

# Steam Cleaner Wasi-Steam Classic II



174996 #CCVA#  
Wasi-Steam Classic II  
Stainless Steel



174996 #CCWH#  
Wasi-Steam Classic II  
Stainless Steel White



USER MANUAL

**Dear customer,**

Thank you for choosing a product from the Wassermann range. Wassermann Dental-Maschinen incorporates the highest standards of quality and the latest technology.

In order to enjoy maximum performance and years of trouble-free operation, please read this user manual carefully before you connect this unit and start work, and operate the unit according to the recommended guidelines. The operation safety and the functionality of this unit can only be guaranteed if you follow both the general safety guidelines and the applying laws to prevent accidents as well as the precautions given in this user manual. We are not liable for any damages which occur due to inappropriate usage or faulty operation of this unit.



Make sure that anyone using this unit has read and understood this user manual.

Keep this user manual in a safe place where it can be referred to as required at any time.

 The unit complies with the relevant EU guidelines.



The unit is subject to the EU guidelines 2012/19/EU (WEEE Directive).

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## 1 Features

- **Operation with distilled/ softened water is possible and is recommended**
- **Wasi-Steam Classic II:** Perfect for use with limited space
- **Offered in two colour variations:**
  - 174996 #CCVA# Wasi-Steam Classic II Stainless Steel
  - 174996 #CCWH# Wasi-Steam Classic II Stainless Steel White
- Manual filling so the location can be flexibly selected
- Variable working pressure, variable up to 5 bar
- Short heat-up phase through 1,200 Watt-special steel heating
- Comfortable application through single-handed operation of the jet gun
- Gentle and quick to use, thorough results
- High safety because of protection against dry running / Thermo-safety switch with manual reset
- Tank and diverse housing parts made of stainless steel
- Splash protection, available as accessory
- Wall mounting possible, a fastening set for wall mounting is available as accessory, for further information please see 6.2 and 6.4 of this manual

## 2 Safety Symbols used in this Manual



### **Warning!**

This is a warning of risk situations and dangers.

Failure to observe this warning could be life-threatening. These warnings has to be observed.



### **Information!**

This symbol draws your attention to specific features that has to be observed.

### 3 Safety Guidelines

Configuring and operating this equipment requires **precise knowledge** and **observance** of the instructions in this **user manual**. The equipment is designed only for its intended application.



**WARNING:**

Service and repairs should be carried out only by authorised specialists.  
Disconnect the power plug before starting any maintenance work.



Make sure that the equipment is connected to the correct power source.



Never touch the steam gun directly at the nozzle – **risk of scalding!**

When refilling with water (Operation with distilled/ softened water is possible and is recommended.) it is imperative to note point **8 (Operation)** of this user manual – **risk of scalding!**

Never point the steam gun at people (living beings) – **risk of injury!**

The unit has several safety features:

- Pushbutton switch 5 bar,
- Thermo-safety switch with manual reset 165°C degrees Celsius
- Adjustable thermostat max. 185°C degrees Celsius
- Safety valve 7 bar

The unit can be filled manually, e.g. by means of a beaker, funnel, or the like.  
The unit must not be filled with pressure and or be attached to a tap.

**Operation with distilled/ softened water is possible and is recommended.**

## 4 Responsibility for Operation or Damage

The responsibility for operating the unit lies exclusively with the owner or user if said unit is incorrectly serviced, maintained or altered by persons not employed by an authorised dealer or if the unit is used in a manner contrary to its specified purpose.

The unit has to be maintained and operated in accordance with this user manual.

Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the **nonobservance** of these instructions.

Warranty and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.

### 4.1 Warranty



The warranty period for our equipment is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our service department.

Your equipment should only be operated in perfect condition. If faults occur which could harm operators or third parties, the unit should not be used until it has been fixed.

This warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the unit by unauthorized persons.

## 5 Application

Because of its variable work pressure of up to 5 bar it offers the user a gentle but quick and thorough cleaning of all small parts in the dental laboratory.

Only use the unit **Wasi-Steam Classic II** for this type of application.

## 6 Before Starting

### 6.1 Transport

Before transporting the unit, ensure that it has been unplugged from the power socket. Make sure that it is packed correctly in order to avoid accidental damage.



Be sure to check for any transport damage when unpacking the goods. Note down any damage if found.

### 6.2 Installation

Open the box, remove the packing materials, and carefully lift out the unit and accessories. Check the included accessories.

The unit must stand on a steady and even surface or may be mounted to a stable wall by means of the mounting kit (REF. 174358 available as accessory). If mounting the unit on the wall, make sure that the wall is strong enough to take the weight. For further information please see 6.4 of this manual.



