

## INDUSTRIAL VACUUMS

SV1-430-MBS20 SV1-430-MBS SV1-430-MLS



INSTRUCTION MANUAL

GEBRAUCHS-UND WARTUNGSANLEITUNGEN

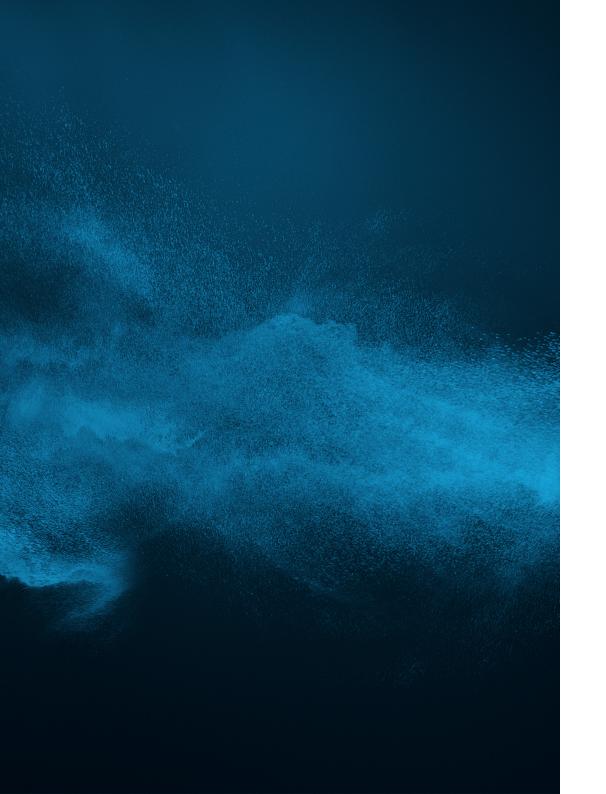
**INSTRUCTIEHANDLEIDING** 

ISTRUZIONI PER L'USO E LA MANUTENZIONE

INSTRUCTIONS D'UTILISATION ET D'ENTRETIEN

INSTRUCCIONES DE USO Y MANTENIMIENTO







## SV1-430 INDUSTRIAL VACUUM RANGE



SV1-430 RANGE MAX-VAC.COM



# **ENGLISH**

# INSTRUCTION MANUAL

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### WARNINGS



## The appliances described in this manual are suitable for:

- Vacuuming dust and liquids.
- Professional use (e.g. hotels, schools, hospitals, factories, shops, offices and rental agencies).
- The 'M' Category is suitable for the separation of dry powders (as long as they are not explosive, inflammable and/or carcinogenic) with maximum permeability
   <0.1% and MAC (Maximum Allowable Concentration) ≥0.1mg/m³</li>

### Carefully keep this instruction manual.

- An electric appliance is not a toy. Use and store it out of reach of children.
   Children must be supervised to ensure they do not play with the appliance.
- Keep the packaging components (cardboard box, PSE protections, etc.) out of reach of children.
- This appliance has not been designed to be used by person's (including children) with reduced physical, sensory and mental faculties, or who have not first read this instruction manual.
- This appliance has been designed to operate with alternating current only.
   Before starting the appliance, check that the mains voltage corresponds to that indicated on the data plate.
- Check that the electric system is fitted with a differential switch (type automatic cut-out)



- Use an extension cable only if in perfect conditions and make sure that the cross-section is appropriate for the power of the appliance plus the power of the electric tool.
- Never leave the appliance running unattended.
- If the discharge air is released back into the working environment, it must have
  a sufficient Class 'M' air exchange index. In order to observe the required limit
  values, the flow rate must be maximum 50% of the fresh air flow rate (volume
  of the environment VR by air exchange index LW). Also comply with the
  regulations in force.
- Activate the "self-cleaning filter" function (when fitted) for a maximum time of 60 seconds.
- Completely unwind the power cable before starting the appliance.
- Do not aim the suction hose at ears, eyes, hair, persons or animals in general.
   During transport of the appliance, the motor must be off. Also ensure that the appliance cannot disperse dust into the environment and that it is in a stable position
- Shut off the machine in the case of high dust emission, fire or smoke. Using the appliance is allowed only after it is checked an repaired by an authorized person.
- Always pull the plug from the mains power socket immediately after use and before carrying out any cleaning or maintenance on the appliance.

## Risk of falling:

Do not climb onto or sit on the cover of the appliance.





 Repairs may only be carried out by specialists who keep the original spare parts supplied by the manufacturer.

