TECNOVAP

L'ARTE DEL VAPORE

STEAM BOX MINI

USER INSTRUCTION

Standard

Bacchus

With vacuum cleaner

Interpretation of the symbols placed on the unit

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

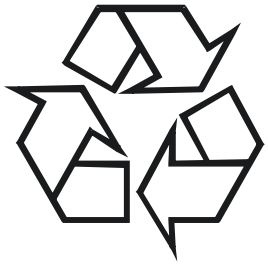
IT IS RECOMMENDED TO KEEP THIS INSTRUCTION MANUAL TO CONSULT IT LATER OR TO GIVE IT TO THE FOLLOWING OWNERS.

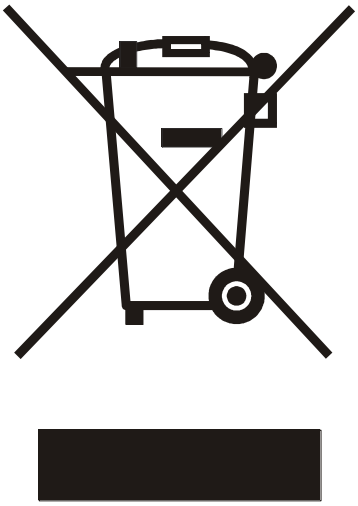
PLEASE READ THE SAFETY INSTRUCTIONS ON THIS HANDBOOK BEFORE PROCEEDING WITH THE FIRST USE.

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.**

Environment protection

	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.

	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.
	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.
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 electric supply 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 when proceeding with the muds drain; it will display the notice C A L C alternatively to the current visualization.

▪ **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.

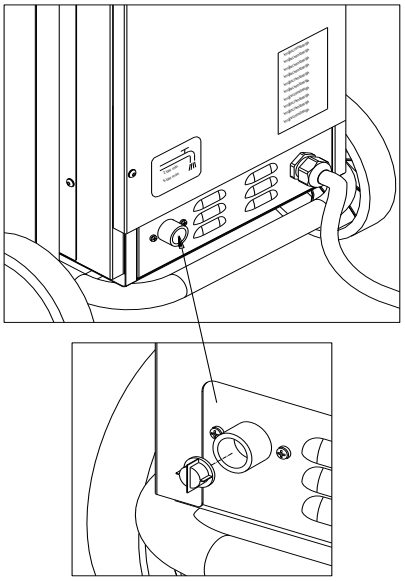
- **ATTENTION.** Do not use the appliance within the range of persons unless they wear protective clothing.
- **ATTENTION.** The high pressure jets can be dangerous if not used properly. The jet does not have to be directed against persons, electrical devices under tension or the unit itself.
- **ATTENTION.** 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 device is not intended to be used by persons (including children) with a reduced physical, mental or sensorial ability or with insufficient experience and/or competence, unless they are not supervised by a person responsible for their safety and they are not instructed by that person on how to use the device.
- 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, fitting and couplings are important for the safety of the machine. Use only hoses, fitting 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 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 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.

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 MINI**, 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 MINI 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 MINI is the ideal solution when it comes to cleaning and disinfecting.

5. TECHNICAL CHARACTERISTICS

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

Model		**10b Vac**	**10b**	**6b Vac**	**6b**	**6b Bacchus**
Code		3023A12 3W23A12 3040A12 3W40A12	3023012 3W23012 3040011 3W40011	3023A62 3W23A62 3040A62 3W40A62	3023062 3W23062 3040062 3W40062	30230B2
Rated Voltage	V	400/230				
Current type	Hz	50/60 3~				
Rated Power Boiler	kW	3,6				
Power vacuum	kW	1,2		1,2		
Max Rated Power	kW	3,75				
Rated Steam Pressure	kPa bar	1000 10		600 6		
Permissible Steam Pressure	kPa bar	1200 12				
Max. Steam Rated Flow	Kg/h	5,9				
Max temperature	°C	180		165		
Max. inlet water pressure	KPa bar	600 6				
Kickback forces	N	<20				
Vibration hand-arm	m/s^2	< 2,5				
Sound pressure level LPa	dB	98,7				
Sound power level Lwa	dB	111,4				
Mass	kg	35				

6. NOMENCLATURE

Steam Box Mini

1) Power cord
2) Water inlet for direct water feed
3) Electric socket for vacuum cleaner
4) Handle bar
4A) Fixing handwheel screw
4B) Basket
5) General power switch
6) Detergent tank
7) Water tank
8) Control panel
8A) Bacchus control panel
9) Steam outlet
10) Drain cap – detergent tank
11) Drain cap – water tank
12) Drain cap – boiler
13) Key for boiler drain cap
14) Vacuum cleaner motor head
15) Vacuum cleaner main switch
16) Clamping hooks for vacuum motor
17) Clamping hooks for vacuum drum
18) Support mount for vacuum cleaner
19) Vacuum drum
20) Locking latch vacuum outlet
21) Vacuum hose outlet
22) Vacuum cleaner power cord

Kit July / Radames / Star (6bar version)

33) Steam – steam & vacuum hose w/ handgrip
34) Steam plug
34A) Locking latch steam plug
34B) Steel rope
35) Detergent switch
35A) Hot water switch (optional)
35B) Detergent / hot water switch
36) Minimum steam switch
36A) Steam command switch / lever
37) Medium steam switch
37A) Vacuum switch
38) Locking latches for accessories
39) Extension tube
40) Locking handwheel screw for accessories (only 10b)
43) Nylon brush (Ø 28mm)
44) Brass brush (Ø 28mm)
45) St. steel brush (Ø 28mm)
46) Triangular brush
47) Steam plunger
48) Steam scraper
49) Nylon brush (Ø 60mm)
50) St. steel wool pad
71) Steam lance
72) Rectangular brush
73) Cloth holder
74) Triangular brush
75) Vacuum hose
76) Steam / vacuum lance
77) Floor tool for inserts
78) Locking latches for inserts
79) Insert squeegee / brush
80) Insert squeegee / squeegee
81) Steam & vac industrial brush
82) St. steel upholstery tool
83) Floor tool
84) Inserts 300 mm brush / squeegee / for carpet
85) Steam / vacuum nozzle
86) Inserts 145 mm brush / squeegee
87) Steam / vacuum window cleaner 250 mm
88) Steam lance
89) Vacuum nozzle

Bacchus tools (optional)

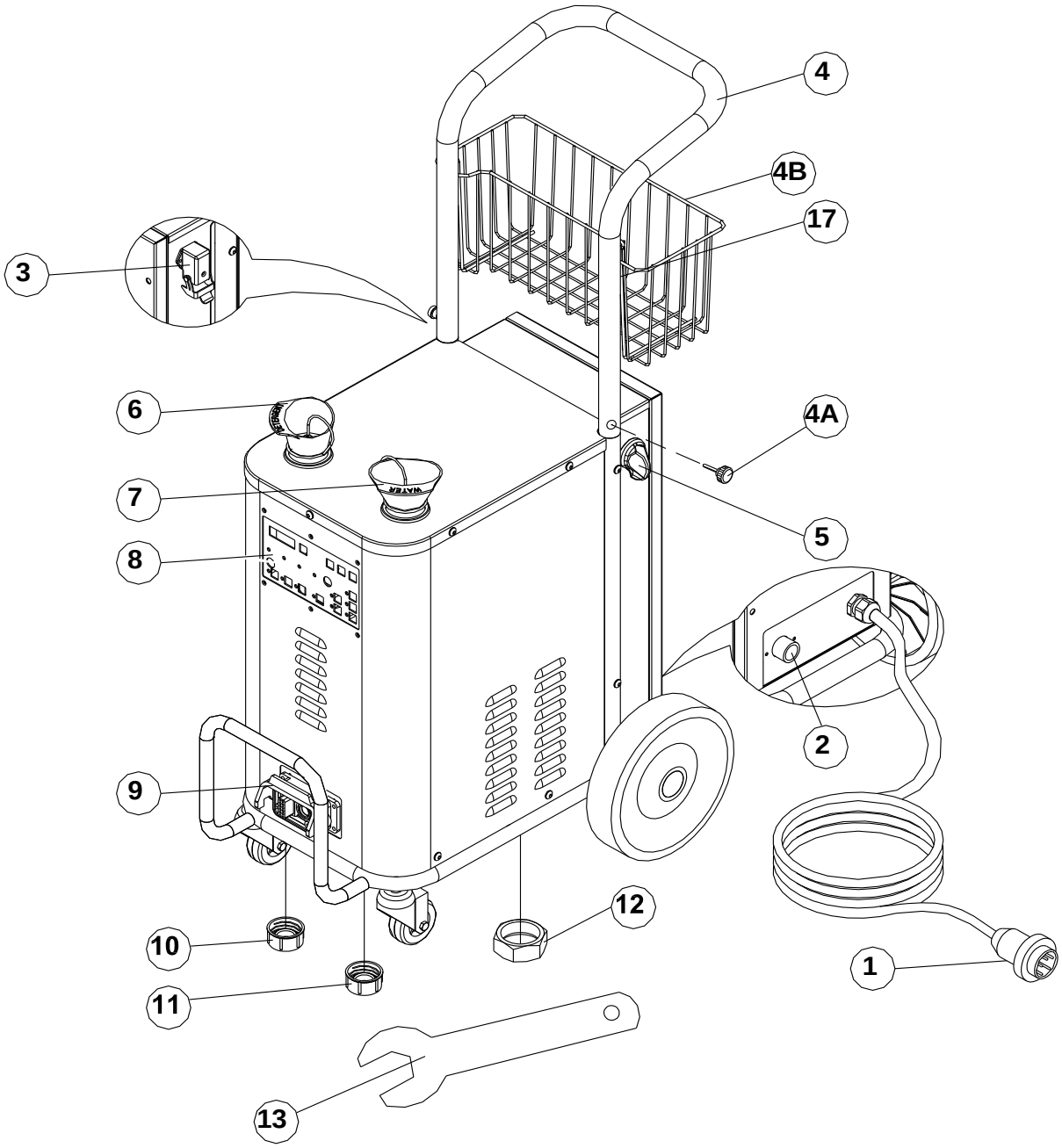
60) Electrical / hydraulic plug
61) Rapid connection hose/plant
62) Steam connection with “Garolla” end
63) Safety valve for plant overpressure
64) “Garolla” end
65) Safety pressure switch (optional)

