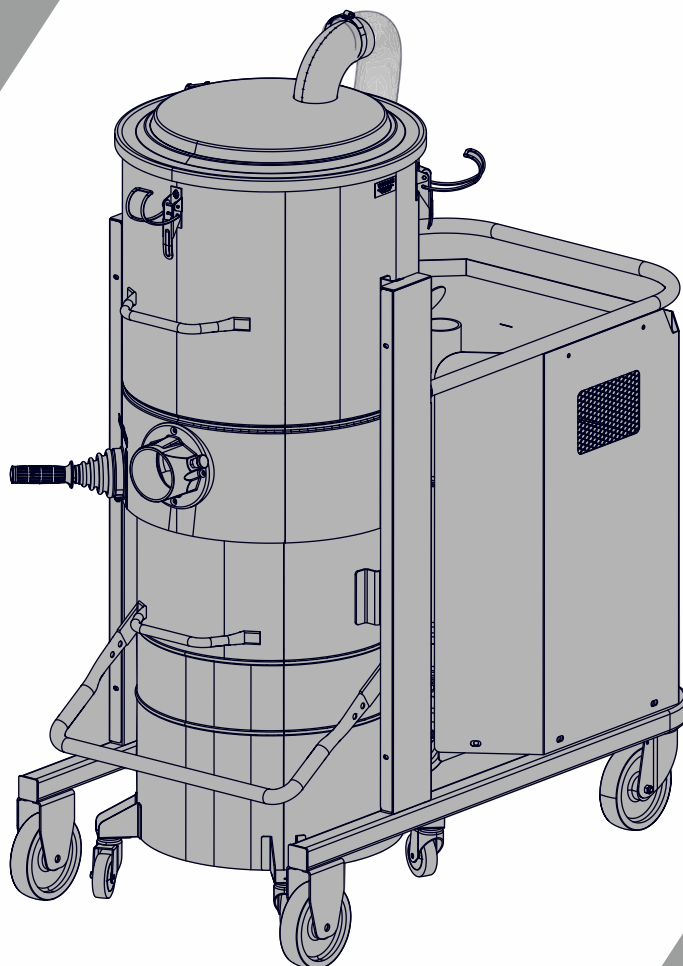


# 100 HD DRY

*Industrial Vacuum Cleaner  
Electric*

**ROOTS**



## Operator's Manual

Read this manual completely and understand the instructions before operating the machine.  
*"English Version"*



# TABLE OF CONTENTS



	Table Of Contents & Important Note	3
	Introduction	4
	Intended Use	5
	Technical Specifications	6
	Safety Instructions	7
	Know Your Machine	12
	Machine Operation	14
	Maintenance & Troubleshooting	18
	Do & Don'ts	22

## IMPORTANT NOTE:

Roots Multiclean Ltd. (RMCL) is not liable for any legal claims that may arise as a direct or indirect result of the contents of this manual.

Roots Multiclean Ltd.

R.K.G. Industrial Estate, Ganapathy,  
Coimbatore - 641 006, India.

### **MACHINE DATA**

Please fill at the time of installation for future reference:

Model No. - \_\_\_\_\_

Serial No. - \_\_\_\_\_

Blower No. - \_\_\_\_\_

Installation Date - \_\_\_\_\_

## USER MANUAL

ROOTS philosophy is to continually improve all of its products. For this reason we may modify the design, appearance and engineering of our products periodically.

Therefore, some changes, modifications and improvements may not be covered in this manual.

For the latest Operator's Manual, visit:

[www.rootsmulticlean.com/user-manual/](http://www.rootsmulticlean.com/user-manual/)

For the latest Spare Parts List, refer:

**RMCL - PartsApp**

P/N: 557411013-00, Rev: A, Date: 09/2023

Prepared by: KM-TD Dept.



## **PREFACE**

*Dear Customer,*

We are pleased with your having chosen the **100 HD DRY** machine for your cleaning requirements. Backed by our industry expertise that spans across decades, we assure you that the machine comes with our Roots promise of quality, efficiency and performance.

We advise you to carefully read through the instructions prior to the operation of the machine. This manual contains detailed instructions for the proper operation of the machine, along with important information regarding its handling, care, maintenance and service needs.

We are sure that you will find the machine and its performance to your utmost satisfaction. Once again, we thank you for choosing Roots Multiclean Ltd. (RMCL) as a trusted partner for your cleaning requirements and solutions.

## **USAGE, HANDLING AND MODIFICATIONS**

Use of the product beyond the specified scope of functioning is deemed improper and the manufacturer cannot be held liable for any damages which may arise due to this.

This machine may be used only by persons who are trained or are familiar with the machine and are aware of the possible hazards involved. The appropriate Accident Prevention Regulations as well as applicable general regulations pertaining to Safety and Health at the work place must be adhered to by the user.

Modifications made to machine without the manufacturer's consent will relieve the manufacturer of responsibility and any possible liability for consequential damage.

## **NOTES ON DOMESTIC WARRANTY**

Please refer to the **Limited Warranty card supplied along with the machine** for additional information. This Warranty Policy is applicable only for the product sold within India.

If the product requires repair or maintenance work to be performed, please ensure that you get the machine serviced from an authorised service center or dealer of RMCL to ensure that the warranty is not void.

## **ACCEPTANCE OF THE MACHINE**

On arrival of the machine at the shipping address, please check for any damage that may have occurred as a result of transit. In the event of any such damage, the purchaser is bound by responsibility to send a claim letter to the concerned authorized branch/dealer with a copy of the invoice. The letter should be sent within 24 hours of receipt of the machine.

## **THE MANUAL**

All information contained is without obligation. RMCL particularly reserves the right to modify any equipment, technical specifications, colours, shapes, materials and the like so as to adapt them to local conditions all without previous announcement and without giving reasons. RMCL may stop manufacturing certain models without previous notice.

The Operator's Manual corresponds to the latest information available for this machine at the time it was printed. Minor deviations resulting from enhancements of the design cannot be entirely represented.

The Operator's Manual is an integral part of the machine and must not be misplaced.

RMCL reserves the right to change the product or contents of this manual without prior information.

For Battery, Motors, Engines and other OEM components related kindly refer to their manufacturers manual supplied along with the machine for instructions regarding usage, maintenance and service.

---

**NOTE:** Illustrations shown in this manual are for representative purpose only. Actual product may vary.

- We have specified the Model No./Type. in some contents/instructions.
- If Model No./Type has not been specified, the instruction will be applicable to all models.



Prior to first operation, read the manual carefully and strictly comply with the instructions contained.

## INTENDED USE



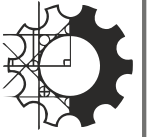
### INTENDED USE

This industrial vacuum cleaner is intended for industrial/commercial use, for example in hotels, schools, hospitals, factories and rental businesses. It is designed to clean and collect solid non-flammable materials in an indoor environment.

