

Industrial Vacuum Cleaner

Operating Instructions

GB

BA1002

01/17

156905

156904

156903

160720



JUNGHEINRICH
PROFI
SHOP

Foreword

Notes on the operating instructions

The present ORIGINAL OPERATING INSTRUCTIONS are designed to provide sufficient instruction for the safe operation of the industrial vacuum cleaner. The information is presented in a precise and clear manner. The chapters are arranged by letter and the pages are numbered continuously.

These operating instructions describe a number of industrial vacuum cleaner versions. When operating and servicing the industrial vacuum cleaner, make sure that the particular section applies to your model.

Our equipment is subject to ongoing development. We reserve the right to alter the design, features and technical aspects of the equipment. No guarantee of particular features of the equipment should therefore be assumed from the present operating instructions.

Safety notices and labeling

Safety instructions and important explanations are indicated by the following icons:

DANGER!

Indicates an extremely hazardous situation. Failure to comply with this instruction will result in severe irreparable injury and even death.

WARNING!

Indicates an extremely hazardous situation. Failure to comply with this instruction may result in severe irreparable injury and even death.

CAUTION!

Indicates a hazardous situation. Failure to comply with this instruction may result in slight to medium injury.

NOTE

Indicates a material hazard. Failure to comply with this instruction may result in material damage.



Used before notices and explanations.

- Denotes standard equipment
- Denotes optional equipment

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A Correct Use

1 General

The industrial vacuum cleaner described in the present operating instructions is suitable for sucking up water from the ground, always without a motor protection filter, or for sucking up dry dirt particles, always with a motor protection filter.

The industrial vacuum cleaner must be used, operated and serviced in accordance with the present instructions. All other types of use are beyond its scope of application and may result in damage to personnel, the industrial vacuum cleaner or property.

2 Correct Use

- Sucking up dirty water from the floor.
- Sucking up dry dirt particles from the floor.
- It is forbidden to suck up water out of containers or recesses.
- It is forbidden to suck up inflammable or volatile liquids.
- It is forbidden to operate the appliance in areas where there is a risk of explosion.

3 Permissible Operating Conditions

- Operation in private and commercial environments.

4 Operating Company Responsibilities

For the purposes of the present operating instructions the “operating company” is defined as any natural or legal person who either uses the industrial vacuum cleaner himself, or on whose behalf it is used. In special cases (e.g. leasing or renting) the operating company is considered to be the person who, in accordance with existing contractual agreements between the owner and user of the industrial vacuum cleaner, is charged with operational duties.

The operating company must ensure that the industrial vacuum cleaner is used only for the purpose for which it is intended and that danger to life and limb of the user and third parties is excluded. Furthermore, accident prevention regulations, safety regulations and operating, servicing and repair guidelines must be followed. The operating company must ensure that all users have read and understood these operating instructions.

NOTE

Failure to comply with the operating instructions shall invalidate the warranty. The same applies if improper work is carried out on the appliance by the customer or third parties without the permission of the manufacturer.

5 Fitting Attachments and/or Accessories

Fitting accessories

The mounting or installation of additional equipment which affects or enhances the performance of the industrial vacuum cleaner requires the written permission of the manufacturer. Local-authority approval may also need to be obtained.

Local-authority approval, however, does not replace the manufacturer's approval.

B Description of the Appliance

1 Types

	Rated power	Collection container
160720	1300 W	15 l
156905	1500 W	30 l
156904	2400 W	70 l
156903	3000 W	80 l



2 Assemblies and Functional Description

2.1 Assembly overview

 The following illustration shows 156903.



Item		Description	Item		Description
1	●	ON/OFF switch	5	●	Rollers
2	●	Motor unit	6	●	Vacuum nozzle
3	●	Discharge hose, only for 156903 and 156904	7	●	Suction pipe
4	●	Collection container			
	●	Standard equipment		○	Optional equipment

2.2 Functional Description

Safety mechanisms

- The motor unit is equipped with a float which interrupts the suction when the maximum quantity of water in the collection container has been reached. This can be clearly perceived when the sound changes during use.

NOTE

The 160720 model is equipped with a motor (1300 W) which is switched on and off with a switch.

