

# **ST4000 VAPOR**

## **Macchina per la pulizia a vapore**



## ***Manuale d'uso e manutenzione***



# CARATTERISTICHE TECNICHE

## **Macchina per la pulizia a vapore MOD. ST4000 VAPOR**

Pressione vapore	9.50 – 10.50 Bar
Temperatura vapore in caldaia	180° C
Temperatura vapore in uscita	150° C
Produttività vapore	42 kg/h
Capacità caldaia	14 lt
Alimentazione caldaia	Gasolio
Consumo gasolio	3,3 lt/h
Capacità serbatoio carburante	45 lt
Alimentazione elettrica	220V 50 Hz
Consumo elettrico	150 Watt
Capacità serbatoio detergente	10lt
Capacità serbatoio anticalcare	1 lt
Peso macchina a secco	120 kg

# ST4000 VAPOR

## ***Operation and maintenance manual***

*Compliments,*

*you have chosen for your activities the use of one of our machine for steam cleaning maneuverable and easy to use. ST4000 is able to respond effectively to all your cleaning needs, from small to professional use. The wide range of optional accessories are perfectly suited to each type of use.*

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# NOTICE

Carefully read the instructions for use

The manufacturer is not liable for any damage to property or persons due to improper use of the machine and failure to observe the safety instructions and maintenance.

This manual is an integral part of the machine and must be available to the user and / or maintenance.

The recommendations in this manual do not replace the safety instructions and technical data for installation and operation, applied directly on the machine.

The user must follow the safety rules in force in the country of installation.

You should not use the machine if you experience any flaws or deteriorated parts that may affect the original security; the installer, user or maintainer has a duty to report any anomalies to the manufacturer.

The machine has been built for specific applications.

Should not be modified and / or used for applications other than those laid down in the field of employment.

The use of this machine goes effectuated by an adult and trained to use.

if you have doubts of interpretation of what is specified in this manual before using the device vendor or consult the manufacturer.



# SAFETY RULES



Do not leave the machine in enclosed spaces or in any case in which there is poor ventilation.



## **ATTENTION:**

**It is recommended that the power supply of this apparatus includes a differential that can interrupt the power supply if the current Earth leakage exceeds 30mA for 30ms.**

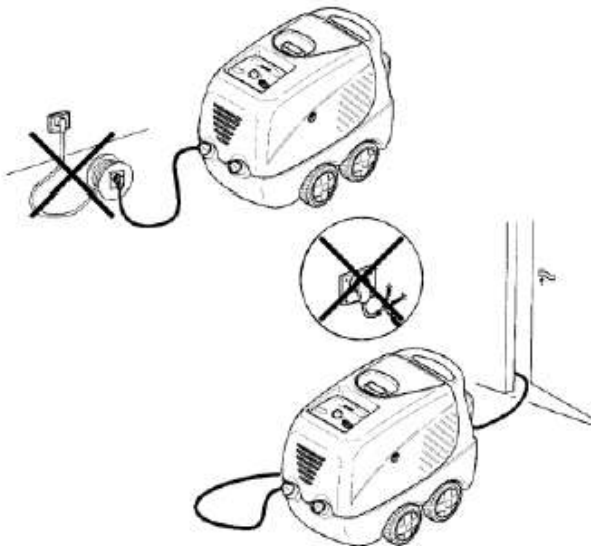


Before attempting any work on the unit, it is necessary to pull the plug out of the socket.

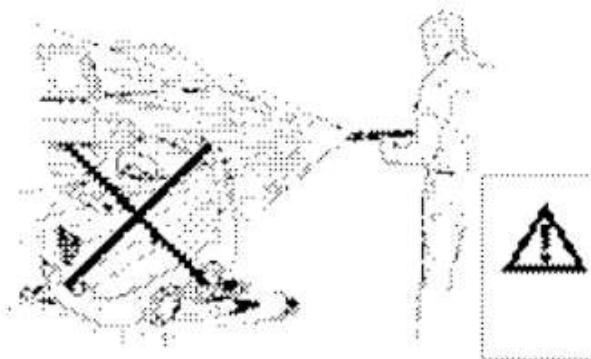


**ATTENTION:**  
**Do not ever manipulate  
the socket with wet hands**

**ATTENTION:**  
**It 'must be connected to  
the ground**



It's forbidden to carry out makeshift repairs to the electric cable. The use of extension cords and plugs or precarious, however, not up to standard.