Repairing the appliance yourself can be extremely dangerous.

- In compliance with the regulations in force, appliances that are to be discarded must be made unusable by cutting the power cable before disposal.
- 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 other appliance parts shall be regarded as contaminated when removed from hazardous area and appropriate action taken to prevent dust dispersal.
- During cleaning and maintenance, it is recommended to always wear personal protection devices (gloves and mask) as required by the national regulations in force.
- Before proceeding with maintenance operations, it is strongly recommended to first decontaminate the appliance by vacuuming clean air for a few minutes and to clean it on the outside.

#### Never use the appliance:

- When your hands are wet or moist;
- If it has fallen and shows evident damage or malfunctions;
- If the power cable or plug is defective.



Clean the appliance using water only. Do not use trichloroethylene, solvents or abrasive detergents.



- Maintenance and cleaning must be carried out in a room with adequate ventilation and in such a way as not to endanger the operators or other persons.
- Clean the place where maintenance is carried out in order to prevent that hazardous substances are dispersed into the environment.
- During maintenance, repair and disposal operations, all the contaminated parts
  of the appliance that cannot be completely cleaned must be eliminated; put
  them in impermeable bags according to the national regulations in force for
  disposal of special waste.
- For proper disposal, it is advisable to indicate on the impermeable bag which substances have been vacuumed.
- It is recommended to carry out a technical inspection on the appliance at least once a year to check that the seals are tight and proper functioning of the control mechanisms so that any malfunctions can be detected. Daily check the integrity of the filter system.
- This appliance has been designed to be used by adequately trained persons, specifically on cleaning and maintenance of the appliance, the risks deriving from vacuumed materials and their proper disposal, and replacement of spare parts according to the directives in force in the various countries.
- Do not vacuum flammable, potentially explosive or corrosive substances and incandescent ash. These substances may compromise safety and operation of the appliance.
- Never put the power cable on sharp edges, do not crush it and keep it away from the rotary electric brushes
- Only use the socket outlet (when fitted) on the machine for purposes specified in the instructions.
- In the event of leaks (foam or liquid) immediately turn off the appliance.





If the power cable is damaged, it must be replaced by the manufacturer or approved technical service centre or in any case by a person with similar qualification so as to prevent any risk.

## CAUTTON

- This machine shall be stored indoors only.
- Frequently clean the seat where the safety float slides and periodically inspect it to check its integrity.
- Do not use the appliance when the filter system is damaged.
- Dust class 'M' does not apply when vacuuming liquids.

### REMEMBER THAT

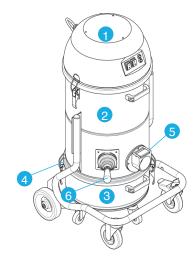
- In case of potentially hazardous substances come in contact with eyes or skin, rinse with water and consult a specialist center.
- In case of potentially hazardous substances were inhaled or ingested call a physician. Do not induce vomiting to avoid contaminating the lungs; it is recommended to rinse your mouth without swallowing water.
- If, in the case of spontaneous vomiting, is supposed to have entered the lungs of potentially dangerous substances, transport to hospital.

The manufacturer declines all responsibility for improper use or not according to the instructions provided, tampering with and inadequate maintenance of the appliance.



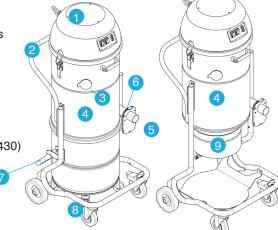
# TECHNICAL SPECIFICATIONS SV1-430 MBS20

- 1. Vacuum's head with commands
- 2. Filter chamber
- 3. Dirt collection container
- 4. Container closing hook
- 5. Suction nozzle
- 6. Filter shaker lever



## SV1-430 MBS/MLS

- 1. Vacuum's head with commands
- 2. Vacuum handle
- 3. AirPulse® valve
- 4. Filter chamber
- 5. Suction inlet
- 6. AirPulse® sliding damper
- 7. Bin handle
- 8. Dust/ Debris Bin (only on MBS430)
- 9. Longopac® System (only on MLS430)





## TECHNICAL SPECIFICATIONS

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	201 430 MB2 50
Power supply voltage	230 V~
Frequency	50/60 V-Hz
Power Rating	2.4-3.4 kW-HP
Maximum airflow approx	380m³/h
Maximum negative pressure	250 mBar
Container capacity	20 Litres
Noise level	72 dB-A
M filter surface	1.5m²
H filter surface (if provided)	2.2m²
Size approx	516 x 545 x 994 mm
Appliance weight	35 Kg