The 156905 model is equipped with a motor (1500 W) which is switched on and off with a switch.

The 156904 model is equipped with two motors (each 1200 W) which can be each switched on and off with their own switch. This allows the suction power to be regulated in two steps according to requirements.

The 156905 model is equipped with three motors (each 1000 W) which can be each switched on and off with their own switch. This allows the suction power to be regulated in three steps according to requirements.

3 Technical Specifications

	160720	156905	156904	156903	
Suction	Wet/dry	Wet/dry	Wet/dry	Wet/dry	
Rated power	1300	1500	1200/2400	1000/2000/ 3000	W
Nominal volume	15	30	70	80	L
Dimensions (L x W x H)	42 x 42 x 57	50 x 46 x 77	60 x 52 x 90	60 x 52 x 98	mm
Suction-nozzle diameter	Ø 36	Ø 40	Ø 40	Ø 40	mm
Flow rate, max.	48	48	106	120	l/s
Suction power, max.	1800	2200	2500	3200	mm Water column
Rated voltage	220-240, 50/60	220-240, 50/60	220-240, 50/60	220-240, 50/60	V~, Hz
Length of mains cable	7,2	7.2	7.2	7.2	m
Protection class	IPX4	IPX4	IPX4	IPX4	
Weight incl. accessories	11,3	13.7	22.1	25.1	kg

3.1 EN standards

Continuous sound pressure level

- 160720: ≤ 80 dB(A)
- 156905: ≤ 75 dB(A)
- 156904: ≤ 80 dB(A)
- 156903: ≤ 85 dB(A)

according to EN 2006/42/EG in accordance with ISO 4871.



The continuous sound pressure level is a mean value calculated according to the relevant standard. The sound pressure level is measured at the driver's ear.

Electromagnetic compatibility (EMC)

The manufacturer confirms that the appliance adheres to the limiting values for electromagnetic emissions and interference immunity as well as the static electricity discharge test in accordance with EMV 2004/108/EG as well as the standardised instructions contained therein.



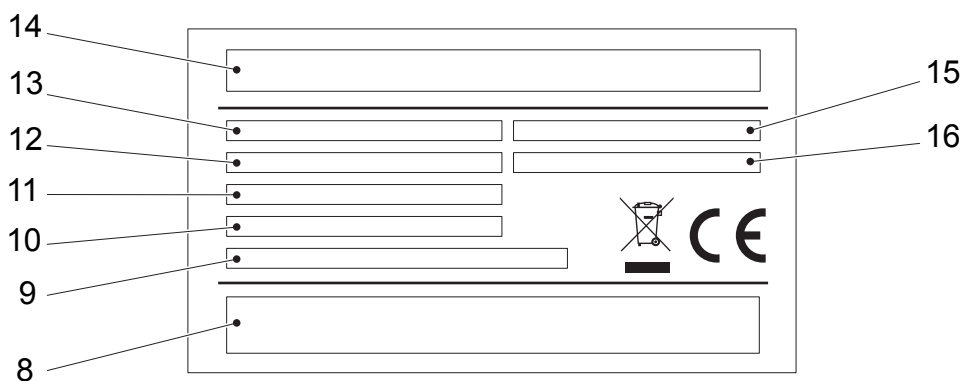
No changes to electric or electronic components or their arrangement may be made without the written agreement of the manufacturer.

3.2 Operating Conditions

Ambient temperature

- for use between 5°C and 40°C

3.3 Data Plate



Item	Description	Item	Description
8	Manufacturer	13	Article number (Art. No.)
9	Year of manufacture	14	Description
10	Weight	15	Capacity
11	Protection class	16	Power
12	Volt		



For queries relating to the industrial vacuum cleaner or when ordering spare parts always quote the article number (13).

C Transport

WARNING!

Accidental movement during transport

An incorrectly secured industrial vacuum cleaner can result in serious accidents during transport.

- The industrial vacuum cleaner must be correctly secured when transported on a lorry or a trailer.
- Use only lashing equipment with sufficient strength.

