



KERNLOCHBOHRER[®]
PROFESSIONAL POWER TOOLS



Operating instructions

Wet-dry vacuum cleaner NTS-38/HEPA

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Introduction

Thank you for choosing the NTS-38/HEPA wet/dry vacuum cleaner from Kernlochbohrer GmbH. This is a high quality product based on the latest technology. We hope that this device is to your satisfaction and meets your expectations. We are constantly striving to improve our products in our product segment and will continue to supply the market with new equipment.

Our company declines all responsibility in the event of violations of the operating instructions that may lead to injuries or machine damage. In addition, all currently applicable regulations of the Accident Prevention Regulations (UVV) and the Employer's Liability Insurance Association (BG) must be observed.

If you have any questions about the operation of the wet-dry vacuum cleaner, please contact Kernlochbohrer GmbH directly. We are available to answer your questions at any time.

Note:

Kernlochbohrer GmbH reserves the right to change the design and appearance of the products and their operating instructions. Future changes to the operating instructions will be made without prior notice.

About this guide

These operating instructions are for the model
NTS-38/HEPA

Check the machine model against the type plate.



Note

Read the entire instruction manual carefully before using the wet-dry vacuum cleaner. Special attention should be paid to the section "Safety precautions".

All spare parts and accessories used with this unit must be specified by Kernlochbohrer GmbH.

Explanation of symbols



Warning of general danger. Failure to observe these safety precautions and instructions may result in electric shock, fire and/or serious injury.

Safety regulations

- ❖ Read all precautions before commissioning and keep the operating instructions. In addition, all currently applicable regulations of the Accident Prevention Regulations (UVV) and the Employer's Liability Insurance Association (BG) must be observed.
- ❖ Please follow the operating instructions carefully, as failure to observe these safety precautions and instructions may cause electric shock, fire and/or serious injury.

1. Check the appliance, cables and plugs before each use. Only have damage repaired by a qualified electrician in accordance with VDE.
2. Only insert the plug into the socket when the machine is switched off.

3. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and/or knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
4. If the mains connection cable is damaged, the unit must no longer be used.
5. Please ensure that the mains connection cable is not damaged by being driven over, squeezed, tugged and the like.
6. Couplings of mains connection or device connection cables must be at least splash-proof.
7. Avoid unintentional starting of the machine. Make sure that the power tool is switched off before connecting it to the power supply.
8. The unit may only be operated in a room with sufficient ventilation (observe national occupational health and safety regulations).
9. When vacuuming, observe the applicable safety regulations of the material manufacturer.



Warning!

10. Do not suck in flammable or explosive liquids (e.g. petrol, alcohol, thinners, solvents, etc.) - **risk of explosion!**



Warning!

11. Do not suck in flammable or explosive dusts (e.g. magnesium, aluminium, etc.) - **risk of explosion!**



Warning!

12. Do not suck in sparks or hot parts (e.g. metal chips, ash, etc.) with a temperature above 60°C - **risk of explosion and fire!**
13. Do not suck in aggressive liquids/solids (acids, alkalis, solvents, etc.).
14. The appliance must not be used near flammable gases and substances.
15. Do not operate the unit including accessories if: the unit shows visible damage (cracks/breaks), the mains connection cable is defective or shows cracks or ageing, there is suspicion of an invisible defect (after a fall).
16. No liability is accepted for any damage caused by misuse, improper operation or improper repair.
17. When emptying, cleaning and changing filters, personnel must be protected by suitable personal protective equipment.
18. There is a risk of electric shock if the appliance earth conductor is not connected properly. Consult a qualified electrician if you are in doubt as to whether the socket is correctly earthed. Do not modify the plug supplied with the appliance. If it does not fit into the socket. Have a suitable socket installed by a qualified electrician.
19. Note that the voltage must not exceed +/-5% of the nominal voltage. Higher voltages can cause irreparable damage. Note that higher voltage peaks are not generated when operating the machine via a generator.
20. Do not use the unit with a damaged cable or plug. If the unit is not working properly, has been dropped or damaged, is outdoors or has fallen into water. Make sure it is repaired by a qualified person.

21. Do not pull or carry the appliance by the cord, use the cord as a handle or pull the cord around sharp edges or corners. Do not run over the mains cable of the vacuum cleaner. Keep the cord away from hot surfaces.
22. Do not pull the plug out of the socket by the cable. Do not hold the plug by the cable to unplug it.
23. Do not handle the plug or the unit with wet hands.
24. Check the cable and plug regularly for damage. If the cable is damaged, it must be replaced by a qualified electrician in accordance with VDE to avoid danger.
25. Do not insert any objects into the openings. Do not use the appliance if any opening is blocked (except when cleaning the filter). Keep the appliance free from dust, hair and anything else that could obstruct the air flow.
26. Be especially careful when cleaning stairs.
27. Do not use the wet-dry vacuum cleaner without a filter. Replace the filter as described in the manual.
28. If you use an extension cable, make sure that the cable is suitable for this machine and that the extension has the same cross-section as the supply line of the dry vacuum cleaner.
29. Do not modify the unit in its original form.

