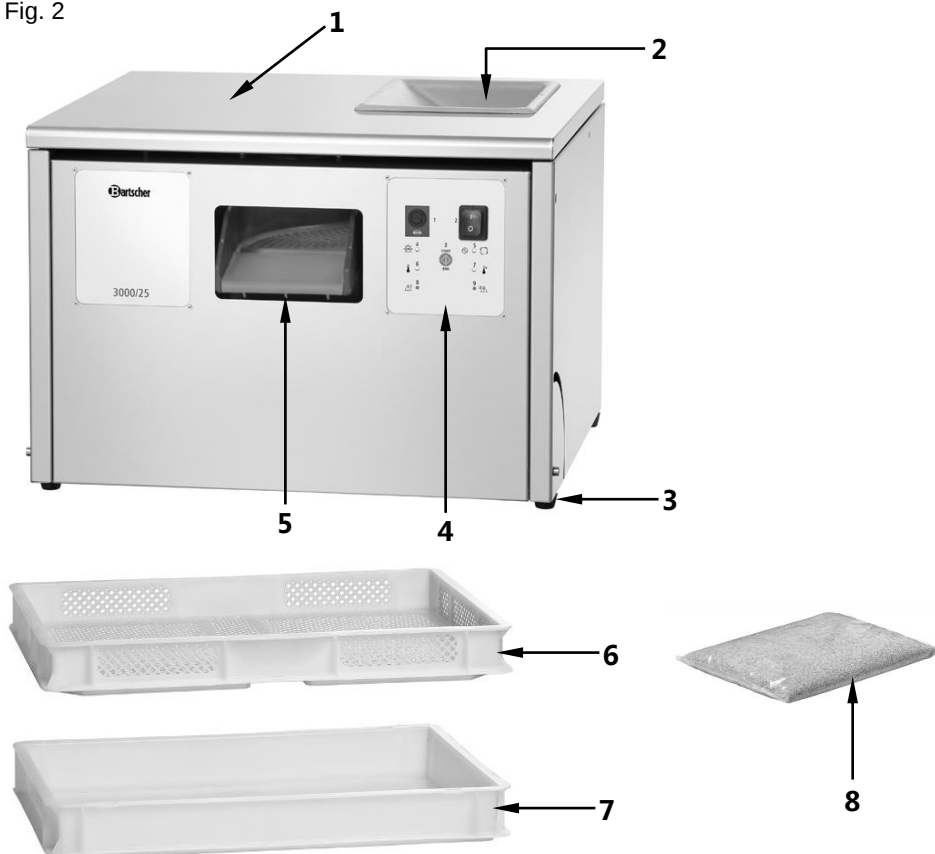
Technical specification

Name	Cutlery polishing machine 1500/17
Code-no.:	110431
Material:	Stainless steel
Model:	▪ Polishing/drying method: heated maize granulate ▪ Maximum output: 1 500 pieces of cutlery per hour ▪ Filing volume of maize granulate: 1.7 kg ▪ Fan for granulate removal ▪ UV lamp for cutlery disinfection ▪ Cutlery input: - right side of the device - width of the opening: 215 mm ▪ Cutlery output: - front of the device - width of the opening: 100 mm ▪ ON/OFF switch ▪ Indicator light: - Temperature - Heating - Standby - Warning light ▪ Features: - Start/Stop key - HACCP compliant due to 80 °C operating temperature - 10 minutes after-run for granulate drying after switch-off - Automatic switch-off when the cover is opened - Easy access to the cutlery channel
Power:	0.4 kW / 230 V 50 Hz
Dimensions:	W 510 x D 440 x H 345 mm
Weight:	27.0 kg
Included:	1 cutlery collection basket, 2 kg of maize granulate

We reserve the right to make technical changes!

List of components 110432

Fig. 2



- 1 Housing
- 2 Cutlery input
- 3 Feet
- 4 Control panel
- 5 Cutlery output
- 6 Cutlery collection sieve
- 7 Cutlery collection basket
- 8 Maize granulate

Technical specification

Name	Cutlery polishing machine 3000/25
Code-no.:	110432
Material:	Stainless steel
Model:	▪ Polishing/drying method: heated maize granulate ▪ Maximum output: 3 000 pieces of cutlery per hour ▪ Filing volume of maize granulate: 2.5 kg ▪ Fan for granulate removal ▪ UV lamp for cutlery disinfection ▪ Cutlery input: - top of the device - width of the opening: 230 mm ▪ Cutlery output: - front of the device - width of the opening: 130 mm ▪ ON/OFF switch ▪ Indicator light: - Temperature - Heating - Standby - Warning light ▪ Features: - Start/Stop key - HACCP compliant due to 80 °C operating temperature - 10 minutes after-run for granulate drying after switch-off - Automatic switch-off when the cover is opened - Easy access to the cutlery channel
Power:	0.56 kW / 230 V 50 Hz
Dimensions:	W 580 x D 560 x H 410 mm
Weight:	40.0 kg
Included:	1 cutlery collection sieve, 1 cutlery collection basket, 3 kg of maize granulate

We reserve the right to make technical changes!

