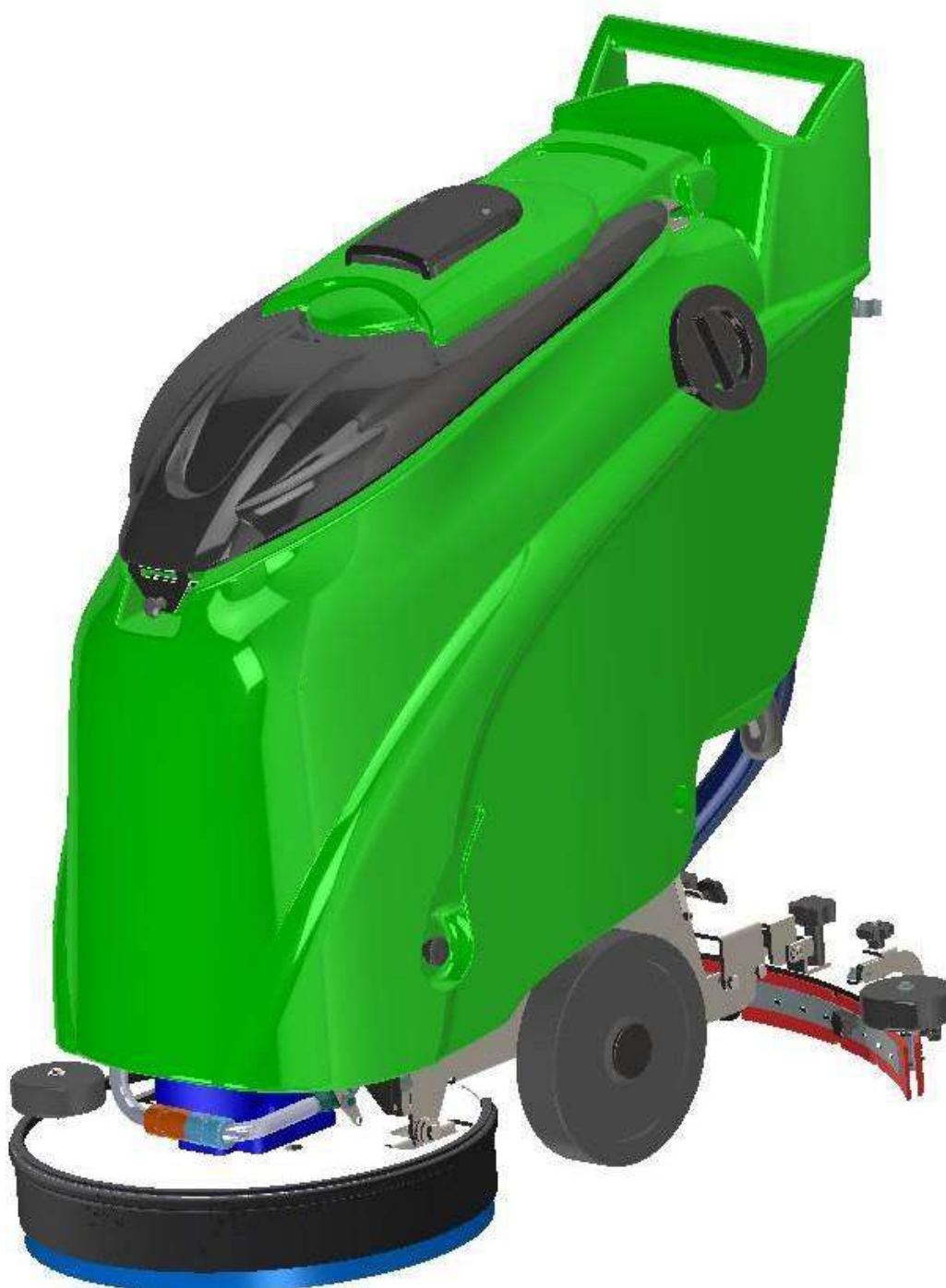


GAIA 50M



1 – INDEX

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1	INDEX	7.13	WORKING METHOD
2	GENERAL INFORMATION	7.13.1	PREPARATION AND WARNINGS
2.1	PURPOSE OF THE MANUAL	7.13.2	CONTROL OF THE STATE OF CHARGE BATTERY
2.2	TERMINOLOGY AND SYMBOLS	7.13.3	DIRECT CARE OR FOR SURFACE SLIGHTLY DIRTY
2.3	PRODUCT IDENTIFICATION	7.13.4	WASHING OR INDIRECT OR FOR VERY DIRTY SURFACES
2.4	OWN USE	7.13.5	OPERATIONS AFTER WASHING
2.5	TECHNICAL CHANGES	7.14	SPECIFIC RULES FOR USE OF MODEL WITH CABLE
3	SAFETY INFORMATION	8	INFORMATION SERVICE
3.1	KEY RECOMMENDATIONS	8.1	TANKS
3.2	TECHNICAL ASSISTANCE	8.2	FILTER THE SOLUTION CLEANER
3.3	DESTRUCTION OF THE MACHINE	8.3	HOSE
3.4	INFORMATION ON THE VIBRATIONS	8.4	SQUEEGEE
4	INFORMATION HANDLING	8.5	ACCESSORIES
4.1	LIFTING AND TRANSPORT PACKING	8.6	MACHINE BODY
4.2	CONTROL ON DELIVERY	8.7	BATTERIES
4.3	UNPACKING	8.8	THERMAL CUTOFF
4.4	DIMENSIONS AND WEIGHT OF PACKAGE	8.9	FREQUENCY
5	TECHNICAL INFORMATION	8.9.1	DAILY OPERATIONS
5.1	SYMBOLS USED ON THE MACHINE	8.9.2	OPERATIONS WEEKLY
5.2	STRUCTURE AND FUNCTION	8.9.3	OPERATIONS AT INTERVALS EXTENDED
5.3	DIMENSIONS	8.10	RECOMMENDED SPARE PARTS
6	INSTALLATION INFORMATION	9	INFORMATION ON THE CONTROL OF EXERCISE
6.1	BATTERY INSTALLATION	9.1	THE MACHINE DOES NOT WORK
6.1.1	BATTERY CONNECTION	9.2	DOES NOT TURN THE BRUSH
6.2	CONFIGURATION CHARGER	9.3	NOT DOWN OR TOO LITTLE FALLS CLEANING SOLUTION
7	USE OF INFORMATION	9.4	MISSING INTAKE
7.1	PREPARATION MACHINE	9.5	LITTLE INTAKE
7.2	BATTERY CHARGING	9.6	MOTOR BRUSH OR THE ENGINE INTAKE NOT HAVE STOPPED
7.3	INSTALLATION AND REMOVAL OF BRUSH	9.7	THE SQUEEGEE DOES NOT CLEAN OR NOT DRY WELL
7.4	MOVING THE MACHINE	9.8	THE CHARGER DOES NOT WORK
7.5	SQUEEGEE ASSEMBLY	9.9	THE BATTERY IS NOT CHARGING OR NOT HOLD CHARGE
7.6	REMOVAL SQUEEGEE	10	SMALTIMENTO DELLA MACCHINA
7.7	BLADE REPLACEMENT RUBBER SQUEEGEE		
7.8	ADJUSTING SQUEEGEE		
7.9	FILLING AND DISCHARGE SOLUTION TANK		
7.10	DRAIN TANK RECOVERY		
7.11	ADJUSTING THE QUANTITY OF THE CLEANING SOLUTION		
7.12	DRIVING THE MACHINE		

2 - GENERAL INFORMATION



2.1 PURPOSE OF THE MANUAL

To facilitate consultation and re-reading of the topics of interest, refer to the index at the beginning. This manual has been prepared by the manufacturer and is an integral part of the product, and as such should be carefully preserved for the entire life of the machine until the demolition. The customer must ensure that operators have read or know the contents of this manual in order to follow the instructions described here. Only the constant observance of the instructions in this manual allows you to get the best results in terms of safety, performance, efficiency and durability of the product is now in your possession.

Failure to follow these rules correctly, can potentially cause damage to man, the machine, the surface washed and the environment that in no case may be borne by the manufacturer.

