



User manual

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V. BRØNDUM A/S

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RONDA[®] 4000H QC

Dust extraction from larger tools

IMPORTANT!

Please read the manual before you start using the vacuum cleaner.

Preface

The user manual is to ensure a secure operation of the vacuum cleaner, and to ensure that the user is in no way uncertain as to the use. The manual must be stored near the vacuum cleaner.

Does any uncertainty arise as to the use of the vacuum cleaner or the material collected, the work should be stopped until all questions have been cleared.

Pictures and drawings are for illustrative purpose and will make the understanding of the manual easier.

In the introduction the user manual will give a survey of the most important safety aspects. Then it will be explained how the vacuum cleaner is built up, and how to operate it in general.

Chapter 3 "Technical Data" provides information about function, performance during normal operation and machine specifications.

Chapter 4 "Composition – Structure – Operation" provides more details on the composition and the operation of the vacuum cleaner.

Maintenance of the vacuum cleaner is described in chapter 6 "Maintenance and Troubleshooting".

Information about repair of minor malfunctions can also be found in chapter 6 "Maintenance and Troubleshooting".

The spare parts list with "exploded" drawing of the vacuum cleaner can be used for the ordering of spare parts and also as an assembly instruction in connection with the replacement of parts.

Finally the user manual contains an EU Declaration of Conformity, information and references to more information and also the contact information.



Before you use the vacuum cleaner you **MUST** read the user manual.

The user manual must be kept readily available for all users.

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1. Introduction

General description

The RONDA® 4000H QC has been designed to be adaptable to the user's needs.

The machine is composed of a basic module: A frame with suction motors / motor top with HEPA filter and a multi-tube filter as pre-filter.

The basic module can be used for various tasks, as the collection part can be replaced as required.



- Large suction power – 4 motors
- Multi-tube filter technology → continuous suction power
- H-class
- Cyclone effect
- Filter cleaning during operation
- Static electricity dissipation
- Handles both cement and wood dust
- Flexible collection with Longopac
- Possibility of emptying during operation
- Possibility of dust-free emptying
- Easy to handle
- Robust metal frame with large wheels
- Telescopic system for low transport height
- Alarm for low air flow

The RONDA® 4000H QC is designed to fit into a delivery/box van. The front bar makes it easy to raise the machine to operation position and lower it to transport position, where the height of the machine is no more than 1600 mm (1.6 m).

REMEMBER: Always lock the transport clips of the machine during transport.



During operation, the machine can also be positioned in the “lowered” position.

Once the Alarm sounds – use the chok valve to clean the filter, turn off the machine and the dust will fall into the Longopac for easy emptying.

Having the machine lowered at operation, will minimize the risk of debris accidentally dropping into the Longopac, when moving the machine during operation and transport.

2. Safety precautions / warnings

Show responsibility towards other people when using the vacuum cleaner.

Follow the instructions of this user manual during use or maintenance of the vacuum cleaner.

2.1 Warning symbols in the user manual

Particularly important instructions concerning the safety, which may cause danger if they are not followed, have been marked with a symbol.



This symbol is used for safety instructions, the non-observance of which could cause danger to the personnel.



This symbol warns the user that the non-observance of the instructions could lead to harm to the device and its functions.

2.2 Warnings

- This vacuum cleaner has been designed for collection of dry materials only. NOT for the suction of liquid.
- This vacuum cleaner has not been designed for collection of conductive dust.
- DO NOT USE THE VACUUM CLEANER WITHOUT A PROPER GROUND CONNECTION. This vacuum cleaner has been designed to be used in an outlet with ground connection. It is the user's responsibility to make sure that the outlet has ground connection.
- Electric vacuum cleaners may develop static electricity during use.
- The appropriate filters have to be correctly placed before use.
- Never collect something burning or smoking, such as warm ashes, cigarettes or matches.
- The container should be clean and dry before you use the vacuum cleaner.
- This vacuum cleaner has been designed for indoor use only.

2.3 Safety precautions / disposal

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and 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.