Install the unit in a place where it will not block the working area and the functionality (take the dimensions into account).

Please see that the louvres are not set because air circulation (heat flow) is absolutely necessary.



Do not install the unit outdoors or in places without proper ventilation. Before start-up, be sure the unit reaches room temperature.



### 6.3 Storage

If the unit is to be stored for an extended period, protect it from moisture and dust.

The unit location is very important when it comes to workplace safety, even if it is only to be set up there for a short period. The room should be dry, well ventilated and vibration-free. An even temperature and wooden supports also help.

The unit should not be stored or set up outdoors.

### 6.4 Mounting Instruction Fastening Set for Wall Mounting Wasi-Steam Classic II



In case of wall mounting a fastening set is necessary.

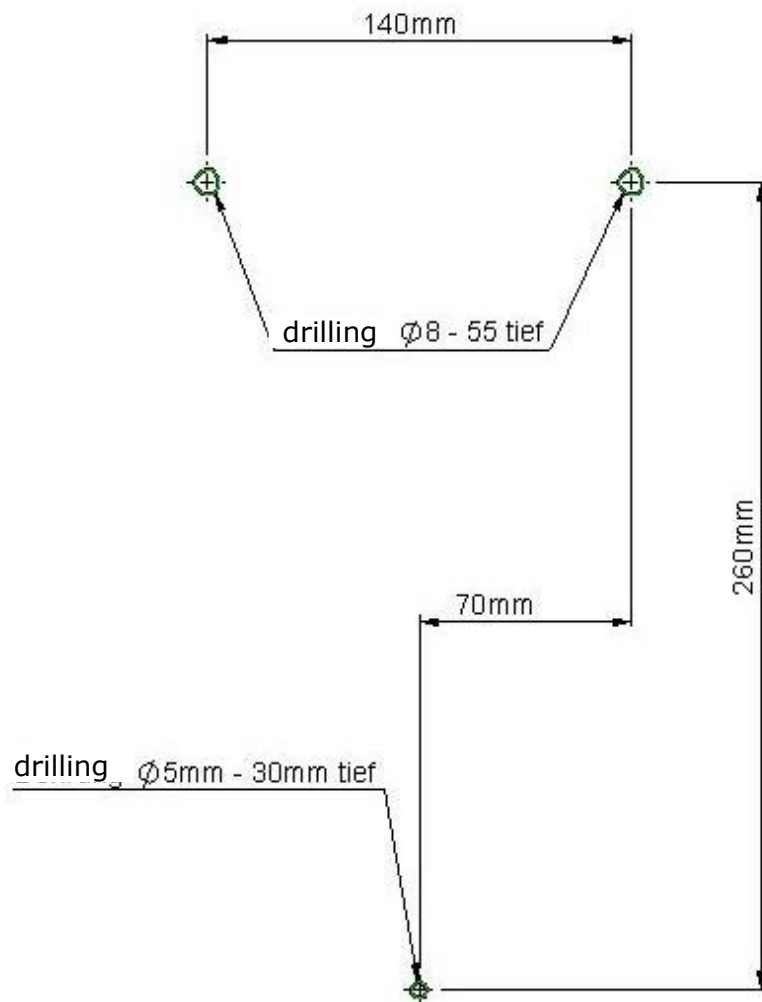
Item.-no. 174358, available as accessory

<b>Incl. in delivery</b> item.-no. 174358 fastening set Wasi-Steam Classic II	
<b>Quantity</b>	<b>Name</b>
1	Securing bracket
1	Phillips head screw M 4x8
1	Washer D 4,3
1	Serrated washer D 4,3
1	Slotted screw 4 x 16
2	Slotted screw 6 x 50
2	Screw anchor S8
1	Screw anchor S5

**Mounting instruction:**

Please drill the holes as indicated in the following drilling template. Please make sure before that the wall is really suitable for mounting a unit (aerated concrete walls and drywall are problematic).

Drilling template



Secure the enclosed screw anchors as shown in Figure 1.

Screw the 6x50 screws into the two upper holes; keep a distance of 6-7 mm to the wall!

