



L'ARTE DEL VAPORE

CARMEN PLUS

USING INSTRUCTIONS



Chattanooga Line



Stainless Steel Line



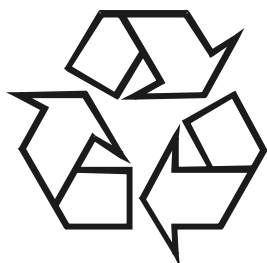
This manual is available in **digital format**, by submitting
a specific request to the following address: info@tecnovap.com



Understanding the symbols on the appliance

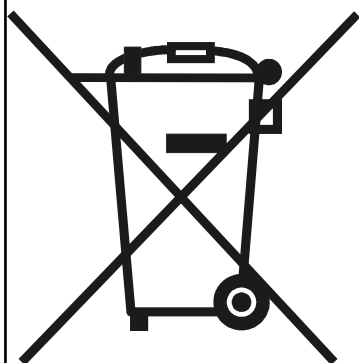
BEFORE USING THIS APPLIANCE, READ AND COMPLY WITH THESE USER INSTRUCTIONS. KEEP THESE INSTRUCTIONS FOR FURTHER CONSULTATION AS NEEDED AND PROVIDE THEM TOGETHER WITH THE APPLIANCE TO THE SUBSEQUENT OWNER. BEFORE USING THE APPLIANCE FOR THE FIRST TIME, YOU ABSOLUTELY HAVE TO READ THE SAFETY REGULATIONS GIVEN IN THIS MANUAL. ANY DAMAGE CAUSED DURING TRANSPORTATION HAS TO BE PROMPTLY NOTIFIED TO YOUR RETAILER.	
	WARNING! STEAM.... DANGER OF SCALDING!
	WARNING!
	READ THE OPERATOR'S MANUAL
	OPERATOR'S MANUAL; USING INSTRUCTIONS

ENVIRONMENTAL PROTECTION



ALL PACKAGINGS ARE RECYCLABLE.

THE PACKAGING MUST NOT BE DISPOSED OF IN THE HOUSEHOLD WASTE AND HAS TO BE DELIVERED TO AN AUTHORISED COLLECTION CENTRE.



DISMISSED APPLIANCES CONTAIN PRECIOUS RECYCLABLE MATERIALS AND SHOULD THEREFORE BE DELIVERED TO A COLLECTION CENTRE. ELECTRICAL AND ELECTRONIC APPLIANCES, BATTERIES, OIL AND SIMILAR SUBSTANCES MUST NOT BE RELEASED TO THE ENVIRONMENT. PLEASE DISPOSE OF THESE USING APPROPRIATE SEPARATED WASTE COLLECTION SYSTEMS.

SUBSTANCES SUCH AS ENGINE OIL, DIESEL, PETROL OR OTHER FUELS MUST NOT BE RELEASED TO THE ENVIRONMENT. PROTECT THE SOIL BY DISPOSING USED OIL IN COMPLIANCE WITH ENVIRONMENTAL LAWS.

THE USER MAY RETURN THE APPLIANCE FOR DISPOSAL TO THE RETAILER WHEN PURCHASING A NEW EQUIVALENT APPLIANCE; ON A ONE-TO-ONE BASIS.

TABLE OF CONTENTS

1. SAFETY REGULATIONS
2. INTRODUCTION
3. TECHNICAL FEATURES
4. NOMENCLATURE
5. TECHNICAL DRAWINGS
6. USING INSTRUCTIONS
7. MAINTENANCE
8. BEFORE CONTACTING THE SERVICE CENTER
9. DECLARATION OF CONFORMITY

1. SAFETY REGULATIONS

1.1 SAFETY DEVICES

SAFETY VALVE This appliance is fitted with two safety valves designed to ensure the safety of the appliance if any other primary control elements were inefficient (due to a fault). Due to the extreme importance of these components and to avoid compromising the safety of the appliance, they should be replaced (by an authorized technical assistance center) every 2 years from the date of purchase.

PRESSURE SWITCH This appliance is equipped with a pressure switch able to check and 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 would mean 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 in this case recommended not to use the appliance, immediately unplug it from the power feeding and call the service center.**

THERMOSTATS The appliance comes with 4 thermostats for the protection of overtemperature. Should the main control system result inefficient, these thermostats would entirely disactivate the boiler heating. In this case unplug the appliance from the power feeding and call the service center.

1.2 PRECAUTIONARY MEASURES TO BE FOLLOWED

- Do not open or remove parts of the machine for any reason. Should the appliance have an operating fault or malfunction, do remove the power plug and contact an authorized technical assistance center or the point of sale where the appliance was purchased.
- The connection of the appliance to the main power has to be done by a qualified electrician and has to be conform to the contents of the IEC 60364-1 norm.
- If the power cable is damaged, it has to be replaced by the manufacturer or a technical assistance center, or in any case by a person with similar qualifications, in order to prevent all risks.
- Make sure that the power supply to this appliance is fitted with a differential device which can cut off the power supply if the leakage current to earth exceeds 30 mA for 30 ms, or a checking device of the earth circuit.
- Risk of explosion. Do not spray flammable liquids.
- Do not use the machine if there are persons standing within its range of action.
- High-pressure jets can be hazardous if used improperly. Do not direct the jet towards persons, live electrical equipment or towards the appliance itself.
- Do not direct the jet towards yourself or other persons to clean clothing or footwear.
- Disconnect the main power by removing the plug from the power socket before carrying out any maintenance to the appliance.
- This appliance is not intended for use by people (children included) with impaired physical, mental or sensory capacities or with insufficient experience and/or expertise, unless they are being supervised or instructed on the use of the appliance by a person responsible for their safety.
- Watch over children to make sure that they cannot play with the machine.
- To ensure the safety of the appliance, do use only original spare parts supplied or approved by the manufacturer.
- The hoses, accessories and couplings are very important for the safety of the appliance. Use only hoses, accessories and couplings recommended by the manufacturer.
- Do not use the appliance if the power cable or other important parts have been damaged, for example safety devices, high-pressure hoses or trigger gun.
- When using an extension cable, the plug and socket must be watertight.
- Inappropriate extension cables may be hazardous.
- Data relating to hand/arm vibrations, attributable to this appliance, are not mentioned as they are below 2,5 m/s².

