

STEAM BOX INDUSTRIAL

USER INSTRUCTION

Standard



Bacchus



With integrated industrial vacuum cleaner



Interpretation of the symbols placed on the unit

BEFORE USING THE STEAM GENERATOR, READ AND FOLLOW THIS INSTRUCTION MANUAL.

IT IS RECOMMENDED TO KEEP THIS INSTRUCTION MANUAL TO CONSULT IT LATER OR TO GIVE IT TO THE FOLLOWING OWNERS.

PLEASE READ THE SAFETY INSTRUCTIONS ON THIS HANDBOOK BEFORE PROCEEDING WITH THE FIRST USE. EVENTUAL DAMAGES DUE TO THE CARRIAGE MUST BE COMMUNICATED AS SOON AS POSSIBLE TO YOUR OWN RETAILER.



ATTENTION!!
STEAM.... BURNING DANGER



ATTENTION!!



READ THE OPERATING MANUAL



OPERATING MANUAL;
OPERATING INSTRUCTIONS

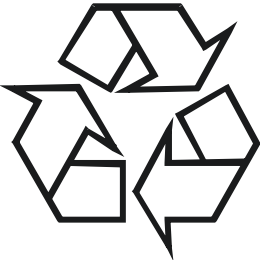


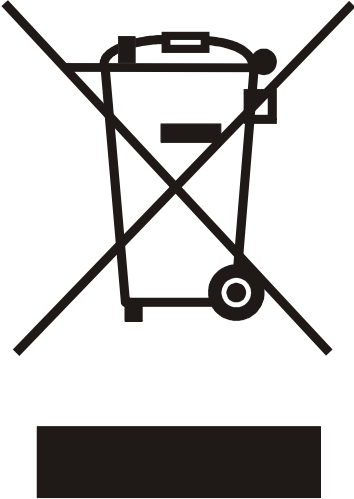
BURNING DANGER!!
IT IS COMPULSORY TO USE PROTECTIVE GLOVES.



EQUIPMENT WITH SOUND PRESSURE LEVEL > 85db
IT IS COMPULSORY TO USE EARS PROTECTIVE SHROUDS.

Environment protection

	<p>ALL THE PACKINGS ARE RECYCLABLE, PACKINGS DO NOT HAVE TO BE THROWN IN THE DOMESTIC WASTE BUT THEY HAVE TO BE DELIVERED TO THE CENTERS SPECIALIZED FOR THE DISPOSING OF THE WASTE.</p>
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	<p>ALL DEVICES NOT USED ANYMORE CONTAIN PRECIOUS RECYCLABLE MATERIALS THAT SHOULD BE DELIVERED TO THE CENTERS SUITABLE FOR THE DISPOSING OF THE WASTE. ELECTRIC AND ELECTRONIC EQUIPMENT, BATTERIES, OIL AND SIMILAR SUBSTANCES MUST BE RECYCLED IN THE PROPER RECYCLING CENTERS AND MUST NOT BE LEFT IN THE ENVIRONMENT.</p> <p>SUBSTANCES SUCH AS OIL FOR MOTORS, DIESEL OIL, PETROL MUST NOT BE LEFT IN THE ENVIRONMENT AND MUST BE RECYCLED IN THE PROPER RECYCLING CENTERS ACCORDING TO THE ENVIRONMENTAL REGULATIONS.</p>
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The user might return the unit for disposal also to the retailer when purchasing a new equivalent device on a one to one ratio.

1. SUMMARY

1. SUMMARY
2. SAFETY REGULATIONS
3. CONNECTION TO THE WATER NET
4. PREFACE
5. TECHNICAL CHARACTERISTICS
6. NOMENCLATURE
7. TECHNICAL DRAWINGS
8. OPERATING INSTRUCTIONS
9. MAINTENANCE
10. BEFORE REFERRING TO THE TECHNICAL SERVICE
11. DECLARATION OF CONFORMITY

2. SAFETY REGULATIONS

- The electrical connection shall be made by a qualified electrician and comply with IEC 60364-1.
- If the power cable is damaged, it has to be replaced by the manufacturer or by an authorized technical service or by a qualified person in order to prevent any risk.
- It is recommended that the electric supply to this machine should include either a residual current device that will interrupt the supply if the leakage current to earth exceeds 30ma for 30ms or a device which will prove the earth circuit.
- **SAFETY VALVE** This machine is equipped with two safety valves, able to ensure the safety of the machine itself in case other primary control devices are inefficient (due to a failure). Due to the extreme importance of these components and as not to compromise the safety of the machine, it is recommended to provide to check them and to substitute them through an authorized service center every 2 years starting from the purchasing date.
- **PRESSURE SWITCH** This machine is equipped with a pressure switch able to check and to maintain the pressure under certain preset limits (ref. "rated pressure" on the technical label underneath the machine). In case there would be a steam leakage on the lower side of the machine, it means that the functioning of this device has been compromised and the safety valve has been involved as to limit the boiler's internal pressure. **It is recommended not to use the machine, immediately unplug the machine from the power feeding and call the service center.**
- **MUD DRAIN FROM THE BOILER** The unit automatically indicates the necessity to proceed with the mud drain; the notice C A L C will be displayed alternatively to the current visualization on the panel.

- **ATTENTION.** Use a new set of fittings, tubes and sealing gaskets every time the appliance is connected to the water net.
- **ATTENTION.** This appliance has been projected for being used with cleaning agents supplied or recommended by the manufacturer. The usage of other detergents and chemicals may adversely affect the safety of the user and of the appliance itself.
- **ATTENTION.** Risk of explosion. Do not spray flammable liquids.
- **ATTENTION.** Do not use the appliance within the range of persons unless they wear protective clothing.
- **ATTENTION.** The high pressure jets can be dangerous if not used properly. The jet does not have to be directed against persons, electrical devices under tension or the unit itself.
- **ATTENTION.** Do not direct the jet against yourself or others in order to clean clothes or footwear.
- **ATTENTION.** Water flowed through the anti-reflux devices is not potable water approved.
- Disconnect the power supply by unplugging the power cable before proceeding with the maintenance effected by the user.
- **ATTENTION.** This unit is not intended to be used by children or by unqualified persons.
- Monitor the children so they cannot play with the machine.
- **ATTENTION.** To ensure the machine's safety, use only original spare parts from the manufacturer or spare parts approved by the manufacturer.
- **ATTENTION.** Pressure hoses, fittings and couplings are important for the safety of the machine. Use only hoses, fittings and couplings recommended by the manufacturer.
- **ATTENTION.** Do not use the machine if the power cord or other important parts of the machine are damaged, i.e. safety devices, pressure hoses and trigger gun.
- **ATTENTION.** If an extension cord is used, the plug and the socket must be of a watertight construction.
- **ATTENTION.** Inadequate extension cords can be dangerous.
- The hand-arm vibration data referred to this device are not mentioned as they are below $2,5 \text{ m/s}^2$.
- **ATTENTION.** The detergent injection of this appliance can't be used continuously but intermittently (20 seconds ON - 20 seconds OFF). The detergent can be continuously used for no longer than two minutes.
- When using detergent (make sure it's non-foaming) please follow the specific instructions: 1 liter of detergent for every 10 liters of water (detergent percentage about 10%), making sure to fill in first the detergent to obtain a better mixing.

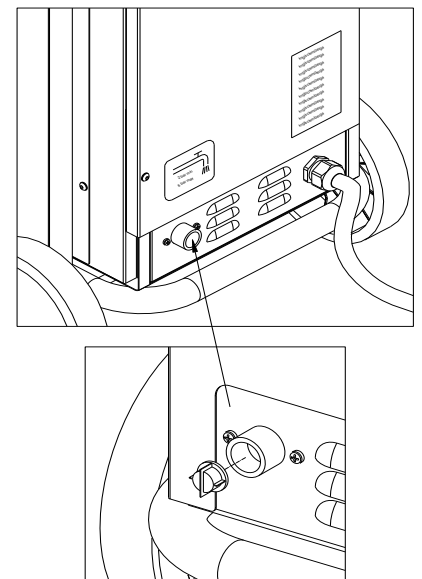
Please be careful with the detergent to be used as some available in commerce will emanate highly toxic gases when heated above 100°C. Always consult the MSDS datasheet from the manufacturer.

- **ATTENTION.** In case of accidental contact with the detergent, strictly follow the instructions indicated on its packaging or in its MSDS.
- Use ear protections and gloves while using the machine.

3. CONNECTION TO THE WATER NET

The connection to the water net shall be made by qualified personnel. It is recommended to use a new set of food grade fittings and food grade hoses; it is not possible to use again the same set (fittings, tubes, gaskets, reductions etc.) for a new connection.

Being a movable device, the connection hose to the water net is not supplied due to the unknown distance from the water connection point.



4. PREFACE

Dear Client,

We would like to congratulate you on your choice.

With the goal of improving and continually updating production by always offering innovative products, TECNOVAP has studied, designed and created **STEAM BOX INDUSTRIAL**, a combined model for cleaning which brings together the power of steam and the force of vacuuming (optional).

This product is equipped with a dependable stainless steel boiler with automatic refilling system which allows it to produce a powerful and continuous supply of steam (24/24 hours).

