



**KERNLOCHBOHRER**<sup>®</sup>  
PROFESSIONAL POWER TOOLS



## Operating instructions

**Dry vacuum cleaner TS-1000/PRO TS-2000/PRO**

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# Introduction

Thank you for choosing the TS-1000/PRO / TS-2000/PRO 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.

## About this guide

These operating instructions are for the model

TS-1000/PRO

TS-2000/PRO

Check the machine model against the type plate.



## Note:

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

The TS-1000/PRO and TS-2000/PRO dry vacuum cleaners are two-stage dust collectors, primarily with an F8 conical filter, secondarily with 1/2/3 H13 HEPA filters. Each of the HEPA filters is individually tested with efficiency > 99.995%@0.3µm. Designed for cleaning construction areas and for connection to electrical machines such as drills, grinders, etc. The unit is suitable for vacuuming dry, non-flammable dust and debris indoors. It is not designed for vacuuming liquids.

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

## Safety regulations

- ❖ Read all precautions before commissioning and keep the operating instructions.
- ❖ 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. The socket on the appliance may only be used for the purposes specified in the instructions for use.
4. 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.

5. If the mains connection cable is damaged, the unit must no longer be used.
6. Please ensure that the mains connection cable is not damaged by being driven over, squeezed, tugged and the like.
7. Couplings of mains connection or device connection cables must be at least splash-proof.
8. The unit must be connected to a line protected by a circuit breaker or a fuse with the minimum current rating of 16A.
9. Avoid unintentional starting of the machine. Make sure that the power tool is switched off before connecting it to the power supply.
10. The unit may only be operated in a room with sufficient ventilation (observe national occupational health and safety regulations).
11. When vacuuming, observe the applicable safety regulations of the material manufacturer.



**Warning!**

12. Do not suck in flammable or explosive liquids (e.g. petrol, alcohol, thinner, solvents etc.) – **Explosion hazard!**



**Warning!**

13. Do not suck in flammable or explosive dusts (e.g. magnesium, aluminium etc.) – **Explosion hazard!**



**Warning!**

14. Do not suck in sparks or hot parts (e.g. metal chips, ashes, etc.) with a temperature above 60°C. – **Explosion and fire hazard!**

15. Do not suck in aggressive liquids/solids (acids, alkalis, solvents, etc.).
16. The appliance must not be used near flammable gases and substances.
17. 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).
18. No liability is accepted for any damage caused by misuse, improper operation or improper repair.
19. Not suitable for absorbing liquids.



### **Caution!**

20. This appliance must not be used or stored outdoors in wet conditions.
21. The noise level during work can exceed 85 dB (A). Wear ear protection!



### **Warning!**

22. The appliance contains dust that is harmful to health. Emptying and maintenance operations, including the removal of dust collection containers, must only be carried out by professionals wearing appropriate protective equipment. Do not operate without the complete filtration system.
23. Before use, users must be provided with information on how to use the appliance and how to handle and dispose of the hazardous substances for which the appliance is to be used.
24. When emptying, cleaning and changing filters, personnel must be protected by suitable personal protective equipment.

25. When carrying out maintenance and repair work, all contaminated items that cannot be satisfactorily cleaned must be disposed of. Such items must be disposed of in impermeable bags in accordance with the regulations in force for the disposal of such waste.
26. 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.
27. 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.
28. 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.
29. 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.
30. Do not pull the plug out of the socket by the cable. Do not hold the plug by the cable to unplug it.
31. Do not handle the plug or the unit with wet hands.
32. 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.
33. 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.

34. Be especially careful when cleaning stairs.
35. Do not use the dry vacuum cleaner without dust bag and/or filters. Replace the collection system and/or filters as described in the manual.
36. 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.
37. 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.

## **Thermal insulation**

The Hoover is equipped with a safety thermal protection switch to prevent the motor from overheating. If the thermal protection should trip, the machine switches off automatically. Disconnect the power supply and check whether a full dust bag, a vacuum hose blockage or a filter blockage is the cause. It may take up to 45 minutes for the safety thermal cut-out to reset.

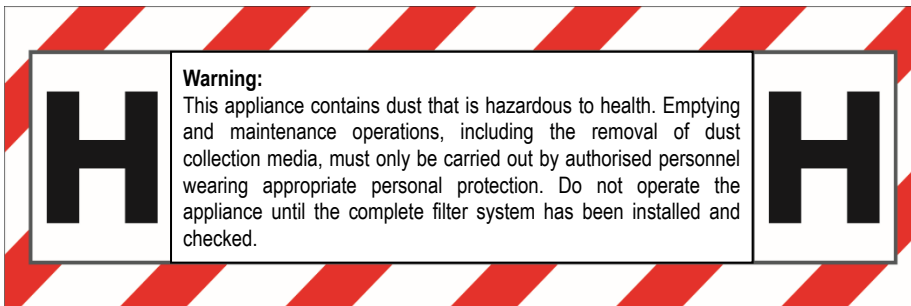


## Grounding

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.

## Safety mark

The following label can be found on the dry vacuum cleaner next to the type plate. Replace the label if it is missing, damaged or illegible. Failure to follow this warning label may result in electric shock or injury.



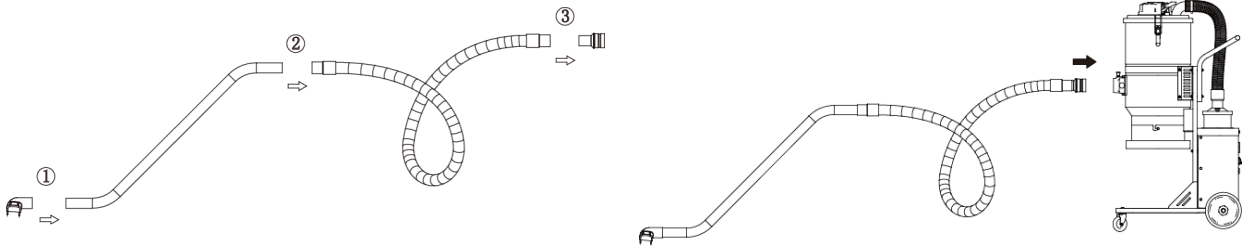
## Unpack

When unpacking the machine, please check that the following accessories are included:

1. The hose with end fittings.
2. Hoover tube
3. Floor brush

If any of the above parts are missing, please contact Kernlochbohrer GmbH. For models where the front rollers are not yet mounted due to packaging restrictions, mount the front rollers with the use of bolt or nut and washer included in the package depending on the application.