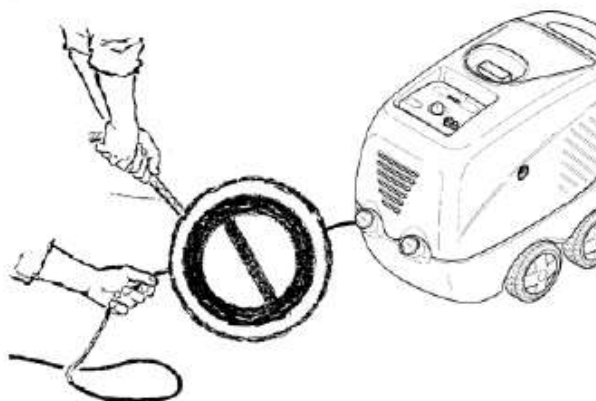
It is forbidden to turn the jet of water against the pump and against any other part under electrical voltage. It may cause electrical damage and danger to the operator.



Protect the machine from the elements. Avoid using the machine in the rain or in thunderstorms and any situation where water or other liquid may invest the electrical parts.

**ATTENTION:**

**Do not use the device in close proximity to people if they do not wear protective clothing.**



Non utilizzare il cavo di alimentazione o i tubi di collegamento per la movimentazione della macchina.

Non utilizzare la spina di alimentazione per eseguire le operazioni di accensione e spegnimento.

Non utilizzare l'apparecchio se il cavo di alimentazione o altre sue parti importanti sono danneggiate, per es. dispositivi di sicurezza, tubi flessibili ad alta pressione, pistole a grilletto, cavi elettrici.

**ATTENTION:**

**The hoses, accessories and fittings High pressure important safety device. ACCESSORIES OR USE ONLY GENUINE PARTS.**

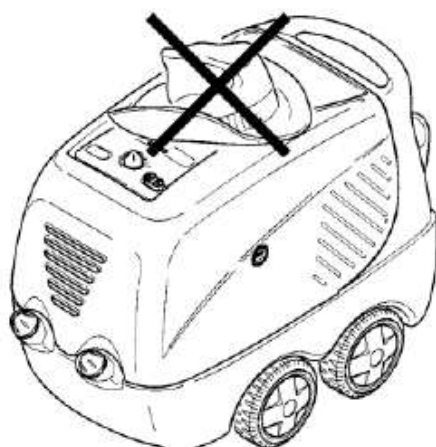




Do not place any objects on the hood: It may damage.



Make sure that the water hose is free of bottlenecks.



Do not block the terminal of the chimney outlet of the fumes of the boiler.



**ATTENTION:**  
Do not use fuel suitable for avoid a dangerous situation.  
Only use diesel fuel from fuels (gasoline).



**ATTENTION:**  
This equipment must be kept under surveillance during operation.





Prepare an unloading device in a free atmosphere of the combustion gases. The drain in closed is highly dangerous!

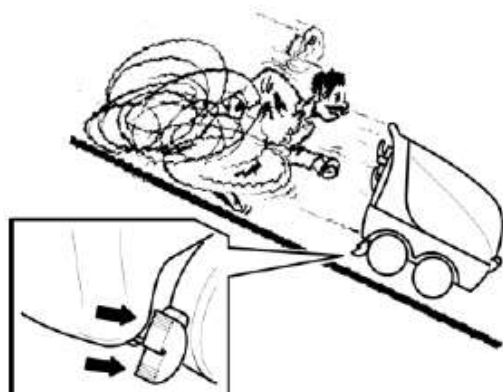


#### ATTENTION:

Jet of water at high pressure. The water jet can be dangerous if used improperly, not direct it at people or animals. You DO NOT USE BY CHILDREN.

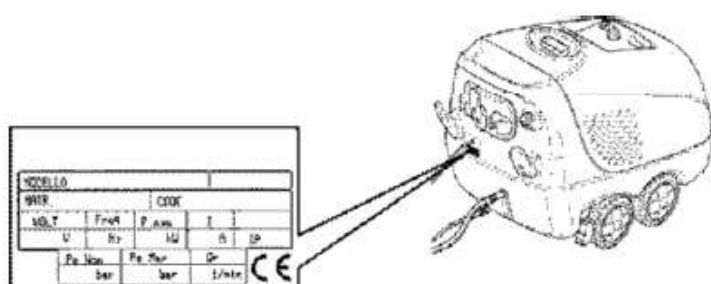
#### ATTENTION:

Use only detergents anaerobic (having characteristics of not solidifying air). If in doubt, consult your dealer.