STEAM BOX INDUSTRIAL offers the overheated water function and is also equipped with a separate detergent tank which allows the injection of detergent up to 90-160°C.

With the power of steam, meaning ecological cleaning power, Tecnovap has combined a powerful vacuum (optional) able to pick up solids and liquids.

STEAM BOX INDUSTRIAL is the ideal solution when it comes to cleaning and disinfecting.

5. TECHNICAL CHARACTERISTICS

FACTORY: TECNOVAP SRL VIA DEI SASSI 1A 37026 PESCONTINA VERONA ITALY

Model		Steam Box Industrial
Code		5W05010 - 5W04010 - 5W03010 - 5W02010 - 5W01010 - 5W0301M - 5W0101M 5W05110 - 5W04110 - 5W03110 - 5W02110 - 5W01110 - 5W0311M - 5W0111M 5W05T10 - 5W04T10 - 5W03T10 - 5W03T1M
Rated Voltage	V	230/400
Current type	Hz	50/60 3~
Rated Power Boiler	kW	10,8 - 14,4 - 21,6 - 28,8 - 36,0 10,8 - 14,4 - 21,6 - 28,8 - 36,0 10,0 - 14,4 - 20,75
Rated Power vacuum	kW	1,0 - 1,2 - 3,0
Max Rated Power	kW	11,0 - 14,8 - 22,0 - 29,2 - 36,4 11,0 - 17,8 - 22,0 - 32,2 - 39,4 11,1 - 15,8 - 22,15
Rated Steam Pressure	kPa bar	1000 10
Permissible Steam Pressure	kPa bar	1200 12
Max. Steam Rated Flow	g/min	291 - 388 - 582 - 776 - 970 291 - 388 - 582 - 776 - 970 291 - 388 - 564
Max. Steam Rated Flow	Kg/h	17,5 - 23,0 - 35,0 - 46,5 - 58,0 17,5 - 23,0 - 35,0 - 46,5 - 58,0 17,5 - 23,0 - 33,8
Max temperature	°C	180
Max. inlet water pressure	KPa bar	600 6
Min. inlet water pressure	KPa bar	50 0,5
Kickback forces	N	< 20
Vibration hand-arm	m/s ²	< 2,5
Sound pressure level L _{Pa}	dB	98,7
Sound power level L _{wa}	dB	111,4
Mass	kg	106

Model		Steam Box Industrial Bacchus
Code		5005060 – 5004060 – 5003060 – 5002060 – 5001060 – 500306M – 500106M
Rated Voltage	V	230/400
Current type	Hz	50/60 3~
Rated Power Boiler	kW	10,8 – 14,4 – 21,6 – 28,8 – 36,0
Max Rated Power	kW	11,0 – 14,8 – 22,0 – 29,2 – 36,4
Rated Steam Pressure	kPa	600
	bar	6
Permissible Steam Pressure	kPa	1200
	bar	12
Max. Steam Rated Flow	g/min	291 – 388 – 582 – 776 – 970
Max. Steam Rated Flow	Kg/h	17,5 – 23,0 – 35,0 – 46,5 – 58,0
Max temperature	°C	165
Max. inlet water pressure	KPa	600
	bar	6
Min. inlet water pressure	KPa	50
	bar	0,5
Kickback forces	N	< 20
Vibration hand-arm	m/s ²	< 2,5
Sound pressure level L _{Pa}	dB	98,7
Sound power level L _{wa}	dB	111,4
Mass	kg	106

6. NOMENCLATURE

Steam Box Industrial

- | | |
|--|---|
| 01) Power cord | 35B) Hot water switch |
| 02) Water inlet for direct water feed | 36) 37) Steam regulation switches |
| 03) Water inlet valve filter | 38) Vacuum switch |
| 04) General power switch | 40) Locking latches for accessories |
| 05) Handle bar | 40A) Handwheel screw |
| 06) Detergent tank | |
| 07) Water tank | 41) Steam / vac extension tubes |
| 08) Control panel | 42) Steam / vac turbo lance |
| 08A) Bacchus control panel | 44) Brass brush (Ø 28mm) |
| 09) Steam outlet | 45) St. steel brush (Ø 28mm) |
| 10) Drain cap – detergent tank | 49) St. steel brush (Ø 60mm) |
| 10A) Detergent filter cap | 50) St. steel wool pad |
| 10B) Detergent filter | 51) Floor tool for inserts |
| 11) Drain cap – water tank | 52) Locking latches for inserts |
| 11A) Water filter cap | 53) Insert squeegee / brush |
| 11B) Water filter | 54) Insert squeegee / squeegee (L. 375mm) |
| 12) Boiler drain cap | 55) Steam & vac industrial brush L.530 |
| 13) Key for boiler drain cap | 56) St. steel upholstery tool |
| 14) Electric socket for vacuum cleaner | |
| 15) Vacuum hose outlet | 70) Steam hose w/ handgrip |
| 16) Locking latch vacuum outlet | 71) Steam lance |
| 17) Base for vacuum drum | 72) Rectangular brush |
| 18) Vacuum drum | 73) Cloth holder |
| 19) Clamping hooks for vacuum motor | 74) Triangular brush |
| 20) Locking latch vacuum outlet | 75) Locking latches for accessories |
| 21) Vacuum hose outlet | 76) Extension tube |
| 22) Vacuum head | 77) Curved bayonet lance 45° |
| 23) Vacuum cleaner power cord | 78) Bayonet lance |
| 24) Vacuum cleaner main switch | |
| 25) Connection tube vacuum drum – turbine | 80) Geyser hose with handgrip |
| 26) Steam hose | 81) Steam plug |
| 26A) Hose - bottling line rapid coupling | 82A) Hot water injection button (red) |
| 27) Garolla connection steam hose coupling | 82B) Detergent button (yellow) |
| 27A) Bottling line overpressure safety valve | 83) Steam outlet lever |
| 27B) Garolla connection | 84) Lances 100 / 400 / 800 / 1200 mm |
| 28) Safety pressure switch (optional) | 85) Round nozzle |
| | 86) Window cleaner with diffuser 250 / 350 / 450 mm |
| 30) Vacuum hose | 87) Steam brush with bristles 250 / 350 / 450 mm |
| 32) Steam plug | 88) St. steel floor scrubber with 3 brushes |
| 33) Steam & vac hose w/ handgrip | 89) Flat nozzle 4 cm with scraper |
| 34) Steam command switch | 90) St. steel brush |
| 35A) Detergent switch (intermittent) | 91) Flat nozzle 1 cm |