Geyser tools

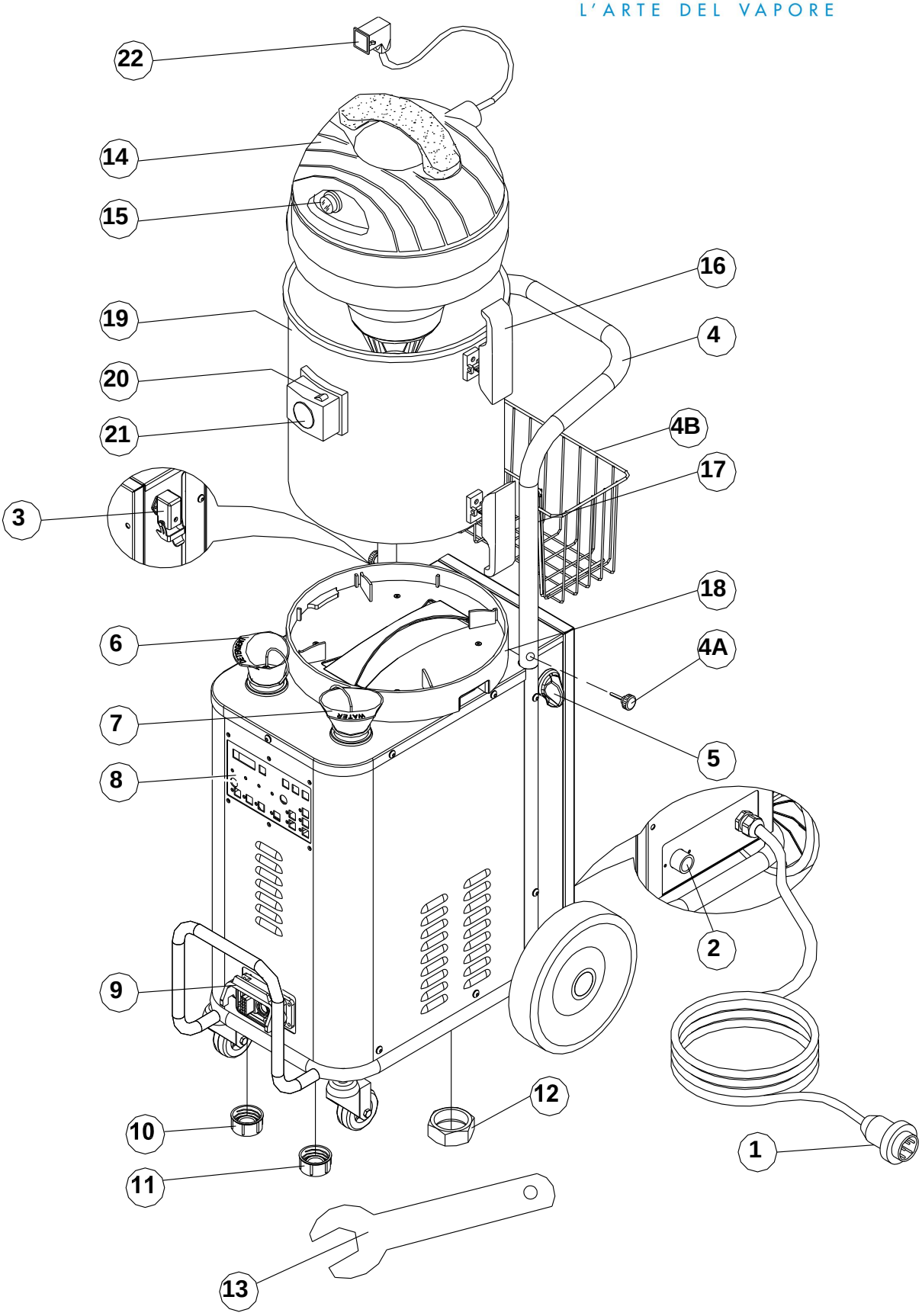
91) Geyser 1 hose w/ handgrip
92) Lances 100 / 400 / 800 / 1200 mm
93) Round nozzle
94) Window cleaner with diffuser 250/350/450 mm
95) Steam brush with bristles 250/350/450 mm
96) St. steel floor scrubber with 3 brushes
97) Flat nozzle 4 cm with scraper
98) St. steel brush
99) Flat nozzle 1 cm

