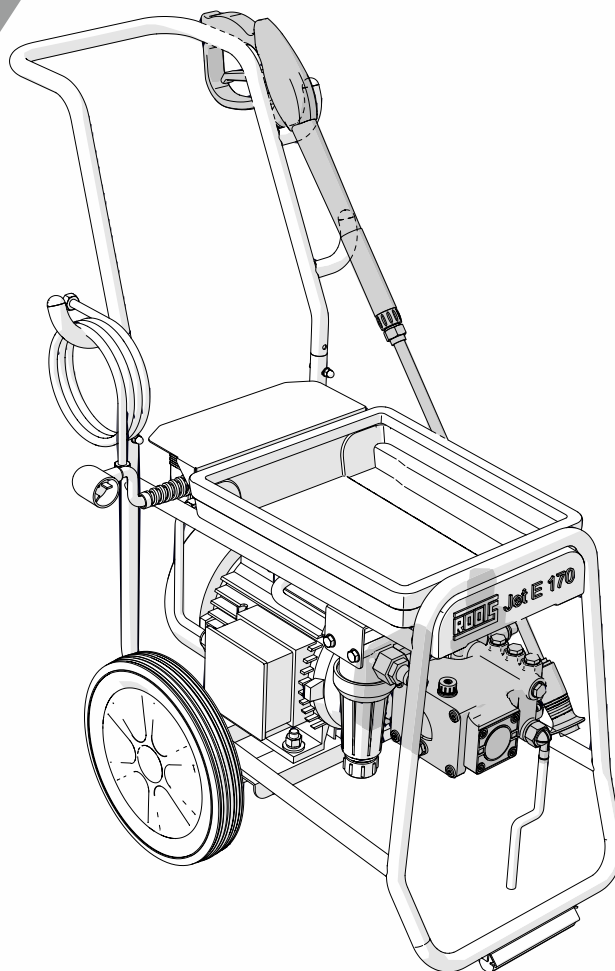


# Jet E 130 / 170

High Pressure Jet Cleaner  
Electric

**ROOTS**



230V/50Hz  
415V/50Hz

## Operator's Manual

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





4	Technical specification
5	Introduction
6	Customer support system & Annual maintenance contract
7	Safety instructions
9	Machine operation
13	Maintenance

