



# GENERAL SAFETY REGULATIONS





# CONTENTS

<b>CONTENTS</b> .....	<b>3</b>
<b>MACHINE WITH CONNECTION TO THE ELECTRICITY GRID</b> .....	<b>4</b>
<i>EXTENSION CABLES</i> .....	<i>5</i>
<b>BATTERY-POWERED MACHINE</b> .....	<b>5</b>
<i>RECHARGING THE BATTERIES</i> .....	<i>6</i>
<b>USING THE MACHINE</b> .....	<b>6</b>
<b>DEACTIVATION OF THE MACHINE</b> .....	<b>8</b>
<b>MAINTENANCE</b> .....	<b>8</b>
<b>TRANSPORT</b> .....	<b>9</b>
<b>RIDE-ON MACHINES</b> .....	<b>10</b>
<b>MACHINES WITH COMBUSTION ENGINE</b> .....	<b>10</b>
<i>REFUELLING</i> .....	<i>11</i>

The following symbols are used to indicate any potentially hazardous situations. Always read this information carefully and take the necessary precautions to protect any people and/or objects that may be present.

Operator cooperation is paramount for accident prevention. No accident prevention programme can be effective without the full cooperation of the person directly responsible for the machine's operation. Most accidents that occur at the workplace, during work activities, or while in transit, are caused by the failure to respect the most basic safety regulations. An attentive, careful operator is most effective guarantee against accidents and is fundamental in order to implement any prevention programme.

## **KEEP THESE SAFETY WARNINGS WITH THE MACHINE USER MANUAL.**

-  **DANGER:** *indicates an imminent dangerous situation that, unless avoided, will result in death or serious injuries.*
-  **WARNING:** *Indicates a potentially dangerous situation that, unless avoided, could cause death or serious injury.*
-  **ATTENTION:** *Indicates a potentially dangerous situation that, unless avoided, could cause slight or moderate injuries.*

### **MACHINE WITH CONNECTION TO THE ELECTRICITY GRID**

#### **DANGER:**

- To reduce the risk of fire, electric shocks or injury, please read and comply with all the safety instructions and warnings. This machine has been designed to be safe when it is used for cleaning in the manner specified. If damage to electrical or mechanical components is found, the machine must be repaired at the relative authorised service centre before use, in order to prevent further damage to the machine or physical injury to the user.
- Before connecting the machine to the electric socket, make sure the electrical information on the serial number plate corresponds to that of the mains supply. The machine must only be powered with alternating current and with a voltage equal to that shown on the serial number plate.
- The power supply cable outlet must have an earth connection in compliance with the regulatory standards.
- If the machine packaging contains the cable to connect to the mains supply, it should only be used for the above-mentioned machine.
- Before using, check for any damage on the connection cable and on the power plug. If the cable is damaged, immediately contact a technician for restoring normal functioning.
- Connect the machine only to an electrical connection installed by an electrical installer in conformity with IEC 60364-1.
- Never touch the power plug with wet hands.
- Make sure that the cable to the mains or the extension cable have not been damaged by having been walked on, crushed, pulled or the like. Protect the cable from heat and from contact with oils or sharp edges.
- Regularly check that the cable connecting to the mains is not damaged, for example with signs of ageing or cracks. If the cable is damaged it should be replaced before using the machine again.

- Protection against splashes of water and the mechanical strength need to be ensured also after any replacement of the joints of the power cable or the extension cable.

 **WARNING:**

- To prevent unauthorised use of the machine, the power supply must be disconnected; switch off the machine using the main switch (if present, remove the key from the ignition) and disconnect the power cable from the mains socket.

 **ATTENTION:**

- When performing any maintenance work or deactivating the machine, switch it off using the main switch (if present, remove the key from the ignition) and disconnect the power cable plug from the mains socket.
- The procedure causes a short-term reduction in voltage.
- In unfavourable grid conditions the other appliances could be damaged.
- This damage could occur if the grid impedance is less than 0.15Ω.

## EXTENSION CABLES

 **WARNING:**

- Only use the materials expressly recommended by a service technician as cable extensions (contact an authorised retailer) or else high quality models. When using an extension, respect its minimum cross-section.