5. Installation and operation

5.1 Installation



CAUTION!

Any installation, connection and maintenance work related to the device must be performed by the qualified and certified technician in accordance with the applicable international, national and local regulations.

Unpacking

- Unpack the device, remove and dispose of all package material according to the environment protection regulations.



CAUTION!

Never remove the nameplate and warning signs from the device.

Remove transport fastenings



CAUTION!

Before starting the device remove all transport fastenings!

Keep all parts for re-use, if the device is to be transported again or moved to a different place.

If the transport fastenings are not removed or if they are not fully removed, this may lead to damaging the device.

In order to remove the transport fastenings, follow this instruction:

- Lift the device's cover.
- Unscrew the fastening knob (A) and remove the cover (B) (Fig. 3).
- Remove the fastening bars (C).
- Reattach the cover (B) and screw it in using the fastening knob (A).

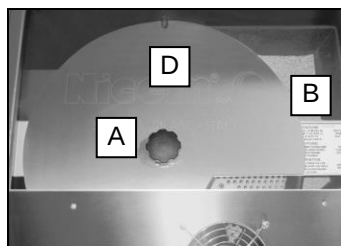


Fig. 3



CAUTION

The cover (B) for closing the drying basin before the use of the device **must be** reinstalled.

- Reinstall the cover before switching the device on.

Positioning

- Put the device on an even, stable, dry and waterproof surface which is resistant to high temperature.
- **Never** place the device on an inflammable surface.
- Do not place the device near open flame, electric heaters or other heat source.
- **Never** place the device at the edge of a table to avoid tilting or falling.
- **Never** put the device in a moist or wet area.
- **Never** locate the device in the direct vicinity of walls, low wall, kitchen furniture, or other objects. Make sure there is enough distance (at least 30 cm) from walls and other flammable or prone to discolouration objects. Follow the valid fire protection regulations.
- Always keep the working area around the device clean and dry.
- When locating the device, make sure the power plug is easily accessible to immediately unplug the device, if necessary.

Connection



DANGER! Electric shock hazard!

The device can cause injuries due to improper installation!

Before installation and connecting the local power grid specification should be compared with that of the device (see rating plate). Connect the device only in case of compliance!

- The power supply circuit with the socket must be protected by the fuse of at least 16A. Connect the device directly to a single grounded socket. Do not use any power bar or multiple socket.

5.2 Operation

- Before use, clean the device according to the instructions set out in point 6 “Cleaning and maintenance”.

Control panel



Fig. 4

No.	Symbol	Description of symbols
1		Fuse Overvoltage protection.
2		ON/OFF switch To switch the device on and off. This switch should be always on during the operation of the device, and in order to switch the device on and off, use START / END button (3).
3		START / END button - The device is switched on by pressing this button. - By pressing this button during the operation, the device is being switched off, the maize granulate is dried for ca. 10 minutes before the device's switch-off.

No.	Symbol	Description of symbols
4		UV lamp indicator light ▪ When the device is switched on, it indicates that the UV lamp is working. ▪ Flashing light indicates lamp malfunction.
5		“Power” / “Cycle switch-off” indicator light ▪ When the device is switched on, it indicates that the power is supplied to the device. ▪ Flashing light indicates that the maize granulate drying cycle is in progress, and then it goes off (ca. 10 minutes).
6		“Operating temperature reached” indicator light ▪ When the device is switched on, it indicates that the maize granulate has an optimum operating temperature. ▪ Flashing light indicates that the maize granulate is being heat up.
7		“Heating” indicator light ▪ When the device is switched on, it indicates that maize granulate is being heat up. ▪ When the device is switched off, it indicates that the maize granulate has an optimum operating temperature.
8		„ALARM 1“ indicator light ▪ See. Table in section 7. “Possible malfunction”
9		„ALARM 2“ indicator light ▪ See. Table in section 7. “Possible malfunction”

Description of operation

Switch-on phase

- Switch the device on by pressing the ON/OFF button (2): the cutlery polishing machine is ready to work.
- Press the **“START”** button (3) to start the device.

Drying cycle

- Wait until the device has reached the operating temperature: **“Operating temperature reached” indicator light** (6) comes on and at the same time the **“Heating” indicator light** (7) comes on.
- The device should be used according to the description presented in the section **“Loading of the cutlery polishing machine”**.

