

Air purifier/humidifier

Axair PH7

## Operating Instructions



1118887 D/E/F 0308

**AxAir**

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# 1 Introduction

We thank you for having purchased the **Axair PH7**. The Axair PH7 is an all-season unit for **air purification** and **air humidification**.

These Operating Instructions will help you to fully benefit from all features offered by the Axair PH7. This manual contains all information required for the correct operation and maintenance of the Axair PH7.

The Axair PH7 is designed in accordance with the latest state of the art and the present safety regulations. In the event of improper use, however, danger can arise for the user or third parties and/or impairment of the unit or other material assets. Please read and observe all safety notes stated in the Operating Instructions of your Axair PH7.

If you have questions, which are not or insufficiently answered in this documentation, please contact your Axair representative. They will be glad to assist you.

## 2 Important notes

### 2.1 Intended use

The Axair PH7 is intended exclusively for **air humidification and air purification of rooms within the specified operating conditions**. Any other type of application is considered as not conforming with the intended purpose and may lead to hazard when operating the Axair PH7.

Operation of the equipment in the intended manner requires **that all the information in these instructions is observed (in particular the safety instructions)**.

### 2.2 Safety instructions

- Carefully read and adhere to the **instructions, directions** and **notes** given in the present Operating Instructions of the Axair PH7. Any improper use of the unit is strictly forbidden.
- The Axair PH7 must only be operated and serviced by persons being familiar with the unit. Persons not familiar with the Operating Instructions, including children and persons under the influence of alcohol, drugs or medicaments, must not operate the unit unless under supervision.
- Except for the steps mentioned in this manual, the user must not carry out further operations with the Axair PH7. **All repairs (e.g. replacement of the mains cable or replacement of the control unit etc.) must be carried out by your Axair supplier only.**

- **Danger of electrical shocks!** The Axair PH7 operates at mains voltage:
  - observe all local safety regulations regarding the handling of mains-powered electrical devices.
  - the fan housing incorporates all electrical components. **Never immerse the housing into water** and protect it from splashes.
  - Never remove the mains plug by pulling the power cord. Make sure your hands are absolutely dry when pulling the plug out of the socket.
  - Handle the mains cable (and the extension cord, if used) with care: **do not lead the cable over sharp edges, do not jam it, do not strain it, do not place it on hot surfaces and avoid contact with oil and solvents**. Never use damaged cables or extension cords!
- **Caution!** Before cleaning and carrying out maintenance work on the Axair PH7 **switch the unit off** and **disconnect it from the mains** (pull mains plug out of the socket), then **wait until the fan comes to a stop**.
- **Caution!** Take appropriate measures to prevent children from playing with the Axair PH7. Children are unaware of the hazards associated with electrical appliances. Never leave the unit running unsupervised. Never allow the mains cable to hang down.
- **Caution! Damaged units must not be set into operation.**
- **No technical modifications** must be applied to the Axair PH7.
- Use **original spare parts** from your Axair supplier exclusively.

### 2.3 Notes on the Operating Instructions

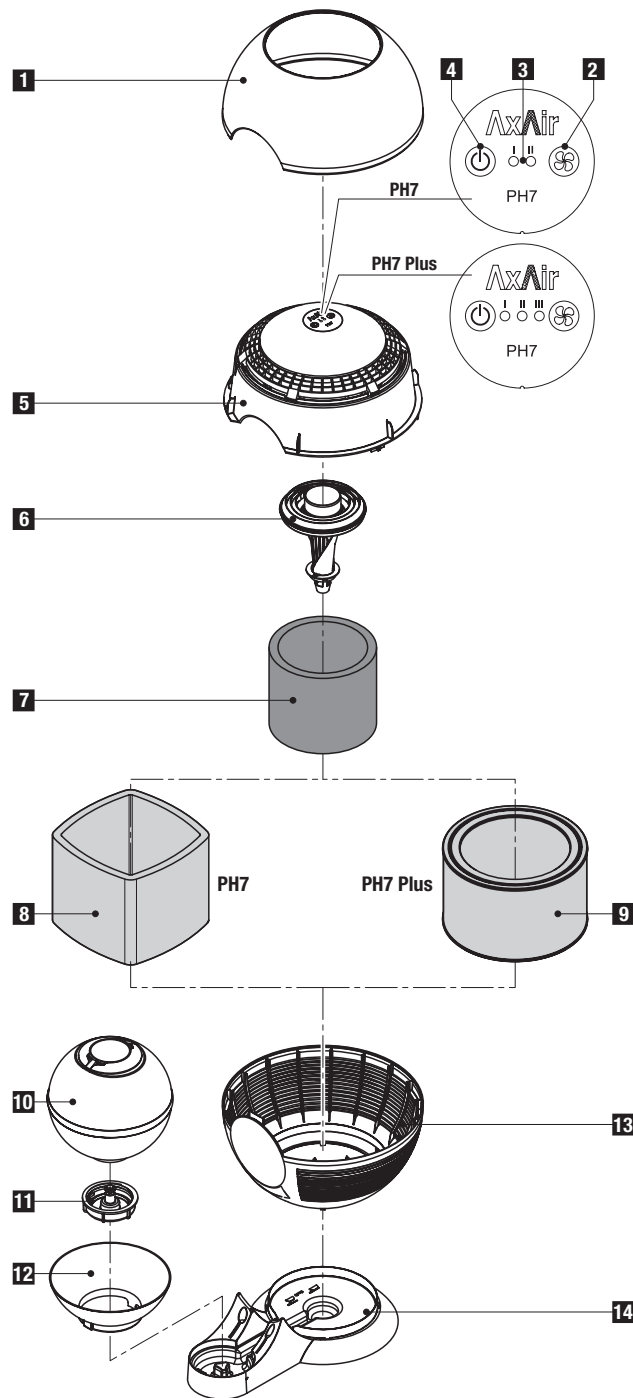


This pictogram designates **safety notes and danger references** which, if not observed, may lead to injury and/or material damage.