SV1	430	MBS	SV1	430	MΙ	S

Power supply voltage	230 V~	230 V~
Frequency	50/60 V-Hz	50/60 V-Hz
Power Rating	2.6-3.5 kW-HP	2.6-3.5 kW-HP
Maximum airflow approx	380m³/h	380m³/h
Maximum negative pressure	250 mBar	250 mBar
Container capacity	72 Litres	72 Litres
Noise level	2,2 dB-A	2,2 dB-A
M filter surface	$4  \text{m}^2$	$4m^2$
Size approx	585 x 545 x 1245 mm	585 x 545 x 1395 mm
Appliance weight	45 Kg	45 Kg



### **OPERATION**

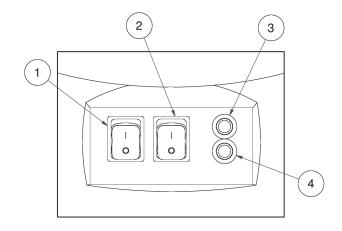
#### **Controls**

1. I/0 Switch: START/ STOP first motor

2. I/0 Switch: START/ STOP second motor

3. White indicator light: PRESENCE OF VOLTAGE

4. Red indicator light: FILTER CLOGGING



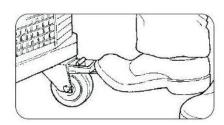
#### **Operation Cycle**

Ensure that the power cord is intact and in perfect state.



Before inserting the plug, ensure that the voltage of the power supply line corresponds to that indicated on the vacuum's identification plate.

- Ensure that the power plug is inserted into the socket correctly.
- Make sure the flexible hose is properly inserted and tightened on the special inlet.
- Ensure that the dirt collecting container is in the proper position and locked in place under the vacuum's chamber.
- Secure the vacuum cleaner using the brake on the rotating wheel, as shown in the figure.



Hold the end of the flexible hose with the chosen vacuum accessory.

To start vacuuming turn the switch (1 or 2) to "I", to interrupt the operation turn the switch (1 or 2) to "0".

For greater suction power it is possible to activate both motors by turning both switches (1 or 2) to "I".





Before turning the vacuum cleaner on again, ensure that the pump has been stopped completely.

To move the vacuum cleaner, use the special handles situated on the front part of the machine.

The red indicator light (4) signals the filter's clogging. When the light comes on or the vacuum value is higher than the one shown on the table below, check first if the hose or the vacuuming accessory aren't clogged. In that case it will be necessary to remove what is causing the clogging, otherwise the filter must be cleaned as described in the following section of this manual.



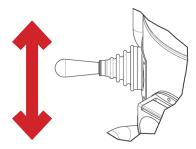
During operation, prevent the flexible pipe from rolling up or kinking.

Do not use the vacuum cleaner with the filter clogged.

#### **Manual Filter Cleaning**

To clean the filter proceed as specified:

- · Switch the vacuum cleaner off
- Wait for the motors to come to a complete stop
- Lift and then lower the lever energetically to shake the internal filter.





The AirPulse Filter Cleaning system only works with the vacuum cleaner switched on.

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#### **Manual Filter Cleaning**

To clean the filter cartridge, the vacuum cleaners of the 430MBS/MLS series, are equipped with the AirPulse® Filter Cleaning system. The system works thanks to the difference in pressure between the internal atmosphere and the external atmosphere leading to the dust becoming detached from the filtering fabric of the cartridge, without needing to switch the vacuum cleaner off.

The system is made up of a disk lid on the filter chamber and a shutter situated on the inlet

Proceed as follows to clean the filter:



With the vacuum cleaner turned on, lift the sliding damper on the inlet



Open the AirPulse valve for a few seconds, and repeat this operation a couple more times.



Lower the shutter and resume normal use.

#### Emptying the container

Depending on the type and quantity of material being vacuumed, it is necessary to check periodically the dirt container to avoid filling it excessively.

Proceed as follows to empty the container:

- Switch the machine off
- As previously mentioned the vacuum is blocked thanks to the brake on the pivoting wheel
- Unlock the container by lifting the special handle
- · Empty the bin in a dedicated container for waste disposal





If the container weighs more than 15 kg, seek assistance from someone else.



#### Inserting and locking the bin

Follow the steps below to insert and lock the bin:

- Insert the container under the vacuum
- Lower the lever using both hands



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#### Replacing parts of the Longopac® sac

Depending on the type and quantity of material being vacuumed, it is necessary to periodically check the sac to avoid filling it excessively.