## Mounting the accessories



1. Connect the floor brush and the Hoover tube.
2. Connect the Hoover tube and hose.
3. Connect the hose and the adapter 4. Connect the accessory kit and the inlet.

### **Note:**

The hose must not be rolled or twisted when working.

## Function

The machine is designed to extract and separate dry, non-flammable dust with an explosion limit of 0.1 mg/m<sup>3</sup>.

The Hoover is started by the switch. All switches can be operated independently of each other.

Type	Models with jet pulse filter cleaning
2 levels	0: Motor off 1: Motor on



### **Caution!**

Before connecting the power supply, please make sure that the voltage corresponds to the type plate on the unit.

1. Make sure that the electrical plug and socket match
2. Make sure that the hose and inlet fit together.
3. Connect the accessories and the hose end

### **Note:**

Switch on the machine until the motor has completely run up. Please unplug the machine if it does not work.

Dust-laden air is then sucked through the inlet valve at high speed via the suction hose. The air is slowed down by the cyclone and coarse dust particles are separated, partly by centrifugal force and partly by gravity. Air and finer particles then pass through the double filter system where separation takes place. The machine is designed for filter cleaning by return air pulse.

The separated dust collects in the cyclone until the machine is switched off, when it falls through the bottom flap into the plastic bag. Filter cleaning is not complete until it is clear that the dust in the tank has fallen into the collection bag. In some extreme cases, the adherence of the dust must be broken manually. This can be done by knocking the dust through the bag or tapping the tank with a rubber mallet.

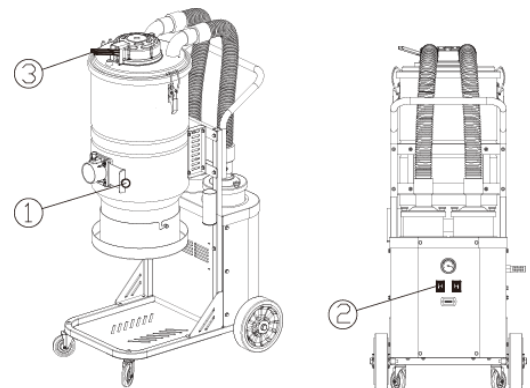
## Automatic start function

If you use the dry vacuum cleaner together with another machine, there is a socket on the dry vacuum cleaner. Connect the machine to be operated to this socket. Then start the machine to be operated, the Hoover starts after approx. 1-2 seconds. When you switch off the machine to be operated, the Hoover continues to run for approx. 10 seconds to empty the hose.

## Filter cleaning

The filter must be cleaned from time to time. This must be done before changing the bag collection system and should also be done after work has been completed or if the extraction is poor.

1. Slide the flap to the left and cover the inlet.
2. Switch on the machine and wait 3 seconds and let the machine build up a vacuum.
3. Press the button down quickly and wait 3 seconds.
4. Repeat the process five times.
5. Switch off the engine and wait until it comes to a complete stop, then uncover the inlet.



### **Note:**

It is important to let the machine rebuild the vacuum between each repetition.

If the suction performance is unsatisfactory, the pre-filter must be replaced. If this does not lead to the desired success, the HEPA filter must be replaced. See instructions in chapter: Filter replacement.

## Dust storage system

The dry vacuum cleaner is equipped with a bag hose system for effective dust storage. The bag hose system is a 22m long plastic hose that can be divided into bags and is attached to the machine with a cable tie.

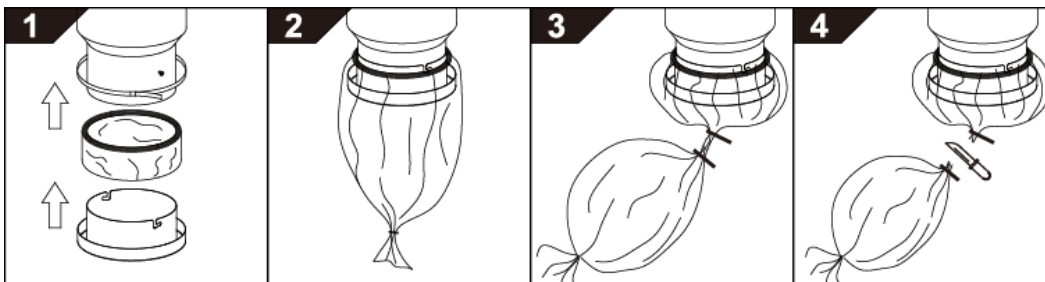
### To fit a new bag hose:

Open the fastening strap with the remaining piece of the bag hose. Remove the holder and pull in a new bag hose. Pull the inner end upwards. Now mount the retaining ring of the collection container and fix the opening with the fastening strap at the bottom. Now pull the outer end down and close it with a cable tie.

All dry vacuum cleaners can be operated with a single-use folding bag or the bag hose system.

Only change the bag hose or the folding bag after the filter cleaning cycle has been completed.

### So bedienen Sie den Beutelschlauch:



1. Gather the bag hose and mount it on the underside of the collection container.
2. After switching off the dry vacuum cleaner, the dust falls into the bag.
3. Use a cable tie to close the bag.
4. Cut off the bag.

## Filter change

Danger of dust spreading - Use personal protective equipment!

Harmful dust can be dispersed when changing the filter. 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.

## Main filter

Loosen the clamps and remove the cover. Remove the bag from the new filter.

Lift out the filter and carefully place it in a plastic bag. This bag must be disposed of properly.

Insert a new filter.

### **Important:**

If you remove the main filter to clean it, be aware that it can be damaged by compressed air.

## HEPA filter

Loosen the two nuts on each filter cover. Carefully lift the filter into a clean plastic bag, use the bag from the new filter. This bag must be disposed of properly. Insert a new filter in reverse order.