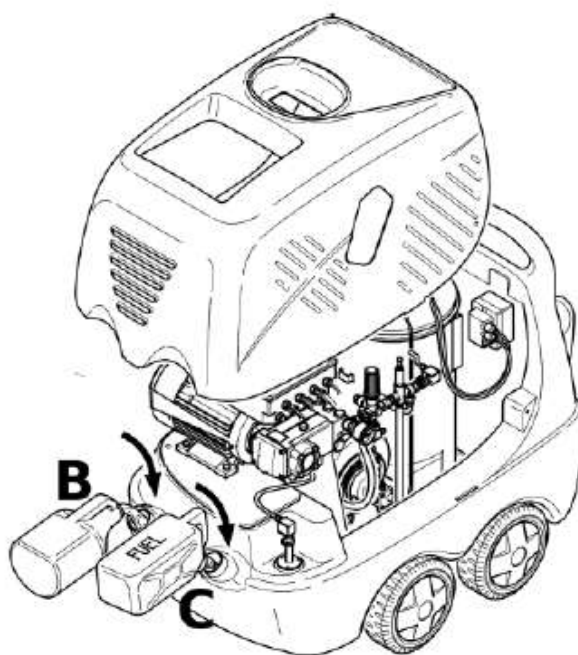
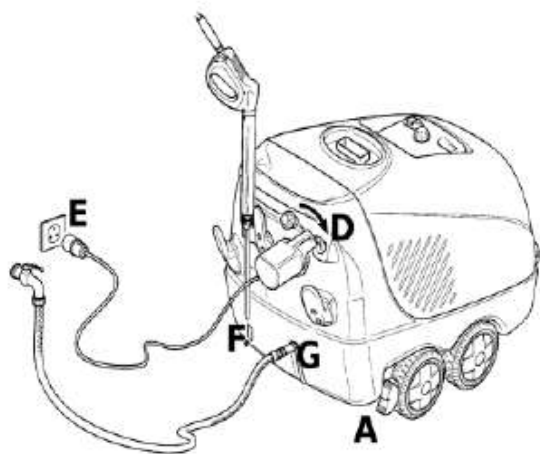
Park the car on level ground. Use the parking brake to block any undesired movement

## MARKING AND IDENTIFICATION



# INSTALLATION

- 1) Place ST4000 VAPOR the place of use and block any movement by using the parking brake (A).
- 2) Insert the diesel fuel into the tank from the entrance (C), the detergent from the entrance (B) and the water softener from the entrance (D).
- 3) If the characteristics of the electric current are (Volts / Hz) than those prescribed on the rating plate fixed to the machine, you can insert the plug (E). The use of extension cords and plugs not flying standards. The wiring system to which the appliance is connected must always comply with the laws in force in the country of installation.
- 4) It is recommended that the presence of a differential thermal breaker with sensitivity of 30 mA, at the power outlet.
- 5) Check that the boiler drain cock (F) is closed.
- 6) Connect the water supply pipe (with a diameter less than 14 mm) to the pump inlet fitting (G).  
Make sure that the suction filter in suction fitting is always clean. A dirty filter does not allow a proper water supply and what is the cause of poor pump operation with the inevitable risk of quickly wearing and breaking the internal mechanisms.





**ATTENTION:**  
must be connected to the  
ground.

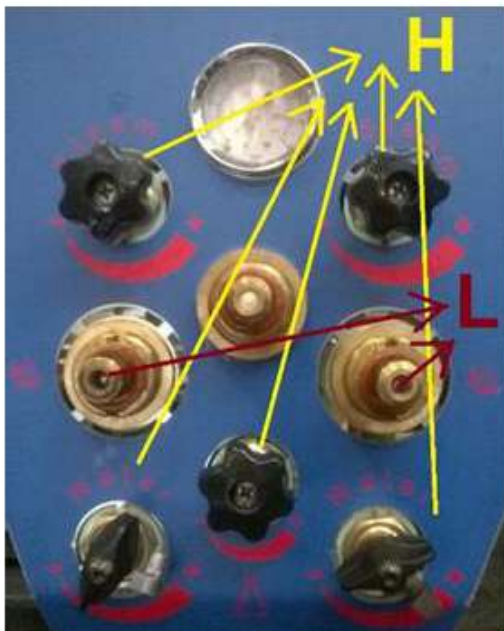


**ATTENTION:**  
Only use diesel traction  
(diesel)



**ATTENTION:**

**Preparations Before you start using machine: connect the machine to the electrical outlet and the water tap, turn the tap and wait until the water fill in the tank. Connect the gun and hose to the machine and move the switch to 1. After about 3 min. the pressure of the steam should arrive to 9 bar.**



- 7) Close all the regulation knobs (H) by turning to the right. Connect the connector (I) of the steam gun (supplied as standard) to one of the output steam (L), tightening the nut.