Use only recommended filters/accessories.

Do not use this machine in any other way other than described in this Operator's Manual.

# TECHNICAL SPECIFICATIONS - 100 HD DRY



Model Description	Unit	100HD DRY Value	100HD DRY HEPA Value
Voltage/Frequency	V/Hz	345-415/50	345-415/50
Phase	--	3	3
Power (Output)	kW	5.5	5.5
Vacuum Pressure	mm of H <sub>2</sub> O	3790	3790
Vacuum Pressure (Operating condition)	mm of H <sub>2</sub> O	3059	3059
Air Flow	m <sup>3</sup> /h	530	530
Filter Surface Area	cm <sup>2</sup>	30,000	30,000
Theoretical Capacity (Dry)	Liters	100	100
Suction Inlet	Dia mm	80	80
Filter Type	--	STAR	STAR
Sound Level	dB(A)	82	85
Protection	IP	55	55
Insulation	Class	F	F
Weight	Kg	172	179
Height	mm	1530	1530
Dimension (L x B)	mm	1125 x 630	1125 x 630
Cleaning System	--	MANUAL	MANUAL
Filter Material - Efficiency	--	POLYESTER - L	POLYESTER - L
Secondary Filter Material - Efficiency	--	--	HEPA - 99.997%

# SAFETY INSTRUCTIONS



## SAFETY & WARNING SYMBOLS

All paragraphs in this manual referring to you personal safety, the safety of your machine and the environmental protection are attributed one of the following warning symbols:

### Safety Provisions (persons and goods)



*Safety provisions in dangerous situation caused by misuse inaccurate adherence of instruction or prescribed work routine.*

### Caution (the machine)



*Important information on handling the machine in order to maintain operability.*

### Ecological Hazard (the environment)



*Due to use of substances representing an inherent danger to health of environment.*

### Read Manual

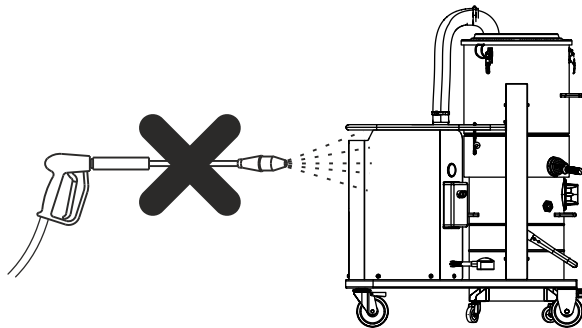


*Prior to first operation, read the manual carefully and strictly comply with the instructions contained.*



## WARNING

**DO NOT CLEAN THE MACHINE WITH WATER OR HIGH-PRESSURE WATER JET (DANGER OF SHORT CIRCUIT OR DAMAGE TO MACHINE).**



## General Guidelines

- In addition to the information contained in this manual, generally applicable legal provisions for Safety and Prevention of accidents must be adhered to.
- Please go through the manual and the instructions contained herein carefully, even if you possess prior experience in operating similar vacuum cleaning equipment.
- Schedule some time for the careful and thorough perusal of the manual contents.
- The responsibility of all persons in the working area fall upon the operator of the machine.
- No persons, children included, should be allowed within the zone of danger.
- The warning and instruction plates attached to the machine carry important advice on safe operation of the machine.
- Lost or illegible stickers must be replaced at the earliest.
- Prior to operation of the machine, the operator must ensure that the machine and its working implements are in proper and safe operating condition.
- Machines with identified and known defects must not be used.
- It is important that operators and all persons likely to use the machine familiarize themselves with all accessories and controls, as well as their functions, before commencing operation.
- Adherence to the above general instructions will help avoid the operator from having to read the manual while operating the machine.

## Safety During Machine Operation

- The machine is applicable for **DRY** vacuuming only.
- The machine may be used only by the authorized personal.
- The machine may be used for cleaning such surfaces approved by the owner or this authorized representatives.
- When transporting machine, shut down the motor. The operator must use the machine in accordance to its intended fields of application.
- During operation, the operator must take account of local conditions (stairs, obstacles) and of other persons, particularly children.
- Turn off the machine before any passage over dormers.
- The following indications are, by themselves, not enough to fully protect against all the hazards that could arise during machine operation. These will have to be integrated with common sense and the experience of the operator, both of which are crucial factors for preventing accidents.
- Maintenance jobs must always be performed with the power plug detached from the power point.
- The employer must inform and train the user according to the provisions of applicable laws.

# SAFETY INSTRUCTIONS



- Before using the machine, prepare and train yourself by reading this manual carefully. Use of the machine by untrained and unauthorized persons is forbidden.
- Using the machine to vacuum toxic substances is forbidden unless this has been equipped with special filters required for the specific type of dusts.
- Do not vacuum flammable materials or substances or which could cause explosions (fuels, solvents, etc.)
- Do not vacuum corrosive substances unless the machine is equipped with containers suitable for this purpose.
- Use of the machine without the supplied filters is not recommended. If the filters are correctly fitted, the machine will not eject any objects.
- If the machine is used to vacuum toxic - harmful substances, the container must be emptied and the filters cleaned using adequate individual protection devices, selected according to the type of substances to be vacuumed.
- The machine casing containing moving parts must not be removed by the user.
- Use the machine cautiously on slopes and ramps. Do not change direction on gradients.
- Make sure the parked machine remains stable by operating the brake wheel.
- During cleaning operations, maintenance jobs or when changing parts, the starter switch must be off and the machine must be disconnected from the power mains by removing the cable from the socket.
- Only skilled persons should carry out repairs.
- Periodically check the main power cable to ensure this is not damaged.
- In the event of the cable being damaged, the machine must not be used.
- In the event of the cable, plugs or couplings being replaced, make sure these are protected against water spray and check mechanical strength.
- Motor and burnt-out fuses must be replaced by Roots or authorized dealers. Always use original spare parts.
- The user is responsible for disposing of vacuumed substances in accordance with applicable laws.
- The machine must not be operated in a corrosive or explosive environment.
- Always make sure the machine is free of all foreign materials such as debris, oil, equipment and other objects that could affect operation and cause injury to persons.
- Avoid using flammable or toxic solvents such as petrol, benzene, ether and alcohol for cleaning.
- Avoid prolonged contact with solvents and inhaling their vapors. Avoid close to open flames or sources of heat.
- Never use the machine without the filter.
- Do not vacuum lit cigarette ends. The filter could be damaged.
- Make sure all the guards and protection devices are in place and that all the safety devices are in place and working properly.
- Do not wear loose or hanging clothing such as ties, scarves or torn garments that could become trapped and be sucked up by the machine.
- The manual should always be kept handy for reference so the operating cycle can be checked every time there are doubts. In the event of this manual being lost or damaged ask Roots for a new copy.
- Structural damage and improper alterations or repairs could change the protection capacity of the vacuum cleaner and therefore cancel this certification.
- During maintenance jobs, affix a notice to the appliance indicating **“MACHINE BEING SERVICED, DO NOT START”**.
- Climbing on the machine is forbidden.
- Never touch electric wires, switches, button etc with wet hands. Before connecting to the power mains, make sure the power voltage and frequency are those shown on the machine plate.
- Make power connections to a main supply with efficient earth system. In the event of an extension being used, make sure this is in perfect condition, marked CE and that the cross section of the cable is suitable for the vacuum cleaner power input.
- When restoring original working conditions, the appointed personnel should make sure that at the end of the operating procedure, proper machine operation safety conditions are restored, especially the safety devices and the protective guards.
- Only adult persons should use the machine.
- During vacuuming operations, always brake the machine using the special revolving wheel lock.
- To ensure the correct operation of the machine, this must be positioned, protected against atmospheric agents (rain, hail, snow, fog, dusts in suspension etc.) With an environmental running temperature between 5°C to 45°C and relative humidity not above 70%.
- Using the machine to vacuum toxic substances is forbidden unless this has been equipped with special filters required for the specific type of dusts. Such filters must be explicitly requested by you.
- Do not open the vacuum container with the machine running.
- In the event of an extension being used, make sure this is in perfect condition, marked and that the cross section of the cable is suitable for the vacuum cleaner power input.