(Figure 2)

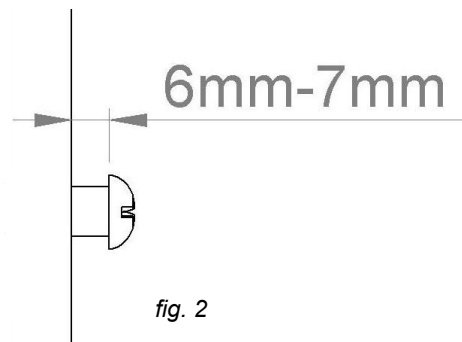
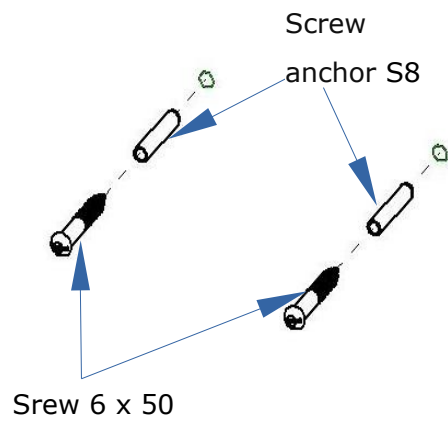


fig. 2

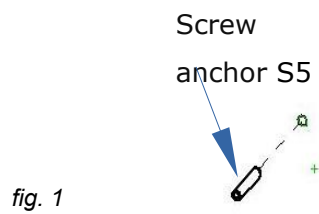


fig. 1

Screw the securing bracket to the **Wasi-Steam Classic II** as shown in Figure 3.  
Do not yet fully tighten the Phillips head screw, however – you still need to be able to move the securing bracket.

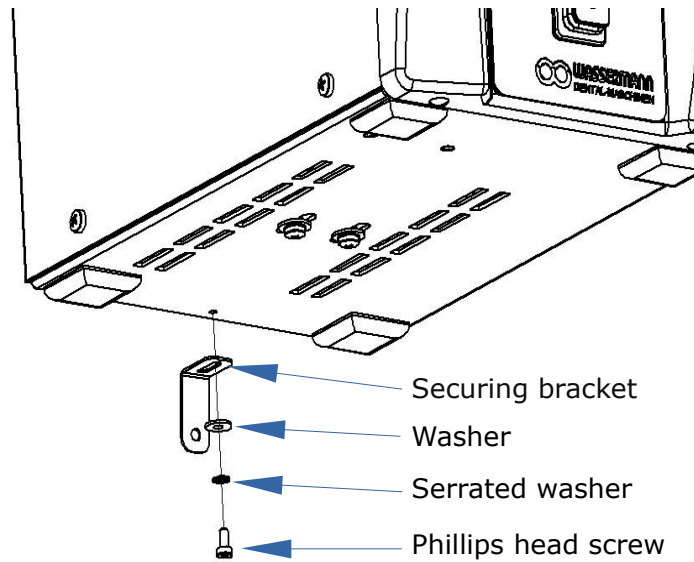
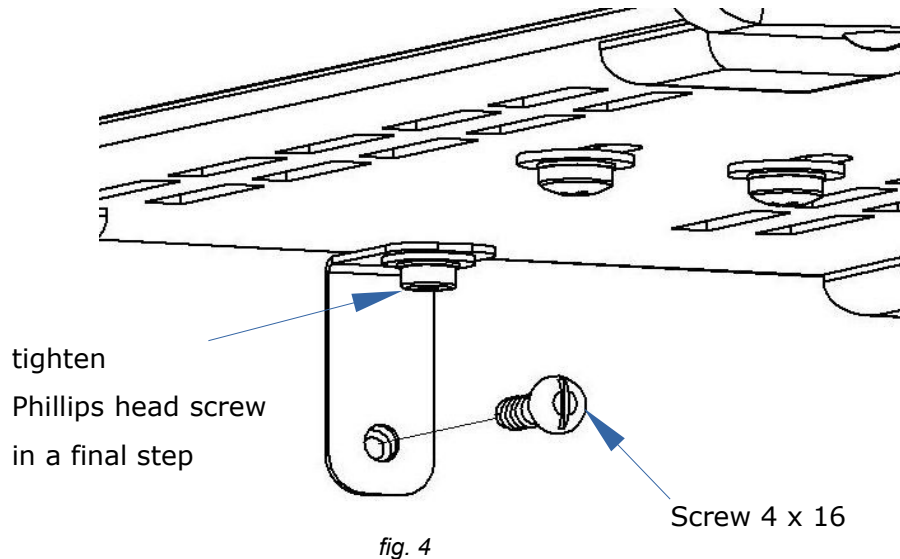


fig. 3

Carefully hook in the unit. Check, whether the unit hangs loosely (i.e. moving back and forth on the screws). If this is the case tighten the 6x50 screws until the unit hangs securely.

Finally tighten the securing bracket. First at the wall, then tighten the screw on the unit itself. (Figure 4)



## 7 Start-up/ Installation



Before you use the steam cleaner, please put on heat-resistant gloves and wear safety goggles.