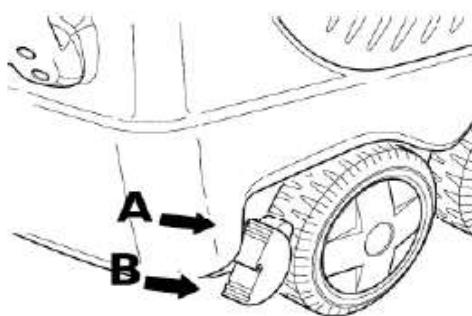
**ATTENTION:**

**Before connecting or disconnecting a gun from the outputs and / or steam cleaner, close all the knobs by turning right and discharge the gun**

# USE

## *Brake application*

1. Braking machine (A).
2. Free machine (B)

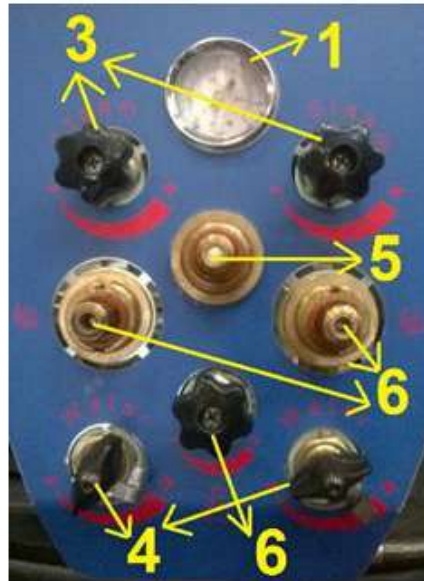


## **Description switchboard**



1. Display: shows the hours of work while the machine is in TST
  2. Alarm flame control: report not to light the flame in the boiler and the boiler block
  3. Limescale
  4. White light constant indicates that the electrical connection is active (voltage is present in the control cabinet)
  5. Knob switch (0 - 1)
  6. Alarm reserve diesel: a red light on the boiler does not work
  7. Alarm lack detergent. Blocks the intake of the product (stop the pump).
  8. No water alarm: stops the machine if there is no water in the pan.
- \* Flame control light + flashing reset button (machine in standby). Press and hold for 6 sec the button to rehabilitate the operation on the machine.

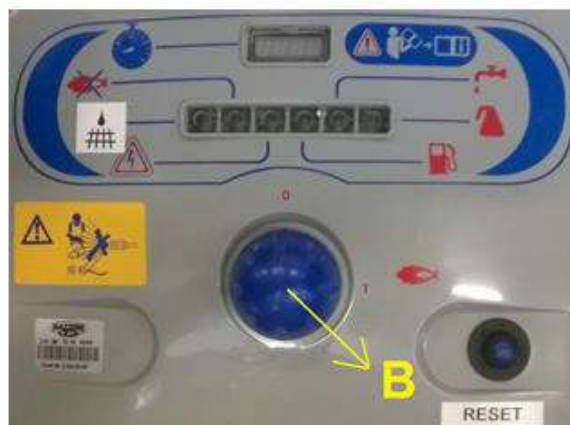
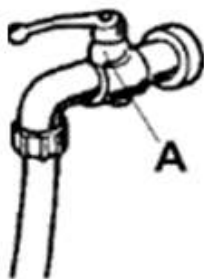
## ***Description control Panel***



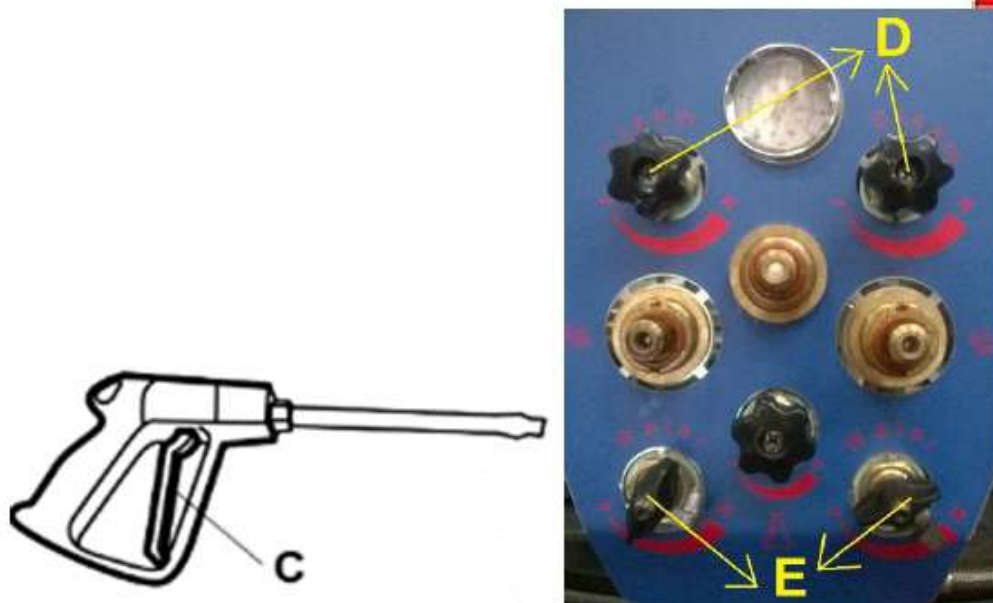
1. Steam pressure gauge
2. Steam Outlet
3. Adjust steam outlet
4. Regulation water outlet
5. Output detergent
6. regulator output detergent

## ***Start-up and use***

1. Open the water tap (A).
2. Turn the switch (B).
3. On the steam gun steam press the lever (C) to release steam.
4. Acting on the knobs (D) to adjust the output of steam, (E) to adjust the output of water (acting on the knobs corresponding to the attack of the gun fitting).







