



L'ARTE DEL VAPORE

EVO 304 BASE – EVO BLU BASE

USER INSTRUCTION



This manual is available in **digital format** on request;
kindly contact Info@tecnovap.it



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 TRANSPORT MUST BE COMMUNICATED AS SOON AS POSSIBLE TO YOUR OWN RETAILER.



ATTENTION!!
STEAM.... RISK OF BURNS



ATTENTION!!

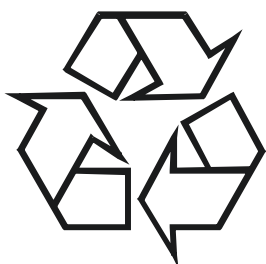


READ THE OPERATING MANUAL



DO NO DIRECT THE STEAM JET AGAINST PEOPLE, ANIMALS, ELECTRICAL DEVICES UNDER TENSION OR THE UNIT ITSELF.

ENVIRONMENT PROTECTION



ALL PACKAGING 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
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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.
- 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 one safety valve, 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 this component and as not to compromise the safety of the machine, it is recommended to provide to check the valve and to substitute it 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.**
- **THERMOSTATS.** The unit is equipped with 2 thermostats able to control the over temperature. In case the main control system becomes inefficient, TR1 and TR4 would intervene permanently by deactivating the boiler heating. If this occurs, disconnect the power plug and contact a service center.

- **MUD DRAIN FROM THE BOILER** The machine is equipped with a warning system “mud drain”. The writing CALC will appear on the display to indicate that it is necessary to proceed with the boiler cleaning (see chapter 8 maintenance).

The opening of the drain cap has to be strictly carried out when the machine has been switched off (plug not inserted) for at least 5 hours.

- **ATTENTION.** Do not use the appliance within the range of persons.
- **ATTENTION.** The steam 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, by removing the plug from the electrical socket, before effectuating the maintenance on user's responsibility.
- **ATTENTION.** Risk of explosion. Do not spray flammable liquids.
- This device is not intended to be used by children. Monitor the children so they cannot play with the machine.
- 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.
- This unit is not designed to operate at over 2000m above sea level.
- **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, accessories and couplings are important for the safety of the machine. Use only those 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.** Always switch off the general power switch when leaving the unit unattended.
- **ATTENTION.** Inadequate extension cords can be dangerous. If an extension cord is used it must be suitable for outdoor use and the connections must be dry and distant from the ground. It is recommended to use a reel able to keep the plug at a minimum distance of 60mm from the ground.
- **ATTENTION.** The user must not leave the iron (optional) unattended when it is connected to the power supply.
- The hand-arm vibration data, referred to this device, are not mentioned as they are below 2.5 m/s^2 .

3. TECHNICAL CHARACTERISTICS

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

Model		Evo Base	
Standard code		304 ER3206I	Blu ER32060
Boiler volume	L	4.0	
Water capacity	L	3.0	
Rated Voltage	V	230	
Current type	Hz	50 / 60	
Rated Power Boiler	kW	2.40	
Max Rated Power	kW	2.40	
Rated Steam Pressure	kPa	600	
	bar	6	
Permissible Steam Pressure	kPa	650	
	bar	6.5	
Max. Steam Rated Flow	L/min	0.064	
Max. Steam Rated Flow	Kg/h	3.8	
Max temperature	°C	165	
Mass	Kg	14	
Sound pressure level	LpA	< 70 dB(A)	

4. PREFACE

Dear Client,

We would like to congratulate you on your choice.

This appliance, together with its accessories, is designed to clean and sanitize surfaces and can be used in both domestic and commercial sector.

Please consider that the machine before leaving our factory has been tested and tweaked by qualified and specialized personnel in order to have the best performing results.

This model has a reliable stainless steel boiler which allows to obtain a powerful and steady steam flow.