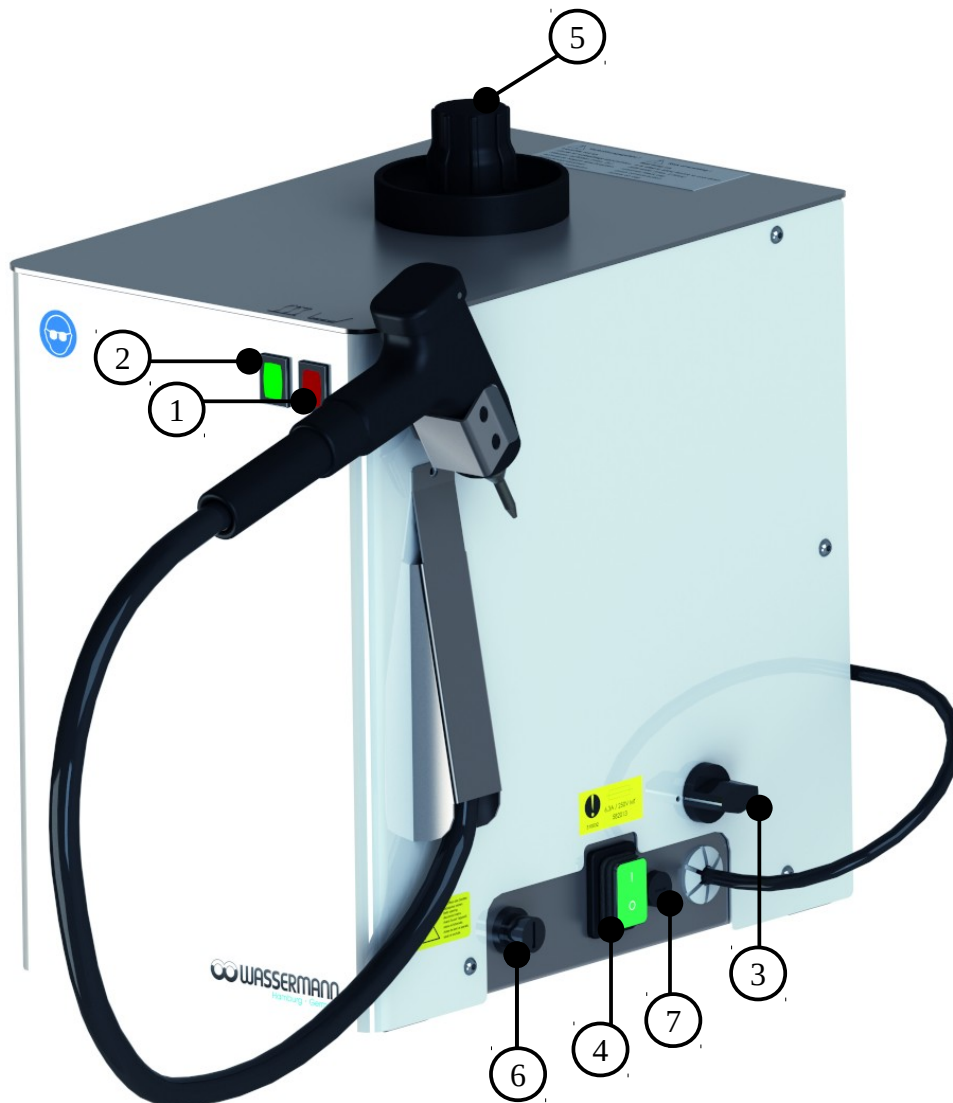
Switch the unit off if it will not be used for an extended period.

**Note:** Optimal and fast pressurization is carried out **only** if the adjusting knob is in the "max." position, since the heater with this is activated via a push button switch, i.e. immediately at the start of every blasting action.

However in case of the pressure choice options "less than max.", the heater is activated via a thermostat, i.e. even in case of a massive decrease in pressure it may take several minutes until the heater is activated due to residual heat of the container for example.

Therefore this setting "less than max." is preferable only in case of occasional work.

 **Please note the details on the equipment and equipment stickers!**



1 = Light red (low water)

2 = Light green (heating operation)

3 = Controller steam quantity „0 – 5 bar“ (max. = 5 bar)

4 = Main switch (unit on / off)

5 = Screw top (pressing down to unscrew)

6 = Thermo-safety switch with manual reset (please see 8.1.1!)

7 = Fuse

- Open the screw top (5) of the container carefully while pressing down the screw top
- **Fill with at most 2 litres of water**
- **Operation with distilled/ softened water is possible and is recommended**
- Tighten container screw top (5) sturdily again (hand-screwed)
- Connect power plug
- Switch on main switch (4)
- Choose pressure range from 0 – 5 (max. = 5 bar) with adjusting knob (3)
- **Heat-up phase** approx. 30 minutes (full container)
- Briefly deaerate the unit after approx. 15 minutes by operating the steam gun
- If the heating light (2) turns off, the unit is ready for use. Now steam blasting via the gun is possible by operating the pushbutton until the temperature delimiter (6) activates (button under black cap on the right side of the unit) and the red light (1) lights up
- Then proceed by referring to point **8.1.1 "refill water"**

## 8 Operation

### 8.1 General Operating Instructions

All instructions for using the unit, whether in verbal or written form, are based on our own experience and experimentation and can only be regarded as guidelines.



