



# BaehrTec A1200 / A2000

**Dry technology pedicure device  
with hand piece**

**Operating Manual**



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**2****Note to users**

**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. When cleaning / disinfecting, please observe the notes described in chapter 5 and its subchapters.
- ✓ 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, non-slip base. Avoid placing it 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 +35° 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 rpm 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 A1200/A2000 and these devices must be at least 50 cm in order to prevent malfunctions.



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 lightning strike and / or surge, the device may be damaged. For this reason, we also recommend installing surge 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.

Before using the device, be sure to observe section "Differences between BaehrTec A1200 and BaehrTec A2000".

2.1 Symbols

2.1.1 Symbols in these operating instructions



**Warning!**

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 mark (Communauté Européenne) with the number of the certification authority. A product bearing this mark meets the requirements of the corresponding EU guideline (the applicable European Standard).

2.1.2 Type rpm with output details

**CE 0483**

Gustav Baehr GmbH  
Max-Eyth-Strasse 39  
D-71332 Waiblingen  
Made in Germany  
Baehr Tec A1200

ON = 15 min (max)  
OFF = 10 min (min)

2 x 3,15A fträge  
(TypH)

110 - 240 V ~  
50 - 60 Hz  
Imax. 3,0 A

Pmax. 150 W

**Fig. 1a**  
BaehrTec A1200

**CE 0483**

Gustav Baehr GmbH  
Max-Eyth-Strasse 39  
D-71332 Waiblingen  
Made in Germany  
Baehr Tec A2000

ON = 15 min (max)  
OFF = 10 min (min)

2 x 3,15A fträge  
(TypH)

110 - 240 V ~  
50 - 60 Hz  
Imax. 3,0 A

Pmax. 150 W

**Fig. 1b**  
BaehrTec A2000

**CE 0483**

CE mark (Communauté Européenne) with the number of the certification authority. A product bearing this mark meets 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 mark 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 podiatry/pedicure.



Functional earthing

This symbol indicates that the power supply is earthed (the rpm is located directly on the power supply unit).






Manufacturer

2.1.3

Symbols on the packaging

	<p>Transport upright (up = in direction of arrow)</p>
	<p>Protect from impacts!</p>

	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

2.1.4 [Differences between BaehrTec A1200 and BaehrTec A2000](#)

BaehrTec A1200	BaehrTec A2000
<i>Speed range handpiece motor</i>	
6,000 – 35,000 rpm	6,000 – 40,000 rpm
<i>The speeds (rpm) of the handpiece motor can be selected directly on the front controls</i>	
6,000	6,000
10,000	10,000
15,000	15,000
20,000	20,000
25,000	25,000
30,000	30,000
<b>32,500</b> (Fig. 4a (11))	<b>35,000</b> (Fig. 4b (11))
<b>35,000</b> (Fig. 4a (12))	<b>40,000</b> (Fig. 4b (12))
<i>Setting the speeds (rpm) of the handpiece motor using the buttons (27) and (28) (Fig. 4a and 4b)</i>	
<i>1,000 rpm increments (6,000 to 31,000)</i>	
31,000 ↔ 32,500	1,000 rpm increments from 6,000 to 40,000
32,500 ↔ 34,000	
34,000 ↔ 35,000	
<i>Maximum vacuum</i>	
-30 mbar (setting 1) to -70 mbar (setting 6)	-35 mbar (setting 1) to -100 mbar (setting 6)
<i>Memory buttons</i>	
<b>2</b> memory buttons (Fig. 4a (29) + (30))	<b>3</b> memory buttons (Fig. 4b (29) + (30) + (31))
<i>Foot pedal operation</i>	
This device <b>cannot</b> be operated by foot pedal. There is no connection on the back of the device (see Fig. 9 (48))	This device can be operated by foot pedal. There is a connection on the back of the device (see Fig. 9 (48))

For details about the speeds of the handpiece motor and suction please see chapter "Technical Data".



**Please particularly note the differences between the BaehrTec A1200 and BaehrTec A2000 when using instruments and when adjusting the handpiece speed.**



All descriptions related to the foot pedal apply to the BaehrTec A2000 only, **not** the BaehrTec A1200.



Unless otherwise specified, all images below always show the BaehrTec A2000.



## 2.2 Foreword

Dear customer!

We are delighted that you have chosen to purchase this foot care dry technology device. The BaehrTec A1200/A2000 boasts technical features that will help to enhance your work.

The BaehrTec A1200/A2000 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.

In addition, the BaehrTec A1200/A2000 has an electronic readjustment for the handpiece motor, which provides power and performance even in the lowest rotation speed range. 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 A1200/A2000 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 on the BaehrTec A1200/A2000. 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. Protect the environment and your purse.

The BaehrTec A1200/A2000 has the following outstanding 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 BaehrTec A1200/A2000 foot care device has been made and tested in accordance with strict quality criteria, and it complies with Directive 93/42 EEC for medical devices.**

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 BaehrTec A1200/A2000 foot care device is intended for use in medical foot care. It must only be used by trained professionals.

Rotating instruments (grinder, files, etc.) are actuated with the BaehrTec A1200/A2000. These can be used to strip away hard skin, calluses, nails etc. and remove corns.

In detail, the A1200/A2000 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 subungual haematoma
- 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 damages caused by improper use, unqualified staff or incorrect operation.**



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



**WARNING: This device may not be altered without the permission of 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.



Only use manufacturer approved mains cables 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 meets 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. Injuries from used instruments may result in infections.

→ Please take care when setting down the handpiece so that you do not injure yourself.

### 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 piece A1200 or A2000 control unit including handpiece (firmly connected to each other)

1 x operating instructions

1 pc. dust bag microfibre (1 bag already installed)

Art-No.: 21185

1 x turbine protection filter (1 filter is already inserted for you)

Dimensions: (~ 93 x 78 mm)

1 x sound-insulating fleece (1 filter is already inserted for you)

Dimensions: (~ 48 x 57.5 mm)

1 x coarse filter fleece (1 filter is already inserted for you)

Dimensions: (~ 48 x 57.5 mm)

1 x carbon filter fleece (1 filter is already inserted for you)

Dimensions: (~ 48 x 57.5 mm)

1 x ultra-fine filter fleece (1 filter is already inserted for you)

Dimensions: (~ 48 x 57.5 mm)

2 x carbon filter foam (2 filters are already inserted for you)

Dimensions: (~ 48 x 57.5 mm)

1 x power cable with straight connector

Art No. 20970006

1 x Easy-Clean tool kit for BaehrTec A2000

Art No.40285

1 x damper for handpiece case (set)

Art-No.: 40286

**For more information, please see the section on "Changing the dampers for the handpiece case".**

If your delivery is incomplete, please inform us of this immediately.



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 designation *BaehrTec A1200/A2000* used in this section refers both to the control unit 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.

Be sure to keep the BaehrTec A1200/A2000 out of 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. To be able to work with the device again, please order a new power cable. Only use manufacturer approved mains cables 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 detachable 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 use the BaehrTec A1200/A2000 in damp areas such as saunas or swimming complexes. Wetness and moisture on the controller can lead to dangerous current leaks, which poses the risk of an electric shock.  
Disconnect the device immediately from the socket.  
Please send the device in for service with a description of the defect.

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

Protect the BaehrTec A1200/A2000 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 accepts no liability for damages to objects, animals or persons which are caused by incorrect operation of the BaehrTec A1200/A2000.


Please ensure that the BaehrTec A1200/A2000 and the instruments are always in an immaculate hygienic condition, in order that they do not put your own health or that of others at risk. For more information please refer to section "*Care (disinfection)*" of the BaehrTec A1200/A2000.

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.

Please only work with the suction turned on in order to suction off any pathogen-containing dust and to prevent the handpiece motor or the handpiece from becoming warm.

