BaehrTec S1200

Spray pedicure device
Handpiece included

Operating Manual

1 Table of Contents

2 Users notice

This operating manual must be read through thoroughly before using the device for the first time and the contained instructions and rules must be precisely observed.

These operating instructions form part of the device user agreement. By thoroughly reading them, you will be familiarised fully with the functioning and operation of the device and will therefore be able to recognise and avoid operating errors, dangers and damage.

Please retain these operating instructions in a safe place with the device.

- ✓ Please read these operating instructions carefully.
- ✓ Please keep these operating instructions for reference purposes – also in case you wish to clean the device.
- ✓ Please observe all warnings and instructions in these operating instructions and on the device.
- ✓ If you ever clean the device, the power supply must be disconnected fully. Remove the power plug from the safety outlet. Please observe the information described in Chapter 5 and its sub-chapters when cleaning / disinfecting the device.
- ✓ Do not place the device near heat sources, such as radiators, air-conditioning units, refrigerators and the like. Please also avoid positioning near to water sources (for example sinks) and / or chemicals. Ensure an appropriately hygienic environment. Place the device on a firm and non-slip base. Avoid positioning on unstable tables, carts or the like. If the device falls, this can cause severe damage and injuries.
- ✓ To guarantee that the device functions reliably, protect it from cold, and also from overheating. Therefore, avoid temperatures below +10° C and above +30° C.
- ✓ Should you use an extension cable, ensure that the overall power supply is not higher than the capacity of the extension cable. Please understand that we cannot accept any liability for accessories of any kind not included in the scope of delivery. This also applies to any consequential damages that may occur.
- ✓ Please avoid:
    - ➢ Touching plug contacts with sharp and / or metallic objects.
    - ➢ Placing water, beverages and other liquids close to the device.
    - ➢ Leaving children unsupervised with the device.
    - ➢ Touching the mains plug with wet and / or damp hands.
- ✓ Please do not carry out any repairs on the device yourself, as this will result in the cancellation of the guarantee claim. For all repairs, please contact qualified experts who are authorised to carry these out. If necessary, please ask the manufacturer or the distributor of the device (see label on the device).
- ✓ On the basis of the risk assessment already implemented we have noticed that (electro) magnetic fields can lead to interference. Therefore, when using the device, please switch off all devices and equipment (mobile telephones, WLAN, etc,) completely that generate or could generate such fields. Should this not be feasible, then the distance between the S1200 and these devices must be at least 50 cm in order to exclude any malfunction form occurring. Please do not use the device in the following cases, and contact the manufacturer:

If the power cable / insulation shows signs of damage.
- ✓ If the device was exposed to moisture and / or wetness.
- ✓ If the device has been dropped and / or if the device housing is damaged.

In the event of lighting strike and / or overvoltage, the device may be damaged. For this reason, we also recommend installing overvoltage protection and removing the plug during a storm and / or after a long period of non-use in order to protect the device from voltage peaks.

Please observe the customary power supply specifications before connecting the device to the mains.

2.1 Symbols

2.1.1 Symbols in these operating instructions

Attention! This symbol indicates a danger to humans or the device. This symbol must always be given the utmost attention. Read the corresponding sections especially carefully and adhere very strictly to the specifications.

This symbol provides especially useful advice and gives additional information on operating the device.

CE 0483

CE sign (Communauté Européenne) with the number of the certification authority. A product bearing this label fulfils the requirements of the corresponding EU guideline (the applicable European Standard).

2.1.2 Type label with output details

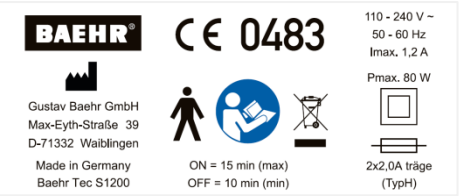


Fig. 1

CE 0483

CE sign (Communauté Européenne) with the number of the certification authority. A product bearing this label fulfils the requirements of the corresponding EU guideline (the applicable European Standard).

Application part of type B
This application part guarantees protection against electric shock due to the compliance of the leakage currents with standards (Type B).

It is a mandatory requirement that these operating instructions are read and observed before using the device.

Electrical/electronic waste. Devices with this label must be disposed of properly and must not be put in household waste.

This symbol indicates which fuse(s) is are used in the device.

Protection class II
This is a device of protection class II with functional earthing.

ON (max) / OFF (min)
Indicates how the device should be operated.
The following applies to the device:
Operating time: 15 minutes (maximum) pause time: 10 min (minimum)
These approved operating times correspond to the common work procedure in podology/pedicure.

Functional earthing
This symbol indicates that the power supply is earthed (the labelling is directly on the power supply unit).

Manufacturer

2.1.3 Symbols on the packaging

	Transport upright (up = in direction of arrow)
	Protect from impacts!
	Protect from wetness!
	Permitted temperature range: -10°C to +40°C
	Permitted humidity range: 30% to 85%
800 hPa - 1060 hPa	Permitted air pressure: 800 hPa - 1060 hPa

2.2 Foreword

Dear customer!

We are pleased that you have chosen to buy this pedicure spray device. The BaehrTec S1200 has technical features that will help you in your work.

The BaehrTec S1200 is made from many high-quality aluminium, stainless-steel and plastic parts which are also used in sports car and aircraft construction and thus guarantee the ultimate stability and quality.

Furthermore, the micro-processor-controlled electronics ensure maximum power and performance from the electronic components.

The BaehrTec S1200 also has an electronic adjuster for the handpiece motor that provides power and performance also in the lowest rotation speed ranges. Try it for yourself – you'll be amazed.

Another highlight is the Easy-Speed concept. Thanks to the instrument illustrations on the controller, setting the engine speed for the instrument currently in use is guaranteed to be child's play (however, this is no substitute for the user checking that the maximum speed for the instrument currently in use is not exceeded).

In addition to the Easy-Speed concept, the BaehrTec S1200 has a colour display that provides you with further information and which will facilitate adjusting some device settings (e.g. colour background).

Modern electronic devices typically have energy-saving features. This is why we have purposely not included a standby function for the BaehrTec S1200. Therefore, when your device is not required, please turn it off using the main switch, which is located in a user-friendly position on the front of the device. Think about the environment and your wallet.

With the BaehrTec S1200 you have the following convincing "Baehr" advantages:

- very low **weight**
- very low **noise level**
- simple **operating with a high degree of operating safety**
- high **performance**, perfectly adjusted to the working conditions
- high **robustness** (for mobile use)
- high and long **reliability**
- high **energy-saving potential** (no standby mode)
- **Button** on handpiece

The pedicure device BaehrTec S1200 is produced and tested according to strict quality criteria. It complies with the Directive 93/42 EWG for medical products.

We hope your new device brings you plenty of enjoyment and we wish you every success in operating it.

Your

Gustav Baehr GmbH

2.3 General product description and application purpose

The pedicure device BaehrTec S1200 is intended for use in medical foot care sector. It must only be used by trained professionals.
Rotating instruments (milling, filing attachments, etc.) are actuated with the BaehrTec S1200. These can be used to strip away hard skin, calluses, nails etc. and remove corns.
In detail, the S1200 is intended for the following:

- for cleansing and milling the nail fold and removing ingrown nails
- to smooth and strip away mycotic and non-mycotic nails
- to polish non-mycotic nails where necessary
- to remove deep callosities or clavi using the hollow cutter
- milling and smoothing the areas around the digit if these are macerated or calloused
- to smooth plantar soles with the twister or the cutting grinder
- Drill through the nail with a round or hollow drill with grinders for clavi or haematoma subunguial tissue
- to roughen the nail in preparation for brace correction
- for preparation in the event of whitlow
- to remove severe plate-like callosities

Other types and fields of application are carried out at your own risk, and may conceal dangers. No form of misappropriation is permitted.

Improper use may lead to damage to persons or objects.

The manufacturer cannot be held responsible for any damage caused by improper use, unqualified staff or incorrect operating.

Only the spray solution approved for the BaehrTec S1200 (Baehr spray solution for Baehr spray technology devices, Art-No. 22333) may be used for this purpose.

All warranty claims are void following improper use or opening the device.

WARNING: This device must not be modified without permission from the manufacturer.

2.3.1 Operator requirements

This device must only be used by trained and instructed podiatrists, medical chiropodists, doctors or persons in related occupational categories. They must be familiar with the appropriate working method and have a relevant qualification.

The operator is obliged to/must ensure that

- only fault-free and flawless work equipment is used
- protects himself, the patient and others from dangers
- contamination through the device is avoided

2.3.2 Staff and Patient Protection

It is essential that you read this section with the utmost care! It contains important information on protecting yourself, others and the device from damage!