# SAFETY INSTRUCTIONS



- This machine splash-water proof.
- Use of the machine in areas prone to explosion hazards is strictly forbidden.



Turn the motors off to protect the machine against unintended movements, before leaving it unattended.

Never collect explosive fluids, undiluted acids and solvents. This includes e.g. gasoline paint thinners or fuel oil, which-when combined with air, may form explosive vapors or mixtures. Acetone, undiluted acids and solvents can be aggressive to the material used for the machine components.

- Do not clean the machine by means of vapour jet or high pressure cleaning equipment. Do not allow water to penetrate the electrical parts.
- Do not USE the machine on steps and slopes.

## Safety Plate and Symbols

- Decals are affixed to the machine showing safety symbols and/or messages.



Make sure all the safety decals are legible. Clean these with a cloth. Do not use solvents, diesel fuel or petrol. Replace the damaged decals with new ones supplied by Roots.

- Read the operator's manual carefully before using the cleaner or doing any maintenance jobs.



- Removing the safety decals on the machine is strictly forbidden.
- The manufacturer declines all liability in relation to machine safety in the event of failure to comply with the above indications.

## Handling of Power Cords

- During movement, keep the load low for greater stability and safety.
- Make sure that the power cord is not damaged by running over, squeezing, dragging, etc.
- The power cords must be checked regularly with regard to damage and aging.
- The machine must not be used unless the power cord is in proper condition.
- Use only original extension cables, with maximum admissible length of 25 m.
- When using or replacing power cords, it is necessary to adhere to as specified by the manufacturer.

- When replacing coupler plugs of power cords or connecting leads, splash-proof protection and mechanical strength must be guaranteed.
- During use, mind the power cord, avoid crushing or pulling these.
- Never pull the machine by means of power cord or the vacuum pipe.
- When replacing with a new power cord ensure the motor rotation direction. If air is blown out of the exhaust port, the wiring is correct. *(Ensure that this is checked during the commissioning of the machine)*

## Crush Hazard



- Risk of crushing upper limbs while fitting and locking the collecting tank on the machine.
- Never place hands between the collecting tank and machine while locking.
- Do not place hands on sides of collecting tank near the guide pins while locking.
- Perform the collecting tank locking operation by means of the lever located on the side using both hands.

## SPARE PARTS & ACCESSORIES:



### WARNING

Only use accessories and spare parts which have been approved by the manufacturer. The exclusive use of original accessories and original spare parts ensures that the machine can be operated safely and trouble free.

### DANGER - Do Not Vacuum:

**Corrosive/Battery Fluids/Explosive/Flammable/Magnetic/Radio-active/Biohazard Materials.**



## PERSONAL PROTECTIVE EQUIPMENT (PPE):

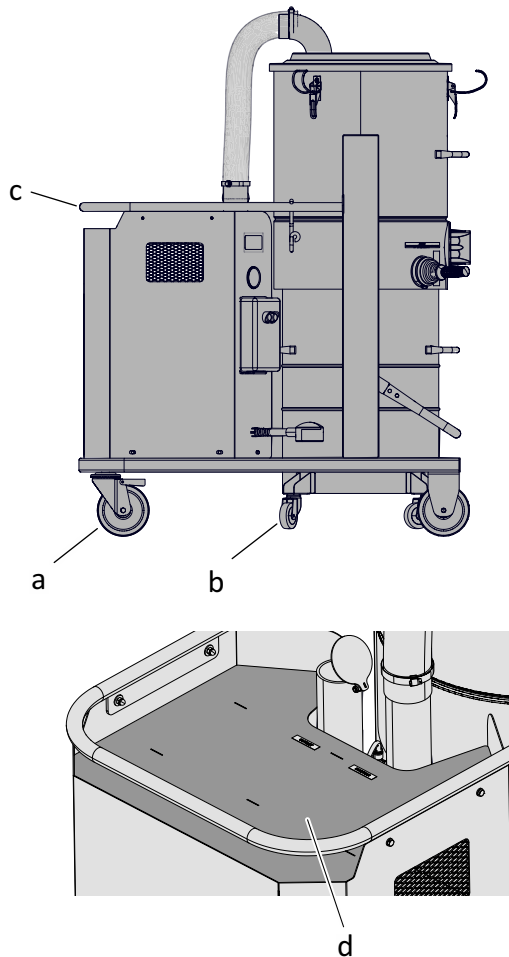
As necessary



# SAFETY INSTRUCTIONS



## TRANSPORT



- For easy transportation, the machine is equipped with fixed (a) and swivel (b) castor wheels.
- The machine can be moved only on flat ground!
- If the machine is moved on inclined grounds, you can risk to lose the control, because of the weight and to damage persons or things.



- ➔ The machine must never be moved using fork-lift or other equipment that lifts it off the floor.
- ➔ If the machine is moved over a hump or a speed breaker, remove the collection tank from the machine to prevent damage to its wheels.

- To move the machine use the large handle (c).
- For greater convenience, the most frequently used accessories can be placed in the accessory tray (d).

## ENVIRONMENTAL RESPONSIBILITY



The packaging material can be recycled. Please do not place the packaging into the ordinary refuse for disposal, but arrange for the proper recycling.






