

USING AND MAINTENANCE MANUAL FOR THE MACHINE



GRACE HP

READ CAREFULLY THIS MANUAL BEFORE USING THE MACHINE

Generalities

GraceHP is a professional carpet extractor, with high performances. A special patented system allows to use an automatic chemical dilution with an optimal concentration, carpet pre-spraying and carpet rinsing cleaning, by cleaning with clean water only.



Safety instructions (read carefully)

Every electrical device must be used for its particular function only, respecting the manufacturer's instructions. Failure to adhere to the instructions could result in serious person injury, electric shock, fire or explosion.

The nowadays machines are normally produced according to the accident prevention regulations and are often homologated by qualified institutes for the safety, but nobody and nothing can save irresponsible users from danger.

Please, read carefully the following points and be sure to understand everything before using the machines. The following information signals potentially dangerous conditions to the operator or equipment.



WARNING: Fire or Explosion Hazard.

- Do not spray water near electrical outlets.
- Do not use the machine to spray or to suck dust, corrosive liquids (acids or bases) and explosive or inflammable liquids.
- Do not use the machine in an explosive atmosphere. This machine is not equipped with an explosion proof motor. The electric motor will spark when powered on which could cause a flash fire or explosion if machine is used in an area where flammable vapors/liquids or combustible dusts are present.
- Never use flammable liquids or operate machine in or near flammable liquids, vapors or combustible dusts.



WARNING: Electrical Hazard.

- Before putting the machine's plug in the current socket, check that the voltage available is the same indicated on the label of the machines.
- Be sure that the electrical system is well earthed and that it has a safety differential switch.
- Verify that the cable plug is complying with the outlet.
- Do not modify plug.
- Do not use adapters or multiple sockets, without knowing the electrical input of each user.

- If any electrical extension is used, check that it corresponds to the absorbed power of the machine and that the connection of the plug with the socket is complying and sealed.
- Take care of the electrical cable. It must be integral and protected from water, tears and chemical agents. Do not repair the cable in case of tears, but replace it with a new one. The cable must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- Do not pull the cable to drag the machine or to pull the plug out.
- Pull the plug out only when the machine is switched off.
- Do not handle the plug with wet hands.
- Unplug cable before servicing machine.



FOR SAFETY:

- Do not let the machine being used by children and people unable to understand the danger connected with the use of electrical power.
- Do not bring the end of the suction hose or one of the accessories near your face or others', particularly near ears and eyes: the sucked air could seriously damage them.
- If the machine is used as a wet vacuum cleaner, you must check the level of water in the recovery tank, in order to prevent water from being sucked by the vacuum motor.
- If the chemical you are using produces foam, or if you are cleaning carpet previously treated with shampoo, you must put some antifoaming liquid into the recovery tank. In the long run, the foam sucked by the motor can damage it.
- In case of abnormal working (very noisy motor, not running pump, extreme temperature rise, or other suspicious signals) switch off the machine and pull the plug out.
- If foam or liquid escapes from the machine, switch machine off immediately.
- After using, store the machine, well cleaned, in a cool and dry place.

The manufacturer cannot be held responsible for any damage/injury caused to persons or property, because of the incorrect use of the machine due to procedures being used which are not specified in this instruction manual.

Attention: all the electrical repairs must be performed by qualified personal only!



PROTECT THE ENVIRONMENT

Please dispose of packaging materials and old machine components in a safe environmentally way according to your local waster disposal regulations.



Always remember to recycle.

Structure of the machine

GraceHP is made by the following parts:

- Machine body
- Solution and vacuum hoses, used to connect the machine body to the carpet wand.
- Carpet wand
- Pre-spray hose and gun, for carpet pre-spraying
- Possible optional accessories, such as for example the instant hot water unit HT1800, to clean using hot water, instantly warmed by the machine.

The machine body contains:

- The lower tank, containing water used for cleaning
- The upper tank, used to recovery the dirt sucked by the vacuum motors
- The solution pump and the vacuum motors, situated inside the lower tank,
- The control panel for the pump and the motors,
- The regulation panel, used to pass from cleaning with chemical mode to rinsing mode and to adjust the spray pump pressure.

Preparation for work

To prepare the machine for work, do the following operations:

1. Connect the pre-spray gun to the pre-spray hose and the pre-spray hose to the quick disconnect coupling located on the regulation panel.
2. Connect the vacuum hose to the solution tank.
3. Connect the carpet wand to the solution and vacuum hose.
4. Put some fresh water into the solution tank. Put only water, without chemical. Use clean buckets only.
5. Insert the pure chemical bottle in the dedicated housing. Check that the chemical bottle is well connected to the chemical input on the regulation panel and that it is not empty.
6. If your machine is supplied with the optional instant hot water unit HT1800, verify its correct connection to the machine body: the heater input hose must be connected to the output of the machine, instead of the solution hose, while the solution hose must be connected at the output of the heater.
7. Connect the plug of the machine to a proper electrical socket, provided of grounding. Read carefully the indications in the safety regulation paragraph.

Working method

The complete process for carpet professional cleaning is carried out through 3 steps:

- A. Carpet pre-spraying, with a concentrated solution of water and chemical
- B. Cleaning with injection-extraction method, using a solution of water and chemical.
- C. Cleaning with injection-extraction method, using clean water only, rinsing carpet surfaces and removing therefore any chemical residual as well.