- The vacuum cleaner is **NOT** approved for collection of flammable, explosive, poisonous or extremely health hazardous dust, fluids or gasses.
- RONDA® 4000H QC can be used for collection of dust hazardous to health according to CEI/IEC 60335-2-69 Annex AA, dust class **H**.
- The user must ensure that the vacuum cleaner is adjusted to the task and that regulatory requirements are met.
- When collecting dust hazardous to health you must use a collection bag and a plastic sack for dust-free emptying.
- Avoid damaging the supply cord. When replacing the supply cord, only use an original supply cord (see the spare parts list). V. BRØNDUM A/S, an authorized V. BRØNDUM A/S dealer or an equally qualified person must carry out the replacement in order to avoid danger. Regularly check the mains connection for damage, such as fissures or ageing. If damage is found, the supply cord must be replaced before further use.
- The vacuum cleaner must be connected to the mains voltage with a reliably operating grounding (HFI or HPFI circuit breaker).
- The plug must be removed from the power supply before any repair or maintenance operations – also cleaning.
- RONDA® 4000H QC must be connected to 230 V power supply. Make sure that the voltage and safety fuse of the power supply correspond with the data of the data plate and the information given in this manual.
- The mains socket of the vacuum cleaner is to be used only for the purposes specified in this user manual.
- In addition to the use as an industrial vacuum cleaner, this machine is also suitable for commercial use, e.g. in hotels, schools, hospitals, factories, shops, offices and rental businesses.
- Before use the operators should be provided with information, instruction and training for the use of the appliance and the substances for which it is to be used, including the safe method of removal and disposal of the material collected.
- For user servicing, the appliance must be dismantled, cleaned and serviced, as far as is reasonably practicable, without causing risk to the maintenance staff and others. Suitable precautions include decontamination before dismantling, provision for local filtered exhaust ventilation where the appliance is dismantled, cleaning of the maintenance area and suitable personal protection.
- In the case of class H appliances the outside of the appliance should be decontaminated by vacuum cleaning methods and wiped clean or treated with sealant before being taken out of a hazardous area. All the appliance parts shall be regarded as contaminated when removed from the hazardous area and appropriate action taken to prevent dust dispersal.
- The manufacturer, or an instructed person, shall perform a technical inspection at least annually, consisting of, for example, inspection of filters for damage, air tightness of the appliance and proper function of the control mechanism. On class H appliances the appliance filtration efficiency should be tested at least annually, or more often, according to national requirements. The test method that may be used for the verification of the

appliance filtration efficiency is given in AA.22.201.2. If the test will not be passed, it must be repeated with a new essential filter.

- When carrying out service or repair operations, all contaminated items, which cannot be satisfactorily cleaned, are to be disposed of. Such items shall be disposed of in impervious bags in accordance with any current regulation of the disposal of such waste.
- The upper part of the motor top is a non-dust proof compartment, and when cleaning, the covers of this compartment are removed by loosening the screws fixing the covers.



IMPORTANT! The motor top must not be covered, when the vacuum cleaner is in use.



IMPORTANT! The motor top must be protected during transport, as described.

RONDA[®] 4000H QC is classified H in accordance with the requirements of the EN 60335-2-69 Annex AA for the collection of dust hazardous to health.

RONDA[®] 4000H QC is also in accordance with the Machinery Directive (2006/42/EC).

H	WARNUNG: Diese Maschine enthält gesundheitsgefährdende Stäube. Die Entleerung, Wartung und der Austausch von Filtern müssen nur von autorisierten Benutzern, mit geeigneten persönlichen Schutzmaßnahmen versehen, ausgeführt werden. Alle Filter müssen montiert werden, bevor die Maschine in Betrieb gesetzt wird.	H
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Advarsel. Dette apparat indeholder sundhedsfarligt støv. Tømning og vedligeholdelse, inklusive fjernelsen af støvposen, må kun foretages af en fagkyndig person, som bærer egnet personligt beskyttelsesudstyr. Tænd ikke før hele filtersystemet er installeret, og volumenstrømkontrolens funktion er kontrolleret.	Warning. This appliance contains dust hazardous to health. Emptying and maintenance operations, including removal of the dust collecting means, must only be carried out by authorised personnel wearing suitable personal protection. Operate only after the full filtration system has been fitted and checked.	Mise en garde: Cet appareil contient des poussières dangereuses pour la santé. Les opérations de vidage et d'entretien, y compris l'enlèvement des moyens de ramassage de la poussière, ne doivent être effectués qu' par du personnel autorisé portant des équipements de protection individuelle appropriés. Ne pas faire fonctionner sans que les systèmes de filtration complets soient en place, et que la fonction de l'indicateur pour la vitesse d'air est vérifiée.
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Three labels are included. One in Danish, one in English and one in French.

The standard language of the label on the machine is German. Therefore the label with the language of the user country is to be placed upon the H-label with the text as shown above.

2.4 Personal protective equipment

You must wear personal protective equipment adapted to the task.

Be aware that the handling, operation and emptying of the machine can cause situations where it can be necessary to use for instance

- Eye protection
- Hearing protection
- Work gloves
- Respirator

The guide lines for the material being worked with and the internal guide lines for the use of personal protective equipment must be followed.

2.5 Training and qualifications of the operator

The operator that uses, maintains or inspects the vacuum cleaner must have the necessary qualifications.

The operator must rehearse the operation and maintenance in order to obtain a routine. If the operator has not got the sufficient qualifications, the necessary training must be implemented.

If the safety instructions are not followed, there may be danger to the operator and damage to the environment.

If the instructions have not been followed, no claim for damages can be made.