## BATTERY-POWERED MACHINE

 **WARNING:**

- To prevent unauthorised use of the machine, the power supply must be disconnected; switch off the machine using the main switch (if present, remove the key from the ignition) and disconnect the battery connector from the electrical system connector.

 **ATTENTION:**

- The machine must only be powered with a voltage equal to that shown on the serial number plate.
- When doing maintenance work, switch off the machine using the main switch (if present, remove the key from the ignition) and disconnect the battery connector from the electrical system connector.
- To manually move electric traction versions of the machine, the electric brake must be disengaged. Once the manual movement operations have been completed, the electric brake must be re-engaged. Never use the machine with the electric brake disengaged.
- If the machine needs to be pushed for maintenance purposes (batteries absent; discharged batteries; etc.), never exceed the speed of 4 km/h.
- If lead batteries (WET) have been installed on the machine, avoid tilting the machine beyond 30° with respect to the horizontal plane, as this could cause the highly corrosive liquid to leak out of the batteries.
- Avoid contact with the battery acid.
- Keep all metal objects away from the batteries.

- Use a non-conductive device for removing the battery.
- Use a hoist and suitable equipment when lifting the batteries.
- The battery must be installed by qualified personnel.
- Always observe the safety measures of the site regarding removing the battery.
- Remove the batteries if the machine needs to be tilted in order to perform maintenance procedures.
- The machine should not be left unattended at the end of its working cycle because of the presence of toxic-harmful materials inside it (batteries, etc.), which are subject to regulations regarding their disposal at special centres (see the chapter on Scrapping).

## RECHARGING THE BATTERIES

### DANGER:

- If the battery charger power cable is damaged or broken, it should be replaced by the charger manufacturer or authorised service personnel, or by another qualified person, in order to protect against hazards.
- The socket for the battery charger cable must have a prescribed earth connection.
- Keep sparks, flames, and incandescent materials at a safe distance from the batteries. Explosive gases are emitted during the charging phase.
- highly explosive hydrogen gas is generated while charging the batteries. Keep the recovery tank and/or the seat mounting plate in the maintenance position during the entire battery recharging cycle, and only perform the procedure in well-ventilated areas at a safe distance from any open flames.
- Before charging check that the electric cable that connects the battery charger to the batteries is not damaged, and if it is damaged do not use it and contact technical assistance.
- Before charging check that the electric cable that connects the battery charger to the mains is not damaged, and if it is damaged do not use it and contact technical assistance.
- Before starting to charge the batteries in versions with on-board battery charger, check there is no stagnant water or humidity in the battery charger socket.
- Do not disconnect the direct current cable of the battery charger from the socket of the machine when the battery charger is operating. This is necessary to prevent electric arcs forming. To disconnect the battery charger when charging, first disconnect the power cable from the mains socket.

### WARNING:

- Do not use incompatible battery chargers since they could damage the batteries and potentially cause a fire.
- Before using the battery charger, make sure that the frequency and the voltage indicated on the battery charger serial number plate or in the charger user manual in versions with on-board battery charger (enclosed with the machine documentation) match the mains voltage.
- Keep the battery charger's cable at a safe distance from any hot surfaces.
- Never smoke in the machine's vicinity while the batteries are charging.
- Carefully read the user manual of the battery charger you want to use before recharging.

## USING THE MACHINE

### DANGER:

- In case of danger, act promptly by pressing the emergency button (if present) or disconnecting the battery connector from the electrical system connector.

- Never collect gases, explosive/inflammable liquids or powders, nor acids and solvents! These include gasoline, paint thinners and fuel oil (which, when mixed with the vacuum air, can form explosive vapours or mixtures), and also non-diluted acids and solvents, acetones, aluminium and magnesium powders. These substances may also corrode the materials used to construct the machine.
- If the machine is used in dangerous areas (e.g. petrol stations), the relative safety standards must be observed. It is forbidden to use the machine in environments with a potentially explosive atmosphere.