Environmental protection

Raw material recovery instead of waste disposal!

To avoid transport damage, the unit must be delivered in sturdy packaging. Packaging as well as the unit and accessories are made of recyclable materials.

The plastic parts of the unit are labelled according to the material. This enables environmentally friendly, sorted disposal via the collection facilities offered.

Only for EU countries

Do not throw power tools in the household waste! According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation in national law, used power tools must be collected separately and recycled in an environmentally sound manner.

Grounding

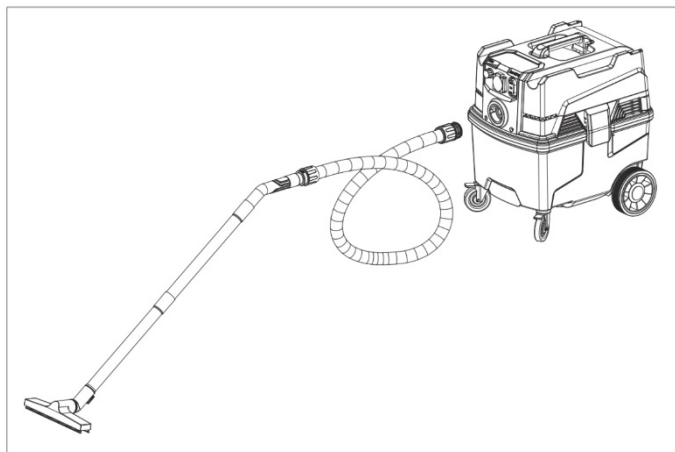
The Hoover must be earthed. Should a malfunction or failure occur, earthing provides a path of least resistance for electric current to reduce the risk of electric shock. The Hoover is equipped with a cord, with an appliance grounding conductor and grounding plug. The plug must be plugged into a suitable outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Commissioning

Put the machine in working position, secure the vacuum cleaner by locking the steering wheel brakes if necessary.

Before fitting the suction hose with floor nozzle or other optional accessories, check that all parts are in good condition and have no damage.

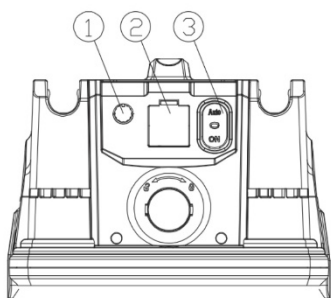
Connect the floor brush to the 2 straight pipes. Then connect the hose with the hose collar to the pipe. Then the hose can be connected to the adapter via the hose collar. Finally, the hose can be connected to the dust extraction connection on the appliance.



Function

The NTS-38/HEPA is suitable for the suction and separation of dry, non-flammable dust with an explosion limit value of 0.1mg/m³.

The wet-dry vacuum cleaner is started by the switch.



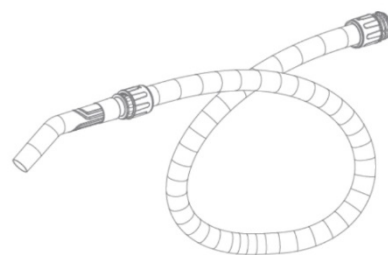
1. Switch for controlling the engine speed
2. Socket (power connection for power tools, max. 1200W)
3. On/Off switch

ON Switch on

0 Switch off

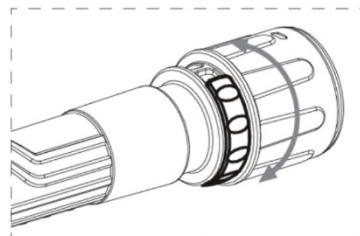
Auto The vacuum starts by the connected power tool, after stopping the power tool the vacuum stops with a delay of 7 seconds.

There is an airflow adjustment ring on the handle of the appliance. By turning the adjustment ring, the suction power can be set for different needs when vacuuming.



Note:

When using the power socket on the unit, make sure that the plug and socket match.



Note:

Switch off the appliance until the motor has come to a complete stop.

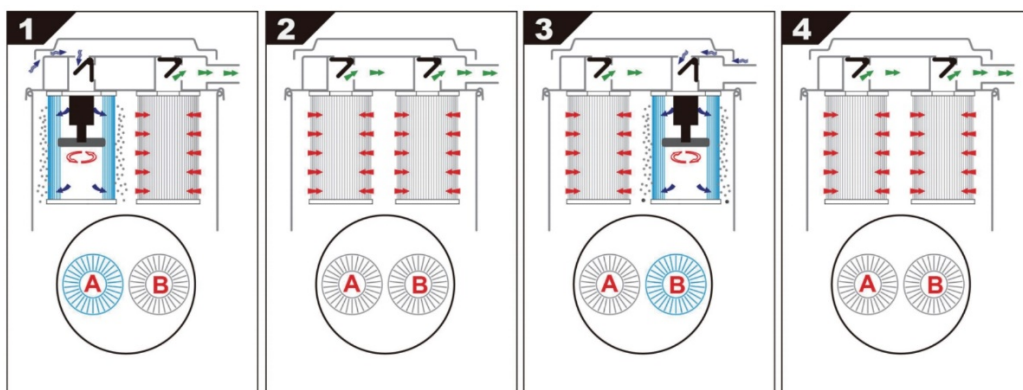
Always unplug the appliance when working on the appliance or when the appliance is not working properly.