2.6 Danger, if the safety instructions are not followed

If the instructions are not followed, the following can happen:

- Failure of important machine operations.
- Defects in connection with maintenance.
- That persons are exposed to the consequences of electrical and mechanical errors.

2.7 Occupational safety

The safety instructions of this manual, the national regulations for the prevention of danger and the internal guidelines for the performance of the work must be followed.

- The safety guards of the motor top may not be removed during operation.
- If substances dangerous for the environment are spilled, these are to be removed in such a way that there is no danger to persons or the environment. Follow the current guidelines for the collection and handling.
- The risk of electrical hazards must be removed.

2.8 Safety rules for operator and service people

It is the operator's responsibility that the maintenance, inspection and repair are made by qualified service people only. The service people must study this manual carefully.

- Maintenance may only be carried out when the vacuum cleaner has been stopped, and the power disconnected by pulling the plug out of the socket.
- The procedure of stopping, emptying and cleaning the vacuum cleaner must be observed.
- The safety guards of the motor top must be remounted immediately after the completion of the maintenance work.
- Before starting the vacuum cleaner again the instructions of this manual must be followed very carefully.

2.9 Safety rules for maintenance, inspection and repair

You are not allowed to make any alterations to the vacuum cleaner without permit from V. BRØNDUM A/S. For safety reasons you are allowed to use original spare parts only. V. BRØNDUM A/S cannot be held responsible if unoriginal spare parts have been used. The vacuum cleaner has been manufactured in accordance with the relevant norms and standards. Repair and replacement of electrical parts must be performed by authorized personnel. If not, considerable danger to the operator may occur.

We can only guarantee for safety and healthiness in connection with this machine, if the instructions of this manual are observed.

If problems, such as breakdown of the machine should arise, you are not allowed to use the vacuum cleaner. Contact V. BRØNDUM A/S on +45 8682 4366.

This manual contains all the necessary information about operation and maintenance. The guarantee becomes void, if the instructions of this manual are not observed.

2.10 Safety instructions



When using electrical equipment the necessary safety precautions must be taken in order to avoid the risk of fire, electrical shock and damage to persons. The below safety instructions are to be read and followed when the vacuum cleaner is being used.

1. Keep the working area clean. Slippery and greasy surfaces increase the risk of accidents.
2. Be aware of the surroundings. Do not expose the vacuum cleaner to rain. Do not use the vacuum cleaner in moist or wet surroundings. Do not use the vacuum cleaner near flammable gasses or liquids.
3. Protect against electrical shock.
Avoid bodily contact with earthed building parts, such as radiator, water pipes and the like and also electrical appliances with their own earth connection.
4. Keep children and unauthorized persons away from the work place.
Do not let unauthorized persons touch the vacuum cleaner or the supply cord. All unauthorized persons should be kept at a distance.
5. Put the vacuum cleaner away, or make it ready for transport after use.
Keep the vacuum cleaner in a dry place and inaccessible to children.
6. Do not use force.
Do not use force when operating the vacuum cleaner. Do not step on the hose, or the electrical cord.
7. Choose the correct tool, accessories for the task.
Do not use badly proportioned or light tools for heavy tasks. Do not use tools for anything they are not intended for.
8. Choose suitable working clothes.
9. Personal protective equipment.
Put on eye and/or hear protection, if necessary. Put on respirator in dusty environments.

10. Protect the electrical cord.

Never carry the vacuum cleaner by the electrical cord. Do not remove the plug from the socket by pulling the electrical cord. Keep the electrical cord away from heating sources, oil and sharp edges.

11. Choose a safe working position so that there will be no risk of falling in the hose and cord.

12. Keep the machine and equipment in good repair.

Keep the vacuum cleaner clean and dry and follow the instructions of the chapter about maintenance.

13. Cut off the electricity supply when the vacuum cleaner is not in use.

Remove the plug from the socket before maintenance, repair and when the vacuum cleaner is not in use.

14. If extension cords are used out of doors, they must be approved for this.

If extension cords are used, the following guidelines must be observed.

Length of cord in meters	Cross section	
	<16A	<25A
Up to 20 m	Ø1,5mm ²	Ø2,5mm ²
20-50 m	Ø2,5mm ²	Ø4,0mm ²

15. Show attention and be rested.

The vacuum cleaner must not be used, if the user is tired, sleepy or sick or under the influence of alcohol or drugs / medicine.

16. Check for damage.

Check the vacuum cleaner for damage. Check that the shields etc. have been properly fastened. Check the electrical switches, and have an authorized service mechanic replace them, if they are damaged. Do not use the vacuum cleaner, if it cannot be started and/or stopped at the switch.