## **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.

**P/N: 557340013-00, Rev: F, Date: 08/2018**

*Prepared by: SN-NPM TD Dept.*

## **MACHINE DATA**

*Please fill at the time of installation for future reference:*

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

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

*Accessories* - \_\_\_\_\_

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



## For Single Phase

Rated voltage - **230 V**

Rated current - **14 A**

Frequency - **50 Hz**

Total power (max) - **3 KW**

Rating - **S1 continuous duty**

Insulation - **F class**



## For Three Phase

Rated voltage - **415 V**

Rated current - **9 A**

Frequency - **50 Hz**

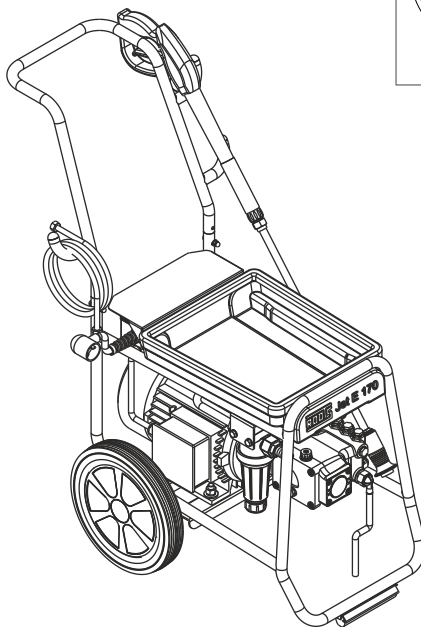
Total power (max) - **5.5 KW**

Rating - **S1 continuous duty**

Insulation - **F class**



Water Inlet Temp - **60° C**

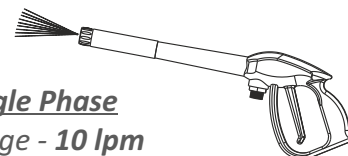


## High Pressure Hose



Type - **2 High Tensile Steel Wire Braided Hose**

Length - **10 m**



## For Single Phase

Discharge - **10 lpm**

Water Pressure - **130 bar**

## For Three Phase

Discharge - **13 lpm**

Water Pressure - **170 bar**

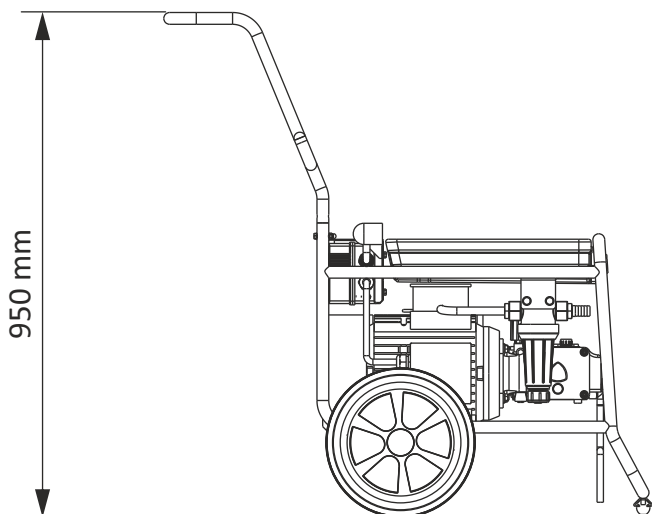


Electrical Cable  
Length - **5 m**

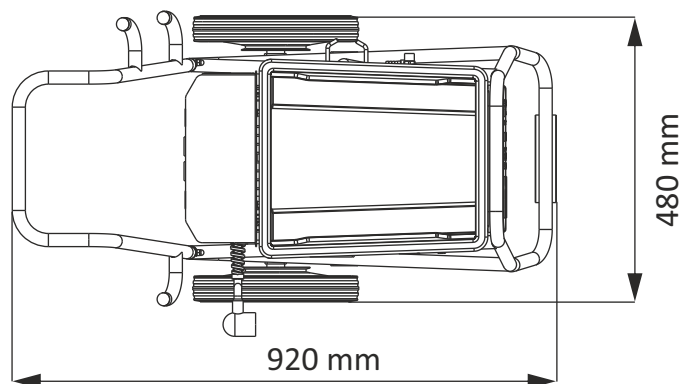


Weight - **60 kg (for 1 Ph)**

Weight - **63 kg (for 3 Ph)**



950 mm



920 mm

480 mm



## PREFACE

**Dear Customer,**

We are pleased with your having chosen the **JET E 130/170** machine for your cleaning requirements. Backed by our industry expertise that spans across two 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 & Modification

This machine has been exclusively designed for cleaning of vehicles, machines, factories, masonry etc, to remove stubborn dirt using pressurized water. 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 centre 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 RMCL branch/dealer with a copy of the invoice. The letter should be sent within 24 hours of receipt of the machine.

# CUSTOMER SUPPORT SYSTEM



## CUSTOMER SUPPORT SYSTEM (CSS)

RMCL has a dedicated CSS Team to ensure prompt after sales service support. One call solution for all your complaints/concerns. Register your complaint or concern through the below toll free number for hassle free support. The customer support executive registers your complaint/concern and will keep you updated on the progress ensuring prompt closure.