### **Important:**

HEPA filters cannot be cleaned, if you try to do so, it could be destroyed. When installing the replacement filter, make sure not to touch the inside of the filter. Any kind of force/damage on the inside of filter media will destroy the new 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. Always wear suitable personal protective equipment when cleaning the appliance. Dust can be dispersed when the main filter and HEPA filter are 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 HEPA 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 industrial 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
The engine does not start	No power	Plug in the mains plug
	Cable defective	Replace cable
	Switch defective	Replace switch
Engine stops immediately after starting	Short circuit on cable/machine	Inspection by qualified electrician according to VDE
Engine runs, but no suction is applied	Hose not connected	Connect hose
	Hose clogged/blocked	Clean hose
	No dust collection 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 off the engine	Incorrectly mounted or damaged filter system	Adapt/Replace Filters
Abnormal noises		Customer service

### **Note:**

For all other problems, please contact our customer service.

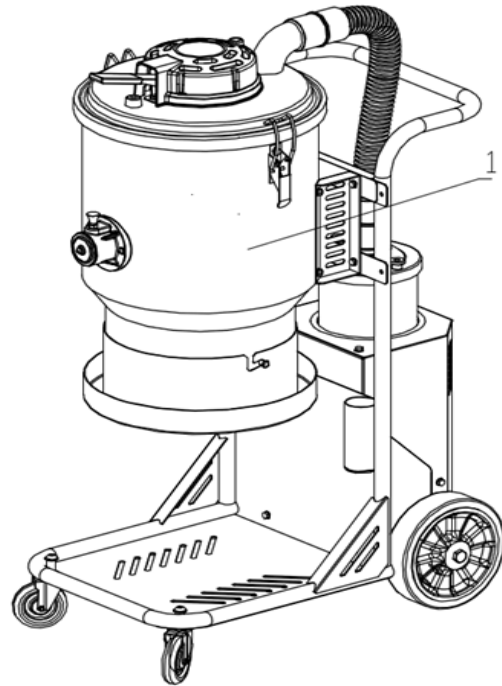
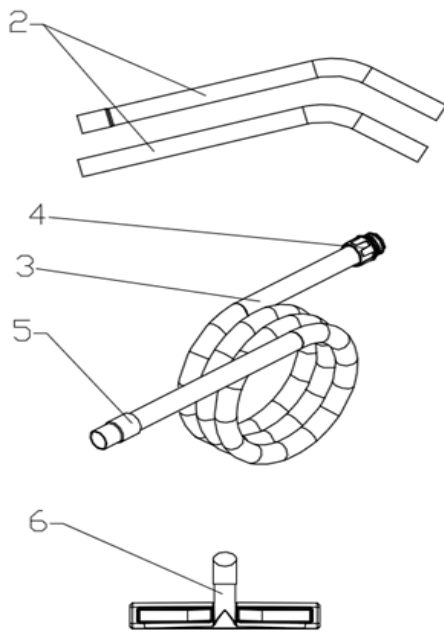


## Technical data

Data	Unit	TS-1000/PRO	TS-2000/PRO
Voltage	V	230V	230V
Power (max)	kW	1.2	2.4
	PS	1.6	3.2
Current (UL)	A	4	8
Air flow (max)	m <sup>3</sup> /h	200	400
	cfm	118	236
Negative pressure (max)	inch	90	90
Main pipe	mm	4m x D38	7.5m x D50
Admission	mm	50	70
Pre filter EN 779-F8	% @1µm	99.5	99.5
Pre filter area	m <sup>2</sup>	1.7	3
HEPA filter EN1833-H13	%	99.99	99.99
H13 HEPA filter area	m <sup>2</sup>	1.2	2.4
Dust extraction system	Type	Plastic bag	Continuous folding bag
Dimensions (L*W*H)	mm	420x680x1100	570x710x1270
Weight	kg	30	48