D Operation

1 **Safety Regulations for the Operation of the Industrial Vacuum Cleaner**

Users and certain groups of persons

This appliance is not intended to be used by persons (including children) with reduced physical, sensory or mental abilities or who lack the relevant experience and/or knowledge unless they are supervised by a person responsible for their safety or have been instructed by this persons in the use of this device. Store the appliance where it is accessible for this group of persons.

Children should be supervised to ensure that they do not play with the appliance.

Users must have read and understood these operating instructions in full.

Users must be fully aware of potential dangers when using this appliance and know how to avoid these.

Users must be alert at all times. They should be neither fatigued nor under the influence of medicaments or other drugs. Working under time pressure or when fatigued is dangerous.

Users must ensure that the work area is clear of other persons or animals.

Unauthorised use of the appliance

This appliance may only be used by persons aged 18 year or older.

Persons above 16 years of age may use the appliance if they have been instructed in its use by the operator and are supervised by the operator while operating it.

The user is responsible for the industrial vacuum cleaner during the time it is in use. The operator must prevent unauthorised persons from using the industrial vacuum cleaner.

Electrical hazards



Risk of electric shock! This appliance works at a dangerous voltage.

Working with liquids in connection with electrical appliances requires the highest level of awareness!

Inattentiveness when carrying out routine tasks is a common cause of accidents. Make sure that your hands are dry when plugging in or pulling out the mains plug or when using the appliance. Non-observance can result in an electric shock.

The appliance should not be subjected to dripping or sprayed water. If the appliance has come into contact with water or other liquids, there is a risk of electric shock. Disconnect from the mains immediately!

Never immerse the motor unit in water or other liquids! Never rinse the motor unit with water or cleaning agents!

Only connect the appliance to a correctly installed socket with a voltage that corresponds to the technical data.

When using an intermediate plug or an extension cable, these must comply with the valid safety regulations. The specified maximum current rating must not be exceeded. If the maximum current rating is exceeded, there is a risk of fire!

The mains cable must be completely unwound before use. Ensure that the mains cable does not get stuck, crushed or damaged by sharp edges or hot objects.

The extension cable and the intermediate connector should never lie in pools of water.

The socket should be freely accessible to allow the mains plug to be pulled quickly when necessary.

Do not use the appliance if:

- it is damaged.
- accessories are exceedingly dirty.
- the mains cable or mains plug are damaged.
- it has been dropped.

Remove the mains plug from the socket:

- if the appliance is not in use.
- every time it has been used.
- before the appliance is cleaned or stored (allow it to cool down completely).
- if a fault has obviously occurred during use.
- during a storm.

When unplugging, always pull the plug and not the mains cable.

Do not modify the appliance or the mains cable in any way.

Safety mechanisms or switches must never be disabled or adjusted.

Repairs must only be carried out by a specialist workshop.

If the appliance's mains cable has been damaged, it must be replaced by the manufacturer, its customer service department or a specialist workshop in order to prevent hazards occurring.

The appliance must not be connected to a timer or a separate remote-control system, e.g. a twilight switch or a remote-controlled mains socket. There is a risk of fire if it is overloaded or a malfunction occurs.

Before cleaning, maintenance or changing the suction function (wet/dry), switch off and unplug the appliance.

Hazardous area



WARNING!

Risk of accidents/injury in the hazardous area of the industrial vacuum cleaner

Never vacuum persons, animals – above all hairs, fingers and other parts of the body – plants and also clothing while it is being worn. This can result in injuries.

Never use the appliance to vacuum toner (laser printer, photocopier). This results in a risk of burning and explosion.

Never vacuum up ash, burning cigarettes or matches. This may result in fires.

Never vacuum sharp objects such as glass splinters, nails, etc. The appliance could be damaged.

Only use the appliance vertically. If the appliance falls over, unplug it immediately!

Do not store the appliance outdoors. It must be stored in a dry, frost-free room.

2 Description of the Controls



The following illustration shows 156903.



