



CARMEN PLUS 3,6-2,4kW







Chattanooga line



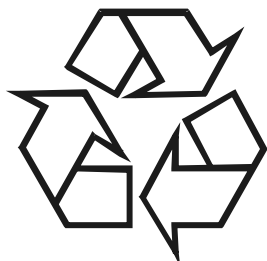
Stainless steel line



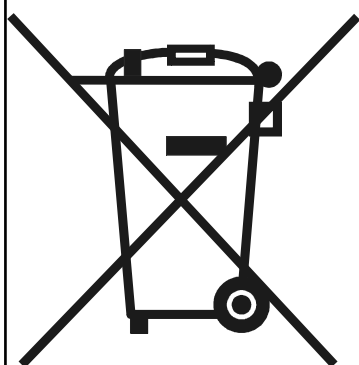
Interpretation of the symbols placed on the unit

<p>BEFORE USING THE STEAM GENERATOR, READ AND FOLLOW THIS INSTRUCTION MANUAL.</p> <p>IT IS RECOMMENDED TO KEEP THIS INSTRUCTION MANUAL TO CONSULT IT LATER OR TO GIVE IT TO THE FOLLOWING OWNERS.</p> <p>PLEASE READ THE SAFETY INSTRUCTIONS ON THIS HANDBOOK BEFORE PROCEEDING WITH THE FIRST USE.</p> <p>EVENTUAL DAMAGES DUE TO THE CARRIAGE MUST BE COMMUNICATED AS SOON AS POSSIBLE TO YOUR OWN RETAILER.</p>	
	<p>ATTENTION!!</p> <p>STEAM.... BURNING DANGER</p>
	<p>ATTENTION!!</p>
	<p>READ THE OPERATING MANUAL</p>
	<p>OPERATING MANUAL;</p> <p>OPERATING INSTRUCTIONS</p>

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

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2. SAFETY REGULATIONS

- It is recommended not to open or remove any machine part for any reason; in case the unit should present an abnormal functioning or a failure, disconnect the power plug and contact an authorized service center or the dealer where the product has been purchased.
- 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 the necessity to proceed with the mud drain; it will display the notice C A L C on the panel. (refer to the chapter 8 Maintenance).
The boiler's drain cap must be opened with the machine OFF (power supply plug removed) since at least 5 hours.

- **ATTENTION.** Do not use the appliance within the range of persons.
- **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.
- Disconnect the power supply 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, 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/s².
- **ATTENTION.** This appliance has been designed for a use with cleaning agents supplied or recommended by the manufacturer. The use of other cleaning agents or chemicals may adversely affect the safety of the user and of the appliance itself.
- **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. 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 the **CARMEN PLUS**, a combined model for cleaning which brings together the power of steam and the force of vacuuming.

This product, with its steel body, 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).

CARMEN PLUS is also equipped with a separate detergent tank which allows the injection of detergent at 90-125°C.

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

CARMEN PLUS is the ideal solution when it comes to cleaning and disinfecting.

Pay careful attention to the following instructions which will be helpful in operating your **CARMEN PLUS**.