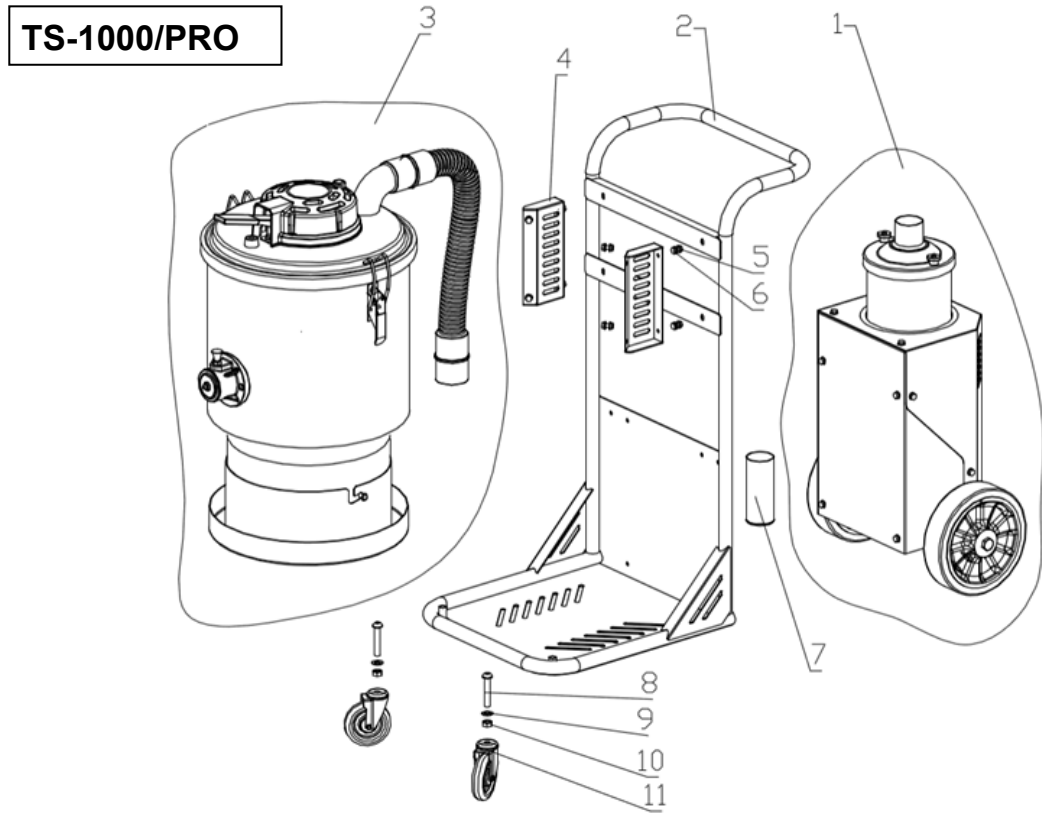
# Packing list

TS-1000/PRO



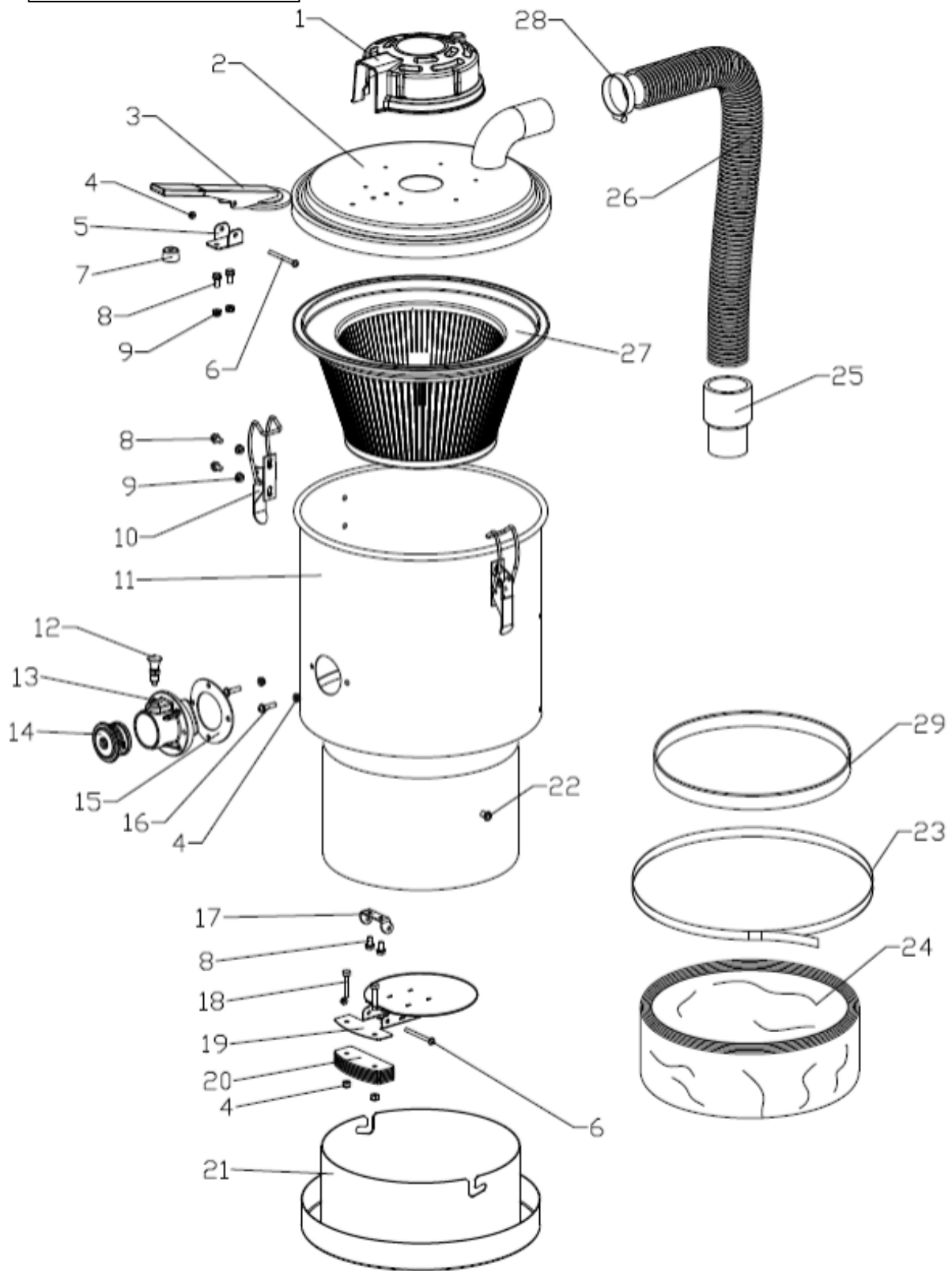
No.	Description	Number	Unit
1	TS-1000/PRO dust collector	1	Piece
2	∅ 38 Vacuum cleaner tube	2	Piece
3	∅ 38 EVA hose	5	Metre
4	∅ 38 Full hose cuff	1	Piece
5	∅ 38 Hose cuff	1	Piece
6	∅ 38 Floor brush	1	Piece

# Exploded view



No.	Designation	Number	Size
1	Motor set	1	
2	TS-1000/PRO Trolley complete	1	
3	TS-1000/PRO Collector	1	
4	Connection plate	2	
5	Screw	4	M6*12
6	Mother	4	M6
7	Storage box for cable ties	1	
8	Screw	2	M10*60
9	Washer	2	M10
10	Lock nut	2	M10
11	Front wheel	2	3"