- 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 2 minutes. This appliance has been conceived to be used with a detergent provided or recommended by the manufacturer. The use of other detergents or chemical substances could endanger the safety of the operator as well as from the appliance itself.

When using detergent (make sure it's non-foaming) please follow the specific instructions on the original packaging: normally 1 litre of detergent for every 10 litres of water (detergent percentage of about 10%), making sure to fill in first the detergent to obtain a better mixing.

Please be very careful with the detergent to be used, as some available in commerce will emanate highly toxic gases when heated above 100°C and thus taken to gaseous state. Do always check the MSDS datasheet of the product and consult your supplier.

In case of accidental contact with the detergent, strictly follow the instructions indicated on its packaging or in its MSDS.

2. INTRODUCTION

Dear Customer,

Congratulations for choosing this appliance.

With the aim of continuously improving and updating its range and offering increasingly innovative models, TECNOVAP has developed, designed and constructed **CARMEN PLUS**, a combined cleaning appliance which ties the steam power with the vacuuming force.

This product, with its steel body, is equipped with a reliable stainless-steel boiler with automatic refilling system which allows the production of a powerful and continuous steam flow (24 hours a day).

CARMEN PLUS is also equipped with a separate detergent tank for the injection of detergent at 90-160°C.

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

CARMEN PLUS is the ideal solution when it comes to cleaning and disinfecting. With the various available accessories, you can clean, disinfect and remove the dirt, while eliminating entirely even the bacterial flora from the most hidden spots.

Pay careful attention to the following instructions which will be helpful in making the best use of your **CARMEN PLUS**.

3. TECHNICAL FEATURES

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	750
	bar	7.5
Max. Steam Rated Flow	g/min	97
Max. Steam Rated Flow	Kg/h	5.9
Max temperature	°C	165
Kickback forces	N	< 20
Vibration hand-arm	m/s ²	< 2,5
Mass	kg	33

4. NOMENCLATURE

Carmen Plus

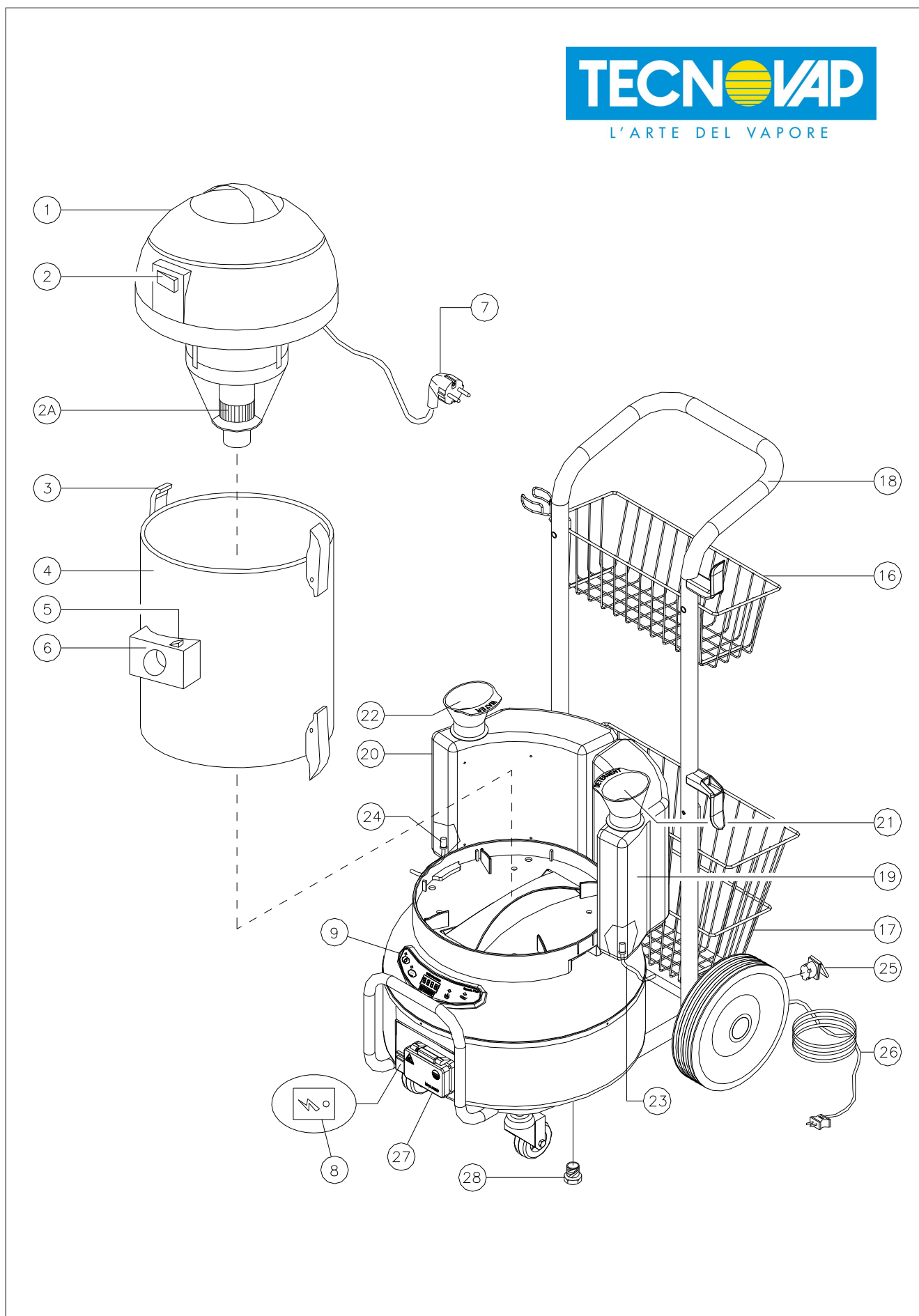
- 01) Vacuum cleaner motor head
- 02) Vacuum cleaner power switch
- 02A) Vacuum cleaner filter
- 03) Clamping hooks for vacuum drum
- 04) Vacuum drum (5.5 – 7.5 litres)
- 05) Locking latch vacuum outlet
- 06) Vacuum hose outlet
- 07) Vacuum cleaner power cord
- 08) Main power switch
- 09) Control panel
- 10) "Power / Standby" button
- 11) "Power / Standby" indicator
- 12) "Boiler" button
- 12A) "Detergent decrease regulation" button (-)
- 12B) "Detergent increase regulation" button (+)
- 13) "Boiler ON" indicator
- 14) "Steam Ready" indicator
- 15) "Low Water" indicator
- 16) Small basket for trolley
- 17) Big basket for trolley
- 18) Trolley handlebar
- 19) Detergent tank
- 20) Water tank
- 21) Detergent tank cap (yellow)
- 22) Water tank cap (blue)
- 23) Drain tube detergent tank
- 24) Drain tube water tank
- 25) Electric socket for vacuum cleaner
- 26) Power cord with plug
- 27) Steam outlet with cover
- 28) Boiler drain cap