- Only use high-quality rotating instruments with standardised shaft (diameter 2.35 mm) from the Baehr product range.
- Please observe the specific instructions of rotating instruments when using them. Above all, observe the manufacturer's information on maximum speeds, cleaning, disinfection and sterilisation.
- Disinfect, clean and sterilise the instruments after each use.
- Only use cleaned, disinfected and sterilised instruments for each change of patient to avoid a possible transfer of germs to the next patient.
- Disinfect the handpiece after each use and before each change of patient. (Please ensure that no disinfecting agent or other liquid can enter the device).
- Disinfect all parts of the device that could have come into contact with contaminated patients after each use and before each change of patient. (Please ensure that no disinfecting agent or other liquid can enter the device).
- The operating staff must wear protective gloves as well as eye, mouth and nose protection when using the device.
- When using the device, the staff must take care that neither hair nor any other loose objects such as wipes, cotton wool or the like can enter the area of the rotating tools. A hair net must be worn where necessary.
- The operating staff must bear in mind that the particles that are removed when working with the rotating tools may chip. Open and untreated wounds on the patient which are in the direct vicinity of the working area should therefore be covered in a sterile way in order to protect them from any splintering particles.
- The device must be maintained and cleaned according to the instructions before and after long pauses in use.
- Only accessories authorised for use with the device may be used.
- The national statutory provisions must be observed during use, in particular:

  the currently applicable work regulations
  the currently applicable accident prevention measures

To guarantee constant readiness for operation and preservation of value, the prescribed care work and maintenance services must be performed.

The device must only be repaired using replacement parts approved by the manufacturer and in accordance with the manufacturer’s instructions. The recommended maintenance services (after notification, but at the latest within 24 months) and inspection and repair work must only be performed by the manufacturer.

This device must not be modified without the permission of the manufacturer.

2.3.3 Information on electromagnetic compatibility

We would like to point out that due to EN 60601-1 on the electromagnetic compatibility of electromedical devices that:

- medical, electric devices are subject to particular precautionary measures and so must be operated according to the requirements of these operating instructions.
- portable and mobile high-frequency communication facilities may affect the functionality of electrical devices.
- in order to comply with the EMV requirements of EN 60601-1, only original feed lines, accessories and spare parts may be used.

You must only use the mains cable supplied by the manufacturer to operate the device. If you require a new cable, please contact the manufacturer. Operating the device using a different cable is not permitted.

2.3.4 Safety notices

The device is not authorised for operation in potentially explosive areas.

Before every application, the operator must make sure of the functional safety and proper condition of the device.

Improper handling, maintenance and care may lead to premature deterioration and malfunctions.
This can result in a reduced product life.
→Therefore, please clean and care for the device regularly and properly and have it sent for servicing regularly (observe service indicator or at the latest within 24 months)!

Damaged functional parts can cause damage or injuries to persons or objects. Furthermore this may result in (even greater) damage to your device.
→ Stop working immediately and disconnect the device from the mains when functional parts are damaged and contact customer service.

Electromagnetic fields may affect the functionality of implanted systems (e.g. pacemakers).
→ Please ask your patients before beginning the treatment whether they have such a system.

Due to the complex interactions between electric devices and mobile telephones, it is possible that mobile phones that are switched on may affect the device, even though the device fulfils the applicable requirements relating to electromagnetic fields.
→ Do not use your mobile phone while working and also inform your patients that their mobile phones should be switched off during treatment.
→ Remove electronic devices, which could cause interaction (e.g. hearing aids, etc.) while using the device.
→ Otherwise, the distance between the device and the upper part of the body of the person to be treated must be at least 50 cm, in order to rule out any malfunctions.

If you put the handpiece down there is risk of injury when reaching for the handpiece. In the event of injuries from used instruments, this may lead to infections.
→ Please take care when setting down the handpiece so that you do not injure yourself.

Stop work immediately and disconnect the device from the power supply if you should notice that fluid is leaking from the device.

3 Before using the device for the first time

3.1 Scope of delivery

Before first use, you should check that all items have been delivered.

Items delivered:
1 x S1200 controller incl. handpiece (these are firmly connected to each other)1 x operating instructions

1 x Operating Manual

1 x power cable with straight connector Art No.
20970006

1 x Easy-Clean tool kit for BaehrTec A2000
Art No.40285

1 x Measuring can

If your delivery is incomplete, please inform us of this immediately.Please keep the delivery box along with any packaging accessories.

Please keep the delivery box along with any packaging accessories. The packaging was developed for this device and provides the best possible protection during transportation. Therefore, please use the original packaging should you send your device in for servicing. There shall be no entitlement to guarantee for any damages that are caused due to inadequate packaging during transportation.

3.2 What to observe before every use!

It is essential that you read this section with the utmost care! It contains important information on protecting yourself, others and the device from damage!

The description used in this section *BaehrTec S1200* refers both to the control device and the handpiece.

Before use, please check whether the type of current and the mains voltage of the power source are suitable for using the device. Information on the type of current and the mains voltage can be found on the nameplate on the controller.

When setting up the device, ensure that it is placed on a level base, that it cannot fall down and that the extracted air can escape easily.

Please ensure that the BaehrTec S1200 is kept well out of the reach of children.

Do not expose the device to direct heat sources (heaters, strong sunlight etc.).

Ensure that the power cable is not damaged due to squeezing, snapping or rubbing on sharp edges. If you notice any damage to the mains cable, please immediately stop working with your device, turn off the main switch and immediately remove the safety plug from the safety socket. To be able to work with the device again, please order a new power cable. You must only use the mains cable supplied by the manufacturer to operate the device. If you require a new cable, please contact the manufacturer. Operating the device using different cables is not permitted.

Never operate the device with a damaged power cable.

Your device has a removable device connector plug mechanism (see section "rear view").
Please ensure that the device is positioned so that a disconnection is unlikely at all times.
Do not work with the BaehrTec S1200 in rooms that are very humid, such as saunas or swimming complexes. Please take care not to spill any liquids when filling the tank. Please only fill the tank using the supplied measuring jug and never directly from cans. Wetness and moisture on the controller can lead to dangerous current leaks, which poses the risk of an electric shock.
Never work with the BaehrTec S1200 when liquid leaks from the control device. This could result in an electric shock.
Disconnect the device immediately from the socket.
Please send the device to customer service with an error description.

Avoid significant differences in temperature. This can cause dampness (condensation).

Protect your BaehrTec S1200 from frost.

The device must be switched off and disconnected from the mains before carrying out any cleaning/maintenance work.

Disconnect the safety plug from the mains immediately should you discover any damage or malfunctions of the device.

The manufacturer does not accept any liability for damage caused to objects, animals or persons that were due to improper operation of the BaehrTec S1200.

Ensure that the BaehrTec S1200 including the instruments is always in a hygienically safe condition so that you do not endanger your health of that of others. Find out more in the section *"Care (disinfection)"* of the BaehrTec S1200.

Rings or jewellery worn while working with the device may cause scratches on the handpiece. Such damage is excluded from the guarantee. Whilst working with the device, you should avoid wearing jewellery.

Never immerse the device in liquid.

Warning – risk of injury!
As shown in the illustration, you should avoid “pulling motions” during your work, as this may cause the instruments to slip out.
Please take care not to exert too much pressure when using the instrument (burns on skin).

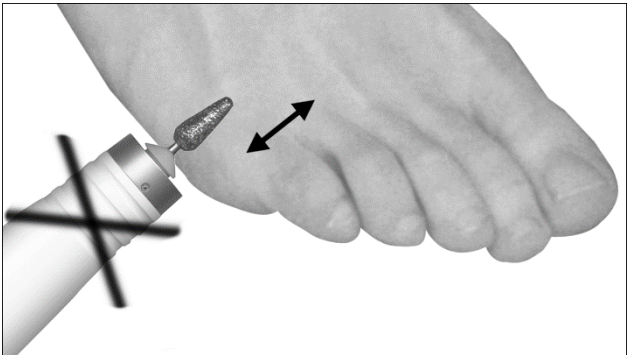


Fig. 2 **Incorrect operation**

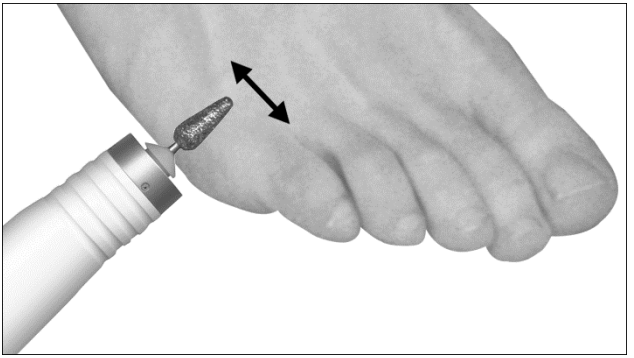


Fig. 3 **Correct operation**

4 Description of device

4.1 Description control device

4.1.1 Front view

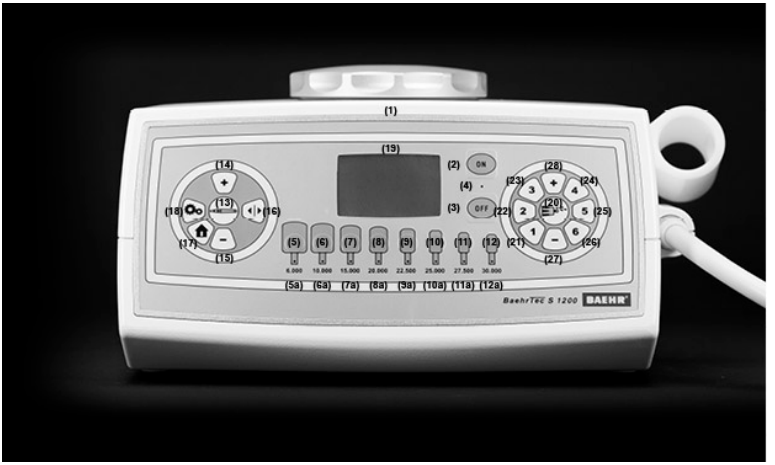


Fig. 4

(1) Controller housing

(2) - (3) Main switch "ON" und "OFF" with respective **LED (4)**

(5) – (12) Push buttons for instrument speeds (6,000 – 30,000 rpm) with respective **LEDs (5a) – (12a)**