 **WARNING:**

- The machine must be exclusively used by authorised, trained personnel.
- Always use the machine in compliance with its intended use, taking into consideration local conditions and looking out for the presence of others when working, especially children.
- This machine should not be used by persons (including children) with physical, sensorial or mental impairments and by persons with little experience and/or little knowledge of the machine itself.
- Do not use the machine on surfaces with a slope greater than the one indicated on the serial number plate.
- The machine is not suitable for cleaning rough or uneven floors. Do not use the machine on slopes.
- In the event of a fire, use a powder extinguisher. Do not use water.
- Adapt the speed to the adhesion conditions.
- Do not use the machine if you do not have the requisite knowledge or authorisation.
- Do not use the machine if these safety warnings and the machine user manual have not been read and understood.
- Do not use the machine under the influence of alcohol or drugs.
- Do not use the machine when using a mobile phone or other types of electronic devices.
- Do not use the machine if it is not working correctly.
- Do not use the machine in areas where there are inflammable vapours or liquids or combustible powders.
- Do not use the machine in areas where it is too dark to see the controls or operate the machine safely, unless the work lights or the front headlights are on (if present).

 **ATTENTION:**

- Children must be supervised to ensure they do not play with the machine.
- During the working of the machine, pay attention to other people and especially to children.
- Read the labels on the machine carefully. Do not cover them for any reason, and replace them immediately if they become damaged.
- The machine must only be used and stored in an enclosed or covered environment.
- The machine must not be used or stored outdoors in damp conditions or directly exposed to rain.
- The machine does not cause harmful vibrations.
- Only use the machine in accordance with the instructions set out in these safety warnings and in the machine user manual.
- Do not pick up anything that is burning or smouldering, like cigarettes, matches or glowing embers.
- Reduce speed on slopes and dangerous corners.
- Always follow the instructions for mixing, use and disposal on the containers of the chemical substances.
- Always take appropriate measures to protect any individuals and/or objects that may be

present while using this machine.

- Be careful to avoid collisions with shelving or scaffolding, above all if there is a risk of objects falling from heights.
- Do not place any liquid containers on the machine.
- The machine must only be used in temperatures ranging from +10 °C to +40 °C. The humidity level must be between 30% and 95%.
- When using detergents to clean the flooring, always follow the instructions and respect the warnings indicated on the containers' labels.
- Always use appropriate gloves and protective equipment when handling the detergents used to clean the floor.
- Avoid working with the brushes when the machine is standing still, so as not to damage the floor.
- In the event of a fire, use a powder fire extinguisher if possible, and avoid the use of water.
- Do not allow any objects to penetrate into the machine's openings. Do not use the machine if the openings are obstructed.
- Keep the machine's openings free of any dust, lint, hairs, or any other foreign materials that could reduce the airflow.
- Do not remove or alter any labels affixed to the machine.
- Only use the brushes and pad holders that have been supplied with the machine, or those specified in the Use and Maintenance Manual. The use of other brushes or felt pads could compromise the machine's safety conditions.
- This machine has not been made for external use but internal locations only.
- Before starting to work check that there are no leaks.
- Before starting to work check that all the safety devices have been installed and are working correctly.
- Take all due precautions so that hair, jewellery, loose clothing do not get entangled in the machine's moving parts.
- Only use the machine in well-lit areas.

## DEACTIVATION OF THE MACHINE

### **WARNING:**

- Always protect the machine against sunlight, rain, and other atmospheric agents, both while it is stationary and while it is in function. Store the machine in a dry, sheltered place: this machine is only designed for use under dry conditions, and must not be used or stored outdoors under humid conditions.
- Do not park the machine near combustible materials, powders, gases or liquids.
- Stop the machine on a flat surface.
- If the machine is left unattended, it must be protected from any accidental movements

### **ATTENTION:**

- The machine must only be stored in temperatures ranging from +10 °C to +40 °C. The humidity level must be between 30% and 95%.

## MAINTENANCE

### **DANGER:**

- In order to avoid short-circuits when working in the vicinity of electrical components, do the

following: avoid the use of non-insulated tools; do not place or allow metallic objects to fall upon the electrically powered components; remove any rings, watches and/or clothing with metallic parts that might come into contact with the electrically powered components.

- do not work underneath the raised machine without adequate fixed safety supports.

 **WARNING:**

- The cleaning and maintenance to be carried out by the user must not be performed by unsupervised children.
- Read all the relevant instructions carefully before performing any maintenance/repair operations.
- If the machine does not work properly, check this is not caused by failure to carry out maintenance. Otherwise, ask for intervention of the authorised technical assistance centre.
- Restore all electrical connections after any maintenance interventions.