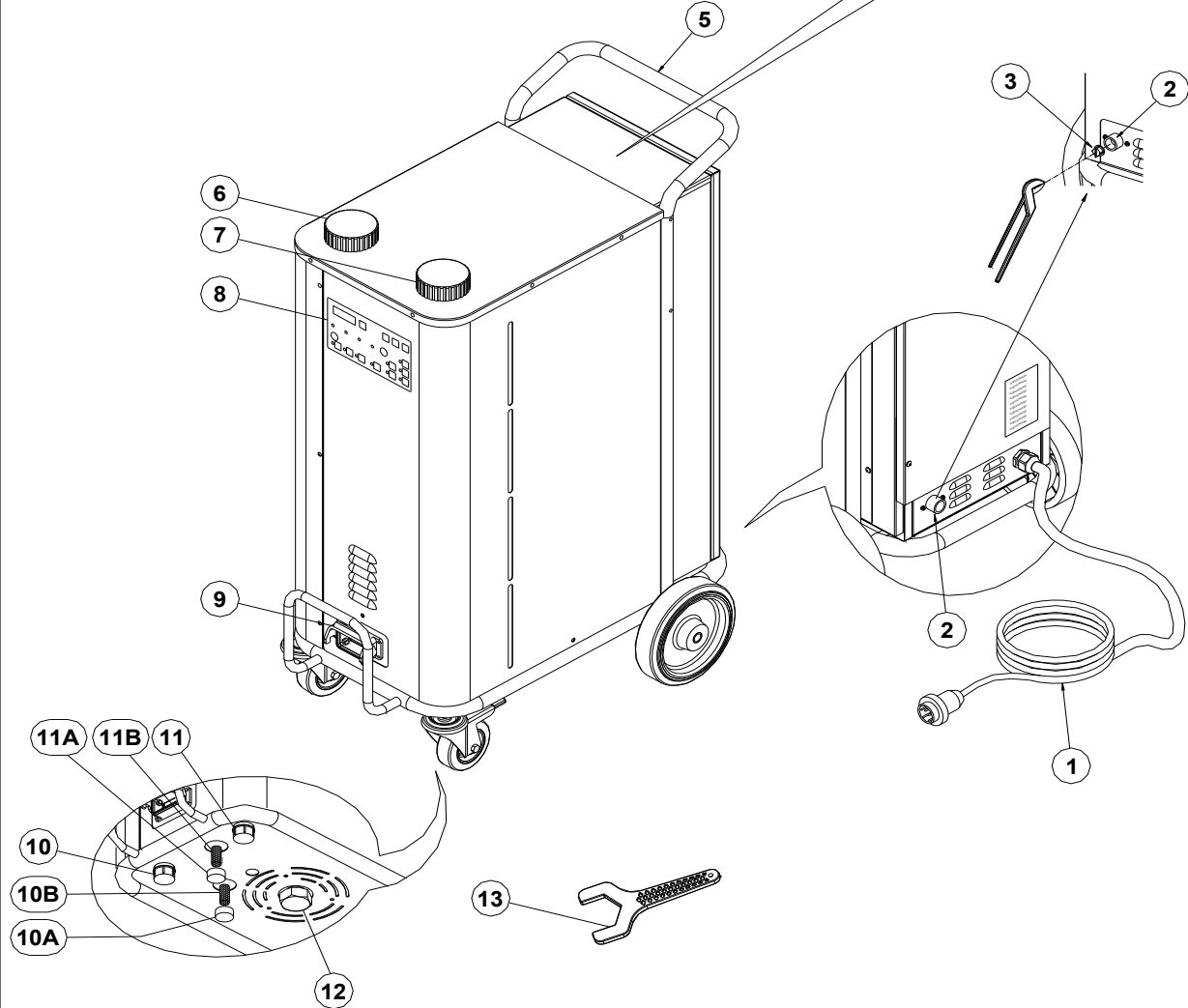
7. TECHNICAL DRAWINGS

STEAM BOX INDUSTRIAL



SINGLE POWER

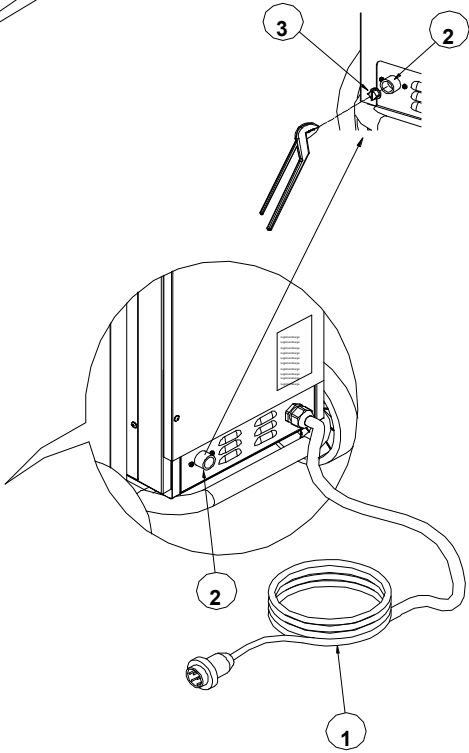
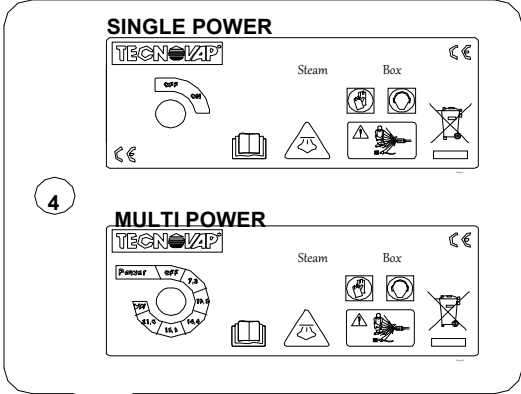
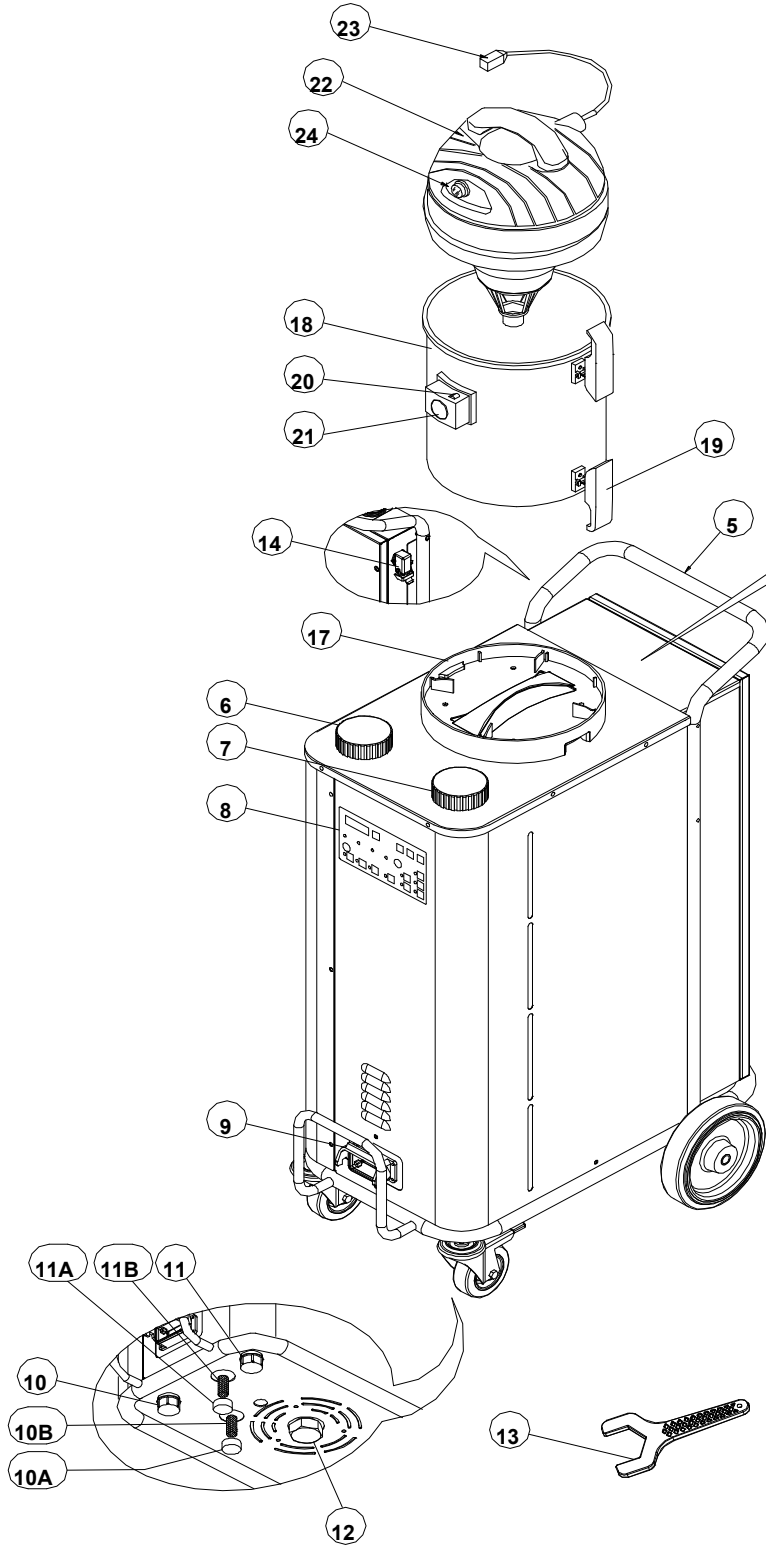
MULTI POWER