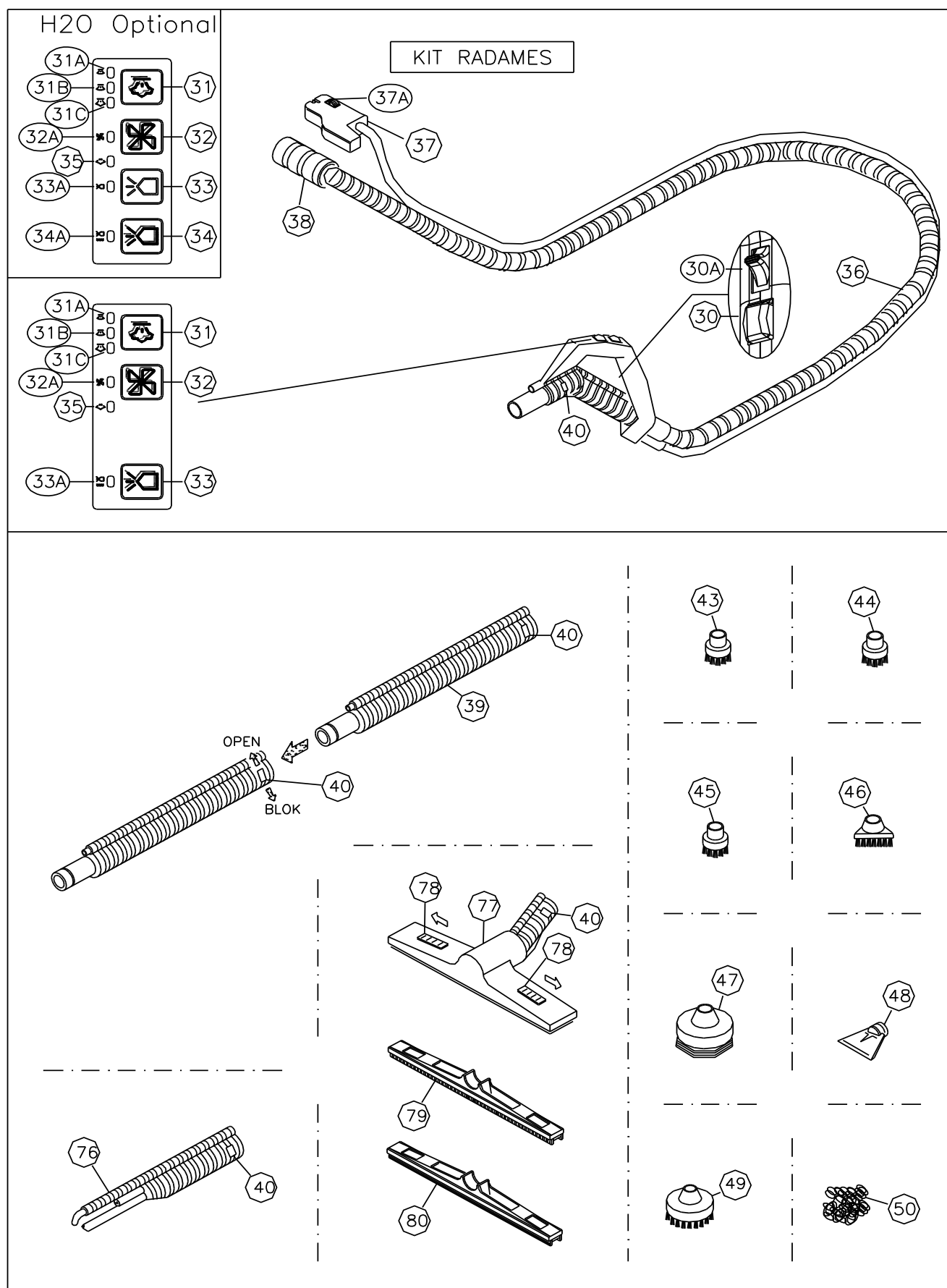
Kit July/Radames/Star

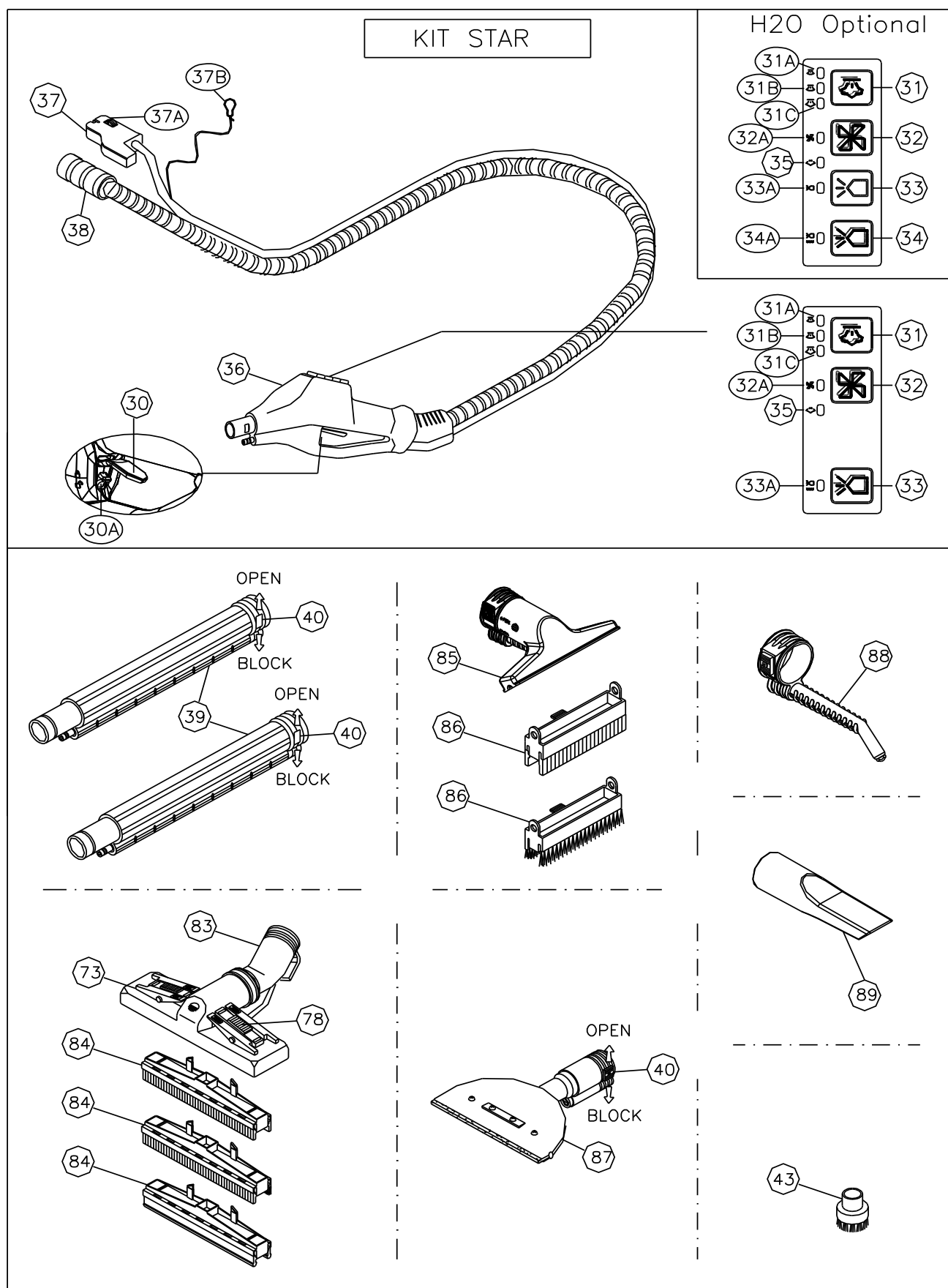
- 30) "Release" button/lever
- 30A) Blocking switch of the release button/lever
- 31) Steam command switch
- 31A, 31B, 31C) Steam indicator MIN/MED/MAX
- 32) "Vacuum" switch