Please keep the Operating Instructions in a safe place where they will be at hand whenever you need them. If the Operating Instructions are mislaid, please contact your Axair supplier for immediate replacement.

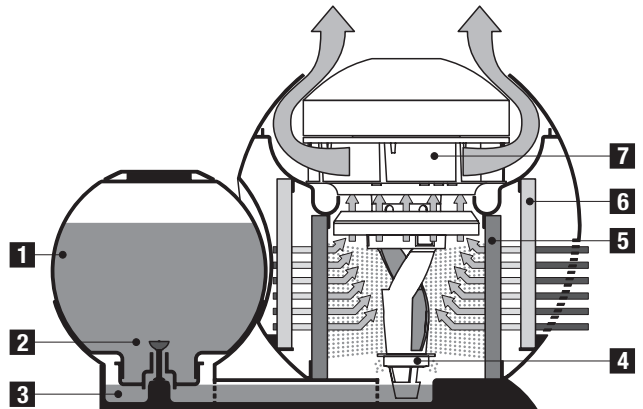
### 3 Product overview

#### 3.1 Design



- |                                    |                           |
|------------------------------------|---------------------------|
| 1 Hood                             | 8 Triplex filter (PH7)    |
| 2 Fan speed key                    | 9 Hepa filter (PH7 Plus)  |
| 3 Fan speed LEDs                   | 10 Water tank             |
| 4 On/Off key                       | 11 Level regulating valve |
| 5 Fan housing                      | 12 Tank base              |
| 6 Impeller                         | 13 Air intake screen      |
| 7 Activated charcoal vaporizer mat | 14 Base tub               |

#### 3.2 Functional description



The Axair PH7 is an all-season unit for **air humidification** and **air purification**.

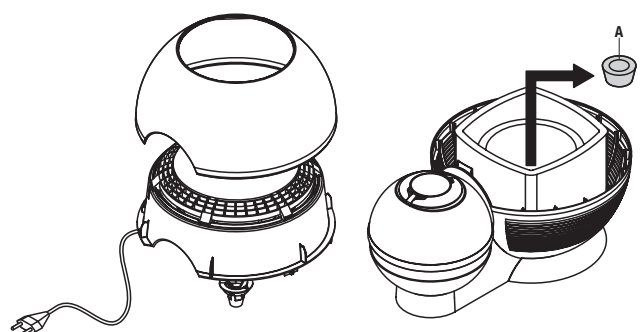
Via the level regulating valve (2) the water flows from the water tank (1) to the base tub (3). The impeller (4) sucks up the water from the base tub and projects fine drops towards the activated charcoal vaporizer mat (5).

The fan (7) located in the upper part of the fan housing takes in ambient air. The filter (6) purifies the air which is then moistened by the activated charcoal vaporizer mat. Finally, the purified and moistened air is exhausted to the room, via the slots in the upper part of the housing.

Note: If the Axair PH7 is operated without water it works as air purifier only and no humidification takes place.

#### 3.3 Unpacking, checking the delivery and removing the transport lock

- Unpack the Axair PH7.  
**Important!** The original packaging of the Axair PH7 was designed for optimum safety during transportation. Please preserve the original packing material as well as the transport lock (see below) in case you once have to return the unit for some reason.
- Lift up the hood. Pull out the mains cable from the cable duct in the air intake screen and carefully lift up the fan housing. Then, remove the transport lock "A".



- **Check the delivery for completeness.** The Axair PH7 is supplied ready for operation, equipped with a **filter** (PH7: Triplex filter, PH7 Plus: Hepa filter) and the **activated charcoal vaporizer mat**.

Check the equipment for damage. Please report any damage to your Axair supplier and to the carriers, as required.

- Put on the fan housing. Lead the mains cable via the cable duct in the air intake screen down to the base tub. Then, put on the hood.

## 4 Notes on correct location



**Caution!** The Axair PH7 must not be installed in hazardous locations and the unit must not be used in rooms where water splashes may occur.

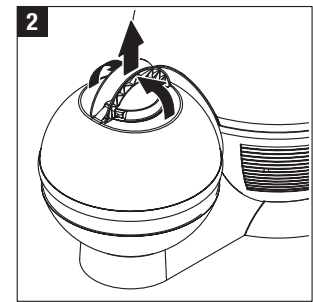
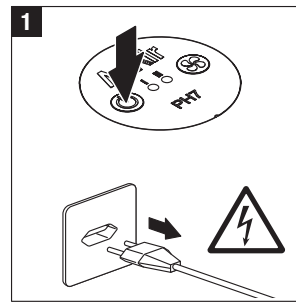
Please observe the following notes for the correct positioning of the Axair PH7:

**Important!** Empty the base tub before moving the unit, otherwise water could possibly escape.

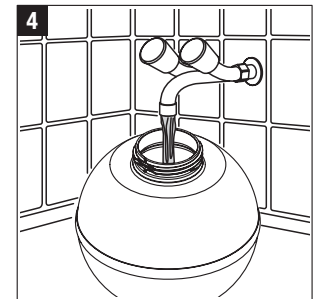
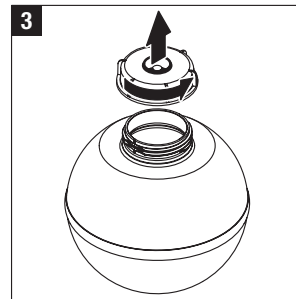
- To ensure proper operation place the Axair PH7 on a **solid horizontal surface** only.
- To make sure the air is entirely recirculated **do not locate the Axair PH7 in narrow recesses, behind curtains etc. Keep a minimum space of 0.5 m between the unit and nearby walls or furniture.** Make sure the air intake and exhaust slots are not covered thus ensuring the purified and moistened air can leave the top of the unit **without hindrance**.
- **Do not** locate the PH7 **close to cold outer walls** and do not expose the unit to **direct sunlight or powerful heat sources** (lamps, radiators, etc.).
- If the Axair PH7 is used in a particular location for an extended period the filter and the activated charcoal vaporizer mat absorbs the odour of the room. When moving the unit to another location, the Axair PH7 emits the odour of the previous room for a certain time. This may be inconvenient if the unit is moved from a room heavily loaded with smell to an almost neutral environment.  
Note: if the unpleasant odour does not disappear after a certain period, the filter and the activated charcoal vaporizer mat must be replaced.

## 5 Operation

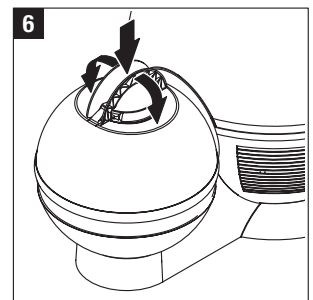
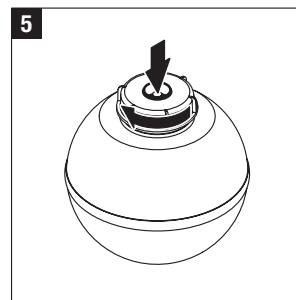
### Filling the water tank



1. Switch off the Axair PH7 via the On/Off key and **remove the mains plug from the wall outlet**.
2. Swivel up the carrying handles of the water tank and remove the water tank to the top.



3. Swivel down the carrying handles, and place the water tank onto the side with the carrying handles. Then, remove the level regulating valve.
4. Thoroughly rinse the water tank and the level regulating valve with hot water, then fill the water tank with cold tap water. Do not use **additives**.

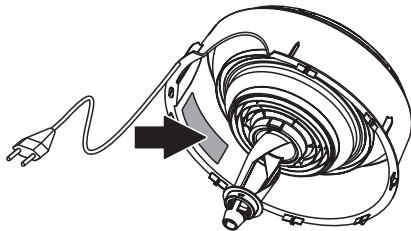


5. Screw in the level regulating valve.
6. Turn the water tank, then swivel up the carrying handles. Carefully insert the water tank into the unit, then swivel down the carrying handles. The water now flows into the base tub.

### Connect the unit to the mains

- Make sure the required supply voltage (see type plate inside the housing) matches the local mains voltage. To do so, disassemble the fan housing, check the specification on the type plate, then assemble the fan housing again. Please follow the information on dismantling and assembly given chapter 6.2.

**Caution!** Do not connect the Axair PH7 to the mains if the voltage does not match!

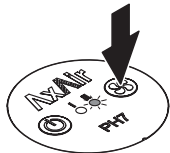


- Connect the mains plug to the wall outlet.  
**Recommendation!** Connect the Axair PH7 to a wall socket featuring a fault current breaker (if available).

### Switching on the unit/Setting the fan speed



Switch on the Axair PH7 via the On/Off key. The unit starts running at the fan speed selected last (the corresponding fan speed LED lights).



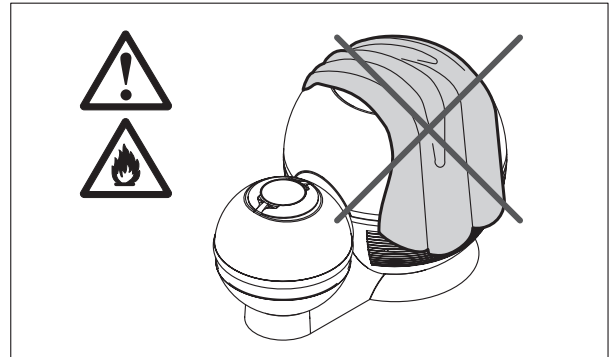
Press the fan speed key to select the desired fan speed according to the following table.

Fan speed	PH7		PH7 Plus		
	I	II	I	II	III
Air recirculation in m <sup>3</sup> /h	100	145	80	100	130
Vaporizing capacity in dl/h (at 45%hr and 23°C)	3.0	4.0	2.8	3.5	4.0

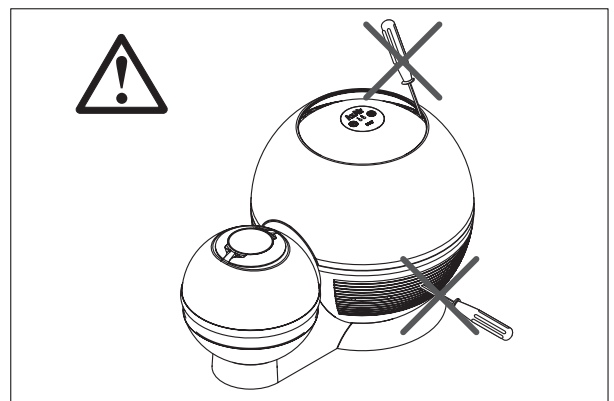
### Notes on operation

- Check the level of the water tank on a regular basis and fill up as required (see section “Refilling the water tank”).  
**Recommendation:** for optimum purification the Axair PH7 should always be operated with water. As an exception to the rule, the unit may be operated without water in rooms that are rarely aired thus preventing excessive humidification (however, this should not be done in the heating period). In this case the Axair PH7 works as air purifier only.
- **Important! Never** operate the PH7 without filter and activated charcoal vaporizer mat.