4. TECHNICAL CHARACTERISTICS

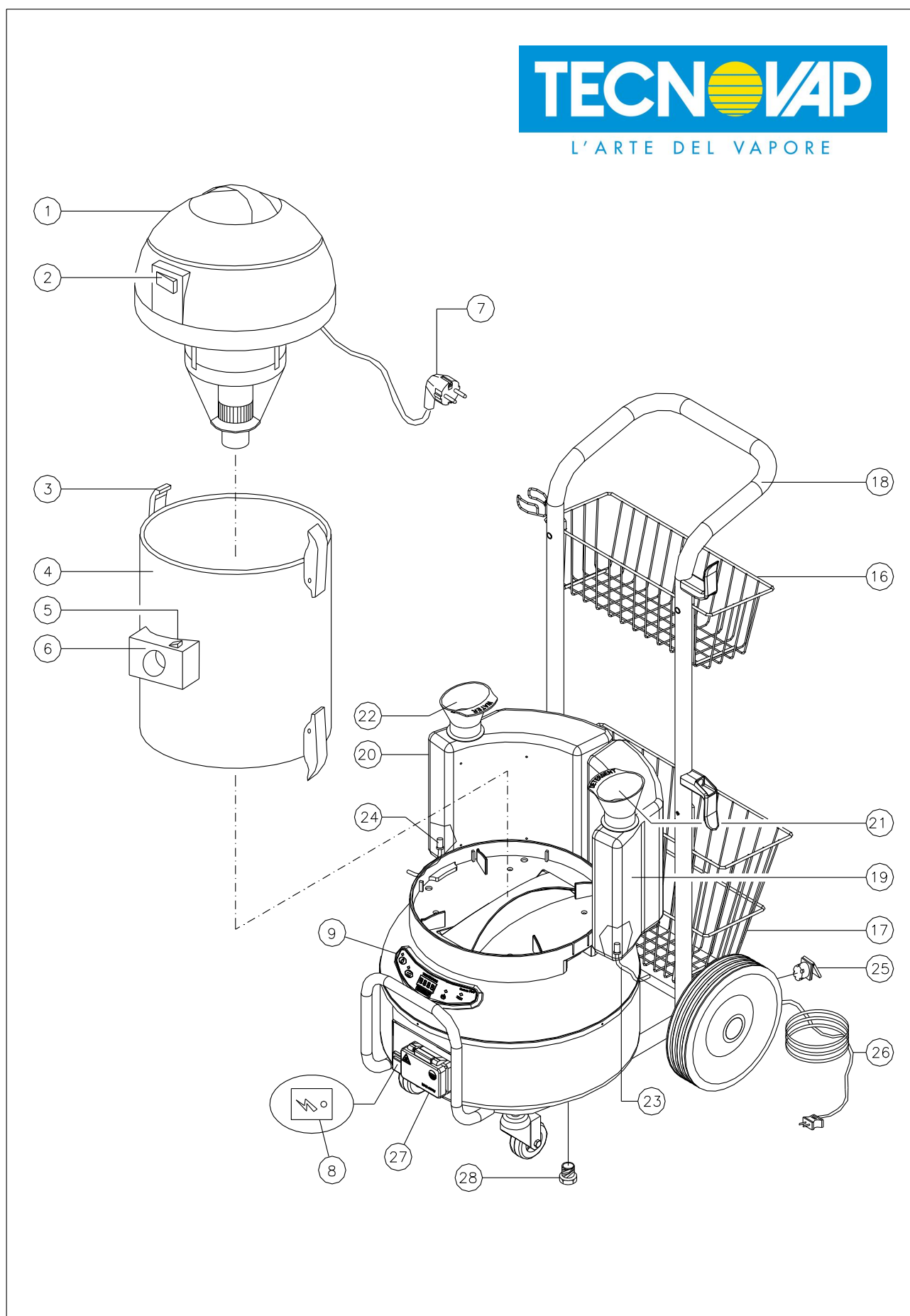
FACTORY: TECNOVAP SRL VIA DEI SASSI 1A 37026 PESCONTINA VERONA ITALY

Model		Carmen Plus
Code		PW3006ITS
Rated Voltage	V	230
Current type	Hz	50/60
Rated Power Boiler	kW	3.6 / 2.4
Max Rated Power	kW	3.65
Rated Steam Pressure	kPa	600
	bar	6
Permissible Steam Pressure	kPa	1200
	bar	12
Max. Steam Rated Flow	g/min	97
Max. Steam Rated Flow	Kg/h	5.9
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
Mass	kg	

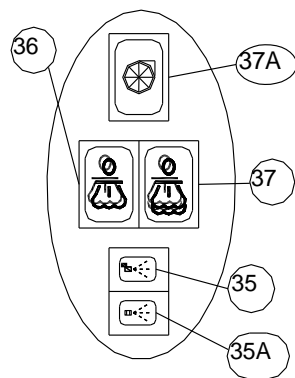
5. NOMENCLATURE

- | | |
|---|--|
| 01) Vacuum cleaner motor head | 35) Detergent switch |
| 2) Vacuum cleaner power switch | 35A) Hot water switch (optional) |
| 03) Clamping hooks for vacuum drum | 35B) Detergent/hot water switch (optional) |
| 04) Vacuum drum (5,5 – 7,5 liters) | 36) Steam adjustment switch - minimum |
| 05) Locking latch vacuum outlet | 36A) Steam command switch / lever |
| 06) Vacuum hose outlet | 37) Steam adjustment switch - medium |
| 07) Vacuum cleaner power cord | 37A) Vacuum switch |
| 08) General power switch | 38) Locking latches for accessories |
| 09) Control panel | 39) Extension tube |
| 10) "Power / Stand-by" button | 43) Nylon brush (Ø 28mm) |
| 11) "Power / Stand-by" indicator | 44) Brass brush (Ø 28mm) |
| 12) "Boiler" button | 45) Stainless steel brush (Ø 28mm) |
| 12A) "Detergent flow decrease" button (-) | 46) Triangular brush |
| 12B) "Detergent flow increase" button (+) | 47) Steam plunger |
| 13) "Boiler on" indicator | 48) Steam scraper |
| 14) "Steam Ready" indicator | 49) Nylon brush (Ø 60mm) |
| 15) "Low Water" indicator | 50) Stainless steel wool pad |
| 16) Small basket for trolley | 71) Steam lance |
| 17) Large basket for trolley | 72) Rectangular brush |
| 18) Trolley handlebar | 73) Cloth holder |
| 19) Detergent tank | 74) Triangular brush |
| 20) Water tank | 75) Vacuum hose |
| 21) Detergent tank cap (yellow) | 76) Steam/vacuum lance |
| 22) Water tank cap (blue) | 77) Floor tool for inserts |
| 23) Drain tube: detergent tank | 78) Locking latches for inserts |
| 24) Drain tube: water tank | 79) Insert squeegee/brush |
| 25) Electric socket for vacuum cleaner | 80) Insert squeegee/squeegee |
| 26) Power cord | 83) Floor tool for inserts |
| 27) Steam outlet | 84) Inserts 300 mm brush / squeegee / for carpet |
| 28) Boiler drain cap | 85) Steam/vacuum nozzle |
| | 86) Inserts 145 mm brush / squeegee |
| | 87) Steam / vacuum window cleaner 250 mm |
| | 88) Steam lance |
| | 89) Vacuum nozzle |
- Kit July/Radames/Star**
- 33) Steam / steam&vacuum hose w/handgrip
 - 34) Steam plug
 - 34A) Locking latch steam plug
 - 34B) Steel rope