2.2 TERMINOLOGY AND SYMBOLS

For greater clarity and to highlight adequately the various aspects of the instructions, were used terms and symbols defined below and illustrated:

- X Machine. This definition replaces the trade name referenced in this manual.
- X Operator. You are the people who normally use the machine, they know the aspects of functioning, but do not have specific technical expertise to perform operations that require it.
- X Technician. Are the people who have the experience, technical skills, knowledge of laws and regulations that allow you to perform any kind of intervention required, with the ability to recognize and avoid possible dangers during installation, use, handling and maintenance of the machine.
- X (ⓘ) INDICATION SYMBOL. Information are of particular importance in order to prevent machine breakdown.
- X (!) WARNING SYMBOL. Information are extremely important in order to avoid serious damage to the machine and the environment in which it operates.
- X (⚠) DANGER SYMBOL. Are vital information in order to avoid serious (or extreme) consequences to the health of people and the integrity of the product and the environment in which it operates.

2.3 PRODUCT IDENTIFICATION

Make sure that the machine is equipped with a label stating the serial number and the CE mark. Otherwise notify your dealer immediately.

The type label contains the following information:

- ✓ manufacturer's identification
- ✓ brand CE
- ✓ model code
- ✓ serial number
- ✓ total rating
- ✓ year of manufacture

2.4 OWN USE

The operator conducts the machine manually. The machine in question is a scrubbing machine: must be used for flushing and aspiration of liquids of floor plans, rigid, horizontal, smooth or moderately rough, uniform and free from encumbrances in both civil and industrial environments. Any other use is prohibited, please refer carefully to the safety information in this manual. The washer-dryer spreads on the surface to be treated a quantity of solution (adjustable appropriately) of water and detergent while the brushes perform the removal of dirt on the ground.

The aspiration system of which the machine is fitted, through a squeegee to the ground, allows to dry completely in a single pass liquids and dirt just removed from the front brushes. Associating suitably a detergent for cleaning with various types of brushes (or abrasive discs) available, the machine is able to adapt to all kinds of combinations of floor and dirty.

2.5 TECHNICAL CHANGES

This machine was designed and built in accordance with the basic requirements for the safety and health of the user introduced by European directives, for this has been the CE mark on the marking label.

The European directives for which the device is compliant are mentioned in the Certificate of Conformity, supplied with this manual. This certificate will be invalid if the device suffers any kind of change is not previously agreed with the manufacturer.

The manufacturer reserves the right to change, without notice, product technical modifications designed to update or improve technically. For this reason, some details of the machine in your possession may be different from the information on commercial catalogs or by the same representations contained in this booklet, without, therefore, compromised security and the information provided in this regard.

3 - SAFETY INFORMATION

3.1 KEY RECOMMENDATIONS

- () Carefully read the "operating instructions manual" before proceeding with the start-up, operation, maintenance, routine maintenance, or any other work on the machine.
- (!) Comply strictly with all requirements must in this manual and those related to batteries and chargers (with particular attention to the caution and danger). The manufacturer declines all responsibility for damage to persons or property resulting from the default of those requirements.
- () Before using the machine, make sure that each component is properly positioned.
- (!) The machine must only be used by personnel who have been trained in the use, which has demonstrated its capacity and it has been expressly instructed to use. To prevent unauthorized use, keep the machine at rest in a place not accessible to outsiders and remove the key from the control panel.
- (!) The use of the machine is prohibited to minors.
- (!) Do not allocate this machine uses other than those expressly provided for. Evaluate the type of building in which they work and scrupulous respect mind the rules and safety conditions existing.

- () Do not use the machine in areas not adequately illuminated, in an explosive atmosphere, in the presence of dirt harmful to health (dust, gases, etc.), Roads and public passages and outdoors in general.
- (!) The temperature range required for the use of the machine is between +4 ° C and +35 ° C; deposit the machine at rest in a dry, non-corrosive, where the temperature is between +10 ° C and +50 ° C . The moisture field intended for the machine in any condition has is between 30% and 95%.

- (⚠) Do not use or suck up liquids, gases, dry powders, acids and solvents (eg, paint thinner, acetone, etc.), also diluted, flammable or explosive substances (eg gasoline, fuel oil, etc.). Do not suck anything that is burning or incandescent.
- (!) Do not operate this machine on slopes or ramps exceeding 2%. In the case of small gradients are not using the machine in a transversal way, manovrandola cautiously and not doing inversions. In the carriage on ramps or inclines higher, use extreme care to avoid tipping and / or uncontrolled acceleration. Use only the lowest speed! Dealing with ramps and / or steps exclusively with brush head and squeegee raised.
- (!) Never park the machine on slopes.
- (🔌) The machine should never be left unattended with the key inserted and connected, leave it until you have unplugged and turned off the key, it secured against accidental movement and disconnected from any power electricity.
- (⚠) Use pay attention to some other person, in particular children present in the environment in which it operates.
- (!) Do not use the machine for the transport of persons / things or pulling things. Do not tow machine.
- (🔌) Do not use the machine as a counter support for any weight and for any reason. Do not block the vents and heat dissipation.
- (!) Do not remove, alter, and evading security devices.
- (!) Always use personal protection devices for operator safety (both when using the maintenance of the machine): apron or protective suit, waterproof and non-slip shoes, rubber gloves, goggles and ear protection, face masks for protection by tract. Before starting to work, remove jewelry, watches, ties and other potentially capable of causing serious injury.
- (!) Do not put your hands between the moving parts.
- (🔌) Do not use cleaning agents other than those provided and follow the instructions given in the corresponding safety data sheets. We recommend to store the detergents in a place inaccessible to children and also, in case of contact with eyes, rinse immediately with plenty of water and, in case of ingestion, consult a doctor immediately. Make sure that the power outlets to power the charger is connected to a suitable ground network and are protected by circuit breakers and differential.
- (⚠) Do not place tools on batteries: danger of short circuit and explosion.
- (⚠) Acid batteries for use, strictly observe the safety instructions. In the presence of magnetic fields particularly high, to assess the effect on the electronic control. Never wash the machine with water jets.
- (🔌) The recovered fluids contain detergents, disinfectants, water, organic and inorganic material recovered during phases of work: they must be disposed of according to applicable law.
- (🔌) Before each use, inspect the machine, in particular, check that the battery charging cable and connector are in good condition and safe to operate. If they are not in perfect condition, do not use the machine for any reason before the repair by an authorized technical specialist.

- (🔌) Stop the engine immediately if you notice the suction foam or liquid spills.
- (🔌) Do not use the machine on textile floor coverings such as carpets, rugs, etc.. The use of waxes, foaming detergents or dispersions along the tubes, can cause serious problems to the machine or obstruct the same pipes.
- (!) In case of failure and / or malfunction of the machine, turn off (by unplugging it from the mains or from batteries) do not touch. Contact a service center of the manufacturer.

3.2 TECHNICAL ASSISTANCE

- (⚠) All maintenance or replacement of accessories must be carried out in a well lit and only after disconnecting the machine from the power supply by disconnecting the battery or plug in the power cord.

- (🔧) To perform any kind of work on the electrical and all the operations of maintenance and repair (particularly those not specifically described in this manual) only by specialists with experience in the field and in the relevant safety standards.
- (🔧) It is allowed only the use of accessories and original spare parts supplied by the manufacturer only, as only these offer the certainty that the device can operate safely and without any problems. Do not use disassembled parts from other machines or other kit as spare parts.
- (🔧) Do not wait until the components are worn out, replace a component at the right time means a better functioning of the machine and at the same time saving due to the fact that you avoid damage.

The manufacturer provides its customers its Technical Assistance Service to resolve any issues regarding the use and maintenance of the machine.

Any requests for assistance should be made after careful analysis of the drawbacks and their causes.

In the case of written requests, please specify in the message as follows:

- X Machine Model
- X Serial Number
- X The details of the defects found
- X The checks carried out
- X Adjustments made and their effects
- X Any other information deemed useful

Direct requests to the:

"AUTHORIZED SERVICE NETWORK"

3.3 DESTRUCTION OF THE MACHINE

If you decide not to use the machine, it is recommended to remove the batteries and dispose of them in an environmentally compatible in accordance with the European Standard 91/157/EEC or be deposited in an authorized depot.

For the disposal of the machine act according to the laws in force in the place of use:

- ✓ the machine must be disconnected from the network, emptied of liquid and clean.
- ✓ the machine should be broken down into groups of homogeneous materials (plastics according to what is indicated by the symbol of recycling, metals, rubber, packaging). In the case of components containing different materials, contact relevant bodies, each homogeneous group should be disposed of in accordance with law in the field of recycling.