After starting the wet-dry vacuum cleaner, the dust-laden air is sucked in at high speed via the suction hose through the inlet valve. The air is slowed down by the cyclone and the coarse dust particles are separated partly by centrifugal force and partly by gravity. The air and dust particles then pass through the filter system where separation takes place. The machine is designed to perform filter cleaning in the form of automatic cleaning. The separated dust collects in the cyclone until the machine is switched off, then it falls through the lower opening into the dust collection tank.

The filter cleaning process is not complete until it is clear that the dust inside the tank has fallen into the collection tank. In some extreme cases, the dust's stickiness must be broken manually. This can be done by tapping the dust through the bag or by carefully tapping the tank, e.g. with a rubber mallet.

Innovative car cleaning

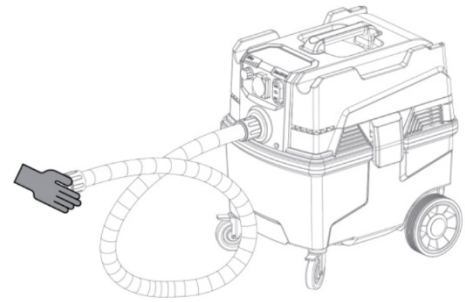
When the hoover is switched on, both filters are cleaned alternately. See diagram:



In rare cases, the filter may be clogged. In this case, we recommend deep cleaning the filter:

- To do this, switch on the vacuum cleaner.
- Cover the hose with your hand for approx. 60 seconds.

If the suction power is still poor after this, the filters must be replaced. See instructions in the chapter "Changing the filters".



Cleaning, maintenance and storage

Empty and clean the Hoover after each use and whenever necessary.

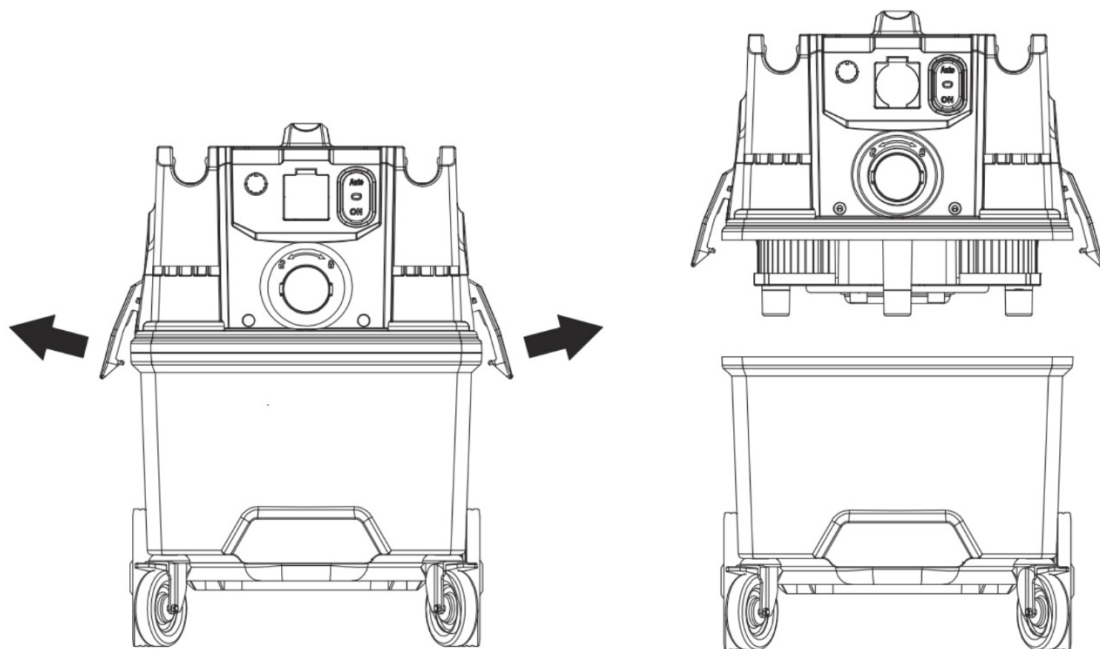
No outside help is required to perform basic maintenance and cleaning. The unit surface and the inside of the tank should be cleaned regularly with a damp cloth.