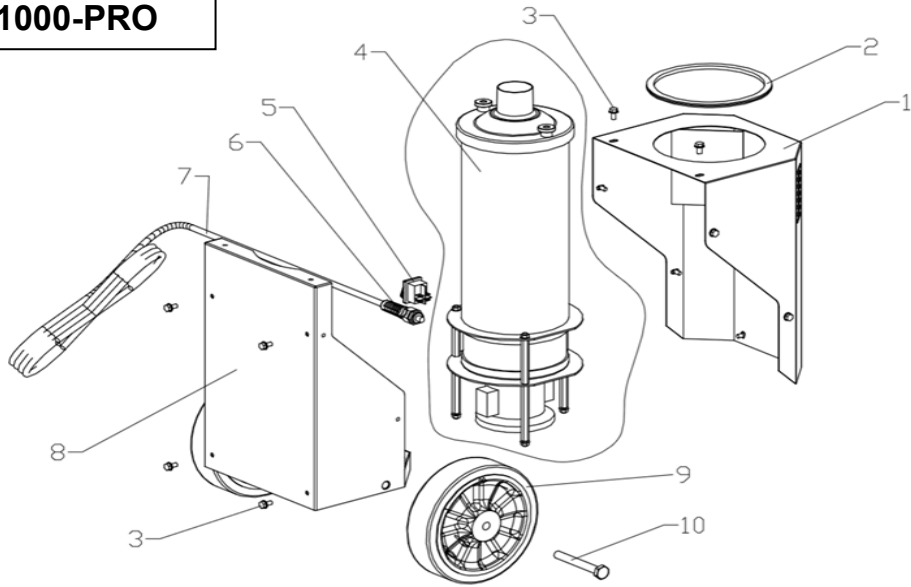
**Collection  
container TS-1000/**



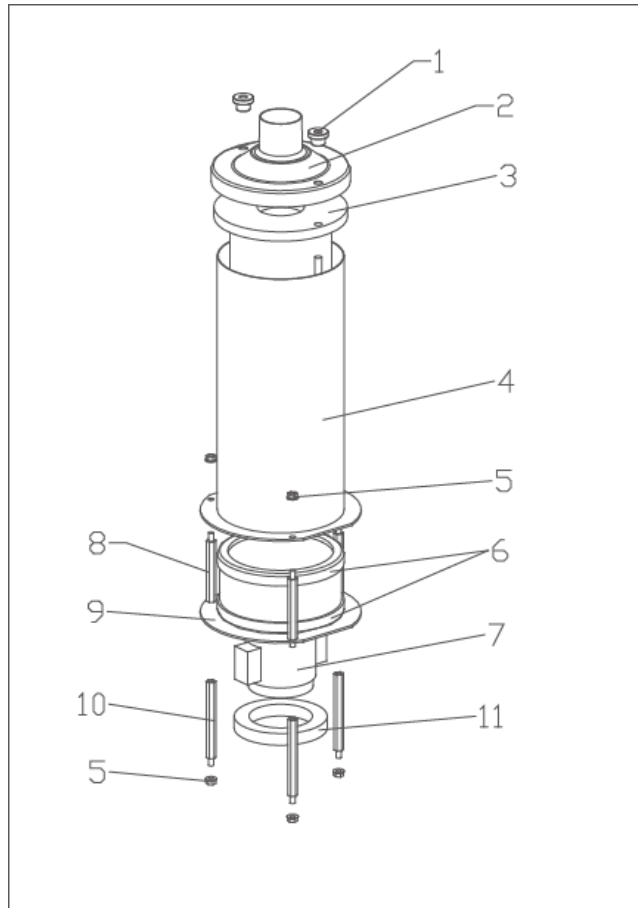
No.	Designation	Number	Size
1	Plastic cover	1	
2	Cover TS-1000/PRO	1	
3	Lever (for jet pulse filter cleaning)	1	
4	Mother	5	M6
5	Lever holder	1	
6	Screw	2	M6*60
7	Damper	1	
8	Screw	6	M6*12
9	Mother	8	M6
10	Quick release	2	
11	TS-1000/PRO container	1	
12	Index Plunger	1	
13	D50 Inlet	1	
14	Inlet gasket complete set	1	
15	Sealing ring for D50 inlet	1	
16	Screw	2	M6*20
17	Bracket	1	
18	Screw	2	M6*35
19	Flap mounting kit	1	
20	Balance weight	6	
21	Endless bag holder	1	
22	Mother	2	M8*15
23	Clamping ring	1	
24	Endless filter bag	1	

25	D50 Antistatic hose sleeve	2	
26	D50 EVA antistatic hose	1	D50*520mm
27	TS-1000/PRO Main filter	1	
28	Hose clamp	1	40-63mm
29	Rubber ring	1	

**Motor kit  
TS-1000-PRO**



No.	Description	Number	Size
1	TS-1000/PRO Engine Cowling	1	
2	Rubber ring	1	
3	Mother	12	M6*12
4	Motor set	1	
5	Switch	1	
6	Plug	1	PG11
7	Cable with mains plug	1	3*1.5 8 metre length -RVV-10A power plug
8	TS-1000/PRO engine cowling	1	
9	Wheel	1	8"
10	Mother	2	M12*100



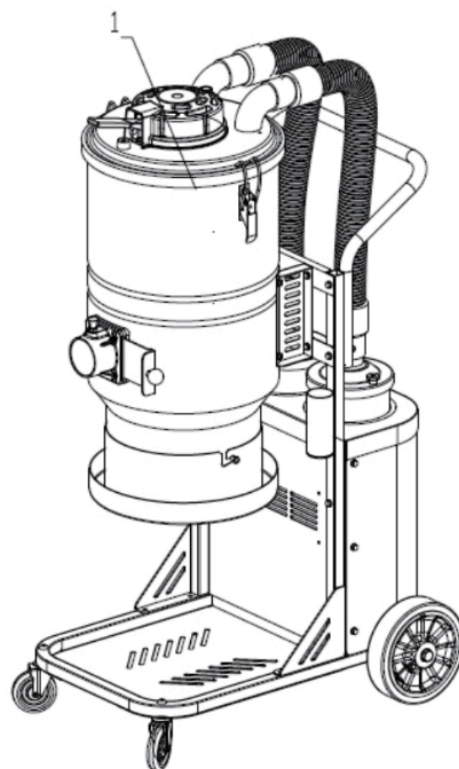
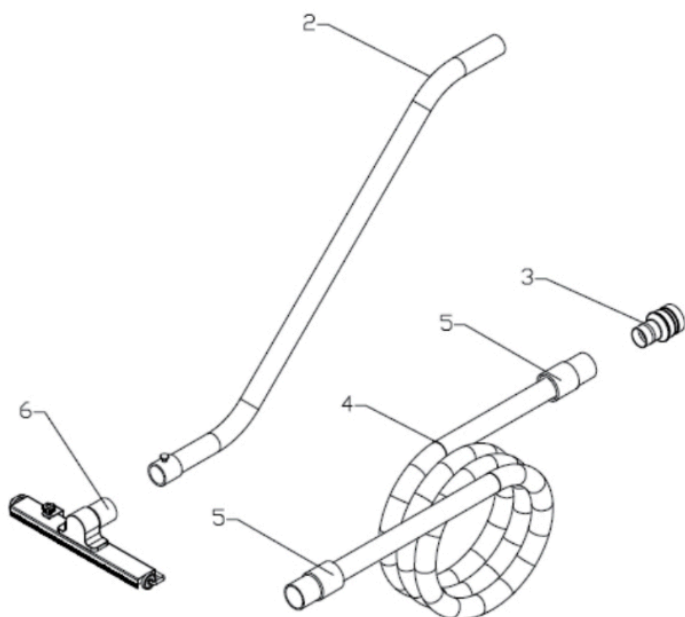
No.	Description	Number	Size
1	Mother	2	M8
2	HEPA filter cover	1	
3	H13 HEPA filter	1	
4	HEPA filter cover	1	
5	Mother	6	M6
6	Damper	2	
7	Single-phase motor	1	240V 1200W
8	Screws-1	3	M6-76.5
9	TS motor hard disk	1	