It is also recommended render harmless those parts of the machine susceptible to danger, especially for children.



As the owner of an electrical or electronic equipment, the law (in accordance with EU directive 2002/96/EC of 27 January 2003 on waste electrical and electronic equipment and the national legislation of EU Member States that have implemented the directive) Forbids her to dispose of this product or its accessories electrical / electronic as household waste not separated. You must instead make use of the provided collection points free of charge.

3.4 INFORMATION ON THE VIBRATIONS

The test conditions were performed in which the vibration pads are compliant with the requirements of the European directives and standards in force and are described in detail in a technical report held by the Manufacturer.

The daily value (8 hours) of exposure to vibration transmitted to the hand - arm is less than 2.5 m/s².

This value can be used only as a comparison value and is not suitable for the determination of the actual levels that depend on the conditions and environment of use.

4 - INFORMATION HANDLING

4.1 LIFTING AND HANDLING PACKAGING

(!) During all lifting operations or transportation, be sure to firmly anchored in the packed machine in order to avoid accidental tipping over or falling.

The operations of loading and unloading from trucks, must be carried out with adequate lighting.

The packed machine must be displaced with appropriate means, taking care not to damage / hurt in the packaging anywhere, turn it upside down, and use the necessary care nell'appoggiarlo to the ground.

4.2 CONTROL ON DELIVERY

(!) Upon delivery of the goods (car, battery or charger) to the carrier, carefully monitor the integrity of the packaging and its contents. If the latter had suffered damage, point it out to the carrier, and reserve the right, in writing (select the document, the word "reserve") to submit the application for compensation before accepting the goods.

4.3 UNPACKING

(!) Wear protective clothing and use appropriate tools to limit the risk of injury.

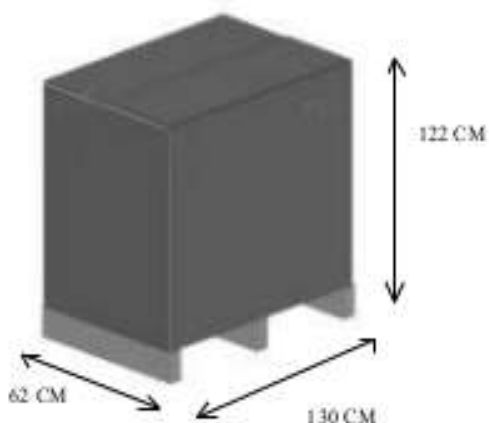
The machine is packaged with cardboard casing in place above a wooden pallet; for unpacking proceed according to the following sequence:

- X Cut and remove the straps with plastic scissors or wire cutter.
- X Remove by pulling out from the top, wrap cardboard.
- X Remove the envelopes inside and check the contents (use and maintenance manual, charger connector).
- X Remove the metal brackets or plastic that holds fix the machine to the pallet.
- X Freeing of the box brush and squeegee.
- X Lower the machine (pushing back) from the pallet using an inclined plane firmly to the floor and the pallet.

It is suggested to keep all the packaging elements, as they may come in handy to protect the machine and accessories in a subsequent transport to another place or at authorized service centers.

Contrary, the packaging must be disposed of in accordance with the laws in force.

4.4 DIMENSIONS AND WEIGHT OF PACKAGE



Volume: 0,98 m³

weight:

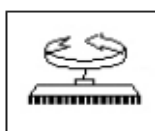
Type "GAIA 45/50 C" 81 kg

Type "GAIA 45/50 BM"
complete with battery 140 kg

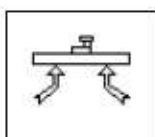
Type "GAIA 45/50 BM"
without battery 82 kg

5 - TECHNICAL INFORMATION

5.1 SYMBOLS USED ON THE MACHINE



SWITCH BRUSH MOTOR



SWITCH VACUUM MOTOR



OPENING CONTROL VALVE

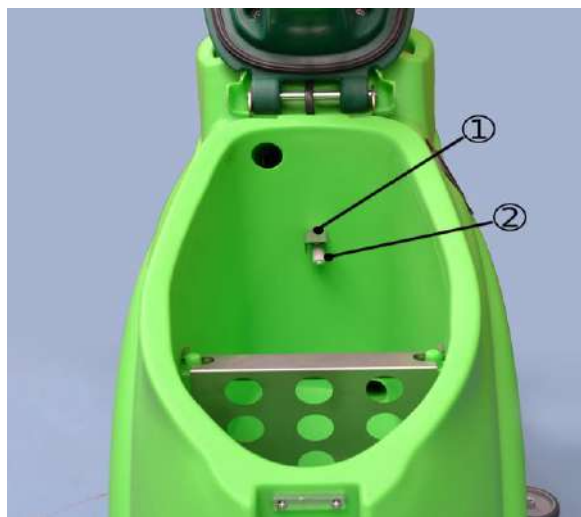


LIFTING COMMAND SQUEEGEE

5.2 STRUCTURE AND FUNCTION



- ① HANDLEBAR
- ② FILLER PLUG
- ③ SOLUTION TANK-RECOVERY
- ④ SQUEEGEE
- ⑤ FILTER
- ⑥ DISH WASHING
- ⑦ SOLENOID
- ⑧ COMPARTMENT COVER INTAKE



- ① PROTECTION FLOAT
- ② FLOAT WATER RECOVERY

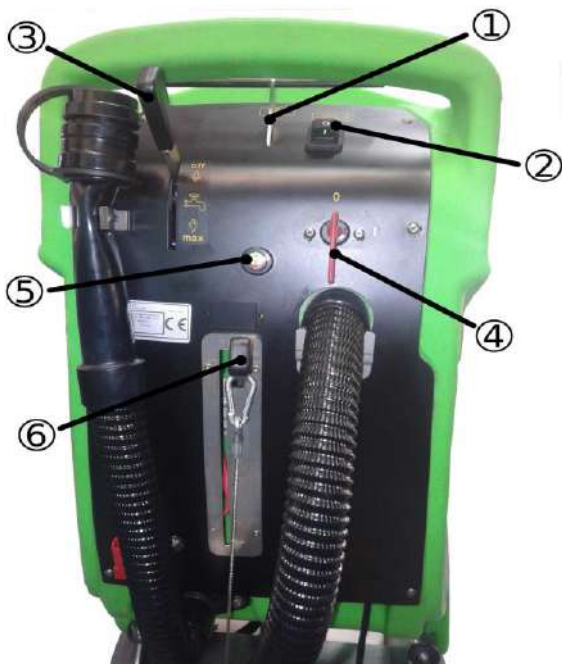


- ① INTAKE FILTER
- ② CONTAINMENT CAP FILTER
- ③ CONTAINMENT FILTER FLANGE



VERSION BATTERY SWITCHES

- ① SWITCH CONTROL BRUSH
- ② VACUUM SWITCH
- ③ MAIN SWITCH
- ④ INDICATOR BATTERY CHARGER
- ⑤ ADJUSTMENT LEVER WATER
- ⑥ LIFTING LEVER SQUEEGEE



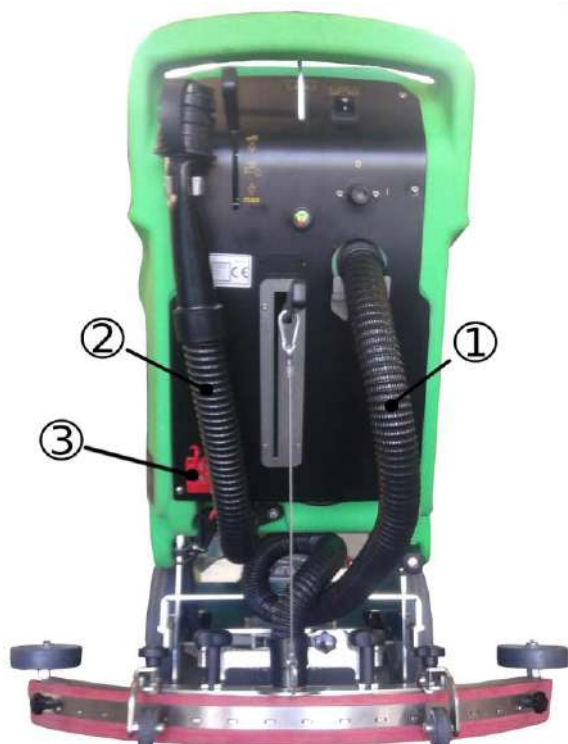
BATTERY VERSION CONTROL LEVER

- ① BRUSH CONTROL LEVER
- ② VACUUM SWITCH
- ③ ADJUSTMENT LEVER WATER
- ④ MAIN SWITCH
- ⑤ INDICATOR BATTERY CHARGER
- ⑥ LIFTING LEVER SQUEEGEE