- Do not clean the unit with a water hose or a high-pressure water jet (risk of short circuits or other damage). Do not immerse the motor head in water for cleaning.
- Empty the dust collection container (see chapter "Emptying the dust collection container").
- Vacuum the unit and wipe it inside and out with a damp cloth.

Emptying the dust collection container

To avoid excessive contamination of the dust collector, it must be checked regularly, depending on the type and quantity of material sucked in.

Switch off the unit and secure it with the parking brakes on the castors.



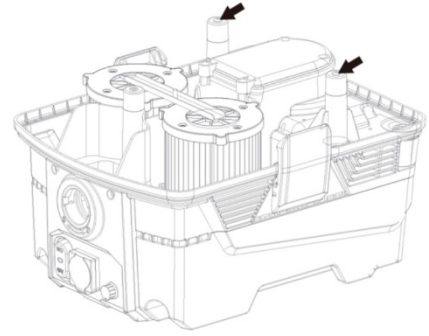
Open the buckle on both sides to separate the upper and lower containers, attach the dust collection bag and remove it from the lower container.

Place a new bag in the lower container and make sure that the holes of the bag fit into the lower container. Now put the upper container back on the lower container and close the buckles.

Sensor for liquid level

Remove the dust collection bag when using the NTS-38/HEPA as a wet Hoover. The maximum water collection capacity is 20L. The wet-dry vacuum cleaner stops automatically when the max. water intake capacity is reached. Then turn the switch to "0". Then you can remove the upper container, empty the lower container and put the upper container back on. Then you can continue working

Please clean the level sensor probes regularly. It is important that you keep the probe clean to prevent the automatic shut-off from working incorrectly or not at all.



Filter change

When changing the filter, dust hazardous to health may be stirred up. Therefore, the user should wear protective goggles, protective gloves and a respiratory mask of protection class FFP3.



Caution!

Remember to switch off the unit and unplug it from the mains socket before carrying out any maintenance.

HEPA -Filter

Loosen the 2 clamps and remove the cover. Unscrew the middle screw on the metal strip and remove it. Remove the old filter and insert a new one.

Important:

If you remove the main filter to clean it, be aware that it can be damaged by compressed air. The filter can be cleaned with water, but avoid cleaning with a high-pressure cleaner, which can destroy the filter.

Service

1. When cleaning and maintaining the machine, you must switch off the machine and disconnect the machine from the mains supply
2. Avoid cleaning with a high-pressure cleaner. However, if this should happen, never spray into the suction engine or the opening of the engine cooling system.
3. Before moving the machine out of the working area, the machine must be cleaned.
4. All equipment used must be considered contaminated and treated accordingly.
5. If possible, use a specially suitable room for cleaning.
6. Suitable personal protective equipment must always be worn when cleaning the appliance. Dust can be dispersed when the filter is changed, which can be hazardous to health. Accordingly, the user should wear protective goggles, protective gloves and a respiratory mask corresponding to protection class FFP3.
7. All parts that are contaminated after service must be properly disposed of in plastic bags in accordance with all regulations.
8. When the machine is used for other purposes, it is extremely important that the machine is cleaned to avoid the spread of hazardous dust.
9. Do not puncture the filter. Danger of dust dispersion.

Warranty

In accordance with our general terms and conditions of delivery, a warranty period of 12 months applies for material defects in business transactions with companies (proof by invoice or delivery note). Damage caused by natural wear and tear, overloading or improper handling shall remain excluded from this. Damage caused by material or manufacturer defects shall be remedied free of charge by repair or replacement. Complaints can only be accepted if the device is sent to the supplier unassembled.

Problem solving

Our wet-dry vacuum cleaner is designed for rough everyday use in construction and industry. Nevertheless, you must bear in mind that the machine must be protected from shocks and impacts. Filters, seals, attachments and connections are carefully adapted and selected to suit the operator's working environment. Therefore, operators and service personnel must treat the machine with care to ensure that it works properly for many years.

Error	Possible cause	Troubleshooting
Engine does not start	No power	Plug in the mains plug
	Cable defective	Replace cable
	Switch defective	Replace switch
Engine stops immediately after	Short circuit on cable/machine	Check by electrician according to VDE
Engine runs, but there is no intake	Hose not connected	Connect hose
	Hose clogged/blocked	Clean hose
	No dust bag	Insert dust collection bag
Engine runs, but poor intake	Hole in the hose	Replace hose
	Filter clogged	Replace filter/filter
	Loose top cover	Adapt
	Defective seals	Replace affected seals
Dust blown from engine	Incorrectly mounted or damaged filter system	Adjust/replace filters
Abnormal noises		Customer service