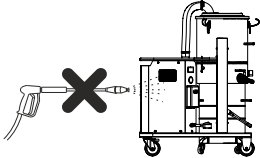



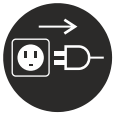



Old machines contain materials that can be recycled. Please arrange for the proper recycling of old machines. Batteries, electrical & electronic components contain substances that must not enter the environment. Please dispose off your old machine, batteries, electrical & electronic components using appropriate collection systems at the end of the product's life cycle.

# SAFETY INSTRUCTIONS

## SYMBOL & HAZARD PICTORIAL DEFINITIONS

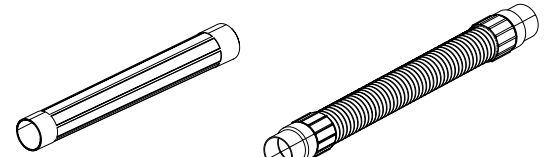
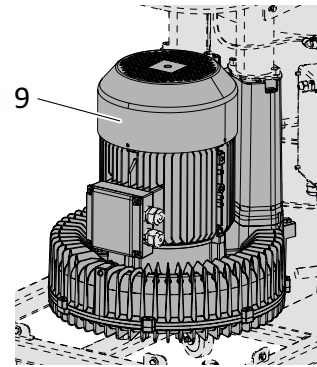
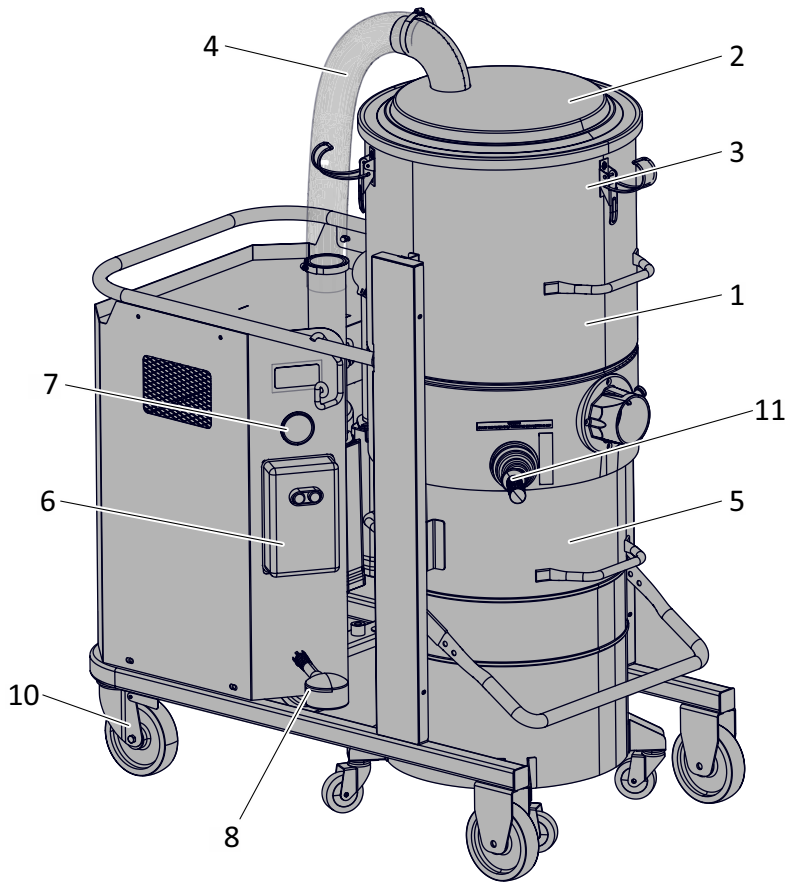


 <p>Read the Operator's Manual</p>	 <p>General Warning</p>	 <p>Caution</p>	 <p>Ecological Hazard</p>
 <p>Toxic Hazard</p>	 <p>Do Not Use High Pressure Jets</p>	 <p>Electrical Hazard</p>	 <p>No Smoking</p>
 <p>Do not let powercord come in contact with water or other fluids.</p>	 <p>Disconnect Powercord</p>	 <div data-bbox="1007 814 1153 949" style="border: 1px solid black; padding: 2px;"> <p><b>! DANGER</b></p> <p><b>Electrical Shock or Burn Hazard.</b> Turn off power supplying this equipment before working on it.</p> </div> <p>Electric Shock Hazard</p>	

# KNOW YOUR MACHINE

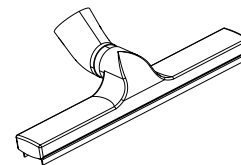


## MAIN COMPONENTS OF THE MACHINE - DRY VERSION

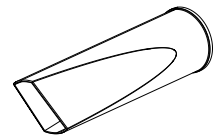


12

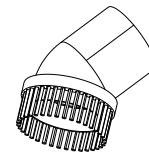
13



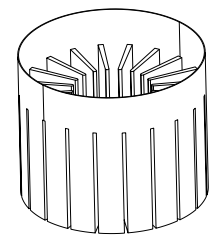
14



15



16



17, (18)

1. Filter chamber
2. Top cover
3. Latch
4. Vacuum hose
5. Dry collection tank
6. On/Off switch
7. Vacuum gauge
8. Power cord
9. Side channel blower
10. Swivel wheel with lock
11. Filter shaker lever
12. Extension pipe (2 nos)
13. Flexible hose assembly
14. Floor tool with holder - Dry
15. Crevice nozzle
16. Round brush nozzle
17. Filter bag
18. HEPA filter (if equipped)

# KNOW YOUR MACHINE



## DECALS ON THE MACHINE

**WARNING!**

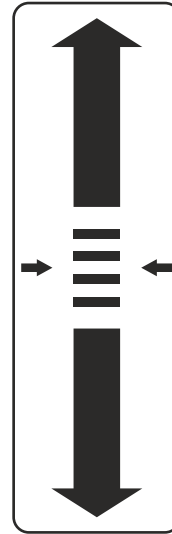
DO NOT VACUUM FLAMMABLE LIQUIDS  
DO NOT VACUUM EXPLOSIVE  
OR FLAMMABLE DUST

Warning Sticker - 1

WARNING!