(13) Push button to switch handpiece motor on and off

Push buttons handpiece speed: (14) + und **(15) -**
This allows you to set the speed in the range of 6,000 – 20,000 rpm in increments of 1,000 and in the range of 20,000 – 30,000 rpm in increments of 500

(16) Push button for instrument direction right/left

(17) Push button “Home”

(18) Push button “Options menu”

(19) Colour display

(20) Push button for standby spray function

(21) - (26) Push buttons "Spray step" (Steps 1-6)

(27) - (28) Push buttons "Spray step adjustments + / - "

4.1.2 Side view with handpiece outlet and handpiece holder

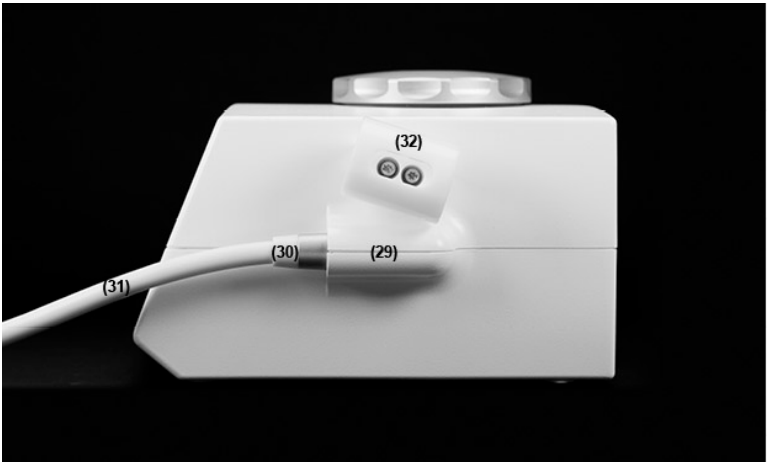


Fig. 5

(29) Handpiece outlet

(30) Protection from bending

(31) Handpiece hose

(32) Handpiece holder

4.1.3 Rear view

Fig. 6

When working from the case, we recommend removing the storage tray from the case in order that the heat created by the device can escape from the case and to avoid potential head build-up.

(33) Non-heating device connector
Only connect the connection cable provided or one approved by the manufacturer.

(34) Fuse clip
For fine fuses 2x 2 A inert Type H)

(35) Type plate

(36) Series No. plate

4.1.4 Bottom view

Fig. 7

(37) Housing screws
Must only be unfastened by the manufacturer

(38) Ventilation holes
Please ensure that these ventilation holes are never covered.

(39) Housing seal
As soon as the housing seal is breached or removed, all guarantee claims shall expire.

(40) Rubber feet

4.1.5 Top view with closed tank lid

Fig. 8

(41) Tank lid

(42) Membrane lid

4.1.6 Top view (open tank lid)

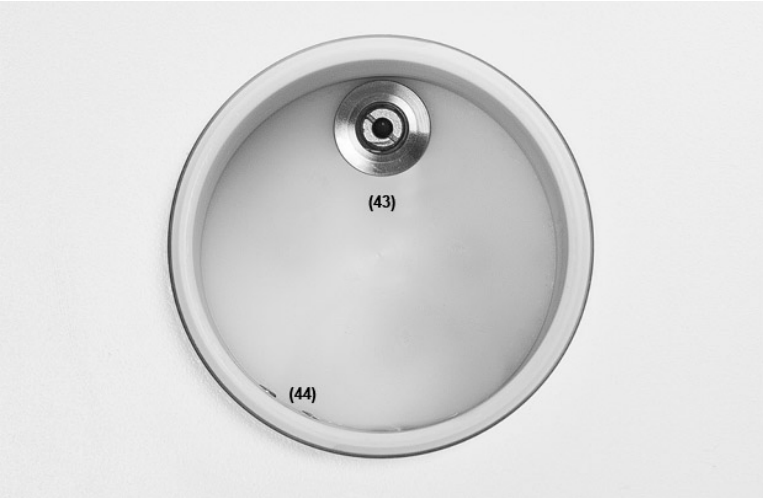


Fig. 9

(43) Fine filter
(44) Filing level contacts

4.1.7 Tank lid (inside)

Fig. 10

(45) Ventilation holes for ventilation membrane

(46) O-ring for tank lid

(47) Screws

4.2 Description handpiece

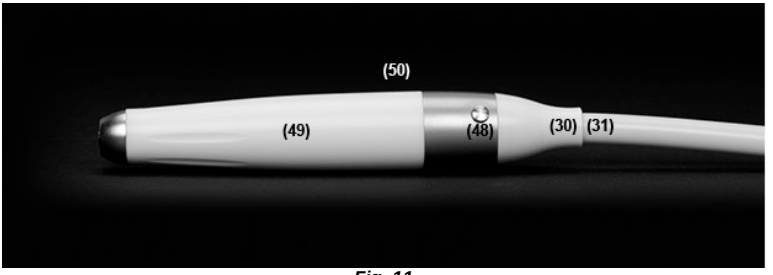


Fig. 11

(30) Protection from bending

(31) Handpiece feed line

(48) Handpiece button

(49) Handpiece housing

(50) Handpiece

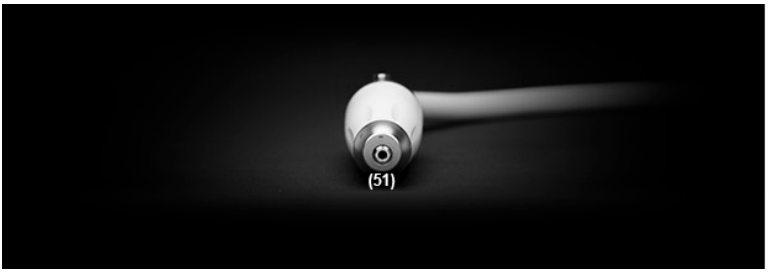


Fig. 12

(51) Opening for DIN instrument with shank diameter 2.35 mm
(for instruments with a max. diameter of 12 mm)

Max. instrument diameter no greater than 12 mm
Warning: Always observe the maximum permissible instrument diameter and the respective maximum permissible speed of the instrument manufacturer. Please ensure that this is never exceeded since it can result in serious injuries to the patient and the operator. Vibrations can also occur at the handpiece. Please keep your safety and the safety of your patient in mind.

Only use diamond and rust-safe cutters (not greater than illustrated)

Fig. 13
Do not use any instruments that are larger than those shown on the front panel of the device!

4.3 Description non-heating device connecting cable

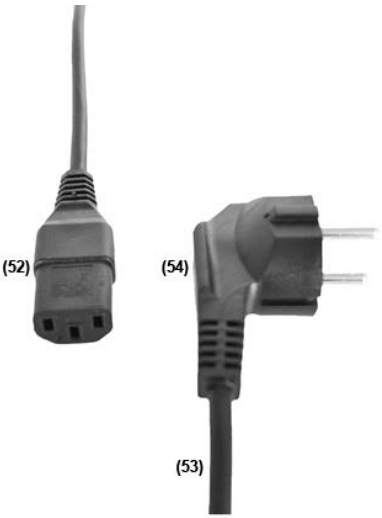


Fig. 14

(52) Device connector

(53) Cable

(54) Safety plug

4.4 Description spray system

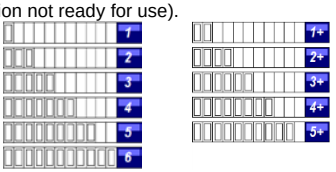
When developing the spray systems of the BaehrTec S1200 we placed great importance on operating safety and speed.