**To avoid an unintentional interruption of use (cooling down period approx. 45 min.), the unit should be refilled every morning in a cold state (take fill level into account, or else the container will be overfilled).**



**Note: Do not refill more than 2 litres of water, if the red light (water shortage) lights up (otherwise the container will be overfilled).  
Operation with distilled/ softened water is possible and is recommended .**



### 8.1.1 Refill the Unit with Water

- After the red light (1) lights up, wait approx. 45 min. (**cooling down period**) until you refill again, or else there is a **risk of scalding** as long as the temperature remains above 100°C
- Container must be **pressureless**; produce a pressure balance via the jet nozzle by operating the steam gun
- Only now open the screw top (5) of the container carefully while pressing down the screw top
- Refill water (**2 litres at most**)
- Operation with distilled/ softened water is possible and is recommended
- Fully tighten the screw top (5) of the container again (hand-screwed)
- Switch on the temperature delimiter (6) (button under black cap on the right side of unit) again as follows; first unscrew the black cap, then push in the pushbutton, the red light (1) goes out and the unit heats up to the adjusted pressure. Finally, screw the black cap back on
- Heat-up phase (see p. 14)
- Operational; i.e. steam blasting via the gun by operating the pushbutton is possible until the temperature delimiter (6) activates again and the red light (1) comes on



## 9 Troubleshooting

Fault	Cause	Solution
The red light (low water) lights up and the heating turns off	This is a safety feature of the steamer: Thermo-safety switch (temperature delimiter 165°C) with manual reset	Please see page 14/15.
No function, only the main switch lights up	Devise fuse faulty	Replace fuse and investigate cause; call service if necessary.
Steam escapes from unit	Safety valve has opened because pressure switch is faulty	Turn off the unit immediately (unplug power plug) and call service.
Hot water leaks from the nozzle instead of steam	Container is overfilled with water	Operate gun until only steam escapes.
Lower amount of steam than usual at max. heating	Nozzle of the steam gun is clogged or the water level in the container has reached the minimum level	Unscrew nozzle from gun and examine for passage ( <u>caution risk of scalding!!</u> ) or refill water (do not overfill!!). Operation with <u>distilled/ softened</u> water is possible and is recommended.
Insufficient pressure build-up	Tank cap is still loose or O-ring is faulty	Check or replace tank cap.
No pressure in boiler	Container empty but red light or thermo switch faulty or container not empty but heater or heating regulator faulty	Check water level, refill if necessary and check the thermo switch button. If still no function, call service. Operation with <u>distilled/ softened</u> water is possible and is recommended.
No steam when operating the pushbutton	Solenoid valve faulty or clogged	When operating the gun's pushbutton, a "clicking sound" is heard from the solenoid valve. If this is the case the problem could be resolved by cleaning the valve. Otherwise call service.



If the above recommendations do not solve the problem, contact your dental depot or our service department.

## 10 Care and Maintenance

### 10.1 Repairs



Servicing or repairs to the unit has only to be carried out by qualified technicians. Only original spare parts are to be used. Responsibility for the product is voided if unauthorised persons alter it or if inappropriate components are installed.

### 10.2 Cleaning



Disconnect the power plug before starting any maintenance work.

The identification plate has always to be kept in easily legible condition and has not to be removed.



Remove external dirt from time to time with some form of cold cleaner.

Use only cold cleaners to avoid damaging the paintwork or removing the lettering. The equipment should be cleaned at regular intervals to ensure trouble-free operation.

It requires only normal cleaning (sponge, damp cloth, mild detergent) and no further chemical additives.



Please see 11 „**Decalcification**“

### 10.3 Maintenance

The **Wasi-Steam Classic II** should, depending on frequency of use, but at least twice a year, be decalcified in accordance with the following instructions. Depending on water hardness a more frequent decalcification could be required. **Operation with distilled/softened water is possible and is recommended.** As a basic principle, the unit must always be kept clean.