Never submerge the device in liquids, and do not suck up any liquids.

If you suck up any cotton wool, paper or the like, this may cause the suction openings in the handpiece to become blocked. This may heavily affect the suction power.

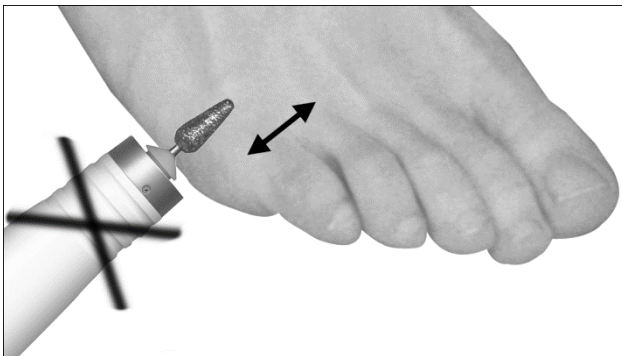
If the symbol for a filter change appears  on the display, it is essential that you change the dust bag (the display can only function reliably if all filters are correctly applied. Therefore, only work with the device if all filters are applied). Otherwise the device will automatically switch to suction level 3 after approximately half a minute to prevent any damage to your device (please refer to section "*Filter change*" for more information on how to change the dust bag and the filter).

Never work with the device if the dust bag or the filter are not inserted, as in such cases, the device may be damaged and the guarantee shall expire.

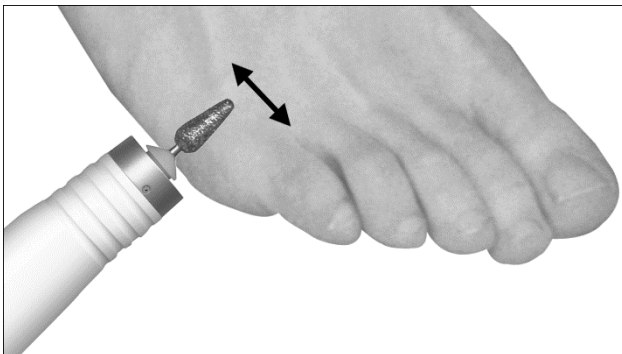
**Warning – risk of injury!**

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 **Device description**
- 4.1 **Description control unit**
- 4.1.1 **Front view BaehrTec A1200**