7. TECHNICAL DRAWINGS

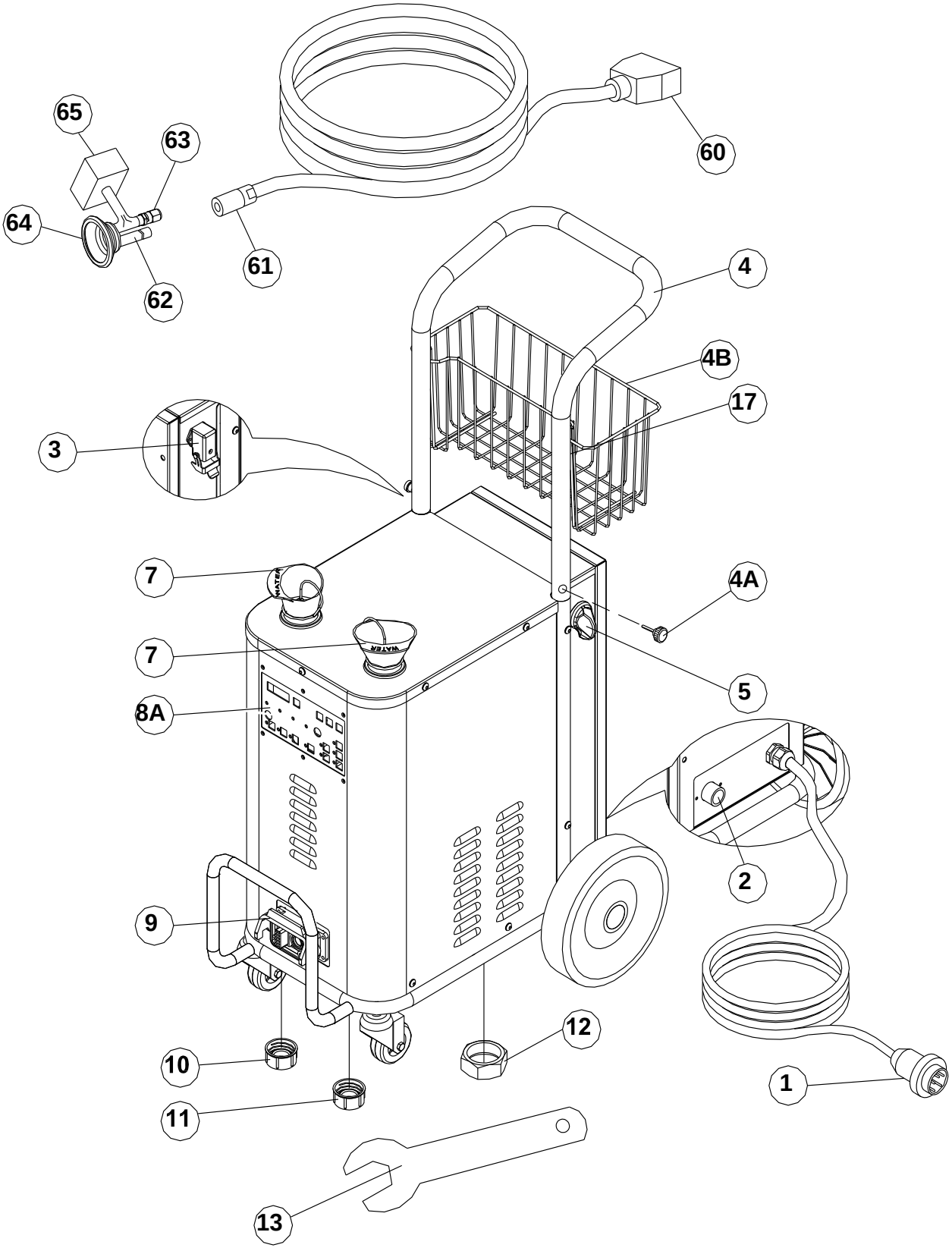
STEAM BOX MINI



STEAM BOX MINI WITH VACUUM CLEANER



STEAM BOX MINI BACCHUS



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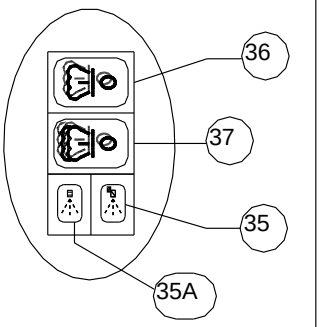
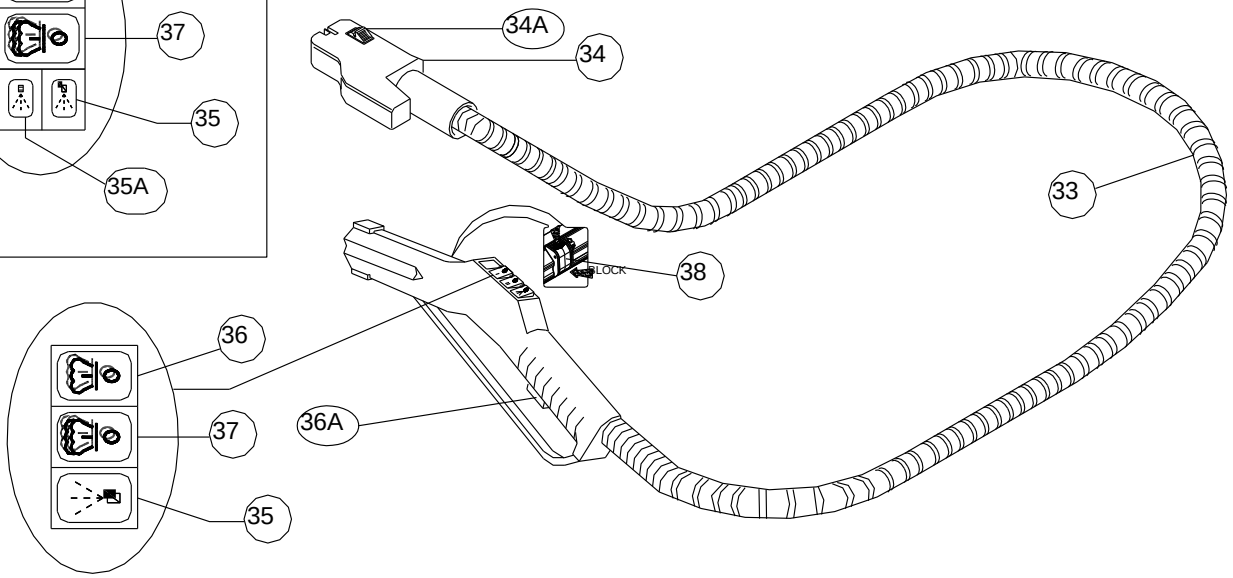
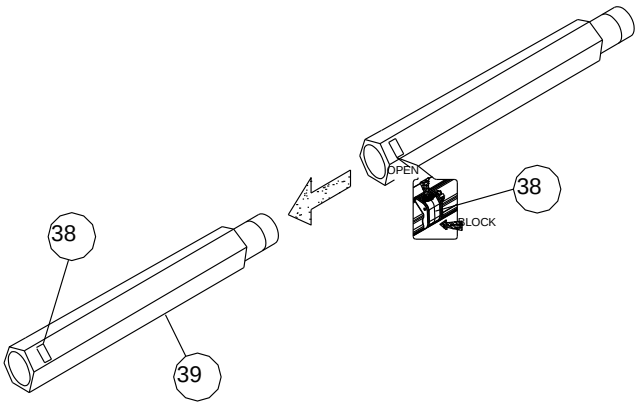
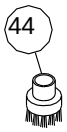
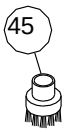