Proceed as follows to replace the portions of used sac:

- · Switch the machine off
- · Block the vacuum cleaner using the lever on the swivelling wheel
- · Close the upper part of the sac with a clamp (provided with the kit)
- Separate the sac portions by cutting between the two clamps
- Remove the portion of the sac containing the vacuumed material, then pull
  the sac until it reaches the plate at the bottom of the vacuum cleaner to have
  another sac, ready for use.
- Resume with the machine's usual operations

#### Storage - Decommissioning

Remove the filter and clean it, empty the debris collecting container or remove the bag part with the debris and store the vacuum cleaner in a place protected from atmospheric agents with temperatures between 0°and 40°C, covering it with a nylon sheet so as to prevent dust from accumulating.





The AirPulse Filter Cleaning system only works with the vacuum cleaner switched on.

#### **Emptying the container**

Depending on the type and quantity of material being vacuumed, it is necessary to check periodically the dirt container to avoid filling it excessively.

Proceed as follows to empty the container:

- · Turn off the machine
- As previously mentioned, the vacuum cleaner can be locked using the brake positioned on the rotating wheel
- Unlock the container unhooking the special closing hooks
- Take the container out from below the filter chamber using the special handles





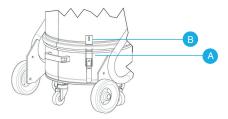
Waste disposal must take place in compliance with the laws in force in the country in which the vacuum cleaner is used - for Swiss Legislative Decree 152/2006 and subsequent amendments. In the event of use with class M and H dusts, these must be conveyed to a special plastic bag.



#### Inserting and locking the bin

Follow the steps below to insert and lock the container:

• Insert the container under the vacuum cleaner, aligning the closing hooks (A) with the corresponding parts (B) located on the filter chamber





Upper limb crushing hazard!

Never insert your hands between the dirt container and the vacuum cleaner in the locking phase

#### **Storage - Decommissioning**

Remove the filter and clean it, empty the debris collecting container or remove the bag part with the debris and store the vacuum cleaner in a place protected from atmospheric agents with temperatures between 0° and 40°C, covering it with a nylon sheet so as to prevent dust from accumulating.

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## **MAINTENANCE**



Special vacuum maintenance must be carried out solely by specialised technicians authorised by MAXVAC.

This section describes the checks and routine maintenance operations required to ensure proper vacuum operation.

Maximum reliability and minimum maintenance costs are the result of a planned maintenance and inspection schedule carefully followed throughout the entire lifespan of the vacuum.

Observe the set maintenance intervals and schedule the interventions according to specific requirements in relation with the vacuum production cycle.

Always use perfectly working tools specifically intended for the operation to be carried out; the use of inadequate or inefficient tools can cause severe damages.

Any other intervention required to remove faults or malfunctions must be expressly authorised by the manufacturer.

In these cases, always communicate the vacuum identification data

For significant repairs, refer to the authorised dealer, whose specialised personnel has the technological expertise in the original factory build and is always available for prompt interventions.

For user maintenance operations, the vacuum must be disassembled, cleaned and maintained, where possible, in such a way as to prevent hazards to the maintenance personnel and to third parties.

Suitable precautionary measures include decontamination before dismantling, measures for filtered forced ventilation of the room where the appliance is disassembled, cleaning of the maintenance area and suitable personal protection equipment.



At least once every three months (or more frequently, according to the operating cycle and the conditions of use), the manufacturer or a qualified technician must check the filters, ensuring that they are not damaged; and ensuring proper operation of the control devices.

Should maintenance operations or repairs be carried out, all contaminated objects must be adequately cleaned, placed in waterproof bags and disposed of in compliance with the regulations in force.



All the operations described above must be carried out with the plug disconnected from the socket.

Before starting any maintenance or cleaning operation, wear suitable PPE (protective clothing, goggles and/or gloves, etc.) according to the work to be done.

Place a sign on the vacuum with the message:

"MACHINE UNDER MAINTENANCE DO NOT START"



Before returning to use, the whole system must be checked according to the starting procedures.

Run a few trial operating cycles after every maintenance operation to ensure proper machine operation.

Failure to observe these precautions can cause serious injury to personnel.

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Maintenance operations must be carried out by trained technicians specialised in the following sectors:

- · Mechanical maintenance
- Flectrical maintenance



It is the Chief Safety Officer's duty to ensure the professionalism and skills of these technicians.