Item	Control		Function
1	Suction-hose lock	●	– Locks the suction-hose coupling
2	Handles	●	– For lifting the appliance or tipping the collection container to empty it
3	Motor-unit tension locks	●	– Lock the motor unit to the collection container
4	Motor-unit handle	●	– For removing the collection container
5	ON/OFF switch	●	– Switches motor 1 on and off
6	ON/OFF switch (only 156904 and 156903)	●	– Switches motor 2 on and off
7	ON/OFF switch (only 156903)	●	– Switches motor 3 on and off
8	Discharge hose, only for 156904 and 156903	●	– To empty the collection container

3 Preparing the Industrial Vacuum Cleaner for Use

3.1 Unpacking

Remove the appliance and the accessories from the cardboard box and carefully remove all packaging material.

WARNING!

Keep packaging material away from children. If swallowed, there is a risk of suffocation. Ensure that children do not place the packaging bag over their heads.

3.2 Checks and Operations to be Performed Before Use

WARNING!

Damage or other defects can result in accidents or material damage.

If damage or other defects are discovered during the following checks, the appliance must be taken out of service until it has been repaired.

- Inspect the exterior of the appliance for signs of damage. Inform the supervisor immediately of any damage, or have it rectified by the manufacturer or a specialist workshop.
- Clearly label a defective appliance and take it out of service or dispose of it.
- Only return the appliance to service when the fault has been rectified.
- Damaged hoses or accessories must be always replaced.
- Check that the ON/OFF switch works correctly.

4 Working with the Industrial Vacuum Cleaner

DANGER!

It is forbidden to suck up water or other liquids out of containers or recesses!

WARNING!

Do not pull the industrial vacuum cleaner on the suction hose as it may topple over. Use the handle to pull the appliance close to the work area, and move it again when moving to a different work area.

Ensure that the mains cable remains behind the appliance and do not roll over it.