10	Screws-2	3	M6-96.5
11	Seal	1	D98-78-15

# Packing list

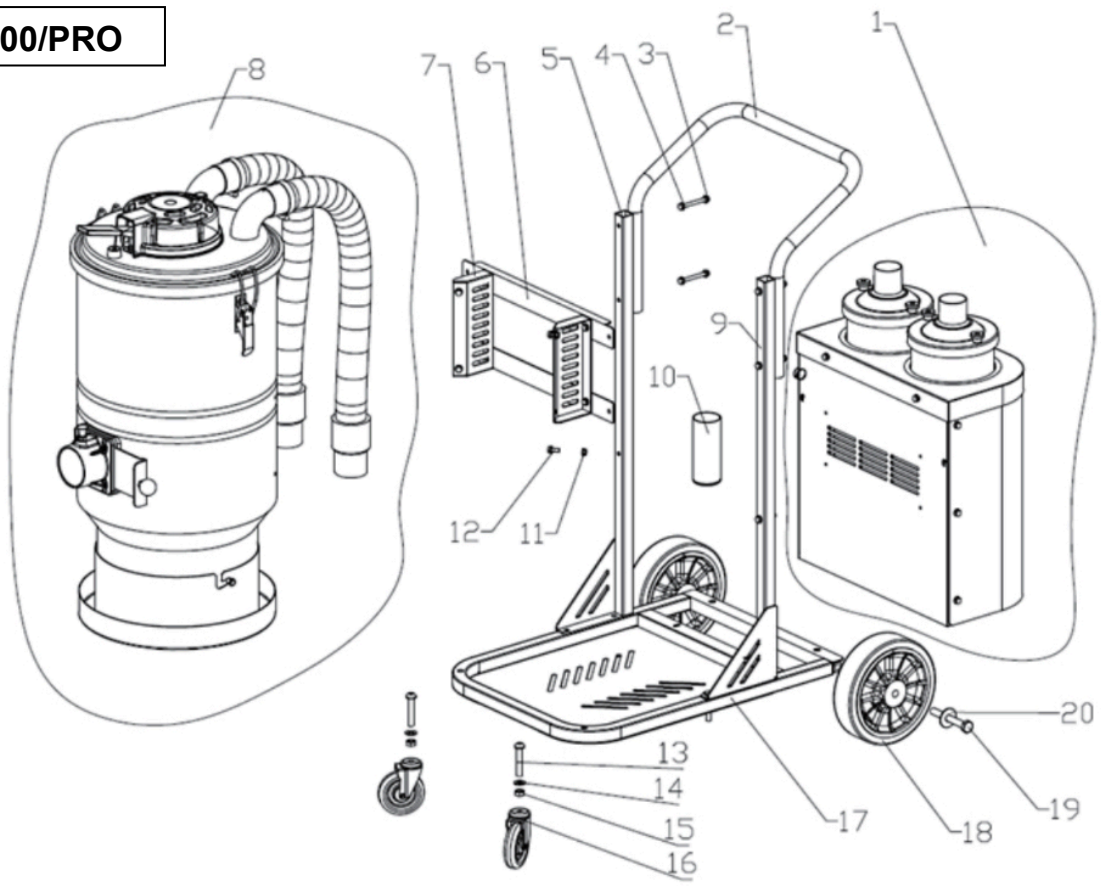
**TS-2000/PRO**



No.	Description	Number	Unit
1	TS-2000/PRO dust collector	1	Piece
2	∅ 50 S Hoover tube	1	Piece
3	∅ 70/50 reducer	1	Piece
4	∅ 50 EVA hose	7.5	Metre
5	∅ 50 Hose cuff	2	Piece
6	∅ 50 Floor brush	1	Piece