So we would first like to provide you with an insight into the handling of the spray system.

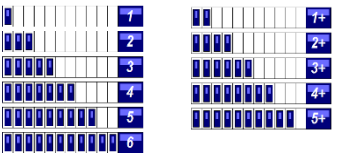
	When the tank is filled for the first time or if it was completely empty (and you are now refilling it) or if the device was not in use for several hours, please switch the device to spray level 6 and let the device spray for a while (approx. 45 seconds), until the spray is again available (at full capacity). Then you can select a lower spray level. If you select a low spray level form the start is will usually take longer for the spray function to reach its full capacity.
	It is possible to work with the handpiece motor switched on when the spray function is deactivated.
	However, it is not possible to work with an activated spray function is the handpiece motor is not running.
	As soon as the handpiece motor is running the air cooling of the handpiece is always automatically switched on (hardly noticeable). This was a conscious design decision since this prevents the handpiece from getting warm quickly.

You can adjust the selected spray level with the button **(20)** at any time so that it is **"not ready for use"** or **"ready for use"**.

"Not ready for use" means that the spray function is not switched on when the handpiece motor is running. This is indicated on the display – the bars in the bar diagram are transparent (= spray function not ready for use).



"Ready for use" means that the spray function is switched on when the handpiece motor is running. This is indicated on the display – the bars in the bar diagram are filled in blue (= spray function ready for use).



The spray function is immediately switched on or off if you press the button **(20)** while the handpiece motor is running.

The spray function is immediately switched on or remains switched off if you press the button **(20)** when you switch on the handpiece motor while the handpiece motor is not running.

This means that ready for use does not necessarily mean that the spray function is also actually active, because the spray function is only active when the spray function is ready for use **and also** the handpiece motor is running.

Two additional symbols on the display indicate whether the spray function is actually active.

	This symbol is shown when the spray function is not currently active at the selected spray level (**spray off**).
	This symbol is shown when the spray function is currently active at the selected spray level (**spray on**) *(Can only appear while the handpiece motor is running).*

Therefore, the following situations are possible:

Handpiece motor	Spray function ready for use	Bar diagram On the display	Spray
Off	No	Transparent	Off
Off	Yes	Filled blue	Off
On	No	Transparent	Off
On	Yes	Filled blue	On

	This offers you the following advantage: If you adjust the spray function so that it is "not ready for use" you can see that last spray level you selected at any time. If you would now like to use the same spray function level simply press **(20)** and the spray function is again ready for use.
	As soon as you press one of the spray function buttons **(21) - (26)**, **(27)** or **(28)**, this spray level is set and immediately "ready for use". **This means you only ever have to press one button.**

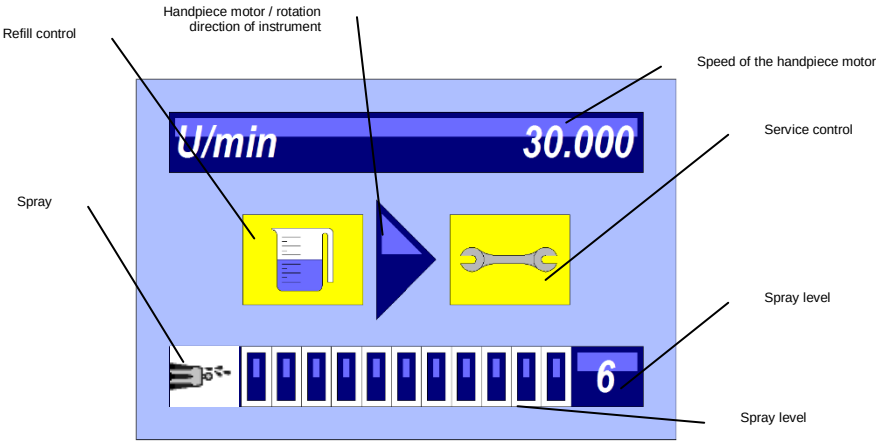
4.5 Colour display

The BaehrTec S1200 has two operating modes that are indicated on the display:

- o Work mode
- o Adjustment mode (Options Menu)

4.5.1 Work mode

As the name suggests, you can operate and work with your device in “Work mode”. As soon as you turn on your device, you will automatically be in “Work mode”. Here, the following information will be shown to you in the display:



Speed of the handpiece motor
Here you will be shown the rotation speed that is currently set for the handpiece motor.

Handpiece motor/instrument rotation direction
The instrument rotation direction is shown in the display

 Direction of rotation right

 Direction of rotation left

The handpiece motor is running when the arrow is shown in blue. The arrow is transparent when it is not running.

 Handpiece motor on

 Handpiece motor off

Spray function

	This symbol is shown when the spray function is not currently active at the selected spray level (**spray off**).
	This symbol is shown when the spray function is currently active at the selected spray level (**spray on**) *(Can only appear while the handpiece motor is running).*

For more information, please refer to the previous section.

Spray level
The selected spray level is shown here in writing and as a bar diagram. The bar diagram also shows you if the spray function is currently active or not.
For more information, please refer to the previous section.

Refill control 
Should the liquid tank be empty (as soon as the filling level is below the sensors) this will be indicated on the monitor with the filter control symbol. In this case you must refill the spray liquid.

Please always bear in mind:
As soon as the handpiece motor is running the air cooling of the handpiece is always automatically switched on (hardly noticeable).
This was a conscious design decision since this prevents the handpiece from getting warm quickly.

Service control 
The BaehrTec S1200 has a servicing interval indicator. The service interval is 905 hours, and refers to the operating hours of the handpiece motor as of the delivery/the last service. You **must** send your device for servicing when the service key lights up on the display (or within 24 months; this time interval is not displayed by the device) to avoid elaborate and costly repairs and comply with the test regulations of your medical device according to VDE 0751-1.

The service interval is actually 900 hours. But as your device already has meter readings at the time of delivery, as described in the following section, we have incorporated a buffer of 5 hours for you.

4.5.2 Adjustment mode (Options Menu)

You can change settings and call up information on your device using the "Adjustment mode". As soon as you turn on your device, you will automatically be in “Work mode”. Then, in order to exit work mode and reach the options menu, please press the button **(18).**

For your own safety, it is only possible to exit from the work area and switch to the options menu when the handpiece motor is turned off.

It will take approx. a half second to change to the next menu item when browsing a menu point using the buttons **(14)** and **(15).** This ensures that you have enough time to get a look at the choices.

Unlike the settings you make in work mode (except memory functions), the settings you make in the options menu will remain even after switching off the device.

The options menu is structured as follows

Menu level 1	Menu level 2	Description
Language	- German - English - French - Italian - Japanese - Russian - Spanish	Set the desired language here
Sounds	Different sounds / sounds off	Here you can select the sound that will sound when you press a button, or you can switch the sound off.
Colour	Different background colours	Select you background colour here
Spray strength	5 different heights	Set the desired spray strength which is to apply in principle to the entire range of spray levels here. **This setting adjusts the amount of spray per spray jet.**
Spray pause	5 different heights	Set the desired spray pause time which is to apply in principle to the entire range of spray levels here. **This setting adjusts the pause time between the successive spray jets.** The pause time indication refers to the lowest spray level setting. The pause time becomes increasingly shorter as the spray level increases.
Information	- Operation - Handpiece - Spray system - Service in - Version	- Information on activation period - Handpiece motor operating hours - operation hours of spray system - When is the next service due = (when will the Service Control symbol appear) - Version status of your S1200

Your BaehrTec S1200 is put through to various quality tests before being delivered. This also includes a function test for your S1200. Please do not be surprised therefore, if the device already has some meter readings. This is perfectly normal and does not mean that it is a used device.

For reasons of operational safety, we recommend that you do not turn off the sounds!

You cannot make any changes to the menu item "Information"! This item is for viewing purposes only.

If you exceed the service interval, negative values will appear for “Service in”, and the device will count the operating hours that have elapsed since the last service date.

You can navigate through the options menu using the following buttons

- Options menu button **(18)**
  --> opens the options menu
  --> switches from menu level 2 to menu level 1 and back to the work mode.
- Buttons for handpiece speed +/- **(14)** and **(15)**
  --> browse within menu level (cursor ↑↓)
- Handpiece motor button **(13)**
  Select (Enter) / Access menu level 2
- Home button **(17)**
  --> Return to work mode

The magenta background indicates which menu item you are currently viewing.

The settings that have just been made will be indicated to you by the “x” on the right-hand edge of the display.

4.6 Home Function (button **(17)**)

This button has two functions:
By briefly pressing the Home button you will be taken directly from the options menu to the Work mode (see section “Work mode”).
By pressing this button for approximately 5 seconds, the base settings made by the factory will be restored:

- Speed of the handpiece motor = 6,000 rpm
- Instrument rotation direction = clockwise
- Language = German
- Sound = Aqua
- Background colour = white
- Spray strength = normal
- Spray pause = max. 3 seconds

The set-up of the base settings cannot be changed.