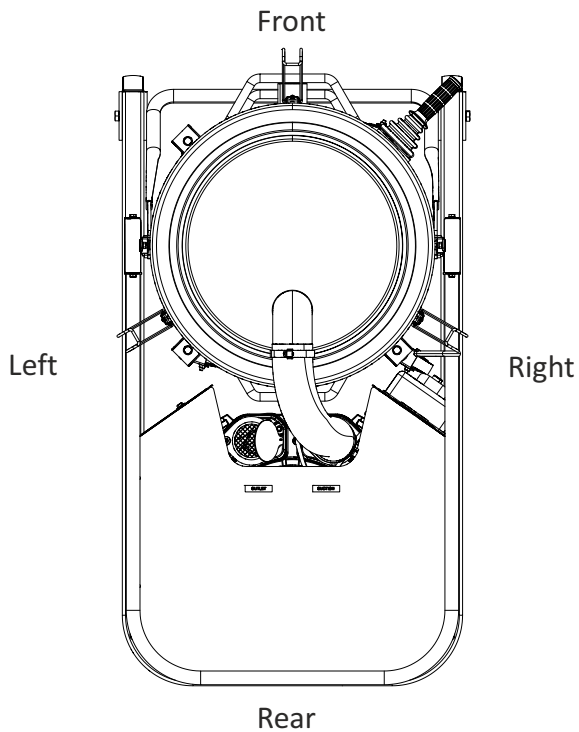
SHAKE THE FILTER ONLY WHEN THE EXHAUSTER IS OFF

Warning Sticker - 2

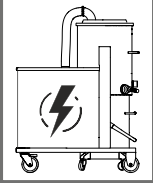


Filter Shaker Sticker

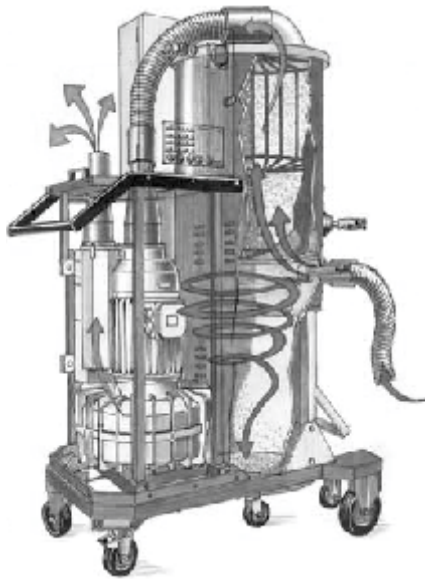
## MACHINE ORIENTATION



# MACHINE OPERATION



## WORKING PRINCIPLE



The material will be sucked through the hose and it will be moved to the suction container. The heavy particles will fall into the collection tank then the fine particles will be filtered by the filter. The blower outlet will dispose the air.

## OPERATOR RESPONSIBILITY

The operator's responsibility is to take care of the machine's daily maintenance and routine checkups to keep the machine in good working condition.

The operator must also inform the supervisor when scheduled maintenance of the machine is to be carried out.



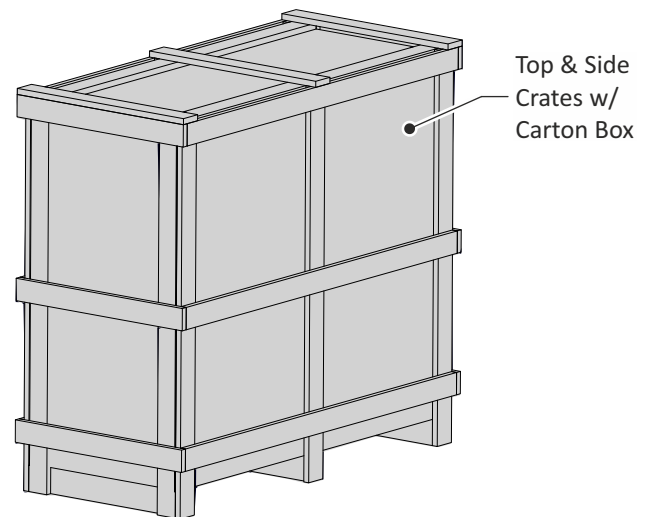
**Read this manual completely and understand before operating this machine. Also ensure that the persons who are going to operate this machine have also read and understood the contents of this manual.**

**THIS MACHINE IS INTENDED FOR VACUUMING ONLY.**

## UNPACKING

The machine is shipped in a packed condition to the customer's place. To unpack the machine follow the below steps:

- ➔ Remove the packing crates from the sides and top.
- ➔ Remove the box containing the accessories.
- ➔ Remove J-Bolts from the chassis of the machine.
- ➔ Cut retaining straps at the front and rear.
- ➔ The main power cord is wound and tied to the machine.
- ➔ Carefully roll the machine from the pallet onto the floor.
- ➔ Check machine and accessories against the order invoice.
- ➔ Accessories will be placed inside the collection tank during packing.



(Packed Condition)

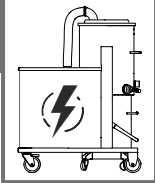
### NOTE

- ☞ **Care should be taken when removing the packing crate as to not to damage the machine.**
- ☞ **Ensure that sufficient man power is used to roll the machine.**
- ☞ **Owner's personnel are not allowed to unpack the machine.**

### NOTE

- ☞ **Before unpacking, carefully check the packaging for signs of damage. Report to authorized Roots Multiclean Ltd personnel immediately.**
- ☞ **Upon unpacking, check for missing items or damaged parts. Report to authorized Roots Multiclean Ltd personnel immediately.**

# MACHINE OPERATION



## Upon Unloading:

- Check the machine for any transit damage such as dents, paint damage, scratches, etc.
- Check power cord.
- Check the filter for any damage.
- Check the accessories for damage.

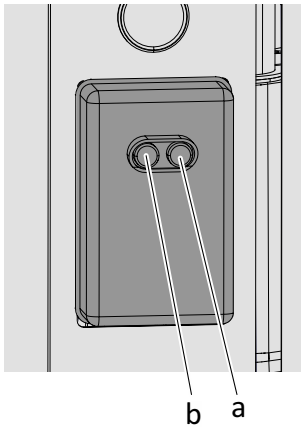


### **WARNING:**

**Do not throw the packaging material into the environment.**

## CONTROLS

### 1. MOTOR STARTER



The machine is equipped with a DOL motor starter. Press the green button (a) to start the motor. Press the red button (b) to stop the motor.

## MACHINE OPERATION

It is the operator's responsibility to be knowledgeable of all potential operating hazards and to take every reasonable precaution to ensure safety of oneself, others, animals, and property.

This section of the Operator's Manual is designed to familiarize, instruct, and educate safe and proper machine use to the operator. The operator must be familiar with the machine operation and all associated safety practices before operating.

Proper operation of the machine, as detailed in this manual, will help ensure years of safe and satisfactory use of the machine.

**READ, UNDERSTAND, and FOLLOW** the safety messages. Serious injury or death may occur unless care is taken to follow the warnings and instructions stated in the safety messages. Always use good common sense to avoid hazards.



## WARNING

**Do not operate a damaged or malfunctioning machine. Risk of equipment failure or cause of injury or death or damage to property.**

### **Operator Requirements:**

Only qualified people are allowed to operate the machine. A qualified operator has to read and understand the owner's manual and should comply with its procedures. If any part of the operation and safe use of this equipment is not completely understood, consult an authorized dealer for a complete explanation.

If the operator cannot read the manual for himself or does not completely understand the operation of the equipment, it is the responsibility of the supervisor to read and explain the manual, safety practices, and operating instructions to the operator.