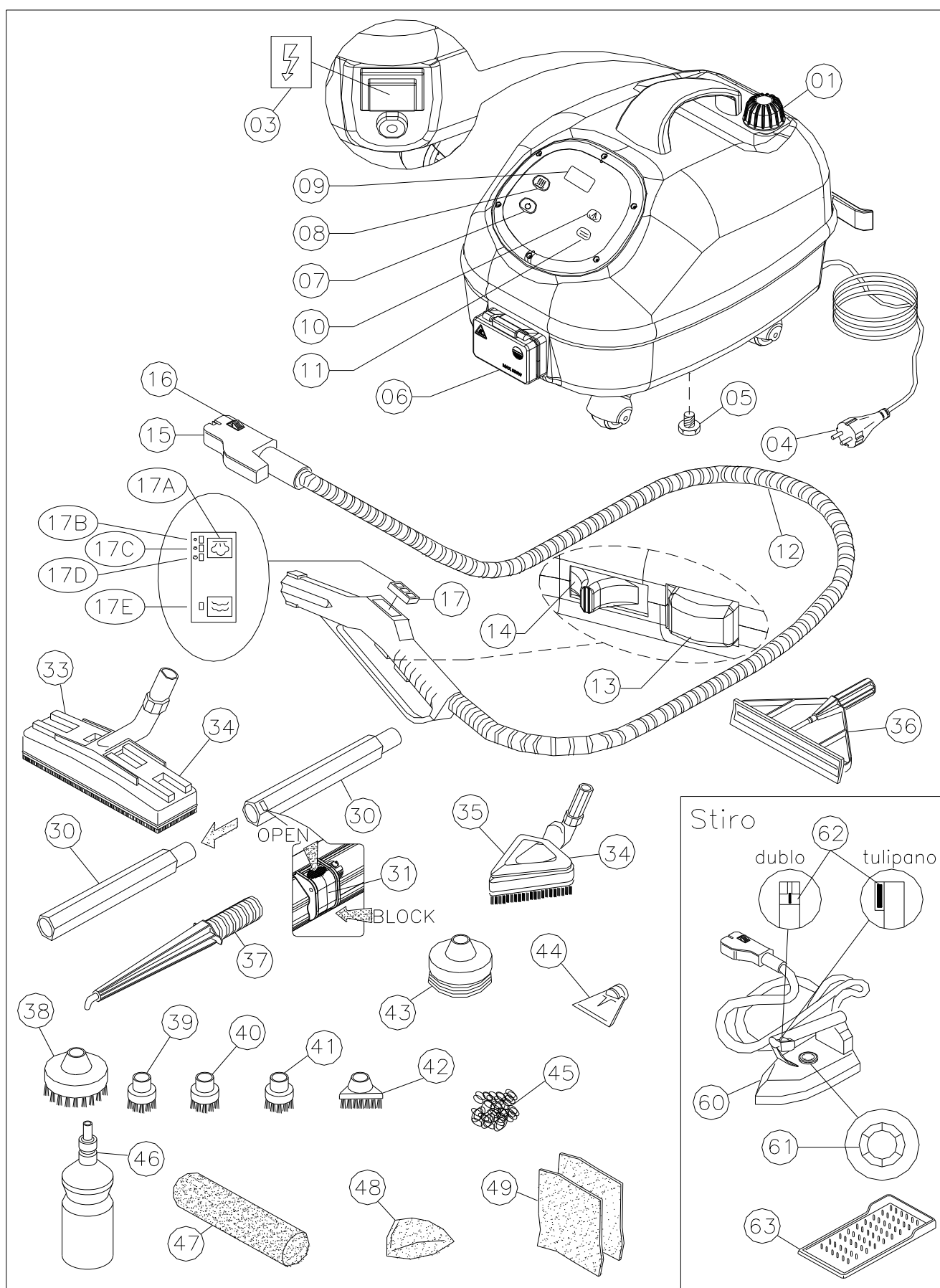
Evo 304 Base / Evo Blu Base is the ideal solution with regards to cleaning and disinfection. With the various available accessories it cleans, disinfects and removes dirt by also completely eliminating the bacterial flora hidden in the most concealed places.

Read carefully this instructions manual as to be able to fully exploit the specifications of your TECNOVAP steam generator and keep it with you in case of future clarifications.