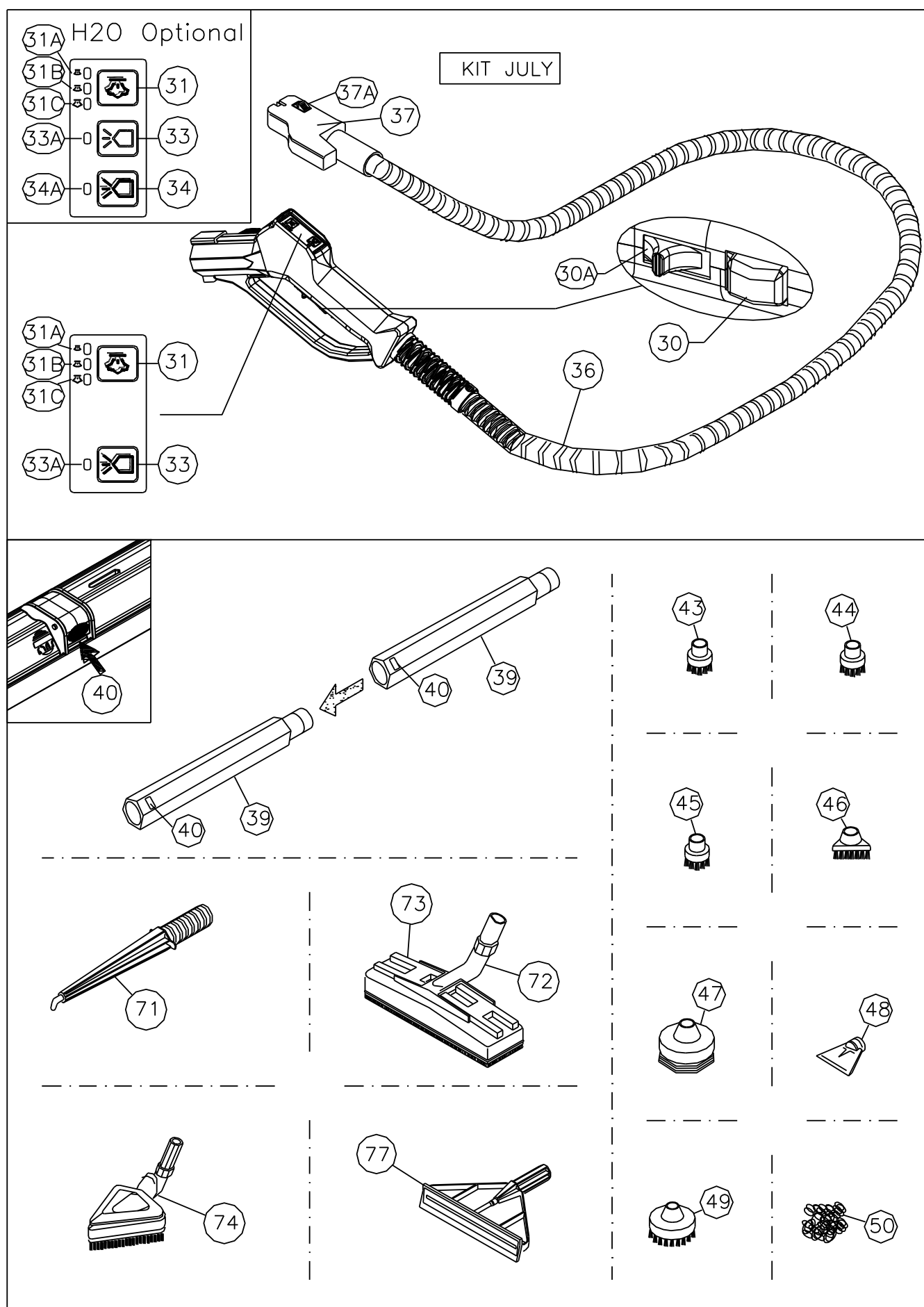
- 32A) "Vacuum" indicator
- 33) "Detergent" switch (intermittent)
- 33A) "Detergent" indicator
- 34) "Superheated Water" switch (optional)
- 34A) "Superheated Water" indicator
- 35) "Steam ready" indicator
- 36) Steam / steam & vacuum hose with handgrip
- 37) Steam plug
- 37A) Locking latch steam plug
- 37B) Steel rope
- 38) Vacuum plug
- 39) Extension tube
- 40) Locking latch
- 43) Nylon brush (Ø 28mm)
- 44) Brass brush (Ø 28mm)
- 45) Stainless steel brush (Ø 28mm)
- 46) Triangular brush
- 47) Steam plunger
- 48) Steam scraper
- 49) Nylon brush (Ø 60mm)
- 50) Stainless steel wool pad
- 71) Steam lance
- 72) Rectangular brush
- 73) Cloth holder
- 74) Triangular brush
- 76) Steam/vacuum lance
- 77) Floor tool for inserts
- 78) Locking latches for inserts
- 79) Insert squeegee/brush
- 80) Insert squeegee/squeegee
- 83) Floor tool for inserts
- 84) 300 mm inserts brush / squeegee / for carpet
- 85) Steam/vacuum nozzle
- 86) 145 mm inserts brush / squeegee
- 87) Steam/vacuum window cleaner 250 mm
- 88) Steam lance
- 89) Vacuum nozzle

5. TECHNICAL DRAWINGS

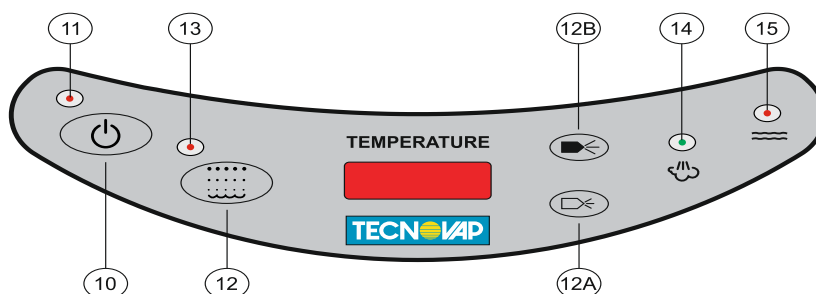








CONTROL PANEL FUNCTIONS



(10) “Power / Standby” button

Activates/disactivates the electrical part, the solenoid valves for steam, the refilling pump of the boiler.



(11) “Power / Standby” indicator

Indicating if the appliance is in power or standby mode.



(12) “Boiler” button

Activates/disactivates the heating elements and the solenoid valves for “superheated water”.



(12A) “Detergent decrease regulation” button -

Decreasing the detergent flow.



(12B) “Detergent increase regulation” button +

Increasing the detergent flow.



(13) “Boiler ON” indicator

Indicating that the boiler is switched on.



(14) “Steam Ready” indicator

Indicating that the steam generator is ready for use.



(15) “Low Water” indicator

Indicating lack of water in the water tank: blinking with simultaneous intermittent acoustic signal.