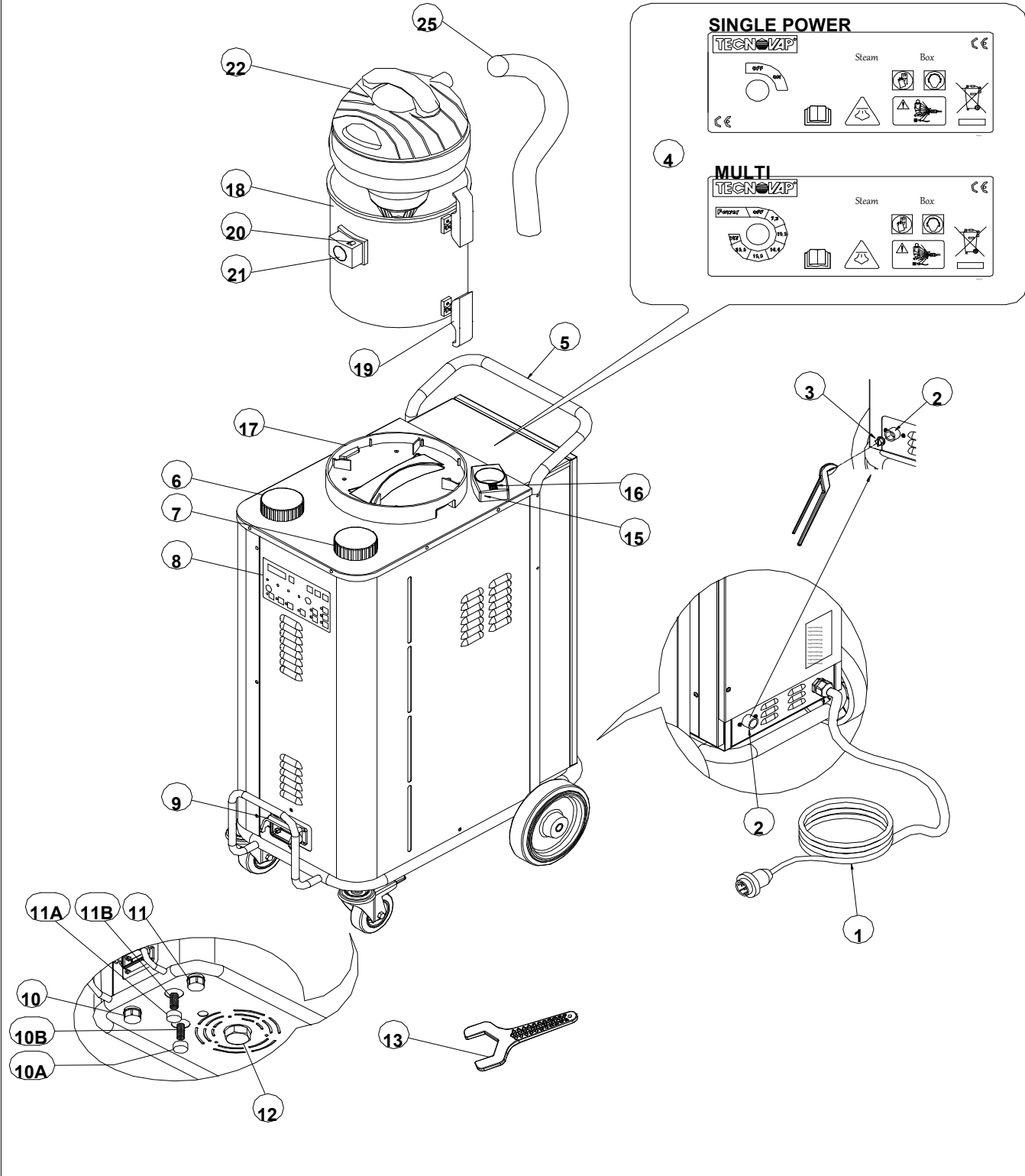


X
STEAM
WITH

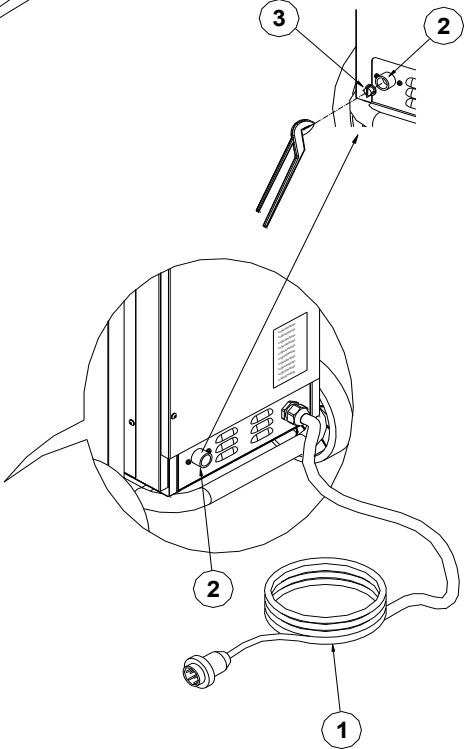
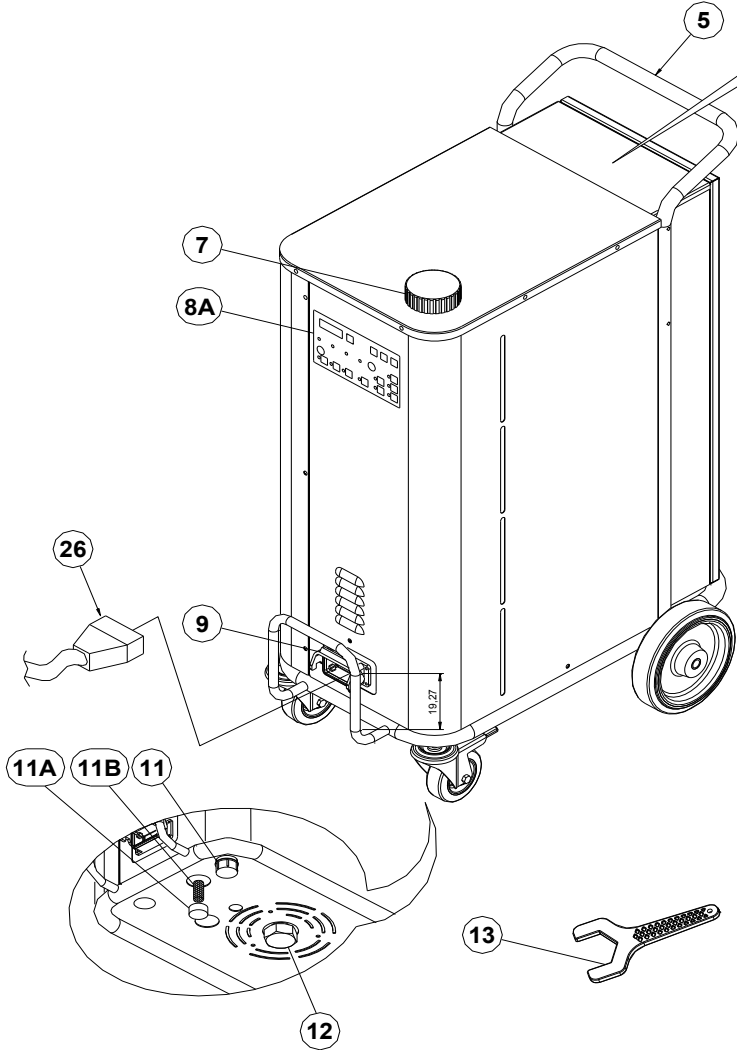
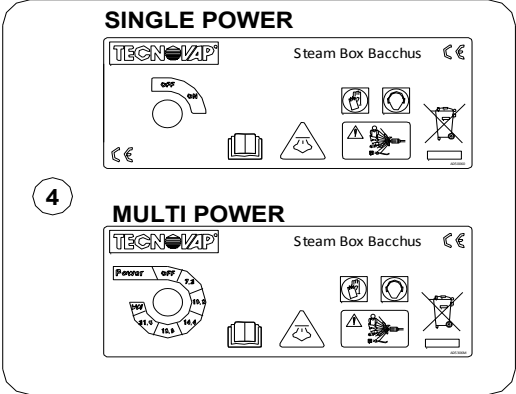
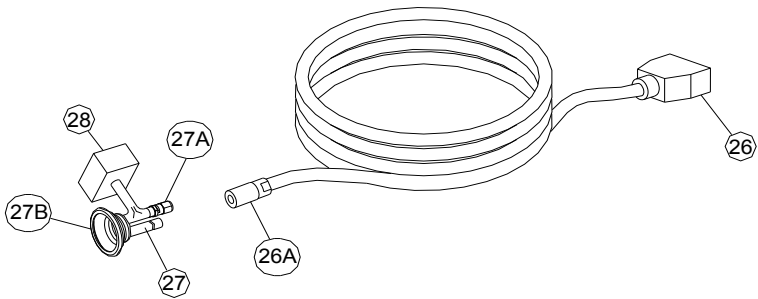
BOX
VACUUM



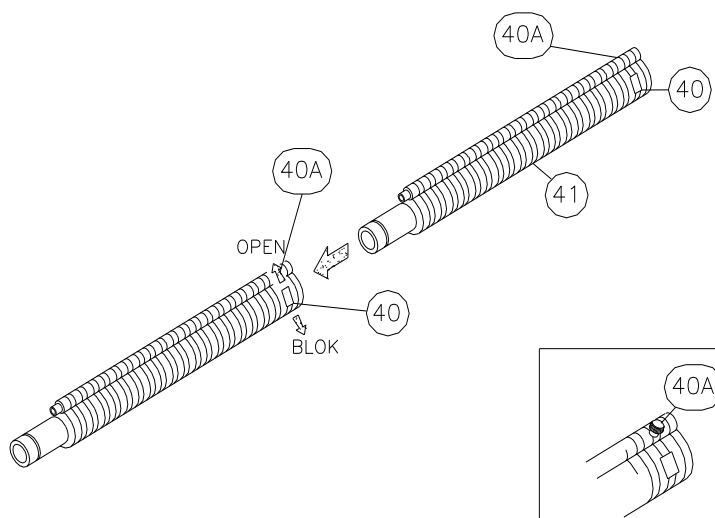
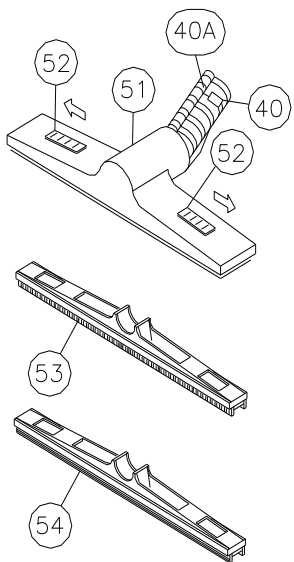
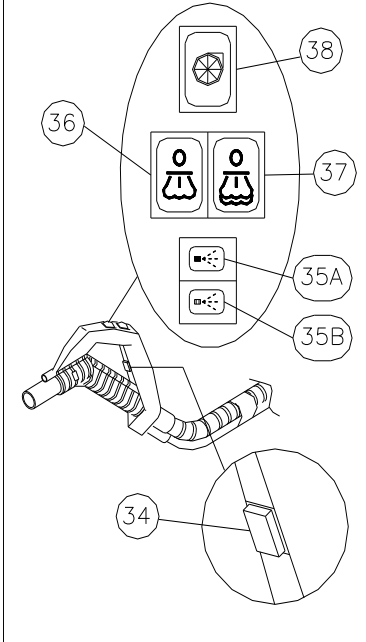
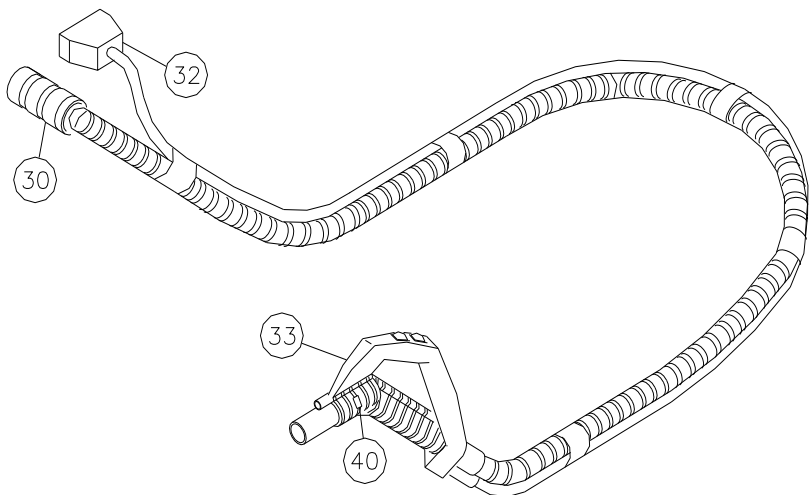
STEAM BOX INDUSTRIAL INTEGRATED VACUUM