- **Important!** Never move the Axair PH7 if the water tank or the base tub are filled with water. The water could escape and moisten the filter thus making it unusable.
- **Caution, fire hazard!** Make sure the air intake and exhaust slots are not covered by objects such as clothes when the unit is in operation as this could cause dangerous accumulation of heat inside the unit.

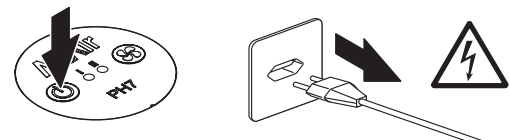


- **Caution, risk of damage!** Do not insert foreign objects into the air intake and exhaust slots.



### Putting the unit out of operation

- Switch the Axair PH7 off, **remove the mains plug from the wall outlet** and wait until the fan comes to a stop.



In case you want to put the Axair PH7 out of operation for an **extended period**:

- Empty the water tank and the base tub. Clean the components as described in chapter 6.2. Make sure the **water tank and the base tub are absolutely dry**, then reassemble the unit. Store the unit in an appropriate, dust-free location.

## 6 Maintenance and cleaning

### 6.1 Maintenance intervals

The maintenance intervals mostly depend on the load of the ambient air, the water quality and the operating time. Consider the following indications as a guideline:

#### weekly:

- clean fan housing
- empty and clean base tub
- clean impeller
- rinse water tank with hot water

#### every 4 weeks:

- delime base tub and impeller

#### every 3 months:

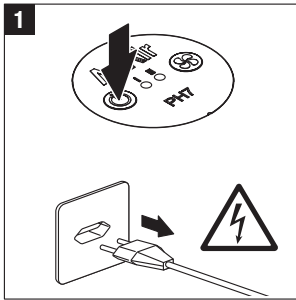
- replace activated charcoal vaporizer mat

**as soon as the filter replacement indicator appears (all LEDs are blinking) or after 6 months at the latest:**

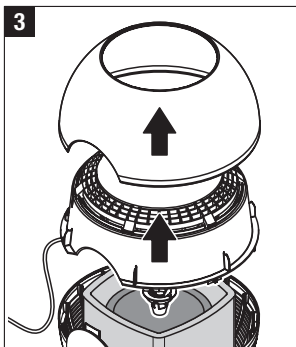
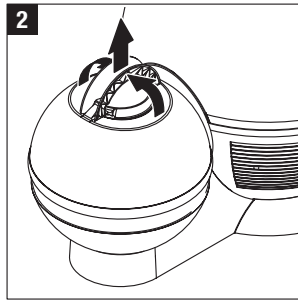
- replace Triplex filter or Hepa filter, respectively

### 6.2 Maintenance

#### Disassembling the unit



1. Switch the Axair PH7 off, **remove the mains plug from the wall outlet** and wait until the fan comes to a stop.
2. Swivel up the carrying handles of the water tank and remove the water tank to the top.

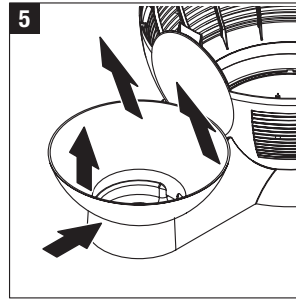


3. Lift up the hood. Pull out the mains cable from the cable duct in the air intake screen. Then, carefully lift up the fan housing and put it aside, with the impeller on top.

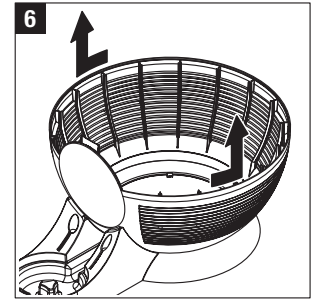


**Caution!** To prevent damage make sure the impeller is not facing the bottom when putting the fan housing aside.

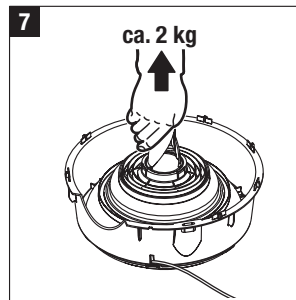
4. Remove the activated charcoal vaporizer mat and the filter.



5. Press the snap lock of the base tub, then pull up the tank base to remove it from its support.



6. Turn the air intake screen counterclockwise to the stop, then lift it up (bayonet lock).



7. Remove the impeller from the snap lock of the fan.

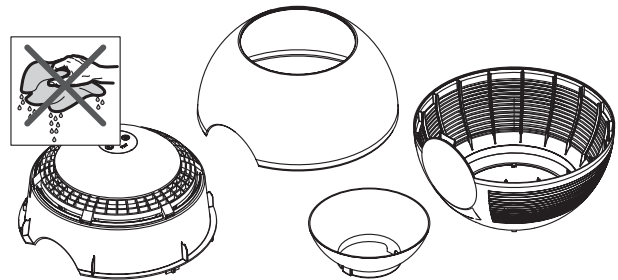
#### Cleaning



**Caution!** Do not use solvents, aggressive agents or abrasive cleaning aids (e.g. scouring cloth).

In case you have to use cleaning or deliming agents strictly adhere to the relevant application notes and safety instructions.