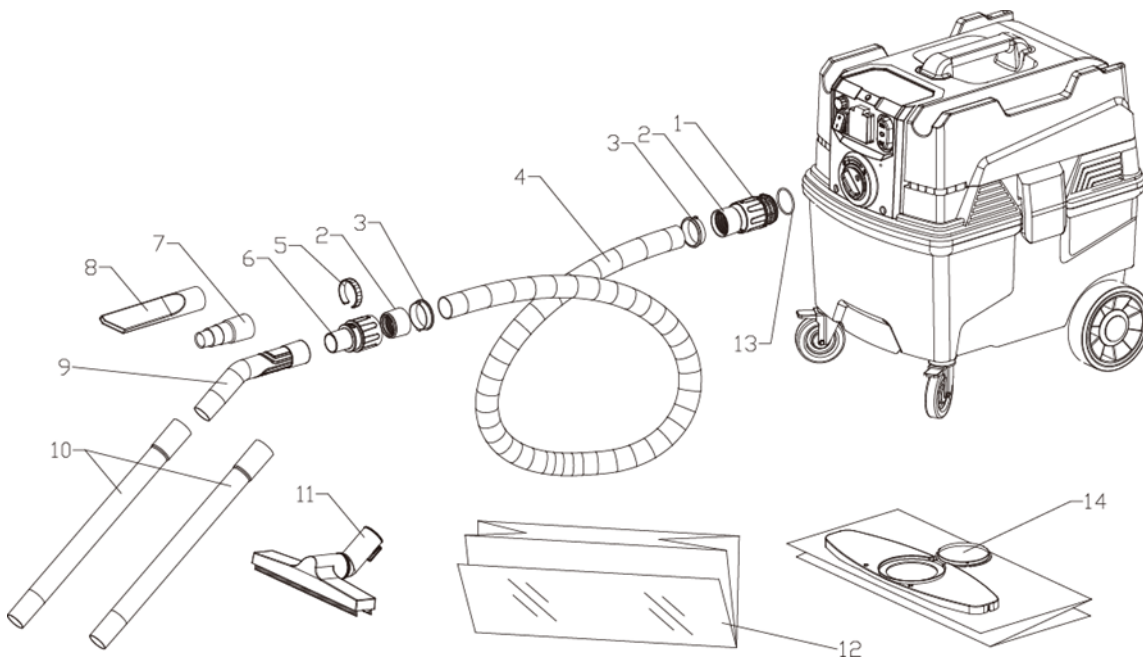
Note:

For all other problems, please contact our customer service.

Technical data

Data	Einheit	NTS-38/HEPA
Voltage	V	230V
Power (max)	kW	1.2
	PS	1.7
Current (UL)	A	10
Air flow (max)	m ³ /h	262
	cfm	154
Negative pressure (max)	inch	104
	Mbar	250
Number of filters	Piece	2
Filter efficiency		HEPA, >99.5%@0.3 µm
Filter cleaning		Self-cleaning function
Adjustable air flow		Ja
Quick start for power tools		Ja
Tank volume	L	38
Dimensions (L*W*H)	mm	385x500x570
Weight	kg	13,5