6. USING INSTRUCTIONS

- (a) After opening the packaging box, insert the main handlebar (18) onto the trolley base and block into place by inserting the big basket (17) into the bottom holes of the handlebar. Then insert the small basket (16) into the top holes of the handlebar.
- (b) Put the vacuum drum (4) as well as the vacuum motor head (1) into place and fix them with the provided clamping hooks (3).
- (c) Insert the plug (7) into the electric socket (25) located behind the machine and verify that the vacuum power switch (2) on the vacuum head (1) is in ON position.
- (d) Remove the tanks caps (21 and 22), fill in **softened water** (max. 3 liters) in the water tank (20) (blue funnel) and fill in the appropriately diluted detergent (max. 3 liters) in the detergent tank (19) (yellow funnel). **Please do fill the water tank exclusively with softened water, any other liquid could damage or make the equipment unsafe. It is also 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 (non-foaming, for suction equipment), please follow the specific instructions reported on original packaging: normally 1/3 litre detergent for every 3 litres water (detergent percentage of about 10%), making sure to fill in first the detergent to obtain a better mixing.
- (f) **Please be very careful with the detergent to be used, as some available in commerce will emanate highly toxic gases when heated above 100°C and thus taken to gaseous state. Do always check the MSDS datasheet of the product and consult your supplier.**
The detergent tank has to be filled only with detergent diluted in water, not with water only, unless you are using demineralized water.
The usage of water only (not demineralized water) in the detergent tank, instead of detergent, causes faults to the mixing circuit.
- (g) 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.
- (h) Switch the unit on by using the main power switch (8) and activate the “Power / Standby” (10) and the “Boiler” (12) buttons.