## 11 Scheduled Decalcification (at least every six months)



### **WARNING:**

**It is imperative to pour out the unit completely in order to prevent undesirable consequences (from unpleasant smells to damage of the plunger).**

**The unit must be opened as described below:**

#### **11.1 Pre-Decalcification**

- Turn off the main switch and unplug the power plug
- Empty / pour out container in cold state
- Mix approx. 50 ccm lime remover with 2 litres of water and fill into the unit
- Depending on lime content, the ratio can be increased:  
Max. 100 ccm lime remover with 2 litres of water
- Heating controller must be set just a little **lower than 1 bar**
- Close tank cap (hand-screwed)
- Insert the power plug into the socket, making sure that the mains and the unit operate on the same voltage.
- Switch on the unit and let it heat up briefly until the green light goes out
- Turn off the unit and allow the lime remover to react for approx 8 hours (lime remover should not react longer than 12 hours)
- Pour out the solution and rinse with clear water (approx. 1 litre) at least two times by shaking the unit

## 11.2 Open the Tank Cap



The unit must be depressurised!

## 11.3 Open the Casing



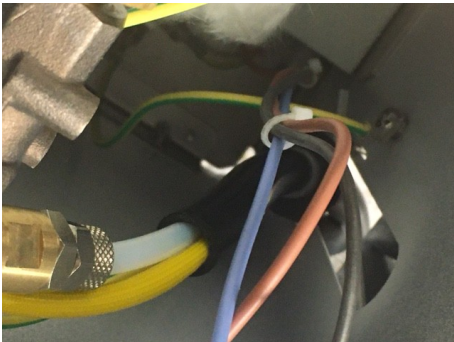
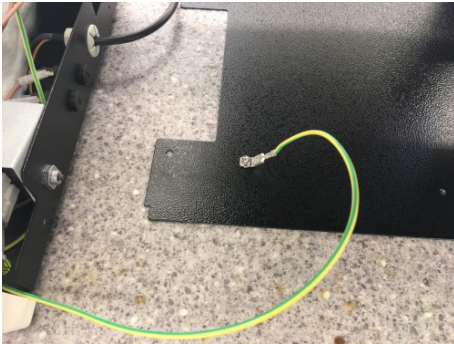
## 11.4 Loosen the Plastic Filler Tray

If necessary, briefly press the plastic filler tray at the top of the unit down to loosen the sealing ring. Then lift the filler tray upwards with a twisting movement.



The below pictures of the Wasi-Steam Classic are quite similar to your product Wasi-Steam Classic II.

### 11.5 Tear off the Flat Plug (Grounding Cable)



### 11.6 Remove the Casing





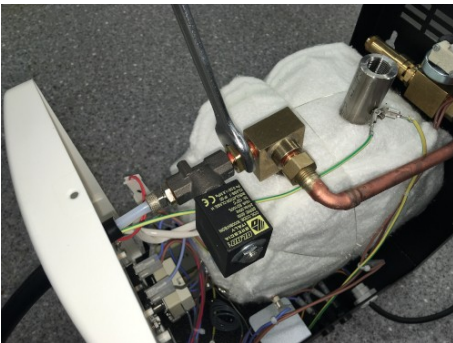
## 11.7 Loosen the Distributor Block

Use a 19 mm spanner to loosen the 3 cap nuts in the following order:

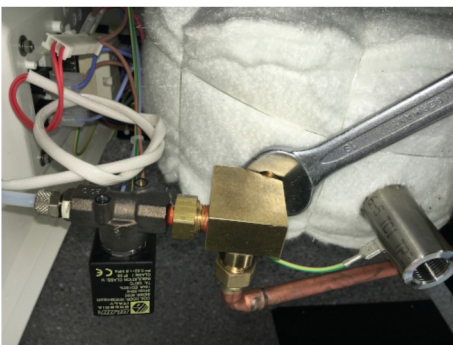
### 11.7.1 Cap Nut between Distributor Block and Copper Pipe



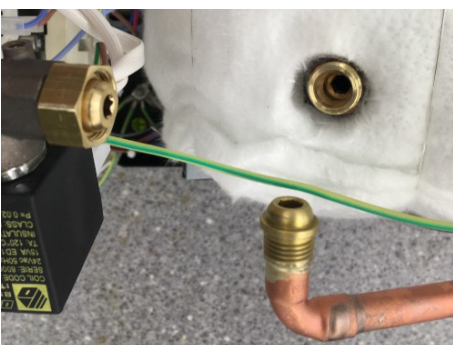
### 11.7.2 Cap Nut between Distributor Block and Solenoid Valve



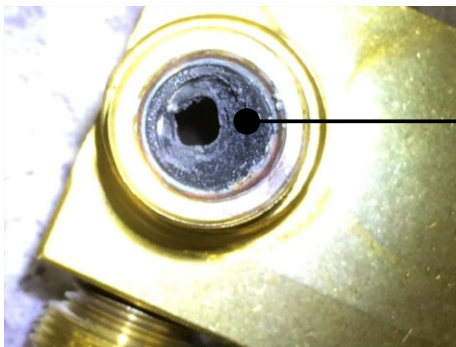
### 11.7.3 Cap Nut between Distributor Block and Tank



### 11.7.4 Remove the Brass Ingots



## 11.8 Cleaning the Distributor Block (Brass)



Contamination (eg lime build-up)

- Clean the distributor block, especially the sealing surfaces.
- Carefully remove the lime build-up from the passages with a 6 mm drill.
- Rinse at the tap.
- Blow clean with compressed air.