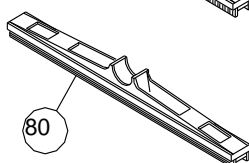
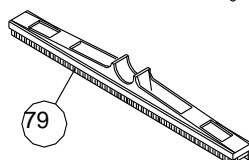
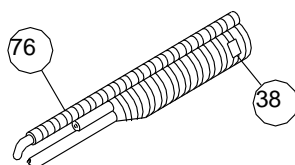
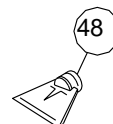
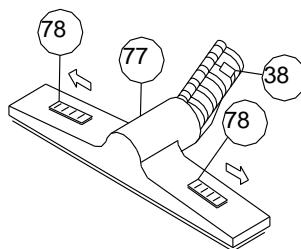
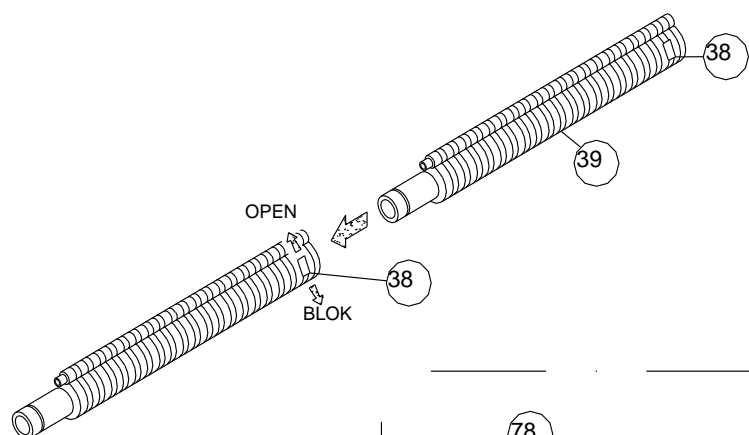
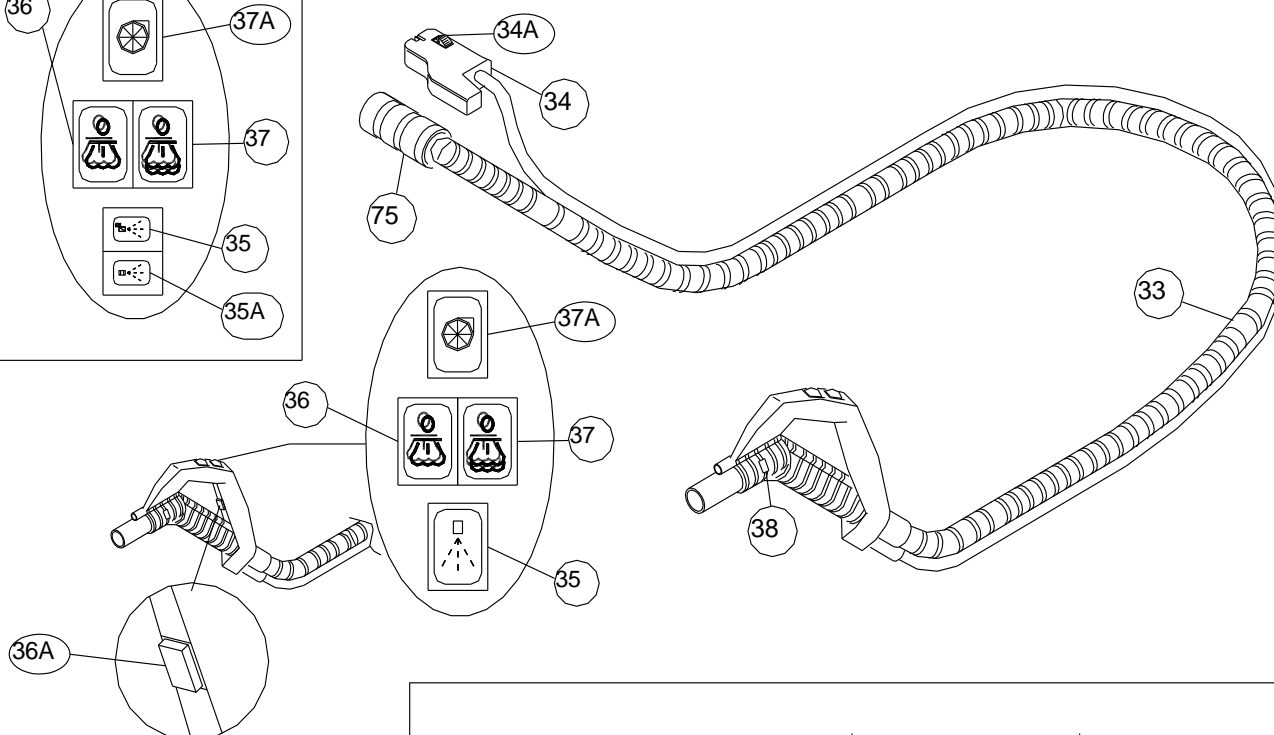
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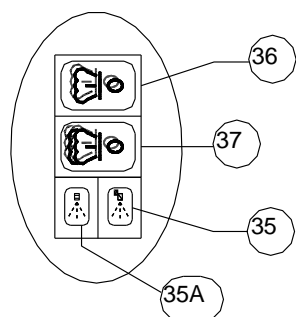
H2O Optional