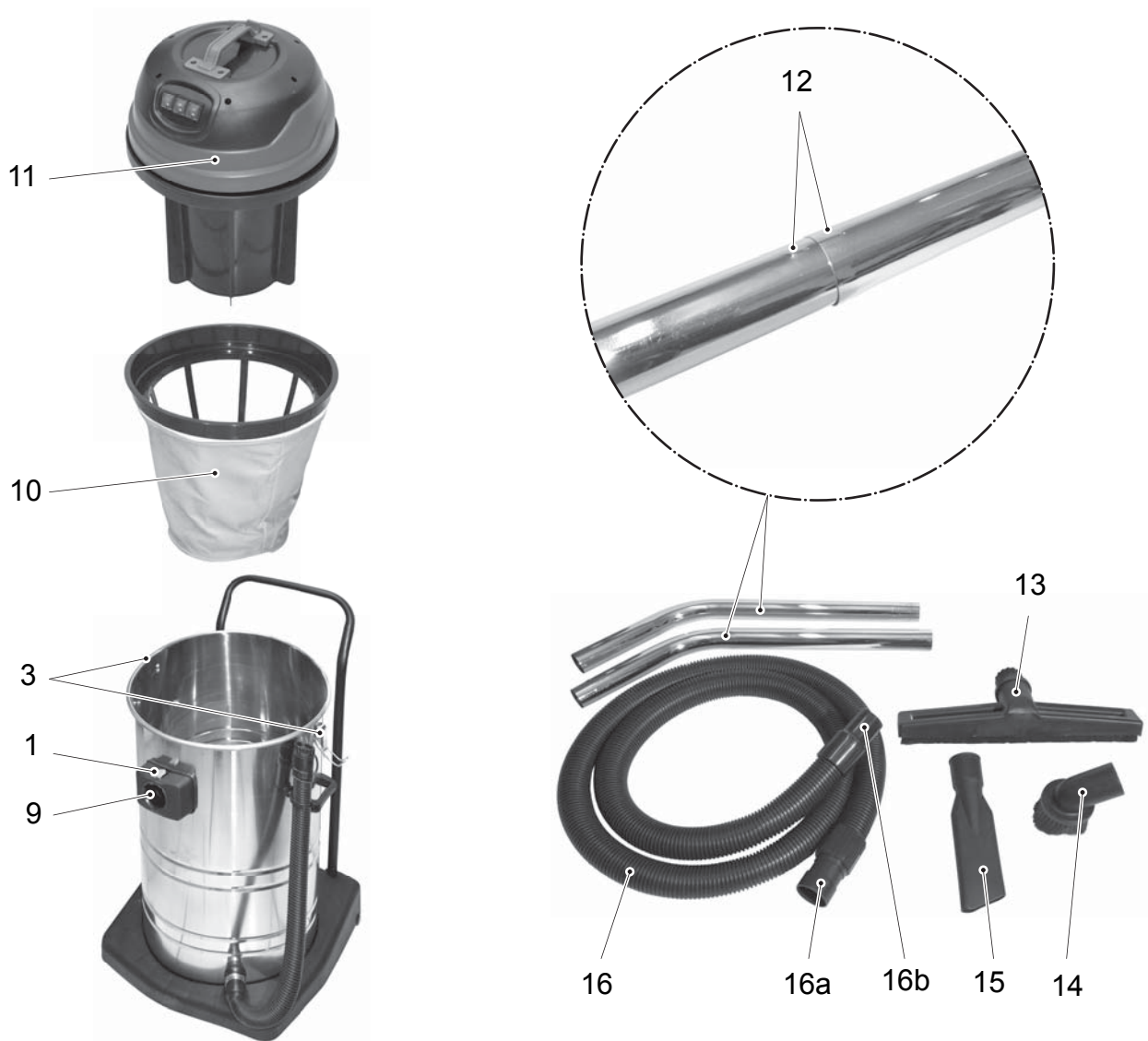
NOTE

When using the appliance for the first time, you may notice a slight odour, which is, however, harmless and will disappear after a short period of time. Ensure that the room is well ventilated.

4.1 Preparing the Appliance for Dry Vacuuming



The following illustration shows 156903.



- Insert the motor protection filter (10) into the collection container.
- Insert the motor unit (11) into the position shown and secure it with the tension locks (3).
- Press the suction hose (16) with the coupling (16a) into the mounting point (9) on the collection container.

NOTE

To disconnect the coupling from the collection container, press the suction-hose lock (1).

- Align the bulges (12) on the suction pipes and slide them into each other. Then firmly press one end of the suction pipe into the connector (16b). The floor brush (13) can be inserted into the other end of the suction pipe.
- The upholstery brush (14) and the joint brush (15) can be used on the connector (16b) of the suction hose.

4.2 Preparing the Appliance for Wet Vacuuming



The following illustration shows 156903.



- Insert the motor unit (11) into the position shown and secure it with the tension locks (3).
- Press the suction hose (16) with the coupling (16a) into the mounting point (9) on the collection container.

NOTE

To disconnect the coupling from the collection container, press the suction-hose lock (1).

- Align the bulges (12) on the suction pipes and slide them into each other. Then firmly press one end of the suction pipe into the connector (16b). The rubber lip (17) can be pushed onto the other end of the suction pipe.

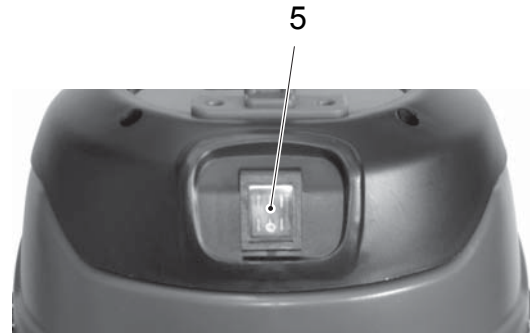
4.3 Preparing the Appliance for Use

- Press ON/OFF switches (5, 6, 7) as required into the **O** position.
- Connect the mains plug to the mains.

4.4 Switching the Industrial Vacuum Cleaner On and Off

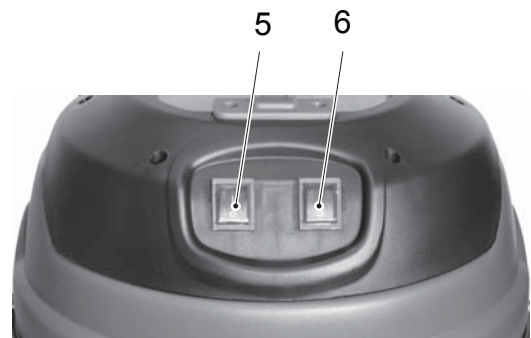
156905 / 160720

- Switching on: Press ON/OFF switch (5) into the **I** position.
- Switching off: Press ON/OFF switch (5) into the **O** position.