- **Hood, fan housing, air intake screen and tank base** Rub with a damp cloth and use a vacuum cleaner to

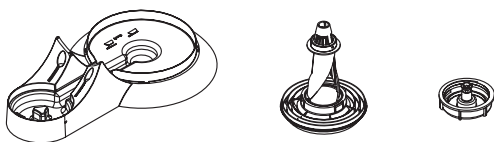


remove dust from the inner and outer side of the housing, as required.



**Caution!** Prevent water from entering the fan housing.

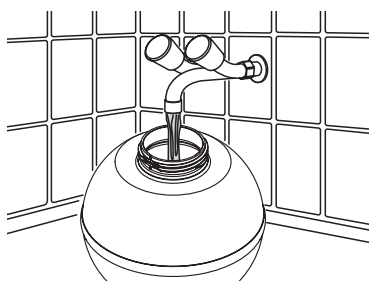
- **Base tub, impeller and level regulating valve**



Accumulation of lime in the base tub, on the impeller or in the level regulating valve promotes the development of microorganisms which may lead to unpleasant odour. If there is accumulation of lime, use a commercially available deliming agent (e.g. acetic cleaning agent or 8-percent formic acid), then rinse thoroughly with fresh water.

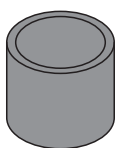
If there is no formation of lime, clean the parts with luke-warm soapy water, then thoroughly rinse with fresh water.

- **Water tank**



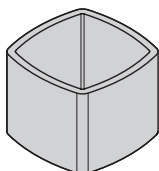
Rinse with hot water. Clean the water tank with acetic cleaning agent as required, then thoroughly rinse with fresh water

- **Activated charcoal vaporizer mat**



Carefully rinse the vaporizer mat with luke-warm water (**without additives**), as required. The vaporizer mat must be replaced after it has been in use for **3 months at the latest**. The vaporizer mat is non-polluting and may be thrown in the trash.

- **Triplex filter (PH7 only)**



Filter **slightly soiled**/filter in use for **less than 6 months**: Vacuum the filter on both sides (use the lowest power setting of the vacuum cleaner).

**Filter replacement indicator** is activated (all LEDs are blinking): **replace filter**.

- **Hepa filter (PH7 Plus only)**



**Filter replacement indicator** is activated (all LEDs are blinking): **replace filter**.

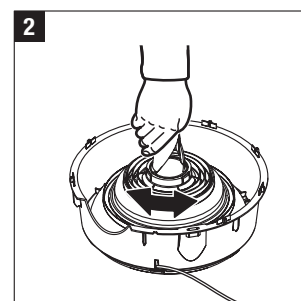
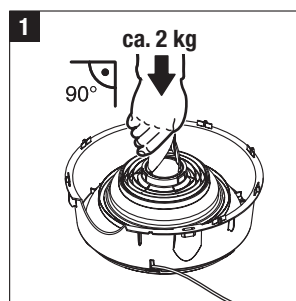
**The Hepa filter cannot be cleaned.**

### Reassembling the unit

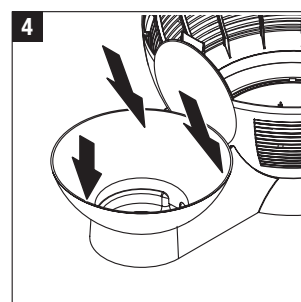
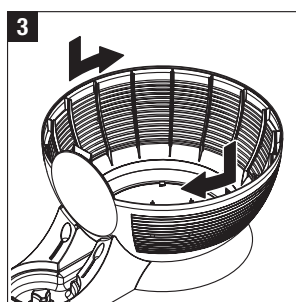


**Caution!** Before reassembling the Axair PH7 check all components for possible damage. Do not reuse damaged parts but replace them before reassembling the unit.

**For the replacement of defective components (e.g. mains cable, indicator lamp, etc.) please contact your Axair supplier.**

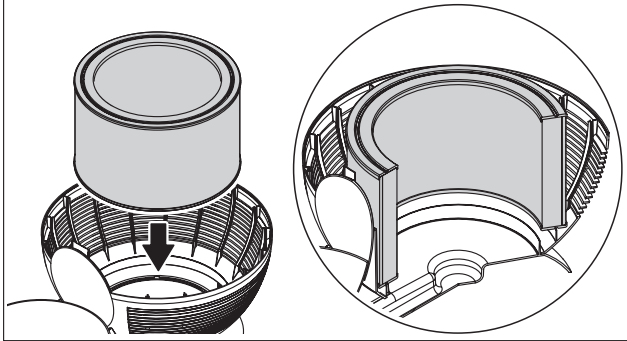
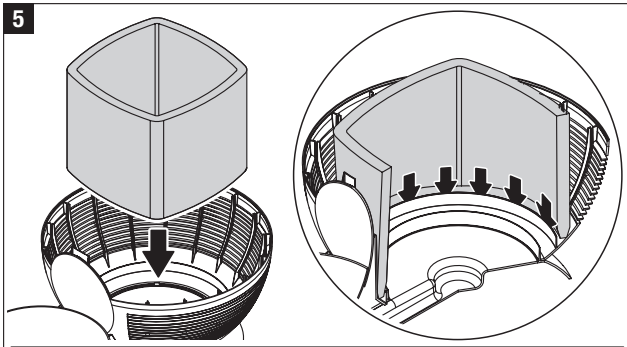


1. Push the impeller into the snap lock of the fan until it properly engages.
2. **Important!** After the impeller has properly engaged, turn it back and forth a couple of times. Then have the impeller rotate at high speed and check for eccentricity. Repeat above procedure as required.