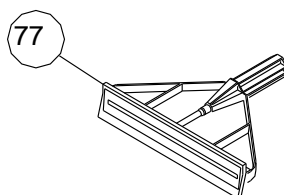
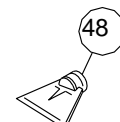
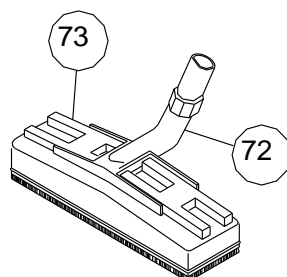
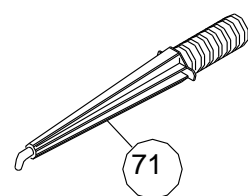
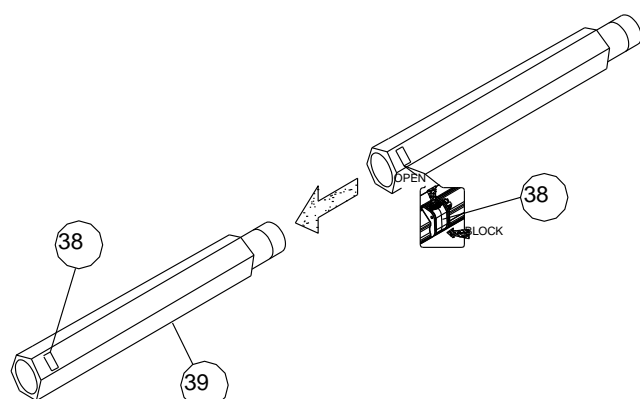
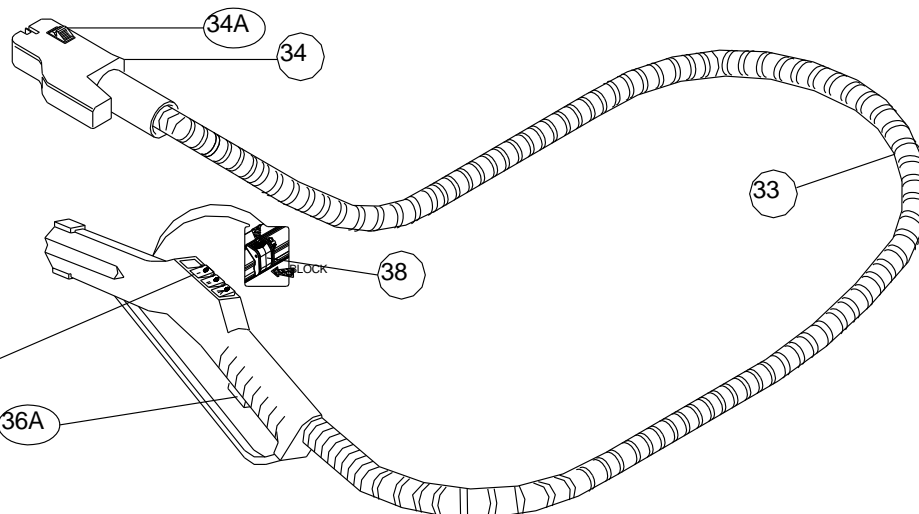
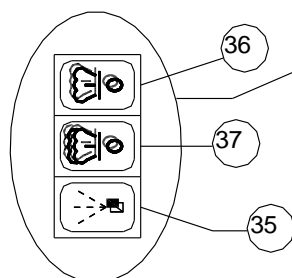
KIT RADAMES