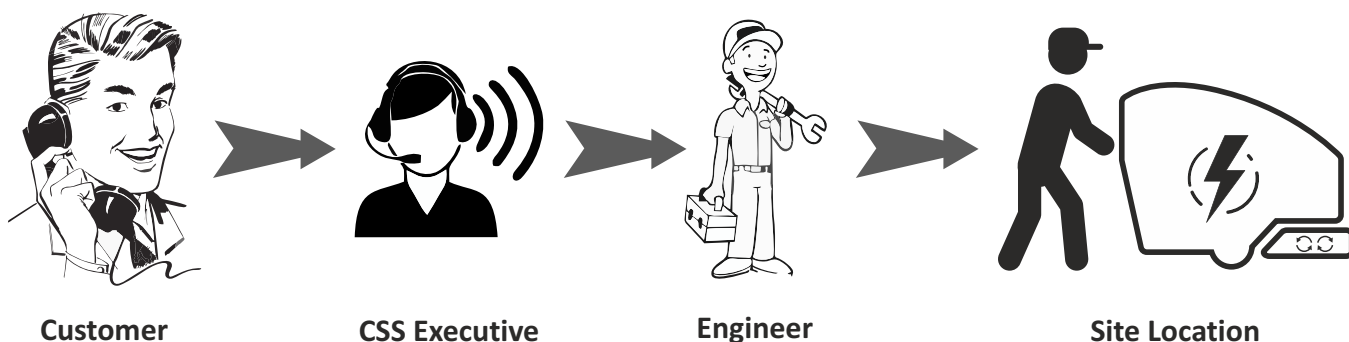
Toll Free Number:

**1800 41 99 77 9**

Our timings (Monday to Saturday):

**8:00 am to 7:00 pm**

### Customer Support System Process



## ANNUAL MAINTENANCE CONTRACT

**AMC**

AMC or Annual Maintenance Contract is a professional and timely maintenance cover offered by RMCL to its customers. AMC takes care of scheduled and preventive maintenance services. Equipment under AMC qualifies for agreed scheduled visits during the contract.

### Advantages of AMC:

- ✓ Pan India network presence.
- ✓ Maximum equipment uptime.
- ✓ Focus on your business while we take care of your equipment.
- ✓ Well trained engineers to take care of the equipment.
- ✓ System driven scheduled periodic maintenance.
- ✓ Genuine spare parts.
- ✓ Toll free number assistance for breakdown.

# 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.

## 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 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.
- This machine must only be used for the manufacturer's approved application as described in this manual.
- The machine must be kept clean and in good condition, if any parts are damaged they shall only be replaced by an approved part by the manufacturer, its service agent or a similar qualified person in order to avoid a hazard.
- Only genuine accessories and spare parts provided with the machine or those approved by the manufacturer should be used. All repairs must be performed by a qualified service agent.



Use only genuine spare parts as specified by the manufacturer. Use of brushes other than those indicated may affect safety.



**Never touch the mains plug with wet hands.**

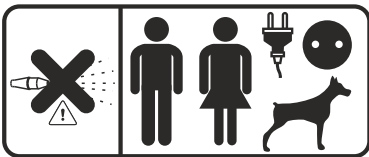
## Safety during Jet Cleaner operation

- Always switch on the machine with trigger in open condition.
- Check flow of water to the filter inlet (2 - 3 bar gravity pressure recommended).
- The machine may be operated by qualified personnel only.
- The machine may be used for cleaning only such surfaces that have been approved by the owner or the authorized representative.
- The operator must use the machine in accordance to its intended fields of application.
- The machine must be unpacked and assembled in accordance with these instructions before connecting to the electrical supply.
- This machine should always be connected to a fully earth power supply of the right voltage and frequency.
- When working on the electrical system, always disconnect the cable.
- Keep the power supply cord away from moving parts.
- Regularly check the power cord for damages, such as cracks or aging. If it is damaged, the cable must be replaced before further use.
- It is not permitted to use aggressive and corrosive cleaning agents.
- Never use excessive foaming or highly corrosive cleaning solutions.
- Ensure all parts are fitted properly before operation.
- Check minimum fuse strength of the socket.