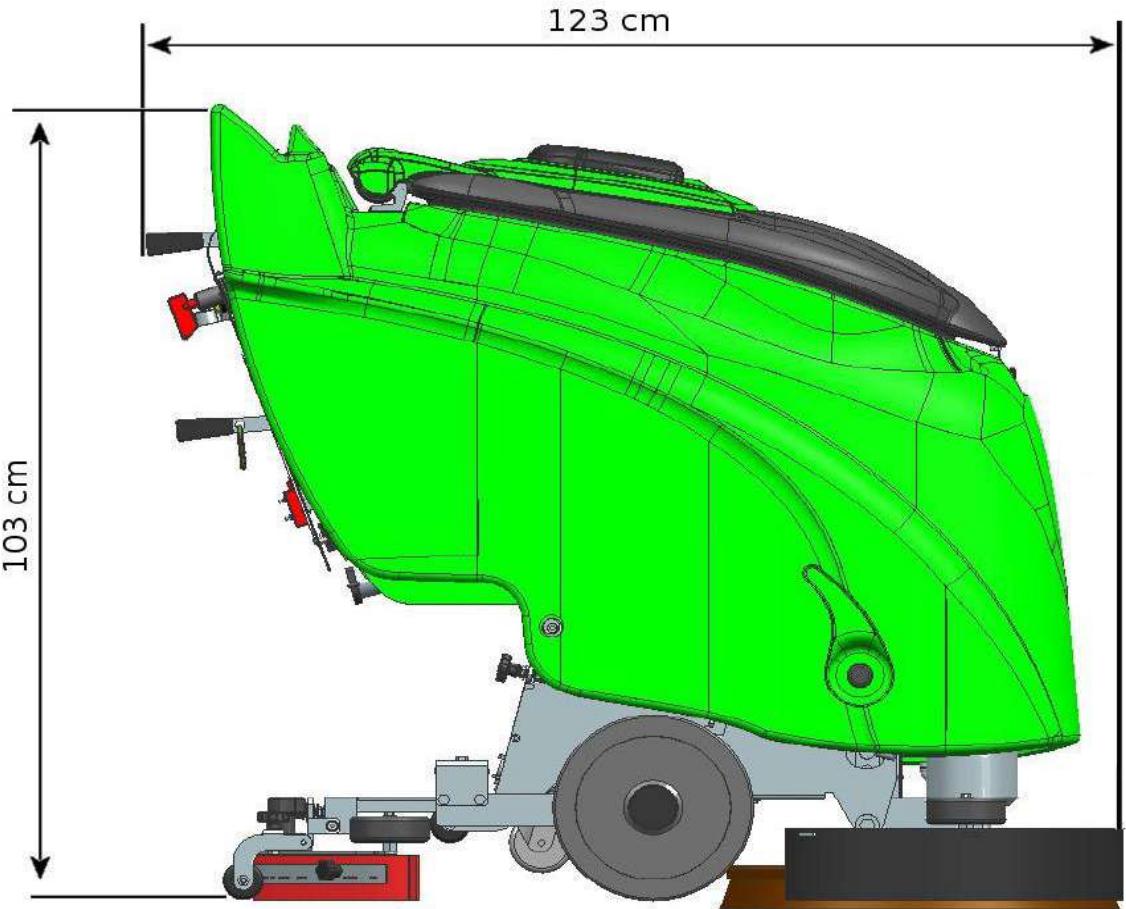
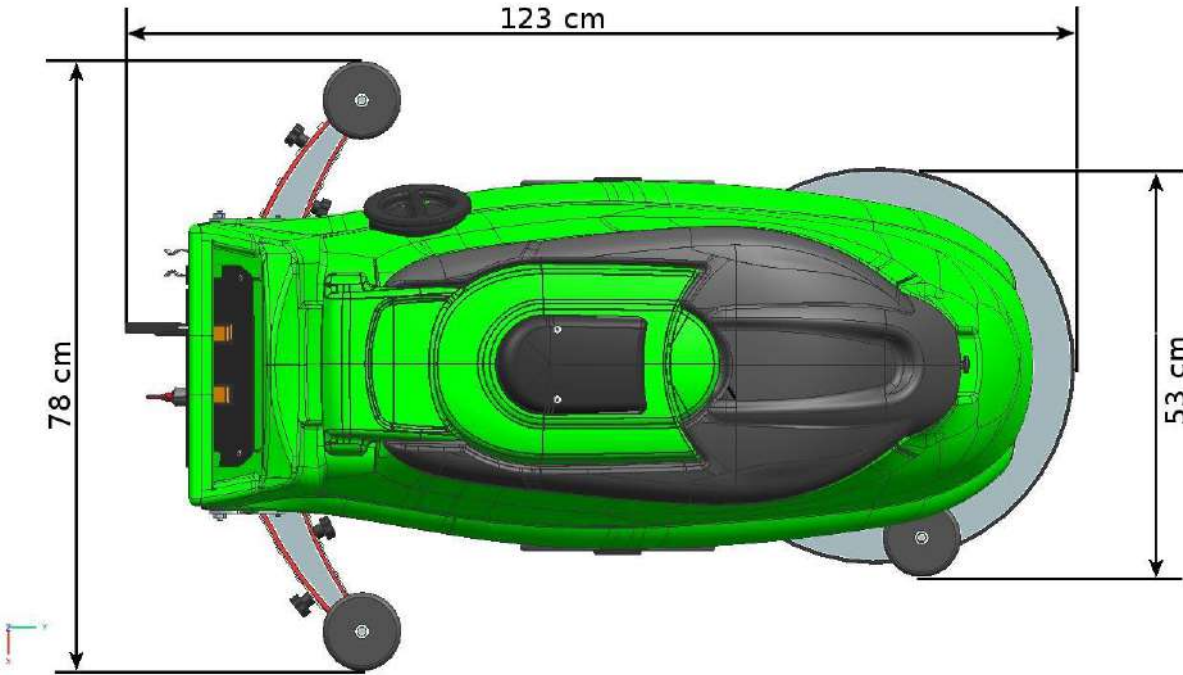
CABLE VERSION