### **Employer Responsibilities:**

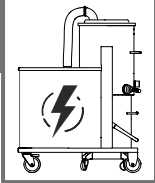
- a. Train the employee to operate the machine in a safe way.
- b. Permit only qualified personnel to operate and service the machine.
- c. Instruct all operators to maintain the shields and guards in its proper working condition at all times.
- d. Ensure that the operators use approved Personal Protective Equipment (PPE) at all times or whenever required.
- e. Forbid the operators to carry additional people on the truck or the machine.
- f. Ensure that nobody including the operator modifies or alters the machine or any of its function, doing so may cause fatal injury or death or it may damage the machine itself.
- g. Ensure that children do not operate the machine.

### **Starting the Machine:**

Before operating the machine, ensure that the equipment is working properly and that you are prepared for cleaning operations by checking the Pre-Operative Checklist and testing the machine functions.

**Note:** Also ensure the direction of rotation of the motor. (*Air should come out of the exhaust port*)

# MACHINE OPERATION



## MACHINE OPERATION

This section describes on how to use the machine under the following sections:

- PRE-VACUUMING CHECKPOINTS
- TRANSPORTING THE MACHINE
- CONNECTING THE SUCTION HOSE
- VACUUMING PROCEDURE - DRY & WET
- END OF VACUUMING
- EMPTYING THE COLLECTION TANK - DRY & WET
- POST-VACUUMING CHECKPOINTS

### PRE-VACUUMING CHECKPOINTS:

- Check for any exterior damage to the machine.
- Check the hoses for damage.
- Check the filter for damage.
- Check for leaks in the suction /collecting tank.
- Check if the area to be cleaned is free from any hazardous chemical or other substance.
- Check if the collection tank is empty and clean.
- Check if the right accessories are equipped for vacuuming.
- Check if the top cover and latches are properly secured.
- Check if the power rating at the worksite matches with the specification on the machine's nameplate.

### Worksite:

Ensure that there are no flammable materials in the vicinity of the machine during vacuuming.

### Start-Up Test:

By identifying any problem before traveling to the worksite, you'll save unnecessary travel time and will be able to make repairs more easily with the proper tools.

### TRANSPORTING THE MACHINE:

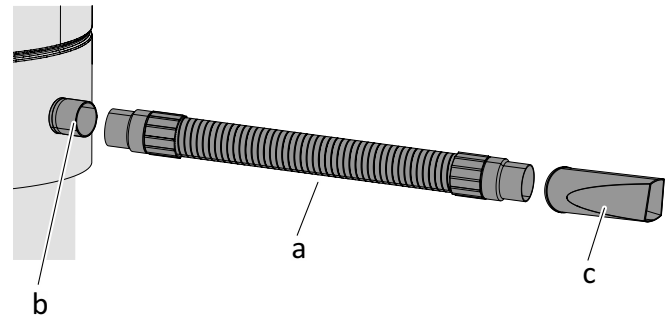
To move the machine, release the parking brake and push/pull the machine using the large handle.

**Note:** Ensure that the accessories and hose are secured in the tray.

### WARNING

- **Do not push or pull the machine at a fast pace, risk of tipping and damaging the machine or risk of running away and causing damage to property or persons.**
- **Hold the handles tightly when going down or up a slope.**
- **Use industrial gloves for better grip (if required).**
- **Do not push or pull the machine when the castor wheel is locked.**

## CONNECTING SUCTION HOSE & TOOLS



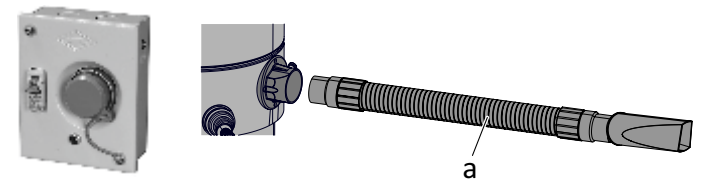
Connect the flexible hose (a) to the machine vacuum inlet (b), connect the required tool (c) to the other end of the flexible hose.

Follow the same procedure to connect anti static accessories with the machine also.

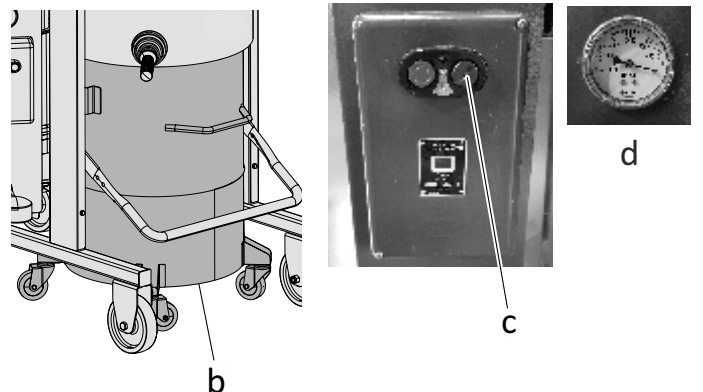
## VACUUMING PROCEDURE



**NOTE:** Before starting the machine, lock the castor wheels. Check the mains power rating with the machine nameplate for correct voltage and frequency.

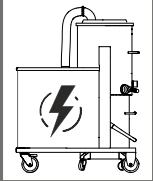


Wall socket

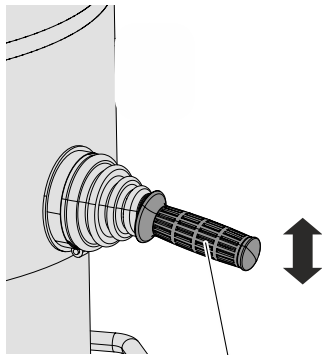




# MACHINE OPERATION



e



f

- Connect machine power cord to wall socket and turn on mains power.
- Ensure that the vacuum hose and tools (a) have been correctly connected into the suction inlet.
- Ensure that the collection tank is properly locked onto the machine (b).
- Ensure that the machine is equipped with a filter in the suction drum assembly.
- Press the start button (green) (c) to start the machine.
- Start vacuuming dry material.
- Check the vacuum gauge (d) periodically to ensure proper performance of the machine.
- Press the stop button (red) (e) to stop the machine.

**Note:** If the machine does not vacuum any material, the collection tank must be full. Empty the collection tank and resume vacuuming. Also check the hose/tool for any block.

- Use the filter shaker (f) to drop the dust from the filter. Operate the filter shaker lever in an up-down motion for a few cycles. Use the filter shaker only when the machine is switched off and the collection tank is in locked position.

**Note:** Upon operating the filter shaker, wait for a few seconds before removing the collection tank from the machine to prevent flying of dust.

- The machine is equipped with a Thermal Overload Protector (TOP) to protect the machine from overheating. In an event of the TOP being activated, the machine shuts off automatically.
- Wait for 30 seconds before restarting the machine.