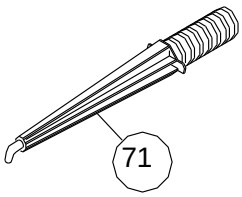
KIT JULY

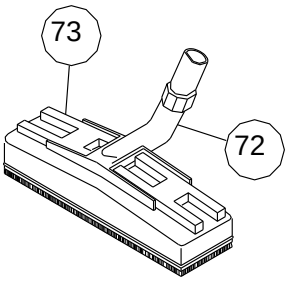


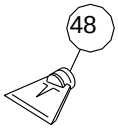


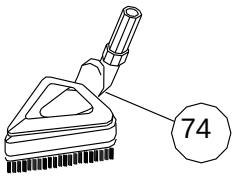


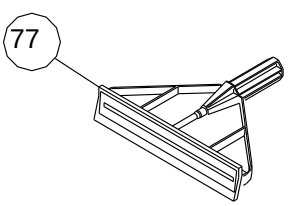


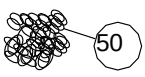


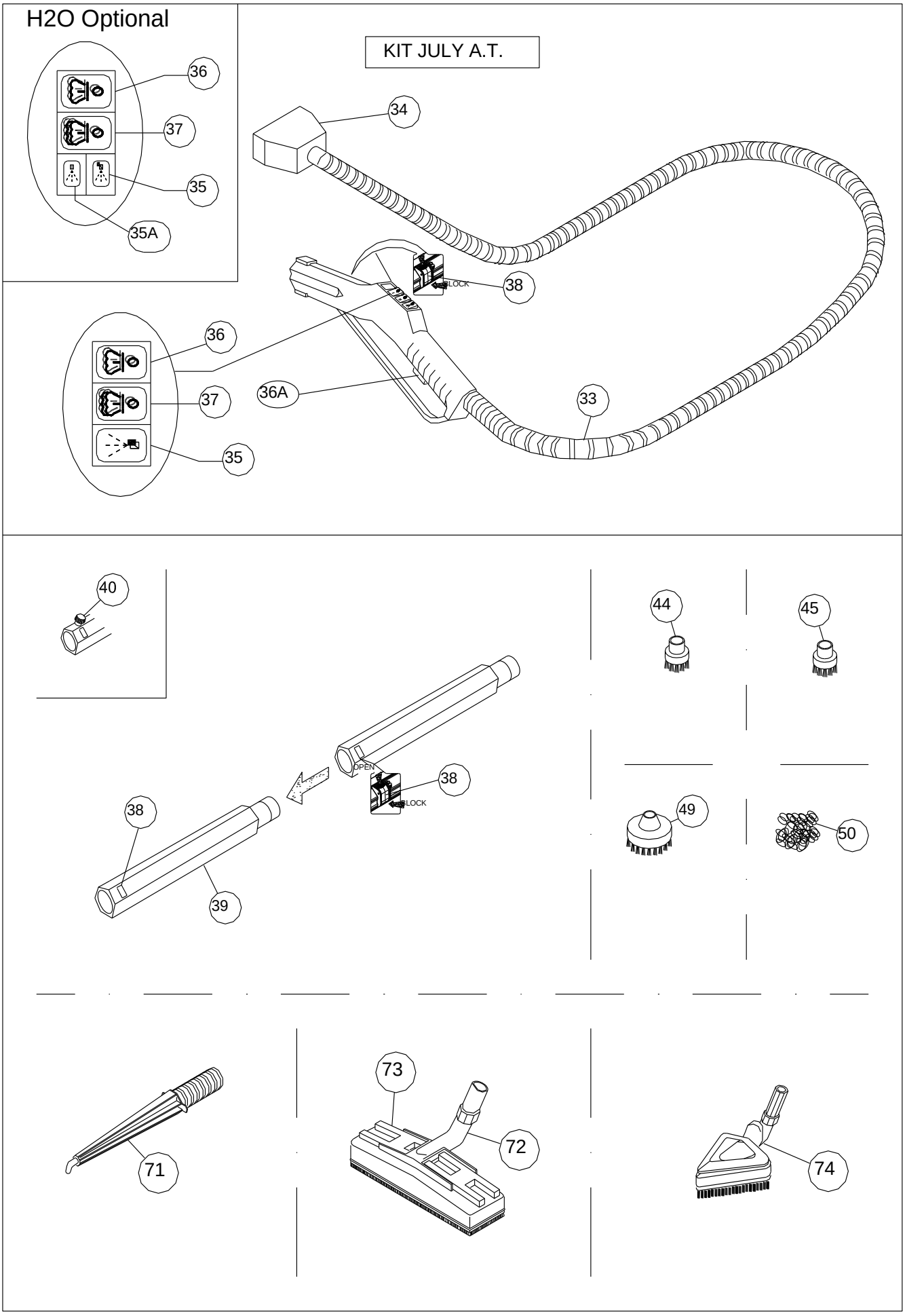