- ① SWITCH CONTROL BRUSH
- ② VACUUM SWITCH
- ③ ADJUSTMENT LEVER WATER
- ④ POWER CABLE
- ⑤ LIFTING LEVER SQUEEGEE



- ① SUCTION TUBE
- ② DRAIN PIPE
- ③ BATTERY WIRING CONNECTION

5.3 SIZES

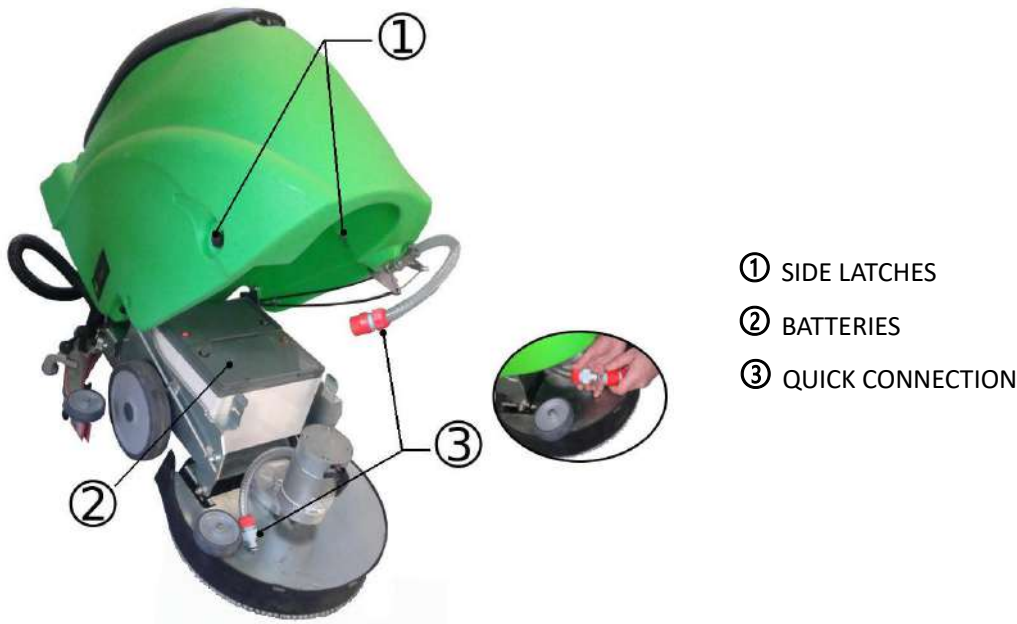


6 - INSTALLATION INFORMATION

6.1 BATTERY INSTALLATION

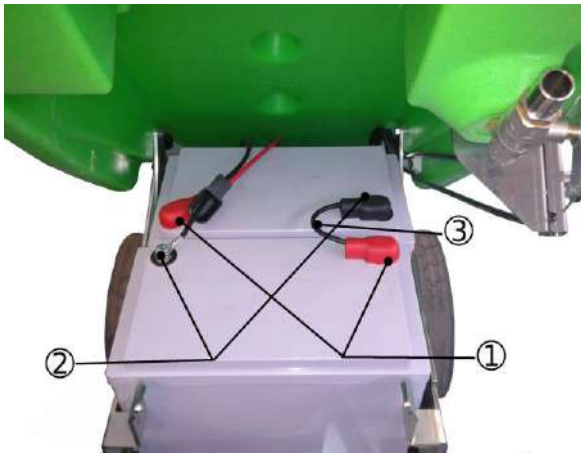
The housing compartment of the battery is located in the frame of the machine, disconnect the quick-access to water and unlock both side latches, then, rotate the tank backwards, but not before removing the squeegee (7.6).

Insert the battery into the seat carefully checking that it is in perfect condition.

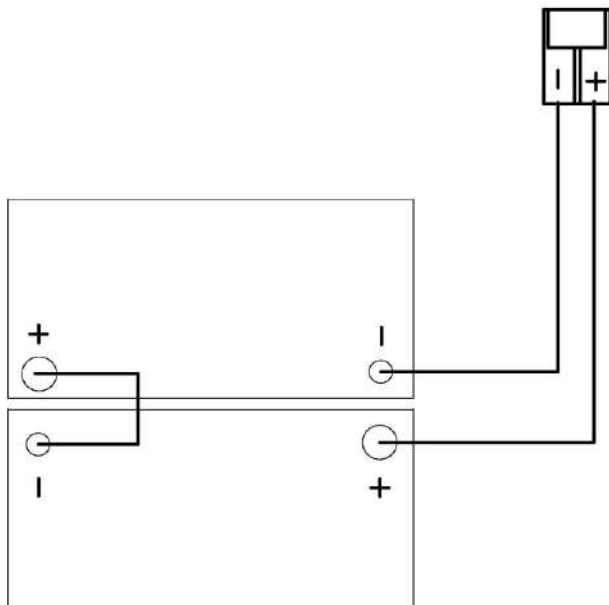


6.1.1 BATTERY CONNECTION

- (⚙) Attach the battery wiring connecting the eyelets exactly and only the poles distinguished by the same symbol (wiring red "+", black wiring "-") and connect the two batteries together using the cable "bridge" always respecting the polarity.
- (⚠) Shorting the battery terminals of the batteries may cause an explosion.
- (!) Make sure the switch is in position machine off, as well as the controls on the control panel, connect the collector of the battery wiring to that found on the body of the machine.
- (!) Close the battery compartment by replacing the tank being careful not to crush any wiring and verifying that both latches have performed the click stop.
Reinsert the quick coupling (3).



- ① BATTERY POSITIVE (+)
- ② BATTERY NEGATIVE (-)
- ③ CABLE BRIDGE



(⚠)WARNING

sulfuric acid is highly corrosive, handle with care.

(!) In case of contact with skin or eyes, rinse with plenty of water and seek medical advice.

(!) The batteries must be filled in a well ventilated area.

(!) Use protective gloves.

6.2 CONFIGURATION CHARGER

To be carried out only by specialized technicians. When you purchase the charger integrated washer dryer is configured for operation with maintenance free batteries OPTIMA.

If it is intended to equip the machine with a Pb-acid batteries or gel / AGM must act as follows:

(!) VIEWING SETTINGS BATTERY CHARGER

The settings of charge of the battery charger is indicated by the flashing of LED light turn on the battery charger itself.

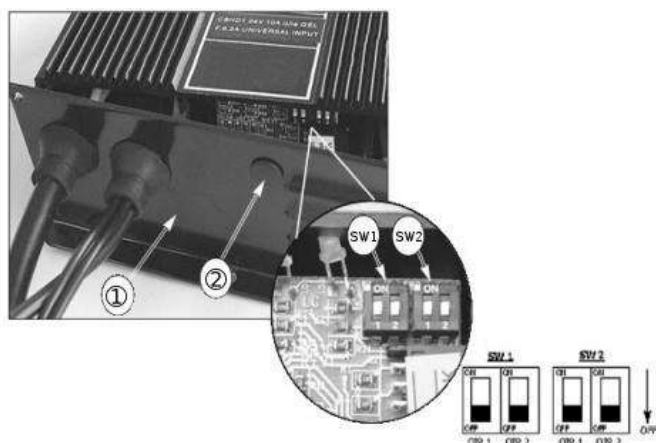
- RED LED light flashes 2 times = charger configured to PB-acid batteries.
 - GREEN LED light flashes 2 times = OPTIMA batteries or charger configured to GEL / AGM
- You can perform this type of verification without the batteries are connected.

(!) DIP-SWITCH CONFIGURATION FOR BATTERY CHARGER CBHD1 24V 10A

To set the charging curve for Pb-acid batteries, GEL batteries / AGM or OPTIMA batteries is necessary to act on the switches (dip-switch) located inside the charger.

To access the dip-switch, take off the bottom cover of the charger or the plastic cap.

To configure the type of load for different types of batteries must have the dip switches as follows:



① COVER BATTERY CHARGER

② PLUG FOR ACCESS TO DIP-SWITCH

SW1

SW2

TYPE OF BATTERY	D-S 1	D-S 2	D-S 1	D-S 2
PB-Acide	OFF	OFF	ON	OFF
Gel/AGM	OFF	OFF	OFF	OFF
Optima				

7 - USE OF INFORMATION

7.1 PREPARATION MACHINE

- (!) Before starting to work, wear non-slip shoes, gloves, and any other personal protective equipment specified by the supplier of the detergent used or required by the environment in which operates.
- (🔧) Perform the following steps before starting work, refer to the relevant sections for a detailed description of these steps:
 - ✓ Control the level of battery charge and recharging, if necessary.
 - ✓ Mount the brush or pad holder (with the abrasive disk) of the type appropriate for the surface and the work to be done.
 - ✓ Mount the squeegee, make sure it is secure, connected to the suction pipe and the blades drying not excessively worn.
 - ✓ Fill the solution tank through the opening laterally with clean water and non-foaming cleanser in the appropriate concentration.
 - ✓ Leave a height difference of 22 cm between the mouth of the cap and the level of the liquid.
- (🔧) To avoid danger, you should familiarize yourself with the movements of the machine, by testing over a wide area and unobstructed.

To get the best results in terms of cleanliness and durability of the equipment we suggest some simple but important steps:

 - ✓ Locate the work area, removing possible obstacles in the way, if the surface is very wide, rectangular areas contiguous to operate and parallel to each other.
 - ✓ Choose a rectilinear trajectory of work and start working from the most remote area to avoid brush up on areas that are already clean.

7.2 BATTERY RECHARGE

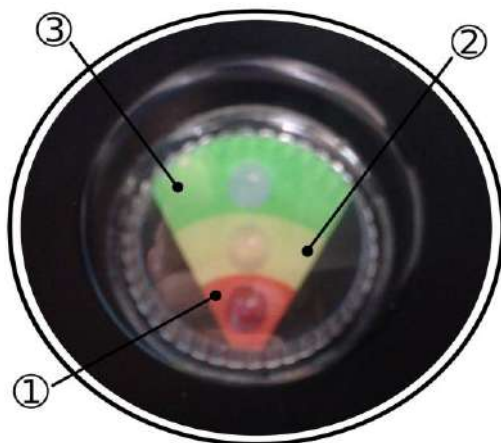
Connect the extension cord to the power cord of the charger and connect it to a power outlet.