# SAFETY INSTRUCTIONS



- Make sure that the line cords are not damaged by running over, pinching, dragging, etc.
- The machine must not be used unless the line cords are in proper condition.
- When replacing coupler plugs of line cords or connecting leads, splash-proof protection and mechanical strength must be guaranteed.
- Protect the cable from heat, oil and sharp objects/edges.
- Unsuitable electrical extension cables can be hazardous. Only use electrical extension cables outdoors which have been approved and labeled for this purpose and have an adequate cable cross - section.
- Do not operate the machine at low temperature and above 60°C.
- All current conducting materials in the working area must be protected from jet cleaner.



**DO NOT USE THE MACHINE DIRECTED AT THE PERSONS, ANIMALS, LIVE ELECTRICAL EQUIPMENT OR THE MACHINE ITSELF.**



- Do not clean the machine by means of vapour jet or high pressure cleaning equipment. Do not allow water to penetrate into the electrical parts.

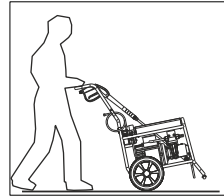


- Do not operate the machine in or around an explosive environment.



- Only qualified personnel must perform any work related to maintenance and repair on the machine
- Turn the machine off before cleaning and maintenance, while replacing parts.

## Transport



In order for easy transportation of the machine, it is recommended to tip the machine as shown in the figure.

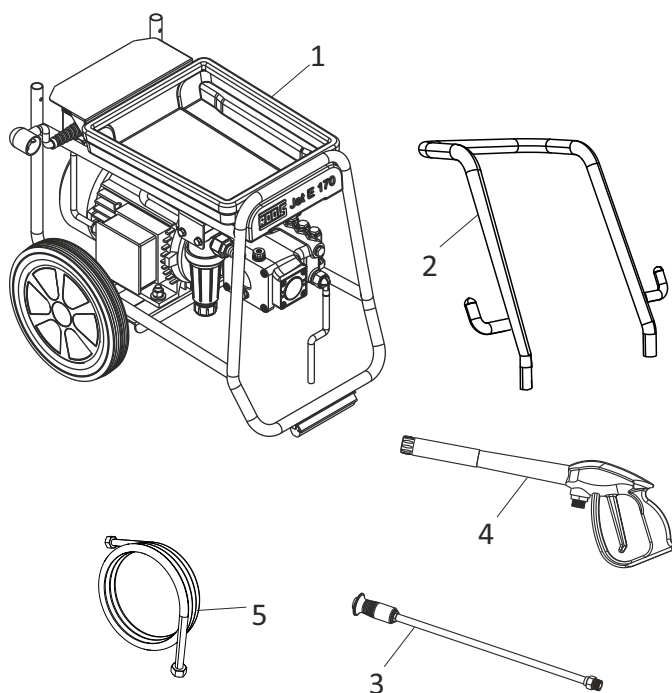


# MACHINE OPERATION

This machine has been exclusively designed for high pressure cleaning. The machine can be used at factories, masonry and to clean vehicles, machines etc,