WARNING

Once the water tank is empty, the red “Low Water” indicator  (15) will switch on followed by an intermittent acoustic signal.

In this case refill the water tank (20) and reactivate the device by pressing the “Boiler” button  (12) to confirm (the blinking button will highlight the need of confirmation).

Using instructions of detergent:

The detergent release is activated by the “Detergent”  switch (33). This function has to be operated at intervals (i.e. 20 seconds ON, 20 seconds OFF).

Warning!! Do never exceed the indicated times as it would cause an overheating of the pump.

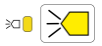
Detergent regulation:

It is possible to regulate the detergent flow by using the 2 following buttons:

- To decrease the detergent release press the button  (12A)
- To increase the detergent release press the button  (12B)

Refilling of detergent:

Once the detergent tank is empty, proceed as following:

1. Refill the detergent tank (19) with diluted detergent.
2. Activate the “Detergent” switch (33)  and activate the “Release” button/lever (30) until detergent comes out from the tool.
3. Detergent release has been triggered, the appliance is now ready for use again.

Pressure visualization

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

Hour counters

The device is equipped with 2 hour counters, one resettable by the user (partial hour counter) and one non resettable indicating the total working hours of the appliance.

To visualize the hour counters, switch the device OFF by using the “Power / Standby” button  (10). The wording “OFF” has to appear on the display.

Press the “Boiler” button  (12) to see the total working hours. On the display will appear the wording “C1” and subsequently the total working hours. Press again the “Boiler” button (12), the wording “C2” will appear on the display and the partial working hours.

Reset of the partial hour counter

Switch the device OFF by using the main power switch  (8) located in the front of machine, press both the “Power / Standby”  (10) and the “Boiler”  (12) buttons and keep them pressed, switch the device ON by using the main power switch  (8). The LED indicators on the control panel (9) will blink intermittently to indicate the resetting of the partial hour counter “C2”.

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 off the generator by pressing and holding for 10 seconds the "Power / Standby" button  (10). The display will show alternately T-ON or T-OFF depending on the previously selected setting.

Changing the boiler power 2,4KW-3,6KW (optional)

With the appliance switched off ("OFF" is visualized on the display) keep simultaneously pressing both detergent regulation buttons (12A) and  (12B)  during 10 seconds.

With each contemporary pressure of these buttons, the wordings "P3.6" and "P2.4" will appear alternatively on the display. By selecting "P.3.6" the boiler output will be of 3,6KW, while by selecting "P.2.4" it will be of 2,4KW.

6.1. OPERATING CARMEN PLUS WITH THE KIT RADAMES

Warning!!

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

Insert the vacuum plug (38) into the vacuum hose outlet (6) on the vacuum cleaner and the steam plug (37) into the steam outlet (27) on the steam generator. Push until the latches (5 and 37A) lock into place.

Activate the main power switch  (8), the "Power / Standby" button  (10) and the "Boiler" button  (12) for the production of steam and wait approx. 4 minutes until the indicator "Steam Ready" (14) lights up indicating the presence of steam inside the boiler. On the hand grip the "Steam Ready" indicator (35) will also light up.

Activate the steam command switch (31) on the handgrip to regulate the steam flow (with each switching ON of the device the steam flow is always disactivated and the LED on the handgrip will blink alternately to indicate the need of desired steam flow selection). After selection, the LED indicator will confirm the selected steam flow as follows: switch (31A)  MINIMUM steam, switch (31B):  MEDIUM steam, switch (31C):  MAXIMUM steam. Use the steam "Release" button/lever  (30) to activate steam flow.

With the blocking switch (30A) it is possible to block the "Release" button/lever' (30).

The "Vacuum" switch  (32) activates the vacuum cleaner and can be used simultaneously with steam.

The “Detergent” switch  (33) enables you to inject detergent to the steam, and has to be activated only for a few seconds at a time to avoid excess liquid with the steam. For models with the function of superheated water injection, please refer to what above indicated activating the “Superheated Water” switch  (34).

The activation of the vacuum, the detergent and the superheated water switches is highlighted on the handgrip with the referring indicators (32A, 33A, 34A)

Both “Detergent” and “Superheated 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 superheated water injection (optional) are possible only if at least one steam command switch is activated and if the “Steam Ready” indicator  (14) is on.

Warning!!

By activating the “Superheated Water” switch  (34) you will get a superheated water jet under pressure which, according to the model of the appliance, can reach a temperature of 180°C. Please be very careful that this switch is not pressed inadvertently and that the jet is never directed towards people or animals.

To combine steam cleaning with the injection of detergent or of superheated water and with vacuum suction, choose the best suited tool and mount it after having previously switched off the device:

The multi-purpose floor tool (77): with appropriate inserts (79 or 80). Inserts are locked into place by sliding the latches (78) towards inside (OPEN position), pressing them upwards, then sliding the latches towards outside (BLOCK position). Then attach the floor tool directly on the hand grip or on 1 or 2 extension tubes (39) as desired and fix everything together by pushing the locking latches (40) in BLOCK position. Remember that the indicators (32A, 33A, 34A) on the handgrip must be switched off or blinking (31A, 31B, 31C) until the end of this procedure.

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

To use this lance, please do follow the same above indicated instructions as for the floor tool.

Once the cleaning is finished it is recommended to vacuum approx. 3-5 litres of clean water to rinse the inside of the hose (36) and the suction conduits. Wash and dry all the used tools. Remove the vacuum drum (4) and, after emptying and rinsing it, let it dry before storing it away.

6.2. OPERATING CARMEN PLUS WITH THE KIT STAR

Warning!!

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

Insert the vacuum hose (38) into the vacuum hose outlet (6) on the vacuum cleaner and the steam plug (37) into the steam outlet (27) on the steam generator. Push until the latches (5 and 37A) lock into place.

Activate the main power switch  (8), the "Power / Standby" button  (10) and the "Boiler" button  (12) for the production of steam and wait approx. 4 minutes until the indicator "Steam Ready" (14) lights up indicating the presence of steam inside the boiler. On the hand grip the "Steam Ready" indicator (35) will also light up.