When you turn the charger performs a test on the battery voltage to decide whether or not to start the charging process. If the battery is not connected to the charger, the LED will flash red. If the test was successful elapsed 1 seconds will start charging the batteries, with the red LED lights up.

During the charging process the progress of the charge is indicated by three LED lights: red, yellow and green.

The green LED indicates that the charging process is completed.

Unplug the charger from the mains.



① LIGHT INDICATOR RED LED BATTERY LOW

② LIGHT INDICATOR YELLOW LED

③ LIGHT INDICATOR GREEN LED BATTERY CHARGE

- (!) For more information, refer to the instruction manual and the safety of the charger manufacturer.
If the machine is equipped with Pb-acid battery, charge only in a well ventilated place, lift the tank top and open the battery caps.
- (⚙) Follow the instructions for use and safety of the manufacturer of the battery (see Battery maintenance).
Regularly check the intensity of the fluid elements with the hydrometer if one or more items prove discharges and other fully charged, the battery is damaged and must be replaced or repaired (refer to the service manual of the battery).
Close the element plugs and replace the tank top.

7.3 INSTALLATION AND REMOVAL BRUSH

- (!) Never work without the brush or abrasive disc pad holder with perfectly installed on the machine.
For the assembly:
- ✓ Place the brush on the floor.
 - ✓ Raise the squeegee through the lever.
 - ✓ Grasp the handle and leveraging it to raise the front of the machine by turning it backwards.
 - ✓ Place it over the brush, making sure that the flange coupling of the brush is under the metal plug of the machine.
 - ✓ Turn on the machine by means of the ignition key.
 - ✓ Select the rotation of the brush through the appropriate switch or lever, in this way the brush engages automatically.
To mount the disk driver to follow the same procedure.
- (!) Do not allow the length of the bristles of the brush is reduced to below 1 cm.
- (!) Do not allow the thickness of the abrasive disc is reduced to below 1 cm.

Working with the brush or too consumed with the abrasive disk is too thin can cause damage to the machine and the floor.

Regularly check the state of wear of these components before you start the job.

- (⚙) For disassembly or replacement:

- X Raise the squeegee through the lever.
 - X Grip the handlebars.
 - X Leveraging on the handlebars, lift the front of the machine by turning it backwards onshore.
 - X Manually perform a rotation of the brush in a clockwise direction (always use protective gloves), in this way the brush disengages the graft alighting on the ground.
- To remove the drive board to follow the same procedure.

7.4 MOVING THE MACHINE

For the displacement of the machine is not in working phase, operate as follows:

- ✓ Switch off the machine using the ignition key or switch on the control panel.
- ✓ Raise the squeegee through the lever.
- ✓ Grasp the handle and prying on it and lift the front of the machine by turning it backwards.
- ✓ Keeping the machine in this condition, push it where necessary for the work or storage.

7.5 SQUEEGEE ASSEMBLY

To mount the squeegee, follow the following procedures:

- X Move the lift lever in the down position.
- X Insert the pins of squeegee inside the compartments of the holder.
- X Tighten the knobs by force.
- X Place the suction tube into its sleeve.
- X Attach the hook of the hoist cable in the hole squeegee.



- ① LIFTING LEVER SQUEEGEE
- ② KNOB MOUNTING SQUEEGEE
- ③ SUCTION TUBE
- ④ SNAP HOOK

7.6 REMOVAL SQUEEGEE

To remove the squeegee, follow the following procedures:

- ✓ Move the lift lever in the down position.
- ✓ Disconnect the vacuum hose from the sleeve.

- ✓ Release the hook from the hole in the squeegee.
- ✓ Unscrew the fixing knobs .
- ✓ Pull back the squeegee.

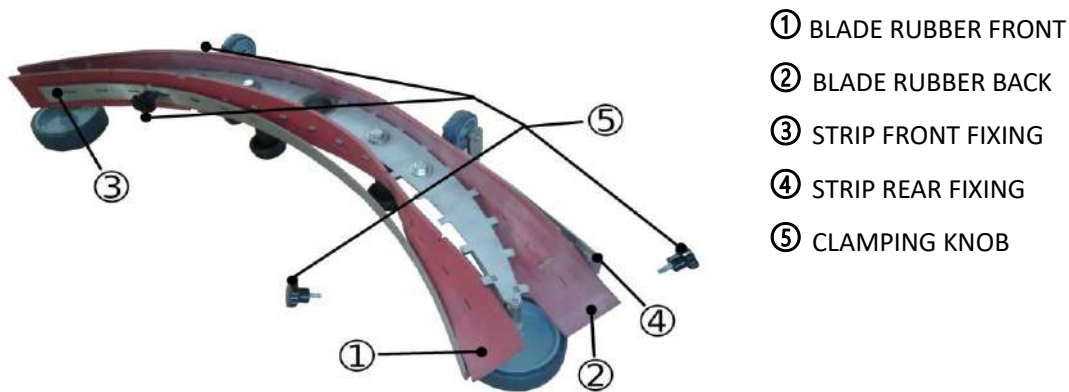
7.7 BLADE REPLACEMENT RUBBER SQUEEGEE

How to remove the squeegee from its holder:

- X Completely unscrew the knobs front and rear.
 - X Remove the clamping bars of the squeegee blades.
 - X Remove the rubber blades from the body by pulling from one end of the squeegee.
- To replace the rubber blades, repeat the procedure on the contrary, starting with the front blade.
- ✓ Slotting the rectangular openings on the body squeegee.
 - ✓ Repositioning the blades and door locks, securing them with the knobs.

(!) WARNING

The blade in the front tire is different from the rear to the presence of notches for the passage of water. The strips are equal.



- ① BLADE RUBBER FRONT
- ② BLADE RUBBER BACK
- ③ STRIP FRONT FIXING
- ④ STRIP REAR FIXING
- ⑤ CLAMPING KNOB

7.8 ADJUSTING SQUEEGEE

The two wheels on the sides of the squeegee, have a knob that allows to adjust the height of the squeegee, and then the resulting angle of the rubber blades relative to the floor.

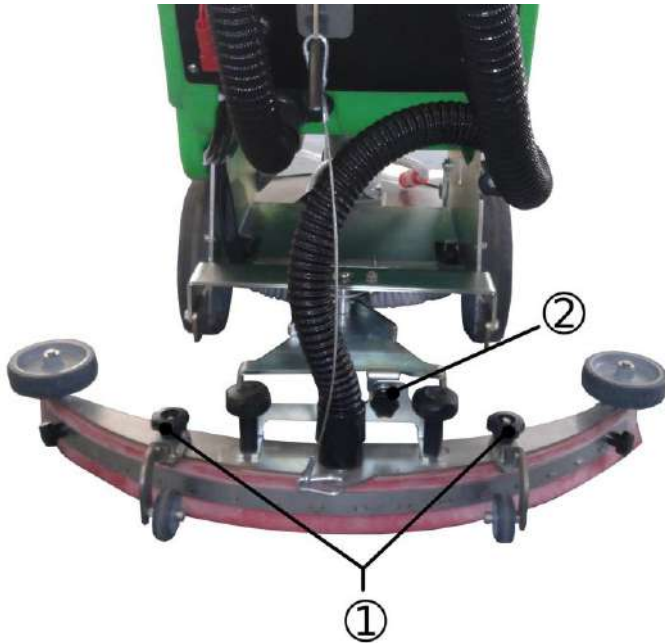
The perfect regulation provides that rubber blade rear, crawling in motion, to flex in every point, with the floor forming an angle of about 45 °.

Varying in a way appropriate to the position of the wheels adjusts the pressure of the squeegee so that the drying is uniform along the entire length of the squeegee.

Traits indicate inadequate drying wet; act on the adjustment wheels to maximize its effectiveness.

A further adjustment is practicable by means of the knob, this allows you to maintain optimum angle of the blades to the center and at the ends of squeegee.

Screwing and unscrewing it, the ends of the squeegee will lower or rise relative to their center.



① PRESSURE ADJUSTMENT KNOB

② ANGLE ADJUSTMENT KNOB

7.9 FILLING AND DISCHARGE SOLUTION TANK

- (ⓘ) The temperature of the water or detergent placed must not exceed 50 ° C.
- (ⓘ) For each tank filling solution, providing always empty the recovery tank.
- (!) Use only products suitable to the floor and dirt to be removed.

