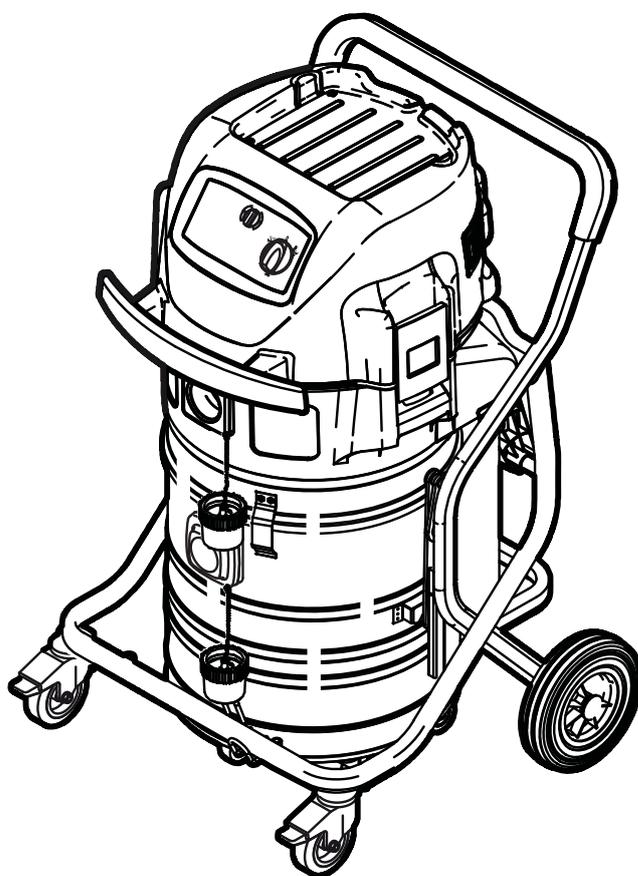


# IVB 995-0H/M SD XC Type 22

Operating Instructions



**CE**  
107400432 A



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# 1 Important safety instructions

## Symbols used to mark instructions



Prior to using the appliance for the first time, be sure to read this document through and keep it ready to hand.

	<b>DANGER</b>
	Danger that leads directly to serious or irreversible injuries, or even death.
	<b>WARNING</b>
	Danger that can lead to serious injuries or even death.
	<b>CAUTION</b>
	Danger that can lead to minor injuries and damage.

The appliance must

- only be used by persons, who have been instructed in its correct usage and explicitly commissioned with the task of operating it
- only be operated under supervision
- not be used by children

Before starting work, the operating staff must be informed on

- use of the vacuum cleaner
- risks associated with the material to be picked up
- safe disposal of the picked up materia

1. Do not use any unsafe work techniques.
2. Never use the vacuum cleaner without a filter.
3. Switch off the appliance and disconnect the mains plug in the following situations:
  - Prior to cleaning and servicing
  - Prior to replacing components
  - Prior to changing over the appliance
  - If foam develops or liquid emerges

Besides the operating instructions and the binding accident prevention regulations valid in the country of use, observe recognised regulations for safety and proper use.

## Purpose and intended use

Since 1997, there is a new division of hazardous dusts and their assigned vacuum machines. These are regulated by IEC 60335-2-69 (world wide) and by EN 60335-2-69 (European wide).

The safety label on the machine warns:

This appliance contains dust hazardous to health. Emptying and maintenance operations, including removal of the dust collecting means, must only be carried out by authorized personnel wearing suitable personal protection. Operate only after the full filtration system has been fitted and checked.



Dust Class M (medium). The dusts which belong to this class are: dusts with OEL values<sup>1)</sup> > 0.1 mg/m<sup>3</sup> as well as saw dust. The machine is tested in its entirety by vacuums for this dust class. The maximum degree of permeability is 0.1% and the disposal must be low dust.



Dust Class H (high). The dusts which belong to this class are: dusts with OEL values<sup>1)</sup>, all carcinogenic dusts and dusts which are mixed with pathogenic agents. Vacuums for Dust Class H are tested in their entirety and have a maximum degree of permeability of 0.005%. The disposal must be dust free.

Machines to be used in Zone 22 are marked as Type 22 vacuums.



- These machines may be used for picking up dust from dust class L, M or H.
- Zone 22 is defined as environments where flammable dusts are present for short periods only (e.g. less than 10 hours per year).
- Type 22 machines are suitable for use as dust extractors.

The air flow in safety vacuum systems has to be strictly controlled to achieve a minimum flow rate of  $V_{\min} = 20$  m/s in the suction hose.

The vacuum cleaner ATTIX 995-0H/M SD XC is suitable for picking up:

- Non flammable liquids (flashpoint 55 °C or higher).
- Sawdust and dusts hazardous to health, including dusts with OEL values, carcinogenic dusts and dusts containing germs and pathogens.
- Flammable, dry dust in Zone 22.

Use the cleaner only if it is certain that no active sources of ignition can be sucked in.

Conductive extraction equipment, e.g. extraction hoods on machines and conductive parts of machining equipment (e.g. equipment in protective class II) that are not earthed through the cleaner, must be earthed in some other way to prevent electrostatic charges.

When picking up flammable dust in Zone 22, the dirt tank must be emptied as required, but always after use.

It must be assured that dust not accumulate on the appliance by regular cleaning.

The vacuum cleaner must be used only, if all filters, as well as the filter for the motor cooling air, are attached and without damage.

The cleaner is not suitable for extraction on machining equipment in operation that could produce sources of ignition.

When dust removers are used, the rate at which air is exchanged in the room must be adequate if the exhaust air from the vacuum

<sup>1)</sup>OEL = Occupational Exposure Limit  
Original Instructions



cleaner is blown into the room (please observe regulations valid in your country).

The appliance is suitable for commercial use, such as e.g. in  
 • Hotels, Schools, Hospitals, Factories, Shops, Offices, Hire shops

Any other use is considered as improper use. The manufacturer accepts no liability for any damage resulting from such use. The risk for such use is borne solely by the user.

Proper use also includes proper operation, servicing and repairs as specified by the manufacturer.

### Transport

1. Before transporting the dirt tank, close all the locks.
2. Make sure that both plugs are inserted in fittings.
3. Do not tilt the cleaner if there is liquid in the dirt tank.
4. Do not use a crane hook to lift the cleaner.

### Storage

1. Store the appliance in a dry place, protected from frost.

### Electrical connection

1. It is recommended that the vacuum cleaner should be connected via a residual current circuit breaker.
2. When picking up flammable dust in zone 22, extension lines, couplings and adapters must not be used.
3. Arrange the electrical parts (sockets, plugs and couplings) and lay down the extension lead so that the protection class is maintained.
4. Connectors and couplings of power supply cords and extension leads must be watertight.

### Extension lead

1. As an extension lead, only use the version specified by the manufacturer or one of a higher quality.
2. When using an extension lead, check the minimum cross-sections of the cable:

Cable length	Cross section	
	< 16 A	< 25 A
up to 20 m	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
20 to 50 m	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>



## Maintenance, cleaning and repair

During the following work, ensure that dust is not unnecessarily spread around. Wear a P2 breathing mask.