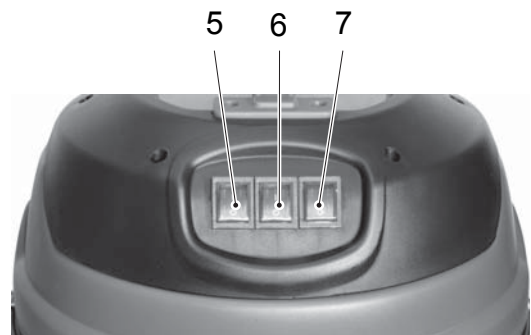
156904

- Switching on motor 1: Press ON/OFF switch (5) into the **I** position.
- Switching off motor 1: Press ON/OFF switch (5) into the **O** position.
- Switching on motor 2: Press ON/OFF switch (6) into the **I** position.
- Switching off motor 2: Press ON/OFF switch (6) into the **O** position.



156903

- Switching on motor 1: Press ON/OFF switch (5) into the **I** position.
- Switching off motor 1: Press ON/OFF switch (5) into the **O** position.
- Switching on motor 2: Press ON/OFF switch (6) into the **I** position.
- Switching off motor 2: Press ON/OFF switch (6) into the **O** position.
- Switching on motor 3: Press ON/OFF switch (7) into the **I** position.
- Switching off motor 3: Press ON/OFF switch (7) into the **O** position.



4.5 Storing the Industrial Vacuum Cleaner Securely

WARNING!

An unsecured industrial vacuum cleaner can cause accidents

Leaving the industrial vacuum cleaner on an incline, in aiseways or in doorways is dangerous and is strictly prohibited. When leaving the work area, even for a short time, always switch off and unplug the appliance.

- Empty the collection container after use.
- Always leave the industrial vacuum cleaner on a level surface. Wind the mains cable around the motor unit and lean the suction unit against the appliance.
- Store the appliance where it remains dry and is protected from frost.

5 Troubleshooting

This chapter enables the user to localize and rectify basic faults or the results of incorrect operation himself. When trying to locate a fault, proceed in the order shown in the table.



If the industrial vacuum cleaner cannot be restored to operational status after carrying out the following corrective measures, contact the manufacturer's service department or a specialist workshop.

Additional troubleshooting must only be performed by the manufacturer's specialist service engineers or a specialist workshop.

In order to react quickly and in a targeted manner to the fault, the following information is important and helpful for the manufacturer's service department: or the specialist workshop:

- Model and serial number of the appliance as shown on the data plate
- Description of the fault
- Current location of appliance

5.1 Corrective Measures



Corrective measures must always be carried out after the appliance has been disconnected from the mains.

Fault observed	Possible cause	Corrective measures
The appliance cannot be switched on with the ON/OFF switch	Mains socket	Test a different appliance in the socket
	Mains cable defective	Unplug the appliance and inform the manufacturer's customer service department
	Motor unit defective	Unplug the appliance and inform the manufacturer's customer service department
Reduced suction power during dry vacuuming	Motor protection filter blocked	Clean the filter
	Collection container full	Clean the container
	Suction unit clogged up	Clean suction hose and pipe
Dust is leaking	Motor protection filter not fitted	Fit the motor protection filter
	Motor unit not correctly fitted to the collection container	Check that the motor unit is correctly fitted
	Motor protection filter damaged	Replace the filter
The suction power drops suddenly when wet vacuuming, and the running noise changes audibly	Float in the motor unit has closed the suction opening	Maximum water level in the collection container has been reached Empty the collection container
Reduced suction power during wet vacuuming	The motor protection filter has been inserted	Remove the motor protection filter

E Maintenance

1 Operational Safety and Environmental Protection

The checks and cleaning operations described in this chapter must be performed at regular intervals.

WARNING!

Risk of accidents and component damage

Any modification to the industrial vacuum cleaner, in particular the safety mechanisms, is prohibited.

NOTE

Only original spare parts have been certified by our quality assurance department. To ensure safe and reliable operation, use only the manufacturer's spare parts.