To load:

- ✓ Pour the required amount in the tank of the chemical , whereas the proportion (%) of the supplier, referring to the full capacity of the tank indicated on the product page.
- ✓ Pour the water into the opening of the load placed in the left side part of the machine.
- ✓ Leave a height of 22 cm, from the mouth of the load.



DROP

- ✓ Close the container with its cap .
- (ⓘ) The machine has been designed to be used with non-foaming and biodegradable detergents , specific scrubber . The use of other chemicals (such as sodium hypochlorite , oxidizing agents , solvents or hydrocarbons) can damage or destroy the car.
Follow the safety precautions specified in the relevant section and on the detergent container.
For a complete list of the proper cleaning agent available , contact the manufacturer of the machine.
- (ⓘ) Always use non-foaming detergents .

- (⚠) Do not leave unattended rubber water for the filling and place it completely in the tank, it may move and moisten delicate parts of the machine.

To unload:

- X Unscrew the filter cap of the cleaning solution in the place bottom of the tank and wait for the complete emptying.
- X Screw the filter cap.

7.10 DRAIN TANK RECOVERY

Move the machine to the right place for draining dirty water, preferably near a sewer drain (observe the national regulations for the disposal of waste water).

- ✓ Unhook the hose from ripettiva clip.
- ✓ Fold the end of the exhaust pipe.
- ✓ Unscrew the cap.
- ✓ Bringing the lower end of the tube in proximity to the exhaust.
- ✓ Leave the end of the hose folded seal and drain the water.



- ① DRAIN HOSE
- ② HOSE CLIP STOP
- ③ LEVER FAUCET
- ④ THERMAL CIRCUIT BREAKER

7.11 ADJUSTING THE QUANTITY OF THE CLEANING SOLUTION

You can adjust the output flow of the cleaning solution mediantela lever on the dashboard (3).

Position the lever for adjusting the flow of the cleaning solution in an intermediate position between the closing and the maximum aperture according to the type of cleaning to be performed.

On models equipped with solenoid valve and the outlet of the cleaning solution only occurs during operation using the switch or lever.

7.12 DRIVING THE MACHINE

MODEL A CABLE

- ✓ Connect the power cable to the network via an extension cord.

- ✓ Operate the main switch to the ON position .
- ✓ Operate the switch lever or ignition of the brush.
- (!) The brush starts to rotate only by operating the lever.
- ✓ Operate the power switch of aspiration .
- ✓ Open the valve by turning the lever dosage detergent solution .
- ✓ Lower the hood using the squeegee lift lever.
- ✓ Run the washing of the floor, moving slowly tilting the switch brushes.
- (!) Remember to lift the squeegee before receding to prevent failure of the squeegee.

MODEL A BATTERY

- X Check the connection of connector batteries, on the dashboard back.
- X Insert and turn the ignition key.
- X Check the state of charge of the battery.
- X Operate the switch lever or ignition of the brush.
- (!) The brush starts to rotate only by operating the lever.
- X Operate the power switch of aspiration.
- X Open the valve by turning the lever dosage detergent solution.
- X Lower the hood using the squeegee lift lever .
- X Run the washing of the floor, moving slowly forward to operate the wiper press the switch or turn the brush command.
- (!) Remember to lift the squeegee before receding to prevent failure of the squeegee.

7.13 WORKING METHOD

7.13.1 PREPARATION AND WARNINGS

Unleashing the surface to be treated (with appropriate tools such as vacuum cleaners, sweepers, etc..) From any solid residue free. If you do not proceed with this preliminary step, solid dirt may prevent the proper functioning of the squeegee, compromising the perfect drying.

This machine should be guided exclusively by trained personnel.

7.13.2 CONTROL OF THE STATE OF CHARGE BATTERY

The sequence of charging status indicator lights will turn off progressively until the battery charge.

When you turn on the red light, turn off the motor brushes, close the dispensing solution, possibly end of the small remnant wet and dry take place at the charger for recharging the battery.

- (!) The batteries can be damaged irreparably if the level of charge remaining decreases too (see the operating manual of the battery), do not force the battery discharge beyond the limits set by the securities, by turning the key or in any other way.

7.13.3 DIRECT CARE OR FOR SURFACE SLIGHTLY DIRTY

Washing and drying in one step. Prepare the machine as described above and used as described in section 7.12.

- (⚠) Never use the machine without the cleaning solution may damage the floor.

7.13.4 WASHING OR INDIRECT OR FOR VERY DIRTY SURFACES

Washing and drying in several steps. Prepare the machine as previously described.

First operation:

- ✓ Run the washing as described in 7:11 but did not proceed to dry the floor.
- ✓ Allow the cleaning solution to take effect on the dirt, as indicated in the information relating to the detergent used.

Second operation:

- X Proceed as explained in the previous paragraph of the "Direct Washing" (7.13.3) to proceed with the drying of the floor.

- (⚠) Never use the machine without the cleaning solution may damage the floor.

7.13.5 OPERATIONS AFTER WASHING

Close the dispensing of detergent. After drying the surface completely by any slight traces of water, wait a few seconds, then lift the squeegee and turn off the vacuum motor.

Head towards a suitable drain the tanks, empty and clean the tanks (see paragraph 7.10).

Turn off the machine with the key and remove it from the picture. Proceed, if necessary, to recharge the battery (see corresponding paragraph).

7.14 SPECIFIC RULES FOR USE OF MODEL WITH CABLE

The cable model can be put into operation if the voltage (voltage) indicated on the rating plate corresponds to that available in the stable and if the outlet is provided with grounding.

Do not damage the power cord, do not crush and do not tear it. Do not pass on the power cord with the machine. The cable may be wound up in moving parts causing a short circuit.

(!) WARNING

The model cable has parts in voltage or current is passed through , the contact with the which can cause serious injury and even death.

Before any work on the machine must be disconnected from the power supply itself.

Never touch electrical wires defective or showing signs of wear.

Before you access to the electrical system, switch off the machine and disconnect it from the power outlet.

If you find any defect in the electrical wiring, damage or cracking, replace immediately with original spare parts.

The links in the network must be protected against splashing water.

To connect to the machine's network use only extension cords that conform with the safety regulations in force.

The mains socket to which the appliance is connected must be equipped with a circuit breaker.

- (!) It is absolutely forbidden to use the machine near swimming pools or ponds.

(!) EMERGENCY SITUATIONS

In case of emergency:

- X Immediately unplug the machine from the mains.
- X Immediately apply first aid measures.

In the event of an accident, the machine must not be restarted until it has been reviewed by a technician authorized by the manufacturer .

8 - INFORMATION SERVICE

- (⚠) Turn the key, remove it from the control panel and disconnect the battery connector from the wiring of the machine.
- (🔧) Have the electrical work and all the maintenance and repair (particularly those not specifically described in this manual) only at authorized service centers or specialized technical personnel experienced in the field and in the relevant safety standards.
The regular maintenance on the machine, carefully following the instructions of the manufacturer, ensures better performance and a longer life of the machine.

8.1 TANKS

Download the two tanks as described in the relevant paragraphs. Remove dirt solid filling and unloading the tanks up to the effective elimination of all the dirt: use for the operation of a washing tube or the like. Only washing the inside of tank.

- (!) Hot water above 50 °, high pressure washer or spray too violent can damage the tanks and machine. Leave the caps of open tanks (only machine at rest), so that they can dry out and avoid the formation of bad odors.

8.2 FILTER THE SOLUTION CLEANER

To clean the filter cleaning solution, remove the cap and the filter element in the network.
After cleaning, replace the filter element mesh in place and screw the cap of the filter.

8.3 SUCTION HOSE

Disconnect the suction hose from the squeegee. Now you can wash and release the tube from clogging.
Push the tube firmly on the body squeegee.

8.4 SQUEEGEE

- (!) Do not handle the squeegee with bare hands, wear gloves and protective clothing appropriate for each operation. Remove the squeegee from the machine and clean it under running water using a sponge or a brush. Monitor the effectiveness and the consumption of the rubber blades in contact with the floor. These have the task of scraping the film of detergent and water on floor and isolate the portion of the surface to obtain the maximum depression of the suction motor: in this way the drying of the machine is perfect. Working continuously in this way, the sharp edge of the blade tends to become round or deteriorate, compromising perfectly dry, so you need to replace the squeegee blades often. To replace worn blades, follow the corresponding section, turn the blades to consume other sharp edges or to mount new ones.