Activate the steam command switch (31) on the handgrip to regulate the steam flow (with each switching ON of the device the steam flow is always disactivated and the LED on the handgrip will blink alternately to indicate the need of desired steam flow selection). After selection, the LED indicator will confirm the selected steam flow as follows: switch (31A):  MINIMUM steam, switch (31B):  MEDIUM steam, switch (31C):  MAXIMUM steam. Use the steam "Release" button/lever  (30) to activate steam flow.

With the blocking switch (30A) it is possible to block the "Release" button/lever' (30).

The "Vacuum" switch  (32) activates the vacuum cleaner and can be used simultaneously with steam.

The "Detergent" switch  (33) enables you to inject detergent to the steam, and has to be activated only for a few seconds at a time to avoid excess liquid with the steam. For models with the function of superheated water injection, please refer to what above indicated activating the "Superheated Water" switch  (34).

The activation of the "Vacuum", the "Detergent" and the "Superheated Water" switches is highlighted on the handgrip with the referring indicators (32A, 33A, 34A)

Both "Detergent" and "Superheated 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 and/or superheated water injection (optional) are possible only if at least one steam command switch is activated and if the "Steam Ready" indicator  (14) is on.

Warning!!

By activating the "Superheated Water" switch  (34) you will get a superheated water jet under pressure which, according to the model of the appliance, can reach a temperature of 180°C. Please be very careful that this switch is not pressed inadvertently and that the jet is never directed towards people or animals.

To combine steam cleaning with the injection of detergent or of superheated water and with vacuum suction, choose the best suited tool and mount it after having previously switched off the device:

The multi-purpose floor tool (83): with appropriate inserts (84). Inserts are locked into place by sliding the latches (78) towards inside (OPEN position), pressing them upwards, then sliding the latches towards outside (BLOCK position). Then attach the floor tool directly on the hand grip or on 1 or 2 extension tubes (39) as desired and fix everything together by pushing the locking latches (40) in BLOCK position. Remember that the indicators (32A, 33A, 34A) on the handgrip must be switched off or blinking (31A, 31B, 31C) until the end of this procedure.

Steam lance/vacuum nozzle (88 and 89): to be used by itself or together with the small nylon brush (43).

To use this lance, please do follow the same above indicated instructions as for the floor tool.

Once the cleaning is finished it is recommended to vacuum approx. 3-5 litres of clean water to rinse the inside of the hose (36) and the suction conduits. Wash and dry all the used tools. Remove the vacuum drum (4) and, after emptying and rinsing it, let it dry before storing it away.

6.3. OPERATING CARMEN PLUS WITH THE KIT JULY

Warning!!

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

Insert the vacuum plug (38) into the vacuum hose outlet (6) on the vacuum cleaner and the steam plug (37) into the steam outlet (27) on the steam generator. Push until the latches (5 and 37A) lock into place.

Activate the main power switch  (8), the "Power / Standby" button  (10) and the "Boiler" button  (12) for the production of steam and wait approx. 4 minutes until the indicator "Steam Ready" (14) lights up indicating the presence of steam inside the boiler. On the hand grip the "Steam Ready" indicator (35) will also light up.

Activate the steam command switch (31) on the handgrip to regulate the steam flow (with each switching ON of the device the steam flow is always disactivated and the LED on the handgrip will blink alternately to indicate the need of desired steam flow selection). After selection, the LED indicator will confirm the selected steam flow as follows: switch (31A) :     MINIMUM steam, switch (31B):    MEDIUM steam, switch (31C):    MAXIMUM steam. Use the steam command switch   (30) to activate steam flow.

With the blocking switch (30A) it is possible to block the "Release" button/lever' (30).

The “Detergent” switch  (33) enables you to inject detergent to the steam, and has to be activated only for a few seconds at a time to avoid excess liquid with the steam.

For models with the function of superheated water injection, please refer to what above indicated activating the “Superheated Water” switch  (34).

The activation of the “Detergent” and the “Superheated Water” switches is highlighted on the handgrip of the steam hose with the referring indicators (33A, 34A).

Both “Detergent” and “Superheated 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 and/or superheated water injection (optional) are possible only if at least one steam command switch is activated and if the “Steam Ready” indicator  (14) is on.

Warning!!

By activating the “Superheated Water” switch  (34) you will get a superheated water jet under pressure which, according to the model of the appliance, can reach a temperature of 180°C. Please be very careful that this switch is not pressed inadvertently and that the jet is never directed towards people or animals.

To combine steam cleaning with the injection of detergent or of superheated water, choose the best suited tool and mount it after having previously switched off the device:

Attach the steam lance (71) directly onto the hose or on 1 or 2 extension tubes (39) as desired and lock into place by sliding the locking latches (40) first in OPEN position and then in BLOCK position.

Same mounting procedure for the rectangular brush (72) or the triangular brush (74) which can be covered with an absorbing cloth/sponge by using the provided gripper (73) to hold the cloth into place. This is above all recommended to clean delicate surfaces (i.e. precious wood) or vertical areas (i.e. tiles). In this case, the cloth is acting as “dirt extractor”.

7. MAINTENANCE

7.1 DISCHARGE OF BOILER SLUDGE AND SCALE DEPOSITS

The appliance is equipped with a maintenance warning system which informs the user of the need to clean the boiler. The system is programmed to signal this condition while showing the wording “CALC” alternately with the temperature on the display.

When this warning is displayed, the machine can in any case be used until the started cleaning operation has been completed.

WARNING: THE BOILER CLEANING ABSOLUTELY HAS TO BE CARRIED OUT WHEN COLD (i.e. GENERATOR SWITCHED OFF FOR AT LEAST 5 HOURS). THE APPLIANCE HAS TO BE DISCONNECTED FROM POWER SUPPLY SINCE AT LEAST 5 HOURS BEFORE INTERVENTION AND DURING THE WHOLE MAINTENANCE PERIOD.