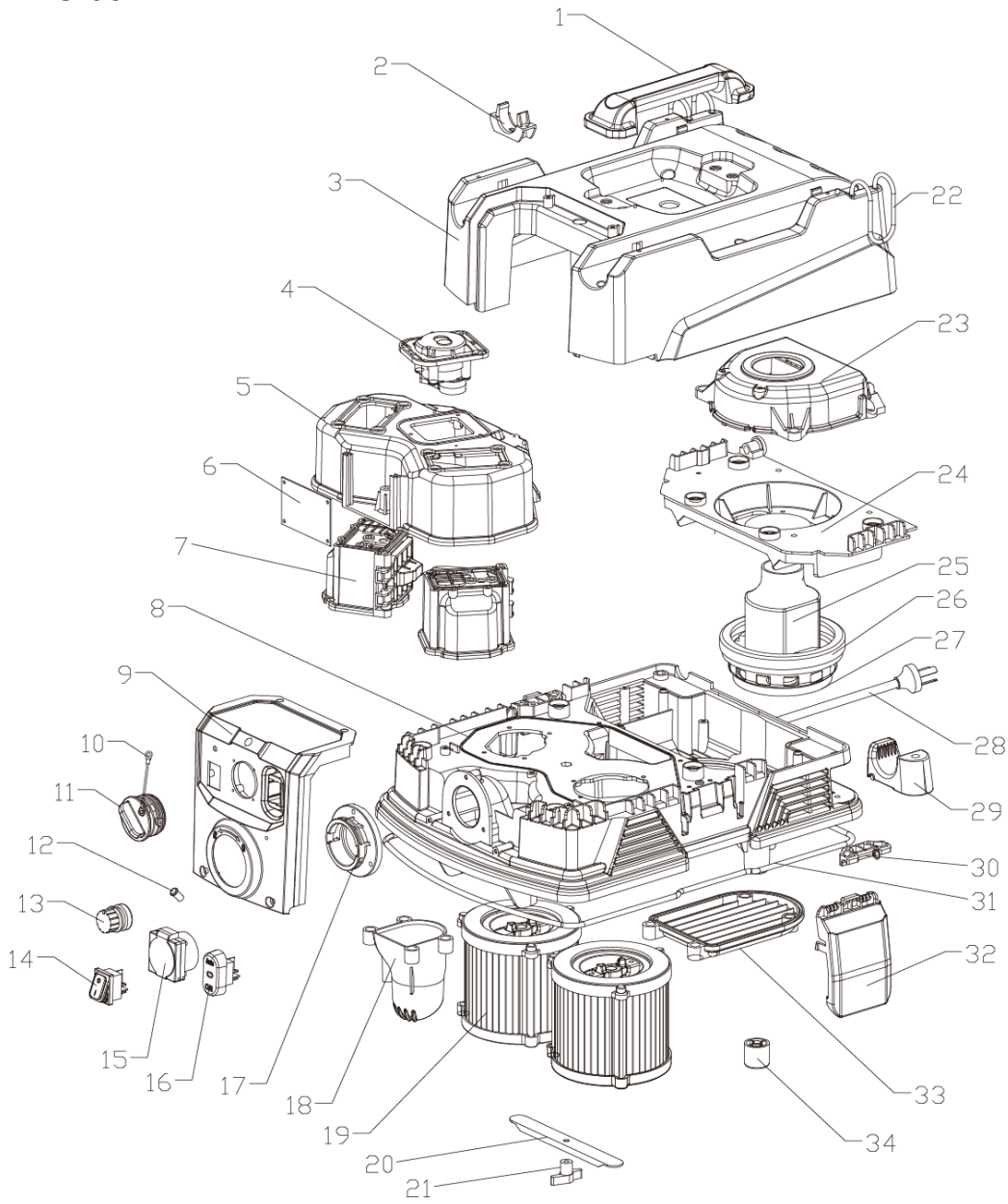
Packing list



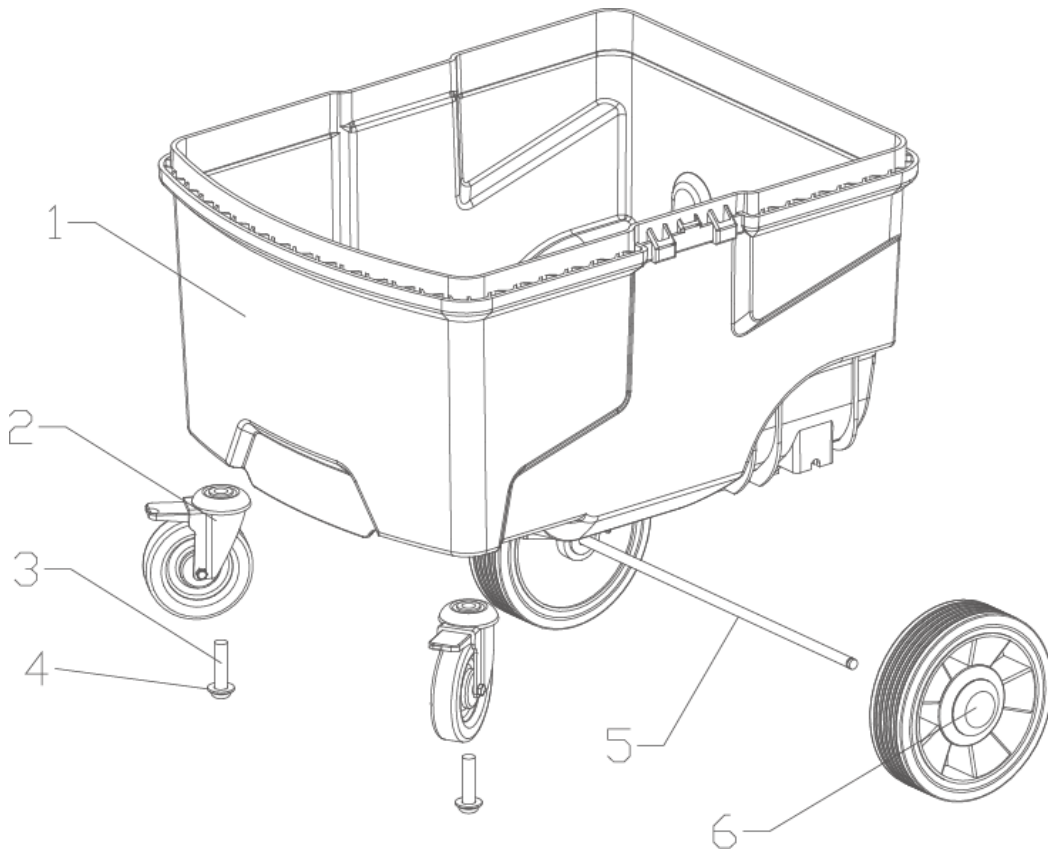
No.	Designation	Number	Specification
1	D35 Hose sleeve 1-vacuum side	1 Piece	
2	D35 Threaded clamping head	2 Piece	
3	D35 bayonet coupling	2 Piece	
4	D35 Antistatic hose	4 metres	
5	Air flow adjustment ring	1 Piece	
6	D35 Hose cuff 2-grip side	1 Piece	
7	D35 reducer	1 Piece	
8	Joint nozzle	1 Piece	
9	D35 Curved handle	1 Piece	
10	D35 Straight handle	2 Piece	D35*450
11	D35 floor brush	1 Piece	L300
12	PE bag	15Piece	
13	O-shaped ring	1 Piece	48*3.5
14	Non woven bag	1 Piece	