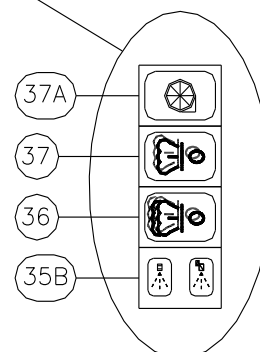
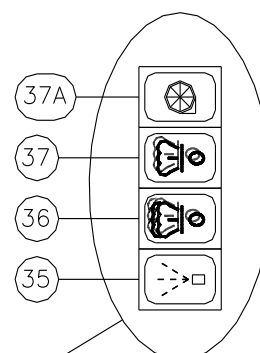
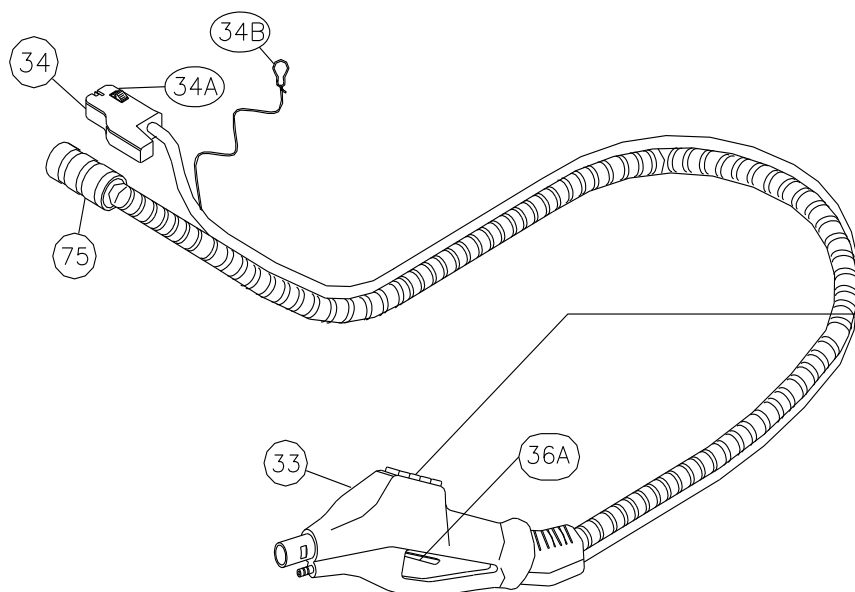
H2O Optional



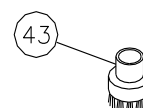
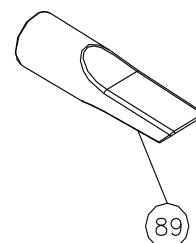
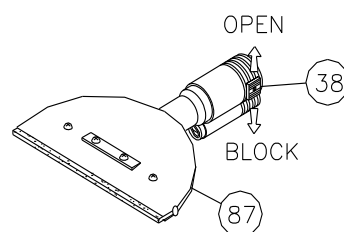
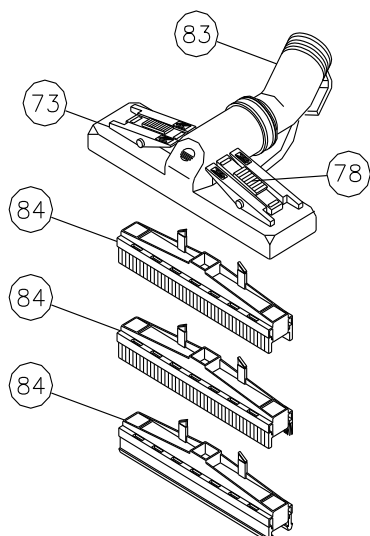
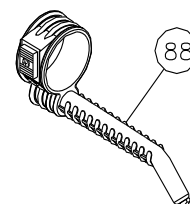
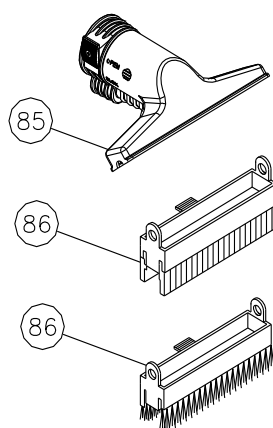
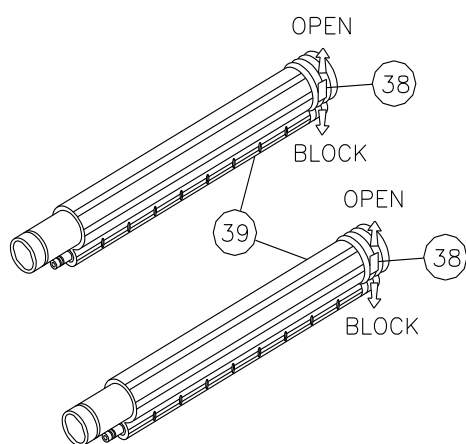
KIT JULY