**Note:** Machine does not restart automatically after an TOP event. It has to be started manually.

## End of Vacuuming:

- Turn off the machine and remove plug from the wall socket.
- Wind up the power cord and place it in the hook.
- Use the filter shaker to remove remaining dust from the filter.
- Empty the collection tank and clean the machine with a dry cloth.
- Wash the collection tank with fresh water if aggressive materials have been vacuumed.
- Store the machine in an indoor dry place.
- Lock the castor wheel.
- Close the suction inlet port with a cap (if equipped).

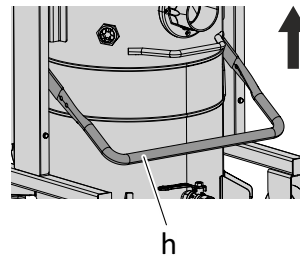
## WARNING



**DO NOT empty the dry collected material into the environment. There is a risk of contaminating the environment.**

## EMPTYING THE COLLECTION TANK

- Pull the tank release lever (h) upwards to lower the collection tank to the floor.
- Pull out the collection tank from the machine.
- Empty the collected material in an approved disposal area.
- Clean the collection tank.



### Note:

Remove the hose before lifting the handle (h).



**WARNING**

**DO NOT USE A HIGH PRESSURE JET TO CLEAN THE TANK.**



## MAINTENANCE WORK

Compliance with our recommendations concerning maintenance work will give you the certitude of always having a machine at your disposal, which is ready to work and in good operating condition.

Please contact your local Roots Multiclean Ltd. dealer. The people there will be glad to perform that work for you. Their well trained personnel and genuine Roots spare parts are at your disposal.

- In case of any inquiry or order for spare parts, please always quote the machine's serial number mentioned on the nameplate.
- The name plate is fixed on the side of the machine.
- When cleaning or servicing the machine, and when replacing any part, shut off the machine and on principle disconnect the power plug from the power supply.
- For reasons of safety during cleaning and/or maintenance work in or on the tank, the tank lid - when lifted - must be secured so as to prevent accidental closing or tilting down.
- The machine may be taken into operation only if all guarding devices are fitted and in protective position. As far as possible, cleaning should not be done by hand, but using appropriate tools or equipment.
- Maintenance and repair work may be carried out only by means of suitable tools and by the people trained in the factory. For reasons of safety, only genuine Roots spare parts may be used.

## **WARNING**

- *Maintenance and/or repair operations must be done by skilled and authorized personnel; all operations on electrical devices are to be performed by specialized personnel only.*
- *Read this manual thoroughly before performing any repair or maintenance operations.*
- *For repair and/or maintenance of high reach areas of the machine, use a suitable work lift or working platforms.*
- *Use genuine Roots spare parts ONLY which are specifically designed for the machine.*
- *USE suitable PPE at all times when working or servicing the machine.*

## **IMPORTANT!**

- **ALWAYS SWITCH OFF AND REMOVE PLUG BEFORE PERFORMING ANY MAINTENANCE OR REPAIR WORK.**
- **ALWAYS ATTACH A 'DO NOT START' OR SIMILAR WARNING SIGN TO THE KEY SWITCH OR A CONTROL BEFORE CLEANING OR SERVICING THE MACHINE.**



## MAINTENANCE TOPICS

This section describes the maintenance of the machine under the following topics:

- PRIMARY FILTER REPLACEMENT
- TIGHTNESS CHECK
- CLEANING THE MACHINE
- PUSHING & TRANSPORTING THE MACHINE
- ELECTRICAL MAINTENANCE
- STORING THE MACHINE
- FREEZE PROTECTION
- MAINTENANCE SCHEDULE CHART



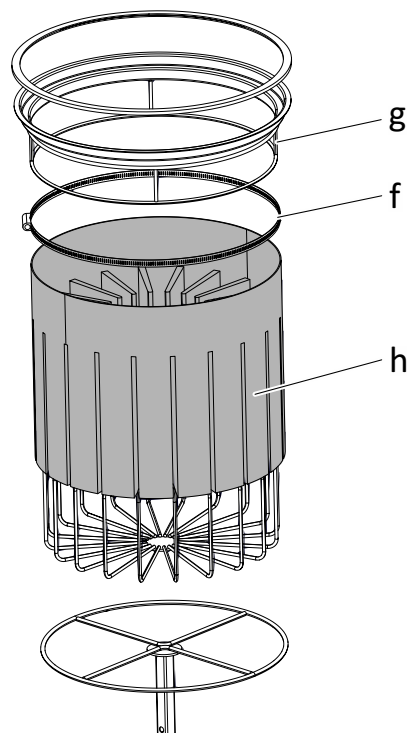
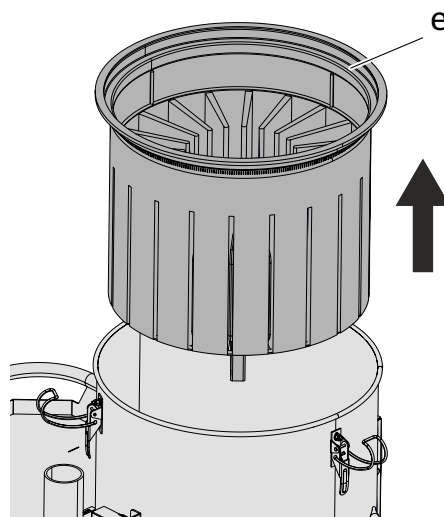
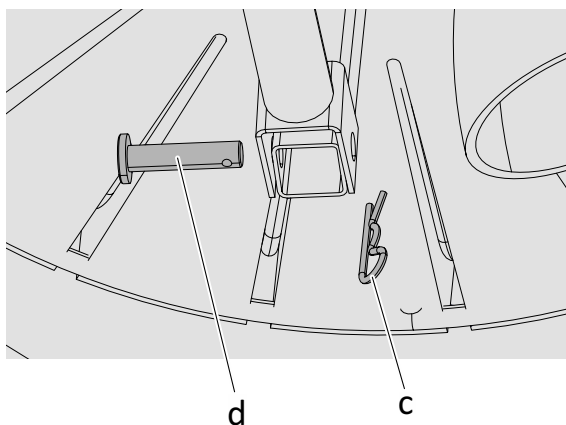
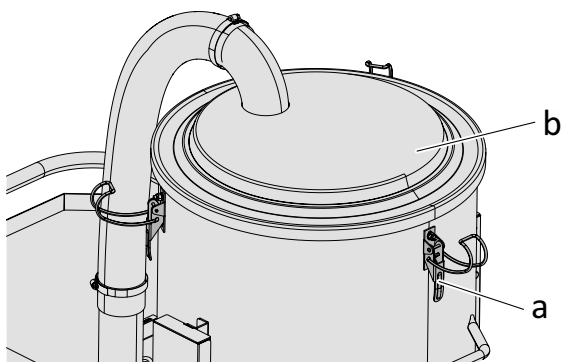
## PRIMARY FILTER REPLACEMENT



### **WARNING**

**Before removing the filter from the machine, lock castor wheel.**

- Park machine on a flat ground.
- Lock castor wheel.
- Remove the collection tank from the machine.
- Remove from underneath the machine: Linch pin (c) and remove the filter lock pin (d).
- Release the three locking clamps (a) and remove the top cover (b).
- Lift the filter group completely (e).
- Loosen the clamp (f) from the filter ring (g).
- Untie the knots of the filter.
- Remove the filter (h).
- Replace the clean filter or a new filter and follow the procedure in vice-versa to complete the procedure.