STEP A – PRE-SPRAYING AND CHEMICAL ACTION

1. Open the chemical input valve on the regulation panel.
2. Check that the pre-spray gun is connected to the machine with the pre-spray hose.
3. Switch on the solution pump, by acting on the pump switch, located on the control panel.
4. To spray the solution, press the lever on the pre-spray gun. Pull backwards the spray nozzle, located in the terminal part of the gun, in order to spray with the correct pressure. The position with nozzle pushed forward may be used to accelerate the pump priming when starting work, with the pre-spray hose still empty.
5. By rotating the nozzle, it is possible to adjust the spray angle. Spray the chemical product uniformly on the carpet. Spray more chemical on spots.
6. During pre-spray, the machine automatically regulates the chemical concentration to a value which is optimal for pre-spray.
7. After pre-spraying, store the pre-spray pipe and gun and connect the carpet wand to the machine.

TIME NECESSARY FOR THE CHEMICAL ACTION

It is enough to leave the chemical act for 2-3 minutes on carpet. Therefore, after pre-spraying an area, it is normally possible to proceed immediately with carpet extraction cleaning.

STEP B – EXTRACTION CLEANING WITH CHEMICAL SOLUTION

- Check on the regulation panel that the chemical input valve is open.
- Proceed with extraction cleaning, using the carpet wand. The chemical concentration is automatically set by the machine, to a value which is optimal for extraction cleaning with chemical solution.

In some cases, it is possible to avoid extraction cleaning with chemical and directly proceed with cleaning with clean water only.

The choice depends on the status of the carpet and the time available for cleaning.

In any case, it is always recommended to perform cleaning with clean water only, in order to rinse the carpet surfaces.

Rinsing is important to eliminate the chemical residual from textiles and ensure that carpet will re-soil slowly after cleaning, just as it happens with a new carpet.

If rinsing is not performed, the chemical residual left on carpet may reduce the time after which carpet is dirty again.

STEP C – EXTRACTION CLEANING WITH CLEAN WATER ONLY

- Check on the regulation panel that the chemical input valve is closed.
- Proceed with extraction cleaning, using the carpet wand and spraying clean water only.

NOTE: After switching OFF the pump, it is necessary to discharge the pressure in the circuit, by pressing the spraying lever on the accessory. If this operation is not performed, the pump might have difficulty and not be able to start when its switch is pressed again in the ON position.

NOTE: The capacity of the recovery tank is enough to vacuum all the liquid previously sprayed with a full tank of the clean water tank. After vacuuming the residual liquid, do not re-fill the clean water tank before draining the recovery tank. Furthermore, avoid to vacuum liquid not sprayed by the same machine, but for example by other sources. In this case in fact the quantity of water vacuumed into the recovery tank could be excessive for its capacity. If this should happen, check often the level of the recovery tank.

Maintenance

The model GraceHP is a professional machine. The warranty on these machines is of 1 year and covers the faults due to manufacturing defects. The faults due to improper use are not covered by warranty. For further details regarding warranty, contact the distributor supplying the machine.

Observe the following advice to obtain a perfect working and a long life of your machine:

1. After every use, before storing the machine, remove all the water from the solution and the recovery tank. Put some liters of clean water into the solution tank and use the pump only, pressing the lever of the solution valve. This operation is useful to clean the internal parts of the pump, of the couplings and nozzles, removing the detergent residues.
2. After every use, store the machine in a cool and dry place with the cover open, to avoid that humidity inside the recovery tank can condensate on the internal parts of the vacuum motor, therefore damaging it. The damage provoked by humidity that condenses on the motor (or the foam sucked by the motor) is not covered by warranty.
3. Periodically clean the water filter, extracting it from the machine and rinsing it under current water.
4. Periodically check and clean the filter of the vacuum motor, which is located under the transparent circular cover of the upper tank.
5. Eliminate the lime that in time deposits inside the hydraulic circuit of the machine, by putting some anti-lime solution in the solution tank and leave it for some hours. Then empty the tank and rinse. It is enough to perform this operation every 6-8 months.
6. Periodically check the consume of the carbon brushes of the vacuum motor. This check should be done after 500 working hours.
7. Worn-out carbon brushes may result in damages to the vacuum motor, which are not covered by warranty. The check of carbon brushes should be done by technical personnel.

Milano, 1 Gennaio 2007

DICHIARAZIONE DI CONFORMITA'
DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITÉ
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DECLARACION DE CONFORMIDAD

Noi / We / Nous / Wir / Nosotros:

SANTOEMMA srl
Via Piave 22/C
20016 PERO (Milano)

dichiaro sotto la nostra responsabilità che il prodotto:

declare under our responsibility that the product:

déclarons sous notre responsabilité que le produit:

erklären unter unserer eigenen Verantwortung, daß das Produkt:

declaramos bajo nuestra responsabilidad que el producto:

Lavamoquette GRACE HP
Spray extractor for carpet GRACE HP
Machine à laver la moquette GRACE HP
Sprühextraktionsgerät für Teppichböden GRACE HP
Máquina limpiamoqueta GRACE HP

alla quale questa dichiarazione si riferisce, è in conformità alle seguenti Direttive Europee ad alle loro modifiche: CEE 73/23, CEE 89/336, CEE 93/68.

to which this documentation relates is in conformity with the following european Directives and their modifications: EC 73/23, EC 89/336, EC 93/68.

à la quelle cette déclaration se réfère, répond aux Directives européennes suivantes et à leurs modifications CEE 73/23, CEE 89/336, CEE 93/68.

auf das sich diese Bescheinigung bezieht, den folgenden Europäischen Richtlinien und ihren Änderungen entspricht: CEE 73/23, CEE 89/336, CEE 93/68.

a la que esta declaración se refiere se conforma con las siguientes directivas europeas y sus modificaciones: EC 73/23, EC 89/336, EC 93/68.

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