**Fig. 4a**

**(1) Controller housing**

**Main switch: (2) "ON" and (3) "OFF" with corresponding (4) LED**

**(5) – (12) Push buttons for instruments speeds (6,000 – 35,000 rpm) with the corresponding (5a) – (12a) LEDs**

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

**Push buttons handpiece speed: (14) + and (15) - (1,000 rpm)**

**(16) Push button for instrument direction right/left**

**(17) Push button "Home"**

**(18) Push button "Options Menu"**

**(19) Colour display**

**(20) Push button for operational readiness of suction**

**(21) - (26) Push buttons for "Suction level" (Levels 1-6)**

**Push buttons for "Change of suction level": (27) + and (28) -**

**(29) - (30) Push buttons "Memory"**

4.1.2

Front view BaehrTec A2000



*Fig. 4b*

**(1) Controller housing**

**Main switch: (2) "ON" and (3) "OFF" with corresponding (4) LED**

**(5) – (12) Push buttons for instrument speeds (6,000 – 40,000 rpm) with the corresponding (5a) – (12a) LEDs**

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

**Push buttons handpiece speed: (14) + and (15) - (1,000 rpm)**

**(16) Push button for instrument direction right/left**

**(17) Push button "Home"**

**(18) Push button "Options Menu"**

**(19) Colour display**

**(20) Push button for operational readiness of suction**

**(21) - (26) Push buttons for "Suction level" (Levels 1-6)**

**Push buttons for "Change of suction level": (27) + and (28) -**

**(29) - (31) Push buttons "Memory"**

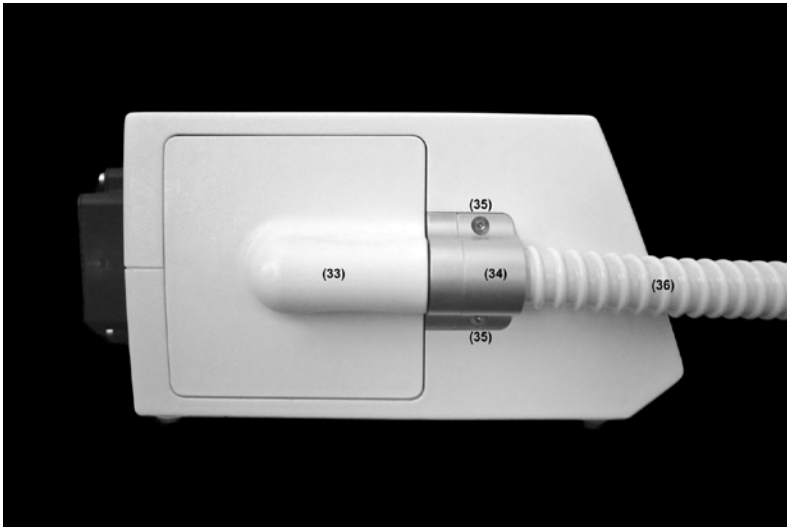
4.1.3 Side view with handpiece holder



*Fig. 5*

**(32) Handpiece holder**

## 4.1.4

Side view with dust bag lid (closed)*Fig. 6*

**(33) Dust bag lid with handle**

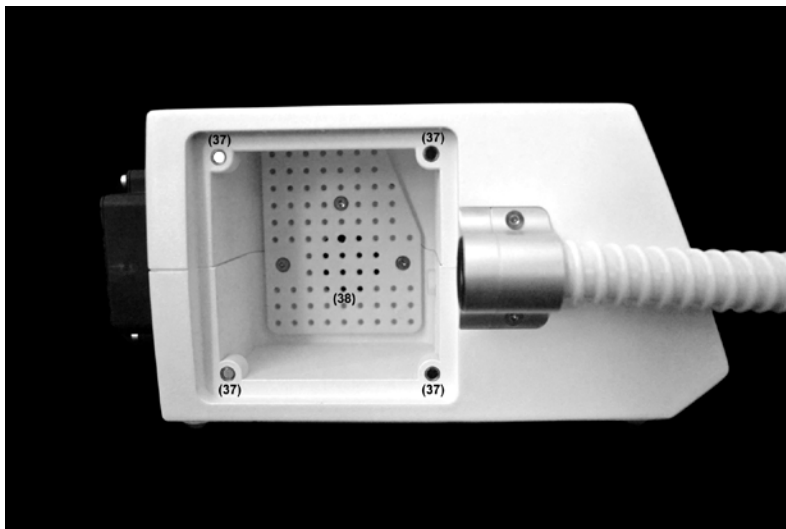
**(34) Handpiece outlet**

**(35) Screws for handpiece outlet**

Must only be unfastened by the manufacturer

**(36) Suction hose**

4.1.5 Side view without dust bag lid and turbine protection filter (open)

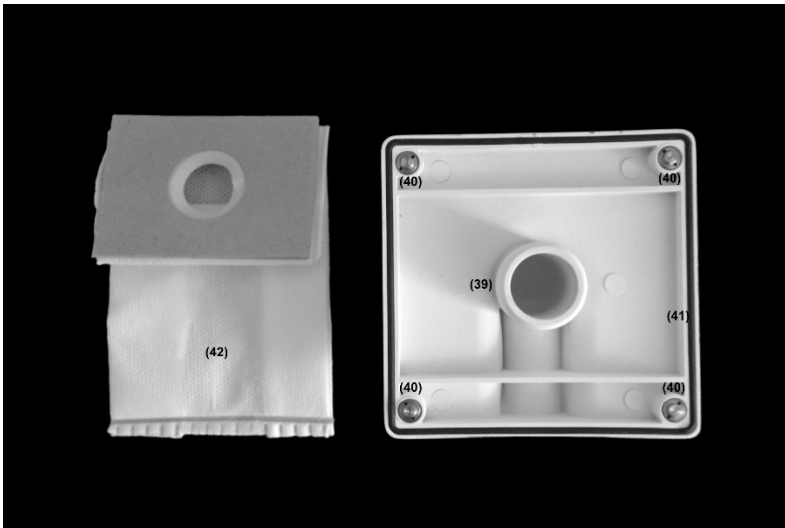


*Fig. 7*

**(37) 4x magnet holder**

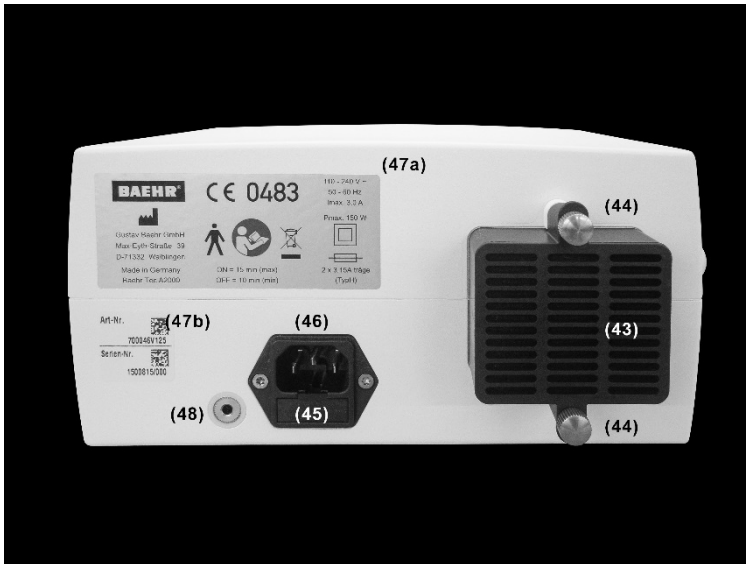
**(38) Filter grille**

## 4.1.6

Dust bag lid (inside)*Fig. 8*

- (39) Receptacle for dust bags**
- (40) Mounting bolts for magnet holder**
- (41) Rubber seal for dust bag lid**
- (42) Dust bag**

4.1.7 Rear view



**Fig. 9**



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.

**(43) Filter cartridge**

**(44) Knurled screws**

**(45) Fuse clip**

For microfuses 2x 3.15 A delay (type H)

**(46) Power connector**

Only connect the connection cable provided or one approved by the manufacturer.

**(47a) Nameplate**

**(47b) Serial no. plate**

**(48) Connector socket for foot pedal (BaehrTec A2000 only)**

## 4.1.8

Bottom view*Fig. 10***(49) Housing screws**

All housing screws must only be unfastened by the manufacturer.

**(50) Housing seal**

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

**(51) Rubber feet (4x)**



4.2 Description of the handpiece



*Fig. 11*

**(36) Suction hose**

**(52) Opening for DIN instruments with a shaft diameter of 2.35 mm  
(for instruments with a maximum diameter of 12 mm)**

**(53) Handpiece case (can be unscrewed)**

**(54) Handpiece cap**

**(55) Push button**

**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)

**Nur Diamant- und rostsichere Fräser verwenden**

(nicht größer als Abb.)



*Fig. 12*

**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. 13*

**(56) Device connector**

**(57) Cable**

**(58) Safety plug**

#### 4.4 Description of suction system

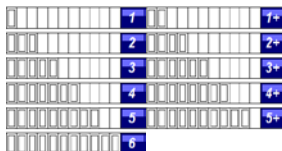
When developing the suction system of the BaehrTec A1200/A2000 we have placed a great deal of emphasis on operating safety and operating speed.

We would therefore like first and foremost to give you an insight into the operation of the suction system.

	It is possible to work with the handpiece motor switched on if the suction is disabled.
	However, it is not possible to work with the suction enabled, if the handpiece motor is not running.
	As soon as the handpiece motor is in operation, the suction will also always be turned on automatically (barely noticeable). We have deliberately chosen to do this because this prevents the handpiece from becoming warm and also ensures that dust created when working is suctioned off to a minimum.
	<b>If you do not turn on the suction yourself, we shall describe this in the following as deactivated suction. Please be aware that this is always running, even if you have not turned it on.</b>

You can set the currently selected suction level using the button (20) at any time so that it is "Not ready for operation" or "Ready for operation".

"Not ready for operation" means that the suction is not activated while the handpiece motor is running. This will be indicated on the display if the bars in the bar graph are presented as transparent (= suction not ready for operation).



"Ready for operation" means that the suction is activated while the handpiece motor is running. This will be indicated on the display if the bars in the bar graph are filled blue (= suction ready for operation).





If you press button (20) while the handpiece motor is running, the suction will immediately be activated/deactivated.

If you press button (20) while the handpiece motor is not running, the suction will be turned on or it will remain turned off once you turn on the handpiece motor.



Here, ready for operation does not necessarily mean that the suction is actually active, as the suction only becomes active when the suction is ready for operation and the handpiece motor is **also** in operation.

If the suction is actually active, this will be indicated on the display by two additional symbols.

	This symbol is displayed if the suction is not currently in operation with the suction level you have set ( <b>suction off</b> ).
	This symbol is displayed if the suction is not currently in operation with the suction level you have set ( <b>suction on</b> ). <i>(Can only appear while the handpiece motor is running).</i>

Therefore, the following situations are possible:

Handpiece motor	Suction ready for use	Bar diagram on the display	Suction
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 set the suction so that it is "not ready for operation", you can see which suction level you last selected at all times. If you then want to set the suction in the same way, all you need to do is simply press button <b>(20)</b> and the suction will be ready for operation again.
	As soon as you press one of the suction level buttons <b>(21) – (26), (27) or (28)</b> , this suction level will immediately be set and will also immediately be "ready for use". <b>This means you only ever have to press one button.</b>

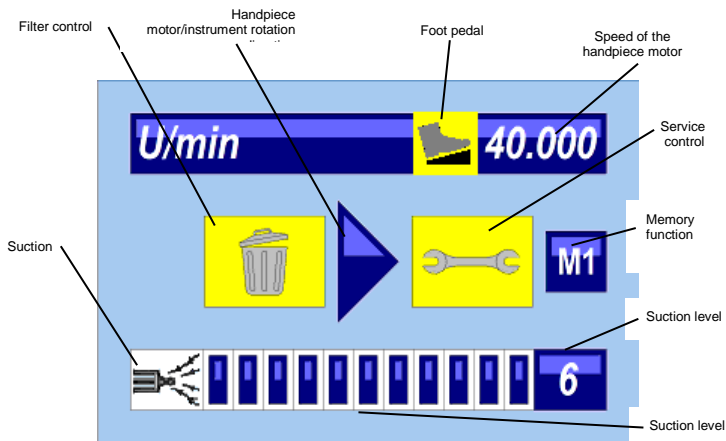
4.5 Colour display

The BaehrTec A1200/A2000 has two operating modes, which are indicated to you on the display:

- Work mode
- 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

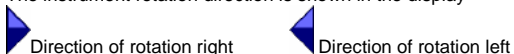


**Speed of the handpiece motor**

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



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



**Suction**

	This symbol is displayed if the suction is not currently in operation with the suction level you have set ( <b>suction off</b> ).
	This symbol is displayed if the suction is not currently in operation with the suction level you have set ( <b>suction on</b> ). (Can only appear while the handpiece motor is running).