By pressing the button for approx. 5 seconds all setting are reset (also the values of the memory buttons) to the factory settings.
The information (meter readings, etc.) will, of course, remain unaffected.

4.7 Getting started

1. Make sure that there is enough spray solution in your BaehrTec S1200. To check, please remove the tank lid and fill the tank up to just below the tank rim of the liquid tank with an **approved spray solution (Baehr spray solution for Baehr spray technology devices, Art-No. 22333).** Now close the tank lid tight by screwing it on.

Never use liquids that are not approved for the device (e.g. tap water or self-mixed solutions) since these could cause calcification or algae

deposits on the fine spray lines. This would destroy the pump (no guarantee on all spray-related units and components).
On no account should you use emulsions of creams you have mixed yourself for the spray function since these could damage the spray function and the guarantee will no longer apply.
Please only use spray liquids that have been approved for the spray device.

2. Please ensure that the device has a secure footing, does not fall down and cannot be torn down, and that the extracted air can escape easily. Please never cover the ventilation holes. Switch the main switch **(3)** off.

3. Connect the supplied non-heating connection cable **(53)** with the non-heating connector **(52)** to the plug **(33).**

4. Plug the safety plug to **(54)** in a proper safety outlet.

5. Now switch the BaehrTec S1200 on using the main switch **(2)**. After a short LED check, the LED "Power ON" **(4)** and the LED for the largest instrument (6,000 rpm.) will light up **(5a)**.

   The following things are set after each power on:
   - Handpiece motor direction of rotation = right
   - Handpiece speed = 6,000 rpm (LED illuminated)
   - Handpiece motor = OFF
   - Spray level = 0
   - Spray = OFF

   These settings will also be shown to you accordingly on the display. The BaehrTec S1200 is now ready for use.

6. Take the handpiece in one hand and insert an instrument with a shank diameter 2.35 mm as deep as possible into the opening DIN instruments **(51)**. The head of the instrument must not be larger than that shown on the front panel (max. 12 mm).

Never use instruments with an oily, worn or bent shaft. Otherwise, it cannot be guaranteed that your instrument can be held firmly in the handpiece!

Caution – risk of injury! Never attempt to insert or remove instruments into/ out of the opening **(51)** when the handpiece motor is running. Instruments can only be changed when the handpiece motor is switched off.
The instrument heads indicated on the front foil are intended to help you identify the maximum speed for your instruments. However, before you work with an instrument, be sure to follow the manufacturer's instructions on the permitted maximum speed. The maximum speed specified there must not be exceeded under any circumstances. This poses a danger of injury and the danger that your device will be damaged.

7. Now select the permitted maximum speed for the instrument you currently want to work with. The instrument heads depicted (max. diameter) and the associated speed should help you to quickly and safely find the permitted maximum speed for your instruments. **The permitted maximum speed must not be exceeded under any circumstances**; otherwise the instrument or the handpiece may be damaged. It can also cause injury due to broken instrument heads. You can find out the correct permissible maximum speed for the instrument that you are using by comparing the instrument head diameter with the instrument heads shown on the front foil. Once you have found a match, press the illustrated instrument head that you have found to be correct. The permitted **maximum** speed is now set. The speed is shown in the display. Lower speeds are generally permitted for all of the instruments.

WARNING: This is a speed recommendation. Please refer to the data sheet of the instrument manufacturer to find out the permitted maximum speed of the instrument. The permitted maximum speed must not be exceeded under any circumstances;

otherwise the instruments or the handpiece may be damaged. It can also cause injury due to broken instruments.

The speed ranges 6,000 and 10,000 rpm for the instruments with 12 mm diameter (abrasive caps/DiaTWISTER) are not designed to be used to remove calluses, but rather **to smoothen** horny skin (with little pressure).

To remove calluses select instruments (abrasive caps/DiaTWISTER) with 10 mm diameter for the speed ranges 15,000 or 20,000 rpm.

8. You can now switch on the handpiece motor using the button **(13)** on the control device or the push button **(48)** on the handpiece. The arrow in the display will now be filled blue. The instrument will now turn clockwise at the speed you have selected. You can now change the motor speed of the handpiece by pressing the buttons **(5) – (12)**, however, you must not exceed the highest permissible speed for the instrument being used. The selected speed is indicated on the display. Using the buttons **(14)** and **(15)**, you can change the instrument speed in the range of 6,000 – 20,000 rpm in increments of 1,000 and in the range of 20,000 – 30,000 rpm in increments of 500.

Please note that changing the rotation speed using button **(14)** or button **(15)** also changes the maximum permissible instrument size when you have reached to defined maximum rotation speed using the buttons **(5)** – **(12)**. This is indicated by the blue LED in the instrumnet area **(5a)** - **(12a)**. The actual speed is shown on the display **(19)**.

E.g.
The speed is set to 6,000 rpm. Now press the button **(14)** until you reach the next defined rotation speed (10,000 rpm = button **(6)**) by presing the buttons **(5)** - **(12)**. Now the LED for 10,000 rpm lights up automatically **(6a)**). This reminds you that a different maximum instrument diameter must be used.

The instrument heads indicated on the front foil are intended to help you identify the maximum speed for your instruments. However, before you work with an instrument, be sure to follow the manufacturer's instructions on the permitted maximum speed. The maximum speed specified there must not be exceeded under any circumstances. This poses a danger of injury and the danger that your device will be damaged.

The maximum speed for the instrument currently in use must not be exceeded.

Make sure that you do not block the handpiece motor by overloading it. This may be the case, for example, if your instrument gets caught in something (such as a towel) while working. If this happens, switch off your device as soon as possible at the main switch or disconnect it from the mains as soon as possible. As soon as the device is disconnected from the mains, remove the blockage and check your device for damage (e.g. instrument or handpiece damaged). Only reconnect the device to the mains and turn it on again if you do not find any damage. Now check your device at a handpiece roatation speed of 6,000 rpm with a small instrument (max. Ø 7 mm) and carefully test the entire rotation speed range in steps. If you do not notice anything here, you may continue your work carefully.

9. With the push buttons **(21) – (26) and (27) or (28)** you can change the spray level. The selected spray level is shown on the display.

10. The push button **(20)** switches the spray function to "not ready to use" in other words it switches it off.

11. You can switch the handpiece motor on and off using the button on the control device **(13)** or the button **(48)** on the handpiece.

Please note that the spray function switches off automatically when the handpiece motor is switched off.

12. You can switch the direction of the handpiece motor to anti-clockwise or clockwise using the push button **(16)**. This is shown on the display when the arrow indicating the direction of rotation points in the other direction.

You can change the direction of rotation while the handpiece motor is running.

13. You can make changes
    - o before the handpiece motor is running
      --> the device runs using the factory settings when the handpiece motor is switched on
    - o while the handpiece motor is running
      --> the changed settings will take effect immediately

14. Please refill the spray solution when the symbol for the refill control lights up on the display. Refilling the tank in time saves you longer waits unstill the spray function is fully available. (compare section "Description spray system.“).

We are confident that you will quickly become accustomed to working with your BaehrTec S1200 safely and properly and wish you lots of fun and success!

5 Servicing and care

5.1 Safety notices

Never clean or refill the tank when the device is still connected to the power supply.

Please make sure the tank is completely empty before sending your device in for servicing!!!

Only send in your device in an immaculate hygienic condition. Any cleaning works will always be charged.

Due to safety regulations, you are required to carry out an individual risk assessment for your electronic devices. On this basis you are obliged to have your devices inspected. We recommend having your devices inspected once a year.

Always send in your device with the original power cable.

5.2 Care (Disinfection)

We recommend Baehr wipes (Art.-No. 11000) or a surface non-alcohol based disinfection agent for cleaning your device.

Do not use any acids, strong alkalis, solvents or corrosive agents for cleaning.

When using disinfectants there may be a slight lightening or dulling of surfaces. However, this will have no effect on the function or the safety of the device.

Never immerse the device in water or any other liquids, as this poses a risk of electric shock.

Clean the handpiece daily. Use a small brush or a tooth brush and the Baehr wipes (Art-No. 11000).

Take care to only fill the tank with approved spray solutions, otherwise the pumps and the cooling system of the device could be destroyed! Only use the spray solution approved for the device **(Baehr spray solution for Baehr spray technology devices, Art-No. 22333).**

There is a membrane in the tank lid of the Baehr Tec S1200 to maintain the pressure balance in the tank. It is important that the tank lid is always clean on the outside (round vent in the lid **(42)**) and inside (7 small holes in the middle **(45)**) since the membrane might otherwise get clogged up and the necessary pressure balance can no longer occur.

The O-ring in the lid must be kept clean and checked for damage. Occasionally apply some silicone spray to the tank rim so that it can be opened and closed easily. **Attention**: do not use oils or grease!