5. NOMENCLATURE

- | | |
|---|---|
| 01) Boiler cap with safety valve | 30) Extension tubes |
| 03) General power switch | 31) Blocking hook |
| 04) Power cord with plug | 33) Rectangular brush |
| 05) Boiler drain cap | 34) Cloth holder |
| 06) Steam outlet / accessory connection | 35) Triangular brush |
| 07) Power button | 36) Window cleaner |
| 08) Boiler switch | 37) Steam lance |
| 09) Digital display | 38) Nylon brush Ø 60 |
| 10) "Steam ready" indicator light | 39) Small nylon brush Ø 28 |
| 11) "Low water" indicator light | 40) Small brass brush Ø 28 |
| | 41) Small st. steel brush Ø 28 |
| 12) Steam hose | 42) Small triangular brush |
| 13) Safety switch - steam outlet | 43) Steam plunger |
| 14) Locking lever for steam outlet | 44) Steam scraper |
| 15) Steam plug / remote control | 45) Steel wool pad |
| 16) Steam plug blocking hook | 46) Filling bottle |
| 17) Steam hose control panel | 47) Rectangular steam buffer (optional) |
| 17A) Steam selector (min-med-max) | 48) Triangular steam buffer (optional) |
| 17B) "Minimum steam" light | 49) Microfiber cloth |
| 17C) "Medium steam" light | |
| 17D) "Maximum steam" light | 60) Steam iron (optional) |
| 17E) "Low water" indicator light | 61) Thermostat |
| | 62) Steam command switch |
| | 63) Rubber rest pad for iron (optional) |

6. TECHNICAL DRAWINGS



FUNCTIONS CONTROL PANEL



7. OPERATING INSTRUCTIONS

- (a) Open the box and eventually block the unit on its cart (optional).
- (b) Open the boiler safety cap (01) and add maximum 3 liters of water, **it is recommended to use only softened water, all other liquids can damage the generator or make it unsafe.**
ATTENTION!! BURNING DANGER!!
- (c) Screw on the safety cap (1) until it completely closes. **NEVER unscrew it during usage.**
- (d) Check that there is an earthing system in the electric socket of your home. Insert the plug (04) into an electrical outlet, making sure that the voltage and the amperage correspond to those printed on the plate located under the machine.
- (e) Refilling of water:
Add water only when the machine has cooled down (switched off for at least 5 hours), or when the “Low water” indicators light on, as follow:
 - Remove the plug from the power supply, unscrew the cap a turn and wait until the steam generator has no pressure (all the steam has to come out).
 - Only after having verified the absence of pressure it is possible to completely unscrew it.
 - **Do NEVER completely unscrew the cap without having read the instructions, it may cause serious burns.**

- In case the refilling of water should be wrongly made without removing the plug from the power supply, confirm the occurred refilling by pressing the “boiler switch” (8).

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 the switch (07), then press and hold for some seconds the “boiler switch” (08). The display will show alternatively T.ON or T.OFF depending on the previously selected setting.

7.1 USAGE OF TOOLS

Insert the steam plug (15) in the steam outlet (06) placed on the machine.

Press well as the blocking hook (16) has to guarantee the fixing of the tool. Activate the general power switch (03), the switches (07) and (08), wait for about 5 minutes until the indicator light (10) switches on which indicates the presence of steam inside the boiler.

Once the indicator (10) lights up select the desired steam flow through the switch (17A) on the steam hose, (at each switching on of the unit, the steam selection is always deactivated; the led lights on the hose will blink alternatively to indicate the necessity to select the desired steam flow). Once the steam flow will be set, the relevant led light (17B, 17C, 17D) will remain on permanently (1 = minimum; 2 = medium; 3 = maximum); press the safety switch (13) to activate the steam flow.

It is possible to lock the safety switch through the lever (14).

To steam clean choose the appropriate accessory (rectangular (33) or triangular (35) brush, window cleaner (36), steam lance (37), etc.). Connect the extension tubes (30) and secure them in place by displacing the blocking hooks (31) to position “BLOCK”.

Wrap a cloth around the rectangular (33) or the triangular (35) brush and fix it with the respective cloth holders (34).