### **Steps off**

1. Turn off the water supply (A).
2. Turn the switch (B)
3. On the gun steam press for a few seconds the steam lever (C) anxious to leak steam and water still in the pipes.
4. Turn the adjustment knobs on the right (D) and (E) to close the exits steam and detergent.



### **ATTENTION :**

**the new machine needs a short running-in of the motor / pump unit. The running is to run the machine no more than 1 hour and wait one hour for it to cool; this should be done 4 or 5 times.**

# ROUTINE MAINTENANCE

The following operations are performed in order to avoid damage to the mechanical parts subject to increased workload and to maintain the performance of your machine.

1) Caution: Your new machine needs a short break of the motor / pump. The running is to run the machine no more than 1 hour and waiting for 1 hour for it to cool; this should be done 4 or 5 times.

2) Do not leave the machine exposed to very low temperatures. Frost can damage the pump and seriously affect other circuits.

In the event of a prolonged stay at temperatures below zero degrees, make sure you empty the circuits.

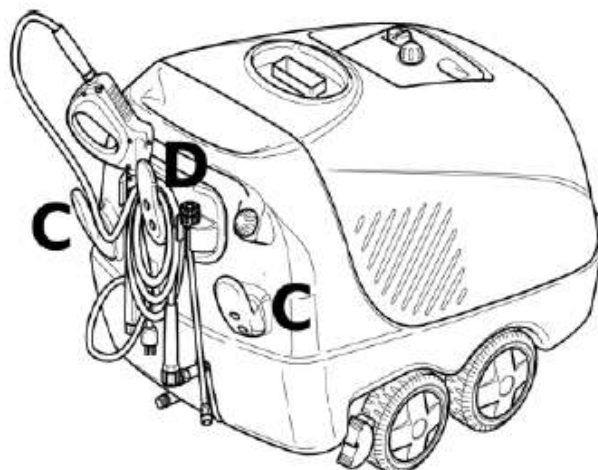
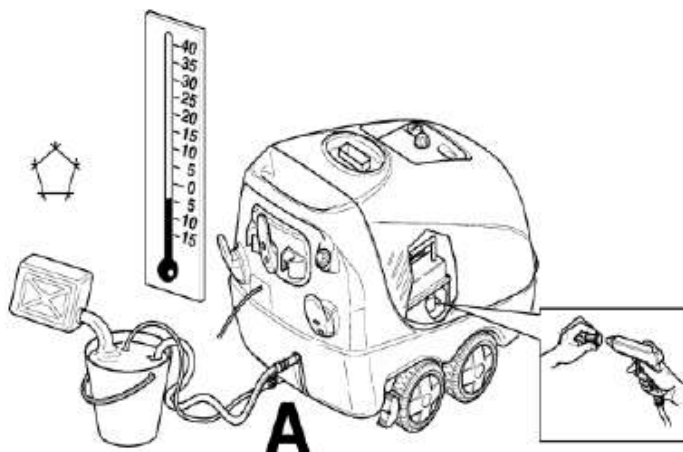
Run for a few minutes the pump with an antifreeze liquid through the inlet hose (A).

3) By contrast, high temperatures can cause the engine to overheat when the machine is in operation.

4) Avoid intake corrosive liquids (paints, acids, solvents, very dense liquids) which could permanently damage the pump. Remember with clean water after using detergents or other liquids other than to avoid deposits and encrustations.

5) Check and clean at least once a month the water filter machine (B).

6) After use, place the accessories in the accessory holder (C) and power cable with the hose gun on the hook (D).





# PROBLEMS AND SOLUTIONS

**ATTENTION :**

**before carrying out any work, disconnect  
the machine from the mains**

<b>PROBLEM</b>	<b>CAUSES</b>	<b>SOLUTIONS</b>
Pump runs but doesn't reach the level of the boiler	The pump sucks air	Check suction pipe and seals
	Clogged suction filter	Clean or replace
The burner stops suddenly	Lack of fuel	Put fuel in the tank
	Dirty electrodes	Clean the electrodes
	Nozzle is clogged and lack of water pressure	Clean the nozzle, if the pump is not under
	High voltage cable electrodes to ground or	Replace the high voltage cable
	Fuel filter clogged	Remove the filter and
Burner that makes a lot of smoke	Oil pressure too high	Turn counter-clockwise the adjustment screw
	Very dirty boiler	Open the cover and
When the water gun the	The microswitch of the pressure switch	Replace

For each of these operations, contact the manufacturer or to a service center.