3. Insert the air intake screen into the notches of the base tub, then lock the screen by turning it clockwise to the stop.
4. Locate the tank base in the base tub, then press the base down until it properly engages in the snap lock of the base tub.

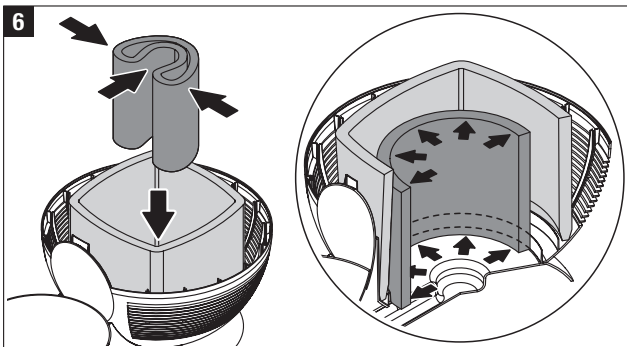




5. Insert the Triplex filter (or the Hepa filter, respectively) into the base tub (**Important!** Make sure the filter does not get in contact with water, **otherwise the filter must be replaced**).

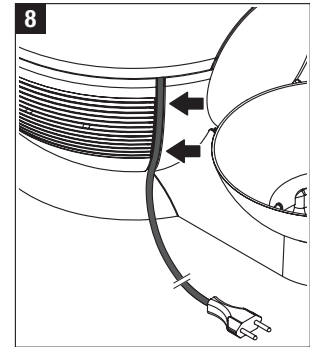
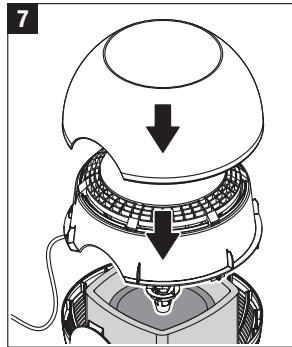
**Important!** When inserting the **Triplex filter** make sure the entire inner perimeter of the filter is located **behind the ridge** of the air intake screen.

**Important!** When inserting the **Hepa filter** make sure the entire inner perimeter of the filter is evenly located **on the ridge** of the air intake screen.



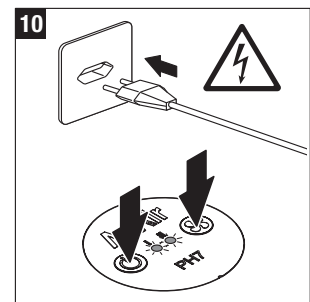
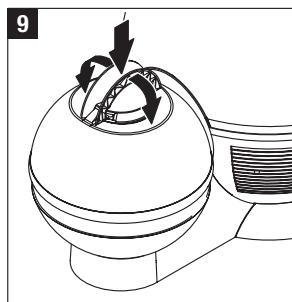
6. Fold the activated charcoal vaporizer mat (as shown in the figure above), then insert the mat into the base tub. Finally, unfold the activated charcoal vaporizer mat and press it towards the inner ridge of the base tub.

**Important!** Make sure the activated charcoal vaporizer mat is properly seated at the bottom of the base tub and does not rest on the ridge.



7. Place the fan housing on the air intake screen and align both parts. Then, put on the hood.

8. Lead the mains cable via the cable duct of the air intake screen down to the base tub.



9. Fill up the water tank (if required) and attach it to the unit.



10. **Reset the filter replacement indicator:** Connect the mains plug to the wall outlet. Then, **simultaneously press the On/Off and the fan speed keys** and keep them depressed (**approx. 4 seconds**) until **all LEDs light up briefly (approx. 2 seconds)**.

### 6.3 Disposal

Please observe the local regulations for correct disposal of the entire unit or particular components . If in doubt, consult your Axair supplier.