Attach the brush (or any other accessory) to the extension tube (30) and secure it in place by displacing the blocking hooks (31) to position “BLOCK”. If you want to use the small nylon brush (39) remember to first attach the steam lance (37). The steam lance may also be used without the small round brush especially to reach difficult areas.

7.2 PRACTICAL TIPS

STEAM LANCE

Direct the strong steam flow toward cracks, hidden areas, greasy objects, kitchen tops, carpets, carpeted floors, armchairs, sofas, tapestries etc. you will be able to remove easily and completely grime, grease and dirt in general. After this operation it will be indispensable to pass over the treated surfaces with a dry cloth.

IN THE KITCHEN

We suggest the use of the steam lance (37) with the various small brushes. These brushes help remove the most obstinate dirt from kitchen tops, hoods, fryers, etc.

It is possible to clean the dishwasher by spraying steam with the turbo lance (37). In case of heavy incrustation, we suggest to use the small nylon brush (39).

IN THE BATHROOM

For all areas which are difficult to reach we suggest applying to the steam hose (12) the steam lance (37) and a small brush (39). This accessory allows cleaning radiator crevices and all difficult points. In case of washbasin clogging, attach the steam plunger (43) to the steam lance (37) and direct the steam into the drain.

WARNING

WHEN USING THE SMALL BRUSHES ON PORCELAIN EXERT THE LEAST POSSIBLE PRESSURE.

WINDOW CLEANER (on glass or plastic surfaces)

We suggest using the window cleaner (36) by inserting it directly on the steam hose handgrip (12) and applying steam on the surface to be cleaned. Then use the squeegee blade mounted on the window cleaner to remove the humidity by using vertical movements to bring the dirt to the bottom of the surface. Use a cotton or microfiber cloth to remove the dirt from the bottom of the treated surface.

TRIANGULAR BRUSH

Suitable for the cleaning of armchairs, sofas and mattresses, we suggest to use the triangular brush with a cloth fastened with the respective clamps.

RECTANGULAR BRUSH (For tiled floors)

To carry out specific grout cleaning we suggest to use the steam lance (37) with a small brush (39 or 40 according to the need). This way it will be possible to get rid of the most difficult dirt and remove it from the grouts thanks to the pressure applied. To remove the dirt from the floor use the rectangular

brush (33) wrapped in a cloth, which will work as an “extractor” when fastened with the special clamps. We suggest applying steam also while picking up the dirt. To get a good result, work with surface areas not larger than 5sm at a time thus preventing dirt from drying and adhering on the floor again.

We suggest that you use the brush without the cloth when the dirt to be removed is considerable and when the dirt is not considerable, it is enough to work with the brush wrapped in a cloth.

When confronted with solid objects while cleaning the floor (i.e. chewing-gum) use the special scraper (44) which can be attached to the steam lance (37) and is able to remove stubborn objects without scratching the treated surface.

To remove wax from the floor use a cloth fastened to the rectangular brush (33). The steam helps loosen the wax so that its removal will be easier. To spread the wax on the floor use as mentioned above a clean cloth fastened onto the brush. Put the wax on the cloth, the heat of the steam will help spread the wax evenly so that its penetration will be easier. When the wax is dry proceed with normal polishing methods.

The power of steam substitutes any type of detergent.

WARNING

THE GENERATOR PRODUCES STEAM WITH A TEMPERATURE OVER 100°C. BEFORE STARTING THE CLEANING TASK WE SUGGEST TO TRY ON A SMALL AREA TO AVOID DAMAGES.

Marble and parquet floors

We suggest adding a steam buffer (47) to the rectangular brush (33) and then wrap it with a cotton cloth to avoid scratching the surface. To continue the cleaning it is necessary to change the cloth according to the quantity of dirt to be collected on the floor.

WARNING

THE STEAM SHOULD NOT BE IN DIRECT CONTACT WITH THIS KIND OF FLOOR FOR AN EXTENDED PERIOD OF TIME! SUCH SURFACES MAY BE DAMAGED IN CASE OF COMBINED USE OF EXCESSIVE HEAT, HUMIDITY AND BRISTLES. THEREFORE CARRY OUT THE CLEANING TASK IN THE SHORTEST POSSIBLE TIME.