For more information, please refer to the previous section.

### Suction level

The suction level you have selected will be shown to you here as text and as a bar graph. In the bar graph, you will also see whether the suction is currently activated or deactivated. For more information, please refer to the previous section.

### Filter control



As soon as the pores of the dust bag become blocked (dust bag is full) this will be shown to you in the display using the filter-control symbol. In such a case, you must replace the dust bag. (For information on how to change the dust bag, please refer to the section "Changing the dust bag").

### Service Control



The BaehrTec A1200/A2000 has a service interval display. 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.

### Foot pedal (BaehrTec A2000 only)



This symbol appears on the display as soon as the optionally available foot pedal is connected.

## 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 your background colour here
 Information	- Operation - Handpiece - Turbine - Service in - Version	- Information on activation period - Handpiece motor operating hours - Operating hours of the turbines - When is the next service due = (when will the Service Control symbol appear) - Version of your A1200/A2000



Your BaehrTec A1200/A2000 goes through various quality controls prior to delivery. Amongst other things, your A1200/A2000 will undergo a functional test during this process. 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 in the Information menu item! 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
- Suction level = 4+
- Language = German
- Sound = Aqua
- Background colour = white

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



By pressing the button for approx. 5 seconds all settings 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 Memory buttons (buttons (29) - (31))

Your device has two (A1200) or three (A2000) memory buttons which you can use to save your preferred settings in Work mode. These settings will be retained even if you turn off the device.

In order to save settings, please set them (instrument rotation speed, instrument rotation direction and suction level) in Work mode and hold the memory button where you would like to save these settings for more than 2 seconds. Once the settings are saved, you will hear a sound and the respective memory storage space is shown on the display.

**All** memory buttons are factory pre-set as follows:

- Handpiece motor speed: 6,000 rpm
- Handpiece motor direction: right
- Suction level: 4+



Please note that the selected adjustments are saved if you keep the memory button pressed for longer than 2 seconds. This means that settings saved to this memory button will be lost.

In order to recall settings that were saved on a memory button, briefly press the desired memory button. The saved settings are then applied. This will be indicated to you on the display by showing the corresponding memory button.



Please note that when briefly pressing the memory buttons, you will only hear a sound once you remove your finger from the button.



The indication of the memory button will only appear on the display if you select the settings via the memory button. If you (accidentally) make settings that are saved to a memory button, you will not be shown on the display that these settings are already stored on a memory button.

#### 4.8 Disconnecting/connecting the dust bag lid to the controller



Before you remove the dust bag lid from the controller or attach it again, turn off the device at the main switch **(3)** and remove the safety plug **(58)** from the socket.

##### 4.8.1 Disconnecting

In order to disconnect the dust bag lid from the controller, please follow these steps:

- 1) Hold the dust bag lid by the handle and lift it off from the controller. You will feel a slight resistance from the magnetic fasteners when lifting it.

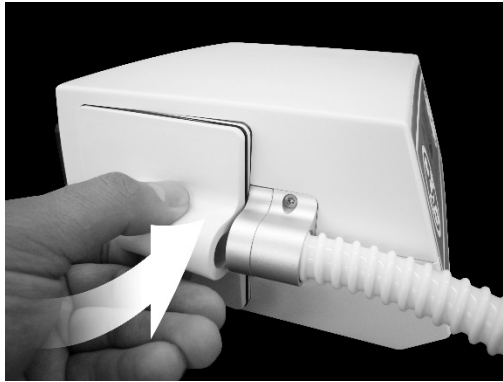
##### 4.8.2 Disconnecting

To attach the dust bag lid to the controller please proceed as follows:

- 1) First, attach the dust bag lid with the mounting bolts for the magnet holder to the side on which the handpiece outlet is not located.
- 2) Then attach the dust bag lid with the mounting bolts for the magnet holder to the side on which the handpiece outlet is located. The magnets ensure that the dust bag lid is pulled towards the housing and thus closed.



**Disconnecting Fig. 14**



Connecting Fig. 15



When changing the dust bag, make sure that the dust bag does not pinch between the controller and the dust bag lid. If this should be the case, remove the dust bag lid once again and make sure that the dust bag is not pinched when closing.



Before you close the dust bag lid and resume your work, always make sure that the turbine protection filter (rectangular) is inserted and that you have attached an undamaged dust bag correctly in the receptacle (39) for the dust bag (42), so that no impurities can enter the turbine and damage the device.

## 4.9

Changing the filter

We recommend changing the dust bag, as well as all filters regularly and at least every four weeks, in order to prevent excessive germ build-up. Think of your health!

Before we describe how to change the filter, we would like to provide you with some quick information on the filtration system in the BaehrTec A1200/A2000.

1. Filter: Dust bag

This filter has been proven in many suction systems to this day. It filters out the majority of dust particles. It is affordable, not too large, and must therefore be changed more often than a large dust bag. **This has the great advantage that you do not have a build-up of organic dust and pathogens in your filter system for too long.** The dust bag is located in the suction chamber on the receptacle (39) for the dust bag (42).

If you need additional dust bags, you can order microfibre dust bags (Art No. 21185) like those contained in the delivery.

2. Filter: Turbine protection filter

This filter prevents larger parts entering the turbines (e.g. if you have forgotten to install a dust bag). The turbine protection filter is located in the filter chamber on the grille.

### 3. Filter cartridge

The filter cartridge includes several different fleeces with different features:

- **Sound-insulating** **fleece**  
This fleece ensures that the suction noise is reduced and thus contributes to the comfortable volume of the A1200/A2000.
- **Coarse** **filter** **fleece**  
This fleece filters coarser particles from the extracted air
- **Carbon** **filter** **fleece**  
This fleece ensures that most odours are neutralised.
- **Ultra-fine** **filter** **fleece**  
This fleece filters ultra-fine particles from the extracted air.  
However, this fleece is also responsible for filtering viruses and bacteria from the extracted air (maximum separation rate 99.99 %).
- **Carbon** **filter** **foam**  
This fleece also ensures the neutralisation of odours.

For information on how to change the fleeces of the filter cartridge, please refer to the section "Changing the filter cartridge".



Before you change any of the filters, please turn off the device at the main switch **(3)** and remove the safety plug **(58)** from the socket.



Used filters must not be cleaned and the dust bags must not be emptied and then re-used. Always use fresh filters and a new dust bag for each filter change.



Please put used filters in the residual waste. It is preferable to discard this in a press-fastening bag.

#### 4.9.1 Changing the dust bag

In principle, the dust bag must be changed immediately once the symbol for a dust bag change



lights up on the display.

If the icon for a dust bag change lights up, the suction system will no longer be fully powerful. If you do not heed this indication, the device will switch automatically within 30 seconds back to suction level 3. This prevents the device from being damaged.

To change the dust bag, please proceed as follows:

- 1) Turn off the device at the main switch and disconnect it from the power supply.
- 2) Disconnect the dust bag lid from the controller (see section "Disconnecting/connecting the dust bag lid to the controller").
- 3) Remove the old dust bag from the receptacle **(39)**.
- 4) Clean the filter chamber and the dust bag lid each time you change the dust bag in order to guarantee proper suction power and to prevent germ formation. Think of your health!



For cleaning, we recommend the Baehr cloths Art. No. 11000.

- 5) Push the dust bag carefully with the opening on the receptacle **(39)**, until the (cardboard) reinforcement of the dust bag locks into the slot on the dust bag lid.



Make sure that you do not damage the dust bag when sliding it on and that you do not bend the seams.

- 6) Place the dust bag lid back on the controller (see section "*Disconnecting/connecting the dust bag lid to the controller*").