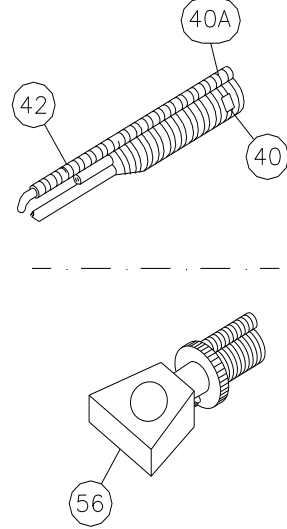
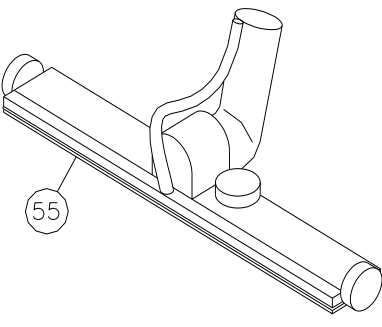
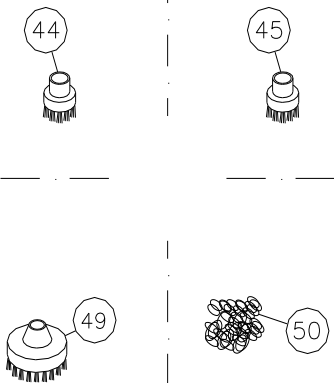
STEAM BOX INDUSTRIAL BACCHUS



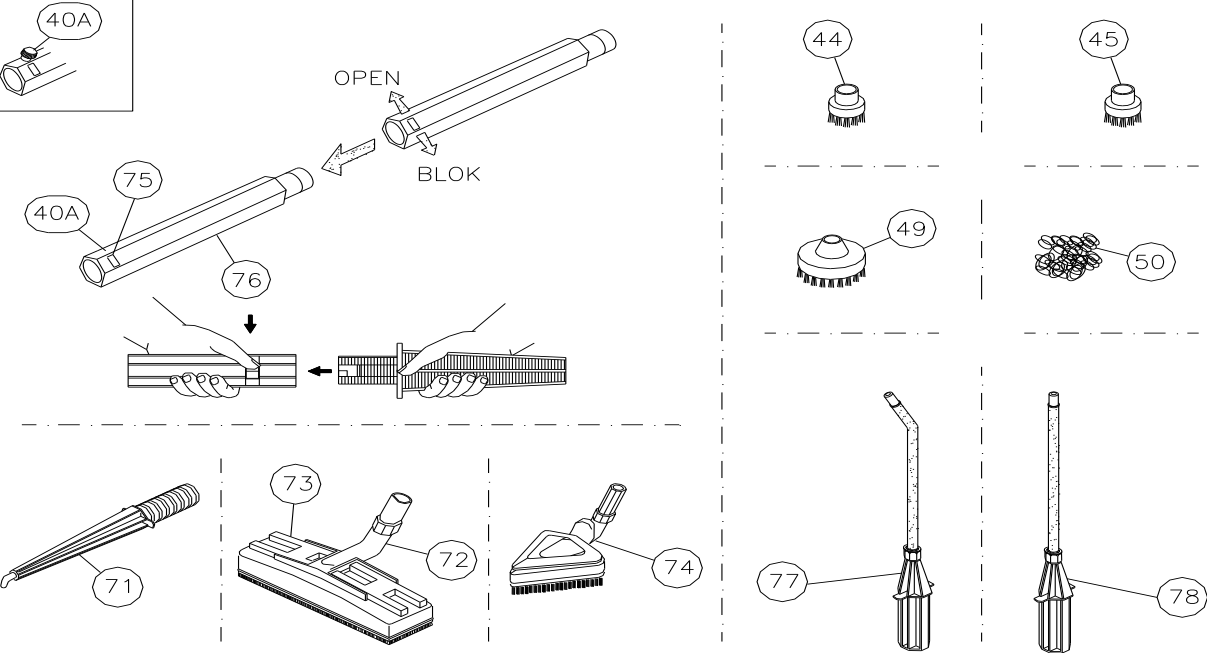
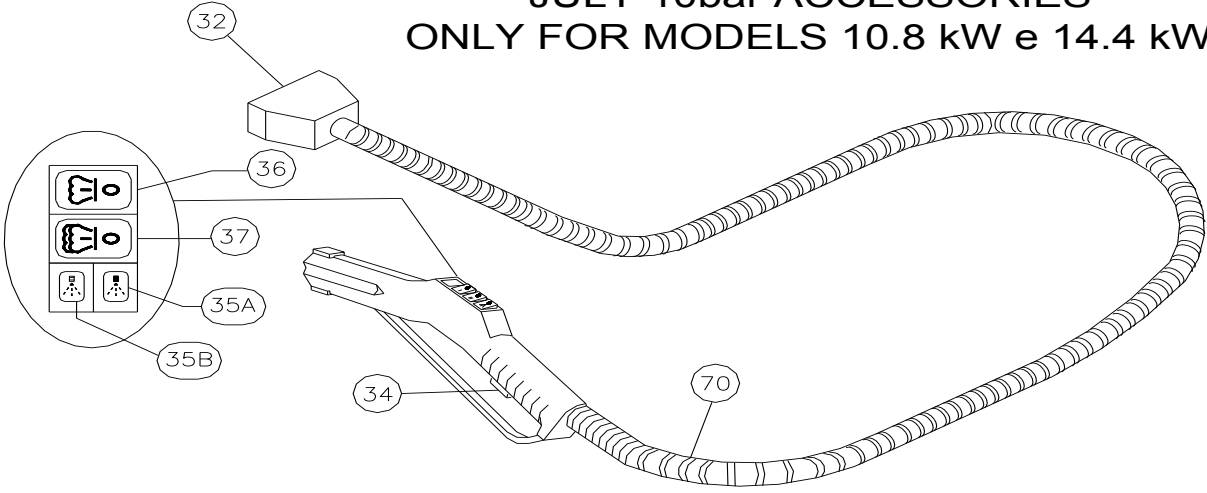
KIT RADAMES