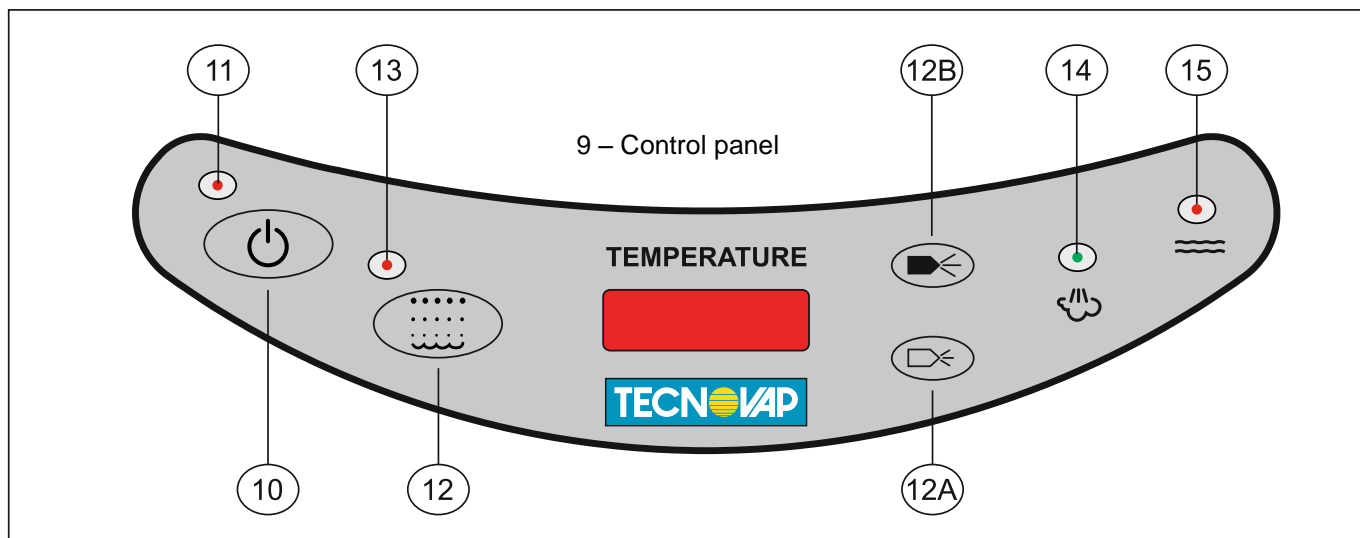
KIT STAR



H2O Optional



CONTROL PANEL



10 : “Power / Stand-by” button

11 : “Power / Stand-by” indicator

12 : “Boiler” button

12A : “Detergent flow decrease” button (-)

12B : “Detergent flow increase” button (+)

13 : “Boiler on” indicator

14 : “Steam Ready” indicator

15 : “Low Water” indicator

7. OPERATING INSTRUCTIONS

- (a) After opening the packaging box, insert the main handlebar (18) onto the trolley base and block into place by inserting the large basket (17) into the bottom holes of the handlebar. Then insert the small basket (16) into the top holes of the handlebar.
- (b) Insert the plug (7) into the outlet (25) located behind the machine, and verify that the vacuum power switch (2) on the vacuum head is in ON position.
- (c) Remove the tanks caps (21 and 22), fill in water (max 3 liters) in the water tank (blue funnel) and fill in the appropriately diluted detergent (max 3 liters) in the detergent tank (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.**
- (d) When using detergent (not foamy for extractions machines), please follow the specific instructions reported on original packaging: 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.
- (e) Insert the plug (26) into an electrical socket, making sure that the voltage and the amperage correspond with the data printed on the plate located near the handlebar on the machine.
- (f) Switch the unit on by using the main switch (8) and activate the “Power / Stand-by” (10) and the “Boiler” (12) switches.

ATTENTION

Once the water tank is empty the red “Low water” indicator light (15) will switch on followed by an intermittent acoustic signal, at the same time the system will disable the power of the heating element until the water tank (22) is filled again.

To reactivate the device, switch off the unit by the button (10), refill the water tank (22) and afterwards switch on the unit again by the button (10).

If the water tank is filled without a prior switching off the machine, the low water indicator light and acoustic signal will remain on; switch the unit off and on again as described above in order to continue the work.

The intervention of the system can occur also after the refilling of the boiler once performed the mud drain during the maintenance process; in this case it will last for 30 seconds and it does not have to be considered as a faulty signal.

Note: Water refilling can be executed without switching the device off.

Hour counters

The device is equipped with two hour counters, one resettable by the user and one non resettable. To visualize the hours, switch the device off by using the button (10), subsequently press the button (12), every time you press this button you can read the respective partial hour counter and total hour counter.

Reset of the partial hour counter

Switch the device off by using the main switch (8) located in the front of machine, press both “Power / Stand-by” (10) and “Boiler” (12) switches and hold them, switch the device on by using the main switch (8), once finished the LED lights sequence, release the switches and the hour counter C2 will be brought to 0000.

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 30 effective working hours (steam solenoid valve on). Proceed as described in the section 8 “Maintenance of the boiler” in order to perform the liquids drainage.

Warning indication (C A L C) restoration

After having performed the maintenance, switch the device off by using the “Power / Stand-by” switch (10), press and hold for 10 seconds the “Boiler” switch (12). The warning C A L C will be restored.

Pressure visualization

With the unit being turned on press and keep pressed the “Boiler” button (12), after some seconds the display will show the value of the pressure in bar inside the boiler, this data will remain visible on the display for 10 seconds, afterwards the value of the temperature in °C will appear again.