# GUARANTEE REGULATIONS

The generic standards of security applied refer to Directive 1999/44 EC "on certain aspects of the sale and guarantee of consumer goods."  
in particular:

## **1) Responsibility of the manufacturer:**

Our products are covered by a 12 month guarantee for failures caused by defects in construction. La warranty does not apply to parts subject to normal wear and tear, in particular: pistons, seals, gaskets, hoses, nozzles and valves.

The warranty is limited to defects demonstrable and attributable to the manufacture and / or materials used. The cases and / or defects that result from normal wear and tear, incorrect and / or improper use, from the incorrect electrical connection and / or water of the unit are not covered by warranty.

The manufacturer is not liable for damage due to failure to use the machine for repairs under warranty and out of warranty.

## **2) Servicing:**

All technical operations carried out by unauthorized personnel will void your warranty with the exception of additional manufacturer's liability, especially for damage to property or third parties. The repair or replacement of defective parts is subject to the unquestionable decision of the manufacturer. Every time they are carried out work on the device and / or on its system - without the authorization of the service center - invalidated your warranty rights. Only the service center and / or specialty retailers will receive spare parts that will be provided on the basis of this guarantee.

## **3) Authorised Service Centres:**

The authorized service replaces the producer obligations and rights on the express terms of this warranty. Will not also advanced claims and / or rights by the Authorized Service Center that are outside of the points brought up by this warranty.

#### **4) Various:**

- The warranty is effective from the time of purchase.
- In any case, the buyer assumes all the costs and risks of transportation product.
- Not covered by warranty periodic checks, calibration and further maintenance and / or modification.
- Introduction exhaustively to access the warranty claim will be the presentation of the corresponding receipt or invoice.
- Any warranty claims if the identification label attached to the machine (indicating the technical data of testing and the SERIAL NUMBER, see section "MARKING AND IDENTIFICATION") is removed, tampered with or defaced.
- The dealer must affix its stamp and signature in the space provided on the last page of this booklet.

The manufacturer reserves the right to make changes to this manual and the technical characteristics of the machines without notice.

- Retention of title:

The real object of the sale remain the exclusive property of the seller until full payment of the agreed price as stipulated in Art. 1523 of the Civil Code.

- Disputes:

Any dispute shall be referred exclusively to the territorial jurisdiction of the court of Reggio Emilia (Italy)



# ORDINARY EQUIPMENT

## Standard equipment includes:

- Steam gun with 7 meters of high pressure hose
- TOTALSTOP (TST): This device allows you to avoid overheating of the machine in case of prolonged suspension of the use. The models of device TOTALSTOP have additional security that is in the block of the machine at the end of the spraying phase (closed with gun trigger is not pressed), in this case the machine stops and goes in stand-by. Lights of Reset button starts blinking. In order to start working, keep the Reset button pushed for 6 sec.

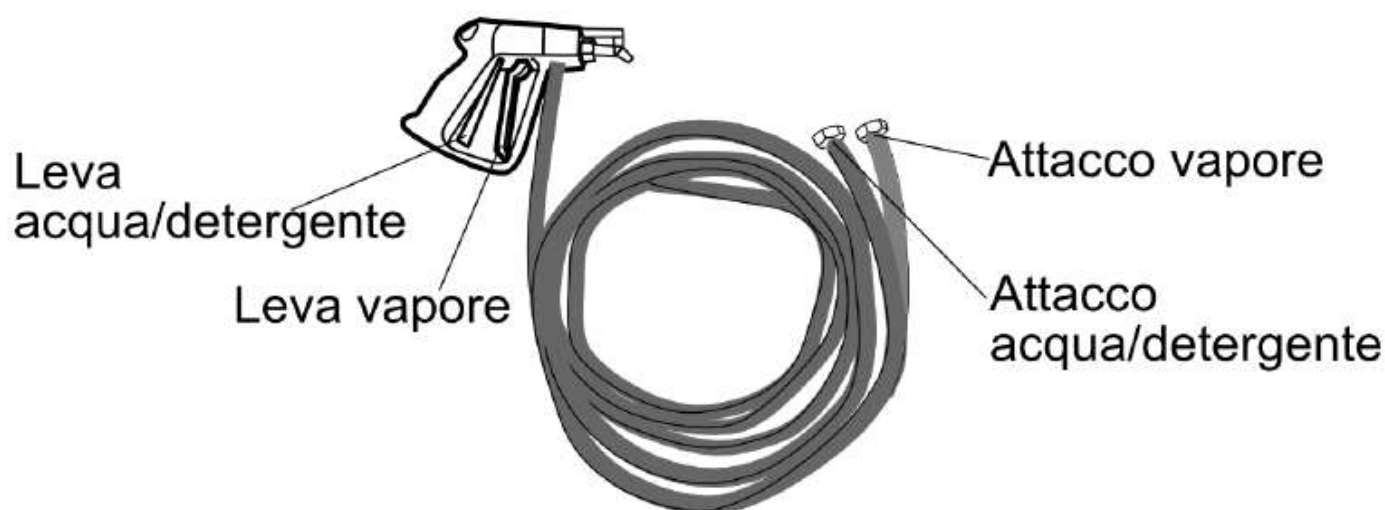
# OPTIONAL EQUIPMENT

The ST4000 can be equipped with additional accessories according to your cleaning needs:

- **Reels:** Support to fix the shell to wrap the pipe.
- **Inverter DC input 10 ~ 15V, output 600 ~ 1000W**
- **Gun 20 cm: 2 outputs / steam cleaner with 7 meters**

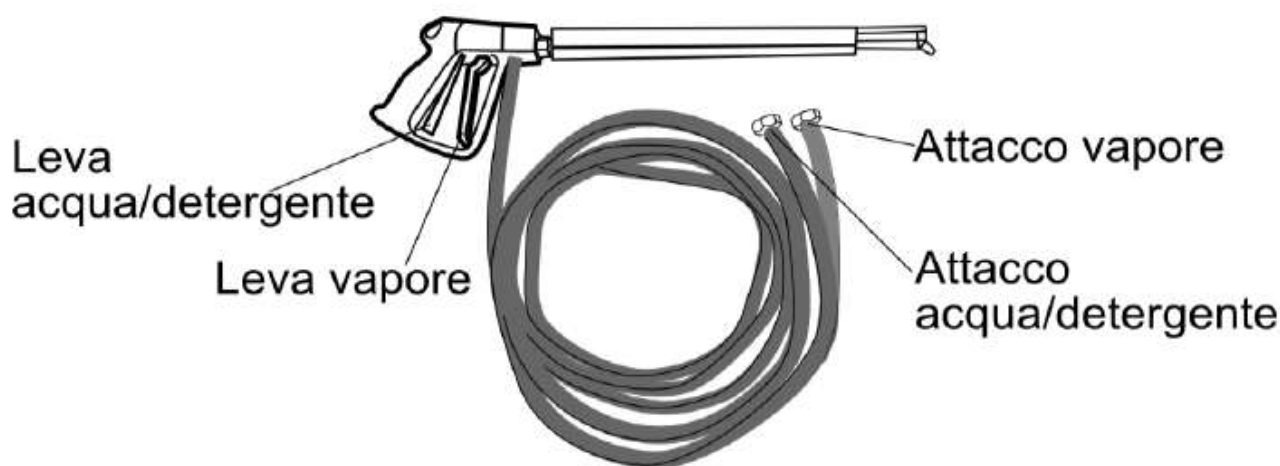
## of hose

- **Brushes made with different materials**
- **Special lances and guns**

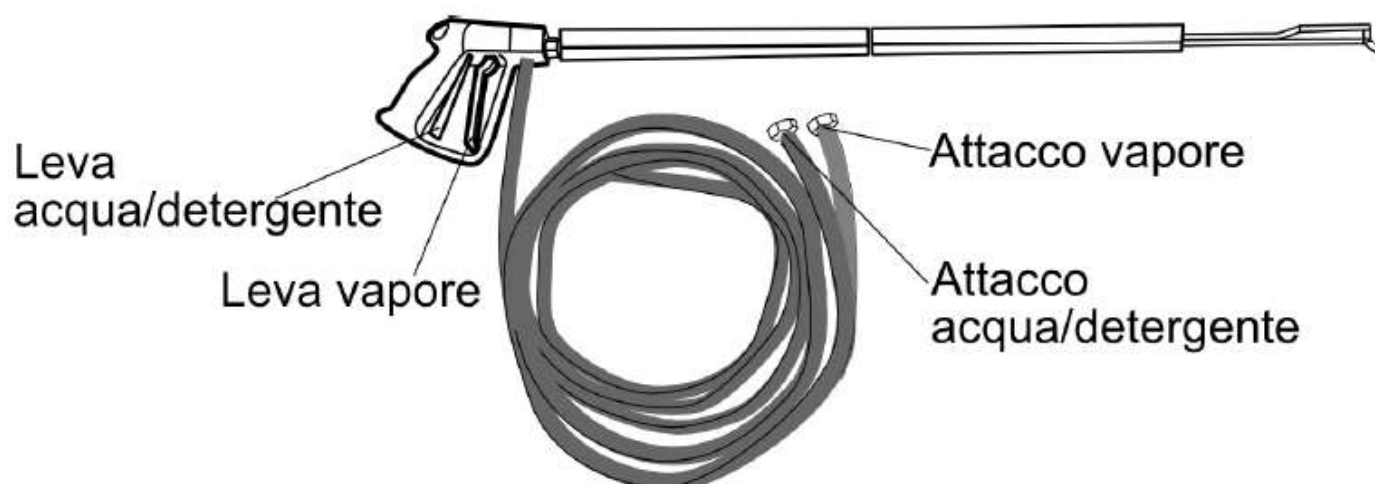


- **Gun 50 cm: 2 outputs / steam cleaner with 7 meters of tube**





- Gun 130 cm: 2 outputs steam / detergent with 7 meters of tubing

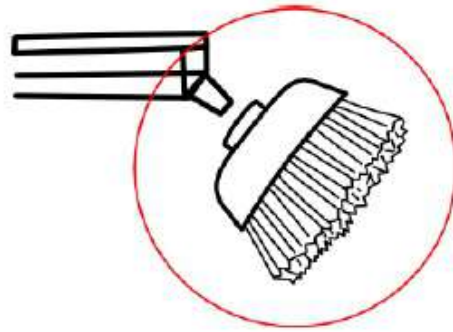


**ATTENTION:**

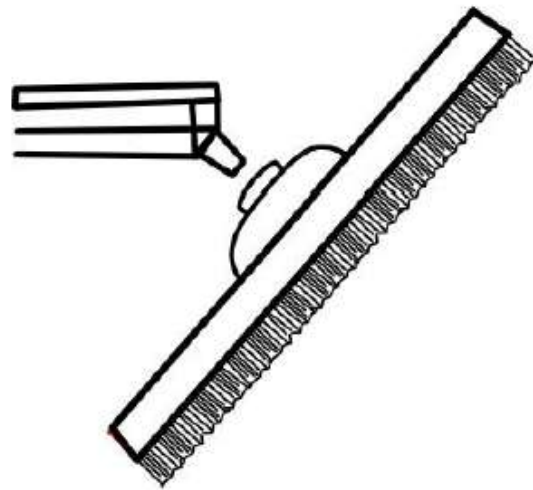
**On request tubes for high pressure guns steam / detergent up to 20 meters**

- Brush d.60 mm gun for steam / detergent bristles pvc
- Brush d.60 mm gun for steam / detergent natural bristles
- Brush d.60 mm gun for steam / detergent metal bristles

- Brush d.60 mm gun for steam / detergent brass bristles



- Rectangular brush 150 x 25 mm for gun steam / detergent metal bristles
- Rectangular brush 150x25 mm for gun steam / detergent



brass bristles

# GENERAL INFORMATIONS

## ***Packaging and transport***

Transportation or transfer takes place on pallets. It should be noted the particular sensitivity of materials used for the packaging to atmospheric agents such as rain, fog, sun, etc.

In case you need to transport when you can not restore the original packaging, the machine must be immobilized to prevent any movement within the vehicle.

## ***Machine demolition***

When you decide to scrap the machine, it is recommended to make it inoperative:

- Cutting the external power cord;
  - Cutting the power supply to the motor;
- not before having completely emptied the various internal tanks from liquids contained therein.