#### 4.9.2 Changing the turbine protection filter



The turbine protection filter and all other filters must be replaced immediately if you have been working with your BaehrTec A1200/A2000 without a dust bag (if you forgot) or if a dust bag has burst.

To change the turbine protection filter, please proceed as follows:

- 1) Turn off the device at the main switch and disconnect it from the power supply.
- 2) Disconnect the dust bag lid from the controller (see section "*Disconnecting/connecting the dust bag lid to the controller*").
- 3) Remove the old turbine protection filter from the suction chamber.
- 4) Clean the suction chamber, the dust bag lid, the grille and the magnetic fasteners on the controller and the dust bag lid during each filter change.



For cleaning, we recommend the Baehr cloths Art. No. 11000.


- 5) Place a new turbine protection filter on the grille.



**Fig. 16**

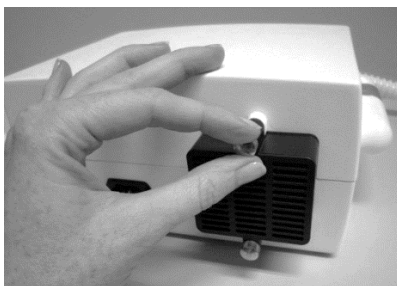
- 6) Place the dust bag lid back on the controller (see section "*Disconnecting/connecting the dust bag lid to the controller*").

#### 4.9.3 Changing the filter cartridge

You must change the turbine protection filter and all other filters if you have installed a new dust bag and the symbol  for a dust bag change still lights up. You should also change the turbine protection filter and the other filters if you believe that the symbol for a dust bag change has lit up too early after successfully changing the dust bag. In principle, we recommend changing the filter cartridge regularly, and at least every four weeks.

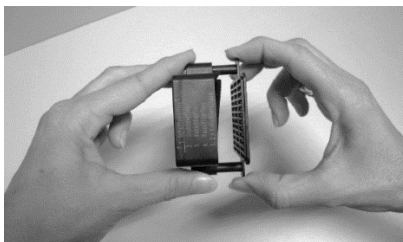
To change the filter cartridge, please proceed as follows:

- 1) Turn off the device at the main switch and disconnect it from the power supply.
- 2) The filter cartridge can be released from the device by turning both knurled screws **(44)** anti-clockwise until the filter cartridge easily comes away from the back of the device.



**Fig. 17**

- 3) Remove the filter cartridge **(43)** and clean the exhaust duct on the controller using Baehr cloths Art. No.11000.
- 4) Remove the knurled screws from the filter cartridge and open it by pulling the filter cartridge grille from the base of the filter cartridge. Pull the filter cartridge grille straight upwards and out, so that the bolts that connect the filter cartridge grille with the base of the filter cartridge do not break.



**Fig. 18**

- 5) Now change the inner fleeces in the order indicated on the outside of the filter cartridge and then put them back into the filter cartridge. Next, put the filter cartridge grille back into the base of the filter cartridge.



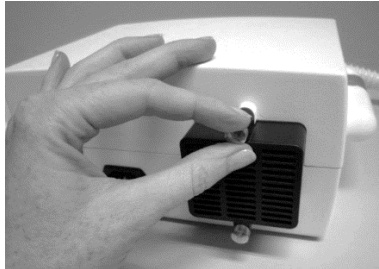
**Fig. 19**

- 6) Change the sound-insulating fleece as well and insert it as described on the outside of the filter cartridge.



**Fig. 20**

- 7) Attach the knurled screws and position the filter cartridge on the controller. Turn the knurled screws clockwise until you feel a slight resistance.



**Fig. 21**

**Attention! Please do not turn the knurled screws too far or overtighten them.**

#### 4.10 Getting started

1. Make sure that there is a dust bag in your BaehrTec A1200/A2000. To do this, you must disconnect the dust bag lid from the controller (see section "*Disconnecting/connecting the dust bag lid to the controller*"). On the receptacle (39) on the inside of the dust bag lid, a dust bag is pushed on as far as the stop. There further is a turbine protection filter inside the suction chamber. If everything is okay, connect the dust bag lid back onto the controller (see section "*Disconnecting/connecting the dust bag lid to the controller*"). If the dust bag is missing, you must insert a new dust bag before working with the device (see section "*Changing the dust bag*"). Now connect the dust bag lid back onto the controller (see section "*Disconnecting/connecting the dust bag lid to the controller*").
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. Switch the main switch (3) off.
3. Connect the supplied non-heating connection cable (57) with the non-heating connector (56) to the plug (46).
4. Plug the safety plug to (58) in a proper safety outlet.
5. Now switch the BaehrTec A1200/A2000 on using the main switch (3). After a short LED check, the "Power ON" LED (4) and the LED for the largest instrument (6,000 rpm) (5) will light up.

The following things are set after each power on:

- o Handpiece motor direction of rotation = right
- o Handpiece speed = 6,000 rpm (LED illuminated)
- o Handpiece motor = OFF
- o Suction level = 4+
- o Suction = ready for operation
- o Suction = off (as handpiece motor = off)

These settings will also be shown to you accordingly on the display. The BaehrTec A1200/A2000 is now ready for use.

6. Now hold the handpiece in one hand and plug an instrument with a shaft diameter of 2.35 mm as far as possible into the opening for DIN-instruments (52). 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 (52) 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. The correct permitted maximum speed for the instrument you currently want to use can be found by comparing the instrument diameter on the front film with the instrument heads shown. 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 turn on the handpiece motor using the push button **(13)** on the controller or the push button **(55)** 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. You can change the instrument speed in steps of 1,000 with the buttons **(14)** and **(15)**.

Please note that by changing the rotation speed in steps of 1,000 (button **(14)** or button **(15)**), also the maximal 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 instrument 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 pressing 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 with the main switch as soon as possible 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 rotation speed of 6,000 rpm with a small instrument (max.  $\varnothing$  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 suction level is shown on the display.



As soon as the handpiece motor is in operation, the suction will also always be turned on automatically (barely noticeable).

We have deliberately chosen to do this because this prevents the handpiece from becoming warm and also ensures that dust created when working is suctioned off to a minimum.

10. Switch the suction function to "Not ready for operation", and therefore off, using the push button **(20)**.

11. You can turn the handpiece motor on/off using the push button **(13)** on the controller or the push button **(55)** on the handpiece.



Please note that the suction is automatically switched off as soon as you turn off the handpiece motor.

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. If the display shows the symbol for a dust bag change, it is time to change the dust bag. In this case the suction system will no longer be fully powerful. If you do not heed this indication, the suction will switch automatically within 30 seconds back to level 3. This prevents the device from being damaged. (For information on how to change the dust bag, please refer to the section "*Changing the dust bag*").

We are confident that you will quickly become accustomed to working with your BaehrTec A1200/A2000 safely and properly and wish you lots of fun and success!

#### 4.11 Accessories

The following accessories are optionally available for your BaehrTec A2000:

##### 4.11.1 Foot pedal (BaehrTec A2000 only)

You can purchase a foot pedal (Art No.23000001) for the BaehrTec A2000. Using this foot pedal, you can adjust the speed continuously from 6,000 rpm to 40,000 rpm.

The device functions the same way with the foot pedal as it does without. There are only two differences:

- o The foot pedal symbol appears on the display
- o As long as the foot pedal is connected the speed of the handpiece motor can only be controlled using the foot pedal (you can see the currently used instrument speed on the display when the foot pedal is activated). Here, you can use the buttons **(5)** – **(12)** to set the maximum speed that you wish to reach when fully depressing the foot pedal. The buttons **(14)** and **(15)** can also be used when the foot pedal is activated. You can also adjust the maximum speed. Please note that the selected maximum speed is only visible when the foot pedal is fully engaged.



We have incorporated this maximum speed limit when operating using the foot pedal for your safety. When working with the foot pedal, it is even more important that you bear in mind the maximum permissible speed of the instrument you are using.