Before starting any maintenance operation, the Chief Safety Officer must:

- Keep unauthorised personnel out of the work area.
- Ensure that the necessary tools are in good conditions and readily available to the maintenance technician.
- Ensure the maintenance technician is equipped with the personal protection equipment required for the specific operation (gloves, goggles, shoes, mask, etc.)
- Make sure the maintenance technician has carefully read the instructions contained in this manual and has perfectly acquired knowledge on the operation of the vacuum and its components.

Before starting any maintenance operation, the Maintenance technician must:

Disconnect all power supplies and put the vacuum cleaner in a safe lock.



If absolutely necessary operating with the power turned on, pursuant to Swiss Legislative Decree 81/08, the maintenance technician must maintain a safe distance, prepare reachable emergency stop buttons and never place hands in the discharge container.

At the end of the procedure and before returning to use, the maintenance technician must check that guards are functioning correctly and the protection devices are intact.

Operations on the motors or on other electrical components must only be carried out by the specially trained electrical maintenance technician authorised by the Chief Safety Officer.



After any maintenance work, the Chief Safety Officer is required to check the safety conditions of the vacuum cleaner and of its safety devices.



#### Before every work shift

- Check that the power cord and the plug are not damaged: replace them immediately if there are any signs of wear, using a cord of the same type (information c/o MaxVac). This operation is the sole responsibility of an electrician.
- Check the integrity of the safety symbols (pictograms) applied to the vacuum cleaner
- · Check for proper efficiency of the filter/filters
- Check the integrity of the flexible hose and of the accessories to be used.



The flexible hose, if perforated, reduces the vacuuming power and releases dust into the surrounding environment.

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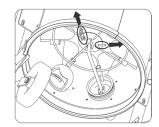
## MANUAL FILTER REPLACEMENT

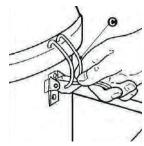


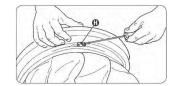
Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

Proceed as follows to replace the filter:

- Switch the vacuum cleaner off by positioning the main switch to "O"
- Disconnect the vacuum cleaner from the power socket
- · Remove the container
- From the bottom of the filter chamber, release the clip and remove the cage filter securing pin to the filter shaker lever
- Unlock the two closing hooks on both sides
- Remove the vacuum cleaner head
- Remove filter H (where provided for)
- Remove the filter and place everything on a worktop
- Loosen the fastening clamp (H); detach the filter from its support and use a pair of scissors to cut the lower wires that lock it to the shaker cage









Remove the filter, put it in a plastic bag, seal it and dispose of it according to the legislation in force regarding the type of material extracted

To reassemble the filter, operate in reverse order:

Insert the new filter in the support ring and lock it by means of the fastening strap (H)



- · Lock the filter to the cage by tying the special laces on the bottom side
- Insert the filter with ring and cage inside the filtering chamber, paying particular attention to align the cage to the filter shaking lever
- Insert the lever end into the appropriate seat on the bottom of the cage and then insert the fastening clip
- Position filter H (where provided for)
- Position the vacuum cleaner head above the filter chamber or filter H (where provided for)
- · Lock the closing hooks
- Lock the dirt collection container under the filter chamber
- Connect the vacuum cleaner to the mains socket
- Turn the vacuum cleaner on, checking its operation.

#### **HEPA** cartridge replacement (where provided for)

To replace the HEPA cartridge, proceed as follows:

- Switch the vacuum cleaner off
- Disconnect the vacuum cleaner from the power supply
- Unlock the two filter H strip closing hooks on both sides from the vacuum cleaner head
- Remove the head
- Unlock the two filter chamber closing hooks on both sides from the filter H strip
- Remove the filter H strip, turn it upside down on a work bench and unscrew the HEPA cartridge fastening screws and remove it from its slot

To re-assemble the HEPA cartridges, proceed in reverse order:

- Position the new HEPA cartridge in its slot and tighten the fastening screw provided. Ensure that it is properly secured
- Replace the filter H strip on the filter chamber and lock it with the special closing hooks
- Place the vacuum cleaner head above the filter H strip and lock it with the special closing hooks
- Connect the vacuum cleaner to the mains power supply
- Turn the vacuum cleaner on and immediately check whether it is in good working order

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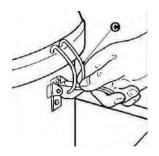
## AIRPULSE FILTER REPLACEMENT



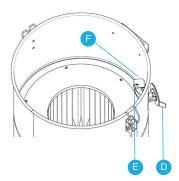
Wear appropriate PPE (dust mask, latex gloves, goggles, etc.).