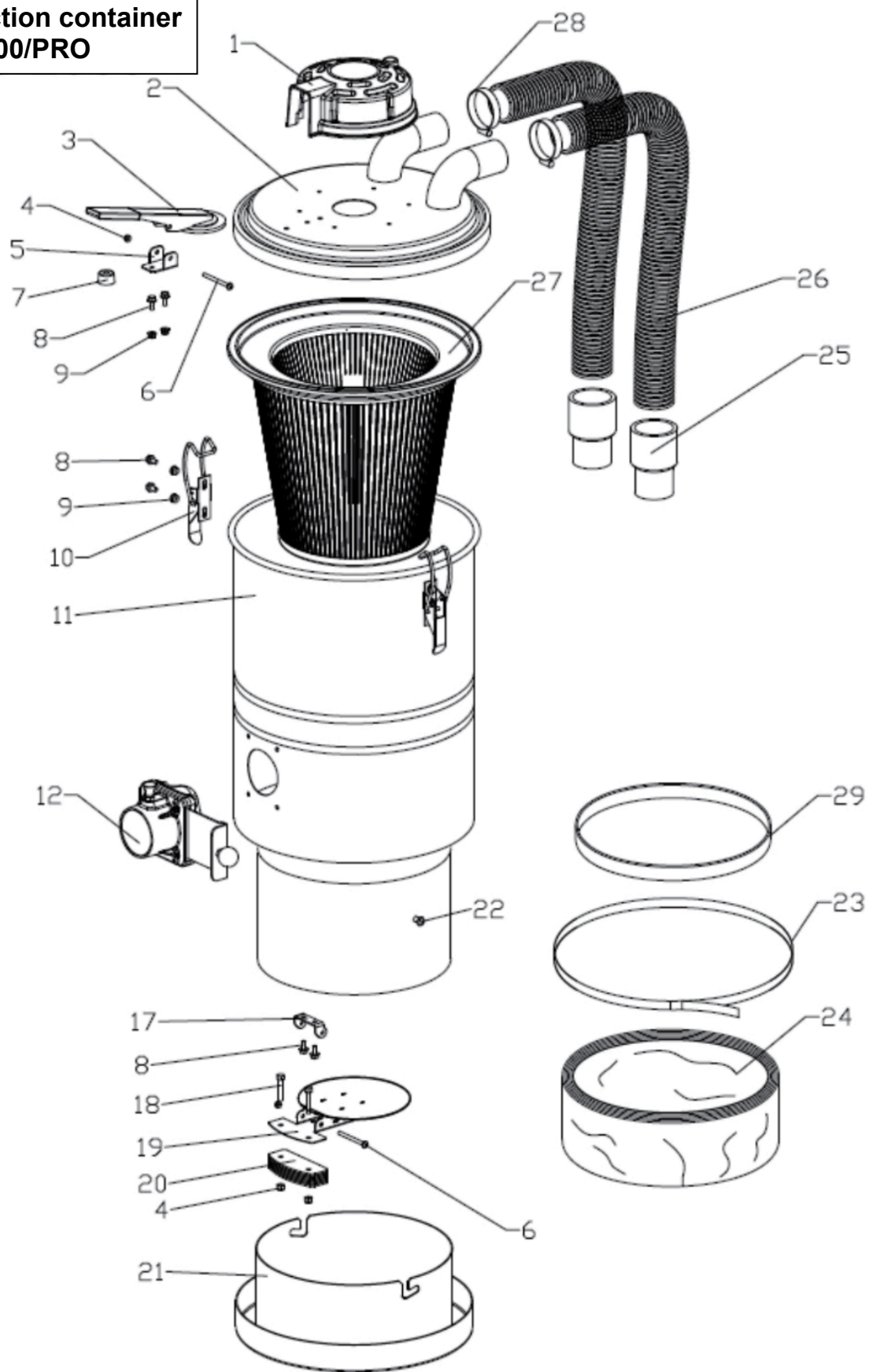
# Exploded view

TS-2000/PRO

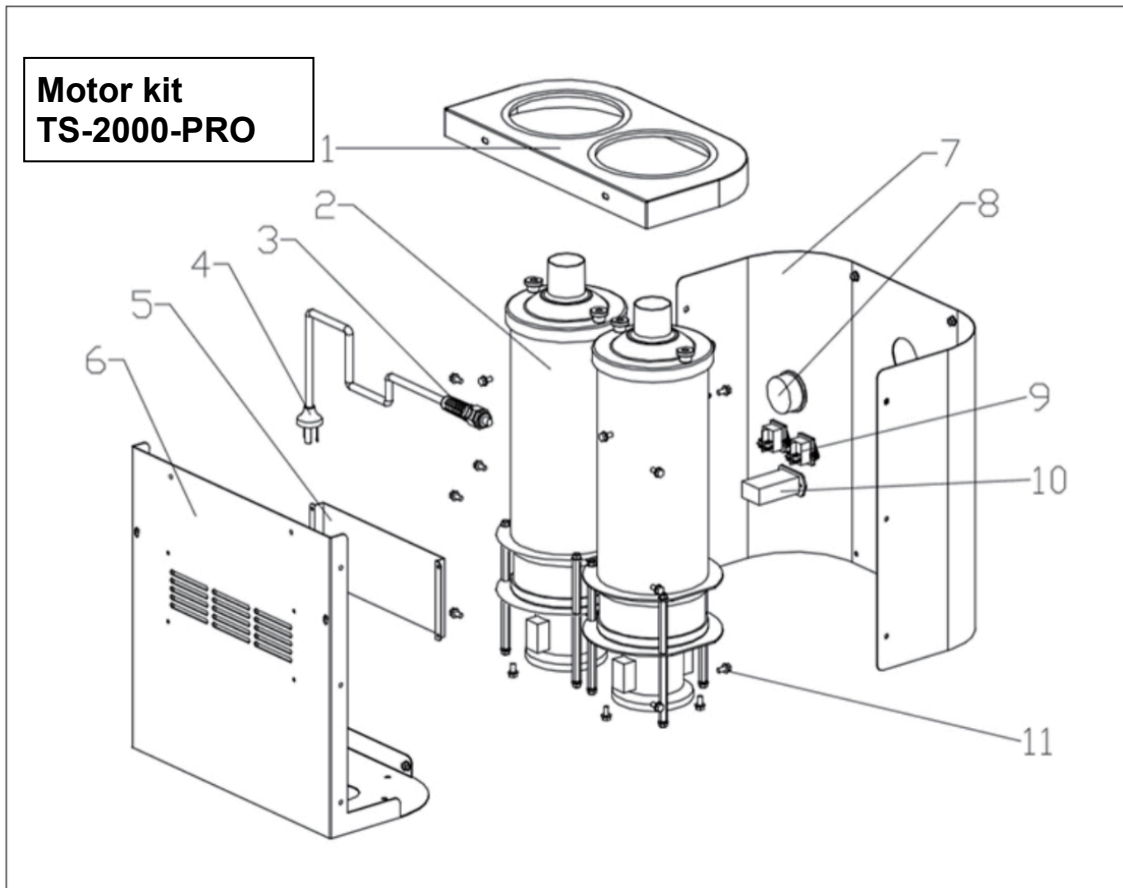


No.	Designation	Number	Size
1	Motor set TS-2000/PRO	1	
2	TS-2000/PRO Trolley complete	1	
3	Mother	4	
4	Screw	4	M6*60
5	TS-2000/PRO right pedestal	1	
6	Support for connection plate	2	
7	Connection plate	2	
8	TS-2000/PRO Collector	1	
9	TS-2000/PRO left pedestal	1	
10	Storage box for cable ties	1	
11	Mother	8	M6
12	Screw	4	M6*12
13	Screw	2	M10*60
14	Washer	2	M10
15	Mother	2	M10
16	Front wheel	2	3"
17	TS-2000/PRO base plate	1	
18	Rear wheel	2	8"
19	Screw	2	M12*100
20	Washer	2	M12*30*2.5