3. Technical data

3.1 Technical specifications

Suction motor, Blow Through, Pnom	2950	Watt
Pmax	3600	Watt
Suction motor, voltage*	230	Volt
Suction capacity	2550	mmH ₂ O
	25,0	kPa
Air flow, max. pr Motor	53,2	l/sec.
	191,5	m ³ /h
Air flow with 5 metres hose	97	l/sec.
	350	m ³ /h
Noise Pressure level	71,5	dB(A) (re 20uPa; KpA 2 dB)
Filter area, multi-tube filter	1.87	m ²
Filter area, HEPA	2.2	m ²
Height	1540/1790	mm
Length	800	mm
Width	715	mm
Weight without accessories	70	kg
Length of cord	8	m
Vibrations	≤ 2,5	m/s ²

* Also available for 380 V



When extracting from tools (dust extractor) it is necessary to ensure a sufficient rate of air renewal (L) in the room. According to the instructions from The Danish Working Environment Service, recirculation of extracted air is forbidden. Please refer to national regulations.

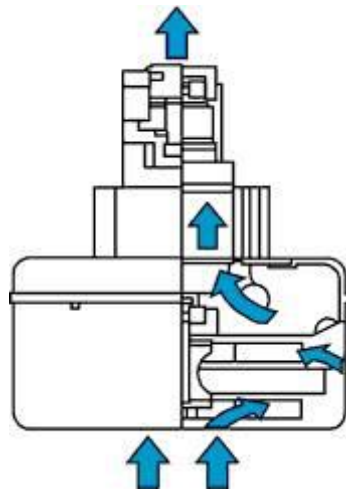
3.2 Mode of operation

When the suction motor of the machine is on, the air will be led through the machine and will collect the dust particles near the nozzle mounted.

The dust particles will be sucked through the hose into the collection container, where the majority of the particles will be held back in the collection bag and/or the multi-tube filter.

The air flow and the remaining particles, which have not fallen to the bottom of the collection container or have been held back in the collection bag or the multi-tube filter, will be carried forward to the HEPA filter.

From the HEPA filter the purified air flow will continue through the suction pump (blow through) and will be led out of the vacuum cleaner through the exhaust and noise reduction filters.



It is recommended not to use the vacuum cleaner at temperatures above 35°C, as the operation of the machine may be unstable.



IMPORTANT!

As the motor leads the cooling air through the machine, all filters **MUST** be mounted and intact.

Never cover up the motor top when the machine is in use.



Never collect warm or glowing materials.

Never extract from processes producing sparks.

4. Composition - Structure - Operation

4.1 Versions of RONDA® 4000H QC and use



RONDA® 4000H QC with Longopac dispenser.

Suitable for collection of cement and other fine and heavy dust that you want to collect in a plastic bag (Longopac).

12 litres can be collected before the machine has to be switched off for emptying of the buffer.

NOTE: The Machine does not empty the dust into the Longopac bag during operation, as the bag is drawn close to the grating or flap valve of the Longopac dispenser. The contents will not be emptied into the bag before the machine is switched off.

The best dispenser in the market for Longopac. After having placed the bag cassette in the dispenser you lock one end with a rubber ring and the other end is pulled over the edge of the cassette. The end of the bag is closed with a cable tie. The dispenser is pushed back into the machine and turned into place. The machine is ready for use.

Now you can collect approx. 12 litres – whereupon the machine has to be switched off in order to have the collected material emptied down into the bag. After having emptied the material down into the bag you can resume the collection, or you can close the Longopac bag with a cable tie and dispose of it.

4.2 Description of the main parts

RONDA® 4000H QC is designed as an effective industrial vacuum cleaner for the collection of fine dust and dust hazardous to health. Below follows a description of the main parts and how they work and operate.

Motor top with suction motor and HEPA filter, cooling ventilator with filter

The motor top is equipped with an integrated handle and switches for the suction motors.

Four suction motors are placed in the motor top and can be operated individually.

Operation of the machine can generate or produce static electricity, which can be inconvenient for the work. The motor top is provided with “earthing points” to divert any static potential to the grounding wire. This also includes the metal frame and hose.



The motor top is provided with a HEPA-filter.

The filter holds back the very fine and small dust particles that are not held back by the multi-tube filter. The actual filter surface is 2.2 m² and is protected by a metal grating, and tested by IFA to fulfil requirements for “dust class H”. The HEPA filter must be changed **at least once a year**.



Guided air outlet

Guided air outlet can easily be mounted (rebuild) with the following components. Please contact V. Brøndum A/S or the reseller for further information and product numbers.

Air outlet uses a 76 mm exhaust hose.



NOTE: Hoses longer than 5-8 meter will affect the suction performance.

Motortop cooling ventilator and filter



The motortop has a cooling air ventilator installed in the top part.

A small fuse is installed, to ensure cut-out, if any ventilator malfunctions arise.

A filter is installed to protect the ventilator from dust.

For filter exchange, please attend to the chapter “Top filter and ventilator maintenance”



Switches for on / off.