**Please keep your safety and the safety of your patient in mind. Therefore, set the maximum speed before you work with the instrument and check it each time you change instruments.**

Only the original Baehr foot pedal may be used with the BaehrTec A2000.



Other foot pedal are not approved for use with the BaehrTec A2000.

Please do not connect any other foot pedals since your device may malfunction and you could endanger yourself and others.

Furthermore, it could cause damage to your device.

Make sure that you never spill liquids on the foot pedal or use the foot pedal on wet surfaces. If fluids should get into the foot pedal, do not use it under any circumstances!

Please send the foot pedal in for service.

Therefore, never connect a damp or wet foot pedal, as this may cause your device to function incorrectly and you may put yourself and others in danger.

Furthermore, it could cause damage to your device.



## 5

### Servicing and care

#### 5.1

#### Safety notices



Never perform cleaning work or change a filter on a device that is still connected to the mains.



**Before sending in the device, it is essential that you remove the dust bag**



**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)

For cleaning, we recommend the Baehr cloths Art. No.11000 or a non-alcohol-based surface disinfectant.



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).



We recommend changing the dust bag and all filters regularly and at least every four weeks (even if the filter display does not indicate a filter change), in order to prevent excessive germ build-up. Think of your health.

## 5.3 Guarantee

The guarantee shall last 24 months.

There is no liability for defects and their consequences which are caused by natural wear and tear, improper cleaning, care or maintenance, non-observance of regulations for operation, maintenance or connection, contaminants in the air supply, unusual or prohibited chemical or electrical influences, unless they are the fault of the supplier.

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

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.

#### 5.4 Recycling/disposal

Old devices must be disposed of as electronic waste and should not be disposed 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.



5.5 Self-help in the event of malfunctions

Fault	Cause	Solution
<p><b>Control unit not working</b></p>	<ul style="list-style-type: none"> <li>• Main switch off</li> <li>• Control unit not connected to power supply</li> <li>• Connecting outlet without power</li> <li>• Mains cable not contacted correctly (plugged in)</li> <li>• Fuse(s) problem (see section 5.5.1 Replacing the fuse)</li> </ul>	<ul style="list-style-type: none"> <li>• Turn on main switch</li> <li>• Connect device to power supply</li> <li>• Connect the device to a functional socket</li> <li>• Plug device connector correctly into the device socket</li> <li>• Check main fuse and replace if necessary</li> </ul> <p><b>The device must be switched off and disconnected from the power supply before checking the fuses.</b></p>
<p><b>Filter indicator lit</b></p>	<ul style="list-style-type: none"> <li>• Handpiece clogged</li> <li>• Dust bag is full</li> <li>• Turbine protection filter in suction box is blocked</li> <li>• Filter cartridge is blocked</li> </ul>	<ul style="list-style-type: none"> <li>• Unscrew the front panel and clean the handpiece. <b>It is essential that the device is turned off and disconnected from the mains beforehand!</b></li> <li>• Change dust bag</li> <li>• Change turbine protection filter</li> <li>• Change filter in cartridge</li> </ul>
<p><b>Low suction power and the device gets hot</b></p>	<ul style="list-style-type: none"> <li>• Filter indicator ignored</li> <li>• Handpiece clogged</li> <li>• Dust bag is full</li> <li>• Turbine protection filter in suction box is blocked</li> <li>• Filter cartridge is blocked</li> <li>• Exhaust is blocked</li> <li>• Dust bag lid is not properly closed</li> <li>• The seal from the guide on the control unit or on the handpiece outlet has slipped, is dirty or defective</li> </ul>	<ul style="list-style-type: none"> <li>• Regularly check for the filter check display</li> <li>• Unscrew the front panel and clean the handpiece. <b>It is essential that the device is turned off and disconnected from the mains beforehand!</b></li> <li>• Change dust bag</li> <li>• Change turbine protection filter</li> <li>• Change filter in cartridge</li> <li>• Please ensure that the extracted air can escape easily from the back of the device</li> <li>• Properly close the dust bag lid</li> <li>• Check O-rings and replace as required. Clean filter box, seal channel and dust bag cover.</li> </ul>
<p><b>Fault</b></p>	<p><b>Cause</b></p>	<p><b>Solution</b></p>

<p><b>Instruments do not</b></p>	<ul style="list-style-type: none"> <li>• Maximum permitted speed for instrument in use is exceeded</li> <li>• Instrument shaft worn</li> <li>• Instrument shaft bent</li> <li>• Instrument not correctly inserted in clamping mechanism</li> <li>• Cream, ointment, or similar on instrument shaft</li> <li>• Too much work pressure on instrument</li> <li>• Pulling movement while working</li> </ul>	<ul style="list-style-type: none"> <li>• Only work with the maximum permissible speed for the instruments used</li> <li>• Check the instrument shaft and use a new instrument if necessary</li> <li>• Replace instrument without fail</li> <li>• Insert instrument until stop in clamping mechanism</li> <li>• 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.</li> <li>• Reduce pressure</li> <li>• Avoid pulling</li> </ul>
<p><b>Suction turbine switches to suction level 3 during operation</b></p>	<p>The dust bag, turbine protection filter and filter cartridge are full, the device will automatically switch to suction level 3 to prevent damage due to a rise in the temperature</p>	<p>Change all filters and the dust bag and make sure that the extracted air can escape easily from the back of the device.</p>
<p><b>Handpiece vibrates; Handpiece is loud with used instruments</b></p>	<ul style="list-style-type: none"> <li>• Maximum permitted speed for instrument in use is exceeded,</li> <li>• Instrument defective (bent, shaft worn, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Only work with the maximum permissible speed for the instruments used</li> <li>• Use new instruments.</li> </ul>
<p><b>Push button on handpiece blocked or is difficult to activate</b></p>	<p>Handpiece or handpiece button soiled</p>	<p>Clean the push-button</p>

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.



### 5.5.1 Change fuse



The fine fuses protect your device from damage caused by two high currents. Attention! Only these fuses may be used with the A1200/A2000: 2X microfuse, 3.15 A delay (Type 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.

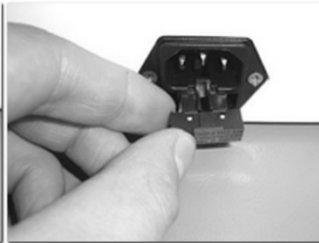


**Fig. 22**

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. 23**



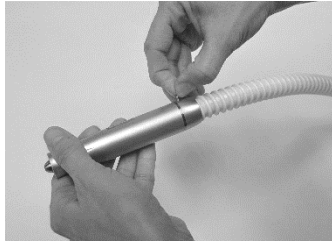
**Fig. 24**

### 5.5.2 Cleaning the handpiece button

If your handpiece button is dirty, or the button no longer functions correctly, then proceed as follows:

Switch off your device at the main switch and disconnect the device from the mains.

Take the button pusher between your thumb and forefinger and pull it out from the button housing.

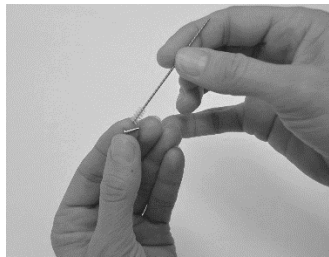


**Fig. 25**

Clean the button pusher and the button housing with a brush.

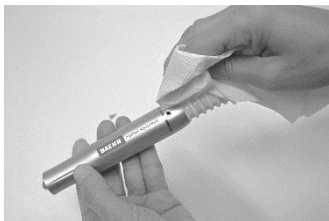


**Fig. 26**



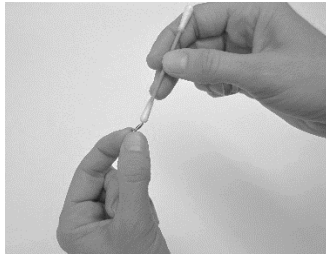
**Fig. 27**

Next, wipe the button pusher and button housing with Baehr quick surface disinfectant (Art No. 11015).