Exploded view

NTS-38/HEPA

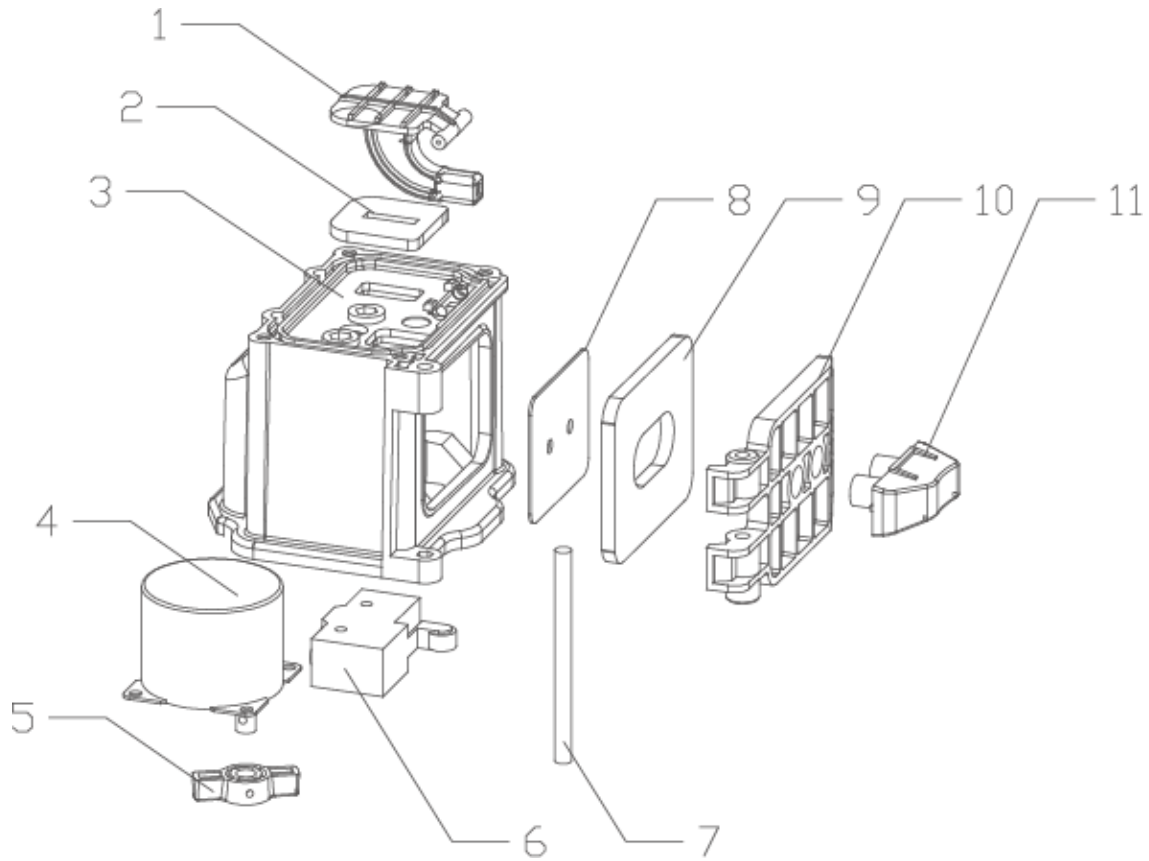


No.	Description	Number	Specification
1	Sling bar	1	
2	Hose clamp	4	
3	Top cover	1	
4	Drive module	1	220V
5	Air bonnet	1	
6	PCB of the control module	1	
7	Reserve valve assembly	1	220V
8	Central coverage	1	
9	Panel	1	
10	Inlet cover strand		
11	Inlet cover		
12	Negative pressure indicator		
13	Switch for setting the airflow speed	1	
14	Main power switch	1	
15	10A output socket	1	
16	Rocker switch	1	
17	Flange connection	1	
18	Air inlet for non-woven bags		
19	HEPA filter	2	
21	Filter holder	1	
22	Elastic cord (Φ 4-0,5m)	2	
23	Engine cover	1	
24	Motor bracket	1	
25	single-phase bypass motor	1	230V-1200W
26	Motor damping ring	1	
27	118 Engine damping ring	1	
28	Mains cable with plug 230V	1	3*1.5 Length 8m RVV-10A Connection
29	Hose holder	2	
30	Buckle holder	2	
31	Sealing ring (Φ 6-1,6m)	1	
32	Buckle	2	
33	Cover plate	1PC	
34	Foot pad	0.5M*2	Φ 4