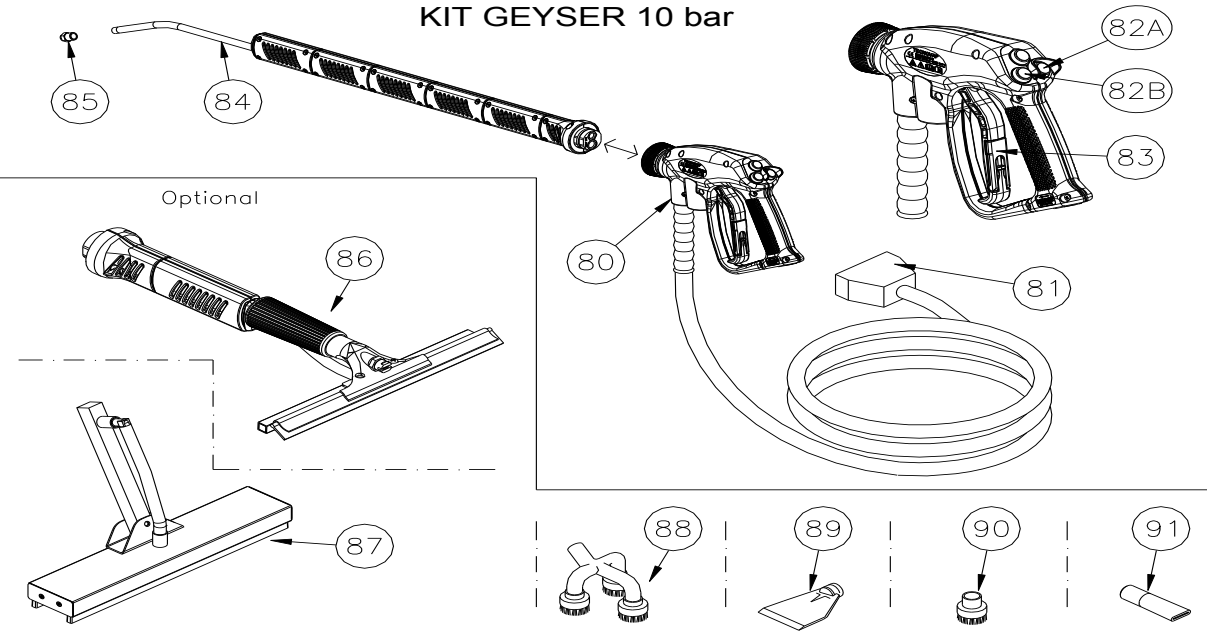
Optional



JULY 10bar ACCESSORIES ONLY FOR MODELS 10.8 kW e 14.4 kW



KIT GEYSER 10 bar



CONTROL PANEL (POS. 8)**Presence of tension**

Informs the user that the appliance is connected to the power source.

**Steam ready indicator**

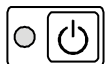
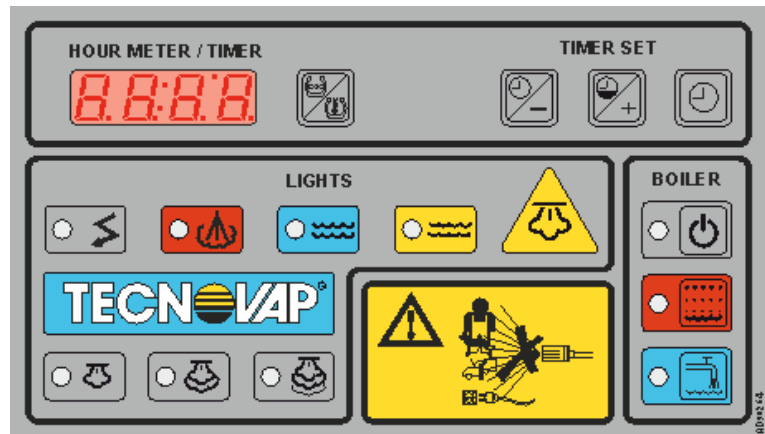
If this indicator is lit up, the generator is ready to use.

**“Low water” indicator**

Indicates the lack of water in the tank, the indication is accompanied by an intermittent buzzer. If lit, the overheated water injection cannot be used and steam production will be interrupted.

**“Low detergent” indicator**

Indicates the lack of detergent in the tank, the indication is accompanied by a continuous buzzer. Attention! The continuous acoustic signal must have priority on the water intermittent acoustic signal. For security reasons, please check the activation of both warning lights.

**Power button**

Powers the electronic components, steam solenoid valves and boiler refilling pump.

**Boiler activation button**

Activates the heating elements, the detergent pump and the overheated water injection valve. If there is no water inside the boiler, the LED light will blink and the heating elements will not be activated as long as the default level of liquid into the boiler will not be achieved. After achieving the correct water level, the light will be fixed.

**Direct water intake button**

Activation of water supply from the water net; the LED light will show the status with a steady light.



Steam regulation indicators: minimum – medium – maximum.



Detergent discharging switch and temperature / pressure display.



Total working hours (C1) (hour counter / totalizer).



Partial working hours; this hour counter is resettable by the user.



Clock set-up switch (the current time is displayed only when the machine is in stand-by mode).

BACCHUS CONTROL PANEL (POS. 8A)



Presence of tension

Informs the user that the appliance is connected to the power source.



Steam ready indicator

If this indicator is lit up, the generator is ready to use.



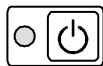
“Low water” indicator

Indicates the lack of water in the tank, the indication is accompanied by an intermittent buzzer. If lit, the overheated water injection (optional) cannot be used and steam production will be interrupted.



“Low detergent” indicator

Function not enabled.



Power button

Powers the electronic components, steam solenoid valves and boiler refilling pump.



Boiler activation button

The unit automatically recognizes the inserted Bacchus hose and activates steam activation buttons on the control panel and the heating elements. If there is no water inside the boiler, the LED light will blink and the heating elements will not be activated as long as the default level of liquid into the boiler will not be achieved. After achieving the correct water level, the light will be fixed.



Direct water intake button

Activation of water supply from the water net; the LED light will show the status with a steady light.



Steam activation buttons/indicators: minimum – medium – maximum.



Temperature / pressure display.



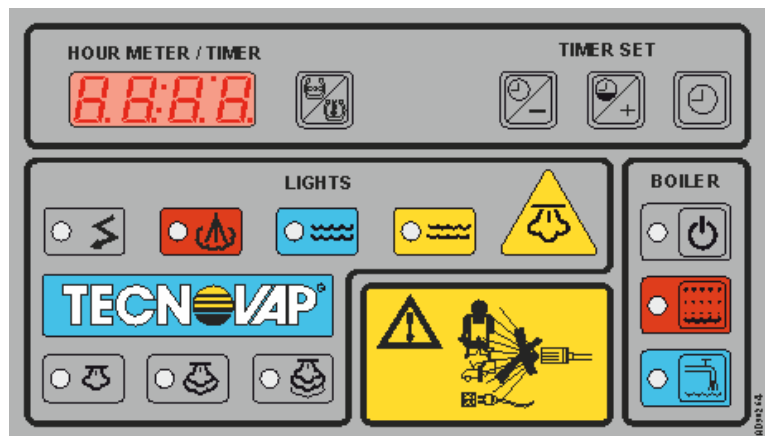
Total working hours (C1) (hour counter / totalizer).



Partial working hours; this hour counter is resettable by the user.



Clock set-up switch (the current time is displayed only when the machine is in stand-by mode).





8. OPERATING INSTRUCTIONS

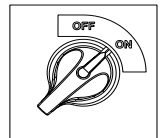
- (a) Fix the vacuum drum (18) on the round black base (17) by operating on the hooks (19).
- (b) Insert the plug of the vacuum cleaner (23) into the outlet located on the right side of the steam generator (14) (only for models with external vacuum cleaner).
- (c) Insert one end of the hose (25) into the vacuum head (22) and the other end into the vacuum hose outlet (15), activating the locking latch (16) (only for models with integrated vacuum cleaner).
- (d) Remove the tanks caps (6 and 7) and fill in water and detergent in the relevant tanks, **water inside the blue funnel and detergent into the yellow funnel. It is recommended to be very careful during this process because an inverted filling up (detergent into the water tank or water into detergent tank) causes a steam generator fault.**
- (e) When using detergent (not foamy for extractions machines), please follow the specific instructions: normally 1 liter of detergent for every 10 liters of water (detergent percentage about 10%), making sure to fill in first the detergent to obtain a better mixing. **Please be careful with the detergent to be used as some available in commerce will emanate highly toxic gases when heated above 100°C. Always consult the MSDS datasheet from the supplier.**


The detergent tank has to be filled only with detergent diluted with water, **not with water only**, unless you are not using demineralized water.

The usage of water only (not demineralized) instead of detergent causes faults to the mixing circuit.

- (f) Insert the plug (1) into the electrical outlet, making sure that the voltage and the amperage correspond with the data printed on the plate located on the rear side of the unit.
- (g) Switch the unit on by rotating the main switch onto position ON or onto the desired power (only for models with power regulation).



Activate the standby  and the boiler  switches.

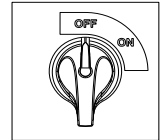


- (h) The machine is equipped with a protective system against thermal shock. Therefore, in case of water lacking inside the boiler, the system automatically disconnects the heating elements supply. This situation is recognizable thanks to the blinking LED light on the “boiler switch” . The system can intervene also after the boiler refilling once performed the mud drain during the maintenance process.

Reset of the partial hour counter




Switch the device off by using the main switch on the side of the electric box.

Press both switches   and hold them, switch the device on by putting the main switch in ON position; once finished the LED lights sequence, release the switches and the hour counter C2 will be brought to 0000.



Clock set-up

Switch the device off by using the stand-by switch  (the main switch has to remain in ON position).



The display will visualize the current time, to adjust it press the switch  and then operate with the -/+ switches   to increase or decrease the time displayed.

Note: the timer is equipped with a battery for time memorization, if the device remains without power supply for a period of more than 30 days, the timer will be reset and it will have to be set again.


Indication of boiler cleaning operation (C A L C)

The controller has been programmed to warn the user about the ordinary maintenance period; the system has been programmed in order to warn each 20 effective working hours (steam solenoid valve on). Proceed as described in the section 9.1 “boiler maintenance” in order to perform the liquids drainage.