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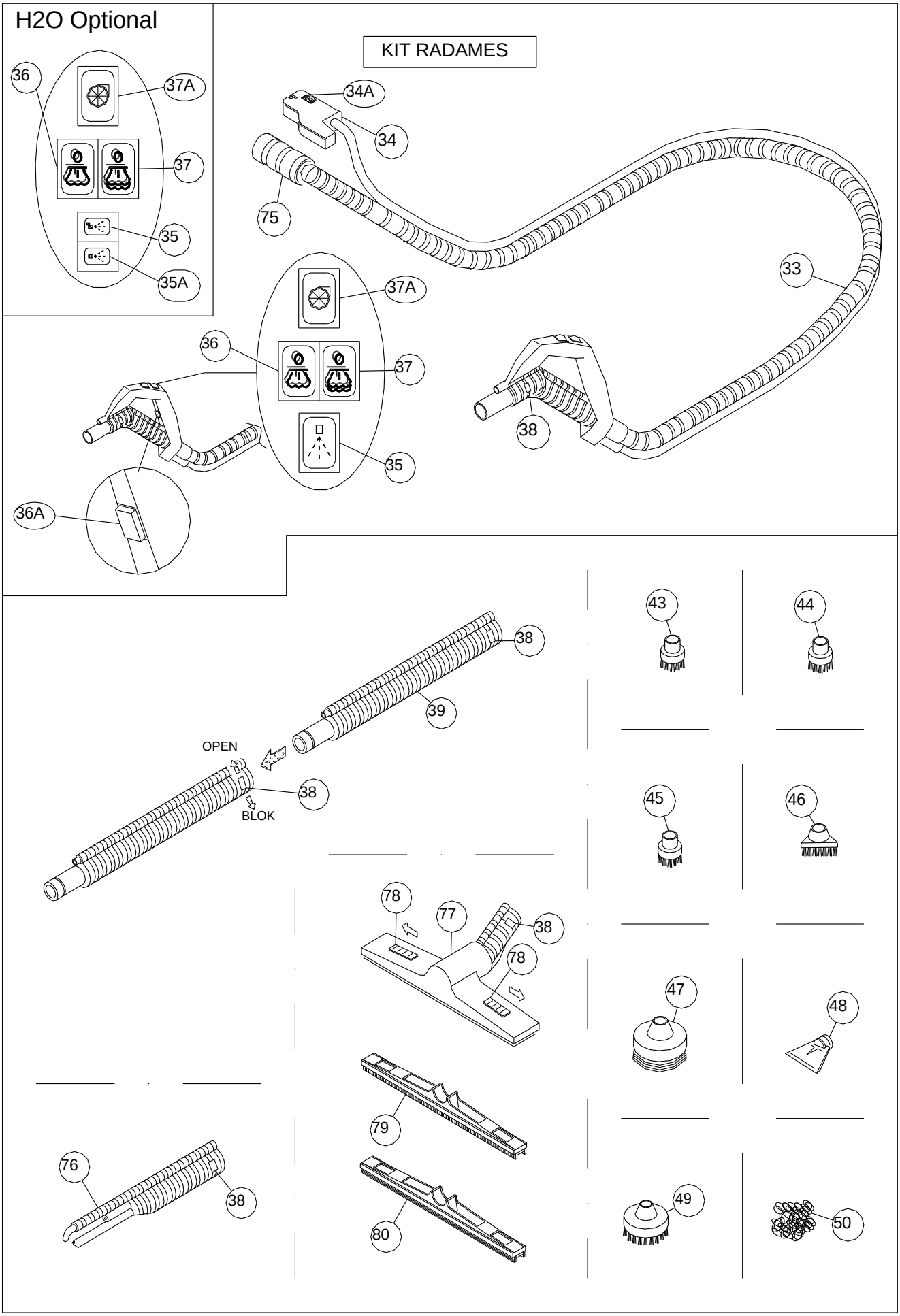
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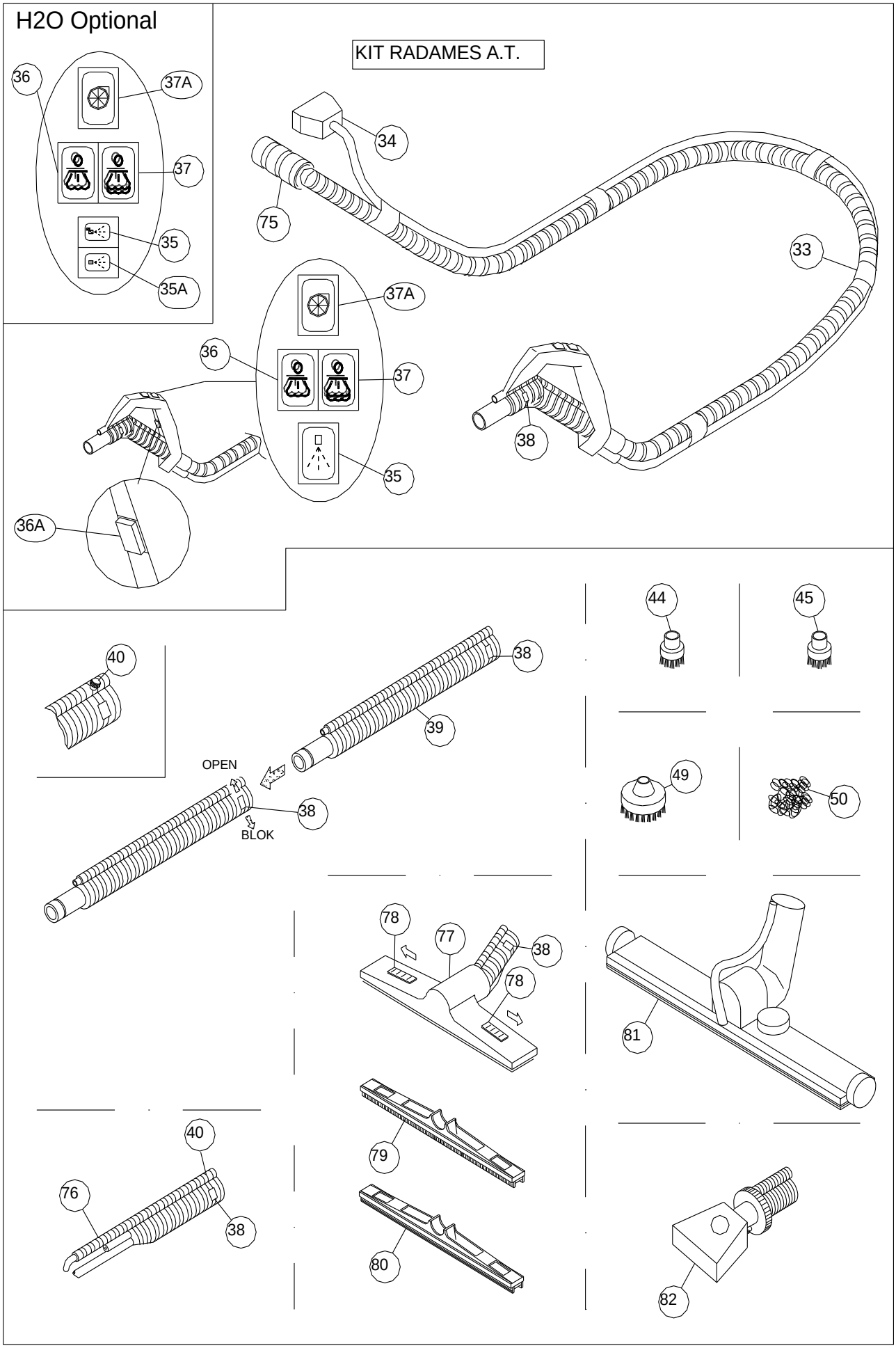
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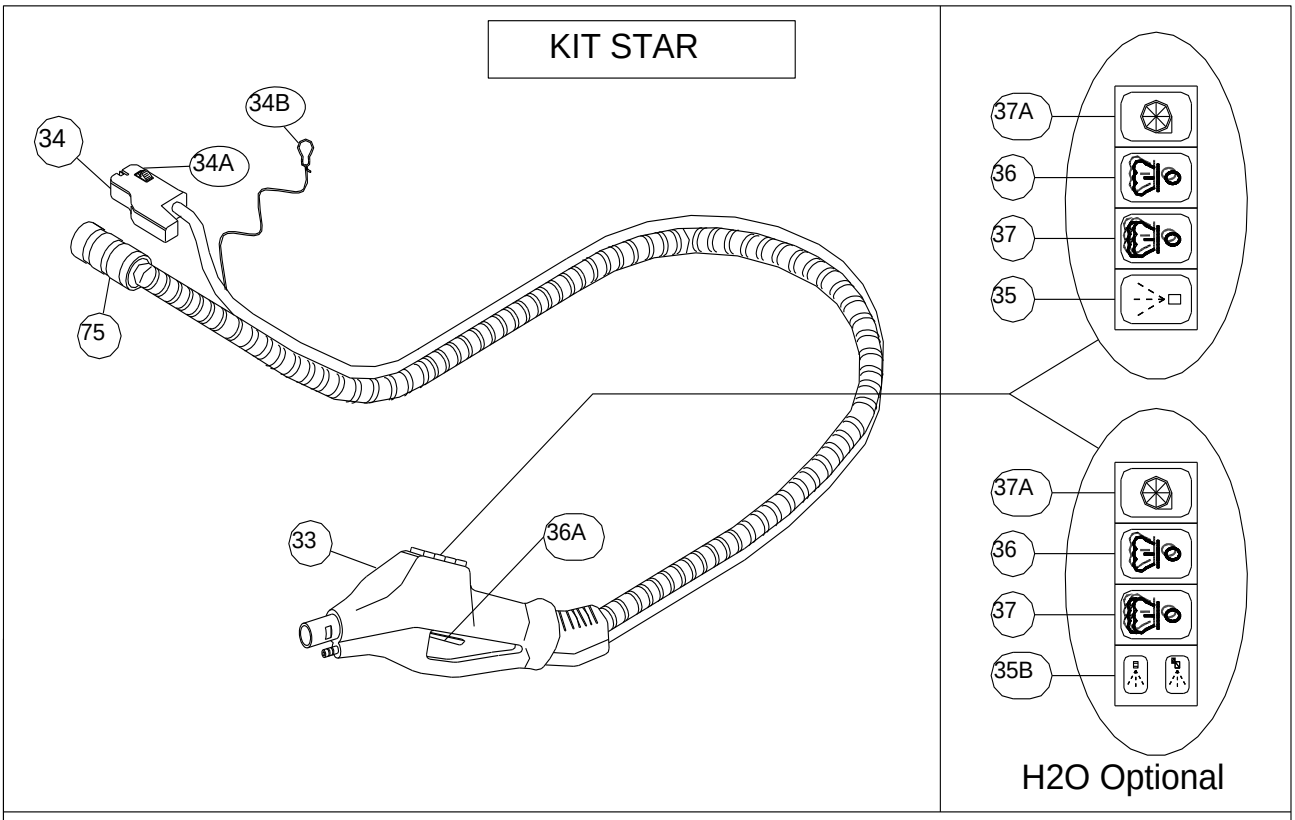
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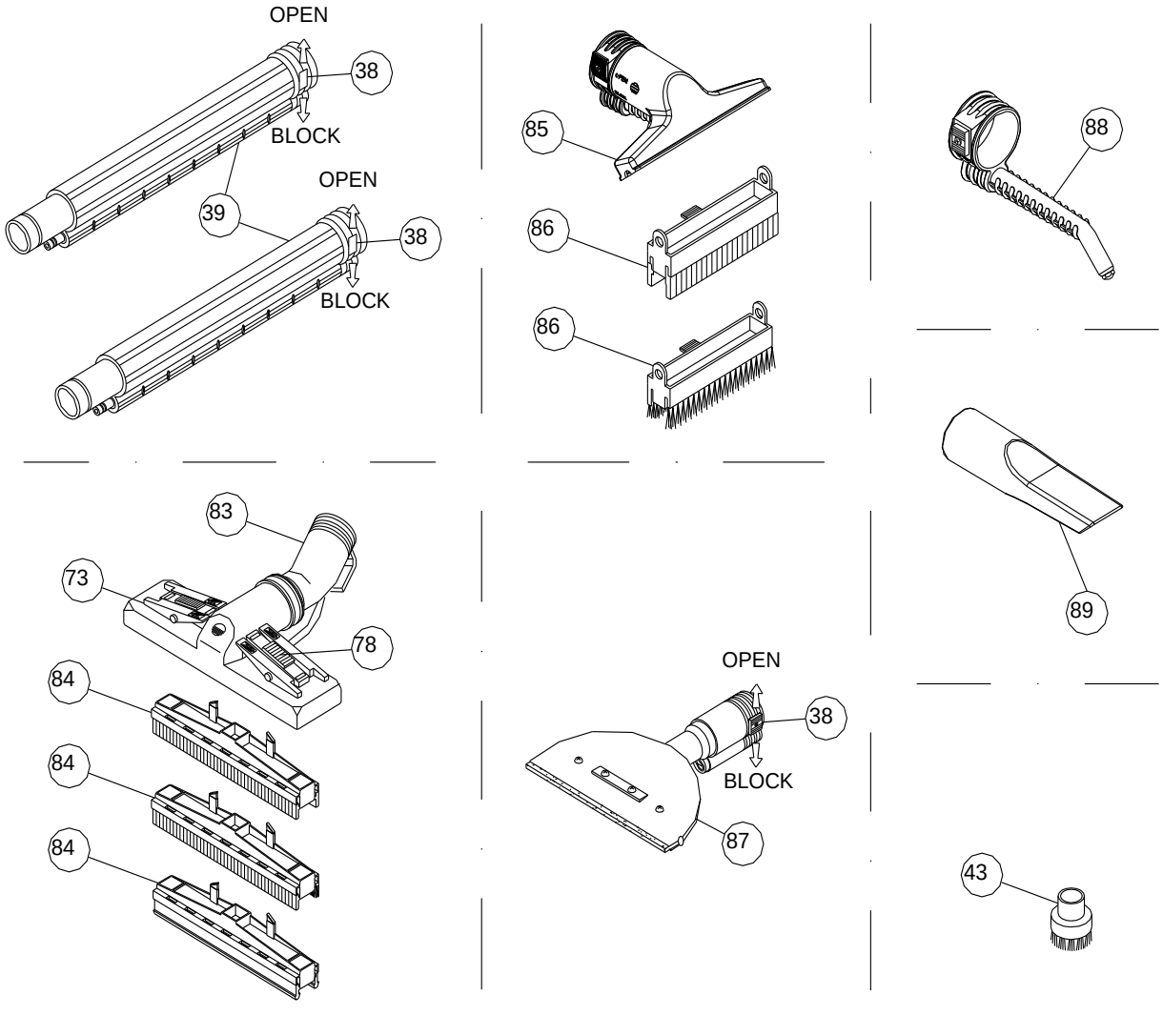