Switch-off phase

- After the use of the device, press the **END** button (3), to start the device's switch-off phase. The device is switched off after ca. 10 minutes, whereas **“Power” / “Cycle switch-off” indicator light** (5) is flashing. After this time the device stops and **“Power” / “Cycle switch-off” indicator light** (5) remains on in continuous mode for the remaining duration of the drying cycle.
- The switch-off phase is necessary to allow for full drying of the maize granulate.

Loading the device with maize granulate

- Switch the device on by pressing the ON/OFF button and press **START** button (3).
- Slowly fill in the cutlery input on the right side or at the top with appropriate maize granulate.



NOTE!

Always add the exact quantity of the maize granulate, as presented in the table **“Technical data”** for a given device.



CAUTION!

Never leave the cutlery polishing machine switched on, if the maize granulate has not been added to the dryer's drum to avoid overheating and damaging the housing of the dryer's drum.

Loading of the cutlery polishing machine

- Switch the device on by pressing the ON/OFF button (2).
- Press the **“START”** button (3) to start the device.
- Before placing the cleaned cutlery in the cutlery input opening, wait until **“Heating” indicator light** goes off.



CAUTION!

Load the device only with properly cleaned cutlery (no fat or oil residues), to avoid damaging the surface of the dryer's drum.

- Place the supplied cutlery collection basket (Code-no.110431, fig. 7), or cutlery collection sieve (Code-no. 10432, fig. 8) under the cutlery output.
- Place the cutlery for drying into the cutlery input at the side (Code-no. 110431, fig. 5) or on the (Code-no. 110432, fig. 6)



NOTE!

Load the cutlery to the cutlery input opening adding them gradually to avoid mixing them up.



Fig. 5



Fig. 6

- Cutlery goes to the dryer's drum with the maize granulate and is dried there (fig. 10).



Fig. 7



Fig. 8

- After the drying phase, cutlery leaves the cutlery polishing machine through the cutlery output and fall the cutlery collection basket (fig. 7) or the cutlery collection sieve with cutlery collection basket (fig. 8).

- In the upper area of the cutlery output there is a blower which prevents the granulate from leaving the device with cutlery.
- Furthermore, there is an UV lamp in this area which disinfects the cutlery.



Fig. 9

- If a piece of cutlery gets stuck and blocks the transport channel, you can easily open the device cover.
- As soon as the cover is opened, a micro-switch embedded in the cover disconnects the motor and heater.
- Remove the cover of the transport channel to diagnose the malfunction and fix it (fig. 10).
- Reinstall removed elements, close the cover and continue the drying process.



Fig. 10

- If the device is no longer used, switch it off using the **START/END** button. The device continues to work for ca. 10 min. drying the granulate. After expiry of this time, the device is switched off. Unplug the device.

6. Cleaning and maintenance



WARNING!

Before beginning cleaning, switch off the unit using the on/ off switch (set it to „O“) and disconnect it from the power supply (pull the plug!).

Leave the device to cool down completely.

The device is not suited for direct washing via water jets!

Protect the device from water penetration.



CAUTION

Do not use any cleaning agents including alcohol, solvents and similar components.

Do not use any abrasive or scouring cleaning agents, such as steel wool, steel wool containing soap, metal / plastic sponges or similar agents with abrasive surface.

Cleaning the inside and outside of the machine

- Clean the external surface of the device daily using warm water and a sponge or soft, moist cloth. Then, wipe dry the surface using a soft cloth.
- Clean the inside of the device (dryer's drum) each time when the maize granulate is replaced. Use only warm water and sponge. Thoroughly wipe dry the dryer's drum with a soft cloth.

Replacement of the maize granulate



CAUTION!

Electronic counter counts the hours of work of the machine. After reaching the number of hours of work set by the manufacturer, alarm indicator lights start flashing (see. Section 7. **“Possible Malfunction”**), which signal a need to replace the maize granulate.

A warning light remains active in Stand-by mode of the device, until zeroing of the hour counter. Reaching of the set number of working hours does not block further operation of the device.

Replacement of the maize granulate

1. Pull the power plug from the socket.
2. Open the cover of the device (fig. 11).
3. Unscrew the fastening knob (A) of the cover of the dryer's drum. Remove the cover of the dryer's drum (B).
4. Remove the maize granulate from the dryer's drum by hand or using small dustpan. The rest may be removed with a vacuum cleaner.
5. Clean the inside of the dryer's drum and wipe it dry thoroughly.
6. Always add precisely measured quantity of the maize granulate (see. "**Technical Data**" table) directly to the dryer's drum of the device (fig. 12).
7. Finally, fasten the cover of the dryer's drum with the fastening knob.
8. Close the cover of the cutlery polishing machine.