Power save mode

The power save mode permits to reduce the unit’s consumption after 1 hour of inactivity. For activating or deactivating such mode it is enough to switch the generator off by pressing and holding for 10 seconds the

“Power / Stand-by” button (10), the display will show alternately T-ON or T-OFF depending on the previously selected setting.

Detergent flow regulation:

It is possible to regulate the detergent flow by using the buttons – (12A) and + (12B).

Refilling of detergent :

Once the detergent tank is empty, proceed as follows:

1. Add diluted detergent into the tank (19).
2. Switch the device on, by pressing the “Power / Stand-by” switch (10) and the “Boiler” switch (12).
3. Activate the detergent switch (35), press and hold the steam command switch (36A) until detergent starts coming out from the tool.
4. Detergent has been triggered and the machine is now ready for use.

Power selection:

For selecting the generator's power, keep the device off (OFF indication on the display) and hold together the detergent flow regulation buttons (12A and 12B) for 10 seconds, every time you press these buttons the display will show alternately P3.6 or P2.4.

7.1. OPERATING OF CARMEN PLUS 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 (6) and the steam plug (34) into the steam outlet (27) on the machine. Push until the latches (5 and 34A) lock into place.

Activate the general power switch (8), the "Power / Stand-by" switch (10) and the "Boiler" switch (12) for the production of steam and wait approx. 4 minutes until the indicator (14) lights up indicating the presence of steam inside the boiler.

The switches (36, 37 and 37A) on the handle have to be switched off (in OFF position).

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 (for models with the function of hot water injection) please refer to what above indicated 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.

Detergent injection or hot water injection (optional) is possible only if at least one steam command switch is activated and if "Steam Ready" indicator (14) 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 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 and 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). Remember that the command switches on the handle (36-37-37A) must be in OFF position until the end of this procedure.

Steam/vac lance (76): to be used by itself, or with the small round brushes (43-46, 49), or with steam plunger (47), or with steam scraper (48) according to the cleaning job to be executed.

If necessary, attach the extension tubes (39) and lock them into place using the clamping units (38) in BLOCK position. Only one tube may be used if desired.

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

7.2. OPERATING OF CARMEN PLUS 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 (27) on the machine. Push until the latches (34A) lock into place.

Activate the general power switch (8), the "Power / Stand-by" switch (10) and the "Boiler" switch (12) for the production of steam and wait approx. 4 minutes until the indicator (14) lights up indicating the presence of steam inside the boiler.

The switches (36, 37) on the handle have to be switched off (in OFF position).

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 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 (for models with the function of hot water injection) please refer to what above indicated 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.

Detergent injection or hot water injection (optional) is possible only if at least one steam command switch is activated and if "Steam Ready" indicator (14) 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 has not to be pressed accidentally and that the jet has not to be directed toward people 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.

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 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".

7.3. OPERATING OF CARMEN PLUS 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 (6) and the steam plug (34) into the steam outlet (27) on the machine. Push until the latches lock into place. Activate the general power switch (8), the “Power / Stand-by” switch (10) and the “Boiler” switch (12) for the production of steam and wait approx. 4 minutes until the indicator (14) lights up indicating the presence of steam inside the boiler.

The switches (36, 37 and 37A) on the handle have to be switched off (in OFF position).

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 (for models with the function of hot water injection) please refer to what above indicated 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.

Detergent injection or hot water injection (optional) is possible only if at least one steam command switch is activated and if “Steam Ready” indicator (14) is on.

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 (83): 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). Remember that the command switches on the handle (36-37-37A) must be in 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 and, after emptying and rinsing it, let it dry before storing it away.

8. MAINTENANCE

8.1. 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 warning system, which every 30 effective working hours displays the advice “C A L C” to warn the user to proceed with the boiler cleaning.

When this warning 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 using the main switch (8) and unplugging the power cable (26).

Place a recipient under the machine, remove the boiler drain cap (28) 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 (26) into a suitable plug and activate the main switch (8), the “Power / Stand-by” switch (10) and the “Boiler” switch (12). 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. 2 minutes).

The maintenance of the boiler is completed; proceed with the using instructions as described in the paragraph (f) of the chapter 7.