Only carry out maintenance work described in the operating instructions.

Always pull out the mains plug before cleaning and maintenance of the vacuum cleaner.

During maintenance and cleaning, handle the vacuum cleaner in such a manner that there is no danger for maintenance staff or other persons.

In the maintenance area

1. Use filtered compulsory ventilation
2. Wear protective clothing
3. Clean the maintenance area so that no harmful substances get into the surroundings.

Before removing the vacuum cleaner from the area contaminated with harmful substances:

1. Clean the outside of the vacuum cleaner, wipe it clean or pack the vacuum cleaner in well sealed packaging
2. and avoid spreading deposited harmful dust.

Warning: Do not reuse the essential filter element after removal out of the appliance (only for class H appliances).

During maintenance and repair work all contaminated parts that could not be cleaned satisfactorily must be:

1. packed in well sealed bags
2. disposed of in a manner that complies with valid regulations for such waste removal.

At least once a year, a Nilfisk-ALTO technician or an instructed person must perform a technical inspection including filters, air tightness and control mechanisms. According to AA.22.201.2 appliances in class H must have their filtration efficiency checked once a year. If the efficiency of the filter does not fulfil the requirements for dust class H, the filter must be replaced, and the new filter must be tested according to AA.22.201.2.



# Risks

## Electrical components

	<p style="text-align: center;"><b>DANGER</b></p> <p>Electric shock due to faulty mains connecting lead. Touching a faulty mains connecting lead can result in serious or even fatal injuries.</p> <ol style="list-style-type: none"> <li>1. Do not damage the mains power lead (e.g. by driving over it, pulling or crushing it).</li> <li>2. Regularly check whether the power cord is damaged or shows signs of ageing.</li> <li>3. Have the faulty mains connecting lead replaced by your Nilfisk-Advance service representative or a qualified electrician prior to using the appliance again.</li> </ol>
	<p style="text-align: center;"><b>DANGER</b></p> <p>The upper section of the vacuum cleaner contains live components. Contact with live components leads to serious or even fatal injuries.</p> <ol style="list-style-type: none"> <li>1. Never spray water on to the upper section of the vacuum cleaner.</li> </ol>
	<p style="text-align: center;"><b>CAUTION</b></p> <p>Damage due to unsuitable mains voltage. The appliance can be damaged as a result of being connected to an unsuitable mains voltage.</p> <ol style="list-style-type: none"> <li>1. Ensure that the voltage shown on the rating plate corresponds to the voltage of the local mains power supply.</li> </ol>

## Picking up liquids

	<p style="text-align: center;"><b>CAUTION</b></p> <p>Picking up liquids. Due to their construction vacuum cleaners with a removable tank (SD) do not have an automatic level indicator. There is a risk of damage to the vacuum cleaner due to overfilling or of damage due to leakage of the picked up liquid.</p> <ol style="list-style-type: none"> <li>1. Never pick up more than 40 litres at once.</li> <li>2. Switch off the vacuum cleaner and empty the dirt tank.</li> </ol>
---	--

**Hazardous materials**

	<b>WARNING</b>	
	<p>Hazardous materials.</p> <p>Vacuuming up hazardous materials can lead to serious or even fatal injuries.</p> <p>1. The following materials must not be picked up by the vacuum cleaner:</p> <ul style="list-style-type: none"> <li>- hot materials (burning cigarettes, hot ash, etc.)</li> <li>- flammable, explosive, aggressive liquids (e.g. petrol, solvents, acids, alkalis, etc.)</li> <li>- mixtures of flammable dusts with liquids</li> <li>- explosive substances or substances considered to be similar in §1 of the law on explosives</li> <li>- flammable dusts with an extremely low minimum ignition energy &lt;1 mJ (also observe national regulations).</li> <li>- Highly reactive dusts or dusts with a high affinity to oxygen</li> </ul>	
		<b>WARNING</b>
<p>For dusts like titanium and magnesium additional requirements apply, consult your national labour authorities or the manufacturer of the vacuum cleaner.</p>		<b>WARNING</b>
<p>When the vacuum cleaner has been used with dust classified as "H", it is necessary to clean the machine thoroughly before using the machine with dust classified as "M" or lower.</p>		



**Spare parts and accessories**

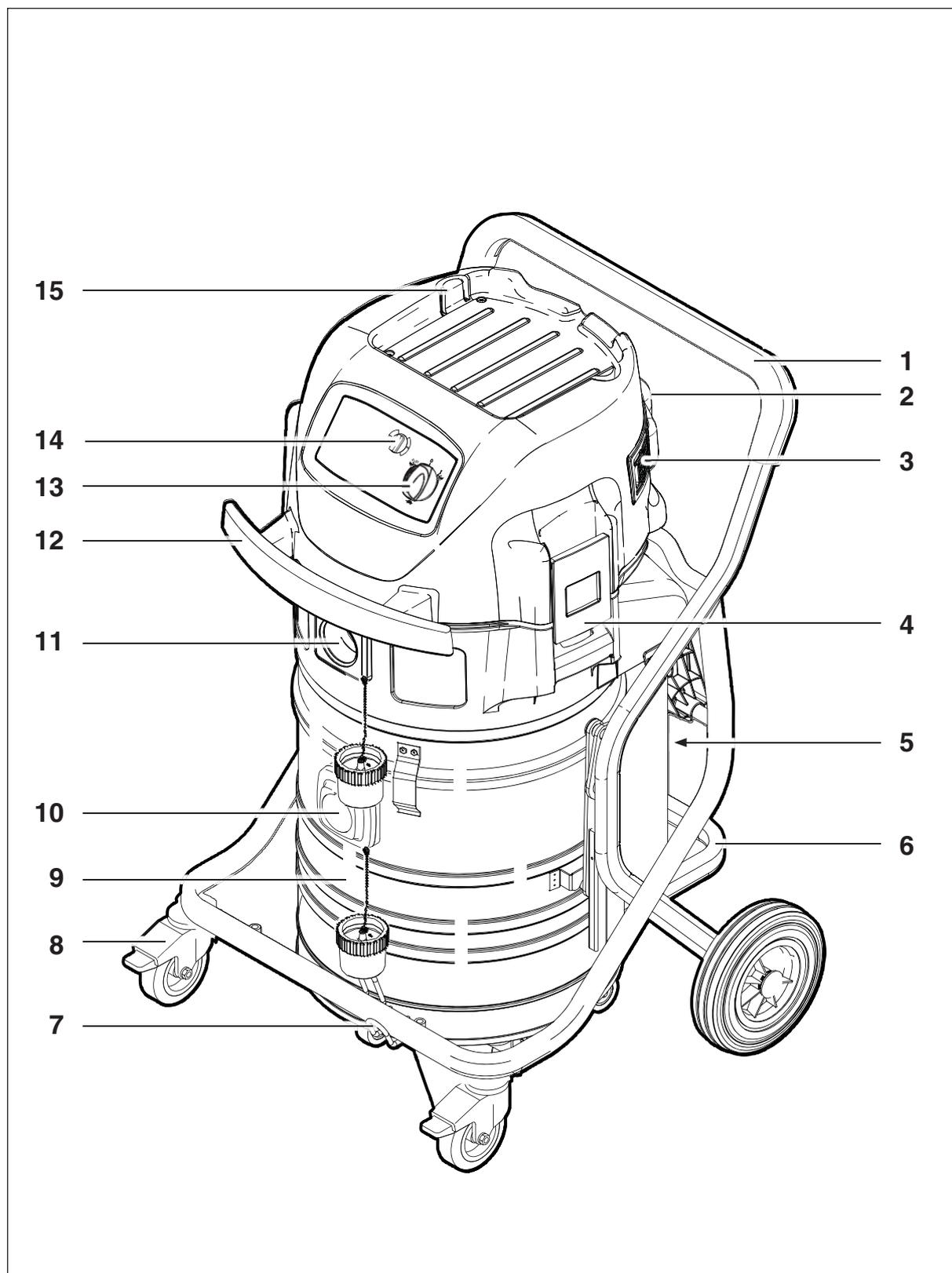
<b>CAUTION</b>	
	<p>Spare parts and accessories.</p> <p>For picking up flammable dust in Zone 22: Only use accessories which are certified by the manufacturer of the Type 22 machine. The use of other accessories can cause danger of explosion.</p> <p>The use of non-genuine spare parts and accessories can impair the safety of the appliance.</p> <ol style="list-style-type: none"> <li>1. Only use spare parts and accessories from Nilfisk-Advance.</li> <li>2. Use only the brushes supplied with the vacuum cleaner or specified in the operating manual.</li> </ol>