The filling level contacts that protrude from the tank walls **(44)**, must be cleaned every four weeks. Please do not use cotton wool or woolen cloths to clean them, but rather a cloth or the Baehr wipes (Art-No. 11000)

5.3 Cleaning and disinfecting the fine filter

The BaehrTec S1200 is equipped with two fine filters **(43)**. Please always ensure that you only fill the tank with spray solution approved for the device **(Baehr spray solution for Baehr spray technology devices, Art-No. 22333).** Should you detect any contamination in the tank, empty it completely immediately and rinse it with clear tap water. Use a microfibre cloth to clean the tank wall if they are dirty.

Should the spray function malfunction at some point despite observing all of the cleaning measures described here, then check the fine filters to see whether they are clogged. To clean the fine filter, **please only do this if the spray function does not work perfectly**, and please proceed as follows.

1) Switch the device off and disconnect it from the power supply.

2) Empty the tank completely.

3) Remove and dirt from the tank.

4) Rinse the tank with clear tap water.

5) Empty the tank completely and dry it (microfibre cloth).

6) Carefully unscrew the fine filter using a flat-head screwdriver and make sure that you never damage the filter mesh.

Fig. 15

Fig. 16

7) Using a small brush clean the fine filter under running tap water and make sure that you do not damage the filter grille.

8) Replace the fine filter and carefully screw it back into place until stop. (**Attention!** fine filters only tighten **gently**). Also ensure that you do not damage the filter mesh.

Send the device in for servicing should the device still not function correctly after cleaning/changing the fine filters.

If you have damaged a fine filter, you can order new filters (Art-No. 22000001). **ATTENTION!** Only operate the device with an undamaged filter, as your device could otherwise suffer serious damage.

Damage caused by dirt in the spray system is not covered by the warranty.

5.4 Cleaning the filling level contacts in the liquid tank

The BaehrTec S1200 is equipped with an electronic filling level indicator .
Clean both filling level contacts in the tank when the liquid tank is empty and the filling level indicator on the display still does not light up (see *Fig. 15 and 16)* with a microfibre cloth.

Your device is now ready to use again.

5.5 Easy-Clean clamping mechanism

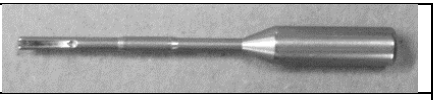
We are delighted to inform you that your handpiece contains our newly developed, innovative and patented Easy-Clean clamping mechanism (hereinafter referred to as “Easy-Clean”).

In a conventional clamping mechanism, the dirt that arises when working can cause an instrument you are operating with your handpiece to stop, even though the motor is running. This can be accelerated even further by creams, oils, fats or the like. The consequence: The clamping mechanism is no longer functional or only functional to a limited extent and previously needed to be sent to the factory for maintenance and cleaning. To save you from doing this in future, we have developed Easy-Clean. You can easily clean Easy-Clean yourself without great expense or effort.

The Easy-Clean grips need to be cleaned at least once a month!
Recommendation: In the case of an average of 8 to 10 treatments per day, you should clean the grips every 14 days with the tool supplied. If you additionally want to clean the grips every day for hygiene reasons – as well as the device itself – please only use the clamping mechanism cleaner 2 (brush) with alcohol.

	It is essential that you read this section with the utmost care! It contains important information on protecting yourself, others and the device from damage! It must only be used by trained professionals.
	Never perform cleaning work or change a filter on a device that is still connected to the mains. Turn off the device at the main switch beforehand and disconnect it from the power supply.
	Caution – risk of injury! Never try to perform cleaning work on the handpiece while the handpiece motor is running. This can only be done when the handpiece motor is switched off.
	Only the appropriate tool should be used to clean Easy-Clean. Other types and fields of application are carried out at your own risk, and may conceal dangers. No form of misappropriation is permitted. Improper use may lead to damage to persons or objects.

	The manufacturer cannot be held responsible for any damage caused by improper use, unqualified staff or incorrect operating. **All warranty claims are void following improper use.**
⚠	The clamping mechanism cleaner must only be used only for Easy-Clean (developed for self cleaning). With conventional clamping mechanisms which are not intended for self cleaning, **under no circumstances** must the clamping mechanism cleaner be used, as the clamping mechanism will immediately suffer damage.
⚠	Clean the clamping device cleaner 1 after each use and make sure that it is always in a perfect hygienic condition before use. We recommend a brush (Art-No. 34916) to clean the clamping mechanism cleaner 1.
⚠	For hygiene reasons, please clean the clamping mechanism cleaner 2 after use under running water and then with alcohol.
⚠	The images are for illustrative purposes only. Subject to technical and optical changes.

1x Clamping device cleaner 1 Universal stainless steel Art-No.: 40287	
1x Clamping device cleaner 2 (Cleaning brush for Easy-Clean) Art-No.: 40269	

To clean Easy-Clean, please proceed as follows:

1. **Turn off the device at the main switch and disconnect it from the power supply. Never clean the devicce while the handpiece motor is still running! Risk of injury! In addition, the clamping mechanism will suffer damage!**
2. Put on a disposable glove, or pull a finger cot over the thumb on the hand with which you want to hold the handpiece while cleaning, and then hold the handpiece in this hand.
3. Now press on the top of the handpiece with your thumb. By holding the tip with the disposable glove/finger cot, you prevent the tip from turning while cleaning (*see Fig. 17*).
4. Insert the clamping mechanism cleaner 1 without pressure as far as possible into the opening of your handpiece and turn the clamping mechanism cleaner 1, pressing slightly to the left and right (*see Fig. 18*).
5. Now pull out the clamping mechanism cleaner 1 from the opening. Next, remove the dirt from the grooves on the clamping mechanism cleaner 1 with a small brush. Repeat the cleaning process until you cannot remove any more dirt.
6. After use, clean the clamping mechanism cleaner 1 with Baehr quick surface disinfectant (Art-No. 11015).
7. Now remove any final impurities with the clamping mechanism cleaner 2 by inserting it as deep as possible into the opening on your handpiece and then turning to the left and right (*see Fig. 19*).
8. Now pull out the clamping mechanism cleaner 2 from the opening.
9. Only clean the clamping mechanism cleaner 2 with water, then with Baehr quick surface disinfectant (Art-No. 11015) and then with Baehr Alcohol (Art-No. 11032) to degrease the tool.


Fig. 17

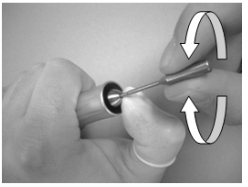


Fig. 18

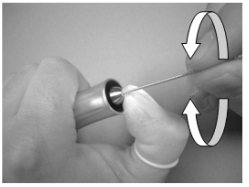


Fig. 19

You can also clean Easy-Clean in the event that cream, fat, oil or the like gets into the clamping mechanism.

To do so proceed as follows.

1. **Turn off the device at the main switch and disconnect it from the power supply. Never clean the devicce while the handpiece motor is still running! Risk of injury! In addition, the clamping mechanism will suffer damage!**
2. Moisten the clamping mechanism cleaner 2 with alcohol (Art-No. 11032) (**never** use re-lubricating disinfectant or other greasy substances, as Easy-Clean may otherwise cease to function properly).
3. Insert the clamping mechanism cleaner 2 into the opening of your handpiece and turn it to the left and right.
4. Remove the clamping mechanism cleaner 2.
5. Now leave the handpiece to air for at least 3 minutes.

Your handpiece is now once again ready for operation.

If your handpiece still does not function correctly in spite of these cleaning measures, or if you have any questions about the cleaning process, please get in touch with us.

For detailed video instructions on cleaning the Easy-Clean grips to supplement this information sheet, please go to www.fusspflege.com/easy-clean.

To access the website directly, please scan the QR code with your smartphone and an appropriate app.

5.6 Instrument changing aid (insertion and removal aid for very small instruments)

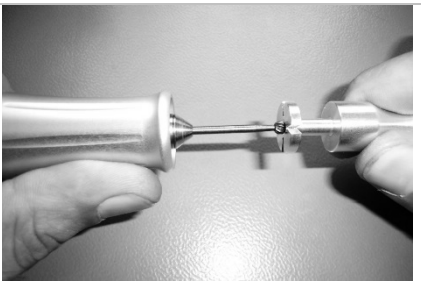
To accompany your Easy-Clean clamping mechanism, we have developed an instrument changing aid to make it easier for you to change (remove and insert) very small instruments (instrument diameter approx. 1.5 mm – approx. 5.0 mm).