**Fig. 28**

Apply a little oil with a cotton swab to the button pusher and reinsert it into the button housing.



**Fig. 29**

Check that the functioning is back to normal by pushing the button pusher with your finger.



**Fig. 30**

### 5.5.3 Changing the dampers for the handpiece case

If you notice that the handpiece motor no longer sits comfortably in the handpiece case, this means that the dampers for the handpiece case are worn.

To change the dampers for the handpiece case, please proceed as follows:

Switch off your device at the main switch and disconnect the device from the mains.

Unscrew the handpiece case from the handpiece cap.

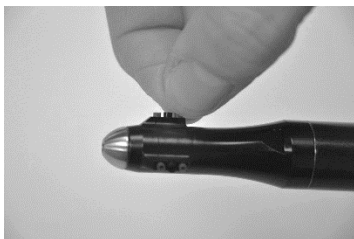


**Fig. 31**



**Fig. 32**

Take the nine dampers for the handpiece case from the slots on the handpiece motor (possibly using a pair of tweezers) and dispose of these properly.



**Fig. 33**

Now reinsert the new dampers for the handpiece case. Make sure that you insert the three black dampers in the middle row.

Insert the six green dampers in the outer storage rows. Press all of the dampers once again afterwards.



**Fig. 34**

Now screw the handpiece case back onto the handpiece cap.



**Fig. 35**

5.5.4 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.
	<b>Caution – risk of injury! Never try to perform cleaning work on the handpiece while the handpiece motor is running. The handpiece motor must be switched off.</b>
	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 damages caused by improper use, unqualified staff or incorrect operating. <b>All warranty claims are void following improper use.</b>
	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, <b>under no circumstances</b> 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 device 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. 36).
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. 37).
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. 38).
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. 36

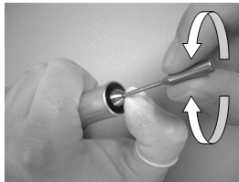


Fig. 37

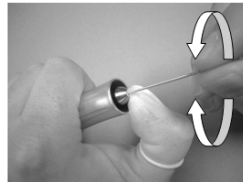


Fig. 38

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 device 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](http://www.fusspflege.com/easy-clean).**

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



5.5.5 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).

	<p>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.</p>
	<p>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.</p>
	<p><b>Caution – risk of injury! Never try to change the instrument on the handpiece while the handpiece motor is running. The handpiece motor must be switched off.</b></p>
	<p>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 damages caused by improper use, unqualified staff or incorrect operating. <b>All warranty claims are void following improper use.</b></p>
	<p>Clean the instrument changing aid after each use and make sure that it is always in a perfect hygienic condition before use.</p>
	<p>For hygiene reasons, please clean the instrument changing aid after use under running water and then with Baehr quick surface disinfectant (Art-No. 11015).</p>
	<p>The images are for illustrative purposes only. Subject to technical and optical changes.</p>



### Inserting

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



Fig. 39

Hold the instrument changing aid horizontally to the handpiece.

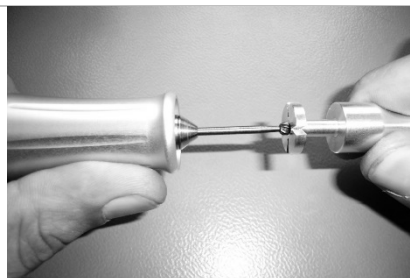


Fig. 40

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

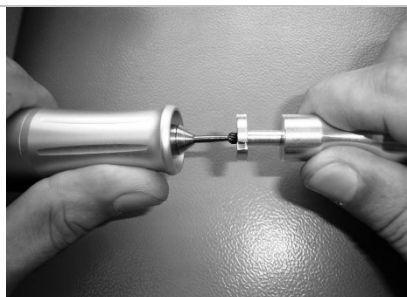


Fig. 41

**Pull out**

Hold the instrument changing aid horizontally to the handpiece.

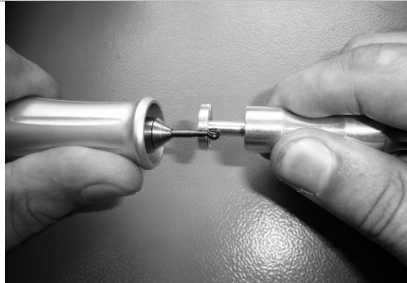


Fig. 42

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.

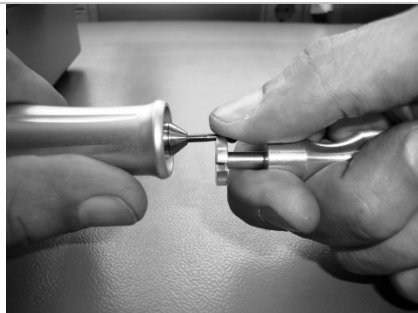


Fig. 43

Carefully remove the instrument from the clamping mechanism on the handpiece with the instrument changing aid.

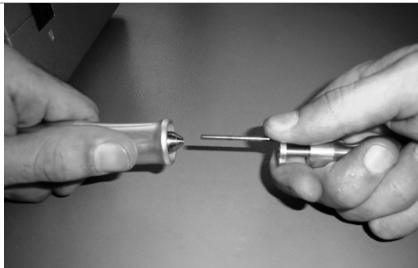


Fig. 44

**For detailed video instructions on using the instrument changing aid to supplement this information sheet, please go to [www.fusspflege.com/easy-clean](http://www.fusspflege.com/easy-clean).**

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





6

**Technical Data**

**BaehrTec A1200**

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 – 35,000 rpm adjustable
Accuracy of the speeds	6,000 – 10,000 rpm, tolerance +/- 25 % 10,001 – 20,000 rpm, tolerance +/- 20 % 20,001 – 35,000 rpm, tolerance +/- 10 %
Power consumption	Max. 150 W
Micromotor voltage	24 V
Working voltage	28 V
Controller dimensions (W x D x H) in mm (without handpiece outlet, without handpiece button and without filter cartridge)	220 x 195 x 110
Controller weight	Mix approx. 2,100 g
Handpiece dimensions (W x min. diameter x max. diameter) in mm	~117 x ~19 x ~24
Handpiece weight	Mix approx. 99 g
Dust bag lid weight	Mix approx. 70 g
Ambient temperature (operation)	+10° - +35° C
Storage temperature	-5° - +40°C
Humidity	30% - 85 %
Permitted air pressure	800 hPa - 1060 hPa
Max. Vacuum (suction level 1) with filter and dust bag	- 30 mbar +/- 25%
Max. Vacuum (suction level 1+) with filter and dust bag	- 34 mbar +/- 25%
Max. Vacuum (suction level 2) with filter and dust bag	- 38 mbar +/- 25%
Max. Vacuum (suction level 2+) with filter and dust bag	- 42 mbar +/- 25%
Max. Vacuum (suction level 3) with filter and dust bag	- 46 mbar +/- 25%
Max. Vacuum (suction level 3+) with filter and dust bag	- 50 mbar +/- 25%
Max. Vacuum (suction level 4) with filter and dust bag	- 54 mbar +/- 25%
Max. Vacuum (suction level 4+) with filter and dust bag	- 58 mbar +/- 10%
Max. Vacuum (suction level 5) with filter and dust bag	- 62 mbar +/- 10%
Max. Vacuum (suction level 5+) with filter and dust bag	- 66 mbar +/- 10%
Max. Vacuum (suction level 6) with filter and dust bag	- 70 mbar +/- 10%
Fuse	2X microfuse, 3.15 A delay (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 <i>Measurement conditions: Device on foam pad (20 mm) from the front; distance 1m; dust bag used; turbine protection filter inserted; filter cartridge installed, handpiece displaced 1m from the control unit and covered. Extracted air flows freely, not discharging in the direction of the sound-level measurement device. Handpiece speed: 6,000 rpm</i>	45 db to 53 db +/- 10%