Warning indication (C A L C) restoration

After having performed the maintenance, press and hold the switch  and switch the device off by using the switch . The warning C A L C will be restored.

Detergent refilling

Once the detergent is finished, the light  will switch on and the appliance will emit a continuous acoustic signal, the detergent pump will be automatically disconnected; therefore proceed by pouring detergent into the tank (6).

Note: the acoustic signal for the lack of detergent (continuous tone) prevails on the acoustic signal for the lack of water (intermittent tone).

Integrated vacuum cleaner (optional)




In case of complete obstruction of the vacuum inlet, a safety system will automatically block the appliance after one minute. To reactivate the integrated vacuum cleaner switch the appliance off by turning the general power switch (4), wait 10 seconds before switching it on again.

8.1. OPERATING OF STEAM BOX INDUSTRIAL WITH KIT RADAMES

Attention!!

It is recommended to switch the steam generator off before connecting the steam hose to the steam outlet (9).

Insert the vacuum male hose (30) into the vacuum hose female outlet (21) located on the vacuum cleaner and the steam plug (32) into the steam outlet (9) on the machine and activate the locking lever.

Activate the general power switch (4) and the switches   for the steam production and wait approx. 3-8 minutes (according to the machine model) until the indicator  lights up indicating the presence of steam inside the boiler.

The switches (36 and 37) on the hose have to be turned off.

Activating the switches (36 and 37) on the handgrip the steam flow is regulated as follows: switch (36): minimum steam, switch (37): medium steam, switches (36 and 37): maximum steam. Use the steam command switch (34) to activate steam flow.

The switch (35A) enables you to inject detergent with the steam, it should be activated for a few seconds at a time to avoid excess liquid with the steam; to spray hot water please refer to the below described mode by activating the switch (35B).

Both detergent and hot water injection functions have to be activated at intermittence (for ex. 20 seconds ON - 20 seconds OFF); both functions have not to be used in continuous duty.

Attention!!

Using the switch (35B) you will get hot water under pressure which, according to the model of the machine, can reach a temperature of 180°C; please pay attention that the switch is not pressed accidentally and do not direct the jet against persons or animals.

To clean with steam choose the accessory best suited for the job (switch the machine off before applying it):

The multi-purpose floor tool (51): with appropriate inserts. Inserts are locked into place by sliding the latches (52) toward the internal side (OPEN position), pressing them upwards, then sliding the latches toward the external side (BLOCK position).

Apply, if necessary, the extension tubes (41) and block them in BLOCK position therefore screw the hand wheel screw (40A). It is possible to use one extension tube only.

Turbo lance steam / vac (42): to be used by itself or with the small brushes (optional), according to the cleaning job to be executed.

Once the cleaning is finished it is recommended to vacuum approx. 3-5 litres of clean water to rinse the inside of the hose (33) and the suction conduits. Wash and dry all accessories used. Remove the vacuum drum and, after emptying and rinsing it, let it dry before storing it away.




8.2. OPERATING OF STEAM BOX INDUSTRIAL WITH KIT JULY

(only for models 10,8 kW and 14,4 kW)

Attention!!

It is recommended to switch the steam generator off before connecting the steam hose to the steam outlet (9).

Insert the steam plug (32) into the steam outlet (9) on the machine and activate the locking lever.

Activate the main switch (4) and the switches   for the steam production and wait approx. 3-8 minutes (according to the machine model) until the light  lights on, indicating the presence of steam inside the boiler.

The switches (36 and 37) on the hose have to be turned off.

Activating the switches (36 and 37) on the handgrip the steam flow is regulated as follows: switch (36): minimum steam, switch (37): medium steam, switches (36 and 37): maximum steam. Use the steam command switch (34) to activate the steam flow.

The switch (35A) enables you to inject detergent with the steam, it should be activated for a few seconds at a time to avoid excess liquid with the steam; to spray hot water please refer to the below described mode by activating the switch (35B).

Both detergent and hot water injection functions have to be activated at intermittence (for ex. 20 seconds ON - 20 seconds OFF); both functions have not to be used in continuous duty.

Attention!!

Using the switch (35B) you will get hot water under pressure which, according to the model of the machine, can reach a temperature of 180°C; please pay attention that the switch is not pressed accidentally and do not direct the jet against persons or animals.

Insert the steam lance (71) by sliding the latch (75) to the OPEN position, lock into place and then slide the latch into the BLOCK position, then screw the handwheel screw (40A).




Follow the same procedure in attaching the rectangular brush (72) or the triangular brush (74) which can be covered with an absorbing cloth by using the gripper (73) to hold the cloth in place. This is a recommended use to clean delicate surfaces (such as precious wood f. e.) or vertical surfaces (tiles f.e.). In this case the cloth is acting as dirt “extractor”.

8.3. OPERATING OF STEAM BOX INDUSTRIAL WITH KIT GEYSER

Attention!!

It is recommended to switch the steam generator off before connecting the steam hose to the steam outlet (9).


Insert the steam plug (81) into the steam outlet (9) on the machine and activate the locking lever.

Activate the main switch (4) and the buttons   for the steam production and wait approx. 3-8 minutes (according to the machine model) until the indicator  lights up indicating the presence of steam inside the boiler.

Insert the desired lance (84) directly onto the handgrip (80) and screw the nozzle (85) or the suitable tools (87-88-89-90-91) or the window cleaner (86) on the lance according to the cleaning job to be performed. Your lance is ready for use.

Use the lever (83) on the handgrip to activate steam flow. If necessary push the button (82B) at intermittance to spray detergent together with steam.

Both detergent and hot water injection functions have to be activated at intermittance (for ex. 20 seconds ON - 20 seconds OFF); both functions have not to be used in continuous duty.

The supply of detergent and overheated water is only possible if steam is in use and if the LED light “presence of steam”  is on.

Attention!!

Using the switch (82A) you will get hot water under pressure which, according to the model of the machine, can reach a temperature of 180°C; please pay attention that the switch is not pressed accidentally and do not direct the jet against persons or animals.

8.4. BACCHUS MODE USE

The appliance is provided of “bacchus” function, sanitation function suitable for the treatment of wine-making, pharmaceutical and other plants.

Such function provides the reduction of pressure in the boiler, the possibility to program the appliance’s switch on/off (st-by) and the safety system against excessive pressure in the treated plant.

Insert the steam plug (26) into the steam outlet (9) on the machine and activate the locking lever.

Connect the garolla fitting (27B) on the plant, insert subsequently the female rapid coupling (26A) on the male coupling (27) present on garolla fitting, always use adequate protection systems against burning.





Activate the main switch (4) and the buttons   for the steam production.

The appliance automatically recognizes the inserted bacchus tool and activates the steam selection buttons on the control panel.

Wait until the indicator  lights up indicating the presence of steam inside the boiler.




Use the respective buttons  minimum steam  medium steam  maximum steam in base of desired steam quantity.




Automatic switch on programming

Press the button  in order to switch the appliance off. Press the button  and keep it pressed until the display starts to flash (approx 7 seconds); use the buttons   in order to set the desired start time (keeping the buttons long pressed, the time will be increased or decreased quickly).

The set time will be memorized and, if the automatic switch on is enabled, the system will activate the appliance daily as programmed.

Automatic switch on enabling

Press in sequence the following buttons   releasing the first button only after having pressed the second one, the button  will start to flash and the display perimetric segments will sometimes lit, all this indicates that the function has been activated. (Repeat the operation in sequence for the deactivation).

Use the buttons    in order to select the quantity of steam desired to be produced at the switch on (the selected flow will be pointed out by a respective indicator light on the button).

The system will activate the appliance at the previously set time for 2 hours, afterwards it will be switched off.

Just press any button within the above indicated period of time in order to deactivate the system of automatic switch off.

9. MAINTENANCE

9.1. MAINTENANCE OF THE BOILER

ATTENTION

DISCONNECT THE UNIT FROM THE ELECTRICAL POWER SUPPLY BEFORE CARRYING OUT USER MAINTENANCE.

ATTENTION. BURNING DANGER

The boiler cleaning must be carried out when the equipment has cooled down (i.e. switched off for at least 5 hours) - for this reason we suggest to maintain the boiler in occasion of the following use, as long as at least 5 hours have passed. Please proceed as follows:

The device is equipped with a maintenance advise system, which every 20 effective working hours displays the advice “C A L C” to warn the user to proceed with the boiler cleaning.



When this advice appears on the display it is still possible to use the unit until the end of the cleaning process; then, it will be necessary to switch the unit off by turning the main switch and unplugging the power cable.

Place a recipient under the machine, remove the boiler drain cap (12) and wait until the boiler is completely emptied.

Clean eventual residuals from the cap with running water, check the efficiency of the gasket located on the bottom of the cap and, if necessary, substitute it (please contact your supplier for the spare parts). Close the drain cap again.

Using water with hardness higher than 10 French degrees, (according to the usage of the unit, > 2 hours / day) it is necessary to use water treated with a proper water softener system, which can reduce the calcium carbonate up to less than 4 French degrees, increasing by consequence the liability of the steam generator. (for any further details or to buy a water softener system, contact your supplier).