**Emptying dirt tank**

<b>CAUTION</b>	
	<p>Picking up environmentally hazardous materials.</p> <p>Materials picked up can present a hazard to the environment.</p> <ol style="list-style-type: none"> <li>1. Dispose of the dirt in accordance with legal regulations.</li> </ol>

## 2 Description

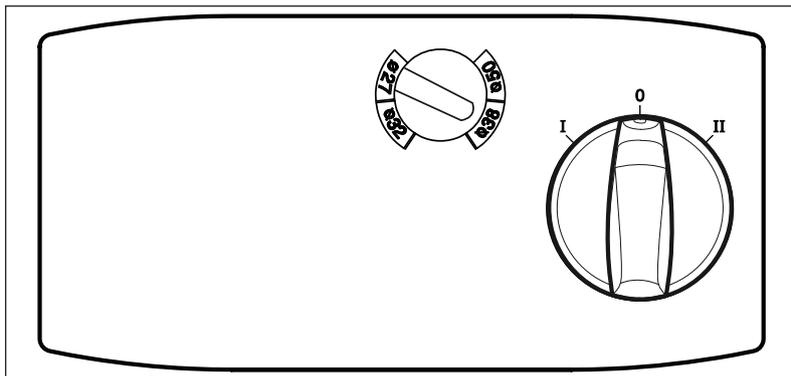
### 2.1 Operating elements





- 1 Handle
- 2 Outlet for waste air
- 3 Inlet for fresh air / Filter for air supply to motor
- 4 Retaining clamp
- 5 Grip to empty tank
- 6 Handle to remove dirt tank
- 7 Bracket for floor nozzle
- 8 Castor with brake
- 9 Dirt tank
- 10 Inlet fitting "H"
- 11 Inlet fitting "M"
- 12 Receptacle for electrical lead
- 13 Appliance switch "I-0-II"
- 14 Hose diameter setting
- 15 Accessory holder

## 2.2 Operating panel

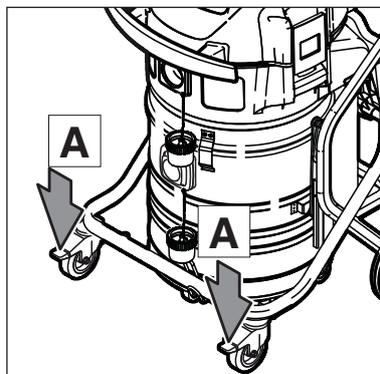


## 3 Before starting the cleaner

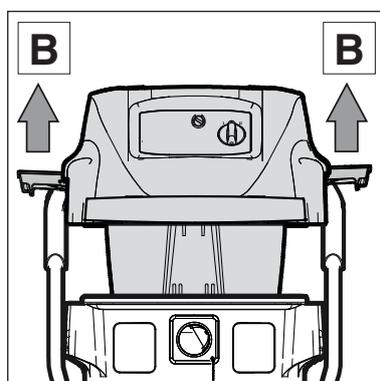
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### 3.1 Assembling the vacuum cleaner

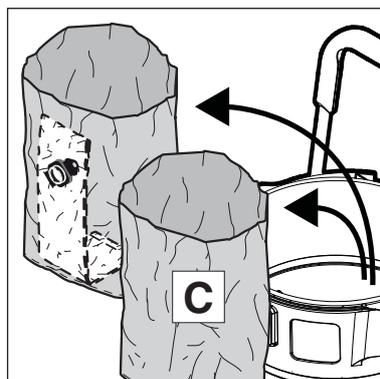
#### 3.1.1 Taking accessories out of the packaging



1. Take vacuum cleaner and accessories out of the packaging.
2. The mains plug should not yet be inserted into a socket.
3. Apply parking brakes (A) on both castors.



4. Open the retaining clamps (B) and remove the upper section of the vacuum cleaner.



5. Take the accessories (C) out of the dirt tank and the packaging.



### 3.1.2 Before starting the cleaner

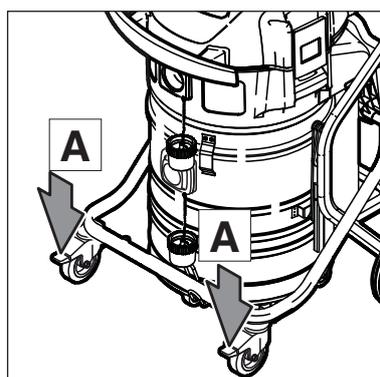
Depending on how hazardous the dust is, the cleaner must be fitted with appropriate filters:

Type of dust	Filter bag/waste bag
<ul style="list-style-type: none"> <li>• Non-hazardous dust</li> <li>• Wood dust</li> <li>• Non-carcinogenic dust with OEL values &gt; 0.1 mg/m<sup>3</sup> (observe any additional national regulations)</li> <li>• Explosive dust, dust explosion class St1, St2, St3 in Zone 22</li> </ul>	 <p>Waste bag (5 pcs.) Order No. 302001480</p>
<ul style="list-style-type: none"> <li>• All dusts with OEL values</li> <li>• Explosive dust, dust explosion class St1, St2, St3 in Zone 22</li> </ul>	 <p>Safety filter bag (5 pcs.) Order No. 302003473</p>
<ul style="list-style-type: none"> <li>• All dusts with OEL values</li> <li>• Explosive dust, dust explosion class St1, St2, St3 in Zone 22</li> </ul>	 <p>Filter element "H" Order No. 107400564</p>
<ul style="list-style-type: none"> <li>• All dusts with OEL values</li> <li>• Explosive dust, dust explosion class St1, St2, St3 in Zone 22</li> </ul>	 <p>Motor cooling filter "TYPE 22" Order No. 107400041</p>