Switch 1): Motor (1)

Switch 2): Motor (2)

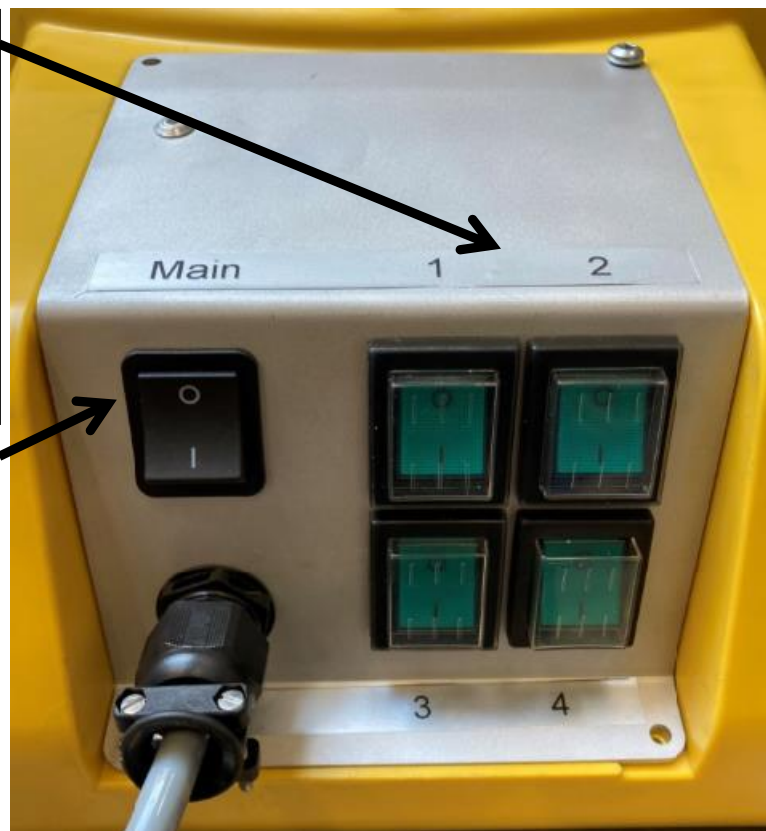
Switch 3): Motor (3)

Switch 4): Motor (4) *

*Motor (4) Can only run with Motor (1),(2) or (3) turned on.

Main Switch.

2 pole disconnecter.



Each Switch 1, 2, 3, and 4 turns on a single motor. Motor 4 can only be operated together with motor 1, 2, or 3.

If the task requires a particularly gentle dust collection, the number of active suction motors can be adjusted accordingly.

Do NOT turn the machine on/off by the use of “Main Switch”. Start the number of required motors one by one at start-up.

Acoustic alarm

With air velocity falling below 20m/s (adjusted to Ø50mm hose) the acoustic alarm will activate in order to warn the user.

Cleaning cycle must be performed – please attend to the chapter “Alarm and filter cleaning during operation”.

Filter container with multi-tube filter

The large multi-tube filter of the RONDA® 4000H QC is mounted in the filter container. The multi-tube filter has been tested with quartz-dust particles, of which more than half is less than 5 µm. (5 µm is the same as 0.005 mm.)

The surface of the filter is 1.87 m² and has a fine Teflon-coating. The Teflon-coating repels the dust, which will in this way not stick so easily to the filter material.

The filter consists of a large number of tubes (channels) mounted on springs. During operation the tubes vibrate, and part of the dust sucked on to the surface of the filter will fall down in the collection container.



4.3 Alarm and filter cleaning during operation

Pressure switches in the motortop measure the airflow internally in the power head.

If the multi-tube filter (and / or the HEPA filter) is clogged by fine particles, the acoustic alarm will be switched on, when the air flow in the hose becomes too low. When the acoustic alarm is switched on, it is an indication that the air velocity in the hose and the tube is too low, and that the multi-tube filter therefore has to be cleaned.

The multi-tube filter can be cleaned during operation, i.e. while the machine is working.

- Remove the hose from the tube.
- Block the suction of the hose so that full vacuum is made.

Vacuum will now be formed inside the machine and in the hose. At the same time the springs of the multi-tube filter will contract a little.

- Pull the flap of the shock valve (a regular pull, not a tug)



The equalization air will now go through the multi-tube filter in the opposite direction in order to equalize the pressure in the collection container and in the hose.

In this way the multi-tube filter is cleaned in an effective way. You can hear the effect of the cleaning as the alarm will be switched off.

Repeat the process a few times, if necessary.

It is recommended to leave the machine for a few minutes before emptying it. The dust will fall to the bottom of the container, and the risk of swirling dust into the surroundings during the emptying is reduced.