## 11.9 Rinse and Pour Out the Steam Boiler



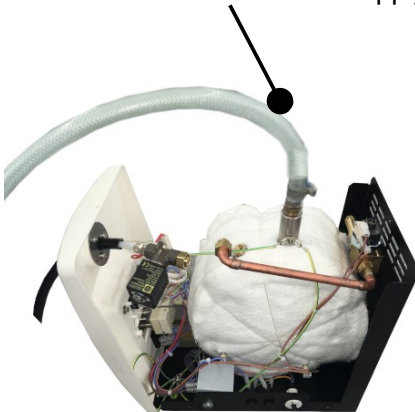
Please make sure that the pre-decalcification (see point 11.1) has already been carried out before!



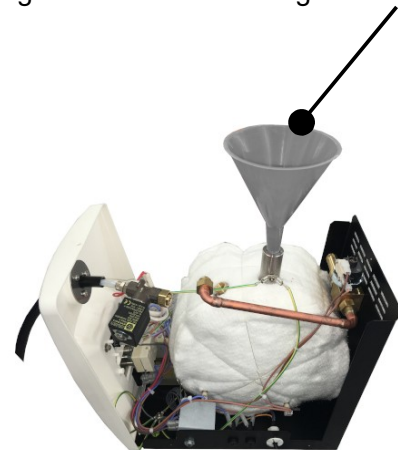
### **WARNING:**

The water must not run over the electrical system!

Recommended:  
Rinse the tank using a hose and a fixed connection to water supply



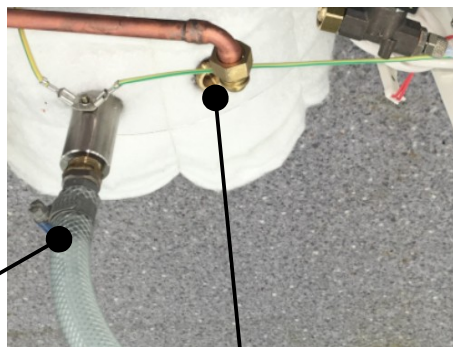
Alternatively:  
Filling with fresh water using a funnel



**WARNING:**

**The water must not run over the electrical system!**

- Insert a hose with a fixed connection to water supply into the large tank opening.
- Hold the unit upside down over a sink.
- Open the tap carefully.



INLET

Water inlet via hose (fixed water connection)

OUTLET

Rinse water / waste water

- Rinse the boiler with a hose until no more particles can be seen from the smaller hole (boiler / threaded connection to the distributor block).
- If there are still deposits, repeat the process.
- If necessary, allow Kalk-Ex to work again (observe max. exposure time of 12 hours).



### 11.10 Shine in the Tank




- Please ensure that the tank is free of deposits.
- If necessary, repeat process **11.9 Rinse and pour out the steam boiler**.




**If the unit has not been cleaned for a longer period of time, please visually check the inside of the tank for deposits (according to 11.10). If necessary, carry out a complete cleaning before changing the plunger.**

## 12 Plunger Change

 Before changing the plunger, please ensure that the tank is free of deposits (see 11.10).

### 12.1 Spare Parts for Plunger Change

Spare Parts	Item no.
Plunger	382042
Lime remover Kalk-Ex, 1000 ccm	655002
Adhesive sealant 302-72	621022
Tank lid	390100
O-Ring 20.32 x 2.62 tank lid	380074

 If necessary, please contact our service hotline.

### 12.2 Service Hotline Plunger Change: 040/ 730 92 6 - 50

**Please inform us in any case about the serial number.** The serial number allows us to find quickly without any doubt the correct answers for the needs of your machine. The identification plate is located on the back or right side of your unit.