Proceed as follows to replace the filter:

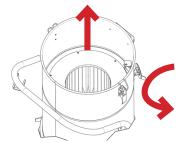
- · Switch the vacuum cleaner off
- Disconnect the vacuum cleaner from the electricity supply
- · Unlock the closing hooks on both sides.



- · Remove the head
- Remove the HEPA Filter (if provided)
- With the help of a second person, hold the AirPulse cleaning system disk lid open, take the disk lid (D) fastening screws out, then, remove the fastening screws and the spring (E) at the junction of the AirPulse system and the chamber (F) support.



 Unscrew the fastening bolts of the filter cartridge and pull it out from inside the filter chamber.





To reassemble the filter, operate in reverse order:

- Insert the new filter in the support ring and lock it by means of the fastening clip (H)
- · Lock the filter to the cage by tying the special laces on the bottom side
- Insert the filter with ring and cage inside the filtering chamber paying particular attention to the alignment of the cage with the filter shaker's handle
- Insert the lever's end into the appropriate seat on the bottom of the cage, then
  insert the fastening clip
- · Place the HEPA Filter (if provided) on top of the filter
- Insert and block the bin or the Longopac® sac
- Lock the cap with the dedicated locking hooks (C)
- Connect the vacuum cleaner to the mains
- Turn the vacuum cleaner on, immediately assessing its efficient operation

#### Replacing the HEPA filter (if provided)

- · Switch the vacuum off
- Disconnect the vacuum cleaner from the power socket
- Unlock the HEPA filter from both sides of the vacuum's head
- Remove the vacuum's head.
- Remove the HEPA filter and lay it, overturned, on a work bench. Then unscrew the filter's fastening screw
- To reassemble the HEPA filter, operate in reverse order:
- Fit the new filter and screw it onto the holding cage by means of the screw previously removed.
- Make sure it is correctly fixed.
- Reposition the HEPA filter on the filter chamber and lock it with the appropriate locking hooks
- Position the vacuum cleaner's head above the HEPA filter, then lock it with the appropriate locking hooks

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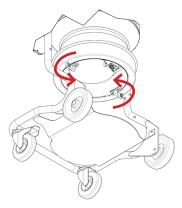
- Connect the vacuum cleaner to the mains
- Switch the vacuum cleaner on by positioning the main switch to "I", then check to make sure it works properly.



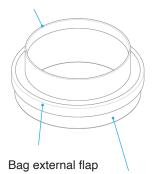


Proceed as follows, to replace the Longopac® bag

- · Switch the vacuum off
- Rotate the red hooks placed under the filter chamber to unlock the bag
- Remove the support ring and the last portion of bag
- Position the bag inside the ring making sure that the internal and external flaps of the bag are outside the ring's edges
- Position the support ring under the chamber and block it by turning the dedicated red hooks back in place
- To prepare the first portion of bag for use pull the external flap of the bag until the vacuum's base and close the lower part of the bag with the provided fastening clamp
- Switch the vacuum on, immediately assessing its efficient operation.



Bag internal flap



Bag supporting ring



## **TROUBLESHOOTING**

Problems	Causes	Solutions
The appliance will not start	No power	Check that the power socket is working
	Defective power cord, switches or motor.	Contact your technical service centre (see attached list).
Irregular Extraction	Clogged filter	Clean the filter. Should this not be enough, replace it.
	Clogged suction hose	Check the suction hose and clean it.
Excessively noisy motors	Motor(s) failure	Contact the MAXVAC technical service centre

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## Do not dispose of electrical appliances with household waste!

In compliance with European Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) and its implementation in accordance with national law, electric tools that have reached the end of their lifecycle must be collected separately and returned to an environmentally compatible recycling facility.

# "EC DECLARATION OF CONFORMITY"

The manufacturer declares that the products described in these instructions

#### SV1 430 MBS20/MBS/MLS

Comply with the essential requisites of European Directives:

2014/35 / EU 2014/30 EU 2011/65 / EU

and is in accordance with standards
This declaration was drawn up in October 2016.

EN 60335-1: 2012 + A11: 2014 EN 60335-2-69-2012 EN 62233: 2008 EN 55014-1: 2006 + A1: 2009 + A2: 2011 EN 55014-2: 2015 EN 61000-3-2: 2014 EN 61000-3-3: 2014



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