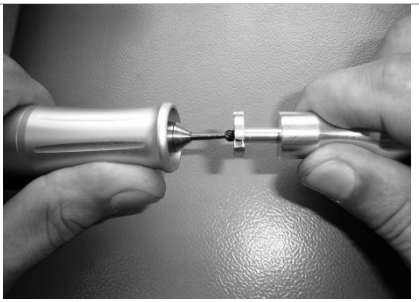
⚠	It is essential that you read this section with the utmost care! It contains important information on protecting yourself, others and the device from damage! It must only be used by trained professionals.
⚠	Never change an instrument on a device that is still connected to the mains. Turn off the device at the main switch beforehand and disconnect it from the power supply.
⚠	**Caution – risk of injury! Never try to change the instrument on the handpiece while the handpiece motor is running. This can only be done when the handpiece motor is switched off.**
⚠	Only the appropriate tool should be used to change the instrument. Other types and fields of application are carried out at your own risk, and may conceal dangers. No form of misappropriation is permitted.

	Improper use may lead to damage to persons or objects. The manufacturer cannot be held responsible for any damage caused by improper use, unqualified staff or incorrect operating. **All warranty claims are void following improper use.**
⚠	Clean the instrument changing aid after each use and make sure that it is always in a perfect hygienic condition before use.
⚠	For hygiene reasons, please clean the instrument changing aid after use under running water and then with Baehr quick surface disinfectant (Art-No. 11015).
⚠	The images are for illustrative purposes only. Subject to technical and optical changes.

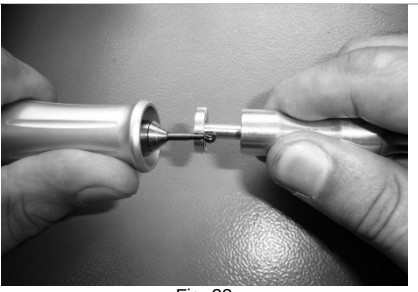
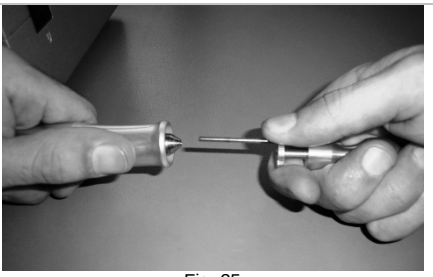
Inserting

Insert the instrument shaft in the clamping mechanism on the handpiece.	 Fig. 20

Hold the instrument changing aid horizontally to the handpiece.	 Fig. 21

With the countersink on the head of the instrument changing aid, insert the instrument in the handpiece up to the stop.	 Fig. 22

Pull out

Hold the instrument changing aid horizontally to the handpiece.	 Fig. 23
Position the instrument head behind the notch on the instrument changing aid. Place your thumb over the notch on the instrument changing aid, so that the instrument does not drop when removing.	 Fig. 24
Carefully remove the instrument from the clamping mechanism on the handpiece with the instrument changing aid.	 Fig. 25

For detailed video instructions on using the instrument changing aid to supplement this information sheet, please go to www.fusspflege.com/easy-clean.

To access the website directly, please scan the QR code with your smartphone and an appropriate app.

5.7 Cleaning and disinfection recommendation

When	What	How	With what (recommendation)
1x per week and after longer periods of disuse	Cleaning and disinfection of liquid tank and the liquid systems **ATTENTION!** Observe danger notices displayed on disinfectants! Only use in well ventilated areas! Do not insert instruments! Set the lowest rotation speed! Spray onto an absorbent towel!	Fill liquid tank completely with disinfecting agent. Set pedicure device to spray level 6 and let it run for at least 45 seconds after the first spray jet. Allow the disinfectant to work – observe soaking time (e.g. 7.5 % solution - 5 minutes) Empty out solution Fill liquid tank with distilled water (DIN 57510) Rinse (Set pedicure device to spray level 6 and let it run 5 minutes) Empty out liquid	Baehr liquid concentrate for surface disinfection
1x daily or after contamination	Cleaning and disinfecting device surfaces	Manual cleaning and wipe disinfection	Baehr quick surface disinfectant
After each treatment	Handpiece, hose, Control panel	Wipe with disinfection cloth	Baehr wipes for quick disinfection

5.8 Guarantee

The guarantee shall last 24 months.

We do not accept any liability for defects and their consequences caused by natural wear, improper cleaning, care or servicing, nonobservance of operating instructions, servicing, or connection, soiling in the spray supply, uncommon or inadmissible chemical or electrical influences insofar as the supplier is not responsible for them.

Wear parts are in particular: Handpiece bearing, clamping mechanism for instruments, bearing of handpiece motor.

The colour fastness of plastics and paints is not covered by the guarantee. The same applies to cable damage.

Damage to the device which is caused by improper handling or falling is not covered by the guarantee.

There is no liability for defects and their consequences which are the result of improper intervention or modifications made by the customer or by third parties that were not approved beforehand by the supplier.

5.9 Recycling/disposal

Old devices must be disposed of as electronic waste and should not be diposed of with household waste. Please refer to the country-specific particularities for this.

The resulting waste must be recycled or disposed of in a way that is not hazardous to humans or the environment. Please note the applicable national provisions here.

The device is subject to the EC Directive 2002/96 on waste electrical and electronic equipment (WEEE). Therefore, we would like to point out that the device must be disposed of in line with the these special requirements within Europe.

5.10 Self-help in the event of malfunctions

Fault	Cause	Solution
Control device without function	• Main switch off • Control device not connected to power supply • Connecting outlet without power • Mains cable not contacted correctly (plugged in) • Fuse(s) not correct (see section "Change fuses)	• Turn on main switch • Connect device to power supply • Connect the device to a functional socket • Plug device connector correctly into the device socket • Check main fuse and replace if necessary **The device must be switched off and disconnected from the power supply before checking the fuses.**
Fault	**Cause**	**Solution**
None Spray	• ignored filling level indicator • Fine filter in tank clogged (see section "Care") • Filling level contacts soiled (see section "Care")	• Regularly check the filling level indicator, fill up the spray solution if necessary • Change or clean fine filters **The device must be switched off and disconnected from the power supply beforehand!** • Cleaning filling level contacts
Water leaks from tank or tank lid when device upside down (this is usually the case when the device is transported and operated from a case).	• Lid is not closed properly. • Liquid leaks from membrane slit • Liquid leaks between tank lid and tank.	• Screw lid on tight. • incorrect spray solution used. **Attention fire risk!** Membrane not positioned correctly • Check O-rings and replace as required.

Fault	Cause	Solution
Instruments do not hold	• Maximum permitted speed for instrument in use is exceeded • Instrument shaft worn • Instrument shaft bent • Instrument not correctly inserted in clamping mechanism • Creme, ointment, or similar on instrument shaft • To much work pressure on instrument • Pulling movement while working	• Only work with the maximum permissible speed for the instruments used • Check the instrument shaft and use a new instrument if necessary • Replace instrument without fail • Insert instrument until stop in clamping mechanism • Clean instrument. Work with small instruments until larger instruments start to clamp securely again. During operation, always make sure that the handpiece tip and the instruments are clean. • Reduce pressure • Avoid pulling movements
Handpiece vibrates; Handpiece is loud with used instruments	• Maximum permitted speed for instrument in use is exceeded, • Instrument defective (bent, shaft worn, etc.)	• Only work with the maximum permissible speed for the instruments used • Use new instruments.
Push button on handpiece blocked or is difficult to activate	Handpiece or handpiece button soiled	Clean button

If one of these faults still persists despite having followed this information, please send the unit to the customer service team.

In addition, please get in touch with the manufacturer for each fault / each malfunction in cases of doubt.

5.10.1 Change fuse

The fine fuses protect your device from damage caused by two high currents.
Attention only there fuses may be used with the device S1200:
2x fine fuses 2A inert (Typ H)

Switch off your device at the main switch and disconnect the device from the mains. Use a screwdriver to open the fuse compartment on the device socket.

Fig. 26

Replace the microfuses in the compartment.
Now push the compartment back into the device socket.
Make sure that the compartment snaps into place in the device socket.
Reconnect the power cable to the controller.
If your device still does not work, please send it to us for service.

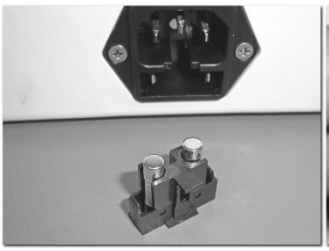


Fig. 27

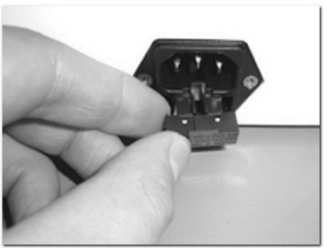


Fig. 28

6 Technical Data

BaehrTec S1200

Medical device	Class 2A according to EU Directive 93/42 Medical devices
EMC test	Under EN 60601-1
Operating voltage	110 – 240 V AC voltage
Frequency	50 – 60 Hz
Micromotor speed range	6,000 – 30,000 rpm adjustable
Accuracy of the speeds	6,000 – 10,000 rpm, tolerance +/- 20 % 10,000 – 30,000 rpm, tolerance +/- 10 %
Power consumption	Max. 80 watts
Micromotor voltage	24 V
Working voltage	28 V
Controller dimensions (W x D x H) in mm (without handpiece outlet, without handpiece holder and without filler cap)	Approx. 220 x 195 x 110
Weight (inkl. Handpiece without power cable)	Approx. 2,070 g
Handpiece dimensions (W x min. diameter x max. diameter) in mm	~130 x ~16 x ~24
Handpiece weight	Approx. 130 g
Ambient temperature (operation)	+10° - +30° C
Storage temperature	-5° - +40°C
Humidity	30% - 85 %
Permitted air pressure	800 hPa - 1060 hPa
Fuse	2 x fine fuses "2 A inert (type H)
IP Protection Class 30	Not protected against water Protection against ingress of solid foreign objects with a diameter > than 2.5 mm
Volume	45 db +/- 15%

Subject to visual and technical changes.