Carpeted floors

Before carrying out the steam cleaning we suggest that you clean the carpeted area with a vacuum cleaner. Then use the rectangular (33) or the triangular (35) brush with a cloth wrapped around it. To continue with the cleaning the cloth should be replaced according to the quantity of dirt on the floor.

Car interiors

To clean car interiors (upholstery, carpets and seats) follow the cleaning instructions for the carpeted floors.

Steam iron

Mod. Tulipano:

To iron with steam the iron thermostat (61) should be positioned between the symbol “••” (wool) and the symbol “•••” (cotton). Wait a few minutes as to allow the iron to reach its ideal temperature. The steam flow from the iron is obtained by activating at short intervals the red switch (62) on the handgrip of the iron.

For dry ironing do not press the red switch (62) and switch off the button (08) on the control panel. In this case position the thermostat according to the type of cloth being ironed. If the power save mode is activated (chapter 7) the device will switch off after 1 hour independently from the usage of the iron.

Mod. Dublo:

To iron with steam the iron thermosta (61) should be positioned between the symbol “••” (wool) and the symbol “•••” (cotton) indipendently from the type of cloth being ironed. Wait a few minutes to allow the iron to reach its ideal temperature then press the red button (62) on the handgrip of the iron to activate the steam flow. To have a constant steam flow press and move the blocking switch on the handgrip of the iron. To release the blocking move the button up.

For dry ironing switch the “boiler switch” off (08) and position the thermostat according to the type of cloth being ironed. If the power save mode is activated (chapter 7) the device will switch off after 1 hour independently from the usage of the iron.

To remove the shine from clothes, brighten up wool tissue, curtains etc. use the iron vertically, directing the steam flow onto the object.

8. MAINTENANCE

WARNING

SWITCH OFF THE ELECTRIC SUPPLY (04) BEFORE PROCEEDING WITH THE USER'S MAINTENANCE. IT IS RECOMMENDED TO CLEAN THE BOILER ONLY WHEN THE MACHINE HAS COOLED DOWN (SWITCHED OFF FOR AT LEAST 5 HOURS).

8.1 MAINTENANCE OF THE STEAM GENERATOR

ELIMINATION OF SCALE DEPOSITS FROM THE BOILER

The unit is equipped with a maintenance warning which is working by writing **CALC** on the display alternatively with the visualized temperature.

When the sign lights up it is possible to finish the cleaning task, then disconnect the power plug and **let the appliance cool down for at least 5 hours.**

It is essential to follow the above procedure to make sure that steam under pressure is no longer present inside the machine. (we suggest to proceed with the boiler cleaning prior to the next usage of the machine provided that minimum 5 hours have been passed after having disconnected the power plug.)

Put a basin under the unit and remove the underlying boiler drain cap (05), wait until the boiler is completely emptied and insert the cap again only once you have removed eventual deposits from it with running water as they may cause water leakages during the usage.

The cleaning process is finalized, insert again the power cord (04) into the electric power outlet and switch the unit on by activating the general switch (03) and the buttons (07) and (08). We recommend to activate also the switch (17A) on the steam hose and to press the safety switch (13) to let out the air from the empty boiler.

Restore maintenance intervals **CALC**

Turn on the appliance by activating the switch (03) and the button (07), then again press the button (07) and keep it pressed for approx. 10 seconds, the writing **CALC** will disappear from the display and will only appear again for the next maintenance intervention.

The maintenance of the boiler is finished, proceed following the instruction described in chapter 7.

8.2. HOUR METERS

The device is equipped with two hour meters, one resettable by the user and one non resettable. To visualize the hours, turn off the unit by pressing the button (07) and subsequently press the button (08); every time you press this button you can read the respective hour meter 1 and hour meter 2.

Resetting of the hour meter 2

Turn off the unit with the general power switch (03).