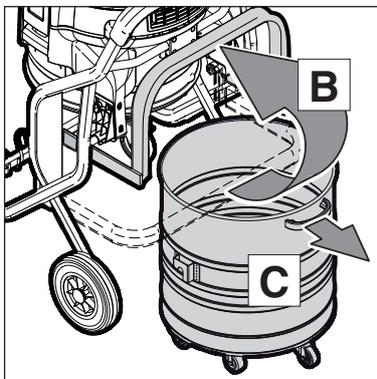
Before picking up dust with occupational exposure limit values:

1. Check that all the filters are present and properly fitted.
2. Do not use the cleaner with damaged or missing antistatic clamp. Risk of explosion due to static discharge in explosive atmospheres.
3. The hose diameter and the setting for the suction hose diameter must be the same.
4. When the motor is running, hold the suction hose shut. For safety reasons, an acoustic warning sounds if the air speed in the suction hose drops to below 20 m/s.

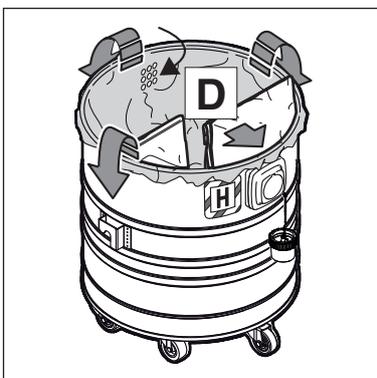
### 3.1.3 Inserting the safety filter bag



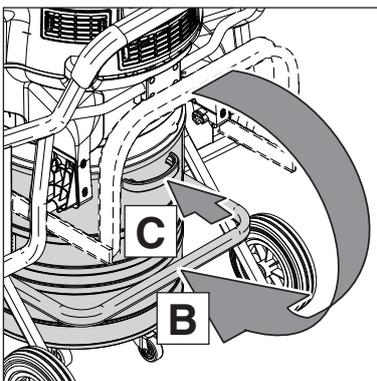
1. The mains plug should not yet be inserted into a socket.
2. Apply parking brakes (A) on both castors.



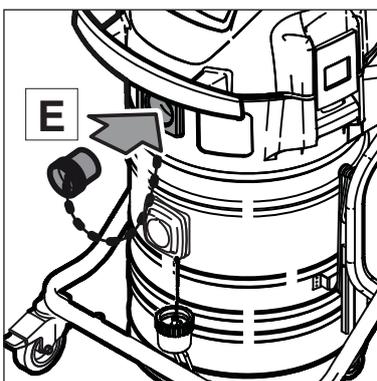
3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.



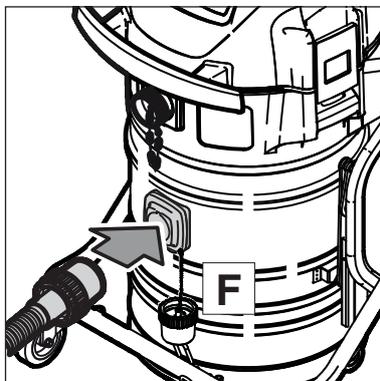
5. Insert the safety filter bag (D) in the dirt tank.
6. Fold the top edge of the disposal bag over the rim of the dirt tank.



7. Push the dirt tank as far as possible into the vacuum cleaner.
8. Swing the bar (B) downwards without forcing it.

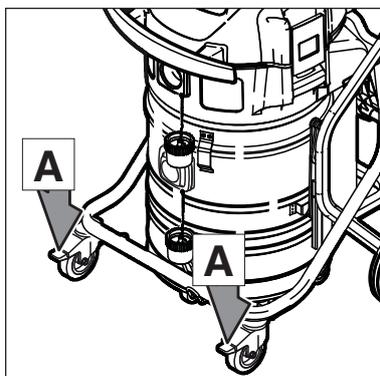


9. Close inlet fitting "M" (top) with plug (E).

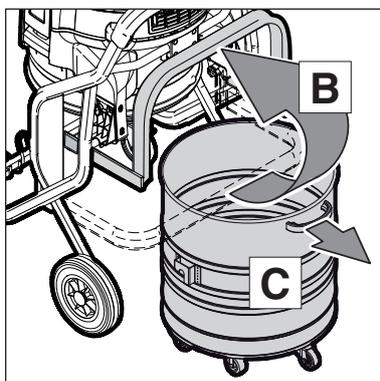


10. Connect suction hose to inlet fitting "H" (down) (F).

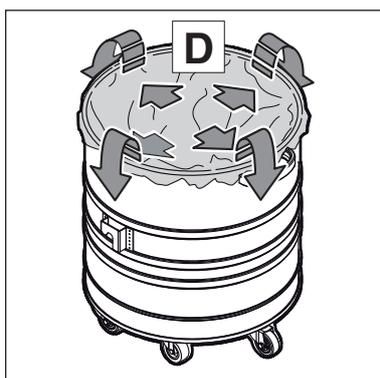
### 3.1.4 Inserting the disposal bag



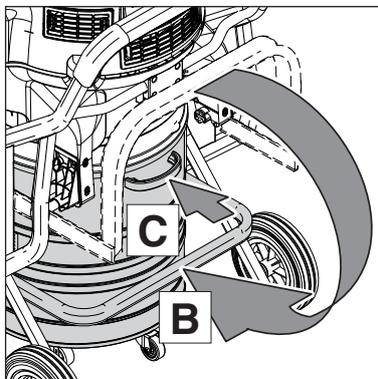
1. The mains plug should not yet be inserted into a socket.
2. Apply parking brakes (A) on both castors.



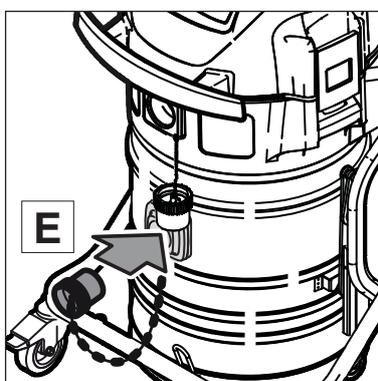
3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.



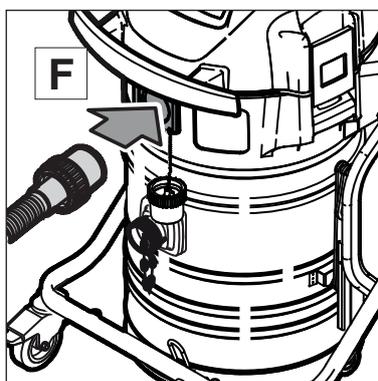
5. Insert the disposal bag (D) in the dirt tank.
6. Fold the top edge of the disposal bag over the rim of the dirt tank.



7. Push the dirt tank as far as possible into the vacuum cleaner.
8. Swing the bar (B) downwards without forcing it.



9. Close inlet fitting "H" (down) with plug (E).



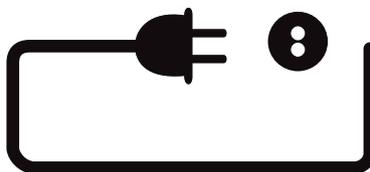
10. Connect suction hose to inlet fitting "M" (top) (F).