5. Assembly

WARNING

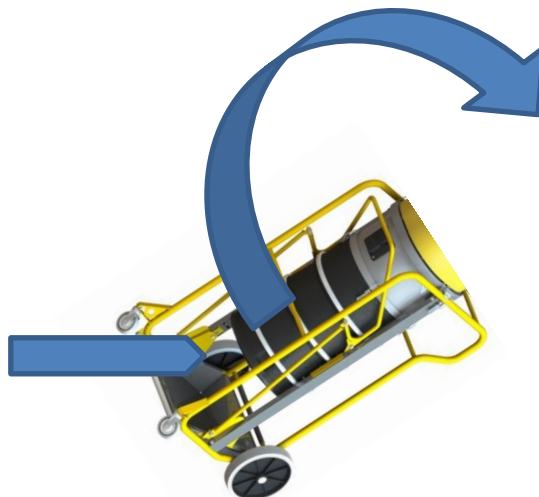
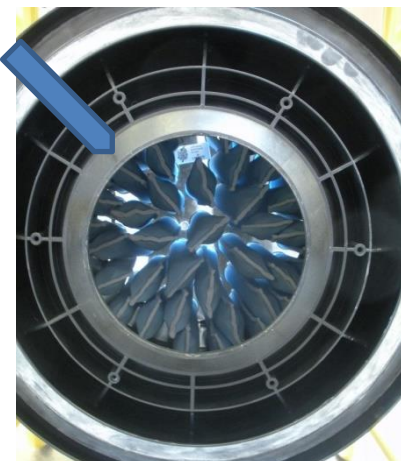
This machine may not be operated, maintained or inspected, if you haven't got the necessary qualifications for it. You must study this manual carefully before you start using the vacuum cleaner.

5.1 Mounting of Longopac flange for dispenser (If not already mounted/installed)

The flange is mounted with screws in the mounting base at the bottom of the machine (or the flap valve – if any).

Lay down the machine for easier access to the mounting.

Tightening sf screws: 4-6 Nm.





5.1.1 Mounting of Longopac in dispenser



- Rubber band
- Dispenser
- Longopac



1. The inner side of the Longopac bag has to be mounted correctly in the dispenser.

The inner opening has to be up.



2. Mount the bag in the dispenser.



3. Cut the strings.



4. Pull up approx. 10 cm of the inner side (1 fold)



5. Put the 10 cm of the bag down into the centre of the dispenser



6. Mount the rubber band by pulling it over the dispenser outside the bag



7. Pull the part of the bag that was put down into the centre of the dispenser over the rubber band.



8. And place it at the inside of the Longopac bag



9. Pull out approx. 30 cm of the outside of bag (3 folds)



10. Pull the bag out over the dispenser



11. Check that the bag does not fold or in any other way prevents the Longopac from being pulled freely out



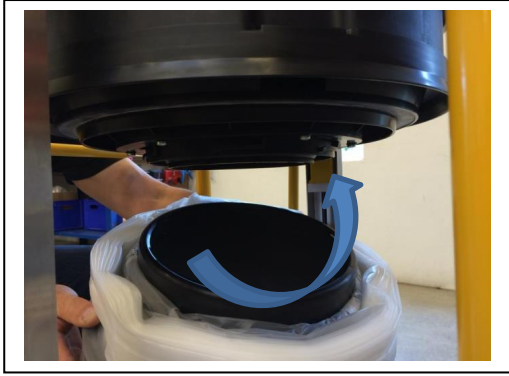
12. Check by pulling the bag evenly, the dispenser being upside down



13. Mount 1-2 cable ties on the bag to close it



14. This will be the beginning of your bag and the bottom. Be aware - when collecting heavy materials - that this cable tie is to hold the total weight of the material collected. Be sure that the cable tie is tight - otherwise it can fall off.



15. Place the dispenser under the machine and lift it up – so that all the "claws" fall into place.



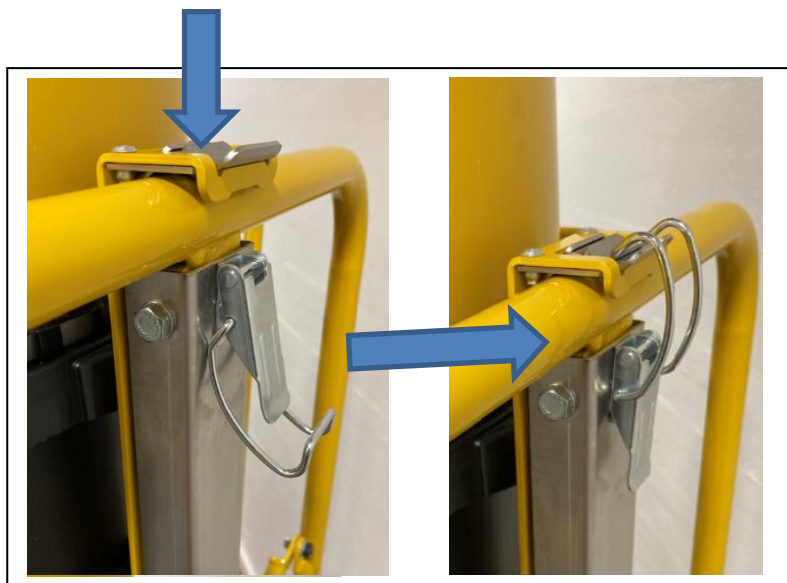
16. Secure the dispenser with a twist.
Now, the machine is ready for operation.