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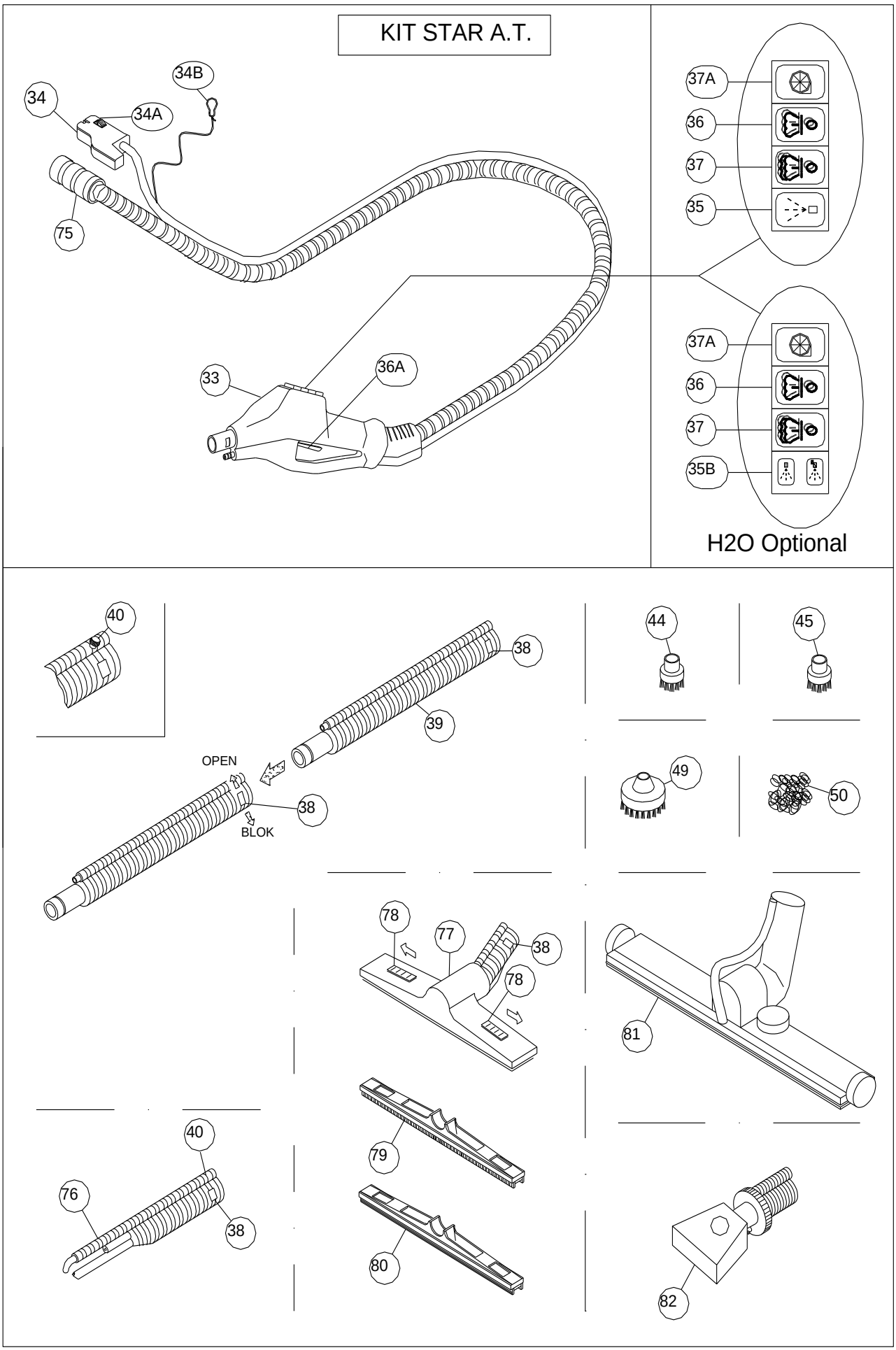
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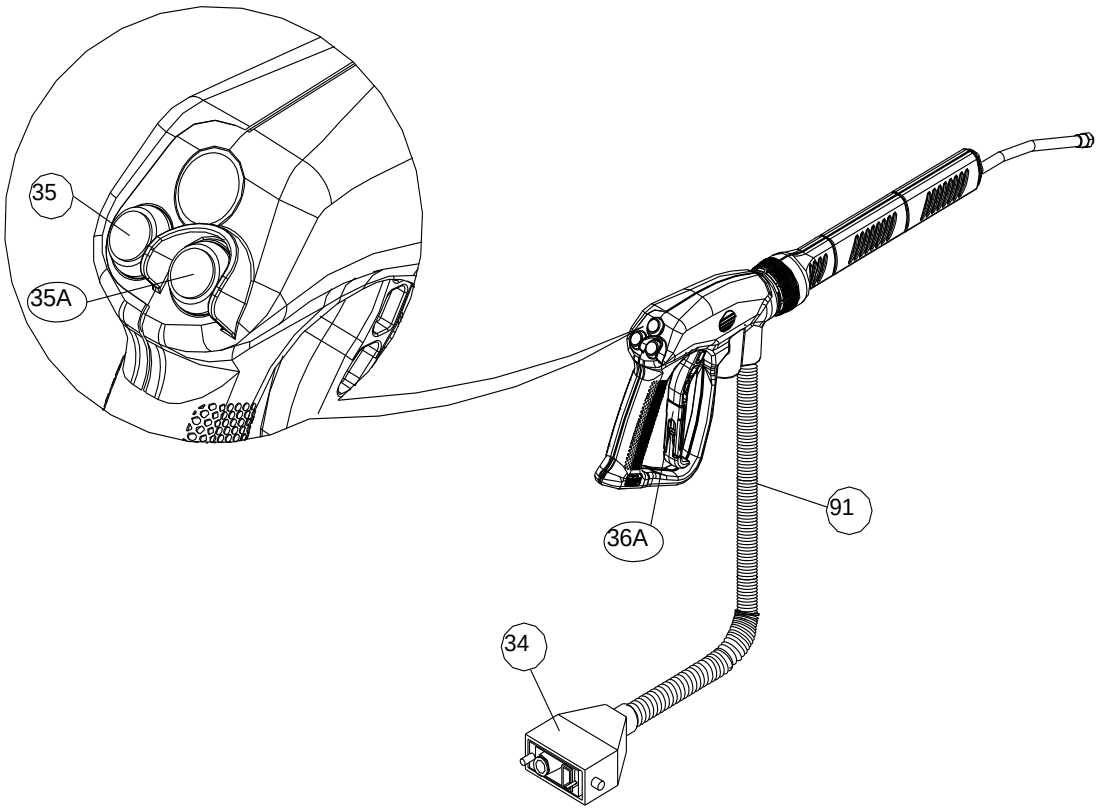
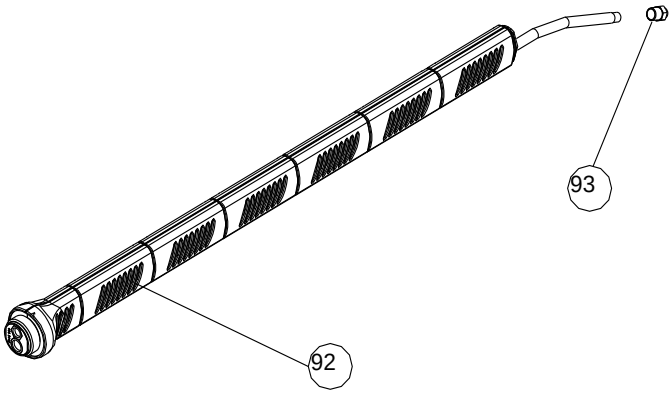
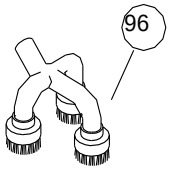
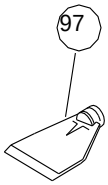
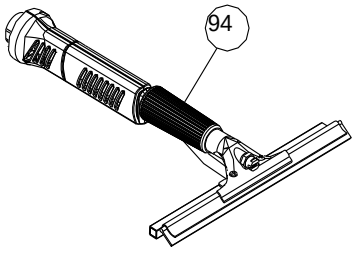
GEYSER 1 TOOLS