# GB 4 Operation

## 4.1 Connections

### 4.1.1 Electrical connection

The operating voltage shown on the rating plate must correspond to the voltage of the mains power supply.

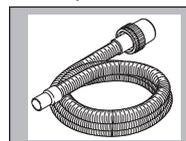


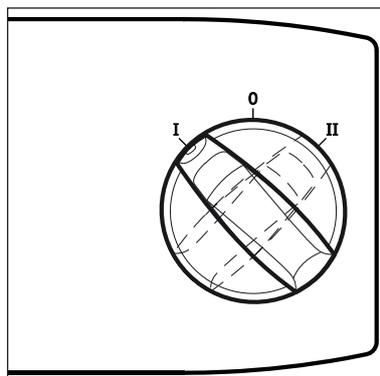
1. Ensure that the cleaner is switched off.
2. Insert the power cord into a properly installed and fused socket with earthing contact.

## 4.2 Switching on the vacuum cleaner

### 4.2.1 Switch „I-0-II“

The hose diameter and the setting for the suction hose diameter must correspond.

	
ø27	ø27
ø32	ø32
ø38	ø38
ø50	ø50



Switch position	Function
I	Reduced suction
0	Off
II	Maximum suction

## 4.3 Check volume flow monitor

Before picking up dust with maximum room concentration values:

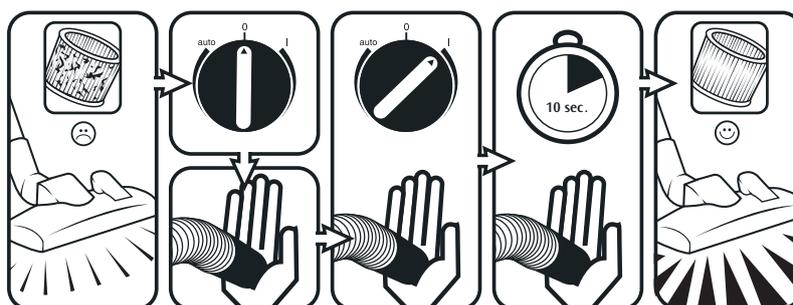
1. Check that all the filters, including the filter for supply air to the motor, are present, properly fitted and not damaged.
2. When the motor is running, hold the suction hose shut. An acoustic warning sounds after approx. 1 second.

## 4.4 Acoustic warning

For safety reasons, an acoustic warning sounds if the air speed in the suction hose drops to below 20 m/s. See section “Troubleshooting”.

#### 4.5 Cleaning the filter element

Only for vacuum cleaning without a cloth insert filter.



To ensure that suction performance is always at its best, the filter element is automatically cleaned during operation. We recommend complete cleaning if the filter element becomes extremely dirty.

1. Switch off the vacuum cleaner
2. Close the nozzles or suction hose opening with the palm of your hand.
3. Turn the switch to position „I“ and let the cleaner operate for approx. 10 seconds with the suction hose opening closed.

# **GB** 5 Applications and techniques

## 5.1 Techniques

If used correctly, additional accessories, suction nozzles and suction hoses can enhance the cleaning action and reduce the cleaning effort.

Effective cleaning is achieved if you follow just a few guidelines in combination with your own practical experience in special fields.

Here are some basic tips.

### 5.1.1 Picking up dry substances

There must always be a safety filter bag in the tank before dry substances with maximum room concentration values are picked up. See section "Optional accessories" for ordering number.

To pick up harmless dust we recommend the use of a waste bag. See section "Optional accessories" for ordering number. Disposal of the picked up material is then simple and hygienic.

After picking up liquids, the filter element is wet. A damp filter element clogs more quickly when dry substances are picked up. For this reason the filter element should be washed and dried or replaced by a dry element before dry substances are picked up.

### 5.1.2 Picking up liquids

#### **CAUTION!**

Do not pick up flammable liquids.

Before liquids are picked up, always remove the filter bag/disposal bag.

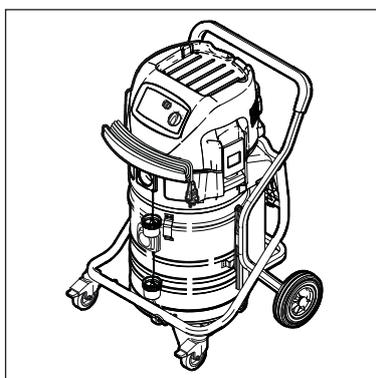
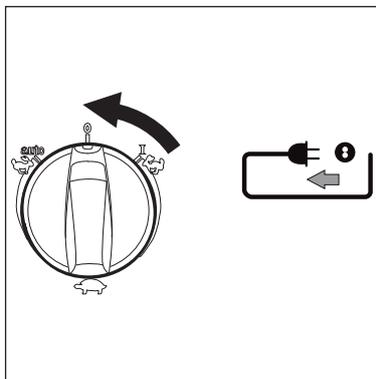
The use of a separate filter element or filter screen is recommended.

If foam appears, stop work immediately and empty the tank.

To reduce the amount of foam, use foam killer Alto Foam Stop (see section "Accessories" for order number).

## 6 After finishing work

### 6.1 Switching the vacuum cleaner off and storage



1. After picking up hazardous dust, vacuum clean the outside of the cleaner.
2. Switch off the vacuum cleaner and pull the mains plug out of the socket.
3. Make sure that both plugs are inserted in fittings.
4. Wind up the power cord and hang it on the handle.
5. Empty the tank and clean the vacuum cleaner.
6. After picking up liquids: Store the upper section of the cleaner separately so that the filter element can dry.
7. Store the vacuum cleaner in a dry room where it is protected from unauthorized use.

# 7 Maintenance

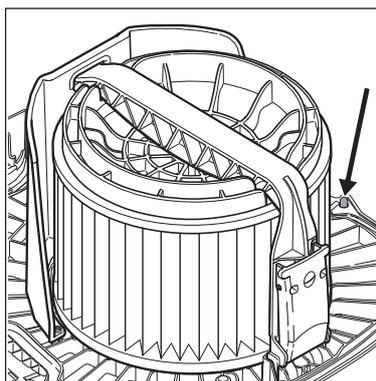
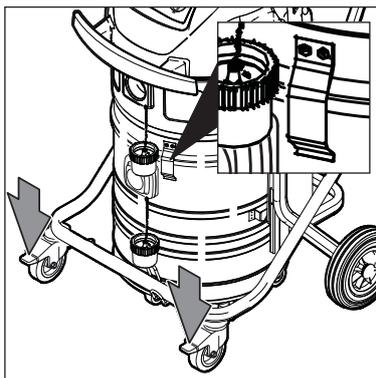
## 7.1 Maintenance plan

		When replacing the filter bag, waste bag or filter element	After finishing work	When required
7.2.1	Check the antistatic clamps	●		
7.2.2	Emptying the dirt tank		●	
7.2.3	Replacing the disposal bag			●
7.2.4	Replacing the safety filter bag			●
7.2.5	Replacing the filter element "H"			●
7.2.6	Replacing the filter for air supply to motor			●