 **ATTENTION:**

- Avoid contact with moving parts. Do not wear loose clothing or jewellery and tie long hair back.
- Block the wheels before lifting the machine.
- Lift the machine with equipment that can sustain the weight to be lifted.
- Never tamper with the machine's protection devices for any reason; always follow the supplied routine maintenance instructions scrupulously.
- If any parts need to be replaced, always request ORIGINAL spare parts from an authorized Dealer or Retailer.
- In order to ensure the machine's safety and proper functionality, always have the scheduled maintenance interventions (specified in the appropriate section of this Manual) performed by authorized personnel or by an authorized Service Centre.
- Do not wash the machine with direct jets of water, pressurised water or with corrosive substances, and do not wet it in the vicinity of electrical components.
- Have the machine checked by an authorised technical assistance centre every year.
- When disposing of consumable materials, observe the laws and regulations in force. Once the machine has reached the end of its service life, the materials contained within it must be disposed of in an appropriate manner, keeping in mind that the machine itself has been built using fully recyclable materials.
- All repairs must be carried out by qualified personnel.
- Do not physically change the design characteristics of the machine.
- Use spare parts provided by authorised service centres.
- Wear personal protective equipment as required and as suggested in the manual.

## TRANSPORT

 **WARNING:**

- Drain both tanks before transport.
- Bring both the squeegee and the brushes to a working position before securing the machine to the transport vehicle.
- Use a ramp, a truck or a trailer that can support the weight of the machine and the operator.
- The ramp for placing the machine on the transport vehicle should have such a slope that the machine does not get damaged.
- Secure the device according to the directives in force in the country of use, so that it cannot slide or tip over when being transported.

- In versions with electric traction, make sure the electric brake is correctly engaged after loading the machine onto the transport vehicle

 **ATTENTION:**

- Use caution when moving the machine under temperatures below freezing. The water contained in the water recovery tank or in the pipes could freeze, and could seriously damage the machine itself.

## RIDE-ON MACHINES

 **WARNING:**

- Do not use the machine in areas where there is a risk of falling objects, unless the machine is equipped with an overhead guard (optional).
- To place the machine on the transport vehicle use a pulley. Do not drive the machine on or off a truck or trailer.
- Engage the parking brake after loading the machine onto the transport vehicle.

 **ATTENTION:**

- Reduce speed before making a turn.
- Keep all parts of your body inside when the machine is moving.
- Be careful when reversing.
- Do not transport passengers. Do not use the machine as a means of transport.
- If the machine is to be used in the presence of other individuals, aside from the operator, the beacon light (optional) must be utilized.
- This machine has not been approved for use on public streets or roadways.
- Do not push or tow the machine without an operator on the seat who can control the machine.
- Before starting work check that the brakes and steering are working correctly.
- Before starting work adjust the seat and steering wheel, and also the seat belt if there is one.

## MACHINES WITH COMBUSTION ENGINE

 **DANGER:**

- The endothermic engine releases toxic and poisonous carbon monoxide gas. Do not use the machine in enclosed and/or poorly ventilated environments.
- In Bifuel versions, the flexible rubber LPG delivery hose must be inspected frequently, and must not show any signs of kinks or stretching. It must be secured to the hose support with a safety strap, and must be replaced by the date stamped on the hose itself.

 **WARNING:**

- Read all relevant instructions carefully before carrying out any maintenance/repairs operations
- In Bifuel versions, the unused cylinders, whether full, partially full, empty, or presumed empty, must never be kept at the user's facilities under any circumstances. The empty cylinder mustn't be thrown away or discarded, but must be brought to the retailer from which the full cylinder is purchased.

- In Bifuel versions, the gasket between the valve and the regulator must be changed each time the cylinder is replaced.
- In Bifuel versions, after replacing the cylinder, carry out a seal test on the connections using soapy water (never use flames for this purpose). Afterwards, perform the machine start-up test.
- If you smell gas in Bifuel versions, turn off the supply (cylinder tap); ventilate the room well, keeping in mind that LPG is heavier than air and spreads at ground level; have the system checked by specialized personnel.
- Do not inhale the exhaust gases. Only use in enclosed spaces with adequate ventilation, and when a second person is in charge of monitoring your health status.