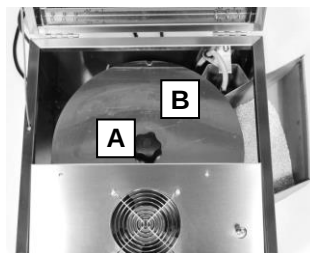


Fig. 11



Fig. 12

Resetting the hour counter.

1. With device switched off, press and hold the **START/END** button and activate the power supply by pressing the ON/OFF button (set it to "I" position).
2. Release the **START/END** button: Red indicator lights (**ALARM 1** and **ALARM 2**) are flashing for 5 seconds. Then the hour counter is set to zero and the device is ready to work.

Cleaning of the UV lamp

1. Pull the power plug from the socket.
2. Open the device's cover (fig. 11).
3. Unscrew the upper side fastening bolts of the front plate of the device using the supplied wrench and remove them; loosen lower side bolts (fig. 13).
4. Using a soft cloth carefully wipe the dust from the lamp's fluorescent tube which might have gathered during the use of the device.
5. If possible do not touch the fluorescent tube with bare hands.
6. After cleaning of the UV lamp, retighten the front plate with screws.



Fig. 12

Replacement of the UV lamp

1. Pull the power plug from the socket.
2. Open the device's cover (fig. 11).
3. Unscrew the upper side fastening bolts of the front plate of the device using the supplied wrench and remove them; loosen lower side bolts (fig. 13).
4. Dismantle the fluorescent tube by turning it 90° and carefully removing it. Handle the fluorescent tube with care and if possible do not touch it with bare hands not to soil the surface during the installation.
5. Finally, retighten the front plate of the device with screws.
6. Close the lid of the device.



NOTE!

In order to ensure the proper operation, the UV lamp (fluorescent tube) should be always replaced after 8000 hours of work.

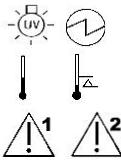
Storing of the device

- If the device is not used for a longer time, clean it thoroughly according to the instructions above and store it in a dry, clean place, protected from cold, sunlight, and children. Do not place any heavy objects on the device.

7. Possible Malfunctions

In case of malfunction, disconnect the device from its power source. Before contacting the service or sales agent, verify - based on the table below - whether it is possible to eliminate disruption in operation.

No.	Symbol	Malfunction	Possible reasons	Solution
1+2		The machine does not work	- No power supply - ON/OFF switch in "O" position - The lid is not closed properly - Fuse damaged	- Check the power cable and make sure that the plug is correctly inserted to the socket. - Check if the ON/OFF switch is pressed into "I" position - Check if the lid is closed properly - Replace the fuse
4		LED 4 indicator light is flashing	- Damaged UV lamp - Damaged lamp socket	- Replace the UV lamp - Replace the lamp socket
8		LED 8 indicator light is flashing	Flashing indicates that no power supply reaches the motor	Check the motor's power supply, possibly contact the service in order to replace the motor
9		LED 9 indicator light is flashing	Flashing indicates that the motor is blocked	Disconnect the device from the power supply. Make sure that no cutlery blocks motor rotation, possibly contact the service in order to replace the motor

No.	Symbol	Malfunction	Possible reasons	Solution
6+8		LED 6 and LED 8 indicator lights are flashing	If both LED indicator lights (6/8) or (6/9) are flashing, the malfunction is related to the temperature sensor (sensor short-circuit or sensor not connected) In this status, the cycle of 8 minutes of OFF and 8 minutes of ON, during which the resistor is controlled directly by the printed circuit board.	Replace the sensor
6+9		LED 6 and LED 9 indicator lights are flashing		
4+5 +6+ 7+8 +9		LED 4, 5, 6, 7, 8, 9 indicator lights are flashing	If all the indicated LED indicator lights are flashing (4, 5, 6, 7, 8, 9), you need to replace the maize granulate and reset the hour counter.	Replace the maize granulate and reset the hour counter (observe instructions in section 6 “Cleaning and maintenance”)
		The device is not heating up	Damaged heating element.	Order the replacement of the heating element from the technical service

If you cannot remove the malfunctions:

- do not open the body,
- notify the customer service point or contact the sales agent, while providing the following information:
 - type of malfunction;
 - article and serial number (rating plate at the rear of the device).

8. Waste disposal

Old devices



The electric devices are marked with this symbol. You must not dispose of electric devices with household waste. When the device may not be longer used each consumer is obliged to dispose of the device at the dedicated local collection point, separately from household waste.



NOTE!

Electric devices should be used and disposed of properly to prevent the impact on the environment.

- Disconnect the device from the power supply and remove the power cord from the device.

Bartscher GmbH
Franz-Kleine-Str. 28
33154 Salzkotten
Germany

phone: +49 5258 971-0
fax: +49 5258 971-120
Service-Hotline: +49 5258 971-197
www.bartscher.com