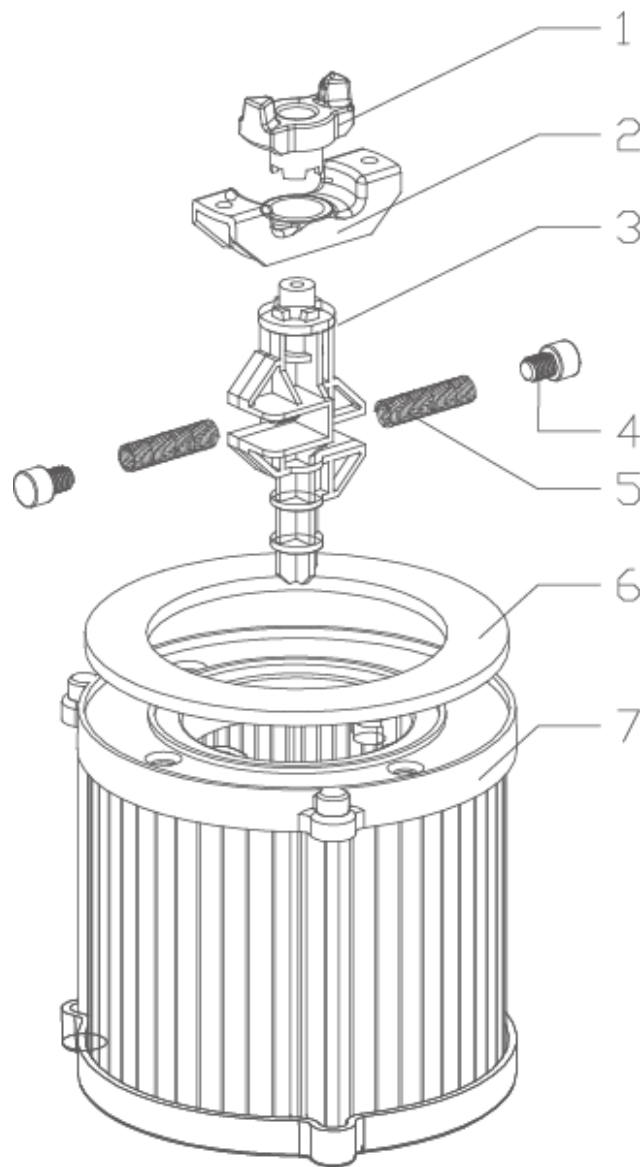
No.	Description	Number	Specification
1	Dust collection container	1	
2	3" universal wheel	2	
3	Hexagon socket bolt with half round head	2	M10*40
4	Spring washer	2	M10
5	AC150 axle	1	
6	6" rear wheel	2	

Self-cleaning system



No.	Description	Number	Specification
1	Reversed air flap	1	
2	Sealing ring	1	
3	Air-recycling house	1	
4	Motor for speed reduction	1	50KTYZ-230V 8 Umdrehungen
5	Motor driven assembly 4	1	
6	Master controller	1	LXW5-11G2
7	Hinge pin	1	5*80
8	Square cushion	1	
9	Sealing ring	1	
10	Air flap	1	
11	Air door pressure plate	1	

HEPA-Filter



No.	Description	Number	Specification
1	Motor driven assembly 1	1	
2	Motor driven assembly 2	1	
3	Motor driven assembly 3	1	
4	Hexagon head nylon screw	3	M8*12
5	Tension spring	2	
6	Sealing ring	1	
7	Filter cover	1	

EC Declaration of Conformity

The manufacturer/marketer
Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen

hereby declares that the following product

Product designation: Dry vacuum cleaner
Type: TS-1000/PRO
TS-2000/PRO
NTS-38/HEPA

complies with all relevant provisions of the applied legal regulations (hereinafter) - including their amendments in force at the time of the declaration. The sole responsibility for issuing this declaration of conformity lies with the manufacturer. This declaration relates only to the machine in the condition in which it was placed on the market; parts and/or interventions subsequently fitted by the end user are not taken into account.

The following legislation was applied:
Machinery Directive 2006/42/EG
EMC Directive 2014/30/EU

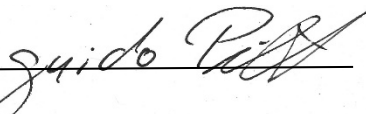
The following harmonised standards were applied:

EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN 60335-1:2012/A15:2021	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60355-2-69:2016	Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for commercial wet and dry vacuum cleaners
EN IEC 61000-6-2:2019	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments
EN IEC 61000-6-4:2019	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission requirements for industrial environments

Name and address of the person authorised to compile the technical file:

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72663 Großbettlingen

Location: Großbettlingen
Date: 17.05.2023



Guido Pillat, Chief Executive