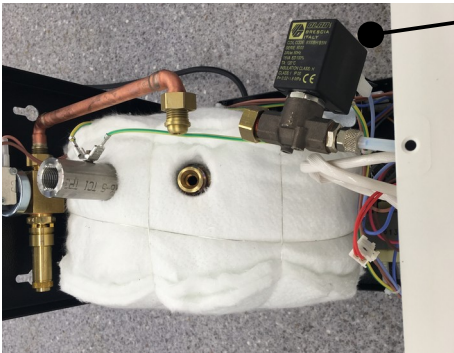
Example of an identification plate at your device

Type = item number

S/N = serial number

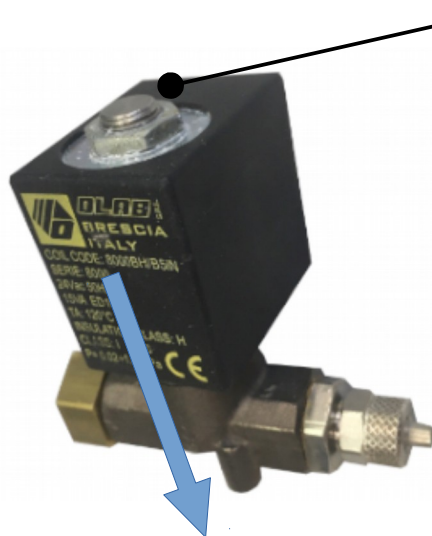
### 12.3 Disassembly of the coil body / solenoid valve / plunger sleeve

- Loosen the nut on the coil body with a size 14 wrench.
- Pull off the coil body.



Loosen the nut on the coil body  
(coil body = black box)

- Then loosen the nut of the plunger sleeve with a suitable wrench (size 19/ 20/ 21)



Nut of the plunger sleeve



Loosen the plunger sleeve from the solenoid valve

## 12.4 Replace the Plunger



Item no. 382042 Plunger

## 12.5 Clean the Solenoid Valve



Clean here

- Place very fine emery paper over the fingertip and polish the fit of the solenoid valve with a twisting motion. Then clean thoroughly with compressed air.

## 12.6 The unit can be reassembled and closed by proceeding in reverse order.

## 12.7 Spare Parts

If necessary please contact our service hotline phone.

## 12.8 Service Hotline 0049 (0)40 730 926 -20/ -24

## 12.9 Accessories for the item 174996 Wasi-Steam Classic II

Accessories	Item no.
Splash protection entirely made of stainless steel W 250 x H 265 x D 255 mm, open at the front and top	174460
Splash protection, stainless steel, plastic basement W 235 x H 385 x D 294 mm, with fixed stainless steel hood	174360
Special spray nozzle Ø 2.5 mm (Spare basic nozzle Ø 1.2 mm, item no. 174100)	174352
Kalk-Ex, lime remover, 1000 ccm	655002
Fastening set for wall mounting	174358

## 13 Technical Data

Wasi-Steam Classic II	Item no. 174996
Voltage	220-240 V / 50/60 Hz
Power consumption	5.3 A (6.3 A medium-blowing-fuse)
Output	1220 W
W x H x D max. W x H x D (housing)	245 x 350 x 315 mm 200 x 305 x 310 mm
Weight	12.5 kg
Working pressure	max. 5 bar
Steam temperature	approx. 151 °C
Boiler capacity	3.3 l
Safety class	IP 22

Other voltages on request.

The noise level of the unit amounts to ≤ 70 dB (A).



Technical changes reserved.

## 14 Disposing of the Unit

The unit has to be disposed by an authorized recycling operation. The selected company has to be informed of all possibly health-hazardous residues in the unit.

### 14.1 Information on Disposal for Countries within the EU



To conserve and protect the environment, prevent environmental pollution and improve the recycling of raw materials, the European Commission adopted a directive that requires the manufacturer to accept the return of electrical and electronic units for proper disposal or recycling.

Within the European Union units with this symbol should not therefore be disposed of in unsorted domestic waste.

For more information regarding proper disposal please apply at your local authority.

**15 EU Declaration of Conformity**

in accordance with 2014/35/EU (Low Voltage Directive) and 2014/30/EU (Electromagnetic Compatibility Directive) and 2006/42/EC (Machinery Directive) and 2011/65/EU (RoHS Directive) and 2014/68/EU (Pressure Units Directive)

Manufacturer: W A S S E R M A N N      Product description: Steam Cleaner for  
Dental-Maschinen GmbH      dental  
Rudorffweg 15-17      applications  
21031 Hamburg  
Germany

Model: Wasi-Steam Classic II      Item no. 174996

Applicable standards: DIN EN 61010-1  
DIN EN 61000-6-3  
DIN EN 61000-6-1  
DIN 45635-1  
DIN EN 60335-1

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EU-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above mentioned machine complies with the described EU guidelines. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur d'Union européenne. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los límites requeridos por el reglamento UE. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigingen aan de machine worden aangebracht.

Place, date: Hamburg, 2021-04-06

Company stamp :



Signature: \_\_\_\_\_

Sven Wassermann  
(Managing Director)



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