## 7 What if...?

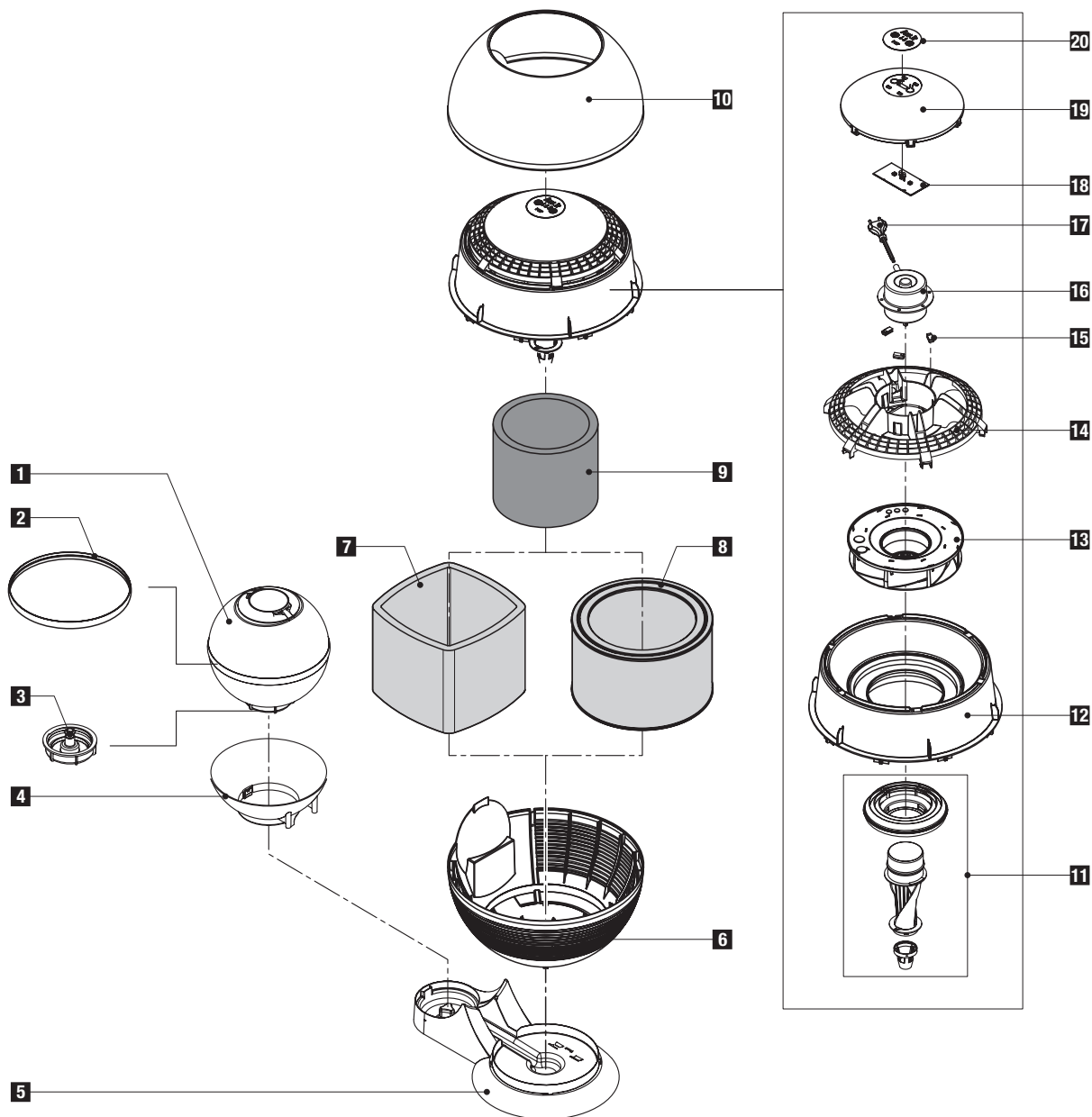
The following table lists symptoms of malfunction that may occur in daily operation, together with possible causes and suggested remedies.

Symptom	Cause	Remedy
<p><b>Unit does not operate after having pressed the On/Off key.</b></p>	<p>Unit is not connected to the mains or mains failure.</p> <p>Wrong mains voltage.</p> <p>Unit is defective.</p>	<p>Connect the unit to the mains or have the mains supply checked.</p> <p>Check main voltage.</p> <p>Contact your Axair supplier.</p>
<p><b>Unit is operational but emits a brushing sound.</b></p> <p> <b>Caution! Set unit out of operation without delay.</b></p>	<p>Fan housing mounted incorrectly.</p> <p>Impeller improperly located.</p>	<p>Mount fan housing correctly.</p> <p>Install impeller properly.</p>
<p><b>Insufficient humidification.</b></p>	<p>Accumulation of lime on impeller and/or activated charcoal vaporizer mat.</p> <p>No water in the water tank.</p> <p>Intake/exhaust slots of the fan housing and/or filter badly soiled.</p>	<p>Clean impeller. Clean or replace activated charcoal vaporizer mat.</p> <p>Fill up water tank.</p> <p>Clean fan housing. Clean or replace filter.</p>
<p><b>Unit is switched on, all LEDs are blinking (filter replacement indicator).</b></p>	<p>Filter and/or activated charcoal vaporizer mat soiled.</p>	<p>Clean or replace Filter and/or activated charcoal vaporizer mat.</p> <p><b>Important!</b> After filter replacement re-set filter replacement indicator.</p>
<p><b>Unit is switched on, one of the LEDs lights, fan does not rotate.</b></p> <p> <b>Caution! Set unit out of operation without delay.</b></p>	<p>Drive jammed:</p> <ul style="list-style-type: none"> <li>– Fan housing mounted incorrectly.</li> <li>– Impeller improperly located.</li> </ul> <p>Excess temperature switch of electric motor triggered:</p> <ul style="list-style-type: none"> <li>– Ambient temperature too high.</li> <li>– Wrong mains voltage.</li> <li>– Electric motor jammed or damaged.</li> </ul>	<p>Mount fan housing correctly.</p> <p>Install impeller properly.</p> <p>Remove the mains plug from the wall outlet and wait approx. <b>1 hour</b> (cooling time).</p> <p>The unit is designed for operation at room temperature.</p> <p>Check mains voltage.</p> <p>Contact your Axair supplier.</p>

## 8 Technical data

	Axair PH7		Axair PH7 Plus		
System					
Air cleaning:	three-layer filter with activated charcoal		Hepa filter with activated charcoal		
Air humidification:			cold evaporation		
Dimensions (W x H x D)			590 x 382 x 383 mm		
Weight			5.7 kg (dry)		
Mains connection			via twin-core power cord		
Supply voltage			220...240 V, 50/60 Hz or 100...115 V, 50/60 Hz		
Capacity per fan speed position	I	II	I	II	III
Air recirculation (m <sup>3</sup> /h)	100	145	80	100	130
Humidification capacity at 45 %rh and 23 °C (dl/h)	3.0	4.0	2.8	3.5	4.0
Power consumption at 230 V (W)	17	24	12	15	26
Acoustic capacity level (dBA)	46	53	44	48	52
Sound intensity level (dBA)	40	47	38	42	46
Impeller			polystyrene, attached to fan		
Triplex filter					
– Structure			coarse filter – activated charcoal filter – fine dust filter		
– Filter surface			0,2 m <sup>2</sup>		
Activated charcoal vaporizer mat			polyurethane foam with activated charcoal coating		
Water tank			made of transparent SAN with incorporated level regulating valve, removable capacity: 6.0 litres		
Base tub			made of impact-proof polystyrene, resistant to commercially available deliming and cleaning agents		
Admissible operating temperature			room temperature		
Admissible ambient humidity			0...80 %rh, non-condensing		
Conformity (standards)			SEV, VDE, GS, CE		