## ***Information ecological***

The disposal of the packaging machine, the pieces replaced, the machine as a whole, of the various liquids, should be performed in compliance with the environment, avoiding pollution of ground water and air in each case respecting the legislation in the matter.

## ***Guidelines for proper treatment of waste***

- Ferrous materials, aluminum, copper: recyclable materials to be given to an authorized depot.
- Plastic materials: materials to landfills, incinerator or a special recycling center.
- Exhausted oils: give these to an authorized collection center (in Italian Consortium Required oils used).



# OPTIONAL DETERGENT

**CVK75 RED THUNDER UNIVERSAL DEGREASING:** degreasing detergent for external car, mechanical parts and Textiles for internal car.

**CVK76 DETERGENT CIRCLES AND WHEELS:** degreasing detergent for circles and wheels.

**CVK77 POLISHING WAX FOR EXTERNAL:** waxing product polishing for external.

**RIP1453 MOTORS DETERGENTS AND MECCHANICAL PARTS "PULIMOTORS PLUS":** prewash foaming product concentrated, effective against all of type of dirty.

**RIP1452 DETERGENT "ALL SUPER":** universal washer for ordinary cleaning of all washable floors in PVC, Linoleum, rubber, granite, marble, floor tiles, steel.

**CVK33B SPECIAL GUM:** special product to remove Chewing gum from the seats, plastic floor and in marble, from rough and smooth surfaces.

**OXFORT:** limescale product concentrated.

**RIP2325:**  
Water tank to get BF4000 indipendent without water network.



# TECHNICAL DETAILS

## Machine for cleaning steam MOD. ST4000 VAPOR

Steam pressure	9.50 – 10.50 Bar
Boiler steam temperature	180° C
Temperature steam output	150° C
Productivity steam	42 kg/h
Boiler capacity	14 lt
Boiler supply	Diesel
Diesel consumption	3,3 lt/h
Fuel tank capacity	45 lt
Power supply	220V 50 Hz
Power consumption	150 Watt
Detergent tank capacity	10lt
Tank capacity limescale	1 lt
Machine weight dry	120 kg