Guidelines and MANUFACTURER statement – ELECTROMAGNETIC EMISSION		
The model BaehrTec S1200 is intended for use in the ELECTROMAGNETIC ENVIRONMENTS specified below. The customer or user[N11)] of the model BaehrTec S1200 should ensure that it is used in such an environment.		
Emission measurements	**Compliance**	**ELECTROMAGNETIC ENVIRONMENT – Guidelines**
HF emissions according to CISPR 11	Group 1	The model BaehrTec S1200 uses HF energy exclusively in its internal FUNCTION. That means that its HF emission is very low and it is unlikely that adjacent electronic devices will suffer any interference. The model BaehrTec S1200 is intended for use in all facilities including living areas and also that are connected to a PUBLIC POWER SUPPLY that include buildings that are used for residential purposes.
HF emissions according to CISPR 11	Class B	
Harmonics under IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker under IEC 61000-3-3	Fulfilled	

[N11)] National footnote: Here, user is meant in the sense of a "RESPONSIBLE ORGANISATION".

Guidelines and MANUFACTURER statement – ELECTROMAGNETIC EMISSION The model BaehrTec S1200 is intended for use in the ELECTROMAGNETIC ENVIRONMENTS specified below. The customer or user[N13)] of the model BaehrTec S1200 should ensure that it is used in such an environment.			
STABILITY TESTS	**IEC 60601-TEST LEVEL**	**COMPLIANCE LEVEL**	**ELECTROMAGNETIC ENVIRONMENT – GUIDELINES**
ELECTROSTATIC DISCHARGE (ESD) under IEC 61000-4-2	± 6 kV Contact discharge ± 8 kV Air discharge	± 6 kV Contact discharge ± 8 kV Air discharge	Floorings should be made of wood or concrete or covered with tiles. If the floor is covered with synthetic material, the relative humidity must be at least 30 %.
Electrical electric disturbance variables/bursts according to IEC 61000-4-4	± 2 kV For power supply lines ± 1 kV For input and output lines	± 2 kV For power supply lines ± 1 kV For input and output lines	The quality of the supply voltage should be to the standard of a typical commercial or hospital environment.
Surge voltages under IEC 61000-4-5	± 1 kV Voltage phase conductor - phase conductor ± 2 kV Voltage phase conductor - earth	± 1 kV Voltage phase conductor - phase conductor ± 2 kV Voltage phase conductor - earth	The quality of the supply voltage should be to the standard of a typical commercial or hospital environment.
Voltage dips, Short interruptions and fluctuations in the supply voltage according to IEC 61000-4-11	< 5 % U_T for 1/2 period (> 95% dip) 40 % U_T for 5 periods (60 % dip) 70 % U_T for 25 periods (30 % dip) < 5 % U_T for 5 s (> 95% dip)	< 5 % U_T for 1/2 period (> 95% dip) 40 % U_T for 5 periods (60 % dip) 70 % U_T for 25 periods (30 % dip) < 5 % U_T for 5 s (> 95% dip)	The quality of the supply voltage should be to the standard of a typical commercial or hospital environment. We recommend powering the model BaehrTec S1200 with a interruption-free power supply or a battery, should the user of the model BaehrTec S1200 FUNCTION also require continued FUNCTION also when interruptions in the power supply occur.
Magnetic field at a supply frequency of (50/60 Hz) under IEC 61000-4-8	3 A/m	3 A/m	The magnetic fields of both power frequencies should be to the standard of a typical commercial or hospital environment.

[N13)] National footnote: Here, user is meant in the sense of a "RESPONSIBLE ORGANISATION".

Guidelines and MANUFACTURER statement – ELECTROMAGNETIC EMISSION			
The model BaehrTec S1200 is intended for use in the ELECTROMAGNETIC ENVIRONMENTS specified below. The customer or user[N15] of the model BaehrTec S1200 should ensure that it is used in such an environment.			
STABILITY tests	**IEC 60601-TEST LEVEL**	**COMPLIANCE level**	**ELECTROMAGNETC ENVIRONMENT – guidelines**
Conducted HF-disturbances according to IEC 61000-4-6 Radiated HF disturbances under IEC 61000-4-3	3 $V_{Effective\ value}$ 150 kHz to 80 MHz 3 V/m 80 MHz to 2.5 GHz	3 $V_{Effective\ value}$ 3 V/m	Portable and mobile radio sets are not used closer to the model BaehrTec S1200 including lines than the recommended protective distance, according to the appropriate formula to calculate the transmission frequency. **Recommended protective distance:** $d = 1.2\sqrt{P}$ $d = 1.2\sqrt{P}$ 80 MHz to 800 MHz $d = 2.3\sqrt{P}$ 800 MHz to 2.5 GHz with *P* as the nominal output of the transmitter in Watt (W) according to the specifications provided by the transmitter manufacturer and *d* as the recommended protective distance in metres (m). The field strength of stationary radios is lower than the CONFORMANCE LEVEL [b] at all frequencies according to a test conducted on location[a]. Interference is possible in the vicinity of devices marked with the following symbols. 

NOTE 1 At 80 MHz and 800 MHz, the higher value applies.

NOTE 2 These guidelines may not apply in all situations. The distribution of electromagnetic waves is affected by absorption and reflections from buildings, objects and people.

[a] The field strengths of stationary radios, such as basis stations of radio telephones and mobile land radio services amateur stations, AM and FM radio and television channels cannot be theoretically determined precisely beforehand. In order to ascertain the ELECTROMAGNETIC ENVIRONMENT as a result of stationary HF transmitters, an investigation of the location is recommended. If the determined field strength at the location of the model BaehrTec S1200 exceeds the CONFORMANCE LEVEL given above, then the model BaehrTec S1200 must be monitored regarding its normal operation at every location it is used. If any unusual features are observed, it may be necessary to take additional measures, such as reorienting or relocating the model BaehrTec S1200.

[b] The field strength is smaller than 3V/m across the frequency range of 150 kHz to 80 MHz.

[N15] National footnote: Here, user is meant in the sense of a "RESPONSIBLE ORGANISATION".

Recommended protective distances between portable and mobile HF communication devices and the model BaehrTec S1200			
The model BaehrTec S1200 is intended for use in an ELECTROMAGNETIC ENVIRONMENT, in which the emitted HF-disturbances are controlled. The customer or the user of the model BaehrTec S1200 can help prevent, electromagnetic disturbances by observing the minimum distances between portable and mobile HF communication facilities (transmitters) and the model BaehrTec S1200, as given below according to the maximum output of the communication facilities			
Nominal output of the transmitter W	**Protective distance according to transmitter frequency** m		
	150 kHz to 80 MHz $d = 1.2\sqrt{P}$	**80 MHz to 800 MHz** $d = 1.2\sqrt{P}$	**800 MHz to 2.5 GHz** $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23
The distance can be determined for transmitters whose nominal output is not given in the table above using the formula that belongs to the respective column, where *P* is the nominal output of the transmitter in Watt (W) according to the specification provided by the manufacturer. NOTE 1 An additional factor of 10/3 was used to calculate the recommended protective distance from transmitters in the frequency range 80 MHz to 2.5 GHz in order to lower the probability of a disturbance being caused by a mobile/portable device unintentionally brought into the PATIENT area. NOTE 2 These guidelines may not apply in all situations. The distribution of electromagnetic waves is affected by absorption and reflections from buildings, objects and people.			

7 Spare parts/accessories

- Baehr cloths
  Art-No.: 11000
- Baehr cloths refill bag
  Art-No.: 11001
- Baehr quick surface disinfectant
  Art-No.: 11015
- Baehr alcohol
  Art-No.: 11032
- Brushes
  Art-No.: 34916
- Power cable case, short for BaehrTec A2000/S1200
  Art-No.: 40796
- Power cable with straight connector
  Art-No.: 20970006
- Fine filter S1200
  Article-No.: 22000001
- Baehr spray solution for Baehr spray technology devices
  Art-No.: 22333

CE 0483

Contact address & manufacturer

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