5.2 Transport



The machine is transported standing.
You can lower the machine to transport position by using the handle in front



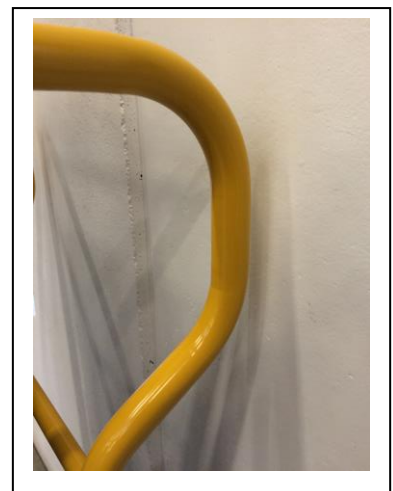
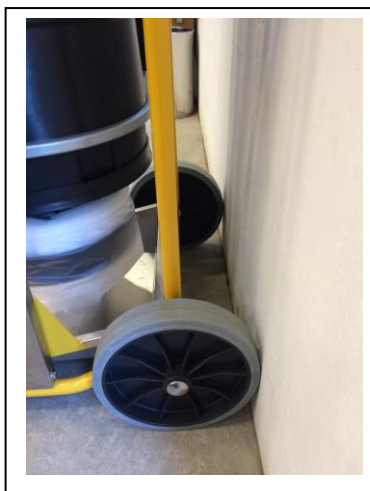
During transport the transport bracket / handle **MUST** be locked.



The machine is transported standing.
Clamping etc. only round the cross bar at the front of the frame.
See the markings on the picture to the left.
Max. traction: 10 kg.



Furthermore, make sure that the wheels and the back of the frame have a fixed installation in the car /trailer so that the frame is not tightened unevenly or will tip over during transport.



IMPORTANT:

Make sure the machine is equipped with a Longopac and that the machine inlet is blocked with the plug during transport.



REMEMBER:

Disposal of dust hazardous to health must always take place according to the current rules.

If the machine has been used for dust hazardous to health, you **MUST** use personal protection equipment (PPE) when emptying, handling and cleaning the machine.

The machine must **ALWAYS** be emptied after use.

6. MAINTENANCE and TROUBLESHOOTING

WARNING

Before maintenance and repair the vacuum cleaner must be switched off and the plug removed from the socket.

6.1 Cleaning and maintenance

The machine must be emptied after every use. If the machine is left with dust, there is a risk of self-ignition.

Read the chapter concerning safety precautions before cleaning and maintenance.

The easiest way to clean the machine is as follows:

- Clean the multi-tube filter as required. See the description of filter cleaning during operation.
- Wipe the machine on the outside with a dry or slightly wet cloth.

6.2 Maintenance of the motor top

The motor top is made of maintenance-free parts and needs therefore no daily maintenance, apart from external cleaning and check that the supply cords and plugs are undamaged.

The easiest way to clean the motor top is with a wet cloth. Do not aim jets of water directly at the motor top.

In order to avoid stop in operation it is recommended to let an authorised technician make an annual inspection of the electrical parts.

It is recommended to let an authorised service centre inspect the brushes of the suction motor after approx. 700 working hours, and if necessary replace them. In this way the life of the suction motor is prolonged.

6.3 Change of filters

When replacing the filters, the necessary precautions to protect the environment and the respiratory passages of the operator must be taken. This protection must be based on the tasks and the type of dust or sludge being on the surface of the filters. Before checking or replacing the filters you must clean the multi-tube filter as previously described, and you must empty the machine.

6.3.1 Check and replacement of the multi-tube filter (Product No. 84.67.1098)

The multi-tube filter is made of a robust filter material and has a very long life. However, the filter will gradually be worn by the many large and small particles that are held back. Therefore it is necessary to check regularly if the filter is undamaged and intact. If the filter material is not intact, the multi-tube filter cannot hold back the dust particles, which will penetrate the filter and be caught by the HEPA-filter. The HEPA-filter is intended for very fine dust and will rapidly be blocked, if the multi-tube filter is damaged.

- Loosen the container clips of the motor top and remove the motor top.
- Place the motor top on a dry, clean and even surface.
- If necessary, loosen the adapter ring and lift it away from the yellow frame in order to be able to inspect the filter container.
- Check the top surface of the multi-tube filter for dust particles. If you can see dust particles there, it is a sign of a damaged multi-tube filter and worn filter material.