## Unpacking & Handling

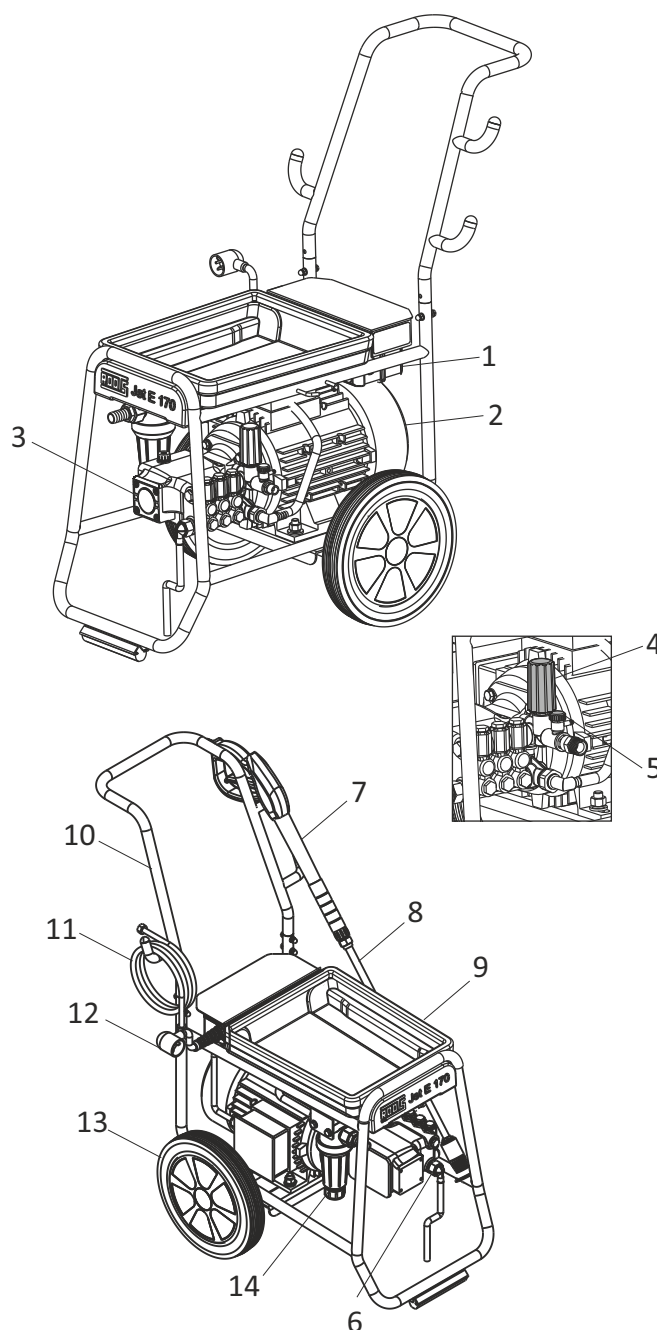
- Remove the fastening straps, open the package and unscrew the J hook and move the machine from the pallet.
- To save packing space and to ensure the safety of the machine during transporting, the machine comes to you with its handle, gun, lance, hose and Accessories in dismantled condition.



1. Machine Unit
2. Handle assy
3. Lance
4. Gun
5. High pressure hose assy

- Ensure that the listed parts are present as shown and identify them in order to understand the assembly instructions.

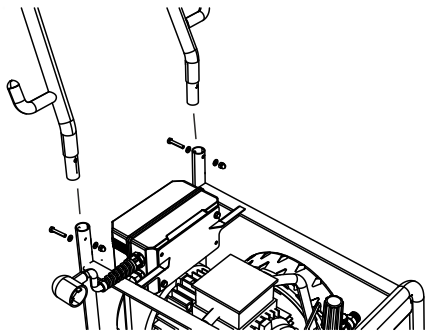
## Identification of Main Parts



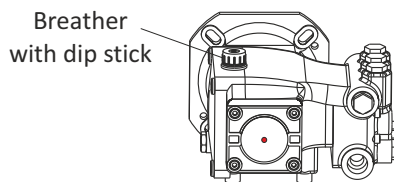
1. Starter
2. Motor assy
3. Pump assy
4. Pressure adjustment knob
5. Solution adjustment knob
6. Thermal valve
7. Gun
8. Lance
9. Tray
10. Handle assy
11. High pressure hose
12. Cable assy
13. Wheel
14. Filter assy



## Before Operation - Assembly



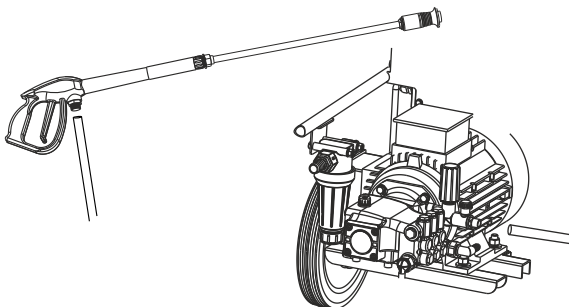
- Insert the handle assembly into the machine and secure them by screw (2 Nos), washer (4 Nos) & domed cap nut (2 Nos) & with the help of tools.