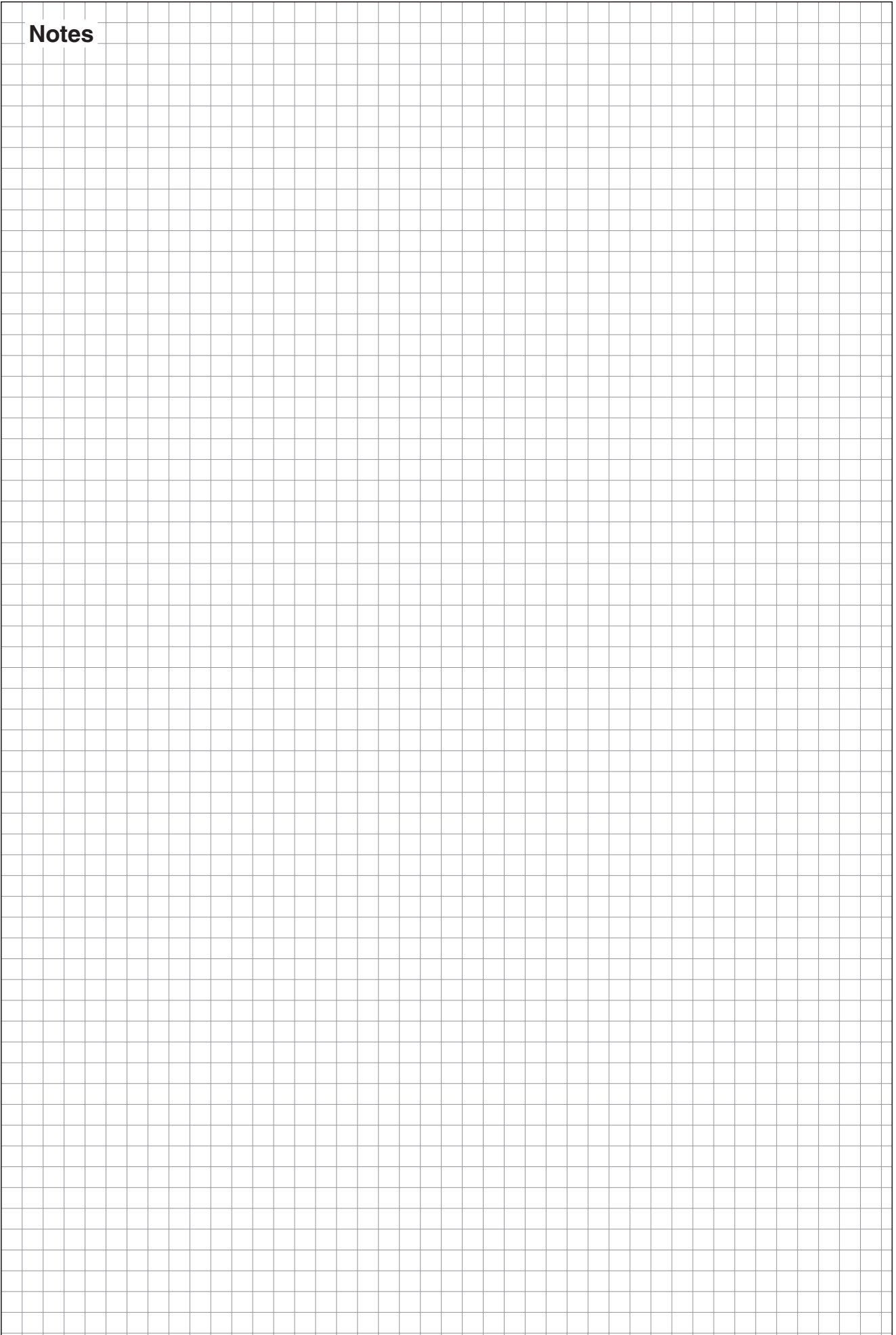
## 9 Spare parts list



Pos.	Spare parts	Type	SAP-No.
1	Water tank cpl.		1118659
2	Covering band		1118657
3	Level regulating valve		1104407
4	Tank base		1118677
5	Base tub		1118658
6	Air intake screen		1118660
7	Triplex filter		1118613
8	Hepa filter		1118614
9	Activated charcoal vaporizer mat		1118615
10	Hood, large		1118664
11	Impeller cpl.		1104377
12	Support		1118661
13	Fan		1118665
14	Motor support		1118662

Pos.	Spare parts	Type	SAP-No.
15	Set of rubber bearings (3 pcs.)		1118670
16	Motor	2-step, 230 V	1118666
		2-step, 100 V	1118667
		3-step, 230 V	1118668
		3-step, 100 V	1118669
17	Mains cable	normal	1103268
		Japanese	1115938
		Korean	1105876
18	Control unit	2-step, 230 V	1118672
		2-step, 100 V	1118673
		3-step, 230 V	1118674
		3-step, 100 V	1118675
19	Hood, small		1118663
20	Keypad	2-step (PH7)	1118678
		3-step (PH7 plus)	1118679

## Notes





Reg.No. 40002-2

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**AxAir**