Open the caps (10A) and (11A) and, if necessary, clean the filters (10B) and (11B) with water. Insert the caps with their filters into the respective seats, making sure that their gaskets are correctly positioned on the bottom.

The cleaning of the boiler is completed, insert the power cable (1) into a suitable plug and activate the main switch (4) and the switches   . It is recommended to activate also the minimum steam switch (36 on July and Radames) on the handgrip, pressing also the safety switch (34 on July and Radames or 83 on Geyser) to allow the outlet of the air remained in the empty boiler. Wait until the refilling system has finished (approx. 3 minutes).

The maintenance of the boiler is completed; proceed with the using instructions as described in the paragraph (h) of the chapter 8.

9.2. REACTIVATION OF THE DETERGENT PUMP (not present on Bacchus models)

The following procedure has to be effectuated only when the detergent output is inactive after its refilling.

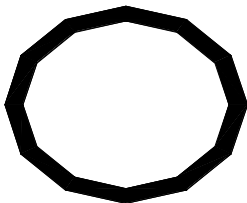
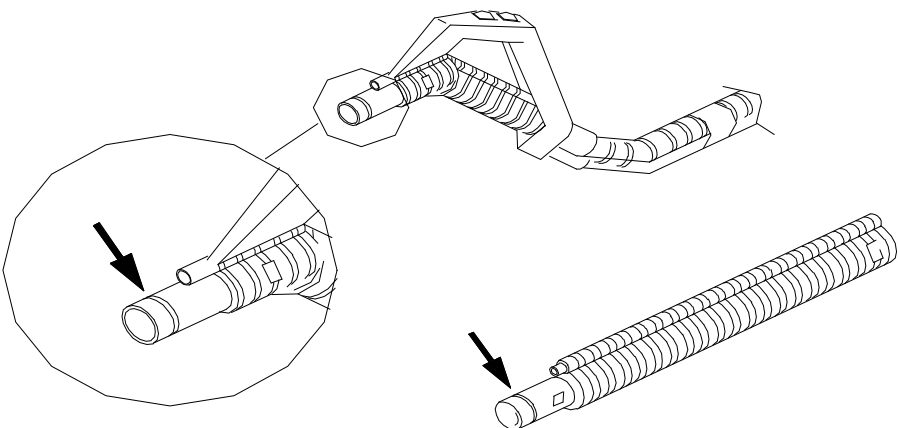

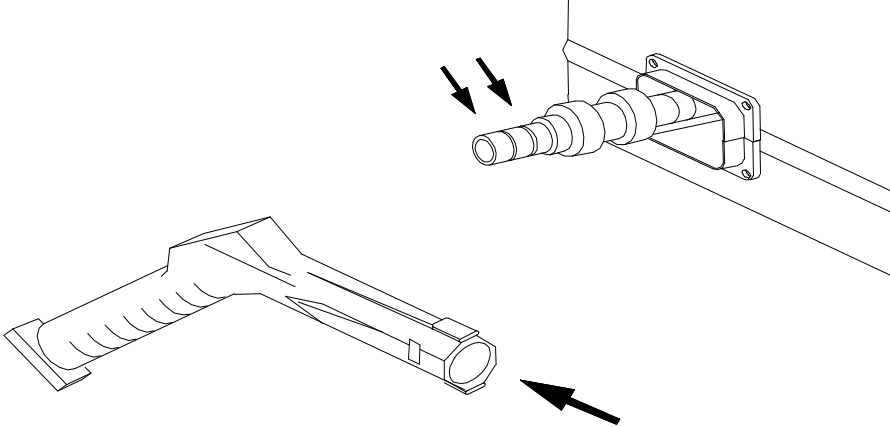

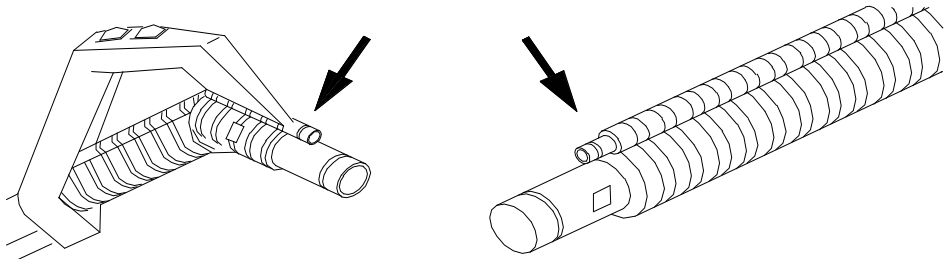

- 1) Switch the device on by pressing only the switch , the switch  as to remain off.
- 2) Activate the steam switch (36 on July and Radames), keeping pressed the detergent button (35 on July and Radames or 82B on Geyser) and press the steam command safety switch (34 on July and Radames or 83 on Geyser) located on the hose; then press the switch  on the control panel to activate the detergent pump, keeping it pressed until detergent will start coming out from the tool.
- 3) Detergent has been triggered and the machine is now ready for use.

9.3. MAINTENANCE OF THE FILTERS








Remove the filter inside the water connection valve (2) by grasping with a pliers the proper tang located in the center of the filter; clean it and reposition it.

9.3. MAINTENANCE OF THE TOOLS

Grease occasionally joints on the extension tubes and on the accessories.

	
PG5123	
OR 29.82x2.62	
	
PG5106	
OR 9.25x1.78	
	
PG5116	
OR 6.75x1.78	
	

10. BEFORE REFERRING TO THE TECHNICAL SERVICE

PROBLEM	POSSIBLE CAUSE	REMEDY
Machine does not produce steam and vacuum does not work.	Lack of power. Protective system activated.	Make sure plug (1) is well inserted, check if the main switch (4) and if the switches   are activated.
The red "low water" indicator lights up. 	All the water from the water tank (7) has been consumed.	Refill the water tank (7) with clean water.
There is no injection of detergent.	All the detergent from the detergent tank (6) has been consumed. Boiler indicator  is off. The "ready system" light  is off. Presence of air inside the mixing circuit.	Refill the detergent tank. Activate the switch "activation of heating elements". Wait until the "ready steam" light lights up (about 175°C). Proceed with the reactivation of the pump (ref. paragraph "maintenance" 9.2)
Suction power is missing.	A) Lack of power to the vacuum cleaner. B) The vacuum tube is obstructed. C) The vacuum drum is full of water.	A) Make sure the switch (4) is on and the plug (23) is well inserted into the socket (14). B) Clean the vacuum tube and the accessories used. C) Empty the vacuum drum.
Steam does not come out.	A) Boiler has not reached yet the operational pressure (light  is off). B) Steam switches (36 and 37) are off. C) Steam command switch (34) has not been activated.	A) Wait a few minutes. B) Switch on the steam switches (36 and 37). C) Use the steam command switch (34) to activate steam flow.
Steam leaks through the connections of the accessories.	Check the wear of the o-rings.	Clean and lubricate the o-rings. If necessary, substitute them with the spares supplied.
Visualization of "ALL1" on the display	Water filters obstructed, wrong power supply to the device, drain cap not inserted.	Clean the filter of the water tank, check that the voltage corresponds to the data indicated on the technical label. Insert the drain cap.
Visualization of "ALL2" on the display.	Temperature exceeded the threshold, drain cap not inserted, boiler under pressure after the mud draining.	Insert the drain cap, discharge the air inside the boiler by activating the steam switch on the handgrip.
Blinking light 	Protection water net control activated.	Control the presence of pressure and water into the valve (2). Remove and clean the filter (3) of the water net valve.

Drops of water come out of the accessories.	At beginning of work water condenses in the tubes and accessories due to the difference in temperature.	After a few minutes of use this problem will cease. If it continues, proceed to the cleaning of the boiler.
Noise inside the generator.	The boiler getting cold, after about 6-7 hours creates an internal depression which, at each ignition, provokes some vibrations.	Wait the pressure stabilization (about 2-3 minutes), the noise will disappear.
Accessories do not fit perfectly.	There is dirt build up in the joints and locking latches.	Clean and lubricate the joints.

11. DECLARATION OF CONFORMITY



DICHIARAZIONE DI CONFORMITA' CE ***(EC DECLARATION OF CONFORMITY)***

TECNOVAP S.R.L. con la presente dichiara che:
la macchina per pulizia a vapore modello:
(Certifies that the steam cleaning machine model:)
Steam Box Vac Industrial

Risulta conforme alle specifiche delle direttive
(conforms to the specifications of directives)
2006/95/CE 2004/108/CE 2006/42/CE 2002/95/CE

Per il controllo della conformità alle sopraindicate direttive, sono stati seguiti i seguenti standard :
(For the checking of conformity to the above directives, the following standards have been used):

Riferimento alle norme armonizzate:
(Reference to harmonized standards):

EN 60335-1
EN 60335-2-79
EN 60335-2-69
EN 55014-1
EN55014-2
EN 61000-3-2
EN 61000-3-3

PESCANTINA – VERONA (ITALY) 07-11-2014


Franchini Giuseppe
(Managing Director)



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