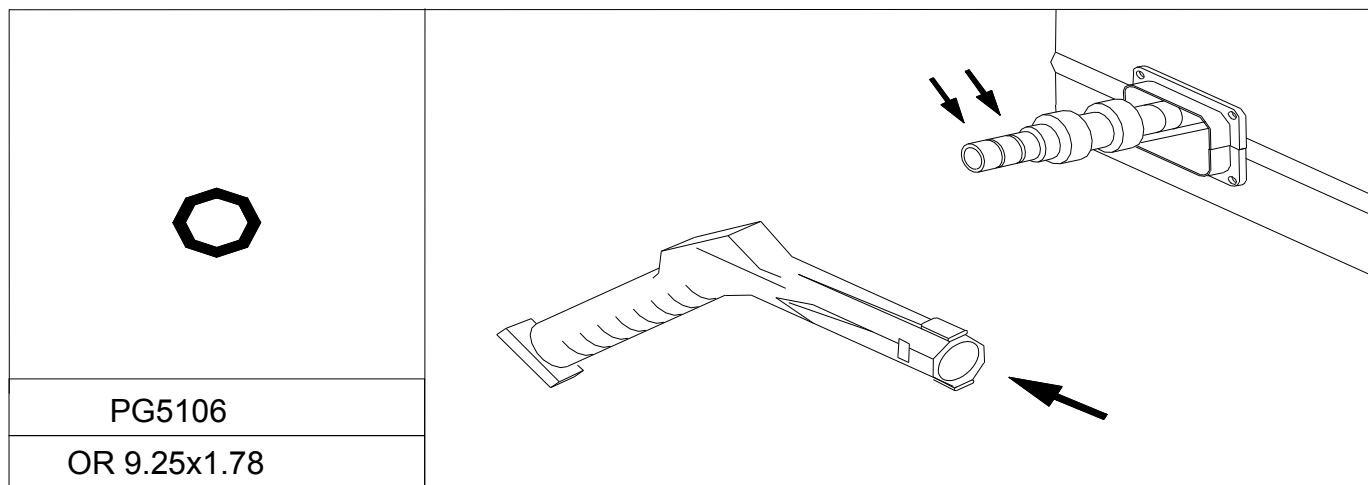
Press and keep pressed the buttons (07) and (08), while you keep them pressed switch on the machine again by activating the general power switch (03).

8.3. PRESSURE GAUGE

With the unit being turned on press and keep pressed the button (07), 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 value of the temperature in °C will appear again.

8.4. MAINTENANCE OF THE ACCESSORIES

Grease occasionally joints on the accessories and hose extensions.



9. BEFORE REFERRING TO THE TECHNICAL SERVICE

PROBLEM	POSSIBLE CAUSE	REMEDY
The machine does not produce steam.	Lack of power.	Make sure that the plug (04) is well inserted and that the main switch of the building is activated.
The red "low water" indicator (11) lights up.	All the water from the boiler (01) has been consumed.	Refill the boiler (01) with clean water.
Water leaks through the connections of the accessories.	Check the wear of the o-rings.	Clean and lubricate the o-rings with grease. If necessary, replace with the spares supplied.
Steam does not come out.	A) Boiler has not reached yet the operational pressure (green light (10) is off). B) Boiler switch (08) has not been activated. C) Safety switch (13) has not been activated.	A) Wait a few minutes. B) Activate the "boiler switch" (08). C) Press the safety switch (13) to activate the steam flow.
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 disappear. If it continues, proceed with the boiler cleaning.
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 until the pressure stabilizes (about 2-3 minutes), the noise will disappear.
Steam leaks from the valve cap (01).	The valve cap (01) is not correctly screwed. The rubber seal on the valve cap is damaged.	Screw on the safety cap correctly. Substitute the seal.
Accessories do not fit perfectly.	There is dirt build up in the joints and the connections.	Clean and lubricate the joints of the accessories.

10. DECLARATION OF CONFORMITY



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

TECNOVAP S.R.L. con la presente dichiara che:
le macchine per pulizia a vapore modello:
(Certifies that the steam cleaning machine model:)
Evo Cod: ER3206I, ER32060

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

PESCANTINA – VERONA (ITALY) 01-08-2016


Franchini Giuseppe
(Managing Director)

Extraordinary maintenance procedures

[illegible]

NOTES

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