## 7.2 Maintenance work

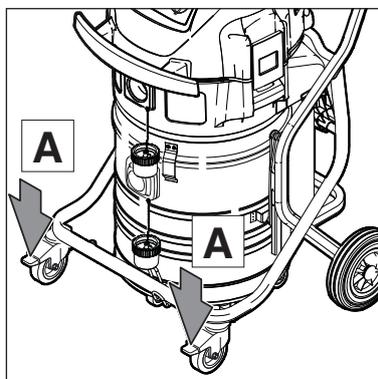
### 7.2.1 Check the antistatic clamps

*Do not use the cleaner with damaged or missing antistatic clamps. Risk of explosion due to static discharge in explosive atmospheres.*

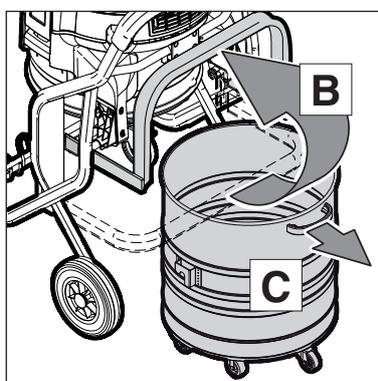


1. Check the antistatic clamps for damage and have them replaced by Nilfisk-Advance Service if necessary.

## 7.2.2 Emptying the dirt tank



1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.



### Removing the dirt tank:

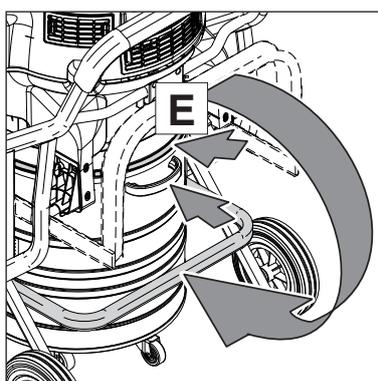
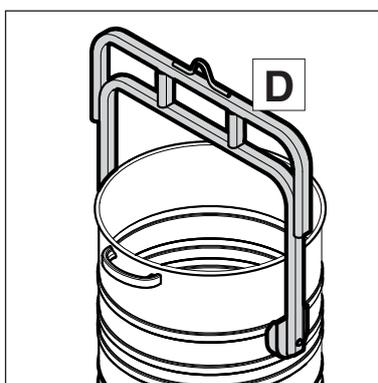
3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.

5. Tipping out the collected dirt:

#### **WARNING!**

If heavy dirt has been picked up, never lift the dirt tank alone. Use the FORKLIFT (D), which is available as an accessory.

6. Use a crane or fork lift truck to position the FORKLIFT above the dirt tank.
7. Attach the tank to the accessory.
8. Dispose of the dirt in accordance with legal regulations.

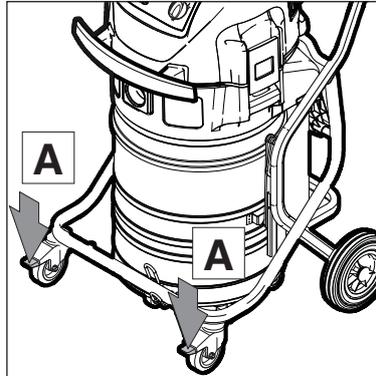


### Inserting the dirt tank:

9. Clean the dirt tank.
10. Check the seals (E) between the tank and the upper section of the vacuum cleaner.
11. Push the dirt tank as far as possible into the vacuum cleaner.
12. Swing the bar (B) downwards without forcing it.



### 7.2.3 Replacing the disposal bag



1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.

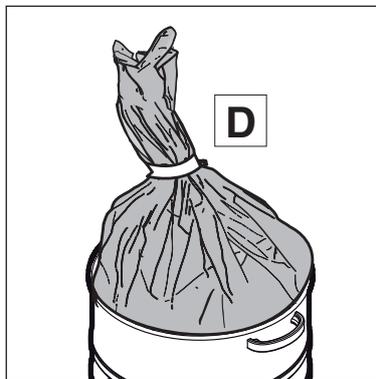
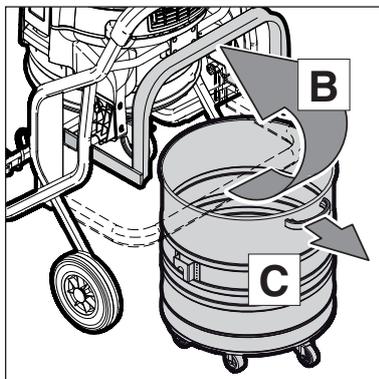
#### Removing the disposal bag:

3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.
5. Close the disposal bag with string (D) and remove it from the dirt tank.

#### WARNING!

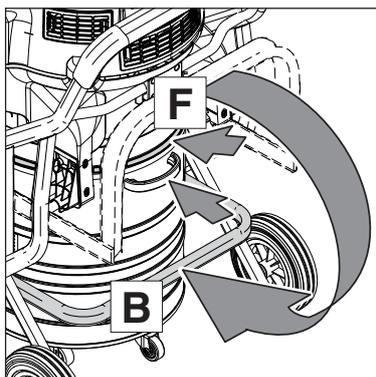
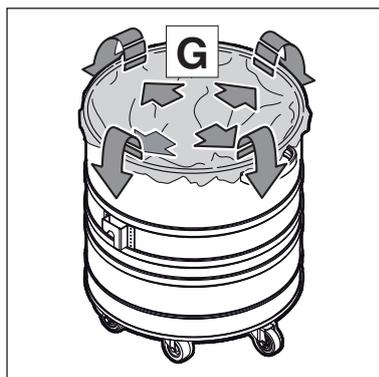
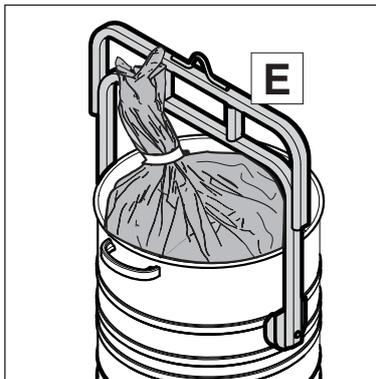
If heavy dirt has been picked up, never lift the dirt tank alone. Use the FORKLIFT (E), which is available as an accessory.

6. Use a crane or fork lift truck to position the FORKLIFT above the dirt tank.
7. Attach the tank to the accessory.
8. Dispose of the dirt in accordance with legal regulations.