 **ATTENTION:**

- When doing maintenance work, switch off the machine using the main switch. Remove the key from the instrument panel and remove the alternator connector from the electrical system connector. Turn off the fuel flow adjustment tap. Close the valve on the LPG cylinder in Bifuel versions.
- Disconnect the starter battery's connectors before working on the machine.
- When turning on the machine, make sure that the parking brake is engaged and that the direction selection lever is set to its neutral position.
- The hot muffler can cause burns. Do not approach if the engine has been running.
- The machine must not be kept in underground or poorly ventilated places, near combustible materials or electrical systems, or near air vents, ducts and other openings that communicate with underground rooms. Furthermore, the bi-fuel version of the machine must not be kept in places with a classified fire risk (car ports, garages, etc.).
- In Bifuel versions, close the valve on the cylinder after each use.
- Never park the machine near any combustible materials, powders, gases or liquids.
- Avoid contact with the engine's hot coolant.
- Never remove the radiator cap while the engine is hot.
- Always allow the engine to cool before starting any maintenance interventions.
- Keep all metallic objects at a safe distance from the starter battery.
- The battery must be installed by qualified personnel.
- Always observe the safety measures of the site regarding removing the battery.
- In Bifuel versions, remove the batteries and the LPG cylinder if the machine needs to be tilted in order to perform maintenance procedures.
- The machine must be regularly inspected by qualified personnel, especially in Bifuel versions with regard to the LPG cylinder and its connections, as required by the local or national safety regulations.

## REFUELLING

 **DANGER:**

- Fuel fumes are highly flammable, have a low flashpoint, and are explosive, especially within enclosed environments. Avoid exposing the vapours to any potential source of ignition, as the resulting fire and explosion could result in serious accidents or injuries, or even death.
- Shut off the engine to perform the refuelling operations: the engine generates both extremely high temperatures and electrical sparks. The resulting fire and explosion could result in serious accidents or injuries, or even death.
- The refuelling place must be well aired. Never refuel the engine inside a building where the fuel fumes could come into contact with flames or sparks.
- Shut off all personal electronic devices, including mobile phones and portable music players,

as these could generate electrical sparks. The resulting fire and explosion could result in serious accidents or injuries, or even death. Discharge any static electricity from your body before approaching the fuel tank.

- It is prohibited to smoke, use open flames, or generate sparks in the refuelling area. The resulting fire and explosion could result in serious accidents or injuries, or even death.
- When replacing the LPG cylinder in Bifuel versions, stay well away from flames, cinders or active electric devices.
- Before replacing the cylinder in Bifuel versions, make sure that the valves on both the old and the new cylinders are completely turned off.
- In Bifuel versions, the LPG cylinders must always be purchased from authorised retailers. It is strictly forbidden by law to have the cylinders filled by automobile LPG distributors or using amateur means, as this can be extremely dangerous. The cylinders may only be filled by authorized facilities. Unauthorized filling is subject to criminal penalties and a pecuniary fine. The penalty is applied directly to the user.

 **WARNING:**

- Only use the appropriate containers to transport the fuel, and always remove them from the vehicle before filling them. Any failure to respect this precaution could result in spillage from the container, which in turn could result in a fire.
- You are advised to always put on protective gloves before handling the fuel, to avoid any risk of serious injury to your hands.
- Fuels may contain substances similar to solvents. Avoid any contact of mineral oil products with the skin and eyes. Use gloves when refuelling. Change your protective clothes frequently, and clean them.
- Always open the tank cap carefully, to slowly discharge the overpressure and prevent fuel from spurting out.
- Do not inhale the fuel vapours
- For environmental protection purposes, make sure the fuel doesn't seep into the ground.
- In the event of a fuel spill, clean the machine immediately.
- After refuelling, replace the tank cap.
- Tighten it firmly, but without using tools. The cap must not come loose while the machine is being used.
- Check the tank for any leaks or ineffective seals. If you notice a fuel leakage, do not switch on or use the machine.
- Do not overfill the fuel tank. If too much fuel is added, it could spill out while the vehicle is being driven. The fuel could also spill out due to an increase in volume caused by high ambient temperatures.
- Keep the fuel in containers that meet the legal requisites and bear an identification label.
- The endothermic engine must only be powered using the fuel type described in the use and maintenance manual for the engine itself, which can be found enclosed with the documentation provided with the machine.