**BaehrTec A2000**

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 – 40,000 rpm adjustable
Accuracy of the speeds	6,000 – 10,000 rpm, tolerance +/- 25 % 10,001 – 20,000 rpm, tolerance +/- 20 % 20,001 – 40,000 rpm, tolerance +/- 10 %
Power consumption	Max. 150 W
Micromotor voltage	24 V
Working voltage	28 V
Controller dimensions (W x D x H) in mm (without handpiece outlet, without handpiece button and without filter cartridge)	220 x 195 x 110
Controller weight	Mix approx. 2,100 g
Handpiece dimensions (W x min. diameter x max. diameter) in mm	-117 x -19 x -24
Handpiece weight	Mix approx. 99 g
Dust bag lid weight	Mix approx. 70 g
Ambient temperature (operation)	+10° - +35° C
Storage temperature	-5° - +40° C
Humidity	30% - 85 %
Permitted air pressure	800 hPa - 1060 hPa
Max. Vacuum (suction level 1) with filter and dust bag	- 35 mbar +/- 25%
Max. Vacuum (suction level 1+) with filter and dust bag	- 40 mbar +/- 25%
Max. Vacuum (suction level 2) with filter and dust bag	- 55 mbar +/- 25%
Max. Vacuum (suction level 2+) with filter and dust bag	- 62 mbar +/- 10%
Max. Vacuum (suction level 3) with filter and dust bag	- 67 mbar +/- 10%
Max. Vacuum (suction level 3+) with filter and dust bag	- 75 mbar +/- 10%
Max. Vacuum (suction level 4) with filter and dust bag	- 80 mbar +/- 10%
Max. Vacuum (suction level 4+) with filter and dust bag	- 85 mbar +/- 10%
Max. Vacuum (suction level 5) with filter and dust bag	- 90 mbar +/- 10%
Max. Vacuum (suction level 5+) with filter and dust bag	- 95 mbar +/- 10%
Max. Vacuum (suction level 6) with filter and dust bag	- 100 mbar +/- 10%
Fuse	2X microfuse, 3.15 A delay (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 <i>Measurement conditions: Device on foam pad (20 mm) from the front; distance 1m; dust bag used; turbine protection filter inserted; filter cartridge installed, handpiece displaced 1m from the control unit and covered. Extracted air flows freely, not discharging in the direction of the sound-level measurement device. Handpiece speed: 6,000 rpm</i>	48 db to 55 db +/- 10%

Subject to visual and technical changes.




Guidelines and MANUFACTURER statement – ELECTROMAGNETIC EMISSION		
The model BaehrTec A1200/A2000 is intended for use in the ELECTROMAGNETIC ENVIRONMENTS specified below. The customer or end user <sup>(N11)</sup> of the model BaehrTec A1200/A2000 should ensure it is used in such an environment.		
Emission measurements	Compliance	ELECTROMAGNETIC ENVIRONMENT – Guidelines
HF emissions according to CISPR 11	Group 1	The model BaehrTec A1200/A2000 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 A1200/A2000 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	

<sup>(N11)</sup> National footnote: Here, user refers to a "RESPONSIBLE ORGANISATION".

Guidelines and MANUFACTURER DECLARATION – ELECTROMAGNETIC STABILITY			
The model BaehrTec A1200/A2000 is intended for use in the ELECTROMAGNETIC ENVIRONMENTS specified below. The customer or user <sup>(N13)</sup> of the model BaehrTec A1200/A2000 should ensure that it is used in such an environment.			
STABILITY TESTS	IEC 60601-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	Floorsings 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 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 A1200/A2000 with a interruption-free power supply or a battery, should the user of the model BaehrTec A1200/A2000 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.

<sup>(N13)</sup> National footnote: Here, user refers to a "RESPONSIBLE ORGANISATION".

Guidelines and MANUFACTURER declaration – ELECTROMAGNETIC STABILITY			
<p>The model BaehrTec A1200/A2000 is intended for use in the ELECTROMAGNETIC ENVIRONMENTS specified below. The customer or user<sup>(N15)</sup> of the model BaehrTec A1200/A2000 should ensure that it is used in such an environment.</p>			
STABILITY tests	IEC 60601-TEST LEVEL	COMPLIANCE level	ELECTROMAGNETIC ENVIRONMENT – guidelines
<p>Conducted HF-disturbances according to IEC 61000-4-6</p> <p>Radiated HF disturbances under IEC 61000-4-3</p>	<p>3 V<sub>Effective value</sub> 150 kHz to 80 MHz</p> <p>3 V/m 80 MHz to 2.5 GHz</p>	<p>3 V<sub>Effective value</sub></p> <p>3 V/m</p>	<p>Portable and mobile radio sets are not used closer to the model BaehrTec A1200/A2000 including lines than the recommended protective distance, according to the appropriate formula to calculate the transmission frequency.</p> <p><b>Recommended protective distance:</b></p> $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = 2.3 \sqrt{P} \quad 800 \text{ MHz to } 2.5 \text{ GHz}$ <p>with <i>P</i> as the nominal output of the transmitter in Watt (W) according to the specifications provided by the transmitter manufacturer and <i>d</i> as the recommended protective distance in metres (m).</p> <p>The field strength of stationary radios is lower than the CONFORMANCE LEVEL<sup>b</sup> at all frequencies according to a test conducted on location<sup>a</sup>.</p> <p>Interference is possible in the vicinity of devices marked with the following symbols.</p> 
<p>NOTE 1 At 80 MHz and 800 MHz, the higher value applies.</p> <p>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.</p>			
<p><sup>a</sup> 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 A1200/A2000 exceed the CONFORMANCE LEVEL, the model BaehrTec A1200/A2000 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 A1200/A2000.</p> <p><sup>b</sup> The field strength is smaller than 3V/m across the frequency range of 150 kHz to 80 MHz.</p>			
<p><sup>(N15)</sup> National footnote: Here, user refers to a "RESPONSIBLE ORGANISATION".</p>			



<b>Recommended protective distances between portable and mobile HF communication devices and the model BaehrTec A1200/A2000</b>			
The BaehrTec A1200/A2000 model is intended for operation in an ELECTROMAGNETIC ENVIRONMENT in which radiated HF disturbances are controlled. The customer or the user of the model BaehrTec A1200/A2000 can help prevent, electromagnetic disturbances by observing the minimum distances between portable and mobile HF communication facilities (transmitters) and the model BaehrTec A1200/A2000, 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	80 MHz to 800 MHz	800 MHz to 2.5 GHz
	$d = 1.2 \sqrt{P}$	$d = 1.2 \sqrt{P}$	$d = 2.3 \sqrt{P}$
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 <i>P</i> 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.			

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**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**
- Replacement filter set for A2000 (fits A1200/A2000)  
**Art No.: 22734**
- Brushes  
**Art No.: 34916**
- Easy-Clean tool kit for BaehrTec A2000 (fits A1200/A2000)  
**Art No.: 40285**
- Damper for handpiece case (Set)  
**Art No.: 40286**
- Power cable case, short for BaehrTec A2000 (fits A1200/A2000)  
**Art No.: 40796**
- Power cable with straight connector  
**Art No.: 20970006**
- Foot controller for BaehrTec A2000  
**Art No.: 23000001**



**CE 0483**

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