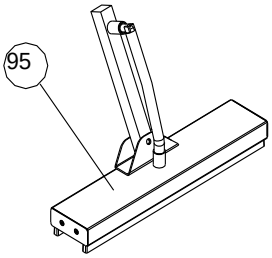


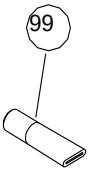




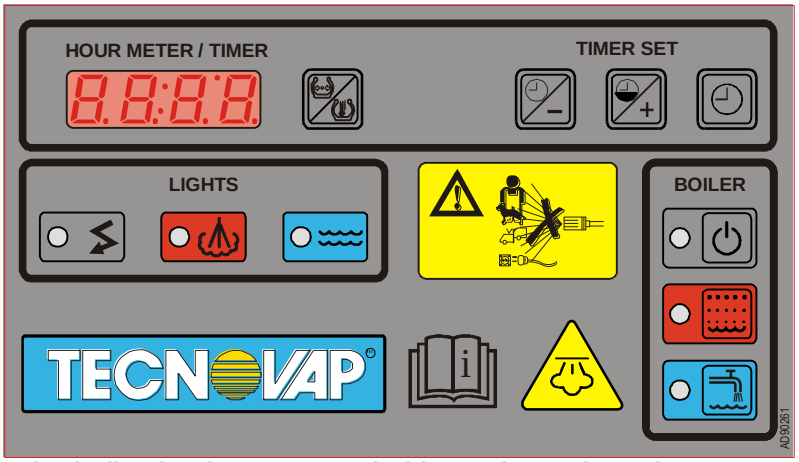








CONTROL PANEL (POS. 8)



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.

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).

Power button

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

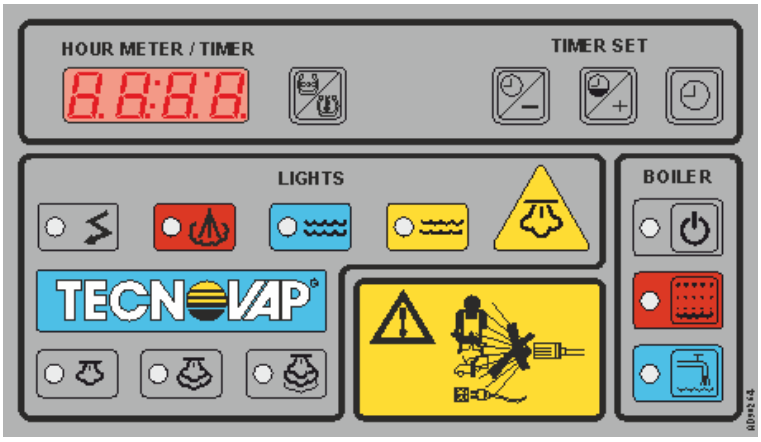
Boiler activation button

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.

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) After opening the packaging box, insert the handle bar (4) into its seat and fix it with the hand wheel screws (4A).

(b) Fix the vacuum drum on the round base operating on the hooks (17) and the vacuum head using the hooks (16).

(c) Insert the plug (22) into the outlet (3) and verify that the vacuum power switch (15) on the vacuum head is in ON position.

(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 detergent for every 10 liters water (percentage detergent about 10%), making sure to fill in first the detergent to obtain a better mixing. **Please be aware to the used detergent, as some in commerce, if you get them above 100°C, taken to the gaseous state, could emanate highly toxic steams. Be aware to check the technical data sheet and to consult 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 an 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, rotating the main switch in position ON

and activate the switches “stand-by” and “boiler”

(h) The machine is equipped with a protective system against thermal shock.

In case of water lacking inside the boiler, the system automatically disconnects the heating elements supply. This process is recognizable thanks to the blinking LED light on the “boiler switch” The intervention of the system can occur also after the refilling of the boiler; in this case it will last for 30 seconds and it does not have to be considered as a faulty signal.

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.

Notes: 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.

Refilling of detergent

Once the detergent tank is empty, proceed as follow:

1) Add diluted detergent into the tank (6)
2) Switch the device on, by pressing only the switch . The switch has to remain off.
3) Activate the steam switch (36), the detergent switch (35) and the steam command switch (36/A) 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.
4) Detergent has been trigged and the machine is now ready for use.

8.1. OPERATING OF STEAM BOX MINI WITH KIT JULY

Attention!!

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

Insert the steam plug (34) into the steam outlet (9) located in front of the unit and lock them with the lever.

Activate the main switch (5) and the switches for the steam production and wait approx. 5 minutes 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.

Activate the switches (36 and 37) on the handgrip to regulate the steam flow as follows: switch (36): minimum steam, switch (37): medium steam, switches (36 and 37): maximum steam. Use the steam command switch (36A) to activate steam flow.

The switch (35) 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 (35A).

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.

The supply of detergent or of hot water (optional) is only possible if steam is in use (minimum, medium or maximum steam) and if the LED light “presence of steam” is on.

Attention!!

Using the switch (35A) 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) directly onto the hose (33) or on extension tubes (39) by sliding the latch (38) to the OPEN position, lock into place and then slide the latch into the BLOCK position, then screw the handwheel screw (40) (only for 10bar models).

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 us precious wood f. e.) or vertical surfaces (tiles f.e.). In this case the cloth is acting as dirt “extractor”.

8.2. OPERATING OF STEAM BOX MINI WITH KIT RADAMES

Attention!!

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

Insert the vacuum hose (75) into the vacuum hose outlet (21) and the steam plug (34) into the steam outlet (9) on the machine. Push until the latches lock into place. Activate the general power switch (5) and the switches for the production of steam and wait approx. 5 minutes until the indicator lights up indicating the presence of steam inside the boiler.

The switches (36 and 37) on the handle have to be switched off.

Activate the switches (36 and 37) on the handgrip to regulate the steam flow as follows: switch (36): minimum steam, switch (37): medium switch, switches (36 and 37): maximum steam. Use the steam command switch (36A) to activate steam flow.

The vacuum switch (37A) activates the vacuum cleaner and can be used simultaneously with steam.

The switch (35) enables you to inject detergent with the steam by activating it for a few seconds at a time to avoid excess liquid with the steam; to spray hot water please refer to what below indicated activating the switch (35A).

Attention!!

Using the switch (35A) 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 has not to be pressed accidentally and that the jet has not to be directed toward people or animals.

To clean with the combination of steam, injection of detergent or of hot water and vacuum suction, choose the accessory best suited for the job:

The multi-purpose floor tool (77): with appropriate inserts (79,80). Inserts are locked into place by sliding the latches (78) toward the internal side (OPEN position), pressing them upwards, then sliding the latches toward the external side (BLOCK position). By consequence apply the tool on the hose or on the extension tubes and lock them with the latches (38), then screw the handwheel screw (40) (only for 10bar models). Remember that the command switches on the handle (36-37-37A) must be on OFF position until the end of this procedure.

Turbo lance steam/vac (76): to be used by itself with the small round brushes (43, 44, 45) or with steam plunger (47) and steam scraper (48) according to the cleaning job to be executed. To fix this tool please refer to the fixing instruction indicated above.

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 (19) and, after emptying and rinsing it, let it dry before storing it away.

8.3. OPERATING OF STEAM BOX MINI WITH KIT STAR

Attention!!

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

Insert the vacuum hose (75) into the vacuum hose outlet (21) and the steam plug (34) into the steam outlet (9) on the machine. Push until the latches lock into place. Activate the general power switch (5) and the switches for the production of steam and wait approx. 5 minutes until the indicator lights up indicating the presence of steam inside the boiler.

The switches (36 and 37) on the handle have to be switched off.

Activate the switches (36 and 37) on the handgrip to regulate the steam flow as follows: switch (36): minimum steam, switch (37): medium switch, switches (36 and 37): maximum steam. Use the steam command switch (36A) to activate steam flow.

The vacuum switch (37A) activates the vacuum cleaner and can be used simultaneously with steam.