2 Safety Instructions to be Observed During Servicing

Maintenance personnel

Maintenance and repairs to the industrial vacuum cleaner may only be carried out by the manufacturer's service department or a specialist workshop.

Cleaning

WARNING!

Fire hazard

Do not use flammable liquids to clean the industrial vacuum cleaner.

- Always disconnect the appliance from the mains before cleaning.
- Do not use metal objects, aggressive chemical cleaning agents, scouring agents, hard sponges or similar means to clean the appliance.
- Clean the appliance using a light damp cloth with a small amount of detergent.

CAUTION!

Before the appliance is used again, ensure that it is completely dry.

3 Cleaning

WARNING!

Always switch the unit off and disconnect it from the mains before cleaning.

Never immerse the motor unit in water or other liquids! Never rinse the motor unit with water or cleaning agents!

Motor unit

- Clean the motor unit (1) using a light damp cloth with a small amount of detergent.

Motor protection filter (dry vacuuming)



Clean the motor protection filter (2) every time the collection container (4) is emptied. If the filter is damaged, it must be replaced.

- The filter can be separated from the basket for cleaning. Rinse the filter under running water and then press it out carefully.
- Place the filter on the basket and push the rim of the filter fully over the shoulder (3).
- Allow the motor protection filter to dry completely before inserting it in the industrial vacuum cleaner.

Collection container

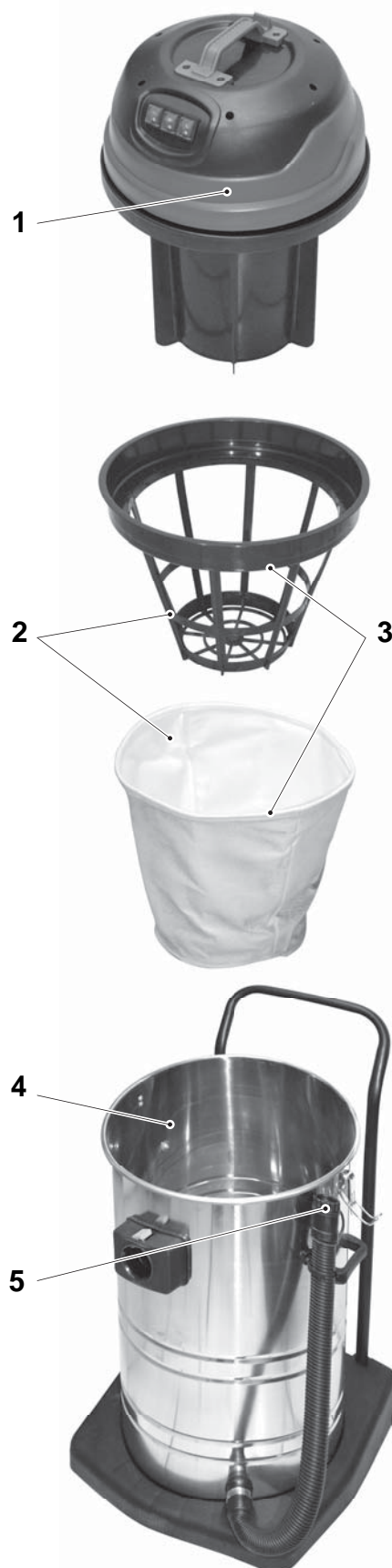


The 156904 and 156903 models are equipped with a discharge hose (5).

- To drain the dirty water, pull the discharge hose (5) out of its holder and open the stopper.
- To completely empty the collection container (4), tip it over and rinse it out with a water jet.

Accessories

- Check if the accessories are blocked and, if necessary, remove and clean them.
- Clean brushes and the rubber lip regularly.



4 Disposal



Dispose of the packaging according to material.



The appliance may not be disposed of along with household refuse!

If the appliance can no longer be used, ask the relevant waste-disposal association for information on the necessary disposal measures.



WARNING!

To avoid hazards caused by a defective appliance, cut off the mains cable before disposal.

**Disconnect the appliance from the mains before cutting off the mains cable.
Risk of death due to electric shock!**