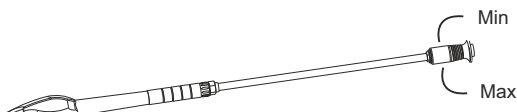
- To avoid the oil leakage during the transportation, dummy cap placed in breather position.
- **Before operate the machine, remove the dummy cap and replace the breather with dip stick.**



- Fit the lance with the trigger with hand tight.

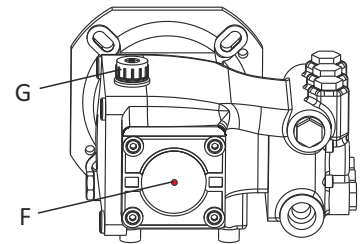
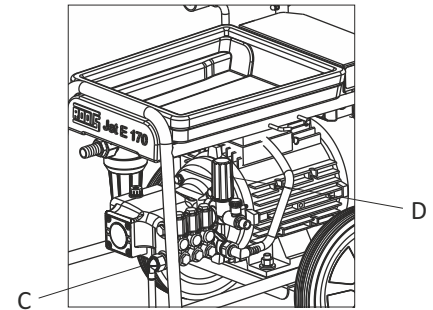
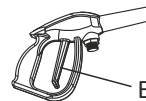
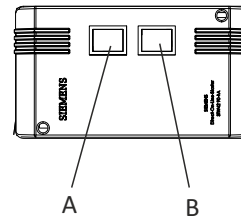


- Connect one end of the hose with Pump outlet and another end of the hose with trigger by hand tight.



- Adjust the nozzle for required angle of water spray.

## Operating & Indicator Elements



A - ON Switch ( Green color )

B - OFF Switch ( Red color )

C - Thermal valve

To avoid wear out of O rings, seals of pump, the thermal valve is provided to eject the hot water from the pump when it is running in idle condition.

D - Pressure adjustment knob

It is used to adjust the pressure of the outlet water.

E - Trigger lever

It is used operate the trigger.

F - Oil level indicator

To show the oil level of the pump.

Oil to be used - SAE 15W40 grade for below 40° environmental temperature.

Oil to be used - WD751WD90 grade for above 40° environmental temperature.

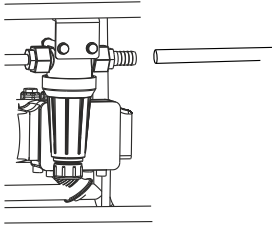
Oil capacity - 300ml



**The level of oil should not come below the Red color mark.**

G - Breather with dip stick

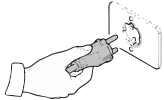
It is used to refill the oil in pump.



- Connect the fresh water supply to the filter.



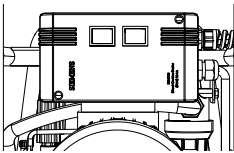
Ensure that the infeed water is clean.  
**DO NOT USE HOT WATER**



- Connect the cable to main power.
- The machine should only be connected to a mains power supply equipped with an adequate earth connection.



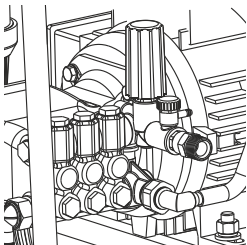
Ensure to bleed the residual air before starting the machine. Release the safety lock and press the trigger to bleed the air.



- Switch on the machine



- Release the safety lock and pull the lever.



- Adjust the pressure adjustment knob for your usage



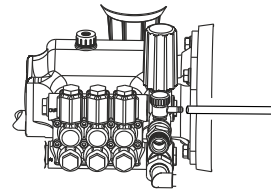
After the operation hold the safety lock in trigger for safety.