Is the multi-tube filter damaged, or have holes been worn in the filter surface, the multi-tube filter must be replaced.

A replacement of the multi-tube filter should also include a replacement of the HEPA-filter. See the next chapter.

6.3.2 Replacement of the HEPA filter (Product No. 84.67.5037)



- Loosen the three container clips of the motor top and remove the motor top. Place the motor top so that the filter is easily accessible.
- Loosen the bolt holding the filter. Now the filter can be removed and disposed of.
- Place a plastic bag to cover the filter. Ensuring no dust release when removing the filter



- Remove the used filter within the plastic bag.
- Mount the new filter on the motor top and make sure that the contact surface of the filter is undamaged and clean.
- Make sure “static discharge spring is touching the filter element.
- Tighten the bolt so that the filter shuts tight and is firmly connected to the contact face of the motor top. Don’t tighten the bolt too much.



6.3.3 Top filter and ventilator maintenance



- Remove the 4 screws holding the black top cap
- Remove the cap



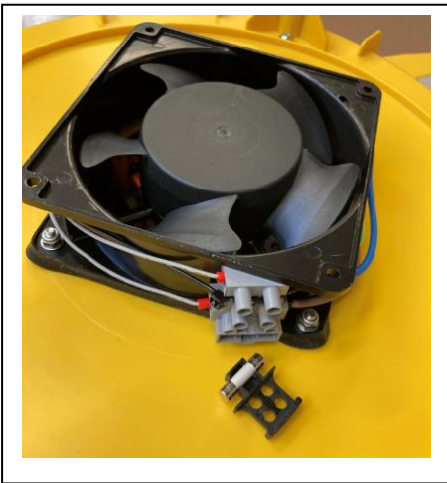
- Place a plastic bag to cover the filter. Ensuring no dust release when removing the filter
- Remove the used filter within the plastic bag



- Mount the new filter on the motor top and make sure that the contact surface of the filter is undamaged and clean.
- Put back the black top cover and tighten it down with the 4 screws.

Changing the fuse for the ventilator:

- Remove the filter as described
- Pull out the fuse and install replacement.
- Reattach the filter and top cover as described.



6.3.4 Disposal of used filters and collected dust



When you dispose of the used filters you must make sure that this is done according to the environmental legislation.



REMEMBER:

Disposal of dust hazardous to health must always take place according to the current rules.

If the machine has been used for dust hazardous to health, you **MUST** use personal protection equipment (PPE) when emptying, handling and cleaning the machine.

The machine must **ALWAYS** be emptied after use.

6.4 Troubleshooting

If the alarm is constantly activated:

- The multi-tube filter is blocked
Clean the multi-tube filter as described in the chapter concerning cleaning of filter during operation.
- The HEPA-filter is blocked
Replace the filter as described in the chapter concerning change of filters.
- The suction hose, tube or nozzle may be blocked.
Stop the machine, and remove the blocking.

If the machine does not collect the material in a satisfactory way:

- The suction hose, tube or nozzle may be blocked.
Stop the machine, and remove the blocking.
- The collection container may be filled to overflowing.
Stop the machine, and empty the container.
- A leak might have arisen in connection with the mounting of the motor top or the collection container.
Start the machine, and block the suction hose. Normally you will be able to hear a possible leak. Loosen the container clips of the motor top or collection container, place the motor or the collection container correctly, and lock the clips again.
- The multi-tube filter may be blocked.
Clean the multi-tube filter as described in the chapter concerning cleaning of filter during operation.
- The HEPA-filter may be blocked.
Replace the filter as described in the chapter concerning change of filters.

7. EU Declaration of Conformity



DECLARATION OF CONFORMITY

V. BRØNDUM A/S
Sadolinsvej 14
DK – 8600 Silkeborg

hereby declare that the following product:

Electrically operated industrial vacuum cleaner,
Classified for dust class “H” .

Model:
RONDA[®] 4000H QC

has been designed and produced in accordance with the basic requirements and other
relevant stipulations of the following directives:

Machinery Directive (Directive 2006/42/EF)
Low Voltage Directive (Directive 2006/95/EF)
EMC Directive (Directive 2004/108/EF).
ROHS (Directive 2011/65/EU – (Add. 2015/863)

The compatibility has been achieved by using the following standards:

EN 60 335-2-69 (Including Annex AA)
EN 61000-3-2
EN 61000-3-3
EN 55014-1
EN 55014-2
EMF EN 50366

Silkeborg, September 2022

A handwritten signature in black ink, appearing to read 'P. Brøndum'.

Per Brøndum
Managing Director

This vacuum cleaner is manufactured by:

V. BRØNDUM A/S
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