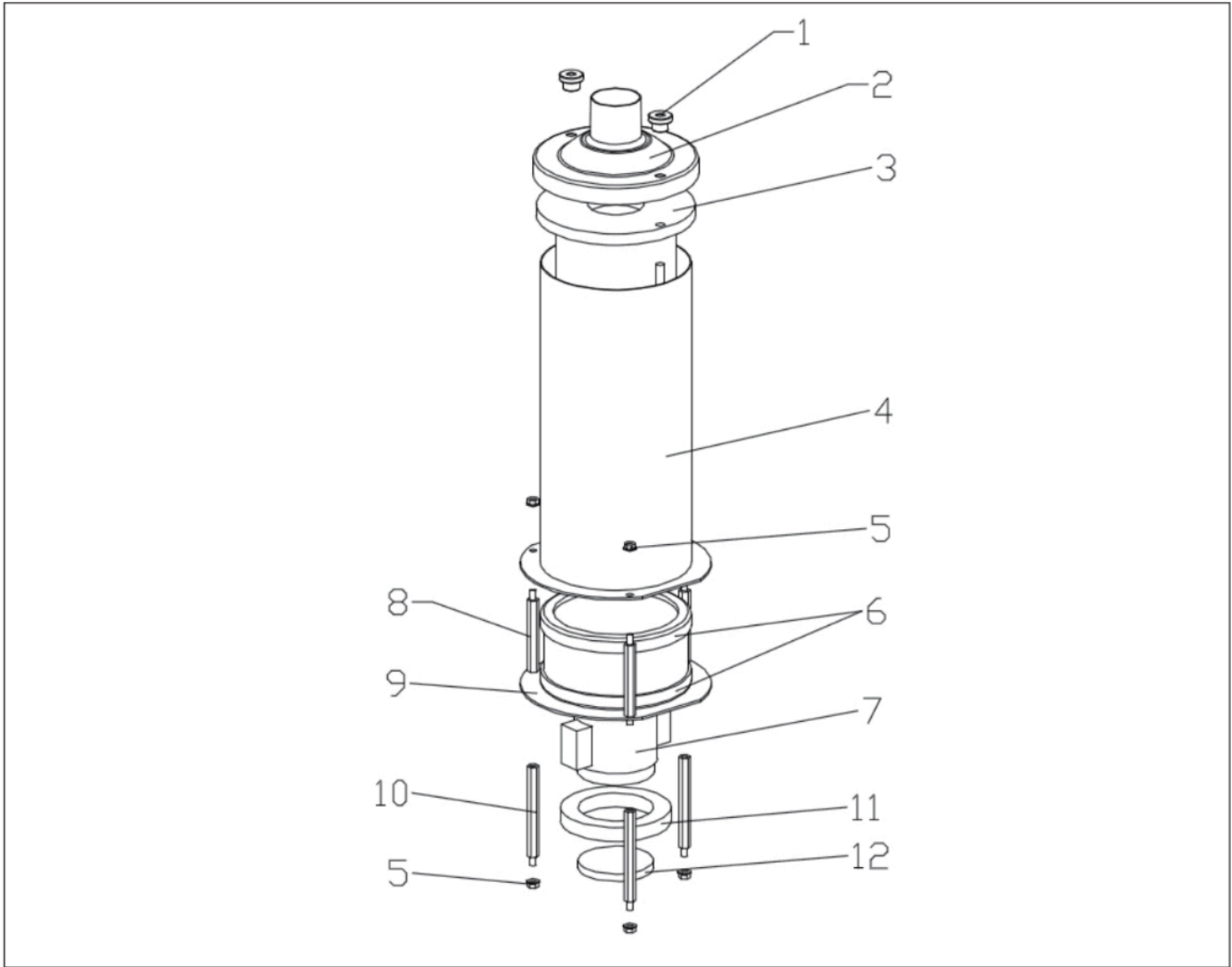
**Collection container  
TS-2000/PRO**



No.	Designation	Number	Size
1	Plastic cover	1	
2	Lid TS-2000/PRO	1	
3	Lever (for jet pulse filter cleaning)	1	
4	Mother	5	M6
5	Lever holder	1	
6	Screw	2	M6*60
7	Damper	1	
8	Screw	6	M6*12
9	Mother	8	M6
10	Quick release	2	
11	TS-2000/PRO Container	1	
12	D70 inlet	1	
13	Bracket	1	
14	Inlet gasket complete set	1	
15	Hexagon head screw	1	M6*60
21	Endless bag holder	1	
22	Mother	2	M8*15
23	Hose clamp	1	
24	Endless filter bag	1	
25	D50 Antistatic hose sleeve	6	
26	D50 EVA antistatic hose	2	D50*520mm
27	TS-2000/PRO Main filter	1	M8*15
28	Hose clamp	2	40-63mm
29	Rubber ring	1	



No.	Description	Number	Size
1	TS-2000/PRO Engine Cowling	1	
2	Motor set	2	
3	Connection	1	PG11
4	Cable with mains plug	1	3*1.5 8 meter length -RVV-10A plug
5	Baffle	1	
6	TS-2000/PRO Front engine cowling	1	
7	TS-2000/PRO Rear engine cowling	1	
8	Vacuum gauge	1	
9	Switch	2	
10	Hour counter	1	
11	Screw	20	M6*12



No.	Description	Number	Size
1	Mother	2	M8
2	HEPA filter cover	1	
3	H13 HEPA filter	1	
4	HEPA filter cover	1	
5	Mother	6	M6
6	Damper	2	
7	Single-phase motor	1	240V 1000W
8	Screws-1	3	M6-76.5
9	TS motor fixing plate	1	
10	Screws-2	3	M6-96.5



11	Seal	1	D98-78-15
12	Cotton filter	1	D78-8

## 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  
EMV Directive 2014/30/EU

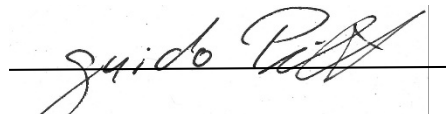
The following harmonised standards were applied:

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

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Date: 17.05.2023

  
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