## End of cleaning

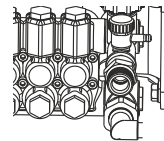
- Switch OFF the mains power.
- Stop the water supply for filter inlet.
- Bleed the residual air from the system by pressing the trigger for a few seconds.
- Mount the gun & hose on its place.
- Clean the filter.

## For Solution

**There is a provision to use detergent for cleaning purpose**



- Connect the solution tank to the solution inlet through the hose.



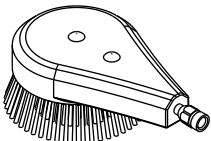
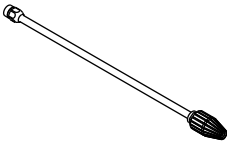
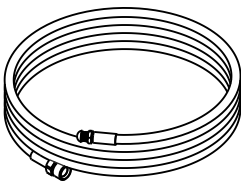

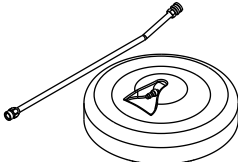
- Adjust the solution control knob for usage.



- For solution applying, just pull the nozzle forward.



## Accessories

ACCESSORY	Description	Application
	Rotating Brush Kit	This accessory has a soft brush which can be used to clean cars, floors, walls and the like.
	Turbo Nozzle Assy	This accessory has a turbo nozzle which forces out water in a spiral motion, used to clean heavy dirt.
	Drain Cleaner Kit	This accessory has a long pipe with a special nozzle, used to clean drains, trenches, pipes, etc.
	Foam Dispenser Kit	This accessory is used to mix cleaning solution with water, handy tool for car washing.
	Floor Cleaner kit	This accessory is used to clean special surface floors like tiles or industrial floors.



Before undertaking the cleaning of machine, switch off the machine and unplug from the electrical supply.

## Filter cleaning

- After machine operation, open the bottom cap and empty the filter.
- Remove the strainer and clean it for clogging.

## Nozzle

- After machine operation, clean the nozzle with pressurized air, for any blockage.

<b>Maintenance Schedule</b>	<b>Daily</b>	<b>Weekly</b>	<b>Every 500 hrs</b>
Clean nozzle	✓		
Clean filter	✓		
Check cable for damage	✓		
Check hose for damage	✓		
Remove the strainer & clean		✓	
Check oil level		✓	
Oil change (Initial change in 50 hrs)			✓

## Do's & Don'ts

### Do's

- The machine must be disconnected from the mains supply (by pulling the plug out) before cleaning the machine and for maintenance.
- Use only the accessories recommended as per the instruction manual. Usage of any other accessories can cause safety problems.
- Periodically inspect the power cord for possible damage. A damaged power cord must be replaced.
- Regularly clean the filter.
- Periodically change the oil for lubrication.
- Operator must wear hand gloves during machine operation.
- Always place the machine in even surface.
- Always lock the safety lock in gun, whenever the machine not in use.

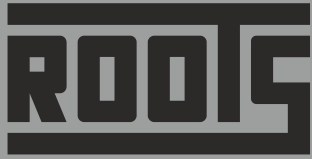
## Don'ts

- Do not use the machine without water.
- Do not place the machine over the power cable.
- Do not leave the machine connected to the power supply when not in use, always remove the plug from the mains socket.
- Do not use the machine near current conducting materials.
- Do not use the machine without oil.
- Do not use the machine pointing against persons, animals and the machine itself.
- Do not operate the machine at low temperature and above 60°C.

## Troubleshooting

<b>Problem</b>	<b>Possible Fault</b>	<b>Remedy</b>
Machine fails to start	No power	Check cable for damage
		Check the voltage of power supply
Pressure does not build up	problem with nozzle	clean nozzle
		Replace nozzle
	Filter clogged	Clean filter
	Poor water supply	Check water supply
Air Block	Air block in pump	Continuously press the gun
	Air block in lance	
	Air block in hose	
Water leak	Connections	Check tightness of the fittings.
	Gun	
	Inlet	
	Filter	





**Roots Multiclean Ltd.**

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