The switch (35) enables you to inject detergent with the steam by activating it for a few seconds at a time to avoid excess liquid with the steam; to spray hot water please refer to what below indicated activating the switch (35B).

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 has not to be pressed accidentally and that the jet has not to be directed toward people or animals.

To clean with the combination of steam, injection of detergent or of hot water and vacuum suction, choose the accessory best suited for the job:

The multi-purpose floor tool (78): with appropriate inserts (84). Inserts are locked into place by sliding the latches (78) toward the internal side (OPEN position), pressing them upwards, then sliding the latches toward the external side (BLOCK position). By consequence apply the tool on the hose or on the extension tubes and lock them with the latches (38), then screw the handwheel screw (40) (only for 10bar models). Remember that the command switches on the handle (36-37-37A) must be on OFF position until the end of this procedure.

Steam/vac lance (88 and 89): to be used by itself or with the small round brush (43). To fix this tool please refer to the fixing instruction indicated above.

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 (19) and, after emptying and rinsing it, let it dry before storing it away.

8.4. OPERATING OF STEAM BOX MINI WITH KIT GEYSER

Attention!!

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

Insert the steam plug (34) into the steam outlet (9) located on the machine and activate the locking lever.

Connect one of the available lances (92) directly onto the handgrip (91) making sure to lock everything with the fixing nut, then screw onto the lance the nozzle (93) or various optional accessories (95 / 96 / 97 / 98 / 99), or connect onto the handgrip the window cleaner (94), according to the cleaning job to be performed. Your lance is ready for use.

Activate the main switch (5) and the buttons for the production of steam and wait approx. 5 minutes until the indicator lights up indicating the presence of steam inside the boiler. The lever (36A) and the buttons (35 and 35A) located on the handle have to be in OFF position.

Use the lever (36A) to activate steam flow and the button (35) to spray detergent or the button (35A) to spray hot water (optional) together with steam.

The supply of detergent or of hot water (optional) is only possible if steam is in use and if the LED light “presence of steam” is on.

Both detergent and hot water (optional) 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 (35A) 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.

8.5. BACCHUS MODE USE (OPTIONAL)

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 (60) into the steam outlet (9) on the machine and activate the locking lever.

Connect the garolla fitting (64) on the plant, insert subsequently the female rapid coupling (61) on the male coupling (62) present on garolla fitting, always use adequate protection systems against burning.

Activate the main switch (5) 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.

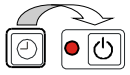
Use the respective buttons minimum steam medium steam maximum steam in base of desired steam quantity.

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  <u>releasing the first button only after having pressed the second one,</u> 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

DESCONNECT 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 50 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 (5) 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).

The cleaning of the boiler is completed, insert the power cable (1) into a suitable plug and activate the main switch (5) and the switches . It is recommended to activate also the minimum steam switch (36) on the handgrip, pressing also the safety switch (36A) 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.

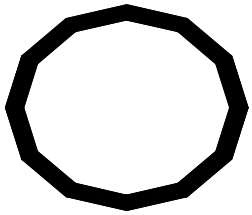
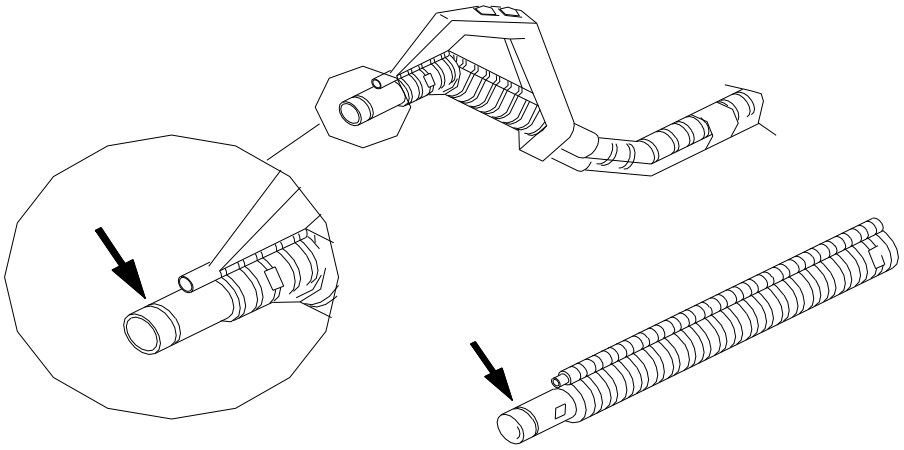
1) Switch the device on by pressing only the switch the switch as to remain off.
2) Activate the steam switch (36 on July and Radames), keeping pressed the detergent button (35 on July, Radames and Geyser) and press the steam command safety switch (36A on July, Radames and Geyser) located on the hose; 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 trigged 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.

9.4. MAINTENANCE OF THE TOOLS

Grease occasionally joints on the extension tubes and on the accessories.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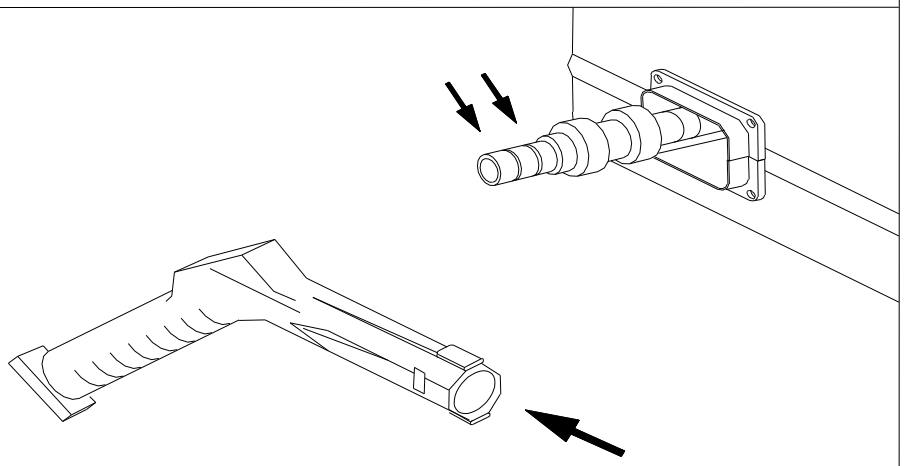
OR 29.82x2.62	
	
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	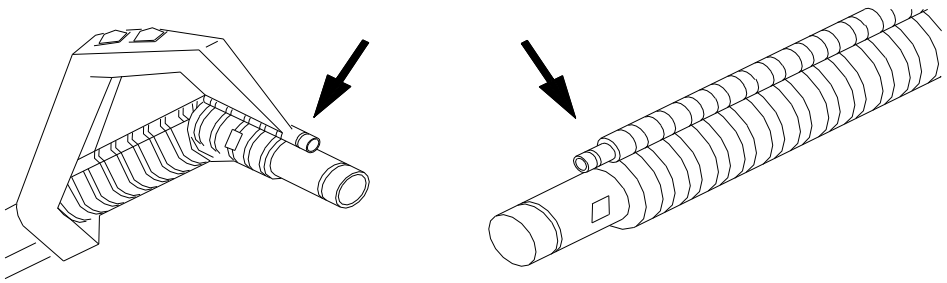
PG5116	
OR 6.75x1.78	

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 (5) is in ON position 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 (19) is full of water.	A) Make sure the switch (15) is on and the plug (22) is well inserted into the socket (3). B) Clean tube and accessory used. C) Empty the vacuum drum (19)
Steam does not come out.	A) Boiler has not reached yet the operational pressure (green light is off). B) Steam command switches (36 and 37) are off. C) Steam command switch (36/A) has not been activated.	A) Wait a few minutes. B) Switch on the steam switches (36 and 37). C) Use the steam command switch (36A) 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 of the water net valve. (refer to section 9.3.)

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 (38).	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 Mini Vac

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 60335-2-2
EN 60335-2-3
EN 55014-1
EN 55014-2
EN 61000-3-2
EN 61000-3-3

PESCANTINA – VERONA (ITALY)07-03-2012

FRANCHINI Giuliano
(Managing Director)

Ordinary maintenance procedures

Generator working hours	Frequency of intervention	Notes

Extraordinary maintenance procedures

Generator working hours	Date of intervention	Intervention description, replaced components etc.

NOTES

THE MANUFACTURER RESERVES THE RIGHT TO BRING TECHNICAL AND STRUCTURAL IMPROVEMENTS WITHOUT PRIOR NOTICE.