#### Inserting the disposal bag:

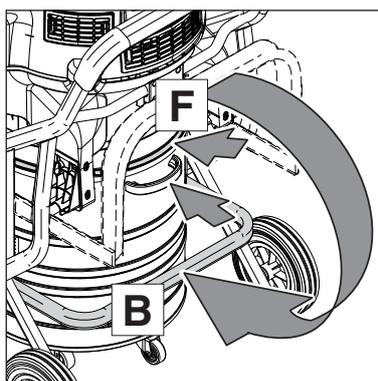
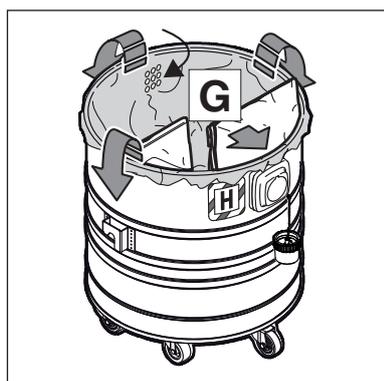
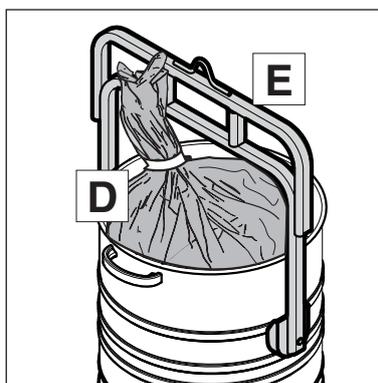
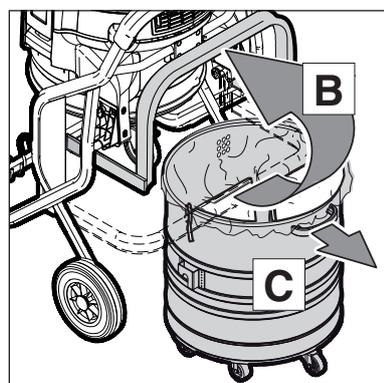
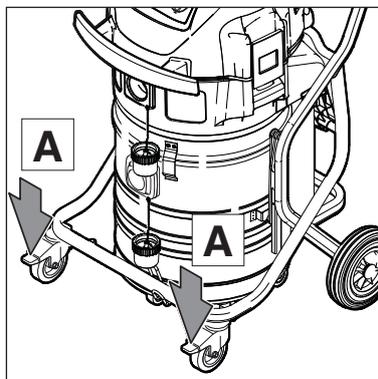
9. Clean the dirt tank.
10. Check the seals (F) between the tank and the upper section of the vacuum cleaner.
11. Insert the disposal bag (G) in the dirt tank.
12. Fold the top edge of the disposal bag over the rim of the dirt tank.
13. Push the dirt tank as far as possible into the vacuum cleaner.
14. Swing the bar (B) downwards without forcing it.



### 7.2.4 Replacing the safety filter bag

During the following work, ensure that dust is not unnecessarily spread around. Wear a P2 breathing mask.

Never use the vacuum cleaner without a filter.



1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.

#### Removing the safety filter bag:

3. Swing the bar (B) upwards.
4. Use the handle (C) to pull the dirt tank out of the vacuum cleaner.
5. Close the disposal bag with string (D) and remove it from the dirt tank.  
**WARNING!** If heavy dirt has been picked up, never lift the dirt tank alone. Use the FORKLIFT (E), which is available as an accessory.
6. Use a crane or fork lift truck to position the FORKLIFT above the dirt tank.
7. Attach the tank to the accessory.
8. Dispose of the dirt in accordance with legal regulations.

#### Inserting the safety filter bag:

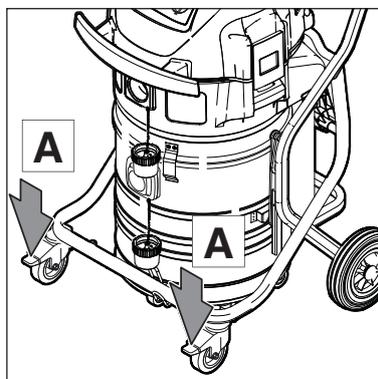
9. Clean the dirt tank.
10. Check the seals (F) between the tank and the upper section of the vacuum cleaner.
11. Insert the safety filter bag (G) in the dirt tank.
12. Fold the top edge of the disposal bag over the rim of the dirt tank.
13. Push the dirt tank as far as possible into the vacuum cleaner.
14. Swing the bar (B) downwards without forcing it.



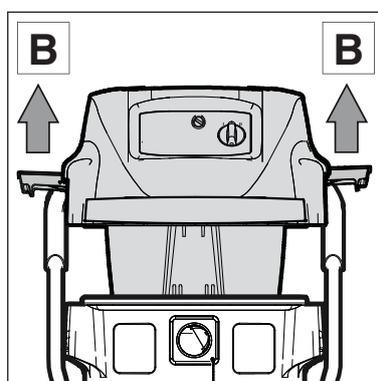
### 7.2.5 Replacing the filter element "H"

*During the following work, ensure that dust is not unnecessarily spread around. Wear a P2 breathing mask.*

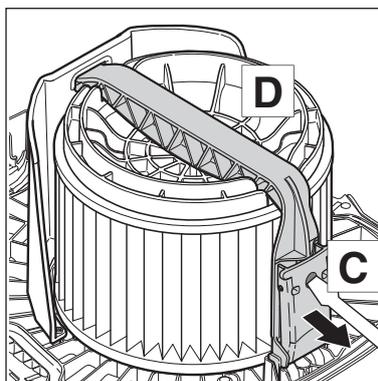
*Never use the vacuum cleaner without a filter.*



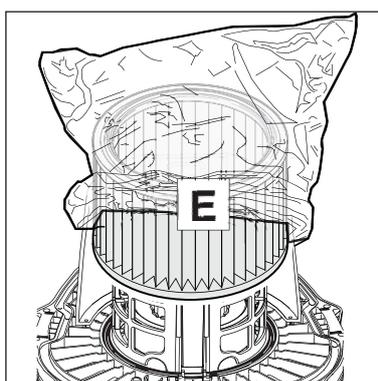
1. Switch off the vacuum cleaner and pull the mains plug out of the socket.
2. Apply parking brakes (A) on both castors.



3. Open the retaining clamps (B) and remove the upper section of the vacuum cleaner.



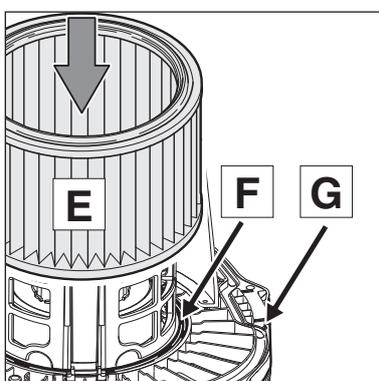
- Remove the filter element:**
4. Lay the upper section of the cleaner down with the filter element facing upwards.
  5. Unscrew the screw (C), open the bar handle and remove it.
  6. Remove the filter holder (D).



7. Place the protective filter bag over the filter element.

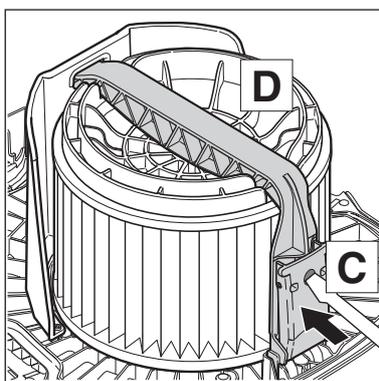


8. Carefully remove the filter element and close the protective filter bag with a knot.



#### Inserting the filter element:

9. Clean the filter seal (F). Check it for damage and replace it if necessary.
10. Check the antistatic clamp (G) for damage and have it replaced by Nilfisk-Advance Service if necessary.
11. Fit a new filter element (E).