### **WARNING**

**All the material trapped by the filter and the filter itself must be disposed of through authorized channels in the country where the machine is being used.**

### **WARNING**

**Before locking the clamps to the top cover, shake the filter group unit by hand to correct any positional defects.**

### **WARNING**

**DO NOT DISPOSE THE USED FILTER INTO THE ENVIRONMENT. THERE IS A RISK OF CONTAMINATING THE ENVIRONMENT.**

# MAINTENANCE & TROUBLESHOOTING



## TIGHTNESS CHECK

### Hoses:

Ensure that the connecting hoses are in good operating condition.

If the hoses are damaged, cracked or broken, they must be replaced.

Check inlet hoses for clogging.

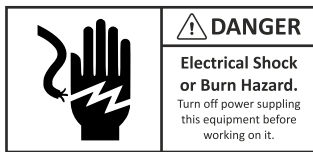
To clean the hoses, scrape the inlet from the outside to remove any deposits.

### Gasket:

Check the condition of the top cover gasket for wear or damage, replace if required.

Check the condition of the suction gasket for wear or damage, replace if required.

## ELECTRICAL MAINTENANCE



**NOTE:** Before leaving or servicing the machine, park on a level surface, turn off mains and unplug power cord.



**IMPORTANT:** All electrical repairs should be done by authorized Roots Multiclean Ltd. service engineer **ONLY**.

The DOL starter is located on the right side of the machine. In an event of the machine getting tripped, the DOL starter automatically resets.

Wait for 30 seconds before restarting the machine.

**NOTE**

If there should be repeated cases of failure, look for reason.



DOL Starter

## STORING THE MACHINE

The following steps should be taken when storing the machine for an extended period of time.

- Disconnect power cord from mains.
- All hoses and tools have to be removed from the machine and stored in a safe dry place.
- Empty the collection tank dry/wet.
- Store the machine in a dry indoor area.
- Close the suction port with a cap.
- Lock the castor wheel.

**NOTE:** Do not expose the machine to rain. Store indoors only.



**NOTE:** To prevent potential damage to the machine store the machine in a insect and rodent free environment.



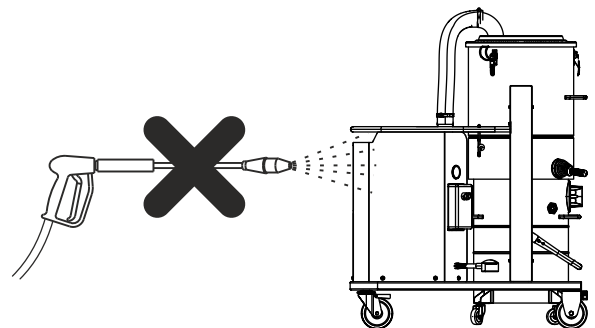
## CLEANING THE MACHINE



- Unplug power cord from wall socket.
- Lock castor wheel.
- Empty dry collection tank and clean.
- Use a damp sponge with mild detergent to clean the exteriors of the machine.
- Ensure that water does not enter any electrical part.
- **DO NOT** use high pressure jet or steam cleaning equipments to clean the machine.

**! WARNING**

**DO NOT CLEAN THE MACHINE BY MEANS OF VAPOUR JET OR HIGH PRESSURE CLEANING EQUIPMENT.**



**WARNING:** Disconnect power cord.



## MAINTENANCE CHART

The below table indicates the Person Responsible for each procedure:

**O = Operator**

**T = Trained Personnel**

Interval	Person Resp.	To Do
Daily	O	Check connections - extension cables and plugs for good condition, discard defective cables immediately
	O	Clean filter manually
	O	Clean dry collection tank
	O	Check power supply voltage
	O	Check hoses for damage
Weekly	O	Remove filter and clean with low pressure air
	O	Check collection tank seals/gasket for good condition
Monthly	T	Check electrical systems like motors, starters for proper function

## TROUBLESHOOTING



Fault	Cause	Remedy
Machine fails to start	No power	Check mains supply. Check the integrity of the plug and power cord
	Thermal magnetic switch tripped	Reset the switch after 30 seconds
Dust leaking out through exhaust port	Damaged vacuum hose	Replace hose
	Damaged filter	Replace filter.
	Filter unsuitable for the job	Fit a suitable filter for the type of material to be vacuumed
Machine does not work as intended	Hose damaged or blocked	Check the hose and if necessary replace
	Collection tank is full	Empty tank
	Filter blocked	Replace filter
	Seals worn	Clean the seals, if necessary replace them
	Air leak	Check for leaks in the hose clamps, tighten if necessary

# DO'S & DON'TS



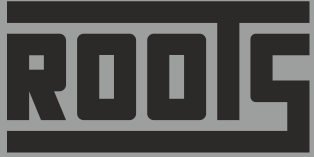
## DO'S

- ✓ Power cord to be checked, if damaged, it should be replaced.
- ✓ Check the gasket for its proper seating in the filter assembly.
- ✓ Wheels should be cleaned & lubricated for free movement.
- ✓ Ensure the machine & wall socket have good earth connection.
- ✓ If the filter gets clogged, use the filter shaker.
- ✓ If DOL starter gets tripped, check the reason and reset the same.
- ✓ Ensure the collection container is locked properly with the filter chamber.
- ✓ Check the impeller exhaust pipe to prevent any blockage.

## DON'TS

- ✗ Do not use the machine, when the collection tank gets filled.
- ✗ Do not use the machine for vacuuming explosive, hot and flammable materials.
- ✗ Do not operate the machine with bare foot, risk of electrical shock.
- ✗ Do not use the filter shaker, while the machine is operating.
- ✗ Do not do any kind of service, except Roots authorized representative.
- ✗ Do not use the machine, if any abnormal sound is noticed in the suction turbine.
- ✗ Do not use the machine, if the filter is damaged.





**Roots Multiclean Ltd.**

R.K.G. Industrial Estate, Ganapathy,  
Coimbatore - 641 006, India.



+91 (422) 4330 330



rmclsales@rootsemail.com



rootsmulticlean.com



+91 95978 12345