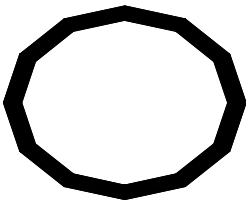
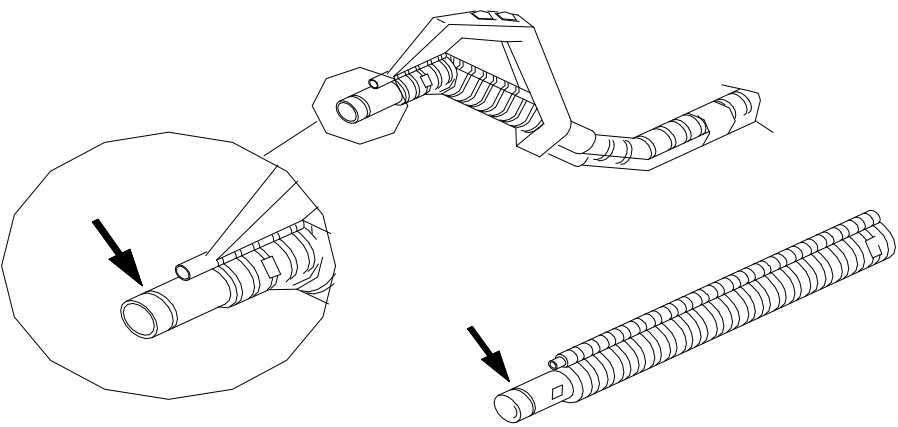

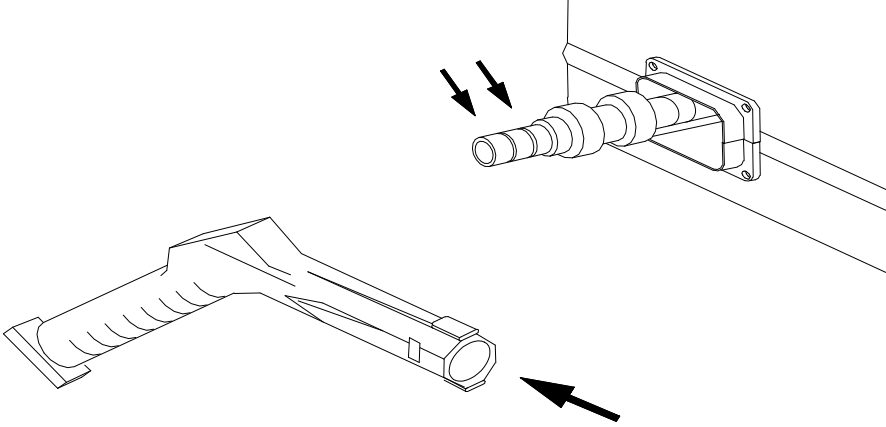

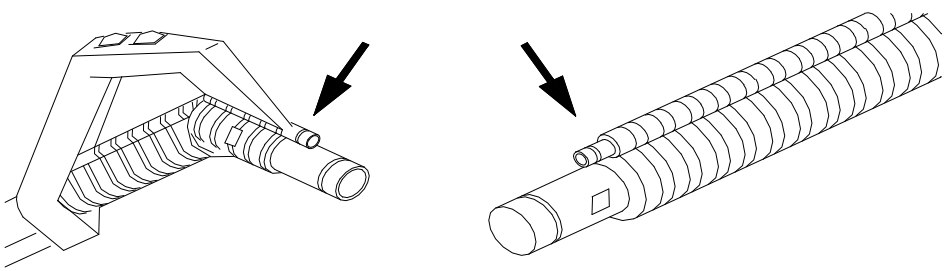

We suggest to empty the water tank (20) completely if the machine will not be used for a long period of time.

8.2. Maintenance of the vacuum cleaner

The vacuum cleaner of CARMEN PLUS models does not require any specific maintenance.

8.3. 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		
		

9. BEFORE REFERRING TO THE TECHNICAL SERVICE

PROBLEM	POSSIBLE CAUSE	REMEDY
Machine does not produce steam and vacuum does not work.	Lack of power.	Make sure that the plug (26) is well inserted and that the main switch of the building is activated.
The red "Low Water" indicator (15) lights up.	All the water from the water tank (20) has been consumed.	Refill the water tank (20) with clean water.
There is no injection of detergent.	All the detergent from the detergent tank (19) has been consumed.	Check the level in the detergent tank (19). If necessary, refill the detergent tank (19).
Suction power is missing.	A) Lack of power to the vacuum cleaner. B) The vacuum tube is obstructed. C) The vacuum drum (4) is full of water.	A) Make sure that the switch (2) is in ON position and that the plug (7) is well inserted into the socket (25). B) Clean the vacuum tube and the accessory in use. C) Empty the vacuum drum (4).
Steam does not come out.	A) Boiler has not reached yet the operational pressure (light (10) is off). B) Steam command switches (36-37) are off. C) Steam command switch (36A) has not been activated.	A) Wait a few minutes. B) Switch on the steam command switches (36-37). C) Use the steam command switch (36A) to activate the 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 "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.
Drops of water come out of the accessories.	At beginning of work water condenses in the tubes and tools due to the difference in temperature between steam and accessories.	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.

10. 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:)
Chattanooga Carmen Plus

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
EN60335-2-79
EN 60335-2-2
EN 55014-1
EN55014-2
EN 61000-3-2
EN 61000-3-3

PESCANTINA – VERONA (ITALY) 21-03-2016


Franchini Giuseppe
(Managing Director)

Ordinary maintenance procedures

[illegible]

Extraordinary maintenance procedures

[illegible]

NOTES

[illegible]

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



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