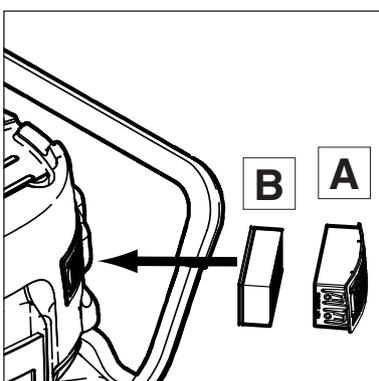


12. Fit the filter holder (D). Ensure that it is in the correct position.
13. Fit bar and close bar handle (C).
14. Dispose of the used filter element in accordance with legal regulations.

### 7.2.6 Replacing the filter for air supply to motor

*During the following work, ensure that dust is not unnecessarily spread around. Wear a P2 breathing mask.*

*Never use the vacuum cleaner without a filter.*



1. Remove filter cassette (A).
2. Remove filter element (B) from filter cassette.
3. Dispose of the used filter element in accordance with legal regulations.
4. Fit a new filter element.
5. Attach the filter cartridge.

## **GB** 8 Troubleshooting

<b>Fault</b>	<b>Cause</b>	<b>Remedy</b>
‡ Motor does not start	<ul style="list-style-type: none"> <li>&gt; Fuse of the mains socket has blown.</li> <li>&gt; Overload protection switch has tripped.</li> <li>&gt; Motor is faulty.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect mains fuse.</li> <li>• Switch off the vacuum cleaner and allow it to cool for approx. 5 minutes. If the cleaner cannot be started again, contact the Nilfisk-Advance service department.</li> <li>• Have motor changed by Nilfisk-Advance Service.</li> </ul>
‡ The acoustic warning sounds. (Reduced suction power)	<ul style="list-style-type: none"> <li>&gt; Suction power selected with suction power control is too low.</li> <li>&gt; Hose diameter and switch position do not correspond.</li> <li>&gt; Clogged suction hose/nozzle.</li> <li>&gt; Tank, disposal bag or safety filter bag is full.</li> <li>&gt; Filter element is clogged.</li> <li>&gt; Cleaning mechanism is defective.</li> </ul>	<ul style="list-style-type: none"> <li>• Set suction power in accordance with section „Switching on the vacuum cleaner“.</li> <li>• Set correct switch position for hose diameter.</li> <li>• Clean suction hose/nozzle</li> <li>• See "Emptying tank" or "Replacing disposal bag, safety filter bag" sections.</li> <li>• See section „Cleaning filter element“ and „Replacing filter element“.</li> <li>• Contact Nilfisk-Advance Service.</li> </ul>
‡ No suction power during wet cleaning	<ul style="list-style-type: none"> <li>&gt; Tank is full.</li> </ul>	<ul style="list-style-type: none"> <li>• Switch off the cleaner. Empty the tank.</li> </ul>
‡ Voltage fluctuations	<ul style="list-style-type: none"> <li>&gt; Impedance of power supply is too high.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect the cleaner to another socket closer to the fuse box. Voltage fluctuations over 7% should not occur if the impedance at the transfer point is <math>\leq 0.15 \Omega</math>.</li> </ul>

## 9 Further information



### 9.1 Recycling the vacuum cleaner

Make the old cleaner unusable immediately:

1. Unplug the cleaner
2. Cut the power cord.
3. Do not discard of electrical appliances with household waste.



As specified in European Directive 2002/96/EC on old electrical and electronic appliances, used electrical goods must be collected separately and recycled ecologically.

Contact your local authorities or your nearest dealer for further information.

### 9.2 Guarantee

Our general conditions of business are applicable with regard to the guarantee.

Unauthorised modifications to the appliance, the use of incorrect brushes in addition to using the appliance in a way other than for the intended purpose exempt the manufacturer from any liability for the resulting damage.

### 9.3 Tests and approvals

Electrical tests must be performed in accordance with the provisions of safety regulations (VBG4) and to DIN VDE 0701 Part 1 and Part 3. In accordance with DIN VDE 0702 these tests must be performed at regular intervals and after repairs or modifications.

The vacuum cleaner has been approved in accordance with IEC/EN 60335-2-69.

Equally, the cleaners fulfil the requirements of the ATEX regulation 94/9/EG for use in zone 22.

### 9.4 EC declaration of conformity

	<b>EC conformity declaration</b>
NILFISK-ADVANCE A/S Sognevej 25 DK-2605 Brøndby	
<b>Product:</b>	Vacuum cleaner for wet and dry operation
<b>Model:</b>	IVB 995-0H/M SD XC Type 22
<b>Description:</b>	230-240 V~, 50/60 Hz, 2x1200W Dust Class M and H ATEX Zone 22  II 3D Ex tD A22 T135 °C IP54
<b>The design of this appliance complies with the following provisions:</b>	EC - Machinery Directive 2006/42/EC EC - Directive EMC 2004/108/EC EC - Explosive Atmosphere directive 94/9/EC „ATEX“
<b>Applied harmonized standards:</b>	EN ISO 12100-1 (2004), EN ISO 12100-2 (2004), EN 55014-1 (2006), EN 55014-2 (2001), EN 61000-3-2 (2006), EN 61241-1 (2004), EN 61241-10 (2004)
<b>Applied national standards and technical specifications:</b>	EN 60335-2-69 (2009) IEC 60335-2-69 (2008)
 Anton Sørensen General Manager EAPC Technical Operations	Brøndby, 2008-06-01



## 9.5 Technical data

IVB			
		995-0H/M SD XC Type 22	
		EU	GB
Voltage	V	230	
Mains frequency	Hz	50/60	
Fuse	A	16	13
Power consumption <sub>IEC</sub>	W	2x1100	
Total connected load	W	2200	
Air flow rate	m <sup>3</sup> /h l/min	2 x 216 2 x 3600	
Vacuum	hPa/mbar kPa	230 23	
Sound pressure level at a distance of 1 m, EN 60704-1	dB(A)	70 ± 2	
Sound level	dB(A)	67 ± 2	
Power cord: Length	m	10	
Power cord: Type		H07RN-F3G1,5 mm <sup>2</sup>	H05RR-F3G1,5 mm <sup>2</sup>
Protection class		I	
Type of protection (splash water protected)		IP 54	
Radio interference level		EN 55014-1	
Tank volume	l	50	
Width	mm	615	
Depth	mm	690	
Height	mm	990	
Weight	kg	45	

## 9.6 Optional accessories

Description	Order No.
Safety filter bag (5 pcs.)	302003473
Disposal bag (5 pcs.)	302001480
Filter element "H"	107400564
Protective filter bag (10 pcs.)	30082
Filter screen	302002885
Alto-Foam-Stop (6 x 1 l)	8469



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