It is essential to follow the above described procedure to make sure that there is no steam under pressure left inside the device.

Place a suitably sized basin under the appliance to collect the drainage water from the boiler, remove the drainage cap (28) underneath with the provided key, then wait for the boiler to be completely empty (once the tap was removed, the water outflow could be slow and difficult; in that case clean the drain tube of the boiler from incrustations so to get an unobstructed outflow).

Clean any dirt off the cap (28) with running water, check that the seal on the bottom of the cap is in good condition, replace if necessary (contact your supplier for spare parts).

Then screw the cap back on the machine and check carefully that it has been screwed on correctly.

To cancel the maintenance warning “CALC” on the display, insert the power cable (26) into the power socket and switch on the main power switch  (8). The wording “OFF” has to appear on the display. Press and keep the “Boiler” button  (12) pressed until the wording “CLR” will appear on the display.

The boiler cleaning is done. Insert the power cable (05) back into the power socket, refill entirely the water tank (20) with water and activate the “Boiler” switch  (12) to return to normal use of the appliance.

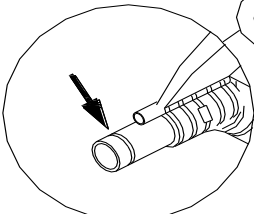
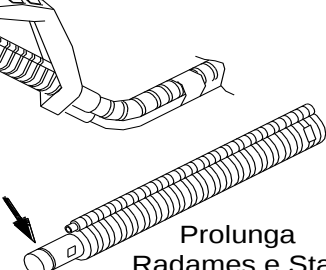
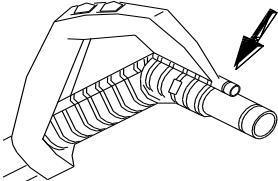
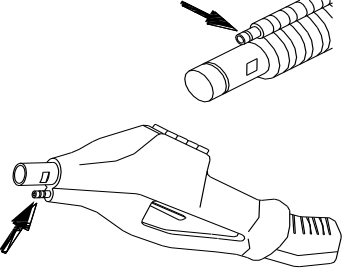
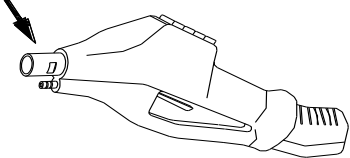
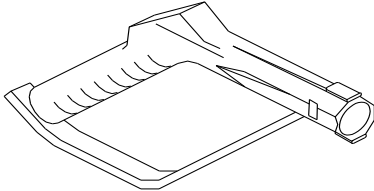
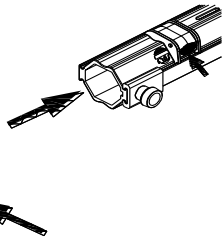
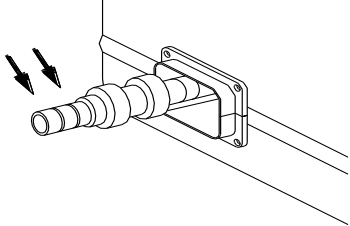
If the used water has a hardness of over 10 French degrees (depending on product use, > 2 hours/day) water should be treated with special water softeners, these devices can reduce the calcium carbonate content in the water to below 4 French degrees significantly improving the reliability of the generator. (For further details or to purchase a softener filter, please do contact the manufacturer).

7.2. MAINTENANCE VACUUM CLEANER

Verify occasionally the filter cleanliness (2A) and remove eventual deposits.

7.3. MAINTENANCE ACCESSORIES

Lubricate occasionally the joints of the extension tubes and accessories.

 PG5123 OR 29.82x2.62	Imp. Radames   Prolunga Radames e Star
 PG5116 OR 6.75x1.78	Imp. Radames e Star  
 PG53903 OR 26.7x1.78	Imp. Star 
 PG5142 OR 9.25x1.78	Imp. July  
 PG5142 OR 9.25x1.78	Generatore 

8. BEFORE CONTACTING THE SERVICE CENTER

INCONVENIENTE	CAUSA POSSIBILE	RIMEDIO
The generator does not produce steam and the vacuum cleaner does not work.	It could be a lack of power.	Make sure that the plug (26) is well inserted in the power socket 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) with diluted detergent.
Suction power is missing.	A) Lack of power to the vacuum cleaner. B) The vacuum hose 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: indicator (14) is off. B) Steam command switch  (31) is in OFF position. C) Steam "Release" button/lever (30) has not been activated.	A) Wait a few minutes. B) Switch ON the steam command switch  (31). C) Use the steam "Release" button/lever (30) to activate the steam flow.
Water 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, due to the temperature difference between steam and accessories, water condenses in the tubes and tools.	After a few minutes of use this problem will cease. If it continues, proceed to the boiler cleaning.
Noise inside the generator.	After cooling down (6-7 hours), an internal depression is created inside the boiler, which causes vibrations with each new ignition.	Wait for the pressure to be stabilized inside the boiler (about 2-3 minutes), the noise will disappears.
The accessories do not fit perfectly.	Dirt has deposited on the O-rings and the locking latches (40).	Clean and lubricate the joints of the accessories.

9. 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:)
Carmen Plus

Risulta conforme alle specifiche delle direttive
(conforms to the specifications of directives)
2014/35/UE 2014/30/UE 2011/65/UE 2006/42/EC

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 55014-1
EN55014-2
EN 61000-3-2
EN 61000-3-3

PESCANTINA – VERONA (ITALY) 1-06-2018


Franchini Giuseppe
(Managing Director)

Routine Maintenance

[illegible]

Non-Routine Maintenance

[illegible]

THE MANUFACTURER RESERVES THE RIGHT OF TECHNICAL AND STRUCTURAL MODIFICATIONS AS WELL AS IMPROVEMENTS WITHOUT PRIOR NOTICE.



Via dei Sassi 1/A, Pescantina (VR) Italy - Tel. +39 045 6767252

Fax. +39 045 6703631 – E-mail: tecnovap@tecnovap.it – www.tecnovap.it