8.5 ACCESSORIES

Remove and clean the brushes or pad holders.

- (!) Carefully check that there are no foreign bodies such as metal parts, screws, chips or ropes and the like, to prevent damage to the floor and the machine.
Check the flatness of the work of the brushes (check if there is irregular wear on the brushes or abrasive wheels). Use only accessories recommended by the manufacturer, other products may affect safety.

8.6 MACHINE BODY

To clean the outer body of the car, use a wet sponge or cloth, with the help, if necessary with a soft brush for stubborn dirt win.

The surface of the machine is shockproof wrinkled to avoid scratches highlight procured during use, however this solution does not facilitate the removal of persistent stains on the surface.

It is forbidden the use of steam engines, pipes with running water or a pressure washer.

8.7 BATTERIES

PB-Acid Batteries

Perform maintenance in accordance with the manufacturer's instructions and with all the information set forth herein.

Leave discoveries (not completely immersed in the acid solution) plates of the elements attorney rapid oxidation and irreparably compromises the functionality of the item.

The overflow of the acid solution may corrode the machine.

Use the charger recommended by the manufacturer, however, suitable for the type of battery to be charged.

Always charge batteries in well-ventilated rooms, there is a risk of explosion!

The use of gel batteries or maintenance is highly recommended.

GEL batteries

Perform maintenance in accordance with the manufacturer's instructions and with all the information set forth herein.

Only use chargers recommended by the manufacturer.

8.8 THERMAL CUTOFF

The machine is equipped with electrical protection called "electric circuit breaker" to protect the brush motor (page 19 n.4).

When this thermal circuit breaker automatically intervenes to re-enable the disabled simply press down the switch tripped.

The intervention of the thermal circuit breaker, especially in the first weeks of life of the machine, it may not be the actual origins from malfunction of the machine, but you must have it checked by a qualified technician correct operation of the device in question if the circuit breaker continues to intervene.

8.9 FREQUENCY

For all the operations described here refer to the instructions and warnings detailed in the relevant paragraphs.

8.9.1 DAILY OPERATIONS

- Disassemble and inspect the brush or pad holder (with the sanding disc mounted). Verify that there are no extraneous elements that impede the movement or the effectiveness of all the organs of cleaning.
- Check the squeegee: clean the blades and check the integrity / wear.

If batteries are used in the Pb-acid, carefully perform the operations indicated by the battery manufacturer.

- Proceed to recharge the batteries.

8.9.2 OPERATIONS WEEKLY

- X Check and replace the splash guard.
- X Carefully check the profile of the squeegee blades, replace if necessary.
- X Check that hoses and intake pipes are not clogged.
- X Thoroughly clean the solution and recovery tanks.

For models with Pb-Acid Battery: check electrolyte level in all the elements and add distilled water if necessary. Refer to the detailed instructions of the manufacturer of the batteries.

8.9.3 OPERATIONS AT INTERVALS EXTENDED

Although the machine has been built with rigor and complies with the most stringent quality tests, the electrical and mechanical components are inevitably subject to wear and aging after long periods of use.

To operate safely and without any problems, we recommend to carefully check your machine by one of our authorized technical assistance center (or by a specialist familiar with all relevant safety standards contained in this manual), each year.

Interventions of this kind may be needed more often if the machine works in special / difficult situations and / or has not been properly maintained.

8.10 RECOMMENDED SPARE PARTS

You will be able to maximize your profitability by taking your car always available consumables most common and ordinary and extraordinary maintenance planning.
For a list of these parts, refer to your dealer.

9 - INFORMATION ON THE CONTROL OF EXERCISE

These directions are for understanding the causes of some problems in the face of certain types of problems, for the type of action to be taken, however, please refer to the specific sections below.

9.1 THE MACHINE DOES NOT WORK

The key is not inserted correctly or turned.

- Insert and turn the key to position "1" or the machine is on.
The battery connector is disconnected or poorly connected to the main wiring harness.
- Firmly connect the two connectors.
The machine is recharging.
- Terminate charging.
The batteries are discharged.
- Recharge the batteries.

9.2 DOES NOT TURN THE BRUSH

It is thermal protection brush motor, the motor is overheated.

- ✓ Check the pattern (or similar strings that prevent movement, excessively rough surfaces, etc..) and press the reset circuit breaker (page 19 n.4).
The relay of the motor or motor brushes is faulty.
- ✓ It replaced.

9.3 NOT DOWN OR TOO LITTLE FALLS CLEANING SOLUTION

The solution tank is empty.

- Fill the solution tank, after emptying the recovery tank.
The tap adjustment of the flow is closed or nearly closed.
- Adjust / increase the output flow of solution as desired.
The filter cleaning solution is obstructed at some point.
- Open the filter and clean by removing dirt.

9.4 MISSING INTAKE

The suction hose is not connected to the squeegee or the recovery tank.

- Connect it properly .
The suction pipe, the pipe is clogged squeegee.
- Free and clean the ducts obstruction.
The suction motor is turned off.
- Activate it.
The recovery tank is full.
- Empty it.
The vacuum motor is not receiving power or is burned.
- Check the connections and, in the latter case, please replace the motor.

9.5 LITTLE INTAKE

The lid of the vacuum space on the recovery tank is not securely tightened.

- Tighten it securely.
The suction pipe, conduit or squeegee compartment inspection are clogged.

- Free and clean the ducts obstruction.

9.6 MOTOR BRUSH OR THE ENGINE INTAKE NOT HAVE STOPPED

Stop the machine, interrupting the main power supply by disconnecting the main connector of the battery and contact a service technician.

9.7 THE SQUEEGEE DOES NOT CLEAN OR NOT DRY WELL

The squeegee blades are worn or dirty drag solid.

- Replace or clean them.
Squeegee adjustment is not correct, the feed must be exactly perpendicular to the direction of travel.
- Proceed to adjust the squeegee.
The suction pipe, the pipe is clogged squeegee.
- Free and clean the ducts obstruction.

9.8 THE CHARGER DOES NOT WORK

Battery charging does not start.

- Check that the charger is indeed connected to the battery. Refer to the manual of the charger.

9.9 THE BATTERY IS NOT CHARGING OR NOT HOLD CHARGE

The battery is new and not 100% of the expected benefits.

- The battery reaches its maximum performance after 20-30 cycles of complete charging.
The electrolyte is evaporated and does not completely cover the plates.
- Check the use and maintenance of the battery manufacturer.
There are striking differences in density between the various elements.
- Replace the damaged battery.

Always consult the manual of use and maintenance of the batteries and the charger, if you do not solve the problem, contact your authorized service technician.

The manufacturer shall **NOT** be helpful to problems caused by the use of batteries and chargers are not provided directly.

10 – DISPOSAL OF THE MACHINE

Once it has reached the end of its life, the machine requires special disposal of its components which is indicated in the following list:

- Polyethylene components ► Storage with shredding and separation of pollutants.
- ABS components ► Storage with shredding and separation of pollutants.
- Stainless steel components ► Direct recovery in metallurgical plants, storage for the elimination of foreign substances.
- Aluminum components ► Direct recovery in metallurgical plants, storage for the elimination of foreign substances by granulation.
- Galvanized ferrous components ► Direct recovery in metallurgical plants, storage for the elimination of foreign substances.
- Painted ferrous components ► Direct recovery in metallurgical plants, storage for the elimination of foreign substances.
- Wiring and similar ► Reprocessing with mechanical processing for the removal of the coating, grinding and granulation of the rubber, granulation of the metal fraction for recovery in the metallurgical industry.
- Rubber based components ► Recovery in the rubber industry for compatible mixes, recovery in bitumen production, storage for the elimination of foreign substances by granulation.
- Wooden packaging ► Stockpiling of wood waste for obtaining raw materials.
- Paper packaging ► Direct reuse in the paper industry or put in reserve for the production of secondary raw material for the paper industry.
- Motors ► Disassembly for separation of reusable components.
- Electronic cards ► Disassembly for separation of reusable components.
- Batteries ► They are the only component of the machine made of hazardous material. It is therefore recommended that they be disposed of by taking them to a specialized center.